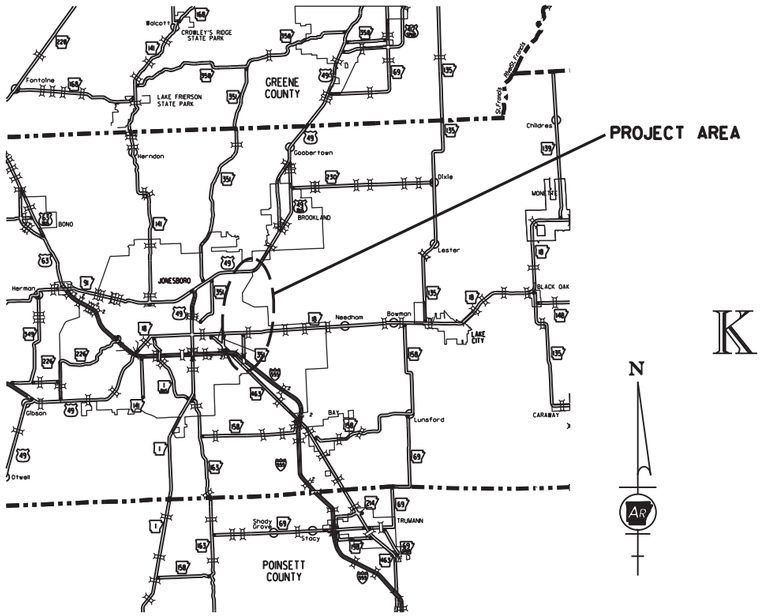
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
09-12-22		6	ARK.	100657	1	418
		I-555 - HWY. 49 (DR. MARTIN LUTHER KING JR. DR. EXTENSION) (JONESBORO) (S)				

"A PARTIALLY CONTROLLED ACCESS FACILITY"
ARKANSAS DEPARTMENT OF TRANSPORTATION
CONSTRUCTION PLANS FOR STATE HIGHWAY

I-555 - HWY. 49
(DR. MARTIN LUTHER KING JR. DR. EXTENSION) (JONESBORO) (S)

CRAIGHEAD COUNTY
ROUTE 18 SECTION 4S
FED. AID PROJ. ACCMAQ-9227(74)
JOB 100657



VICINITY MAP

ARK. HWY. DIST. NO. 10

BRIDGE DATA

① STA. 330+95.82 BRIDGE END
BRIDGE NO. 07533
452'-0" CONTINUOUS PLATE GIRDER
UNIT (144'-164'-144')
58' CLEAR ROADWAY
454'-4¼" BRIDGE LENGTH
STA. 335+50.18 BRIDGE END

STRUCTURES OVER 20'-0" SPAN

[1] STA. 148+23 IN PLACE
DBL. 5' X 4' X 41' R.C. BOX CULVERT
REMOVE AND CONSTRUCT
TRI. 10' X 5' X 95' R.C. BOX CULVERT
W/ 3:1 WINGS LT. AND RT.
Q50 = 640 CFS D.A. = 865 ACRES
SPAN = 32'-4"

[2] STA. 187+65 IN PLACE
QUAD. 5' X 5' X 44' R.C. BOX CULVERT
REMOVE AND CONSTRUCT
TRI. 10' X 5' X 97' R.C. BOX CULVERT
W/ 3:1 WINGS LT. AND RT.
Q50 = 640 CFS D.A. = 646 ACRES
SPAN = 32'-4"

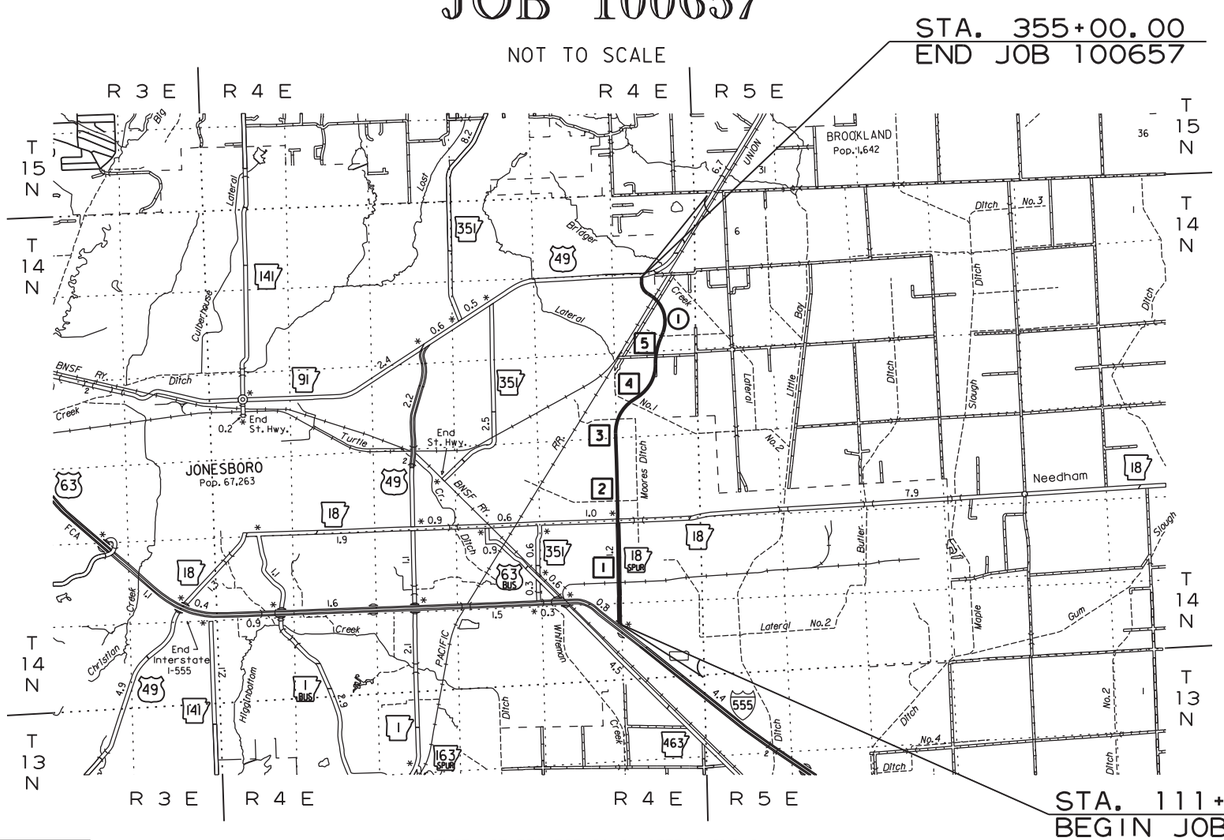
[3] STA. 240+55 CONSTRUCT
DBL. 12' X 8' X 108' R.C. BOX CULVERT
ON 15° RT. FWD. SKEW
W/ 3:1 WINGS LT. AND RT.
Q50 = 1220 CFS D.A. = 999 ACRES
SPAN = 26'-10"

[4] STA. 254+15 CONSTRUCT
TRI. 12' X 12' X 106' R.C. BOX CULVERT
ON 10° RT. FWD. SKEW
W/ 3:1 WINGS LT. AND RT.
Q50 = 2030 CFS D.A. = 2470 ACRES
SPAN = 40'-8½"

[5] STA. 303+60 CONSTRUCT
DBL. 12' X 7' X 106' R.C. BOX CULVERT
ON 5° LT. FWD. SKEW
W/ 3:1 WINGS LT. AND RT.
Q50 = 875 CFS D.A. = 506 ACRES
SPAN = 25'-11"

	BEGIN PROJECT	MID-POINT OF PROJECT	END PROJECT
LATITUDE	N 35°48'12"	N 35°50'12"	N 35°51'58"
LONGITUDE	W 90°37'28"	W 90°37'25"	W 90°36'48"

NOT TO SCALE



LENGTH OF PROJECT CALCULATED ALONG C.L.

GROSS LENGTH OF PROJECT	24359.02	FEET	OR	4.613	MILES
NET . . ROADWAY	23746.54	.		4.497	MILES
NET . . BRIDGES	612.48	.		0.116	MILES
NET . . PROJECT	24359.02	.		4.613	MILES

DESIGN TRAFFIC DATA

DESIGN YEAR	2042
2022 ADT	8500
2042 ADT	21000
2042 DHV	2310
DIRECTIONAL DISTRIBUTION	0.60
TRUCKS	7%
DESIGN SPEED	45 MPH

APPROVED

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 10045
KELVIN REX VINES

Vines, Rex
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DEPUTY DIRECTOR
AND CHIEF ENGINEER

HT39710 9/8/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	2	418
		INDEX OF SHEETS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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INDEX OF SHEETS

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2	INDEX OF SHEETS		
3	STANDARD DRAWINGS		
4	GOVERNING SPECIFICATIONS AND GENERAL NOTES		
5 - 15	TYPICAL SECTIONS OF IMPROVEMENT		
16 - 45	SPECIAL DETAILS		
46 - 86	TEMPORARY EROSION CONTROL DETAILS		
87 - 117	MAINTENANCE OF TRAFFIC DETAILS		
118 - 134	PERMANENT PAVEMENT MARKING DETAILS		
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156 - 157	SUMMARY OF QUANTITIES AND REVISIONS		
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213	TRAFFIC SIGNAL STREET NAME SIGNS		
214	GROUNDING ARRAY DETAIL		
215	TRAFFIC SIGNAL QUANTITIES - HWY. 18S/C.W. POST		
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220	TRAFFIC SIGNAL QUANTITIES - HWY. 18S/HWY.18		
221 - 230	SIGNALIZATION PLAN SHEETS		
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251	DETAILS OF BENT 4 (SHEET 4 OF 4)	07533	63976
252	DETAILS OF ELASTOMETRIC BEARINGS	07533	63977
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254	DETAILS OF 452'-0" CONTINUOUS PLATE GIRDER UNIT (SHEET 2 OF 16)	07533	63979
255	DETAILS OF 452'-0" CONTINUOUS PLATE GIRDER UNIT (SHEET 3 OF 16)	07533	63980
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268	DETAILS OF 452'-0" CONTINUOUS PLATE GIRDER UNIT (SHEET 16 OF 16)	07533	63993
269	DETAILS OF DECK DRAINS	07533	63994
270	DETAILS OF CURVED CHAIN LINK FENCE	07533	63995
271	DETAILS OF TYPE SPECIAL APPROACH SLAB	07533	63996
272	DETAILS OF CONCRETE RIPRAP	07533	63997
273 - 418	CROSS SECTIONS		

NOTE: CROSS SECTIONS NOT NORMALLY INCLUDED IN PLANS SOLD TO PROSPECTIVE BIDDERS, BUT MAY BE HAD UPON REQUEST.

HT39710 6/16/2021
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
10-19-22		6	ARK.	100657	3	418
		STANDARD DRAWINGS				

STATE OF ARKANSAS
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No. 11425
TRINITY D. SMITH

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BRIDGE STANDARD DRAWINGS

DRWG.NO.	TITLE	DATE
55000	STANDARD DETAILS FOR EMBANKMENT CONSTRUCTION AND BACKFILL AT BRIDGE ENDS	02-27-14
55002	STANDARD DETAILS FOR CONCRETE RIPRAP	02-27-14
55005	STANDARD DETAILS FOR PERMANENT STEEL BRIDGE DECK FORMS FOR STEEL & CONCRETE GIRDER SPANS	03-24-16
55006	STANDARD GENERAL NOTES FOR STEEL BRIDGE STRUCTURES	09-02-15
55007	STANDARD DETAILS FOR STEEL BRIDGE STRUCTURES	02-11-16
55008	STANDARD DETAILS FOR POURED SILICONE JOINTS	02-11-16
55010	STANDARD DETAILS FOR TYPE D BRIDGE NAME PLATE	05-11-21
55015	STANDARD DETAILS FOR TYPE H2 RAILING	06-25-20
55021	STANDARD DETAILS FOR CONCRETE FILLED STEEL SHELL PILES AND PILE ENCASEMENTS	03-24-16
55070	STANDARD DETAILS FOR BRIDGE TRAFFIC RAIL TYPE SSTR36	09-27-22

ROADWAY STANDARD DRAWINGS

DRWG.NO.	TITLE	DATE
CDP-1	CONCRETE DITCH PAVING	12-08-16
CG-1	CURBING DETAILS	11-29-07
DR-1	DETAILS OF DRIVEWAYS & ISLANDS	05-19-22
DR-2	DETAILS OF DRIVEWAYS & STREET TURNOUTS	05-19-22
FES-1	FLARED END SECTION	10-18-96
FES-2	FLARED END SECTION	10-18-96
FPC-9	DETAILS OF DROP INLETS & JUNCTION BOXES	11-16-01
FPC-9E	DETAILS OF DROP INLETS (TYPE C)	08-22-02
FPC-9M	DETAILS OF DROP INLET (TYPE MO)	08-22-02
MB-1	MAILBOX DETAILS	11-18-04
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
RRS-1	PAVEMENT MARKING FOR RAILROAD CROSSING	12-08-16
SD-4	LOOP DETECTOR INSTALLATION	11-07-19
SD-5	CONTROLLER CABINET UTILITY DRAWER	09-12-13
SD-6	HEAVY DUTY PULL BOX	11-16-17
SD-7	SPAN WIRE ASSEMBLY WOOD POLE	11-16-17
SD-8	SIGNAL HEAD PLACEMENT	12-08-16
SD-9	SERVICE POINT	11-07-19
SD-11	STEEL POLE WITH MAST ARM	11-16-17
SE-2	TABLES AND METHOD OF SUPERELEVATION FOR TWO-WAY TRAFFIC	11-07-19
SE-3	TABLES AND METHOD OF SUPERELEVATION FOR TWO-WAY TRAFFIC (4% MAXIMUM)	11-07-19
SI-1	DETAILS OF SPECIAL ITEMS	10-25-18
SI-3	CONCRETE WALK (TYPE SPECIAL)	11-05-20
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	08-12-21
TC-4	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION-TEMPORARY PRECAST BARRIER	11-07-19
TC-5	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION-TEMPORARY PRECAST BARRIER	11-07-19
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
WF-1	WIRE FENCE TYPE A AND B	08-22-02
WF-2	WIRE FENCE WATER GAPS	04-20-79
WR-1	WHEELCHAIR RAMPS NEW CONSTRUCTION AND ALTERATIONS	11-10-05

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	4	418
		GOVERNING SPECS. AND GENERAL NOTES				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
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GOVERNING SPECIFICATIONS

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

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 - TRAINING PROGRAM - JOB 100657
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
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
307-1_____	CEMENT
308-1_____	CEMENT
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
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
501-2_____	CEMENT
502-1_____	WELDED WIRE REINFORCEMENT
505-1_____	PORTLAND CEMENT CONCRETE DRIVEWAY
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)
605-1_____	CONCRETE DITCH PAVING
606-1_____	PIPE CULVERTS FOR SIDE DRAINS
620-1_____	MULCH COVER
621-1_____	FILTER SOCKS
632-1_____	CONCRETE ISLAND
633-1_____	CONCRETE WALKS, CONCRETE STEPS, AND HAND RAILING
634-1_____	CURBING
700-2_____	TRAFFIC CONTROL FACILITIES
800-1_____	STRUCTURES
802-3_____	CONCRETE FOR STRUCTURES
802-4_____	CEMENT
804-2_____	REINFORCING STEEL FOR STRUCTURES
807-2_____	STEEL STRUCTURES
808-1_____	INSTALLATION OF ELASTOMERIC BEARINGS
808-2_____	ELASTOMERIC BEARINGS
JOB 100657__	ACTUATED CONTROLLER
JOB 100657__	AIRPORT CLEARANCE REQUIREMENTS
JOB 100657__	ARCHITECTURAL FINISH
JOB 100657__	ARCHITECTURAL FINISH (CAST-IN PLACE RETAINING WALLS)
JOB 100657__	ASSESSMENT OF WORKING DAYS – MAINTENANCE OF TRAFFIC
JOB 100657__	BIDDING REQUIREMENTS AND CONDITIONS
JOB 100657__	BROADBAND INTERNET SERVICE FOR ASPHALT CONCRETE PLANT
JOB 100657__	BROADBAND INTERNET SERVICE FOR FIELD OFFICE
JOB 100657__	CABINET DRAWER ASSEMBLY
JOB 100657__	CARGO PREFERENCE ACT REQUIREMENTS
JOB 100657__	CLASS C FLY ASH IN PORTLAND CEMENT CONCRETE PAVEMENT AND CLASS S(AE) CONCRETE
JOB 100657__	COLD MILLING - COUNTY PROPERTY
JOB 100657__	CONCRETE BRIDGE DECK CURING AND SURFACE TREATMENT RESTRICTIONS
JOB 100657__	CONSTRUCTION IN SPECIAL FLOOD HAZARD AREAS
JOB 100657__	CONSTRUCTION PROJECT INFORMATION SIGN
JOB 100657__	CULVERT CLEAN OUT
JOB 100657__	DELAY IN RIGHT OF WAY OCCUPANCY
JOB 100657__	DIRECT TENSION INDICATORS FOR HIGH STRENGTH BOLT ASSEMBLIES
JOB 100657__	DISADVANTAGED BUSINESS ENTERPRISE BIDDER'S RESPONSIBILITIES
JOB 100657__	EDGE CARD VIDEO PROCESSOR
JOB 100657__	ELECTRICAL CONDUCTORS FOR LUMINAIRES
JOB 100657__	ELECTRICAL CONDUCTORS-IN-CONDUIT
JOB 100657__	EXTENSION FOR PIPE CULVERTS
JOB 100657__	FLEXIBLE BEGINNING OF WORK – CALENDAR DAY CONTRACT
JOB 100657__	GOALS FOR DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION
JOB 100657__	INSURANCE, CONSTRUCTION, AND FLAGGING REQUIREMENTS ON RAILROAD PROPERTY (CITY OF JONESBORO)
JOB 100657__	INSURANCE, CONSTRUCTION, AND FLAGGING REQUIREMENTS ON RAILROAD PROPERTY (UPRR)
JOB 100657__	IP VIDEO DETECTION SYSTEM
JOB 100657__	LED COUNTDOWN PEDESTRIAN SIGNAL HEAD
JOB 100657__	LED LUMINAIRE ASSEMBLY (BUG U0 TYPE)
JOB 100657__	LED TRAFFIC SIGNAL HEAD
JOB 100657__	LIQUIDATED DAMAGES PROCEDURE FOR BID LETTINGS
JOB 100657__	LONGITUDINAL JOINT DENSITIES FOR ACHM SURFACE COURSES
JOB 100657__	LOOP WIRING REVISION 1.4

GOVERNING SPECIFICATIONS - CONTINUED

NUMBER	TITLE
JOB 100657__	MAINTENANCE OF TRAFFIC
JOB 100657__	MANDATORY ELECTRONIC CONTRACT
JOB 100657__	MANDATORY ELECTRONIC DOCUMENT SUBMITTAL
JOB 100657__	NESTING SITES OF MIGRATORY BIRDS
JOB 100657__	OFF-SITE RESTRAINING CONDITIONS FOR INDIANA AND NORTHERN LONG-EARED BATS
JOB 100657__	PARTNERING REQUIREMENTS
JOB 100657__	PERCENT WITHIN LIMITS/PAVEMENT SMOOTHNESS (IRI)
JOB 100657__	PLASTIC PIPE
JOB 100657__	PRICE ADJUSTMENT FOR ASPHALT BINDER
JOB 100657__	PRICE ADJUSTMENT FOR FUEL
JOB 100657__	PROHIBITION OF CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT
JOB 100657__	REMOVAL OF TRAFFIC SIGNAL EQUIPMENT
JOB 100657__	RESTRICTIONS ON THE USE OF RECYCLED ASPHALT PAVEMENT MATERIAL
JOB 100657__	RETROREFLECTIVE BACKPLATES
JOB 100657__	SERVICE POINT ASSEMBLY (TRAFFIC CONTROL DEVICES)
JOB 100657__	SHORING FOR CULVERTS
JOB 100657__	SITE USE (A+C METHOD) – CALENDAR DAY CONTRACT
JOB 100657__	SOIL STABILIZATION
JOB 100657__	SPECIAL CLEARING REQUIREMENTS
JOB 100657__	SPECIAL SAFETY REQUIREMENTS FOR BRIDGES
JOB 100657__	STORM WATER POLLUTION PREVENTION PLAN
JOB 100657__	STREET NAME SIGN (MAST ARM MOUNTED)
JOB 100657__	SUBMISSION OF ASPHALT CONCRETE HOT MIX ACCEPTANCE TEST RESULTS
JOB 100657__	SYSTEM LOCAL CONTROLLER
JOB 100657__	TEXTURED COATING FINISH (CAST-IN PLACE RETAINING WALLS)
JOB 100657__	UTILITY ADJUSTMENTS
JOB 100657__	VALUE ENGINEERING
JOB 100657__	VIDEO DETECTOR (COLOR)
JOB 100657__	WARM MIX ASPHALT
JOB 100657__	WELLHEAD PROTECTION

GENERAL NOTES

1. GRADE LINE DENOTES FINISHED GRADE WHERE SHOWN ON PLANS.
2. ALL PIPE LINES, POWER, TELEPHONE, AND TELEGRAPH LINES TO BE MOVED OR LOWERED BY THE RESPECTIVE OWNERS AS PER AGREEMENT WITH SUCH OWNERS.
3. 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.
4. 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.
5. ALL LAND MONUMENTS LOCATED WITHIN THE CONSTRUCTION AREA SHALL BE PROTECTED IN ACCORDANCE WITH SECTION 107.12 OF THE STANDARD SPECIFICATIONS.
6. 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.
7. 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.
8. 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.
9. ALL FLEXIBLE BASE AND ASPHALTIC PAVEMENTS REMOVED SHALL BE PAID FOR UNDER THE ITEM NO. 210 - UNCLASSIFIED EXCAVATION.
10. 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.
11. 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.

HT39710 6/16/2021
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	5	418
		TYPICAL SECTIONS OF IMPROVEMENT				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

May 17 2022 11:51 AM

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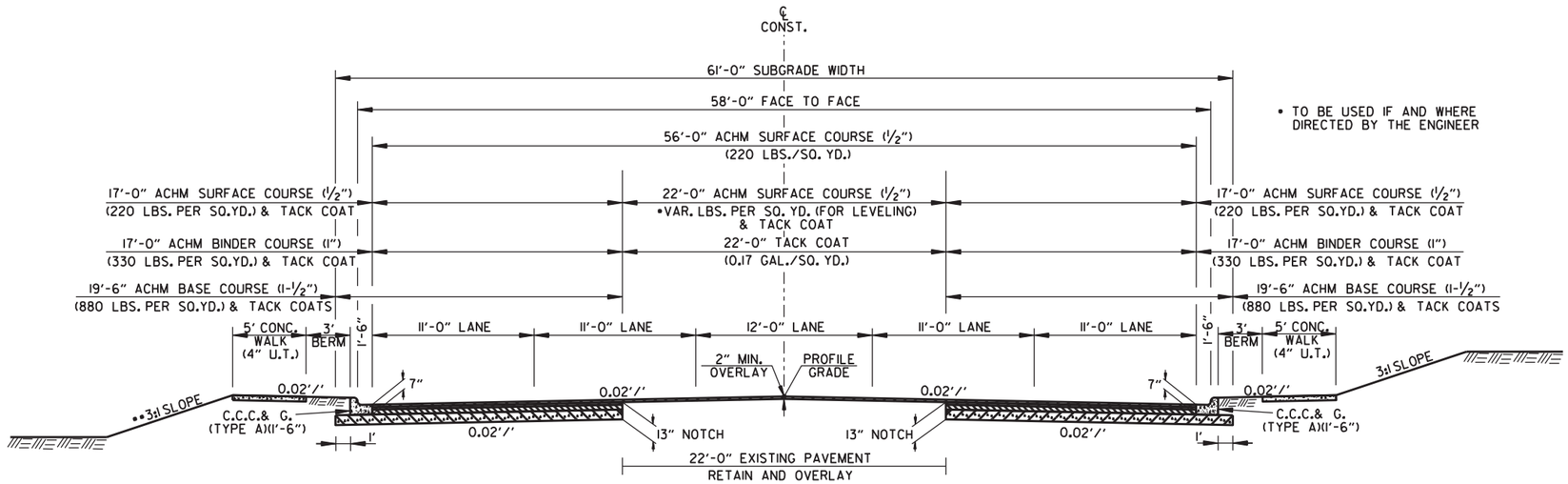
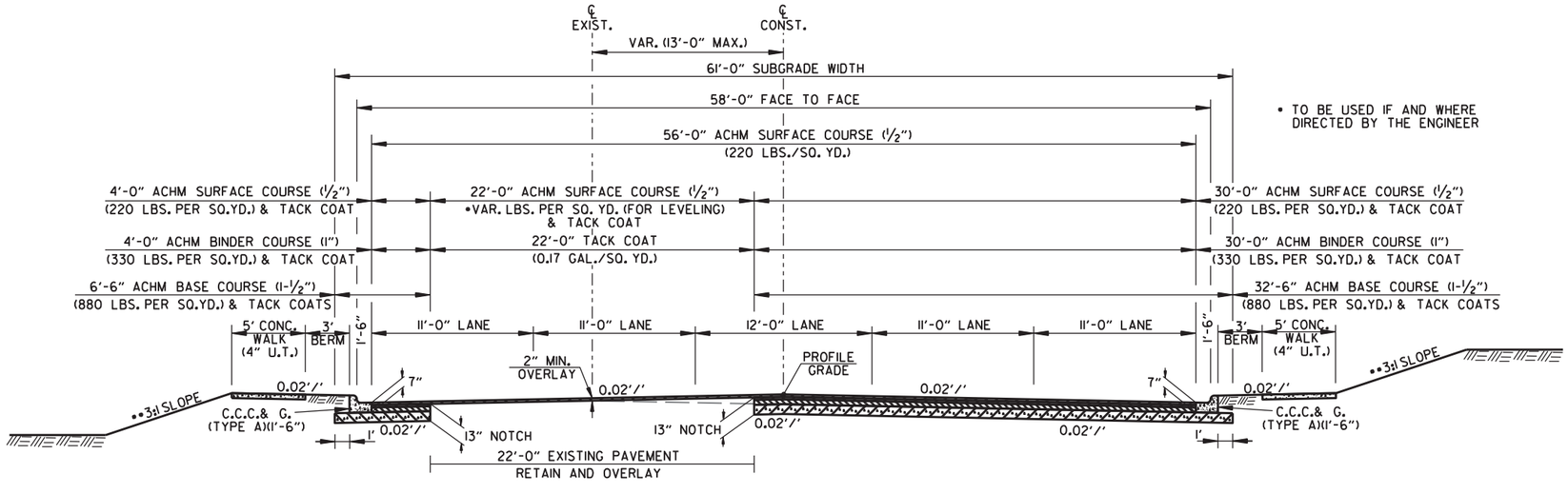


•• 2:1 SLOPES ON LT.
STA. 118+00 TO STA. 121+60

HWY. 18S
TYPICAL SECTION OF IMPROVEMENT
58' FACE-FACE C.C.C.&G.
NOTCH AND WIDEN
STA. 111+40.98 TO STA. 119+00.00
STA. 161+00.00 TO STA. 174+28.00
STA. 174+86.00 TO STA. 227+31.00



•• 2:1 SLOPES ON LT.
STA. 118+00 TO STA. 121+60
2:1 SLOPES ON RT.
STA. 119+25 TO STA. 121+60

HWY. 18S
TYPICAL SECTION OF IMPROVEMENT
58' FACE-FACE C.C.C.&G.
NOTCH AND WIDEN
STA. 119+00.00 TO STA. 129+00.00
STA. 145+00.00 TO STA. 161+00.00

NOTES:

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 PAYMENT 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.

REFER TO PLAN SHEETS FOR SIDEWALK LOCATIONS.

PRIOR TO AND DURING PLACEMENT OF PAVEMENT IN FRONT OF THE CURB AND GUTTER, THE CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE AT ALL TIMES. THE METHOD(S) USED SHALL BE APPROVED BY THE ENGINEER. PAYMENT FOR THIS WORK SHALL BE CONSIDERED INCLUDED IN THE PRICE BID FOR THE VARIOUS CONTRACT ITEMS.

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TRANSVERSE EXPANSION JOINTS SHALL BE PLACED IN CONCRETE WALKS AT 45' INTERVALS.

HT.39710 5/6/2022
R100657.DGN

TYPICAL SECTIONS OF IMPROVEMENT

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	6	418
		TYPICAL SECTIONS OF IMPROVEMENT				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

May 17 2022 11:52 AM

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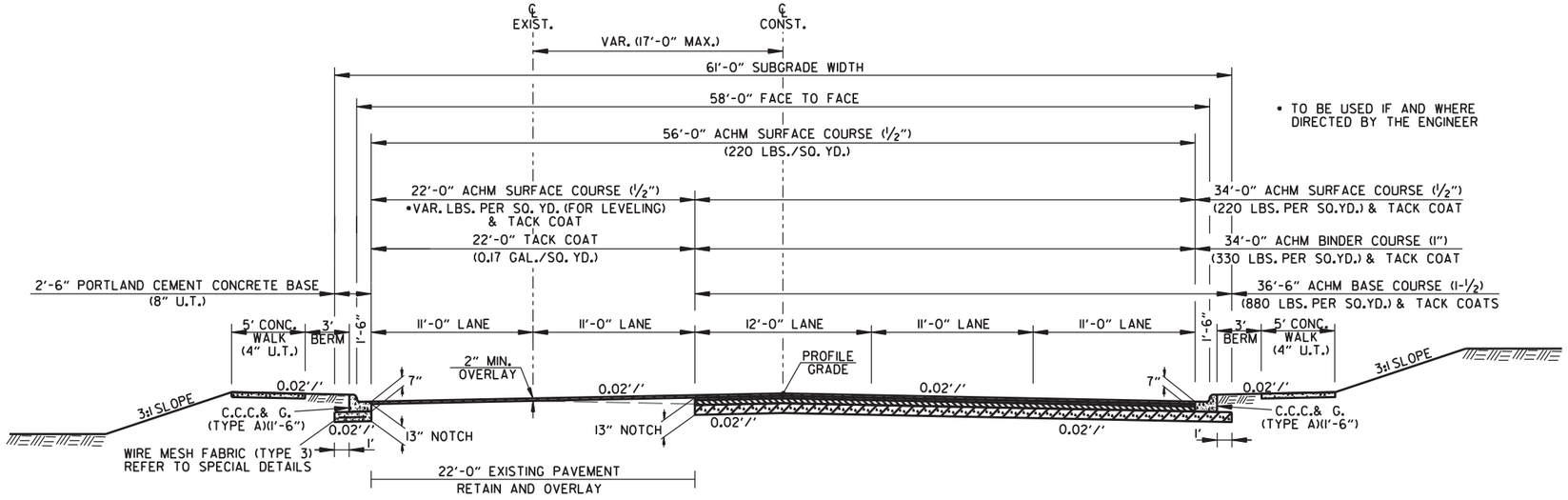
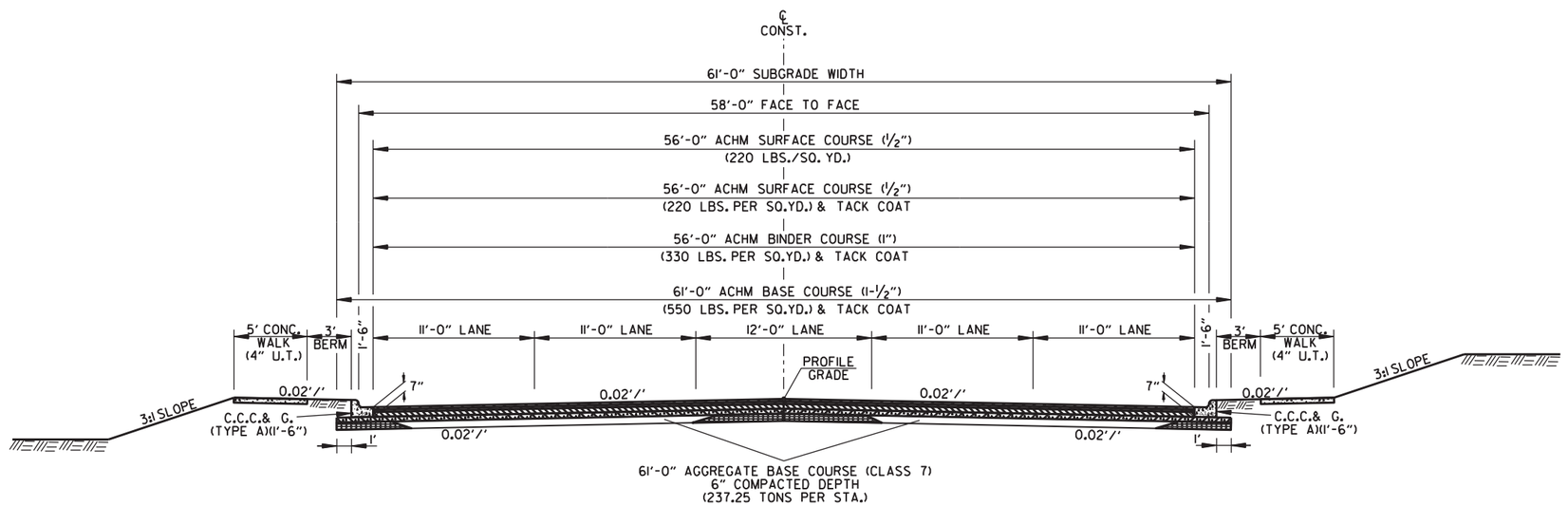


HWY. 18S
TYPICAL SECTION OF IMPROVEMENT
58' FACE-FACE C.C.C.&G.
NOTCH AND WIDEN
STA. 129+00.00 TO STA. 134+86.00
STA. 135+01.00 TO STA. 145+00.00



HWY. 18S
TYPICAL SECTION OF IMPROVEMENT
58' FACE-FACE C.C.C.&G.
FULL DEPTH
STA. 227+31.00 TO STA. 231+24.88
STA. 327+89.88 TO STA. 330+49.55
STA. 335+96.45 TO STA. 346+63.59

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.

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REFER TO PLAN SHEETS FOR SIDEWALK LOCATIONS.

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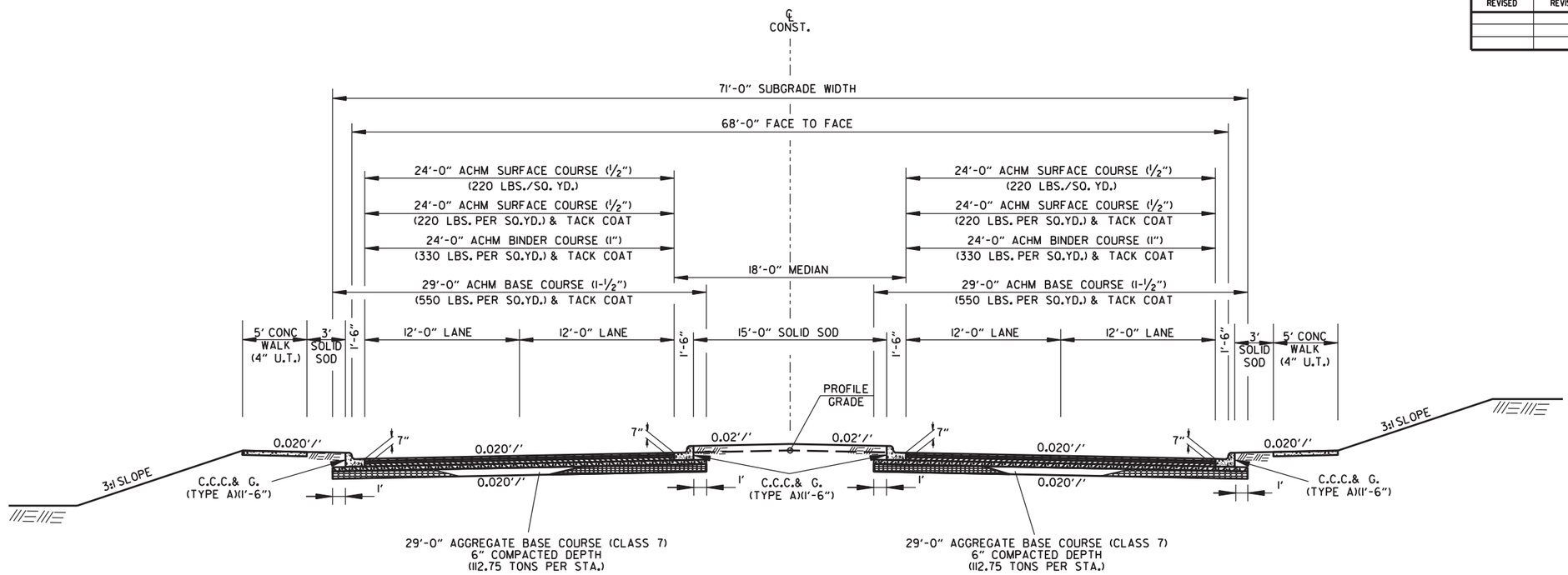
TRANSVERSE EXPANSION JOINTS SHALL BE PLACED IN CONCRETE WALKS AT 45' INTERVALS.

HT39710 5/6/2022
R100657.DGN

TYPICAL SECTIONS OF IMPROVEMENT

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	7	418
		TYPICAL SECTIONS OF IMPROVEMENT				



HWY. 18S
TYPICAL SECTION OF IMPROVEMENT
68' FACE-FACE C.C.C.&G. WITH RAISED MEDIAN
FULL DEPTH
STA. 231+24.88 TO STA. 243+39.88
STA. 250+59.88 TO STA. 263+39.88
STA. 270+59.88 TO STA. 285+98.39
STA. 292+96.39 TO STA. 305+39.88
STA. 312+59.88 TO STA. 323+89.88

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.

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STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

May 17 2022 11:53 AM
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HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	8	418
		TYPICAL SECTIONS OF IMPROVEMENT				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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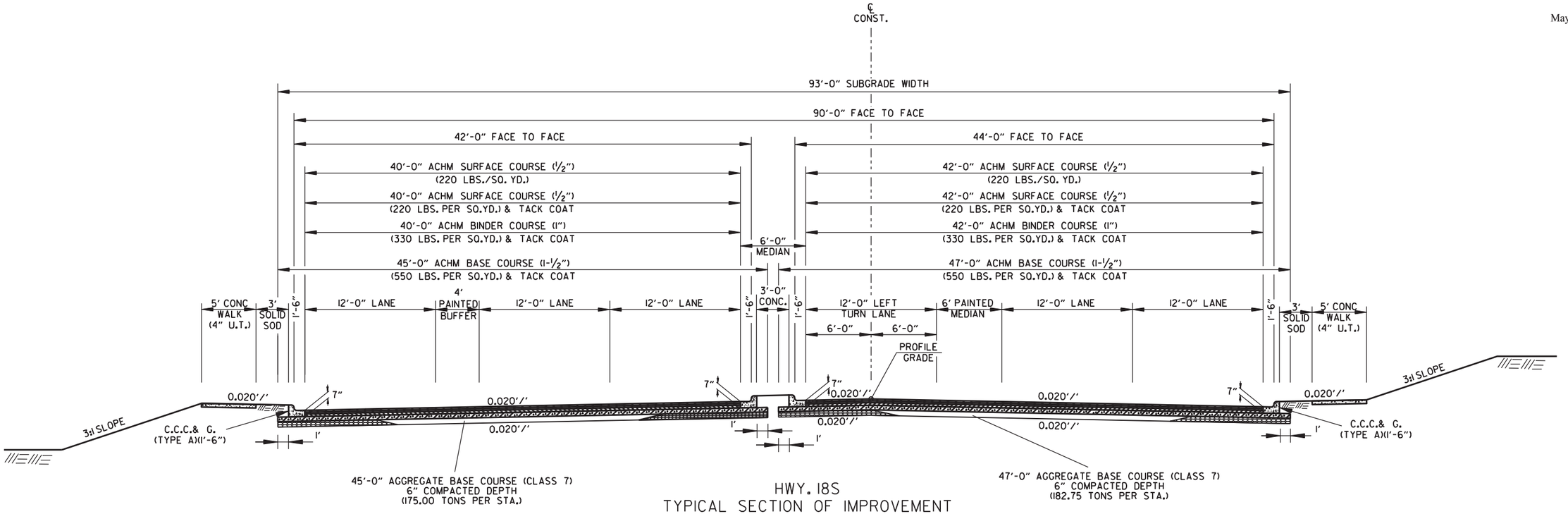

HWY. 18S
TYPICAL SECTION OF IMPROVEMENT
90' FACE-FACE C.C.C.&G. MEDIAN BREAK
FULL DEPTH
STA. 243+39.88 TO STA. 250+59.88
STA. 263+39.88 TO STA. 270+59.88
STA. 285+98.39 TO STA. 292+96.39
STA. 305+39.88 TO STA. 312+59.88

NOTE: LEFT TURN LANE SHOWN FOR RT. SIDE.
REVERSE FOR LEFT TURN LANE ON LT. SIDE.

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.

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HT39710 5/6/2022
R100657.DGN

TYPICAL SECTIONS OF IMPROVEMENT

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	9	418
		TYPICAL SECTIONS OF IMPROVEMENT				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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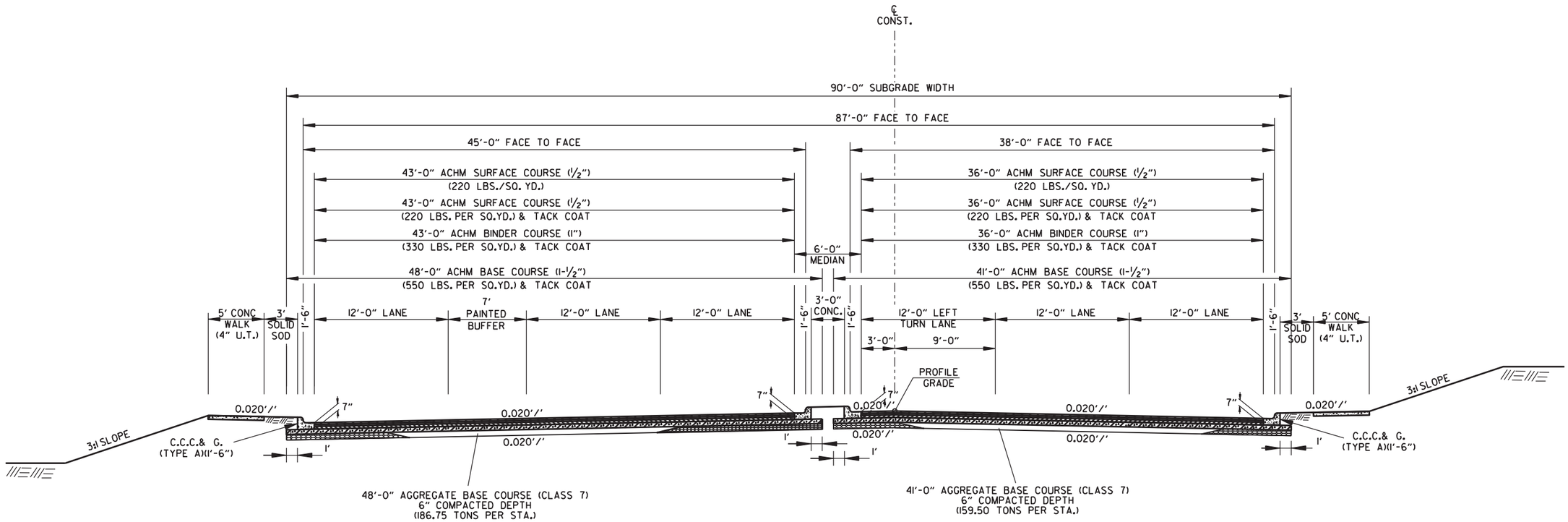

HWY. 18S
TYPICAL SECTION OF IMPROVEMENT
87' FACE-FACE C.C.C.&G. MEDIAN BREAK
FULL DEPTH
STA. 323+89.88 TO STA. 327+89.88

NOTES:
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HT39710 5/6/2022
R100657.DGN

TYPICAL SECTIONS OF IMPROVEMENT

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	10	418
		TYPICAL SECTIONS OF IMPROVEMENT				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

May 17 2022 11:53 AM

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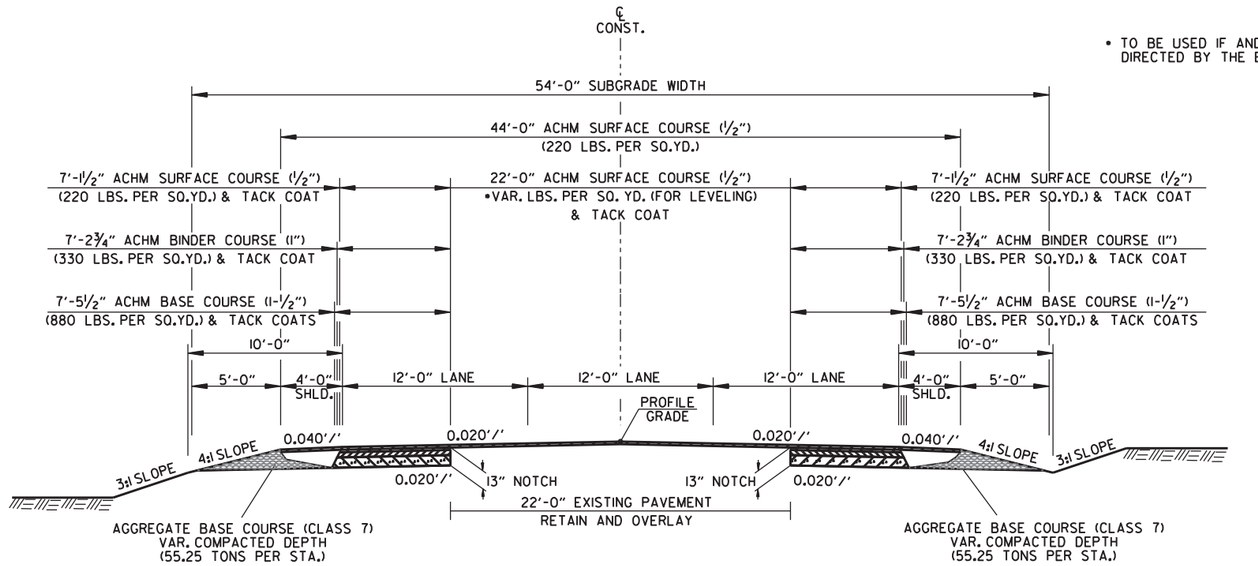

• TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER

C.W. POST
TYPICAL SECTION OF IMPROVEMENT
OPEN SHOULDER
STA. 502+26.25 TO STA. 507+86.06
STA. 508+42.07 TO STA. 512+73.95

NOTES:

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R100657.DGN

TYPICAL SECTIONS OF IMPROVEMENT

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	11	418
		TYPICAL SECTIONS OF IMPROVEMENT				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

May 17 2022 11:54 AM

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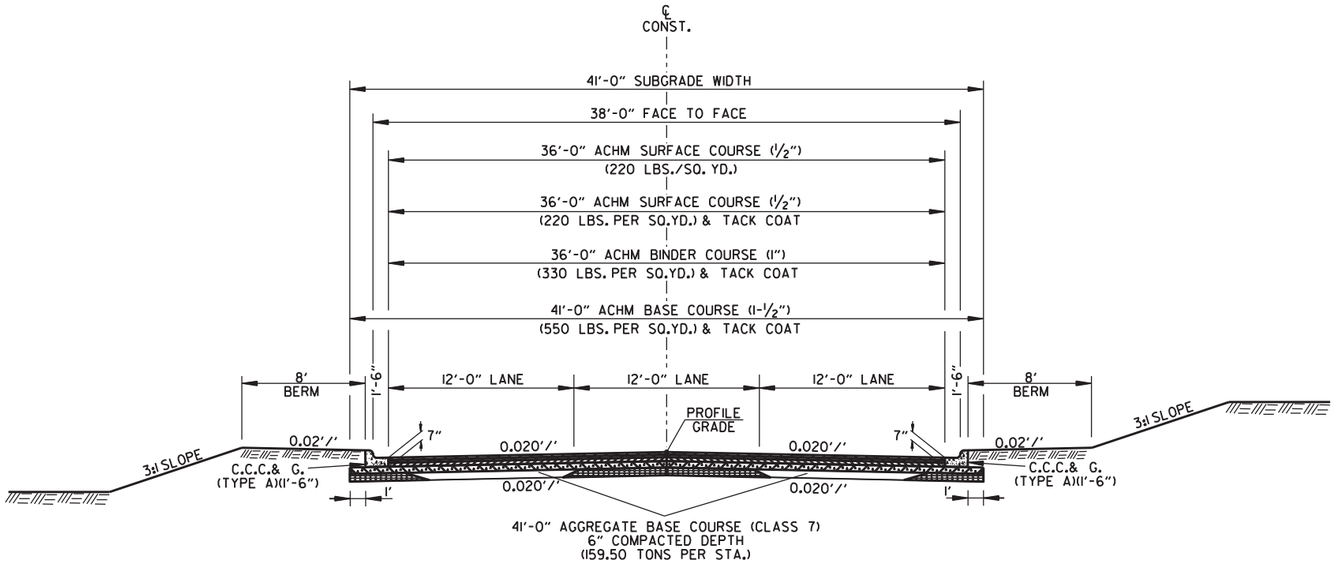

CLINTON SCHOOL RD.
TYPICAL SECTION OF IMPROVEMENT
38' FACE-FACE C.C.C.&G.
FULL DEPTH
STA. 347+19.35 TO STA. 348+27.03

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.

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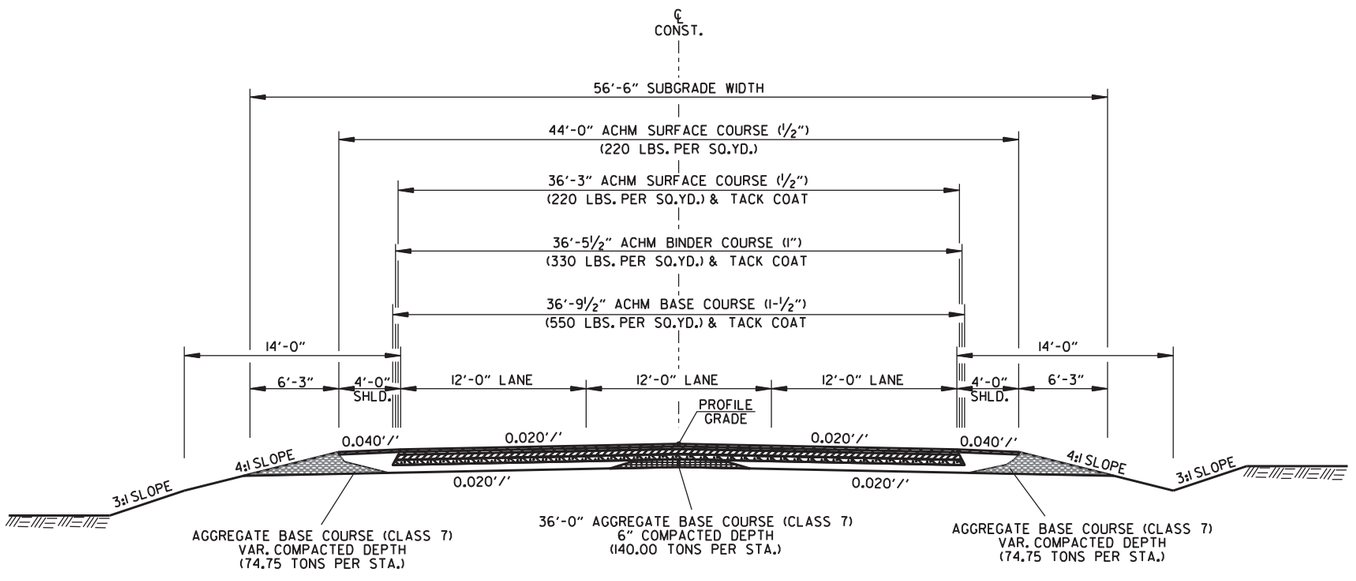

CLINTON SCHOOL RD.
TYPICAL SECTION OF IMPROVEMENT
OPEN SHOULDER
FULL DEPTH
STA. 348+27.03 TO STA. 350+08.69

HT39710 5/6/2022
R100657.DGN

TYPICAL SECTIONS OF IMPROVEMENT

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	12	418
		TYPICAL SECTIONS OF IMPROVEMENT				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

May 17 2022 11:54 AM

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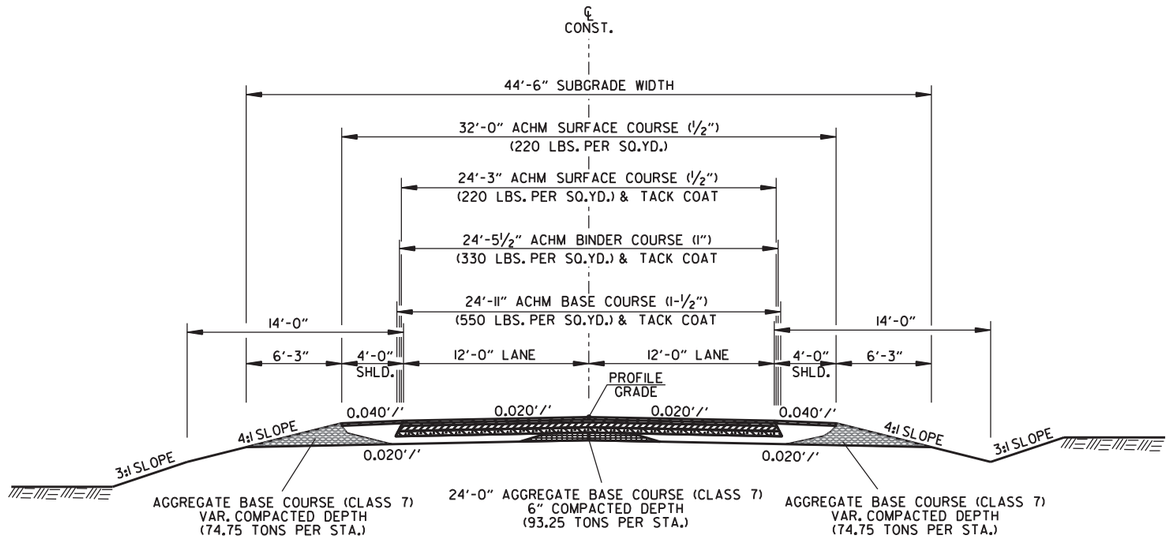

CLINTON SCHOOL RD.
TYPICAL SECTION OF IMPROVEMENT
OPEN SHOULDER
FULL DEPTH
STA. 350+08.69 TO STA. 355+00.00

NOTES:
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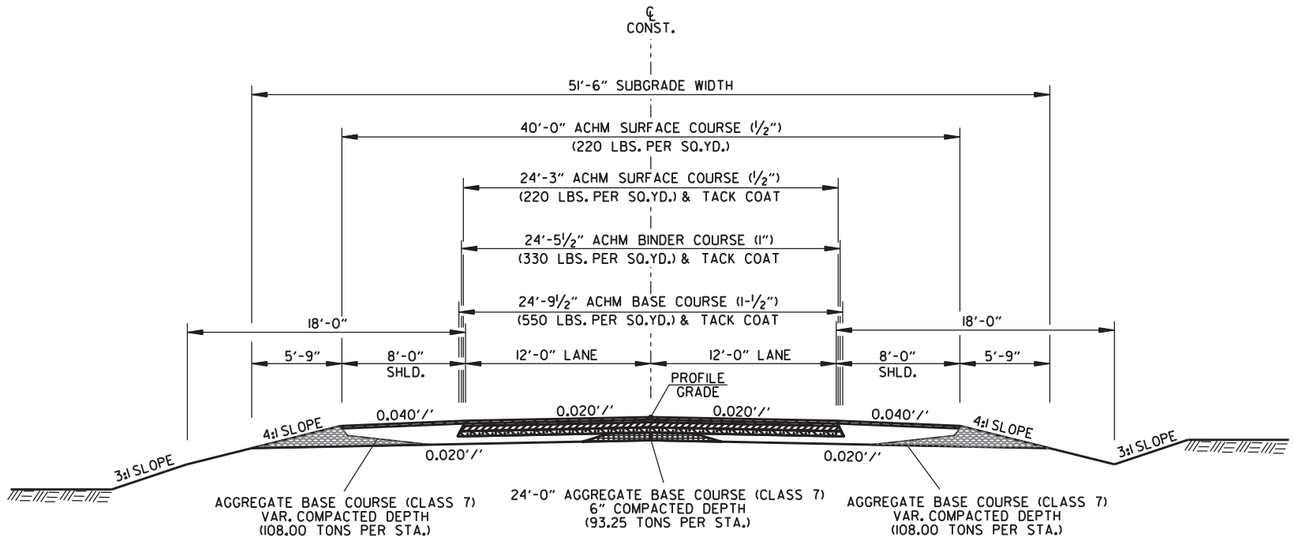

KATHLEEN ST. CONNECTOR
TYPICAL SECTION OF IMPROVEMENT
OPEN SHOULDER
FULL DEPTH
STA. 650+11.84 TO STA. 656+13.02

HT39710 5/6/2022
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TYPICAL SECTIONS OF IMPROVEMENT

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		6	ARK.	100657	13	418
		TYPICAL SECTIONS OF IMPROVEMENT				

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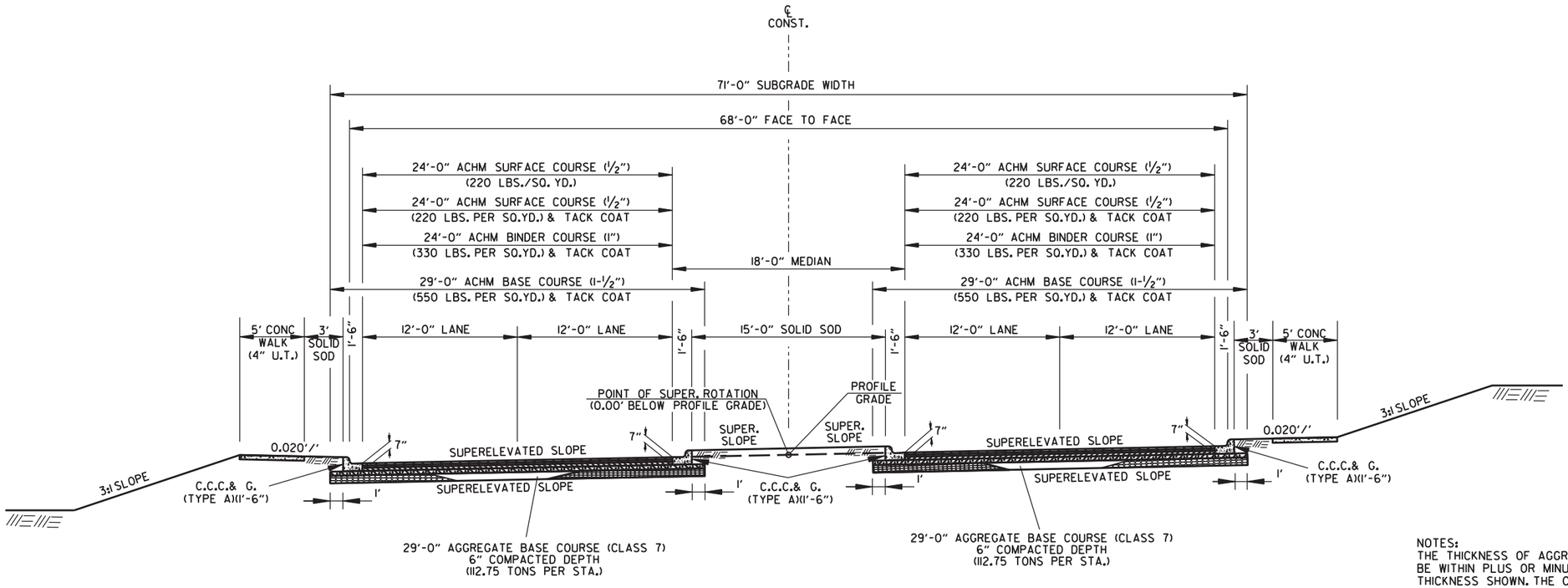

HWY. 18S
TYPICAL SECTION OF IMPROVEMENT
68' FACE-FACE C.C.C.&G. WITH RAISED MEDIAN
FULL DEPTH
SUPERELEVATED

NOTES:
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TRANSVERSE EXPANSION JOINTS SHALL BE PLACED IN CONCRETE WALKS AT 45' INTERVALS.

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DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	14	418
		TYPICAL SECTIONS OF IMPROVEMENT				

STATE OF ARKANSAS
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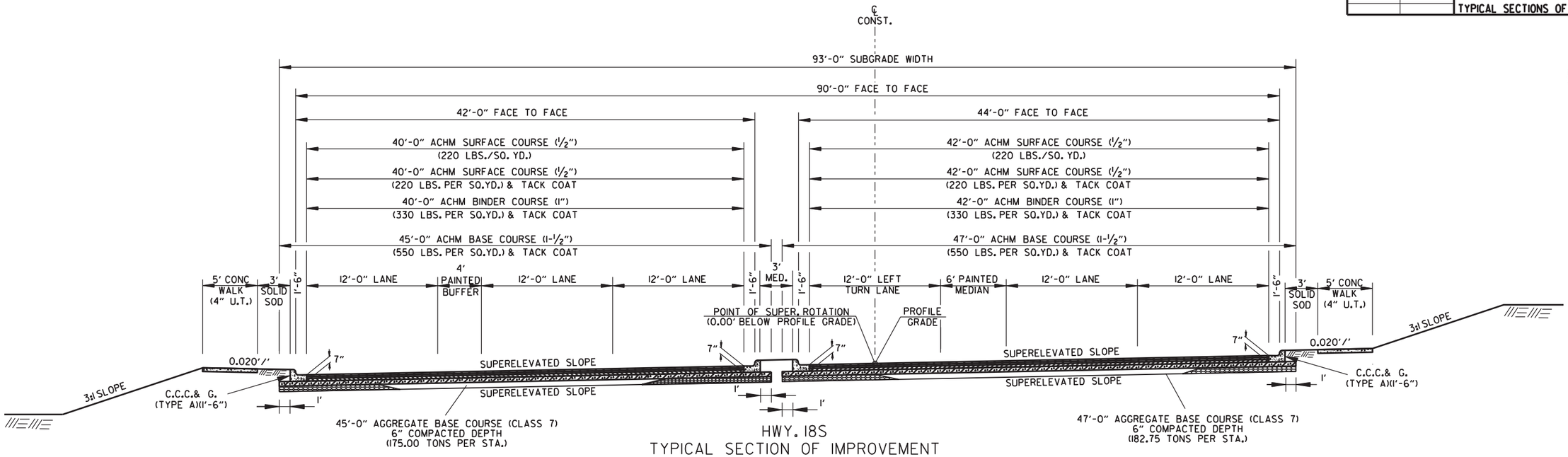
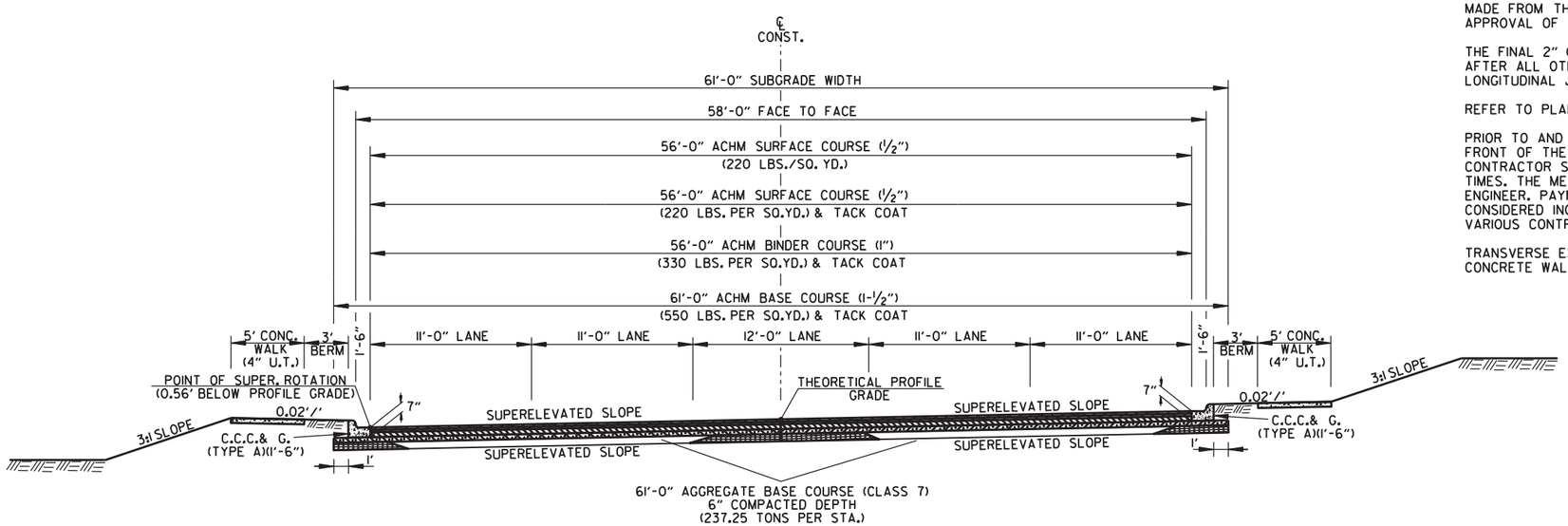


HWY. 18S
TYPICAL SECTION OF IMPROVEMENT
90' FACE-FACE C.C.C.&G. MEDIAN BREAK
FULL DEPTH
SUPERELEVATED

NOTE: LEFT TURN LANE SHOWN FOR RT. SIDE.
REVERSE FOR LEFT TURN LANE ON LT. SIDE.



HWY. 18S
TYPICAL SECTION OF IMPROVEMENT
58' FACE-FACE C.C.C.&G.
FULL DEPTH
SUPERELEVATED

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.

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

REFER TO PLAN SHEETS FOR SIDEWALK LOCATIONS.

PRIOR TO AND DURING PLACEMENT OF PAVEMENT IN FRONT OF THE CURB AND GUTTER, THE CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE AT ALL TIMES. THE METHOD(S) USED SHALL BE APPROVED BY THE ENGINEER. PAYMENT FOR THIS WORK SHALL BE CONSIDERED INCLUDED IN THE PRICE BID FOR THE VARIOUS CONTRACT ITEMS.

TRANSVERSE EXPANSION JOINTS SHALL BE PLACED IN CONCRETE WALKS AT 45' INTERVALS.

HT39710 5/6/2022
RI00657.DGN

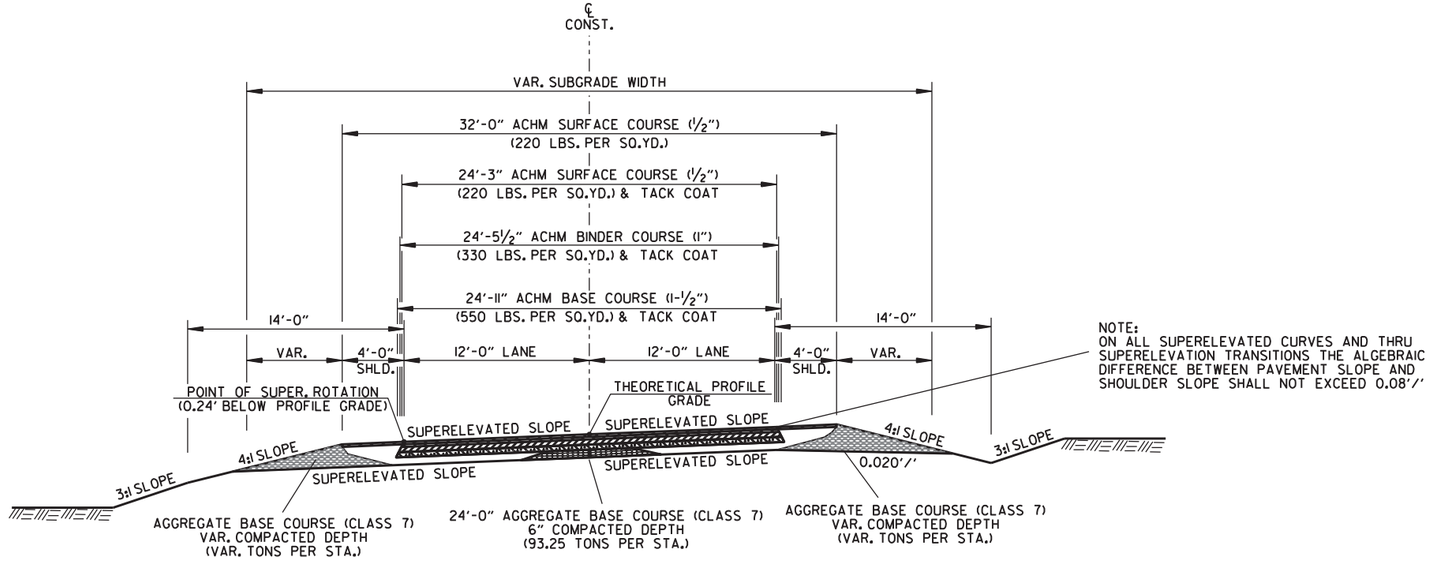
TYPICAL SECTIONS OF IMPROVEMENT

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	15	418
		TYPICAL SECTIONS OF IMPROVEMENT				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

May 17 2022 11:55 AM

DocuSign

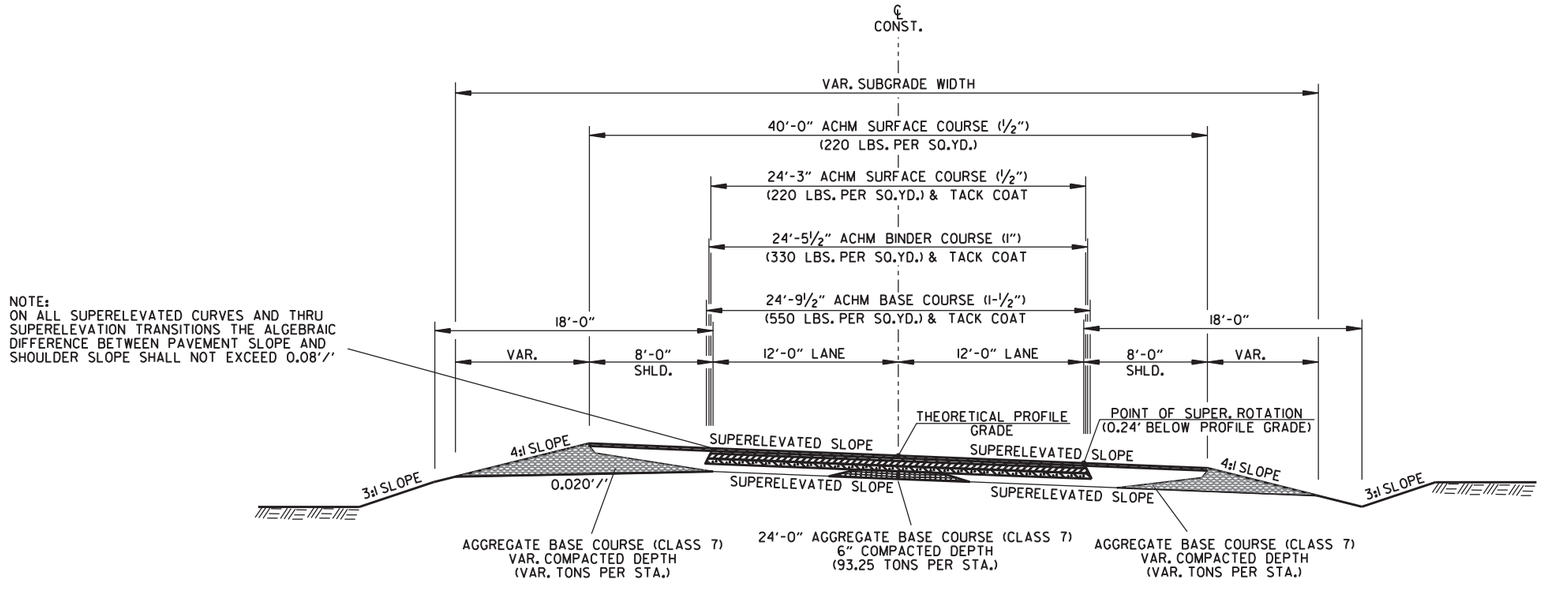


CLINTON SCHOOL RD.
TYPICAL SECTION OF IMPROVEMENT
OPEN SHOULDER
FULL DEPTH
SUPERELEVATED

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.

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



KATHLEEN ST. CONNECTOR
TYPICAL SECTION OF IMPROVEMENT
OPEN SHOULDER
FULL DEPTH
SUPERELEVATED

HT39710 5/6/2022
R100657.DGN

TYPICAL SECTIONS OF IMPROVEMENT

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	16	418
		SPECIAL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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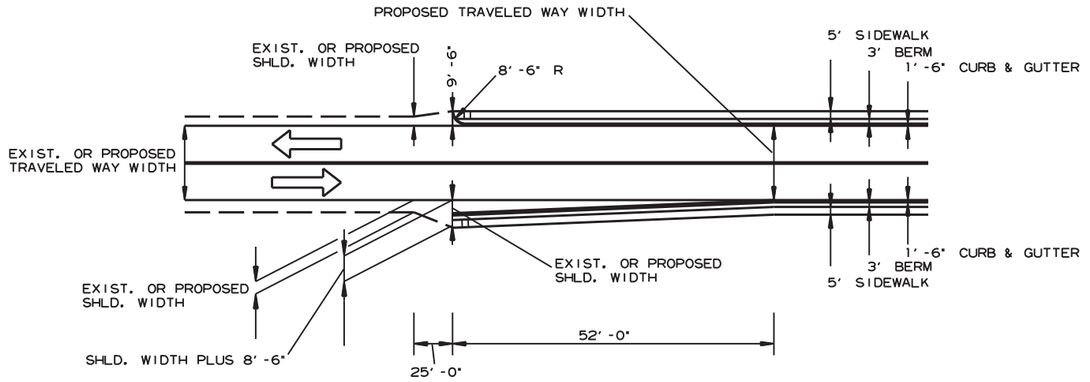
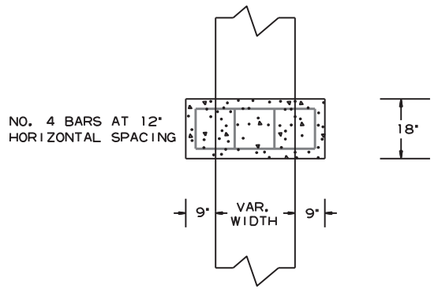
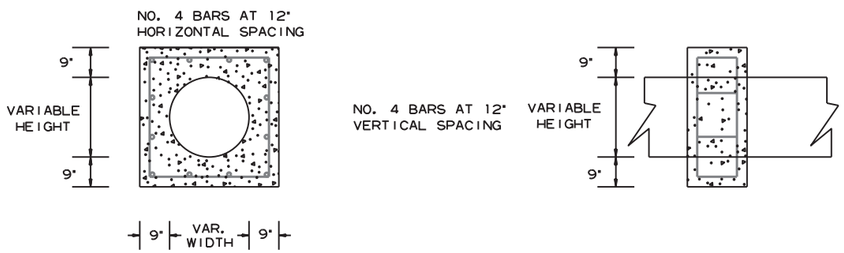


TRANSITION FROM OPEN SHOULDER TO CURB & GUTTER SECTION CLINTON SCHOOL RD.



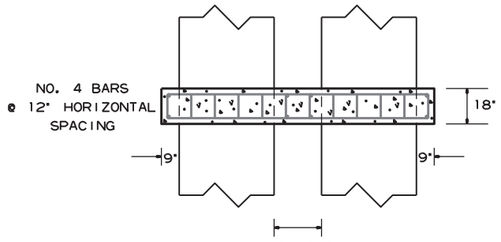
TOP VIEW

MIN 3" COVER



FRONT VIEW SIDE VIEW

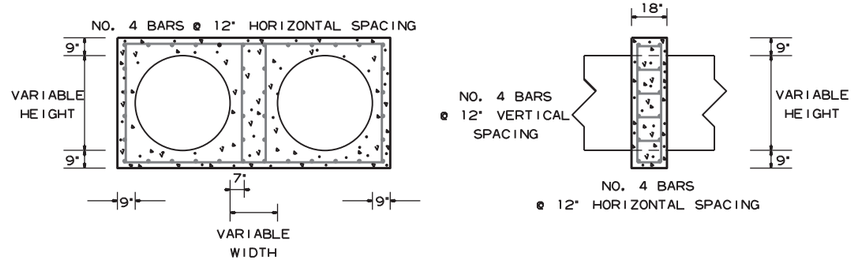
PIPE EXTENSION REINFORCED CONCRETE COLLAR DETAIL



TOP VIEW

NOTE: PIPE COLLAR TO BE UTILIZED AS APPROVED BY THE ENGINEER.

MIN. 3" COVER



FRONT VIEW SIDE VIEW

PIPE EXTENSION REINFORCED CONCRETE COLLAR DETAIL

HT39710 5/4/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	17	418
		SPECIAL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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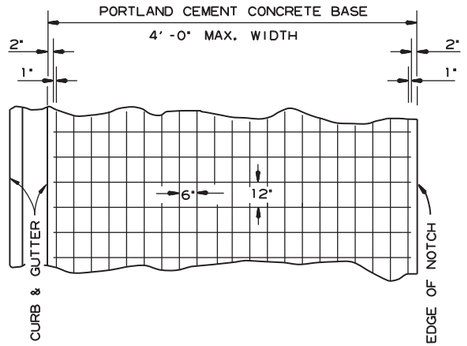
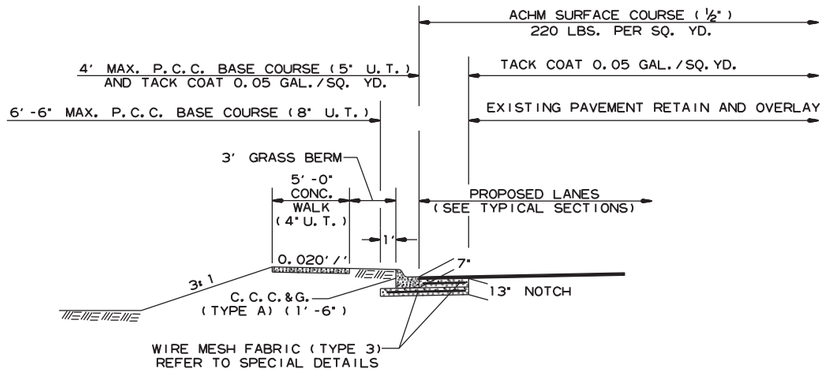


6" X 12" MESH FABRIC (TYPE 3) (W5.5 X W2.9) = 4.26 LBS./SQ.YD.

NOTES:

1. LAP MESH FABRIC MIN. 12" LONGITUDINALLY AND MIN. 6" TRANSVERSELY.
2. MESH FABRIC IS NOT REQUIRED WHEN WIDTH OF PORTLAND CEMENT CONCRETE BASE IS LESS THAN 12".
3. MESH FABRIC (TYPE 3) WILL NOT BE PAID FOR DIRECTLY, BUT FULL COMPENSATION THEREFORE WILL BE CONSIDERED INCLUDED IN THE CONTRACT PRICE BID PER SQ. YD. FOR PORTLAND CEMENT CONCRETE BASE (5" AND 8" U.T.)

DETAIL OF REINFORCING STEEL FOR PAVEMENT (MESH FABRIC TYPE 3)



P.C.C. BASE WIDENING DETAIL

P.C.C. BASE WIDENING TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER.

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DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	18	418
		SPECIAL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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6.0" Radius, 1.3" Border, Black on Orange;
"Job XXXXXX" C 2K; "Start Date Mo Year" C 2K;
"Est Completion Mo Year" C 2K; "IDRIVE " Arial;
" ARKANSAS.COM " Arial;

CONSTRUCTION PROJECT INFORMATION SIGN

HT39710 5/4/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	19	418
		SPECIAL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
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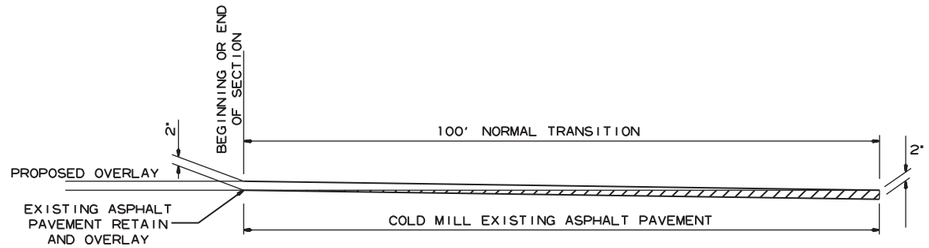
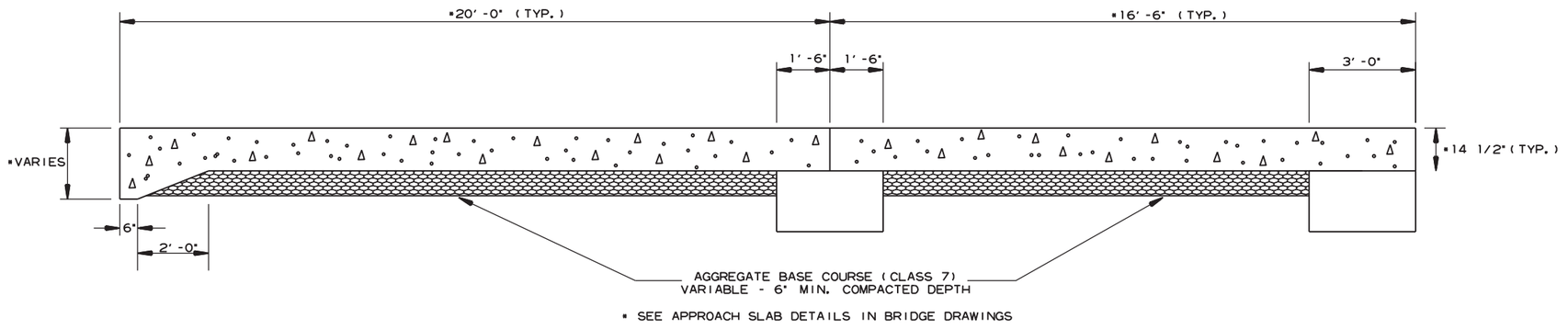


DETAIL FOR TRANSITIONS



* SEE APPROACH SLAB DETAILS IN BRIDGE DRAWINGS

SECTION OF APPROACH SLAB

HT39710 5/4/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	20	418
		SPECIAL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
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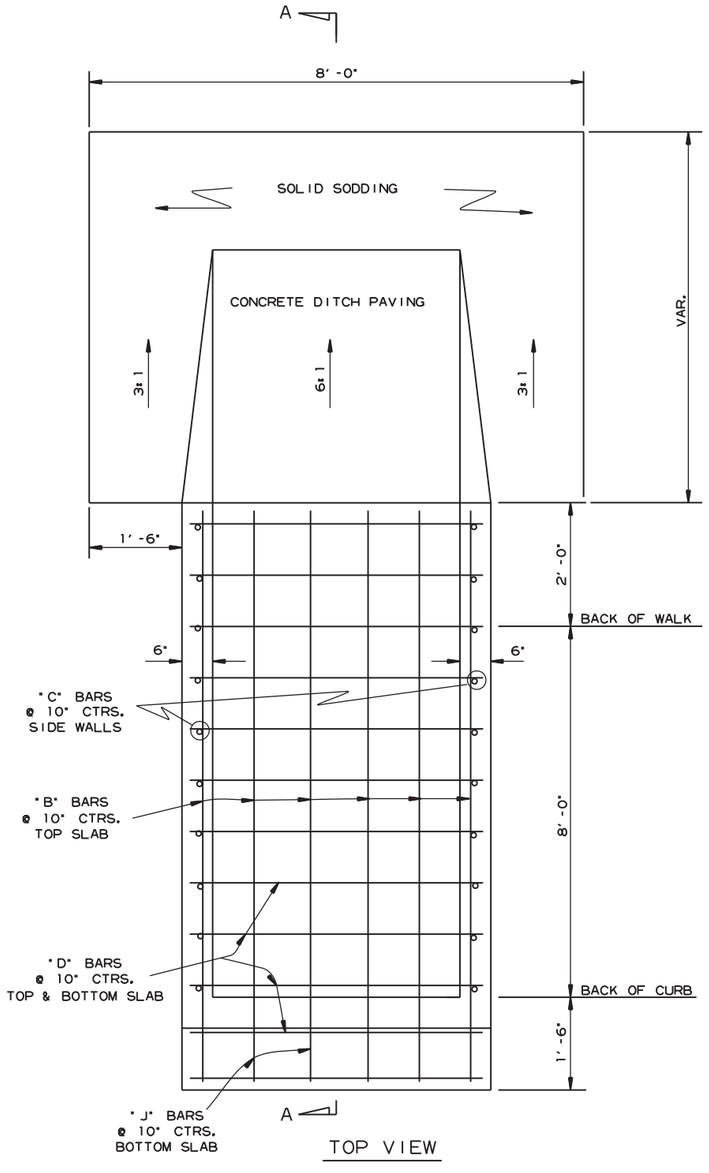
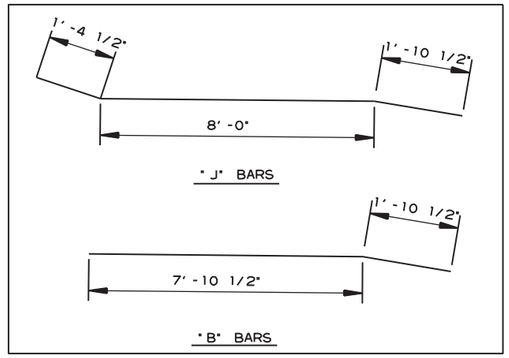


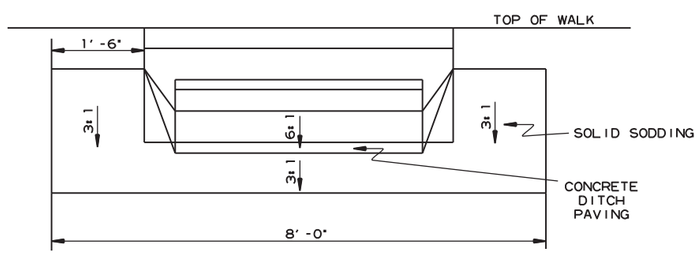
TOP VIEW

BAR DIAGRAM

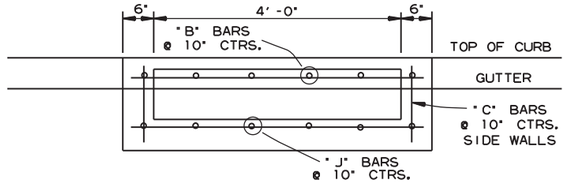


CLASS A CONC.	REINF. STEEL-RDWY. GRADE 60
CU. YDS.	POUND
2.53	207

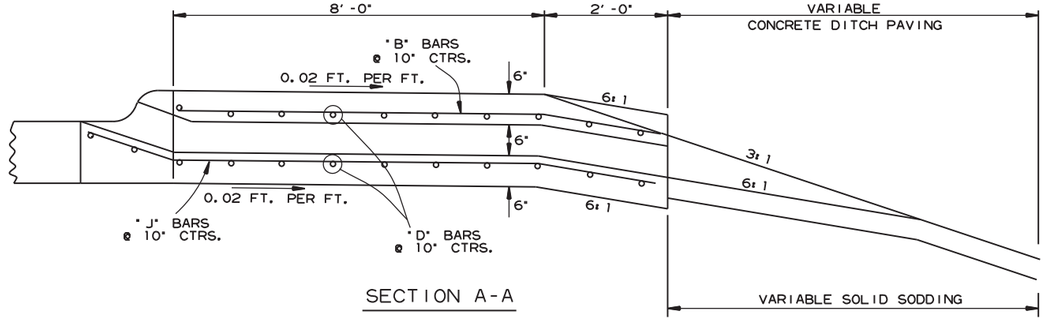
QUANTITIES FOR INFORMATION ONLY
DROP INLET (TYPE SPECIAL)



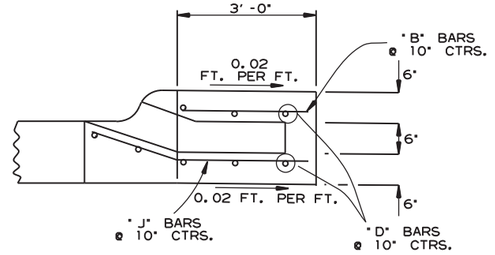
BACK VIEW



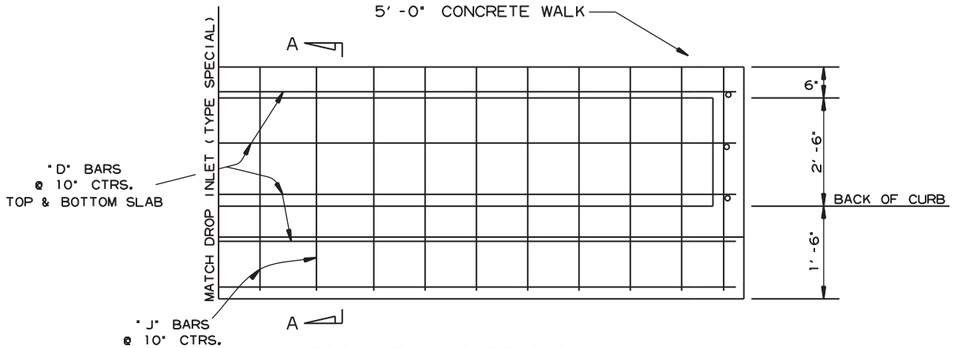
FRONT VIEW



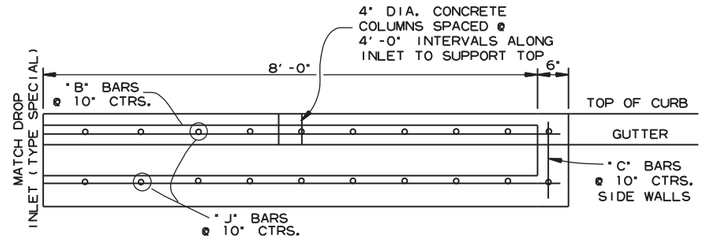
SECTION A-A



SECTION A-A - EXTENSION



TOP VIEW - EXTENSION



FRONT VIEW - EXTENSION

GENERAL NOTES:

1. ALL EXPOSED CORNERS TO HAVE 3/4" CHAMFER.
2. ALL REINF. BARS SHALL BE #4 AND HAVE 1 1/2" COVER.
3. DROP INLETS AND EXTENSIONS ON CURVED SECTIONS SHALL CONFORM TO THE CURVATURE OF THE CURB.
4. DURING CONSTRUCTION OF THE ROADWAY THE CONTRACTOR SHALL MAINTAIN DRAINAGE INTO OR AROUND THE DROP INLET AS APPROVED BY THE ENGINEER.
5. PAYMENT FOR CURB AND/OR CURB AND GUTTER WITHIN THE LIMITS OF DROP INLETS AND DROP INLET EXTENSIONS SHALL BE CONSIDERED INCLUDED IN PAYMENT MADE FOR DROP INLETS AND/OR DROP INLET EXTENSIONS.
6. CONCRETE DITCH PAVING & SOLID SODDING SHALL BE PAID FOR SEPARATELY.
7. CONSTRUCT EXTENSIONS UPSTREAM OF DROP INLET UNLESS OTHERWISE SPECIFIED.

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DROP INLET (TYPE SPECIAL)

SPECIAL DETAILS

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	21	418
		SPECIAL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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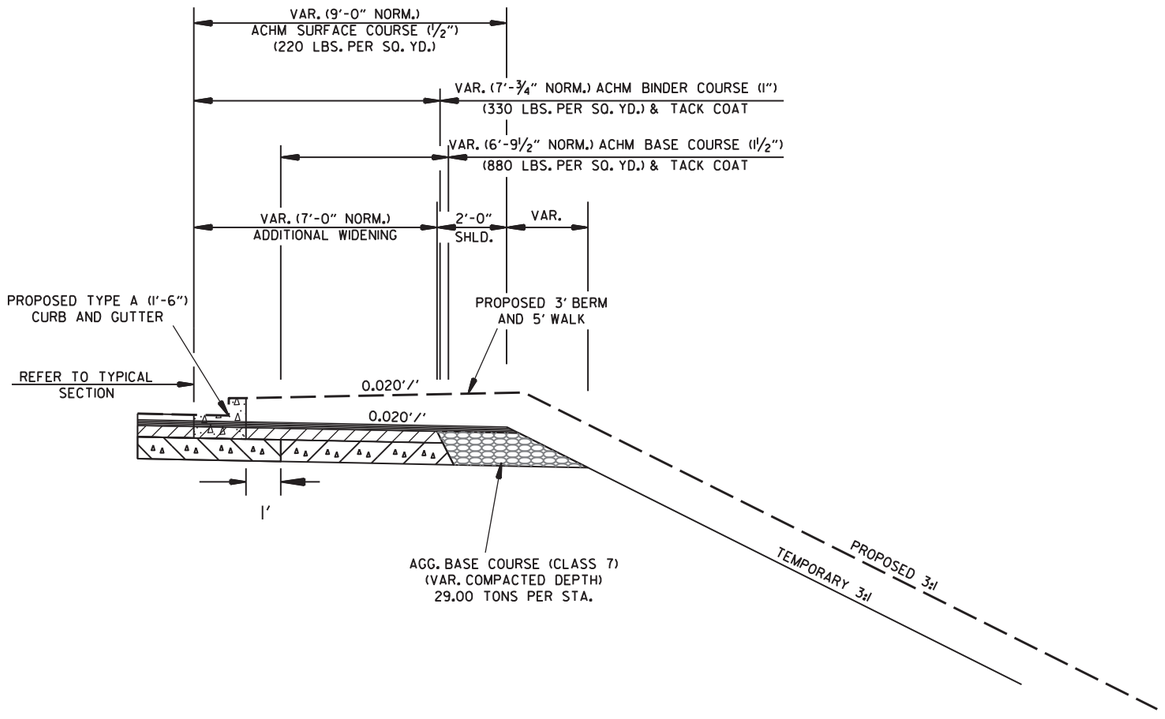

ADDITIONAL WIDENING FOR MAINTENANCE OF TRAFFIC (STAGE I WIDENING ON RT.)

STA. 184+84.00 - STA. 194+30.00

HT39710 5/4/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	22	418
		SPECIAL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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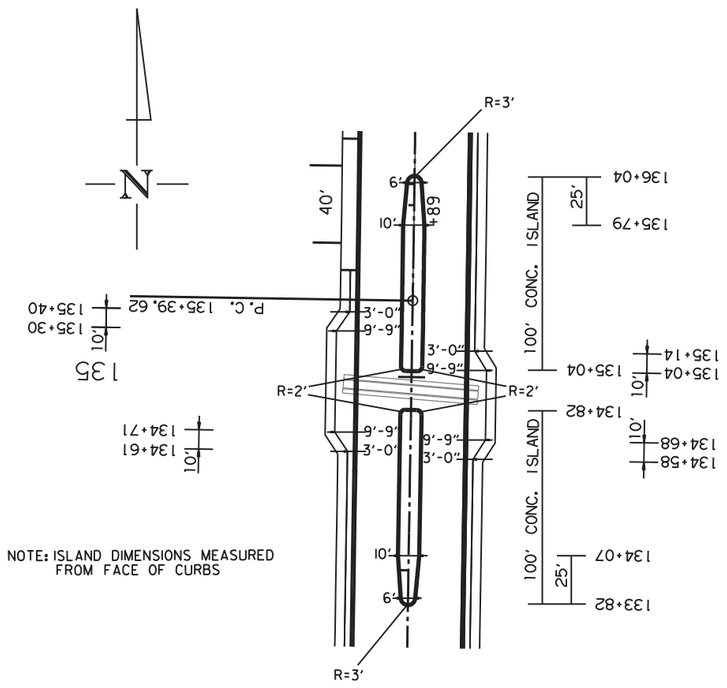
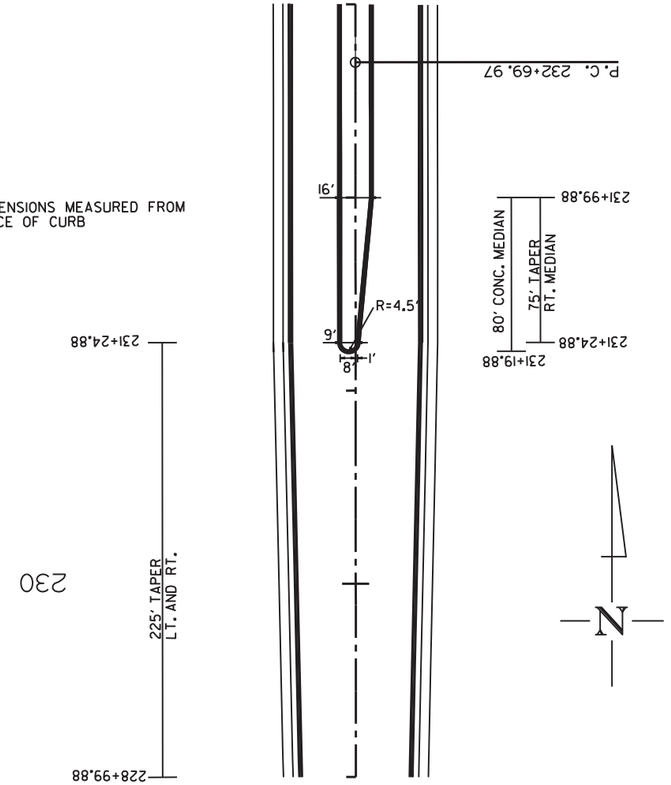


HWY. 18S
AT-GRADE RAILROAD ISLAND DETAILS

NOTE: DIMENSIONS MEASURED FROM FACE OF CURB



HWY. 18S
MEDIAN DETAIL

HT39710 5/4/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	23	418
		SPECIAL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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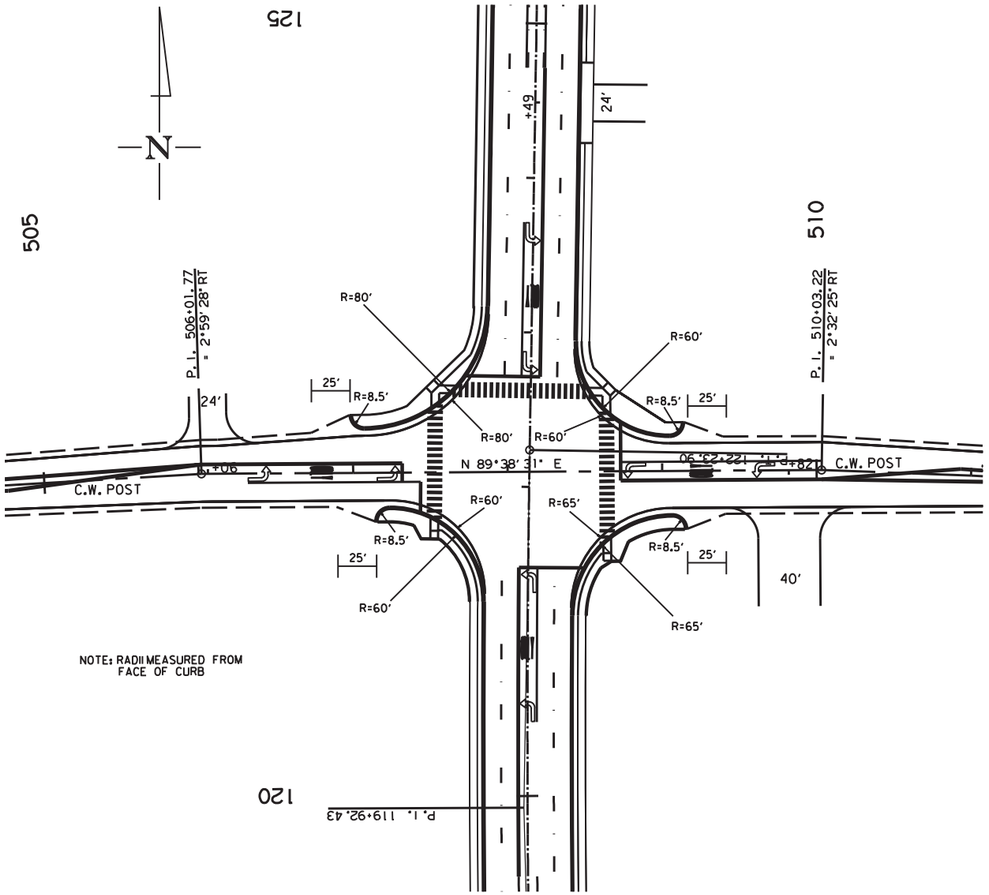
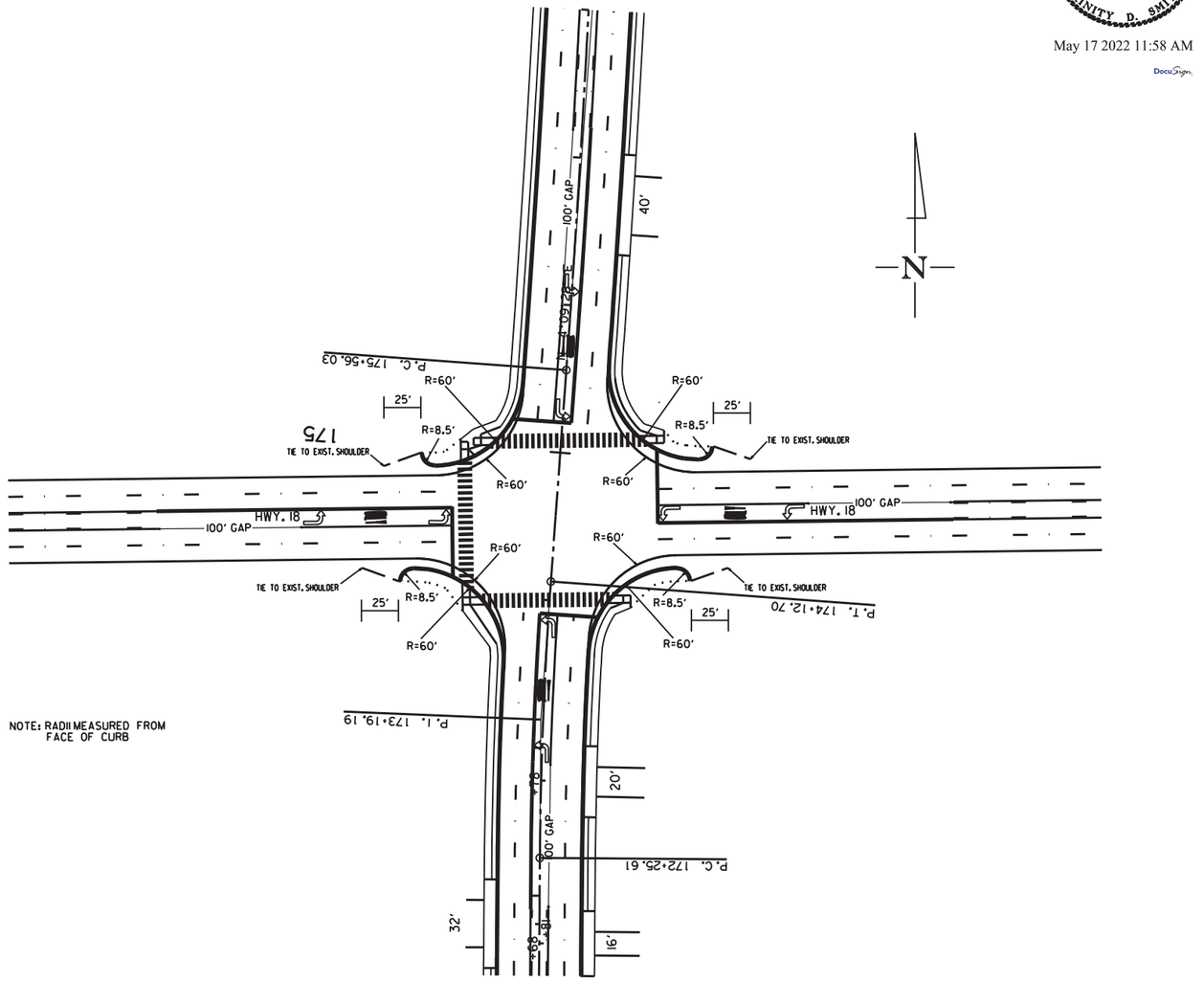


HWY. 18S/C.W. POST
INTERSECTION DETAILS



HWY. 18S/HWY. 18
INTERSECTION DETAILS

HT39710 5/4/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	24	418
		SPECIAL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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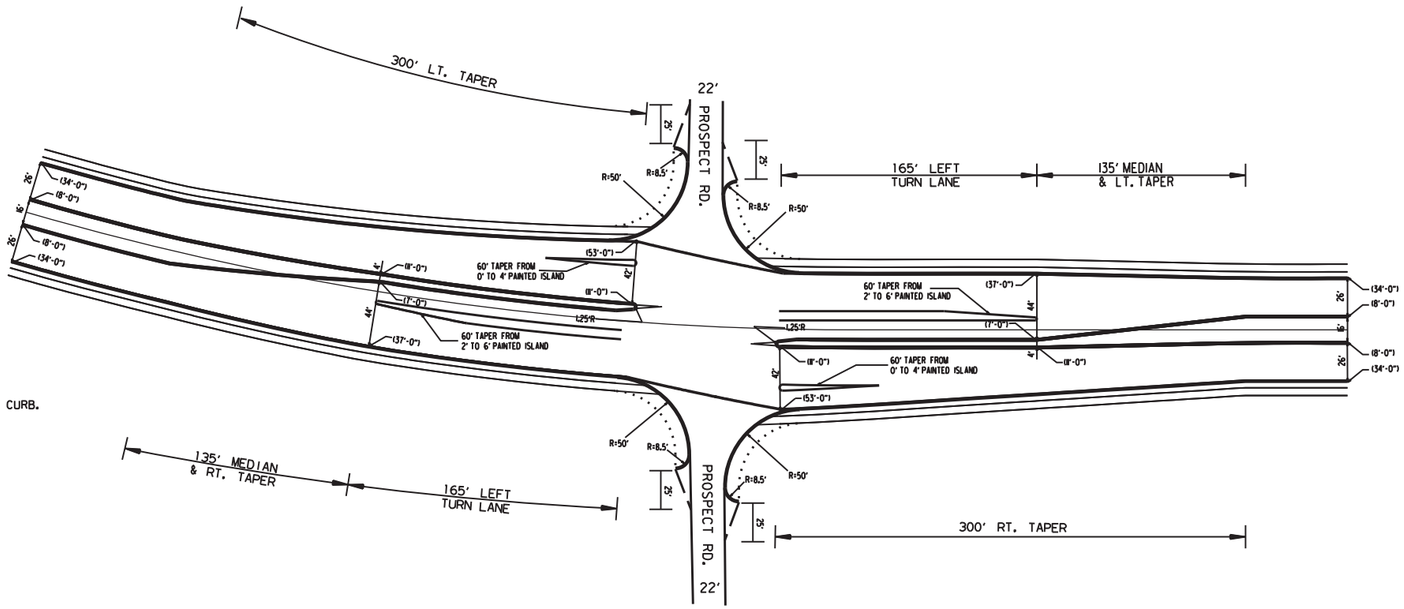
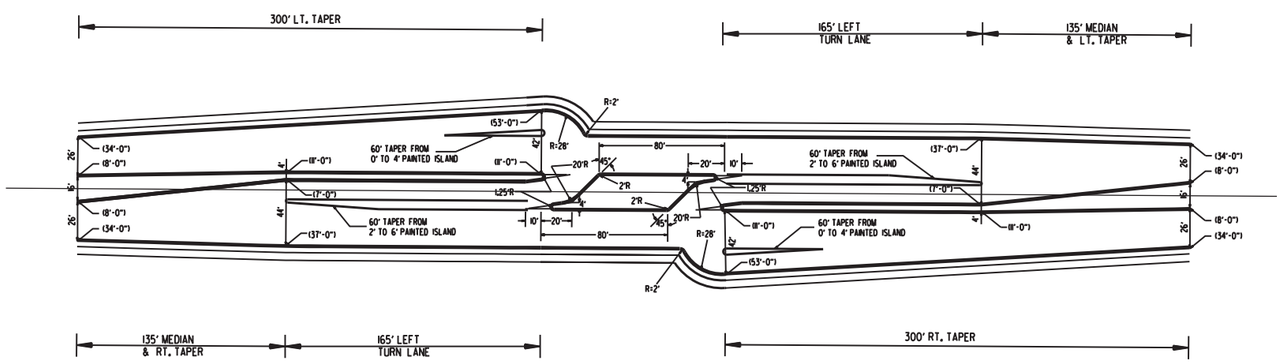


NOTE: ALL DIMENSIONS MEASURED FROM FACE OF CURB.

DISTANCES SHOWN IN PARENTHESE ( ) ARE MEASURED FROM C.L. CONST. TO FACE OF CURB.

HWY. 18S/PROSPECT RD.
PARTIAL MEDIAN BREAK DETAILS



NOTE: ALL DIMENSIONS MEASURED FROM FACE OF CURB.

DISTANCES SHOWN IN PARENTHESE ( ) ARE MEASURED FROM C.L. CONST. TO FACE OF CURB.

HWY. 18S
U-TURN MEDIAN BREAK DETAILS
STA. 243+39.88 TO STA. 250+59.88
STA. 263+39.88 TO STA. 270+59.88
STA. 305+39.88 TO STA. 312+59.88

HT39710 5/4/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	25	418
		SPECIAL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

May 17 2022 11:59 AM

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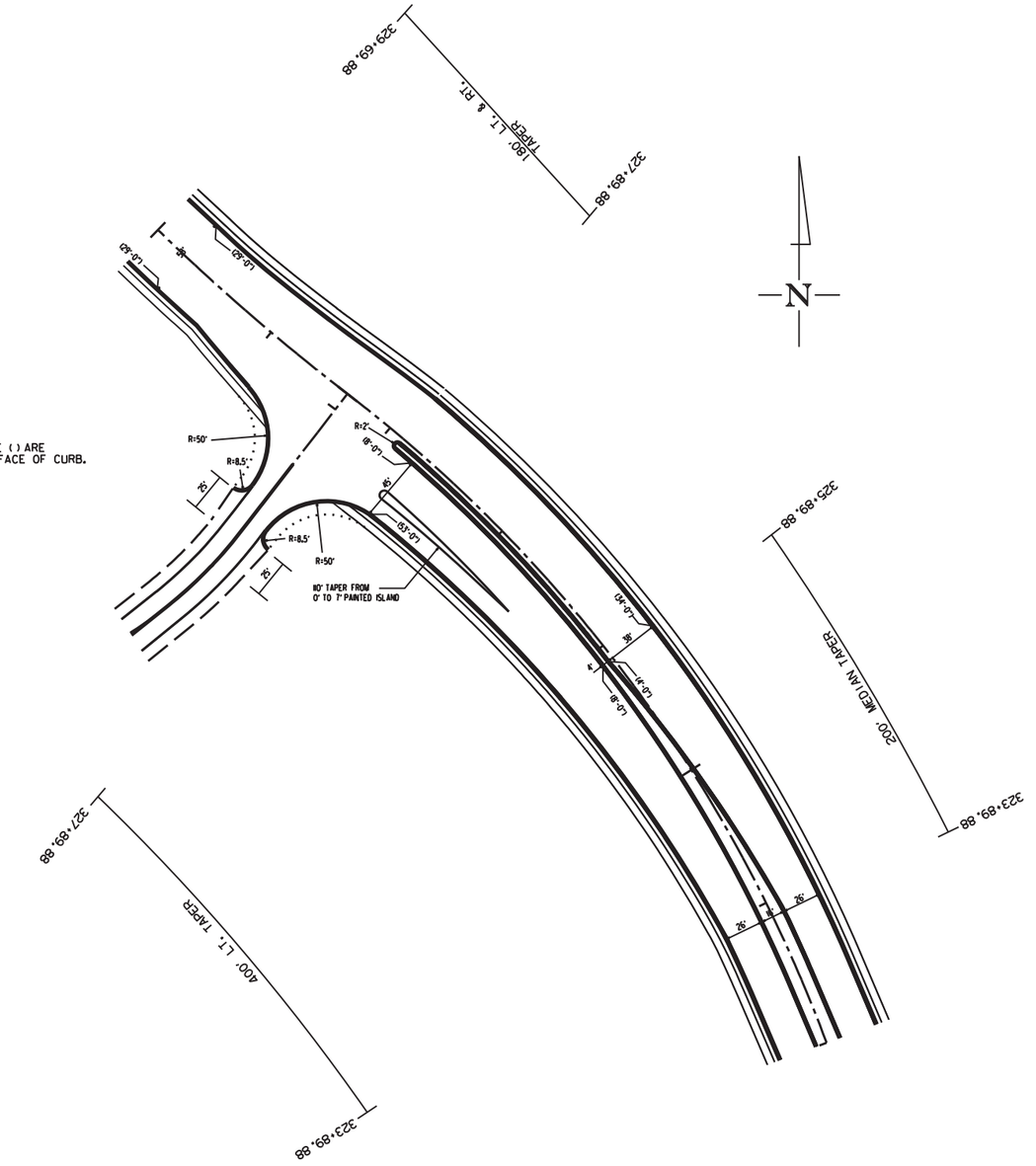
NOTE: ALL DIMENSIONS MEASURED FROM FACE OF CURB.

DISTANCES SHOWN IN PARENTHESE ( ) ARE MEASURED FROM C.L. CONST. TO FACE OF CURB.



HWY. 18S/KATHLEEN ST. CONNECTOR DETAILS

HT39710 5/4/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	26	418
		SPECIAL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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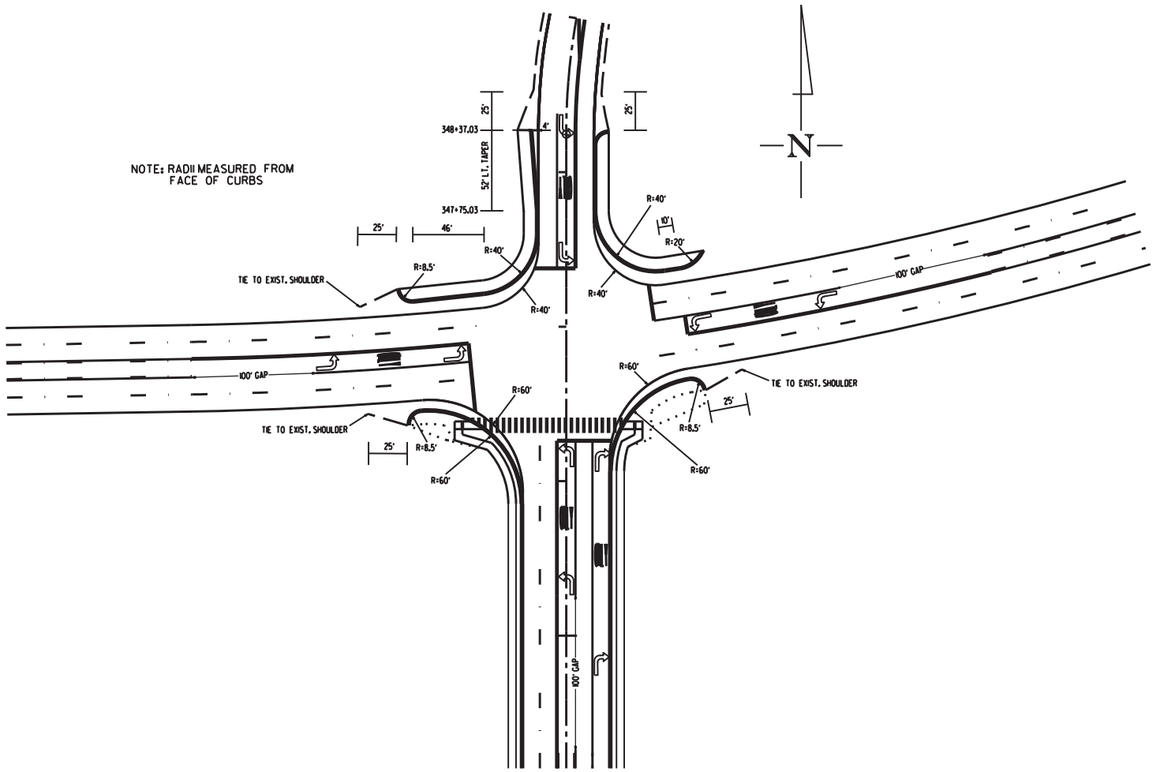


HWY. 18S/HWY. 49/CLINTON SCHOOL RD.
INTERSECTION DETAILS

HT39710 5/4/2022
R100657.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		27	418
				JOB NO.		100657		

① SPECIAL DETAILS

STATE OF ARKANSAS
Sep 9 2021 9:37 AM
LICENSED PROFESSIONAL ENGINEER
No. 9235
CHARLES R. ELLIS

TABULAR DATA BY: MCB DATE: 08/25/21
CHECKED BY: RD DATE: 08/31/21

INLET WINGWALL TABLE

OVER ALL WIDTH	CLEAR HEIGHT	FOOTING THK.	WING WALL THK.	BOX SKEW (DEG.)	SLOPE	HDWL LENGTH	HEEL	WALL HEIGHT		WINGWALL ANGLE (DEGREE)		FOOTING WIDTH AT WALL END	WIDTH OF WING FOOTINGS AT HDWL		FOOTING DIMENSION PARALLEL WITH HDWL		LENGTH OF WINGWALLS		LENGTH OF FOOTING HEEL	
								AT HDWL	AT WING END	WING A	WING B		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
11'-8"	3'-0"	0'-9"	0'-8"	0	2:1	10'-8"	1'-0"	3'-10"	1'-0"	30	30	2'-2"	2'-2"	2'-2"	0'-0"	0'-0"	6'-6"	6'-6"	3'-4 5/8"	8'-4 5/8"

CLASS "S" CONCRETE (Includes apron)	REINFORCING STEEL (Includes apron and laps if required)
INLET	INLET
CU.YD	.BS.
2.57	262

WING	F1 BAR SIZE	F1 MAX. SPACING	F1 NO. REQ'D	F1 LENGTHS VARY	F1 LENGTHS	F2 BAR SIZE	F2 SPACING	F2 NO. REQ'D	F2 LENGTHS	F3 BAR SIZE	F3 SPACING	F3 NO. REQ'D	F3 LENGTHS	F4 BAR SIZE	F4 SPACING	F4 NO. REQ'D	F4 LENGTHS VARY	F5 BAR SIZE	F5 SPACING	F5 NO. REQ'D	F5 LENGTHS
WING A	4	12	7	L	L -	-	-	-	L -	-	-	-	L -	4	18	2	Min	4	18	2	6'-2"
				X	X -				X -				X -				Max				
				Y	Y -				Y -				Y -				Min				
																	Max				
WING B	4	12	7	L	L -	-	-	-	L -	-	-	-	L -	4	18	2	Min	4	18	2	6'-2"
				X	X -				X -				X -				Max				
				Y	Y -				Y -				Y -				Min				
																	Max				

WING	F6 BAR SIZE	F6 SPACING	F6 NO. REQ'D	F6 LENGTHS VARY	F6 LENGTHS	F7 BAR SIZE	F7 NO. REQ'D	F7 LENGTHS	F8 BAR SIZE	F8 SPACING	F8 NO. REQ'D	F8 LENGTHS VARY	F9 BAR SIZE	F9 SPACING	F9 NO. REQ'D	F9 LENGTHS	F10 BAR SIZE	F10 NO. REQ'D	F10 LENGTHS	F11 BAR SIZE	F11 NO. REQ'D	F11 LENGTHS	F12 BAR SIZE	F12 SPACING	F12 NO. REQ'D	F12 LENGTHS	REINF. STEEL QTY. PER WING LBS)
WING A	4	18	5	L	Min 2'-7"	4	6	5'-3"	6	18	4	Min	-	-	-	Min	4	2	6'-8"	4	2	7'-7"	6	12	3	L 3'-4'	131
				X	Max 5'-3"							1'-8"				-										X 1'-8'	
					Min 1'-4"							Max				Max											
				Y	Max 1'-4"							1'-8"				-											
					Min 1'-4"																						
					Max 4'-0"																						
WING B	4	18	5	L	Min 2'-7"	4	6	5'-3"	6	18	4	Min	-	-	-	Min	4	2	6'-8"	4	2	7'-7"	6	12	3	L 3'-4'	131
				X	Max 5'-3"							1'-8"				-										X 1'-8'	
					Min 1'-4"							Max				Max											
				Y	Max 1'-4"							1'-8"				-											
					Min 1'-4"																						
					Max 4'-0"																						

MID-SECTION BAR LAP TABLE

# of Long. Laps Req'd.	SL = SectionLength
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"

Bar Pin Dia. Table	
#4	3"
#5	3 3/4"
#6	4 1/2"
#7	5 1/4"
#8	6"

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.

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

INLET SKEWED END SECTION

| 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 "a" SIZE | "a" SPACING | "a" LENGTHS VARY | "a" NO. REQ'D | TOP SLAB REINFORCING STEEL "c" SIZE | "c" SPACING | "c" LENGTHS VARY | "c" NO. REQ'D | BOTTOM SLAB REINFORCING STEEL "d" SIZE | "d" SPACING | "d" LENGTHS VARY | "d" NO. REQ'D | BOTTOM SLAB REINFORCING STEEL "f" SIZE | "f" SPACING | "f" LENGTHS VARY | "f" NO. REQ'D | SIDE WALL REINFORCING STEEL "f0" SIZE | "f0" SPACING | "f0" NO. REQ'D | "f0" LENGTH | INTERIOR WALL REINFORCING STEEL "f1" SIZE | "f1" SPACING | "f1" NO. REQ'D | "f1" LENGTH | TOP SLAB DISTRIBUTION REINFORCING STEEL "g" SIZE | "g" SPACING | "g" NO. REQ'D | "g" LENGTHS VARY | BOTTOM SLAB DISTRIBUTION REINFORCING STEEL "e" SIZE | "e" SPACING | "e" NO. REQ'D | "e" LENGTHS VARY | SIDE WALL DISTRIBUTION REINFORCING STEEL "d1" SIZE | "d1" SPACING | "d1" NO. REQ'D | "d1" LENGTH | INTERIOR WALL DISTRIBUTION REINFORCING STEEL "d2" SIZE | "d2" SPACING | "d2" NO. REQ'D | "d2" LENGTH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		28	418
				JOB NO.		100657		
				①		SPECIAL DETAILS		

STATE OF ARKANSAS
Sep 9 2021 9:37 AM
LICENSED PROFESSIONAL ENGINEER
* * *
No. 9235
CHARLES R. ELLIS

TABULAR DATA BY: MCB DATE: 08/25/21
CHECKED BY: RD DATE: 08/31/21

OUTLET WINGWALL TABLE

OVER ALL WIDTH	CLEAR HEIGHT	FOOTING THK.	WING WALL THK.	BOX SKEW (DEG.)	SLOPE	HDWL LENGTH	HEEL	WALL HEIGHT		WINGWALL ANGLE (DEGREE)		FOOTING WIDTH AT WALL END	WIDTH OF WING FOOTINGS AT HDWL		FOOTING DIMENSION PARALLEL WITH HDWL		LENGTH OF WINGWALLS		LENGTH OF FOOTING HEEL	
								AT HDWL	AT WING END	WING A	WING B		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
11'-8"	5'-0"	0'-9"	0'-8"	0	2:1	10'-8"	1'-0"	3'-10"	1'-0"	30	30	2'-2"	2'-2"	2'-2"	0'-0"	0'-0"	6'-6"	6'-6"	3'-4 5/8"	8'-4 5/8"

CLASS "S" CONCRETE (Includes apron)	REINFORCING STEEL (Includes apron and laps if required)
OUTLET	OUTLET
CU.YD	LBS.
2.97	262

WING	F1 BAR SIZE	F1 MAX. SPACING	F1 NO. REQ'D	F1 LENGTHS VARY	F1	F2 BAR SIZE	F2 SPACING	F2 NO. REQ'D	F2 LENGTHS	F3 BAR SIZE	F3 SPACING	F3 NO. REQ'D	F3 LENGTHS	F4 BAR SIZE	F4 SPACING	F4 NO. REQ'D	F4 LENGTHS VARY	F5 BAR SIZE	F5 SPACING	F5 NO. REQ'D	F5 LENGTHS	F6 BAR SIZE	F6 SPACING	F6 NO. REQ'D	F6 LENGTHS VARY	F6	F7 BAR SIZE	F7 NO. REQ'D	F7 LENGTHS	F8 BAR SIZE	F8 SPACING	F8 NO. REQ'D	F8 LENGTHS VARY	F9 BAR SIZE	F9 SPACING	F9 NO. REQ'D	F9 LENGTHS	F10 BAR SIZE	F10 NO. REQ'D	F10 LENGTHS	F11 BAR SIZE	F11 NO. REQ'D	F11 LENGTHS	F12 BAR SIZE	F12 SPACING	F12 NO. REQ'D	F12 LENGTHS	REINF. STEEL QTY. PER WING (LBS)
WING A	4	12	7	L Min	2'-0"	-	-	-	-	-	-	-	-	4	18	2	Min	4	18	2	6'-2"	4	18	5	L Min	2'-7"	4	6	9'-3"	6	18	4	Min	-	-	-	-	4	2	6'-8"	4	2	7'-7"	6	12	3	L 3'-4"	131
				L Max	4'-8"												3'-8"								Max	5'-3"							1'-8"				Max									X 1'-3"	
				X Min	0'-9"			X	-			X	-				Max					X	Min	1'-4"																					
				X Max	0'-9"																		Max	1'-4"																					
				Y Min	1'-4"			Y	-			Y	-				Min					Y	Min	1'-4'																					
				Y Max	4'-0"												3'-8"						Max	4'-0'																					
WING B	4	12	7	L Min	2'-0"	-	-	-	-	-	-	-	-	4	18	2	Min	4	18	2	6'-2"	4	18	5	L Min	2'-7"	4	6	9'-3"	6	18	4	Min	-	-	-	-	4	2	6'-8"	4	2	7'-7"	6	12	3	L 3'-4"	131
				L Max	4'-8"												3'-8"								Max	5'-3"							1'-8"				Max									X 1'-3"	
				X Min	0'-9"			X	-			X	-				Max					X	Min	1'-4"																					
				X Max	0'-9"																		Max	1'-4"																					
				Y Min	1'-4"			Y	-			Y	-				Min					Y	Min	1'-4'																					
				Y Max	4'-0"												3'-8"						Max	4'-0'																					

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

Bar Pin Dia. Table	
#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)."

OUTLET SKEWED END SECTION

| 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 "a" SIZE | "a" SPACING | "a" LENGTHS VARY | "a" NO. REQ'D | TOP SLAB REINFORCING STEEL "c" SIZE | "c" SPACING | "c" LENGTHS VARY | "c" NO. REQ'D | BOTTOM SLAB REINFORCING STEEL "d" SIZE | "d" SPACING | "d" LENGTHS VARY | "d" NO. REQ'D | BOTTOM SLAB REINFORCING STEEL "f" SIZE | "f" SPACING | "f" LENGTHS VARY | "f" NO. REQ'D | SIDE WALL REINFORCING STEEL "f0" SIZE | "f0" SPACING | "f0" NO. REQ'D | "f0" LENGTH | INTERIOR WALL REINFORCING STEEL "f1" SIZE | "f1" SPACING | "f1" NO. REQ'D | "f1" LENGTH | TOP SLAB DISTRIBUTION REINFORCING STEEL "g" SIZE | "g" SPACING | "g" NO. REQ'D | "g" LENGTHS VARY | BOTTOM SLAB DISTRIBUTION REINFORCING STEEL "e" SIZE | "e" SPACING | "e" NO. REQ'D | "e" LENGTHS VARY | SIDE WALL DISTRIBUTION REINFORCING STEEL "d1" SIZE | "d1" SPACING | "d1" NO. REQ'D | "d1" LENGTH | INTERIOR WALL DISTRIBUTION REINFORCING STEEL "d2" SIZE | "d2" SPACING | "d2" NO. REQ'D | "d2" LENGTH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		29	418
				JOB NO.		100657		

① SPECIAL DETAILS

STATE OF ARKANSAS
Sep 9 2021 9:27 AM
LICENSED PROFESSIONAL ENGINEER
* * *
No. 9235
CHARLES R. ELLIS

TABULAR DATA BY: MCB DATE: 08/25/21
CHECKED BY: RD DATE: 08/25/21

INLET WINGWALL TABLE

OVER ALL WIDTH	CLEAR HEIGHT	FOOTING THK.	WING WALL THK.	BOX SKEW (DEG.)	SLOPE	HDWL LENGTH	HEEL	WALL HEIGHT AT HDWL	WALL HEIGHT AT WING END	WINGWALL ANGLE (DEGREE) WING A	WINGWALL ANGLE (DEGREE) WING B	FOOTING WIDTH AT WALL END	WIDTH OF WING FOOTINGS AT HDWL WING A	WIDTH OF WING FOOTINGS AT HDWL WING B	FOOTING DIMENSION PARALEL WITH HDWL WING A	FOOTING DIMENSION PARALEL WITH HDWL WING B	LENGTH OF WINGWALLS WING A	LENGTH OF WINGWALLS WING B	LENGTH OF FOOTING HEEL WING A	LENGTH OF FOOTING HEEL WING B	CLASS "S" CONCRETE (Includes apron) INLET	REINFORCING STEEL (Includes apron and laps if required) INLET
OW	H	WB	CW	SK	SL	K	HL	WH1	WH2	AF1	AF2	WE	WF1	WF2	G1	G2	W1	W2	W3	W4	CU.YD	LBS.
32'-4"	5'-0"	0'-9"	0'-8"	0	3:1	31'-4"	1'-0"	5'-10"	1'-8"	30	30	2'-2"	2'-11 3/4"	2'-11 3/4"	0'-11 1/4"	0'-11 1/4"	14'-0"	14'-0"	15'-10 5/8"	15'-10 5/8"	7.24	630

WING	F1 BAR SIZE	F1 MAX SPACING	F1 NO. REQD	F1 LENGTHS VARY			F2 BAR SIZE	F2 SPACING	F2 NO. REQD	F2 LENGTHS	F3 BAR SIZE	F3 SPACING	F3 NO. REQD	F3 LENGTHS	F4 BAR SIZE	F4 SPACING	F4 NO. REQD	F4 LENGTHS VARY	F5 BAR SIZE	F5 SPACING	F5 NO. REQD	F5 LENGTHS	F6 BAR SIZE	F6 SPACING	F6 NO. REQD	F6 LENGTHS VARY			F7 BAR SIZE	F7 NO. REQD	F7 LENGTHS	F8 BAR SIZE	F8 SPACING	F8 NO. REQD	F8 LENGTHS VARY	F9 BAR SIZE	F9 SPACING	F9 NO. REQD	F9 LENGTHS	F10 BAR SIZE	F10 NO. REQD	F10 LENGTHS	F11 BAR SIZE	F11 NO. REQD	F11 LENGTHS	F12 BAR SIZE	F12 SPACING	F12 NO. REQD	F12 LENGTHS		REINF. STEEL QTY. PER WING (LBS)
WING A	4	12	14	L	Min	2'-10"	-	-	-	L -	-	-	-	L -	4	18	6	Min	4	18	2	13'-8"	4	18	10	L	Min	3'-3"	4	6	16'-9"	6	18	10	Min	-	-	-	Min	4	2	14'-2"	4	2	15'-8"	6	12	5	L	3'-4"	315
					Max	7'-6"												1'-8"								Max	7'-3"							Max				-										
				X	Min	0'-9"				X -				X -				Min								X	Min	1'-4"											Max							X	1'-3"	
					Max	1'-7"												1'-4"									Max	1'-4"																				
				Y	Min	2'-2"				Y -				Y -				Max								Y	Min	2'-0"							2'-6"				-										
					Max	6'-0"												12'-2"									Max	6'-0"																				
WING B	4	12	14	L	Min	2'-10"	-	-	-	L -	-	-	-	L -	4	18	6	Min	4	18	2	13'-8"	4	18	10	L	Min	3'-3"	4	6	16'-9"	6	18	10	Min	-	-	-	Min	4	2	14'-2"	4	2	15'-8"	6	12	5	L	3'-4"	315
					Max	7'-6"												1'-8"								Max	7'-3"							Max				-										
				X	Min	0'-9"				X -				X -				Min								X	Min	1'-4"											Max							X	1'-3"	
					Max	1'-7"												1'-4"									Max	1'-4"																				
				Y	Min	2'-2"				Y -				Y -				Max								Y	Min	2'-0"							2'-6"				-										
					Max	6'-0"												12'-2"									Max	6'-0"																				

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"

Bar Pin Dia. Table	
#4	3"
#5	3 3/4"
#6	4 1/2"
#7	5 1/4"
#8	6"

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.

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

INLET SKEWED END SECTION

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 'a' SIZE	'a' SPACING	'a' LENGTHS VARY	'a' NO. REQD	'c' SIZE	'c' SPACING	'c' LENGTHS VARY	'c' NO. REQD	BOTTOM SLAB REINFORCING STEEL "d" SIZE	"d" SPACING	"d" LENGTHS VARY	"d" NO. REQD	"f" SIZE	"f" SPACING	"f" LENGTHS VARY	"f" NO. REQD	SIDE WALL REINFORCING STEEL "f0" SIZE	"f0" SPACING	"f0" NO. REQD	"f0" LENGTH	INTERIOR WALL REINFORCING STEEL "f1" SIZE	"f1" SPACING	"f1" NO. REQD	"f1" LENGTH	TOP SLAB DISTRIBUTION REINFORCING STEEL "g" SIZE	"g" SPACING	"g" NO. REQD	"g" LENGTHS VARY	BOTTOM SLAB DISTRIBUTION REINFORCING STEEL "e" SIZE	"e" SPACING	"e" NO. REQD	"e" LENGTHS VARY	SIDE WALL DISTRIBUTION REINFORCING STEEL "d1" SIZE	"d1" SPACING	"d1" NO. REQD	"d1" LENGTH	INTERIOR WALL DISTRIBUTION REINFORCING STEEL "d2" SIZE	"d2" SPACING	"d2" NO. REQD	"d2" LENGTH	CLASS "S" CONCRETE (Includes HDWL) CU. YDS.	① REINFORCING STEEL (GR 60) (Includes HDWL) LBS.
SK	SL	D	S	H	LL	T	HD	B	C	W	OW	OH			Max / Min				Max / Min				Max / Min															Max / Min							LONG / SHORT									

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		30	418
				JOB NO.		100657		

① SPECIAL DETAILS

STATE OF ARKANSAS
Charles R. Ellis Sep 9 2021 9:37 AM
LICENSED PROFESSIONAL ENGINEER
* * *
No. 9235
CHARLES R. ELLIS

TABULAR DATA BY: MCB DATE: 08/25/21
CHECKED BY: RD DATE: 08/31/21

OUTLET WINGWALL TABLE

OVER ALL WIDTH	CLEAR HEIGHT	FOOTING THK.	WING WALL THK.	BOX SKEW (DEG.)	SLOPE	HDWL LENGTH	HEEL	WALL HEIGHT AT HDWL	WALL HEIGHT AT WING END	WINGWALL ANGLE (DEGREE) WING A	WINGWALL ANGLE (DEGREE) WING B	FOOTING WIDTH AT WALL END	WIDTH OF WING FOOTINGS AT HDWL WING A	WIDTH OF WING FOOTINGS AT HDWL WING B	FOOTING DIMENSION PARALEL WITH HDWL WING A	FOOTING DIMENSION PARALEL WITH HDWL WING B	LENGTH OF WINGWALLS WING A	LENGTH OF WINGWALLS WING B	LENGTH OF FOOTING HEEL WING A	LENGTH OF FOOTING HEEL WING B
OW	H	WB	CW	SK	SL	K	HL	WH1	WH2	AF1	AF2	WE	WF1	WF2	G1	G2	W1	W2	W3	W4
32'-4"	5'-0"	0'-9"	0'-8"	0	3:1	31'-4"	1'-0"	5'-10"	1'-8"	30	30	2'-2"	2'-11 3/4"	2'-11 3/4"	0'-11 1/4"	0'-11 1/4"	14'-0"	14'-0"	15'-10 5/8"	15'-10 5/8"

CLASS "S" CONCRETE (Includes apron)	REINFORCING STEEL (Includes apron and laps if equired)
OUTLET	OUTLET
CU.YD	LBS.
8.30	630

WING	F1 BAR SIZE	F1 MAX. SPACING	F1 NO. REQD	F1 LENGTHS VARY	F1 LENGTHS	F2 BAR SIZE	F2 SPACING	F2 NO. REQD	F2 LENGTHS	F3 BAR SIZE	F3 SPACING	F3 NO. REQD	F3 LENGTHS	F4 BAR SIZE	F4 SPACING	F4 NO. REQD	F4 LENGTHS VARY	F4 LENGTHS	F5 BAR SIZE	F5 SPACING	F5 NO. REQD	F5 LENGTHS	F6 BAR SIZE	F6 SPACING	F6 NO. REQD	F6 LENGTHS VARY	F6 LENGTHS	F7 BAR SIZE	F7 NO. REQD	F7 LENGTHS	F8 BAR SIZE	F8 SPACING	F8 NO. REQD	F8 LENGTHS VARY	F8 LENGTHS	F9 BAR SIZE	F9 SPACING	F9 NO. REQD	F9 LENGTHS	F10 BAR SIZE	F10 NO. REQD	F10 LENGTHS	F11 BAR SIZE	F11 NO. REQD	F11 LENGTHS	F12 BAR SIZE	F12 SPACING	F12 NO. REQD	F12 LENGTHS	REINF. STEEL QTY. PER WING (LBS)
WING A	4	12	14	L Min	2'-10"	-	-	-	L -	-	-	-	L -	4	18	6	Min	2'-1"	4	18	2	13'-8"	4	18	10	L Min	3'-3"	4	6	16'-9"	6	18	10	Min	1'-8"	-	-	-	Min -	4	2	14'-2"	4	2	15'-8"	6	12	5	L 3'-4"	315
				L Max	7'-6"												Max	12'-1"								Max	7'-3"							Max	2'-6"				Max -									X 1'-8"	
				X Min	0'-9"				X -				X -													L Min	1'-4"																					
				X Max	1'-7"																					Max	1'-4"																					
				Y Min	2'-2"				Y -				Y -													Y Min	2'-0"																					
				Y Max	6'-0"																					Max	6'-0"																					
WING B	4	12	14	L Min	2'-10"	-	-	-	L -	-	-	-	L -	4	18	6	Min	2'-1"	4	18	2	13'-8"	4	18	10	L Min	3'-3"	4	6	16'-9"	6	18	10	Min	1'-8"	-	-	-	Min -	4	2	14'-2"	4	2	15'-8"	6	12	5	L 3'-4"	315
				L Max	7'-6"												Max	12'-1"								Max	7'-3"							Max	2'-6"				Max -									X 1'-8"	
				X Min	0'-9"				X -				X -													L Min	1'-4"																					
				X Max	1'-7"																					Max	1'-4"																					
				Y Min	2'-2"				Y -				Y -													Y Min	2'-0"																					
				Y Max	6'-0"																					Max	6'-0"																					

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

Bar Pin Dia. Table	
#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)."

OUTLET SKEWED END SECTION

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 "a" SIZE	"a" SPACING	"a" LENGTHS VARY	"a" NO. REQD	TOP SLAB REINFORCING STEEL "c" SIZE	"c" SPACING	"c" LENGTHS VARY	"c" NO. REQD	BOTTOM SLAB REINFORCING STEEL "d" SIZE	"d" SPACING	"d" LENGTHS VARY	"d" NO. REQD	BOTTOM SLAB REINFORCING STEEL "f" SIZE	"f" SPACING	"f" LENGTHS VARY	"f" NO. REQD	SIDE WALL REINFORCING STEEL "f0" SIZE	"f0" SPACING	"f0" NO. REQD	"f0" LENGTH	INTERIOR WALL REINFORCING STEEL "f1" SIZE	"f1" SPACING	"f1" NO. REQD	"f1" LENGTH	TOP SLAB DISTRIBUTION REINFORCING STEEL "g" SIZE	"g" SPACING	"g" NO. REQD	"g" LENGTHS VARY	BOTTOM SLAB DISTRIBUTION REINFORCING STEEL "e" SIZE	"e" SPACING	"e" NO. REQD	"e" LENGTHS VARY	SIDE WALL DISTRIBUTION REINFORCING STEEL "d1" SIZE	"d1" SPACING	"d1" NO. REQD	"d1" LENGTH	INTERIOR WALL DISTRIBUTION REINFORCING STEEL "d2" SIZE	"d2" SPACING	"d2" NO. REQD	"d2" LENGTH
SK	SL	D	S	H	LL	T	HD	B	C	W	OW	OH			Max				Max				Max				Max													Max							LONG			LONG
															Min				Min				Min				Min													Min							SHORT			SHORT

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

"k1" HDWL BARS SIZE	"k1" HDWL BARS LENGTH	"k1" HDWL BARS NO. REQ'D	"k2" HDWL BARS SIZE	"k2" HDWL BARS LENGTH	"k2" HDWL BARS NO. REQ'D	"h" HDWL BARS SIZE	"h" HDWL BARS LENGTH	"h" HDWL BARS Y	"h" HDWL BARS NO. REQ'D

OUTLET SLOPE SECTION(S)

R.C. BOX SECTION	DESIGN FILLDEPTH (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.)	LENGTH = OW - 4" + BENDS "a" SIZE	"a" L	Bent "b" SIZE	Bent "b" L	"c" SIZE	"c" L	"c" SPACING	"c" NO. REQ'D	BOTTOM SLAB REINFORCING STEEL LENGTH = OW - 4" + BENDS "d" SIZE	"d" L	Bent "b1" SIZE	Bent "b1" L	"f" SIZE	"f" L	"f" SPACING	"f" NO. REQ'D	SIDE WALL RENFORCING STEEL "f0" LENGTH = OH - 4" SIZE	SPACING	NO. REQ'D	LENGTH	INTERIOR WALL REINFORCING STEEL "f1" LENGTH = OH - 4" SIZE	SPACING	NO. REQ'D	LENGTH	TOP SLAB DISTRIBUTION REINFORCING STEEL "g" LENGTH = SL SIZE	SPACING	NO. REQ'D	BOTTOM SLAB DISTRIBUTION REINFORCING STEEL "e" LENGTH = SL SIZE	SPACING	NO. REQ'D	SIDE WALL DISTRIBUTION REINFORCING STEEL "d1" LENGTH = SL SIZE	SPACING	NO. REQ'D	INTERIOR WALL DISTRIBUTION REINFORCING STEEL "d2" LENGTH = SL SIZE	SPACING	NO. REQ'D
D	S	H	T	B	C	W	OW	OH	SL																																									

HDWL DEPTH HD	ADDITIONAL REINF. FOR HDWL LBS.	"h" HDWL BARS SIZE	"h" HDWL BARS Y	"h" HDWL BARS LENGTH	"h" HDWL BARS NO. REQ'D
3"	43	4	0'-11"	1'-11"	24

CLASS "S" CONCRETE CU. YDS.	REINFORCING STEEL (GR. 60) LBS.
TOTAL	
0.30	86

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.

SHEET 2 OF 2
DETAILS OF R.C. BOX CULVERT

TRIPLE BARREL BOX CULVERT
Sta. 148+23

SPECIAL DETAILS

Ver. Lui7 bl00657_c2.dgn

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		31	418
				JOB NO.		100657		

① SPECIAL DETAILS

STATE OF ARKANSAS
Sep 9 2021 9:27 AM
LICENSED PROFESSIONAL ENGINEER
* * *
No. 9235
CHARLES R. ELLIS

TABULAR DATA BY: MCB DATE: 08/25/21
CHECKED BY: RD DATE: 08/31/21

INLET WINGWALL TABLE

OVER ALL WIDTH	CLEAR HEIGHT	FOOTING THK.	WING WALL THK.	BOX SKEW (DEG.)	SLOPE	HDWL LENGTH	HEEL	WALL HEIGHT AT HDWL	WALL HEIGHT AT WING END	WINGWALL ANGLE (DEGREE) WING A	WINGWALL ANGLE (DEGREE) WING B	FOOTING WIDTH AT WALL END	WIDTH OF WING FOOTINGS AT HDWL WING A	WIDTH OF WING FOOTINGS AT HDWL WING B	FOOTING DIMENSION PARALEL WITH HDWL WING A	FOOTING DIMENSION PARALEL WITH HDWL WING B	LENGTH OF WINGWALLS WING A	LENGTH OF WINGWALLS WING B	LENGTH OF FOOTING HEEL WING A	LENGTH OF FOOTING HEEL WING B	CLASS "S" CONCRETE (Includes apron) INLET	REINFORCING STEEL (Includes apron and laps if required) INLET
OW	H	WB	CW	SK	SL	K	HL	WH1	WH2	AF1	AF2	WE	WF1	WF2	G1	G2	W1	W2	W3	W4	CU.YD	LBS.
32'-4"	5'-0"	0'-9"	0'-8"	0	3:1	31'-4"	1'-0"	5'-10"	1'-8"	30	30	2'-2"	2'-11 3/4"	2'-11 3/4"	0'-11 1/4"	0'-11 1/4"	14'-0"	14'-0"	15'-10 5/8"	15'-10 5/8"	7.24	630

WING	F1 BAR SIZE	F1 MAX SPACING	F1 NO. REQD	F1 LENGTHS VARY	F2 BAR SIZE	F2 SPACING	F2 NO. REQD	F2 LENGTHS	F3 BAR SIZE	F3 SPACING	F3 NO. REQD	F3 LENGTHS	F4 BAR SIZE	F4 SPACING	F4 NO. REQD	F4 LENGTHS VARY	F5 BAR SIZE	F5 SPACING	F5 NO. REQD	F5 LENGTHS	F6 BAR SIZE	F6 SPACING	F6 NO. REQD	F6 LENGTHS VARY	F7 BAR SIZE	F7 NO. REQD	F7 LENGTHS	F8 BAR SIZE	F8 SPACING	F8 NO. REQD	F8 LENGTHS VARY	F9 BAR SIZE	F9 SPACING	F9 NO. REQD	F9 LENGTHS	F10 BAR SIZE	F10 NO. REQD	F10 LENGTHS	F11 BAR SIZE	F11 NO. REQD	F11 LENGTHS	F12 BAR SIZE	F12 SPACING	F12 NO. REQD	F12 LENGTHS	REINF. STEEL QTY. PER WING (LBS)
WING A	4	12	14	L Min 2'-10" / Max 7'-6"; X Min 0'-9" / Max 1'-7"; Y Min 2'-2" / Max 6'-0"	-	-	-	L - / X - / Y -	-	-	-	L - / X - / Y -	4	18	6	Min 2'-1" / Max 12'-2"	4	18	2	13'-8"	4	18	10	L Min 3'-3" / Max 7'-3"; X Min 1'-4" / Max 1'-4"; Y Min 2'-0" / Max 6'-0"	4	6	16'-9"	6	18	10	Min 1'-8" / Max 2'-6"	-	-	-	Min - / Max -	4	2	14'-2"	4	2	15'-8"	6	12	5	L 3'-4" / X 1'-3"	315
WING B	4	12	14	L Min 2'-10" / Max 7'-6"; X Min 0'-9" / Max 1'-7"; Y Min 2'-2" / Max 6'-0"	-	-	-	L - / X - / Y -	-	-	-	L - / X - / Y -	4	18	6	Min 2'-1" / Max 12'-2"	4	18	2	13'-8"	4	18	10	L Min 3'-3" / Max 7'-3"; X Min 1'-4" / Max 1'-4"; Y Min 2'-0" / Max 6'-0"	4	6	16'-9"	6	18	10	Min 1'-8" / Max 2'-6"	-	-	-	Min - / Max -	4	2	14'-2"	4	2	15'-8"	6	12	5	L 3'-4" / X 1'-3"	315

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"

Bar Pin Dia. Table	
#4	3"
#5	3 3/4"
#6	4 1/2"
#7	5 1/4"
#8	6"

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.

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

INLET SKEWED END SECTION

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
SK	SL	D	S	H	LL	T	HD	B	C	W	OW	OH

TOP SLAB REINFORCING STEEL 'a' SIZE	'a' SPACING	'a' LENGTHS VARY	'a' NO. REQD	'c' SIZE	'c' SPACING	'c' LENGTHS VARY	'c' NO. REQD
		Max / Min				Max / Min	

BOTTOM SLAB REINFORCING STEEL 'd' SIZE	'd' SPACING	'd' LENGTHS VARY	'd' NO. REQD	'f' SIZE	'f' SPACING	'f' LENGTHS VARY	'f' NO. REQD
		Max / Min				Max / Min	

SIDE WALL REINFORCING STEEL "f0" SIZE	SPACING	NO. REQD	LENGTH

INTERIOR WALL REINFORCING STEEL "f1" SIZE	SPACING	NO. REQD	LENGTH

TOP SLAB DISTRIBUTION REINFORCING STEEL 'g' SIZE	SPACING	NO. REQD	LENGTHS VARY
			Max / Min

BOTTOM SLAB DISTRIBUTION REINFORCING STEEL "e" SIZE	SPACING	NO. REQD	LENGTHS VARY
			Max / Min

SIDE WALL DISTRIBUTION REINFORCING STEEL "d1" SIZE	SPACING	NO. REQD	LENGTH
			LONG / SHORT

INTERIOR WALL DISTRIBUTION REINFORCING STEEL "d2" SIZE	SPACING	NO. REQD	LENGTH
			LONG / SHORT

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

"k1" HDWL BARS SIZE	"k1" LENGTH	"k1" NO. REQ'D	"k2" HDWL BARS SIZE	"k2" LENGTH	"k2" NO. REQ'D	"h' HDWL BARS SIZE	"h' LENGTH	"h' Y	"h' NO. REQ'D

INLET SLOPE SECTION(S)

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.)
	D	S	H	T	B	C	W	OW	OH	SL

TOP SLAB REINFORCING STEEL LENGTH = OW - 4" + BENDS "a" SIZE	"a" L	Bent "b" SIZE	Bent "b" L	"c" SIZE	"c" L	SPACING	NO. REQ'D

BOTTOM SLAB REINFORCING STEEL LENGTH = OW - 4" + BENDS "d" SIZE	"d" L	Bent "b1" SIZE	Bent "b1" L	"f" SIZE	"f" L	SPACING	NO. REQ'D

SIDE WALL REINFORCING STEEL "f0" LENGTH = OH - 4" SIZE	SPACING	NO. REQ'D	LENGTH

INTERIOR WALL REINFORCING STEEL "f1" LENGTH = OH - 4" SIZE	SPACING	NO. REQ'D	LENGTH

TOP SLAB DISTRIBUTION REINFORCING STEEL "g" LENGTH = SL SIZE	SPACING	NO. REQ'D

BOTTOM SLAB DISTRIBUTION REINFORCING STEEL "e" LENGTH = SL SIZE	SPACING	NO. REQ'D

SIDE WALL DISTRIBUTION REINFORCING STEEL "d1" LENGTH = SL SIZE	SPACING	NO. REQ'D

INTERIOR WALL DISTRIBUTION REINFORCING STEEL "d2" LENGTH = SL SIZE	SPACING	NO. REQ'D

CLASS "S" CONCRETE CU. YDS.	REINFORCING STEEL (GR. 60) LBS.
0.30	86
TOTAL	
0.30	86

HDWL DEPTH HD	ADDITIONAL REINF. FOR HDWL LBS.	"h" HDWL BARS SIZE	"h" Y	"h" LENGTH	"h" NO. REQ'D
3"	43	4	0'-11"	1'-11"	34

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.

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 LENGTH = OW - 4" + BENDS "a" SIZE | "a" L | Bent "b" SIZE | Bent "b" L | "c" SIZE | "c" L | SPACING | NO. REQ'D | BOTTOM SLAB REINFORCING STEEL LENGTH = OW - 4" + BENDS "d" SIZE | "d" L | Bent "b1" SIZE | Bent "b1" L | "f" SIZE | "f" L | SPACING | NO. REQ'D | SIDE WALL REINFORCING STEEL "f0" LENGTH = OH - 4" SIZE | SPACING | NO. REQ'D | LENGTH | INTERIOR WALL REINFORCING STEEL "f1" LENGTH = OH - 4" SIZE | SPACING | NO. REQ'D | LENGTH | TOP SLAB DISTRIBUTION REINF. STEEL "g" LENGTH = SL SIZE | SPACING | NO. REQ'D | BOTTOM SLAB DISTRIBUTION REINF STEEL "e" LENGTH = SL SIZE | SPACING | NO. REQ'D | SIDE WALL DISTRIBUTION REINF. STEEL "d1" LENGTH = SL SIZE | SPACING | NO. REQ'D | INTERIOR WALL DISTRIBUTION REINF. STEEL "d2" LENGTH = SL SIZE | SPACING | NO. REQ'D | CLASS "S" CONCRETE CU. YDS. | REINFORCING STEEL (GR. 60) LBS. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		32	418
				JOB NO.		100657		

① SPECIAL DETAILS

STATE OF ARKANSAS
Charles R. Ellis Sep 9 2021 9:37 AM
LICENSED PROFESSIONAL ENGINEER
* * *
No. 9235
CHARLES R. ELLIS

TABULAR DATA BY: MCB DATE: 08/25/21
CHECKED BY: RD DATE: 08/31/21

OUTLET WINGWALL TABLE

OVER ALL WIDTH	CLEAR HEIGHT	FOOTING THK.	WING WALL THK.	BOX SKEW (DEG.)	SLOPE	HDWL LENGTH	HEEL	WALL HEIGHT AT HDWL	WALL HEIGHT AT WING END	WINGWALL ANGLE (DEGREE) WING A	WINGWALL ANGLE (DEGREE) WING B	FOOTING WIDTH AT WALL END	WIDTH OF WING FOOTINGS AT HDWL WING A	WIDTH OF WING FOOTINGS AT HDWL WING B	FOOTING DIMENSION PARALEL WITH HDWL WING A	FOOTING DIMENSION PARALEL WITH HDWL WING B	LENGTH OF WINGWALLS WING A	LENGTH OF WINGWALLS WING B	LENGTH OF FOOTING HEEL WING A	LENGTH OF FOOTING HEEL WING B
OW	H	WB	CW	SK	SL	K	HL	WH1	WH2	AF1	AF2	WE	WF1	WF2	G1	G2	W1	W2	W3	W4
32'-4"	5'-0"	0'-9"	0'-8"	0	3:1	31'-4"	1'-0"	5'-10"	1'-8"	30	30	2'-2"	2'-11 3/4"	2'-11 3/4"	0'-11 1/4"	0'-11 1/4"	14'-0"	14'-0"	15'-10 5/8"	15'-10 5/8"

CLASS "S" CONCRETE (Includes apron)	REINFORCING STEEL (Includes apron and laps if equired)
OUTLET	OUTLET
CU.YD	LBS.
8.30	630

WING	F1 BAR SIZE	F1 MAX. SPACING	F1 NO. REQD	F1 LENGTHS VARY	F1 LENGTHS	F2 BAR SIZE	F2 SPACING	F2 NO. REQD	F2 LENGTHS	F3 BAR SIZE	F3 SPACING	F3 NO. REQD	F3 LENGTHS	F4 BAR SIZE	F4 SPACING	F4 NO. REQD	F4 LENGTHS VARY	F5 BAR SIZE	F5 SPACING	F5 NO. REQD	F5 LENGTHS	F6 BAR SIZE	F6 SPACING	F6 NO. REQD	F6 LENGTHS VARY	F6 LENGTHS
WING A	4	12	14	L Min	2'-10"	-	-	-	L -	-	-	-	L -	4	18	6	Min 2'-1"	4	18	2	13'-8"	4	18	10	L Min 3'-3"	
				L Max	7'-6"												Max 12'-2"								Max 7'-3"	
				X Min	0'-9"				X -				X -												X Min 1'-4"	
				X Max	1'-7"																				Max 1'-4"	
				Y Min	2'-2"				Y -				Y -												Y Min 2'-0"	
				Y Max	6'-0"																				Max 6'-0"	
WING B	4	12	14	L Min	2'-10"	-	-	-	L -	-	-	-	L -	4	18	6	Min 2'-1"	4	18	2	13'-8"	4	18	10	L Min 3'-3"	
				L Max	7'-6"												Max 12'-2"								Max 7'-3"	
				X Min	0'-9"				X -				X -												X Min 1'-4"	
				X Max	1'-7"																				Max 1'-4"	
				Y Min	2'-2"				Y -				Y -												Y Min 2'-0"	
				Y Max	6'-0"																				Max 6'-0"	

WING	F6 LENGTHS	F7 BAR SIZE	F7 NO. REQD	F7 LENGTHS	F8 BAR SIZE	F8 SPACING	F8 NO. REQD	F8 LENGTHS VARY	F9 BAR SIZE	F9 NO. REQD	F9 LENGTHS	F10 BAR SIZE	F10 NO. REQD	F10 LENGTHS	F11 BAR SIZE	F11 NO. REQD	F11 LENGTHS	F12 BAR SIZE	F12 SPACING	F12 NO. REQD	F12 LENGTHS	REINF. STEEL QTY. PER WING (LBS)
WING A		4	6	16'-9"	6	18	10	Min 1'-8"	-	-	Min -	4	2	14'-2"	4	2	15'-8"	6	12	5	L 3'-4"	315
								Max 2'-6"			Max -										X 1'-8"	
WING B		4	6	16'-9"	6	18	10	Min 1'-8"	-	-	Min -	4	2	14'-2"	4	2	15'-8"	6	12	5	L 3'-4"	315
								Max 2'-6"			Max -										X 1'-8"	

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

Bar Pin Dia. Table	
#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)."

OUTLET SKEWED END SECTION

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 'a' SIZE	'a' SPACING	'a' LENGTHS VARY	'a' NO. REQD	TOP SLAB REINFORCING STEEL 'c' SIZE	'c' SPACING	'c' LENGTHS VARY	'c' NO. REQD	BOTTOM SLAB REINFORCING STEEL 'd' SIZE	'd' SPACING	'd' LENGTHS VARY	'd' NO. REQD	BOTTOM SLAB REINFORCING STEEL 'f' SIZE	'f' SPACING	'f' LENGTHS VARY	'f' NO. REQD	SIDE WALL REINFORCING STEEL "f0" SIZE	"f0" SPACING	"f0" NO. REQD	"f0" LENGTH
SK	SL	D	S	H	LL	T	HD	B	C	W	OW	OH																			
															Max				Max				Max				Max				
															Min				Min				Min				Min				

INTERIOR WALL REINFORCING STEEL "f1" SIZE	"f1" SPACING	"f1" NO. REQD	"f1" LENGTH	TOP SLAB DISTRIBUTION REINFORCING STEEL "g" SIZE	"g" SPACING	"g" NO. REQD	"g" LENGTHS VARY	BOTTOM SLAB DISTRIBUTION REINFORCING STEEL "e" SIZE	"e" SPACING	"e" NO. REQD	"e" LENGTHS VARY	SIDE WALL DISTRIBUTION REINFORCING STEEL "d1" SIZE	"d1" SPACING	"d1" NO. REQD	"d1" LENGTH	INTERIOR WALL DISTRIBUTION REINFORCING STEEL "d2" SIZE	"d2" SPACING	"d2" NO. REQD	"d2" LENGTH
							Max				Max				LONG				LONG
							Min				Min				SHORT				SHORT

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

"k1" HDWL BARS SIZE	"k1" HDWL BARS LENGTH	"k1" HDWL BARS NO. REQ'D	"k2" HDWL BARS SIZE	"k2" HDWL BARS LENGTH	"k2" HDWL BARS NO. REQ'D	"h" HDWL BARS SIZE	"h" HDWL BARS LENGTH	"h" HDWL BARS Y	"h" HDWL BARS NO. REQ'D

OUTLET SLOPE SECTION(S)

R.C. BOX SECTION	DESIGN FILLDEPTH (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.)	LENGTH = OW - 4" + BENDS "a" SIZE	"a" L	Bent "b" SIZE	Bent "b" L	"c" SIZE	"c" L	"c" SPACING	"c" NO. REQ'D	BOTTOM SLAB REINFORCING STEEL LENGTH = OW - 4" + BENDS "d" SIZE	"d" L	Bent "b1" SIZE	Bent "b1" L	"f" SIZE	"f" L	"f" SPACING	"f" NO. REQ'D	SIDE WALL RENFORCING STEEL "f0" LENGTH = OH - 4" SIZE	SPACING	NO. REQ'D	LENGTH	INTERIOR WALL REINFORCING STEEL "f1" LENGTH = OH - 4" SIZE	SPACING	NO. REQ'D	LENGTH	TOP SLAB DISTRIBUTION REINFORCING STEEL "g" LENGTH = SL SIZE	SPACING	NO. REQ'D	BOTTOM SLAB DISTRIBUTION REINFORCING STEEL "e" LENGTH = SL SIZE	SPACING	NO. REQ'D	SIDE WALL DISTRIBUTION REINFORCING STEEL "d1" LENGTH = SL SIZE	SPACING	NO. REQ'D	INTERIOR WALL DISTRIBUTION REINFORCING STEEL "d2" LENGTH = SL SIZE	SPACING	NO. REQ'D
D	S	H	T	B	C	W	OW	OH	SL																																					

HDWL DEPTH HD	ADDITIONAL REINF. FOR HDWL LBS.	"h" HDWL BARS SIZE	"h" HDWL BARS Y	"h" HDWL BARS LENGTH	"h" HDWL BARS NO. REQ'D
3"	43	4	0'-11"	1'-11"	24

CLASS "S" CONCRETE CU. YDS.	REINFORCING STEEL (GR. 60) LBS.
TOTAL	
0.30	86

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.

SHEET 2 OF 2
DETAILS OF R.C. BOX CULVERT

TRIPLE BARREL BOX CULVERT
Sta. 187+65

SPECIAL DETAILS

Ver. Lji7 bi00657_c3.dgn

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		33	418
				JOB NO.		100657		

(1) SPECIAL DETAILS

STATE OF ARKANSAS
Sep 9 2021 9:37 AM
LICENSED PROFESSIONAL ENGINEER
* * *
No. 9235
CHARLES R. ELLIS

TABULAR DATA BY: MCB DATE: 08/25/21
CHECKED BY: RD DATE: 08/31/21

INLET WINGWALL TABLE

OVER ALL WIDTH	CLEAR HEIGHT	FOOTING THK.	WING WALL THK.	BOX SKEW (DEG.)	SLOPE	HDWL LENGTH	HEEL	WALL HEIGHT		WINGWALL ANGLE (DEGREE)		FOOTING WIDTH AT WALL END	WIDTH OF WING FOOTINGS AT HDWL		FOOTING DIMENSION PARALEL WITH HDWL		LENGTH OF WINGWALLS		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	WING A	WING B	INLET	INLET
OW	H	WB	CW	SK	SL	K	HL	WH1	WH2	AF1	AF2	WE	WF1	WF2	G1	G2	W1	W2	W3	W4	CU.YD	LBS.
9'-0"	4'-0"	0'-9"	0'-8"	0	3:1	8'-0"	1'-0"	4'-10"	1'-4"	30	30	2'-2"	2'-5 3/4"	2'-5 3/4"	0'-4 3/8"	0'-4 3/8"	12'-0"	12'-0"	13'-10 5/8"	13'-10 5/8"	4.56	466

WING	F1 BARSIZE	F1 MAX SPACING	F1 NO. REQ'D	F1 LENGTHS VARY			F2 BARSIZE	F2 SPACING	F2 NO. REQ'D	F2 LENGTHS	F3 BARSIZE	F3 SPACING	F3 NO. REQ'D	F3 LENGTHS	F4 BARSIZE	F4 SPACING	F4 NO. REQ'D	F4 LENGTHS VARY	F5 BARSIZE	F5 SPACING	F5 NO. REQ'D	F5 LENGTHS	F6 BARSIZE	F6 SPACING	F6 NO. REQ'D	F6 LENGTHS VARY			F7 BARSIZE	F7 NO. REQ'D	F7 LENGTHS	F8 BARSIZE	F8 SPACING	F8 NO. REQ'D	F8 LENGTHS VARY	F9 BARSIZE	F9 SPACING	F9 NO. REQ'D	F9 LENGTHS	F10 BARSIZE	F10 NO. REQ'D	F10 LENGTHS	F11 BARSIZE	F11 NO. REQ'D	F11 LENGTHS	F12 BARSIZE	F12 SPACING	F12 NO. REQ'D	F12 LENGTHS		REINF. STEEL QTY. PER WING (LBS)
WING A	4	12	12	L	Min	2'-6"	-	-	-	L -	-	-	-	L -	4	18	4	Min	4	18	2	11'-8"	4	18	8	L	Min	3'-2"	4	6	14'-9"	6	18	8	Min	-	-	-	Min	4	2	12'-0"	4	2	13'-4"	6	12	4	L	3'-4"	233
					Max	6'-0"												3'-10"								Max	6'-3"							1'-8"				-											
				X	Min	0'-9"				X -				X -				Max					X	18	8	Min	1'-4"							Max				Max									X	1'-3"	
					Max	1'-1"												9'-0"								Max	1'-4"							2'-0"				-											
				Y	Min	1'-10"				Y -				Y -									Y	18	8	Min	1'-11"																						
					Max	5'-0"																				Max	5'-0"																						
WING B	4	12	12	L	Min	2'-6"	-	-	-	L -	-	-	-	L -	4	18	4	Min	4	18	2	11'-8"	4	18	8	L	Min	3'-2"	4	6	14'-9"	6	18	8	Min	-	-	-	Min	4	2	12'-0"	4	2	13'-4"	6	12	4	L	3'-4"	233
					Max	6'-0"												3'-10"								Max	6'-3"							1'-8"				-											
				X	Min	0'-9"				X -				X -				Max					X	18	8	Min	1'-4"							Max				Max									X	1'-3"	
					Max	1'-1"												9'-0"								Max	1'-4"							2'-0"				-											
				Y	Min	1'-10"				Y -				Y -									Y	18	8	Min	1'-11"																						
					Max	5'-0"																				Max	5'-0"																						

INLET SKEWED END SECTION

SKEW (DEGREE)	SLOPE	DESIGN FILL DEPTH (FT.)	CLEAR SPAN (FT.)	CLEAR HEIGHT (FT.)	SECTION LENGTH	TOP SLAB THICKNESS	BOTTOM SLAB THK.	SIDE WALL THICKNESS	HEADWALL DEPTH	OVER ALL WIDTH	OVER ALL HEIGHT	TOP SLAB REINFORCING STEEL "a"				BOTTOM SLAB REINFORCING STEEL "b"				SIDE WALL REINFORCING STEEL "f"				TOP SLAB DISTRIBUTION REINFORCING STEEL "d"				BOTTOM SLAB DISTRIBUTION REINFORCING STEEL "e"				SIDE WALL DISTRIBUTION REINFORCING STEEL "d1"				HEADWALL REINFORCING STEEL "k1", "k2" & "h"				CLASS "S" CONCRETE (Includes HDWL)	(1) REINFORCING STEEL (GR 60) (Includes HDWL)
												SIZE	SPACING	LENGTHS VARY	NO. REQ'D	SIZE	SPACEING	LENGTHS VARY	NO. REQ'D	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	BAR	SIZE	NO. REQ'D	LENGTH		
SK	SL	D	S	H	LL	T	B	C	HD	OW	OH																													CU. YDS.	LBS.
														Max				Max								Max				Max				LONG	"k1"				
																																			"k2"					
														Min				Min												Min				SHORT							
																																			"h"			Y		

INLET SLOPE SECTION(S)

R.C. BOX SECTION	DESIGN FILL DEPTH (FT.)	CLEAR SPAN (FT.)	CLEAR HEIGHT (FT.)	TOP SLAB THICKNESS	BOTTOM SLAB THK.	SIDE WALL THICKNESS	OVER ALL WIDTH	OVER ALL HEIGHT	SECTION LENGTH (FT.)	TOP SLAB REINFORCING STEEL "a" LENGTH = OW - 4"				BOTTOM SLAB REINFORCING STEEL "b" LENGTH = OW - 4"				SIDE WALL REINFORCING STEEL "f" LENGTH = OH - 4"				TOP SLAB DISTRIBUTION REINF. STEEL "d" LENGTH = SL			BOTTOM SLAB DISTRIBUTION REINF. STEEL "e" LENGTH = SL			SIDE WALL DISTRIBUTION REINF.STEEL "d1" LENGTH = SL			CLASS "S" CONCRETE	REINFORCING STEEL (GR. 50)
	D	S	H	T	B	C	OW	OH	SL	SIZE	SPACING	NO. REQ'D	LENGTH	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	CU. YDS.	LBS.

HDWL DEPTH	ADDITIONAL REINF. FOR HDWL		"h" HDWL BARS			
HD	LBS		SIZE	Y	LENGTH	NO. REQD
3"	26		4	0'-10"	1'-10"	10

CU. YDS.	LBS.
TOTAL	
0.18	38

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	OVER ALL WIDTH	OVER ALL HEIGHT	SECTION LENGTH (FT.)	TOP SLAB REINFORCING STEEL "a" LENGTH = OW - 4"				BOTTOM SLAB REINFORCING STEEL "b" LENGTH = OW- 4"				SIDE WALL REINFORCING STEEL "f" LENGTH = OH - 4"				TOP SLAB DISTRIBUTION REINF. STEEL "d" LENGTH = SL			BOTTOM SLAB DISTRIBUTION REINF. STEEL "e" LENGTH = SL			SIDE WALL DISTRIBUTION REINF. STEEL "d1" LENGTH = SL			CLASS "S" CONCRETE	REINFORCING STEEL (Gr. 60)
	D	S	H	T	B	C	OW	OH	SL	SIZE	SPACING	NO. REQ'D	LENGTH	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	CU. YDS.	LBS.
A	2	8	4	11.5	11.5	6	9'-0"	5'-11"	93.00	6	6	186	8'-8"	6	6	186	3'-8"	4	8.5	262	5'-7"	4	9	12	4	9	12	4	12	8	73.19	7885

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

Bar Pin Dia. Table	
#4	3"
#5	3 3/4"
#6	4 1/2"
#7	5 1/4"
#8	6"

Design Fill Depth	Range o' 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.

MID-SECTION BAR LAP TABLE

# of Long. Laps Req'd.	SL = Section Length
0	< 40.0 ft
1	>40.0ft - 78.0 ft
2	>78.0 t - 116.0 ft
3	>116.0ft - 154.0 ft
4	>154.0ft - 192.0 ft
5	>192.0ft - 230.0 ft
6	>230.0ft - 268.0 ft
7	>268.0ft - 306.0 ft
8	>306.0ft - 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 2 OF 4, "GENERAL DETAILS OF R.C. BOX CULVERT", 'DETAILS OF SINGLE-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.

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

SHEET 1 OF 2
DETAILS OF R.C. BOX CULVERT
SINGLE BARREL BOX CULVERT
Sta. 191+00

SPECIAL DETAILS

Ver. Lin7 bl00657_c4.dgn

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		34	418
				JOB NO.		100657		

① SPECIAL DETAILS

STATE OF ARKANSAS
Sep 9 2021 9:37 AM
LICENSED PROFESSIONAL ENGINEER
No. 9235
CHARLES R. ELLIS

TABULAR DATA BY: MCB DATE: 08/25/21
CHECKED BY: RD DATE: 08/31/21

OUTLET WINGWALL TABLE

OVER ALL WIDTH	CLEAR HEIGHT	FOOTING THK.	WING WALL THK.	BOX SKEW (DEG.)	SLOPE	HDWL LENGTH	HEEL	WALL HEIGHT AT HDWL	WALL HEIGHT AT WING END	WINGWALL ANGLE (DEGREE) WING A	WINGWALL ANGLE (DEGREE) WING B	FOOTING WIDTH AT WALL END	WIDTH OF WING FOOTINGS AT HDWL WING A	WIDTH OF WING FOOTINGS AT HDWL WING B	FOOTING DIMENSION PARALEL WITH HDWL WING A	FOOTING DIMENSION PARALEL WITH HDWL WING B	LENGTH OF WINGWALLS WING A	LENGTH OF WINGWALLS WING B	LENGTH OF FOOTING HEEL WING A	LENGTH OF FOOTING HEEL WING B	CLASS "S" CONCRETE (Includes apron) OUTLET	REINFORCING STEEL (Includes apron and laps if required) OUTLET
OW	H	WB	CW	SK	SL	K	HL	WH1	WH2	AF1	AF2	WE	WF1	WF2	G1	G2	W1	W2	W3	W4	CU.YD	LBS.
9'-0"	4'-0"	0'-9"	0'-8"	0	3:1	8'-0"	1'-0"	4'-10"	1'-4"	30	30	2'-2"	2'-5 3/4"	2'-5 3/4"	0'-4 3/8"	0'-4 3/8"	12'-0"	12'-0"	13'-10 5/8"	13'-10 5/8"	5.01	466

WING	F1 BARSIZE	F1 MAX SPACING	F1 NO. REQ'D	F1 LENGTHS VARY			F2 BARSIZE	F2 SPACING	F2 NO. REQ'D	F2 LENGTHS	F3 BARSIZE	F3 SPACING	F3 NO. REQ'D	F3 LENGTHS	F4 BARSIZE	F4 SPACING	F4 NO. REQ'D	F4 LENGTHS VARY	F5 BARSIZE	F5 SPACING	F5 NO. REQ'D	F5 LENGTHS	F6 BARSIZE	F6 SPACING	F6 NO. REQ'D	F6 LENGTHS VARY			F7 BARSIZE	F7 NO. REQ'D	F7 LENGTHS	F8 BARSIZE	F8 SPACING	F8 NO. REQ'D	F8 LENGTHS VARY	F9 BARSIZE	F9 SPACING	F9 NO. REQ'D	F9 LENGTHS	F10 BARSIZE	F10 NO. REQ'D	F10 LENGTHS	F11 BARSIZE	F11 NO. REQ'D	F11 LENGTHS	F12 BARSIZE	F12 SPACING	F12 NO. REQ'D	F12 LENGTHS		REINF. STEEL QTY. PER WING (LBS)
WING A	4	12	12	L	Min	2'-6"	-	-	-	L -	-	-	-	L -	4	18	4	Min	4	18	2	11'-8"	4	18	8	L	Min	3'-2"	4	6	14'-9"	6	18	8	Min	-	-	-	Min	4	2	12'-0"	4	2	13'-4"	6	12	4	L	3'-4"	233
					Max	6'-0"												3'-10"									Max	6'-3"							1'-8"													
				X	Min	0'-9"				X -				X -				Max								X	Min	1'-4"							Max				Max								X	1'-3"	
					Max	1'-1"																					Max	1'-4"							2'-0"													
				Y	Min	1'-10"				Y -				Y -				9'-0"								Y	Min	1'-11"							-				-									
					Max	5'-0"																					Max	5'-0"																				
WING B	4	12	12	L	Min	2'-6"	-	-	-	L -	-	-	-	L -	4	18	4	Min	4	18	2	11'-8"	4	18	8	L	Min	3'-2"	4	6	14'-9"	6	18	8	Min	-	-	-	Min	4	2	12'-0"	4	2	13'-4"	6	12	4	L	3'-4"	233
					Max	6'-0"												3'-10"									Max	6'-3"							1'-8"													
				X	Min	0'-9"				X -				X -				Max								X	Min	1'-4"							Max				Max								X	1'-3"	
					Max	1'-1"																					Max	1'-4"							2'-0"													
				Y	Min	1'-10"				Y -				Y -				9'-0"								Y	Min	1'-11"							-				-									
					Max	5'-0"																					Max	5'-0"																				

OUTLET SKEWED END SECTION

SKEW (DEGREE)	SLOPE	DESIGN FILL DEPTH (FT.)	CLEAR SPAN (FT.)	CLEAR HEIGHT (FT.)	SECTION LENGTH	TOP SLAB THICKNESS	BOTTOM SLAB THK.	SIDE WALL THICKNESS	HEADWALL DEPTH	OVER ALL WIDTH	OVER ALL HEIGHT	TOP SLAB REINFORCING STEEL "a" SIZE	SPACING	LENGTHS VARY	NO. REQ'D	BOTTOM SLAB REINFORCING STEEL "b" SIZE	SPACING	LENGTHS VARY	NO. REQ'D	SIDE WALL REINFORCING STEEL "f" SIZE	SPACING	NO. REQ'D	LENGTH	TOP SLAB DISTRIBUTION REINFORCING STEEL "d" SIZE	SPACING	NO. REQ'D	LENGTHS VARY	BOTTOM SLAB DISTRIBUTION REINFORCING STEEL "e" SIZE	SPACING	NO. REQ'D	LENGTHS VARY	SIDE WALL DISTRIBUTION REINFORCING STEEL "d1" SIZE	SPACING	NO. REQ'D	LENGTH	HEADWALL REINFORCING STEEL "k1", "k2" & "h"	BAR	SIZE	NO. REQ'D	LENGTH	CLASS "S" CONCRETE (Includes HDWL) CU. YDS.	① REINFORCING STEEL (GR. 60) (Includes HDWL) LBS.
SK	SL	D	S	H	LL	T	B	C	HD	OW	OH																																	
														Max				Max								Max				Max			LONG	"k1"								
																																		"k2"								
														Min				Min								Min				Min			SHORT									
																																		"h"				Y				

OUTLET SLOPE SECTION(S)

R.C. BOX SECTION	DESIGN FIL. DEPTH (FT.)	CLEAR SPAN (FT.)	CLEAR HEIGHT (FT.)	TOP SLAB THICKNESS	BOTTOM SLAB THK.	SIDE WALL THICKNESS	OVER ALL WIDTH	OVER ALL HEIGHT	SECTION LENGTH (FT.)	TOP SLAB REINFORCING STEEL "a" LENGTH = OW - 4" SIZE	SPACING	NO. REQ'D	LENGTH	BOTTOM SLAB REINFORCING STEEL "b" LENGTH = OW - 4" SIZE	SPACING	NO. REQ'D	LENGTH	SIDE WALL REINFORCING STEEL "f" LENGTH = OH - 4" SIZE	SPACING	NO. REQ'D	LENGTH	TOF SLAB DISTRBUTION REINF. STEEL "d" LENGTH = SL SIZE	SPACING	NO. REQ'D	BOTTOM SLAB DISTRIBUTION REINF. STEEL "e" LENGTH = SL SIZE	SPACING	NO. REQ'D	SIDE WALL DISTRIBUTION REINF.STEEL "d1" LENGTH = SL SIZE	SPACING	NO. REQ'D	CLASS "S" CONCRETE CU. YDS.	REINFORCING STEEL (GR. 50) LBS
	D	S	H	T	B	C	OW	OH	SL																								
HDWL DEPTH	ADDITIONAL REINF. FOR HDWL									"h" HDWL BARS																						
HD	LBS									SIZE	Y			LENGTH	NO. REQD																	
3"	26									4	0'-10"			1'-10"	10																	

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

Bar Pin Dia. Table	
#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)."

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.

SHEET 2 OF 2
DETAILS OF R.C. BOX CULVERT

SINGLE BARREL BOX CULVERT
Sta. 191+00

SPECIAL DETAILS

Ver. Lu17 bl00657_c4.dgn

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		35	418
				JOB NO.		100657		
				①	SPECIAL DETAILS			

INLET WINGWALL TABLE

OVER ALL WIDTH	CLEAR HEIGHT	FOOTING THK.	WING WALL THK.	BOX SKEW (DEG.)	SLOPE	HDWL LENGTH	HEEL	WALL HEIGHT AT HDWL	WALL HEIGHT AT WING END	WINGWALL ANGLE (DEGREE) WING A	WINGWALL ANGLE (DEGREE) WING B	FOOTING WIDTH AT WALL END	WIDTH OF WING FOOTINGS AT HDWL WING A	WIDTH OF WING FOOTINGS AT HDWL WING B	FOOTING DIMENSION PARALLEL WITH HDWL WING A	FOOTING DIMENSION PARALLEL WITH HDWL WING B	LENGTH OF WINGWALLS WING A	LENGTH OF WINGWALLS WING B	LENGTH OF FOOTING HEEL WING A	LENGTH OF FOOTING HEEL WING B
OW	H	WB	CW	SK	SL	K	HL	WH1	WH2	AF	AF2	WE	WF1	WF2	G1	G2	W1	W2	W3	W4
25'-11"	8'-0"	0'-9"	0'-8"	15	3:1	25'-6 1/2"	2'-0"	8'-10"	2'-8"	15	45	3'-2"	4'-1 5/8"	4'-6 1/4"	1'-3"	1'-7 1/2"	19'-0"	26'-0"	22'-4 3/8"	29'-4 3/8"

CLASS "S" CONCRETE (Includes apron)	REINFORCING STEEL (Includes apron and laps if required)
INLET	INLET
CU.YD	LBS.
14.02	1397

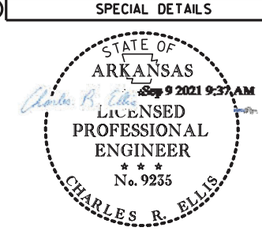
WING	F1 BAR SIZE	F1 MAX. SPACING	F1 NO. REQ'D	F1 LENGTHS VARY	F2 BAR SIZE	F2 SPACING	F2 NO. REQ'D	F2 LENGTHS	F3 BAR SIZE	F3 SPACING	F3 NO. REQ'D	F3 LENGTHS	F4 BAR SIZE	F4 SPACING	F4 NO. REQ'D	F4 LENGTHS VARY	F5 BAR SIZE	F5 SPACING	F5 NO. REQ'D	F5 LENGTHS	F6 BAR SIZE	F6 SPACING	F6 NO. REQ'D	F6 LENGTHS VARY	F7 BAR SIZE	F7 NO. REQ'D	F7 LENGTHS	F8 BAR SIZE	F8 SPACING	F8 NO. REQ'D	F8 LENGTHS VARY	F9 BAR SIZE	F9 SPACING	F9 NO. REQ'D	F9 LENGTHS	F10 BAR SIZE	F10 NO. REQ'D	F10 LENGTHS	F11 BAR SIZE	F11 NO. REQ'D	F11 LENGTHS	F12 BAR SIZE	F12 SPACING	F12 NO. REQ'D	F12 LENGTHS	REINF. STEEL QTY. PER WING (LBS)
WING A	4	12	19	L Min 3'-10" / Max 10'-8"	4	12	7	L 4'-10"	-	-	-	L -	4	18	8	Min 1'-1" / Max 15'-1"	4	18	4	18'-8"	4	18	13	L Min 5'-5" / Max 11'-3"	4	8	23'-2"	6	18	13	Min 2'-8" / Max 3'-8"	-	-	-	Min - / Max -	4	2	19'-6"	4	2	20'-3"	6	12	8	L 3'-4" / X 1'-8"	581
				X Min 0'-9" / Max 1'-9"				X 1'-5"				X -												X Min 2'-4" / Max 2'-4"																							
				Y Min 3'-2" / Max 9'-0"				Y 3'-6"				Y -												Y Min 3'-2" / Max 9'-0"																							
WING B	4	12	26	L Min 3'-9" / Max 11'-0"	4	12	9	L 5'-1"	-	-	-	L -	4	18	8	Min 2'-8" / Max 21'-7"	4	18	4	25'-8"	4	18	18	L Min 5'-3" / Max 11'-3"	4	8	31'-2"	6	18	18	Min 2'-8" / Max 4'-0"	4	18	2	Min 31'-5" / Max 31'-5"	4	2	26'-3"	4	2	28'-10"	6	12	8	L 3'-4" / X 1'-8"	816
				X Min 0'-9" / Max 2'-1"				X 1'-8"				X -												X Min 2'-4" / Max 2'-4"																							
				Y Min 3'-1" / Max 9'-0"				Y 3'-6"				Y -												Y Min 3'-0" / Max 9'-0"																							

MID-SECTION BAR LAP TABLE

# of Long. Laps Req'd.	SL = SectionLength
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"

Bar Pin Dia. Table	
#4	3"
#5	3 3/4"
#6	4 1/2"
#7	5 1/4"
#8	6"



TABULAR DATA BY: MCB DATE: 08/25/21
CHECKED BY: RD DATE: 08/31/21

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.

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

INLET SKEWED END SECTION

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
SK	SL	D	S	H	LL	T	HD	B	C	W	OW	OH
15	3:1	2	12	8	5'-6"	13.5	3	13.5	7.5	8	25'-11"	10'-3"

TOP SLAB REINFORCING STEEL "a" SIZE	"a" SPACING	"a" LENGTHS VARY	"a" NO. REQ'D	TOP SLAB REINFORCING STEEL "c" SIZE	"c" SPACING	"c" LENGTHS VARY	"c" NO. REQ'D
5	6	Max 25'-7" / Min 6'-0" / 25'-7"	11 / 4	7	5	Max 25'-7" / Min 6'-0" / 25'-7"	13 / 5

BOTTOM SLAB REINFORCING STEEL "d" SIZE	"d" SPACING	"d" LENGTHS VARY	"d" NO. REQ'D	BOTTOM SLAB REINFORCING STEEL "f" SIZE	"f" SPACING	"f" LENGTHS VARY	"f" NO. REQ'D
4	4.5	Max 25'-7" / Min 6-0" / 25'-7"	14 / 6	5	9	Max 25'-7" / Min 6'-0" / 25'-7"	7 / 3

SIDE WALL REINFORCING STEEL "f0" SIZE	"f0" SPACING	"f0" NO. REQ'D	"f0" LENGTH
6	6	22	9'-11"

INTERIOR WALL REINFORCING STEEL "f1" SIZE	"f1" SPACING	"f1" NO. REQ'D	"f1" LENGTH
4	12	12	9'-11"

TOP SLAB DISTRIBUTION REINFORCING STEEL "g" SIZE	"g" SPACING	"g" NO. REQ'D	"g" LENGTHS VARY
4	8	75	Max 8'-9" / Min 1'-10"

BOTTOM SLAB DISTRIBUTION REINFORCING STEEL "e" SIZE	"e" SPACING	"e" NO. REQ'D	"e" LENGTHS VARY
4	8	75	Max 8'-9" / Min 1'-10"

SIDE WALL DISTRIBUTION REINFORCING STEEL "d1" SIZE	"d1" SPACING	"d1" NO. REQ'D	"d1" LENGTH
4	12	8	LONG 8'-3" / SHORT 1'-11"

INTERIOR WALL DISTRIBUTION REINFORCING STEEL "d2" SIZE	"d2" SPACING	"d2" NO. REQ'D	"d2" LENGTH
4	12	16	5'-4"

CLASS "S" CONCRETE (Includes HDWL) CU. YDS.	① REINFORCING STEEL (GR 60) (Includes HDWL) LBS.
15.46	2716

'k1" HDWL BARS SIZE	'k1" HDWL BARS LENGTH	'k1" HDWL BARS NO. REQ'D	"k2" HDWL BARS SIZE	"k2" HDWL BARS LENGTH	"k2" HDWL BARS NO. REQ'D
4	26'-7"	6	4	26'-7"	6

'h" HDWL BARS SIZE	'h" HDWL BARS LENGTH	'h" HDWL BARS Y	'h" HDWL BARS NO. REQ'D
4	2'-0"	1'-0"	28

INLET SLOPE SECTION(S)

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.)
	D	S	H	T	B	C	W	OW	OH	SL

TOP SLAB REINFORCING STEEL — LENGTH = OW - 4" + BENDS

"a" SIZE	"a" L	Bent "b" SIZE	Bent "b" L	"c" SIZE	"c" L	SPACING	NO. REQ'D

BOTTOM SLAB REINFORCING STEEL — LENGTH = OW - 4" + BENDS

"d" SIZE	"d" L	Bent "b1" SIZE	Bent "b1" L	"f" SIZE	"f" L	SPACING	NO. REQ'D

SIDE WALL REINFORCING STEEL "f0" LENGTH = OH - 4" SIZE	SPACING	NO. REQ'D	LENGTH

INTEROR WALL REINFORCING STEEL 'f1" LENGTH = OH - 4" SIZE	SPACING	NO. REQ'D	LENGTH

TOP SLAB DISTRIBUTION REINF. STEEL "g" LENGTH = SL SIZE	SPACING	NO. REQ'D

BOTTOM SLAB DISTRIBUTION REINF. STEEL "e" LENGTH = SL SIZE	SPACING	NO. REQ'D

SDE WALL DISTRIBUTION REINF. STEEL "d1" LENGTH = SL SIZE	SPACING	NO. REQ'D

INTERIOR WALL DISTRIBUTION REINF. STEEL "d2" LENGTH = SL SIZE	SPACING	NO. REQ'D

HDWL DEPTH HD	ADDITIONAL REINF. FOR HDWL LBS.

'h" HDWL BARS SIZE	Y	LENGTH	NO REQ'D

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

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.)
	D	S	H	T	B	C	W	OW	OH	SL
A	2	12	8	13.5	13.5	7.5	8	25'-11"	10'-3"	97

TOP SLAB REINFORCING STEEL — LENGTH = OW - 4" +BENDS

"a" SIZE	"a" L	Bent "b" SIZE	Bent "b" L	"c" SIZE	"c" L	SPACING	NO. REQ'D
4	25'-7"	8	26'-0"	8	25'-7"	13	89

BOTTOM SLAB REINFORCING STEEL — LENGTH = OW - 4" + BENDS

"d" SIZE	"d" L	Bent "b1" SIZE	Bent "b1" L	"f" SIZE	"f" L	SPACING	NO. REQ'D
4	25'-7"	5	25'-0"	5	25'-7"	9	129

SIDE WALL REINFORCING STEEL "f0" LENGTH = OH - 4" SIZE	SPACING	NO. REQ'D	LENGTH
6	6	388	9'-11"

INTERIOR WALL REINFORCING STEEL "f1" LENGTH = OH - 4' SIZE	SPACING	NO. REQ'D	LENGTH
4	12	194	9'-11"

TOP SLAB DISTRIBUTION REINF. STEEL "g" LENGTH = SL SIZE	SPACING	NO. REQ'D
4	8	75

BOTTOM SLAB DISTRIBUTION REINF. STEEL "e" LENGTH = SL SIZE	SPACING	NO. REQ'D
4	8	75

SIDE WALL DISTRIBUTION STEEL "d1" LENGTH = SL SIZE	SPACING	NO. REQ'D
4	12	16

INTERIOR WALL DISTRIBUTION STEEL "d2" LENGTH = SL SIZE	SPACING	NO. REQ'D
4	12	16

CLASS "S" CONCRETE CU. YDS.	REINFORCING STEEL (GR. 60) LBS.
264.58	4217.8

SHEET 1 OF 2
DETAILS OF R.C. BOX CULVERT
DOUBLE BARREL BOX CULVERT
Sta. 240+55

SPECIAL DETAILS

Ver. 1.17 b100657_c5.dgn

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		36	418
				JOB NO.		100657		
				①		SPECIAL DETAILS		

STATE OF ARKANSAS
Sep 9 2021 9:37 AM
LICENSED PROFESSIONAL ENGINEER
* * *
No. 9235
CHARLES R. ELLIS

TABULAR DATA BY: MCB DATE: 08/25/21
CHECKED BY: RD DATE: 08/31/21

OUTLET WINGWALL TABLE

OVER ALL WIDTH	CLEAR HEIGHT	FOOTING THK.	WING WALL THK.	BOX SKEW (DEG.)	SLOPE	HDWL LENGTH	HEEL	WALL HEIGHT AT HDWL	WALL HEIGHT AT WING END	WINGWALL ANGLE (DEGREE) WING A	WINGWALL ANGLE (DEGREE) WING B	FOOTING WIDTH AT WALL END	WIDTH OF WING FOOTINGS AT HDWL WING A	WIDTH OF WING FOOTINGS AT HDWL WING B	FOOTING DIMENSION PARALLEL WITH HDWL WING A	FOOTING DIMENSION PARALLEL WITH HDWL WING B	LENGTH OF WINGWALLS WING A	LENGTH OF WINGWALLS WING B	LENGTH OF FOOTING HEEL WING A	LENGTH OF FOOTING HEEL WING B
OW	H	WB	CW	SK	SL	K	HL	WH1	WH2	AF1	AF2	WE	WF1	WF2	G1	G2	W1	W2	W3	W4
25'-11"	4'-0"	0'-9"	0'-8"	15	3:1	25'-6 1/2"	2'-0"	8'-10"	2'-8"	15	45	3'-2"	4'-1 5/8"	4'-6 1/4"	1'-3"	1'-7 1/2"	19'-0"	26'-0"	22'-4 3/8"	29'-4 3/8"

CLASS "S" CONCRETE (Includes apron)	REINFORCING STEEL (Includes apron and laps if required)
OUTLET	OUTLET
CU.YD	LBS.
15.13	1397

WING	F1 BAR SIZE	F1 MAX SPACING	F1 NO. REQ'D	F1 LENGTHS VARY	F1	F2 BAR SIZE	F2 SPACING	F2 NO. REQ'D	F2 LENGTHS	F3 BAR SIZE	F3 SPACING	F3 NO. REQ'D	F3 LENGTHS	F4 BAR SIZE	F4 SPACING	F4 NO. REQ'D	F4 LENGTHS VARY	F5 BAR SIZE	F5 SPACING	F5 NO. REQ'D	F5 LENGTHS	F6 BAR SIZE	F6 SPACING	F6 NO. REQ'D	F6 LENGTHS VARY	F6	F7 BAR SIZE	F7 NO. REQ'D	F7 LENGTHS	F8 BAR SIZE	F8 SPACING	F8 NO. REQ'D	F8 LENGTHS VARY	F9 BAR SIZE	F9 SPACING	F9 NO. REQ'D	F9 LENGTHS	F10 BAR SIZE	F10 NO. REQ'D	F10 LENGTHS	F11 BAR SIZE	F11 NO. REQ'D	F11 LENGTHS	F12 BAR SIZE	F12 SPACING	F12 NO. REQ'D	F12 LENGTHS	REINF. STEEL QTY. PER WING (LBS)
WING A	4	12	19	L Min 3'-10" / Max 10'-8"	X Min 0'-9" / Max 1'-9"	4	12	7	L 4'-10" / X 1'-5" / Y 3'-6"	-	-	-	L - / X - / Y -	4	18	8	Min 1'-1" / Max 15'-8"	4	18	4	18'-8"	4	18	13	L Min 5'-5" / Max 11'-3"; X Min 2'-4" / Max 2'-4"; Y Min 3'-2" / Max 9'-0"		4	8	23'-2"	6	18	13	Min 2'-8" / Max 3'-8"	-	-	-	Min - / Max -	4	2	19'-6"	4	2	20'-3"	6	12	8	L 3'-4" / X 1'-3"	581
WING B	4	12	26	L Min 3'-9" / Max 11'-0"	X Min 0'-9" / Max 2'-1"	4	12	9	L 5'-1" / X 1'-8" / Y 3'-6"	-	-	-	L - / X - / Y -	4	18	8	Min 2'-8" / Max 21'-7"	4	18	4	25'-8"	4	18	18	L Min 5'-3" / Max 11'-3"; X Min 2'-4" / Max 2'-4"; Y Min 3'-0" / Max 9'-0"		4	8	30'-2"	6	18	18	Min 2'-8" / Max 4'-0"	4	18	2	Min 31'-5" / Max 31'-5"	4	2	26'-3"	4	2	28'-10"	6	12	8	L 3'-4" / X 1'-3"	816

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

Bar Pin Dia. Table	
#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)."

OUTLET SKEWED END SECTION

| 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 "a" SIZE | "a" SPACING | "a" LENGTHS VARY | "a" NO. REQ'D | TOP SLAB REINFORCING STEEL "c" SIZE | "c" SPACING | "c" LENGTHS VARY | "c" NO. REQ'D | BOTTOM SLAB REINFORCING STEEL "d" SIZE | "d" SPACING | "d" LENGTHS VARY | "d" NO. REQ'D | BOTTOM SLAB REINFORCING STEEL "f" SIZE | "f" SPACING | "f" LENGTHS VARY | "f" NO. REQ'D | SIDE WALL REINFORCING STEEL "f0" SIZE | "f0" SPACING | "f0" NO. REQ'D | "f0" LENGTH | INTERIOR WALL REINFORCING STEEL "f1" SIZE | "f1" SPACING | "f1" NO. REQ'D | "f1" LENGTH | TOP SLAB DISTRIBUTION REINFORCING STEEL "g" SIZE | "g" SPACING | "g" NO. REQ'D | "g" LENGTHS VARY | BOTTOM SLAB DISTRIBUTION REINFORCING STEEL "e" SIZE | "e" SPACING | "e" NO. REQ'D | "e" LENGTHS VARY | SIDE WALL DISTRIBUTION REINFORCING STEEL "d1" SIZE | "d1" SPACING | "d1" NO. REQ'D | "d1" LENGTH | INTERIOR WALL DISTRIBUTION REINFORCING STEEL "d2" SIZE | "d2" SPACING | "d2" NO. REQ'D | "d2" LENGTH | CLASS "S" CONCRETE (Includes HDWL) | ①REINFORCING STEEL (GR 60) (Includes HDWL) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		37	418
				JOB NO.		100657		

① SPECIAL DETAILS

INLET WINGWALL TABLE

OVER ALL WIDTH	CLEAR HEIGHT	FOOTING THK.	WING WALL THK.	BOX SKEW (DEG.)	SLOPE	HDWL LENGTH	HEEL	WALL HEIGHT AT HDWL	WALL HEIGHT AT WING END	WINGWALL ANGLE (DEGREE) WING A	WINGWALL ANGLE (DEGREE) WING B	FOOTING WIDTH AT WALL END	WIDTH OF WING FOOTINGS AT HDWL WING A	WIDTH OF WING FOOTINGS AT HDWL WING B	FOOTING DIMENSION PARALEL WITH HDWL WING A	FOOTING DIMENSION PARALEL WITH HDWL WING B	LENGTH OF WINGWALLS WING A	LENGTH OF WINGWALLS WING B	LENGTH OF FOOTING HEEL WING A	LENGTH OF FOOTING HEEL WING B	CLASS "S" CONCRETE (Includes apron) INLET	REINFORCING STEEL (Includes apron and laps if required) INLET
OW	H	WB	CW	SK	SL	K	HL	WH1	WH2	AF1	AF2	WE	WF1	WF2	G1	G2	W1	W2	W3	W4	CU.YD	LBS.
40'-0"	12'-0"	1'-1"	1'-0"	10	3:1	37'-10 7/8"	2'-0"	12'-10"	4'-0"	20	40	3'-6"	6'-5 1/4"	6'-11 1/4"	3'-3 1/2"	4'-3 5/8"	28'-0"	34'-6"	30'-6 3/8"	37'-0 3/8"	35.94	2846

WING	F1 BAR SIZE	F1 MAX SPACING	F1 NO. REQD	F1 LENGTHS VARY			F2 BAR SIZE	F2 SPACING	F2 NO. REQD	F2 LENGTHS	F3 BAR SIZE	F3 SPACING	F3 NO. REQD	F3 LENGTHS	F4 BAR SIZE	F4 SPACING	F4 NO. REQD	F4 LENGTHS VARY	F5 BAR SIZE	F5 SPACING	F5 NO. REQD	F5 LENGTHS	F6 BAR SIZE	F6 SPACING	F6 NO. REQD	F6 LENGTHS VARY			F7 BAR SIZE	F7 NO. REQD	F7 LENGTHS	F8 BAR SIZE	F8 SPACING	F8 NO. REQD	F8 LENGTHS VARY	F9 BAR SIZE	F9 SPACING	F9 NO. REQD	F9 LENGTHS	F10 BAR SIZE	F10 NO. REQD	F10 LENGTHS	F11 BAR SIZE	F11 NO. REQD	F11 LENGTHS	F12 BAR SIZE	F12 SPACING	F12 NO. REQD	F12 LENGTHS		REINF. STEEL QTY. PER WING (LBS)
WING A	4	12	28	L	Min	5'-10"	6	12	10	L 10'-3"	4	12	7	L 6'-1"	4	18	10	Min	4	18	6	27'-8"	4	18	19	L Min	7'-5"		4	8	31'-4"	6	18	19	Min	4	18	4	Min	4	2	28'-11"	4	2	30'-3"	6	12	12	L	3'-4"	1277
					Max	17'-3"												5'-1"								Max	15'-11"							3'-0"				16'-3"									
				X	Min	1'-1"				X 3'-0"				X 2'-4"				Min								Min	2'-8"							Max				Max							X	1'-3"	
					Max	4'-0"												Max								Max	2'-8"							5'-10"				30'-8"									
				Y	Min	4'-10"				Y 7'-4"				Y 3'-10"				24'-2"								Min	4'-10'																					
					Max	13'-4"																				Max	13'-4"																					
WING B	4	12	35	L	Min	5'-8"	6	12	12	L 10'-6"	4	12	8	L 6'-3"	4	18	10	Min	4	18	6	34'-2"	4	18	23	L Min	7'-6"		4	8	37'-10"	6	18	25	Min	4	18	4	Min	4	2	35'-2"	4	2	38'-11"	6	12	12	L	3'-4"	1569
					Max	17'-7"												6'-4"								Max	15'-11"							3'-0"				18'-0"									
				X	Min	1'-1"				X 3'-3"				X 2'-6"				Min								Min	2'-8"							Max				Max							X	1'-3"	
					Max	4'-4"												Max								Max	2'-8"							6'-5"				33'-11"									
				Y	Min	4'-8"				Y 7'-4"				Y 3'-10"				29'-3"								Min	4'-11'																					
					Max	13'-4"																				Max	13'-4"																					

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"

Bar Pin Dia. Table	
#4	3"
#5	3 3/4"
#6	4 1/2"
#7	5 1/4"
#8	6"

STATE OF ARKANSAS
Sep 9 2021 9:27 AM
LICENSED PROFESSIONAL ENGINEER
No. 9235
CHARLES R. ELLIS

TABULAR DATA BY: MCB DATE: 08/25/21
CHECKED BY: RD DATE: 08/31/21

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.

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

INLET SKEWED END SECTION

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	TCP SLAB REINFORCING STEEL 'a' SIZE	'a' SPACING	'a' LENGTHS VARY	'a' NO. REQD	'c' SIZE	'c' SPACING	'c' LENGTHS VARY	'c' NO. REQD	BOTTOM SLAB REINFORCING STEEL "d" SIZE	"d" SPACING	"d" LENGTHS VARY	"d" NO. REQD	"f" SIZE	"f" SPACING	"f" LENGTHS VARY	"f" NO. REQD	SIDE WALL REINFORCING STEEL "f0" SIZE	"f0" SPACING	"f0" NO. REQD	"f0" LENGTH	INTERIOR WALL REINFORCING STEEL "f1" SIZE	"f1" SPACING	"f1" NO. REQD	"f1" LENGTH	TOP SLAB DISTRIBUTION REINFORCING STEEL 'g' SIZE	'g' SPACING	'g' NO. REQD	'g' LENGTHS VARY	BOTTOM SLAB DISTRIBUTION REINFORCING STEEL "e" SIZE	"e" SPACING	"e" NO. REQD	"e" LENGTHS VARY	SIDE WALL DISTRIBUTION REINFORCING STEEL "d1" SIZE	"d1" SPACING	"d1" NO. REQD	"d1" LENGTH	INTERIOR WALL DISTRIBUTION REINFORCING STEEL "d2" SIZE	"d2" SPACING	"d2" NO. REQD	"d2" LENGTH	CLASS "S" CONCRETE (Includes HDWL)	① REINFORCING STEEL (GR 60) (Includes HDWL)
SK	SL	D	S	H	LL	T	HD	B	C	W	OW	OH																		

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		38	418
				JOB NO.		100657		

① SPECIAL DETAILS

STATE OF ARKANSAS
Sep 9 2021 9:37 AM
LICENSED PROFESSIONAL ENGINEER
* * *
No. 9235
CHARLES R. ELLIS

TABULAR DATA BY: MCB DATE: 08/25/21
CHECKED BY: RD DATE: 08/31/21

OUTLET WINGWALL TABLE

OVER ALL WIDTH	CLEAR HEIGHT	FOOTING THK.	WING WALL THK.	BOX SKEW (DEG.)	SLOPE	HDWL LENGTH	HEEL	WALL HEIGHT		WINGWALL ANGLE (DEGREE)		FOOTING WIDTH AT WALL END	WIDTH OF WING FOOTINGS AT HDWL		FOOTING DIMENSION PARALEL WITH HDWL		LENGTH OF WINGWALLS		LENGTH OF FOOTING HEEL	
								AT HDWL	AT WING END	WING A	WING B		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
40'-0"	12'-0"	1'-1"	1'-0"	10	3:1	37'-10 7/8"	2'-0"	12'-10"	4'-0"	20	40	3'-6"	6'-5 1/4"	6'-11 1/4"	3'-3 12"	4'-3 5/8"	28'-0"	34'-6"	30'-6 3/8"	37'-0 3/8"

CLASS "S" CONCRETE (Includes apron)	REINFORCING STEEL (Includes apron and laps if equired)
OUTLET	OUTLET
CU.YD	LBS.
37.50	2846

WING	F1					F2				F3				F4				F5			F6				F7		F8			F9			F10			F11			F12				REINF. STEEL QTY. PER WING (LBS)
	BAR SIZE	MAX. SPACING	NO. REQD	LENGTHS VARY		BAR SIZE	SPACING	NO. REQD	LENGTHS	BAR SIZE	SPACING	NO. REQD	LENGTHS	BAR SIZE	SPACING	NO. REQD	LENGTHS VARY	BAR SIZE	SPACING	NO. REQD	BAR SIZE	SPACING	NO. REQD	LENGTHS VARY	BAR SIZE	NO. REQD	LENGTHS	BAR SIZE	SPACING	NO. REQD	LENGTHS VARY	BAR SIZE	NO. REQD	LENGTHS	BAR SIZE	NO. REQD	LENGTHS	BAR SIZE	SPACING	NO. REQD	LENGTHS	
WING A	4	12	28	L	Min 5'-10"	6	12	10	L 10'-3"	4	12	7	L 6'-1"	4	18	10	Min 5'-1"	4	18	6	4	18	19	L Min 7'-5"	4	8	31'-4"	6	18	19	Min 3'-0"	4	18	4	Min 16'-3"	4	2	28'-11"	4	2	30'-3"	6	12	12	L 3'-4"	1277
					Max 17'-3"												Max 24'-1"							Max 15'-11"							Max 5'-10"			Max 30'-8"								X 1'-8"	
				X	Min 1'-1"				X 3'-0"				X 2'-4"											X Min 2'-8"																			
					Max 4'-0"																			Max 2'-8"																			
				Y	Min 4'-10"				Y 7'-4"				Y 3'-10"											Y Min 4'-10"																			
					Max 13'-4"																			Max 13'-4"																			
WING B	4	12	35	L	Min 5'-8"	6	12	12	L 10'-6"	4	12	8	L 6'-3"	4	18	10	Min 6'-4"	4	18	6	4	18	23	L Min 7'-6"	4	8	37'-10"	6	18	25	Min 3'-0"	4	18	4	Min 18'-0"	4	2	35'-2"	4	2	38'-11"	6	12	12	L 3'-4"	1569
					Max 17'-7"												Max 29'-3"							Max 15'-11"							Max 6'-5"			Max 33'-11"								X 1'-8"	
				X	Min 1'-1"				X 3'-3"				X 2'-6"											X Min 2'-8"																			
					Max 4'-4"																			Max 2'-8"																			
				Y	Min 4'-8"				Y 7'-4"				Y 3'-10"											Y Min 4'-11"																			
					Max 13'-4"																			Max 13'-4"																			

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

Bar Pin Dia. Table	
#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)."

OUTLET SKEWED END SECTION

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)	①REINFORCING STEEL (GR 60) (Includes HDWL)
													"a"				"c"				"d"				"f"				"f0"				"f1"				"g"				"e"				"d1"				"d2"					
SK	SL	D	S	H	LL	T	HD	B	C	W	OW	OH	SIZE	SPACING	LENGTHS VARY	NO. REQD	SIZE	SPACING	LENGTHS VARY	NO. REQD	SIZE	SPACING	LENGTHS VARY	NO. REQD	SIZE	SPACING	LENGTHS VARY	NO. REQD	SIZE	SPACING	NO. REQD	LENGTH	SIZE	SPACING	NO. REQD	LENGTH	SIZE	SPACING	NO. REQD	LENGTH	SIZE	SPACING	NO. REQD	LENGTHS VARY	SIZE	SPACING	NO. REQD	LENGTH	SIZE	SPACING	NO. REQD	LENGTH	CU. YDS	LBS.
10	3:1	2	12	12	5'-6"	13.5	3	3.5	16	8	40'-0"	14'-3"	6	8	Max 39'-8" Min 9'-7"	8	8	8	Max 39'-8" Min 9'-7"	8	5	7	Max 39'-8" Min 9'-7"	10	5	7	Max 39'-8" Min 9'-7"	10	5	6	23	13'-11"	4	12	26	13'-11"	4	8	113	Max 8'-11" Min 1'-10"	4	8	113	Max 8'-11" Min 1'-10"	4	10	15	LONG 8'-8" SHORT 2'-0"	4	12	24	LONG 6'-6" SHORT 4'-3"	29.06	4203
															39'-8"	3			39'-8"	3			39'-8"	4			39'-8"	4																										

"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	40'-3"	6	4	40'-3"	6	4	2'-0"	1'-0"	42

OUTLET SLOPE SECTION(S)

R.C. BOX SECTION	DESIGN FILLDEPTH (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.)	LENGTH = OW - 4" + BENDS								BOTTOM SLAB REINFORCING STEEL LENGTH = OW - 4" + BENDS								SIDE WALL RENFORCING STEEL "f0" LENGTH = OH - 4"				INTERIOR WALL REINFORCING STEEL "f1" LENGTH = OH - 4"				TOP SLAB DISTRIBUTION REINFORCING STEEL "g" LENGTH = SL			BOTTOM SLAB DISTRIBUTION REINFORCING STEEL "e" LENGTH = SL			SIDE WALL DISTRIBUTION REINFORCING STEEL "d1" LENGTH = SL			INTERIOR WALL DISTRIBUTION REINFORCING STEEL "d2" LENGTH = SL			CLASS "S" CONCRETE	REINFORCING STEEL (GR. 60)
											"a"		Bent "b"		"c"		SPACING	NO. REQ'D	"d"		Bent "b1"		"f"		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	SPACING	NO. REQ'D	CU. YDS.	LBS.
D	S	H	T	B	C	W	OW	OH	SL	SIZE	L	SIZE	L	SIZE	L	SPACING	NO. REQ'D	SIZE	L	SIZE	L	SIZE	L	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	SPACING	NO. REQ'D		
TOTAL																																																			

HDWL DEPTH	ADDITIONAL REINF. FOR HDWL	"h" HDWL BARS			
HD	LBS.	SIZE	Y	LENGTH	NO. REQ'D

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.

SHEET 2 OF 2
DETAILS OF R.C. BOX CULVERT

TRIPLE BARREL BOX CULVERT
Sta. 254+15

SPECIAL DETAILS

Ver. Lj17 bl00657_c6.dgn

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		39	418
				JOB NO.		100657		
				①	SPECIAL DETAILS			

INLET WINGWALL TABLE

OVER ALL WIDTH	CLEAR HEIGHT	FOOTING THK.	WING WALL THK.	BOX SKEW (DEG.)	SLOPE	HDWL LENGTH	HEEL	WALL HEIGHT AT HDWL	WALL HEIGHT AT WING END	WINGWALL ANGLE (DEGREE) WING A	WINGWALL ANGLE (DEGREE) WING B	FOOTING WIDTH AT WALL END	WIDTH OF WING FOOTINGS AT HDWL WING A	WIDTH OF WING FOOTINGS AT HDWL WING B	FOOTING DIMENSION PARALLEL WITH HDWL WING A	FOOTING DIMENSION PARALLEL WITH HDWL WING B	LENGTH OF WINGWALLS WING A	LENGTH OF WINGWALLS WING B	LENGTH OF FOOTING HEEL WING A	LENGTH OF FOOTING HEEL WING B
OW	H	WB	CW	SK	SL	K	HL	WH1	WH2	AF	AF2	WE	WF1	WF2	G1	G2	W1	W2	W3	W4
25'-10"	7'-0"	0'-9"	0'-8"	5	3:1	24'-9 1/8"	2'-0"	7'-10"	2'-4"	25	35	3'-2"	3'-9 3/4"	4'-0 7/8"	0'-9 5/8"	1'-0 1/4"	18'-0"	20'-0"	21'-5 3/8"	23'-5 3/8"

CLASS "S" CONCRETE (Includes apron)	REINFORCING STEEL (Includes apron and laps if required)
INLET	INLET
CU.YD	LBS.
11.23	1069

WING	F1 BAR SIZE	F1 MAX. SPACING	F1 NO. REQ'D	F1 LENGTHS VARY	F2 BAR SIZE	F2 SPACING	F2 NO. REQ'D	F2 LENGTHS	F3 BAR SIZE	F3 SPACING	F3 NO. REQ'D	F3 LENGTHS	F4 BAR SIZE	F4 SPACING	F4 NO. REQ'D	F4 LENGTHS VARY	F5 BAR SIZE	F5 SPACING	F5 NO. REQ'D	F5 LENGTHS	F6 BAR SIZE	F6 SPACING	F6 NO. REQ'D	F6 LENGTHS VARY	F7 BAR SIZE	F7 NO. REQ'D	F7 LENGTHS	F8 BAR SIZE	F8 SPACING	F8 NO. REQ'D	F8 LENGTHS VARY	F9 BAR SIZE	F9 SPACING	F9 NO. REQ'D	F9 LENGTHS	F10 BAR SIZE	F10 NO. REQ'D	F10 LENGTHS	F11 BAR SIZE	F11 NO. REQ'D	F11 LENGTHS	F12 BAR SIZE	F12 SPACING	F12 NO. REQ'D	F12 LENGTHS	REINF. STEEL QTY. PER WING (LBS)
WING A	4	12	18	L Min 3'-6" / Max 9'-4"	4	12	4	L 3'-9"	-	-	-	L -	4	18	6	Min 3'-8" / Max 13'-4"	4	18	4	17'-8"	4	18	12	L Min 5'-3" / Max 10'-3"	4	8	22'-3"	6	18	12	Min 2'-8" / Max 3'-3"	-	-	-	Min - / Max -	4	2	18'-4"	4	2	19'-5"	6	12	7	L 3'-4" / X 1'-8"	506
				X Min 0'-9" / Max 1'-5"				X 1'-4"				X -												X Min 2'-4" / Max 2'-4"																							
				Y Min 2'-10" / Max 8'-0"				Y 2'-6"				Y -												Y Min 3'-0" / Max 8'-0"																							
WING B	4	12	20	L Min 3'-5" / Max 9'-7"	4	12	4	L 3'-11"	-	-	-	L -	4	18	6	Min 4'-1" / Max 15'-1"	4	18	4	19'-8"	4	18	14	L Min 4'-11" / Max 10'-3"	4	8	21'-3"	6	18	14	Min 2'-8" / Max 3'-7"	-	-	-	Min - / Max -	4	2	20'-3"	4	2	21'-10"	6	12	7	L 3'-4" / X 1'-8"	563
				X Min 0'-9" / Max 1'-8"				X 1'-6"				X -												X Min 2'-4" / Max 2'-4"																							
				Y Min 2'-9" / Max 8'-0"				Y 2'-6"				Y -												Y Min 2'-8" / Max 8'-0"																							

MID-SECTION BAR LAP TABLE

# of Long. Laps Req'd.	SL = SectionLength
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"

Bar Pin Dia. Table	
#4	3"
#5	3 3/4"
#6	4 1/2"
#7	5 1/4"
#8	6"

STATE OF ARKANSAS
Sep 9 2021 9:37 AM
LICENSED PROFESSIONAL ENGINEER
No. 9235
CHARLES R. ELLIS

TABULAR DATA BY: MCB DATE: 08/25/21
CHECKED BY: RD DATE: 08/31/21

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.

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

SKEWED END SECTION

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 REINF. STEEL "a" SIZE	"a" SPACING	"a" LENGTHS VARY	"a" NO. REQ'D	TOP SLAB REINF. STEEL "c" SIZE	"c" SPACING	"c" LENGTHS VARY	"c" NO. REQ'D	BOTTOM SLAB REINF. STEEL "d" SIZE	"d" SPACING	"d" LENGTHS VARY	"d" NO. REQ'D	BOTTOM SLAB REINF. STEEL "f" SIZE	"f" SPACING	"f" LENGTHS VARY	"f" NO. REQ'D	SIDE WALL REINF. STEEL "f0" SIZE	"f0" SPACING	"f0" NO. REQ'D	"f0" LENGTH	INTERIOR WALL REINF. STEEL "f1" SIZE	"f1" SPACING	"f1" NO. REQ'D	"f1" LENGTH	TOP SLAB DISTRIB. REINF. STEEL "g" SIZE	"g" SPACING	"g" NO. REQ'D	"g" LENGTHS VARY	BOTTOM SLAB DISTRIB. REINF. STEEL "e" SIZE	"e" SPACING	"e" NO. REQ'D	"e" LENGTHS VARY	SIDE WALL DISTRIB. REINF. STEEL "d1" SIZE	"d1" SPACING	"d1" NO. REQ'D	"d1" LENGTH	INTERIOR WALL DISTRIB. REINF. STEEL "d2" SIZE	"d2" SPACING	"d2" NO. REQ'D	"d2" LENGTH
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	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
5	3:1	2	12	7	3'-2"	13.5	3	3.5	7	8	25'-10"	9'-3"	5	6	Max 25'-6" / Min 17'-5" / 25'-6"	2 / 4	8	7	Max 25'-6" / Min 17'-5" / 25'-6"	2 / 4	4	5	Max 25'-6" / Min 17'-5" / 25'-6"	2 / 5	4	5	Max 25'-6" / Min 17'-5" / 25'-6"	2 / 5	6	8	10	8'-11"	4	12	8	8'-11"	4	8	75	Max 4'-1" / Min 1'-10"	4	8	75	Max 4'-1" / Min 1'-10"	4	12	7	LONG 4'-1" / SHORT 1'-10"	4	12	14	3'-0"

CLASS "S" CONCRETE (Includes HDWL) CU. YDS.	① REINFORCING STEEL (GR 60) (Includes HDWL) LBS.
8.75	1541

'k1" HDWL BARS SIZE	LENGTH	NO. REQ'D	"k2" HDWL BARS SIZE	LENGTH	NO. REQ'D	'h" HDWL BARS SIZE	LENGTH	Y	NO. REQ'D
4	25'-7"	6	4	25'-7"	6	4	2'-0"	1'-0"	27

INLET SLOPE SECTION(S)

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 REINF. STEEL LENGTH = OW - 4" + BENDS "a" SIZE	"a" L	Bent "b" SIZE	Bent "b" L	"c" SIZE	"c" L	SPACING	NO. REQ'D	BOTTOM SLAB REINF. STEEL LENGTH = OW - 4" + BENDS "d" SIZE	"d" L	Bent "b1" SIZE	Bent "b1" L	"f" SIZE	"f" L	SPACING	NO. REQ'D	SIDE WALL REINF. STEEL "f0" LENGTH = OH - 4" SIZE	SPACING	NO. REQ'D	LENGTH	INTERIOR WALL REINF. STEEL "f1" LENGTH = OH - 4" SIZE	SPACING	NO. REQ'D	LENGTH	TOP SLAB DISTRIB. REINF. STEEL "g" LENGTH = SL SIZE	SPACING	NO. REQ'D	BOTTOM SLAB DISTRIB. REINF. STEEL "e" LENGTH = SL SIZE	SPACING	NO. REQ'D	SIDE WALL DISTRIB. REINF. STEEL "d1" LENGTH = SL SIZE	SPACING	NO. REQ'D	INTERIOR WALL DISTRIB. REINF. STEEL "d2" LENGTH = SL SIZE	SPACING	NO. REQ'D
D	S	H	T	B	C	W	OW	OH	SL																																									

HDWL DEPTH HD	ADDITIONAL REINF. FOR HDWL LBS.	'h" HDWL BARS SIZE	Y	LENGTH	NO REQ'D

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

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 REINF. STEEL LENGTH = OW - 4" + BENDS "a" SIZE	"a" L	Bent "b" SIZE	Bent "b" L	"c" SIZE	"c" L	SPACING	NO. REQ'D	BOTTOM SLAB REINF. STEEL LENGTH = OW - 4" + BENDS "d" SIZE	"d" L	Bent "b1" SIZE	Bent "b1" L	"f" SIZE	"f" L	SPACING	NO. REQ'D	SIDE WALL REINF. STEEL "f0" LENGTH = OH - 4" SIZE	SPACING	NO. REQ'D	LENGTH	INTERIOR WALL REINF. STEEL "f1" LENGTH = OH - 4' SIZE	SPACING	NO. REQ'D	LENGTH	TOP SLAB DISTRIB. REINF. STEEL "g" LENGTH = SL SIZE	SPACING	NO. REQ'D	BOTTOM SLAB DISTRIB. REINF. STEEL "e" LENGTH = SL SIZE	SPACING	NO. REQ'D	SIDE WALL DISTRIB. STEEL "d1" LENGTH = SL SIZE	SPACING	NO. REQ'D	INTERIOR WALL DISTRIB. STEEL "d2" LENGTH = SL SIZE	SPACING	NO. REQ'D
D	S	H	T	B	C	W	OW	OH	SL																																									
A 2	12	7	13.5	13.5	7.0	8.0	25'-10"	9'-3"	99.66	4	25'-6"	8	25'-11"	8	25'-6"	14	85	4	25'-6"	5	25'-11"	5	25'-6"	9	132	6	8	298	8'-11"	4	12	198	8'-11"	4	8	75	4	8	75	4	12	14	4	12	14

CLASS "S" CONCRETE CU. YDS.	REINFORCING STEEL (GR. 60) LBS.
261.92	40029

SHEET 1 OF 2
DETAILS OF R.C. BOX CULVERT
DOUBLE BARREL BOX CULVERT
Sta. 303+60

SPECIAL DETAILS

Ver. Lin7 b100657_c7.dgn

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		40	418
				JOB NO.		100657		
				①		SPECIAL DETAILS		

STATE OF ARKANSAS
Sep 9 2021 9:37 AM
LICENSED PROFESSIONAL ENGINEER
* * *
No. 9235
CHARLES R. ELLIS

TABULAR DATA BY: MCB DATE: 08/25/21
CHECKED BY: RD DATE: 08/31/21

OUTLET WINGWALL TABLE

OVER ALL WIDTH	CLEAR HEIGHT	FOOTING THK.	WING WALL THK.	BOX SKEW (DEG.)	SLOPE	HDWL LENGTH	HEEL	WALL HEIGHT AT HDWL	WALL HEIGHT AT WING END	WINGWALL ANGLE (DEGREE) WING A	WINGWALL ANGLE (DEGREE) WING B	FOOTING WIDTH AT WALL END	WIDTH OF WING FOOTINGS AT HDWL WING A	WIDTH OF WING FOOTINGS AT HDWL WING B	FOOTING DIMENSION PARALLEL WITH HDWL WING A	FOOTING DIMENSION PARALLEL WITH HDWL WING B	LENGTH OF WINGWALLS WING A	LENGTH OF WINGWALLS WING B	LENGTH OF FOOTING HEEL WING A	LENGTH OF FOOTING HEEL WING B
OW	H	WB	CW	SK	SL	K	HL	WH1	WH2	AF1	AF2	WE	WF1	WF2	G1	G2	W1	W2	W3	W4
25'-10"	7'-0"	0'-9"	0'-8"	5	3:1	24'-9 1/8"	2'-0"	7'-10"	2'-4"	25	35	3'-2"	3'-9 3/4"	4'-0 7/8"	0'-9 5/8"	1'-0 1/4"	18'-0"	20'-0"	21'-5 3/8"	23'-5 3/8"

CLASS "S" CONCRETE (Includes apron)	REINFORCING STEEL (Includes apron and laps if required)
OUTLET	OUTLET
CU.YD	LBS.
12.25	1069

WING	F1 BAR SIZE	F1 MAX. SPACING	F1 NO. REQ'D	F1 LENGTHS VARY	F1 LENGTHS	F2 BAR SIZE	F2 SPACING	F2 NO. REQ'D	F2 LENGTHS	F3 BAR SIZE	F3 SPACING	F3 NO. REQ'D	F3 LENGTHS	F4 BAR SIZE	F4 SPACING	F4 NO. REQ'D	F4 LENGTHS VARY	F4 LENGTHS	F5 BAR SIZE	F5 SPACING	F5 NO. REQ'D	F5 LENGTHS	F6 BAR SIZE	F6 SPACING	F6 NO. REQ'D	F6 LENGTHS VARY	F6 LENGTHS	F7 BAR SIZE	F7 NO. REQ'D	F7 LENGTHS	F8 BAR SIZE	F8 SPACING	F8 NO. REQ'D	F8 LENGTHS VARY	F8 LENGTHS	F9 BAR SIZE	F9 SPACING	F9 NO. REQ'D	F9 LENGTHS	F10 BAR SIZE	F10 NO. REQ'D	F10 LENGTHS	F11 BAR SIZE	F11 NO. REQ'D	F11 LENGTHS	F12 BAR SIZE	F12 SPACING	F12 NO. REQ'D	F12 LENGTHS	REINF. STEEL QTY. PER WING (LBS)
WING A	4	12	18	L Min 3'-6" / Max 9'-4"	L 3'-9"	4	12	4	X Min 1'-4" / Max 1'-5"	-	-	-	X -	4	18	6	Min 3'-8" / Max 13'-4"	17'-8"	4	18	4	17'-8"	4	18	12	L Min 5'-3" / Max 10'-3"	X Min 2'-4" / Max 2'-4"	4	8	22'-3"	6	18	12	Min 2'-8" / Max 3'-3"	-	-	-	Min - / Max -	4	2	18'-4"	4	2	19'-5"	6	12	7	L 3'-4" / X 1'-3"	506
				Y Min 2'-10" / Max 8'-0"	Y 2'-6"								Y -													Y Min 3'-0" / Max 8'-0"																							
WING B	4	12	20	L Min 3'-5" / Max 9'-7"	L 3'-11"	4	12	4	X Min 1'-6" / Max 1'-8"	-	-	-	X -	4	18	6	Min 4'-1" / Max 15'-1"	19'-8"	4	18	4	19'-8"	4	18	14	L Min 4'-11" / Max 10'-3"	X Min 2'-4" / Max 2'-4"	4	8	24'-3"	6	18	14	Min 2'-8" / Max 3'-7"	-	-	-	Min - / Max -	4	2	20'-3"	4	2	21'-10"	6	12	7	L 3'-4" / X 1'-3"	563
				Y Min 2'-9" / Max 8'-0"	Y 2'-6"								Y -													Y Min 2'-8" / Max 8'-0"																							

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

Bar Pin Dia. Table	
#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)."

OUTLET SKEWED END SECTION

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 "a" SIZE	"a" SPACING	"a" LENGTHS VARY	"a" NO. REQ'D	TOP SLAB REINFORCING STEEL "c" SIZE	"c" SPACING	"c" LENGTHS VARY	"c" NO. REQ'D	BOTTOM SLAB REINFORCING STEEL "d" SIZE	"d" SPACING	"d" LENGTHS VARY	"d" NO. REQ'D	BOTTOM SLAB REINFORCING STEEL "f" SIZE	"f" SPACING	"f" LENGTHS VARY	"f" NO. REQ'D	SIDE WALL REINFORCING STEEL "f0" SIZE	"f0" SPACING	"f0" NO. REQ'D	"f0" LENGTH	INTERIOR WALL REINFORCING STEEL "f1" SIZE	"f1" SPACING	"f1" NO. REQ'D	"f1" LENGTH	TOP SLAB DISTRIBUTION REINFORCING STEEL "g" SIZE	"g" SPACING	"g" NO. REQ'D	"g" LENGTHS VARY	BOTTOM SLAB DISTRIBUTION REINFORCING STEEL "e" SIZE	"e" SPACING	"e" NO. REQ'D	"e" LENGTHS VARY	SIDE WALL DISTRIBUTION REINFORCING STEEL "d1" SIZE	"d1" SPACING	"d1" NO. REQ'D	"d1" LENGTH	INTERIOR WALL DISTRIBUTION REINFORCING STEEL "d2" SIZE	"d2" SPACING	"d2" NO. REQ'D	"d2" LENGTH	CLASS "S" CONCRETE (Includes HDWL)	①REINFORCING 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	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	CU. YDS.	LBS.
5	3:1	2	12	7	3'-2"	13.5	3	13.5	7	8	25'-10"	9'-3"	5	6	Max 25'-6" / Min 17'-5" / 25'-6"	2 / 4	8	7	Max 25'-6" / Min 17'-5" / 25'-6"	2 / 4	4	5	Max 25'-6" / Min 17'-5" / 25'-6"	2 / 5	4	5	Max 25'-6" / Min 17'-5" / 25'-6"	2 / 5	6	8	10	8'-11"	4	12	8	8'-11"	4	8	75	Max 4'-1" / Min 1'-10"	4	4	75	Max 4'-1" / Min 1'-10"	4	12	7	LONG 4'-1" / SHORT 1'-10"	4	12	14	3'-0"	875	1541

"k1" HDWL BARS SIZE	"k1" HDWL BARS LENGTH	"k1" HDWL BARS NO. REQ'D	"k2" HDWL BARS SIZE	"k2" HDWL BARS LENGTH	"k2" HDWL BARS NO. REQ'D	"h" HDWL BARS SIZE	"h" HDWL BARS LENGTH	"h" HDWL BARS Y	"h" HDWL BARS NO. REQ'D
4	25'-7"	6	4	25'-7"	6	4	2'-0"	1'-0"	27

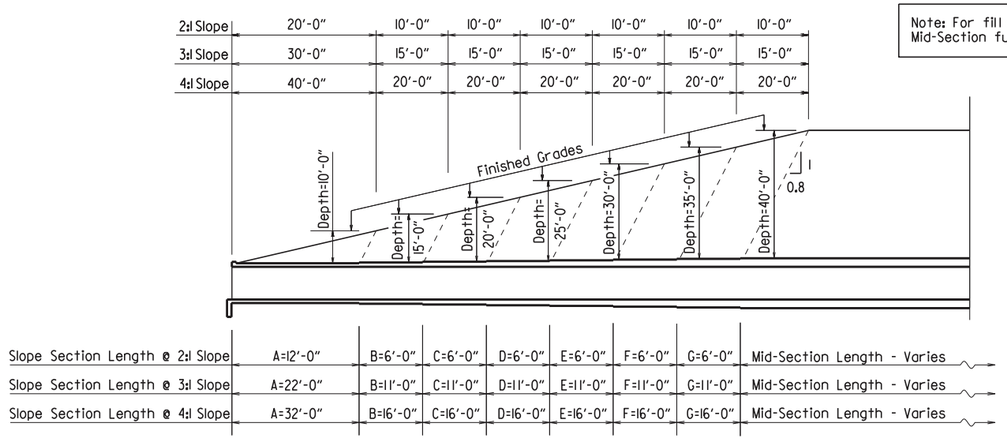
OUTLET SLOPE SECTION(S)

RC. 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 LENGTH = OW - 4" + BENDS "a" SIZE	"a" L	Bent "b" SIZE	Bent "b" L	"c" SIZE	"c" L	"c" SPACING	"c" NO. REQ'D	BOTTOM SLAB REINFORCING STEEL LENGTH = OW - 4" + BENDS "d" SIZE	"d" L	Bent "b1" SIZE	Bent "b1" L	"f" SIZE	"f" L	"f" SPACING	"f" NO. REQ'D	SIDE WALL REINFORCING STEEL "f0" LENGTH = OH - 4" SIZE	SPACING	NO. REQ'D	LENGTH	INTERIOR WALL REINFORCING STEEL 'f1" LENGTH = OH - 4" SIZE	SPACING	NO. REQ'D	LENGTH	TOP SLAB DISTRIBUTION REINF. STEEL "g" LENGTH = SL SIZE	SPACING	NO. REQ'D	BOTTOM SLAB DISTRIBUTION REINF. STEEL "e" LENGTH = SL SIZE	SPACING	NO. REQ'D	SIDE WALL DISTRIBUTION REINF. STEEL "d1" LENGTH = SL SIZE	SPACING	NO. REQ'D	INTERIOR WALL DISTRIBUTION REINF. STEEL "d2" LENGTH = SL SIZE	SPACING	NO. REQ'D	CLASS "S" CONCRETE CU. YDS.	REINFORCING STEEL (GR. 60) LBS
D	S	H	T	B	C	W	OW	OH	SL																		

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	ARK.		41	418
JOB NO.		100657		

(1) SPECIAL DETAILS

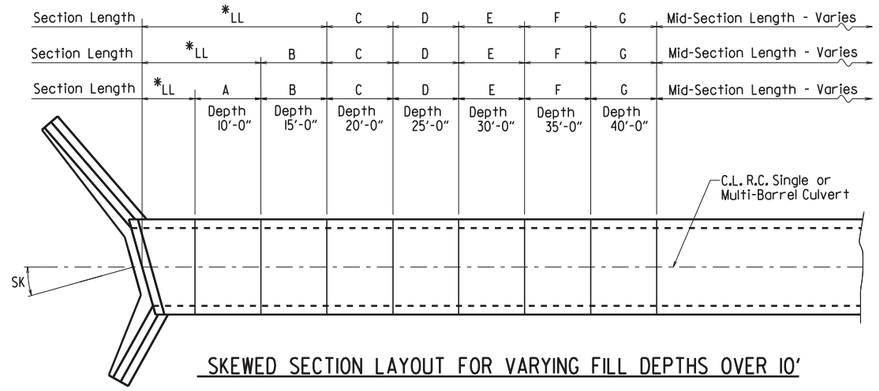


Note: For fill depths 10' and under, use Mid-Section full length of box culvert.

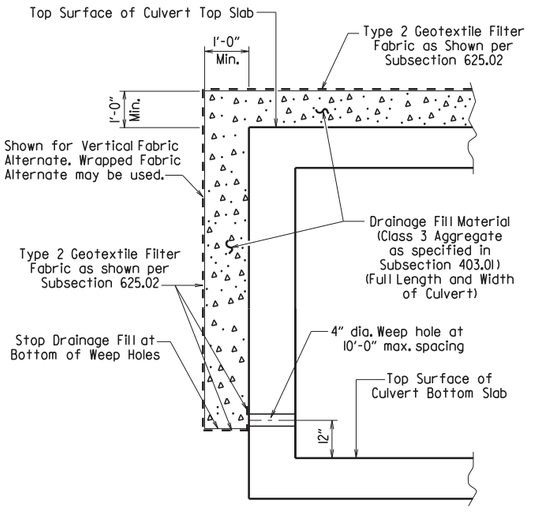
LONGITUDINAL SECTION LENGTH SCHEDULE FOR VARYING FILL DEPTHS OVER 10'

Lengths for Non-Skewed Boxes

*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.

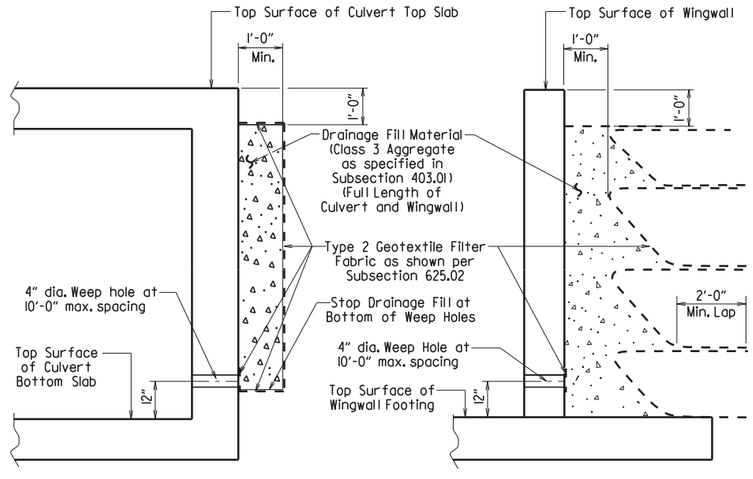


SKEWED SECTION LAYOUT FOR VARYING FILL DEPTHS OVER 10'



CULVERT DRAINAGE DETAIL FOR ROCK FILL

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

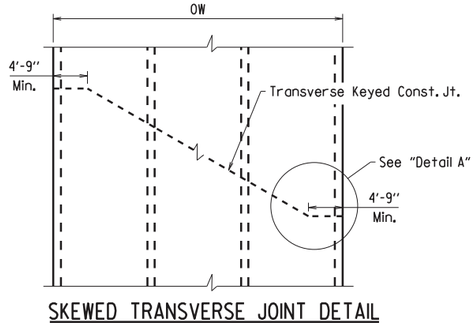


For Details of Excavation and Pay Limits, see Standard Drawing RCB-2.

VERTICAL FABRIC ALTERNATE
(Shown for Culvert, Similar for Wingwall)

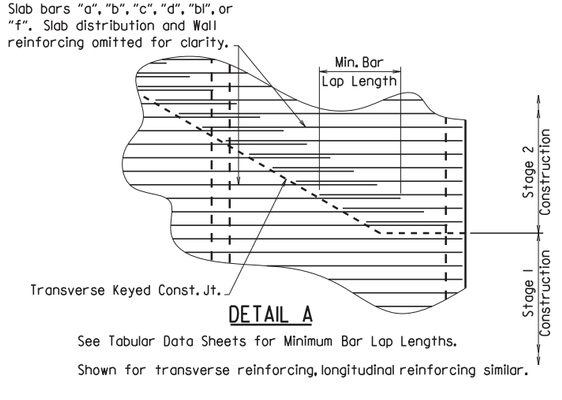
WRAPPED FABRIC ALTERNATE
(Shown for Wingwall, Similar for Culvert)

WINGWALL & CULVERT DRAINAGE DETAIL



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.



DETAIL A

See Tabular Data Sheets for Minimum Bar Lap Lengths.

Shown for transverse reinforcing, longitudinal reinforcing similar.

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 S with a minimum 28-day compressive strength of 3,500 psi and shall be poured in the dry. All exposed corners to have ¾" 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 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 S 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 S Tined Bridge Roadway Surface Finish. Curing and finishing shall not be paid for directly, but shall be considered incidental to the item "Class S 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.

STATE OF ARKANSAS
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CHARLES R. ELLIS

SHEET 1 OF 5
GENERAL DETAILS OF R.C. BOX CULVERT
GENERAL NOTES & LONGITUDINAL SECTION LENGTH SCHEDULE
SPECIAL DETAILS

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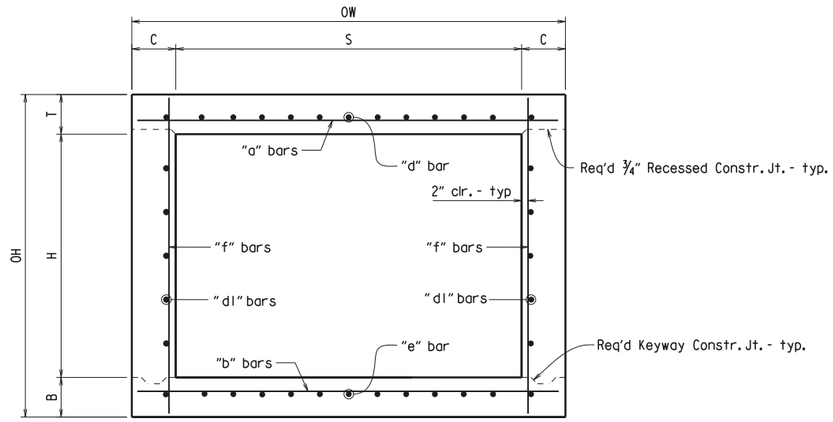
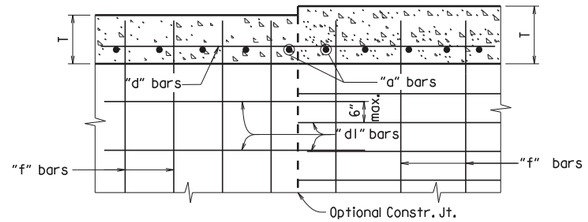
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		42	418
				JOB NO.		100657		

(1) SPECIAL DETAILS

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



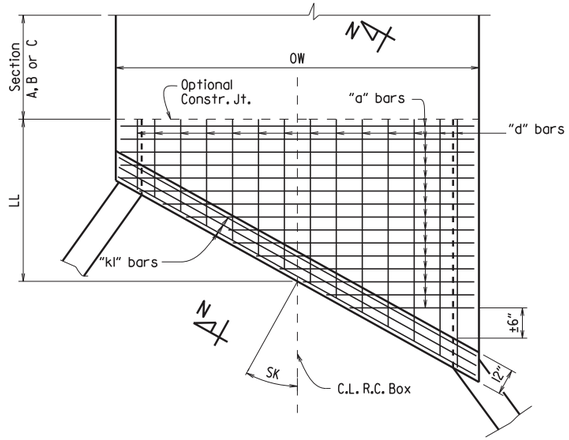
TYPICAL SECTION M-M



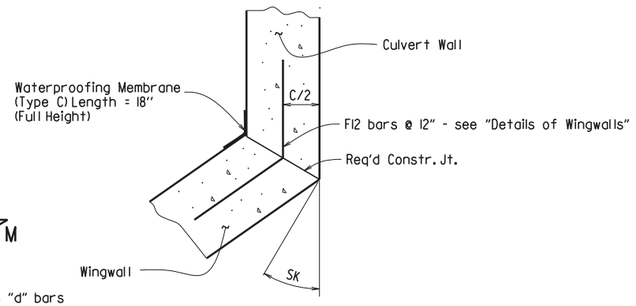
Longitudinal Bar Spacing at individual sections shall be maintained, which may result in noncontact bar laps.

LONGITUDINAL LAP DETAIL AT CHANGE IN SECTIONS

TOP SLAB SHOWN, BOTTOM SLAB SIMILAR

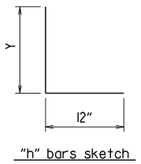


TOP SLAB REINFORCEMENT



WINGWALL ATTACHMENT

See "Details of Wingwalls" for additional information and wingwall details.

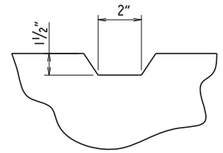


PART LONGITUDINAL SECTION

(Non-Skewed Ends)

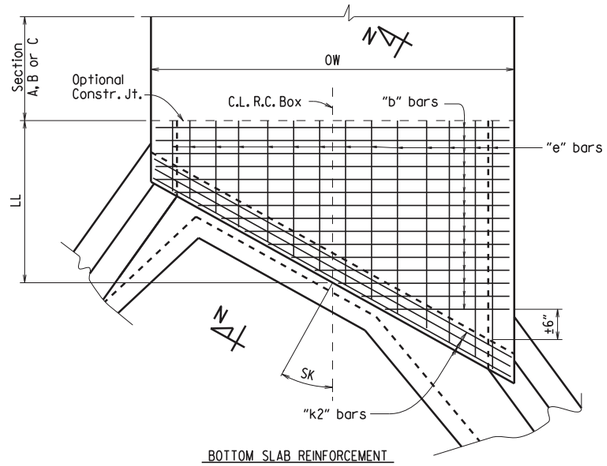
PART LONGITUDINAL SECTION N-N

(Skewed Ends)



TYPICAL KEYWAY DETAIL

(All Construction Joints)



BOTTOM SLAB REINFORCEMENT

SKEWED END SECTION DETAILS

SHEET 2 OF 5
GENERAL DETAILS OF R.C. BOX CULVERT

DETAILS OF SINGLE BARREL
R.C. BOX CULVERT

SPECIAL DETAILS

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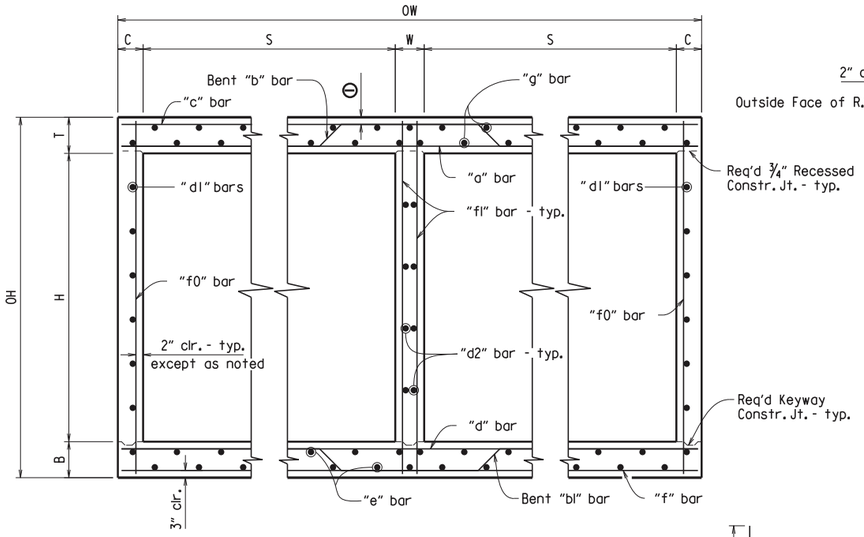
				6	ARK.		43	418
				JOB NO.		100657		

(1) SPECIAL DETAILS

(1) 2" clr. for fill depth (D) greater than 2 ft.
2½" clr. for fill depth (D) equal to or less than 2 ft.

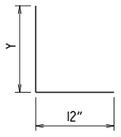
Note: When top slab of culvert serves as finished roadway surface, see General Notes on Sheet 1 of 4.



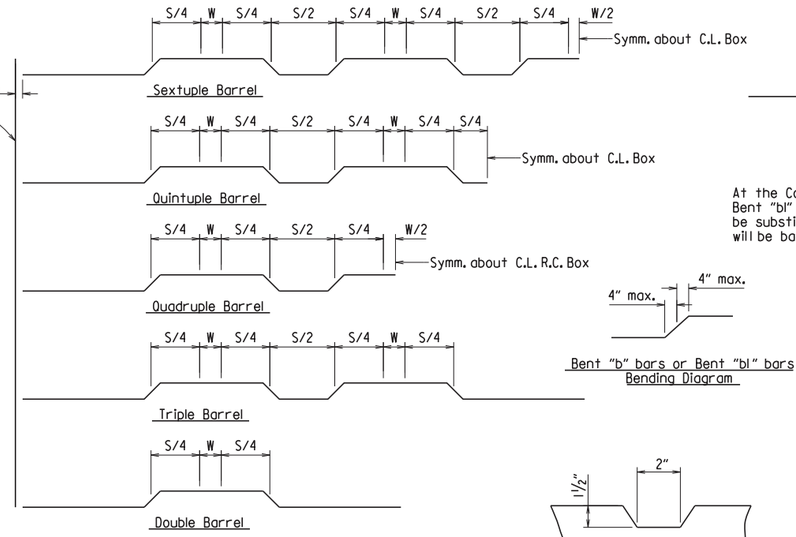
TYPICAL SECTION M-M

Top Slab
Straight "c" bars shall alternate with Bent "b" bars in top.
Straight "a" bars shall alternate with Bent "b" bars in bottom.

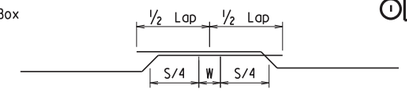
Bottom Slab
Straight "d" bars shall alternate with Bent "bl" bars in top.
Straight "f" bars shall alternate with Bent "bl" bars in bottom.



"h" bars sketch



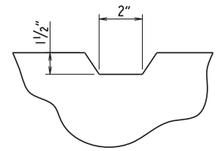
Bent "b" bars or Bent "bl" bars sketch



Lap Detail
For Bent "b" bars and Bent "bl" bars

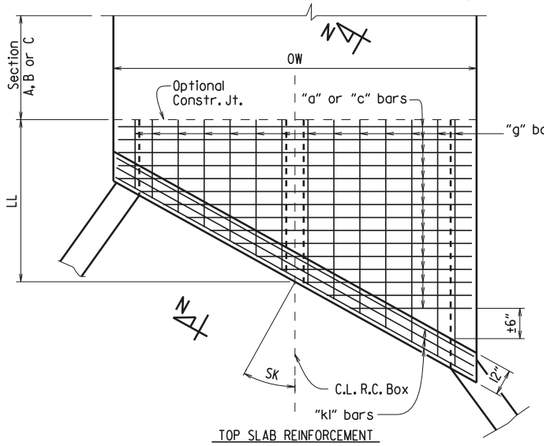
At the Contractor's option in lieu of providing Bent "b" or Bent "bl" bars, one bar top and bottom of equivalent size may be substituted for each bent bar. Payment for the reinforcing will be based on the weight of the "b" or "bl" bar.

Bent "b" bars or Bent "bl" bars
Bending Diagram

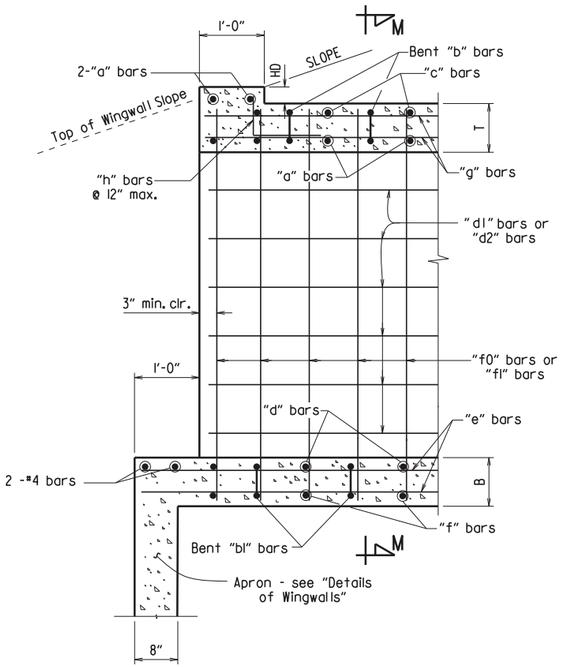


TYPICAL KEYWAY DETAIL

(All Construction Joints)

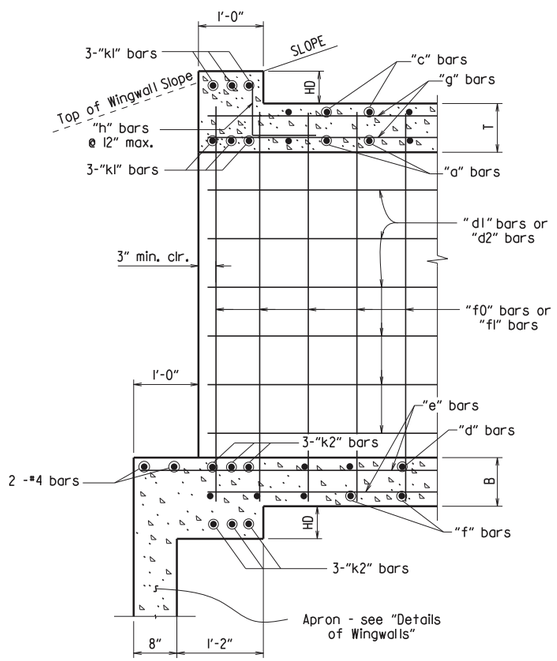


TOP SLAB REINFORCEMENT
Straight "c" bars in top.
Straight "a" bars in bottom.



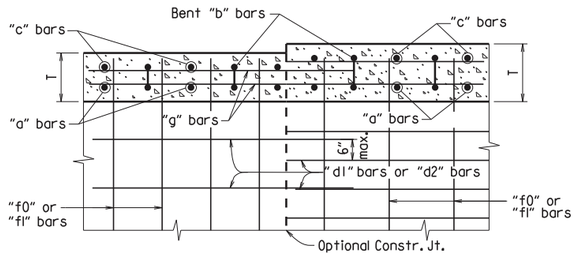
PART LONGITUDINAL SECTION

(Non-Skewed Ends)



PART LONGITUDINAL SECTION N-N

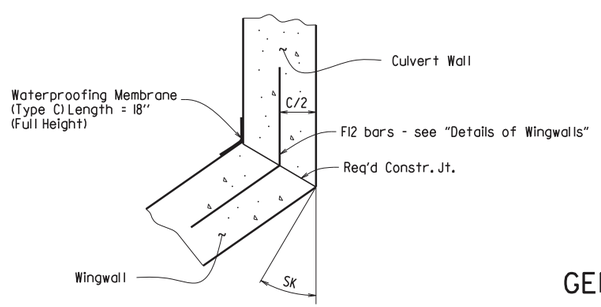
(Skewed Ends)



Longitudinal Bar Spacing at individual sections shall be maintained, which may result in noncontact bar laps.

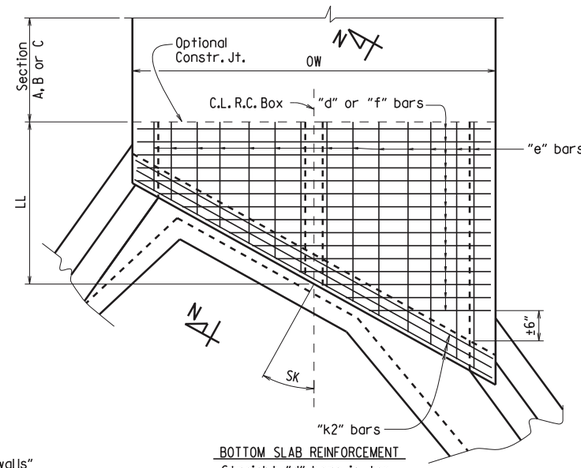
LONGITUDINAL LAP DETAIL AT CHANGE IN SECTIONS

TOP SLAB SHOWN, BOTTOM SLAB SIMILAR



WINGWALL ATTACHMENT

See "Details of Wingwalls" for additional information and wingwall details.



BOTTOM SLAB REINFORCEMENT
Straight "d" bars in top.
Straight "f" bars in bottom.

SKEWED END SECTION DETAILS

SHEET 3 OF 5
GENERAL DETAILS OF R.C. BOX CULVERT

DETAILS OF MULTI-BARREL R.C. BOX CULVERT

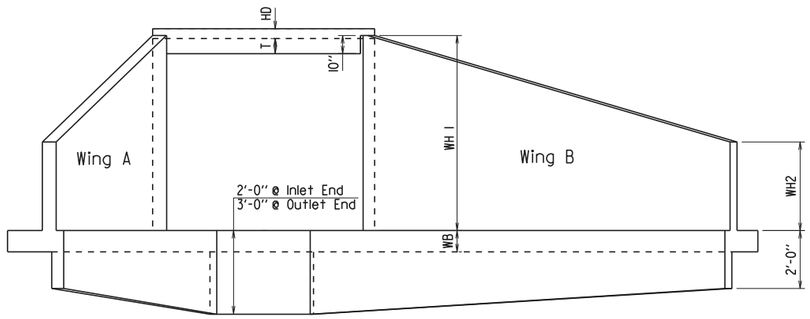
SPECIAL DETAILS

STATE OF ARKANSAS
Sep 9 2021 9:38 AM
LICENSED PROFESSIONAL ENGINEER
* * *
No. 9235
CHARLES R. ELLIS

v 1.1.17 b100657_culvert.dgn

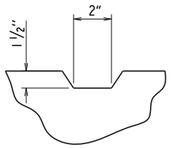
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		44	418
				JOB NO.		100657		

SPECIAL DETAILS



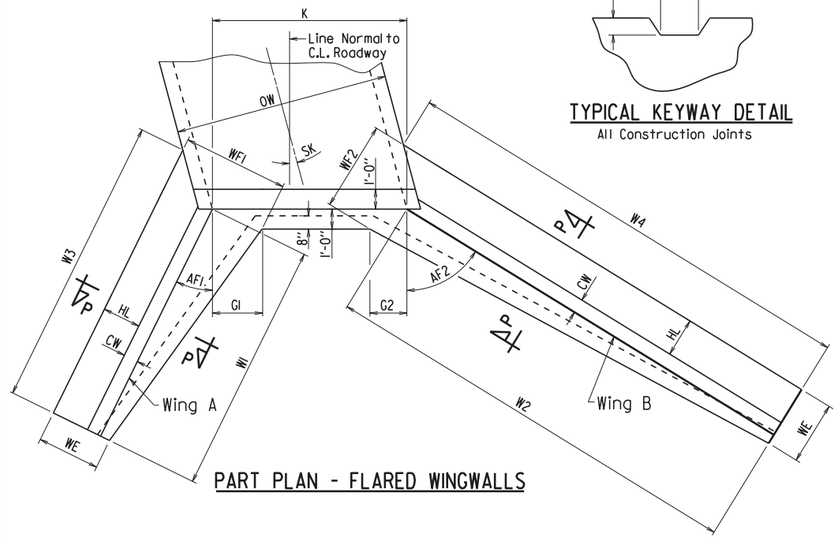
END ELEVATION

Flared Wingwalls Shown

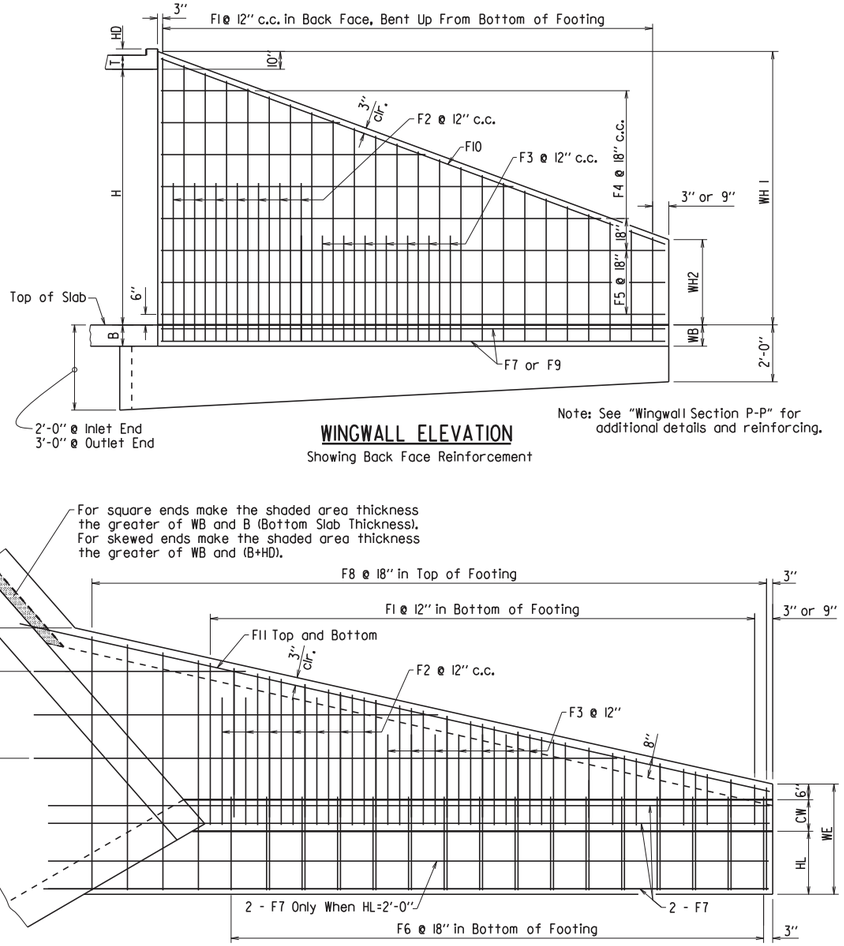


TYPICAL KEYWAY DETAIL

All Construction Joints



PART PLAN - FLARED WINGWALLS



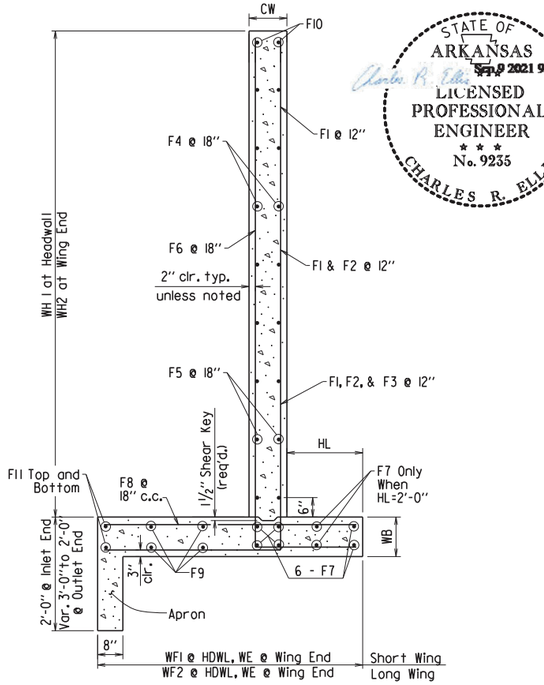
WINGWALL ELEVATION

Showing Back Face Reinforcement

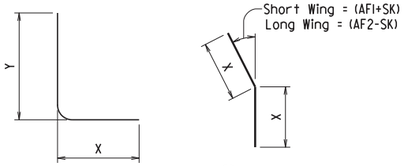
Note: See "Wingwall Section P-P" for additional details and reinforcing.

PLAN - FLARED WINGWALLS

Showing Footing Reinforcement



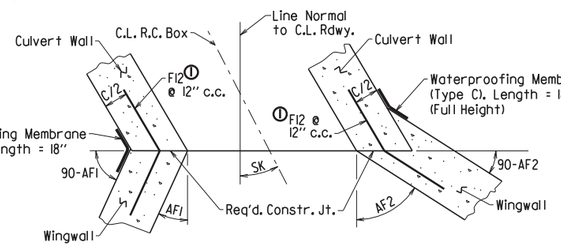
WINGWALL SECTION P-P



F1, F2, F3, & F6 BARS

ⓘF12 BAR

ⓘF12 is a straight bar for parallel wingwalls



CONSTRUCTION JOINTS

Flared Wingwalls Shown

SHEET 4 OF 5

GENERAL DETAILS OF R.C. BOX CULVERT

DETAILS OF WINGWALLS

SPECIAL DETAILS

STATE OF ARKANSAS
Sep 9 2021 9:38 AM
LICENSED PROFESSIONAL ENGINEER
No. 9235
CHARLES R. ELLIS

v LJI7 bl00657_culvert.dgn

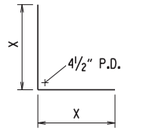
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		45	418
				JOB NO.		100657		
				(1)		SPECIAL DETAILS		

STATE OF ARKANSAS
Ellis, Rick
Sep 9 2021 9:35 AM
LICENSED PROFESSIONAL ENGINEER
* * *
No. 9235
CHARLES R. ELLIS

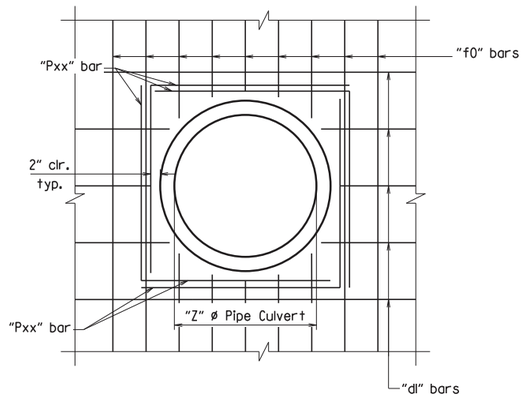
BAR LIST - ROUND PIPE

"Z"	"Pxx" Bar	SIZE	NUMBER	"X"	LENGTH
18"	P18	#6	4	28"	4'-7"
24"	P24	#6	4	34"	5'-7"
30"	P30	#6	4	42"	6'-11"
36"	P36	#6	4	48"	7'-11"

Note: See Roadway Plans for locations and dimensions of Pipe Culverts.



"Pxx" bar sketch



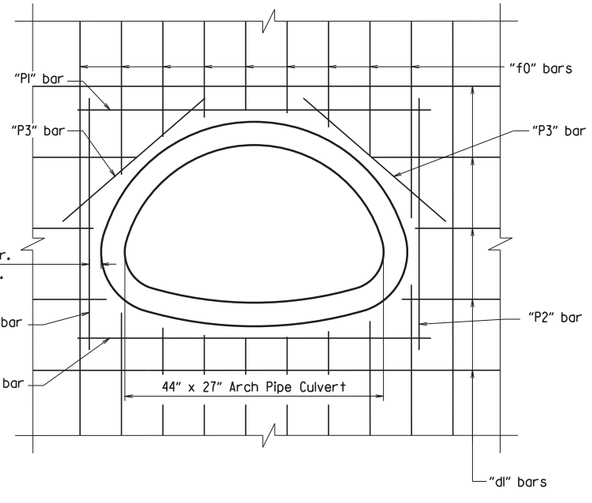
R.C. ROUND PIPE REINFORCING DETAIL

No Scale

BAR LIST - ARCH PIPE

Bar	SIZE	NUMBER	LENGTH
"P1"	#6	2	5'-0"
"P2"	#6	2	3'-7"
"P3"	#6	2	3'-0"

Note: See Roadway Plans for locations and dimensions of Pipe Culverts.



R.C. ARCH PIPE REINFORCING DETAIL

No Scale

Note:
R.C. Pipe penetrating into R.C. Box Culvert walls shall be set to line and grade prior to concrete placement. "f0" and "dl" bars shall be cut to 2" clear of R.C. Pipe penetrations. Additional reinforcing bars shall be added as shown. This reinforcing and work shall not be paid for directly, but shall be considered subsidiary to Class S Concrete.

SHEET 5 OF 5
GENERAL DETAILS OF R.C. BOX CULVERT
DETAILS OF R.C. PIPE

SPECIAL DETAILS

V 1.1.7 bl00657_culvert.dgn

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
09-12-22		6	ARK.	100657	46	418

TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

Smith, Trinity D.
Sep 29 2022 1:41 PM
DocuSign

STA. 111+40.98
BEGIN JOB 100657
LOG MILE 1.194

C.L. HWY. 18S

EXIST. R/W & PROP. C/A

PROP. R/W & C/A

EXIST. R/W

PROP. R/W & C/A

P.I. 506+01.77
= 2°59'28" RT

ELECTRIC SUB STATION

PAVED SHOULDER

N 0°36'20" E

N 1°23'52" W

N 0°55'02" E

REVISIONS

DATE OF REVISION	REVISION

LEGEND

- E-5 = SAND BAG DITCH CHECKS
- E-6 = ROCK DITCH CHECKS
- E-11 = 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.

CLEARING AND GRUBBING
TEMPORARY EROSION CONTROL DETAILS

HT39710 9/9/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	47	418

TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

May 17 2022 12:00 PM

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N

LEGEND

E-5 = SAND BAG DITCH CHECKS

E-6 = ROCK DITCH CHECKS

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

CLEARING AND GRUBBING
TEMPORARY EROSION CONTROL DETAILS

HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
10-19-22		6	ARK.	100657	48	418
		TEMPORARY EROSION CONTROL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

Nov 2 2022 11:38 AM

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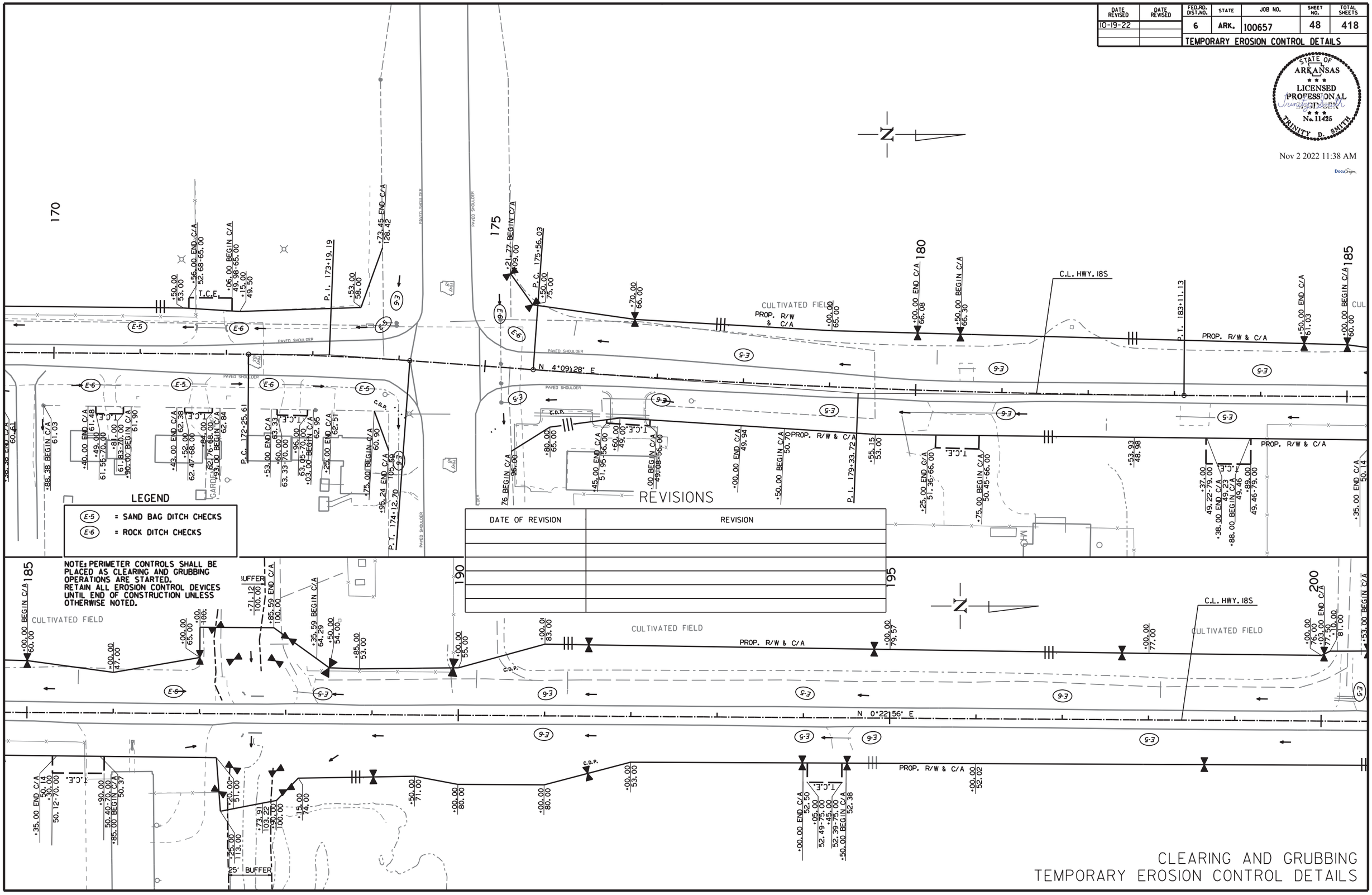

REVISIONS

DATE OF REVISION	REVISION

HT39710 10/19/2022
R100657.DGN

CLEARING AND GRUBBING
TEMPORARY EROSION CONTROL DETAILS

DATE REVISED	DATE REVISED
10-19-22	

FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
6	ARK.	100657	49	418

TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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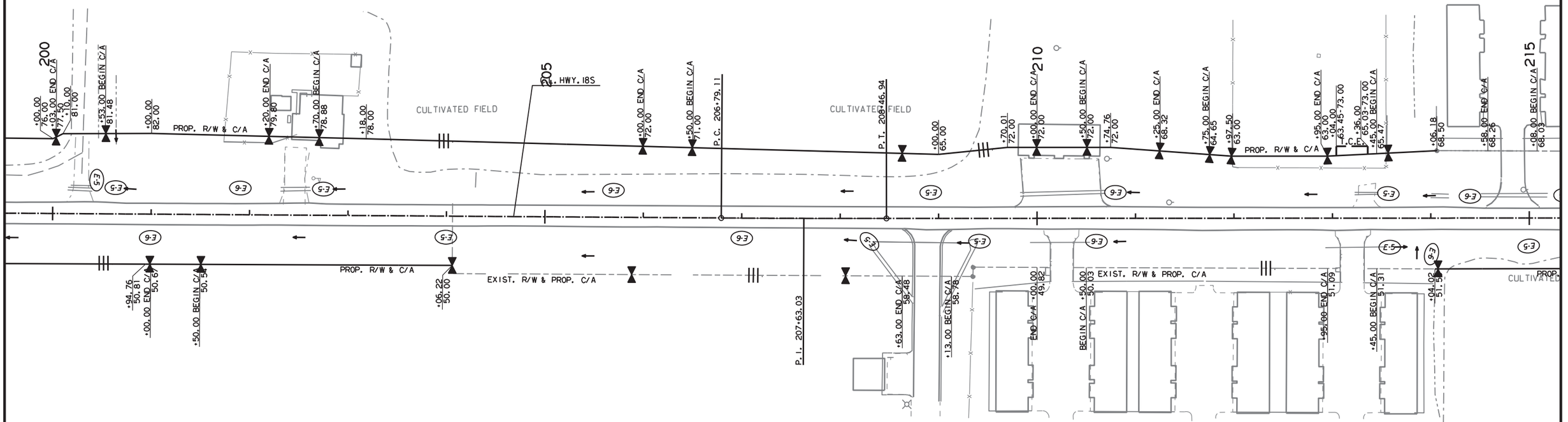

REVISIONS

DATE OF REVISION	REVISION

LEGEND

E-5	= SAND BAG DITCH CHECKS
E-6	= ROCK DITCH CHECKS

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.

HT39710 10/19/2022
R100657.DGN

CLEARING AND GRUBBING
TEMPORARY EROSION CONTROL DETAILS

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
09-12-22		6	ARK.	100657	50	418
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STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

Sep 29 2022 1:34 PM

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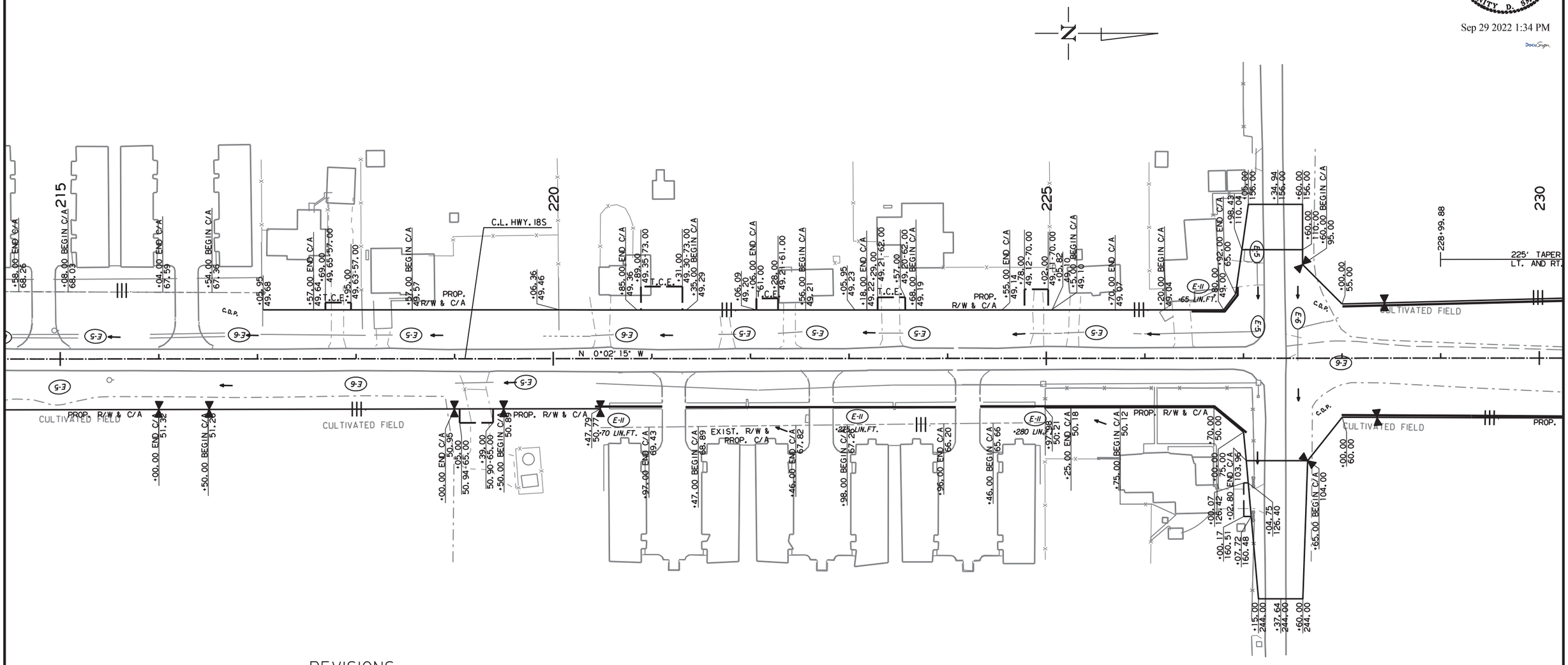

REVISIONS

DATE OF REVISION	REVISION

LEGEND

E-5	= SAND BAG DITCH CHECKS
E-6	= ROCK DITCH CHECKS
E-11	= 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.

CLEARING AND GRUBBING
TEMPORARY EROSION CONTROL DETAILS

HT39710 9/9/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
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No. 11425
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May 17 2022 12:01 PM

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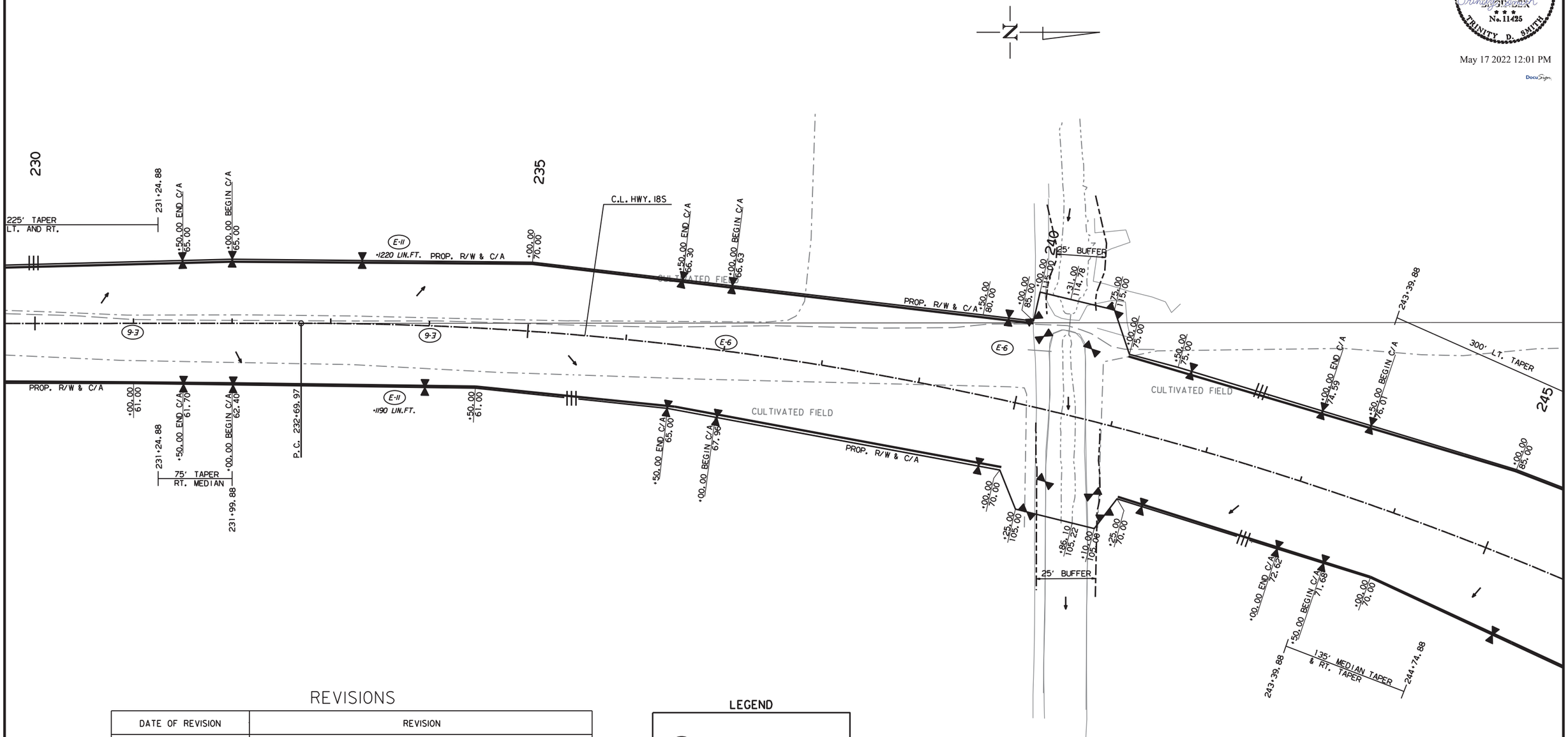

REVISIONS

DATE OF REVISION	REVISION

LEGEND

E-6 = ROCK DITCH CHECKS
E-11 = 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.

HT39710 5/6/2022
R100657.DGN

CLEARING AND GRUBBING TEMPORARY EROSION CONTROL DETAILS

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
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STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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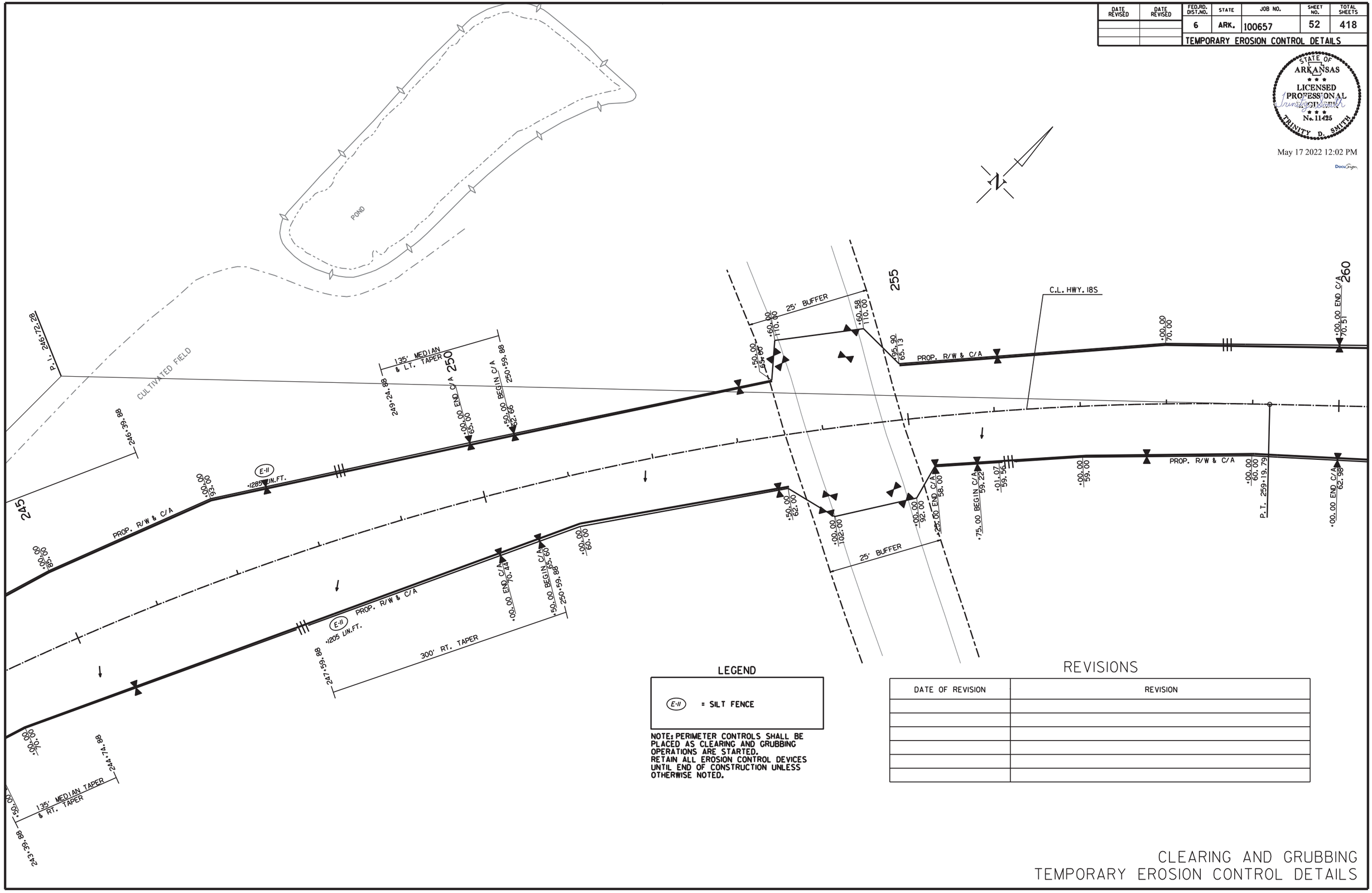

LEGEND

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

HT39710 5/6/2022
R100657.DGN

CLEARING AND GRUBBING
TEMPORARY EROSION CONTROL DETAILS

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	53	418
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STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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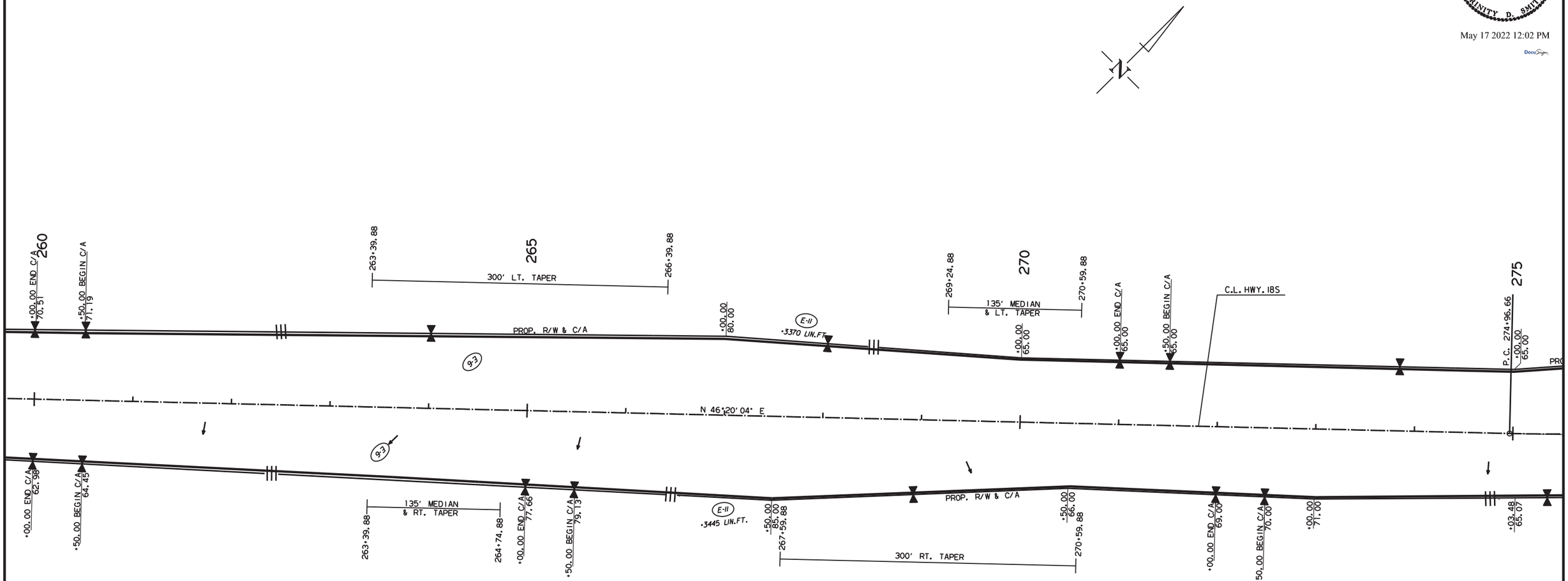

REVISIONS

DATE OF REVISION	REVISION

LEGEND

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.

HT39710 5/6/2022
R100657.DGN

CLEARING AND GRUBBING
TEMPORARY EROSION CONTROL DETAILS

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	54	418
		TEMPORARY EROSION CONTROL DETAILS				

REVISIONS

DATE OF REVISION	REVISION

LEGEND

E-6 = ROCK DITCH CHECKS

E-11 = 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.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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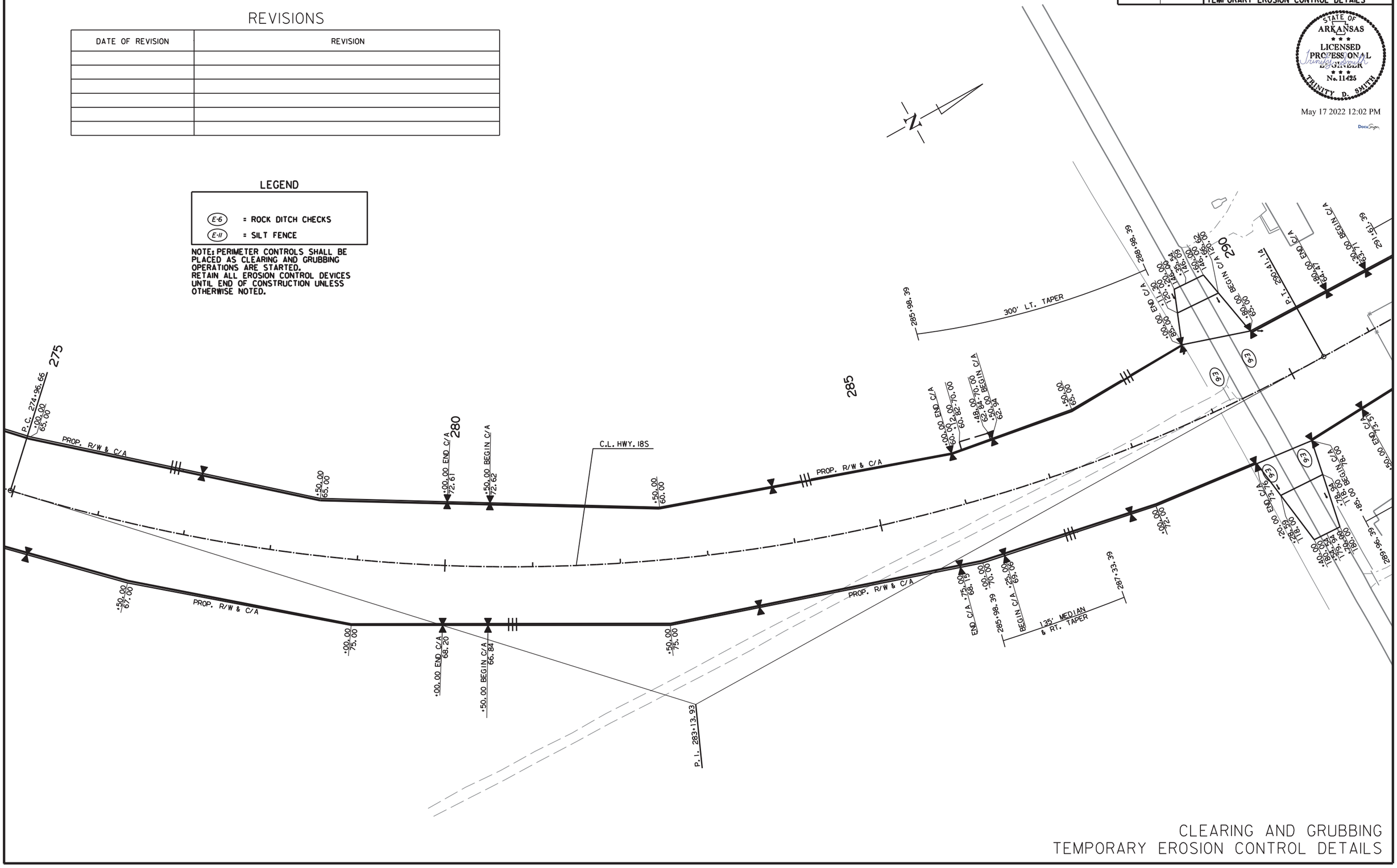
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+00.00
65.00
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65.00
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75.00
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+00.00
70.00
285+98.39
BEGIN C/A +25.00
69.08
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& RT. TAPER
287+33.39
+00.00
72.
+20.00 END C/A
+50.00
75.00
+85.00 BEGIN C/A
+78.94
+80.00
+80.00
+80.00

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	55	418

TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

May 17 2022 12:03 PM

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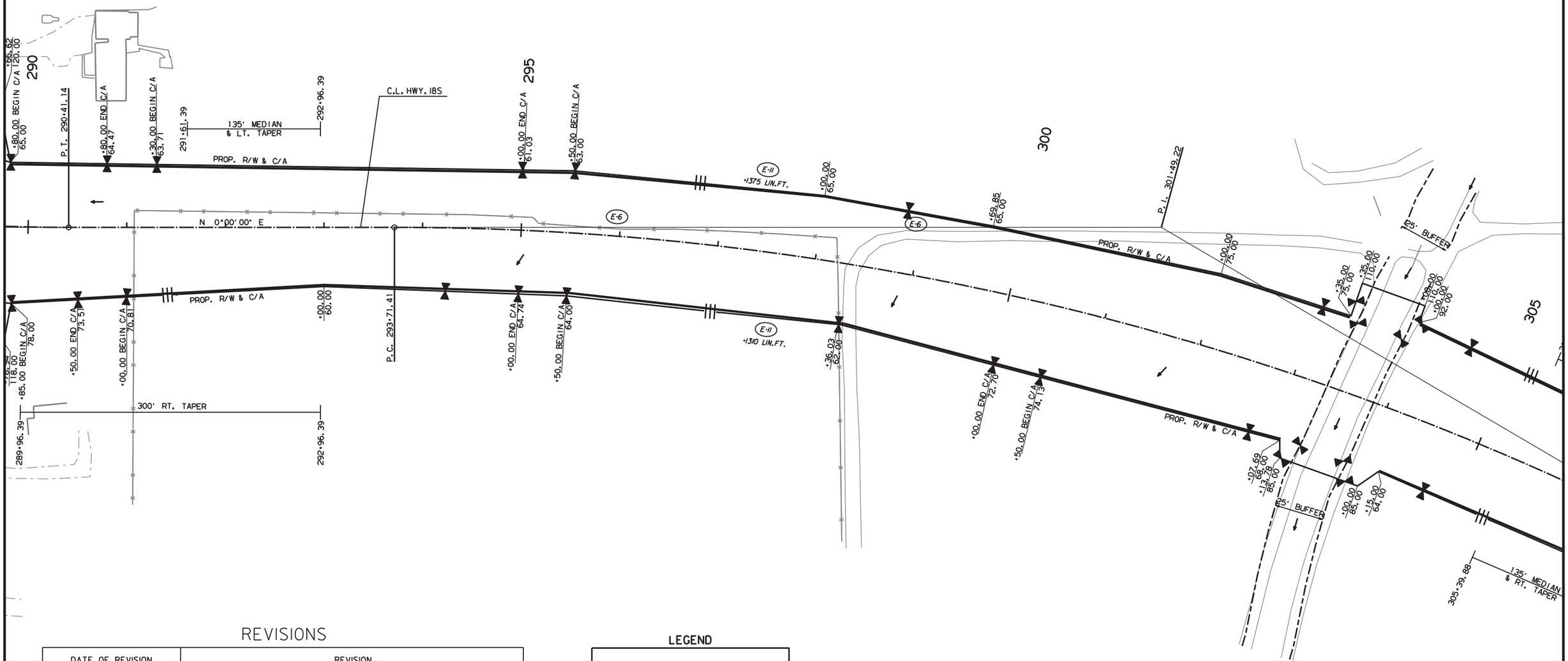

REVISIONS

DATE OF REVISION	REVISION

LEGEND

E-6 = ROCK DITCH CHECKS

E-11 = 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.

CLEARING AND GRUBBING
TEMPORARY EROSION CONTROL DETAILS

HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	56	418
		TEMPORARY EROSION CONTROL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

May 17 2022 12:03 PM

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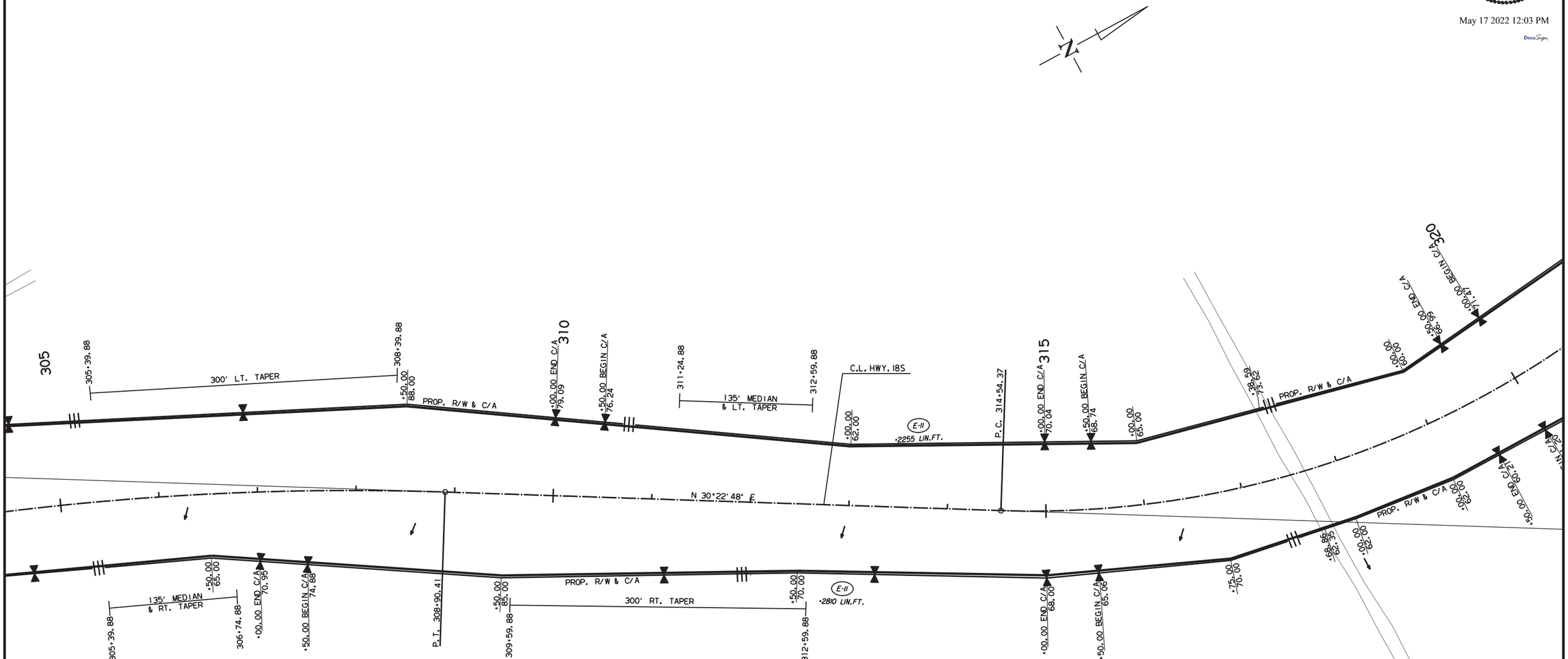

REVISIONS

DATE OF REVISION	REVISION

LEGEND

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.

HT39710 5/6/2022
R100657.DGN

CLEARING AND GRUBBING
TEMPORARY EROSION CONTROL DETAILS

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
09-12-22		6	ARK.	100657	57	418
		TEMPORARY EROSION CONTROL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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C.L. KATHLEEN ST. CONNECTOR
C.L. HWY. 18S
400' LT. TAPER
200' MEDIAN TAPER
180' LT. & RT. TAPER
PROP. R/W & C/A
P.C.E.
P.I. 328+32.15
P.I. 335+42.23
PT654+98.66
PC650+67.77
N 37°42'48" E
N 52°17'12" W
S 56°06'27" E
320
325
330
335
655
E-II .580 LIN.FT.
E-II .375 LIN.FT.
E-II .255 LIN.FT.
E-II .200 LIN.FT.
E-6

REVISIONS

DATE OF REVISION	REVISION

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.

HT39710 9/9/2022
R100657.DGN

CLEARING AND GRUBBING
TEMPORARY EROSION CONTROL DETAILS

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	58	418

TEMPORARY EROSION CONTROL DETAILS

REVISIONS

DATE OF REVISION	REVISION

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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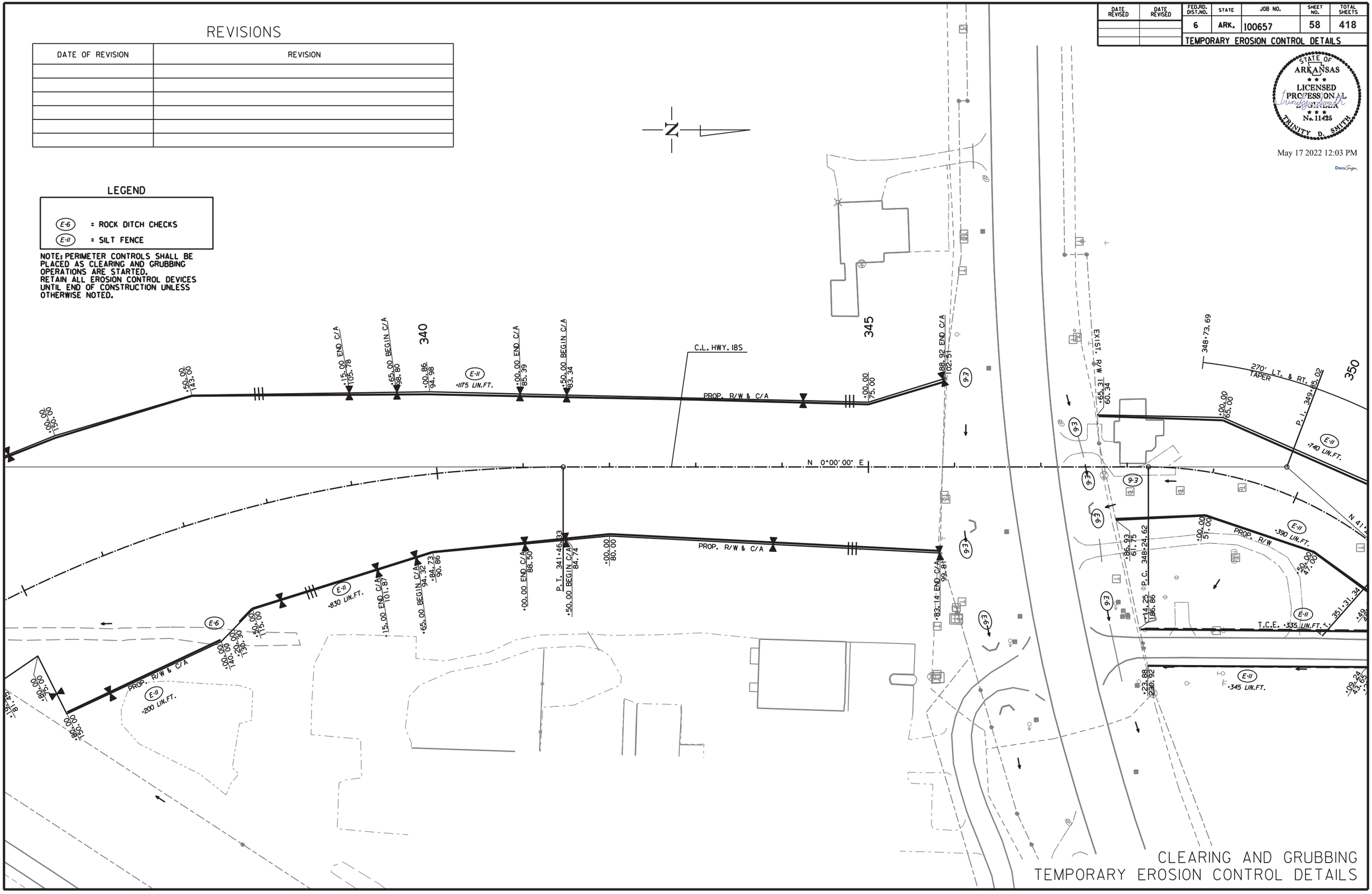
LEGEND

E-6 = ROCK DITCH CHECKS

E-11 = 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.



CLEARING AND GRUBBING
TEMPORARY EROSION CONTROL DETAILS

HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	59	418
		TEMPORARY EROSION CONTROL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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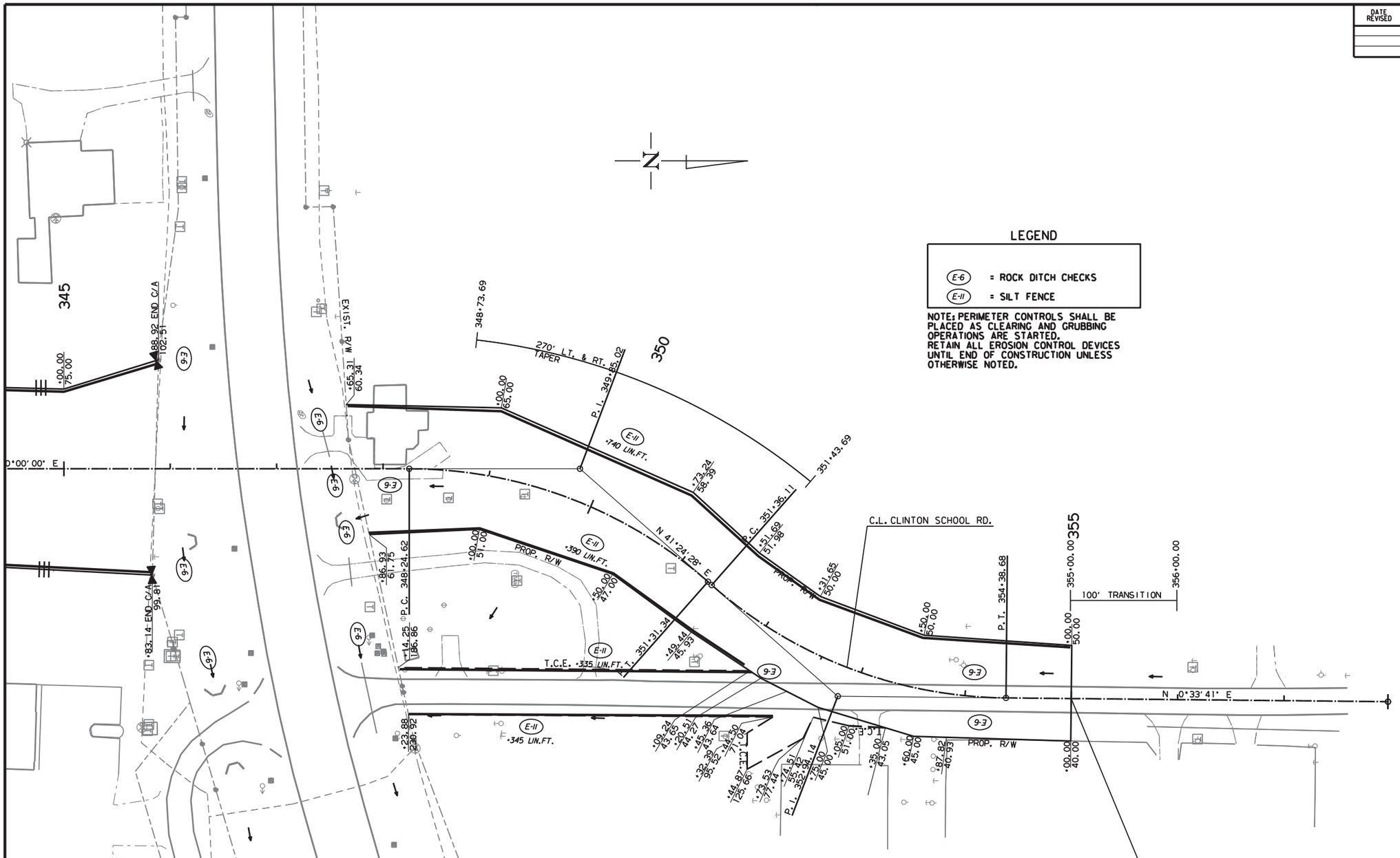

LEGEND

E-6 = ROCK DITCH CHECKS

E-11 = 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.

STA. 355+00.00
END JOB 100657

REVISIONS

DATE OF REVISION	REVISION

CLEARING AND GRUBBING
TEMPORARY EROSION CONTROL DETAILS

HT.39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
09-12-22		6	ARK.	100657	60	418
		TEMPORARY EROSION CONTROL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
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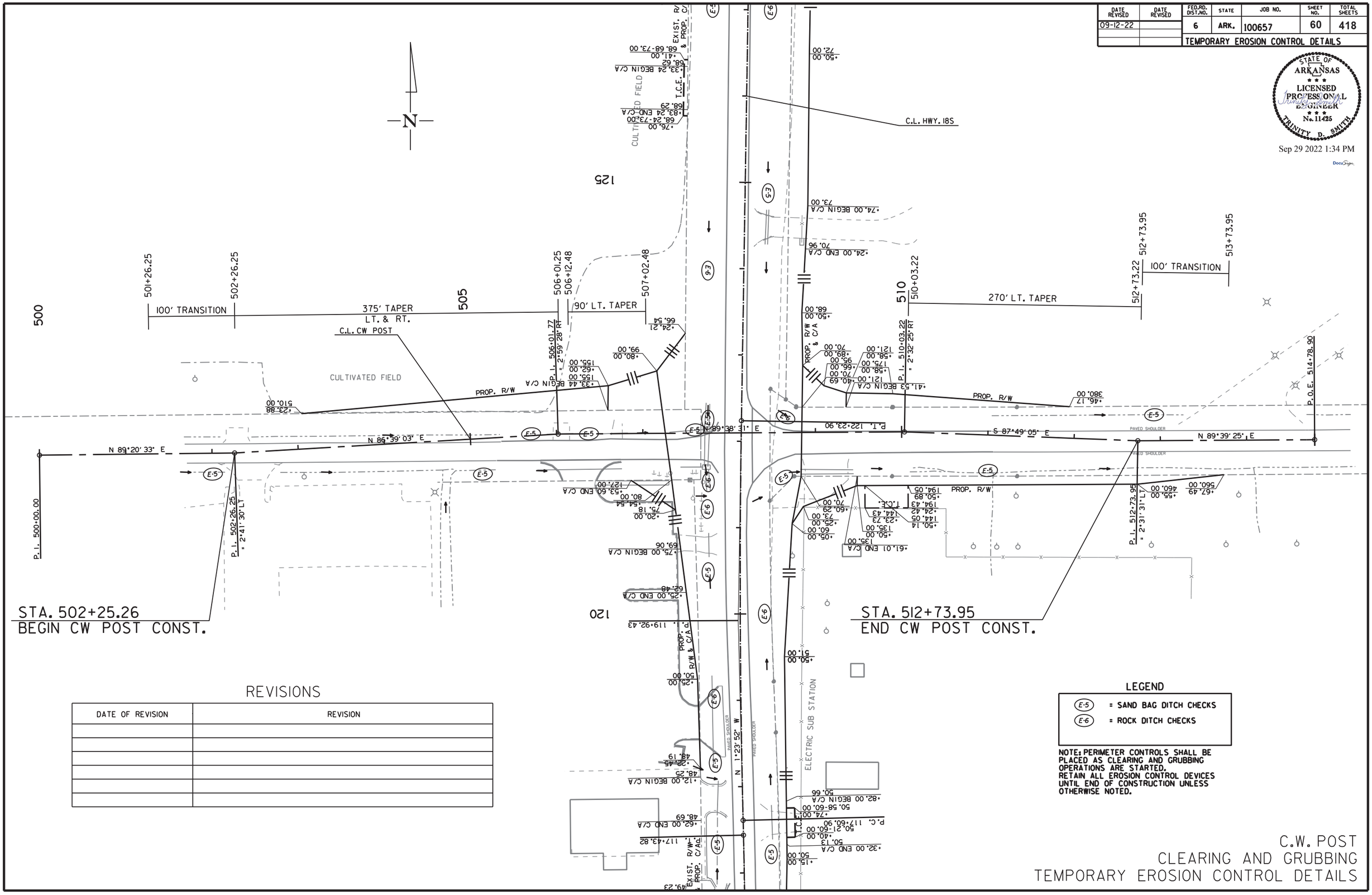

STA. 502+25.26
BEGIN CW POST CONST.

STA. 512+73.95
END CW POST CONST.

REVISIONS

DATE OF REVISION	REVISION

LEGEND

E-5 = SAND BAG DITCH CHECKS
E-6 = ROCK DITCH CHECKS

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.

C.W. POST
CLEARING AND GRUBBING
TEMPORARY EROSION CONTROL DETAILS

HT39710 9/9/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
09-12-22		6	ARK.	100657	61	418

TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

Sep 29 2022 1:34 PM

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STA. 111+40.98
BEGIN JOB 100657
LOG MILE 1.194

C.L. HWY. 18S

EXIST. R/W & PROP. C/A

PROP. R/W & C/A

P.I. 506+01.77
= 2°59'28" RT

CONST. LIMITS

ELECTRIC SUB STATION

PAVED SHOULDER

N 0°36'20" E

N 1°23'52" W

N 0°55'02" E

E 80.68

E 39.03

LEGEND

- E-5 = SAND BAG DITCH CHECKS
- E-6 = ROCK DITCH CHECKS
- E-11 = SILT FENCE
- E-13 = FILTER SOCK

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

STAGE I
TEMPORARY EROSION CONTROL DETAILS

HT39710 9/9/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	62	418

TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

May 17 2022 12:05 PM

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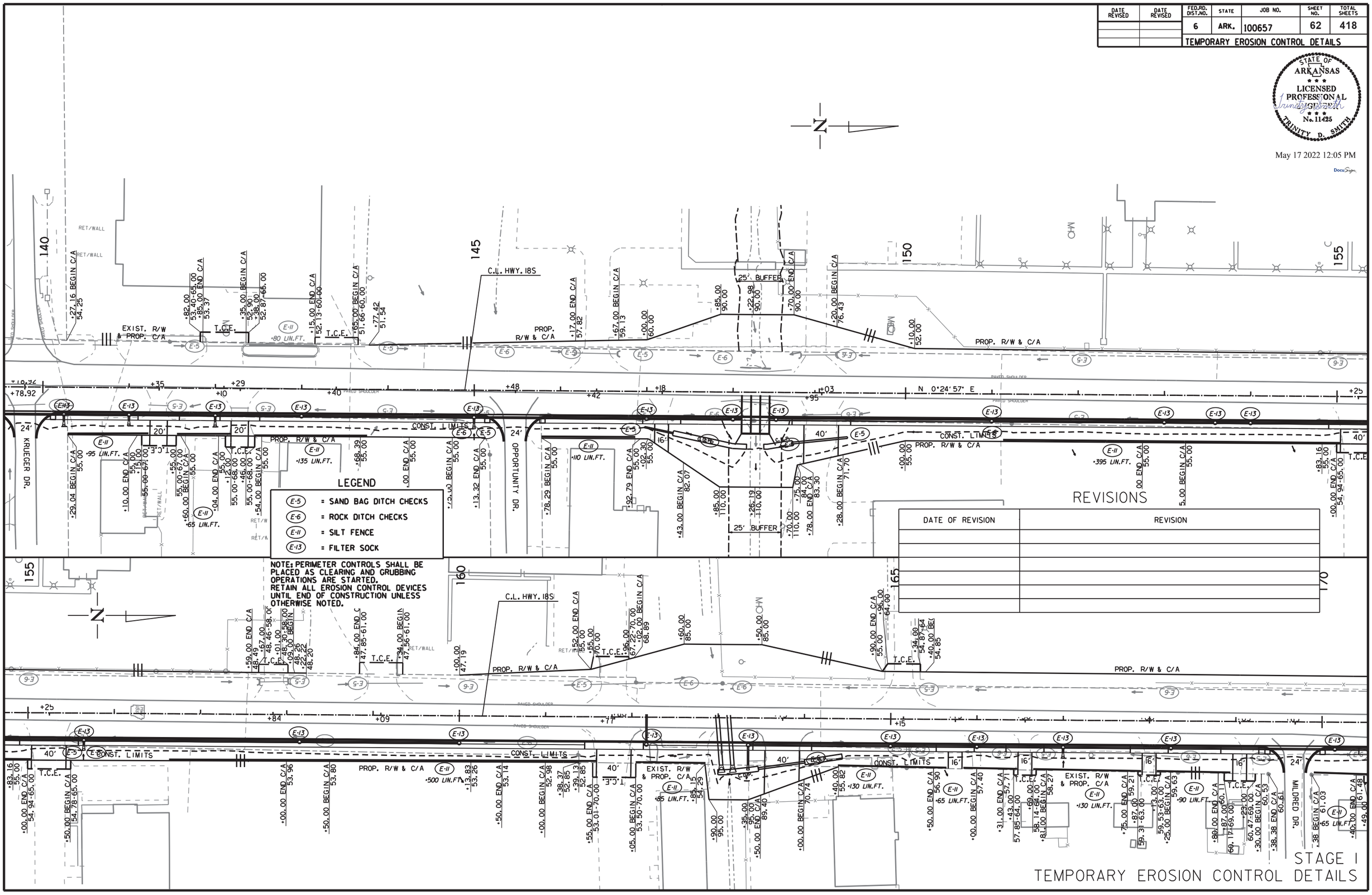

REVISIONS

DATE OF REVISION	REVISION

HT39710 5/6/2022
R100657.DGN

STAGE I
TEMPORARY EROSION CONTROL DETAILS

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
10-19-22		6	ARK.	100657	63	418
		TEMPORARY EROSION CONTROL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

Nov 2 2022 11:39 AM
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REVISIONS

DATE OF REVISION	REVISION

LEGEND

- E-5 = SAND BAG DITCH CHECKS
- E-6 = ROCK DITCH CHECKS
- E-11 = SILT FENCE
- E-13 = FILTER SOCK

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.

HT 39710 10/19/2022
R100657.DGN

STAGE I
TEMPORARY EROSION CONTROL DETAILS

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
10-19-22		6	ARK.	100657	64	418
		TEMPORARY EROSION CONTROL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

Nov 2 2022 11:39 AM

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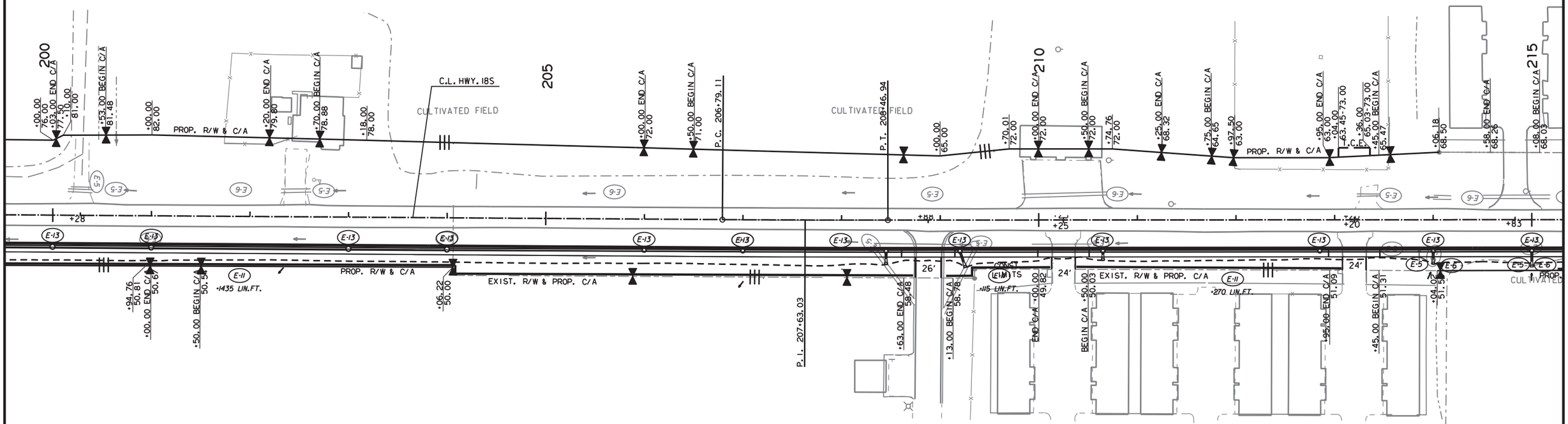

REVISIONS

DATE OF REVISION	REVISION

LEGEND

E-5	= SAND BAG DITCH CHECKS
E-6	= ROCK DITCH CHECKS
E-11	= SILT FENCE
E-13	= FILTER SOCK

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.

HT39710 10/19/2022
R100657.DGN

STAGE I
TEMPORARY EROSION CONTROL DETAILS

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
09-12-22		6	ARK.	100657	65	418

TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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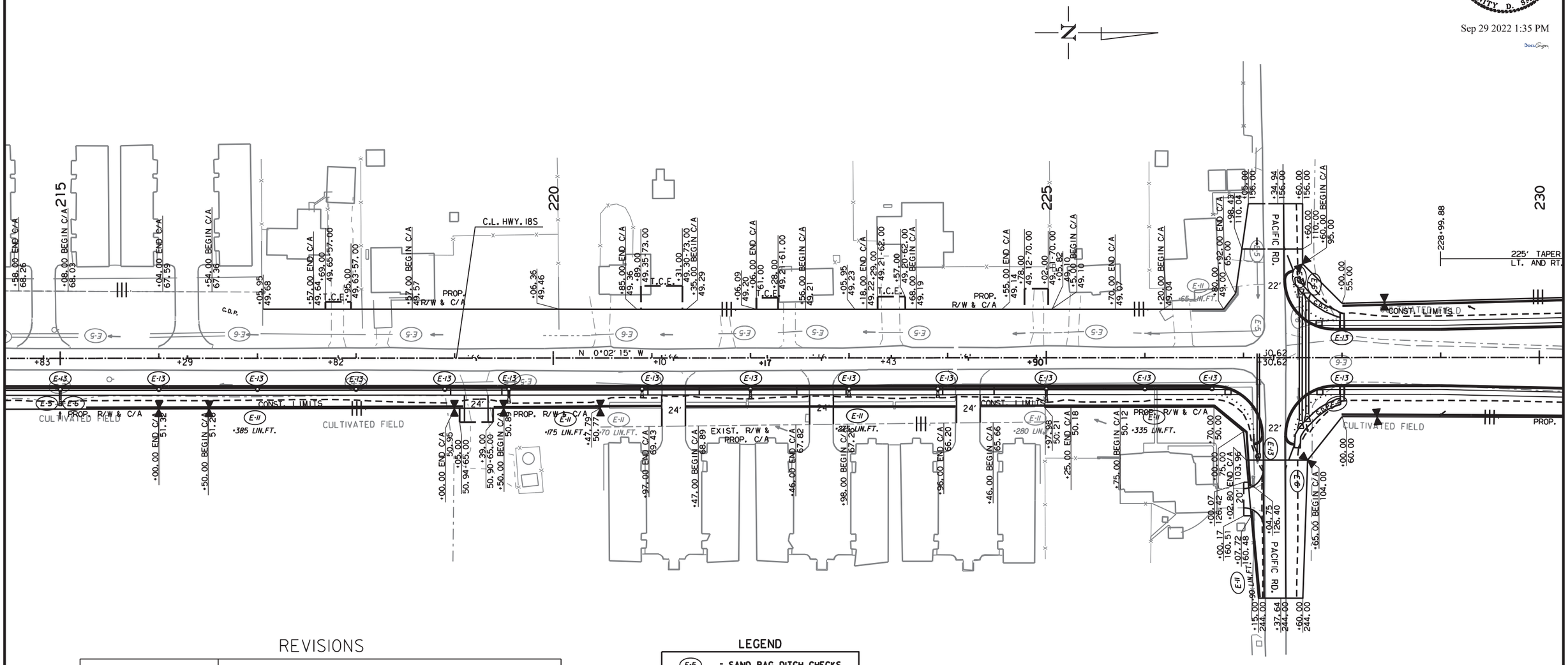

REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-11) = SILT FENCE
- (E-13) = FILTER SOCK

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.

STAGE I
TEMPORARY EROSION CONTROL DETAILS

H139710 9/9/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	66	418
		TEMPORARY EROSION CONTROL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

May 17 2022 12:07 PM

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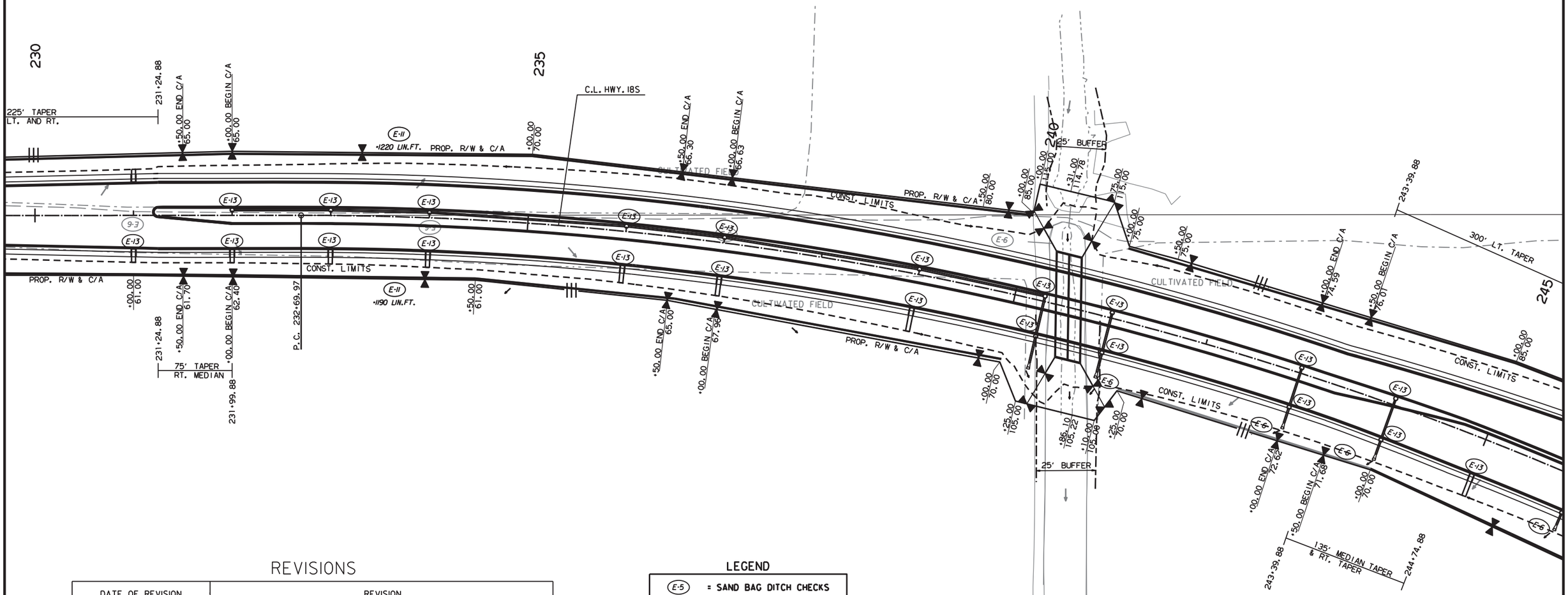

REVISIONS

DATE OF REVISION	REVISION

LEGEND

E-5	= SAND BAG DITCH CHECKS
E-6	= ROCK DITCH CHECKS
E-11	= SILT FENCE
E-13	= FILTER SOCK

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.

HT39710 5/6/2022
R100657.DGN

STAGE I
TEMPORARY EROSION CONTROL DETAILS

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	67	418
		TEMPORARY EROSION CONTROL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

May 17 2022 12:07 PM

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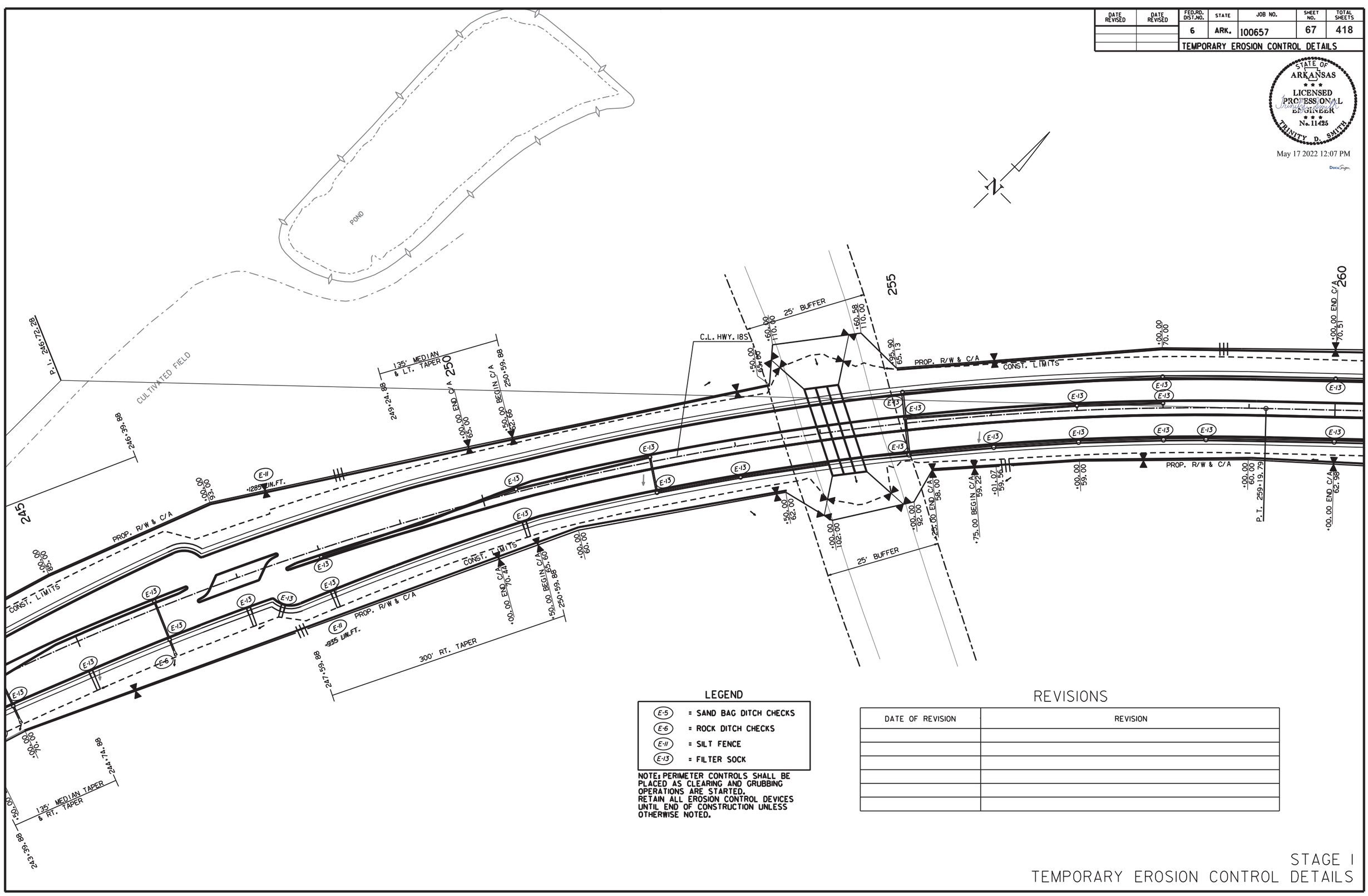

LEGEND

E-5	= SAND BAG DITCH CHECKS
E-6	= ROCK DITCH CHECKS
E-11	= SILT FENCE
E-13	= FILTER SOCK

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

HT39710 5/6/2022
R100657.DGN

STAGE I
TEMPORARY EROSION CONTROL DETAILS

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	68	418
		TEMPORARY EROSION CONTROL DETAILS				

REVISIONS

DATE OF REVISION	REVISION

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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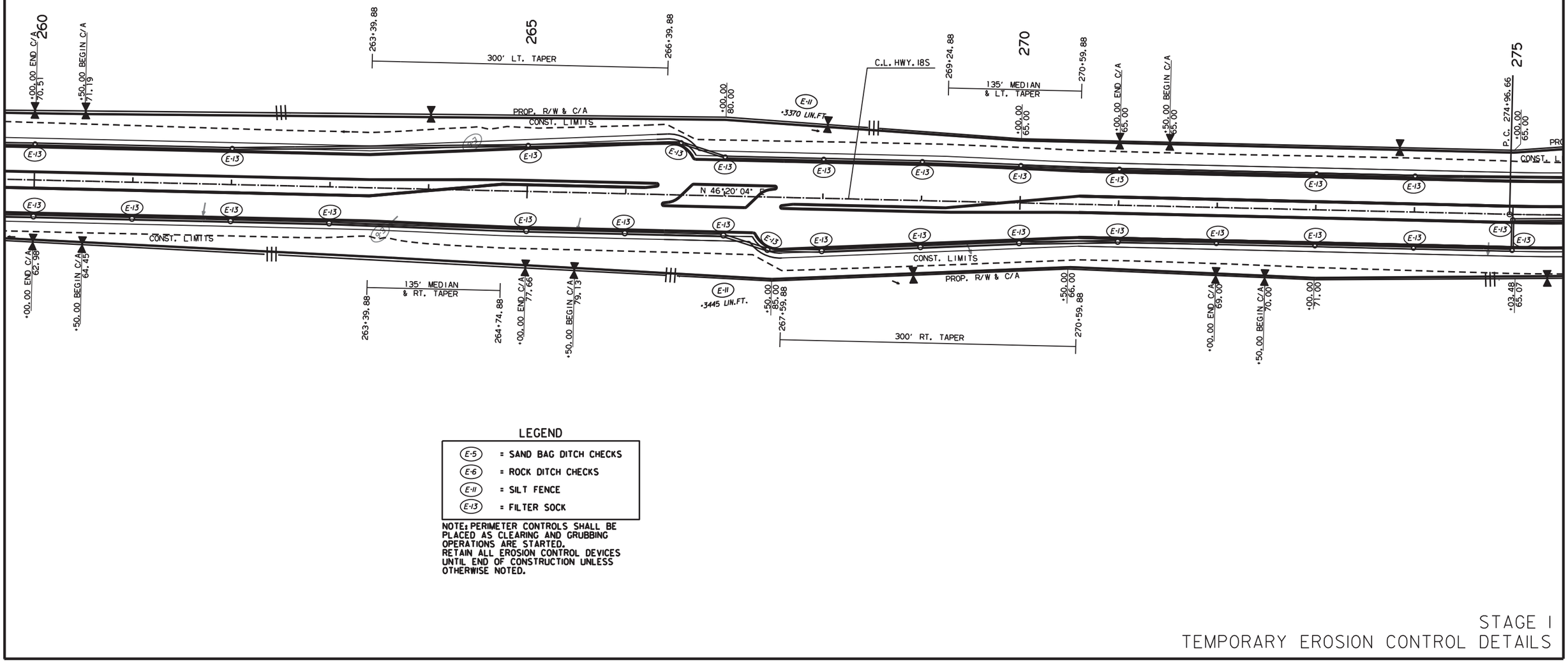

LEGEND

E-5	= SAND BAG DITCH CHECKS
E-6	= ROCK DITCH CHECKS
E-11	= SILT FENCE
E-13	= FILTER SOCK

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.

HT39710 5/6/2022
R100657.DGN

STAGE I
TEMPORARY EROSION CONTROL DETAILS

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	69	418
		TEMPORARY EROSION CONTROL DETAILS				

REVISIONS

DATE OF REVISION	REVISION

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

May 17 2022 12:08 PM

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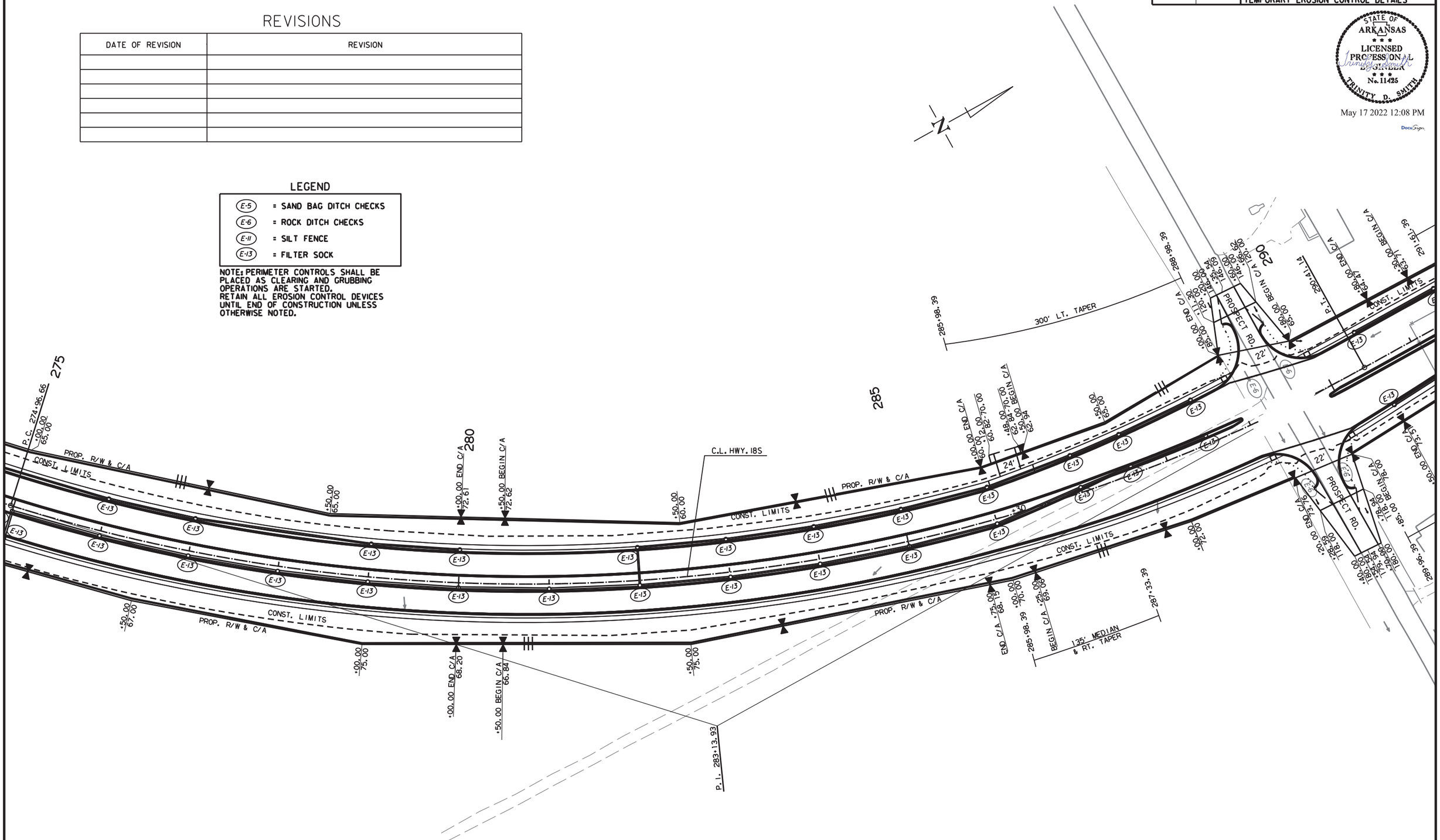
LEGEND

E-5	= SAND BAG DITCH CHECKS
E-6	= ROCK DITCH CHECKS
E-11	= SILT FENCE
E-13	= FILTER SOCK

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.



DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	70	418

TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

May 17 2022 12:09 PM

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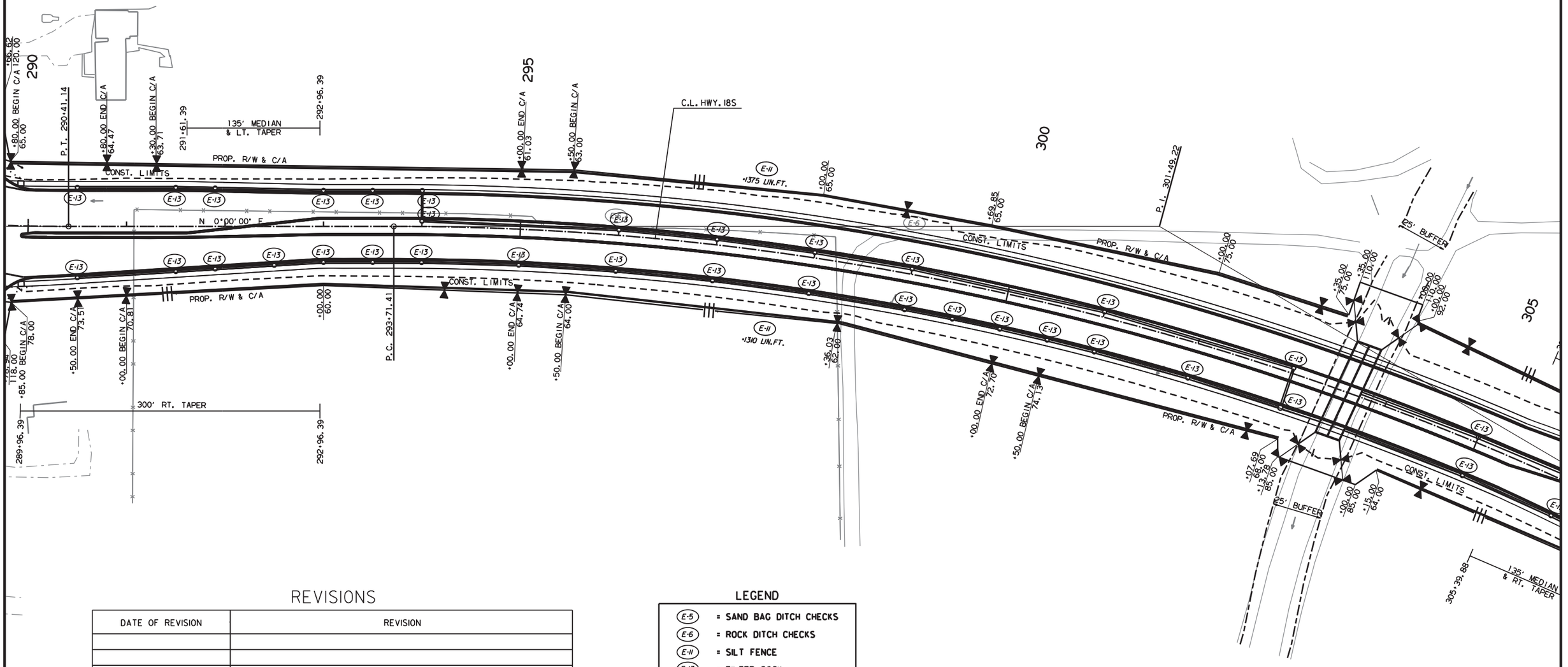

REVISIONS

DATE OF REVISION	REVISION

LEGEND

E-5	= SAND BAG DITCH CHECKS
E-6	= ROCK DITCH CHECKS
E-11	= SILT FENCE
E-13	= FILTER SOCK

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.

STAGE I
TEMPORARY EROSION CONTROL DETAILS

HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	71	418
		TEMPORARY EROSION CONTROL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
May 17 2022 12:09 PM
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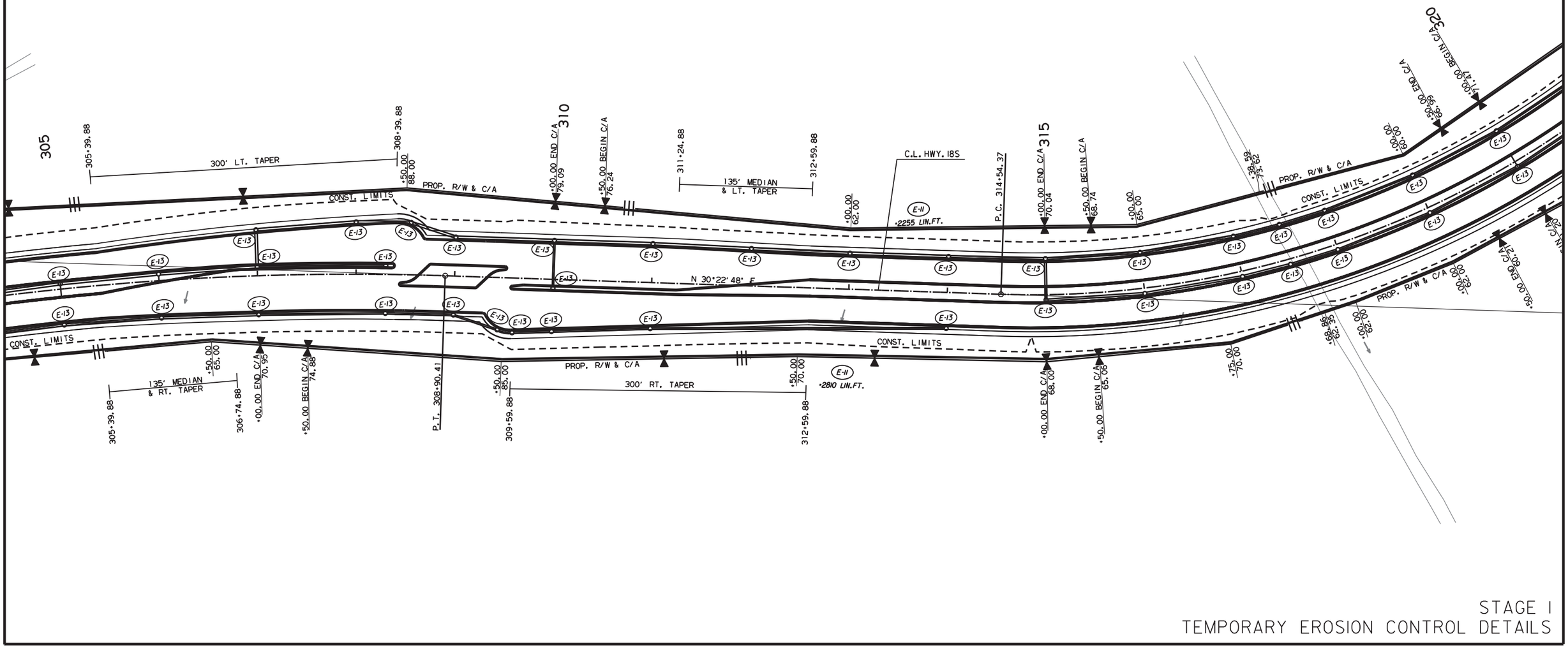
REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-11) = SILT FENCE
- (E-13) = FILTER SOCK

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.



STAGE I
TEMPORARY EROSION CONTROL DETAILS

HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
09-12-22		6	ARK.	100657	72	418
		TEMPORARY EROSION CONTROL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

Sep 29 2022 1:35 PM

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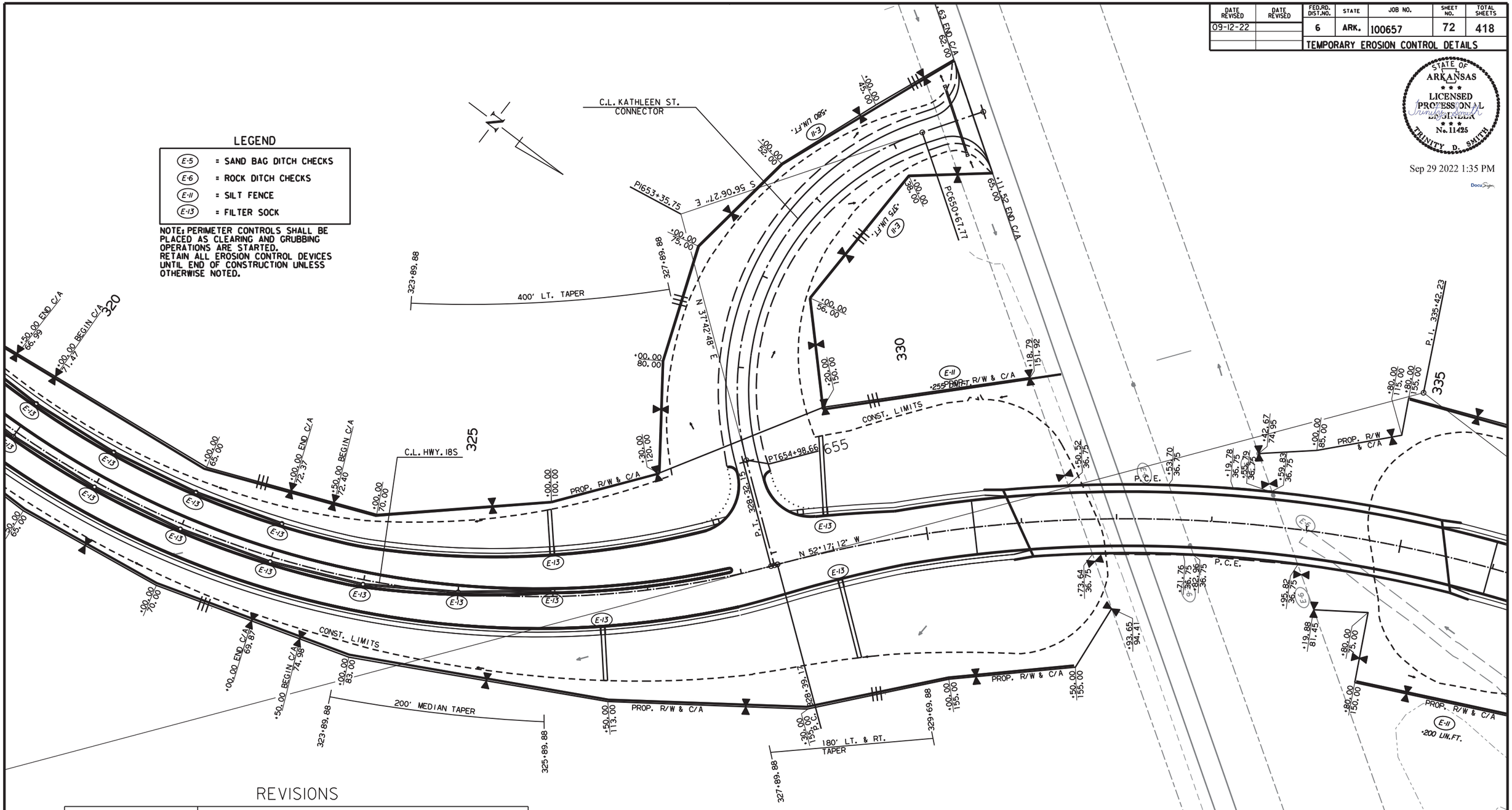
LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-11) = SILT FENCE
- (E-13) = FILTER SOCK

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

HT39710 9/9/2022
R100657.DGN

STAGE I
TEMPORARY EROSION CONTROL DETAILS

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	73	418

TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

May 17 2022 12:09 PM

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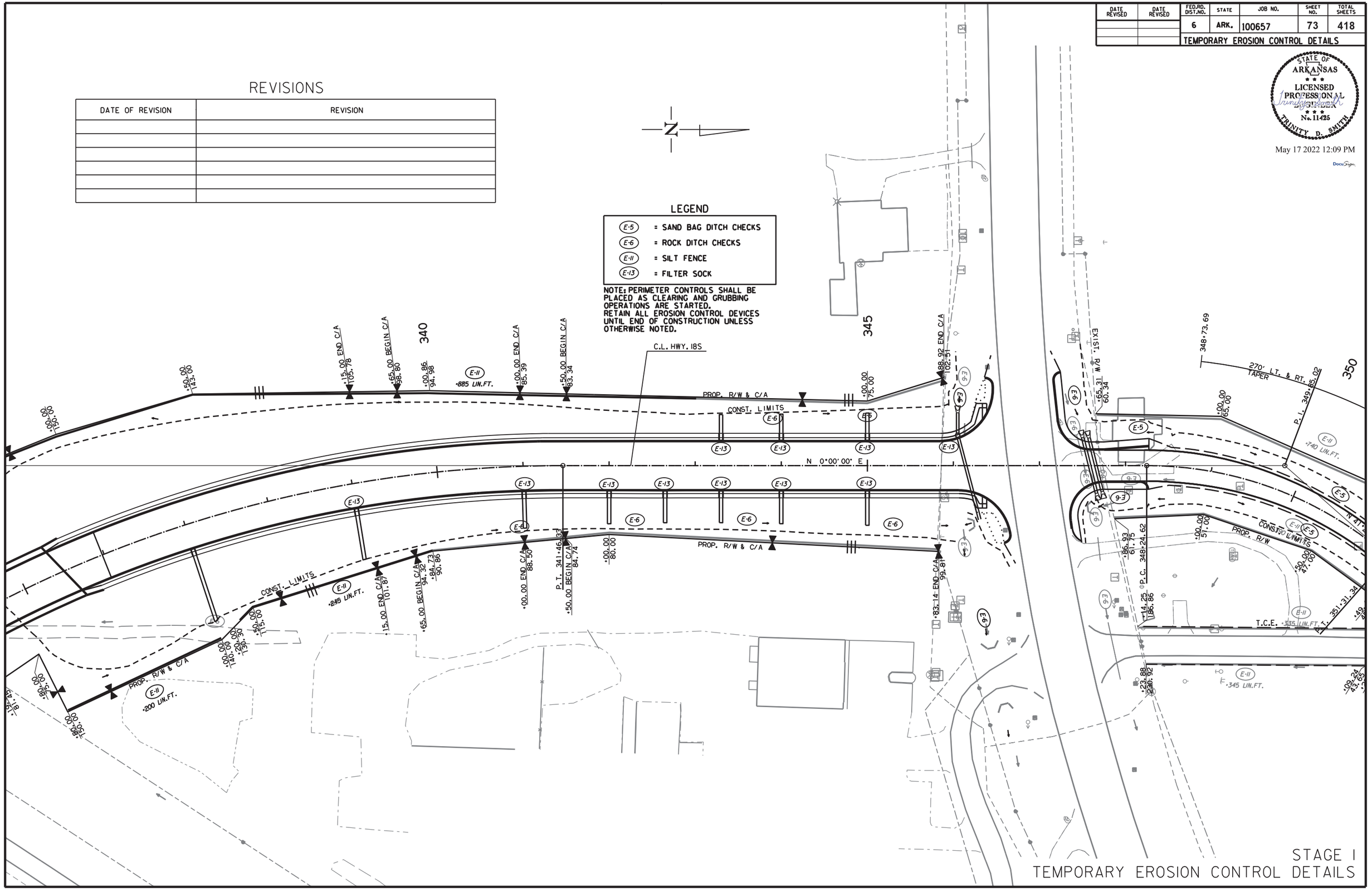
REVISIONS

DATE OF REVISION	REVISION

LEGEND

E-5	= SAND BAG DITCH CHECKS
E-6	= ROCK DITCH CHECKS
E-11	= SILT FENCE
E-13	= FILTER SOCK

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.



STAGE I
TEMPORARY EROSION CONTROL DETAILS

HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	74	418
		TEMPORARY EROSION CONTROL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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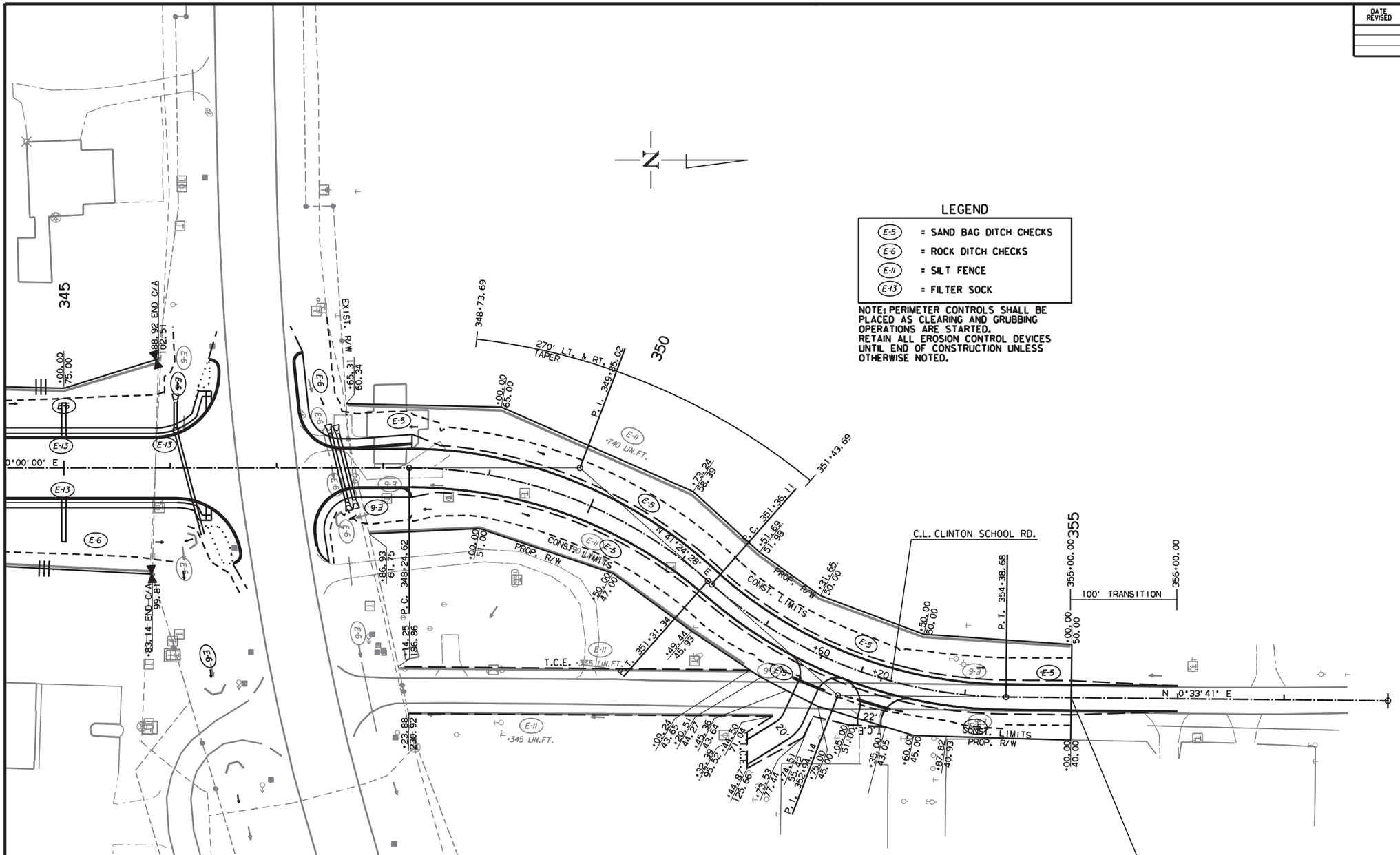

REVISIONS

DATE OF REVISION	REVISION

HT39710 5/6/2022
R100657.DGN

STAGE I
TEMPORARY EROSION CONTROL DETAILS

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
09-12-22		6	ARK.	100657	75	418
		TEMPORARY EROSION CONTROL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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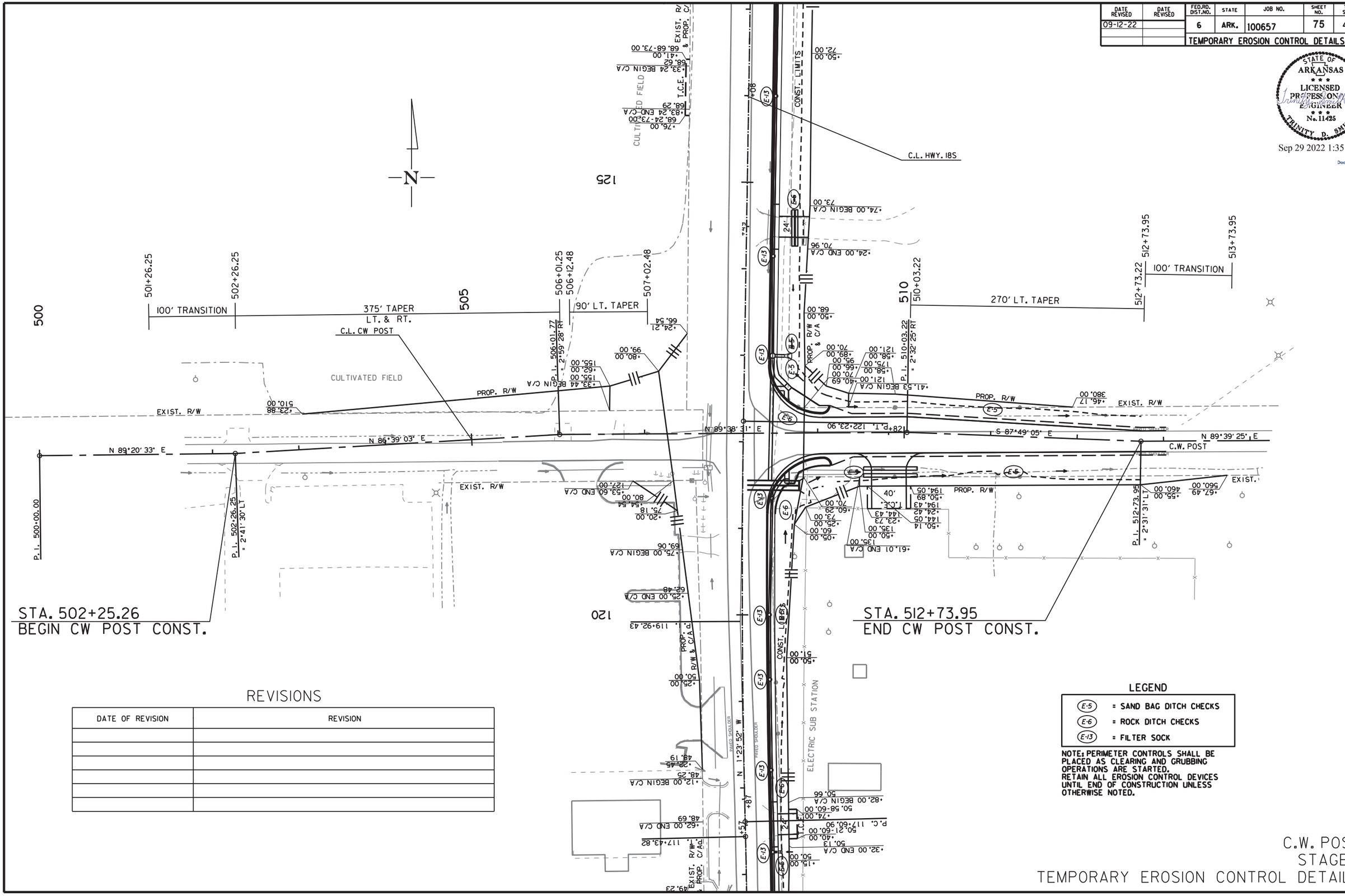

REVISIONS

DATE OF REVISION	REVISION

LEGEND

E-5	= SAND BAG DITCH CHECKS
E-6	= ROCK DITCH CHECKS
E-13	= FILTER SOCK

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.

C.W. POST
STAGE I
TEMPORARY EROSION CONTROL DETAILS

HT39710 9/9/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
09-12-22		6	ARK.	100657	76	418

TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

Sep 29 2022 1:35 PM
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STA. 111+40.98
BEGIN JOB 100657
LOG MILE 1.194

I-555 ON RAMP

EXIST. R/W & PROP. C/A

C.L. HWY. 18S

COMMERCE SQ.

PROP. R/W & C/A

CONST. LIMITS

PAVED SHOULDER

P.I. 506+01.77 = 2°59'28" RT

N 0°36'20" E

N 1°23'52" W

N 0°55'02" E

REVISIONS

DATE OF REVISION	REVISION

LEGEND

- E-5 = SAND BAG DITCH CHECKS
- E-6 = ROCK DITCH CHECKS
- E-11 = SILT FENCE
- E-13 = FILTER SOCK

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.

KRUEGER DR.

STAGE 2
TEMPORARY EROSION CONTROL DETAILS

HT39710 9/9/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	77	418

TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

May 17 2022 12:12 PM

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LEGEND

E-5	= SAND BAG DITCH CHECKS
E-6	= ROCK DITCH CHECKS
E-11	= SILT FENCE
E-13	= FILTER SOCK

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

STAGE 2
TEMPORARY EROSION CONTROL DETAILS

HT.39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
10-19-22		6	ARK.	100657	78	418
		TEMPORARY EROSION CONTROL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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REVISIONS

DATE OF REVISION	REVISION

LEGEND

E-5	= SAND BAG DITCH CHECKS
E-6	= ROCK DITCH CHECKS
E-11	= SILT FENCE
E-13	= FILTER SOCK

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.

HT39710 10/19/2022
R100657.DGN

STAGE 2
TEMPORARY EROSION CONTROL DETAILS

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
10-19-22		6	ARK.	100657	79	418
		TEMPORARY EROSION CONTROL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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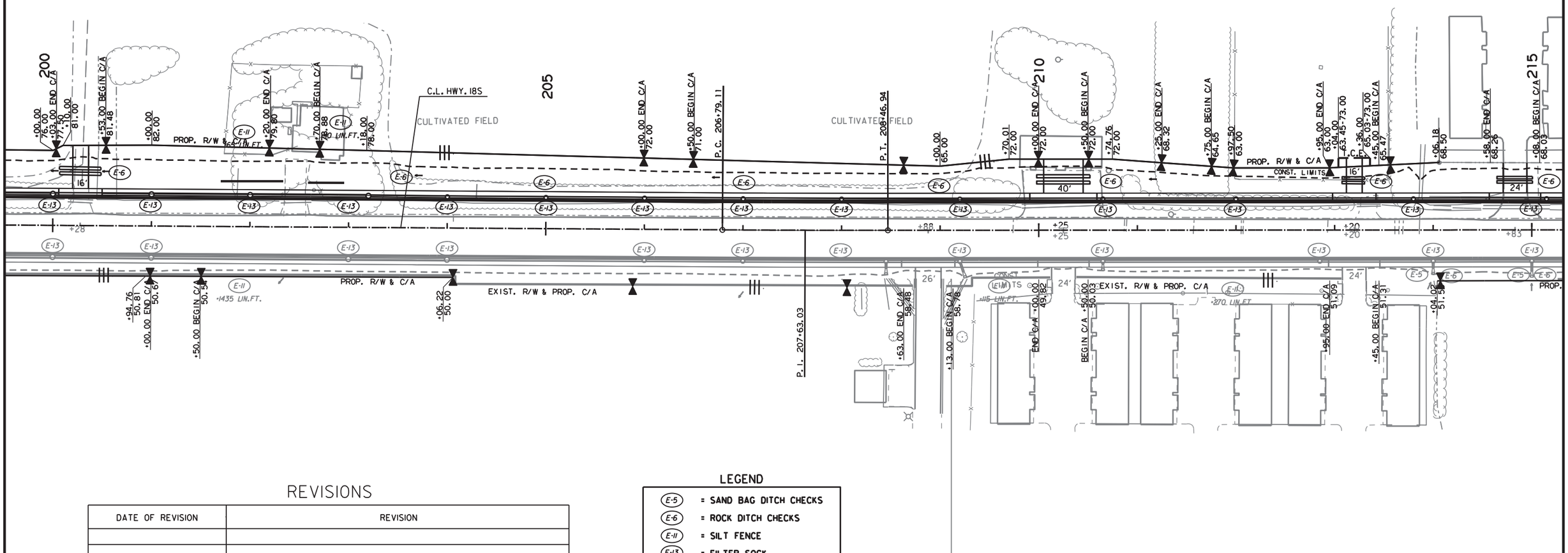

REVISIONS

DATE OF REVISION	REVISION

LEGEND

E-5	= SAND BAG DITCH CHECKS
E-6	= ROCK DITCH CHECKS
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HT39710 10/19/2022
R100657.DGN

STAGE 2
TEMPORARY EROSION CONTROL DETAILS

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
09-12-22		6	ARK.	100657	80	418
		TEMPORARY EROSION CONTROL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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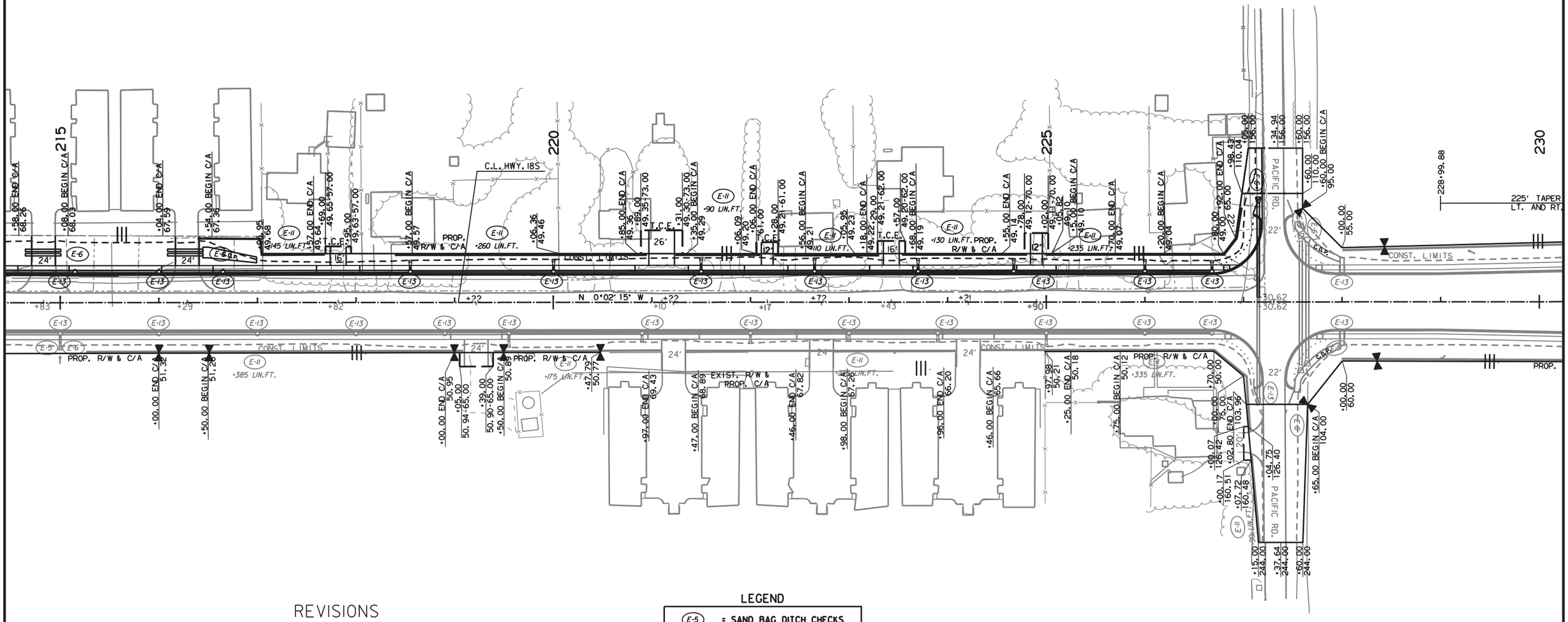

REVISIONS

DATE OF REVISION	REVISION

LEGEND

E-5	= SAND BAG DITCH CHECKS
E-6	= ROCK DITCH CHECKS
E-11	= SILT FENCE
E-13	= FILTER SOCK

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.

STAGE 2
TEMPORARY EROSION CONTROL DETAILS

H139710 9/9/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	81	418
		TEMPORARY EROSION CONTROL DETAILS				

REVISIONS

DATE OF REVISION	REVISION

LEGEND

E-5	= SAND BAG DITCH CHECKS
E-6	= ROCK DITCH CHECKS
E-11	= SILT FENCE
E-13	= FILTER SOCK

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.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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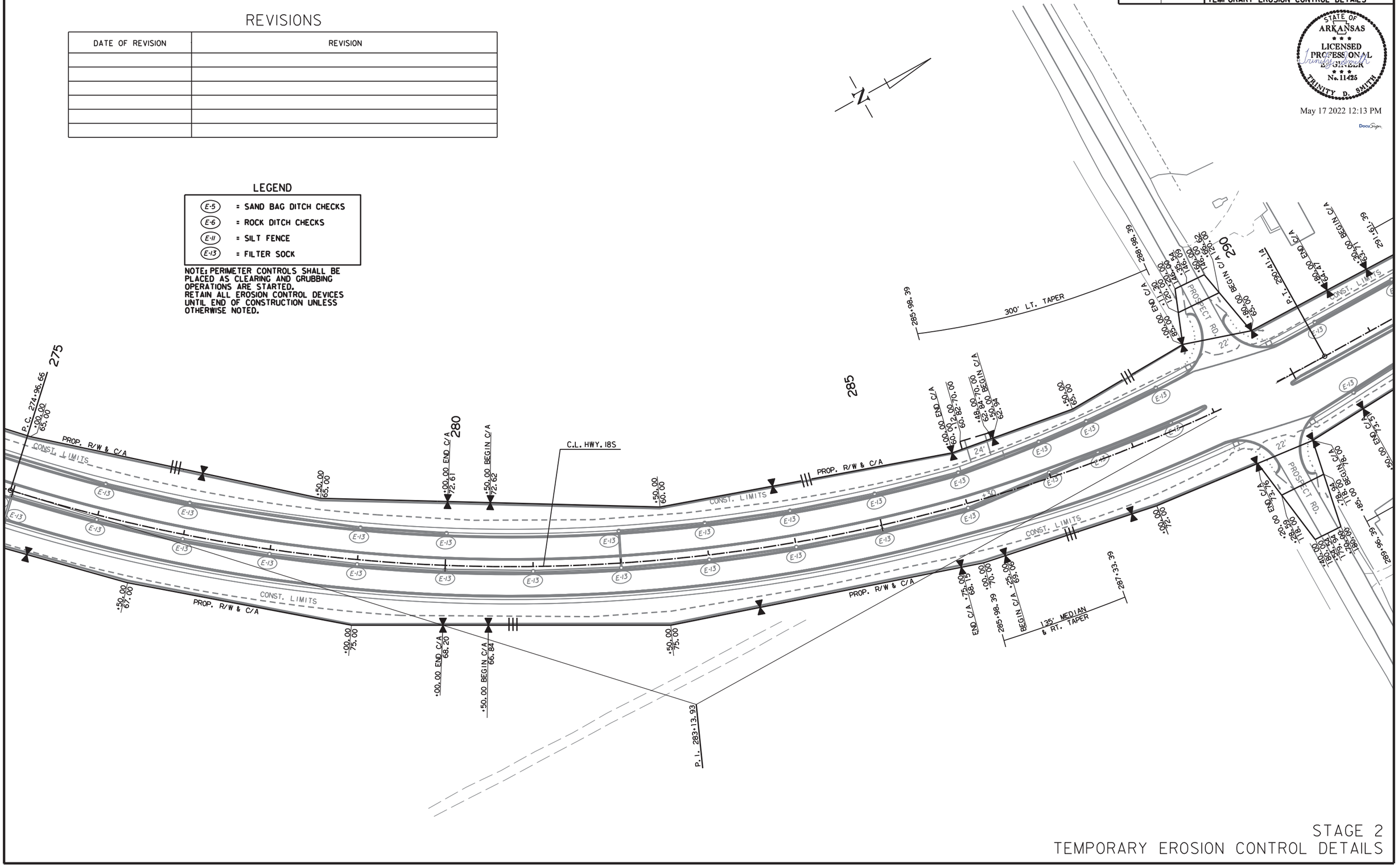
N
P.C. 274+96.66
+00.00
65.00
PROP. R/W & C/A
CONST. LIMITS
+50.00
65.00
+00.00 END C/A
72.61
280
+50.00 BEGIN C/A
72.62
C.L. HWY. 18S
+50.00
60.00
+50.00
67.00
+00.00
75.00
+00.00 END C/A
68.20
+50.00 BEGIN C/A
66.84
+50.00
75.00
P.I. 283+13.93
+00.00 END C/A
69.82
+70.00
+84.70.00 BEGIN C/A
62.94
+50.00
69.00
285
24'
END C/A +75.00
68.15
285+98.39
+00.00
70.00
BEGIN C/A +25.00
69.08
287+33.39
135' MEDIAN
& RT. TAPER
+00.00
72.00
288+98.39
300' LT. TAPER
295+98.39
+00.00 END C/A
62.30
+30.00
120.00
+60.00
146.00
+90.00
BEGIN C/A
65.00
290
290+41.14
P.I.
+00.00 END C/A
64.47
+30.00 BEGIN C/A
63.71
291+61.39
PROSPECT RD.
22'
CONST. LIMITS
+00.00 END C/A
75.76
+18.84.00
+00.00 BEGIN C/A
+50.00 END C/A
75.53
+85.00 BEGIN C/A
+18.84.00
+00.00
180.00
+50.00
180.00
+30.00
180.00
+20.00 END C/A
75.76
+18.84.00
+30.00
180.00
+90.00
180.00
+30.00
180.00
+30.00
180.00
+90.00
180.00
+30.00
180.00
+30.00
180.00
+90.00
180.00
+30.00
180

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
09-12-22		6	ARK.	100657	82	418
		TEMPORARY EROSION CONTROL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

Sep 29 2022 1:35 PM

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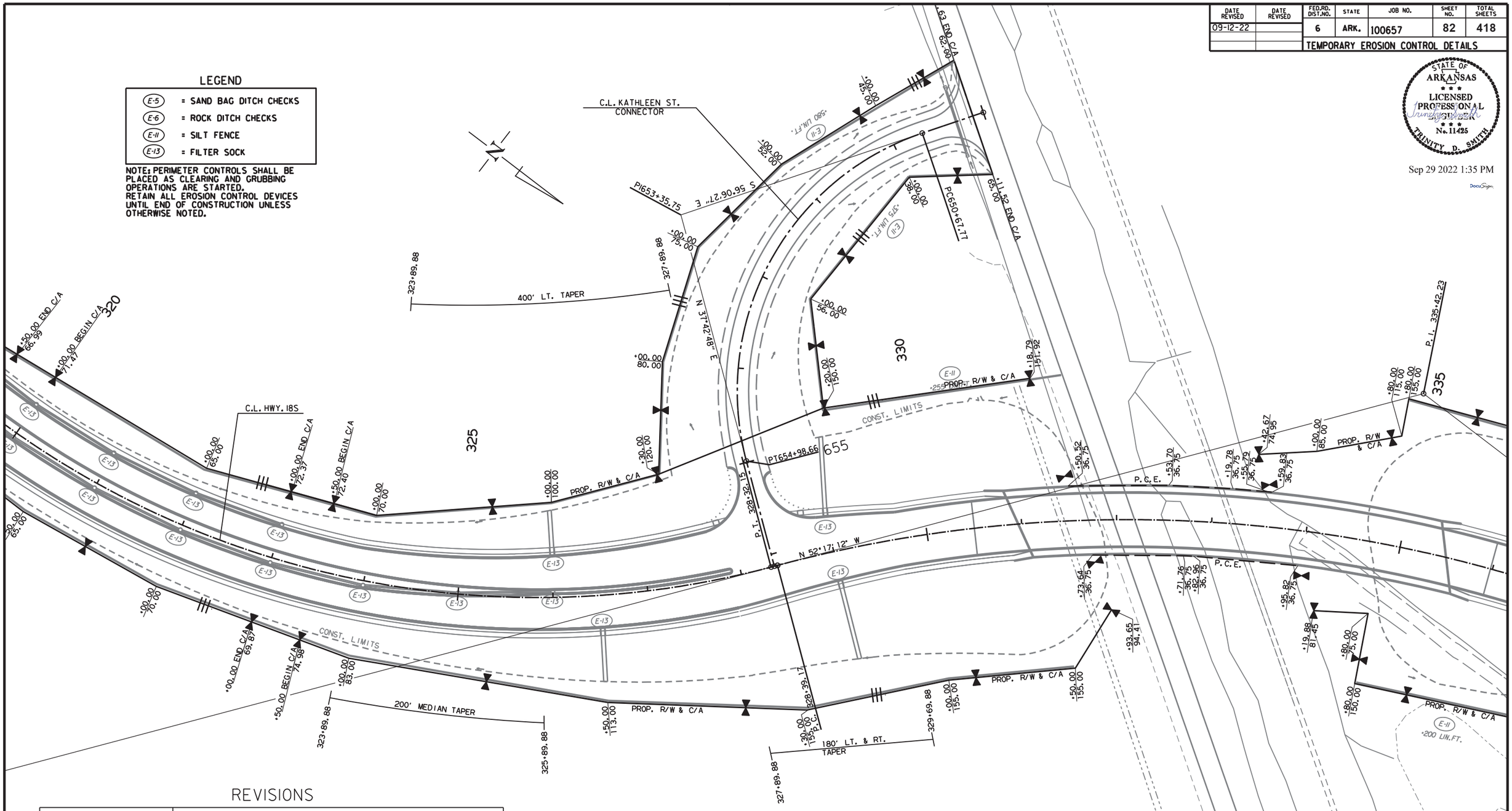
LEGEND

E-5	= SAND BAG DITCH CHECKS
E-6	= ROCK DITCH CHECKS
E-11	= SILT FENCE
E-13	= FILTER SOCK

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

HT39710 9/9/2022
R100657.DGN

STAGE 2
TEMPORARY EROSION CONTROL DETAILS

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	83	418

TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

May 17 2022 12:14 PM

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REVISIONS

DATE OF REVISION	REVISION

LEGEND

E-5	= SAND BAG DITCH CHECKS
E-6	= ROCK DITCH CHECKS
E-11	= SILT FENCE
E-13	= FILTER SOCK

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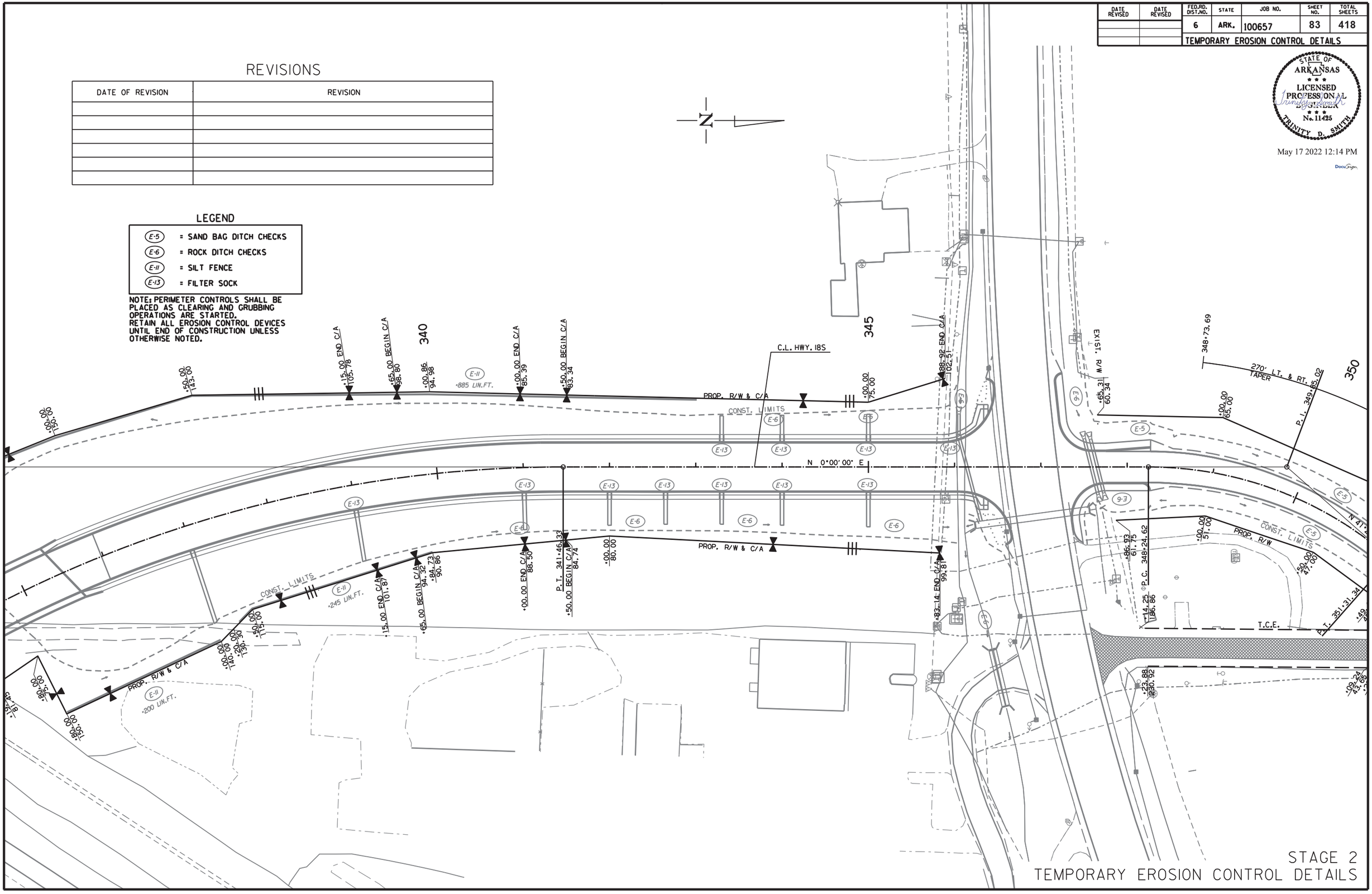

STAGE 2
TEMPORARY EROSION CONTROL DETAILS

HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	84	418
		TEMPORARY EROSION CONTROL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

May 17 2022 12:14 PM

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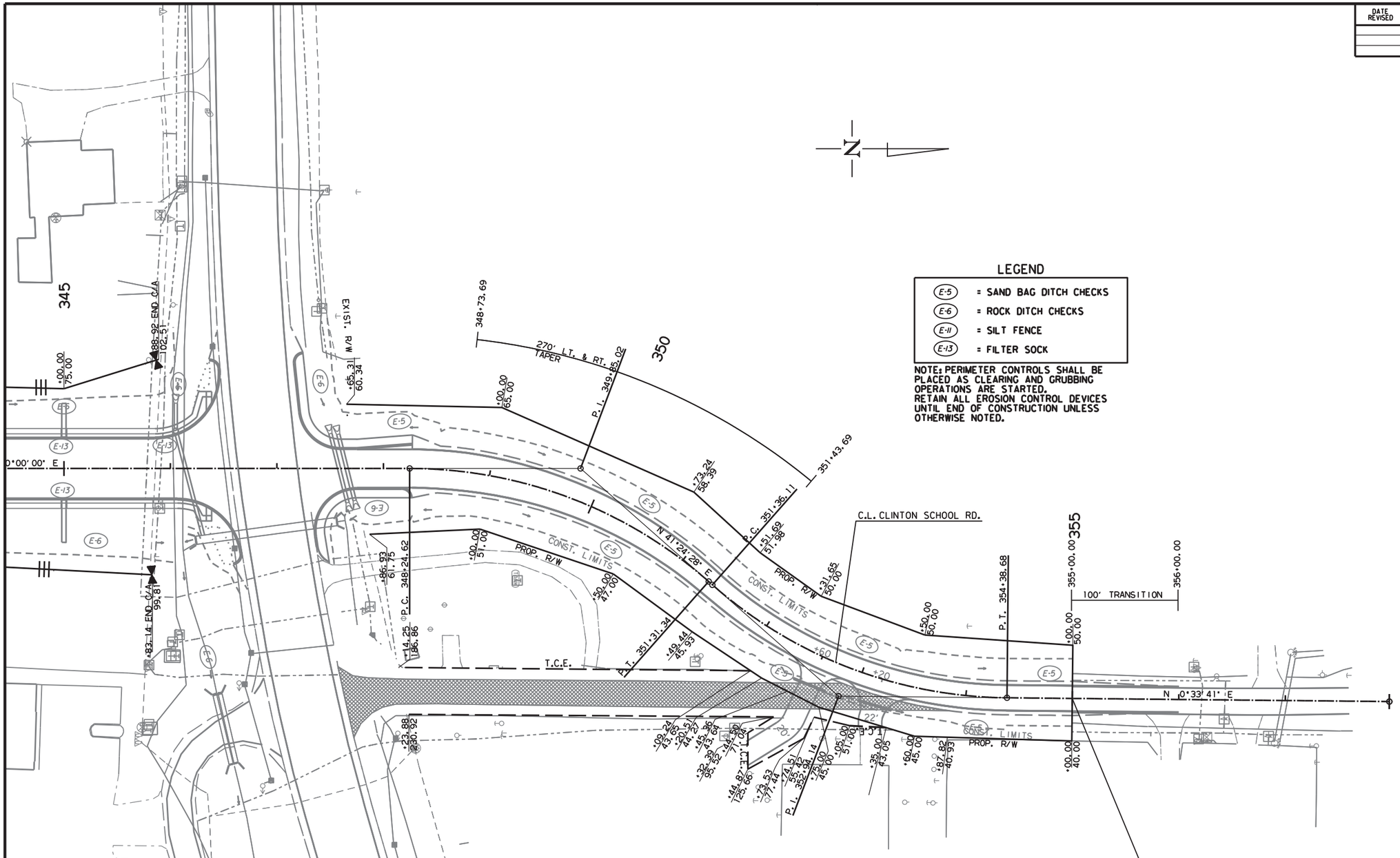
LEGEND

E-5	= SAND BAG DITCH CHECKS
E-6	= ROCK DITCH CHECKS
E-11	= SILT FENCE
E-13	= FILTER SOCK

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

STAGE 2
TEMPORARY EROSION CONTROL DETAILS

HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
09-12-22		6	ARK.	100657	85	418
		TEMPORARY EROSION CONTROL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSION ENGINEER
No. 11425
TRINITY D. SMITH

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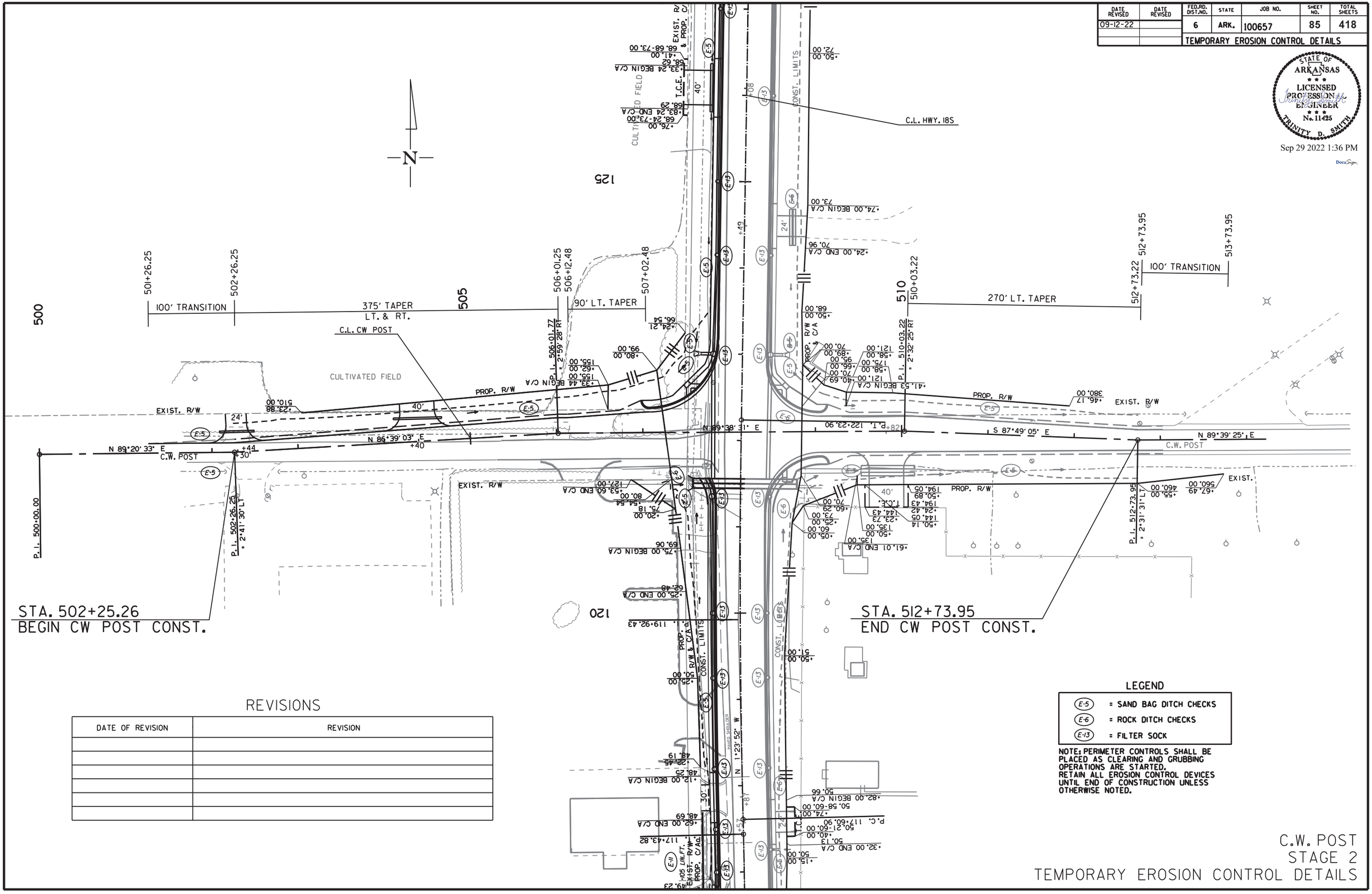

REVISIONS

DATE OF REVISION	REVISION

LEGEND

E-5	= SAND BAG DITCH CHECKS
E-6	= ROCK DITCH CHECKS
E-13	= FILTER SOCK

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.

C.W. POST
STAGE 2
TEMPORARY EROSION CONTROL DETAILS

HT39710 9/9/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
10-19-22		6	ARK.	100657	86	418
		TEMPORARY EROSION CONTROL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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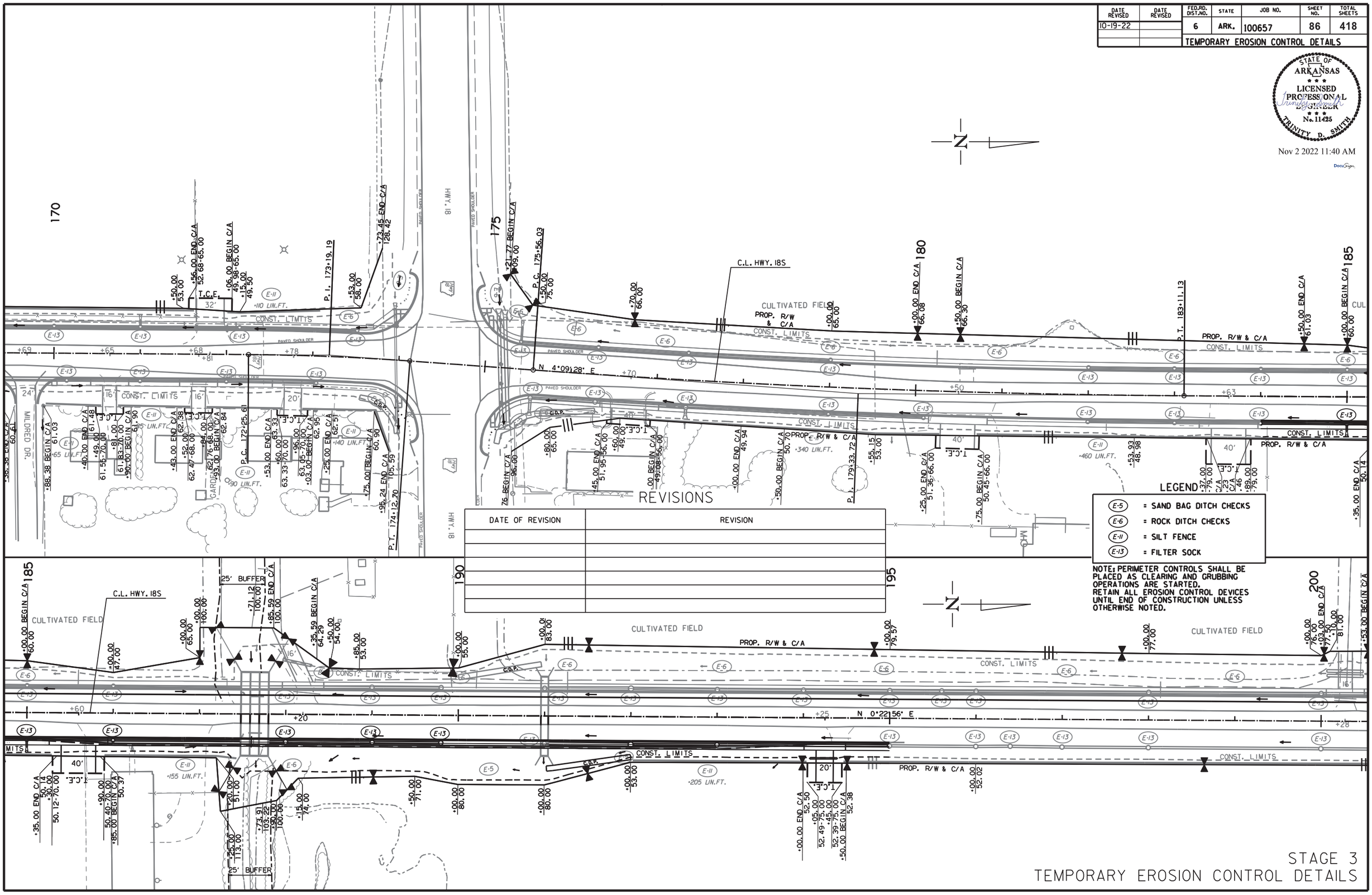

HT 39710 10/19/2022
R100657.DGN

STAGE 3
TEMPORARY EROSION CONTROL DETAILS

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	87	418
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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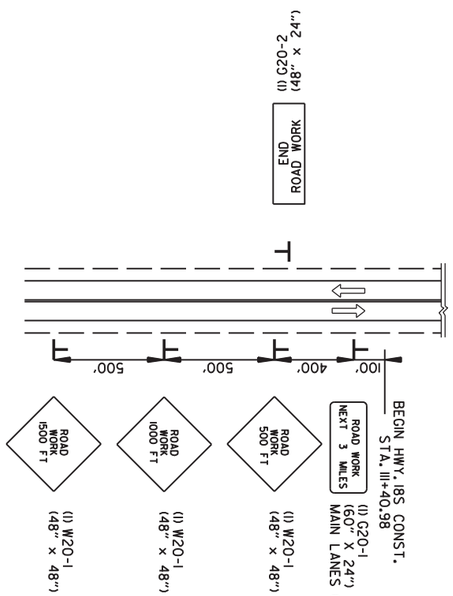
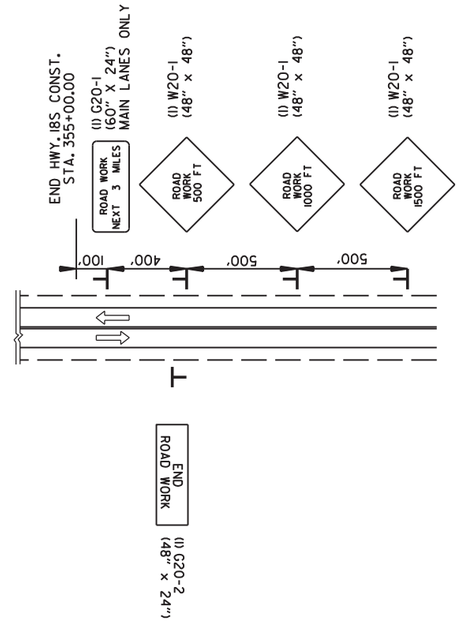
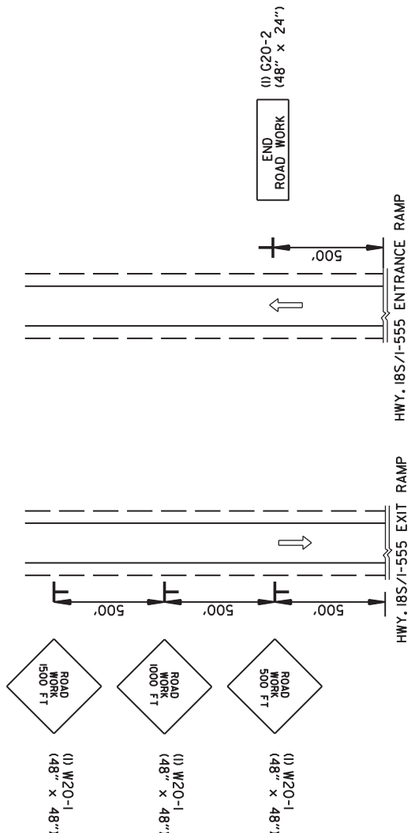
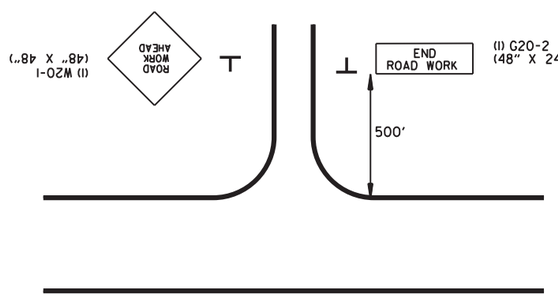


ADVANCE WARNING
(ALL STAGES)



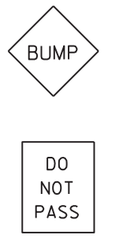


ADVANCE WARNING
(ALL STAGES)



STA. 122+98 RT. - C.W. POST RD.
STA. 139+79 LT. - KRUEGER DR.
STA. 169+69 RT. - MILDRED DR.
STA. 174+50 LT. & RT. - HWY. 18
STA. 227+31 LT. & RT. PACIFIC RD.
STA. 289+48 LT. & RT. - PROSPECT RD.
STA. 346+90 LT. & RT. - HWY. 49

ADVANCE WARNING - SIDE ROADS
(ALL STAGES)



(22) W8-1
(30" X 30")

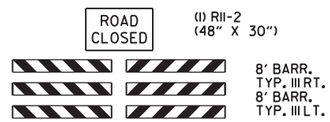
ALL STAGES
TO BE USED IF AND
WHERE DIRECTED BY
THE ENGINEER

(40) R4-1
(24" X 30")

ALL STAGES
SPACED AT 1/4
MILE INTERVALS

(40) W21-5a
(36" x 36")

ALL STAGES
TO BE USED IF AND
WHERE DIRECTED BY
THE ENGINEER



(1) R11-2
(48" X 30")

STAGE 1 AND 2
STA. 227+43 (2)
STA. 289+36 (2)
STA. 289+60 (2)
STA. 346+55 (2)
STA. 347+23 (2)
STA. 353+23 (2)
STA. 353+63 (2)
STA. 650+15 (2)

(1) R11-2
(48" X 30")

STAGE 2
STA. 147+50 LT.
STA. 186+90 LT.
STA. 190+10 LT.

(1) R11-2
(48" X 30")

STAGE 2
STA. 192+80 LT.

ADVANCE WARNING
MAINTENANCE OF TRAFFIC DETAILS

HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	88	418
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

May 17 2022 12:15 PM

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CONSTRUCTION SEQUENCE

STAGE 1:

INSTALL ADVANCE WARNING SIGNS AT THE LOCATIONS LISTED ON THE ADVANCE WARNING DETAILS. INSTALL END ROAD WORK SIGNS AT THE END OF JOB AS SHOWN ON THE ADVANCE WARNING DETAILS. INSTALL ROAD WORK AHEAD (W20-1) SIGN ON SIDE ROADS AS SHOWN IN THE ADVANCE WARNING DETAILS.

MAINTAIN TRAFFIC IN EXISTING LANES.

INSTALL CONSTRUCTION PAVEMENT MARKINGS, PRECAST CONCRETE BARRIERS, TRAFFIC CONES, AND TRAFFIC DRUMS AS SHOWN IN THE STAGE 1 MAINTENANCE OF TRAFFIC DETAILS.

APPLY LEVELING COURSE IF AND WHERE DIRECTED BY THE ENGINEER.

CONSTRUCT RT. OF HWY. 18S FROM STA. 111+40.98 TO STA. 227+31, LT. AND RT. OF HWY. 18S FROM STA. 227+31 TO STA. 355+00, LT. AND RT. OF CW POST FROM STA. 508+42.07 TO STA. 512+73.95, AND LT. AND RT. OF KATHLEEN ST. CONNECTOR AS SHOWN IN THE STAGE 1 MAINTENANCE OF TRAFFIC DETAILS. CONSTRUCT TEMPORARY WIDENING RT. OF HWY. 18S FROM STA. 184+84 TO STA. 194+30.

CONSTRUCT DRAINAGE STRUCTURES AS SHOWN IN THE STAGE 1 MAINTENANCE OF TRAFFIC DETAILS. CROSS DRAINS AT STA. 135+45, STA. 163+06, STA. 175+20, STA. 227+15, STA. 227+62, AND STA. 347+62 MAY BE REQUIRED TO BE CONSTRUCTED IN THEIR ENTIRETY DURING STAGE 1 TO MAINTAIN POSITIVE DRAINAGE. CONSTRUCT RT. OF BOX CULVERTS AT STA. 121+50, STA. 148+23, STA. 187+65, AND STA. 191.00. CONSTRUCT LT. AND RT. OF BOX CULVERTS AT STA. 240+55, STA. 254+15, AND STA. 303+60.

STAGE 2:

RETAIN ADVANCE WARNING SIGNS AT THE LOCATIONS LISTED ON THE ADVANCE WARNING DETAILS. RETAIN END ROAD WORK SIGNS AT THE END OF JOB AS SHOWN ON THE ADVANCE WARNING DETAILS. RETAIN ROAD WORK AHEAD SIGNS AS SHOWN ON ADVANCE WARNING DETAILS.

SHIFT TRAFFIC TO STAGE 2 CENTERLINE AS SHOWN. INSTALL CONSTRUCTION PAVEMENT MARKINGS, TRAFFIC CONES, AND TRAFFIC DRUMS AND RELOCATE PRECAST CONCRETE BARRIERS AS SHOWN IN THE STAGE 2 MAINTENANCE OF TRAFFIC DETAILS.

CONSTRUCT. LT. OF HWY. 18S FROM STA. 111+40.98 TO STA. 227+31 AND LT. OF CW POST FROM STA. 502+26.25 TO STA. 507+86.06.

CONSTRUCT DRAINAGE STRUCTURES AS SHOWN IN THE STAGE 2 MAINTENANCE OF TRAFFIC DETAILS. CONSTRUCT LT. OF BOX CULVERTS AT STA. 121+50, STA. 148+23, STA. 187+65, AND STA. 191+00.

OBLITERATE PAVEMENT IN AREAS SHOWN IN THE STAGE 2 MAINTENANCE OF TRAFFIC DETAILS.

STAGE 3:

RETAIN ADVANCE WARNING SIGNS AT THE LOCATIONS LISTED ON THE ADVANCE WARNING DETAILS. RETAIN END ROAD WORK SIGNS AT THE END OF JOB AS SHOWN ON THE ADVANCE WARNING DETAILS. RETAIN ROAD WORK AHEAD SIGN AS SHOWN ON ADVANCE WARNING DETAILS.

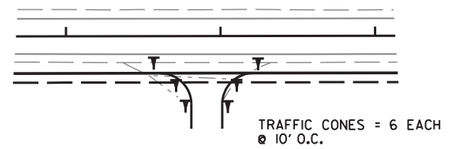
SHIFT TRAFFIC TO STAGE 3 CENTERLINE AS SHOWN. INSTALL CONSTRUCTION PAVEMENT MARKINGS, TRAFFIC CONES, AND TRAFFIC DRUMS AS SHOWN IN THE STAGE 3 MAINTENANCE OF TRAFFIC DETAILS. MAINTAIN STAGE 2 CONSTRUCTION PAVEMENT MARKINGS FROM STA. 111+40.98 TO STA. 180+65 AND FROM STA. 197+90 TO STA. 227+31.

REMOVE ANY TEMPORARY WIDENING THAT IS BEYOND PERMANENT CONSTRUCTION SLOPES FROM STA. 184+84 TO STA. 194+30. CONSTRUCT RT. OF HWY. 18S FROM STA. 184+00 TO STA. 195+00.

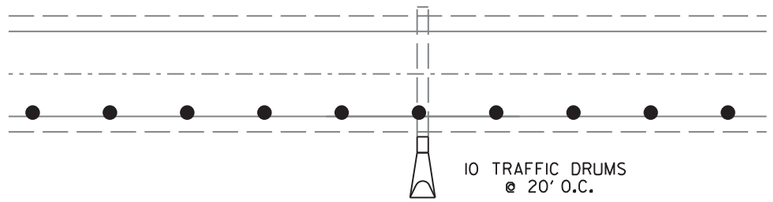
CONSTRUCT ISLANDS AT THE RAILROAD CROSSING FROM STA. 133+82 TO STA. 134+82 AND FROM STA. 135+04 TO STA. 136+04.

CONSTRUCT RT. OF CW POST FROM STA. 502+26.25 TO STA. 507+86.06.

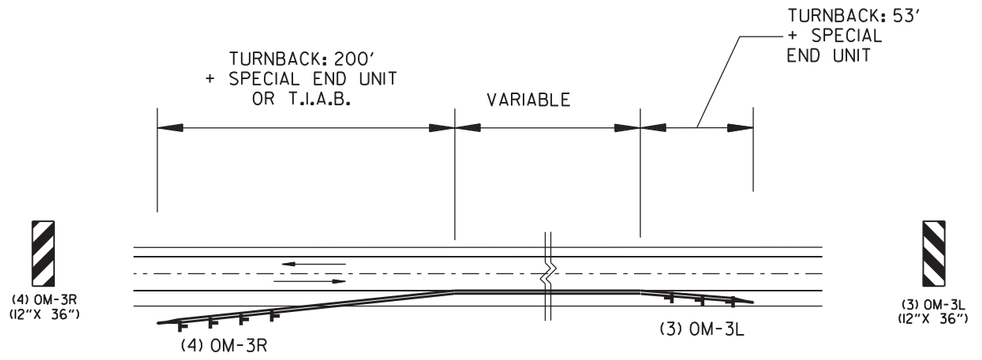
SHIFT TRAFFIC TO CONSTRUCTION CENTERLINE. APPLY FINAL 2" LIFT OF ACHM AND PLACE PERMANENT PAVEMENT MARKINGS AS SHOWN IN THE PERMANENT PAVEMENT MARKING DETAILS.



DRIVEWAY/TRAFFIC CONE DETAIL



TRAFFIC DRUMS AND SIGNS ON EXISTING SHOULDER
FOR EXTENDING/CONSTRUCTING PIPE CULVERTS LT. AND RT.



REFER ALSO TO STANDARD DRAWING TC-5 FOR DETAILS OF PLACEMENT OF PCCB TURNBACKS.

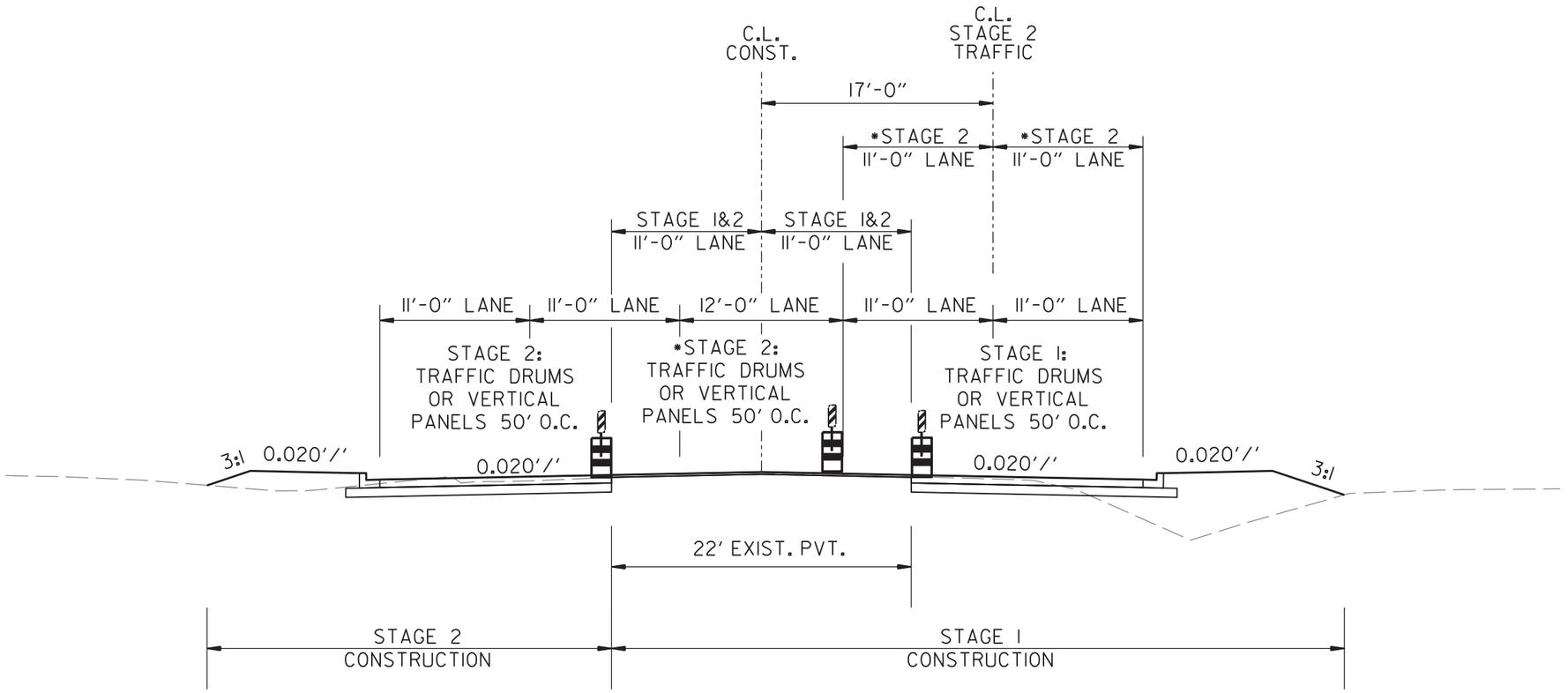
NOTE: OM-3L & OM-3R SIGNS SHALL BE EQUALLY SPACED ALONG P.C.C.B. TURNBACK.

DETAIL OF OBJECT MARKERS
AT PRECAST CONCRETE BARRIER TURNBACKS

HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	89	418
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
May 17 2022 12:17 PM
DocuSign



STAGE CONSTRUCTION
STAGE 1 TRAFFIC: STA. 111+40.98 TO STA. 227+31.00
STAGE 2 TRAFFIC: STA. 111+40.98 TO STA. 115+50.00
STA. 154+50.00 TO 184+00.00
STA. 195+00.00 TO STA. 227+31.00
*STAGE 2 TRAFFIC: STA. 115+50.00 TO STA. 154+50.00

HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	90	418
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

May 17 2022 12:17 PM

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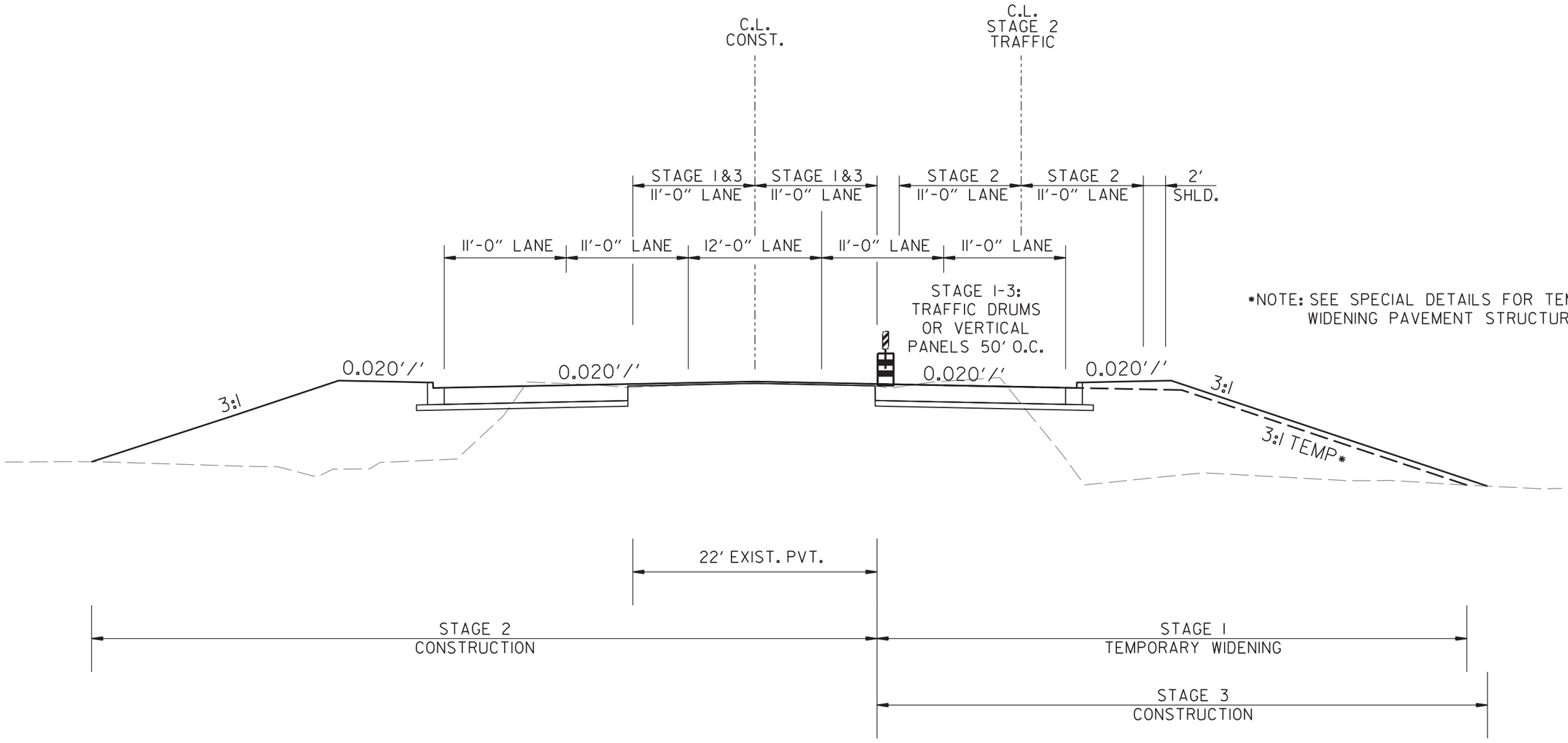

*NOTE: SEE SPECIAL DETAILS FOR TEMPORARY WIDENING PAVEMENT STRUCTURE

STAGE CONSTRUCTION
STAGE 1-3 TRAFFIC: STA. 184+00.00 TO STA. 195+00.00

H139710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
09-12-22		6	ARK.	100657	91	418
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
Sep 29 2022 1:36 PM
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STA. 111+40.98
BEGIN JOB 100657
LOG MILE 1.194

TRAFFIC DRUMS AT 50' O.C.

N 0°36' 20" E

N 1°23' 52" W

N 0°55' 02" E

EXIST. R/W & PROP. C/A

PAVED SHOULDER

CONST. LIMITS

PROP. R/W & C/A

DBL. YELLOW SOLID CONST. PVMT. MARKING

WHITE SOLID CONST. PVMT. MARKING

C.L. HWY. 18S

C.L. STAGE 1 TRAFFIC

P.I. 116+43.66

P.C. 117+60.90

P.I. 119+92.43

P.C. 135+39.62

P.T. 137+40.12

ELECTRIC SUB STATION

FURNISH AND INSTALL PRECAST CONCRETE BARRIER WITH SPECIAL END UNIT - 153 LIN. FT.
INSTALL TIAB - 1 EACH

CULTIVATED FIELD

T.C.E.

P.C.E.

EXIST. R/W

PROP. R/W

I-555 OFF

KRUEGER DR.

HT39710 9/9/2022
R100657.DGN

STAGE 1
MAINTENANCE OF TRAFFIC DETAILS

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	92	418
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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TRAFFIC DRUMS AT 50' O.C.

C.L. HWY. 18S

DBL. YELLOW SOLID CONST. PVMT. MARKING

FURNISH AND INSTALL PRECAST CONCRETE BARRIER WITH SPECIAL END UNIT - 173 LIN. FT.
INSTALL TIAB - 1 EACH

WHITE SOLID CONST. PVMT. MARKING

C.L. STAGE I TRAFFIC

EXIST. R/W & PROP. C/A

PROP. R/W & C/A

CONST. LIMITS

EXIST. R/W & PROP. C/A

WHITE SOLID CONST. PVMT. MARKING

DBL. YELLOW SOLID CONST. PVMT. MARKING

C.L. STAGE I TRAFFIC

PROP. R/W & C/A

CONST. LIMITS

KRUEGER DR.

MALDED DR.

STAGE I
MAINTENANCE OF TRAFFIC DETAILS

HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
10-19-22		6	ARK.	100657	93	418
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

Nov 2 2022 11:40 AM

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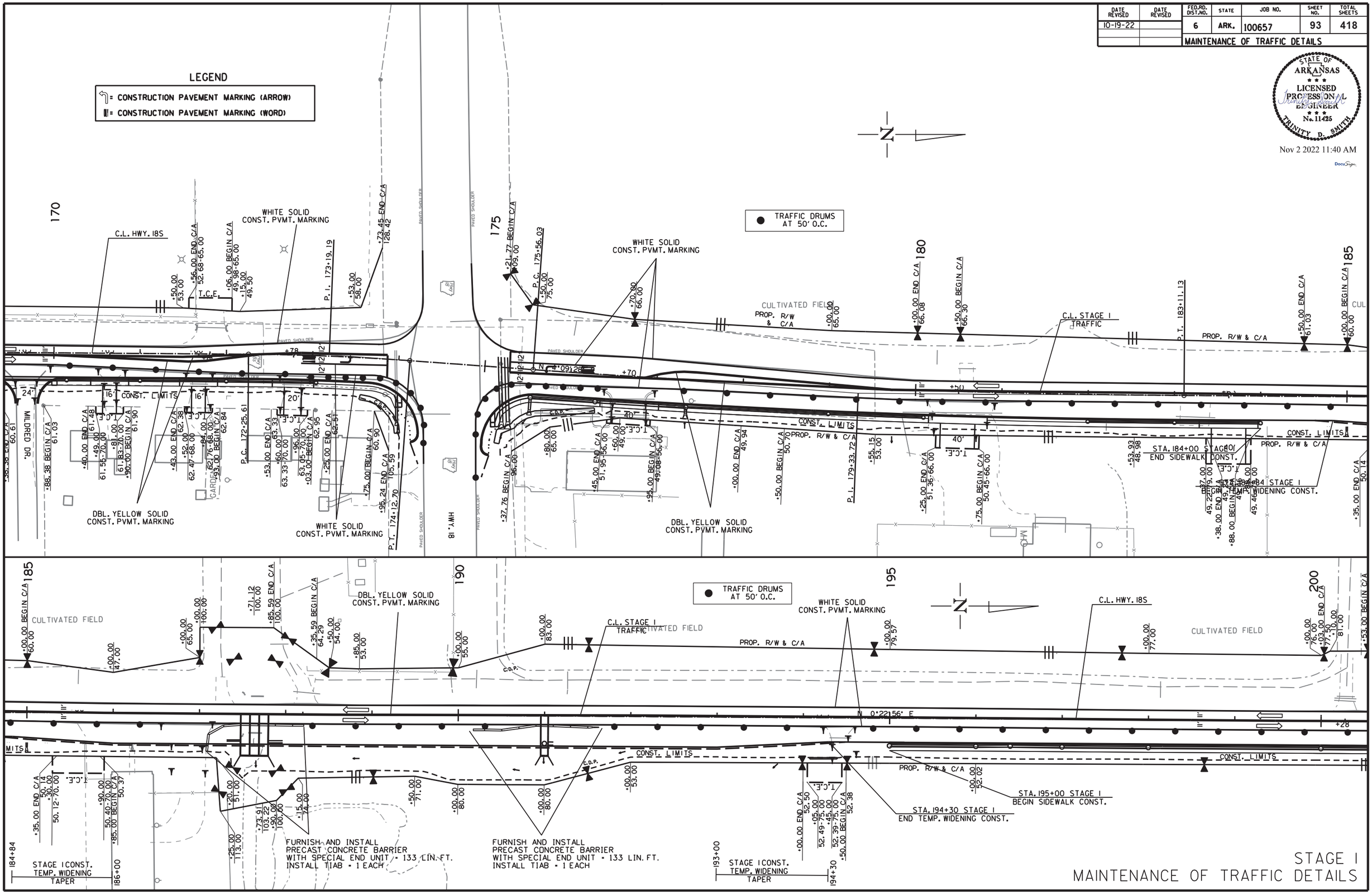
LEGEND

= CONSTRUCTION PAVEMENT MARKING (ARROW)

= CONSTRUCTION PAVEMENT MARKING (WORD)

TRAFFIC DRUMS AT 50' O.C.



STAGE I
MAINTENANCE OF TRAFFIC DETAILS

HT 39710 10/19/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
10-19-22		6	ARK.	100657	94	418
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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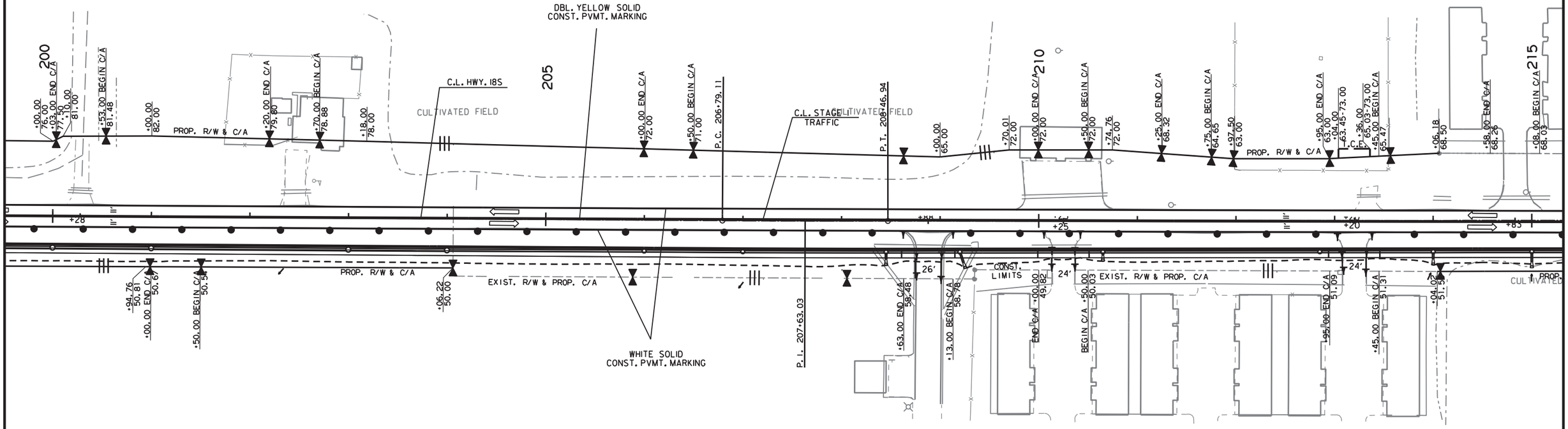
● TRAFFIC DRUMS AT 50' O.C.



STAGE I
MAINTENANCE OF TRAFFIC DETAILS

HT39710 10/19/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
09-12-22		6	ARK.	100657	95	418
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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TRAFFIC DRUMS AT 50' O.C.

N

C.L. HWY. 18S

C.L. STAGE I TRAFFIC

PROP. R/W & C/A

CONST. LIMITS

CULTIVATED FIELD

EXIST. R/W & PROP. C/A

DBL. YELLOW SOLID CONST. PVMT. MARKING

WHITE SOLID CONST. PVMT. MARKING

TYPE III BARRICADE

225' TAPER LT. AND RT.

STAGE I
MAINTENANCE OF TRAFFIC DETAILS

HT39710 9/9/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	96	418
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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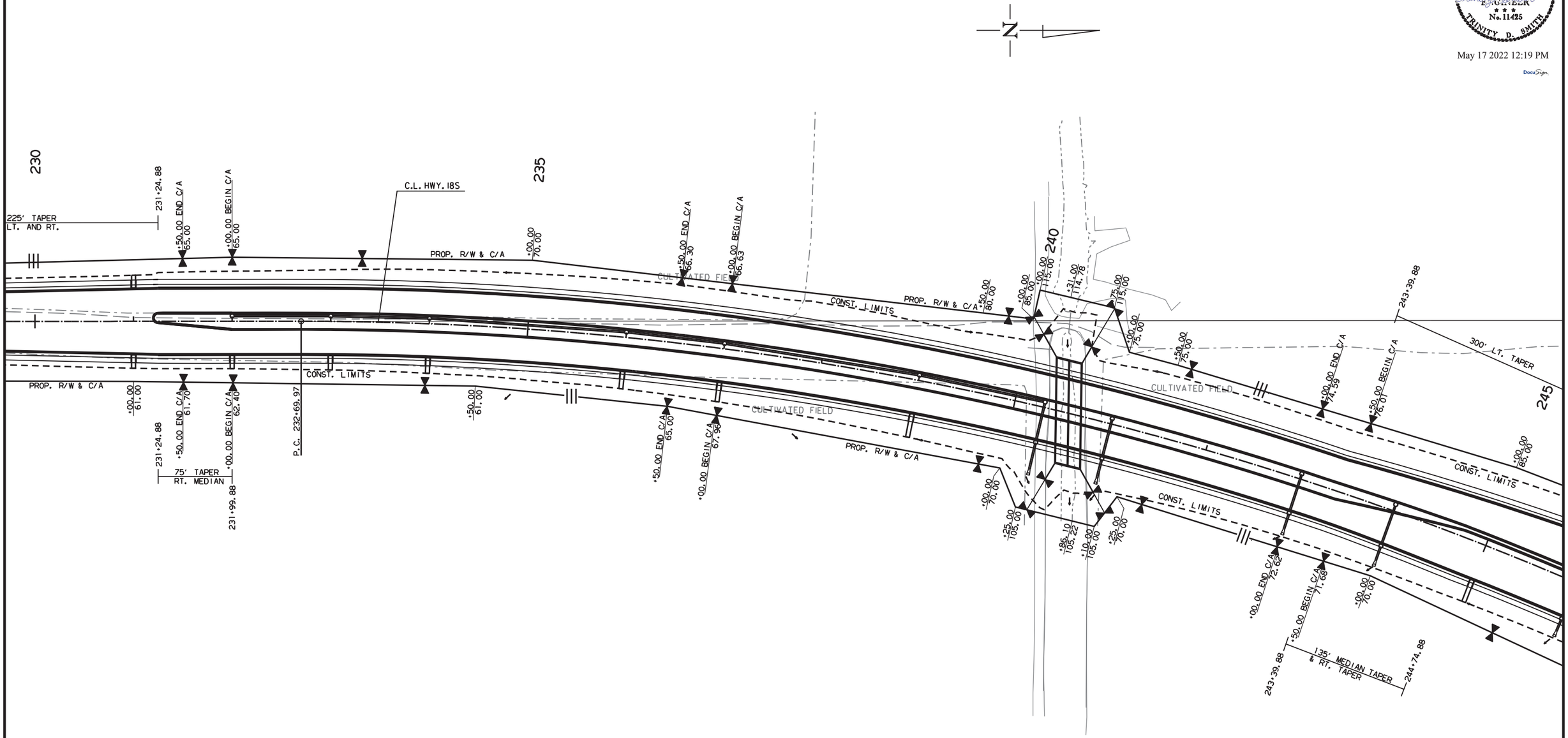

STAGE I
MAINTENANCE OF TRAFFIC DETAILS

HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	97	418
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

May 17 2022 12:19 PM

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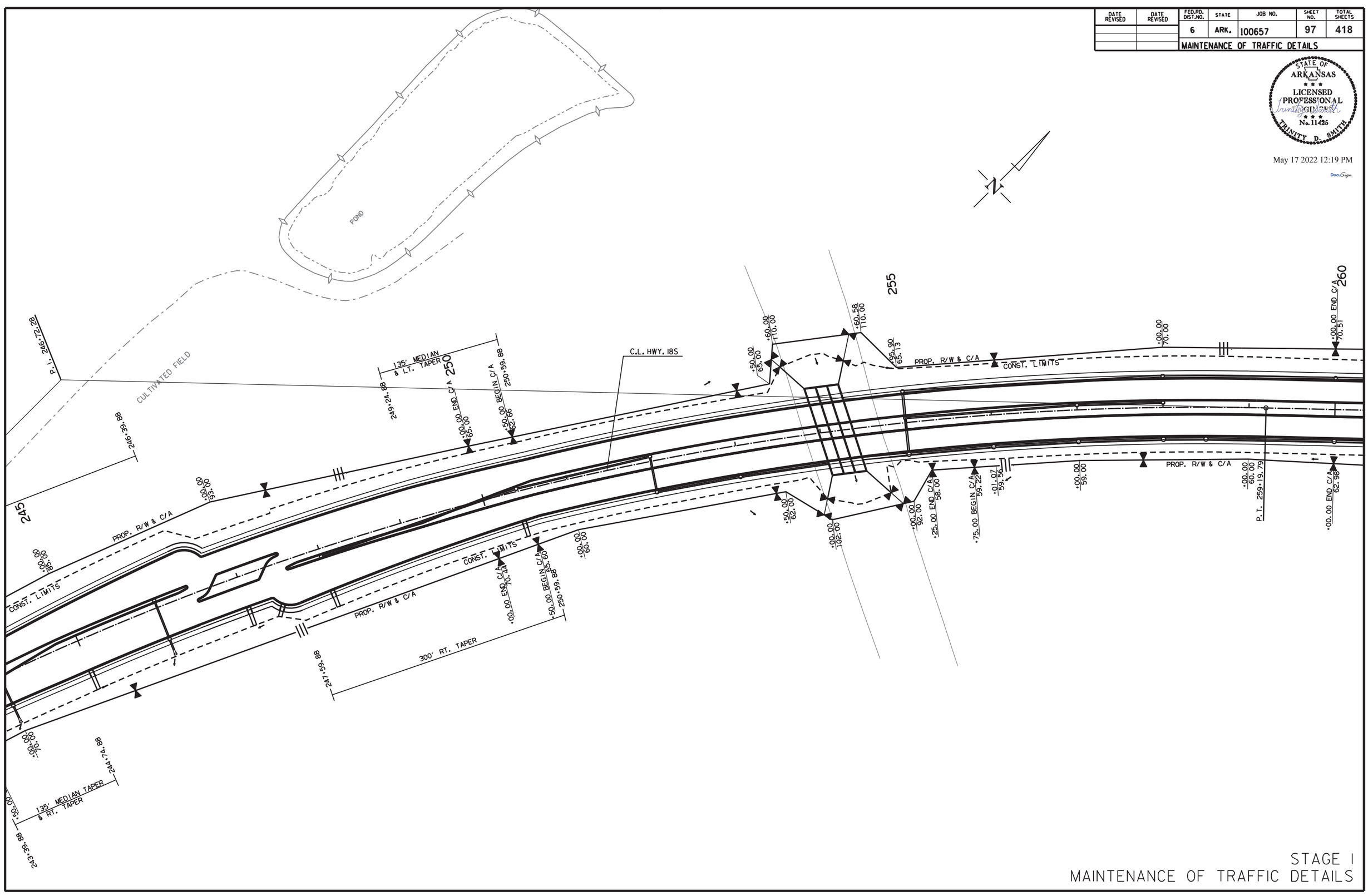

STAGE I
MAINTENANCE OF TRAFFIC DETAILS

HT.39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	98	418
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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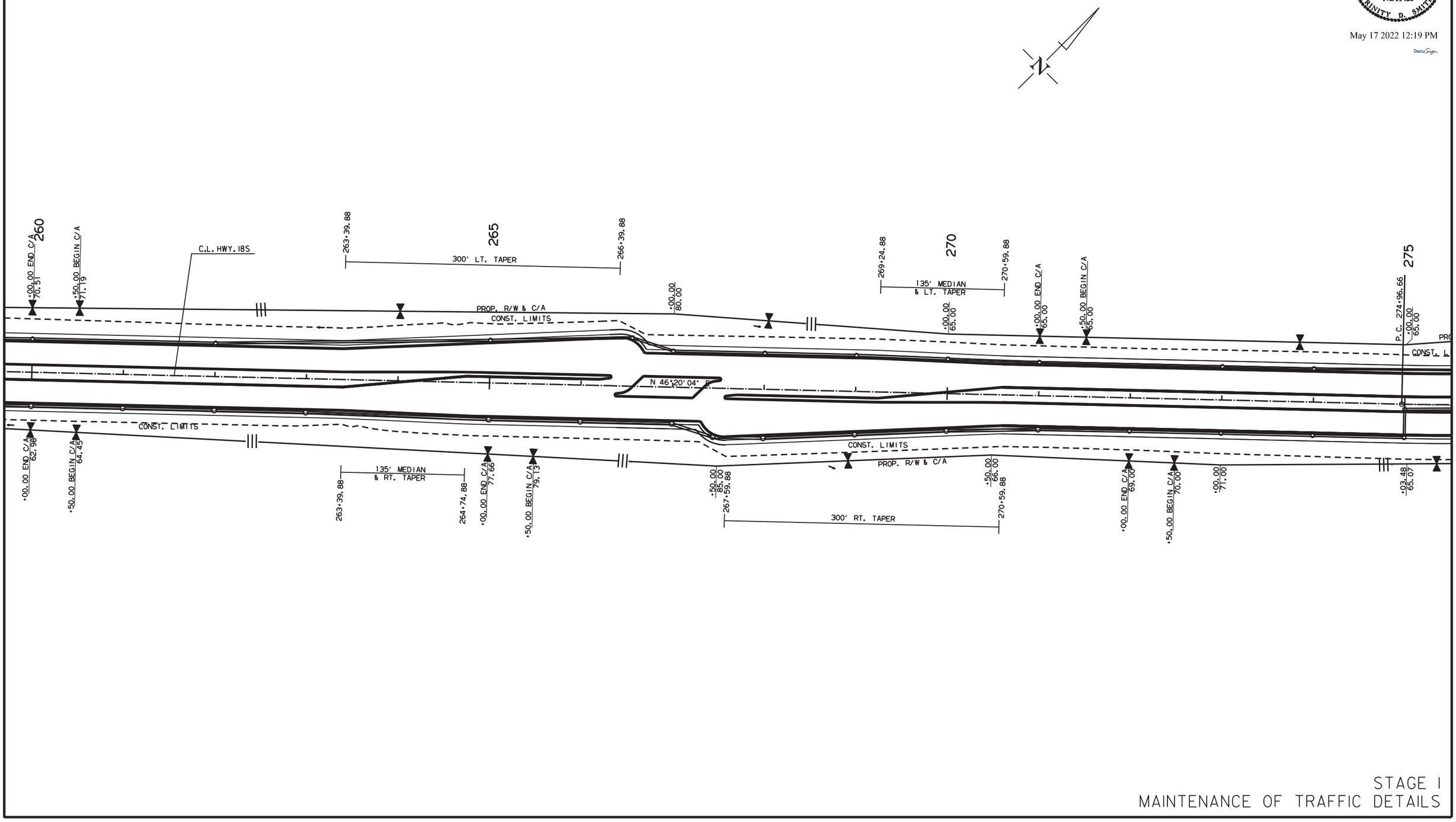

STAGE I
MAINTENANCE OF TRAFFIC DETAILS

HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	99	418
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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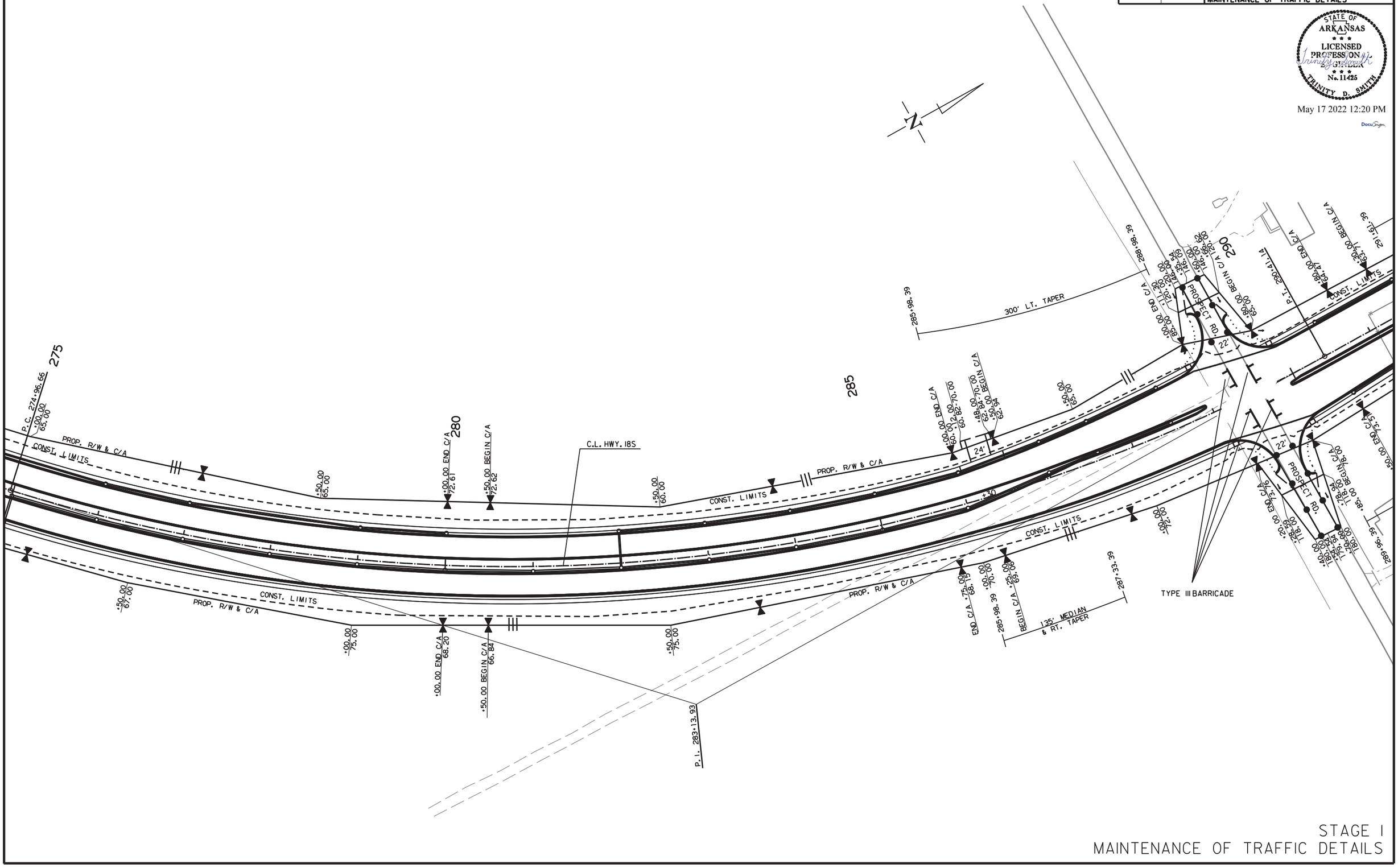

STAGE I
MAINTENANCE OF TRAFFIC DETAILS

HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	100	418
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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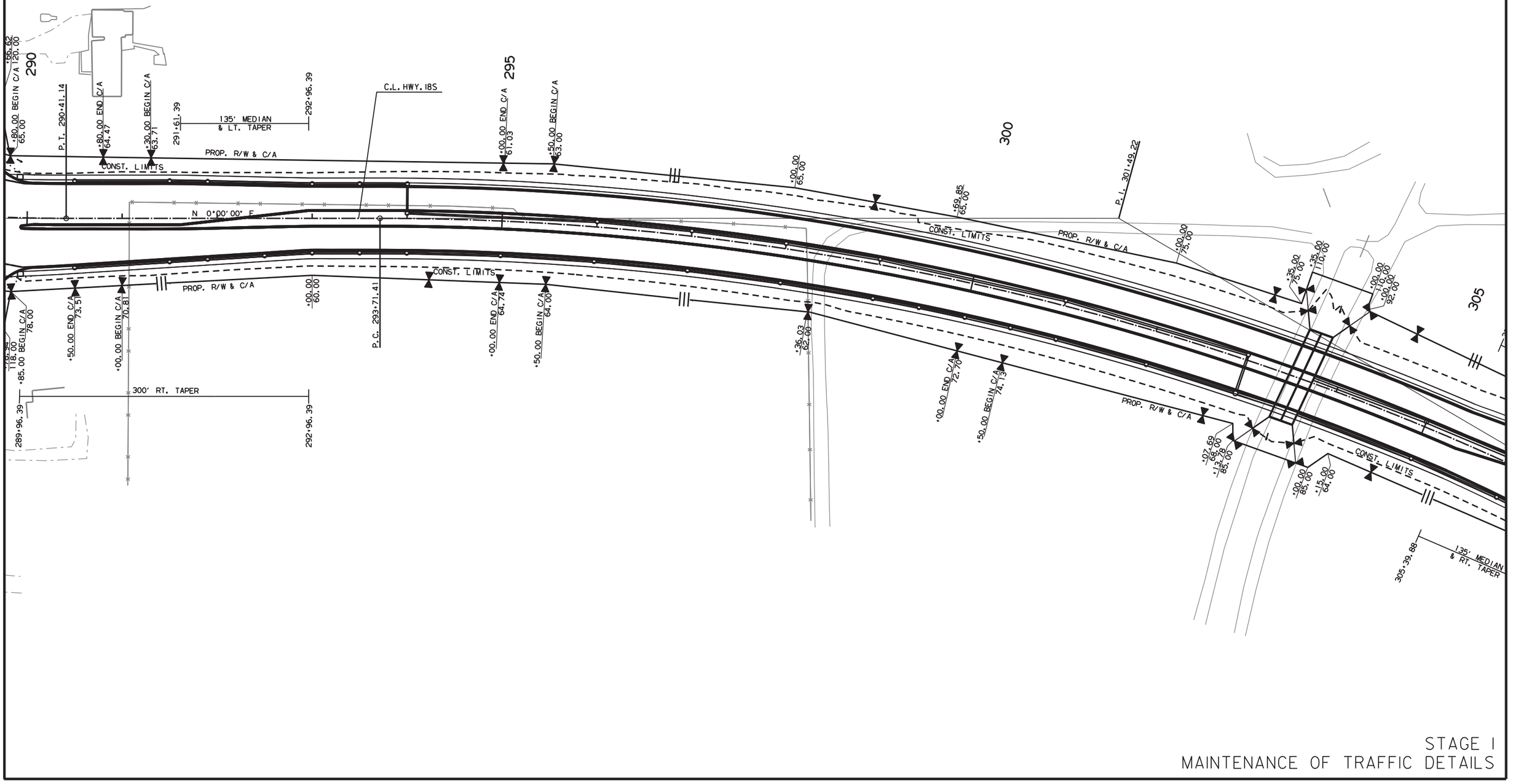

STAGE I
MAINTENANCE OF TRAFFIC DETAILS

HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	101	418
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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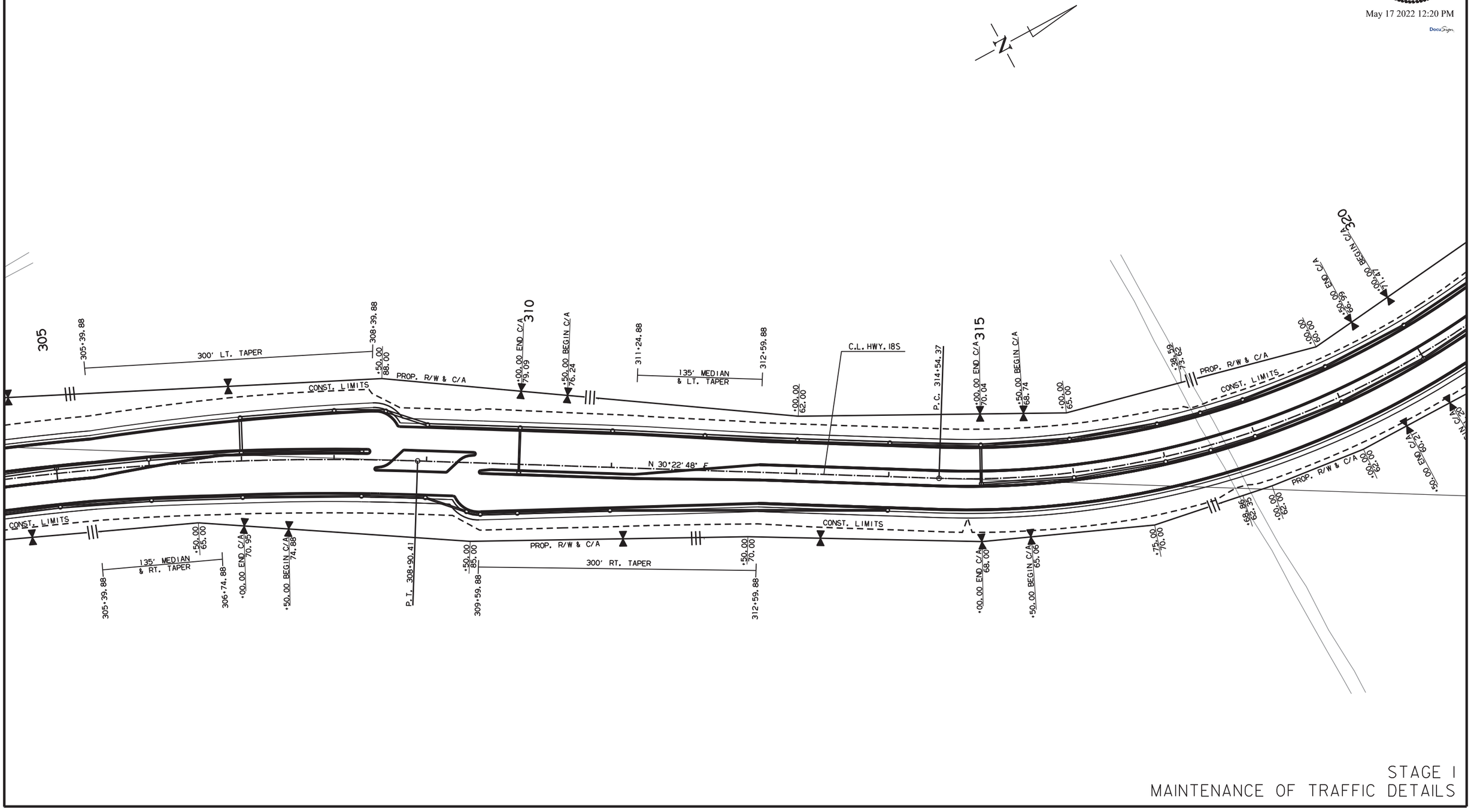

STAGE I
MAINTENANCE OF TRAFFIC DETAILS

HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
09-12-22		6	ARK.	100657	102	418
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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C.L. KATHLEEN ST. CONNECTOR

C.L. HWY. 18S

TYPE III BARRICADE

400' LT. TAPER

200' MEDIAN TAPER

180' LT. & RT. TAPER

CONST. LIMITS

PROP. R/W & C/A

P.C.E.

P.I. 335+42.23

PC650+67.77

PT654+98.66

P.I. 328+32.15

N 37°42'48" E

S 56°06'27" E

N 52°17'12" W

320

325

330

335

655

HT39710 9/9/2022
R100657.DGN

STAGE I
MAINTENANCE OF TRAFFIC DETAILS

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	103	418
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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TRAFFIC DRUMS AT 50' O.C.

C.L. HWY. 18S

PROP. R/W & C/A

CONST. LIMITS

EXIST. R/W

TYPE III BARRICADE

T.C.E.

N 0°00'00" E

STAGE I
MAINTENANCE OF TRAFFIC DETAILS

HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	104	418
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

May 17 2022 12:21 PM

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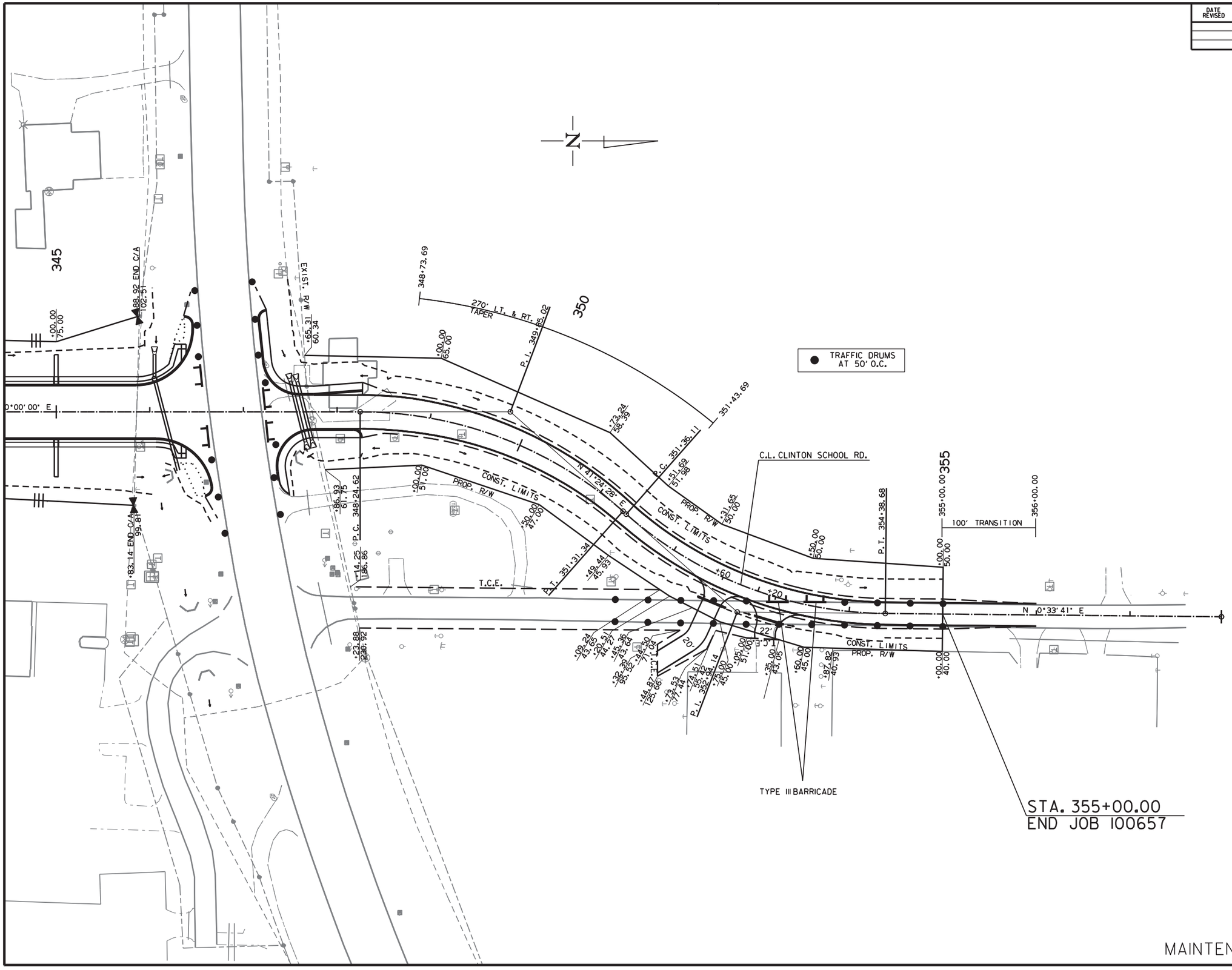

HT39710 5/6/2022
R100657.DGN

STAGE I
MAINTENANCE OF TRAFFIC DETAILS

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
09-12-22		6	ARK.	100657	105	418
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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TRAFFIC DRUMS AT 50' O.C.

STA. 502+26.25
BEGIN C.W. POST CONST.

STA. 512+73.95
END C.W. POST CONST.

C.W. POST

WHITE SOLID CONST. PVMT. MARKING

DBL. YELLOW SOLID CONST. PVMT. MARKING

CW POST
STAGE I
MAINTENANCE OF TRAFFIC DETAILS

HT39710 9/9/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
09-12-22		6	ARK.	100657	106	418

MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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STA. 111+40.98
BEGIN JOB 100657
LOG MILE 1.194

TRAFFIC DRUMS AT 50' O.C.

RELOCATE PRECAST CONCRETE BARRIER WITH SPECIAL END UNITS - 146 LIN. FT.

DBL. YELLOW SOLID CONST. PVMT. MARKING

C.L. HWY. 18S

EXIST. R/W & PROP. C/A

PROP. R/W & C/A

CONST. LIMITS

T.C.E.

PAVED SHOULDER

I-555 ON RAMP

I-555 OFF RAMP

COMMERCE SO.

ELECTRIC SUB STATION

EXIST. R/W

P.I. 116+43.66

STA. 115+50.00 HWY. 18S = STA. 115+50.00 STAGE 2 0.00' OFFSET

STA. 120+00.00 HWY. 18S = STA. 120+00.00 STAGE 2 17.00' OFFSET

STAGE 2 450' TAPER

WHITE SOLID CONST. PVMT. MARKING

P.I. 506+01.77 = 2°59'28" RT

C.L. STAGE 2 TRAFFIC

KRUEGER DR.

CULTIVATED FIELD

DBL. YELLOW SOLID CONST. PVMT. MARKING

WHITE SOLID CONST. PVMT. MARKING

C.L. STAGE 2 TRAFFIC

STAGE 2
MAINTENANCE OF TRAFFIC DETAILS

HT39710 9/9/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	107	418
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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TRAFFIC DRUMS AT 50' O.C.

RELOCATE PRECAST CONCRETE BARRIER WITH SPECIAL END UNITS - 146 LIN. FT.

WHITE SOLID CONST. PVMT. MARKING

TYPE III BARRICADE

C.L. HWY. 18S

DBL. YELLOW SOLID CONST. PVMT. MARKING

C.L. STAGE 2 TRAFFIC

STA. 154+50.00 HWY. 18S = STA. 154+50.00 STAGE 2 4.32' OFFSET (EXIST. C.L. - OFFSET WILL VARY)

STA. 150+00.00 HWY. 18S = STA. 150+00.00 STAGE 2 17.00' OFFSET

STAGE 2 450' TAPER

KRUEGER DR.

OPPORTUNITY DR.

WILDRED DR.

EXIST. R/W & PROP. C/A

PROP. R/W & C/A

CONST. LIMITS

T.C.E.

C.D.P.

N 0°24'57" E

STAGE 2
MAINTENANCE OF TRAFFIC DETAILS

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
07-20-22		6	ARK.	100657	108	418
10-19-22						
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

Nov 2 2022 11:40 AM

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LEGEND

= CONSTRUCTION PAVEMENT MARKING (ARROW)

= CONSTRUCTION PAVEMENT MARKING (WORD)

TRAFFIC DRUMS AT 50' O.C.

WHITE SOLID CONST. PVMT. MARKING

DBL. YELLOW SOLID CONST. PVMT. MARKING

C.L. HWY. 18S

HWY. 18

CONST. LIMITS

PROP. R/W & C/A

CULTIVATED FIELD

MILDRED DR.

T.C.E. 32'

P.I. 173+19.19

P.T. 174+12.70

P.C. 172+25.61

P.C. 175+56.03

P.T. 183+11.13

N 4°09'28" E

N 0°22'56" E

STA. 180+65.00 HWY. 18S = STA. 180+65.00 STAGE 2 1.00' OFFSET (EXIST. C.L. - OFFSET WILL VARY)

STAGE 2 535' TAPER

STAGE 2 490' TAPER

RELOCATE PRECAST CONCRETE BARRIER - 120 LIN. FT. FURNISH AND INSTALL SPECIAL END UNITS - 26 LIN. FT.

TYPE III BARRICADE

C.L. STAGE 2 TRAFFIC

STA. 186+00.00 HWY. 18S = STA. 186+00.00 STAGE 2 24.00' OFFSET

STA. 193+00.00 HWY. 18S = STA. 193+00.00 STAGE 2 24.00' OFFSET

STA. 197+90.00 HWY. 18S = STA. 197+90.00 STAGE 2 0.00' OFFSET

RELOCATE PRECAST CONCRETE BARRIER - 140 LIN. FT. RELOCATE TIAB - 1 EACH FURNISH AND INSTALL SPECIAL END UNIT - 13 LIN. FT.

HT39710 10/19/2022
R100657.DGN

STAGE 2
MAINTENANCE OF TRAFFIC DETAILS

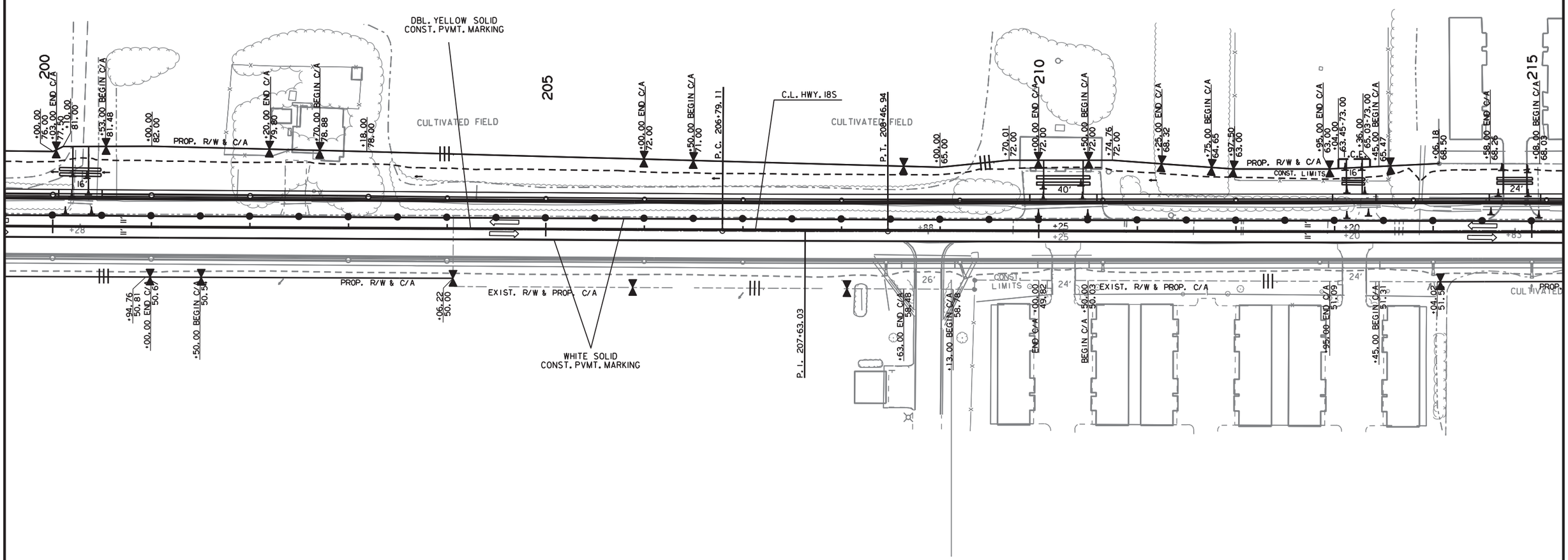
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
10-19-22		6	ARK.	100657	109	418
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

Nov 2 2022 11:40 AM

DocuSign

TRAFFIC DRUMS AT 50' O.C.



STAGE 2
MAINTENANCE OF TRAFFIC DETAILS

HT39710 10/19/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
09-12-22		6	ARK.	100657	110	418
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
Sep 29 2022 1:37 PM
DocuSign

TRAFFIC DRUMS AT 50' O.C.

C.L. HWY. 18S

DBL. YELLOW SOLID CONST. PVMT. MARKING

WHITE SOLID CONST. PVMT. MARKING

PROP. R/W & C/A

CONST. LIMITS

EXIST. R/W & PROP. C/A

CULTIVATED FIELD

N 0°02'15" W

225' TAPER LT. AND RT.

TYPE III BARRICADE

STAGE 2
MAINTENANCE OF TRAFFIC DETAILS

HT39710 9/9/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	111	418
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

May 17 2022 12:23 PM

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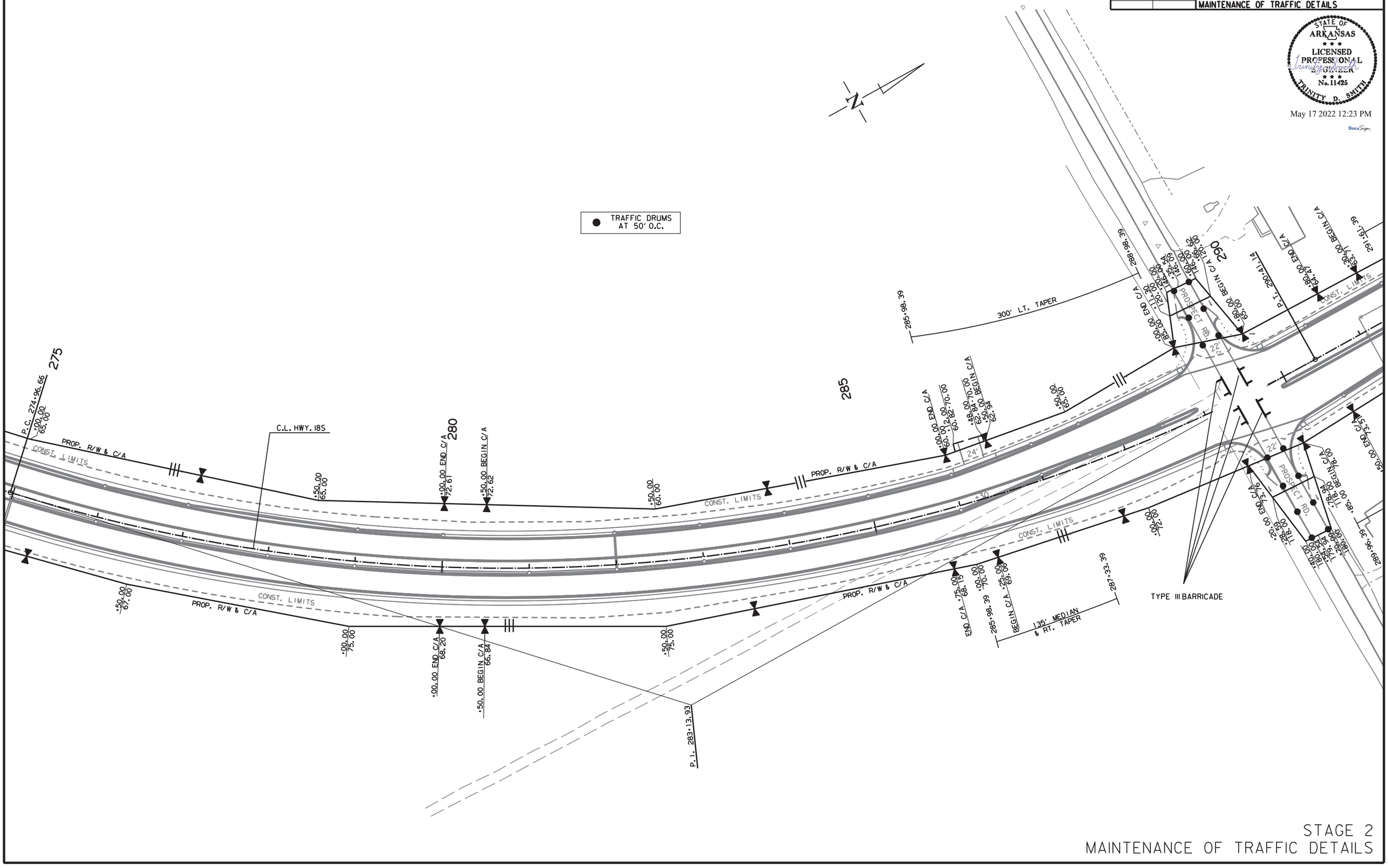
● TRAFFIC DRUMS AT 50' O.C.



STAGE 2
MAINTENANCE OF TRAFFIC DETAILS

HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
09-12-22		6	ARK.	100657	112	418
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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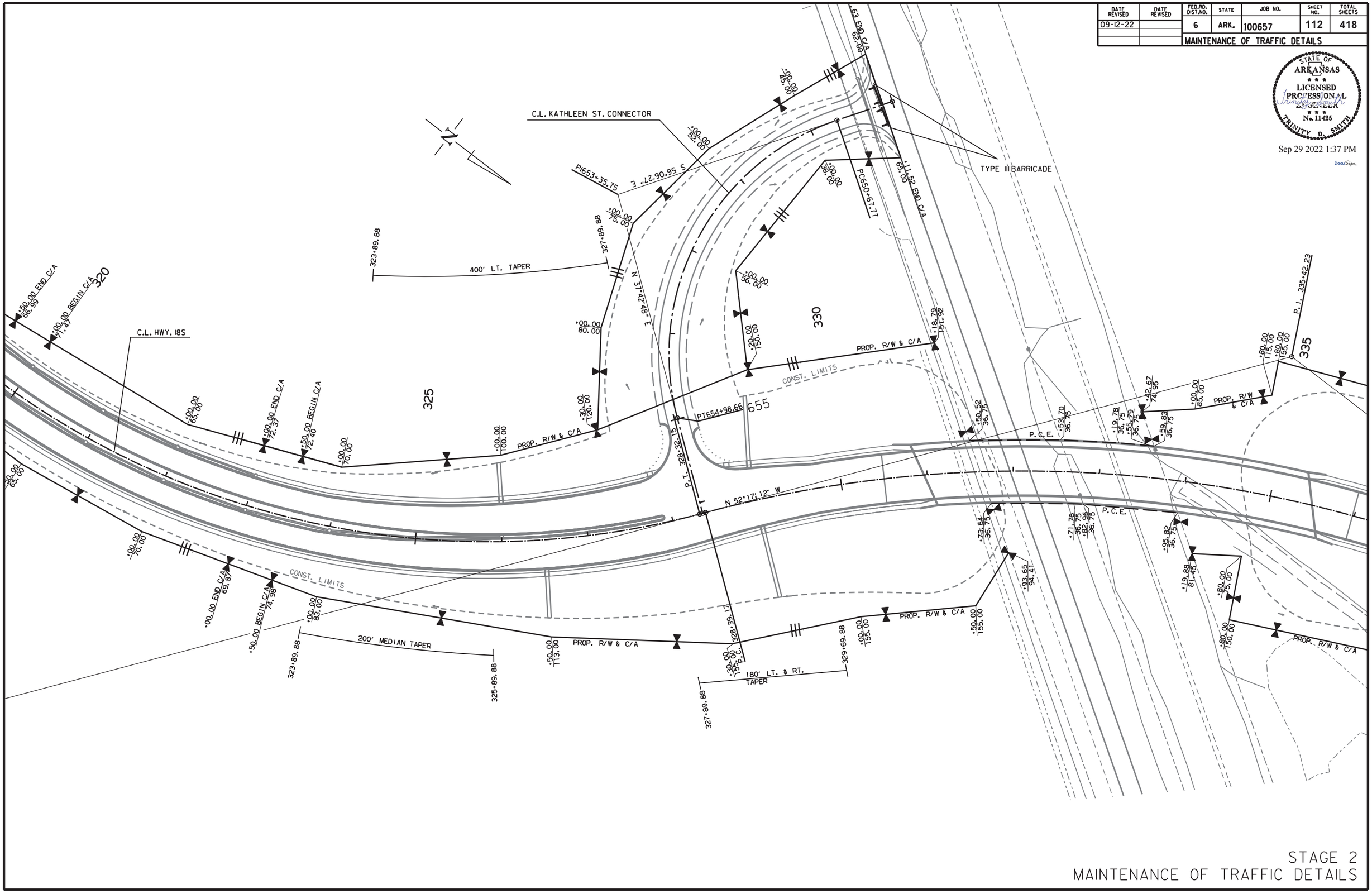

STAGE 2
MAINTENANCE OF TRAFFIC DETAILS

HT39710 9/9/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	113	418
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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TRAFFIC DRUMS AT 50' O.C.

TYPE III BARRICADE

TYPE III BARRICADE

C.L. HWY. 18S

N 0°00'00" E

PROP. R/W & C/A

CONST. LIMITS

EXIST. R/W

PROP. R/W

T.C.E.

340

345

350

+50.00 143.00

+15.00 END C/A 105.78

+65.00 BEGIN C/A 98.80

+00.86 94.98

+00.00 END C/A 85.39

+50.00 BEGIN C/A 83.34

+00.00 73.00

+88.92 END C/A 102.51

+65.31 60.34

348+73.69

270' LT. & RT. TAPER

+00.00 65.00

P.I. 349+85.02

+00.00 150.00

+80.00 75.00

+80.00 150.00

+00.00 +20.30 13.30

+50.00 117.00

+15.00 END C/A 101.87

+65.00 BEGIN C/A 94.32

+84.73 90.86

+00.00 END C/A 88.50

P.T. 341+46.33

+50.00 BEGIN C/A 84.74

+00.00 80.00

+83.14 END C/A 99.81

+86.93 61.75

P.C. 349+24.62

+00.00 51.00

+50.00 47.00

+14.25 136.86

+23.88 136.92

P.T. 351+31.34

+49

+09.24 43.66

HT39710 5/6/2022
R100657.DGN

STAGE 2
MAINTENANCE OF TRAFFIC DETAILS

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	114	418
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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TRAFFIC DRUMS AT 50' O.C.

345

350

355

C.L. CLINTON SCHOOL RD.

100' TRANSITION

CONST. LIMITS

PROP. R/W

T.C.E.

TYPE III BARRICADE

STA. 355+00.00
END JOB 100657

STAGE 2
MAINTENANCE OF TRAFFIC DETAILS

HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
09-12-22		6	ARK.	100657	115	418
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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TRAFFIC DRUMS AT 50' O.C.

N

500 501+26.25 502+26.25 505 506+01.25 506+12.48 507+02.48 510 510+03.22 512+73.22 512+73.95 513+73.95

100' TRANSITION | 375' TAPER LT. & RT. | 90' LT. TAPER | 270' LT. TAPER | 100' TRANSITION

CULTIVATED FIELD

EXIST. & PROP. T.C.E.

CONST. LIMITS

C.L. HWY. 18S

EXIST. R/W

PROP. R/W

PROP. R/W & C/A

P.I. 500+00.00

P.I. 502+26.25 = 2°41'30" LT

P.I. 506+01.77 = 2°59'28" RT

P.I. 510+03.22 = 2°32'25" RT

P.I. 512+73.95 = 2°31'31" LT

P.T. 122+23.90

N 89°20'33" E

N 86°39'03" E

N 89°38'31" E

S 87°49'05" E

N 89°39'25" E

C.W. POST

C.L. CW POST

WHITE SOLID CONST. PVMT. MARKING

DBL. YELLOW SOLID CONST. PVMT. MARKING

PAVED SHOULDER

ELECTRIC SUB STATION

STA. 502+26.25
BEGIN C.W. POST CONST.

STA. 512+73.95
END C.W. POST CONST.

CW POST
STAGE 2
MAINTENANCE OF TRAFFIC DETAILS

HT39710 9/9/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
10-19-22		6	ARK.	100657	116	418
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
Nov 2 2022 11:41 AM
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LEGEND

= CONSTRUCTION PAVEMENT MARKING (ARROW)
= CONSTRUCTION PAVEMENT MARKING (WORD)

TRAFFIC DRUMS AT 50' O.C.

N

C.L. HWY. 18S
WHITE SOLID CONST. PVMT. MARKING
DBL. YELLOW SOLID CONST. PVMT. MARKING
WHITE SOLID CONST. PVMT. MARKING
DBL. YELLOW SOLID CONST. PVMT. MARKING
WHITE SOLID CONST. PVMT. MARKING
C.L. STAGE 3 SAME AS C.L. STAGE 1
C.L. HWY. 18S
DBL. YELLOW SOLID CONST. PVMT. MARKING
C.L. STAGE 3 SAME AS C.L. STAGE 1
WHITE SOLID CONST. PVMT. MARKING

HWY. 18
PAVED SHOULDER
CONST. LIMITS
PROP. R/W & C/A
CULTIVATED FIELD
MILDRED DR.
GATE
C.O.P.
T.C.E.
N 0°09'28" E
N 0°22'56" E

STAGE 3
MAINTENANCE OF TRAFFIC DETAILS

HT39710 10/19/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
09-12-22		6	ARK.	100657	117	418
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

Sep 29 2022 1:37 PM

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TRAFFIC DRUMS AT 50' O.C.

N

500 501+26.25 100' TRANSITION 502+26.25 375' TAPER LT. & RT. 505 506+01.25 506+12.48 90' LT. TAPER 507+02.48 510 510+03.22 270' LT. TAPER 512+73.22 100' TRANSITION 513+73.95

P.I. 500+00.00

P.I. 502+26.25 = 2°41'30" LT

P.I. 506+01.77 = 2°59'28" RT

P.I. 510+03.22 = 2°32'25" RT

P.I. 512+73.95 = 2°31'31" LT

C.L. HWY. 18S

CONST. LIMITS

CULTIVATED FIELD

PROP. R/W

PROP. R/W C/A

EXIST. & PROP. T.C.E.

C.W. POST

C.L. CW POST

WHITE SOLID CONST. PVMT. MARKING

DBL. YELLOW SOLID CONST. PVMT. MARKING

PAVED SHOULDER

ELECTRIC SUB STATION

STA. 502+26.25
BEGIN C.W. POST CONST.

STA. 512+73.95
END C.W. POST CONST.

CW POST
STAGE 3
MAINTENANCE OF TRAFFIC DETAILS

HT39710 9/9/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
09-12-22		6	ARK.	100657	118	418

PERMANENT PAVEMENT MARKING DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
Sep 29 2022 1:37 PM
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LEGEND

= THERMOPLASTIC PAVEMENT MARKING (ARROW)

= THERMOPLASTIC PAVEMENT MARKING (WORD)

110+40.98

113+10.98

270' CENTER TURN LANE STRIPING TAPER

THERMOPLASTIC PAVEMENT MARKING YELLOW (6") DOUBLE YELLOW WITH R.P.M. (TYPE II) AT 80' O.C.

STA. 111+40.98
BEGIN JOB 100657
LOG MILE 1.194

THERMOPLASTIC PAVEMENT MARKING WHITE (6") SOLID

300' THERMOPLASTIC PAVEMENT MARKING WHITE (6") DOTTED (3' STRIPE, 9' GAP)

THERMOPLASTIC PAVEMENT MARKING WHITE (8") SOLID AROUND ISLAND

I-555 ON RAMP

COMMERCE SOUTH

EXIST. R/W & PROP. C/A

T.C.E.

CONST. LIMITS

C.L. HWY. 18S

P.C. 115+43.48

P.I. 116+43.66

P.C. 117+60.90

P.I. 117+43.82

N 04°36'28" E

N 1°23'52" W

PROP. R/W & C/A

EXIST. R/W & PROP. C/A

P.I. 119+92.43

EXIST. R/W

PROP. R/W

BEGIN C/A P.I. 506+01.77 = 2°59'28" RT

THERMOPLASTIC PAVEMENT MARKING WHITE (12") STOP LINE

100' THERMOPLASTIC PAVEMENT MARKING WHITE (6") SOLID

THERMOPLASTIC PAVEMENT MARKING WHITE (12") CROSS WALK

200' THERMOPLASTIC PAVEMENT MARKING YELLOW (6") DOUBLE YELLOW WITH R.P.M. (TYPE II) AT 80' O.C.

THERMOPLASTIC PAVEMENT MARKING WHITE (6") SKIP LINE WITH R.P.M. (TYPE II) AT 80' O.C.

THERMOPLASTIC PAVEMENT MARKING YELLOW (6") SKIP LINE WITH SOLID YELLOW WITH R.P.M. (TYPE II) AT 80' O.C.

THERMOPLASTIC PAVEMENT MARKING WHITE (6") SKIP LINE WITH SOLID YELLOW WITH R.P.M. (TYPE II) AT 80' O.C.

THERMOPLASTIC PAVEMENT MARKING WHITE (6") SOLID

THERMOPLASTIC PAVEMENT MARKING WHITE (6") SKIP LINE WITH R.P.M. (TYPE II) AT 80' O.C.

THERMOPLASTIC PAVEMENT MARKING (RAILROAD EMBLEM)

THERMOPLASTIC PAVEMENT MARKING WHITE (24") STOP LINE

CULTIVATED FIELD

ELECTRIC SUB STATION

P.C. 135+39.62

P.T. 137+40.12

P.C.C.P.

EXIST. R/W & PROP. C/A

CONST. LIMITS

PROP. R/W & C/A

HT39710 9/9/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	119	418

PERMANENT PAVEMENT MARKING DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

May 17 2022 12:25 PM

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THERMOPLASTIC PAVEMENT MARKING YELLOW (6") SKIP LINE WITH SOLID YELLOW WITH R.P.M. (TYPE II) AT 80' O.C.

THERMOPLASTIC PAVEMENT MARKING WHITE (6") SKIP LINE WITH R.P.M. (TYPE II) AT 80' O.C.

THERMOPLASTIC PAVEMENT MARKING YELLOW (6") SKIP LINE WITH SOLID YELLOW WITH R.P.M. (TYPE II) AT 80' O.C.

THERMOPLASTIC PAVEMENT MARKING WHITE (6") SKIP LINE WITH R.P.M. (TYPE II) AT 80' O.C.

C.L. HWY. 18S

PROP. R/W & C/A

EXIST. R/W & PROP. C/A

CONST. LIMITS

T.C.E.

C.D.P.

RET/WALL

HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
10-19-22		6	ARK.	100657	120	418
		PERMANENT PAVEMENT MARKING DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

Nov 2 2022 11:41 AM

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LEGEND

= THERMOPLASTIC PAVEMENT MARKING (ARROW)

= THERMOPLASTIC PAVEMENT MARKING (WORD)

THERMOPLASTIC PAVEMENT MARKING WHITE (12") CROSS WALK

200' THERMOPLASTIC PAVEMENT MARKING YELLOW (6") DOUBLE YELLOW WITH R.P.M. (TYPE II) AT 80' O.C.

THERMOPLASTIC PAVEMENT MARKING WHITE (6") SKIP LINE WITH R.P.M. (TYPE II) AT 80' O.C.

THERMOPLASTIC PAVEMENT MARKING WHITE (12") STOP LINE

100' THERMOPLASTIC PAVEMENT MARKING WHITE (6") SOLID

THERMOPLASTIC PAVEMENT MARKING YELLOW (6") SKIP LINE WITH SOLID YELLOW WITH R.P.M. (TYPE II) AT 80' O.C.

THERMOPLASTIC PAVEMENT MARKING WHITE (12") CROSS WALK

200' THERMOPLASTIC PAVEMENT MARKING YELLOW (6") DOUBLE YELLOW WITH R.P.M. (TYPE II) AT 80' O.C.

THERMOPLASTIC PAVEMENT MARKING WHITE (6") SKIP LINE WITH R.P.M. (TYPE II) AT 80' O.C.

THERMOPLASTIC PAVEMENT MARKING YELLOW (6") SKIP LINE WITH SOLID YELLOW WITH R.P.M. (TYPE II) AT 80' O.C.

THERMOPLASTIC PAVEMENT MARKING WHITE (6") SKIP LINE WITH R.P.M. (TYPE II) AT 80' O.C.

THERMOPLASTIC PAVEMENT MARKING YELLOW (6") SKIP LINE WITH SOLID YELLOW WITH R.P.M. (TYPE II) AT 80' O.C.

THERMOPLASTIC PAVEMENT MARKING WHITE (6") SKIP LINE WITH R.P.M. (TYPE II) AT 80' O.C.

C.L. HWY. 18S

CULTIVATED FIELD

PROP. R/W & C/A

CONST. LIMITS

P.C. 172+25.61

P.T. 174+12.70

P.I. 173+19.19

P.I. 179+33.72

P.T. 183+11.13

P.C. 175+56.03

N 8°22'56" E

HT 39710 10/19/2022
R100657.DGN

PERMANENT PAVEMENT MARKING DETAILS

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
10-19-22		6	ARK.	100657	121	418
		PERMANENT PAVEMENT MARKING DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

Nov 2 2022 11:41 AM

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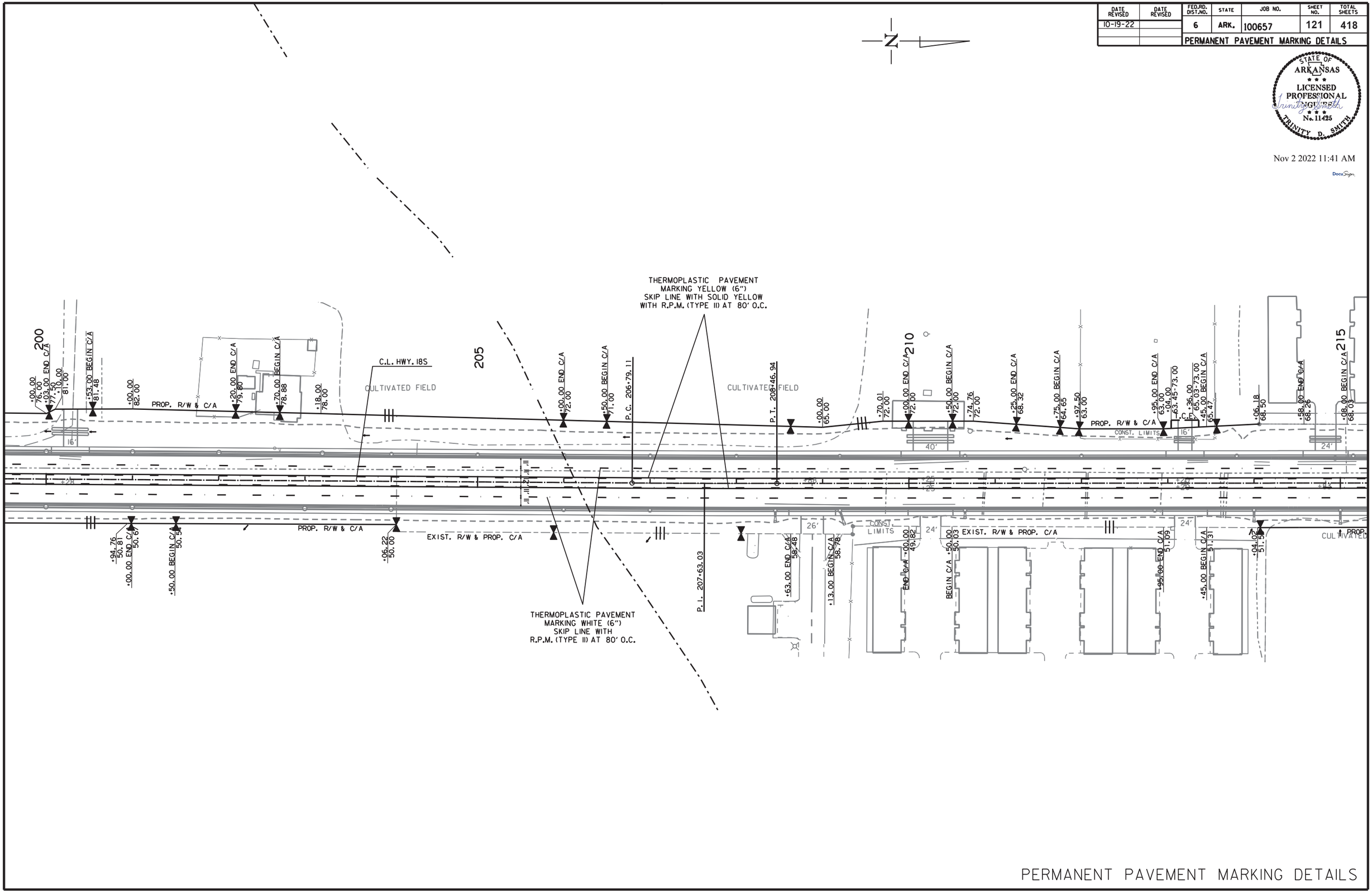

PERMANENT PAVEMENT MARKING DETAILS

HT39710 10/19/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
09-12-22		6	ARK.	100657	122	418
		PERMANENT PAVEMENT MARKING DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

Sep 29 2022 1:37 PM

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THERMOPLASTIC PAVEMENT MARKING YELLOW (6") DOUBLE YELLOW WITH R.P.M. (TYPE II) AT 80' O.C.

THERMOPLASTIC PAVEMENT MARKING WHITE (6") SKIP LINE WITH R.P.M. (TYPE II) AT 80' O.C.

THERMOPLASTIC PAVEMENT MARKING YELLOW (6") SKIP LINE WITH SOLID YELLOW WITH R.P.M. (TYPE II) AT 80' O.C.

THERMOPLASTIC PAVEMENT MARKING WHITE (6") SKIP LINE WITH R.P.M. (TYPE II) AT 80' O.C.

THERMOPLASTIC PAVEMENT MARKING YELLOW (6") HATCHING

PERMANENT PAVEMENT MARKING DETAILS

HT39710 9/9/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	123	418
		PERMANENT PAVEMENT MARKING DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

May 17 2022 12:27 PM

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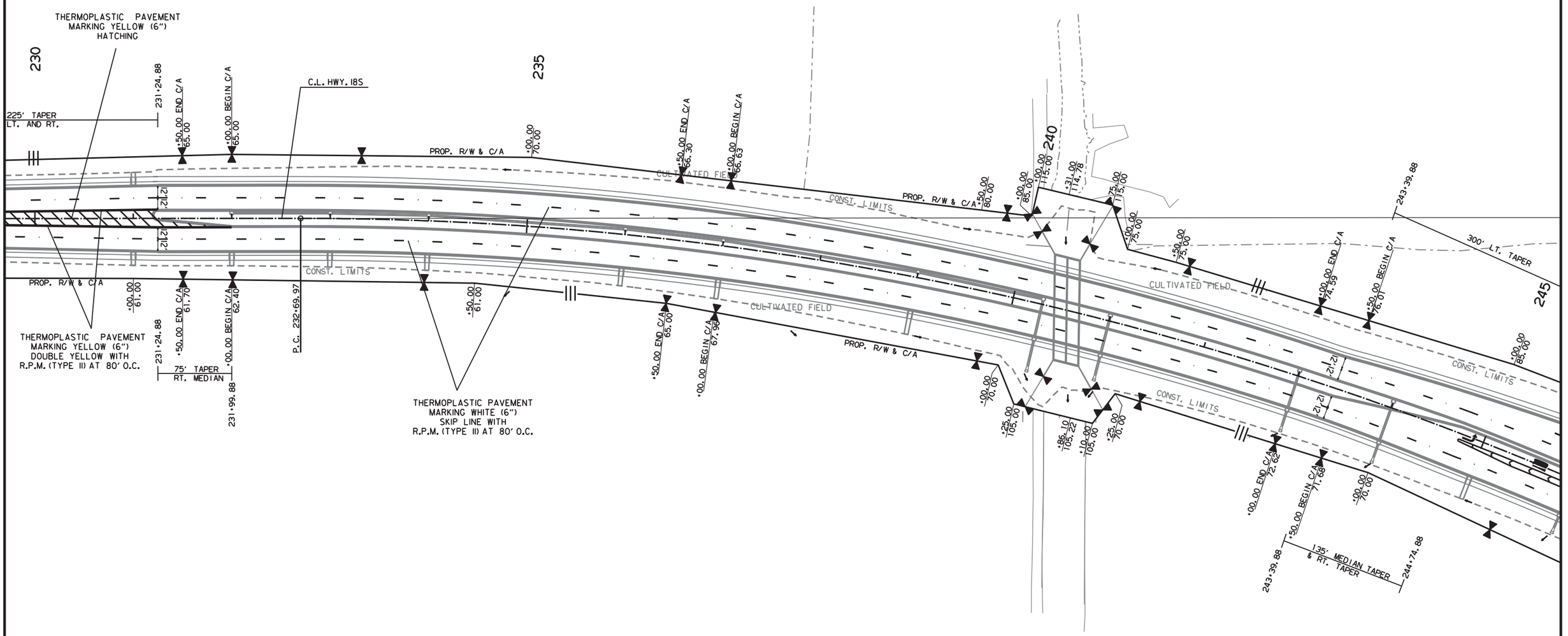

HT39710 5/6/2022
R100657.DGN

PERMANENT PAVEMENT MARKING DETAILS

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	124	418
		PERMANENT PAVEMENT MARKING DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

May 17 2022 12:27 PM

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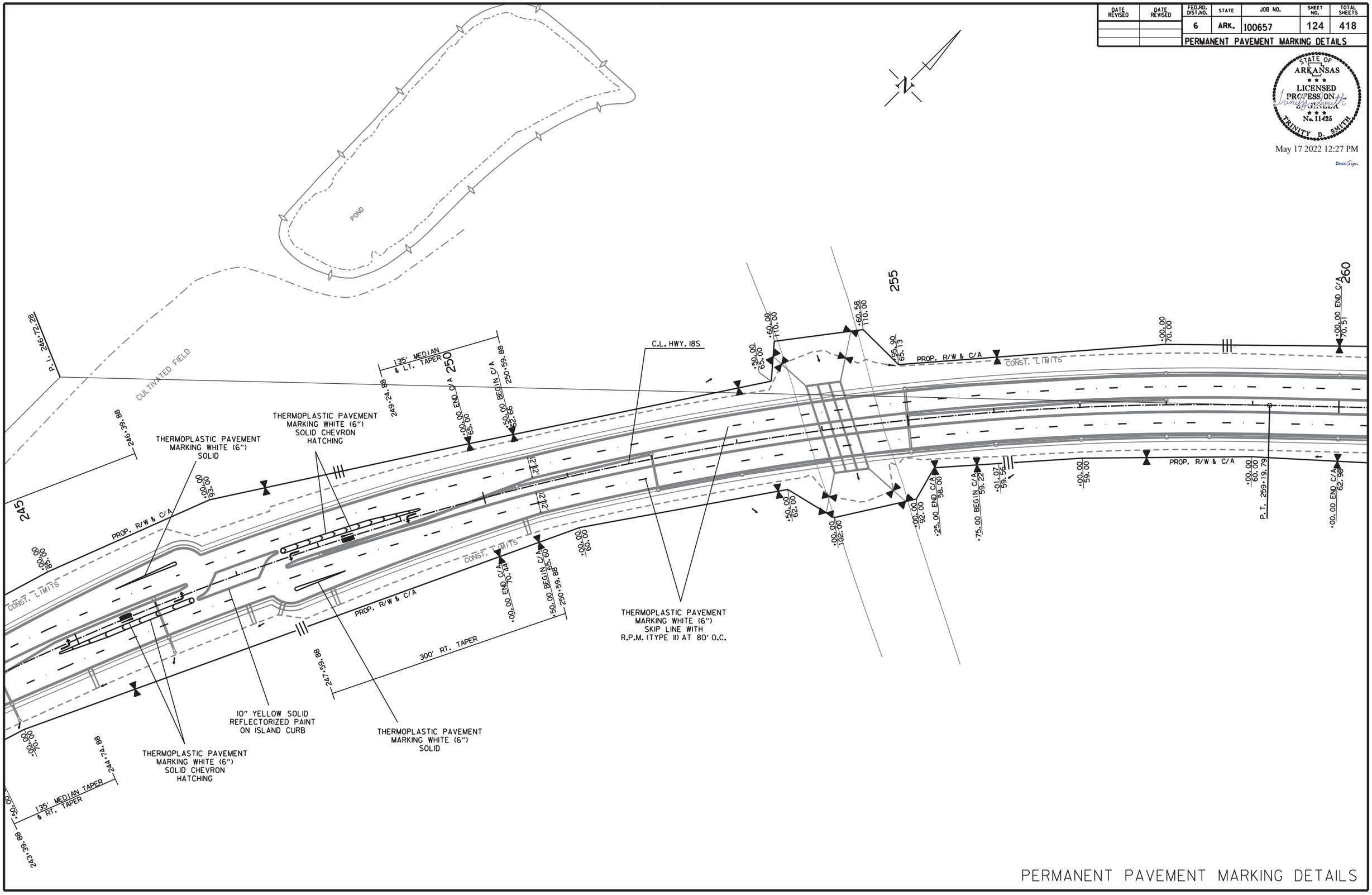

HT39710 5/6/2022
R100657.DGN

PERMANENT PAVEMENT MARKING DETAILS

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	125	418
		PERMANENT PAVEMENT MARKING DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

May 17 2022 12:27 PM

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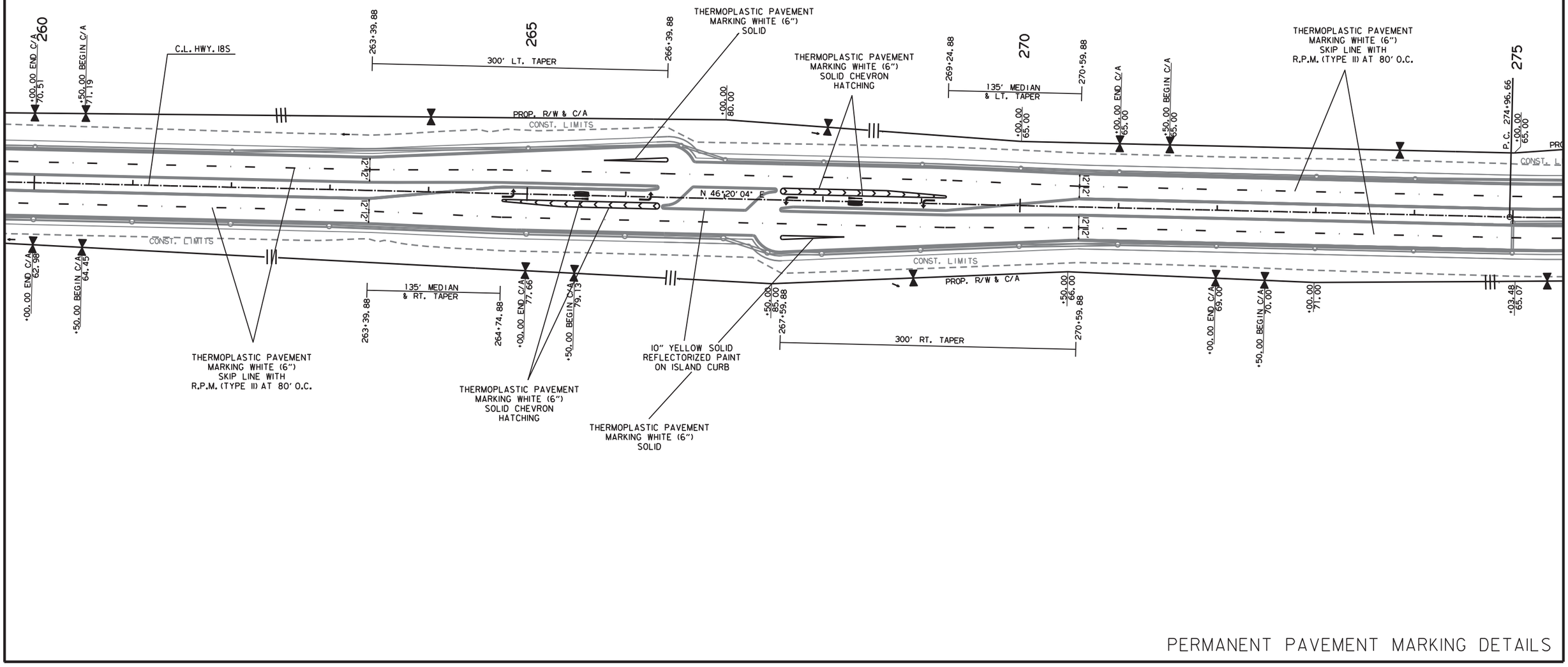

PERMANENT PAVEMENT MARKING DETAILS

HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	126	418
		PERMANENT PAVEMENT MARKING DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

May 17 2022 12:28 PM

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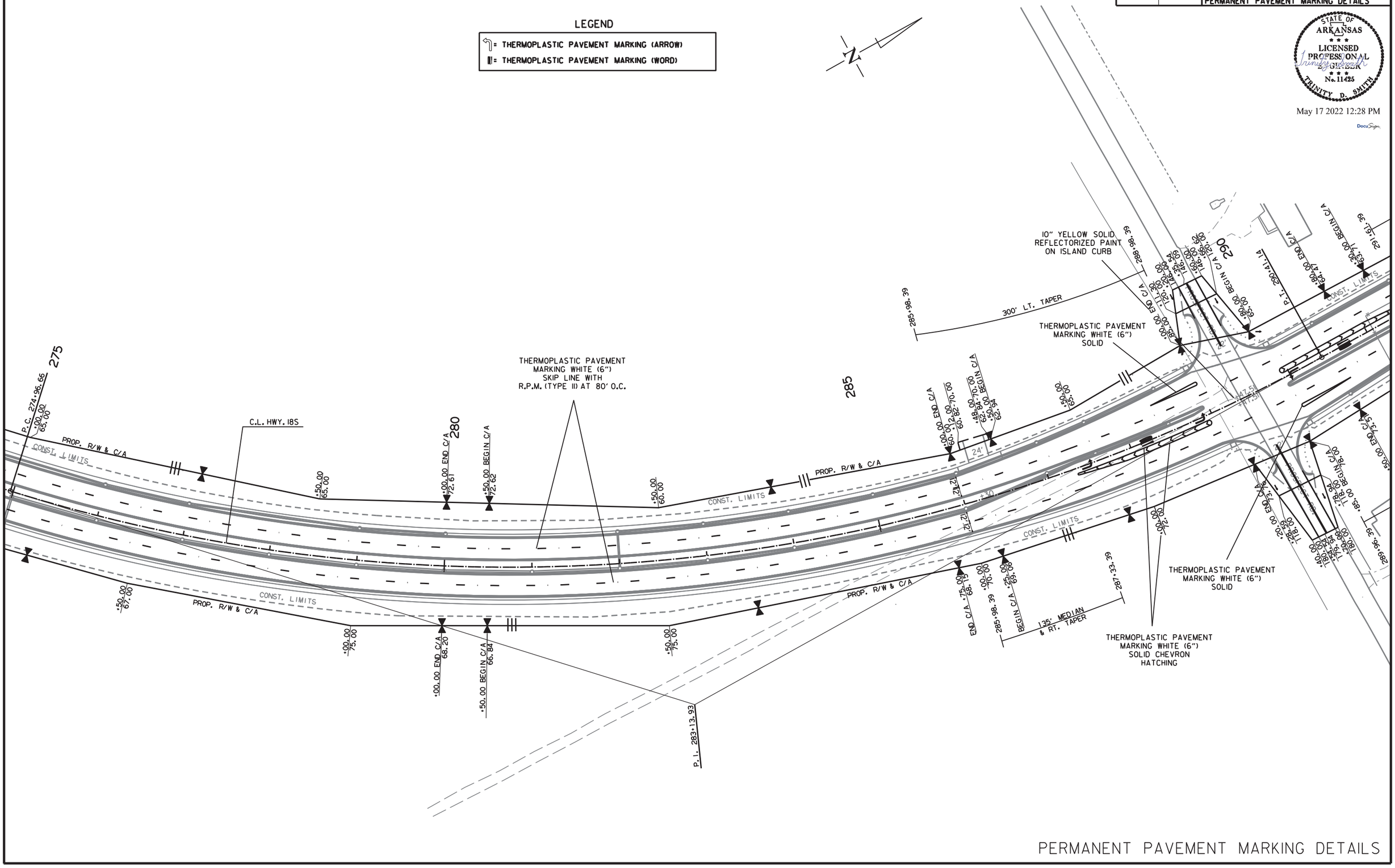
LEGEND

= THERMOPLASTIC PAVEMENT MARKING (ARROW)

= THERMOPLASTIC PAVEMENT MARKING (WORD)


N
275
P.C. 274+96.66
+00.00
65.00
C.L. HWY. 18S
PROP. R/W & C/A
CONST. LIMITS
+50.00
65.00
280
+00.00 END C/A
72.61
+50.00 BEGIN C/A
72.62
+50.00
60.00
THERMOPLASTIC PAVEMENT
MARKING WHITE (6")
SKIP LINE WITH
R.P.M. (TYPE II) AT 80' O.C.
+50.00
67.00
+00.00
75.00
+00.00 END C/A
68.20
+50.00 BEGIN C/A
66.84
+50.00
75.00
P.I. 283+13.93
285
END C/A
+00.00
70.00
+00.00
65.00
BEGIN C/A
+00.00
65.00
24'
12'
+30
12'
+50.00
65.00
END C/A
+75.00
68.00
285+98.66
BEGIN C/A
+25.00
68.00
135' MEDIAN
& RT. TAPER
287+33.63
THERMOPLASTIC PAVEMENT
MARKING WHITE (6")
SOLID
THERMOPLASTIC PAVEMENT
MARKING WHITE (6")
SOLID CHEVRON
HATCHING
290
288+98.39
10" YELLOW SOLID
REFLECTORIZED PAINT
ON ISLAND CURB
300' LT. TAPER
259+98.39
END C/A
+60.00
145.00
+45.00
+60.00
120.00
+60.00
145.00
+45.00
+60.00
120.00
290+41.14
P.I.
+80.00
64.47
BEGIN C/A
+30.00
63.71
291+61.39
CONST. LIMITS
+47.5
+47.5
24'
+50.00
END C/A
+85.00
78.54
BEGIN C/A
+20.00
END C/A
+00.00
180.00
+00.00
180.00
+00.00
180.00

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	127	418

PERMANENT PAVEMENT MARKING DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

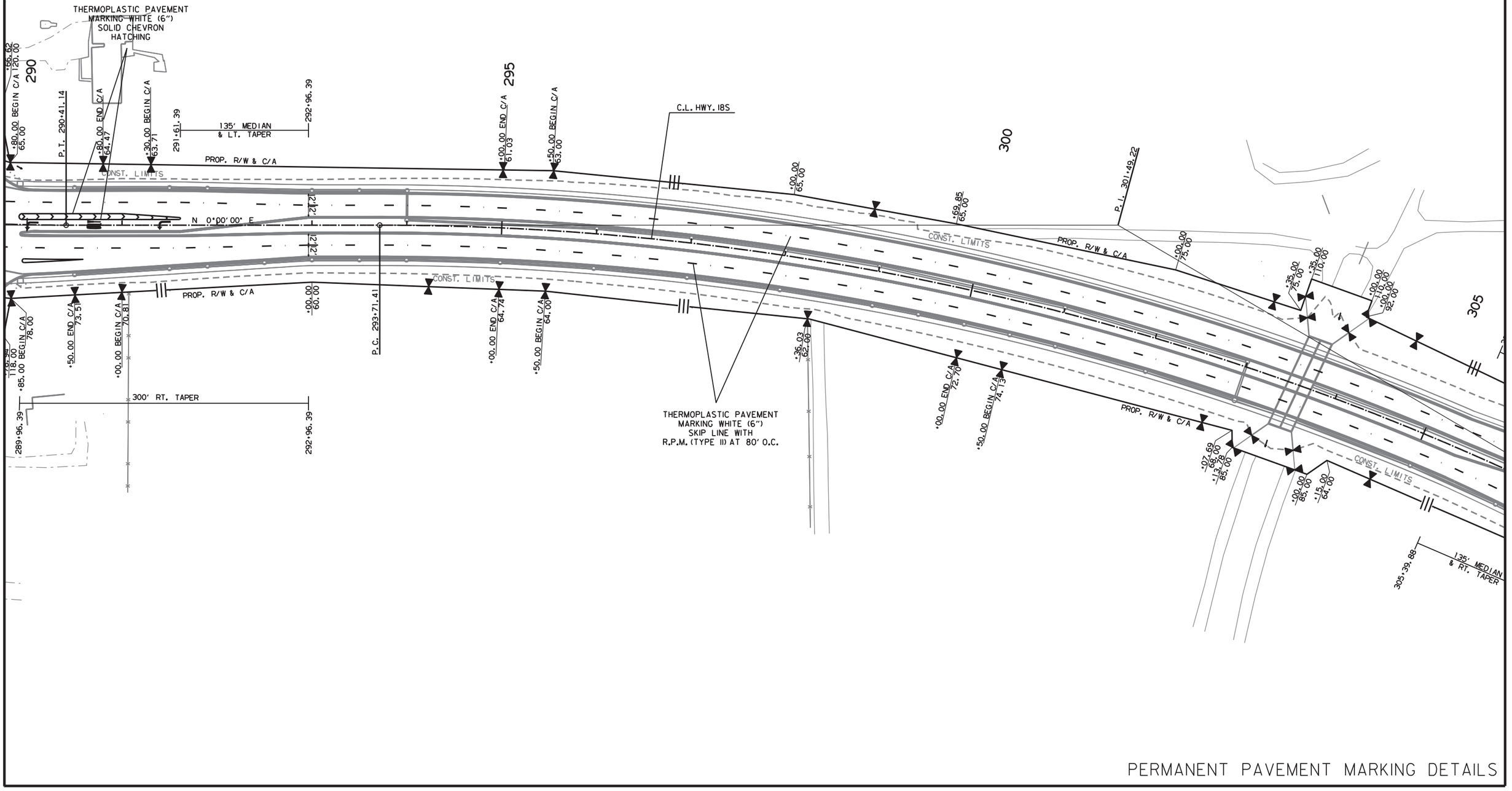
May 17 2022 12:28 PM

DocuSign

LEGEND

= THERMOPLASTIC PAVEMENT MARKING (ARROW)

= THERMOPLASTIC PAVEMENT MARKING (WORD)



HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	128	418
		PERMANENT PAVEMENT MARKING DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

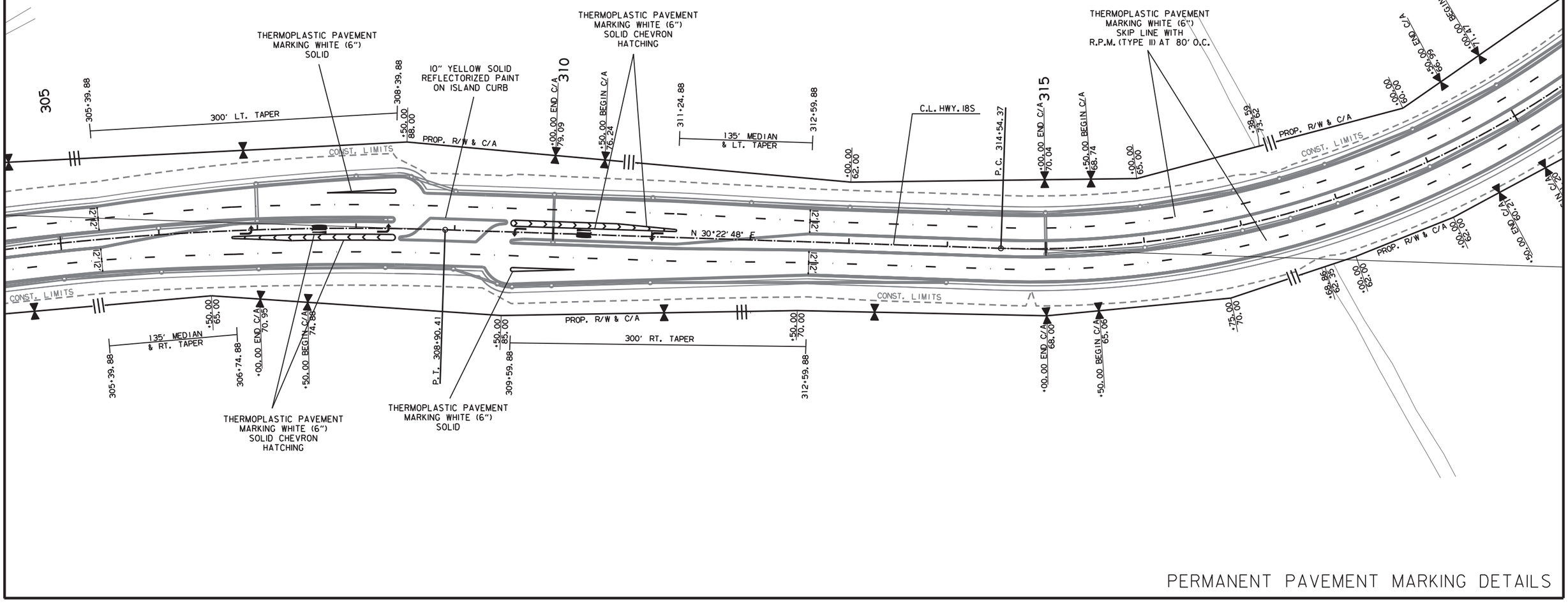
May 17 2022 12:28 PM

DocuSign

LEGEND

= THERMOPLASTIC PAVEMENT MARKING (ARROW)

= THERMOPLASTIC PAVEMENT MARKING (WORD)



HT.39710 5/6/2022
R100657.DGN

PERMANENT PAVEMENT MARKING DETAILS

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
09-12-22		6	ARK.	100657	129	418
		PERMANENT PAVEMENT MARKING DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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LEGEND

= THERMOPLASTIC PAVEMENT MARKING (ARROW)

= THERMOPLASTIC PAVEMENT MARKING (WORD)

N

THERMOPLASTIC PAVEMENT MARKING YELLOW (6") DOUBLE YELLOW WITH R.P.M. (TYPE II) AT 80' O.C.

THERMOPLASTIC PAVEMENT MARKING WHITE (6") SKIP LINE WITH R.P.M. (TYPE II) AT 80' O.C.

THERMOPLASTIC PAVEMENT MARKING WHITE (6") SOLID

THERMOPLASTIC PAVEMENT MARKING YELLOW (6") HATCHING

THERMOPLASTIC PAVEMENT MARKING WHITE (6") SOLID

THERMOPLASTIC PAVEMENT MARKING YELLOW (6") DOUBLE YELLOW WITH R.P.M. (TYPE II) AT 80' O.C.

THERMOPLASTIC PAVEMENT MARKING YELLOW (6") SKIP LINE WITH SOLID YELLOW WITH R.P.M. (TYPE II) AT 80' O.C.

THERMOPLASTIC PAVEMENT MARKING WHITE (6") SKIP LINE WITH R.P.M. (TYPE II) AT 80' O.C.

200' THERMOPLASTIC PAVEMENT MARKING WHITE (6") SOLID

C.L. KATHLEEN ST. CONNECTOR

C.L. HWY. 18S

CONST. LIMITS

PROP. R/W & C/A

400' LT. TAPER

200' MEDIAN TAPER

180' LT. & RT. TAPER

P.C.E.

PI653+35.75

PC650+67.77

PT654+98.66

P.I. 335+42.23

320

325

330

335

655

HT39710 9/9/2022
R100657.DGN

PERMANENT PAVEMENT MARKING DETAILS

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	130	418

PERMANENT PAVEMENT MARKING DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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LEGEND

= THERMOPLASTIC PAVEMENT MARKING (ARROW)

= THERMOPLASTIC PAVEMENT MARKING (WORD)

THERMOPLASTIC PAVEMENT MARKING YELLOW (6") SKIP LINE WITH SOLID YELLOW WITH R.P.M. (TYPE II) AT 80' O.C.

THERMOPLASTIC PAVEMENT MARKING WHITE (12") STOP LINE

THERMOPLASTIC PAVEMENT MARKING WHITE (12") CROSS WALK

THERMOPLASTIC PAVEMENT MARKING WHITE (12") STOP LINE

THERMOPLASTIC PAVEMENT MARKING WHITE (6") SOLID

200' THERMOPLASTIC PAVEMENT MARKING YELLOW (6") DOUBLE YELLOW WITH R.P.M. (TYPE II) AT 80' O.C.

C.L. HWY. 18S

PROP. R/W & C/A

CONST. LIMITS

EXIST. R/W

270' LT. & RT. TAPER

P.I. 349+85.02

N 0°00'00" E

N 41°

P.C. 348+24.62

T.C.E.

P.T. 351+31.34

100' THERMOPLASTIC PAVEMENT MARKING WHITE (6") SOLID

200' THERMOPLASTIC PAVEMENT MARKING WHITE (6") SOLID

300' THERMOPLASTIC PAVEMENT MARKING WHITE (6") DOTTED (3' STRIPE, 9' GAP)

THERMOPLASTIC PAVEMENT MARKING WHITE (6") SKIP LINE WITH R.P.M. (TYPE II) AT 80' O.C.

THERMOPLASTIC PAVEMENT MARKING YELLOW (6") DOUBLE YELLOW WITH R.P.M. (TYPE II) AT 80' O.C.

P.T. 341+46.33

340

345

350

HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	131	418
		PERMANENT PAVEMENT MARKING DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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LEGEND

= THERMOPLASTIC PAVEMENT MARKING (ARROW)

= THERMOPLASTIC PAVEMENT MARKING (WORD)

THERMOPLASTIC PAVEMENT MARKING YELLOW (6") DOUBLE YELLOW WITH R.P.M. (TYPE II) AT 80' O.C.

STA. 355+00.00
END JOB 100657

HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
09-12-22		6	ARK.	100657	132	418
		PERMANENT PAVEMENT MARKING DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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LEGEND

= THERMOPLASTIC PAVEMENT MARKING (ARROW)

= THERMOPLASTIC PAVEMENT MARKING (WORD)

N

125

500

505

510

120

501+26.25

502+26.25

506+01.25

506+12.48

507+02.48

510+03.22

512+73.22

512+73.95

513+73.95

100' TRANSITION

375' TAPER
LT. & RT.

90' LT. TAPER

270' LT. TAPER

100' TRANSITION

THERMOPLASTIC PAVEMENT MARKING YELLOW (6") DOUBLE YELLOW WITH R.P.M. (TYPE II) AT 80' O.C.

THERMOPLASTIC PAVEMENT MARKING WHITE (12") CROSS WALK

THERMOPLASTIC PAVEMENT MARKING WHITE (6") SOLID

THERMOPLASTIC PAVEMENT MARKING WHITE (12") STOP LINE

C.L. C.W. POST

EXIST. R/W

PROP. R/W

EXIST. & PROP. C/A

CONST. LIMITS

T.C.E.

C.W. POST RD.

P.I. 500+00.00

P.I. 502+26.25
= 2°41'30" LT

P.I. 506+01.77
= 2°59'28" RT

P.I. 510+03.22
= 2°32'25" RT

P.I. 512+73.95
= 2°31'31" LT

P.O.E. 514+78.90

N 89°20' 33" E

N 86°39'03" E

N 89°38'31" E

S 87°49'05" E

N 89°39'25" E

STA. 502+26.25
BEGIN C.W. POST CONST.

STA. 512+73.95
END C.W. POST CONST.

C.W. POST
PERMANENT PAVEMENT MARKING DETAILS

HT39710 9/9/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	133	418

PERMANENT PAVEMENT MARKING DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

May 17 2022 12:30 PM

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LEGEND

= THERMOPLASTIC PAVEMENT MARKING (ARROW)

= THERMOPLASTIC PAVEMENT MARKING (WORD)

THERMOPLASTIC PAVEMENT MARKING WHITE (6") SKIP LINE WITH R.P.M. (TYPE II) AT 80' O.C.

THERMOPLASTIC PAVEMENT MARKING WHITE (12") STOP LINE

200' THERMOPLASTIC PAVEMENT MARKING YELLOW (6") DOUBLE YELLOW WITH R.P.M. (TYPE II) AT 80' O.C.

THERMOPLASTIC PAVEMENT MARKING WHITE (12") CROSS WALK

THERMOPLASTIC PAVEMENT MARKING YELLOW (6") SKIP LINE WITH SOLID YELLOW WITH R.P.M. (TYPE II) AT 80' O.C.

THERMOPLASTIC PAVEMENT MARKING WHITE (6") SOLID

100' THERMOPLASTIC PAVEMENT MARKING WHITE (6") SOLID

THERMOPLASTIC PAVEMENT MARKING WHITE (12") STOP LINE

100' THERMOPLASTIC PAVEMENT MARKING WHITE (6") SOLID

THERMOPLASTIC PAVEMENT MARKING YELLOW (6") SKIP LINE WITH SOLID YELLOW WITH R.P.M. (TYPE II) AT 80' O.C.

THERMOPLASTIC PAVEMENT MARKING WHITE (6") SOLID

THERMOPLASTIC PAVEMENT MARKING WHITE (6") SKIP LINE WITH R.P.M. (TYPE II) AT 80' O.C.

200' THERMOPLASTIC PAVEMENT MARKING YELLOW (6") DOUBLE YELLOW WITH R.P.M. (TYPE II) AT 80' O.C.

C.L. HWY. 18S

HWY. 18

MILDRED DR.

CONST. LIMITS

PROP. R/W & C/A

CULTIVATED FIELD

PAVED SHOULDER

T.C.E.

GARDEN

HT39710 5/6/2022
R100657.DGN

HWY. 18
PERMANENT PAVEMENT MARKING DETAILS

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	134	418
		PERMANENT PAVEMENT MARKING DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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LEGEND

= THERMOPLASTIC PAVEMENT MARKING (ARROW)

= THERMOPLASTIC PAVEMENT MARKING (WORD)

200' THERMOPLASTIC PAVEMENT MARKING YELLOW (6") DOUBLE YELLOW WITH R.P.M. (TYPE II) AT 80' O.C.

THERMOPLASTIC PAVEMENT MARKING WHITE (6") SOLID

THERMOPLASTIC PAVEMENT MARKING WHITE (6") SKIP LINE WITH R.P.M. (TYPE II) AT 80' O.C.

THERMOPLASTIC PAVEMENT MARKING YELLOW (6") SKIP LINE WITH SOLID YELLOW WITH R.P.M. (TYPE II) AT 80' O.C.

THERMOPLASTIC PAVEMENT MARKING WHITE (12") STOP LINE

THERMOPLASTIC PAVEMENT MARKING YELLOW (6") SKIP LINE WITH SOLID YELLOW WITH R.P.M. (TYPE II) AT 80' O.C.

THERMOPLASTIC PAVEMENT MARKING WHITE (6") SKIP LINE WITH R.P.M. (TYPE II) AT 80' O.C.

THERMOPLASTIC PAVEMENT MARKING WHITE (6") SOLID

THERMOPLASTIC PAVEMENT MARKING WHITE (12") STOP LINE

THERMOPLASTIC PAVEMENT MARKING YELLOW (6") DOUBLE YELLOW WITH R.P.M. (TYPE II) AT 80' O.C.

C.L. HWY. 18S

HWY. 49
PERMANENT PAVEMENT MARKING DETAILS

HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
07-20-22		6	ARK.	100657	135	418
		QUANTITIES				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
Trinity D. Smith
No. 11425
TRINITY D. SMITH

Jul 22 2022 10:46 AM

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ADVANCE WARNING SIGNS AND DEVICES

SIGN NUMBER	DESCRIPTION	SIGN SIZE	STAGE 1	STAGE 2	STAGE 3	END OF JOB	MAXIMUM NUMBER REQUIRED	TOTAL SIGNS REQUIRED		CONSTRUCTION PROJECT INFORMATION SIGN UPDATE	VERTICAL PANELS	TRAFFIC DRUMS	TRAFFIC CONE	BARRICADES (TYPE III)		FURNISHING & INSTALLING PRECAST CONC. BARRIER	RELOCATING PRECAST CONCRETE BARRIER	TEMPORARY IMPACT ATTENUATION BARRIER	TEMP. IMPACT ATTEN.BARR. (REPAIR)	TEMP. IMPACT ATTEN.BARR. (RELOCATION)
			LIN. FT. - EACH					NO.	SQ. FT.	EACH	EACH			RIGHT	LEFT	LIN. FT.			EACH	
W20-1	ROAD WORK 1500 FT.	48"x48"	3	3	3		3	3	48.0											
W20-1	ROAD WORK 1000 FT.	48"x48"	3	3	3		3	3	48.0											
W20-1	ROAD WORK 500 FT.	48"x48"	3	3	3		3	3	48.0											
W20-1	ROAD WORK AHEAD	48"x48"	11	11	11		11	11	176.0											
G20-2	END ROAD WORK	48"x24"	14	14	14		14	14	112.0											
G20-1	ROAD WORK NEXT xx MILES	60"x24"	2	2	2		2	2	20.0											
R11-2	ROAD CLOSED	48"x30"	16	20			20	20	200.0											
OM-3L	OBJECT MARKER	12"x36"	12	12			12	12	36.0											
OM-3R	OBJECT MARKER	12"x36"	16	16			16	16	48.0											
R4-1	DO NOT PASS	24"x30"	40	40	40		40	40	200.0											
W21-5a	RIGHT SHOULDER CLOSED	36"x36"	40	40	40		40	40	360.0											
W8-1	BUMP	30"x30"	22	22	22		22	22	137.5											
SPECIAL	CONSTRUCTION PROJECT INFORMATION SIGN	96"x48"	2	2	2		2	2	64.0											
	CONSTRUCTION PROJECT INFORMATION SIGN UPDATE									10										
	VERTICAL PANELS		311	325	45		325				325									
	TRAFFIC DRUMS		311	325	45		325					325								
	TRAFFIC CONES		204	192	12		204						204							
	TYPE III BARRICADE-RT. (8')		16	16			16							128						
	TYPE III BARRICADE-LT. (8')		16	16			16								128					
	TYPE III BARRICADE-RT. (16')			1			1							16						
	TYPE III BARRICADE-LT. (16')			3			3								48					
	FURNISHING AND INSTALLING PRECAST CONCRETE BARRIER		592	39			631									631				
	RELOCATING PRECAST CONCRETE BARRIER			552			552										552			
	TEMPORARY IMPACT ATTENUATION BARRIER		4				4											4		
	TEMPORARY IMPACT ATTENUATION BARRIER (REPAIR)		4				4												4	
	TEMPORARY IMPACT ATTENUATION BARRIER (RELOCATION)			1			1													1
TOTALS:									**1497.5**	**10**	**325**	**325**	**204**	**144**	**176**	**631**	**552**	**4**	**4**	**1**

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

THE QUANTITY OF VERTICAL PANELS PROVIDED IN THE CONTRACT IS FOR ONE SIDE OF THE ROADWAY FOR THE FULL LENGTH OF THE JOB. THIS IS THE MAXIMUM QUANTITY REQUIRED TO ALLOW THE CONTRACTOR TO NOTCH ONE MILE, BACKFILL TO A POINT WHERE THE VERTICAL DIFFERENTIAL IS 4" OR LESS, AND THEN NOTCH ANOTHER ONE-MILE SECTION. THIS IS THE MAXIMUM NUMBER OF VERTICAL PANELS THAT WILL BE PAID FOR. REFER TO SECTION 603.02 OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION REQUIREMENTS.

RD38049 7/22/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	136	418
		QUANTITIES				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

May 17 2022 12:31 PM

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CONSTRUCTION PAVEMENT MARKINGS AND PERMANENT PAVEMENT MARKINGS

DESCRIPTION	STAGE 1	STAGE 2	STAGE 3	END OF JOB	REMOVAL OF PERMANENT PAVEMENT MARKINGS	CONSTRUCTION PAVEMENT MARKINGS	CONSTRUCTION PAVEMENT MARKINGS		REMOVAL OF CONSTRUCTION PAVEMENT MARKINGS	RAISED PAVEMENT MARKERS		THERMOPLASTIC PAVEMENT MARKING								REFLECTORIZED PAINT PAVEMENT MARKING
							WORDS	ARROWS		TYPE II (WHITE/RED)	TYPE II (YELLOW/YELLOW)	6" WHITE	6" YELLOW	8" WHITE	12" WHITE	24" WHITE	WORDS	ARROWS	RAILROAD EMBLEMS	10" YELLOW
	LIN. FT. - EACH				LIN. FT.	LIN. FT.	EACH		LIN. FT.	EACH		LIN. FT.					EACH			LIN. FT.
REMOVAL OF PERMANENT PAVEMENT MARKINGS				3000	3000															
CONSTRUCTION PAVEMENT MARKINGS	51857	51126	10616			113599														
CONSTRUCTION PAVEMENT MARKINGS (WORDS)	2	2					4													
CONSTRUCTION PAVEMENT MARKINGS (ARROWS)	2	2						4												
REMOVAL OF CONSTRUCTION PAVEMENT MARKINGS		22500	11652						34152											
RAISED PAVEMENT MARKERS TYPE II (WHITE/RED)				622						622										
RAISED PAVEMENT MARKERS TYPE II (YELLOW/YELLOW)	152	152	32	413							749									
THERMOPLASTIC PAVEMENT MARKING WHITE (6")				28140								28140								
THERMOPLASTIC PAVEMENT MARKING YELLOW (6")				46079									46079							
THERMOPLASTIC PAVEMENT MARKING WHITE (8")				424										424						
THERMOPLASTIC PAVEMENT MARKING WHITE (12")				2091											2091					
THERMOPLASTIC PAVEMENT MARKING WHITE (24")				44												44				
THERMOPLASTIC PAVEMENT MARKING (WORDS)				23													23			
THERMOPLASTIC PAVEMENT MARKING (ARROWS)				46														46		
THERMOPLASTIC PAVEMENT MARKING (RAILROAD EMBLEMS)				4															4	
REFLECTORIZED PAINT PAVEMENT MARKING YELLOW (10")				913																913
TOTALS:					**3000**	**113599**	**4**	**4**	**34152**	**622**	**749**	**28140**	**46079**	**424**	**2091**	**44**	**23**	**46**	**4**	**913**

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

TOTALS:					3000	113599	4	4	34152	622	749	28140	46079	424	2091	44	23	46	4	913

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

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 (E-5)	ROCK DITCH CHECKS (E-6)	SILT FENCE (E-11)	DROP INLET FILTER SOCK (12") (E-13)	SEDIMENT BASIN (E-14)	OBLITERATION OF SEDIMENT BASIN	*SEDIMENT REMOVAL & DISPOSAL
			ACRE	TON	ACRE	M.GAL.	ACRE	ACRE	ACRE	M.GAL.	BAG	CU.YD.	LIN. FT.	LIN. FT.	CU.YD.	CU.YD.	CU. YD.
ENTIRE	PROJECT	CLEARING AND GRUBBING						82.12	82.12	1675.2	1826	255	25605				1116
ENTIRE	PROJECT	STAGE 1	16.54	33.08	16.54	1687.1	16.54	62.78	62.78	1280.7	572	84	28155	6678			1097
ENTIRE	PROJECT	STAGE 2	4.25	8.50	4.25	433.5	4.25	17.84	17.84	363.9	814	81	2475	2364			156
ENTIRE	PROJECT	STAGE 3	0.42	0.84	0.42	42.8	0.42	1.50	1.50	30.6				281			
*ENTIRE PROJECT TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER.			5.30	10.60	5.30	540.6	5.30	41.06	41.06	837.6	803	105	14059	2331	6000	6000	6592
TOTALS:			**26.51**	**53.02**	**26.51**	**2704.0**	**26.51**	**205.30**	**205.30**	**4188.0**	**4015**	**525**	**70294**	**11654**	**6000**	**6000**	**8961**

BASIS OF ESTIMATE:
LIME .....2 TONS / ACRE OF SEEDING
WATER.....102.0 M.G. / ACRE OF SEEDING
WATER.....20.4 M.G. / ACRE OF TEMPORARY SEEDING
SAND BAG DITCH CHECKS.....22 BAGS / LOCATION
ROCK DITCH CHECKS.....3 CU.YD./LOCATION
FILTER SOCKS.....23 LIN. FT./ 4' DIA. INLET
FILTER SOCKS.....27 LIN. FT./ 5' DIA. INLET
FILTER SOCKS.....30 LIN. FT./ 6' DIA. INLET

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.

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QUANTITIES

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09-12-22		6	ARK.	100657	137	418
		QUANTITIES				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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EARTHWORK

STATION	STATION	LOCATION / DESCRIPTION	UNCLASSIFIED EXCAVATION	COMPACTED EMBANKMENT
			CU. YD.	
ENTIRE	PROJECT	STAGE 1-MAIN LANES	16111	314957
ENTIRE	PROJECT	STAGE 2-MAIN LANES	9181	13528
ENTIRE	PROJECT	STAGE 3-MAIN LANES	334	875
ENTIRE	PROJECT	APPROACHES	15	2995
ENTIRE	PROJECT	TEMPORARY APPROACHES		1140
ENTIRE	PROJECT	STAGE 1-CW POST	594	407
ENTIRE	PROJECT	STAGE 2-CW POST	931	148
ENTIRE	PROJECT	STAGE 3-CW POST	468	9
ENTIRE	PROJECT	STAGE 1-KATHLEEN ST. CONNECTOR		12997
121+50	121+50	CHANNEL EXCAVATION	519	
148+23	148+23	CHANNEL EXCAVATION	1615	1
187+65	187+65	CHANNEL EXCAVATION	1618	11
191+00	191+00	CHANNEL EXCAVATION	694	
240+55	240+55	CHANNEL EXCAVATION	1207	9
254+15	254+15	CHANNEL EXCAVATION	3321	1
303+60	303+60	CHANNEL EXCAVATION	1479	
347+50	353+85	CLINTON SCHOOL RD. - OBLITERATION OF EXIST. PVT.	237	
TOTALS:			38324	347078

SOIL LOG

STATION	LATITUDE			LONGITUDE			LOCATION	DEPTH	LIQUID LIMIT	PLASTICITY INDEX	AASHTO CLASSIFICATION	COLOR
	DEG	MIN	SEC	DEG	MIN	SEC		FEET				
115+00	35	48	16.20	90	37	28.40	6 RT	-	22	7	A-4(4)	BROWN
115+00	35	48	16.20	90	37	28.30	27 RT	-	ND	NP	A-4(0)	BROWN
124+00	35	48	25.10	90	37	28.60	6 LT	-	30	13	A-6(11)	BR/GR
124+00	35	48	25.10	90	37	28.80	27 LT	-	31	14	A-6(6)	BR/GR
124+00	35	48	25.10	90	37	28.80	27 LT	-	31	13	A-6(9)	BR/GR
131+00	35	48	32.00	90	37	28.20	6 RT	-	36	16	A-6(15)	BROWN
131+00	35	48	32.00	90	37	28.00	27 RT	-	33	15	A-6(13)	BROWN
138+00	35	48	39.00	90	37	28.20	6 LT	-	25	10	A-4(4)	BR/GR
138+00	35	48	39.00	90	37	28.30	18 LT	-	27	10	A-4(7)	BROWN
147+00	35	48	47.80	90	37	27.70	6 RT	-	40	23	A-6(21)	BR/GR
155+00	35	48	55.70	90	37	27.60	6 T	-	29	13	A-6(9)	BROWN
155+00	35	48	55.70	90	37	27.70	18 LT	-	34	19	A-6(15)	BROWN
164+00	35	49	4.80	90	37	27.10	6 RT	-	31	15	A-6(14)	GRAY
170+00	35	49	10.70	90	37	27.10	6 LT	0-5	ND	NP	A-4(0)	BR/GR
179+00	35	49	19.30	90	37	26.40	9 RT	0-5	26	6	A-4(5)	GRAY
187+00	35	49	27.50	90	37	26.20	6 LT	0-5	23	5	A-4(2)	BR/GR
187+00	35	49	27.50	90	37	26.30	15 LT	0-5	30	12	A-5(9)	BR/GR
187+00	35	49	27.50	90	37	26.30	15 LT	0-5	27	7	A-4(5)	BR/GR
195+00	35	49	35.20	90	37	25.90	6 RT	0-5	30	13	A-6(11)	GRAY
203+00	35	49	43.20	90	37	25.80	0 LT	0-5	29	13	A-6(11)	BR/GR
203+00	35	49	43.10	90	37	25.90	15 LT	0-5	33	15	A-6(13)	BR/GR
211+00	35	49	51.00	90	37	25.50	6 RT	0-5	31	13	A-6(12)	GRAY
219+00	35	49	59.00	90	37	25.50	6 LT	0-5	27	8	A-4(6)	BR/GR
226+00	35	50	5.90	90	37	25.30	6 RT	0-5	33	18	A-6(17)	BR/GR
235+00	35	50	14.50	90	37	24.80	10 LT	0-5	ND	NP	A-4(0)	BROWN
235+00	35	50	14.50	90	37	24.80	10 LT	0-5	ND	NP	A-4(0)	BROWN
241+00	35	50	20.50	90	37	23.70	C.L.	0-5	29	11	A-6(10)	BROWN
253+50	35	50	31.90	90	37	16.90	C.L.	0-5	27	8	A-4(7)	BROWN
255+00	35	50	32.10	90	37	14.60	C.L.	0-5	28	7	A-4(6)	BROWN
267+00	35	50	40.70	90	37	7.90	150 LT	0-5	48	31	A-7-6(32)	BROWN
275+80	35	50	47.50	90	36	58.60	30 LT	0-5	ND	NP	A-4(0)	BROWN
283+00	35	50	53.30	90	36	53.50	C.L.	0-5	ND	NP	A-4(0)	BROWN
291+00	35	51	0.90	90	36	50.90	C.L.	0-5	27	6	A-4(5)	BROWN
299+00	35	51	8.80	90	36	50.70	70 LT	0-5	30	12	S-4(11)	BROWN
304+00	35	51	13.30	90	36	49.10	C.L.	0-5	35	18	A-6(18)	BROWN
317+00	35	51	25.10	90	36	42.10	C.L.	0-5	ND	NP	A-4(0)	BROWN
339+00	35	51	44.00	90	36	50.30	C.L.	0-5	ND	NP	A-4(0)	BROWN
347+12	35	51	51.60	90	36	51.60	C.L.	0-5	36	20	A-6(13)	BROWN
347+30	35	51	51.70	90	36	51.60	C.L.	0-5	29	14	A-6(5)	BROWN
355+00	35	51	58.60	90	36	49.00	6 LT	0-5	28	8	A-4(7)	BROWN
613+00	35	51	39.00	90	36	46.80	5 RT	0-5	30	12	A-6(9)	BROWN
613+00	35	50	38.90	90	36	46.70	14 RT	0-5	26	8	A-4(5)	BROWN

SOIL CHARACTERISTICS TABULATED ABOVE ARE REPRESENTATIVE AT THE LOCATION OF THE SAMPLE, AND FROM SURFACE INDICATIONS ARE TYPICAL FOR THE LIMITS SHOWN. THESE DATA ARE SHOWN FOR INFORMATION ONLY. THE STATE WILL NOT BE RESPONSIBLE FOR VARIATIONS IN THE SOIL CHARACTERISTICS AND/OR EXTENT OF SAME DIFFERING FROM THE ABOVE TABULATIONS.
NP - NON-PLASTIC
ND - NOT DETERMINABLE

SOIL STABILIZATION

STATION	STATION	LOCATION / DESCRIPTION	SOIL STABILIZATION
			TON
ENTIRE	PROJECT	TO BE USED IF AND WHERE	3000
		DIRECTED BY THE ENGINEER	
TOTAL:			3000

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

CLEARING AND GRUBBING

STATION	STATION	LOCATION	CLEARING	GRUBBING
			STATION	
121+00	123+00	MAIN LANES	2	2
134+00	136+00	MAIN LANES	2	2
142+00	143+00	MAIN LANES	1	1
146+00	149+00	MAIN LANES	3	3
161+00	174+00	MAIN LANES	13	13
175+00	241+00	MAIN LANES	66	66
253+00	255+00	MAIN LANES	2	2
262+50	265+50	MAIN LANES	3	3
284+00	305+00	MAIN LANES	21	21
334+00	346+50	MAIN LANES	13	13
347+50	353+00	MAIN LANES	6	6
502+26	507+87	CW POST	6	6
650+00	652+00	KATHLEEN ST. CONNECTOR	2	2
TOTALS:			140	140

REMOVAL AND DISPOSAL OF FENCE AND GATES

STATION	STATION	LOCATION	FENCE	GATES
			LIN. FT.	EACH
124+31	124+63	RT. MAIN LANES		1
163+02	164+94	LT. MAIN LANES	251	
165+33	172+64	LT. MAIN LANES	672	
184+08	185+68	RT. MAIN LANES	215	
188+24	189+94	LT. MAIN LANES	182	
188+50	188+50	LT. MAIN LANES		1
211+98	213+55	LT. MAIN LANES	186	
217+05	217+05	LT. MAIN LANES	20	
218+06	218+06	LT. MAIN LANES	20	
219+22	219+22	RT. MAIN LANES		1
220+06	220+06	LT. MAIN LANES	21	
224+99	227+10	RT. MAIN LANES	320	
291+08	298+34	LT. AND RT. MAIN LANES	895	
TOTALS:			2782	3

EROSION CONTROL MATTING

STATION	STATION	LOCATION	LENGTH	CLASS 3
			LIN. FT.	SQ. YD.
163+35.00	164+50.00	LT. MAIN LANES	115.00	102.22
507+07.46	507+60.18	LT. CW POST	52.72	46.86
TOTAL:				149.08

NOTE: AVERAGE WIDTH = 8'-0"

HT39710 9/9/2022
RI00657.DGN

QUANTITIES

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	138	418
		QUANTITIES				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

May 17 2022 12:32 PM

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REMOVAL AND DISPOSAL OF ITEMS (BOX 1 OF 2)

STATION	STATION	LOCATION	CURB	BRICK WALLS	CONCRETE PAVEMENT	CONCRETE DRIVEWAYS	WALKS	FLAG POLE	SIGN FOUNDATIONS	FOOT BRIDGE	GUARDRAIL	BUILDINGS	SIGNS	PLANTERS
			LIN. FT.	LIN. FT.	SQ. YD.	SQ. YD.	SQ. YD.	EACH	EACH	EACH	LIN. FT.	EACH	EACH	EACH
113+11	115+86	LT. MAIN LANES	25			523								
113+35	113+44	LT. MAIN LANES	25											
113+83	114+24	LT. MAIN LANES	102											
114+62	115+34	LT. MAIN LANES	143											
115+75	116+21	LT. MAIN LANES	103											
116+60	117+71	LT. MAIN LANES	151											
118+03	118+22	LT. MAIN LANES	48											
118+31	118+55	LT. MAIN LANES	33											
118+84	119+07	LT. MAIN LANES	32											
124+24	124+24	RT. MAIN LANES							1				1	
124+33	124+38	RT. MAIN LANES	14											
124+60	124+66	RT. MAIN LANES	20											
130+40	130+40	LT. MAIN LANES				149								
134+00	134+00	LT. MAIN LANES				193								
136+13	136+13	RT. MAIN LANES							1				1	
138+18	138+18	RT. MAIN LANES				137								
142+31	143+19	LT. MAIN LANES	188											
142+72	142+72	RT. MAIN LANES												1
147+85	148+63	RT. MAIN LANES									78			
147+90	148+68	LT. MAIN LANES									78			
148+95	148+95	LT. MAIN LANES				177								
149+03	149+03	RT. MAIN LANES				98								
149+22	149+22	LT. MAIN LANES							1				1	
149+36	149+36	RT. MAIN LANES							1				1	
155+25	155+25	RT. MAIN LANES				249								
157+84	157+84	LT. MAIN LANES				93								
161+42	161+42	RT. MAIN LANES												1
161+58	161+62	LT. MAIN LANES	28											
161+61	161+61	LT. MAIN LANES							1				1	
161+80	161+80	RT. MAIN LANES				82								
161+98	162+35	RT. MAIN LANES	48											
162+50	162+50	RT. MAIN LANES				97								
162+92	162+92	RT. MAIN LANES							1				1	1
163+35	163+55	RT. MAIN LANES	57											
163+75	163+75	RT. MAIN LANES				281								
163+94	165+02	RT. MAIN LANES	190											
164+50	164+50	RT. MAIN LANES								1				
164+82	164+82	RT. MAIN LANES							1				1	
164+90	164+90	LT. MAIN LANES							1				1	
171+50	171+50	RT. MAIN LANES												1
171+84	171+84	RT. MAIN LANES												1
172+18	172+18	LT. MAIN LANES							1				1	1
175+41	176+49	RT. MAIN LANES	187											
176+88	176+99	RT. MAIN LANES	47											
185+58	187+16	RT. MAIN LANES			656									
186+22	186+22	RT. MAIN LANES		10					1				1	
202+40	202+95	LT. MAIN LANES										1		
208+29	208+74	RT. MAIN LANES	129											
209+03	209+38	RT. MAIN LANES	128											
209+77	209+86	LT. MAIN LANES	52											
209+77	210+75	LT. MAIN LANES			438									
209+81	210+64	LT. MAIN LANES										1		
210+10	210+13	RT. MAIN LANES	34											
210+25	210+25	RT. MAIN LANES				114								
SUBTOTALS (BOX 1 OF 2):			**1784**	**10**	**1094**	**2193**			**10**	**1**	**156**	**2**	**10**	**6**

NOTE: THE QUANTITY SHOWN ABOVE FOR THE REMOVAL AND DISPOSAL OF GUARDRAIL SHALL INCLUDE THE REMOVAL AND DISPOSAL OF ALL GUARDRAIL TERMINALS AND TERMINAL ANCHOR POSTS.

HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	139	418
		QUANTITIES				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

May 17 2022 12:32 PM

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REMOVAL AND DISPOSAL OF ITEMS (BOX 2 OF 2)

STATION	STATION	LOCATION	CURB	BRICK WALLS	CONCRETE PAVEMENT	CONCRETE DRIVEWAYS	WALKS	FLAG POLE	SIGN FOUNDATIONS	FOOT BRIDGE	GUARDRAIL	BUILDINGS	SIGNS	PLANTERS
			LIN. FT.	LIN. FT.	SQ. YD.	SQ. YD.	SQ. YD.	EACH	EACH	EACH	LIN. FT.	EACH	EACH	EACH
210+36	210+40	RT. MAIN LANES	34											
210+57	210+57	RT. MAIN LANES							1				1	
210+62	210+75	LT. MAIN LANES	53											
212+88	212+88	RT. MAIN LANES							1				1	
213+04	213+08	RT. MAIN LANES	34											
213+20	213+20	RT. MAIN LANES				116								
213+32	213+36	RT. MAIN LANES	34											
214+56	214+72	LT. MAIN LANES	61											
214+83	214+83	LT. MAIN LANES				182								
214+95	215+10	LT. MAIN LANES	61											
215+99	216+16	LT. MAIN LANES	61											
216+29	216+29	LT. MAIN LANES				182								
216+40	216+55	LT. MAIN LANES	61											
218+28	218+28	LT. MAIN LANES				57								
219+22	219+22	RT. MAIN LANES				45								
220+57	221+11	RT. MAIN LANES					34							
220+99	221+10	RT. MAIN LANES	37											
221+22	221+22	RT. MAIN LANES				108								
221+33	221+44	RT. MAIN LANES	37											
221+33	221+96	RT. MAIN LANES					40							
222+40	222+40	LT. MAIN LANES				56								
222+58	222+84	RT. MAIN LANES	70											
222+72	222+72	RT. MAIN LANES				112								
222+83	224+08	RT. MAIN LANES					84							
223+43	223+43	LT. MAIN LANES				103								
224+06	224+34	RT. MAIN LANES	70											
224+21	224+21	RT. MAIN LANES				117								
224+33	224+89	RT. MAIN LANES					35							
225+19	225+19	RT. MAIN LANES												1
226+11	226+11	RT. MAIN LANES					6							
226+22	226+22	LT. MAIN LANES			12									
226+94	226+94	RT. MAIN LANES												1
227+06	227+06	LT. MAIN LANES		22										1
227+10	227+10	RT. MAIN LANES - PACIFIC RD.		22										
502+06	502+27	RT. C/W POST	30											
502+06	502+81	RT. C/W POST				108								
502+61	502+81	RT. C/W POST	30											
509+44	509+44	LT. C/W POST											1	
SUBTOTALS (BOX 2 OF 2):			**673**	**44**	**12**	**1186**	**199**		**2**				**3**	**3**
TOTALS:			**2457**	**54**	**1106**	**3379**	**199**		**12**	**1**	**156**	**2**	**13**	**9**

NOTE: THE QUANTITY SHOWN ABOVE FOR THE REMOVAL AND DISPOSAL OF GUARDRAIL SHALL INCLUDE THE REMOVAL AND DISPOSAL OF ALL GUARDRAIL TERMINALS AND TERMINAL ANCHOR POSTS.

HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	140	418
		QUANTITIES				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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REMOVAL AND DISPOSAL OF CULVERTS AND DROP INLETS (BOX 1 OF 2)

STATION	DESCRIPTION	PIPE CULVERTS	BOX CULVERTS	JUNCTION BOXES	DROP INLETS
		EACH	EACH	EACH	EACH
113+33	RT. MAIN LANES	1			
114+00	LT. MAIN LANES	2			1
115+00	LT. MAIN LANES	1			1
115+88	LT. MAIN LANES	1			1
116+80	LT. MAIN LANES	1			1
117+57	RT. MAIN LANES	1			
117+87	LT. MAIN LANES	1			
124+49	RT. MAIN LANES	2			
129+36	LT. MAIN LANES	1			
130+40	LT. MAIN LANES	1			
130+80	RT. MAIN LANES	2			
134+00	LT. MAIN LANES	2			
135+25	LT. MAIN LANES	3			
135+75	RT. MAIN LANES	1			
135+93	LT. MAIN LANES	1			
136+70	RT. MAIN LANES	1			
137+17	LT. MAIN LANES	1			
138+18	RT. MAIN LANES	1			
139+00	LT. MAIN LANES	1			
139+79	LT. MAIN LANES	1			
139+79	RT. MAIN LANES	1			
140+18	LT. MAIN LANES	1			1
140+73	LT. MAIN LANES	1			
141+35	RT. MAIN LANES	1			
142+10	LT. MAIN LANES	1			
142+29	RT. MAIN LANES	1			
145+48	RT. MAIN LANES	1			
146+42	LT. MAIN LANES	1			
147+18	RT. MAIN LANES	1			
148+16	MAIN LANES	1			
148+23	MAIN LANES		1		
148+36	MAIN LANES	1			
148+95	LT. MAIN LANES	1			
149+03	RT. MAIN LANES	1			
155+25	RT. MAIN LANES	1			
157+84	LT. MAIN LANES	1			
159+09	LT. MAIN LANES	1			
161+77	LT. MAIN LANES	1			
163+00	LT. MAIN LANES	1			
163+12	LT. MAIN LANES	1			
165+15	LT. MAIN LANES	1			
166+00	RT. MAIN LANES	1			
166+56	RT. MAIN LANES	1			
168+00	RT. MAIN LANES	1			
169+05	RT. MAIN LANES	1			
170+65	RT. MAIN LANES	1			
171+68	RT. MAIN LANES	1			
171+81	LT. MAIN LANES	1			
172+78	RT. MAIN LANES	1			
SUBTOTALS (BOX 1 OF 2):		**54**	**1**		**5**

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

REMOVAL AND DISPOSAL OF CULVERTS AND DROP INLETS (BOX 2 OF 2)

STATION	DESCRIPTION	PIPE CULVERTS	BOX CULVERTS	JUNCTION BOXES	DROP INLETS
		EACH	EACH	EACH	EACH
175+20	MAIN LANES	2			
176+00	LT. MAIN LANES	1			
176+70	RT. MAIN LANES	3			
179+87	RT. MAIN LANES - REMOVE 15'	1			
180+24	LT. MAIN LANES	1			
180+50	RT. MAIN LANES	1			
180+58	LT. MAIN LANES	1			
183+15	RT. MAIN LANES	1			
185+59	LT. MAIN LANES	1			
187+65	MAIN LANES		1		
187+80	MAIN LANES	1			
188+20	LT. MAIN LANES	1			
189+91	LT. MAIN LANES	1			
190+21	LT. MAIN LANES	1			
191+27	LT. MAIN LANES	1			
194+25	RT. MAIN LANES	1			
198+14	LT. MAIN LANES	1			
200+28	LT. MAIN LANES	3			
202+45	LT. MAIN LANES	2			
204+30	LT. MAIN LANES	1			
208+88	RT. MAIN LANES	1			
210+25	LT. MAIN LANES	1			
210+25	RT. MAIN LANES	1			
213+20	LT. MAIN LANES	2			
213+20	RT. MAIN LANES	1			
214+08	LT. MAIN LANES	1			
214+83	LT. MAIN LANES	2			
216+29	LT. MAIN LANES	2			
217+82	LT. MAIN LANES	1			
218+28	LT. MAIN LANES	1			
219+22	RT. MAIN LANES	1			
220+48	LT. MAIN LANES	1			
221+22	RT. MAIN LANES	1			
222+08	RT. MAIN LANES			1	
222+38	LT. MAIN LANES	1			
222+70	RT. MAIN LANES	1			
223+43	LT. MAIN LANES	1			
223+45	RT. MAIN LANES			1	
224+21	RT. MAIN LANES	1			
225+00	RT. MAIN LANES	1			1
225+28	LT. MAIN LANES	1			
226+38	LT. MAIN LANES	1			
227+15	MAIN LANES	1			
227+15	RT. MAIN LANES	1		1	
227+55	LT. MAIN LANES	1			
346+46	MAIN LANES	1			
502+30	LT. CW POST	1			
502+44	RT. CW POST	1			
506+06	LT. CW POST	1			
506+65	LT. CW POST	1			
507+75	CW POST	2			
509+00	CW POST	2			
509+13	RT. CW POST	2			
SUBTOTALS (BOX 2 OF 2):		**62**	**1**	**3**	**1**
TOTALS:		**116**	**2**	**3**	**6**

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

HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
09-12-22		6	ARK.	100657	141	418
		QUANTITIES				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

Sep 29 2022 1:38 PM

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CONCRETE DITCH PAVING

STATION	STATION	LOCATION	LENGTH	"W"	CONC. DITCH PAVING (TYPE B)	SOLID SODDING	WATER
			LIN. FT.	FEET	SQ. YD.	SQ. YD.	M. GAL.
135+10.00	135+45.00	LT. MAIN LANES	35.00	6.33	24.62	15.56	0.20
147+00.00	148+15.00	LT. MAIN LANES	115.00	6.33	80.88	51.11	0.64
147+00.00	148+00.00	RT. MAIN LANES	100.00	6.33	70.33	44.44	0.56
148+40.00	150+00.00	LT. MAIN LANES	160.00	6.33	112.53	71.11	0.90
148+40.00	150+00.00	RT. MAIN LANES	160.00	6.33	112.53	71.11	0.90
162+00.00	163+00.00	LT. MAIN LANES	100.00	6.33	70.33	44.44	0.56
163+10.00	164+50.00	RT. MAIN LANES	140.00	6.33	98.47	62.22	0.78
173+50.00	173+96.00	RT. MAIN LANES	46.00	6.33	32.35	20.44	0.26
175+20.00	176+30.00	RT. MAIN LANES	110.00	6.33	77.37	48.89	0.62
190+00.00	190+95.00	LT. MAIN LANES	95.00	6.33	66.82	42.22	0.53
191+05.00	192+00.00	RT. MAIN LANES	95.00	6.33	66.82	42.22	0.53
216+50.00	217+00.00	LT. MAIN LANES	50.00	6.33	35.17	22.22	0.28
227+66.00	228+00.00	LT. MAIN LANES	34.00	6.33	23.91	15.11	0.19
227+66.00	228+00.00	RT. MAIN LANES	34.00	6.33	23.91	15.11	0.19
228+00.00	228+00.00	LT. MAIN LANES-TYPE SPECIAL DROP INLET	8.00	5.00	4.44	3.56	0.04
228+00.00	228+00.00	RT. MAIN LANES-TYPE SPECIAL DROP INLET	7.00	5.00	3.89	3.11	0.04
231+00.00	231+00.00	LT. MAIN LANES-TYPE SPECIAL DROP INLET	5.00	5.00	2.78	2.22	0.03
231+00.00	231+00.00	RT. MAIN LANES-TYPE SPECIAL DROP INLET	6.00	5.00	3.33	2.67	0.03
232+00.00	232+00.00	RT. MAIN LANES-TYPE SPECIAL DROP INLET	6.00	5.00	3.33	2.67	0.03
233+00.00	233+00.00	RT. MAIN LANES-TYPE SPECIAL DROP INLET	7.00	5.00	3.89	3.11	0.04
234+00.00	234+00.00	RT. MAIN LANES-TYPE SPECIAL DROP INLET	8.00	5.00	4.44	3.56	0.04
236+00.00	236+00.00	RT. MAIN LANES-TYPE SPECIAL DROP INLET	10.00	5.00	5.56	4.44	0.06
237+00.00	237+00.00	RT. MAIN LANES-TYPE SPECIAL DROP INLET	12.00	5.00	6.67	5.33	0.07
239+00.00	239+00.00	RT. MAIN LANES-TYPE SPECIAL DROP INLET	17.00	5.00	9.44	7.56	0.10
240+00.00	240+52.00	RT. MAIN LANES	52.00	6.33	36.57	23.11	0.29
245+00.00	245+00.00	RT. MAIN LANES-TYPE SPECIAL DROP INLET	16.00	5.00	8.89	7.11	0.09
247+00.00	247+00.00	RT. MAIN LANES-TYPE SPECIAL DROP INLET	15.00	5.00	8.33	6.67	0.08
247+40.00	247+40.00	RT. MAIN LANES-TYPE SPECIAL DROP INLET	7.00	5.00	3.89	3.11	0.04
248+00.00	248+00.00	RT. MAIN LANES-TYPE SPECIAL DROP INLET	13.00	5.00	7.22	5.78	0.07
250+40.00	250+40.00	RT. MAIN LANES-TYPE SPECIAL DROP INLET	11.00	5.00	6.11	4.89	0.06
326+00.00	326+00.00	LT. MAIN LANES-TYPE SPECIAL DROP INLET	40.00	5.00	22.22	17.78	0.22
326+50.00	326+50.00	RT. MAIN LANES-TYPE SPECIAL DROP INLET	49.00	5.00	27.22	21.78	0.27
329+00.00	329+00.00	LT. MAIN LANES-TYPE SPECIAL DROP INLET	80.00	5.00	44.44	35.56	0.45
329+00.00	329+00.00	RT. MAIN LANES-TYPE SPECIAL DROP INLET	78.00	5.00	43.33	34.67	0.44
337+00.00	337+00.00	RT. MAIN LANES-TYPE SPECIAL DROP INLET	81.00	5.00	45.00	36.00	0.45
339+00.00	339+00.00	RT. MAIN LANES-TYPE SPECIAL DROP INLET	52.00	5.00	28.89	23.11	0.29
341+00.00	341+00.00	RT. MAIN LANES-TYPE SPECIAL DROP INLET	35.00	5.00	19.44	15.56	0.20
342+00.00	342+00.00	RT. MAIN LANES-TYPE SPECIAL DROP INLET	31.00	5.00	17.22	13.78	0.17
342+65.00	342+65.00	RT. MAIN LANES-TYPE SPECIAL DROP INLET	29.00	5.00	16.11	12.89	0.16
343+30.00	343+30.00	LT. MAIN LANES-TYPE SPECIAL DROP INLET	22.00	5.00	12.22	9.78	0.12
343+30.00	343+30.00	RT. MAIN LANES-TYPE SPECIAL DROP INLET	29.00	5.00	16.11	12.89	0.16
344+00.00	344+00.00	LT. MAIN LANES-TYPE SPECIAL DROP INLET	23.00	5.00	12.78	10.22	0.13
344+00.00	344+00.00	RT. MAIN LANES-TYPE SPECIAL DROP INLET	30.00	5.00	16.67	13.33	0.17
345+00.00	345+00.00	LT. MAIN LANES-TYPE SPECIAL DROP INLET	24.00	5.00	13.33	10.67	0.13
345+00.00	345+00.00	RT. MAIN LANES-TYPE SPECIAL DROP INLET	32.00	5.00	17.78	14.22	0.18
TOTALS:					**1367.58**	**937.34**	**11.79**

BASIS OF ESTIMATE:
WATER.....12.6 GAL. / SQ. YD. OF SOLID SODDING.

BENCH MARKS

STATION	LOCATION	BENCH MARKS
		EACH
121+50	LT. MAIN LANES	1
148+23	RT. MAIN LANES	1
187+65	LT. MAIN LANES	1
191+00	RT. MAIN LANES	1
240+55	LT. MAIN LANES	1
254+15	RT. MAIN LANES	1
303+60	LT. MAIN LANES	1
TOTAL:		**7**

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

WHEELCHAIR RAMPS

STATION	LOCATION	TYPE 2	TYPE 3
		SQ.YD.	SQ.YD.
116+02	LT. MAIN LANES		5.4
116+82	LT. MAIN LANES		5.4
122+63	LT. MAIN LANES	10.9	
122+63	RT. MAIN LANES	11.3	
139+46	LT. MAIN LANES		5.4
139+48	RT. MAIN LANES		5.4
140+12	RT. MAIN LANES		5.4
140+21	LT. MAIN LANES		5.4
145+16	RT. MAIN LANES		5.4
145+80	RT. MAIN LANES		5.4
169+37	RT. MAIN LANES		5.4
170+01	RT. MAIN LANES		5.4
173+96	LT. MAIN LANES		13.3
174+04	RT. MAIN LANES		7.4
175+00	LT. MAIN LANES		8.0
175+03	LT. MAIN LANES		7.7
175+14	RT. MAIN LANES		7.9
226+83	LT. MAIN LANES		6.7
226+84	RT. MAIN LANES		6.2
227+77	LT. MAIN LANES		6.2
227+78	RT. MAIN LANES		6.2
288+95	LT. MAIN LANES		6.2
289+08	RT. MAIN LANES		6.2
289+92	LT. MAIN LANES		6.2
289+94	RT. MAIN LANES		6.2
327+86	LT. MAIN LANES		6.2
328+74	LT. MAIN LANES		6.2
346+36	LT. MAIN LANES		8.4
346+36	RT. MAIN LANES		7.0
507+52	RT. CW POST		6.9
508+64	RT. CW POST		7.3
TOTALS:		**22.2**	**190.4**

CONCRETE WALKS (TYPE SPECIAL)

STATION	STATION	LOCATION	CONCRETE WALKS (TYPE SPECIAL)	HAND RAILING	ARCHITECTURAL FINISH	TEXTURED COATING FINISH
			SQ. YD.	LIN. FT.	SQ. FT.	SQ. YD.
123+16	125+88	LT. MAIN LANES	151	272	979	89
126+28	129+20	LT. MAIN LANES	162	292	1051	95
129+52	130+20	LT. MAIN LANES	38	68	143	11
130+60	133+06	LT. MAIN LANES	137	246	664	56
TOTALS:			488	878	2837	251

H139710 9/9/2022
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QUANTITIES

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
09-12-22		6	ARK.	100657	142	418
		QUANTITIES				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
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SOLID SODDING

STATION	STATION	LOCATION	LENGTH	SOLID SODDING	WATER
			LIN. FT.	SQ.YD.	M. GAL.
110+42	111+58	RT. MAIN LANES	154	137	1.7
111+15	112+12	LT. MAIN LANES	177	157	2.0
111+14	113+06	RT. MAIN LANES	192	64	0.8
111+71	113+29	LT. MAIN LANES	158	53	0.7
113+60	117+31	RT. MAIN LANES	371	124	1.6
113+97	114+10	LT. MAIN LANES	13	4	0.1
114+78	115+99	LT. MAIN LANES	121	40	0.5
116+85	117+58	LT. MAIN LANES	73	24	0.3
117+83	121+63	RT. MAIN LANES	380	127	1.6
118+16	121+77	LT. MAIN LANES	361	120	1.5
122+64	125+74	LT. MAIN LANES	310	103	1.3
126+42	129+06	LT. MAIN LANES	264	88	1.1
122+64	124+23	RT. MAIN LANES	159	53	0.7
124+75	134+86	RT. MAIN LANES	1011	337	4.2
129+66	130+06	LT. MAIN LANES	40	13	0.2
130+74	132+92	LT. MAIN LANES	218	73	0.9
133+60	134+86	LT. MAIN LANES	126	42	0.5
135+01	136+36	RT. MAIN LANES	135	45	0.6
135+01	135+55	LT. MAIN LANES	54	18	0.2
136+27	136+83	LT. MAIN LANES	56	19	0.2
137+04	137+96	RT. MAIN LANES	92	31	0.4
137+51	139+43	LT. MAIN LANES	192	64	0.8
138+40	139+45	RT. MAIN LANES	105	35	0.4
140+15	141+11	RT. MAIN LANES	96	32	0.4
140+24	141+76	LT. MAIN LANES	152	51	0.6
141+59	142+05	RT. MAIN LANES	46	15	0.2
142+44	143+06	LT. MAIN LANES	62	21	0.3
142+53	145+13	RT. MAIN LANES	260	87	1.1
143+74	146+16	LT. MAIN LANES	242	81	1.0
145+82	146+96	RT. MAIN LANES	114	38	0.5
146+68	148+69	LT. MAIN LANES	201	67	0.8
147+40	148+69	RT. MAIN LANES	129	43	0.5
149+21	157+58	LT. MAIN LANES	837	279	3.5
149+37	154+91	RT. MAIN LANES	554	185	2.3
155+59	161+46	RT. MAIN LANES	587	196	2.5
158+10	158+77	LT. MAIN LANES	67	22	0.3
159+41	161+48	LT. MAIN LANES	207	69	0.9
162+06	164+90	LT. MAIN LANES	284	95	1.2
162+14	163+41	RT. MAIN LANES	127	42	0.5
164+09	165+53	RT. MAIN LANES	144	48	0.6
165+40	171+51	LT. MAIN LANES	611	204	2.6
165+97	166+34	RT. MAIN LANES	37	12	0.2
166+78	167+78	RT. MAIN LANES	100	33	0.4
168+22	168+83	RT. MAIN LANES	61	20	0.3
169+27	169+34	RT. MAIN LANES	7	2	0.1
170+04	170+43	RT. MAIN LANES	39	13	0.2
170+87	171+46	RT. MAIN LANES	59	20	0.3
171+90	172+54	RT. MAIN LANES	64	21	0.3
172+11	174+15	LT. MAIN LANES	242	106	1.3
173+02	174+02	RT. MAIN LANES	154	84	1.1
175+06	187+98	LT. MAIN LANES	1337	461	5.8
175+16	176+36	RT. MAIN LANES	172	78	1.0
177+04	180+16	RT. MAIN LANES	312	104	1.3
180+84	183+29	RT. MAIN LANES	245	82	1.0
183+97	185+26	RT. MAIN LANES	129	43	0.5
185+94	194+01	RT. MAIN LANES	807	269	3.4
188+42	200+06	LT. MAIN LANES	1164	388	4.9
194+49	208+61	RT. MAIN LANES	1412	471	5.9
200+50	209+91	LT. MAIN LANES	941	314	4.0
209+15	209+99	RT. MAIN LANES	84	28	0.4
210+51	212+94	RT. MAIN LANES	243	81	1.0
210+59	212+98	LT. MAIN LANES	239	80	1.0
213+42	214+57	LT. MAIN LANES	115	38	0.5
213+46	218+96	RT. MAIN LANES	550	183	2.3
215+09	216+03	LT. MAIN LANES	94	31	0.4
216+55	217+60	LT. MAIN LANES	105	35	0.4
218+04	220+83	LT. MAIN LANES	279	93	1.2
221+37	221+97	LT. MAIN LANES	60	20	0.3
222+37	223+21	LT. MAIN LANES	84	28	0.4
219+48	220+96	RT. MAIN LANES	148	49	0.6
221+48	222+46	RT. MAIN LANES	98	33	0.4
222+98	223+95	RT. MAIN LANES	97	32	0.4
223+65	224+47	LT. MAIN LANES	82	158	2.0
224+87	227+19	LT. MAIN LANES	232	158	2.0
224+47	227+20	RT. MAIN LANES	273	131	1.7
227+41	286+04	LT. MAIN LANES	5863	1954	24.6
227+42	289+41	RT. MAIN LANES	6199	2145	27.0
232+00	244+75	MEDIAN	1275	2035	25.6
249+25	264+75	MEDIAN	1550	2403	30.3
269+25	287+33	MEDIAN	1808	2834	35.7
286+56	289+30	LT. MAIN LANES	318	144	1.8
289+54	328+23	LT. MAIN LANES	3869	1368	17.2
289+63	331+06	RT. MAIN LANES	4143	1422	17.9
291+61	306+75	MEDIAN	1514	2343	29.5
311+25	325+90	MEDIAN	1465	2218	27.9
328+47	330+86	LT. MAIN LANES	239	123	1.5
335+40	346+46	LT. MAIN LANES	1110	400	5.0
335+60	346+67	RT. MAIN LANES	1107	414	5.2
347+15	348+27	LT. CLINTON SCHOOL RD.	168	160	2.0
347+35	348+27	RT. CLINTON SCHOOL RD.	132	115	1.4
506+99	507+51	LT. CW POST	55	52	0.7
507+15	507+50	RT. CW POST	40	35	0.4
508+67	509+13	LT. CW POST	51	66	0.8
508+67	509+15	RT. CW POST	58	51	0.6
TOTALS:				27327	344.2

BASIS OF ESTIMATE:
WATER.....12.6 GAL. / SQ. YD. OF SOLID SODDING.

CONCRETE WALKS & HAND RAILING

STATION	STATION	LOCATION	LENGTH	CONCRETE WALKS	HAND RAILING
			LIN. FT.	SQ.YD.	LIN. FT.
111+14	113+06	RT. MAIN LANES	192	107	
111+71	113+29	LT. MAIN LANES	158	88	
113+60	117+31	RT. MAIN LANES	371	206	
113+97	114+10	LT. MAIN LANES	13	7	
114+78	115+99	LT. MAIN LANES	121	67	
116+85	117+58	LT. MAIN LANES	73	41	
117+83	121+17	RT. MAIN LANES	334	186	
118+16	121+26	LT. MAIN LANES	310	172	
121+17	121+52	RT. MAIN LANES	35	19	98
121+26	121+65	LT. MAIN LANES	39	22	92
122+64	124+23	RT. MAIN LANES	159	88	
122+64	123+16	LT. MAIN LANES	52	29	
122+64	124+23	RT. MAIN LANES	159	88	
124+75	134+86	RT. MAIN LANES	1011	562	
129+66	130+06	LT. MAIN LANES	40	22	
130+74	132+92	LT. MAIN LANES	218	121	
133+60	134+86	LT. MAIN LANES	126	70	
135+01	136+36	RT. MAIN LANES	135	75	
135+01	135+55	LT. MAIN LANES	54	30	
136+27	136+83	LT. MAIN LANES	56	31	
137+04	137+96	RT. MAIN LANES	92	51	
137+51	139+43	LT. MAIN LANES	192	107	
138+40	139+45	RT. MAIN LANES	105	58	
140+15	141+11	RT. MAIN LANES	96	53	
140+24	141+76	LT. MAIN LANES	152	84	
141+59	142+05	RT. MAIN LANES	46	26	
142+44	143+06	LT. MAIN LANES	62	34	
142+53	145+13	RT. MAIN LANES	260	144	
143+74	146+16	LT. MAIN LANES	242	134	
145+82	146+96	RT. MAIN LANES	114	63	
146+68	148+69	LT. MAIN LANES	201	112	
147+40	148+69	RT. MAIN LANES	129	72	
149+21	157+58	LT. MAIN LANES	837	465	
149+37	154+91	RT. MAIN LANES	554	308	
155+59	161+46	RT. MAIN LANES	587	326	
158+10	158+77	LT. MAIN LANES	67	37	
159+41	161+48	LT. MAIN LANES	207	115	
162+06	164+90	LT. MAIN LANES	284	158	
162+14	163+41	RT. MAIN LANES	127	71	
164+09	165+53	RT. MAIN LANES	144	80	
165+40	171+51	LT. MAIN LANES	611	339	
165+97	166+34	RT. MAIN LANES	37	21	
166+78	167+78	RT. MAIN LANES	100	56	
168+22	168+83	RT. MAIN LANES	61	34	
169+27	169+34	RT. MAIN LANES	7	4	
170+04	170+43	RT. MAIN LANES	39	22	
170+87	171+46	RT. MAIN LANES	59	33	
171+90	172+54	RT. MAIN LANES	64	36	
172+11	173+93	LT. MAIN LANES	189	105	
173+02	174+02	RT. MAIN LANES	107	59	
175+06	187+98	LT. MAIN LANES	1306	726	
175+16	176+36	RT. MAIN LANES	136	76	
177+04	180+16	RT. MAIN LANES	312	173	
180+84	183+29	RT. MAIN LANES	245	136	
183+97	185+26	RT. MAIN LANES	129	72	
185+94	194+01	RT. MAIN LANES	807	448	
188+42	200+06	LT. MAIN LANES	1164	647	
194+49	208+61	RT. MAIN LANES	1412	784	
200+50	209+91	LT. MAIN LANES	941	523	
209+15	209+99	RT. MAIN LANES	84	47	
210+51	212+94	RT. MAIN LANES	243	135	
210+59	212+98	LT. MAIN LANES	239	133	
213+42	214+57	LT. MAIN LANES	115	64	
213+46	218+96	RT. MAIN LANES	550	306	
215+09	216+03	LT. MAIN LANES	94	52	
216+55	217+60	LT. MAIN LANES	105	58	
218+04	220+83	LT. MAIN LANES	279	155	
221+37	221+97	LT. MAIN LANES	60	33	
222+37	223+21	LT. MAIN LANES	84	47	
219+48	220+96	RT. MAIN LANES	148	82	
221+48	222+46	RT. MAIN LANES	98	54	
222+98	223+95	RT. MAIN LANES	97	54	
223+65	224+47	LT. MAIN LANES	82	46	
224+87	226+80	LT. MAIN LANES	193	107	
224+47	226+82	RT. MAIN LANES	235	131	
227+80	286+04	LT. MAIN LANES	5824	3236	
227+80	289+05	RT. MAIN LANES	6125	3403	
286+56	288+92	LT. MAIN LANES	236	131	
289+94	327+82	LT. MAIN LANES	3788	2104	
289+97	330+89	RT. MAIN LANES	4092	2273	
328+77	330+64	RT. MAIN LANES	187	104	
335+57	346+34	LT. MAIN LANES	1110	617	
335+84	346+34	RT. MAIN LANES	1050	583	
507+15	507+56	RT. MAIN LANES			46
508+66	509+15	RT. MAIN LANES			58
TOTALS:				22778	294

CONCRETE ISLAND

STATION	LOCATION	CURB FACE TYPE*	CONCRETE ISLAND
			SQ.YD.
134+50	MAIN LANES - RAILROAD ISLAND	A	129
135+50	MAIN LANES - RAILROAD ISLAND	A	129
231+19	MAIN LANES - BEGINNING OF MEDIAN	N/A	99
244+75	MAIN LANES - 3' MEDIAN	N/A	54
247+00	MAIN LANES	A	196
247+56	MAIN LANES - 3' MEDIAN	N/A	54
264+75	MAIN LANES - 3' MEDIAN	N/A	51
267+00	MAIN LANES	A	221
267+56	MAIN LANES - 3' MEDIAN	N/A	55
287+33	MAIN LANES - 3' MEDIAN	N/A	52
289+92	MAIN LANES - 3' MEDIAN	N/A	55
306+75	MAIN LANES - 3' MEDIAN	N/A	54
309+00	MAIN LANES	A	203
309+56	MAIN LANES - 3' MEDIAN	N/A	55
325+90	MAIN LANES - 3' MEDIAN	N/A	66
TOTAL:			1473

*CURB QUANTITIES FOR CURB FACE TYPE LABELED AS "N/A" ARE PROVIDED IN CONCRETE COMBINATION CURB AND GUTTER QUANTITIES

CONCRETE COMBINATION CURB AND GUTTER

STATION	STATION	LOCATION	TYPE A (1' 6")
			LIN. FT.
110+42	121+17	RT. MAIN LANES	1131
111+15	116+22	LT. MAIN LANES	627
116+62	121+25	LT. MAIN LANES	481
121+17	121+84	RT. MAIN LANES - RADIUS	118
122+25	121+86	LT. MAIN LANES - RADIUS	112
122+33	122+95	RT. MAIN LANES - RADIUS	113
122+35	122+16	LT. MAIN LANES - RADIUS	141
122+95	134+86	RT. MAIN LANES	1795
122+16	134+86	LT. MAIN LANES	1691
135+01	139+68	RT. MAIN LANES	1795
135+01	139+66	LT. MAIN LANES	1691
139+98	174+16	LT. MAIN LANES	3481
139+92	145+35	RT. MAIN LANES	578
145+59	169+57	RT. MAIN LANES	2432
169+81	174+29	RT. MAIN LANES	504
174+84	227+19	LT. MAIN LANES	5316
175+01	227+20	RT. MAIN LANES	5313
227+41	289+30	LT. MAIN LANES	6294
227+42	289+41	RT. MAIN LANES	6302
231+19	246+42	LT. AND RT. OF MEDIAN	3051
247+56	266+34	LT. AND RT. OF MEDIAN	3756
267+56	288+95	LT. AND RT. OF MEDIAN	4278
289+54	328+23	LT. MAIN LANES	3927
289+63	331+07	RT. MAIN LANES	4222
289+92	308+40	LT. AND RT. OF MEDIAN	3696
309+56	327+92	LT. AND RT. OF MEDIAN	3672
328+47	330+86	LT. MAIN LANES	285
335+40	346+47	LT. MAIN LANES	1172
335+60	346+67	RT. MAIN LANES	1133
TOTAL:			69107

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QUANTITIES

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	143	418
		QUANTITIES				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

May 17 2022 12:33 PM

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FENCING AND GATES

STATION	STATION	LOCATION	WIRE FENCE (TYPE A)	WIRE FENCE (TYPE C)	* 16'-0" GATES
			LIN. FT.		EACH
175+21	180+00	LT. MAIN LANES	492		
180+50	184+50	LT. MAIN LANES	400		
185+00	187+85	LT. MAIN LANES	324		
187+23	194+00	RT. MAIN LANES	714		
187+65	187+65	LT. MAIN LANES - BOX CULVERT		162	1
188+35	189+95	LT. MAIN LANES		162	
189+95	200+03	LT. MAIN LANES	1014		
194+50	201+00	RT. MAIN LANES	650		
200+53	202+20	LT. MAIN LANES	167		
201+50	208+05	RT. MAIN LANES	665		
202+70	206+00	LT. MAIN LANES	330		
206+50	210+00	LT. MAIN LANES	350		
210+50	211+25	LT. MAIN LANES	76		
211+75	211+98	LT. MAIN LANES	23		
211+98	212+95	LT. MAIN LANES		98	
213+45	213+55	LT. MAIN LANES		10	
214+06	216+00	RT. MAIN LANES	194		
216+50	219+00	RT. MAIN LANES	250		
219+50	220+48	RT. MAIN LANES	98		
227+60	231+50	LT. MAIN LANES	407		
227+65	231+50	RT. MAIN LANES	407		
232+00	236+50	LT. MAIN LANES	154		
232+00	236+50	RT. MAIN LANES	443		
237+00	243+00	LT. MAIN LANES	668		
237+00	243+00	RT. MAIN LANES	628		
240+55	240+55	LT. & RT. MAIN LANES - BOX CULVERT	668		2
243+50	250+00	LT. MAIN LANES	668		
243+50	250+00	RT. MAIN LANES	636		
250+50	260+00	LT. MAIN LANES	1027		
250+50	255+25	RT. MAIN LANES	498		
254+15	254+15	LT. & RT. MAIN LANES - BOX CULVERT	419		2
255+75	260+00	RT. MAIN LANES	419		
260+50	271+00	LT. MAIN LANES	1051		
260+50	265+00	RT. MAIN LANES	450		
265+50	272+00	RT. MAIN LANES	650		
271+50	280+00	LT. MAIN LANES	833		
272+50	280+00	RT. MAIN LANES	769		
280+50	286+00	LT. MAIN LANES	532		
280+50	285+75	RT. MAIN LANES	545		
286+25	289+20	RT. MAIN LANES	306		
286+50	289+00	LT. MAIN LANES	243		
289+80	290+80	LT. MAIN LANES	98		
289+85	290+50	RT. MAIN LANES	68		
291+00	295+00	RT. MAIN LANES	398		
291+30	295+00	LT. MAIN LANES	373		
295+50	310+00	LT. MAIN LANES	1540		
295+50	300+00	RT. MAIN LANES	440		
300+50	307+00	RT. MAIN LANES	658		
303+60	303+60	LT. & RT. MAIN LANES - BOX CULVERT	750		2
307+50	315+00	RT. MAIN LANES	750		
310+50	315+00	LT. MAIN LANES	448		
315+50	319+50	LT. MAIN LANES	374		
315+50	319+50	RT. MAIN LANES	428		
320+00	323+00	LT. MAIN LANES	279		
320+00	323+00	RT. MAIN LANES	322		
323+50	327+30	LT. MAIN LANES	348		
323+50	331+93	RT. MAIN LANES	960		
329+20	331+48	LT. MAIN LANES	340		
333+42	339+15	LT. MAIN LANES	716		
334+01	339+15	RT. MAIN LANES	586		
339+65	341+00	LT. MAIN LANES	145		
339+65	341+00	RT. MAIN LANES	127		
341+50	345+89	LT. MAIN LANES	444		
341+50	345+84	RT. MAIN LANES	434		
650+45	654+50	LT. KATHLEEN ST. CONNECTOR	332		
650+47	654+91	RT. KATHLEEN ST. CONNECTOR	544		
TOTALS:			30070	432	7

* DENOTES ALTERNATE BID ITEM.

FLOWABLE SELECT MATERIAL

STATION	LOCATION	CU. YD.
118+10		245
TOTAL:		245

SELECTED PIPE BEDDING

LOCATION	SELECTED PIPE BEDDING
	CU.YD.
ENTIRE PROJECT TO BE USED IF	
AND WHERE DIRECTED BY THE	3200
ENGINEER	
TOTAL:	3200

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

4" PIPE UNDERDRAIN

STATION	STATION	LOCATIONS	4" PIPE UNDERDRAINS	UNDERDRAIN OUTLET PROTECTORS
			LIN. FT.	EACH
* ENTIRE PROJECT TO BE USED IF AND			12000	48
WHERE DIRECTED BY THE ENGINEER				
TOTALS:			12000	48

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

UNDERDRAINS SHALL BE STUBBED INTO THE PROPOSED DROP INLET IF AND WHERE DIRECTED BY THE ENGINEER. PAYMENT FOR THIS TO BE INCLUDED IN THE UNIT PRICE BID FOR 4" PIPE UNDERDRAIN.

CONCRETE BASE

STATION	STATION	LOCATION	LENGTH	PORTLAND CEMENT CONCRETE BASE			
				AVG. WID.	5" U.T.	AVG. WID.	8" U.T.
			FEET	FEET	SQ. YD.	FEET	SQ. YD.
129+00.00	145+00.00	LT. MAIN LANES	1600.00	2.00	355.56	4.50	800.00
TOTALS:					355.56		800.00

CULVERT CLEAN OUT

STATION	LOCATION	EACH
173+96	MAIN LANES	1
TOTAL:		1

MAILBOXES

LOCATION	MAILBOXES	MAILBOX SUPPORTS (SINGLE)	MAILBOX SUPPORTS (DOUBLE)
	EACH		
ENTIRE PROJECT	47	29	9
TOTALS:	47	29	9

PAVEMENT REPAIR OVER CULVERTS (CONCRETE)

STATON	LOCATION	WIDTH	LENGTH	CU.YD.
		FEET		
135+45	MAIN LANES	15.67	22	12.8
162+17	MAIN LANES	7.92	22	6.5
163+06	MAIN LANES	19.67	22	16.0
175+20	MAIN LANES	19.67	22	16.0
227+15	MAIN LANES	8.50	22	6.9
TOTAL:				58.2

AVG. DEPTH = 12"

HT39710 5/6/2022
R100657.DGN

QUANTITIES

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
09-12-22		6	ARK.	100657	144	418
		QUANTITIES				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

Sep 29 2022 1:38 PM

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STRUCTURES (BOX 1 OF 8)

STATION	DESCRIPTION	REINFORCED CONCRETE PIPE CULVERT (CLASS III) 18"	24"	30"	36"	44"X27"	(CLASS IV) 30"	36"	48"	(CLASS V) 24"	36"	29"X18"	44"X27"	51"X31"	SIDE DRAIN 12"	PIPE CULVERT STORM DRAIN ALTERNATES 1 & 2 18"	24"	30"	36"	36"X23"	FLARED END SECTIONS FOR R.C. PIPE CULVERTS 18"	24"	30"	36"	48"	29"X18"	44"X27"	51"X31"	DROP INLETS TYPE C	MO	TYPE SPECIAL	EXT. 4'	8'	JUNCT. BOXES (TYPE E)	YARD DRAINS	SOLID SODDING	WATER	STD. DWG. NOS.
		LIN. FT.																			EACH															SQ.YD.	M.GAL.	
112+00	CONSTRUCT DROP INLET ON LT. AND PIPE INLET W/FES AND PIPE OUTLET		2																	116		1							1							8	0.10	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1, PCM-1
112+00	CONSTRUCT DROP INLET ON RT. AND PIPE INLET W/FES AND PIPE OUTLET	4														96					1							1							5	0.06	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1, PCM-1
113+00	CONSTRUCT DROP INLET ON RT. AND PIPE INLET W/FES AND PIPE OUTLET	4														130					1							1							5	0.06	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1, PCM-1
113+20	CONSTRUCT DROP INLET ON LT. AND PIPE INLET W/FES AND PIPE OUTLET		4																	80		1						1							8	0.10	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1, PCM-1
114+05	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET																			76								1									FPC-9E, FPC-9M, PCC-1, PCM-1
114+33	CONSTRUCT DROP INLET ON RT. AND PIPE INLET W/FES AND PIPE OUTLET	2														64					1							1							5	0.06	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1, PCM-1
114+85	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET																			96								1									FPC-9E, FPC-9M, PCC-1, PCM-1
115+00	CONSTRUCT DROP INLET ON RT. AND PIPE INLET W/FES AND PIPE OUTLET	4															98				1							1							5	0.06	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1, PCM-1
115+85	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET																			110								1									FPC-9E, FPC-9M, PCC-1, PCM-1
116+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET																122											1									FPC-9E, FPC-9M, PCC-1, PCM-1
117+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET																			46								1									FPC-9E, FPC-9M, PCC-1, PCM-1
117+25	CONSTRUCT DROP INLET ON RT. AND PIPE INLET W/FES AND PIPE OUTLET	4															92				1							1							5	0.06	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1, PCM-1
117+50	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET																			66								1									FPC-9E, FPC-9M, PCC-1, PCM-1
118+20	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET																			102								1									FPC-9E, FPC-9M, PCC-1, PCM-1
118+20	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET																102											1									FPC-9E, FPC-9M, PCC-1, PCM-1
119+25	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET																			72								1									FPC-9E, FPC-9M, PCC-1, PCM-1
119+25	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET																72											1									FPC-9E, FPC-9M, PCC-1, PCM-1
120+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET																			132								1									FPC-9E, FPC-9M, PCC-1, PCM-1
120+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET																			132								1									FPC-9E, FPC-9M, PCC-1, PCM-1
121+35	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET					8																						1									FPC-9E, FPC-9M, PCC-1
121+35	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET		8																									1									FPC-9E, FPC-9M, PCC-1
123+00	CONSTRUCT DROP INLET ON LT. W/EXT. AND PIPE INLET W/FES AND PIPE OUTLET			10	144																			1				1							13	0.16	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1
123+00	CONSTRUCT DROP INLET ON RT. W/EXT. AND PIPE INLET W/FES AND PIPE OUTLET			10	142																			1					1						13	0.16	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1
124+15	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET																112											1									FPC-9E, FPC-9M, PCC-1, PCM-1
124+15	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET																112											1									FPC-9E, FPC-9M, PCC-1, PCM-1
125+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET																82											1									FPC-9E, FPC-9M, PCC-1, PCM-1
127+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET																196											1									FPC-9E, FPC-9M, PCC-1, PCM-1
126+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET																182											1									FPC-9E, FPC-9M, PCC-1, PCM-1
127+75	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET															72												1									FPC-9E, FPC-9M, PCC-1, PCM-1
127+75	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET															172												1									FPC-9E, FPC-9M, PCC-1, PCM-1
129+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET															122												1									FPC-9E, FPC-9M, PCC-1, PCM-1
129+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET															122												1									FPC-9E, FPC-9M, PCC-1, PCM-1
129+50	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET															46												1									FPC-9E, FPC-9M, PCC-1, PCM-1
129+85	CONSTRUCT DROP INLET ON LT. W/EXT. AND PIPE OUTLET															82												1			1						FPC-9E, FPC-9M, PCC-1, PCM-1
130+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET															46												1									FPC-9E, FPC-9M, PCC-1, PCM-1
131+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET															112												1									FPC-9E, FPC-9M, PCC-1, PCM-1
131+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET															98												1									FPC-9E, FPC-9M, PCC-1, PCM-1
132+80	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET															178												1									FPC-9E, FPC-9M, PCC-1, PCM-1
133+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET															196												1									FPC-9E, FPC-9M, PCC-1, PCM-1
134+00	CONSTRUCT DROP INLET ON RT. W/EXT. AND PIPE OUTLET															96												1			1						FPC-9E, FPC-9M, PCC-1, PCM-1
134+05	CONSTRUCT DROP INLET ON LT. W/EXT. AND PIPE OUTLET															122												1			1						FPC-9E, FPC-9M, PCC-1, PCM-1
134+28	CONSTRUCT JUNCTION BOX ON RT. AND DBL. PIPE OUTLET W/FES			52																				2							1			18	0.23	FES-1, FES-2, FPC-9E, PCC-1
134+48	CONSTRUCT JUNCTION BOX AND DBL. PIPE OUTLET AND EXTEND DBL. PIPE INLET W/FES									72														2							1					
135+45	CONSTRUCT DBL. PIPE CULVERT W/FES LT. AND RT.					184																	4											28	0.35	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1
136+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET															114												1									FPC-9E, FPC-9M, PCC-1, PCM-1
136+40	CONSTRUCT DROP INLET ON LT. W/EXT. AND PIPE INLET W/FES AND PIPE OUTLET	10														112					1							1				1			5	0.06	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1, PCM-1
137+17	CONSTRUCT DROP INLET ON RT. W/EXT. AND PIPE INLET W/FES AND PIPE OUTLET	6														130					1							1			1				5	0.06	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1, PCM-1
137+55	CONSTRUCT DROP INLET ON LT. AND PIPE INLET W/FES AND PIPE OUTLET	10														166					1							1							5	0.06	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1, PCM-1
138+50	CONSTRUCT DROP INLET ON RT. W/EXT. AND PIPE INLET W/FES AND PIPE OUTLET	6														172					1							1			1				5	0.06	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1, PCM-1
139+25	CONSTRUCT DROP INLET ON LT. AND PIPE INLET W/FES AND PIPE OUTLET	10														96					1							1							5	0.06	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1, PCM-1
140+25	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET															142												1									FPC-9E, FPC-9M, PCC-1, PCM-1
140+25	CONSTRUCT DROP INLET ON RT. AND PIPE INLET W/FES AND PIPE OUTLET	6														72					1							1							5	0.06	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1, PCM-1
141+00	CONSTRUCT DROP INLET ON RT. AND PIPE INLET W/FES AND PIPE OUTLET	6														96					1							1							5	0.06	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1, PCM-1
SUBTOTALS (BOX 1 OF 8):		**72**	**14**		**72**	**294**	**184**				**72**					**2854**	**1170**		**912**	**116**	**12**	**2**	**4**	**6**					**50**			**4**	**4**	**2**		**143**	**1.82**	

BASIS OF ESTIMATE:
WATER.....12.6 GAL. / SQ. YD. OF SOLID SODDING

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.

HT39710 9/9/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	145	418
		QUANTITIES				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

May 17 2022 12:34 PM

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STRUCTURES (BOX 2 OF 8)

STATION	DESCRIPTION	REINFORCED CONCRETE PIPE CULVERT (CLASS III) 18"	24"	30"	36"	44"X27"	(CLASS IV) 30"	36"	48"	(CLASS V) 24"	36"	29"X18"	44"X27"	51"X31"	SIDE DRAIN 12"	PIPE CULVERT STORM DRAIN ALTERNATES 1 & 2 18"	24"	30"	36"	36"X23"	FLARED END SECTIONS FOR R.C. PIPE CULVERTS 18"	24"	30"	36"	48"	29"X18"	44"X27"	51"X31"	DROP INLETS TYPE C	MO	TYPE SPECIAL	EXT. 4'	8'	JUNCT. BOXES (TYPE E)	YARD DRAINS	SOLID SODDING	WATER	STD. DWG. NOS.
		LIN.FT.														EACH					EACH														SQ.YD.	M.GAL.	
141+70	CONSTRUCT DROP INLET ON LT. W/EXT. AND PIPE INLET W/FES AND PIPE OUTLET	10														126					1									1		1				5	0.06	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1, PCM-1
142+00	CONSTRUCT DROP INLET ON RT. AND PIPE INLET W/FES AND PIPE OUTLET	6														96					1									1						5	0.06	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1, PCM-1
143+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET															76														1								FPC-9E, FPC-9M, PCC-1, PCM-1
143+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET															196														1								FPC-9E, FPC-9M, PCC-1, PCM-1
143+80	CONSTRUCT DROP INLET ON LT. AND PIPE INLET W/FES AND PIPE OUTLET	12														116					1									1						5	0.06	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1, PCM-1
145+00	CONSTRUCT DROP INLET ON LT. AND PIPE INLET W/FES AND PIPE OUTLET	10														96					1									1						5	0.06	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1, PCM-1
145+00	CONSTRUCT DROP INLET ON RT.AND PIPE INLET W/FES AND PIPE OUTLET	6														196					1									1						5	0.06	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1, PCM-1
146+00	CONSTRUCT DROP INLET ON LT. AND PIPE INLET W/FES AND PIPE OUTLET	10														96					1									1						5	0.06	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1, PCM-1
147+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET															96														1								FPC-9E, FPC-9M, PCC-1, PCM-1
147+00	CONSTRUCT DROP INLET ON RT. W/EXT. AND PIPE OUTLET															96														1		1						FPC-9E, FPC-9M, PCC-1, PCM-1
148+00	CONSTRUCT DROP INLET ON LT. W/EXT. AND PIPE OUTLET																10													1		1						FPC-9E, FPC-9M, PCC-1, PCM-1
148+00	CONSTRUCT DROP INLET ON RT. W/EXT. AND PIPE OUTLET															10														1		1						FPC-9E, FPC-9M, PCC-1, PCM-1
148+50	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET																6													1								FPC-9E, FPC-9M, PCC-1, PCM-1
148+50	CONSTRUCT DROP INLET ON RT. W/EXT. AND PIPE OUTLET																8													1		1						FPC-9E, FPC-9M, PCC-1, PCM-1
151+00	CONSTRUCT DROP INLET ON LT. W/EXT. AND PIPE OUTLET																246													1		1						FPC-9E, FPC-9M, PCC-1, PCM-1
151+00	CONSTRUCT DROP INLET ON RT. W/EXT. AND PIPE OUTLET																246													1		1						FPC-9E, FPC-9M, PCC-1, PCM-1
153+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET																196													1								FPC-9E, FPC-9M, PCC-1, PCM-1
153+00	CONSTRUCT DROP INLET ON RT. W/EXT. AND PIPE OUTLET															196														1		1						FPC-9E, FPC-9M, PCC-1, PCM-1
153+59	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET															56														1								FPC-9E, FPC-9M, PCC-1, PCM-1
153+59	CONSTRUCT DROP INLET ON RT. W/EXT. AND PIPE OUTLET															56														1		1						FPC-9E, FPC-9M, PCC-1, PCM-1
154+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET															38														1								FPC-9E, FPC-9M, PCC-1, PCM-1
154+00	CONSTRUCT DROP INLET ON RT. W/EXT. AND PIPE OUTLET															38														1		1						FPC-9E, FPC-9M, PCC-1, PCM-1
155+65	CONSTRUCT DROP INLET ON LT. W/EXT. AND PIPE OUTLET															162														1		1						FPC-9E, FPC-9M, PCC-1, PCM-1
155+65	CONSTRUCT DROP INLET ON RT. W/EXT. AND PIPE INLET W/FES AND PIPE OUTLET	4														162					1									1		1				5	0.06	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1, PCM-1
158+15	CONSTRUCT DROP INLET ON LT. W/EXT. AND PIPE OUTLET	6														246					1									1		1				5	0.06	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1, PCM-1
158+15	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET															246														1								FPC-9E, FPC-9M, PCC-1, PCM-1
159+50	CONSTRUCT DROP INLET ON LT. W/EXT. AND PIPE OUTLET	4														132					1									1		1				5	0.06	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1, PCM-1
160+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET															182														1								FPC-9E, FPC-9M, PCC-1, PCM-1
162+17	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET W/FES	10																			1									1						5	0.06	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1
162+17	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET	60																												1								FPC-9E, FPC-9M, PCC-1
163+06	CONSTRUCT DBL. PIPE CULVERT ON 5° RT. FWD. SKEW W/FES LT. AND RT.								196															4											62	0.78	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1
163+35	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET W/FES		28																1											1					8	0.10	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1
163+35	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET W/FES	28																			1									1						5	0.06	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1
164+85	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET																146													1								FPC-9E, FPC-9M, PCC-1, PCM-1
165+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET															162														1								FPC-9E, FPC-9M, PCC-1, PCM-1
166+00	CONSTRUCT DROP INLET ON LT. W/EXT. AND PIPE OUTLET															112														1		1						FPC-9E, FPC-9M, PCC-1, PCM-1
166+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET															96														1								FPC-9E, FPC-9M, PCC-1, PCM-1
167+00	CONSTRUCT DROP INLET ON LT. W/EXT. AND PIPE OUTLET															96														1		1						FPC-9E, FPC-9M, PCC-1, PCM-1
167+00	CONSTRUCT DROP INLET ON RT. AND PIPE INLET W/FES AND PIPE OUTLET	4														96					1									1						5	0.06	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1, PCM-1
168+25	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET															122														1								FPC-9E, FPC-9M, PCC-1, PCM-1
168+25	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET															122														1								FPC-9E, FPC-9M, PCC-1, PCM-1
170+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET															172														1								FPC-9E, FPC-9M, PCC-1, PCM-1
170+15	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET															186														1								FPC-9E, FPC-9M, PCC-1, PCM-1
171+00	CONSTRUCT DROP INILET ON LT. AND PIPE OUTLET	6														96					1									1						5	0.06	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1, PCM-1
171+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET															82														1								FPC-9E, FPC-9M, PCC-1, PCM-1
172+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET															96														1								FPC-9E, FPC-9M, PCC-1, PCM-1
172+15	CONSTRUCT DROP INILET ON LT. AND PIPE OUTLET															112														1								FPC-9E, FPC-9M, PCC-1, PCM-1
173+05	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET															102														1								FPC-9E, FPC-9M, PCC-1, PCM-1
173+50	CONSTRUCT DROP INILET ON LT. AND PIPE OUTLET															134														1								FPC-9E, FPC-9M, PCC-1, PCM-1
173+96	IN PLACE R.C. PIPE CULVERT RETAIN AND EXTEND LT. AND RT. W/FES LT. AND RT.									24														2											16	0.20	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1
175+20	CONSTRUCT DBL. ARCH PIPE CULVERT ON 5° RT. FWD. SKEW W/FES LT. AND RT.														228												4									74	0.93	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1
SUBTOTALS (BOX 2 OF 8):		**176**	**28**						**196**	**24**					**228**		**4500**	**858**				**13**	**3**			**4**			**4**		**48**		**16**				**225**	**2.79**	

BASIS OF ESTIMATE:
WATER.....12.6 GAL. / SQ. YD. OF SOLID SODDING

NOTE: FOR R.C. PIPE CULVERT INSTALLATIONS USE TYPE 3 BEDDING UNLESS OTHERWISE SPECFIED.

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

HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	146	418
		QUANTITIES				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

May 17 2022 12:34 PM

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STRUCTURES (BOX 3 OF 8)

STATION	DESCRIPTION	REINFORCED CONCRETE PIPE CULVERT (CLASS III) 18"	24"	30"	36"	44"X27"	(CLASS IV) 30"	36"	48"	(CLASS V) 24"	36"	29"X18"	44"X27"	51"X31"	SIDE DRAIN 12"	PIPE CULVERT STORM DRAIN ALTERNATES 1 & 2 18"	24"	30"	36"	36"X23"	FLARED END SECTIONS FOR R.C. PIPE CULVERTS 18"	24"	30"	36"	48"	29"X18"	44"X27"	51"X31"	DROP INLETS TYPE C	MO	TYPE SPECIAL	EXT. 4'	8'	JUNCT. BOXES (TYPE E)	YARD DRAINS	SOLID SODDING	WATER	STD. DWG. NOS.
		LIN. FT.																			EACH															SQ.YD.	M.GAL.	
175+40	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET W/FES	12																			1									1						5	0.06	FES-1, FES-2, FPC-9E, FPC-9N, PCC-1
175+55	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET W/FES			10																			1						1						13	0.16	FES-1, FES-2, FPC-9E, FPC-9N, PCC-1
176+30	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET															86												1								FPC-9E, FPC-9M, PCC-1, PCM-1
176+30	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET																	72										1								FPC-9E, FPC-9M, PCC-1, PCM-1
177+35	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET															102												1								FPC-9E, FPC-9M, PCC-1, PCM-1
177+35	CONSTRUCT DROP INLET ON RT. AND PIPE INLET W/FES AND PIPE OUTLET			6														102					1						1						13	0.16	FES-1, FES-2, FPC-9E, FPC-9N, PCC-1, PCM-1
179+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET															162												1								FPC-9E, FPC-9M, PCC-1, PCM-1
179+00	CONSTRUCT DROP INLET ON RT. W/EXT. AND PIPE OUTLET															162												1			1					FPC-9E, FPC-9M, PCC-1, PCM-1
180+10	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET															108												1								FPC-9E, FPC-9M, PCC-1, PCM-1
182+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET															96												1								FPC-9E, FPC-9M, PCC-1, PCM-1
182+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET															98												1								FPC-9E, FPC-9M, PCC-1, PCM-1
183+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET															96												1								FPC-9E, FPC-9M, PCC-1, PCM-1
183+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET															96												1								FPC-9E, FPC-9M, PCC-1, PCM-1
184+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET															96												1								FPC-9E, FPC-9M, PCC-1, PCM-1
184+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET															96												1								FPC-9E, FPC-9M, PCC-1, PCM-1
185+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET															96												1								FPC-9E, FPC-9M, PCC-1, PCM-1
185+00	CONSTRUCT DROP INLET ON RT. AND PIPE INLET W/FES AND PIPE OUTLET	6														96					1							1						5	0.06	FES-1, FES-2, FPC-9E, FPC-9N, PCC-1, PCM-1
186+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET															148												1								FPC-9E, FPC-9M, PCC-1, PCM-1
186+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET															148												1								FPC-9E, FPC-9M, PCC-1, PCM-1
188+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET																	18										1								FPC-9E, FPC-9M, PCC-1, PCM-1
189+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET																		118									1								FPC-9E, FPC-9M, PCC-1, PCM-1
189+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET																	96										1								FPC-9E, FPC-9M, PCC-1, PCM-1
189+80	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET																		76									1								FPC-9E, FPC-9M, PCC-1, PCM-1
189+80	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET																	76										1								FPC-9E, FPC-9M, PCC-1, PCM-1
189+80	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET																	76										1								FPC-9E, FPC-9M, PCC-1, PCM-1
191+00	CONSTRUCT DROP INLET ON LT. ON TOP OF BOX CULVERT																											1								FPC-9, FPC-9E, FPC-9M
191+00	CONSTRUCT DROP INLET ON RT. ON TOP OF BOX CULVERT																											1								FPC-9, FPC-9E, FPC-9M
192+00	CONSTRUCT DROP INLET ON LT. W/EXT. AND PIPE OUTLET					96																						1				1				FPC-9E, FPC-9M, PCC-1
192+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET					96																						1								FPC-9E, FPC-9M, PCC-1
193+00	CONSTRUCT DROP INLET ON LT. W/EXT. AND PIPE OUTLET																		96									1				1				FPC-9E, FPC-9M, PCC-1, PCM-1
193+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET																	96										1								FPC-9E, FPC-9M, PCC-1, PCM-1
194+00	CONSTRUCT DROP INLET ON LT. W/EXT. AND PIPE OUTLET																		96									1			1					FPC-9E, FPC-9M, PCC-1, PCM-1
195+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET																		96									1								FPC-9E, FPC-9M, PCC-1, PCM-1
195+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET																	196										1								FPC-9E, FPC-9M, PCC-1, PCM-1
195+60	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET																		56									1								FPC-9E, FPC-9M, PCC-1, PCM-1
196+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET																		36									1								FPC-9E, FPC-9M, PCC-1, PCM-1
196+00	CONSTRUCT DROP INLET ON RT. W/EXT. AND PIPE OUTLET																	96										1			1					FPC-9E, FPC-9M, PCC-1, PCM-1
196+40	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET																	36										1								FPC-9E, FPC-9M, PCC-1, PCM-1
197+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET																	56										1								FPC-9E, FPC-9M, PCC-1, PCM-1
198+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET																	196										1								FPC-9E, FPC-9M, PCC-1, PCM-1
198+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET																	96										1								FPC-9E, FPC-9M, PCC-1, PCM-1
200+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET																	196										1								FPC-9E, FPC-9M, PCC-1, PCM-1
200+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET																	196										1								FPC-9E, FPC-9M, PCC-1, PCM-1
201+00	CONSTRUCT DROP INLET ON LT. W/EXT. AND PIPE OUTLET																	96										1				1				FPC-9E, FPC-9M, PCC-1, PCM-1
201+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET																	96										1								FPC-9E, FPC-9M, PCC-1, PCM-1
202+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET																	96										1								FPC-9E, FPC-9M, PCC-1, PCM-1
203+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET																	196										1								FPC-9E, FPC-9M, PCC-1, PCM-1
203+20	CONSTRUCT DROP INLET ON LT. W/EXT. AND PIPE OUTLET																	116										1				1				FPC-9E, FPC-9M, PCC-1, PCM-1
204+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET															76												1								FPC-9E, FPC-9M, PCC-1, PCM-1
204+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET																	96										1								FPC-9E, FPC-9M, PCC-1, PCM-1
205+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET															96												1								FPC-9E, FPC-9M, PCC-1, PCM-1
SUBTOTALS (BOX 3 OF 8):		**18**		**16**		**192**										**1686**	**172**	**2224**	**574**		**2**		**2**						**50**		**3**	**4**			**38**	**0.44**	

BASIS OF ESTIMATE:
WATER.....12.6 GAL. / SQ. YD. OF SOLID SODDING

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.

HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
09-12-22		6	ARK.	100657	147	418
		QUANTITIES				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

Sep 29 2022 1:38 PM

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STRUCTURES (BOX 4 OF 8)

STATION	DESCRIPTION	REINFORCED CONCRETE PIPE CULVERT (CLASS III) 18"	24"	30"	36"	44"X27"	(CLASS IV) 30"	36"	48"	(CLASS V) 24"	36"	29"X18"	44"X27"	51"X31"	SIDE DRAIN 12"	PIPE CULVERT STORM DRAIN ALTERNATES 1 & 2 18"	24"	30"	36"	36"X23"	FLARED END SECTIONS FOR R.C. PIPE CULVERTS 18"	24"	30"	36"	48"	29"X18"	44"X27"	51"X31"	DROP INLETS TYPE C	MO	TYPE SPECIAL	EXT. 4'	8'	JUNCT. BOXES (TYPE E)	YARD DRAINS	$OLID SODDING	WATER	STD. DWG. NOS.
		LIN.FT.														EACH					EACH								EACH							$Q.YD.	M.GAL.	
206+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET															98													1								FPC-9E, FPC-9M, PCC-1, PCM-1
206+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET															196													1								FPC-9E, FPC-9M, PCC-1, PCM-1
207+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET															96													1								FPC-9E, FPC-9M, PCC-1, PCM-1
207+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET															96													1								FPC-9E, FPC-9M, PCC-1, PCM-1
208+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET															96													1								FPC-9E, FPC-9M, PCC-1, PCM-1
208+45	CONSTRUCT DROP INLET ON RT. AND PIPE INLET W/FES AND PIPE OUTLET	8														142					1								1							5	0.06	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1, PCM-1
209+20	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET															116													1								FPC-9E, FPC-9M, PCC-1, PCM-1
209+20	CONSTRUCT DROP INLET ON RT. AND PIPE INLET W/FES AND PIPE OUTLET	6														72					1								1							5	0.06	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1, PCM-1
210+65	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET															142													1								FPC-9E, FPC-9M, PCC-1, PCM-1
210+65	CONSTRUCT DROP INLET ON RT. AND PIPE INLET W/FES AND PIPE OUTLET	4														142					1								1							5	0.06	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1, PCM-1
212+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET															132													1								FPC-9E, FPC-9M, PCC-1, PCM-1
212+85	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET															216													1								FPC-9E, FPC-9M, PCC-1, PCM-1
213+80	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET															176													1								FPC-9E, FPC-9M, PCC-1, PCM-1
214+00	CONSTRUCT DROP INLET ON RT. AND PIPE INLET W/FES AND PIPE OUTLET	6														112					1								1							5	0.06	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1, PCM-1
215+00	CONSTRUCT DROP INLET ON RT. AND PIPE INLET W/FES AND PIPE OUTLET	6														96					1								1							5	0.06	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1, PCM-1
215+15	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET															132													1								FPC-9E, FPC-9M, PCC-1, PCM-1
216+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET															82													1								FPC-9E, FPC-9M, PCC-1, PCM-1
216+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET															96													1								FPC-9E, FPC-9M, PCC-1, PCM-1
216+65	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET															62													1								FPC-9E, FPC-9M, PCC-1, PCM-1
217+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET															96													1								FPC-9E, FPC-9M, PCC-1, PCM-1
218+00	CONSTRUCT DROP INLET ON RT. W/EXT. AND PIPE OUTLET															96													1		1						FPC-9E, FPC-9M, PCC-1, PCM-1
218+55	CONSTRUCT DROP INLET ON LT. AND PIPE INLET W/FES AND PIPE OUTLET	4														186					1								1							5	0.06	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1, PCM-1
218+90	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET															86													1								FPC-9E, FPC-9M, PCC-1, PCM-1
219+55	CONSTRUCT DROP INLET ON RT. AND PIPE INLET W/FES AND PIPE OUTLET	6														62					1								1							5	0.06	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1, PCM-1
220+00	CONSTRUCT DROP INLET ON LT. AND PIPE INLET W/FES AND PIPE OUTLET	4														142					1								1							5	0.06	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1, PCM-1
220+90	CONSTRUCT DROP INLET ON RT. AND PIPE INLET W/FES AND PIPE OUTLET	4														132					1								1							5	0.06	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1, PCM-1
221+50	CONSTRUCT DROP INLET ON LT. AND PIPE INLET W/FES AND PIPE OUTLET	6														146					1								1							5	0.06	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1, PCM-1
222+00	CONSTRUCT DROP INLET ON RT. AND PIPE INLET W/FES AND PIPE OUTLET	4														106					1								1							5	0.06	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1, PCM-1
222+65	CONSTRUCT DROP INLET ON LT. AND PIPE INLET W/FES AND PIPE OUTLET	6														112					1								1							5	0.06	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1, PCM-1
223+00	CONSTRUCT DROP INLET ON RT. W/OPENING IN BACK AND PIPE OUTLET															96														1								FPC-9E, FPC-9M, PCC-1, PCM-1
223+70	CONSTRUCT DROP INLET ON LT. W/EXT. AND PIPE INLET W/FES AND PIPE OUTLET	6														102					1								1			1				5	0.06	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1, PCM-1
223+90	CONSTRUCT DROP INLET ON RT. AND PIPE INLET W/FES AND PIPE OUTLET	4														86					1								1							5	0.06	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1, PCM-1
224+67	CONSTRUCT DROP INLET ON LT. AND PIPE INLET W/FES AND PIPE OUTLET	4														94					1								1							5	0.06	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1, PCM-1
225+00	CONSTRUCT DROP INLET ON RT. AND PIPE INLET W/FES AND PIPE OUTLET	4														106					1								1							5	0.06	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1, PCM-1
226+00	CONSTRUCT DROP INLET ON LT. AND PIPE INLET W/FES AND PIPE OUTLET	4														130					1								1							5	0.06	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1, PCM-1
226+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET															96													1								FPC-9E, FPC-9M, PCC-1, PCM-1
226+68	CONSTRUCT DROP INLET ON LT. W/EXT. AND PIPE INLET W/FES AND PIPE OUTLET	4														64					1								1			1				5	0.06	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1, PCM-1
226+68	CONSTRUCT DROP INLET ON RT. W/EXT. AND PIPE OUTLET															64													1			1						FPC-9E, FPC-9M, PCC-1, PCM-1
227+15	CONSTRUCT ARCH PIPE CULVERT W/FES LT.											200													1											8	0.10	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1, PCM-1
227+15	CONSTRUCT JUNCTION BOX ON RT. 100' FROM C.L.																																1				FPC-9
227+62	CONSTRUCT DBL. PIPE CULVERT W/FES LT. AND RT.										228													4											36	0.43	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1, PCM-1
228+00	CONSTRUCT DROP INLET ON LT. W/EXT.																													1		1					SPECIAL DETAILS
228+00	CONSTRUCT DROP INLET ON RT. W/EXT.																													1		1					SPECIAL DETAILS
231+00	CONSTRUCT DROP INLET ON LT.																													1							SPECIAL DETAILS
231+00	CONSTRUCT DROP INLET ON RT.																													1							SPECIAL DETAILS
232+00	CONSTRUCT DROP INLET LT. OF MEDIAN AND PIPE OUTLET															98													1								FPC-9E, FPC-9M, PCC-1, PCM-1
232+00	CONSTRUCT DROP INLET ON RT.																													1							SPECIAL DETAILS
233+00	CONSTRUCT DROP INLET LT. OF MEDIAN AND PIPE OUTLET															98													1								FPC-9E, FPC-9M, PCC-1, PCM-1
233+00	CONSTRUCT DROP INLET ON RT.																													1							SPECIAL DETAILS
234+00	CONSTRUCT DROP INLET LT. OF MEDIAN AND PIPE OUTLET															198													1								FPC-9E, FPC-9M, PCC-1, PCM-1
234+00	CONSTRUCT DROP INLET ON RT. W/EXT.																													1		1					SPECIAL DETAILS
SUBTOTALS (BOX 4 OF 8):		**90**									**228**	**200**				**1870**	**2826**				**18**			**4**		**1**			**1**	**40**	**7**	**5**	**2**	**1**			**134**	**1.61**	

BASIS OF ESTIMATE:
WATER.....12.6 GAL. / SQ. YD. OF SOLID SODDING

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.

H139710 9/9/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	148	418
		QUANTITIES				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

May 17 2022 12:35 PM

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STRUCTURES (BOX 5 OF 8):

STATION	DESCRIPTION	REINFORCED CONCRETE PIPE CULVERT (CLASS III) 18"	24"	30"	36"	44"X27"	(CLASS IV) 30"	36"	48"	(CLASS V) 24"	36"	29"X18"	44"X27"	51"X31"	SIDE DRAIN 12"	PIPE CULVERT STORM DRAIN ALTERNATES 1 & 2 18"	24"	30"	36"	36"X23"	FLARED END SECTIONS FOR R.C. PIPE CULVERTS 18"	24"	30"	36"	48"	29"X18"	44"X27"	51"X31"	DROP INLETS TYPE C	MO	TYPE SPECIAL	EXT. 4'	8'	JUNCT. BOXES (TYPE E)	YARD DRAINS	SOLID SODDING	WATER	STD. DWG. NOS.
		LIN. FT.														EACH					EACH															SQ.YD.	M.GAL.	
236+00	CONSTRUCT DROP INLET LT. OF MEDIAN AND PIPE OUTLET															98													1								FPC-9E, FPC-9M, PCC-1, PCM-1
236+00	CONSTRUCT DROP INLET ON RT.																													1								SPECIAL DETAILS
237+00	CONSTRUCT DROP INLET LT. OF MEDIAN W/EXT. AND PIPE OUTLET															198													1			1					FPC-9E, FPC-9M, PCC-1, PCM-1
237+00	CONSTRUCT DROP INLET ON RT. W/EXT.																													1			1					SPECIAL DETAILS
239+00	CONSTRUCT DROP INLET LT. OF MEDIAN W/EXT. AND PIPE OUTLET															128													1			1					FPC-9E, FPC-9M, PCC-1, PCM-1
239+00	CONSTRUCT DROP INLET ON RT.																													1								SPECIAL DETAILS
240+30	CONSTRUCT DROP INLET LT. OF MEDIAN AND PIPE OUTLET	38																											1								FPC-9E, FPC-9M, PCC-1
240+30	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET W/FES	24																			1								1						5	0.06	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1
241+00	CONSTRUCT DROP INLET LT. OF MEDIAN W/EXT. AND PIPE OUTLET	38																											1			1					FPC-9E, FPC-9M, PCC-1
241+00	CONSTRUCT DROP INLET ON RT. W/EXT. AND PIPE OUTLET W/FES	16																			1								1			1			5	0.06	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1
243+00	CONSTRUCT DROP INLET LT. OF MEDIAN AND PIPE OUTLET	38																											1								FPC-9E, FPC-9M, PCC-1
243+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET W/FES	14																			1								1						5	0.06	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1
244+00	CONSTRUCT DROP INLET LT. OF MEDIAN AND PIPE OUTLET	42																											1								FPC-9E, FPC-9M, PCC-1
244+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET W/FES	12																			1								1						5	0.06	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1
245+00	CONSTRUCT DROP INLET ON RT.																													1								SPECIAL DETAILS
246+00	CONSTRUCT DROP INLET LT. OF MEDIAN AND PIPE OUTLET	46																											1								FPC-9E, PCC-1
246+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET W/FES	12																			1								1						5	0.06	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1
247+00	CONSTRUCT DROP INLET ON RT. W/EXT.																													1			1					SPECIAL DETAILS
247+40	CONSTRUCT DROP INLET ON RT.																													1								SPECIAL DETAILS
248+00	CONSTRUCT DROP INLET LT. OF MEDIAN W/EXT. AND PIPE OUTLET															238													1			1					FPC-9E, PCC-1, PCM-1
248+00	CONSTRUCT DROP INLET ON RT. W/EXT.																													1			1					SPECIAL DETAILS
250+40	CONSTRUCT DROP INLET LT. OF MEDIAN AND PIPE OUTLET															158													1								FPC-9E, FPC-9M, PCC-1, PCM-1
250+40	CONSTRUCT DROP INLET ON RT.																													1								SPECIALS
252+00	CONSTRUCT DROP INLET LT. OF MEDIAN W/EXT. AND PIPE OUTLET	38																											1			1					FPC-9E, FPC-9M, PCC-1
252+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET															96													1								FPC-9E, FPC-9M, PCC-1, PCM-1
253+00	CONSTRUCT DROP INLET ON RT. W/EXT. AND PIPE OUTLET															104													1			1					FPC-9E, FPC-9M, PCC-1, PCM-1
255+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET		28																										1								FPC-9E, FPC-9M, PCC-1
255+00	CONSTRUCT DROP INLET LT. OF MEDIAN AND PIPE OUTLET		38																										1								FPC-9E, FPC-9M, PCC-1
255+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET																		52										1								FPC-9E, FPC-9M, PCC-1, PCM-1
256+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET																	94											1								FPC-9E, FPC-9M, PCC-1, PCM-1
257+00	CONSTRUCT DROP INLET LT. OF MEDIAN AND PIPE OUTLET															198													1								FPC-9E, FPC-9M, PCC-1, PCM-1
257+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET																	94											1								FPC-9E, FPC-9M, PCC-1, PCM-1
258+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET																300												1								FPC-9E, FPC-9M, PCC-1, PCM-1
258+00	CONSTRUCT DROP INLET LT. OF MEDIAN AND PIPE OUTLET															98													1								FPC-9E, FPC-9M, PCC-1, PCM-1
258+00	CONSTRUCT DROP INLET ON RT. W/EXT. AND PIPE OUTLET																	94											1			1					FPC-9E, FPC-9M, PCC-1, PCM-1
258+50	CONSTRUCT DROP INLET ON RT. W/EXT. AND PIPE OUTLET																	46											1			1					FPC-9E, FPC-9M, PCC-1, PCM-1
260+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET																198												1								FPC-9E, FPC-9M, PCC-1, PCM-1
260+00	CONSTRUCT DROP INLET ON RT. W/EXT. AND PIPE OUTLET																	146											1			1					FPC-9E, FPC-9M, PCC-1, PCM-1
261+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET																	96											1								FPC-9E, FPC-9M, PCC-1, PCM-1
262+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET																196												1								FPC-9E, FPC-9M, PCC-1, PCM-1
262+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET																	96											1								FPC-9E, FPC-9M, PCC-1, PCM-1
263+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET																	96											1								FPC-9E, FPC-9M, PCC-1, PCM-1
265+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET																298												1								FPC-9E, FPC-9M, PCC-1, PCM-1
265+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET																	196											1								FPC-9E, FPC-9M, PCC-1, PCM-1
266+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET																	96											1								FPC-9E, FPC-9M, PCC-1, PCM-1
266+55	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET																152												1								FPC-9E, FPC-9M, PCC-1, PCM-1
267+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET																44												1								FPC-9E, FPC-9M, PCC-1, PCM-1
267+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET																	96											1								FPC-9E, FPC-9M, PCC-1, PCM-1
267+45	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET																	42											1								FPC-9E, FPC-9M, PCC-1, PCM-1
268+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET																96												1								FPC-9E, FPC-9M, PCC-1, PCM-1
268+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET																	50											1								FPC-9E, FPC-9M, PCC-1, PCM-1
SUBTOTALS (BOX 5 OF 8):		**318**	**66**													**1316**	**1284**	**1242**	**52**		**5**								**2**	**4**	**8**	**13**				**25**	**0.30**	

BASIS OF ESTIMATE:
WATER.....12.6 GAL. / SQ. YD. OF SOLID SODDING

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.

HT39710 5/6/2022
R100657.DGN

QUANTITIES

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	149	418
		QUANTITIES				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

May 17 2022 12:35 PM

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STRUCTURES (BOX 6 OF 8)

STATION	DESCRIPTION	REINFORCED CONCRETE PIPE CULVERT (CLASS III) 18"	24"	30"	36"	44"X27"	(CLASS IV) 30"	36"	48"	(CLASS V) 24"	36"	29"X18"	44"X27"	51"X31"	SIDE DRAIN 12"	PIPE CULVERT STORM DRAIN ALTERNATES 1 & 2 18"	24"	30"	36"	36"X23"	FLARED END SECTIONS FOR R.C. PIPE CULVERTS 18"	24"	30"	36"	48"	29"X18"	44"X27"	51"X31"	DROP INLETS TYPE C	TYPE M0	TYPE SPECIAL	EXT. 4'	EXT. 8'	JUNCT. BOXES (TYPE E)	YARD DRAINS	SOLID SODDING	WATER	STD. DWG. NOS.
		LIN. FT.																			EACH											EACH							
269+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET																96												1									FPC-9E, FPC-9M, PCC-1, PCM-1
269+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET																	96											1									FPC-9E, FPC-9M, PCC-1, PCM-1
270+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET																96												1									FPC-9E, FPC-9M, PCC-1, PCM-1
270+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET																	96											1									FPC-9E, FPC-9M, PCC-1, PCM-1
271+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET															96													1									FPC-9E, FPC-9M, PCC-1, PCM-1
271+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET																	96											1									FPC-9E, FPC-9M, PCC-1, PCM-1
272+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET																96												1									FPC-9E, FPC-9M, PCC-1, PCM-1
273+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET															198													1									FPC-9E, FPC-9M, PCC-1, PCM-1
273+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET																96												1									FPC-9E, FPC-9M, PCC-1, PCM-1
274+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET															96													1									FPC-9E, FPC-9M, PCC-1, PCM-1
274+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET																96												1									FPC-9E, FPC-9M, PCC-1, PCM-1
275+00	CONSTRUCT DROP INLET RT. OF MEDIAN AND PIPE OUTLET		28																										1									FPC-9E, FPC-9M, PCC-1
275+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET																98												1									FPC-9E, FPC-9M, PCC-1, PCM-1
276+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET															194													1									FPC-9E, FPC-9M, PCC-1, PCM-1
276+00	CONSTRUCT DROP INLET RT. OF MEDIAN W/EXT. AND PIPE OUTLET																98												1			1						FPC-9E, FPC-9M, PCC-1, PCM-1
277+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET															96													1									FPC-9E, FPC-9M, PCC-1, PCM-1
277+00	CONSTRUCT DROP INLET RT. OF MEDIAN AND PIPE OUTLET																98												1									FPC-9E, FPC-9M, PCC-1, PCM-1
278+00	CONSTRUCT DROP INLET RT. OF MEDIAN AND PIPE OUTLET																98												1									FPC-9E, FPC-9M, PCC-1, PCM-1
279+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET															194													1									FPC-9E, FPC-9M, PCC-1, PCM-1
279+00	CONSTRUCT DROP INLET RT. OF MEDIAN AND PIPE OUTLET																98												1									FPC-9E, FPC-9M, PCC-1, PCM-1
280+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET															96													1									FPC-9E, FPC-9M, PCC-1, PCM-1
280+00	CONSTRUCT DROP INLET RT. OF MEDIAN AND PIPE OUTLET																98												1									FPC-9E, FPC-9M, PCC-1, PCM-1
281+00	CONSTRUCT DROP INLET RT. OF MEDIAN AND PIPE OUTLET																98												1									FPC-9E, FPC-9M, PCC-1, PCM-1
282+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET	38																											1									FPC-9E, FPC-9M, PCC-1
282+00	CONSTRUCT DROP INLET RT. OF MEDIAN AND PIPE OUTLET																98												1									FPC-9E, FPC-9M, PCC-1, PCM-1
283+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET															96													1									FPC-9E, FPC-9M, PCC-1, PCM-1
283+00	CONSTRUCT DROP INLET RT. OF MEDIAN AND PIPE OUTLET															98													1									FPC-9E, FPC-9M, PCC-1, PCM-1
284+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET															96													1									FPC-9E, FPC-9M, PCC-1, PCM-1
284+00	CONSTRUCT DROP INLET RT. OF MEDIAN AND PIPE OUTLET															96													1									FPC-9E, FPC-9M, PCC-1, PCM-1
285+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET															96													1									FPC-9E, FPC-9M, PCC-1, PCM-1
285+00	CONSTRUCT DROP INLET RT. OF MEDIAN AND PIPE OUTLET															98													1									FPC-9E, FPC-9M, PCC-1, PCM-1
286+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET															96													1									FPC-9E, FPC-9M, PCC-1, PCM-1
286+00	CONSTRUCT DROP INLET RT. OF MEDIAN AND PIPE OUTLET															98													1									FPC-9E, FPC-9M, PCC-1, PCM-1
287+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET															96													1									FPC-9E, FPC-9M, PCC-1, PCM-1
287+00	CONSTRUCT DROP INLET RT. OF MEDIAN AND PIPE OUTLET															98													1									FPC-9E, FPC-9M, PCC-1, PCM-1
287+60	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET															56													1									FPC-9E, FPC-9M, PCC-1, PCM-1
287+60	CONSTRUCT DROP INLET RT. OF MEDIAN AND PIPE OUTLET															56												1									FPC-9E, PCC-1, PCM-1
288+50	CONSTRUCT DROP INLET ON LT. W/OPENING IN BACK AND PIPE OUTLET															84													1									FPC-9E, FPC-9M, PCC-1, PCM-1
288+50	CONSTRUCT DROP INLET RT. OF MEDIAN AND PIPE OUTLET															86												1									FPC-9E, PCC-1, PCM-1
290+50	CONSTRUCT DROP INLET ON LT. W/OPENING IN BACK AND PIPE OUTLET															96													1									FPC-9E, FPC-9M, PCC-1, PCM-1
290+50	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET															98													1									FPC-9E, FPC-9M, PCC-1, PCM-1
291+50	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET															36													1									FPC-9E, FPC-9M, PCC-1, PCM-1
291+50	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET															38													1									FPC-9E, FPC-9M, PCC-1, PCM-1
291+90	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET															108													1									FPC-9E, FPC-9M, PCC-1, PCM-1
291+90	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET															58													1									FPC-9E, FPC-9M, PCC-1, PCM-1
292+50	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET															48													1									FPC-9E, FPC-9M, PCC-1, PCM-1
293+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET															46													1									FPC-9E, FPC-9M, PCC-1, PCM-1
293+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET															46													1									FPC-9E, FPC-9M, PCC-1, PCM-1
293+50	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET															48													1									FPC-9E, FPC-9M, PCC-1, PCM-1
293+50	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET															46													1									FPC-9E, FPC-9M, PCC-1, PCM-1
SUBTOTALS (BOX 6 OF 8):		**38**	**28**													**2886**	**1264**	**288**										**2**	**48**		**1**						

BASIS OF ESTIMATE:
WATER.....12.6 GAL. / SQ. YD. OF SOLID SODDING

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.

HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	150	418
		QUANTITIES				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

May 17 2022 12:35 PM

DocuSign

STRUCTURES (BOX 7 OF 8)

STATION	DESCRIPTION	REINFORCED CONCRETE PIPE CULVERT (CLASS III) 18"	(CLASS III) 24"	(CLASS III) 30"	(CLASS III) 36"	(CLASS III) 44"X27"	(CLASS IV) 30"	(CLASS IV) 36"	(CLASS IV) 48"	(CLASS V) 24"	(CLASS V) 36"	(CLASS V) 29"X18"	(CLASS V) 44"X27"	(CLASS V) 51"X31"	SIDE DRAIN 12"	PIPE CULVERT STORM DRAIN ALTERNATES 1 & 2 18"	24"	30"	36"	36"X23"	FLARED END SECTIONS FOR R.C. PIPE CULVERTS 18"	24"	30"	36"	48"	29"X18"	44"X27"	51"X31"	DROP INLETS TYPE C	TYPE M0	TYPE SPECIAL	EXT. 4'	EXT. 8'	JUNCT. BOXES (TYPE E)	YARD DRAINS	SOLID SODDING	WATER	STD. DWG. NOS.
		LIN. FT.																			EACH																
294+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET	28																										1								
294+00	CONSTRUCT DROP INLET LT. OF MEDIAN AND PIPE OUTLET															198												1								
294+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET															96												1								
295+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET															96												1								
296+00	CONSTRUCT DROP INLET LT. OF MEDIAN AND PIPE OUTLET															98												1								
296+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET															96												1								
297+00	CONSTRUCT DROP INLET LT. OF MEDIAN AND PIPE OUTLET															98												1								
297+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET															96												1								
298+00	CONSTRUCT DROP INLET LT. OF MEDIAN AND PIPE OUTLET															98												1								
298+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET															96												1								
299+00	CONSTRUCT DROP INLET LT. OF MEDIAN AND PIPE OUTLET																198											1								
299+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET															46												1								
299+50	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET															46												1								
300+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET																46											1								
300+50	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET																46											1								
301+00	CONSTRUCT DROP INLET LT. OF MEDIAN AND PIPE OUTLET																198											1								
301+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET																96											1								
302+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET																96											1								
303+00	CONSTRUCT DROP INLET LT. OF MEDIAN AND PIPE OUTLET		38																									1								
303+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET																	42										1								
305+00	CONSTRUCT DROP INLET LT. OF MEDIAN AND PIPE OUTLET																	126										1								
305+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET																128											1								
306+00	CONSTRUCT DROP INLET LT. OF MEDIAN AND PIPE OUTLET																	98										1								
306+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET																96											1								
307+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET			36																								1								
307+00	CONSTRUCT DROP INLET LT. OF MEDIAN AND PIPE OUTLET																	98										1								
307+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET																96											1								
308+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET																	98										1								
308+30	CONSTRUCT DROP INLET LT. OF MEDIAN W/EXT. AND PIPE OUTLET															128												1								
308+30	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET															128												1								
308+55	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET																	52										1								
309+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET																	44										1								
309+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET															66												1								
309+45	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET															44												1								
309+60	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET															12												1								
310+00	CONSTRUCT DROP INLET ON LT. W/EXT. AND PIPE OUTLET																	96										1				1				
310+00	CONSTRUCT DROP INLET LT. OF MEDIAN AND PIPE OUTLET			46																								1								
310+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET															38												1								
311+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET																	96										1								
311+00	CONSTRUCT DROP INLET ON RT. W/EXT. AND PIPE OUTLET															98												1			1					
312+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET																	96										1								
313+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET																	96										1								
314+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET																	96										1								
314+00	CONSTRUCT DROP INLET ON RT. AND PIPE OUTLET															298												1								
315+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET																96											1								
315+00	CONSTRUCT DROP INLET RT. OF MEDIAN AND PIPE OUTLET									38																		1								
316+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET																94											1								
316+00	CONSTRUCT DROP INLET RT. OF MEDIAN AND PIPE OUTLET																98											1								
317+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET																94											1								
317+00	CONSTRUCT DROP INLET RT. OF MEDIAN AND PIPE OUTLET																98											1								
SUBTOTALS (BOX 7 OF 8):		**28**	**38**	**82**						**38**						**1874**	**1480**	**1038**										**3**	**47**		**1**	**1**				

BASIS OF ESTIMATE:
WATER.....12.6 GAL. / SQ. YD. OF SOLID SODDING

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.

HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
09-12-22		6	ARK.	100657	151	418
		QUANTITIES				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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STRUCTURES (BOX 8 OF 8)

STATION	DESCRIPTION	REINFORCED CONCRETE PIPE CULVERT (CLASS III) 18"	24"	30"	36"	44"X27"	(CLASS IV) 30"	36"	48"	(CLASS V) 24"	36"	29"X18"	44"X27"	51"X31"	SIDE DRAIN 12"	PIPE CULVERT STORM DRAIN ALTERNATES 1 & 2 18"	24"	30"	36"	36"X23"	FLARED END SECTIONS FOR R.C. PIPE CULVERTS 18"	24"	30"	36"	48"	29"X18"	44"X27"	51"X31"	DROP INLETS TYPE C	MO	TYPE SPECIAL	EXT. 4	8'	JUNCT BOXES (TYPE E)	YARD DRAINS	SOLID SODDING	WATER	STD. DWG. NOS.
		LIN. FT.														EACH					EACH								EACH							SQ.YD.	M.GAL.	
317+50	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET															48													1								FPC-9E, FPC-9M, PCC-1, PCM-1
317+50	CONSTRUCT DROP INLET RT. OF MEDIAN AND PIPE OUTLET																48												1								FPC-9E, FPC-9M, PCC-1, PCM-1
318+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET															48													1								FPC-9E, FPC-9M, PCC-1, PCM-1
318+00	CONSTRUCT DROP INLET RT. OF MEDIAN AND PIPE OUTLET															48													1								FPC-9E, FPC-9M, PCC-1, PCM-1
319+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET															94													1								FPC-9E, FPC-9M, PCC-1, PCM-1
319+00	CONSTRUCT DROP INLET RT. OF MEDIAN AND PIPE OUTLET															98													1								FPC-9E, FPC-9M, PCC-1, PCM-1
320+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET															94													1								FPC-9E, FPC-9M, PCC-1, PCM-1
320+00	CONSTRUCT DROP INLET RT. OF MEDIAN AND PIPE OUTLET															98													1								FPC-9E, FPC-9M, PCC-1, PCM-1
321+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET															94													1								FPC-9E, FPC-9M, PCC-1, PCM-1
321+00	CONSTRUCT DROP INLET RT. OF MEDIAN AND PIPE OUTLET															98													1								FPC-9E, FPC-9M, PCC-1, PCM-1
322+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET															94													1								FPC-9E, FPC-9M, PCC-1, PCM-1
322+00	CONSTRUCT DROP INLET RT. OF MEDIAN AND PIPE OUTLET															98													1								FPC-9E, FPC-9M, PCC-1, PCM-1
323+00	CONSTRUCT DROP INLET ON LT. AND PIPE OUTLET															94													1								FPC-9E, FPC-9M, PCC-1, PCM-1
323+00	CONSTRUCT DROP INLET RT. OF MEDIAN AND PIPE OUTLET															98													1								FPC-9E, FPC-9M, PCC-1, PCM-1
324+00	CONSTRUCT DROP INLET RT. OF MEDIAN AND PIPE OUTLET															98													1								FPC-9E, FPC-9M, PCC-1, PCM-1
325+00	CONSTRUCT DROP INLET RT. OF MEDIAN AND PIPE OUTLET															98													1								FPC-9E, FPC-9M, PCC-1, PCM-1
326+00	CONSTRUCT DROP INLET ON LT.																													1							SPECIAL DETAILS
326+00	CONSTRUCT DROP INLET RT. OF MEDIAN AND PIPE OUTLET															96												1									FPC-9E, PCC-1, PCM-1
326+50	CONSTRUCT DROP INLET ON RT.																													1							SPECIAL DETAILS
329+00	CONSTRUCT DROP INLET ON LT.																													1							SPECIAL DETAILS
329+00	CONSTRUCT DROP INLET ON RT. W/EXT.																													1	1						SPECIAL DETAILS
337+00	CONSTRUCT DROP INLET ON RT. W/EXT.																													1	1						SPECIAL DETAILS
339+00	CONSTRUCT DROP INLET ON RT. W/EXT.																													1	1						SPECIAL DETAILS
341+00	CONSTRUCT DROP INLET ON RT. W/EXT.																													1	1						SPECIAL DETAILS
342+00	CONSTRUCT DROP INLET ON RT. W/EXT.																													1	1						SPECIAL DETAILS
342+65	CONSTRUCT DROP INLET ON RT. W/EXT.																													1	1						SPECIAL DETAILS
343+30	CONSTRUCT DROP INLET ON LT. W/EXT.																													1	1						SPECIAL DETAILS
343+30	CONSTRUCT DROP INLET ON RT. W/EXT.																													1	1						SPECIAL DETAILS
344+00	CONSTRUCT DROP INLET ON LT.																													1							SPECIAL DETAILS
344+00	CONSTRUCT DROP INLET ON RT.																													1							SPECIAL DETAILS
345+00	CONSTRUCT DROP INLET ON LT. W/EXT.																													1	1						SPECIAL DETAILS
345+00	CONSTRUCT DROP INLET ON RT. W/EXT.																													1	1						SPECIAL DETAILS
346+05	CONSTRUCT DROP INLET ON LT. AND PIPE INLET W/FES AND PIPE OUTLET ON 15° RT. FWD. SKEW							120																1					1						17	0.21	FES-', FES-2, FPC-9E, FPC-9M, PCC-1
347+62	CONSTRUCT DBL. ARCH PIPE CULVERT ON 15° RT. FWD. SKEW W/FES LT. AND RT.											136													4										36	0.45	FES-', FES-2, PCC-1
*	ENTIRE PROJECT TO BE USED AS DIRECTED BY THE ENGINEER														1200																		12				
SUBTOTALS (BOX 1 OF 8):		72	14		72	294	184				72					2854	1170		912	116	12	2	4	6					50		4	4	2		148	1.82	
SUBTOTALS (BOX 2 OF 8):		176	28						196	24				228		4500	858				13	3			4			4	48		16				225	2.79	
SUBTOTALS (BOX 3 OF 8):		18		16		192										1686	172	2224	574		2		2					50		3	4			36	0.44	
SUBTOTALS (BOX 4 OF 8):		90								228	200					1870	2826				18			4		1		1	40	7	5	2	1		134	1.61	
SUBTOTALS (BOX 5 OF 8):		318	66													1316	1284	1242	52		5							2	41	8	13				25	0.30	
SUBTOTALS (BOX 6 OF 8):		38	28													2886	1264	288										2	48		1						
SUBTOTALS (BOX 7 OF 8):		28	36	82						36						1674	1480	1036										3	47		1	1					
SUBTOTALS (BOX 8 OF 8):								120				136		1200		1392	48							1			4	1	17	15	10		12	53	0.66	
TOTALS:		740	174	98	72	486	184	120	196	62	300	200	136	228	1200	18378	9102	4792	1538	116	50	5	6	11	4	1	4	4	9	341	30	53	11	3	12	621	7.62	

BASIS OF ESTIMATE:
WATER.....12.6 GAL. / SQ. YD. OF SOLID SODDING

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.

STRUCTURES UNDER 20'-0"

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.
		LIN. FT.			CU.YD.	POUND	CU.YD.	SQ.YD.	M.GAL.	
121+50	CONSTRUCT DBL. 5' X 3' X 122' R.C. BOX CULVERT W/2:1 WINGS LT. AND RT.	5	3	122	116.21	14146	43	13	0.16	SPECIAL DETAILS, RCB-1, RCB-2
191+00	CONSTRUCT 8'X4'X93' R.C. BOX CULVERT	8	4	93	82.92	8893	44	16	0.20	SPECIAL DETAILS, RCB-1, RCB-2
TOTALS:					199.13	23039	87	29	0.36	

BASIS OF ESTIMATE:
WATER.....12.6 GAL. / SQ. YD. OF SOLID SODDING

HT39710 9/9/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
09-12-22		6	ARK.	100657	152	418
		QUANTITIES				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
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STRUCTURES OVER 20'-0"

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.
		LIN. FT.			CU.YD.	POUND	CU.YD.	SQ.YD.	M.GAL.	
148+23	CONSTRUCT TRI. 10' X 5' X 95' R.C. BOX CULVERT W/ 3:1 WINGS LT. AND RT.	10	5	95	284.72	40195	117	29	0.37	SPECIAL DETAILS, RCB-1, RCB-2
187+65	CONSTRUCT TRI. 10' X 5' X 97' W/ 3:1 WINGS LT. AND RT.	10	5	97	290.37	41001	119	29	0.37	SPECIAL DETAILS, RCB-1, RCB-2
240+55	CONSTRUCT DBL. 12' X 8' X 108' R.C. BOX CULVERT ON 15° RT. FWD. SKEW W/ 3:1 WINGS LT. AND RT.	12	8	108	324.65	54404	143	33	0.42	SPECIAL DETAILS, RCB-1, RCB-2
254+15	CONSTRUCT TRI. 12' X 12' X 106' R.C. BOX CULVERT ON 10° RT. FWD. SKEW W/ 3:1 WINGS LT. AND RT.	12	12	106	617.12	70475	204	48	0.60	SPECIAL DETAILS, RCB-1, RCB-2
303+60	CONSTRUCT DBL. 12' X 7' X 106' R.C. BOX CULVERT ON 5° LT. FWD. SKEW W/ 3:1 WINGS LT. AND RT.	12	7	106	302.90	45249	137	31	0.39	SPECIAL DETAILS, RCB-1, RCB-2
TOTALS:					**1819.76**	**251324**	**720**	**170**	**2.15**	

BASIS OF ESTIMATE:
WATER.....12.6 GAL. / SQ. YD. OF SOLID SODDING

DRIVEWAYS & TURNOUTS (BOX 1 OF 2)

STATION	SIDE	LOCATION	WIDTH	**MODIFIED CURB		PORTLAND CEMENT CONCRETE DRIVEWAY	ACHM SURFACE COURSE (1/2") 220 LBS. PER SQ. YD. (PG 64-22)		AGGREGATE BASE COURSE (CLASS 7)	SIDE DRAINS					STANDARD DRAWINGS
										18"	24"	30"	36"	48"	
			FEET	STATION	STATION	SQ. YD.	SQ. YD.	TON	TON	LIN. FT.					
113+33	RT	MAIN LANES	26	113+06	113+60	48.00	34.67	3.81	14.16						DR-1
113+63	LT	MAIN LANES	40	113+29	113+97	113.77									DR-1
114+44	LT	MAIN LANES	40	114+10	114+78	149.33									DR-1
116+42	LT	MAIN LANES - COMMERCE SQ. RD.	40				60.44	6.65	24.68						DR-2
117+57	RT	MAIN LANES	24	117+31	117+83	46.22	61.33	6.75	25.04						DR-1
117+87	LT	MAIN LANES	30	117+58	118+16	51.56	36.67	4.03	14.97						DR-1
124+49	RT	MAIN LANES	24	124+23	124+75	46.22	93.33	10.27	38.11				84		DR-1, PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
126+08	LT	MAIN LANES	40	125+74	126+42	220.44							56		DR-1, PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
129+36	LT	MAIN LANES	32	129+06	129+66	53.33	78.22	8.60	31.94				48		DR-1, PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
130+40	LT	MAIN LANES	40	130+06	130+74	149.33							58		DR-1, PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
133+26	LT	MAIN LANES	40	132+92	133+60	180.44							56		DR-1, PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
135+89	LT	MAIN LANES	40	135+55	136+23	60.44	124.44	13.69	50.81	56					DR-1, PCC-1, PCM-1, PCP-1, PCP-2, PCP-4
136+70	RT	MAIN LANES	40	136+36	137+04	60.44	88.89	9.78	36.30						DR-1
137+17	LT	MAIN LANES	40	136+83	137+51	60.44	124.44	13.69	50.81	54					DR-1, PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
138+18	RT	MAIN LANES	16	137+96	138+40	97.78									DR-1
139+79	LT	MAIN LANES - KRUEGER DR.	34				55.11	6.06	22.50						DR-2
139+79	RT	MAIN LANES - KRUEGER DR.	24				46.22	5.08	18.87						DR-2
141+35	RT	MAIN LANES	20	141+11	141+59	42.67	66.67	7.33	27.22						DR-1
142+10	LT	MAIN LANES	40	141+76	142+44	60.44	124.44	13.69	50.81						DR-1
142+29	RT	MAIN LANES	20	142+05	142+53	42.67	68.89	7.58	28.13						DR-1
143+40	LT	MAIN LANES	40	143+06	143+74	60.44	102.22	11.24	41.74						DR-1
145+48	RT	MAIN LANES - OPPORTUNITY DR.	24				46.22	5.08	18.87						DR-2
146+42	LT	MAIN LANES	24	146+16	146+68	46.22	58.67	6.45	23.96		40				DR-1, PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
147+18	RT	MAIN LANES	16	146+96	147+40	39.11	49.78	5.48	20.33	28					DR-1, PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
148+95	LT	MAIN LANES	24	148+39	149+21	168.89					52				DR-1, PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
149+03	RT	MAIN LANES	40	148+39	149+37	242.66					66				DR-1, PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
155+25	RT	MAIN LANES	40	154+91	155+59	184.88									DR-1
157+84	LT	MAIN LANES	24	157+58	158+10	102.22									DR-1
159+09	LT	MAIN LANES	36	158+77	159+41	56.89	96.00	10.56	39.20						DR-1
161+77	LT	MAIN LANES	30	161+48	162+06	51.56	110.00	12.10	44.92						DR-1
161+80	RT	MAIN LANES	40	161+46	162+14	207.11									DR-1
163+75	RT	MAIN LANES	40	163+41	164+09	251.55					64				DR-1, PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
165+15	LT	MAIN LANES	22	164+90	165+40	44.44	66.00	7.26	26.95						DR-1
165+75	RT	MAIN LANES	16	165+53	165+97	39.11	35.56	3.91	14.52						DR-1
166+56	RT	MAIN LANES	16	166+34	166+78	39.11	48.00	5.28	19.60						DR-1
168+00	RT	MAIN LANES	16	167+78	168+22	39.11	46.22	5.08	18.87						DR-1
169+05	RT	MAIN LANES	16	168+83	169+27	39.11	56.89	6.26	23.23						DR-1
169+69	RT	MAIN LANES - MILDRED DR.	24				46.22	5.08	18.87						DR-2
170+65	RT	MAIN LANES	16	170+43	170+87	39.11	58.67	6.45	23.96						DR-1
171+68	RT	MAIN LANES	16	171+46	171+90	39.11	55.11	6.06	22.50						DR-1
171+81	LT	MAIN LANES	32	171+51	172+11	53.33	99.56	10.95	40.65						DR-1
172+78	RT	MAIN LANES	20	172+54	173+02	42.67	73.33	8.07	29.94						DR-1
176+70	RT	MAIN LANES	40	176+36	177+04	60.44	84.44	9.29	34.48						DR-1
180+50	RT	MAIN LANES	40	180+16	180+84	60.44	128.89	14.18	52.63						DR-1
183+63	RT	MAIN LANES	40	183+29	183+97	247.11									DR-1
185+60	RT	MAIN LANES	40	185+26	185+94	207.11									DR-1
188+20	LT	MAIN LANES	16	187+98	188+42	39.11	110.22	12.12	45.01			32			DR-1, PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
194+25	RT	MAIN LANES	20	194+01	194+49	42.67	84.44	9.29	34.48	32					DR-1, PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
200+28	LT	MAIN LANES	16	200+06	200+50	39.11	78.22	8.60	31.94				88		DR-1, PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
SUBTOTALS (BOX 1 OF 2):						**3966.14**	**2598.42**	**285.80**	**1061.00**	**170**	**222**	**32**	**390**		

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

THE CONTRACTOR, WITH THE APPROVAL OF THE ENGINEER, WILL BE ALLOWED TO SUBSTITUTE A HIGHER PERFORMANCE GRADE ASPHALT SURFACE COURSE FOR DRIVEWAYS AND MINOR SIDE STREET CONSTRUCTION AT NO ADDITIONAL COST TO THE DEPARTMENT.

** FOR INFORMATION ONLY

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.

HT39710 9/9/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
09-12-22		6	ARK.	100657	153	418
		QUANTITIES				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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DRIVEWAYS & TURNOUTS (BOX 2 OF 2)

STATION	SIDE	LOCATION	WIDTH	**MODIFIED CURB		PORTLAND CEMENT CONCRETE DRIVEWAY	ACHM SURFACE COURSE (1/2") 220 LBS. PER SQ. YD. (PG 64-22)		AGGREGATE BASE COURSE (CLASS 7)	SIDE DRAINS					STANDARD DRAWINGS
										18"	24"	30"	36"	48"	
			FEET	STATION	STATION	SQ. YD.	SQ. YD.	TON	TON	LIN. FT.					
208+88	RT	MAIN LANES	26	208+61	209+15	48.00	63.56	6.99	25.95						DR-1
210+25	LT	MAIN LANES	40	209+91	210+59	216.00							116		DR-1, PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
210+25	RT	MAIN LANES	24	209+99	210+51	80.89									DR-1
213+20	LT	MAIN LANES	16	212+98	213+42	39.11	64.00	7.04	26.13			60			DR-1, PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
213+20	RT	MAIN LANES	24	212+94	213+46	83.55									DR-1
214+83	LT	MAIN LANES	24	214+57	215+09	128.89						72			DR-1, PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
216+29	LT	MAIN LANES	24	216+03	216+55	126.22						72			DR-1, PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
217+82	LT	MAIN LANES	16	217+60	218+04	39.11	35.56	3.91	14.52						DR-1
219+22	RT	MAIN LANES	24	218+96	219+48	46.22	74.67	8.21	30.49						DR-1
221+10	LT	MAIN LANES	26	220+83	221+37	48.00	104.00	11.44	42.47						DR-1
221+22	RT	MAIN LANES	24	220+96	221+48	131.55									DR-1
222+17	LT	MAIN LANES	12	221+97	222+37	35.56	32.00	3.52	13.07						DR-1
222+72	RT	MAIN LANES	24	222+46	222+98	126.22									DR-1
223+43	LT	MAIN LANES	16	223+21	223+65	39.11	44.44	4.89	18.15						DR-1
224+21	RT	MAIN LANES	24	223+95	224+47	123.55									DR-1
224+67	LT	MAIN LANES	12	224+47	224+87	78.23									DR-1
227+11	RT	MAIN LANES - DRIVE OFF OF PACIFIC RD.	20				52.80	5.81	21.56						DR-2
227+31	LT	MAIN LANES - PACIFIC RD.	22				240.00	26.40	98.00						DR-2
227+31	RT	MAIN LANES - PACIFIC RD.	22				460.00	50.60	187.83						DR-2
286+30	LT	MAIN LANES	24	286+04	286+56	46.22	72.00	7.92	29.40						DR-1
289+48	LT	MAIN LANES - PROSPECT RD.	22				191.11	21.02	78.04						DR-2
289+48	RT	MAIN LANES - PROSPECT RD.	22				264.44	29.09	107.98						DR-2
352+60	RT	MAIN LANES	20			266.34				30					PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
353+20	RT	MAIN LANES	22				72.12	7.93	29.45	32					PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
502+30	LT	CW POST	24			51.23	34.67	3.81	14.16		36				PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
502+44	RT	CW POST	30			61.90	20.00	2.20	8.17		40				PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
504+40	RT	CW POST	40			79.68	53.33	5.87	21.78		56				PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
509+82	RT	CW POST	40				275.24	30.28	112.39					120	PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
* ENTIRE PROJECT TEMPORARY DRIVES									770.00						
SUBTOTALS (BOX 2 OF 2):						**1895.58**	**2153.94**	**236.93**	**1649.54**	**62**	**132**	**204**	**116**	**120**	
TOTALS:						**5861.72**	**4752.36**	**522.73**	**2710.54**	**232**	**354**	**236**	**506**	**120**	

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

THE CONTRACTOR, WITH THE APPROVAL OF THE ENGINEER, WILL BE ALLOWED TO SUBSTITUTE A HIGHER PERFORMANCE GRADE ASPHALT SURFACE COURSE FOR DRIVEWAYS AND MINOR SIDE STREET CONSTRUCTION AT NO ADDITIONAL COST TO THE DEPARTMENT.

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

'* FOR INFORMATION ONLY

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.

APPROACH SLABS

STATION	STATION	LOCATION	APPROACH SLABS (TYPE SPECIAL)	REINFORCING STEEL-RDWY. (GR. 60)	AGGREGATE BASE CRS. (CLASS 7)
			CU.YD.	POUND	TON
330+49.55	330+95.82	BRIDGE HWY. 18 OVER UPRR & KATHLEEN ST.	166.89	20340	95.3
335+50.18	335+96.45	BRIDGE HWY. 18 OVER UPRR & KATHLEEN ST.	166.89	20340	95.3
TOTALS:			**333.78**	**40680**	**190.6**

ASPHALT CONCRETE PATCHING FOR MAINTENANCE OF TRAFFIC

LOCATION	TON	TACK COAT
		GALLON
ENTIRE PROJECT - TO BE USED IF AND WHERE	125	250
DIRECTED BY THE ENGINEER		
TOTALS:	**125**	**250**

NOTE: QUANTITIES ARE ESTIMATED.
SEE SECTION 104.03 OF THE STD. SPECS.
BASIS OF ESTIMATE:
ASPHALT CONCRETE PATCHING FOR MAINTENANCE OF TRAFFIC...25 TON/MILE
TACK COAT FOR MAINTENANCE OF TRAFFIC.....50 GAL./MILE

ACHM PATCHING OF EXISTING ROADWAY

DESCRIPTION	TON
ENTIRE PROJECT - TO BE USED IF AND WHERE	125
DIRECTED BY THE ENGINEER	
TOTAL:	**125**

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

COLD MILLING ASPHALT PAVEMENT

STATION	STATION	LOCATION	AVG. WIDTH	COLD MILLING ASPHALT PAVEMENT
			FEET	SQ. YD.
110+40.98	111+40.98	MAIN LANES - 100' TRANSITION & RADIUS AREAS	152.00	1688.89
111+40.98	117+00.00	MAIN LANES	22.00	1366.49
128+00.00	136+00.00	MAIN LANES	20.00	1777.78
145+00.00	157+00.00	MAIN LANES	17.00	2266.67
167+00.00	172+00.00	MAIN LANES	22.00	1222.22
208+00.00	209+20.00	MAIN LANES	10.00	133.33
214+00.00	220+00.00	MAIN LANES	16.00	1066.67
355+00.00	356+00.00	MAIN LANES - 100' TRANSITION	23.00	255.56
501+26.25	502+26.25	CW POST - 100' TRANSITION	22.00	244.44
512+73.95	513+73.25	CW POST - 100' TRANSITION	24.00	264.80
TOTAL:				**10286.85**

NOTE: AVERAGE MILLING DEPTH 1".

COLD MILLINGS SHALL BE STOCKPILED AT THE FOLLOWING LOCATION:
CRAIGHEAD COUNTY ROAD DEPARTMENT
2800 MOORE RD
JONESBORO, AR 72401

HT.39710 9/9/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	154	418
		QUANTITIES				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

May 17 2022 12:37 PM

DocuSign

BASE AND SURFACING

STATION	STATION	LOCATION	LENGTH	AGGREGATE BASE COURSE (CLASS 7)		TACK COAT							ACHM BASE COURSE (1 1/2")				ACHM BINDER COURSE (1")				ACHM SURFACE COURSE (1/2")							
						(0.05 GAL. PER SQ. YD.)			(0.17 GAL. PER SQ. YD.)																			
				TON / STATION	TON	TOTAL WID.	SQ.YD.	GALLON	TOTAL WID.	SQ.YD.	GALLON	TOTAL GALLONS	AVG. WID.	SQ.YD.	POUND / SQ.YD.	PG 70-22	AVG. WID.	SQ.YD.	POUND / SQ.YD.	PG 70-22	AVG. WID.	SQ.YD.	POUND / SQ.YD.	PG 76-22	AVG. WID.	SQ.YD.	POUND / SQ.YD.	PG 76-22	TOTAL PG 76-22
			FEET			FEET			FEET				FEET			TON	FEET			TON	FEET			TON	FEET			TON	TON
MAIN LANES																												
110+40.98	111+40.98	MAIN LANES - 100' TRANSITION & RADIUS AREAS	100.00			VAR.	1414.44	70.72				70.72	VAR.	383.11	880.00	168.57	VAR.	324.11	330.00	53.48	VAR.	324.11	220.00	35.65	VAR.	1466.56	220.00	161.32	196.97
111+40.98	129+00.00	MAIN LANES - 22' NOTCH, 58' FACE-FACE	1759.02			168.00	32835.04	1641.75				1641.75	39.00	7622.42	880.00	3353.86	34.00	6645.19	330.00	1095.46	34.00	6645.19	220.00	730.97	56.00	10945.01	220.00	1203.95	1934.92
129+00.00	145+00.00	MAIN LANES - 22' NOTCH (17' MAX. OFFSET LT.), 58' FACE - FACE	1600.00			163.00	28977.78	1448.89				1448.89	36.50	6488.89	880.00	2855.11	34.00	6044.44	330.00	997.33	34.00	6044.44	220.00	684.89	56.00	9955.56	220.00	1095.11	1760.00
145+00.00	174+28.00	MAIN LANES - 22' NOTCH, 58' FACE-FACE	2928.00			168.00	54656.00	2732.80				2732.80	39.00	12688.00	880.00	5582.72	34.00	11061.33	330.00	1825.12	34.00	11061.33	220.00	1216.75	56.00	18218.67	220.00	2004.05	3220.80
174+86.00	227+31.00	MAIN LANES - 22' NOTCH, 58' FACE-FACE	5245.00			168.00	97906.67	4895.33				4895.33	39.00	22728.33	880.00	10000.47	34.00	19814.44	330.00	3269.38	34.00	19814.44	220.00	2179.59	56.00	32635.56	220.00	3589.91	5769.50
227+31.00	228+99.88	MAIN LANES - FULL DEPTH, 58' FACE-FACE	168.88	237.25	400.67	173.00	3246.25	162.31				162.31	61.00	1144.63	550.00	314.77	56.00	1050.81	330.00	173.38	56.00	1050.81	220.00	115.59	56.00	1050.81	220.00	115.59	231.18
228+99.88	231+24.88	MAIN LANES - FULL DEPTH, 225' TAPER	225.00	256.75	577.69	188.00	4700.00	235.00				235.00	66.00	1650.00	550.00	453.75	61.00	1525.00	330.00	251.63	61.00	1525.00	220.00	167.75	61.00	1525.00	220.00	167.75	335.50
231+24.88	231+99.88	MAIN LANES - 75' MEDIAN TAPER	75.00	239.25	179.44	164.50	1370.83	68.54				68.54	61.50	512.50	550.00	140.94	51.50	429.17	330.00	70.81	51.50	429.17	220.00	47.21	51.50	429.17	220.00	47.21	94.42
231+99.88	243+39.88	MAIN LANES - FULL DEPTH RAISED MEDIAN, 68' FACE - FACE	1140.00	225.50	2570.70	154.00	19506.67	975.33				975.33	58.00	7346.67	550.00	2020.33	48.00	6080.00	330.00	1003.20	48.00	6080.00	220.00	668.80	48.00	6080.00	220.00	668.80	1337.60
243+39.88	246+39.88	MAIN LANES - FULL DEPTH RAISED MEDIAN 300' TAPER	300.00	308.50	925.50	218.05	7268.33	363.42				363.42	79.35	2645.00	550.00	727.38	69.35	2311.67	330.00	381.43	69.35	2311.67	220.00	254.28	69.35	2311.67	220.00	254.28	508.56
246+39.88	247+59.88	MAIN LANES - FULL DEPTH MEDIAN BREAK, 90' FACE - FACE	120.00	321.50	385.80	237.92	3172.27	158.61				158.61	82.64	1101.87	550.00	303.01	77.64	1035.20	330.00	170.81	77.64	1035.20	220.00	113.87	77.64	1035.20	220.00	113.87	227.74
247+59.88	250+59.88	MAIN LANES - FULL DEPTH RAISED MEDIAN 300' TAPER	300.00	308.50	925.50	218.05	7268.33	363.42				363.42	79.35	2645.00	550.00	727.38	69.35	2311.67	330.00	381.43	69.35	2311.67	220.00	254.28	69.35	2311.67	220.00	254.28	508.56
250+59.88	263+39.88	MAIN LANES - FULL DEPTH RAISED MEDIAN, 68' FACE - FACE	1280.00	225.50	2886.40	154.00	21902.22	1095.11				1095.11	58.00	8248.89	550.00	2268.44	48.00	6826.67	330.00	1123.40	48.00	6826.67	220.00	750.93	48.00	6826.67	220.00	750.93	1501.86
263+39.88	266+39.88	MAIN LANES - FULL DEPTH RAISED MEDIAN 300' TAPER	300.00	308.50	925.50	218.05	7268.33	363.42				363.42	79.35	2645.00	550.00	727.38	69.35	2311.67	330.00	381.43	69.35	2311.67	220.00	254.28	69.35	2311.67	220.00	254.28	508.56
266+39.88	267+59.88	MAIN LANES - FULL DEPTH MEDIAN BREAK, 90' FACE - FACE	120.00	321.50	385.80	237.92	3172.27	158.61				158.61	82.64	1101.87	550.00	303.01	77.64	1035.20	330.00	170.81	77.64	1035.20	220.00	113.87	77.64	1035.20	220.00	113.87	227.74
267+59.88	270+59.88	MAIN LANES - FULL DEPTH RAISED MEDIAN 300' TAPER	300.00	308.50	925.50	218.05	7268.33	363.42				363.42	79.35	2645.00	550.00	727.38	69.35	2311.67	330.00	381.43	69.35	2311.67	220.00	254.28	69.35	2311.67	220.00	254.28	508.56
270+59.88	285+98.39	MAIN LANES - FULL DEPTH RAISED MEDIAN, 68' FACE - FACE	1538.51	225.50	3469.34	154.00	26325.62	1316.28				1316.28	58.00	9914.84	550.00	2726.58	48.00	8205.39	330.00	1353.89	48.00	8205.39	220.00	902.59	48.00	8205.39	220.00	902.59	1805.18
285+98.39	288+98.39	MAIN LANES - FULL DEPTH RAISED MEDIAN 300' TAPER	300.00	308.50	925.50	218.05	7268.33	363.42				363.42	79.35	2645.00	550.00	727.38	69.35	2311.67	330.00	381.43	69.35	2311.67	220.00	254.28	69.35	2311.67	220.00	254.28	508.56
288+98.39	289+96.39	MAIN LANES - FULL DEPTH MEDIAN BREAK, 90' FACE - FACE	98.00	361.75	354.52	269.00	2929.11	146.46				146.46	93.00	1012.67	550.00	278.48	88.00	958.22	330.00	158.11	88.00	958.22	220.00	105.40	88.00	958.22	220.00	105.40	210.80
289+96.39	292+96.39	MAIN LANES - FULL DEPTH RAISED MEDIAN 300' TAPER	300.00	308.50	925.50	218.05	7268.33	363.42				363.42	79.35	2645.00	550.00	727.38	69.35	2311.67	330.00	381.43	69.35	2311.67	220.00	254.28	69.35	2311.67	220.00	254.28	508.56
292+96.39	305+39.88	MAIN LANES - FULL DEPTH RAISED MEDIAN, 68' FACE - FACE	1243.49	225.50	2804.07	154.00	21277.50	1063.88				1063.88	58.00	8013.60	550.00	2203.74	48.00	6631.95	330.00	1094.27	48.00	6631.95	220.00	729.51	48.00	6631.95	220.00	729.51	1459.02
305+39.88	308+39.88	MAIN LANES - FULL DEPTH RAISED MEDIAN 300' TAPER	300.00	308.50	925.50	218.05	7268.33	363.42				363.42	79.35	2645.00	550.00	727.38	69.35	2311.67	330.00	381.43	69.35	2311.67	220.00	254.28	69.35	2311.67	220.00	254.28	508.56
308+39.88	309+59.88	MAIN LANES - FULL DEPTH MEDIAN BREAK, 90' FACE - FACE	120.00	321.50	385.80	237.92	3172.27	158.61				158.61	82.64	1101.87	550.00	303.01	77.64	1035.20	330.00	170.81	77.64	1035.20	220.00	113.87	77.64	1035.20	220.00	113.87	227.74
309+59.88	312+59.88	MAIN LANES - FULL DEPTH RAISED MEDIAN 300' TAPER	300.00	308.50	925.50	218.05	7268.33	363.42				363.42	79.35	2645.00	550.00	727.38	69.35	2311.67	330.00	381.43	69.35	2311.67	220.00	254.28	69.35	2311.67	220.00	254.28	508.56
312+59.88	323+89.88	MAIN LANES - FULL DEPTH RAISED MEDIAN, 68' FACE - FACE	1130.00	225.50	2548.15	154.00	19335.56	966.78				966.78	58.00	7282.22	550.00	2002.61	48.00	6026.67	330.00	994.40	48.00	6026.67	220.00	662.93	48.00	6026.67	220.00	662.93	1325.86
323+89.88	327+89.88	MAIN LANES - FULL DEPTH RAISED MEDIAN 400' TAPER	400.00	297.50	1190.00	209.50	9311.11	465.56				465.56	76.50	3400.00	550.00	935.00	66.50	2955.56	330.00	487.67	66.50	2955.56	220.00	325.11	66.50	2955.56	220.00	325.11	650.22
327+89.88	329+39.88	MAIN LANES - FULL DEPTH, 150' TAPER	150.00	293.50	440.25	216.50	3608.33	180.42				180.42	75.50	1258.33	550.00	346.04	70.50	1175.00	330.00	193.88	70.50	1175.00	220.00	129.25	70.50	1175.00	220.00	129.25	258.50
329+39.88	330+49.55	MAIN LANES - FULL DEPTH, 58' FACE - FACE	109.67	237.25	260.19	173.00	2108.10	105.41				105.41	61.00	743.32	550.00	204.41	56.00	682.39	330.00	112.59	56.00	682.39	220.00	75.06	56.00	682.39	220.00	75.06	150.12
335+96.45	346+63.59	MAIN LANES - FULL DEPTH, 58' FACE - FACE	1067.14	237.25	2531.79	173.00	20512.80	1025.64				1025.64	61.00	7232.84	550.00	1989.03	56.00	6639.98	330.00	1095.60	56.00	6639.98	220.00	730.40	56.00	6639.98	220.00	730.40	1460.80
347+19.35	348+27.03	CLINTON SCHOOL RD. - FULL DEPTH, 38' FACE - FACE	107.68	179.25	193.02	128.36	1535.76	76.79				76.79	46.12	551.80	550.00	151.75	41.12	491.98	330.00	81.18	41.12	491.98	220.00	54.12	41.12	491.98	220.00	54.12	108.24
348+27.03	348+73.69	CLINTON SCHOOL RD. - FULL DEPTH, 3 LANE OPEN SHOULDER	46.66	356.00	166.11	109.50	567.70	28.39				28.39	36.79	190.74	550.00	52.45	36.46	189.02	330.00	31.19	36.25	187.94	220.00	20.67	44.00	228.12	220.00	25.09	45.76
348+73.69	351+43.69	CLINTON SCHOOL RD. - FULL DEPTH, OPEN SHOULDER, 270' TAPER	270.00	299.38	808.33	91.50	2745.00	137.25				137.25	30.79	923.70	550.00	254.02	30.46	913.80	330.00	150.78	30.25	907.50	220.00	99.83	38.00	1140.00	220.00	125.40	225.23
351+43.69	355+00.00	CLINTON SCHOOL RD. - FULL DEPTH, 2 LANE OPEN SHOULDER	356.31	242.75	864.94	73.50	2909.87	145.49				145.49	24.92	986.58	550.00	271.31	24.46	968.37	330.00	159.78	24.25	960.06	220.00	105.61	32.00	1266.88	220.00	139.36	244.97
355+00.00	356+00.00	CLINTON SCHOOL RD. - 100' TRANSITION	100.00	139.63	139.63	3.76	41.78	2.09				2.09	1.40	15.56	550.00	4.28	1.23	13.37	330.00	2.26	1.13	12.56	220.00	1.38	27.00	300.00	220.00	33.00	34.38
501+26.25	502+26.25	CW POST - 100' TRANSITION	100.00	60.50	60.50	40.15	446.11	22.31				22.31													26.00	288.89	220.00	31.78	31.78
502+26.25	507+86.06	CW POST	559.81	121.00	677.37	104.43	6495.66	324.78				324.78	22.51	1400.15	880.00	616.07	22.17	1379.00	330.00	227.54	21.96	1365.94	220.00	150.25	45.00	2799.05	220.00	307.90	458.15
508+42.07	512+73.95	CW POST	431.88	121.00	522.57	89.13	4277.05	213.85				213.85	16.15	774.98	880.00	340.99	15.82	759.15	330.00	125.26	15.61	749.07	220.00	82.40	48.76	2339.83	220.00	257.38	339.78
512+73.95	513+73.95	CW POST - 100' TRANSITION	100.00	60.50	60.50	40.15	446.11	22.31				22.31													32.00	355.56	220.00	39.11	39.11
650+11.84	656+13.02	KATHLEEN ST. CONNECTOR	601.18	309.25	1859.15	73.50	4909.64	245.48				245.48	24.79	1655.92	550.00	455.38	24.46	1633.87	330.00	269.59	24.25	1619.85	220.00	178.18	40.00	2671.91	220.00	293.91	472.09
ADDITIONAL FOR LEVELING																													
112+00.00	227+31.00	MAIN LANES	11531.00						22.00	28186.89	4791.77	4791.77													VAR.	1567.50	VAR.	5167.80	5167.80
502+26.25	507+86.06	CW POST	559.81						15.29	951.05	161.68	161.68													VAR.	14.10	VAR.	67.32	67.32
508+42.07	512+73.95	CW POST	431.88						25.40	1218.86	207.21	207.21													VAR.	19.50	VAR.	85.14	85.14
ADDITIONAL FOR MAINTENANCE OF TRAFFIC - TEMPORARY WIDENING																													
184+84.00	186+00.00	MAIN LANES - STAGE 1 TEMP. WIDENING TAPER	116.00	21.88	25.38	7.43	95.76	4.79				4.79	3.40	43.82	880.00	19.28	3.53	45.50	330.00	7.51	4.50	58.00	220.00	8.38					6.38
186+00.00	193+00.00	MAIN LANES - STAGE 1 TEMP. WIDENING	700.00	29.00	203.00	14.85	1155.00	57.75				57.75	6.79	528.11	880.00	232.37	7.06	549.11	330.00	90.60	9.00	700.00	220.00	77.00					77.00
193+00.00	194+30.00	MAIN LANES - STAGE 1 TEMP. WIDENING TAPER	130.00	21.88	28.44	7.43	107.32	5.37				5.37	3.40	49.11	880.00	21.61	3.53	50.99	330.00	8.41	4.50	65.00	220.00	7.15					7.15
ADDITIONAL FOR SUPERELEVATION																													
347+20.00	348+75.74	CLINTON SCHOOL RD.	155.74	17.63	27.46																								
348+75.74	349+77.98	CLINTON SCHOOL RD.	102.24	35.25	36.04																								
349+77.98	351+33.72	CLINTON SCHOOL RD.	155.74	17.63	27.46																								
351+33.72	352+87.39	CLINTON SCHOOL RD.	153.67	17.50	26.89																								
352+87.39	353+46.33	CLINTON SCHOOL RD.	58.94	35.00	20.63																								
353+46.33	355+00.00	CLINTON SCHOOL RD.	153.67	17.50	26.89																								
650+67.77	652+82.77	KATHLEEN ST. CONNECTOR	215.00	59.25	127.39																								
652+82.77	653+54.00	KATHLEEN ST. CONNECTOR	71.23	118.50	84.41																								
653+54.00	655+69.00	KATHLEEN ST. CONNECTOR	215.00	59.25	127.39																								
TOTALS:					34888.11		465320.24	23266.05		30356.80	5160.66	28426.71		139257.34		46992.43		121669.74		20075.57		121793.18		13397.20		157490.45		22468.03	35865.23

BASIS OF ESTIMATE:
ACHM SURFACE COURSE (1/2").....94.8% MIN. AGGR.....5.2% ASPHALT BINDER
ACHM BINDER COURSE (1").....95.9% MIN. AGGR.....4.1% ASPHALT BINDER
ACHM BASE COURSE (1 1/2").....96.1% MIN. AGGR.....3.9% ASPHALT BINDER
MAXIMUM NUMBER OF GYRATIONS = 160 FOR PG 70-22
MAXIMUM NUMBER OF GYRATIONS = 205 FOR PG 76-22
TACK COAT QUANTITIES WERE CALCULATED USING THE EMULSIFIED ASPHALT RATES. REFER TO SS-400-1 FOR THE RESIDUAL ASPHALT APPLICATION RATES.

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
10-19-2022				6	ARK.		155	418
				JOB NO.		100657		
				①		07533 - QUANTITIES - 63960		

SCHEDULE OF BRIDGE QUANTITIES - JOB NO. 100657

BRIDGE NO. / NAME PLATE TITLE	UNIT OF STRUCTURE	ITEM NO.	~~619~~	801	SP, SS, & 802	SP, SS, & 802	SP & 803	SS & 804	SS & 804	SS & 805	SS & 806	SP, SS & 807	SS & 807	SS & 808	SS & 809	812	SS & 816	SP JOB 100657
		ITEM	5' STEEL CHAIN LINK FENCE	UNCLASSIFIED EXCAVATION FOR STRUCTURES - BRIDGE	CLASS S CONCRETE - BRIDGE	CLASS S(AE) CONCRETE - BRIDGE	CLASS 1 PROTECTIVE SURFACE TREATMENT	REINFORCING STEEL - BRIDGE (GRADE 60)	EPOXY COATED REINFORCING STEEL (GRADE 60)	① STEEL SHELL PILING (18" DIA.)	METAL BRIDGE RAILING (TYPE H2)	STRUCTURAL STEEL IN PLATE GIRDER SPANS (A709, GR. 50W)	②PAINTING STRUCTURAL STEEL	ELASTOMERIC BEARINGS	SILICONE JOINT SEAL	BRIDGE NAME PLATE (TYPE D)	CONCRETE RIPRAP	ARCHITECTURAL FINISH
		UNIT	LIN. FT.	CU. YD.	CU. YD.	CU. YD.	GAL.	LB.	LB.	LIN. FT.	LIN. FT.	LB.	TON	CU. IN.	LIN. FT.	EACH	CU. YD.	SQ. FT.
07533 HIGHWAY 18 OVER UPRR & KATHLEEN STREET	BENT NO. 1			142.75		0.3	25,387	759	1,660		5,639		10,655.2	79		225	27
	BENT NO. 2		596	443.25			110,789		4,845		4,406		6,703.8				930
	BENT NO. 3		704	445.20			112,076		4,845		4,406		6,703.8				931
	BENT NO. 4			138.80		0.3	26,778	759	1,660		5,639		10,665.2	79		223	27
	452'-0" CONT. PL GIRDER UNIT		255		1,153.70		79.3		⚠1 ~~273,002~~ 273,512		650	1,641,640	34.8			1		1,808
	TOTALS FOR JOB NO. 100657		255	1,300	1,170.00	1,153.70	79.9	275,030	⚠1 ~~274,520~~ 275,030	13,010	650	1,661,730	34.8	34,728.0	158	1	448	3,723

⚠1 SS & 619

① Steel shell piles shall conform to ASTM A252, Grade 3, Fy = 45 ksi.

② All Grade 50W structural steel, except galvanized members, surfaces in contact with concrete, and the expansion device, within ten feet of bridge deck expansion joints shall be painted as specified in Subsection 807.75. The color of paint shall be Brown equal or close to Federal Std. 595B, Color Chip No. 30070 and as approved by the Engineer. The finish system may be applied in the shop. Any damage to the paint system occurring during transport or installation shall be corrected according to the manufacturer's recommendations at no cost to the Department. ASTM F3125, Grade A325 Type 3 bolts shall be used within these painted zones and shall be painted.

THOMAS GERARD
DESIGN SECTION SUPERVISOR

⚠1 Add SS reference & revision of rebar quantities.
Rev. by: JWP 10/12/2022
Ck. by: MCB 10/18/2022

STATE OF ARKANSAS
Oct 18 2022 2:32 PM
LICENSED PROFESSIONAL ENGINEER
No. 9235
CHARLES R. ELLIS

BRIDGE ENGINEER

SCHEDULE OF BRIDGE QUANTITIES
I-555 - HWY. 49 (DR. MARTIN LUTHER KING JR. DR. EXTENSION) (JONESBORO) (S)
CRAIGHEAD COUNTY

ROUTE 18 SEC. 45

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: JWP DATE: 1/19/2021 FILENAME: b100657_q1.dgn
CHECKED BY: MCB DATE: 8/25/2021 SCALE: No Scale
DESIGNED BY: --- DATE: ---

BRIDGE NO. 07533 DRAWING NO. 63960

PRINT DATE: 10/18/2022

SUMMARY OF QUANTITIES (BOX 1 OF 2)

	ITEM NUMBER	ITEM		QUANTITY	UNIT
	SP & 201	CLEARING		140	STATION
	201	GRUBBING		140	STATION
	202	REMOVAL AND DISPOSAL OF CURB		2457	LIN. FT.
	202	REMOVAL AND DISPOSAL OF FENCE		2782	LIN. FT.
	202	REMOVAL AND DISPOSAL OF GATES		3	EACH
	202	REMOVAL AND DISPOSAL OF BRICK WALLS		54	LIN. FT.
	202	REMOVAL AND DISPOSAL OF CONCRETE PAVEMENT		1106	SQ. YD.
	202	REMOVAL AND DISPOSAL OF CONCRETE DRIVEWAYS		3379	SQ. YD.
	202	REMOVAL AND DISPOSAL OF WALKS		199	SQ. YD.
	202	REMOVAL AND DISPOSAL OF FOOT BRIDGE		1	EACH
	202	REMOVAL AND DISPOSAL OF SIGN FOUNDATIONS		12	EACH
	202	REMOVAL AND DISPOSAL OF JUNCTION BOXES		3	EACH
	202	REMOVAL AND DISPOSAL OF DROP INLETS		6	EACH
	202	REMOVAL AND DISPOSAL OF PIPE CULVERTS		116	EACH
	202	REMOVAL AND DISPOSAL OF BOX CULVERTS		2	EACH
	202	REMOVAL AND DISPOSAL OF GUARDRAIL		156	LIN. FT.
	202	REMOVAL AND DISPOSAL OF BUILDINGS		2	EACH
	202	REMOVAL AND DISPOSAL OF SIGNS		13	EACH
	202	REMOVAL AND DISPOSAL OF PLANTERS		9	EACH
	SS & 206	FLOWABLE SELECT MATERIAL		245	CU. YD.
	SP, SS, & 210	UNCLASSIFIED EXCAVATION		38324	CU. YD.
	SP & 210	COMPACTED EMBANKMENT		347078	CU. YD.
	SP & 210	SOIL STABILIZATION		3000	TON
	SP, SS, & 303	AGGREGATE BASE COURSE (CLASS 7)		37789	TON
	SP, SS, & 309	PORTLAND CEMENT CONCRETE BASE (5" UNIFORM THICKNESS)		356	SQ. YD.
	SP, SS, & 309	PORTLAND CEMENT CONCRETE BASE (8" UNIFORM THICKNESS)		800	SQ. YD.
	SS & 401	TACK COAT		28677	GAL.
	SP, SS, & 405	MINERAL AGGREGATE IN ACHM BASE COURSE (1 1/2")		45160	TON
	SP, SS, & 405	ASPHALT BINDER (PG 70-22) IN ACHM BASE COURSE (1 1/2")		1833	TON
	SP, SS, & 406	MINERAL AGGREGATE IN ACHM BINDER COURSE (1")		19253	TON
	SP, SS, & 406	ASPHALT BINDER (PG 70-22) IN ACHM BINDER COURSE (1")		823	TON
	SP, SS, & 407	MINERAL AGGREGATE IN ACHM SURFACE COURSE (1/2")		34496	TON
	SP, SS, & 407	ASPHALT BINDER (PG 64-22) IN ACHM SURFACE COURSE (1/2")		27	TON
	SP, SS, & 407	ASPHALT BINDER (PG 76-22) IN ACHM SURFACE COURSE (1/2")		1865	TON
	SP & 412	COLD MILLING ASPHALT PAVEMENT		10287	SQ. YD.
	SP, SS, & 414	ASPHALT CONCRETE PATCHING FOR MAINTENANCE OF TRAFFIC		125	TON
	SP, SS, & 415	ACHM PATCHING OF EXISTING ROADWAY		125	TON
	SP, SS, & 504	APPROACH SLABS		333.78	CU. YD.
	SP, SS, & 505	PORTLAND CEMENT CONCRETE DRIVEWAY		5861.72	SQ. YD.
	601	MOBILIZATION		1.00	LUMP SUM
	SP & 602	FURNISHING FIELD OFFICE		1	EACH
	SP, SS, & 603	MAINTENANCE OF TRAFFIC		1.00	LUMP SUM
	SS & 604	SIGNS		1498	SQ. FT.
	SP, SS, & 604	CONSTRUCTION PROJECT INFORMATION SIGN UPDATE		10	EACH
	SS & 604	BARRICADES		320	LIN. FT.
	SS & 604	TRAFFIC DRUMS		325	EACH
	SS & 604	TRAFFIC CONE		204	EACH
	SS & 604	FURNISHING AND INSTALLING PRECAST CONCRETE BARRIER		631	LIN. FT.
	SS & 604	RELOCATING PRECAST CONCRETE BARRIER		552	LIN. FT.
	604	CONSTRUCTION PAVEMENT MARKINGS		113599	LIN. FT.
	604	CONSTRUCTION PAVEMENT MARKINGS (WORDS)		4	EACH
	604	CONSTRUCTION PAVEMENT MARKINGS (ARROWS)		4	EACH
	604	REMOVAL OF CONSTRUCTION PAVEMENT MARKINGS		34152	LIN. FT.
	604	REMOVAL OF PERMANENT PAVEMENT MARKINGS		3000	LIN. FT.
	SS & 604	VERTICAL PANELS		325	EACH
	SP, SS, & 605	CONCRETE DITCH PAVING (TYPE B)		1368	SQ. YD.
	SP	CULVERT CLEAN OUT		1	EACH
	SS & 606	18" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)		740	LIN. FT.
*	SS & 606	18" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)	(ALTERNATE NO. 1)	18378	LIN. FT.
*	SS & 606	18" SMOOTH LINED POLYMER PRECOATED METALLIC COATED CORRUGATED STEEL PIPE	(ALTERNATE NO. 2)	18378	LIN. FT.
	SS & 606	24" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)		174	LIN. FT.
*	SS & 606	24" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)	(ALTERNATE NO. 1)	9102	LIN. FT.
*	SS & 606	24" SMOOTH LINED POLYMER PRECOATED METALLIC COATED CORRUGATED STEEL PIPE	(ALTERNATE NO. 2)	9102	LIN. FT.
	SS & 606	24" REINFORCED CONCRETE PIPE CULVERTS (CLASS V)		62	LIN. FT.
	SS & 606	30" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)		98	LIN. FT.
*	SS & 606	30" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)	(ALTERNATE NO. 1)	4792	LIN. FT.
*	SS & 606	30" SMOOTH LINED POLYMER PRECOATED METALLIC COATED CORRUGATED STEEL PIPE	(ALTERNATE NO. 2)	4792	LIN. FT.
	SS & 606	30" REINFORCED CONCRETE PIPE CULVERTS (CLASS IV)		184	LIN. FT.
	SS & 606	36" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)		72	LIN. FT.
*	SS & 606	36" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)	(ALTERNATE NO. 1)	1538	LIN. FT.
*	SS & 606	36" SMOOTH LINED POLYMER PRECOATED METALLIC COATED CORRUGATED STEEL PIPE	(ALTERNATE NO. 2)	1538	LIN. FT.
	SS & 606	36" REINFORCED CONCRETE PIPE CULVERTS (CLASS IV)		120	LIN. FT.
	SS & 606	36" REINFORCED CONCRETE PIPE CULVERTS (CLASS V)		300	LIN. FT.
	SS & 606	48" REINFORCED CONCRETE PIPE CULVERTS (CLASS IV)		196	LIN. FT.
	SS & 606	29" X 18" REINFORCED CONCRETE ARCH PIPE CULVERTS (CLASS V)		200	LIN. FT.
*	SS & 606	36" X 23" REINFORCED CONCRETE ARCH PIPE CULVERTS (CLASS III)	(ALTERNATE NO. 1)	116	LIN. FT.
*	SS & 606	35" X 24" SMOOTH LINED POLYMER PRECOATED METALLIC COATED CORRUGATED STEEL ARCH PIPE	(ALTERNATE NO. 2)	116	LIN. FT.
	SS & 606	44" X 27" REINFORCED CONCRETE ARCH PIPE CULVERTS (CLASS III)		486	LIN. FT.
	SS & 606	44" X 27" REINFORCED CONCRETE ARCH PIPE CULVERTS (CLASS V)		136	LIN. FT.
	SS & 606	51" X 31" REINFORCED CONCRETE ARCH PIPE CULVERTS (CLASS V)		228	LIN. FT.
	SS & 606	12" SIDE DRAIN		1200	LIN. FT.
	SP, SS, & 606	18" SIDE DRAIN		232	LIN. FT.
	SP, SS, & 606	24" SIDE DRAIN		354	LIN. FT.
	SP, SS, & 606	30" SIDE DRAIN		236	LIN. FT.
	SP, SS, & 606	36" SIDE DRAIN		506	LIN. FT.
	SP, SS, & 606	48" SIDE DRAIN		120	LIN. FT.
	SS & 606	18" FLARED END SECTIONS FOR REINFORCED CONCRETE PIPE CULVERTS		50	EACH
	SS & 606	24" FLARED END SECTIONS FOR REINFORCED CONCRETE PIPE CULVERTS		5	EACH
	SS & 606	30" FLARED END SECTIONS FOR REINFORCED CONCRETE PIPE CULVERTS		6	EACH
	SS & 606	36" FLARED END SECTIONS FOR REINFORCED CONCRETE PIPE CULVERTS		11	EACH
	SS & 606	48" FLARED END SECTIONS FOR REINFORCED CONCRETE PIPE CULVERTS		4	EACH
	SS & 606	29" X 18" FLARED END SECTIONS FOR REINFORCED CONCRETE ARCH PIPE CULVERTS		1	EACH
	SS & 606	44" X 27" FLARED END SECTIONS FOR REINFORCED CONCRETE ARCH PIPE CULVERTS		4	EACH
	SS & 606	51" X 31" FLARED END SECTIONS FOR REINFORCED CONCRETE ARCH PIPE CULVERTS		4	EACH
	SS & 606	SELECTED PIPE BEDDING		3200	CU. YD.
	SS & 609	DROP INLETS (TYPE C)		9	EACH
	SS & 609	DROP INLETS (TYPE MO)		341	EACH
	SS & 609	DROP INLETS (TYPE SPECIAL)		30	EACH
	SS & 609	JUNCTION BOXES (TYPE E)		3	EACH
	SS & 609	DROP INLET EXTENSIONS (4')		53	EACH
	SS & 609	DROP INLET EXTENSIONS (8')		11	EACH
	SS & 609	YARD DRAINS		12	EACH
	SS & 611	4" PIPE UNDERDRAINS		12000	LIN. FT.
	SS & 611	UNDERDRAIN OUTLET PROTECTORS		48	EACH
	SS & 615	PAVEMENT REPAIR OVER CULVERTS (CONCRETE)		58.2	CU. YD.
	SS & 619	WIRE FENCE (TYPE A)		30070	LIN. FT.
*	SS & 619	WIRE FENCE (TYPE C)		432	LIN. FT.
*	SS & 619	16' STEEL GATES	(ALTERNATE NO. 1)	7	EACH
*	SS & 619	16' ALUMINUM GATES	(ALTERNATE NO. 2)	7	EACH
	620	LIME		53	TON
	620	SEEDING		26.51	ACRE
	SS & 620	MULCH COVER		231.81	ACRE
	620	WATER		7258.1	M. GAL.
	621	TEMPORARY SEEDING		205.30	ACRE
	621	SILT FENCE		70294	LIN. FT.
	621	SAND BAG DITCH CHECKS		4015	BAG
	621	SEDIMENT BASIN		6000	CU. YD.
	621	OBLITERATION OF SEDIMENT BASIN		6000	CU. YD.
	621	SEDIMENT REMOVAL AND DISPOSAL		8961	CU. YD.
	621	ROCK DITCH CHECKS		525	CU. YD.
	SS & 621	FILTER SOCK (12")		11654	LIN. FT.
	623	SECOND SEEDING APPLICATION		26.51	ACRE
	624	SOLID SODDING		29084	SQ. YD.
	626	EROSION CONTROL MATTING (CLASS 3)		149	SQ. YD.
	SP, SS, & 632	CONCRETE ISLAND		1473	SQ. YD.
	SP, SS, & 633	CONCRETE WALKS		22778	SQ. YD.
	SP, SS, & 633	CONCRETE WALKS (TYPE SPECIAL)		488	SQ. YD.
	SS & 633	HAND RAILING		1172	LIN. FT.
	SS & 634	CONCRETE COMBINATION CURB AND GUTTER (TYPE A) (1' 6")		69107	LIN. FT.
	635	ROADWAY CONSTRUCTION CONTROL		1.00	LUMP SUM
	637	MAILBOXES		47	EACH
	637	MAILBOX SUPPORTS (SINGLE)		29	EACH
	637	MAILBOX SUPPORTS (DOUBLE)		9	EACH
	SP, SS, & 641	WHEELCHAIR RAMPS (TYPE 2)		22	SQ. YD.
	SP, SS, & 641	WHEELCHAIR RAMPS (TYPE 3)		190	SQ. YD.

* DENOTES ALTERNATE BID ITEMS.

SUMMARY OF QUANTITIES

DATE REVISED	DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
07-20-22			6	ARK.	100657	156	418
09-12-22							

SUMMARY OF QUANTITIES

STATE OF ARKANSAS
LICENSED
PROFESSIONAL
ENGINEER
No. 11485
TIMOTHY R. SMITH

Sep 29 2022 1:39 PM

SUMMARY OF QUANTITIES (BOX 2 OF 2)

ITEM NUMBER	ITEM	QUANTITY	UNIT
SP & 701	SYSTEM LOCAL CONTROLLER TS2-TYPE 2, E-NET (8 PHASES)	4	EACH
SP	ETHERNET SWITCH, T100 HARDENED (8-PORT)	4	EACH
SP	E-NET CABLE (EXTERIOR CAT 5E)	165	LIN. FT.
SP	CELLULAR MODEM	1	EACH
SP	LOCAL RADIO (E-NET 5.8) WITH ANTENNA	1	EACH
704	VEHICLE DETECTOR-RACK MOUNT	8	EACH
SP	LOOP WIRING CLASS III (1C/16 A.W.G.)	1912	LIN. FT.
704	FEEDER WIRE	3580	LIN. FT.
SP & 706	TRAFFIC SIGNAL HEAD, LED, (3 SECTION, 1 WAY)	40	EACH
SP & 706	TRAFFIC SIGNAL HEAD, LED, (4 SECTION, 1 WAY)	14	EACH
SP & 707	COUNTDOWN PEDESTRIAN SIGNAL HEAD, LED	14	EACH
708	TRAFFIC SIGNAL CABLE (5C/14 A.W.G.)	5976	LIN. FT.
708	TRAFFIC SIGNAL CABLE (7C/14 A.W.G.)	2856	LIN. FT.
708	TRAFFIC SIGNAL CABLE (20C/14 A.W.G.)	2029	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/8 A.W.G., E.G.C.)	2079	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/12 A.W.G., E.G.C.)	650	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (2C/6 A.W.G.)	226	LIN. FT.
SP	ELECTRICAL CONDUCTORS FOR LUMINAIRES	2628	LIN. FT.
709	GALVANIZED STEEL CONDUIT (2")	80	LIN. FT.
709	GALVANIZED STEEL CONDUIT (3")	60	LIN. FT.
710	NON-METALLIC CONDUIT (1")	588	LIN. FT.
710	NON-METALLIC CONDUIT (1.25")	160	LIN. FT.
710	NON-METALLIC CONDUIT (2")	1187	LIN. FT.
710	NON-METALLIC CONDUIT (3")	1789	LIN. FT.
SS & 711	CONCRETE PULL BOX (TYPE 2)	4	EACH
SS & 711	CONCRETE PULL BOX (TYPE 1 HD)	10	EACH
SS & 711	CONCRETE PULL BOX (TYPE 2 HD)	15	EACH
SS & 713	SPAN WIRE ASSEMBLY	1	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (38')	1	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (44')	2	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (46')	2	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (48')	1	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (50')	1	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (56')	2	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (62')	1	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (66')	2	EACH
SP	LED LUMINAIRE ASSEMBLY	12	EACH
SS & 715	TRAFFIC SIGNAL PEDESTAL POLE WITH FOUNDATION	7	EACH
SP	SERVICE POINT ASSEMBLY (2 CIRCUITS)	3	EACH
SP	REMOVAL OF TRAFFIC SIGNAL EQUIPMENT	1.00	LUMP SUM
716	TREATED WOOD POLE (CLASS 2, 45')	4	EACH
718	REFLECTORIZED PAINT PAVEMENT MARKING YELLOW (10")	913	LIN. FT.
719	THERMOPLASTIC PAVEMENT MARKING WHITE (6")	28140	LIN. FT.
719	THERMOPLASTIC PAVEMENT MARKING WHITE (8")	424	LIN. FT.
719	THERMOPLASTIC PAVEMENT MARKING WHITE (12")	2091	LIN. FT.
719	THERMOPLASTIC PAVEMENT MARKING WHITE (24")	44	LIN. FT.
719	THERMOPLASTIC PAVEMENT MARKING YELLOW (6")	46079	LIN. FT.
719	THERMOPLASTIC PAVEMENT MARKING (WORDS)	23	EACH
719	THERMOPLASTIC PAVEMENT MARKING (ARROWS)	46	EACH
719	THERMOPLASTIC PAVEMENT MARKING (RAILROAD EMBLEMS)	4	EACH
721	RAISED PAVEMENT MARKERS (TYPE II)	1371	EACH
SP	18" STREET NAME SIGN	14	EACH
SS & 731	TEMPORARY IMPACT ATTENUATION BARRIER	4	EACH
SS & 731	TEMPORARY IMPACT ATTENUATION BARRIER (REPAIR)	4	EACH
SS & 731	TEMPORARY IMPACT ATTENUATION BARRIER (RELOCATION)	1	EACH
SP & 733	VIDEO DETECTOR (CLR)	8	EACH
SP & 733	VIDEO DETECTOR (IP)	20	EACH
733	VIDEO CABLE	1700	LIN. FT.
SP & 733	VIDEO CABLE (EXTERIOR CAT 5E)	4641	LIN. FT.
733	VIDEO MONITOR (CLR)	1	EACH
SP & 733	VIDEO MONITOR (CLR)	3	EACH
SP & 733	VIDEO PROCESSOR, EDGE CARD (2 CAMERA)	4	EACH
SP & 733	VEHICLE DETECTOR RACK (16 CHANNEL)	4	EACH
SP & 733	CENTRAL CONTROL UNIT (8 CHANNEL)	6	EACH
SP & 733	VIDEO PROCESSOR, EDGE CARD IP (2 CAMERA)	12	EACH
801	UNCLASSIFIED EXCAVATION FOR STRUCTURES-ROADWAY	87	CU. YD.
SP, SS, & 802	CLASS S CONCRETE-ROADWAY	199.13	CU. YD.
SP	ARCHITECTURAL FINISH	2837	SQ. FT.
SP	TEXTURED COATING FINISH	251	SQ. YD.
SS & 804	REINFORCING STEEL-ROADWAY (GRADE 60)	63719	POUND
	STRUCTURES OVER 20' SPAN		
SS & 619	5' STEEL CHAIN LINK FENCE	255	LIN. FT.
636	BRIDGE CONSTRUCTION CONTROL	1.00	LUMP SUM
801	UNCLASSIFIED EXCAVATION FOR STRUCTURES-BRIDGE	1300	CU. YD.
801	UNCLASSIFIED EXCAVATION FOR STRUCTURES-ROADWAY	720	CU. YD.
SP, SS, & 802	CLASS S CONCRETE-ROADWAY	1819.76	CU. YD.
SP, SS, & 802	CLASS S CONCRETE-BRIDGE	1170.00	CU. YD.
SP, SS, & 802	CLASS S(AE) CONCRETE-BRIDGE	1153.70	CU. YD.
SP	ARCHITECTURAL FINISH	3723	SQ. FT.
SP & 803	CLASS 1 PROTECTIVE SURFACE TREATMENT	79.9	GAL.
SS & 804	REINFORCING STEEL-ROADWAY (GRADE 60)	251324	POUND
SS & 804	REINFORCING STEEL-BRIDGE (GRADE 60)	275030	POUND
SS & 804	EPOXY COATED REINFORCING STEEL (GRADE 60)	275030	POUND
SS & 805	STEEL SHELL PILING (18" DIAMETER)	13010	LIN. FT.
SS & 806	METAL BRIDGE RAILING (TYPE H2)	650	LIN. FT.
SP, SS, & 807	STRUCTURAL STEEL IN PLATE GIRDER SPANS (A709, GR. 50W)	1661730	POUND
SS & 807	PAINTING STRUCTURAL STEEL	34.8	TON
SS & 808	ELASTOMERIC BEARINGS	34728.0	CU. IN.
SS & 809	SILICONE JOINT SEALANT	158	LIN. FT.
812	BRIDGE NAME PLATE (TYPE D)	1	EACH
SS & 816	CONCRETE RIPRAP	448	CU. YD.

REVISIONS

DATE	REVISION	SHEET NUMBER
07-20-2022	REVISED "FURNISHING AND INSTALLING PRECAST CONCRETE BARRIER" AND "RELOCATING PRECAST CONCRETE BARRIER" QUANTITIES.	108, 135, 156, 157.
09-12-2022	REVISED SHEETS FOR RIGHT OF WAY REVISIONS AT UPRR BRIDGE, TO ADD DRIVEWAY AT STA. 126+08 LT, TO SHIFT AND WIDEN DRIVEWAY FROM STA. 220+27 LT TO STA. 221+10 LT, AND TO SHIFT AND WIDEN DRIVEWAY FROM STA. 506+06 LT. TO STA. 504+40 LT. REVISED QUANTITIES "UNCLASSIFIED EXCAVATION", "COMPACTED EMBANKMENT", "AGGREGATE BASE COURSE (CLASS 7)", "MINERAL AGGREGATE IN ACHM SURFACE COURSE (1/2")", "PORTLAND CEMENT CONCRETE DRIVEWAY", "18" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)", "18" SMOOTH LINED POLYMER PRECOATED METALLIC COATED CORRUGATED STEEL PIPE", "24" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)", "24" SMOOTH LINED POLYMER PRECOATED METALLIC COATED CORRUGATED STEEL PIPE", "24" SIDE DRAIN", "36" SIDE DRAIN", "DROP INLETS (TYPE MO)", "DROP INLET EXTENSIONS (8')", "WATER", "SOLID SODDING", "CONCRETE WALKS", "CONCRETE WALKS (TYPE SPECIAL)", "HAND RAILING", "ARCHITECTURAL FINISH", AND "TEXTURED COATING FINISH". REVISED "UTILITY ADJUSTMENTS", "DELAY IN RIGHT OF WAY OCCUPANCY", AND "PRICE ADJUSTMENT FOR FUEL" SPECIAL PROVISIONS. REVISED FAP NUMBER ON TITLE SHEET AND IN PRECONSTRUCTION.	1, 46, 50, 57, 60, 61, 65, 72, 75, 76, 80, 82, 85, 91, 95, 102, 105, 106, 110, 112, 115, 117, 118, 122, 129, 132, 137, 141, 142, 144, 147, 151-153, 156, 157, 175-178, 189, 190, 203, 209, 216, 217, 283, 284, 345-347, 413, 414.
10-19-2022	REVISED BRIDGE STANDARD DRAWING "STANDARD DETAILS FOR BRIDGE TRAFFIC RAIL TYPE SSTR36". REVISED TITLE BORDER ON BRIDGE DRAWING NUMBER 63983. REPLACED STANDARD DRAWING "TC-3" WITH LATEST DRAWING REVISION IN PLAN SET. ADDED PLAN SHEET NUMBER 188 TO PLANS. REVISED SHEETS FOR RIGHT OF WAY REVISIONS. REVISED "MAINTENANCE OF TRAFFIC", "DELAY IN RIGHT OF WAY OCCUPANCY", AND "UTILITY ADJUSTMENTS" SPECIAL PROVISIONS. REVISED "5' STEEL CHAIN LINK FENCE" AND "EPOXY COATED REINFORCING STEEL (GRADE 60)" QUANTITIES.	3, 48, 49, 63, 64, 78, 79, 86, 93, 94, 108, 109, 116, 120, 121, 155, 157, 185, 187, 188, 253, 254, 258, 268.

SUMMARY OF QUANTITIES AND REVISIONS

DATE REVISED	DATE REVISED	DATE REVISED
07-20-22		
09-12-22		
10-19-22		

FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
6	ARK.	100657	157	418

SUMMARY OF QUANTITIES AND REVISIONS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11485
TIMOTHY D. SMITH

Nov 2 2022 11:42 AM

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	158	418
		SURVEY CONTROL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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SURVEY CONTROL COORDINATES

Project Name: s100657
Date: 3/16/2018
Coordinate System: ARKANSAS STATE PLANE - NORTH ZONE BASED ON GPS CONTROL, PROJECTED TO GROUND.
Units: U.S. SURVEY FOOT

Point Name	Northing	Easting	Elev	Feature	Description
1	537506.2808	1720290.4021	259.560	CTL	ARDOT STD. MON. STAMPED PN: 1
2	538345.5177	1720248.2162	236.099	CTL	ARDOT STD. MON. STAMPED PN: 2
3	539030.0238	1720310.4861	236.076	CTL	ARDOT STD. MON. STAMPED PN: 3
4	539760.0764	1720291.6750	236.001	CTL	ARDOT STD. MON. STAMPED PN: 4
5	540504.1706	1720298.0323	237.191	CTL	ARDOT STD. MON. STAMPED PN: 5
6	541388.6277	1720319.2866	236.223	CTL	ARDOT STD. MON. STAMPED PN: 6
7	542069.2182	1720315.1623	236.355	CTL	ARDOT STD. MON. STAMPED PN: 7
8	542921.9561	1720326.1747	237.100	CTL	ARDOT STD. MON. STAMPED PN: 8
9	543802.8038	1720339.4653	237.134	CTL	ARDOT STD. MON. STAMPED PN: 9
10	544373.2616	1720294.5609	237.305	CTL	ARDOT STD. MON. STAMPED PN: 10
11	544348.7967	1719588.9021	239.019	CTL	ARDOT STD. MON. STAMPED PN: 11
12	544369.1332	1720894.9800	237.892	CTL	ARDOT STD. MON. STAMPED PN: 12
13	545203.3872	1720378.6546	238.180	CTL	ARDOT STD. MON. STAMPED PN: 13
14	545844.2070	1720382.6601	237.318	CTL	ARDOT STD. MON. STAMPED PN: 14
15	546627.6343	1720387.7883	237.728	CTL	ARDOT STD. MON. STAMPED PN: 15
16	547196.3727	1720392.1486	238.508	CTL	ARDOT STD. MON. STAMPED PN: 16
17	548453.7039	1720396.7630	240.923	CTL	ARDOT STD. MON. STAMPED PN: 17
18	549611.5032	1720357.5012	242.607	CTL	ARDOT STD. MON. STAMPED PN: 18
19	540897.9560	1720256.8593	236.476	CTL	ARDOT STD. MON. STAMPED PN: 19
20	550292.8970	1720098.7225	241.952	CTL	ARDOT STD. MON. STAMPED PN: 20
21	550878.4583	1720476.6271	245.318	CTL	ARDOT STD. MON. STAMPED PN: 21
22	550884.2139	1720188.2824	246.129	CTL	ARDOT STD. MON. STAMPED PN: 22
23	551244.1095	1720975.9266	242.767	CTL	ARDOT STD. MON. STAMPED PN: 23
24	551905.8843	1721594.4238	249.008	CTL	ARDOT STD. MON. STAMPED PN: 24
25	552405.5738	1721778.7868	244.258	CTL	ARDOT STD. MON. STAMPED PN: 25
26	552903.0456	1722321.6191	243.471	CTL	ARDOT STD. MON. STAMPED PN: 26
27	553407.6923	1722775.1326	243.249	CTL	ARDOT STD. MON. STAMPED PN: 27
28	553885.7000	1723093.3803	244.583	CTL	ARDOT STD. MON. STAMPED PN: 28
29	554633.5547	1723112.6836	246.331	CTL	ARDOT STD. MON. STAMPED PN: 29
30	554865.1571	1723697.4276	245.447	CTL	ARDOT STD. MON. STAMPED PN: 30
31	554861.2137	1722837.1877	247.941	CTL	ARDOT STD. MON. STAMPED PN: 31
32	555446.1453	1722894.0274	247.113	CTL	ARDOT STD. MON. STAMPED PN: 32
33	556208.1069	1722901.9649	247.298	CTL	ARDOT STD. MON. STAMPED PN: 33
34	556755.9302	1723138.1762	248.371	CTL	ARDOT STD. MON. STAMPED PN: 34
35	557509.2859	1723336.5932	249.074	CTL	ARDOT STD. MON. STAMPED PN: 35
36	558251.0169	1723401.2174	249.831	CTL	ARDOT STD. MON. STAMPED PN: 36
37	558436.9028	1723121.2081	253.465	CTL	ARDOT STD. MON. STAMPED PN: 37
38	559183.9693	1723609.0869	255.116	CTL	ARDOT STD. MON. STAMPED PN: 38
39	559494.0785	1723250.9266	255.321	CTL	ARDOT STD. MON. STAMPED PN: 39
40	560130.6592	1723128.6026	262.562	CTL	ARDOT STD. MON. STAMPED PN: 40
41	560598.4327	1723230.3202	258.484	CTL	ARDOT STD. MON. STAMPED PN: 41
42	561166.0751	1723237.5307	259.880	CTL	ARDOT STD. MON. STAMPED PN: 42
43	560168.1531	1722392.9598	260.959	CTL	ARDOT STD. MON. STAMPED PN: 43
44	560540.7848	1724086.8920	260.356	CTL	ARDOT STD. MON. STAMPED PN: 44
45	561062.8495	1724607.4448	259.108	CTL	ARDOT STD. MON. STAMPED PN: 45
100	537075.4475	1721211.6243	236.282	GPS	ARDOT GPS #160013
101	537126.4589	1720281.7162	259.710	GPS	ARDOT GPS #160013A
102	547737.3624	1720365.0834	239.889	GPS	ARDOT GPS #160041
103	548967.4029	1720400.3439	242.016	GPS	ARDOT GPS #160041A
104	560074.3476	1721831.2877	260.502	GPS	ARDOT GPS #160042
105	560211.8214	1723459.6126	260.992	GPS	ARDOT GPS #160042A
901	538356.7520	1720241.7340	235.899	TBM	CHISELED SQUARE
902	540514.9562	1720307.5129	235.951	TBM	CHISELED SQUARE
903	542629.1945	1720269.4962	236.945	TBM	CHISELED SQUARE
904	545206.6770	1720390.8174	238.026	TBM	CHISELED SQUARE
905	548791.2315	1720408.0684	243.072	TBM	CHISELED SQUARE
906	549568.3710	1719759.2617	242.276	TBM	CHISELED SQUARE
907	549574.2215	1717348.6518	246.516	TBM	CHISELED SQUARE
908	550832.1424	1718176.5448	250.876	TBM	CHISELED SQUARE
909	552677.8110	1719437.5624	251.727	TBM	CHISELED SQUARE
910	554394.7253	1720479.8067	256.115	TBM	CHISELED SQUARE
911	556891.1711	1722092.5740	252.482	TBM	CHISELED SQUARE
912	560118.9554	1724227.9601	255.788	TBM	CHISELED SQUARE
913	554892.7509	1722461.0689	248.442	TBM	
914	550908.3821	1720391.6408	247.293	TBM	PAINT ON E END OF BIG STEEL CU
915	560221.3893	1723047.7804	258.372	TBM	ARDOT CAP W END OF HW ON DBL BOX CU
916	560418.1794	1723957.5445	255.468	TBM	ARDOT CAP W END OF HW ON BOX CU
998	544229.3259	1720256.1198	236.689	BM	NGS 1ST ORDER BM L 332
999	544273.7348	1721622.7487	236.988	BM	NGS 1ST ORDER BM M 332

*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).
USE CAF = 1.0 FOR STAKEOUT FOR THIS PROJECT
A PROJECT CAF OF 0.999934954 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 s100657gi.ctl
HORIZONTAL DATUM: NAD 83 (2011)
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 - 0301-NORTH ZONE
DETERMINED FROM GPS CONTROL POINTS: 160013 - 160013A, 160041 - 160041A, 160042 - 160042A
CONVERGENCE ANGLE: 00-48-21 RIGHT AT LT: 35-50-58 LG: 090-36-54
GRID AZIMUTH = ASTRONOMICAL AZIMUTH - CONVERGENCE ANGLE.

HWY. 18S

POINT NO.	TYPE	STATION	NORTHING	EASTING
8000	POB	100+00.00	536861.5121	1720255.9926
8001	PC	115+43.48	538404.9106	1720272.3021
8003	PT	117+43.82	538605.2272	1720270.9169
8004	PC	117+60.90	538622.3055	1720270.5001
8006	PT	122+23.90	539085.2679	1720268.5578
8007	PC	135+39.62	540400.8181	1720289.6171
8009	PT	137+40.12	540601.3079	1720291.9494
8010	PC	172+25.61	544086.7027	1720317.2468
8012	PT	174+12.70	544273.6121	1720324.7106
8013	PC	175+56.03	544416.5618	1720335.1021
8015	PT	183+11.13	545170.9400	1720365.0043
8016	PC	206+79.11	547538.8666	1720380.7980
8018	PT	208+46.94	547706.6984	1720381.3029
8019	PC	232+69.97	550129.7263	1720379.7198
8021	PT	259+19.79	552500.2477	1721393.2034
8022	PC	274+96.66	553588.9951	1722533.8809
8024	PT	290+41.14	554970.5515	1723125.0800
8025	PC	293+71.41	555300.8243	1723125.0800
8027	PT	308+90.41	556749.6433	1723518.4444
8028	PC	314+54.37	557236.1657	1723803.6576
8030	PT	328+32.15	558474.5325	1723563.9901
8031	PC	328+39.17	558478.8236	1723558.4407
8033	PT	341+46.33	559611.9644	1723002.2574
8034	PC	348+24.62	560290.2493	1723002.2574
8036	PT	351+31.34	560570.9624	1723108.3520
8037	PC	351+36.11	560574.5393	1723111.5063
8039	PT	354+38.68	560851.0935	1723217.5806
8040	POE	357+97.71	561210.1132	1723221.0988

CW POST

POINT NO.	TYPE	STATION	NORTHING	EASTING
8041	POB	500+00.00	539045.2989	1719454.9351
8042	PI	502+26.25	539047.8955	1719681.1656
8043	PI	506+01.77	539069.8348	1720056.0522
8044	PI	510+03.22	539072.3441	1720457.4931
8045	PI	512+73.95	539062.0364	1720728.0243
8046	POE	514+78.90	539063.2639	1720932.9738

KATHLEEN ST. CONNECTOR

POINT NO.	TYPE	STATION	NORTHING	EASTING
8100	POB	650+00.00	558361.4863	1723048.5662
8101	PC	650+67.77	558323.6965	1723104.8194
8103	PT	654+98.66	558386.2565	1723491.1982
8104	POE	656+13.02	558476.7255	1723561.1541

HT39710 5/5/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	159	418
		SURVEY CONTROL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

May 17 2022 12:38 PM

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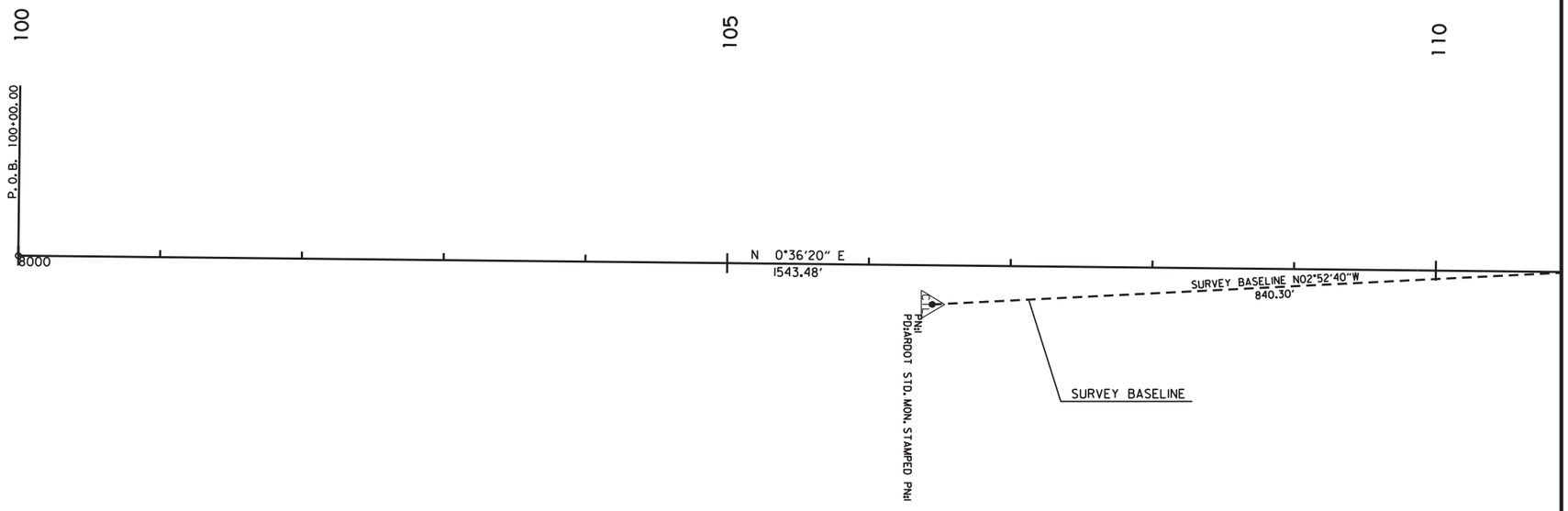

HT39710 5/5/2022
R100657.DGN

SURVEY CONTROL DETAILS

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	160	418
		SURVEY CONTROL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
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STA. 111+40.98
BEGIN JOB 100657
LOG MILE 1.194

110 115 120 125

HWY. 18S/MLK JR. DR.
P.I. = 116+43.66
Δ = 02°00'12"LT.
D = 01°00'00"
T = 100.18'
L = 200.33'
P.C. = 115+43.48
P.T. = 117+43.82
NO SUPERELEVATION

P.C. 115+43.48
P.T. 117+43.82
P.I. 116+43.66
P.C. 117+60.90
P.I. 119+92.43

PN:2
PD:ARDOT STD. MON. STAMPED PN:2

SURVEY BASELINE N02°52'40"W 840.30'
N 0°36'20" E 1543.48'
N 0°36'20" E 100.18'
N 1°23'52" W 100.18'
N 1°23'52" W 17.08'
N 1°23'52" W 231.53'
N 0°55'02" E 231.53'
N 0°55'02" E 1315.72'
SURVEY BASELINE N05°11'53"E 687.33'
SURVEY BASELINE N01°28'34"W 730.29'

8001 8003 8004 8006

C.L. C.W. POST STA. 508+14.07
C.L. HWY. 18S STA. 122+09.79
Δ = 90°00'00"

C.L. C.W. POST
C.L. HWY. 18S
P.I. 506+01.77
N 39°03" E 75.53'
505
8043
N 89°38'31" E 401.45'
P.I. 119+92.43
P.I. 122+23.90

HWY. 18S/MLK JR. DR.
P.I. = 119+92.43
Δ = 02°18'54"RT.
D = 00°30'00"
T = 231.53'
L = 463.00'
P.C. = 117+60.90
P.T. = 122+23.90
NO SUPERELEVATION

SURVEY BASELINE

PN:3
PD:ARDOT STD. MON. STAMPED PN:3

125 130 135 140

C.L. HWY. 18S

N 0°55'02" E 1315.72'
SURVEY BASELINE N01°28'34"W 730.29'
SURVEY BASELINE N00°29'22"E 744.12'
SURVEY BASELINE N05°58'08"W 395.93'
N 0°24'57" E 3485.49'
N 0°55'02" E 100.25'
N 0°24'57" E 100.25'

PN:4
PD:ARDOT STD. MON. STAMPED PN:4

SURVEY BASELINE

HWY. 18S/MLK JR. DR.
P.I. = 136+39.87
Δ = 00°30'05"LT.
D = 00°15'00"
T = 100.25'
L = 200.50'
P.C. = 135+39.62
P.T. = 137+40.12
NO SUPERELEVATION

P.C. 135+39.62
P.T. 137+40.12
P.I. 136+39.87

8007 8009

PN:5
PD:ARDOT STD. MON. STAMPED PN:5

SURVEY CONTROL DETAILS

HT39710 5/5/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	161	418
		SURVEY CONTROL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
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140 145 150 155

PN#9
PD:ARDOT STD. MON. STAMPED PN#9

SURVEY BASELINE N07°15'02"E
494.63'

PN#6
PD:ARDOT STD. MON. STAMPED PN#6

SURVEY BASELINE

C.L. HWY. 18S

SURVEY BASELINE N00°20'50"W
680.60'

N 0°24'57" E
3485.49'

PN#7
PD:ARDOT STD. MON. STAMPED PN#7

155 160 165 170

N 0°24'57" E
3485.49'

SURVEY BASELINE N00°44'24"E
852.81'

PN#8
PD:ARDOT STD. MON. STAMPED PN#8

SURVEY BASELINE

C.L. HWY. 18S

SURVEY BASELINE N00°51'52"E
880.95'

PN#9
PD:ARDOT STD. MON. STAMPED PN#9

SURVEY CONTROL DETAILS

HT39710 5/5/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	162	418
		SURVEY CONTROL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

May 17 2022 12:39 PM

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170 175 180 185

HWY. 18S/MLK JR. DR.
P.I. = 179+33.72
Δ = 03°46'32"LT.
D = 00°30'00"
T = 377.69'
L = 755.11'
P.C. = 175+56.03
P.T. = 183+11.13
NO SUPERELEVATION

SURVEY BASELINE

C.L. HWY. 18S

P.I. 173+19.19

P.C. 175+56.03

P.T. 183+11.13

PN#0
PD:ARDOT STD. MON. STAMPED PN#0

N 0°24'57" E
3485.49'

SURVEY BASELINE NO4°30'03"W
572.22'

8010

N 0°24'57" E
93.58'

N 4°09'28" E
93.58'

8012

N 4°09'28" E
143.33'

8013

N 4°09'28" E
377.69'

SURVEY BASELINE NO6°35'18"E
838.96'

N 0°22'56" E
377.69'

8015

N 0°22'56" E
2367.98'

SURVEY BASELINE NO0°43'59"W
637.58'

PN#3
PD:ARDOT STD. MON. STAMPED PN#3

P.C. 172+25.61

P.T. 174+12.70

HWY. 18S/MLK JR. DR.
P.I. = 173+19.19
Δ = 03°44'31"RT.
D = 02°00'00"
T = 93.58'
L = 187.09'
P.C. = 172+25.61
P.T. = 174+12.70
NO SUPERELEVATION

P.I. 179+33.72

185 190 195 200

C.L. HWY. 18S

SURVEY BASELINE NO0°43'59"W
637.58'

PN#4
PD:ARDOT STD. MON. STAMPED PN#4

SURVEY BASELINE NO0°22'30"E
783.44'

N 0°22'56" E
2367.98'

SURVEY BASELINE NO0°26'21"E
568.76'

PN#5
PD:ARDOT STD. MON. STAMPED PN#5

SURVEY BASELINE

SURVEY CONTROL DETAILS

HT39710 5/5/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	163	418
		SURVEY CONTROL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
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TRINITY D. SMITH

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200 205 210 215

HWY. 18S/MLK JR. DR.
P.I. = 207+63.03
Δ = 00°25'11"LT.
D = 00°15'00"
T = 83.92'
L = 167.83'
P.C. = 206+79.11
P.T. = 208+46.94
NO SUPERELEVATION

C.L. HWY. 18S

P.C. 206+79.11

P.T. 208+46.94

SURVEY BASELINE

PN#02
PD:ARDOT GPS #160041

N 0°22'56" E
2367.98'

SURVEY BASELINE N00°26'21"E
568.76'

PN#6
PD:ARDOT STD. MON. STAMPED PN#6

SURVEY BASELINE N02°51'51"W
541.67'

8016 N 0°22'56" E 83.92'

N 0°02'15" W 83.92' 8018

N 0°02'15" W
2423.03'

SURVEY BASELINE N02°31'56"E
717.04'

P.I. 207+63.03

HT39710 5/5/2022
R100657.DGN

SURVEY CONTROL DETAILS

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	164	418
		SURVEY CONTROL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

May 17 2022 12:54 PM

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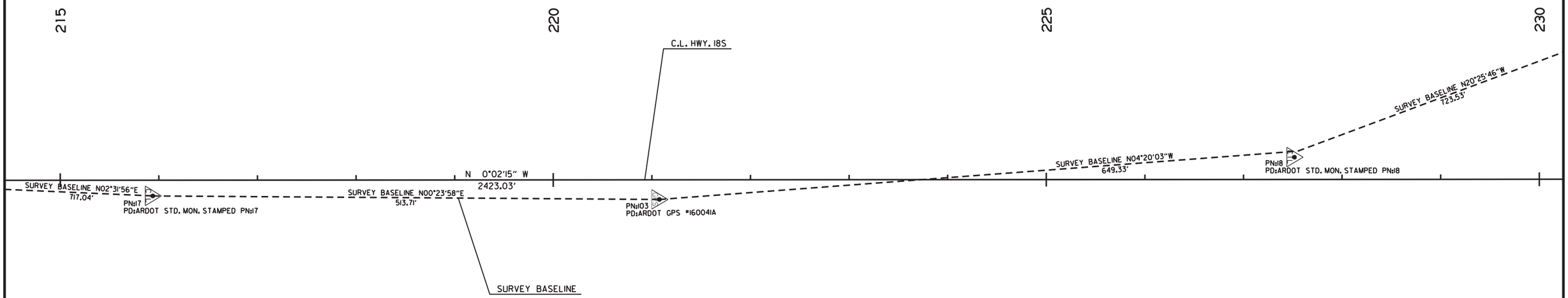

HT39710 5/5/2022
R100657.DGN

SURVEY CONTROL DETAILS

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	165	418
		SURVEY CONTROL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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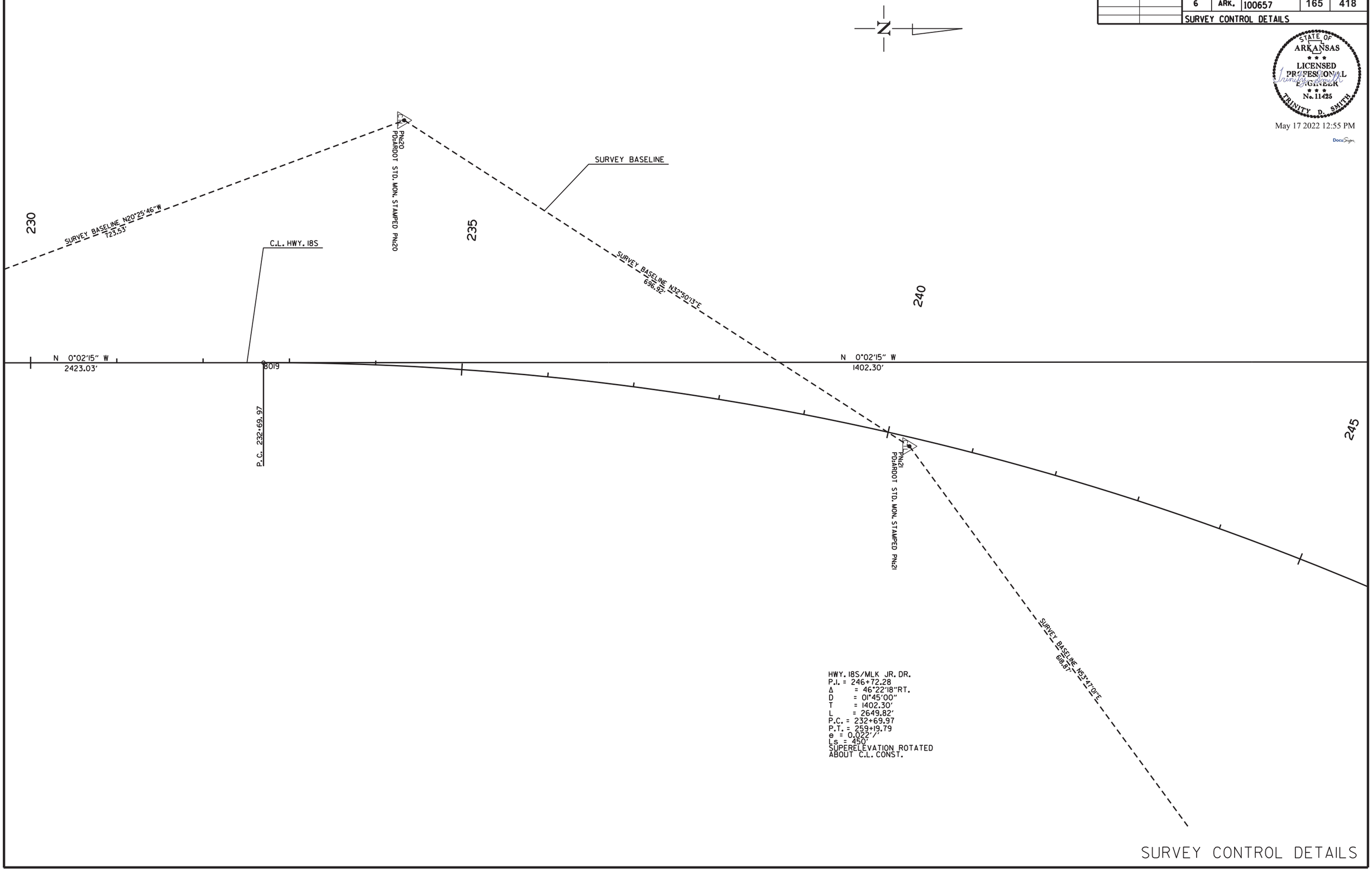

SURVEY CONTROL DETAILS

HT39710 5/5/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	166	418
		SURVEY CONTROL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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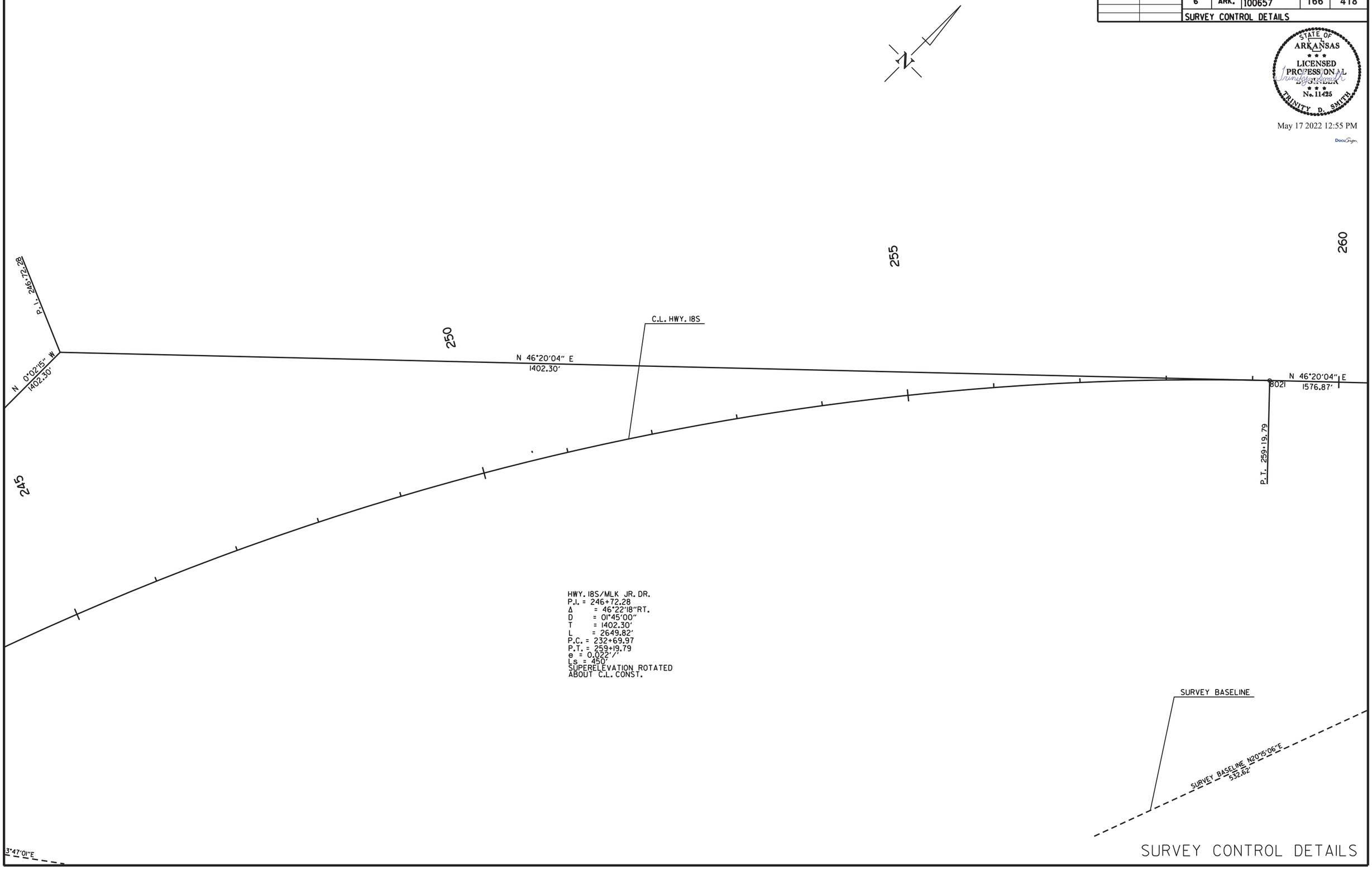

SURVEY CONTROL DETAILS

HT39710 5/5/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	167	418
		SURVEY CONTROL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

May 17 2022 12:56 PM

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260 265 270 275

C.L. HWY. 18S

N 46°20'04" E
1576.87'

P.C. 274+96.66

18022

HWY. 18S/MLK JR. DR.
P.I. = 283+13.93
Δ = 46°20'04"LT.
D = 03°00'00"
T = 817.27'
L = 1544.48'
P.C. = 274+96.66
P.T. = 290+41.14
e = 0.028'/'
Ls = 450'
SUPERELEVATION ROTATED ABOUT C.L. CONST.

SURVEY BASELINE

SURVEY BASELINE N20°15'06"W
532.62'

PN:25
PD:ARDOT STD. MON. STAMPED PN:25

SURVEY BASELINE N47°29'48"E
736.31'

PN:26
PD:ARDOT STD. MON. STAMPED PN:26

SURVEY BASELINE N41°56'43"E
678.49'

PN:27
PD:ARDOT STD. MON. STAMPED PN:27

HT39710 5/5/2022
R100657.DGN

SURVEY CONTROL DETAILS

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	168	418
		SURVEY CONTROL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

May 17 2022 12:56 PM

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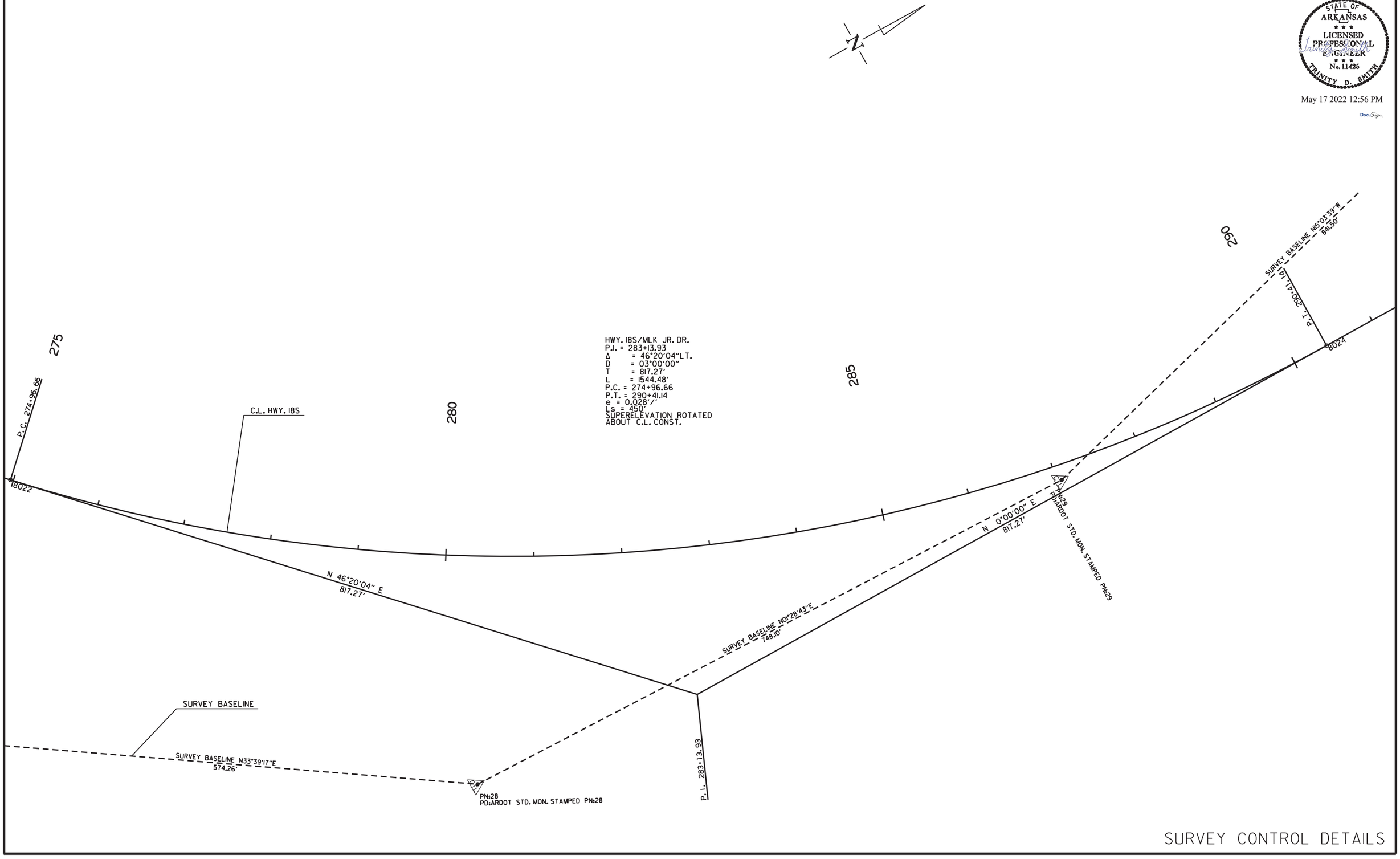

HT 39710 5/5/2022
R100657.DGN

SURVEY CONTROL DETAILS

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	169	418
		SURVEY CONTROL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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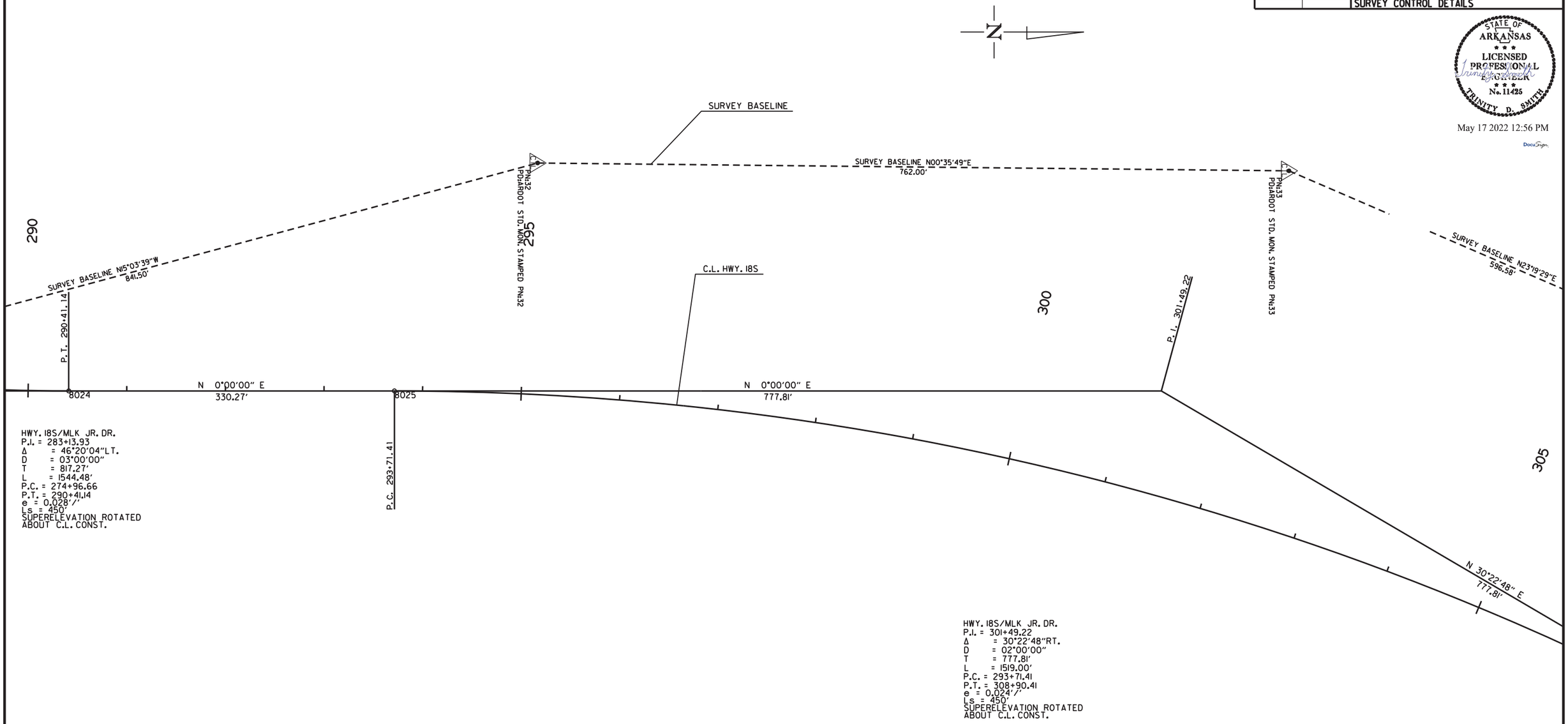

HWY. 18S/MLK JR. DR.
P.I. = 283+13.93
Δ = 46°20'04"LT.
D = 03°00'00"
T = 817.27'
L = 1544.48'
P.C. = 274+96.66
P.T. = 290+41.14
e = 0.028'/'
Ls = 450'
SUPERELEVATION ROTATED
ABOUT C.L. CONST.

HWY. 18S/MLK JR. DR.
P.I. = 301+49.22
Δ = 30°22'48"RT.
D = 02°00'00"
T = 777.81'
L = 1519.00'
P.C. = 293+71.41
P.T. = 308+90.41
e = 0.024'/'
Ls = 450'
SUPERELEVATION ROTATED
ABOUT C.L. CONST.

HT39710 5/5/2022
R100657.DGN

SURVEY CONTROL DETAILS

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	170	418
		SURVEY CONTROL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

May 17 2022 12:57 PM

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SURVEY BASELINE N23°19'29"E
596.58'

PIN:34
PDARDOT STD. MON. STAMPED PIN:34

SURVEY BASELINE

SURVEY BASELINE N14°45'19"E
719.05'

SURVEY BASELINE N04°58'46"E
744.54'

PIN:35
PDARDOT STD. MON. STAMPED PIN:35

HWY. 18S/MLK JR. DR.
P.I. = 322+94.28
Δ = 82°40'00"LT.
D = 06°00'00"
T = 839.91'
L = 1377.78'
P.C. = 314+54.37
P.T. = 328+32.15
e = 0.038'/'
Ls = 540'
SUPERELEVATION ROTATED
ABOUT C.L. CONST.

320

305

310

315

C.L. HWY. 18S

P.C. 314+54.37

N 30°22'48" E
777.81'

8027

N 30°22'48" E
563.96'

8028

N 30°22'48" E
839.91'

P.T. 308+90.41

HWY. 18S/MLK JR. DR.
P.I. = 301+49.22
Δ = 30°22'48"RT.
D = 02°00'00"
T = 777.81'
L = 1519.00'
P.C. = 293+71.41
P.T. = 308+90.41
e = 0.024'/'
Ls = 450'
SUPERELEVATION ROTATED
ABOUT C.L. CONST.

SURVEY CONTROL DETAILS

HT39710 5/5/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	171	418
		SURVEY CONTROL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

May 17 2022 12:57 PM
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SURVEY BASELINE N04°58'16"E 744.54'

SURVEY BASELINE

P.I. 653+35.75

S 56°06'27" E 267.98'

8101 S 56°06'27" E 67.77' 8100

P.O.B. 650+00.00

P.C. 650+67.77

650

KATHLEEN ST. CONNECTOR
P.I. = 653+35.75
Δ = 86°10'45"LT.
D = 20°00'00"
T = 267.98'
L = 430.89'
P.C. = 650+67.77
P.T. = 654+98.66
e = 0.097'/'
Ls = 250'
SUPERELEVATION ROTATED ABOUT INSIDE E.O.P.

C.L. KATHLEEN ST. CONNECTOR

320

HWY. 18S/MLK JR. DR.
P.I. = 322+94.28
Δ = 82°40'00"LT.
D = 06°00'00"
T = 839.91'
L = 1377.78'
P.C. = 314+54.37
P.T. = 328+32.15
e = 0.038'/'
Ls = 540'
SUPERELEVATION ROTATED ABOUT C.L. CONST.

C.L. HWY. 18S

325

N 37°42'48" E 267.98'

PK36 POINT STD. MON. STAMPED PK36

330

655

P.T. 654+98.66

8103 N 37°42'48" E 114.36'

8104 P.I. 328+32.15

8030 8031 P.O.E.= 656+13.02

N 52°17'12" W 703.07'

P.C. 328+32.17

335

P.I. 335+42.23

N 0°00'00" E 703.07'

N 52°17'12" W 839.91'

SURVEY BASELINE N12°33'39"E 955.85'

HWY. 18S/MLK JR. DR.
P.I. = 335+42.23
Δ = 52°17'12"RT.
D = 04°00'00"
T = 703.07'
L = 1307.17'
P.C. = 328+39.17
P.T. = 341+46.33
e = 0.034'/'
Ls = 450'
SUPERELEVATION ROTATED ABOUT INSIDE E.O.P.

C.L. KATHLEEN ST. CONNECTOR STA. 656+13.02 =
C.L. HWY. 18S STA. 328+35.74
Δ = 90°00'00"

HT39710 5/5/2022
R100657.DGN

SURVEY CONTROL DETAILS

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	172	418
		SURVEY CONTROL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

May 17 2022 12:57 PM

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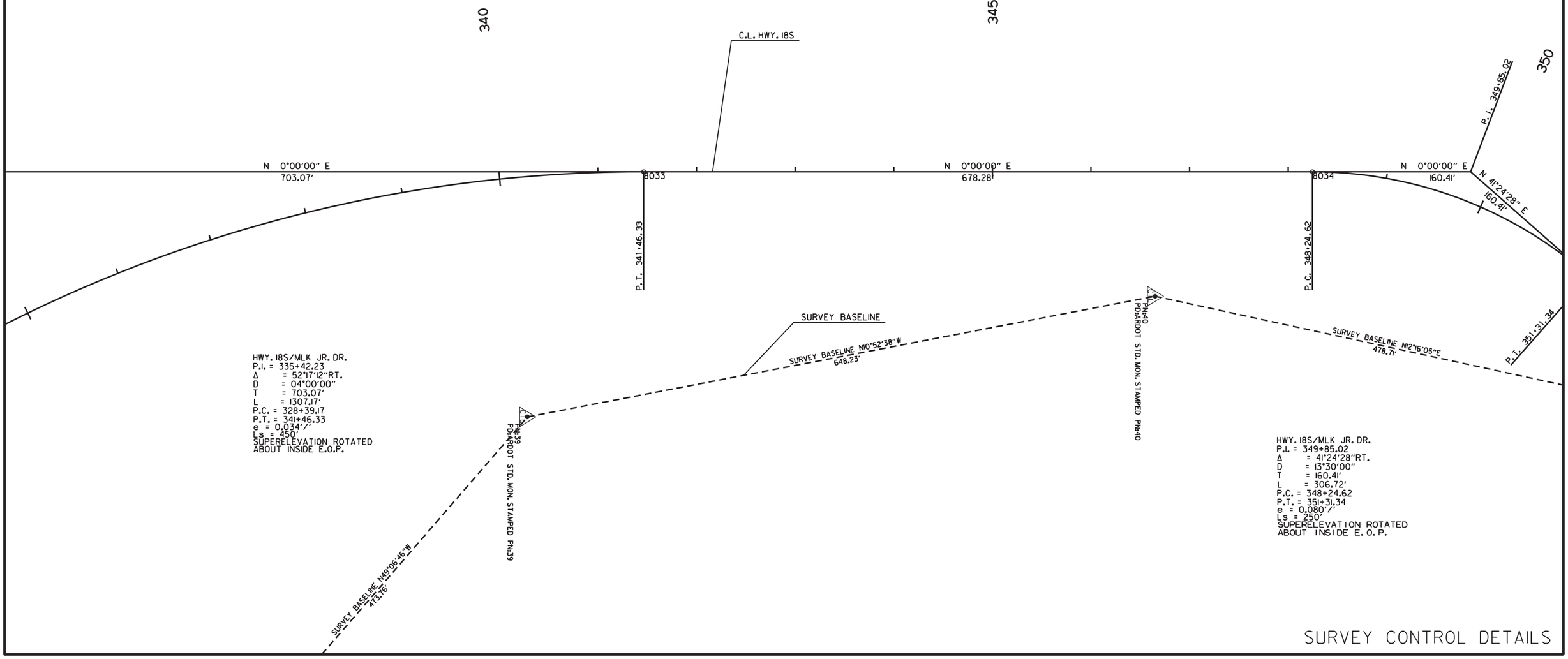

HT39710 5/5/2022
R100657.DGN

SURVEY CONTROL DETAILS

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	173	418
		SURVEY CONTROL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

May 17 2022 12:58 PM

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345

350

355

HWY. 18S/MLK JR. DR.
P.I. = 352+94.14
Δ = 40°50'47"LT.
D = 13°30'00"
T = 158.03'
L = 302.57'
P.C. = 351+36.11
P.T. = 354+38.68
e = 0.080'/'
Ls = 250'
SUPERELEVATION ROTATED
ABOUT INSIDE E.O.P.

N 0°00'00" E
678.28'

8034

N 0°00'00" E
160.41'

P.I. 349+85.02

N 41°24'28" E
160.41'

P.C. 348+24.62

P.C. 351+36.11

N 41°24'28" E
477.71'

8036

8037

C.L. HWY. 18S

SURVEY BASELINE

SURVEY BASELINE N10°52'38"W
648.23'

PN-40
PDIARDOT STD. MON. STAMPED PN-40

SURVEY BASELINE N12°16'05"E
478.71'

P.T. 351+31.34

N 41°24'28" E
158.03'

P.T. 354+38.68

N 0°33'41" E
158.03'

8039

SURVEY BASELINE N00°43'40"E
567.69'

N 0°33'41" E
359.04'

8040

P.O.E. 357+97.71

PN-41
PDIARDOT STD. MON. STAMPED PN-41

P.I. 352+94.14

PN-42
PDIARDOT STD. MON. STAMPED PN-42

HWY. 18S/MLK JR. DR.
P.I. = 349+85.02
Δ = 41°24'28"RT.
D = 13°30'00"
T = 160.41'
L = 306.72'
P.C. = 348+24.62
P.T. = 351+31.34
e = 0.080'/'
Ls = 250'
SUPERELEVATION ROTATED
ABOUT INSIDE E.O.P.

STA. 355+00.00
END JOB 100657

HT39710 5/5/2022
R100657.DGN

SURVEY CONTROL DETAILS

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	174	418
		SURVEY CONTROL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
May 17 2022 12:58 PM
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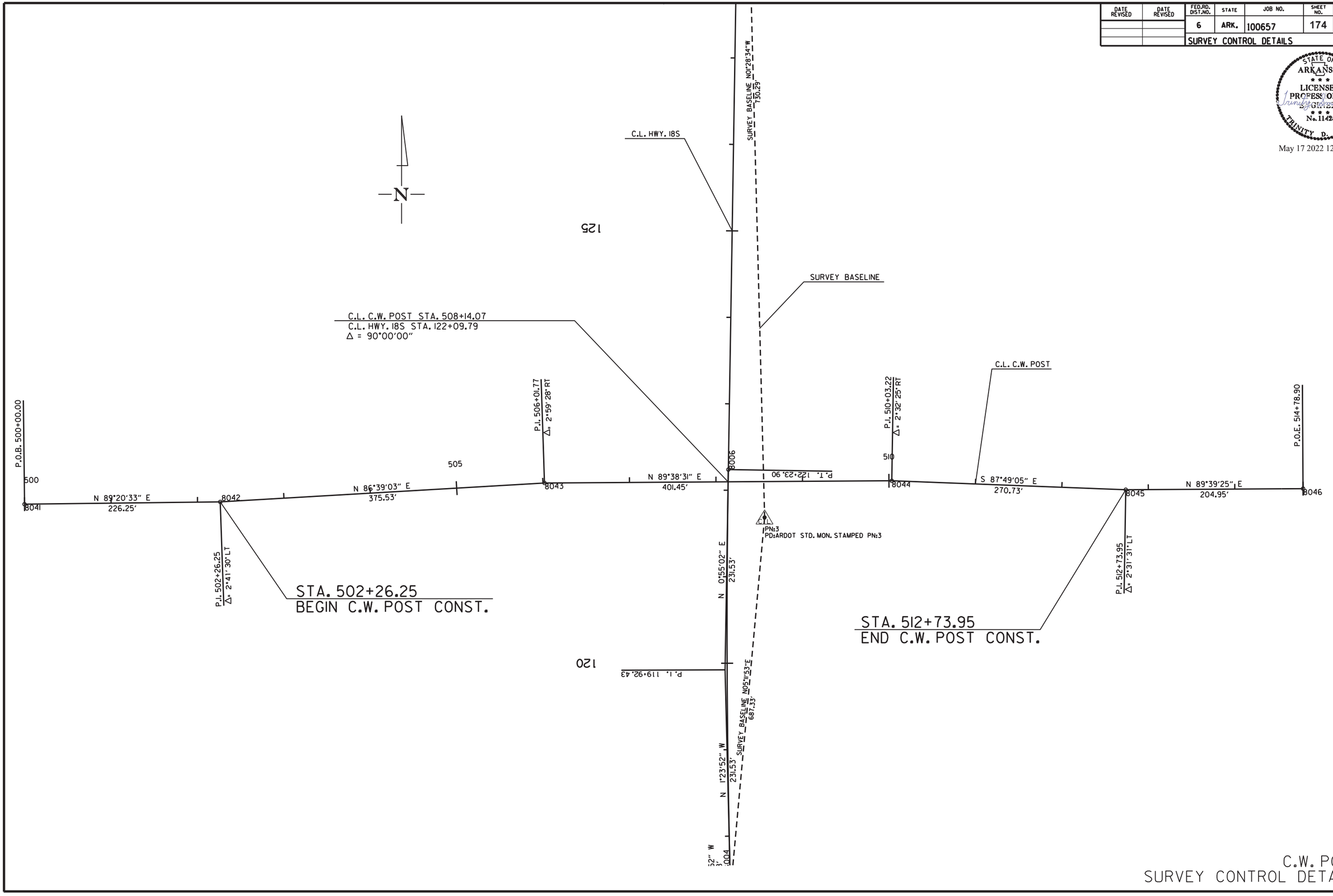

C.W. POST
SURVEY CONTROL DETAILS

HT39710 5/5/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
09-12-22		6	ARK.	100657	175	418
		PLAN AND PROFILE SHEETS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
Sep 29 2022 1:39 PM

STA. 112+00 CONSTRUCT
DROP INLET ON LT.
AND 24" X 2' R.C. PIPE INLET W/ F.E.S.
AND 36" X 23" X 116' R.C. ARCH PIPE OUTLET
CONNECT TO DROP INLET @ STA. 113+20 LT.
DROP INLET H = 3'-1"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
24" R.C. PIPE (CLASS III)(TYPE 3) = 2 LIN. FT.
24" F.E.S. = 1EACH
36" X 23" R.C. ARCH PIPE (CLASS III)(TYPE 3) = 116 LIN. FT.
36" X 23" SLPCCS ARCH PIPE (TYPE 2) = 116 LIN. FT.

STA. 113+20 CONSTRUCT
DROP INLET ON LT.
AND 24" X 4' R.C. PIPE INLET W/ F.E.S.
AND 36" X 80' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 114+05 LT.
DROP INLET H = 3'-10"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
24" R.C. PIPE (CLASS III)(TYPE 3) = 4 LIN. FT.
24" F.E.S. = 1EACH
36" R.C. PIPE (CLASS III)(TYPE 3) = 80 LIN. FT.
36" SLPCCS PIPE (TYPE 2) = 80 LIN. FT.

STA. 113+63 CONSTRUCT
APPROACH ON LT. = 5 CU. YD.

STA. 114+00 IN PLACE
DROP INLET ON LT.
AND 24" X 72' R.C. PIPE INLET
AND 24" X 90' R.C. PIPE OUTLET
REMOVE

STA. 114+05 CONSTRUCT
DROP INLET ON LT.
AND 36" X 76' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 114+85 LT.
DROP INLET H = 3'-10"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
36" R.C. PIPE (CLASS III)(TYPE 3) = 76 LIN. FT.
36" SLPCCS PIPE (TYPE 2) = 76 LIN. FT.

STA. 114+44 CONSTRUCT
APPROACH ON LT. = 10 CU YD. UNC. EXC.

STA. 114+85 CONSTRUCT
DROP INLET ON LT.
AND 36" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 115+85 LT.
DROP INLET H = 4'-0"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
36" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
36" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 115+00 IN PLACE
DROP INLET ON LT.
AND 24" X 92' R.C. PIPE OUTLET
REMOVE

STA. 115+54
REMOVE APPROACH ON LT.

STA. 115+85 CONSTRUCT
DROP INLET ON LT.
AND 36" X 110' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 117+00 LT.
DROP INLET H = 4'-6"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
36" R.C. PIPE (CLASS III)(TYPE 3) = 110 LIN. FT.
36" SLPCCS PIPE (TYPE 2) = 110 LIN. FT.

STA. 115+88 IN PLACE
DROP INLET ON LT.
AND 24" X 92' R.C. PIPE OUTLET
REMOVE

STA. 116+02 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 5.4 SQ. YDS.

STA. 116+42 CONSTRUCT
TURNOUT ON LT. = 10 CU. YD.

STA. 116+80 IN PLACE
DROP INLET ON LT.
AND 24" X 80' C.M. PIPE OUTLET
REMOVE

STA. 116+82 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 5.4 SQ. YDS.

STA. 117+00 CONSTRUCT
DROP INLET ON LT.
AND 36" X 46' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 117+50 LT.
DROP INLET H = 5'-0"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
36" R.C. PIPE (CLASS III)(TYPE 3) = 46 LIN. FT.
36" SLPCCS PIPE (TYPE 2) = 46 LIN. FT.

STA. 117+50 CONSTRUCT
DROP INLET ON LT.
AND 36" X 66' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 118+20 LT.
DROP INLET H = 5'-3"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
36" R.C. PIPE (CLASS III)(TYPE 3) = 66 LIN. FT.
36" SLPCCS PIPE (TYPE 2) = 66 LIN. FT.

STA. 117+87 IN PLACE
24" X 40' C.M. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH ON LT. = 5 CU. YD.

STA. 118+10 IN PLACE
24" X 50' C.M. PIPE CULVERT
W/ F.E.S. LT. AND RT.
FILL AND ABANDON

STA. 118+20 CONSTRUCT
DROP INLET ON LT.
AND 36" X 102' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 119+25 LT.
DROP INLET H = 5'-7"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
36" R.C. PIPE (CLASS III)(TYPE 3) = 102 LIN. FT.
36" SLPCCS PIPE (TYPE 2) = 102 LIN. FT.

STA. 119+25 CONSTRUCT
DROP INLET ON LT.
AND 36" X 72' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 120+00 LT.
DROP INLET H = 6'-1"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
36" R.C. PIPE (CLASS III)(TYPE 3) = 72 LIN. FT.
36" SLPCCS PIPE (TYPE 2) = 72 LIN. FT.

STA. 120+00 CONSTRUCT
DROP INLET ON LT.
AND 36" X 131' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 121+35 LT.
DROP INLET H = 6'-3"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
36" R.C. PIPE (CLASS III)(TYPE 3) = 132 LIN. FT.
36" SLPCCS PIPE (TYPE 2) = 132 LIN. FT.

STA. 121+25 LT. INSTALL
HANDRAIL AROUND SOUTHWEST
RADIUS OF INTERSECTION = 92 LIN. FT.

STA. 121+35 IN PLACE
DBL. 48" X 54' R.C. PIPE CULVERT
PLUG AND ABANDON

STA. 121+35 CONSTRUCT
DROP INLET ON LT.
AND 44" X 27" X 8' R.C. ARCH PIPE OUTLET
CONNECT TO R.C. BOX CULVERT @ STA. 121+50
DROP INLET H = 6'-3"
TYPE MO DROP INLET = 6' DIA.
TYPE C DROP INLET = 4' X 5'
44" X 27" R.C. ARCH PIPE
(CLASS III)(TYPE 3) = 8 LIN. FT.

STA. 121+50 CONSTRUCT
DBL. 5' X 3' X 122' R.C. BOX CULVERT
W/ 21 WINGS LT. AND RT.
Q50 = 112 CFS D.A. = 110 ACRES
SPAN = 4'-8"

STA. 122+63 CONSTRUCT
TYPE 2 WHEELCHAIR RAMP ON LT.
= 10.9 SQ. YDS.

STA. 123+00 CONSTRUCT
DROP INLET ON LT. W/ 4' EXTENSION
AND 36" X 9' R.C. PIPE INLET W/FES
AND 44" X 27" X 143' R.C. ARCH PIPE OUTLET
CONNECT TO R.C. BOX CULVERT @ STA. 121+50 LT.
DROP INLET H = 5'-8"
TYPE MO DROP INLET = 6' DIA.
TYPE C DROP INLET = 4' X 5'
36" R.C. PIPE (CLASS III)(TYPE 2) = 10 LIN. FT.
36" F.E.S. = 1EACH
44" X 27" R.C. ARCH PIPE
(CLASS III)(TYPE 3) = 144 LIN. FT.

STA. 123+16 CONSTRUCT
CONCRETE WALK (TYPE SPECIAL) ON LT.
AND INSTALL HANDRAIL
TO STA. 125+88 LT.

STA. 124+15 CONSTRUCT
DROP INLET ON LT.
AND 24" X 111' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 123+00 LT.
DROP INLET H = 4'-11"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 112 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 112 LIN. FT.

STA. 124+49 IN PLACE
DBL. 24" X 40' C.M. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL
DBL. 36" X 42' R.C. PIPE CULVERT
CONSTRUCT APPROACH ON RT. = 100 CU. YD.

STA. 125+88 CONSTRUCT
DROP INLET ON LT.
AND 24" X 111' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 123+00 LT.
DROP INLET H = 4'-10"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 112 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 112 LIN. FT.

C.L. C.W. POST STA. 508+14.07 =
C.L. HWY. 18S STA. 122+09.79
Δ = 90°00'00"

REMOVAL AND DISPOSAL OF FENCE

STA.	STA.	SIDE	LIN. FT.	GATES
124+31	124+63	RT.		1

STA. 111+40.98
BEGIN JOB 100657
LOG MILE 1.194

STA. 112+00 CONSTRUCT
DROP INLET ON RT.
AND 18" X 4' R.C. PIPE INLET W/ F.E.S.
AND 18" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 113+00 RT.
DROP INLET H = 3'-1"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 100 LIN. FT.
18" F.E.S. = 1EACH
18" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 113+00 CONSTRUCT
DROP INLET ON RT.
AND 18" X 4' R.C. PIPE INLET W/ F.E.S.
AND 18" X 130' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 114+33 RT.
DROP INLET H = 2'-10"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 134 LIN. FT.
18" F.E.S. = 1EACH
18" SLPCCS PIPE (TYPE 2) = 130 LIN. FT.

STA. 113+33 IN PLACE
36" X 40' C.M. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH = 5 CU. YD. UNC. EXC.

STA. 114+33 CONSTRUCT
DROP INLET ON RT.
AND 18" X 2' R.C. PIPE INLET W/ F.E.S.
AND 18" X 64' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 115+00 RT.
DROP INLET H = 2'-6"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 66 LIN. FT.
18" F.E.S. = 1EACH
18" SLPCCS PIPE (TYPE 2) = 64 LIN. FT.

STA. 115+00 CONSTRUCT
DROP INLET ON RT.
AND 18" X 4' R.C. PIPE INLET W/ F.E.S.
AND 24" X 98' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 116+00 RT.
DROP INLET H = 2'-10"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 4 LIN. FT.
18" F.E.S. = 1EACH
24" R.C. PIPE (CLASS III)(TYPE 3) = 98 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.

STA. 116+00 CONSTRUCT
DROP INLET ON RT.
AND 24" X 122' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 117+25 RT.
DROP INLET H = 3'-6"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 122 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 122 LIN. FT.

STA. 117+25 CONSTRUCT
DROP INLET ON RT.
AND 18" X 4' R.C. PIPE INLET W/ F.E.S.
AND 24" X 92' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 118+20 RT.
DROP INLET H = 3'-4"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 4 LIN. FT.
18" F.E.S. = 1EACH
24" R.C. PIPE (CLASS III)(TYPE 3) = 92 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 92 LIN. FT.

STA. 117+57 IN PLACE
36" X 40' C.M. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH ON RT. = 10 CU. YD.

STA. 118+20 CONSTRUCT
DROP INLET ON RT.
AND 24" X 102' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 119+25 RT.
DROP INLET H = 5'-0"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 102 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 102 LIN. FT.

STA. 119+25 CONSTRUCT
DROP INLET ON RT.
AND 24" X 72' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 120+00 RT.
DROP INLET H = 5'-8"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 72 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 72 LIN. FT.

STA. 120+00 CONSTRUCT
DROP INLET ON RT.
AND 24" X 132' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 121+35 RT.
DROP INLET H = 6'-0"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 132 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 132 LIN. FT.

STA. 121+17 RT. INSTALL
HANDRAIL AROUND SOUTHEAST
RADIUS OF INTERSECTION = 98 LIN. FT.

STA. 121+35 CONSTRUCT
DROP INLET ON RT.
AND 24" X 8' R.C. PIPE OUTLET
CONNECT TO R.C. BOX CULVERT @ STA. 121+50
DROP INLET H = 6'-3"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 8 LIN. FT.

STA. 123+00 CONSTRUCT
DROP INLET ON RT. W/ 8' EXTENSION
AND 36" X 9' R.C. PIPE INLET W/ F.E.S.
AND 44" X 27" X 142' R.C. ARCH PIPE OUTLET
CONNECT TO R.C. BOX CULVERT @ STA. 121+50 RT.
DROP INLET H = 5'-8"
TYPE MO DROP INLET = 6' DIA.
TYPE C DROP INLET = 4' X 5'
36" R.C. PIPE (CLASS III)(TYPE 3) = 10 LIN. FT.
36" F.E.S. = 1EACH
44" X 27" R.C. ARCH PIPE
(CLASS III)(TYPE 3) = 142 LIN. FT.

HWY. 18S/MLK JR. DR.
P.I. = 116+43.66
Δ = 02°00'12" LT.
D = 01°00'00"
T = 100.18'
L = 200.33'
P.C. = 115+43.48
P.T. = 117+43.82
NO SUPERELEVATION

HWY. 18S/MLK JR. DR.
P.I. = 119+92.43
Δ = 02°18'54" RT.
D = 00°30'00"
T = 231.53'
L = 463.00'
P.C. = 117+60.90
P.T. = 122+23.90
NO SUPERELEVATION

P.I. 510+03.22
= 2°32'25" RT

P.I. 512+73.95
= 2°31'31" LT

I-555 ON RAMP
I-555 OFF RAMP
EXIST. R/W & PROP. C/A
PROP. R/W & C/A
CONST. LIMITS
T.C.E.
COMMERCE ST.
ELECTRIC SUB STATION
SPECIAL FLOOD HAZARD AREA BOUNDARY
CULTIV.
N 0°36'20" E
N 1°23'52" W
N 0°55'02" E
S 87°49'09" E 3

HWY. 18S/MLK JR. DR.

HT39710 9/9/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
09-12-22		6	ARK.	100657	176	418
		PLAN AND PROFILE SHEETS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

Sep 29 2022 1:40 PM

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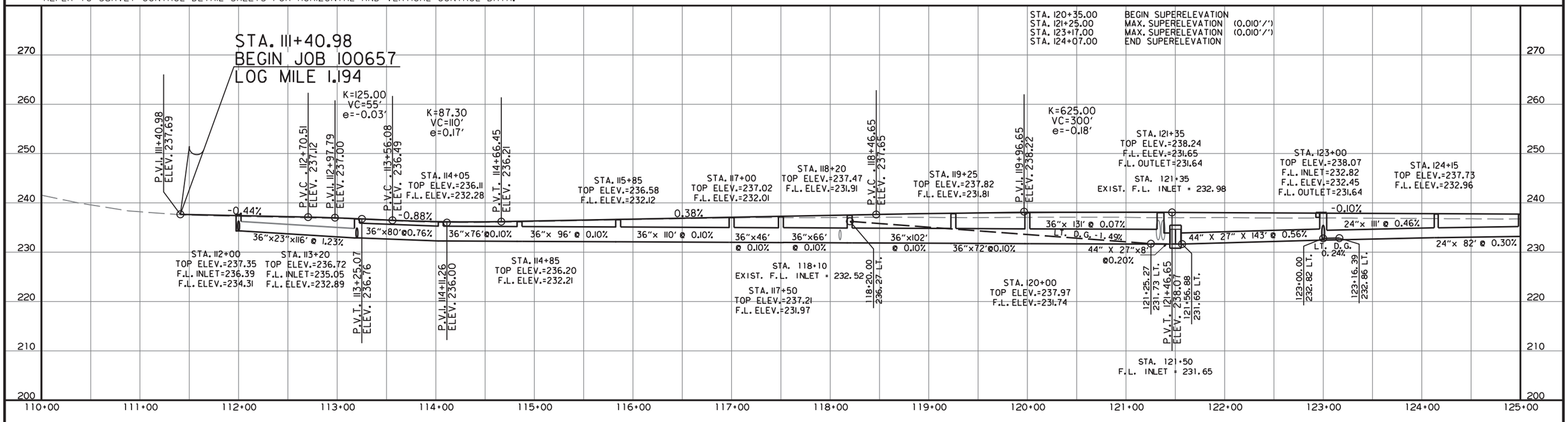
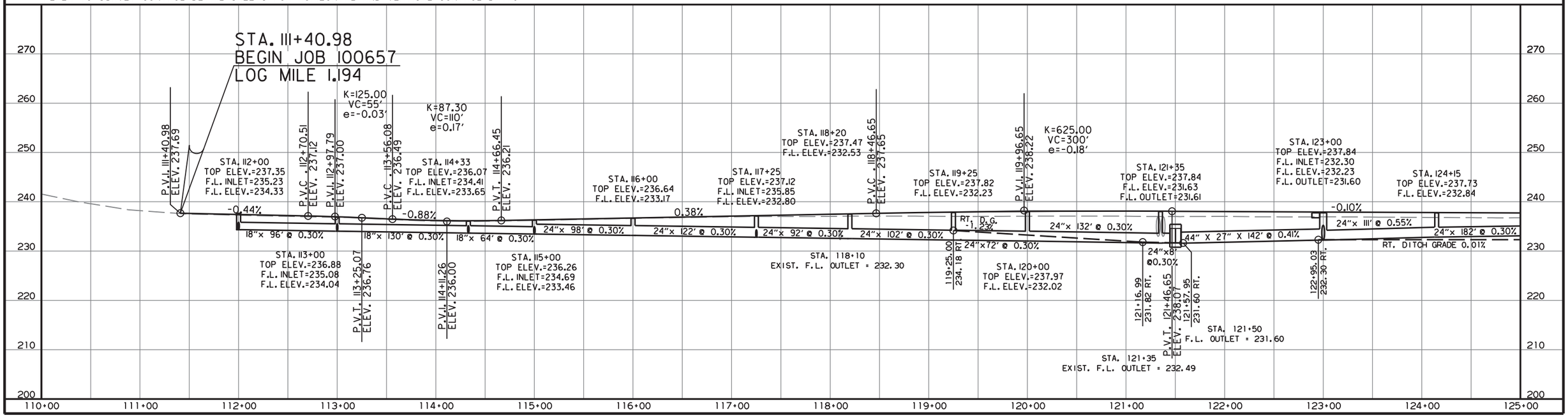
REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

LEFT SIDE OF HWY. 18S/MLK JR. DR.



REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

RIGHT SIDE OF HWY. 18S/MLK JR. DR.



HT39710 9/9/2022
R100657.DGN

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09-12-22		6	ARK.	100657	177	418
		PLAN AND PROFILE SHEETS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
TRINITY D. SMITH
No. 11425

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STA. 125+00 CONSTRUCT
DROP INLET ON LT.
AND 24" X 82' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 124+15 LT.
DROP INLET H = 4'-6"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 82 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 82 LIN. FT.

STA. 126+08 INSTALL
36" X 56' R.C. PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 85 CU. YD.

STA. 126+28 CONSTRUCT
CONCRETE WALK (TYPE SPECIAL) ON LT.
AND INSTALL HANDRAIL
TO STA. 129+20 LT.

STA. 127+00 CONSTRUCT
DROP INLET ON LT.
AND 24" X 196' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 125+00 LT.
DROP INLET H = 3'-8"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 196 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 196 LIN. FT.

STA. 127+75 CONSTRUCT
DROP INLET ON LT.
AND 18" X 71' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 127+00 LT.
DROP INLET H = 3'-5"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 72 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 72 LIN. FT.

STA. 129+00 CONSTRUCT
DROP INLET ON LT.
AND 18" X 122' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 127+75 RT.
DROP INLET H = 3'-0"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 122 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 122 LIN. FT.

STA. 129+00 CONSTRUCT
DROP INLET ON LT.
AND 18" X 122' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 127+75 LT.
DROP INLET H = 2'-11"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 122 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 122 LIN. FT.

STA. 129+36 IN PLACE
36" X 40' C.M. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL
36" X 48' R.C. PIPE CULVERT
CONSTRUCT APPROACH ON LT. = 20 CU. YD.

STA. 129+52 CONSTRUCT
CONCRETE WALK (TYPE SPECIAL) ON LT.
AND INSTALL HANDRAIL
TO STA. 130+20 LT.

STA. 129+85 CONSTRUCT
DROP INLET ON LT. W/ 4' EXTENSION
AND 18" X 82' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 129+00 LT.
DROP INLET H = 2'-8"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 82 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 82 LIN. FT.

STA. 130+40 IN PLACE
34" X 62' C.M. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL
36" X 58' R.C. PIPE CULVERT
CONSTRUCT APPROACH ON LT. = 15 CU. YD.

STA. 130+60 CONSTRUCT
CONCRETE WALK (TYPE SPECIAL) ON LT.
AND INSTALL HANDRAIL
TO STA. 133+06 LT.

STA. 131+00 CONSTRUCT
DROP INLET ON LT.
AND 18" X 112' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 129+85 LT.
DROP INLET H = 2'-4"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 112 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 112 LIN. FT.

STA. 132+80 CONSTRUCT
DROP INLET ON LT.
AND 18" X 177' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 131+00 LT.
DROP INLET H = 2'-3"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 178 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 178 LIN. FT.

STA. 133+26 INSTALL
36" X 56' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 70 CU. YD.

STA. 134+00 IN PLACE
DBL. 24" X 62' C.M. PIPE CULVERT
LT. SIDE DRAIN
REMOVE

STA. 134+05 CONSTRUCT
DROP INLET ON LT. W/ 8' EXTENSION
AND 18" X 121' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 132+80 LT.
DROP INLET H = 2'-3"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 122 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 122 LIN. FT.

STA. 134+85 IN PLACE
DBL. 18" X 32' C.M. PIPE CULVERT
LT. SIDE DRAIN
TO BE REMOVED BY OTHERS

STA. 135+25 IN PLACE
24" X 32' C.M. PIPE CULVERT
LT. SIDE DRAIN
REMOVE

STA. 135+25 IN PLACE
DBL. 32" X 82' C.M. PIPE CULVERT
ON 35° LT. FWD. SKEW
REMOVE

STA. 135+45 CONSTRUCT
DBL. 30" X 92' R.C. PIPE CULVERT
W/ F.E.S LT. AND RT.
050 = 58 CFS D.A. = 38 ACRES
30" R.C. PIPE (CLASS IV)(TYPE 3) = 184 LIN. FT.
30" F.E.S. = 4 EACH

STA. 135+89 IN PLACE
18" X 36' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL
18" X 56' R.C. PIPE CULVERT
CONSTRUCT APPROACH = 70 CU. YD.

STA. 136+40 CONSTRUCT
DROP INLET ON LT. W/ 8' EXTENSION
AND 18" X 10' R.C. PIPE INLET W/ F.E.S.
AND 18" X 112' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 137+55 LT.
DROP INLET H = 4'-10"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 122 LIN. FT.
18" F.E.S. = 1EACH
18" SLPCCS PIPE (TYPE 2) = 112 LIN. FT.

STA. 137+17 IN PLACE
18" X 42' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL
18" X 54' R.C. PIPE CULVERT
CONSTRUCT APPROACH = 55 CU. YD.

STA. 137+55 CONSTRUCT
DROP INLET ON LT.
AND 18" X 10' R.C. PIPE INLET W/ F.E.S.
AND 18" X 166' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 139+25 LT.
DROP INLET H = 5'-3"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 176 LIN. FT.
18" F.E.S. = 1EACH
18" SLPCCS PIPE (TYPE 2) = 166 LIN. FT.

STA. 139+00 IN PLACE
18" X 34' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE

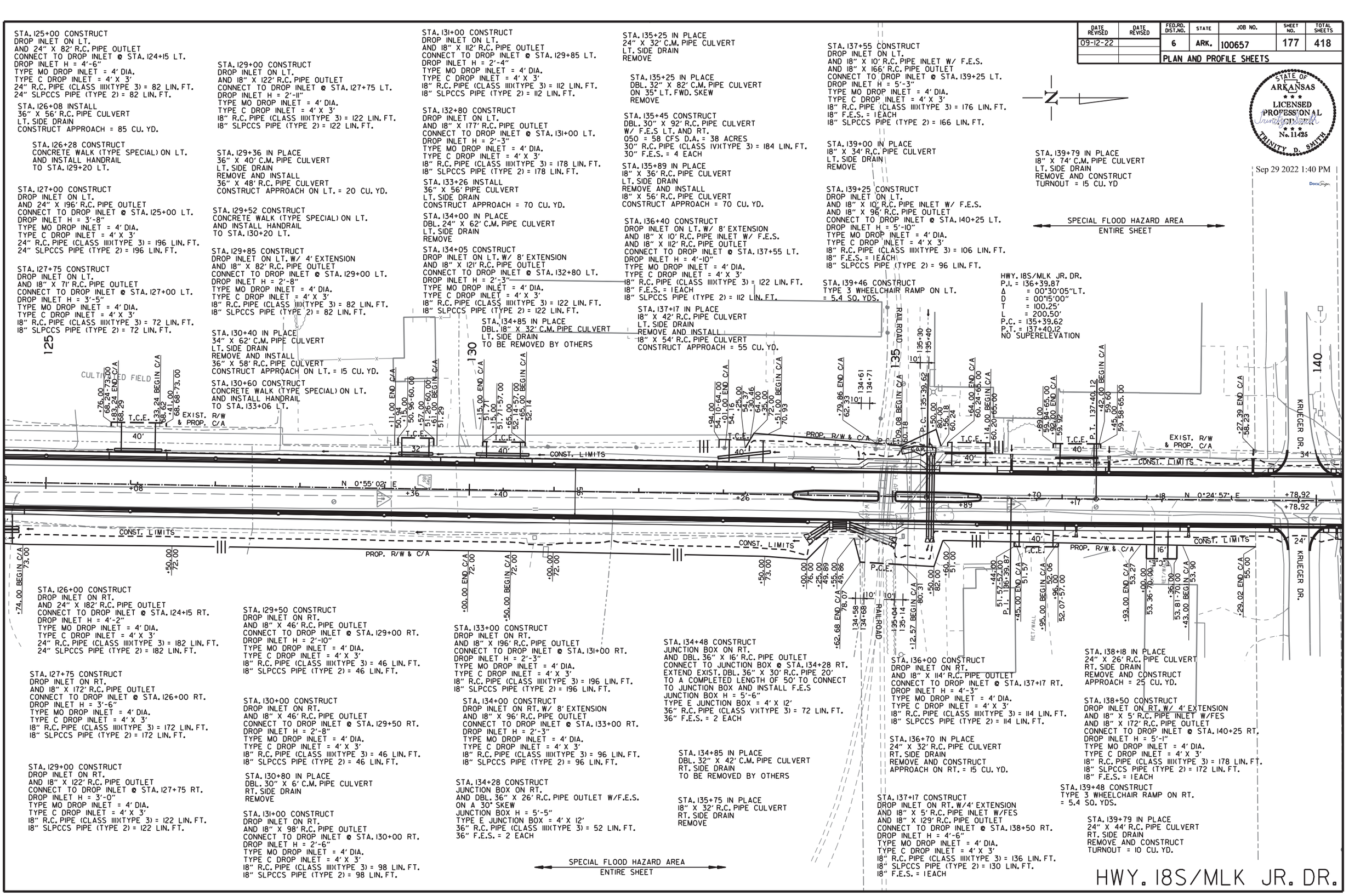
STA. 139+25 CONSTRUCT
DROP INLET ON LT.
AND 18" X 10' R.C. PIPE INLET W/ F.E.S.
AND 18" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 140+25 LT.
DROP INLET H = 5'-10"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 106 LIN. FT.
18" F.E.S. = 1EACH
18" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 139+46 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 5.4 SQ. YDS.

STA. 139+79 IN PLACE
18" X 74' C.M. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND CONSTRUCT
TURNOUT = 15 CU. YD

SPECIAL FLOOD HAZARD AREA
ENTIRE SHEET

HWY. 18S/MLK JR. DR.
P.I. = 136+39.87
Δ = 00°30'05"LT.
D = 00°15'00"
T = 100.25'
L = 200.50'
P.C. = 135+39.62
P.T. = 137+40.12
NO SUPERELEVATION



STA. 126+00 CONSTRUCT
DROP INLET ON RT.
AND 24" X 182' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 124+15 RT.
DROP INLET H = 4'-2"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 182 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 182 LIN. FT.

STA. 127+75 CONSTRUCT
DROP INLET ON RT.
AND 18" X 172' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 126+00 RT.
DROP INLET H = 3'-6"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 172 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 172 LIN. FT.

STA. 129+00 CONSTRUCT
DROP INLET ON RT.
AND 18" X 122' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 127+75 RT.
DROP INLET H = 3'-0"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 122 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 122 LIN. FT.

STA. 129+50 CONSTRUCT
DROP INLET ON RT.
AND 18" X 46' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 129+00 RT.
DROP INLET H = 2'-10"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 46 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 46 LIN. FT.

STA. 130+00 CONSTRUCT
DROP INLET ON RT.
AND 18" X 46' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 129+50 RT.
DROP INLET H = 2'-8"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 46 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 46 LIN. FT.

STA. 130+80 IN PLACE
DBL. 30" X 6' C.M. PIPE CULVERT
RT. SIDE DRAIN
REMOVE

STA. 131+00 CONSTRUCT
DROP INLET ON RT.
AND 18" X 98' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 130+00 RT.
DROP INLET H = 2'-6"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 98 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.

STA. 133+00 CONSTRUCT
DROP INLET ON RT.
AND 18" X 196' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 131+00 RT.
DROP INLET H = 2'-3"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 196 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 196 LIN. FT.

STA. 134+00 CONSTRUCT
DROP INLET ON RT. W/ 8' EXTENSION
AND 18" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 133+00 RT.
DROP INLET H = 2'-3"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 134+28 CONSTRUCT
JUNCTION BOX ON RT.
AND DBL. 36" X 26' R.C. PIPE OUTLET W/F.E.S.
ON A 30° SKEW
JUNCTION BOX H = 5'-5"
TYPE E JUNCTION BOX = 4' X 12'
36" R.C. PIPE (CLASS III)(TYPE 3) = 52 LIN. FT.
36" F.E.S. = 2 EACH

STA. 134+48 CONSTRUCT
JUNCTION BOX ON RT.
AND DBL. 36" X 16' R.C. PIPE OUTLET
CONNECT TO JUNCTION BOX @ STA. 134+28 RT.
EXTEND EXIST. DBL. 36" X 30' R.C. PIPE 20'
TO A COMPLETED LENGTH OF 50' TO CONNECT
TO JUNCTION BOX AND INSTALL F.E.S
JUNCTION BOX H = 5'-6"
TYPE E JUNCTION BOX = 4' X 12'
36" R.C. PIPE (CLASS V)(TYPE 3) = 72 LIN. FT.
36" F.E.S. = 2 EACH

STA. 134+85 IN PLACE
DBL. 32" X 42' C.M. PIPE CULVERT
RT. SIDE DRAIN
TO BE REMOVED BY OTHERS

STA. 135+75 IN PLACE
18" X 32' R.C. PIPE CULVERT
RT. SIDE DRAIN
REMOVE

STA. 136+00 CONSTRUCT
DROP INLET ON RT.
AND 18" X 114' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 137+17 RT.
DROP INLET H = 4'-3"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 114 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 114 LIN. FT.

STA. 136+70 IN PLACE
24" X 32' R.C. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH ON RT. = 15 CU. YD.

STA. 137+17 CONSTRUCT
DROP INLET ON RT. W/4' EXTENSION
AND 18" X 5' R.C. PIPE INLET W/FES
AND 18" X 129' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 138+50 RT.
DROP INLET H = 4'-6"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 136 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 130 LIN. FT.
18" F.E.S. = 1EACH

STA. 138+18 IN PLACE
24" X 26' R.C. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH = 25 CU. YD.

STA. 138+50 CONSTRUCT
DROP INLET ON RT. W/ 4' EXTENSION
AND 18" X 5' R.C. PIPE INLET W/FES
AND 18" X 172' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 140+25 RT.
DROP INLET H = 5'-1"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 178 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 172 LIN. FT.
18" F.E.S. = 1EACH

STA. 139+48 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 5.4 SQ. YDS.

STA. 139+79 IN PLACE
24" X 44' R.C. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND CONSTRUCT
TURNOUT = 10 CU. YD.

SPECIAL FLOOD HAZARD AREA
ENTIRE SHEET

HWY. 18S/MLK JR. DR.

HT39710 9/9/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
09-12-22		6	ARK.	100657	178	418
		PLAN AND PROFILE SHEETS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

Sep 29 2022 1:40 PM

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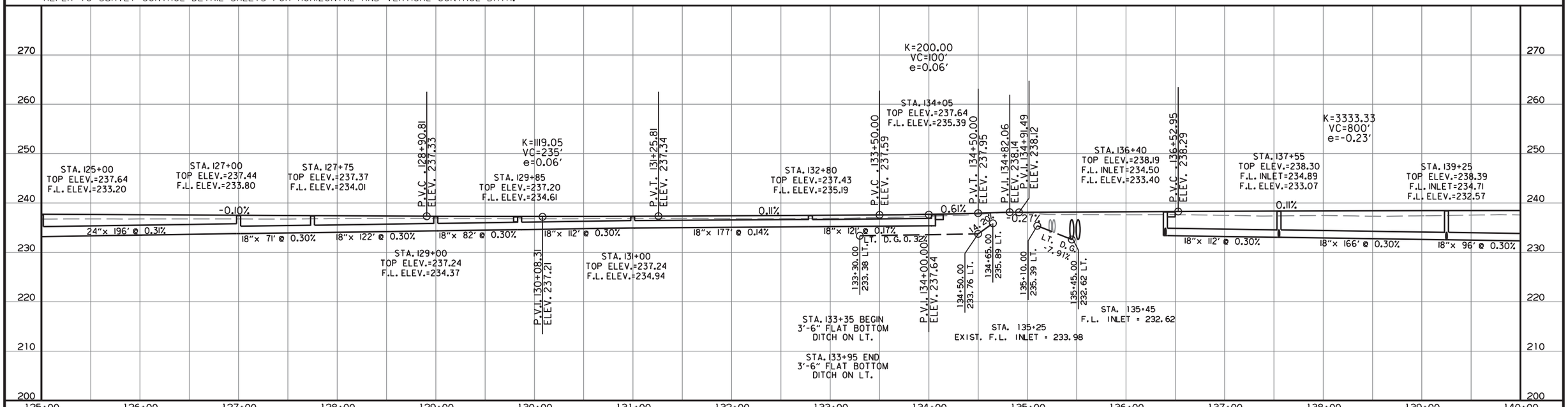
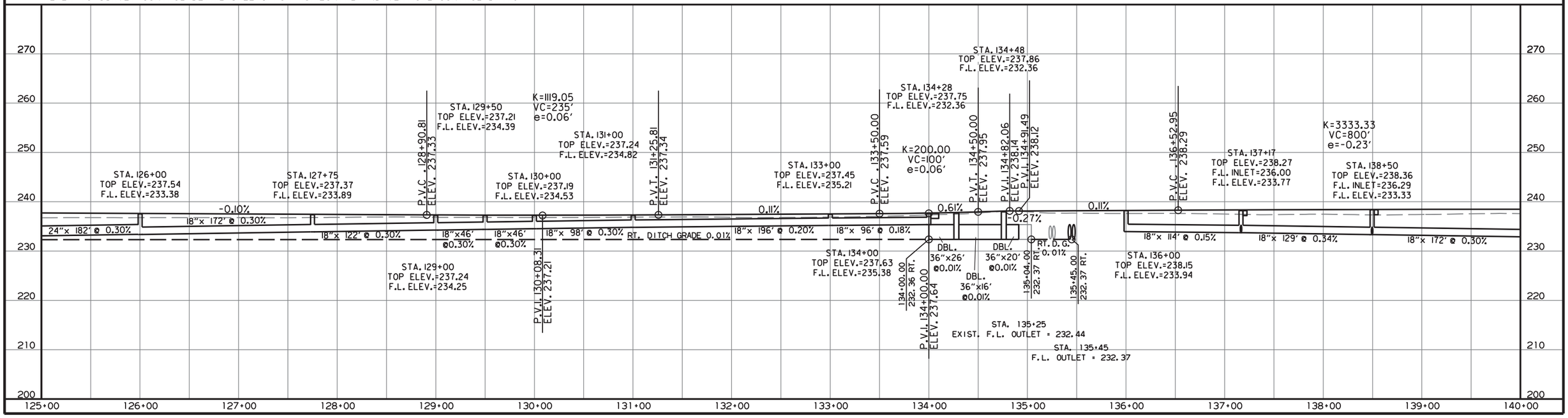
REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

LEFT SIDE OF HWY. 18S/MLK JR. DR.



REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

RIGHT SIDE OF HWY. 18S/MLK JR. DR.



HT39710 9/9/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	179	418
		PLAN AND PROFILE SHEETS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

May 17 2022 12:59 PM

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STA. 140+18 IN PLACE
DROP INLET ON LT.
AND 18" X 52' R.C. PIPE OUTLET
REMOVE

STA. 140+21 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 5.4 SQ. YDS.

STA. 140+25 CONSTRUCT
DROP INLET ON LT.
AND 18" X 142' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 141+70 LT.
DROP INLET H = 6'-2"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 142 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 142 LIN. FT.

STA. 140+73 IN PLACE
18" X 29' C.M. PIPE CULVERT
LT. SIDE DRAIN
REMOVE

STA. 141+70 CONSTRUCT
DROP INLET ON LT. W/ 4' EXTENSION
AND 18" X 10' R.C. PIPE INLET W/ F.E.S.
AND 18" X 126' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 143+00 LT.
DROP INLET H = 6'-6"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 136 LIN. FT.
18" F.E.S. = 1 EACH
18" SLPCCS PIPE (TYPE 2) = 126 LIN. FT.

STA. 142+10 IN PLACE
18" X 186' C.M. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH = 35 CU. YD.

STA. 143+00 CONSTRUCT
DROP INLET ON LT.
AND 18" X 76' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 143+80 LT.
DROP INLET H = 6'-10"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 76 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 76 LIN. FT.

STA. 143+40 CONSTRUCT
APPROACH = 30 CU. YD.

STA. 143+80 CONSTRUCT
DROP INLET ON LT.
AND 18" X 12' R.C. PIPE INLET W/ F.E.S.
AND 18" X 116' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 145+00 LT.
DROP INLET H = 7'-0"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 128 LIN. FT.
18" F.E.S. = 1 EACH
18" SLPCCS PIPE (TYPE 2) = 116 LIN. FT.

STA. 145+00 CONSTRUCT
DROP INLET ON LT.
AND 18" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 146+00 LT.
DROP INLET H = 7'-2"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 106 LIN. FT.
18" F.E.S. = 1 EACH
18" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 146+00 CONSTRUCT
DROP INLET ON LT.
AND 18" X 10' R.C. PIPE INLET W/ F.E.S.
AND 18" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 147+00 LT.
DROP INLET H = 7'-4"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 106 LIN. FT.
18" F.E.S. = 1 EACH
18" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 146+42 IN PLACE
24" X 50' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL
24" X 40' R.C. PIPE CULVERT
CONSTRUCT APPROACH = 10 CU. YD.

STA. 147+00 CONSTRUCT
DROP INLET ON LT.
AND 18" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 148+00 LT.
DROP INLET H = 7'-6"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 148+00 CONSTRUCT
DROP INLET ON LT. W/ 4' EXTENSION
AND 24" X 10' R.C. PIPE OUTLET
CONNECT TO R.C. BOX CULVERT @ STA. 148+23
DROP INLET H = 7'-8"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 10 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 10 LIN. FT.

STA. 148+16 IN PLACE
42" X 41' R.C. PIPE CULVERT
REMOVE

STA. 148+23 IN PLACE
DBL. 5' X 4' X 41' R.C. BOX CULVERT
REMOVE AND CONSTRUCT
TRI. 10' X 5' X 95' R.C. BOX CULVERT
W/ 3:1 WINGS LT. AND RT.
050 = 640 CFS D.A. = 865 ACRES
SPAN = 32'-4"

STA. 148+36 IN PLACE
42" X 41' R.C. PIPE CULVERT
REMOVE

STA. 148+50 CONSTRUCT
DROP INLET ON LT.
AND 24" X 6' R.C. PIPE OUTLET
CONNECT TO R.C. BOX CULVERT @ STA. 148+23
DROP INLET H = 6'-11"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 6 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 6 LIN. FT.

SPECIAL FLOOD HAZARD AREA
ENTIRE SHEET

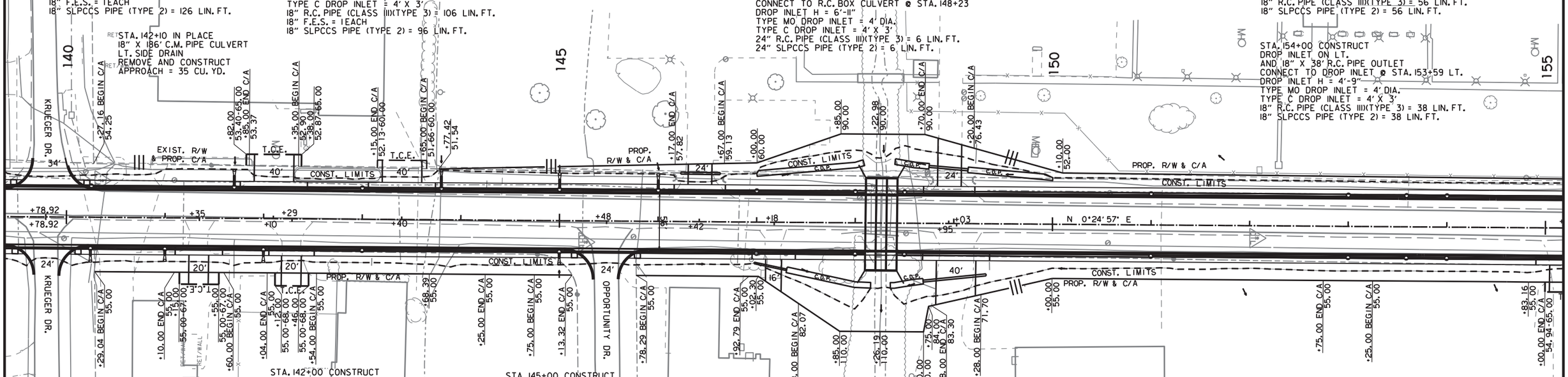
STA. 148+95 IN PLACE
24" X 44' C.M. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL
24" X 52' R.C. PIPE CULVERT
CONSTRUCT APPROACH = 135 CU. YD.

STA. 151+00 CONSTRUCT
DROP INLET ON LT. W/ 4' EXTENSION
AND 24" X 246' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 148+60 LT.
DROP INLET H = 5'-11"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 246 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 246 LIN. FT.

STA. 153+00 CONSTRUCT
DROP INLET ON LT.
AND 24" X 196' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 151+00 LT.
DROP INLET H = 5'-1"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 196 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 196 LIN. FT.

STA. 153+59 CONSTRUCT
DROP INLET ON LT.
AND 18" X 56' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 153+00 LT.
DROP INLET H = 4'-11"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 56 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 56 LIN. FT.

STA. 154+00 CONSTRUCT
DROP INLET ON LT.
AND 18" X 38' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 153+59 LT.
DROP INLET H = 4'-9"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 38 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 38 LIN. FT.



STA. 140+12 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 5.4 SQ. YDS.

STA. 140+25 CONSTRUCT
DROP INLET ON RT.
AND 18" X 6' R.C. PIPE INLET W/FES
AND 18" X 72' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 141+00 RT.
DROP INLET H = 5'-7"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 78 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 72 LIN. FT.
18" F.E.S. = 1 EACH

STA. 141+00 CONSTRUCT
DROP INLET ON RT.
AND 18" X 5' R.C. PIPE INLET W/FES
AND 18" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 142+00 RT.
DROP INLET H = 5'-10"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 102 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.
18" F.E.S. = 1 EACH

STA. 141+35 IN PLACE
18" X 24' C.M. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH = 30 CU. YD.

STA. 142+00 CONSTRUCT
DROP INLET ON RT.
AND 18" X 6' R.C. PIPE INLET W/FES
AND 18" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 143+00 RT.
DROP INLET H = 6'-1"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 102 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.
18" F.E.S. = 1 EACH

STA. 142+29 IN PLACE
18" X 22' C.M. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH = 20 CU. YD.

STA. 143+00 CONSTRUCT
DROP INLET ON RT.
AND 18" X 196' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 145+00 RT.
DROP INLET H = 6'-10"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 196 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 196 LIN. FT.

SPECIAL FLOOD HAZARD AREA
ENTIRE SHEET

STA. 145+00 CONSTRUCT
DROP INLET ON RT.
AND 18" X 6' R.C. PIPE INLET W/ F.E.S.
AND 18" X 196' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 147+00 RT.
DROP INLET H = 7'-2"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 202 LIN. FT.
18" F.E.S. = 1 EACH
18" SLPCCS PIPE (TYPE 2) = 196 LIN. FT.

STA. 145+16 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 5.4 SQ. YDS.

STA. 145+48 IN PLACE
18" X 42' C.M. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND CONSTRUCT
TURNOUT = 15 CU. YD.

STA. 145+80 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 5.4 SQ. YDS.

STA. 147+00 CONSTRUCT
DROP INLET ON RT. W/ 4' EXTENSION
AND 18" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 148+00 RT.
DROP INLET H = 7'-6"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 147+18 IN PLACE
18" X 24' C.M. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL
18" X 28' R.C. PIPE CULVERT
CONSTRUCT APPROACH = 15 CU. YD.

STA. 148+00 CONSTRUCT
DROP INLET ON RT. W/ 4' EXTENSION
AND 18" X 10' R.C. PIPE OUTLET
CONNECT TO R.C. BOX CULVERT @ STA. 148+23
DROP INLET H = 7'-8"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 10 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 10 LIN. FT.

STA. 148+50 CONSTRUCT
DROP INLET ON RT. W/ 4' EXTENSION
AND 24" X 7' R.C. PIPE OUTLET
CONNECT TO R.C. BOX CULVERT @ STA. 148+23
DROP INLET H = 7'-2"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 8 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 8 LIN. FT.

STA. 149+03 IN PLACE
24" X 42' C.M. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL
24" X 66' R.C. PIPE CULVERT
CONSTRUCT APPROACH = 175 CU. YD.

STA. 151+00 CONSTRUCT
DROP INLET ON RT. W/ 4' EXTENSION
AND 24" X 246' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 148+60 RT.
DROP INLET H = 6'-2"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 246 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 246 LIN. FT.

STA. 153+00 CONSTRUCT
DROP INLET ON RT. W/ 4' EXTENSION
AND 18" X 196' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 151+00 RT.
DROP INLET H = 5'-4"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 196 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 196 LIN. FT.

STA. 153+59 CONSTRUCT
DROP INLET ON RT. W/ 4' EXTENSION
AND 18" X 56' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 153+00 RT.
DROP INLET H = 5'-2"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 56 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 56 LIN. FT.

STA. 154+00 CONSTRUCT
DROP INLET ON RT. W/ 4' EXTENSION
AND 18" X 38' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 153+59 RT.
DROP INLET H = 5'-0"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 38 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 38 LIN. FT.

HT39710 5/6/2022
R100657.DGN

HWY. 18S/MLK JR. DR.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

May 17 2022 1:00 PM

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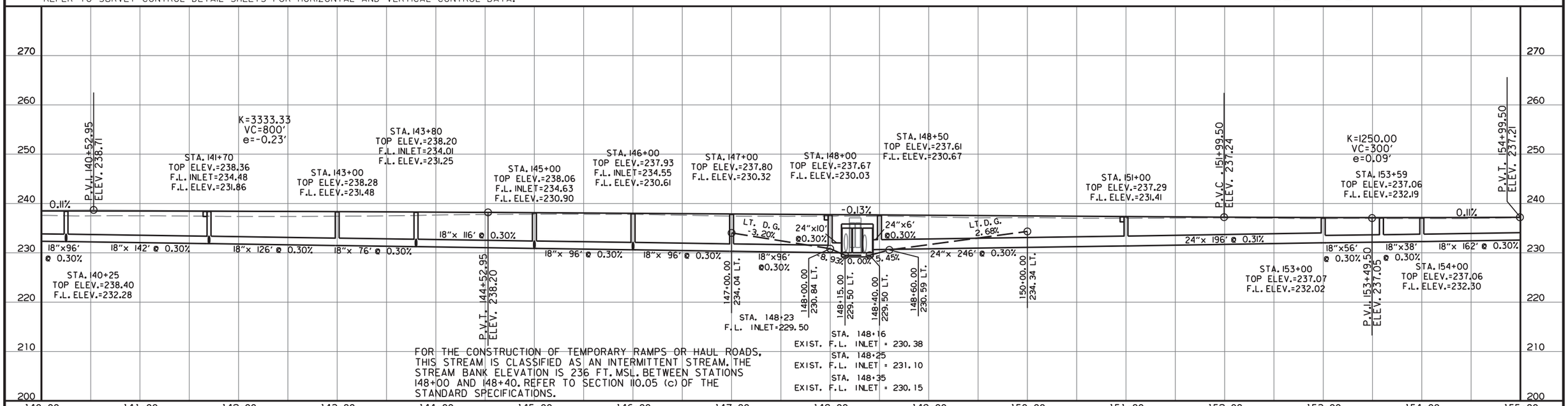
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	180	418
		PLAN AND PROFILE SHEETS				

REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

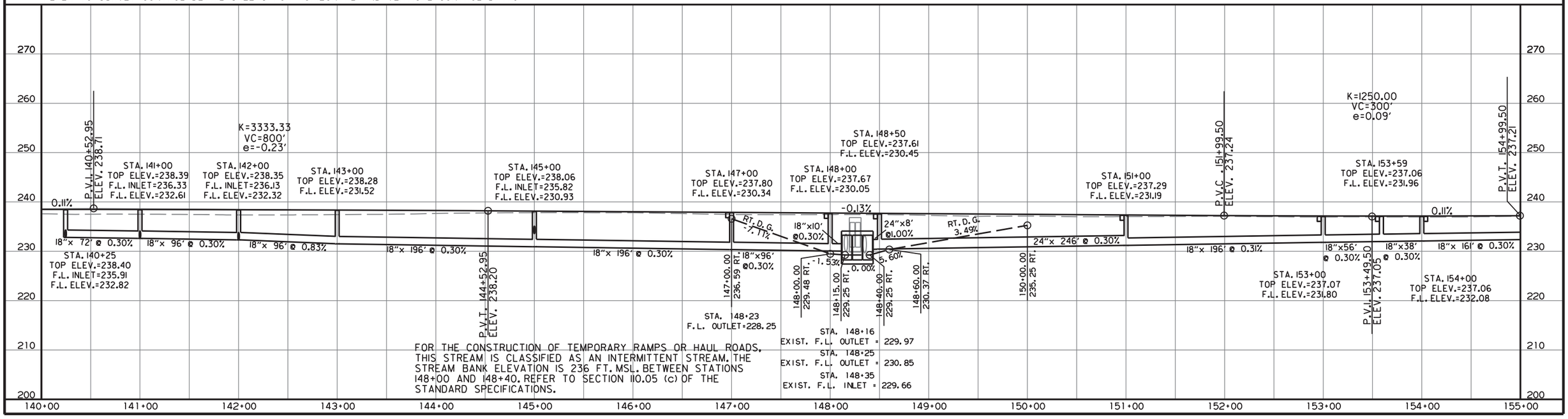
LEFT SIDE OF HWY. 18S/MLK JR. DR.



FOR THE CONSTRUCTION OF TEMPORARY RAMPS OR HAUL ROADS, THIS STREAM IS CLASSIFIED AS AN INTERMITTENT STREAM. THE STREAM BANK ELEVATION IS 236 FT. MSL. BETWEEN STATIONS 148+00 AND 148+40. REFER TO SECTION 110.05 (c) OF THE STANDARD SPECIFICATIONS.

REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

RIGHT SIDE OF HWY. 18S/MLK JR. DR.



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HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	181	418
		PLAN AND PROFILE SHEETS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
TRINITY D. SMITH
No. 11425

May 17 2022 1:00 PM

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REMOVAL AND DISPOSAL OF FENCE

STA.	STA.	SIDE	LIN. FT.	GATES
163+02	164+94	LT.	251	
165+33	172+64	LT.	672	

SPECIAL FLOOD HAZARD AREA
ENTIRE SHEET

STA. 155+65 CONSTRUCT
DROP INLET ON LT. W/ 4' EXTENSION
AND 18" X 162' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 154+00 LT.
DROP INLET H = 4'-5"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 162 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 162 LIN. FT.

STA. 157+84 IN PLACE
24" X 35' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH = 10 CU. YD.

STA. 158+15 CONSTRUCT
DROP INLET ON LT. W/ 4' EXTENSION
AND 18" X 5' R.C. PIPE INLET W/FES
AND 18" X 246' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 155+65 LT.
DROP INLET H = 4'-0"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 252 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 246 LIN. FT.
18" F.E.S. = 1EACH

STA. 159+09 IN PLACE
18" X 66' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH = 20 CU. YD.

STA. 159+50 CONSTRUCT
DROP INLET ON LT. W/ 4' EXTENSION
AND 18" X 3' R.C. PIPE INLET W/FES
AND 18" X 132' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 158+15 LT.
DROP INLET H = 3'-9"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 136 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 132 LIN. FT.
18" F.E.S. = 1EACH

STA. 161+77 IN PLACE
18" X 62' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH = 55 CU. YD.

STA. 162+17 CONSTRUCT
DROP INLET ON LT.
AND 18" X 10' R.C. PIPE OUTLET W/ F.E.S.
DROP INLET H = 4'-6"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 10 LIN. FT.
18" F.E.S. = 1EACH

STA. 163+00 IN PLACE
42" X 55' C.M. PIPE CULVERT
REMOVE

STA. 163+06 CONSTRUCT
DBL. 48" X 98' R.C. PIPE CULVERT
ON 5° RT. FWD. SKEW
W/ F.E.S. LT. AND RT.
050 = 101 CFS D.A. = 70 ACRES
48" R.C. PIPE (CLASS IV)(TYPE 3) = 196 LIN. FT.
48" F.E.S. = 4 EACH

STA. 163+12 IN PLACE
42" X 55' R.C. PIPE CULVERT
REMOVE

STA. 163+35 CONSTRUCT
DROP INLET ON LT.
AND 24" X 28' R.C. PIPE OUTLET W/ F.E.S.
DROP INLET H = 7'-9"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 28 LIN. FT.
24" F.E.S. = 1EACH

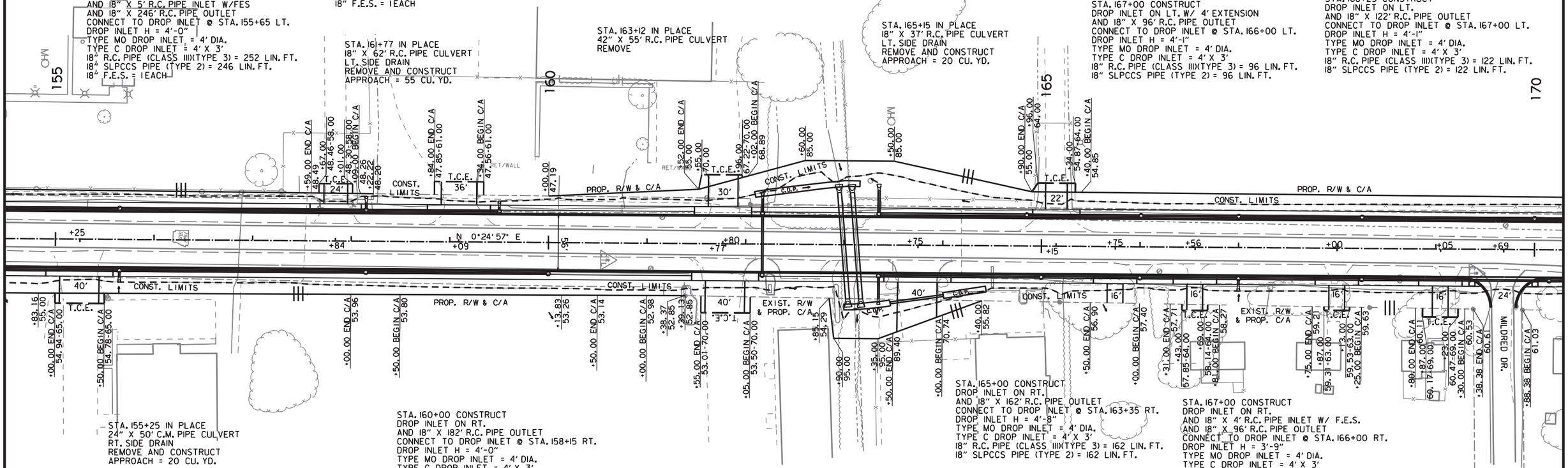
STA. 164+85 CONSTRUCT
DROP INLET ON LT.
AND 24" X 146' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 163+35 LT.
DROP INLET H = 5'-3"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 146 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 146 LIN. FT.

STA. 165+15 IN PLACE
18" X 37' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH = 20 CU. YD.

STA. 166+00 CONSTRUCT
DROP INLET ON LT. W/ 4' EXTENSION
AND 18" X 112' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 164+85 LT.
DROP INLET H = 4'-2"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 112 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 112 LIN. FT.

STA. 167+00 CONSTRUCT
DROP INLET ON LT. W/ 4' EXTENSION
AND 18" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 166+00 LT.
DROP INLET H = 4'-1"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 168+25 CONSTRUCT
DROP INLET ON LT. W/ 4' EXTENSION
AND 18" X 122' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 167+00 LT.
DROP INLET H = 4'-1"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 122 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 122 LIN. FT.



STA. 155+25 IN PLACE
24" X 50' C.M. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH = 20 CU. YD.

STA. 155+65 CONSTRUCT
DROP INLET ON RT. W/ 4' EXTENSION
AND 18" X 4' R.C. PIPE INLET W/ F.E.S.
AND 18" X 162' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 154+00 RT.
DROP INLET H = 4'-8"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 166 LIN. FT.
18" F.E.S. = 1EACH
18" SLPCCS PIPE (TYPE 2) = 162 LIN. FT.

STA. 158+15 CONSTRUCT
DROP INLET ON RT.
AND 18" X 246' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 155+65 RT.
DROP INLET H = 4'-3"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 246 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 246 LIN. FT.

STA. 160+00 CONSTRUCT
DROP INLET ON RT.
AND 18" X 182' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 158+15 RT.
DROP INLET H = 4'-0"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 182 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 182 LIN. FT.

STA. 161+80 CONSTRUCT
APPROACH ON RT. = 60 CU. YD.

STA. 162+17 CONSTRUCT
DROP INLET ON RT.
AND 18" X 60' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 162+17 LT.
DROP INLET H = 4'-4"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS IV)(TYPE 3) = 60 LIN. FT.

SPECIAL FLOOD HAZARD AREA
ENTIRE SHEET

STA. 162+55 REMOVE
APPROACH ON RT.

STA. 163+35 CONSTRUCT
DROP INLET ON RT.
AND 18" X 28' R.C. PIPE OUTLET W/ F.E.S.
DROP INLET H = 7'-5"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 28 LIN. FT.
18" F.E.S. = 1EACH

STA. 163+75 INSTALL
24" X 64' R.C. PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPROACH = 155 CU. YD.

STA. 165+00 CONSTRUCT
DROP INLET ON RT.
AND 18" X 162' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 163+35 RT.
DROP INLET H = 4'-8"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 162 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 162 LIN. FT.

STA. 165+75 CONSTRUCT
APPROACH = 10 CU. YD.

STA. 166+00 CONSTRUCT
DROP INLET ON RT.
AND 18" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 165+00 RT.
DROP INLET H = 3'-10"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 166+00 IN PLACE
18" X 26' C.M. PIPE CULVERT
RT. SIDE DRAIN
REMOVE

STA. 166+56 IN PLACE
18" X 20' R.C.M. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH = 10 CU. YD.

STA. 167+00 CONSTRUCT
DROP INLET ON RT.
AND 18" X 4' R.C. PIPE INLET W/ F.E.S.
AND 18" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 166+00 RT.
DROP INLET H = 3'-9"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 100 LIN. FT.
18" F.E.S. = 1EACH
18" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 168+00 IN PLACE
12" X 17' R.C. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH = 10 CU. YD.

STA. 168+25 CONSTRUCT
DROP INLET ON RT.
AND 18" X 122' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 167+00 RT.
DROP INLET H = 3'-9"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 122 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 122 LIN. FT.

STA. 169+05 IN PLACE
12" X 16' R.C. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH = 20 CU. YD.

STA. 169+37 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 5.4 SQ. YDS.

STA. 169+69 CONSTRUCT
TURNOUT ON RT. = 10 CU. YD.

HT39710 5/6/2022
R100657.DGN

HWY. 18S/MLK JR. DR.

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	182	418
		PLAN AND PROFILE SHEETS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

May 17 2022 1:00 PM

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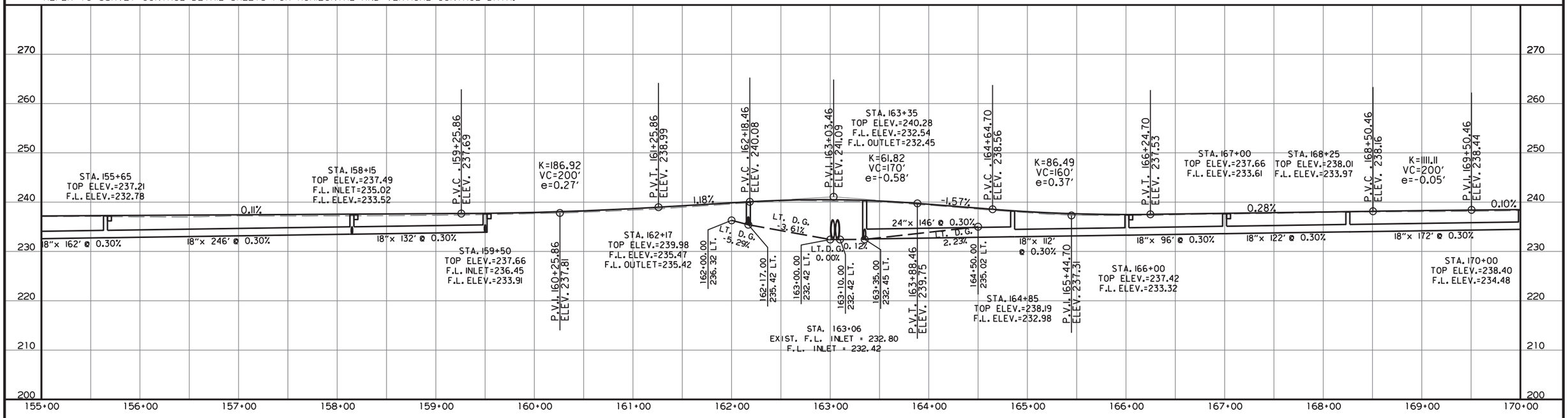
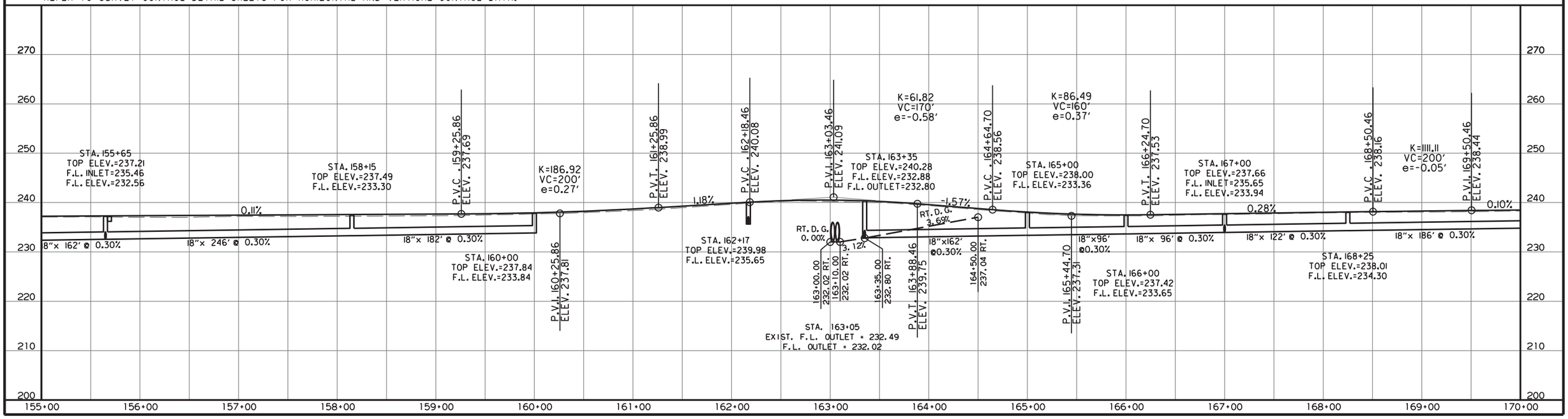
REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

LEFT SIDE OF HWY. 18S/MLK JR. DR.



REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

RIGHT SIDE OF HWY. 18S/MLK JR. DR.



HT39710 5/6/2022
RI00657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	183	418
		PLAN AND PROFILE SHEETS				

SPECIAL FLOOD HAZARD AREA
ENTIRE SHEET

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

May 17 2022 1:01 PM

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STA. 170+00 CONSTRUCT
DROP INLET ON LT.
AND 18" X 172' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 168+25 LT.
DROP INLET H = 3'-11"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 172 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 172 LIN. FT.

STA. 171+00 CONSTRUCT
DROP INLET ON LT.
AND 18" X 5' R.C. PIPE INLET W/FES
AND 18" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 170+00 LT.
DROP INLET H = 3'-9"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 102 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.
18" F.E.S. = 1EACH

STA. 171+81 IN PLACE
18" X 36' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH = 30 CU. YD.

STA. 172+15 CONSTRUCT
DROP INLET ON LT.
AND 18" X 112' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 171+00 LT.
DROP INLET H = 3'-6"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 112 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 112 LIN. FT.

STA. 173+50 CONSTRUCT
DROP INLET ON LT.
AND 18" X 134' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 172+15 LT.
DROP INLET H = 3'-3"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 134 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 134 LIN. FT.

STA. 173+96 IN PLACE
24" X 90' R.C. PIPE CULVERT
ON 5° RT. FWD. SKEW
RETAIN AND EXTEND 14' LT. AND 10' RT.
W/ F.E.S LT. AND RT.
FOR A COMPLETED LENGTH OF 114'
Q50 = 19 CFS D.A. = 12 ACRES
24" R.C. PIPE (CLASS V)(TYPE 3) = 24 LIN. FT.
24" F.E.S. = 2 EACH

STA. 173+96 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 13.3 SQ. YDS.

STA. 175+00 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 8.0 SQ. YDS.

STA. 175+03 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 7.7 SQ. YDS.

STA. 175+20 IN PLACE
DBL. 36" X 92' R.C. PIPE CULVERT
REMOVE AND CONSTRUCT
DBL. 51" X 31" X 114' R.C. ARCH PIPE CULVERT
ON 5° RT. FWD. SKEW
W/ F.E.S. LT. AND RT.
Q50 = 98 CFS D.A. = 109 ACRES
51" X 31" R.C. ARCH PIPE (CLASS V)(TYPE 3) = 228 LIN. FT.
51" X 31" F.E.S. = 4 EACH

STA. 175+40 CONSTRUCT
DROP INLET ON LT.
AND 18" X 12' R.C. PIPE OUTLET W/ F.E.S.
DROP INLET H = 4'-3"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 12 LIN. FT.
18" F.E.S. = 1 EACH

STA. 176+00 IN PLACE
12" X 18' STEEL PIPE CULVERT
LT. SIDE DRAIN
REMOVE

STA. 176+30 CONSTRUCT
DROP INLET ON LT.
AND 18" X 86' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 175+40 LT.
DROP INLET H = 4'-2"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 86 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 86 LIN. FT.

STA. 177+35 CONSTRUCT
DROP INLET ON LT.
AND 18" X 102' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 176+30 LT.
DROP INLET H = 4'-0"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 102 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 102 LIN. FT.

STA. 179+00 CONSTRUCT
DROP INLET ON LT.
AND 18" X 162' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 177+35 LT.
DROP INLET H = 3'-9"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 162 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 162 LIN. FT.

STA. 180+24 IN PLACE
12" X 18' STEEL PIPE CULVERT
LT. SIDE DRAIN
REMOVE

STA. 180+58 IN PLACE
18" X 20' STEEL PIPE CULVERT
LT. SIDE DRAIN
REMOVE

STA. 182+00 CONSTRUCT
DROP INLET ON LT.
AND 18" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 183+00 LT.
DROP INLET H = 3'-10"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 183+00 CONSTRUCT
DROP INLET ON LT.
AND 18" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 184+00 LT.
DROP INLET H = 3'-11"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

FENCE

STA.	STA.	SIDE	TYPE	LIN. FT.
175+21	180+00	LT.	A	492
180+50	184+50	LT.	A	400

STA. 184+00 CONSTRUCT
DROP INLET ON LT.
AND 18" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 185+00 LT.
DROP INLET H = 4'-0"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 185+00 CONSTRUCT
DROP INLET ON LT.
AND 18" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 186+00 LT.
DROP INLET H = 4'-2"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

REMOVAL AND DISPOSAL OF FENCE

STA.	STA.	SIDE	LIN. FT.	GATES
184+08	185+68	RT.	215	

HWY. 18S/MLK JR. DR.
P.I. = 179+33.72
Δ = 03°46'32"LT.
D = 00°30'00"
T = 377.69'
L = 755.11'
P.C. = 175+56.03
P.T. = 183+11.13
NO SUPERELEVATION

HWY. 18S/MLK JR. DR.
P.I. = 173+19.19
Δ = 03°44'31"RT.
D = 02°00'00"
T = 93.58'
L = 187.09'
P.C. = 172+25.61
P.T. = 174+12.70
NO SUPERELEVATION

STA. 170+01 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 5.4 SQ. YDS.

STA. 170+15 CONSTRUCT
DROP INLET ON RT.
AND 18" X 186' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 168+25 RT.
DROP INLET H = 3'-7"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 186 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 186 LIN. FT.

STA. 170+65 IN PLACE
18" X 24' C.M. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH = 15 CU. YD.

STA. 171+00 CONSTRUCT
DROP INLET ON RT.
AND 18" X 82' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 170+15 RT.
DROP INLET H = 3'-5"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 82 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 82 LIN. FT.

STA. 171+68 IN PLACE
12" X 21' C.M. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH = 20 CU. YD.

STA. 172+00 CONSTRUCT
DROP INLET ON RT.
AND 18" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 171+00 RT.
DROP INLET H = 3'-3"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 172+78 IN PLACE
18" X 24' C.M. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH = 20 CU. YD.

STA. 173+05 CONSTRUCT
DROP INLET ON RT.
AND 18" X 102' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 172+00 RT.
DROP INLET H = 3'-0"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 102 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 102 LIN. FT.

STA. 174+04 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 7.4 SQ. YDS.

STA. 175+14 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 7.9 SQ. YDS.

STA. 175+55 CONSTRUCT
DROP INLET ON RT.
AND 30" X 10' R.C. PIPE OUTLET W/ F.E.S.
DROP INLET H = 4'-0"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
30" R.C. PIPE (CLASS III)(TYPE 3) = 10 LIN. FT.
30" F.E.S. = 1EACH

STA. 176+30 CONSTRUCT
DROP INLET ON RT.
AND 30" X 72' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 175+55 RT.
DROP INLET H = 3'-11"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
30" R.C. PIPE (CLASS III)(TYPE 3) = 72 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 72 LIN. FT.

STA. 176+70 IN PLACE
18" X 60' C.M. PIPE CULVERT AND
DBL. 18" X 50' R.C. PIPE CULVERTS
RT. SIDE DRAINS
REMOVE AND CONSTRUCT
APPROACH = 15 CU. YD.

STA. 177+35 CONSTRUCT
DROP INLET ON RT.
AND 30" X 5' R.C. PIPE INLET W/FES
AND 30" X 102' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 176+30 RT.
DROP INLET H = 3'-9"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
30" R.C. PIPE (CLASS III)(TYPE 3) = 108 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 102 LIN. FT.
30" F.E.S. = 1EACH

STA. 179+00 CONSTRUCT
DROP INLET ON RT. W/ 4' EXTENSION
AND 18" X 162' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 177+35 RT.
DROP INLET H = 3'-6"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 162 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 162 LIN. FT.

STA. 179+87 IN PLACE
12" X 50' STEEL PIPE
RT. SIDE DRAIN
REMOVE 15'

STA. 180+10 CONSTRUCT
DROP INLET ON RT.
AND 18" X 108' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 179+00 RT.
DROP INLET H = 3'-4"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 108 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 108 LIN. FT.

STA. 180+50 IN PLACE
24" X 115' R.C. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH = 45 CU. YD.

STA. 182+00 CONSTRUCT
DROP INLET ON RT.
AND 18" X 98' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 183+00 RT.
DROP INLET H = 3'-10"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 98 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.

STA. 183+00 CONSTRUCT
DROP INLET ON RT.
AND 18" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 184+00 RT.
DROP INLET H = 3'-11"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 183+15 IN PLACE
24" X 46' R.C. PIPE CULVERT
RT. SIDE DRAIN
REMOVE

STA. 183+63 CONSTRUCT
APPROACH ON RT. = 100 CU. YD.

STA. 184+00 CONSTRUCT
DROP INLET ON RT.
AND 18" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 185+00 RT.
DROP INLET H = 4'-0"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 185+00 CONSTRUCT
DROP INLET ON RT.
AND 18" X 6' R.C. PIPE INLET W/FES
AND 18" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 186+00 RT.
DROP INLET H = 4'-2"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 102 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.
18" F.E.S. = 1EACH

HWY. 18S/MLK JR. DR.

HT39710 5/6/2022
R100657.DGN

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		6	ARK.	100657	184	418
		PLAN AND PROFILE SHEETS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
TRINITY D. SMITH
No. 11425
May 17 2022 1:01 PM
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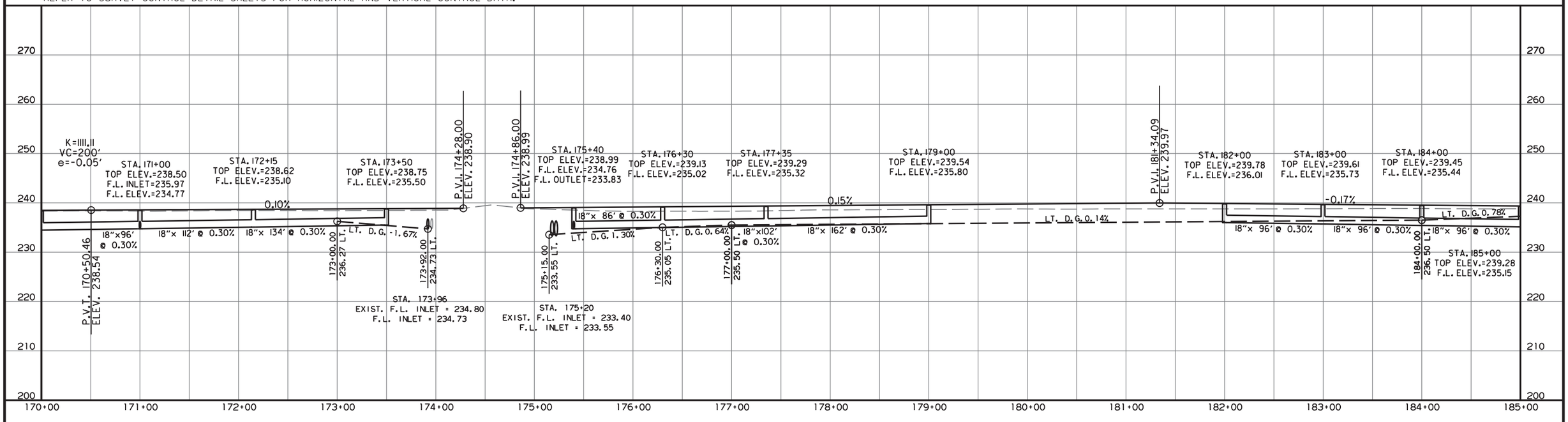
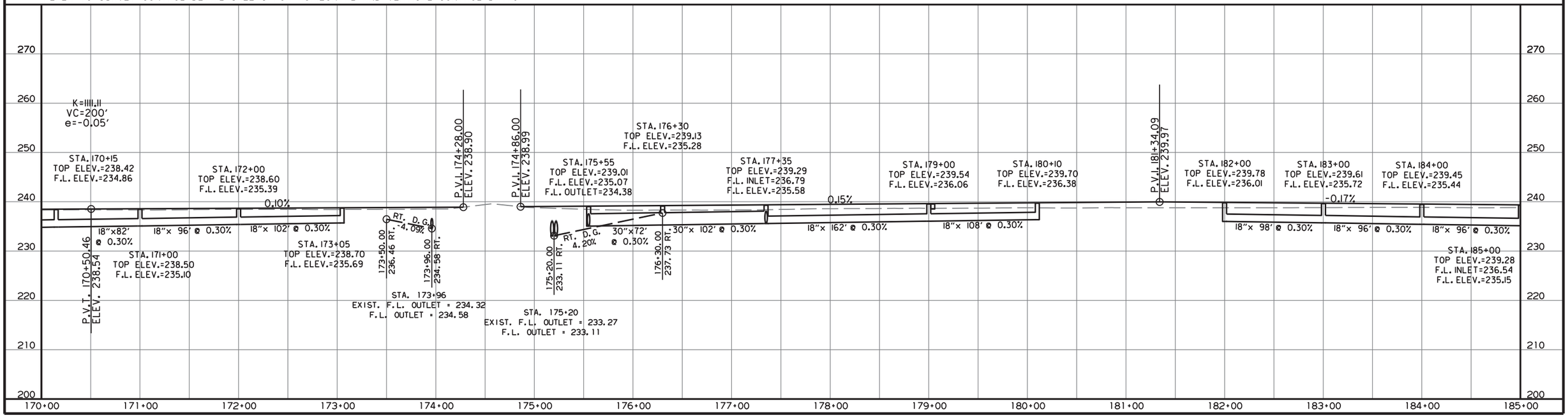
REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

LEFT SIDE OF HWY. 18S/MLK JR. DR.



REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

RIGHT SIDE OF HWY. 18S/MLK JR. DR.



HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
10-19-22		6	ARK.	100657	185	418
		PLAN AND PROFILE SHEETS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

Nov 2 2022 11:42 AM

DocuSign

STA. 185+59 IN PLACE
12" X 18' STEEL PIPE CULVERT
LT. SIDE DRAIN
REMOVE

STA. 186+00 CONSTRUCT
DROP INLET ON LT.
AND 18" X 148' R.C. PIPE OUTLET
CONNECT TO R.C. BOX CULVERT @ STA. 187+65
DROP INLET H = 4'-4"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 148 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 148 LIN. FT.

STA. 187+65 IN PLACE
QUAD. 5' X 5' X 44' R.C. BOX CULVERT
REMOVE AND CONSTRUCT
TRI. 10' X 5' X 97' R.C. BOX CULVERT
W/ 3:1 WINGS LT. AND RT.
050 = 640 CFS D.A. = 646 ACRES
SPAN = 32'-4"

STA. 187+80 IN PLACE
48" X 54' R.C. PIPE CULVERT
REMOVE

STA. 188+20 IN PLACE
60" X 32' R.C. PIPE CULVERT
REMOVE AND INSTALL
30" X 32' R.C. PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 55 CU. YD.

STA. 189+00 CONSTRUCT
DROP INLET ON LT.
AND 36" X 118' R.C. PIPE OUTLET
CONNECT TO R.C. BOX CULVERT @ STA. 187+65
DROP INLET H = 7'-11"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
36" R.C. PIPE (CLASS III)(TYPE 3) = 118 LIN. FT.
36" SLPCCS PIPE (TYPE 2) = 118 LIN. FT.

STA. 189+80 CONSTRUCT
DROP INLET ON LT.
AND 36" X 76' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 189+00 LT.
DROP INLET H = 7'-6"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
36" R.C. PIPE (CLASS III)(TYPE 3) = 76 LIN. FT.
36" SLPCCS PIPE (TYPE 2) = 76 LIN. FT.

STA. 189+91 IN PLACE
8" X 22' PVC PIPE CULVERT
LT. SIDE DRAIN
REMOVE

STA. 190+21 IN PLACE
8" X 22' PVC PIPE CULVERT
LT. SIDE DRAIN
REMOVE

STA. 191+00 CONSTRUCT
8' X 4' X 93' R.C. BOX CULVERT
W/ 3:1 WINGS LT. AND RT.
AND DROP INLET ON LT. ON R.C. BOX CULVERT
DROP INLET H = 7'-5
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'.
Q50 = 176 CFS D.A. = 224 ACRES
SPAN = 9'-0"

STA. 191+27 IN PLACE
12" X 20' C.P. PIPE CULVERT
LT. SIDE DRAIN
REMOVE

STA. 192+00 CONSTRUCT
DROP INLET ON LT. W/ 8' EXTENSION
AND 44" x 27" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 191+00 LT.
DROP INLET H = 7'-5"
TYPE MO DROP INLET = 6' DIA.
TYPE C DROP INLET = 4' X 5'
44"X27" R.C. ARCH PIPE
(CLASS III)(TYPE 3) = 96 LIN. FT.

STA. 193+00 CONSTRUCT
DROP INLET ON LT. W/ 8' EXTENSION
AND 36" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 192+00 LT.
DROP INLET H = 7'-5"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
36" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
36" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

SPECIAL FLOOD HAZARD AREA
ENTIRE SHEET

STA. 194+00 CONSTRUCT
DROP INLET ON LT. W/ 4' EXTENSION
AND 36" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 193+00 LT.
DROP INLET H = 7'-4"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
36" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
36" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 195+00 CONSTRUCT
DROP INLET ON LT.
AND 36" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 194+00 LT.
DROP INLET H = 7'-2"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
36" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
36" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 195+60 CONSTRUCT
DROP INLET ON LT.
AND 36" X 56' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 195+00 LT.
DROP INLET H = 7'-1"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
36" R.C. PIPE (CLASS III)(TYPE 3) = 56 LIN. FT.
36" SLPCCS PIPE (TYPE 2) = 56 LIN. FT.

STA. 196+00 CONSTRUCT
DROP INLET ON LT.
AND 36" X 36' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 195+60 LT.
DROP INLET H = 7'-0"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
36" R.C. PIPE (CLASS III)(TYPE 3) = 36 LIN. FT.
36" SLPCCS PIPE (TYPE 2) = 36 LIN. FT.

STA. 198+00 CONSTRUCT
DROP INLET ON LT.
AND 30" X 196' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 196+00 LT.
DROP INLET H = 6'-8"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
30" R.C. PIPE (CLASS III)(TYPE 3) = 196 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 196 LIN. FT.

STA. 198+14 IN PLACE
12" X 20' STEEL PIPE CULVERT
LT. SIDE DRAIN
REMOVE

STA. 200+00 CONSTRUCT
DROP INLET ON LT.
AND 30" X 196' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 198+00 LT.
DROP INLET H = 6'-3"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
30" R.C. PIPE (CLASS III)(TYPE 3) = 196 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 196 LIN. FT.

REMOVAL AND DISPOSAL OF FENCE & GATES

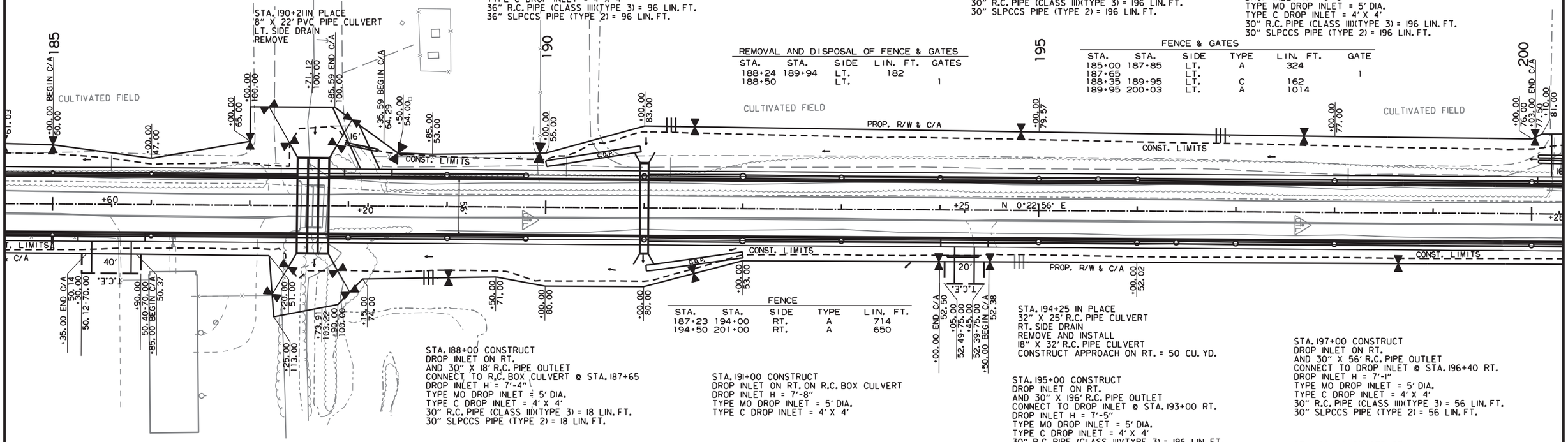
STA.	STA.	SIDE	LIN. FT.	GATES
188+24	189+94	LT.	182	
188+50		LT.		1

FENCE & GATES

STA.	STA.	SIDE	TYPE	LIN. FT.	GATE
185+00	187+85	LT.	A	324	
187+65		LT.			1
188+35	189+95	LT.	C	162	
189+95	200+03	LT.	A	1014	

FENCE

STA.	STA.	SIDE	TYPE	LIN. FT.
187+23	194+00	RT.	A	714
194+50	201+00	RT.	A	650



STA. 185+60 CONSTRUCT
APPROACH ON RT. = 65 CU. YD.

STA. 186+00 CONSTRUCT
DROP INLET ON RT.
AND 18" X 148' R.C. PIPE OUTLET
CONNECT TO R.C. BOX CULVERT @ STA. 187+65
DROP INLET H = 4'-4"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 148 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 148 LIN. FT.

SPECIAL FLOOD HAZARD AREA
ENTIRE SHEET

STA. 188+00 CONSTRUCT
DROP INLET ON RT.
AND 30" X 18' R.C. PIPE OUTLET
CONNECT TO R.C. BOX CULVERT @ STA. 187+65
DROP INLET H = 7'-4"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
30" R.C. PIPE (CLASS III)(TYPE 3) = 18 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 18 LIN. FT.

STA. 189+00 CONSTRUCT
DROP INLET ON RT.
AND 30" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 188+00 RT.
DROP INLET H = 6'-1"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
30" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 189+80 CONSTRUCT
DROP INLET ON RT.
AND 30" X 76' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 189+00 RT.
DROP INLET H = 5'-7"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
30" R.C. PIPE (CLASS III)(TYPE 3) = 76 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 76 LIN. FT.

STA. 191+00 CONSTRUCT
DROP INLET ON RT. ON R.C. BOX CULVERT
DROP INLET H = 7'-8"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'

STA. 192+00 CONSTRUCT
DROP INLET ON RT.
AND 44" X 27" X 96' R.C. ARCH PIPE OUTLET
CONNECT TO DROP INLET @ STA. 191+00 RT.
DROP INLET H = 7'-8"
TYPE MO DROP INLET = 6' DIA.
TYPE C DROP INLET = 4' X 5'
44"X27" R.C. ARCH PIPE
(CLASS III)(TYPE 3) = 96 LIN. FT.

STA. 193+00 CONSTRUCT
DROP INLET ON RT.
AND 30" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 192+00 RT.
DROP INLET H = 7'-7"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
30" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 194+25 IN PLACE
32" X 25' R.C. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL
18" X 32' R.C. PIPE CULVERT
CONSTRUCT APPROACH ON RT. = 50 CU. YD.

STA. 195+00 CONSTRUCT
DROP INLET ON RT.
AND 30" X 196' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 193+00 RT.
DROP INLET H = 7'-5"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
30" R.C. PIPE (CLASS III)(TYPE 3) = 196 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 196 LIN. FT.

STA. 196+00 CONSTRUCT
DROP INLET ON RT. W/ 4' EXTENSION
AND 30" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 195+00 RT.
DROP INLET H = 7'-3"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
30" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 196+40 CONSTRUCT
DROP INLET ON RT.
AND 30" X 36' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 196+00 RT.
DROP INLET H = 7'-2"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
30" R.C. PIPE (CLASS III)(TYPE 3) = 36 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 36 LIN. FT.

STA. 197+00 CONSTRUCT
DROP INLET ON RT.
AND 30" X 56' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 196+40 RT.
DROP INLET H = 7'-1"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
30" R.C. PIPE (CLASS III)(TYPE 3) = 56 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 56 LIN. FT.

STA. 198+00 CONSTRUCT
DROP INLET ON RT.
AND 30" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 197+00 RT.
DROP INLET H = 6'-11"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
30" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 200+00 CONSTRUCT
DROP INLET ON RT.
AND 30" X 196' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 198+00 RT.
DROP INLET H = 6'-6"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
30" R.C. PIPE (CLASS III)(TYPE 3) = 196 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 196 LIN. FT.

HT39710 10/19/2022
R100657.DGN

HWY. 18S/MLK JR. DR.

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	186	418
		PLAN AND PROFILE SHEETS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
TRINITY D. SMITH
No. 11425

May 17 2022 1:02 PM

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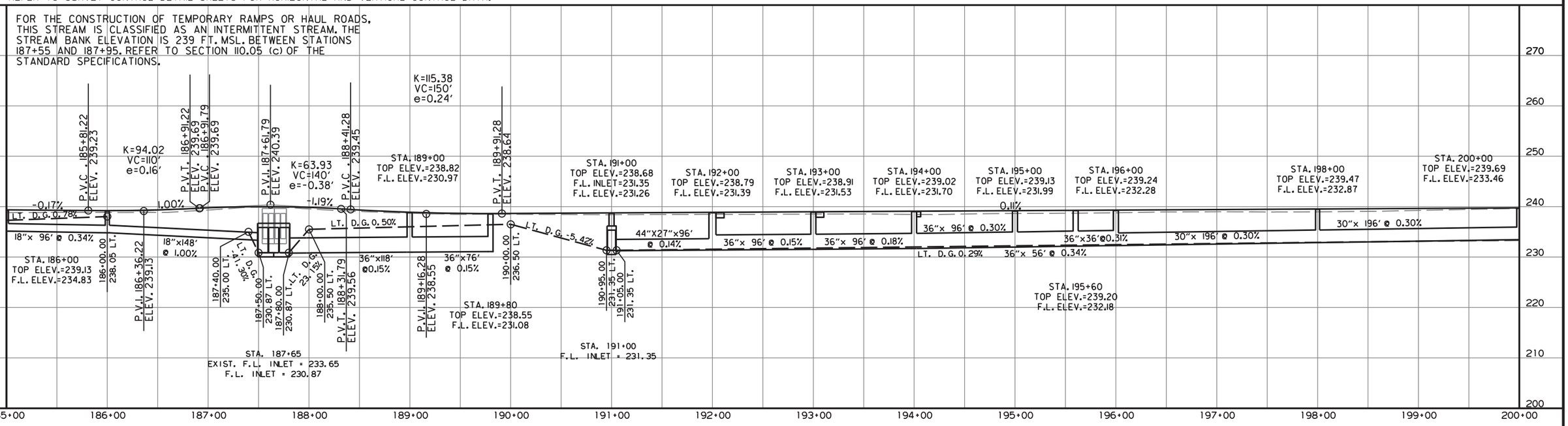
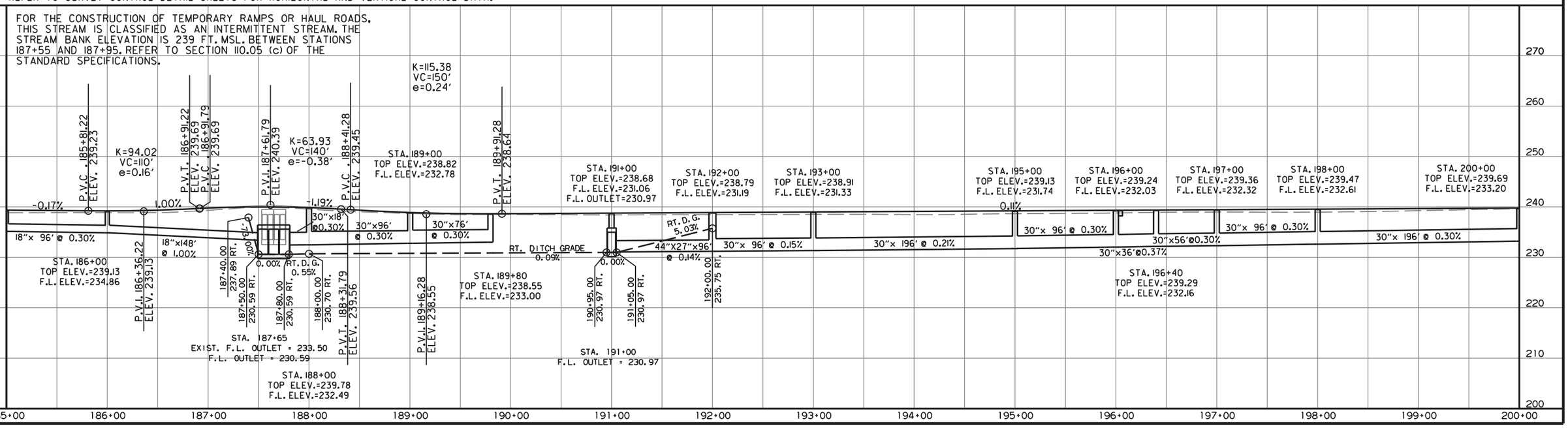
REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

LEFT SIDE OF HWY. 18S/MLK JR. DR.



REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

RIGHT SIDE OF HWY. 18S/MLK JR. DR.



HT39710 5/6/2022
RI00657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
10-19-22		6	ARK.	100657	187	418
		PLAN AND PROFILE SHEETS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
Nov 2 2022 11:42 AM
DocuSign

STA. 200+28 IN PLACE
20" X 25' STEEL PIPE
24" X 21' R.C. PIPE
32" X 25' R.C. PIPE
LT. SIDE DRAIN
REMOVE AND INSTALL
DBL. 36" X 44' PIPE CULVERT
CONSTRUCT APPROACH = 145 CU. YD.

STA. 201+00 CONSTRUCT
DROP INLET ON LT. W/ 8' EXTENSION
AND 30" X 95' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 200+00 LT.
DROP INLET H = 6'-1"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
30" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 202+00 CONSTRUCT
DROP INLET ON LT.
AND 30" X 95' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 201+00 LT.
DROP INLET H = 5'-11"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
30" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 202+45 IN PLACE
24" X 30' R.C. PIPE CULVERT
32" X 30' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE

STA. 203+20 CONSTRUCT
DROP INLET ON LT. W/ 8' EXTENSION
AND 30" X 116' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 202+00 LT.
DROP INLET H = 5'-9"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
30" R.C. PIPE (CLASS III)(TYPE 3) = 116 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 116 LIN. FT.

STA. 204+00 CONSTRUCT
DROP INLET ON LT.
AND 24" X 76' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 203+20 LT.
DROP INLET H = 5'-8"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 76 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 76 LIN. FT.

STA. 204+30 IN PLACE
18" X 16' C.P. PIPE CULVERT
LT. SIDE DRAIN
REMOVE

STA. 205+00 CONSTRUCT
DROP INLET ON LT.
AND 24" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 204+00 LT.
DROP INLET H = 5'-7"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

FENCE

STA.	STA.	SIDE	TYPE	LIN. FT.
202+70	206+00	LT.	A	330
206+50	210+00	LT.	A	350
210+50	211+25	LT.	A	76
211+75	211+98	LT.	A	23
211+98	212+95	LT.	C	98
213+45	213+55	LT.	C	10

REMOVAL AND DISPOSAL OF FENCE

STA.	STA.	SIDE	LIN. FT.	GATES
211+98	213+55	LT.	186	

STA. 206+00 CONSTRUCT
DROP INLET ON LT.
AND 24" X 97' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 205+00 LT.
DROP INLET H = 5'-6"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 98 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.

STA. 207+00 CONSTRUCT
DROP INLET ON LT.
AND 24" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 206+00 LT.
DROP INLET H = 5'-6"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 208+00 CONSTRUCT
DROP INLET ON LT.
AND 24" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 207+00 LT.
DROP INLET H = 5'-6"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 209+20 CONSTRUCT
DROP INLET ON LT.
AND 24" X 116' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 208+00 LT.
DROP INLET H = 5'-5"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 116 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 116 LIN. FT.

STA. 210+25 IN PLACE
24" X 86' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL
DBL. 36" X 58' R.C. PIPE CULVERT
CONSTRUCT APPROACH = 135 CU. YD.

STA. 210+65 CONSTRUCT
DROP INLET ON LT.
AND 24" X 142' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 209+20 LT.
DROP INLET H = 5'-4"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 142 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 142 LIN. FT.

HWY. 18S/MLK JR. DR.
P.I. = 207+63.03
Δ = 00°25'11"LT.
D = 00°15'00"
T = 83.92'
L = 167.83'
P.C. = 206+79.11
P.T. = 208+46.94
NO SUPERELEVATION

STA. 212+00 CONSTRUCT
DROP INLET ON LT.
AND 24" X 132' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 210+65 LT.
DROP INLET H = 5'-0"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 132 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 132 LIN. FT.

STA. 213+20 IN PLACE
DBL. 30" X 24' C.M. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL
DBL. 30" X 30' PIPE CULVERTS
CONSTRUCT APPROACH = 55 CU. YD.

STA. 213+80 CONSTRUCT
DROP INLET ON LT.
AND 24" X 176' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 212+00 LT.
DROP INLET H = 4'-4"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 176 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 176 LIN. FT.

STA. 213+85 IN PLACE
24" X 49' R.C. PIPE CULVERT
PLUG AND ABANDON

STA. 214+08 IN PLACE
24" X 18' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE

STA. 214+83 IN PLACE
DBL. 24" X 68' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL
DBL. 30" X 36' R.C. PIPE CULVERT
CONSTRUCT APPROACH = 55 CU. YD.

STA. 201+00 CONSTRUCT
DROP INLET ON RT.
AND 30" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 200+00 RT.
DROP INLET H = 6'-4"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
30" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 203+00 CONSTRUCT
DROP INLET ON RT.
AND 30" X 196' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 201+00 RT.
DROP INLET H = 6'-0"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
30" R.C. PIPE (CLASS III)(TYPE 3) = 196 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 196 LIN. FT.

FENCE

STA.	STA.	SIDE	TYPE	LIN. FT.
201+50	208+05	RT.	A	665
214+06	216+00	RT.	A	194

STA. 204+00 CONSTRUCT
DROP INLET ON RT.
AND 30" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 203+00 RT.
DROP INLET H = 5'-11"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
30" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 206+00 CONSTRUCT
DROP INLET ON RT.
AND 24" X 196' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 204+00 RT.
DROP INLET H = 5'-9"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 196 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 196 LIN. FT.

STA. 207+00 CONSTRUCT
DROP INLET ON RT.
AND 24" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 206+00 RT.
DROP INLET H = 5'-9"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 208+45 CONSTRUCT
DROP INLET ON RT.
AND 18" X 8' R.C. PIPE INLET W/FES
AND 24" X 142' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 207+00 RT.
DROP INLET H = 5'-10"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 8 LIN. FT.
18" F.E.S. = 1EACH
24" R.C. PIPE (CLASS III)(TYPE 3) = 142 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 142 LIN. FT.

STA. 208+88 IN PLACE
24" X 98' R.C. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH = 15 CU. YD.

STA. 209+20 CONSTRUCT
DROP INLET ON RT.
AND 18" X 6' R.C. PIPE INLET W/FES
AND 24" X 71' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 208+45 RT.
DROP INLET H = 5'-8"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 72 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 72 LIN. FT.
18" R.C. PIPE (CLASS III)(TYPE 3) = 6 LIN. FT.
18" F.E.S. = 1EACH

STA. 210+25 IN PLACE
24" X 61' R.C. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH = 5 CU. YD.

STA. 210+65 CONSTRUCT
DROP INLET ON RT.
AND 18" X 4' R.C. PIPE INLET W/FES
AND 24" X 142' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 209+20 RT.
DROP INLET H = 5'-7"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 142 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 142 LIN. FT.
18" R.C. PIPE (CLASS III)(TYPE 3) = 4 LIN. FT.
18" F.E.S. = 1EACH

STA. 212+85 CONSTRUCT
DROP INLET ON RT.
AND 24" X 216' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 210+65 RT.
DROP INLET H = 4'-11"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 216 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 216 LIN. FT.

STA. 213+20 IN PLACE
24" X 61' R.C. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH = 5 CU. YD.

STA. 214+00 CONSTRUCT
DROP INLET ON RT.
AND 18" X 6' R.C. PIPE INLET W/ F.E.S.
AND 24" X 112' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 212+85 RT.
DROP INLET H = 4'-6"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 6 LIN. FT.
18" F.E.S. = 1EACH
24" R.C. PIPE (CLASS III)(TYPE 3) = 112 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 112 LIN. FT.

STA. 215+00 CONSTRUCT
DROP INLET ON RT.
AND 18" X 6' R.C. PIPE INLET W/ F.E.S.
AND 24" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 214+00 RT.
DROP INLET H = 4'-1"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 6 LIN. FT.
18" F.E.S. = 1EACH
24" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

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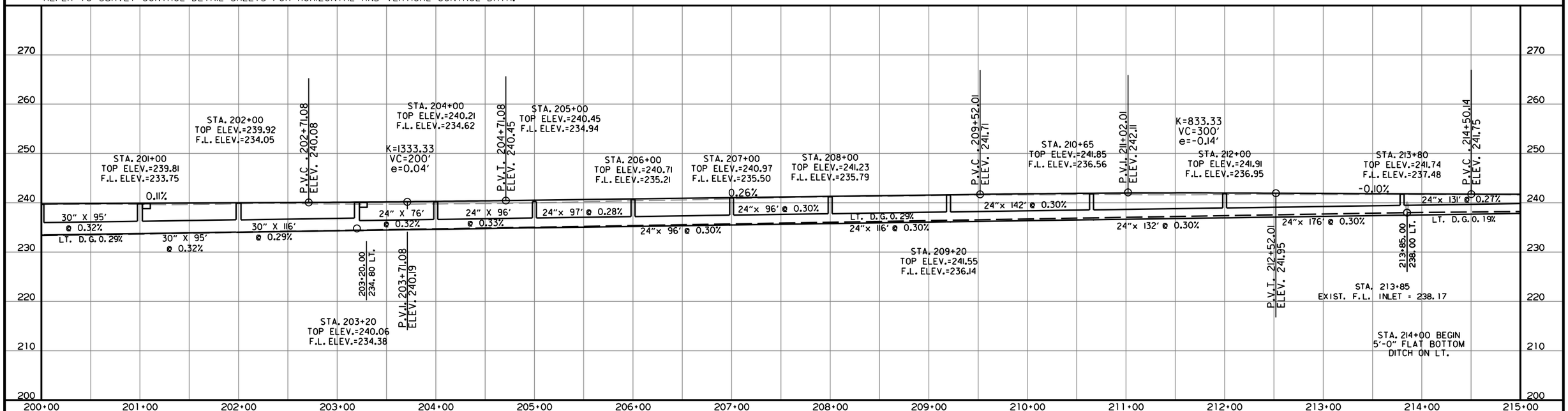
HWY. 18S/MLK JR. DR.

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
10-19-22		6	ARK.	100657	188	418
		PLAN AND PROFILE SHEETS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

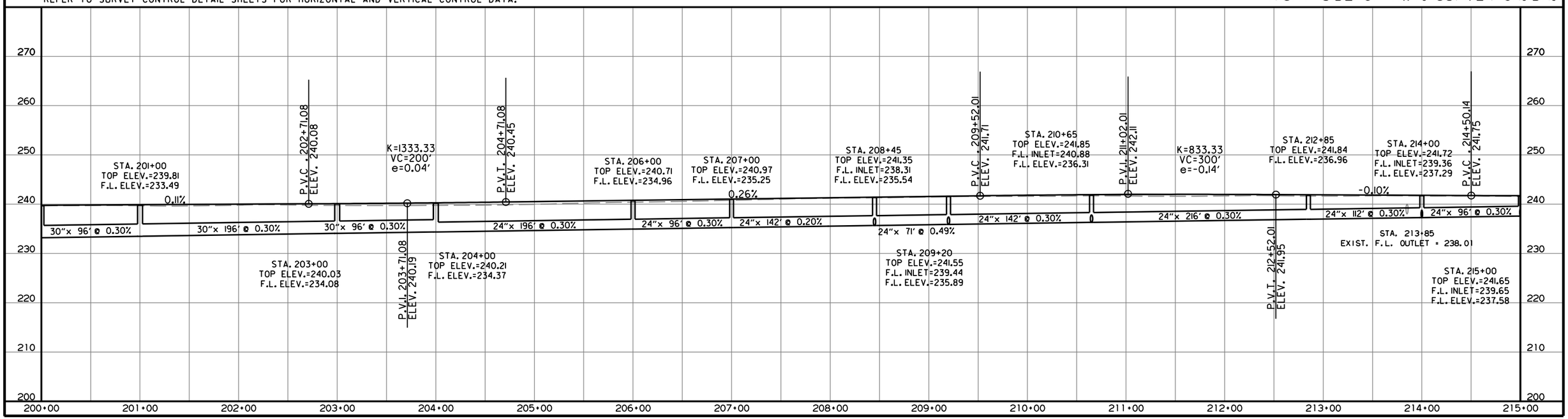
REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

LEFT SIDE OF HWY. 18S/MLK JR. DR.



REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

RIGHT SIDE OF HWY. 18S/MLK JR. DR.



HT39710 10/19/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
09-12-22		6	ARK.	100657	189	418
		PLAN AND PROFILE SHEETS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
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SPECIAL FLOOD HAZARD AREA BOUNDARY

FENCE

STA.	STA.	SIDE	TYPE	LIN. FT.
227+60	231+50	LT.	A	407

STA. 215+15 CONSTRUCT
DROP INLET ON LT.
AND 24" X 131' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 213+80 LT.
DROP INLET H = 3'-10"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 132 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 132 LIN. FT.

STA. 216+00 CONSTRUCT
DROP INLET ON LT.
AND 24" X 82' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 215+15 LT.
DROP INLET H = 3'-8"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 82 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 82 LIN. FT.

STA. 216+29 IN PLACE
DBL. 24" X 76' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL
DBL. 30" X 36' R.C. PIPE CULVERT
CONSTRUCT APPROACH = 55 CU. YD.

STA. 216+65 CONSTRUCT
DROP INLET ON LT.
AND 24" X 62' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 216+00 LT.
DROP INLET H = 3'-9"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 62 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 62 LIN. FT.

STA. 216+00 CONSTRUCT
DROP INLET ON RT.
AND 24" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 215+00 RT.
DROP INLET H = 3'-11"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 217+00 CONSTRUCT
DROP INLET ON RT.
AND 24" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 216+00 RT.
DROP INLET H = 4'-0"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 218+00 CONSTRUCT
DROP INLET ON RT. W/ 4' EXTENSION
AND 24" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 217+00 RT.
DROP INLET H = 4'-3"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 218+90 CONSTRUCT
DROP INLET ON RT.
AND 24" X 86' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 218+00 RT.
DROP INLET H = 4'-9"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 86 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 86 LIN. FT.

STA. 217+82 IN PLACE
24" X 106' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH = 5 CU. YD.

STA. 218+55 CONSTRUCT
DROP INLET ON LT.
AND 18" X 4' R.C. PIPE INLET W/FES
AND 24" X 186' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 216+65 LT.
DROP INLET H = 4'-5"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 186 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 186 LIN. FT.
18" R.C. PIPE (CLASS III)(TYPE 3) = 4 LIN. FT.
18" F.E.S. = 1EACH

STA. 220+00 CONSTRUCT
DROP INLET ON LT.
AND 18" X 4' R.C. PIPE INLET W/FES
AND 18" X 142' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 218+55 LT.
DROP INLET H = 4'-6"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 146 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 142 LIN. FT.
18" F.E.S. = 1EACH

STA. 220+48 IN PLACE
24" X 23' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE

STA. 221+00 CONSTRUCT
APPROACH ON LT. = 50 CU. YD.

STA. 219+22 IN PLACE
24" X 39' C.M. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH = 20 CU. YD.

STA. 219+55 CONSTRUCT
DROP INLET ON RT.
AND 18" X 6' R.C. PIPE INLET W/FES
AND 24" X 62' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 218+90 RT.
DROP INLET H = 4'-9"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 62 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 62 LIN. FT.
18" R.C. PIPE (CLASS III)(TYPE 3) = 6 LIN. FT.
18" F.E.S. = 1EACH

STA. 220+90 CONSTRUCT
DROP INLET ON RT.
AND 18" X 4' R.C. PIPE INLET W/FES
AND 18" X 131' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 219+55 RT.
DROP INLET H = 3'-11"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 136 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 132 LIN. FT.
18" F.E.S. = 1EACH

STA. 221+22 IN PLACE
24" X 164' C.P.P. CULVERT
RT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH = 5 CU. YD.

STA. 222+00 CONSTRUCT
DROP INLET ON RT.
AND 18" X 4' R.C. PIPE INLET W/FES
AND 18" X 106' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 220+90 RT.
DROP INLET H = 3'-8"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 110 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 106 LIN. FT.
18" F.E.S. = 1EACH

STA. 221+50 CONSTRUCT
DROP INLET ON LT.
AND 18" X 6' R.C. PIPE INLET W/FES
AND 18" X 146' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 220+00 LT.
DROP INLET H = 4'-2"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 152 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 146 LIN. FT.
18" F.E.S. = 1EACH

STA. 222+17 CONSTRUCT
APPROACH ON LT. = 5 CU. YD.

STA. 222+38 IN PLACE
24" X 25" C.M. PIPE CULVERT
LT. SIDE DRAIN
REMOVE

STA. 222+65 CONSTRUCT
DROP INLET ON LT.
AND 18" X 6' R.C. PIPE INLET W/FES
AND 18" X 111' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 221+50 LT.
DROP INLET H = 3'-10"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 118 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 112 LIN. FT.
18" F.E.S. = 1EACH

STA. 223+43 IN PLACE
24" X 24' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH = 15 CU. YD.

STA. 222+08 IN PLACE
YARD DRAIN ON RT.
REMOVE

STA. 222+70 IN PLACE
24" X 136' C.P.P. CULVERT
REMOVE

STA. 222+72 CONSTRUCT
APPROACH ON RT. = 5 CU. YD.

STA. 223+00 CONSTRUCT
DROP INLET ON RT.
W/ OPENING IN THE BACK
AND 18" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 222+00 RT.
DROP INLET H = 3'-5"
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 223+45 IN PLACE
YARD DRAIN ON RT.
REMOVE

STA. 223+90 CONSTRUCT
DROP INLET ON RT.
AND 18" X 4' R.C PIPE INLET W/FES
AND 18" X 86' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 223+00 RT.
DROP INLET H = 3'-2"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 90 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 86 LIN. FT.
18" F.E.S. = 1EACH

STA. 224+21 IN PLACE
24" X 153' C.P.P. CULVERT
REMOVE AND CONSTRUCT
APPROACH = 5 CU. YD.

STA. 223+70 CONSTRUCT
DROP INLET ON LT. W/ 4' EXTENSION
AND 18" X 6' R.C. PIPE INLET W/FES
AND 18" X 102' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 222+65 LT.
DROP INLET H = 3'-7"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 108 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 102 LIN. FT.
18" F.E.S. = 1EACH

STA. 224+67 CONSTRUCT
DROP INLET ON LT.
AND 18" X 4' R.C. PIPE INLET W/FES
AND 18" X 94' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 223+70 LT.
DROP INLET H = 3'-4"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 98 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 94 LIN. FT.
18" F.E.S. = 1EACH

STA. 224+90 CONSTRUCT
APPROACH = 20 CU. YD.

STA. 225+00 CONSTRUCT
DROP INLET ON RT.
AND 18" X 4' R.C. PIPE INLET W/FES
AND 18" X 106' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 224+00 RT.
DROP INLET H = 2'-11"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 110 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 106 LIN. FT.
18" F.E.S. = 1EACH
STA. 225+00 IN PLACE
DROP INLET ON RT.
AND 24" X 216' R.C. PIPE OUTLET
REMOVE

STA. 225+28 IN PLACE
24" X 20' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE

STA. 226+00 CONSTRUCT
DROP INLET ON RT.
AND 18" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 225+00 RT.
DROP INLET H = 2'-8"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 226+68 CONSTRUCT
DROP INLET ON RT. W/ 4' EXTENSION
AND 18" X 64' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 226+00 RT.
DROP INLET H = 2'-6"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 64 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 64 LIN. FT.

STA. 226+83 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 6.7 SQ. YDS.

STA. 226+00 CONSTRUCT
DROP INLET ON LT.
AND 18" X 4' R.C. PIPE INLET W/FES
AND 18" X 130' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 225+00 LT.
DROP INLET H = 3'-0"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 102 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.
18" F.E.S. = 1EACH

STA. 226+38 IN PLACE
24" X 110' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE

STA. 226+68 CONSTRUCT
DROP INLET ON LT. W/ 4' EXTENSION
AND 18" X 4' R.C. PIPE INLET W/FES
AND 18" X 64' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 226+00 LT.
DROP INLET H = 2'-10"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 68 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 64 LIN. FT.
18" F.E.S. = 1EACH

STA. 226+84 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 6.2 SQ. YDS.

STA. 227+11 CONSTRUCT
APPROACH ON RT. OFF OF PACIFIC DR.
= 5 CU. YD.

STA. 227+15 IN PLACE
GRATE INLET ON RT.
AND R.C. PIPE OUTLET
REMOVE INLET AND PIPE AND
CONSTRUCT 4' X 4' JUNCTION BOX
APPROX. 100' RT. OF C.L.
CONNECT EXIST. STORM SEWER INTO J.B.
LOCATION AND FLOWLINES TO BE FIELD VERIFIED

STA. 227+31 CONSTRUCT
TURNOUT ON RT. = 30 CU. YD.

STA. 227+78 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 6.2 SQ. YDS.

STA. 228+00 CONSTRUCT
DROP INLET TYPE SPECIAL ON RT.
W/ 8' EXTENSION
DROP INLET H = 1'-0"
TYPE SPECIAL DROP INLET = 4' X 8'

STA. 227+15 IN PLACE
24" X 49' R.C. PIPE CULVERT
REMOVE AND CONSTRUCT
29" X 18" X 199' R.C. ARCH PIPE CULVERT
W/ F.E.S. LT.
CONNECT TO NEW JUNCTION BOX AT STA. 227+15 RT.
FLOWLINES TO BE FIELD VERIFIED
050 = 14 CFS D.A. = 18 ACRES
18" X 29" R.C. ARCH PIPE (CLASS V)(TYPE 3) = 200 LIN. FT.
18" X 29" F.E.S. = 1EACH

STA. 227+55 IN PLACE
36" X 31' R.C. PIPE CULVERT
REMOVE

STA. 227+62 CONSTRUCT
DBL. 36" X 114' R.C. PIPE CULVERT
W/ F.E.S. LT. AND RT.
050 = 57 CFS D.A. = 75 ACRES
36" R.C. PIPE (CLASS V)(TYPE 3) = 228 LIN. FT.
36" F.E.S. = 4 EACH

STA. 227+77 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 6.2 SQ. YDS.

FENCE

STA.	STA.	SIDE	TYPE	LIN. FT.
216+50	219+00	RT.	A	250
219+50	220+48	RT.	A	98
227+65	231+50	RT.	A	407

REMOVAL AND DISPOSAL OF FENCE & GATES

STA.	STA.	SIDE	LIN. FT.	GATES
217+05	217+05	LT.	20	
218+06	218+06	LT.	20	
220+06	220+06	LT.	21	
219+22		RT.		1
224+99	227+10	RT.	320	

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HWY. 18S/MLK JR. DR.

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
09-12-22		6	ARK.	100657	190	418
		PLAN AND PROFILE SHEETS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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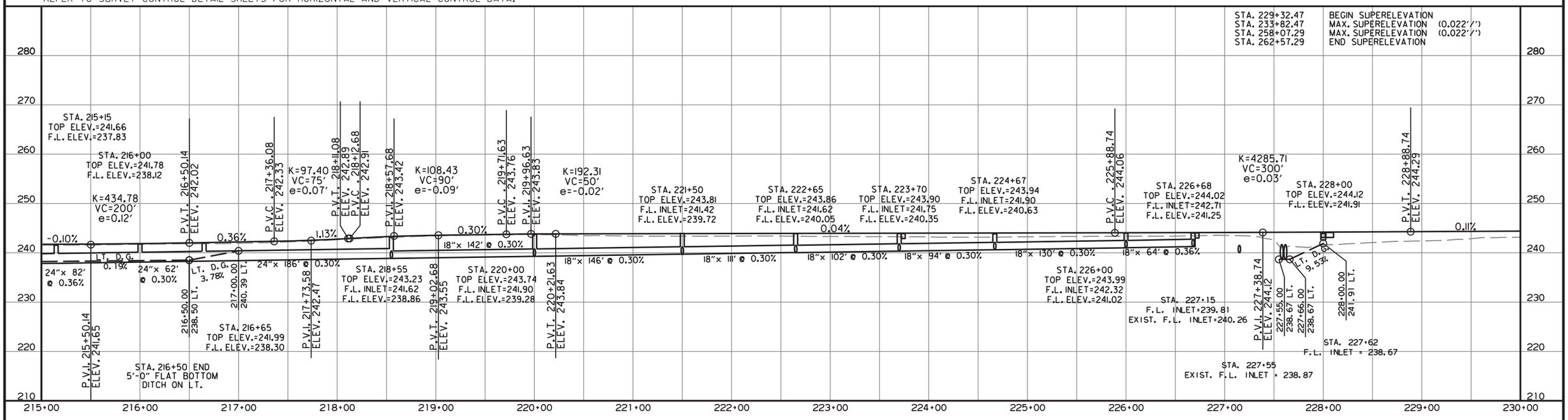
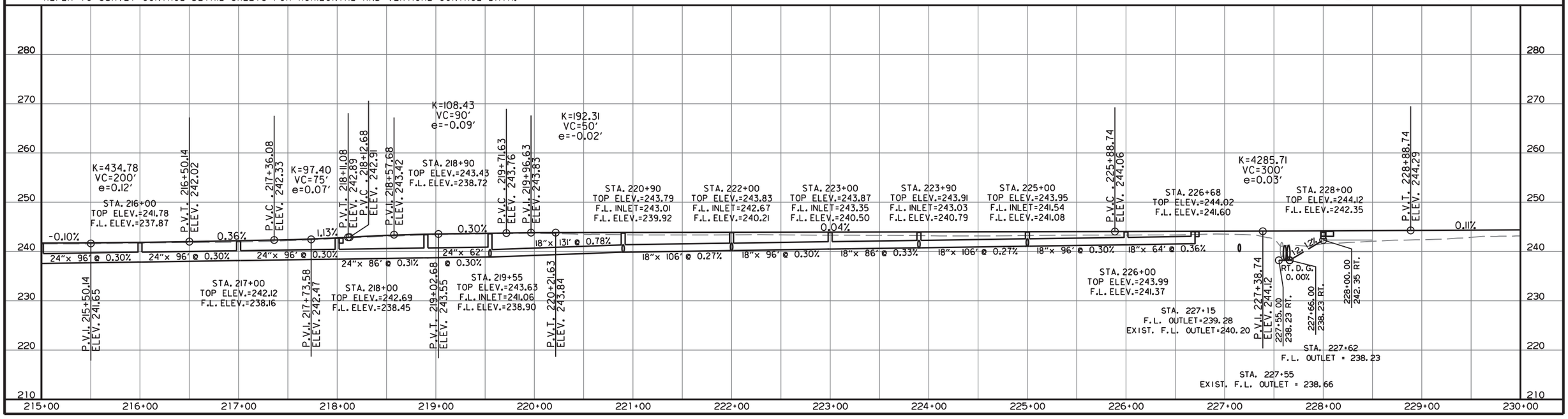
LEFT SIDE OF HWY. 18S/MLK JR. DR.



REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

RIGHT SIDE OF HWY. 18S/MLK JR. DR.



HT39710 9/9/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	191	418
		PLAN AND PROFILE SHEETS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
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STA. 231+00 CONSTRUCT
DROP INLET TYPE SPECIAL ON LT.
DROP INLET H = 1'-0"
TYPE SPECIAL DROP INLET = 4' X 8'

STA. 232+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 18" X 98' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 233+00 M.
DROP INLET H = 2'-4"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 98 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.

STA. 233+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 18" X 98' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 234+00 M.
DROP INLET H = 3'-0"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 98 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.

STA. 234+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 18" X 198' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 236+00 M.
DROP INLET H = 3'-10"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 198 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 198 LIN. FT.

STA. 236+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 18" X 98' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 237+00 M.
DROP INLET H = 5'-9"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 98 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.

STA. 237+00 CONSTRUCT
DROP INLET IN MEDIAN W/ 4' EXTENSION
AND 18" X 98' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 239+00 M.
DROP INLET H = 6'-9"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 198 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 198 LIN. FT.

STA. 239+00 CONSTRUCT
DROP INLET IN MEDIAN W/ 4' EXTENSION
AND 18" X 128' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 240+30 M.
DROP INLET H = 8'-8"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 128 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 128 LIN. FT.

FENCE & GATES

STA.	STA.	SIDE	TYPE	LIN. FT.	GATE
232+00	236+50	LT.	A	154	
237+00	243+00	LT.	A	668	
240+55		LT.&RT.			2
243+50	250+00	LT.	A	668	

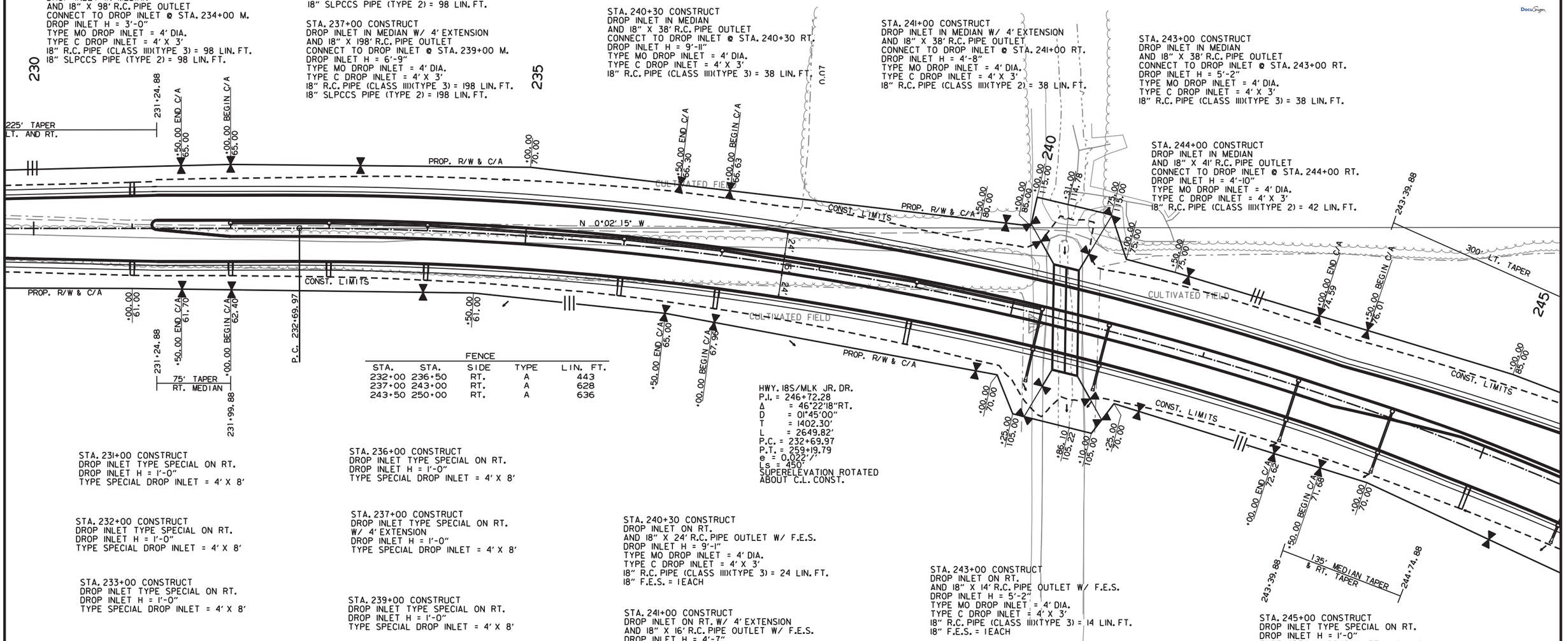
STA. 240+55 CONSTRUCT
DBL. 12' X 8' X 108' R.C. BOX CULVERT
ON 15° RT. FWD. SKEW
W/ 3:1 WINGS LT. AND RT.
Q50 = 1220 CFS D.A. = 999 ACRES
SPAN = 26'-10"

STA. 240+30 CONSTRUCT
DROP INLET IN MEDIAN
AND 18" X 38' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 240+30 RT.
DROP INLET H = 9'-11"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 38 LIN. FT.

STA. 241+00 CONSTRUCT
DROP INLET IN MEDIAN W/ 4' EXTENSION
AND 18" X 38' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 241+00 RT.
DROP INLET H = 4'-8"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 2) = 38 LIN. FT.

STA. 243+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 18" X 38' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 243+00 RT.
DROP INLET H = 5'-2"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 38 LIN. FT.

STA. 244+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 18" X 41' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 244+00 RT.
DROP INLET H = 4'-10"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 2) = 42 LIN. FT.



FENCE

STA.	STA.	SIDE	TYPE	LIN. FT.
232+00	236+50	RT.	A	443
237+00	243+00	RT.	A	628
243+50	250+00	RT.	A	636

HWY. 18S/MLK JR. DR.
P.I. = 246+72.28
Δ = 46°22'18"RT.
D = 01°45'00"
T = 1402.30'
L = 2649.82'
P.C. = 232+69.97
P.T. = 259+19.79
e = 0.022'/'
Ls = 450'
SUPERELEVATION ROTATED
ABOUT C.L. CONST.

STA. 231+00 CONSTRUCT
DROP INLET TYPE SPECIAL ON RT.
DROP INLET H = 1'-0"
TYPE SPECIAL DROP INLET = 4' X 8'

STA. 232+00 CONSTRUCT
DROP INLET TYPE SPECIAL ON RT.
DROP INLET H = 1'-0"
TYPE SPECIAL DROP INLET = 4' X 8'

STA. 233+00 CONSTRUCT
DROP INLET TYPE SPECIAL ON RT.
DROP INLET H = 1'-0"
TYPE SPECIAL DROP INLET = 4' X 8'

STA. 234+00 CONSTRUCT
DROP INLET TYPE SPECIAL ON RT.
W/ 4' EXTENSION
DROP INLET H = 1'-0"
TYPE SPECIAL DROP INLET = 4' X 8'

STA. 236+00 CONSTRUCT
DROP INLET TYPE SPECIAL ON RT.
DROP INLET H = 1'-0"
TYPE SPECIAL DROP INLET = 4' X 8'

STA. 237+00 CONSTRUCT
DROP INLET TYPE SPECIAL ON RT.
W/ 4' EXTENSION
DROP INLET H = 1'-0"
TYPE SPECIAL DROP INLET = 4' X 8'

STA. 239+00 CONSTRUCT
DROP INLET TYPE SPECIAL ON RT.
DROP INLET H = 1'-0"
TYPE SPECIAL DROP INLET = 4' X 8'

STA. 240+30 CONSTRUCT
DROP INLET ON RT.
AND 18" X 24' R.C. PIPE OUTLET W/ F.E.S.
DROP INLET H = 9'-1"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 24 LIN. FT.
18" F.E.S. = 1EACH

STA. 241+00 CONSTRUCT
DROP INLET ON RT. W/ 4' EXTENSION
AND 18" X 16' R.C. PIPE OUTLET W/ F.E.S.
DROP INLET H = 4'-7"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 16 LIN. FT.
18" F.E.S. = 1EACH

STA. 243+00 CONSTRUCT
DROP INLET ON RT.
AND 18" X 14' R.C. PIPE OUTLET W/ F.E.S.
DROP INLET H = 5'-2"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 14 LIN. FT.
18" F.E.S. = 1EACH

STA. 244+00 CONSTRUCT
DROP INLET ON RT.
AND 18" X 12' R.C. PIPE OUTLET W/ F.E.S.
DROP INLET H = 4'-10"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 12 LIN. FT.
18" F.E.S. = 1EACH

STA. 245+00 CONSTRUCT
DROP INLET TYPE SPECIAL ON RT.
DROP INLET H = 1'-0"
TYPE SPECIAL DROP INLET = 4' X 8'

HT39710 5/6/2022
R100657.DGN

HWY. 18S/MLK JR. DR.

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	192	418
		PLAN AND PROFILE SHEETS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
May 17 2022 1:06 PM
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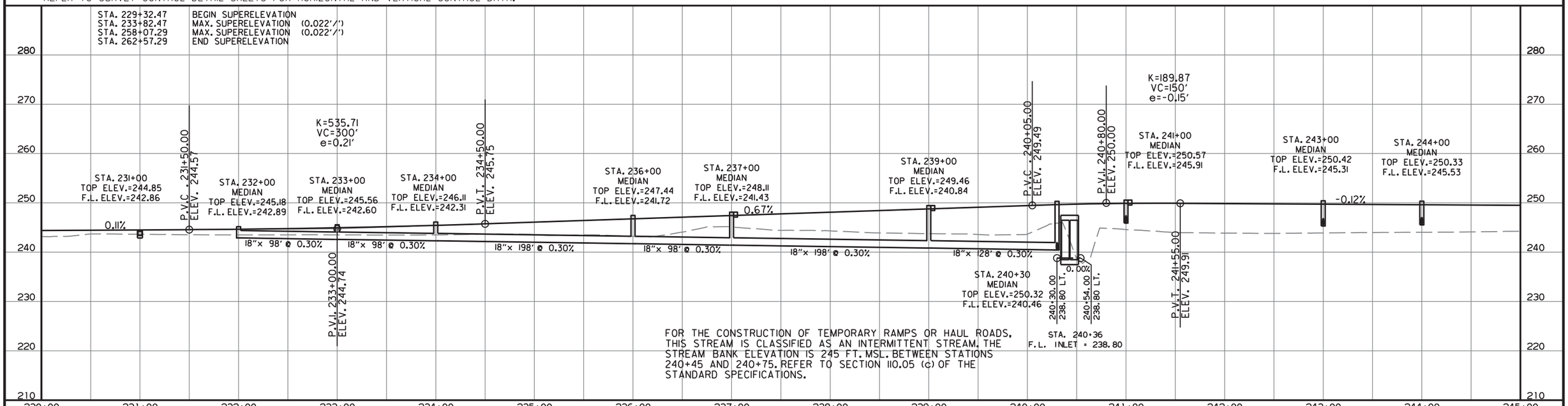
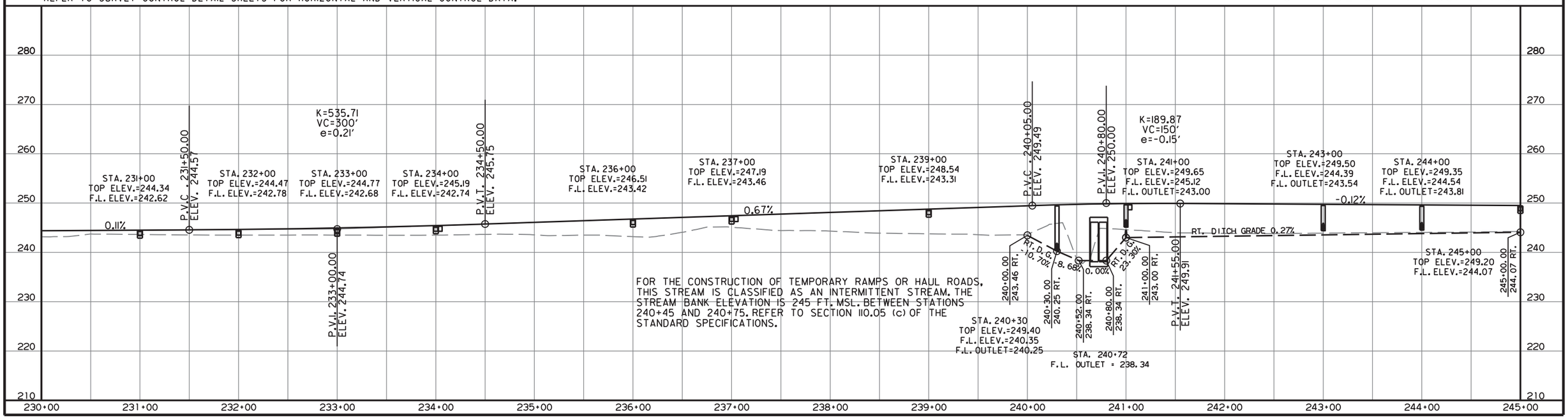
REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

LEFT SIDE OF HWY. 18S/MLK JR. DR.



REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

RIGHT SIDE OF HWY. 18S/MLK JR. DR.



HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	193	418
		PLAN AND PROFILE SHEETS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
May 17 2022 1:07 PM
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STA. 246+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 18" X 45' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 246+00 RT.
DROP INLET H = 4'-5"
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS IV)(TYPE 3) = 46 LIN. FT.

STA. 248+00 CONSTRUCT
DROP INLET IN MEDIAN W/ 4' EXTENSION
AND 18" X 238' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 250+40 M.
DROP INLET H = 4'-4"
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 238 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 238 LIN. FT.

STA. 250+40 CONSTRUCT
DROP INLET IN MEDIAN
AND 18" X 158' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 252+00 M.
DROP INLET H = 5'-2"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 158 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 158 LIN. FT.

STA. 252+00 CONSTRUCT
DROP INLET IN MEDIAN W/ 4' EXTENSION
AND 18" X 38' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 252+00 RT.
DROP INLET H = 5'-9"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 2) = 38 LIN. FT.

STA. 254+15 CONSTRUCT
TRI. 12' X 12' X 106' R.C. BOX CULVERT
ON 10° RT. FWD. SKEW
W/ 3:1 WINGS LT. AND RT.
Q50 = 2030 CFS D.A. = 2470 ACRES
SPAN = 40'-8½"

STA. 255+00 CONSTRUCT
DROP INLET ON LT.
AND 24" X 27' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 255+00 M.
DROP INLET H = 15'-1"
TYPE MO DROP INLET = 4' DIA.
24" R.C. PIPE (CLASS III)(TYPE 2) = 28 LIN. FT.

STA. 255+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 24" X 38' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 255+00 RT.
DROP INLET H = 14'-10"
TYPE MO DROP INLET = 4' DIA.
24" R.C. PIPE (CLASS III)(TYPE 2) = 38 LIN. FT.

STA. 257+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 18" X 198' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 255+00 M.
DROP INLET H = 10'-5"
TYPE MO DROP INLET = 4' DIA.
18" R.C. PIPE (CLASS III)(TYPE 3) = 198 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 198 LIN. FT.

STA. 258+00 CONSTRUCT
DROP INLET ON LT.
AND 24" X 300' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 255+00 LT.
DROP INLET H = 12'-4"
TYPE MO DROP INLET = 4' DIA.
24" R.C. PIPE (CLASS III)(TYPE 3) = 300 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 300 LIN. FT.

STA. 258+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 18" X 98' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 257+00 M.
DROP INLET H = 5'-9"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 98 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.

STA. 260+00 CONSTRUCT
DROP INLET ON LT.
AND 24" X 198' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 258+00 LT.
DROP INLET H = 11'-4"
TYPE MO DROP INLET = 4' DIA.
24" R.C. PIPE (CLASS III)(TYPE 3) = 198 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 198 LIN. FT.

FENCE & GATES

STA.	STA.	SIDE	TYPE	LIN. FT.	GATE
250+50	260+00	LT.	A	1027	
254+15		LT.&RT.			2

FENCE

STA.	STA.	SIDE	TYPE	LIN. FT.
250+50	255+25	RT.	A	498
255+75	260+00	RT.	A	419

HWY. 18S/MLK JR. DR.
P.I. = 246+72.28
Δ = 46°22'18"RT.
D = 01°45'00"
T = 1402.30'
L = 2649.82'
P.C. = 232+69.97
P.T. = 259+19.79
e = 0.022'/'
Ls = 450'
SUPERELEVATION ROTATED ABOUT C.L. CONST.

STA. 246+00 CONSTRUCT
DROP INLET ON RT.
AND 18" X 12' R.C. PIPE OUTLET W/ F.E.S.
DROP INLET H = 4'-5"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 12 LIN. FT.
18" F.E.S. = 1EACH

STA. 247+00 CONSTRUCT
DROP INLET TYPE SPECIAL ON RT.
W/ 4' EXTENSION
DROP INLET H = 1'-0"
TYPE SPECIAL DROP INLET = 4' X 8'

STA. 247+40 CONSTRUCT
DROP INLET TYPE SPECIAL ON RT.
DROP INLET H = 1'-0"
TYPE SPECIAL DROP INLET = 4' X 8'

STA. 248+00 CONSTRUCT
DROP INLET TYPE SPECIAL ON RT.
W/ 4' EXTENSION
DROP INLET H = 1'-0"
TYPE SPECIAL DROP INLET = 4' X 8'

STA. 250+40 CONSTRUCT
DROP INLET TYPE SPECIAL ON RT.
DROP INLET H = 1'-0"
TYPE SPECIAL DROP INLET = 4' X 8'

STA. 252+00 CONSTRUCT
DROP INLET ON RT.
AND 18" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 253+00 RT.
DROP INLET H = 4'-11"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 253+00 CONSTRUCT
DROP INLET ON RT. W/ 4' EXTENSION
AND 18" X 104' R.C. PIPE OUTLET
CONNECT TO R.C. BOX CULVERT @ STA. 254+15 RT.
DROP INLET H = 5'-3"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 104 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 104 LIN. FT.

STA. 255+00 CONSTRUCT
DROP INLET ON RT.
AND 36" X 52' R.C. PIPE OUTLET
CONNECT TO R.C. BOX CULVERT @ STA. 254+15 RT.
DROP INLET H = 14'-5"
TYPE MO DROP INLET = 5' DIA.
36" R.C. PIPE (CLASS III)(TYPE 3) = 52 LIN. FT.
36" SLPCCS PIPE (TYPE 2) = 52 LIN. FT.

STA. 256+00 CONSTRUCT
DROP INLET ON RT.
AND 30" X 94' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 255+00 RT.
DROP INLET H = 14'-2"
TYPE MO DROP INLET = 5' DIA.
30" R.C. PIPE (CLASS III)(TYPE 3) = 94 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 94 LIN. FT.

STA. 257+00 CONSTRUCT
DROP INLET ON RT.
AND 30" X 94' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 256+00 RT.
DROP INLET H = 14'-0"
TYPE MO DROP INLET = 5' DIA.
30" R.C. PIPE (CLASS III)(TYPE 3) = 94 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 94 LIN. FT.

STA. 258+00 CONSTRUCT
DROP INLET ON RT. W/ 4' EXTENSION
AND 30" X 94' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 257+00 RT.
DROP INLET H = 13'-9"
TYPE MO DROP INLET = 5' DIA.
30" R.C. PIPE (CLASS III)(TYPE 3) = 94 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 94 LIN. FT.

STA. 258+50 CONSTRUCT
DROP INLET ON RT. W/ 4' EXTENSION
AND 30" X 46' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 258+00 RT.
DROP INLET H = 13'-9"
TYPE MO DROP INLET = 5' DIA.
30" R.C. PIPE (CLASS III)(TYPE 3) = 46 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 46 LIN. FT.

STA. 260+00 CONSTRUCT
DROP INLET ON RT. W/ 4' EXTENSION
AND 30" X 146' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 258+50 RT.
DROP INLET H = 13'-5"
TYPE MO DROP INLET = 5' DIA.
30" R.C. PIPE (CLASS III)(TYPE 3) = 146 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 146 LIN. FT.

HWY. 18S/MLK JR. DR.

HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	194	418
		PLAN AND PROFILE SHEETS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

May 17 2022 1:07 PM

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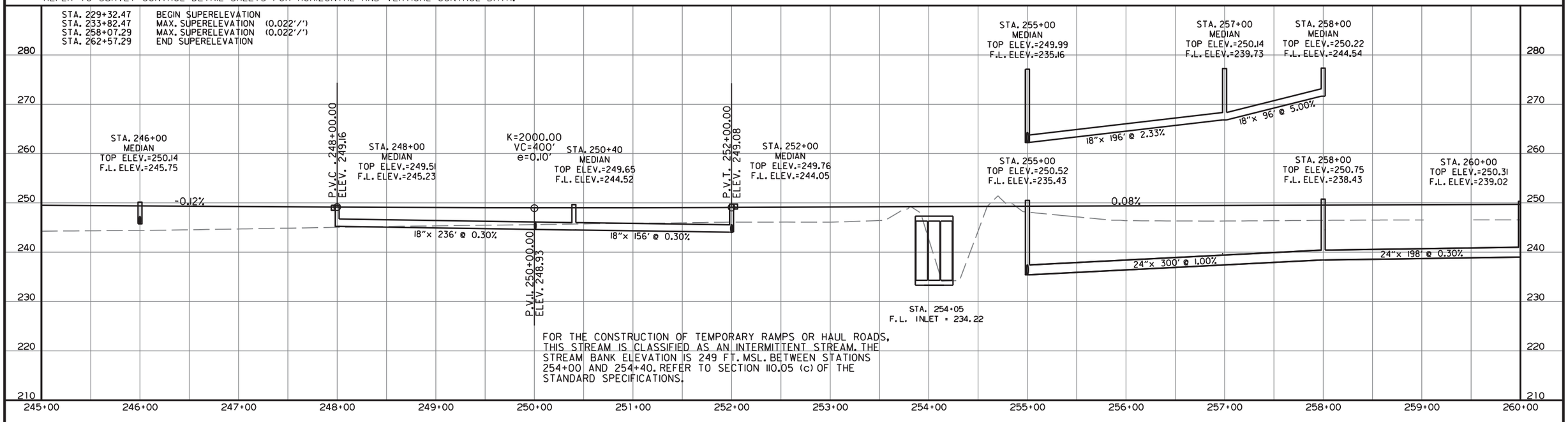
REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

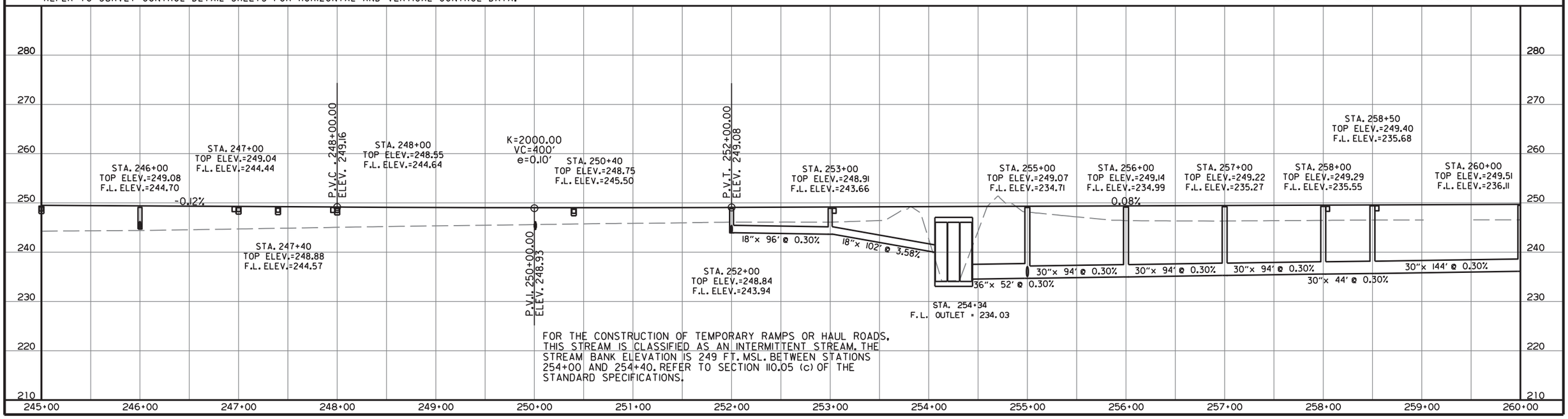
LEFT SIDE OF HWY. 18S/MLK JR. DR.



FOR THE CONSTRUCTION OF TEMPORARY RAMPS OR HAUL ROADS, THIS STREAM IS CLASSIFIED AS AN INTERMITTENT STREAM. THE STREAM BANK ELEVATION IS 249 FT. MSL. BETWEEN STATIONS 254+00 AND 254+40. REFER TO SECTION 110.05 (c) OF THE STANDARD SPECIFICATIONS.

REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

RIGHT SIDE OF HWY. 18S/MLK JR. DR.



FOR THE CONSTRUCTION OF TEMPORARY RAMPS OR HAUL ROADS, THIS STREAM IS CLASSIFIED AS AN INTERMITTENT STREAM. THE STREAM BANK ELEVATION IS 249 FT. MSL. BETWEEN STATIONS 254+00 AND 254+40. REFER TO SECTION 110.05 (c) OF THE STANDARD SPECIFICATIONS.

HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	195	418
		PLAN AND PROFILE SHEETS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

May 17 2022 1:07 PM

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STA. 262+00 CONSTRUCT
DROP INLET ON LT.
AND 24" X 196' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 260+00 LT.
DROP INLET H = 10'-3"
TYPE MO DROP INLET = 4' DIA.
24" R.C. PIPE (CLASS III)(TYPE 3) = 196 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 196 LIN. FT.

STA. 265+00 CONSTRUCT
DROP INLET ON LT.
AND 24" X 298' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 262+00 LT.
DROP INLET H = 9'-1"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 298 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 298 LIN. FT.

STA. 266+55 CONSTRUCT
DROP INLET ON LT.
AND 24" X 152' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 265+00 LT.
DROP INLET H = 8'-5"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 152 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 152 LIN. FT.

STA. 267+00 CONSTRUCT
DROP INLET ON LT.
AND 24" X 44' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 266+55 LT.
DROP INLET H = 8'-6"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 44 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 44 LIN. FT.

STA. 268+00 CONSTRUCT
DROP INLET ON LT.
AND 24" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 267+00 LT.
DROP INLET H = 8'-2"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 269+00 CONSTRUCT
DROP INLET ON LT.
AND 24" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 268+00 LT.
DROP INLET H = 7'-10"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

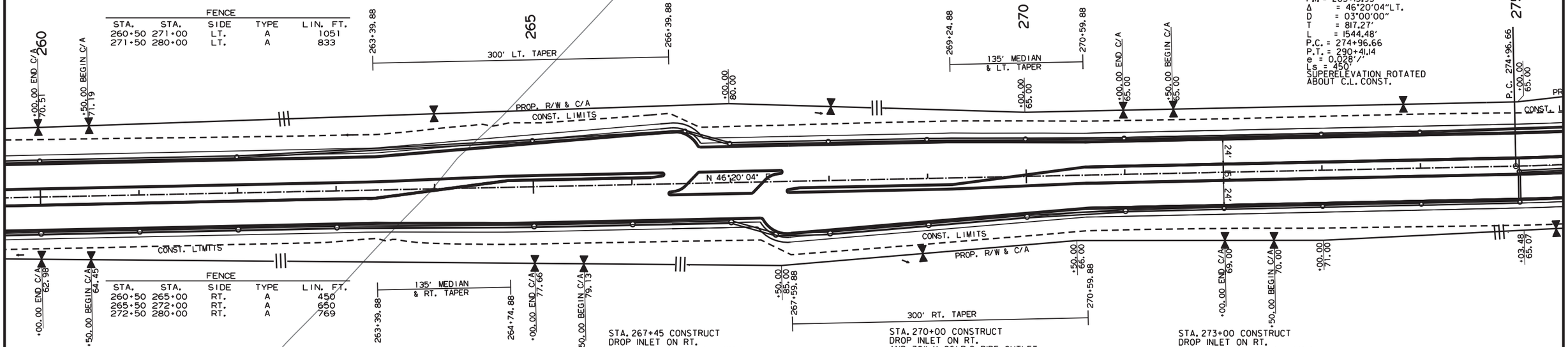
STA. 270+00 CONSTRUCT
DROP INLET ON LT.
AND 24" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 269+00 LT.
DROP INLET H = 7'-6"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 271+00 CONSTRUCT
DROP INLET ON LT.
AND 18" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 270+00 LT.
DROP INLET H = 7'-2"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 273+00 CONSTRUCT
DROP INLET ON LT.
AND 18" X 196' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 271+00 LT.
DROP INLET H = 6'-5"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 196 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 196 LIN. FT.

STA. 274+00 CONSTRUCT
DROP INLET ON LT.
AND 18" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 273+00 LT.
DROP INLET H = 6'-1"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 275+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 24" X 27' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 275+00 RT.
DROP INLET H = 9'-5"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 28 LIN. FT.



STA. 261+00 CONSTRUCT
DROP INLET ON RT.
AND 30" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 260+00 RT.
DROP INLET H = 13'-3"
TYPE MO DROP INLET = 5' DIA.
30" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 262+00 CONSTRUCT
DROP INLET ON RT.
AND 30" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 261+00 RT.
DROP INLET H = 13'-0"
TYPE MO DROP INLET = 5' DIA.
30" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 263+00 CONSTRUCT
DROP INLET ON RT.
AND 30" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 262+00 RT.
DROP INLET H = 12'-10"
TYPE MO DROP INLET = 5' DIA.
30" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 265+00 CONSTRUCT
DROP INLET ON RT.
AND 30" X 196' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 263+00 RT.
DROP INLET H = 12'-2"
TYPE MO DROP INLET = 5' DIA.
30" R.C. PIPE (CLASS III)(TYPE 3) = 196 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 196 LIN. FT.

STA. 266+00 CONSTRUCT
DROP INLET ON RT.
AND 30" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 265+00 RT.
DROP INLET H = 11'-10"
TYPE MO DROP INLET = 5' DIA.
30" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 267+00 CONSTRUCT
DROP INLET ON RT.
AND 30" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 266+00 RT.
DROP INLET H = 11'-6"
TYPE MO DROP INLET = 5' DIA.
30" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 267+45 CONSTRUCT
DROP INLET ON RT.
AND 30" X 42' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 267+00 RT.
DROP INLET H = 11'-0"
TYPE MO DROP INLET = 5' DIA.
30" R.C. PIPE (CLASS III)(TYPE 3) = 42 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 42 LIN. FT.

STA. 268+00 CONSTRUCT
DROP INLET ON RT.
AND 30" X 50' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 267+45 RT.
DROP INLET H = 10'-10"
TYPE MO DROP INLET = 5' DIA.
30" R.C. PIPE (CLASS III)(TYPE 3) = 50 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 50 LIN. FT.

STA. 269+00 CONSTRUCT
DROP INLET ON RT.
AND 30" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 268+00 RT.
DROP INLET H = 10'-7"
TYPE MO DROP INLET = 5' DIA.
30" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 270+00 CONSTRUCT
DROP INLET ON RT.
AND 30" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 269+00 RT.
DROP INLET H = 10'-5"
TYPE MO DROP INLET = 5' DIA.
30" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 271+00 CONSTRUCT
DROP INLET ON RT.
AND 30" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 270+00 RT.
DROP INLET H = 10'-1"
TYPE MO DROP INLET = 5' DIA.
30" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 272+00 CONSTRUCT
DROP INLET ON RT.
AND 24" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 271+00 RT.
DROP INLET H = 9'-11"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 273+00 CONSTRUCT
DROP INLET ON RT.
AND 24" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 272+00 RT.
DROP INLET H = 9'-11"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 274+00 CONSTRUCT
DROP INLET ON RT.
AND 24" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 273+00 RT.
DROP INLET H = 9'-11"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 275+00 CONSTRUCT
DROP INLET ON RT.
AND 24" X 98' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 274+00 RT.
DROP INLET H = 9'-11
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 98 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.

HT39710 5/6/2022
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HWY. 18S/MLK JR. DR.

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	196	418
		PLAN AND PROFILE SHEETS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
May 17 2022 1:08 PM
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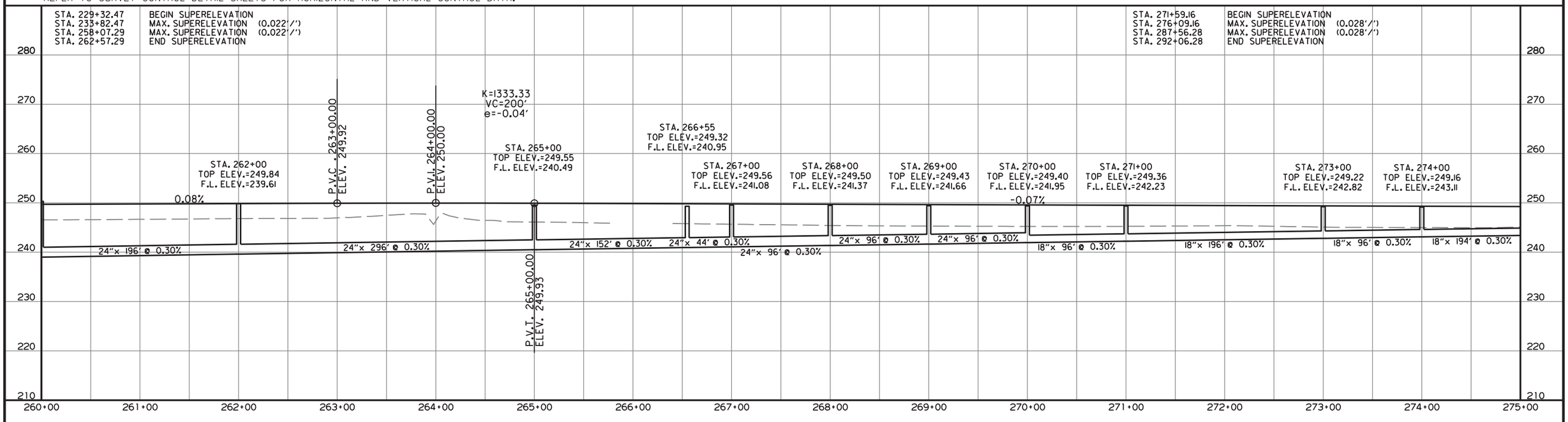
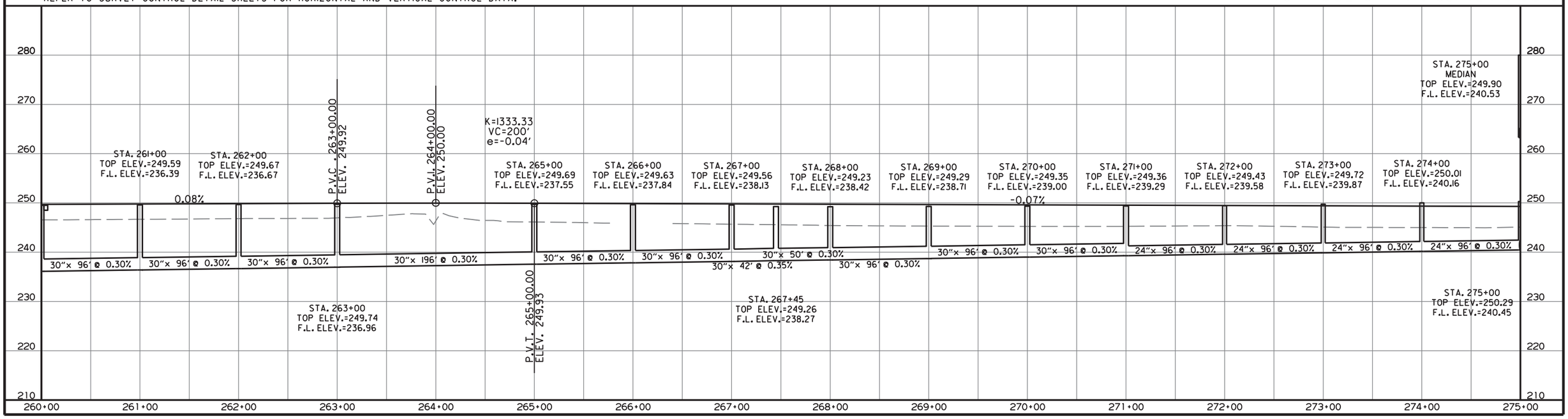
REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

LEFT SIDE OF HWY. 18S/MLK JR. DR.



REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

RIGHT SIDE OF HWY. 18S/MLK JR. DR.



HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	197	418
		PLAN AND PROFILE SHEETS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
May 17 2022 1:08 PM

STA. 276+00 CONSTRUCT
DROP INLET ON LT.
AND 18" X 194' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 274+00 LT.
DROP INLET H = 5'-2"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 194 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 194 LIN. FT.

STA. 277+00 CONSTRUCT
DROP INLET ON LT.
AND 18" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 276+00 LT.
DROP INLET H = 4'-9"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 279+00 CONSTRUCT
DROP INLET ON LT.
AND 18" X 194' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 277+00 LT.
DROP INLET H = 4'-0"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 194 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 194 LIN. FT.

STA. 280+00 CONSTRUCT
DROP INLET ON LT.
AND 18" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 279+00 LT.
DROP INLET H = 3'-8"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 282+00 CONSTRUCT
DROP INLET ON LT.
AND 18" X 38' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 282+00 M.
DROP INLET H = 5'-9"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 38 LIN. FT.

STA. 283+00 CONSTRUCT
DROP INLET ON LT.
AND 18" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 282+00 LT.
DROP INLET H = 5'-5"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 284+00 CONSTRUCT
DROP INLET ON LT.
AND 18" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 283+00 LT.
DROP INLET H = 5'-0"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 285+00 CONSTRUCT
DROP INLET ON LT.
AND 18" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 284+00 LT.
DROP INLET H = 4'-8"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 286+00 CONSTRUCT
DROP INLET ON LT.
AND 18" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 285+00 LT.
DROP INLET H = 4'-4"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 286+30 CONSTRUCT
APPROACH ON LT. = 10 CU. YD.

STA. 287+00 CONSTRUCT
DROP INLET ON LT.
AND 18" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 286+00 LT.
DROP INLET H = 3'-10"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 287+60 CONSTRUCT
DROP INLET ON LT.
AND 18" X 56' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 287+00 LT.
DROP INLET H = 3'-6"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 56 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 56 LIN. FT.

STA. 288+50 CONSTRUCT
DROP INLET ON LT. W/OPENING IN BACK
AND 18" X 84' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 287+60 LT.
DROP INLET H = 3'-1"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 84 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 84 LIN. FT.

STA. 289+48 CONSTRUCT
TURNOUT ON LT. = 10 CU. YD.

STA. 288+95 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 6.2 SQ. YDS.

STA. 289+92 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 6.2 SQ. YDS.

FENCE				
STA.	STA.	SIDE	TYPE	LIN. FT.
280+50	286+00	LT.	A	532
286+50	289+00	LT.	A	243
289+80	290+80	LT.	A	98

HWY. 18S/MLK JR. DR.
P.I. = 283+13.93
Δ = 46°20'04"LT.
D = 03°00'00"
T = 817.27'
L = 1544.48'
P.C. = 274+96.66
P.T. = 290+41.14
e = 0.028'/'
Ls = 450'
SUPERELEVATION ROTATED ABOUT C.L. CONST.

STA. 276+00 CONSTRUCT
DROP INLET IN MEDIAN W/ 4' EXTENSION
AND 24" X 98' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 275+00 M.
DROP INLET H = 9'-2"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 98 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.

STA. 277+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 24" X 98' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 276+00 M.
DROP INLET H = 8'-10"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 98 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.

STA. 278+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 24" X 98' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 277+00 M.
DROP INLET H = 8'-5"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 98 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.

STA. 279+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 24" X 98' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 278+00 M.
DROP INLET H = 8'-1"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 98 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.

STA. 280+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 24" X 98' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 279+00 M.
DROP INLET H = 7'-9"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 98 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.

STA. 281+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 24" X 98' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 280+00 M.
DROP INLET H = 7'-5"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 98 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.

FENCE				
STA.	STA.	SIDE	TYPE	LIN. FT.
280+50	285+75	RT.	A	545
286+25	289+20	RT.	A	306
289+85	290+50	RT.	A	68

STA. 282+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 24" X 98' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 281+00 M.
DROP INLET H = 7'-0"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 98 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.

STA. 283+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 18" X 98' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 282+00 M.
DROP INLET H = 5'-11"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 98 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.

STA. 284+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 18" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 283+00 M.
DROP INLET H = 5'-7"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 285+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 18" X 98' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 284+00 M.
DROP INLET H = 4'-11"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 98 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.

STA. 286+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 18" X 98' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 285+00 M.
DROP INLET H = 4'-11"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 98 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.

STA. 287+60 CONSTRUCT
DROP INLET IN MEDIAN
AND 18" X 56' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 287+00 M.
DROP INLET H = 3'-8"
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 56 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 56 LIN. FT.

STA. 288+50 CONSTRUCT
DROP INLET IN MEDIAN
AND 18" X 86' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 287+60 M.
DROP INLET H = 3'-3"
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 86 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 86 LIN. FT.

STA. 289+48 CONSTRUCT
TURNOUT ON RT. = 75 CU. YD.

STA. 289+08 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 6.2 SQ. YDS.

STA. 289+94 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 6.2 SQ. YDS.

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R100657.DGN

HWY. 18S/MLK JR. DR.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
May 17 2022 1:09 PM
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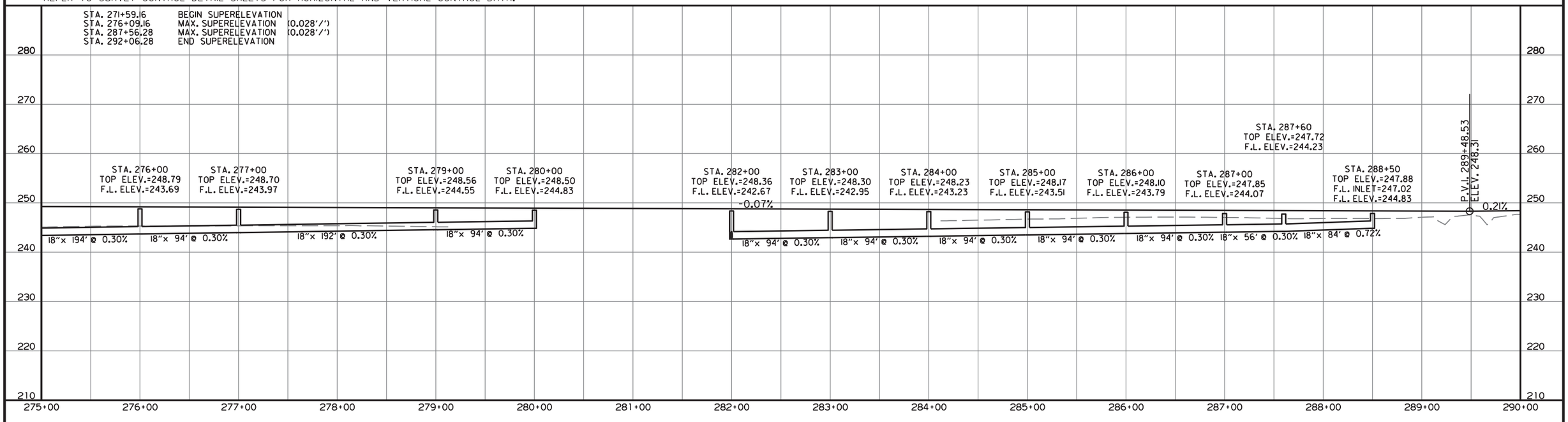
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	198	418
		PLAN AND PROFILE SHEETS				

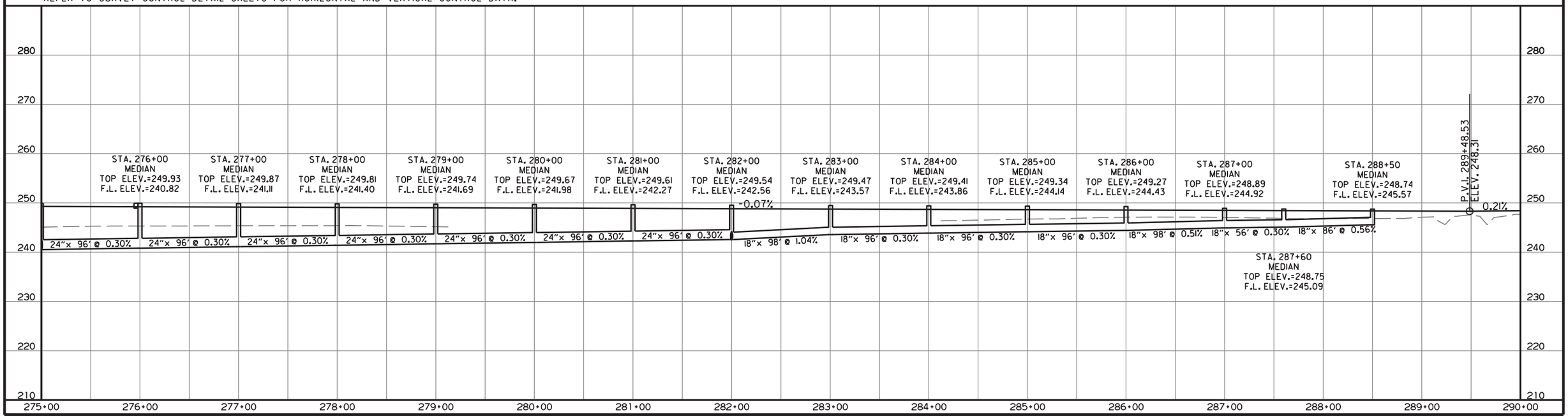
REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

LEFT SIDE OF HWY. 18S/MLK JR. DR.



REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

RIGHT SIDE OF HWY. 18S/MLK JR. DR.



HT39710 5/6/2022
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		6	ARK.	100657	199	418
		PLAN AND PROFILE SHEETS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
TRINITY D. SMITH
No. 11425

May 17 2022 1:09 PM

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STA. 290+50 CONSTRUCT
DROP INLET ON LT. W/OPENING IN BACK
AND 18" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 291+50 LT.
DROP INLET H = 2'-9"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 291+50 CONSTRUCT
DROP INLET ON LT.
AND 18" X 36' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 291+90 LT.
DROP INLET H = 3'-3"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 36 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 36 LIN. FT.

STA. 291+90 CONSTRUCT
DROP INLET ON LT.
AND 18" X 108' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 293+00 LT.
DROP INLET H = 3'-6"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 108 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 108 LIN. FT.

STA. 293+00 CONSTRUCT
DROP INLET ON LT.
AND 18" X 46' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 293+50 LT.
DROP INLET H = 4'-4"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 46 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 46 LIN. FT.

STA. 293+50 CONSTRUCT
DROP INLET ON LT.
AND 18" X 48' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 294+00 LT.
DROP INLET H = 4'-9"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 48 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 48 LIN. FT.

STA. 294+00 CONSTRUCT
DROP INLET ON LT.
AND 18" X 27' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 294+00 M.
DROP INLET H = 5'-2"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 28 LIN. FT.

STA. 294+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 18" X 198' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 296+00 M.
DROP INLET H = 5'-3"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 198 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 198 LIN. FT.

STA. 296+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 18" X 98' R.C. PIPE CULVERT
CONNECT TO DROP INLET @ STA. 297+00 M.
DROP INLET H = 6'-5"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 98 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.

STA. 297+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 18" X 98' R.C. PIPE CULVERT
CONNECT TO DROP INLET @ STA. 298+00 M.
DROP INLET H = 7'-0"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 98 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.

STA. 298+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 18" X 98' R.C. PIPE CULVERT
CONNECT TO DROP INLET @ STA. 299+00 M.
DROP INLET H = 7'-6"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 98 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.

STA. 299+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 24" X 198' R.C. PIPE CULVERT
CONNECT TO DROP INLET @ STA. 301+00 M.
DROP INLET H = 8'-0"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 198 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 198 LIN. FT.

STA. 301+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 24" X 198' R.C. PIPE CULVERT
CONNECT TO DROP INLET @ STA. 303+00 M.
DROP INLET H = 9'-7"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 198 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 198 LIN. FT.

STA. 303+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 24" X 38' R.C. PIPE CULVERT
CONNECT TO DROP INLET @ STA. 303+00 RT.
DROP INLET H = 10'-7"
TYPE MO DROP INLET = 4' DIA.
24" R.C. PIPE (CLASS III)(TYPE 3) = 38 LIN. FT.

STA. 303+60 CONSTRUCT
DBL. 12' X 7' X 106' R.C. BOX CULVERT
ON 5° LT. FWD. SKEW
W/ 3:1 WINGS LT. AND RT.
Q50 = 875 CFS D.A. = 506 ACRES
SPAN = 25'-11"

STA. 305+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 30" X 126' R.C. PIPE CULVERT
CONNECT TO R.C. BOX CULVERT @ STA. 303+69
DROP INLET H = 10'-1"
TYPE MO DROP INLET = 5' DIA.
30" R.C. PIPE (CLASS III)(TYPE 3) = 126 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 126 LIN. FT.

HWY. 18S/MLK JR. DR.
P.I. = 283+13.93
Δ = 46°20'04"LT.
D = 03°00'00"
T = 817.27'
L = 1544.48'
P.C. = 274+96.66
P.T. = 290+41.14
e = 0.028'/'
Ls = 450'
SUPERELEVATION ROTATED
ABOUT C.L. CONST.

FENCE & GATES

STA.	STA.	SIDE	TYPE	LIN. FT.	GATE
291+30	295+00	LT.	A	373	
295+50	310+00	LT.	A	1540	
303+60		LT&RT.			2

REMOVAL AND DISPOSAL OF FENCE

STA.	STA.	SIDE	LIN. FT.
291+08	298+34	LT. AND RT.	895

FENCE

STA.	STA.	SIDE	TYPE	LIN. FT.
291+00	295+00	RT.	A	398
295+50	300+00	RT.	A	440
300+50	307+00	RT.	A	658

STA. 290+50 CONSTRUCT
DROP INLET ON RT.
AND 18" X 98' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 291+50 RT.
DROP INLET H = 4'-3"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 98 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.

STA. 291+50 CONSTRUCT
DROP INLET ON RT.
AND 18" X 38' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 291+90 RT.
DROP INLET H = 4'-4"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 38 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 38 LIN. FT.

STA. 291+90 CONSTRUCT
DROP INLET ON RT.
AND 18" X 58' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 292+50 RT.
DROP INLET H = 4'-4"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 58 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 58 LIN. FT.

STA. 292+50 CONSTRUCT
DROP INLET ON RT.
AND 18" X 48' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 293+00 RT.
DROP INLET H = 4'-8"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 48 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 48 LIN. FT.

STA. 293+00 CONSTRUCT
DROP INLET ON RT.
AND 18" X 46' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 293+50 RT.
DROP INLET H = 5'-0"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 46 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 46 LIN. FT.

STA. 293+50 CONSTRUCT
DROP INLET ON RT.
AND 18" X 46' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 294+00 RT.
DROP INLET H = 5'-3"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 46 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 46 LIN. FT.

STA. 294+00 CONSTRUCT
DROP INLET ON RT.
AND 18" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 295+00 RT.
DROP INLET H = 5'-6"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 295+00 CONSTRUCT
DROP INLET ON RT.
AND 18" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 296+00 RT.
DROP INLET H = 5'-11"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 296+00 CONSTRUCT
DROP INLET ON RT.
AND 18" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 297+00 RT.
DROP INLET H = 6'-5"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 297+00 CONSTRUCT
DROP INLET ON RT.
AND 18" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 298+00 RT.
DROP INLET H = 6'-9"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 298+00 CONSTRUCT
DROP INLET ON RT.
AND 18" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 299+00 RT.
DROP INLET H = 7'-3"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 299+00 CONSTRUCT
DROP INLET ON RT.
AND 18" X 46' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 299+50 RT.
DROP INLET H = 7'-9"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 46 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 46 LIN. FT.

STA. 299+50 CONSTRUCT
DROP INLET ON RT.
AND 18" X 46' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 300+00 RT.
DROP INLET H = 8'-0"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 46 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 46 LIN. FT.

STA. 300+00 CONSTRUCT
DROP INLET ON RT.
AND 24" X 46' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 300+50 RT.
DROP INLET H = 8'-3"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 46 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 46 LIN. FT.

STA. 300+50 CONSTRUCT
DROP INLET ON RT.
AND 24" X 46' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 301+00 RT.
DROP INLET H = 8'-6"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 46 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 46 LIN. FT.

STA. 301+00 CONSTRUCT
DROP INLET ON RT.
AND 24" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 302+00 RT.
DROP INLET H = 8'-9"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 302+00 CONSTRUCT
DROP INLET ON RT.
AND 24" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 303+00 RT.
DROP INLET H = 9'-3"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 303+00 CONSTRUCT
DROP INLET ON RT.
AND 30" X 42' R.C. PIPE OUTLET
CONNECT TO R.C. BOX CULVERT @ STA. 303+54 RT.
DROP INLET H = 9'-8"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
30" R.C. PIPE (CLASS III)(TYPE 3) = 42 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 42 LIN. FT.

STA. 305+00 CONSTRUCT
DROP INLET ON RT.
AND 24" X 128' R.C. PIPE OUTLET
CONNECT TO R.C. BOX CULVERT @ STA. 303+54 RT.
DROP INLET H = 6'-2"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 128 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 128 LIN. FT.

HWY. 18S/MLK JR. DR.
P.I. = 301+49.22
Δ = 30°22'48"RT.
D = 02°00'00"
T = 777.81'
L = 1519.00'
P.C. = 293+71.41
P.T. = 308+90.41
e = 0.024'/'
Ls = 450'
SUPERELEVATION ROTATED
ABOUT C.L. CONST.

HT39710 5/6/2022
R100657.DGN

HWY. 18S/MLK JR. DR.

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	200	418
		PLAN AND PROFILE SHEETS				

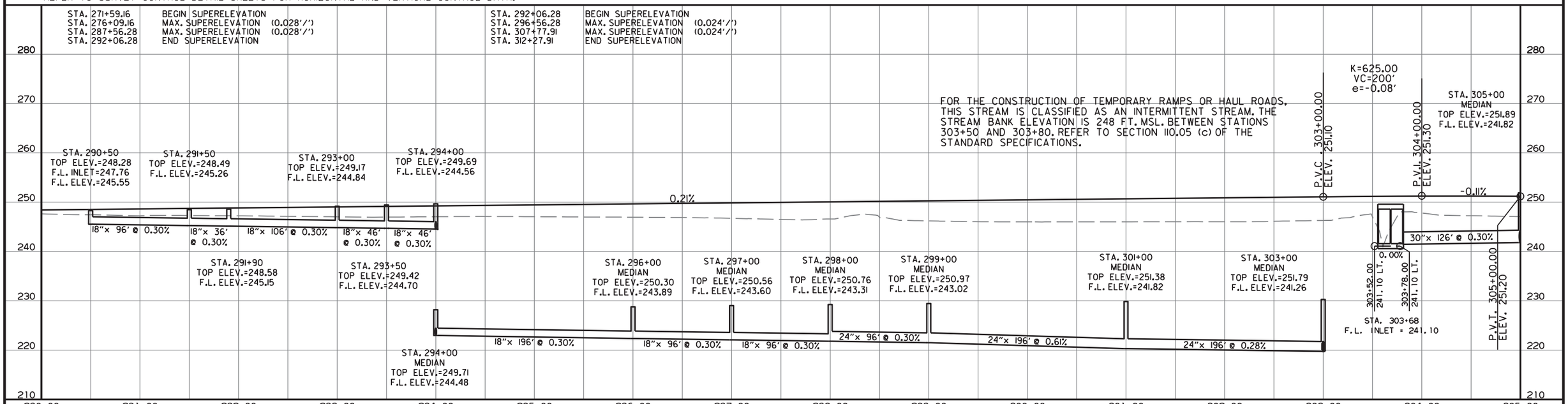
STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

May 17 2022 1:10 PM

DocuSign

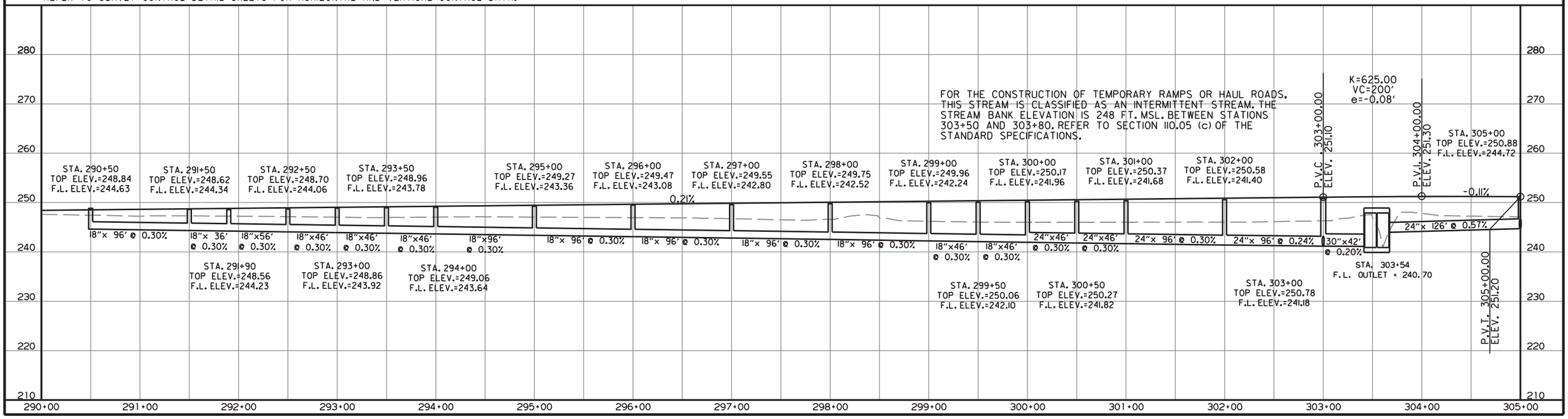
REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

LEFT SIDE OF HWY. 18S/MLK JR. DR.



REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

RIGHT SIDE OF HWY. 18S/MLK JR. DR.



HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	201	418
		PLAN AND PROFILE SHEETS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

May 17 2022 1:10 PM

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STA. 306+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 30" X 98' R.C. PIPE CULVERT
CONNECT TO DROP INLET @ STA. 305+00 M.
DROP INLET H = 9'-9"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
30" R.C. PIPE (CLASS III)(TYPE 3) = 98 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.

STA. 307+00 CONSTRUCT
DROP INLET ON LT.
AND 30" X 35' R.C. PIPE CULVERT
CONNECT TO DROP INLET
@ STA. 307+00 M.
DROP INLET H = 10'-0"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
30" R.C. PIPE (CLASS III)(TYPE 3)
= 36 LIN. FT.

STA. 307+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 30" X 98' R.C. PIPE CULVERT
CONNECT TO DROP INLET @ STA. 306+00 M.
DROP INLET H = 9'-5"
TYPE C DROP INLET = 4' X 3'
30" R.C. PIPE (CLASS III)(TYPE 3) = 98 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.

STA. 308+00 CONSTRUCT
DROP INLET ON LT.
AND 30" X 98' R.C. PIPE CULVERT
CONNECT TO DROP INLET @ STA. 307+00 LT.
DROP INLET H = 9'-8"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
30" R.C. PIPE (CLASS III)(TYPE 3) = 98 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.

STA. 308+30 CONSTRUCT
DROP INLET IN MEDIAN W/ 8' EXTENSION
AND 18" X 128' R.C. PIPE CULVERT
CONNECT TO DROP INLET @ STA. 307+00 M.
DROP INLET H = 8'-10"
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 128 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 128 LIN. FT.

STA. 308+55 CONSTRUCT
DROP INLET ON LT.
AND 30" X 52' R.C. PIPE CULVERT
CONNECT TO DROP INLET @ STA. 308+00 LT.
DROP INLET H = 9'-3"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
30" R.C. PIPE (CLASS III)(TYPE 3) = 52 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 52 LIN. FT.

STA. 309+00 CONSTRUCT
DROP INLET ON LT.
AND 30" X 44' R.C. PIPE CULVERT
CONNECT TO DROP INLET @ STA. 308+55 LT.
DROP INLET H = 8'-8"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
30" R.C. PIPE (CLASS III)(TYPE 3) = 44 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 44 LIN. FT.

STA. 310+00 CONSTRUCT
DROP INLET ON LT. W/ 8' EXTENSION
AND 30" X 96' R.C. PIPE CULVERT
CONNECT TO DROP INLET @ STA. 309+00 LT.
DROP INLET H = 7'-11"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
30" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 310+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 18" X 45' R.C. PIPE CULVERT
CONNECT TO DROP INLET @ STA. 310+00 LT.
DROP INLET H = 7'-7"
TYPE C DROP INLET = 4' X 3'
30" R.C. PIPE (CLASS III)(TYPE 3) = 46 LIN. FT.

STA. 311+00 CONSTRUCT
DROP INLET ON LT.
AND 30" X 96' R.C. PIPE CULVERT
CONNECT TO DROP INLET @ STA. 310+00 LT.
DROP INLET H = 7'-2"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
30" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 312+00 CONSTRUCT
DROP INLET ON LT.
AND 30" X 96' R.C. PIPE CULVERT
CONNECT TO DROP INLET @ STA. 311+00 LT.
DROP INLET H = 6'-5"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
30" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 313+00 CONSTRUCT
DROP INLET ON LT.
AND 30" X 96' R.C. PIPE CULVERT
CONNECT TO DROP INLET @ STA. 312+00 LT.
DROP INLET H = 6'-0"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
30" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 314+00 CONSTRUCT
DROP INLET ON LT.
AND 30" X 96' R.C. PIPE CULVERT
CONNECT TO DROP INLET @ STA. 313+00 LT.
DROP INLET H = 5'-7"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
30" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 315+00 CONSTRUCT
DROP INLET ON LT.
AND 24" X 96' R.C. PIPE CULVERT
CONNECT TO DROP INLET @ STA. 314+00 LT.
DROP INLET H = 4'-4"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 316+00 CONSTRUCT
DROP INLET ON LT.
AND 24" X 94' R.C. PIPE CULVERT
CONNECT TO DROP INLET @ STA. 315+00 LT.
DROP INLET H = 4'-0"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 94 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 94 LIN. FT.

STA. 317+00 CONSTRUCT
DROP INLET ON LT.
AND 24" X 94' R.C. PIPE CULVERT
CONNECT TO DROP INLET @ STA. 316+00 LT.
DROP INLET H = 3'-4"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 94 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 94 LIN. FT.

STA. 317+50 CONSTRUCT
DROP INLET ON LT.
AND 18" X 46' R.C. PIPE CULVERT
CONNECT TO DROP INLET @ STA. 317+00 LT.
DROP INLET H = 3'-0"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 46 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 46 LIN. FT.

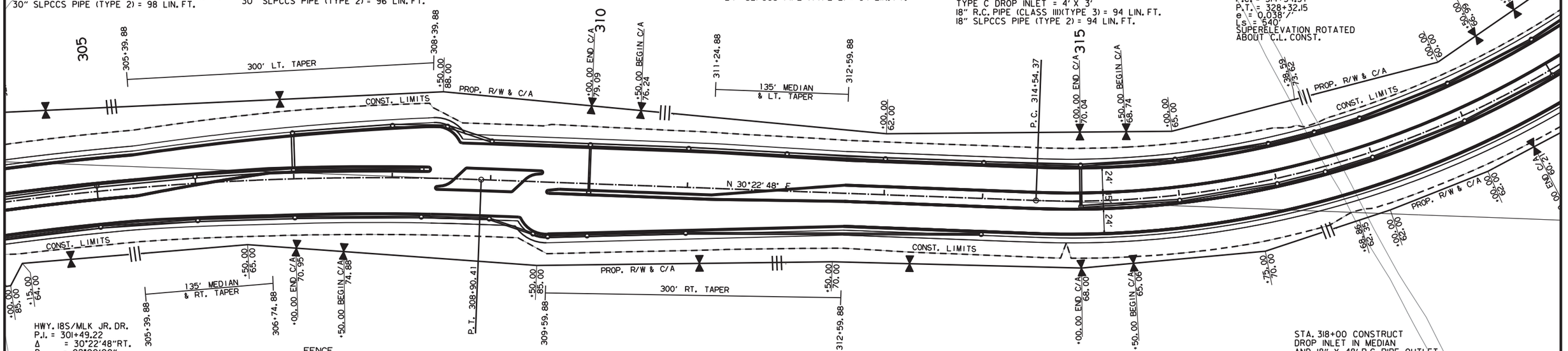
STA. 318+00 CONSTRUCT
DROP INLET ON LT.
AND 18" X 46' R.C. PIPE CULVERT
CONNECT TO DROP INLET @ STA. 317+50 LT.
DROP INLET H = 2'-10"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 46 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 46 LIN. FT.

STA. 319+00 CONSTRUCT
DROP INLET ON LT.
AND 18" X 94' R.C. PIPE CULVERT
CONNECT TO DROP INLET @ STA. 318+00 LT.
DROP INLET H = 2'-8"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 94 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 94 LIN. FT.

STA. 320+00 CONSTRUCT
DROP INLET ON LT.
AND 18" X 94' R.C. PIPE CULVERT
CONNECT TO DROP INLET @ STA. 319+00 LT.
DROP INLET H = 2'-7"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 94 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 94 LIN. FT.

FENCE

STA.	STA.	SIDE	TYPE	LIN. FT.
310+50	315+00	LT.	A	448
315+50	319+50	LT.	A	374



HWY. 18S/MLK JR. DR.
P.I. = 301+49.22
Δ = 30°22'48"RT.
D = 02°00'00"
T = 777.81'
L = 1519.00'
P.C. = 293+71.41
P.T. = 308+90.41
e = 0.024'/'
Ls = 450'
SUPERELEVATION ROTATED
ABOUT C.L. CONST.

FENCE

STA.	STA.	SIDE	TYPE	LIN. FT.
307+50	315+00	RT.	A	750
315+50	319+50	RT.	A	428

STA. 306+00 CONSTRUCT
DROP INLET ON RT.
AND 24" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 305+00 RT.
DROP INLET H = 5'-9"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 307+00 CONSTRUCT
DROP INLET ON RT.
AND 24" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 306+00 RT.
DROP INLET H = 5'-4"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 308+30 CONSTRUCT
DROP INLET ON RT.
AND 18" X 126' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 307+00 RT.
DROP INLET H = 5'-0"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 126 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 126 LIN. FT.

STA. 309+00 CONSTRUCT
DROP INLET ON RT.
AND 18" X 66' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 308+30 RT.
DROP INLET H = 4'-9"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 66 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 66 LIN. FT.

STA. 309+45 CONSTRUCT
DROP INLET ON RT.
AND 18" X 44' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 309+00 RT.
DROP INLET H = 4'-3"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 44 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 44 LIN. FT.

STA. 309+60 CONSTRUCT
DROP INLET ON RT.
AND 18" X 12' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 309+45 RT.
DROP INLET H = 4'-2"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 12 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 12 LIN. FT.

STA. 310+00 CONSTRUCT
DROP INLET ON RT.
AND 18" X 38' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 309+60 RT.
DROP INLET H = 4'-1"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 38 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 38 LIN. FT.

STA. 311+00 CONSTRUCT
DROP INLET ON RT. W/ 4' EXTENSION
AND 18" X 98' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 310+00 RT.
DROP INLET H = 3'-10"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 98 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.

STA. 314+00 CONSTRUCT
DROP INLET ON RT.
AND 18" X 298' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 311+00 RT.
DROP INLET H = 3'-5"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 298 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 298 LIN. FT.

STA. 315+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 24" X 38' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 315+00 LT.
DROP INLET H = 5'-0"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS V)(TYPE 3) = 38 LIN. FT.

STA. 316+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 24" X 98' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 315+00 M.
DROP INLET H = 3'-6"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS V)(TYPE 3) = 98 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.

STA. 317+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 24" X 298' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 316+00 M.
DROP INLET H = 3'-3"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS V)(TYPE 3) = 98 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.

STA. 317+50 CONSTRUCT
DROP INLET IN MEDIAN
AND 24" X 48' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 317+00 M.
DROP INLET H = 3'-2"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS V)(TYPE 3) = 48 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 48 LIN. FT.

STA. 318+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 18" X 48' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 317+50 M.
DROP INLET H = 3'-1"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS V)(TYPE 3) = 48 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 48 LIN. FT.

STA. 319+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 18" X 98' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 318+00 M.
DROP INLET H = 2'-11"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS V)(TYPE 3) = 98 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.

STA. 320+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 18" X 98' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 319+00 M.
DROP INLET H = 2'-10"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS V)(TYPE 3) = 98 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.

H139710 5/6/2022
R100657.DGN

HWY. 18S/MLK JR. DR.

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	202	418
		PLAN AND PROFILE SHEETS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
May 17 2022 1:10 PM
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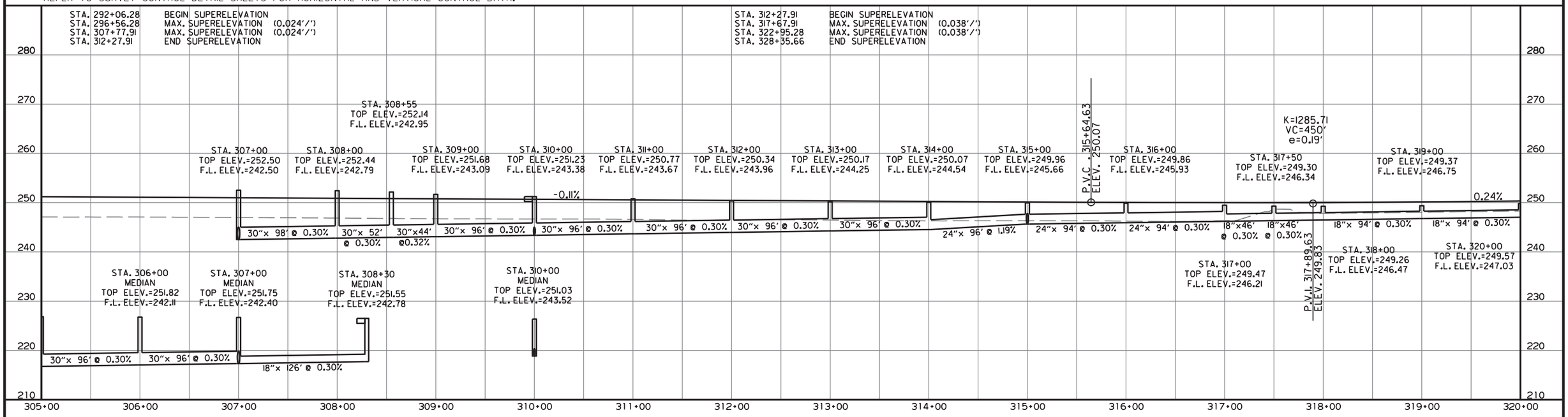
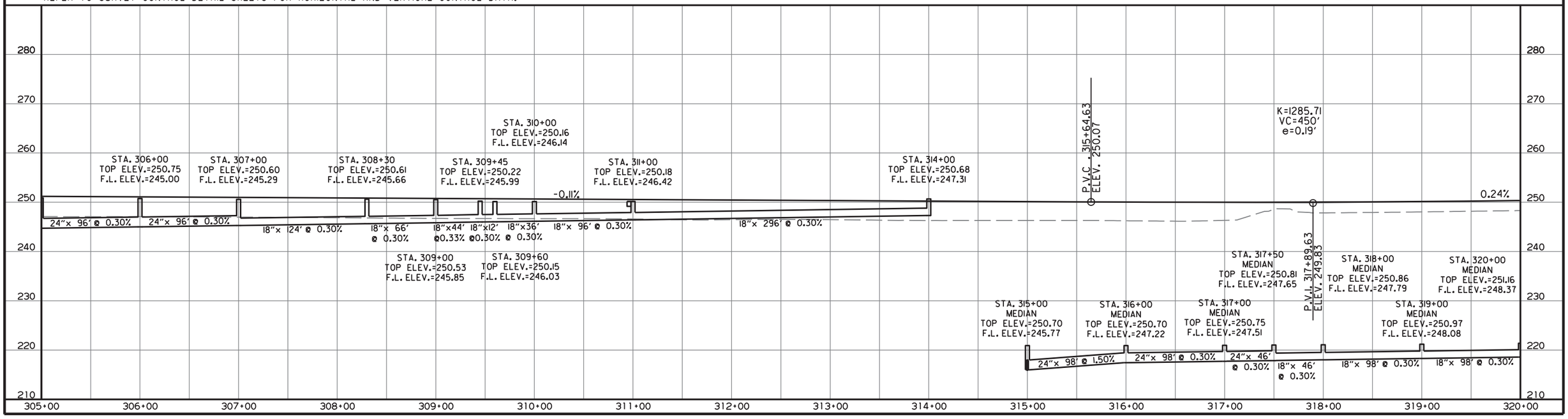
REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

LEFT SIDE OF HWY. 18S/MLK JR. DR.



REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

RIGHT SIDE OF HWY. 18S/MLK JR. DR.



HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
09-12-22		6	ARK.	100657	203	418
		PLAN AND PROFILE SHEETS				

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FENCE

STA.	STA.	SIDE	TYPE	LIN. FT.
320+00	323+00	LT.	A	279
323+50	327+30	LT.	A	348
329+20	331+48	LT.	A	340
333+42	339+15	LT.	A	716

STA. 323+00 CONSTRUCT
DROP INLET ON LT.
AND 18" X 94' R.C. PIPE CULVERT
CONNECT TO DROP INLET @ STA. 322+00 LT.
DROP INLET H = 3'-11"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 94 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 94 LIN. FT.

STA. 321+00 CONSTRUCT
DROP INLET ON LT.
AND 18" X 94' R.C. PIPE CULVERT
CONNECT TO DROP INLET @ STA. 320+00 LT.
DROP INLET H = 2'-9"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 94 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 94 LIN. FT.

STA. 326+00 CONSTRUCT
DROP INLET TYPE SPECIAL ON LT.
DROP INLET H = 1'-0"
TYPE SPECIAL DROP INLET = 4' X 8'

STA. 327+86 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 6.2 SQ. YDS.

STA. 328+74 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 6.2 SQ. YDS.

STA. 322+00 CONSTRUCT
DROP INLET ON LT.
AND 18" X 94' R.C. PIPE CULVERT
CONNECT TO DROP INLET @ STA. 321+00 LT.
DROP INLET H = 3'-3"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 94 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 94 LIN. FT.

STA. 329+00 CONSTRUCT
DROP INLET TYPE SPECIAL ON LT.
DROP INLET H = 1'-0"
TYPE SPECIAL DROP INLET = 4' X 8'

HWY. 18S/MLK JR. DR.
P.I. = 322+94.28
Δ = 82°40'00"LT.
D = 06°00'00"
T = 839.91'
L = 1377.78'
P.C. = 314+54.37
P.T. = 328+32.15
e = 0.038'/'
Ls = 540'
SUPERELEVATION ROTATED ABOUT C.L. CONST.

C.L. KATHLEEN ST. CONNECTOR STA. 656+13.02 =
C.L. HWY. 18S STA. 328+35.74
Δ = 90°00'00"

STA. 330+95.82 BRIDGE END
BRIDGE NO. 07533
452'-0" CONTINUOUS PLATE GIRDER
UNIT (144'-164'-144')
58' CLEAR ROADWAY
454'-4 1/4" BRIDGE LENGTH
STA. 335+50.18 BRIDGE END

BRIDGE END
STA. 330+95.82
ELEV.=285.18

BRIDGE END
STA. 335+50.18
ELEV.=286.69

HWY. 18S/MLK JR. DR.
P.I. = 335+42.23
Δ = 52°17'12"RT.
D = 04°00'00"
T = 703.07'
L = 1307.17'
P.C. = 328+39.17
P.T. = 341+46.33
e = 0.034'/'
Ls = 450'
SUPERELEVATION ROTATED ABOUT INSIDE E.O.P.

FENCE

STA.	STA.	SIDE	TYPE	LIN. FT.
320+00	323+00	RT.	A	322
323+50	331+93	RT.	A	960
334+01	339+15	RT.	A	586

STA. 321+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 18" X 98' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 320+00 M.
DROP INLET H = 3'-0"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS V)(TYPE 3) = 98 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.

STA. 322+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 18" X 98' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 321+00 M.
DROP INLET H = 3'-6"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS V)(TYPE 3) = 98 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.

STA. 323+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 18" X 98' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 322+00 M.
DROP INLET H = 4'-2"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS V)(TYPE 3) = 98 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.

STA. 324+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 18" X 98' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 323+00 M.
DROP INLET H = 5'-2"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS V)(TYPE 3) = 98 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.

STA. 325+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 18" X 98' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 324+00 M.
DROP INLET H = 6'-2"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS V)(TYPE 3) = 98 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.

STA. 326+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 18" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 325+00 M.
DROP INLET H = 7'-2"
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS V)(TYPE 3) = 96 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 326+50 CONSTRUCT
DROP INLET TYPE SPECIAL ON RT.
DROP INLET H = 1'-0"
TYPE SPECIAL DROP INLET = 4' X 8'

STA. 329+00 CONSTRUCT
DROP INLET TYPE SPECIAL ON RT.
W/ 4' EXTENSION
DROP INLET H = 1'-0"
TYPE SPECIAL DROP INLET = 4' X 8'

HWY. 18S/MLK JR. DR.

HT 39710 9/9/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	204	418
		PLAN AND PROFILE SHEETS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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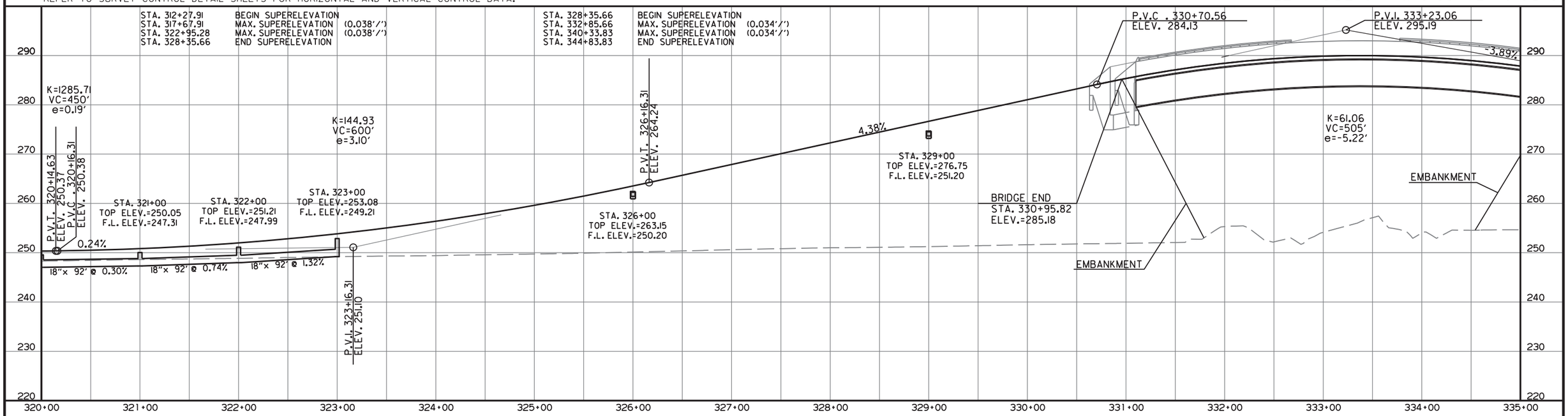
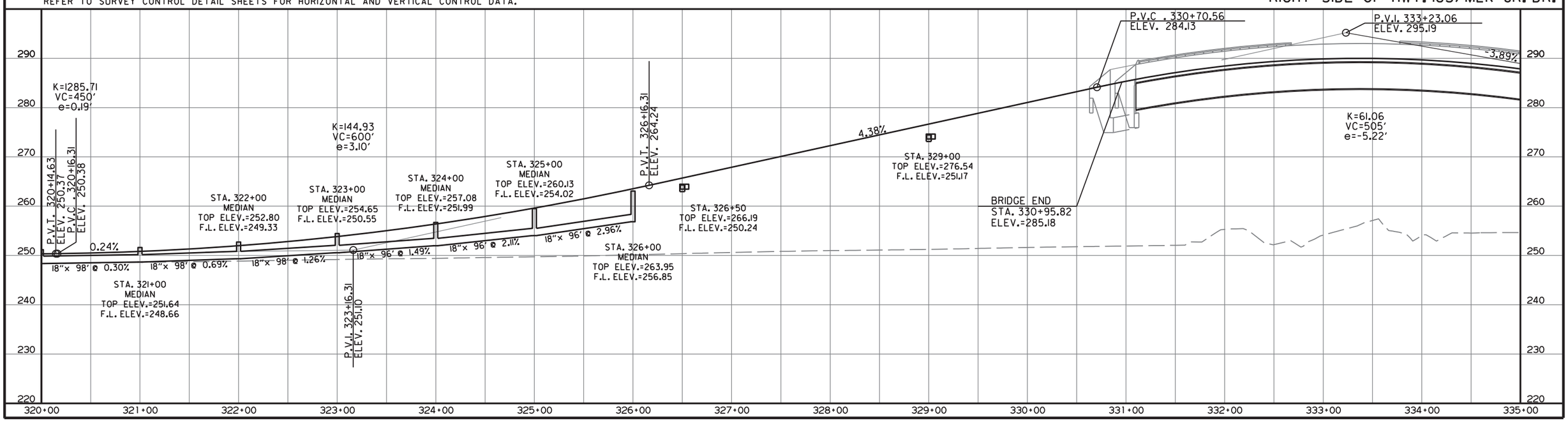
REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

LEFT SIDE OF HWY. 18S/MLK JR. DR.



REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

RIGHT SIDE OF HWY. 18S/MLK JR. DR.



HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	205	418
		PLAN AND PROFILE SHEETS				

STATE OF ARKANSAS
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STA. 344+00 CONSTRUCT
DROP INLET TYPE SPECIAL ON LT.
DROP INLET H = 1'-0"
TYPE SPECIAL DROP INLET = 4' X 8'

STA. 345+00 CONSTRUCT
DROP INLET TYPE SPECIAL ON LT.
W/ 4' EXTENSION
DROP INLET H = 1'-0"
TYPE SPECIAL DROP INLET = 4' X 8'

STA. 343+30 CONSTRUCT
DROP INLET TYPE SPECIAL ON LT.
W/ 4' EXTENSION LT. AND RT.
DROP INLET H = 1'-0"
TYPE SPECIAL DROP INLET = 4' X 8'

STA. 346+05 CONSTRUCT
DROP INLET ON LT.
AND 36" X 19' PIPE INLET W/F.E.S.
AND 36" X 100' PIPE OUTLET ON 15° RT. FWD. SKEW
CONNECT TO EXISTING R.C. BOX CULVERT @ STA. 346+30 RT.
DROP INLET H = 8'-7"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
Q50 = 10 CFS D.A. = 10 ACRES
36" R.C. PIPE (CLASS IV)(TYPE 2) = 120 LIN. FT.
36" F.E.S. = 1EACH

FENCE

STA.	STA.	SIDE	TYPE	LIN. FT.
339+65	341+00	LT.	A	145
341+50	345+89	LT.	A	444

STA. 346+36 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 8.4 SQ. YDS.

STA. 346+46 IN PLACE
44" X 26' C.M. PIPE CULVERT
REMOVE

STA. 347+62 CONSTRUCT
DBL. 44" X 27" X 68' R.C. ARCH PIPE CULVERT
ON 15° RT. FWD. SKEW
W/ F.E.S. LT. AND RT.
Q50 = 38 CFS D.A. = 45 ACRES
44" X 27" R.C. ARCH PIPE (CLASS V)(TYPE 3) = 136 LIN. FT.
44" X 27" F.E.S. = 4 EACH

N

HWY. 49

345

340

335

350

+50.00 143.00
+15.00 END C/A 105.78
+65.00 BEGIN C/A 98.80
+00.86 94.98
+00.00 END C/A 85.39
+50.00 BEGIN C/A 83.34
+00.00 75.00
+88.32 END C/A 102.91
348+73.69
270' LT. & RT. TAPER
+65.31 60.34
+00.00 65.00
P.I. 349+85.02
+00.00 51.00
+50.00 47.00
P.C. 348+24.62
+86.93 61.75
+14.25 86.86
P.I. 351+31.34
+83.14 END C/A 99.81
+00.00 80.00
+50.00 BEGIN C/A 84.74
P.T. 341+46.33
+00.00 END C/A 88.50
+84.73 90.86
+65.00 BEGIN C/A 94.32
+15.00 END C/A 101.87
+00.00 130.00
+50.00 143.00
+00.00 130.00
+00.00 130.00
+00.00 130

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	206	418
		PLAN AND PROFILE SHEETS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
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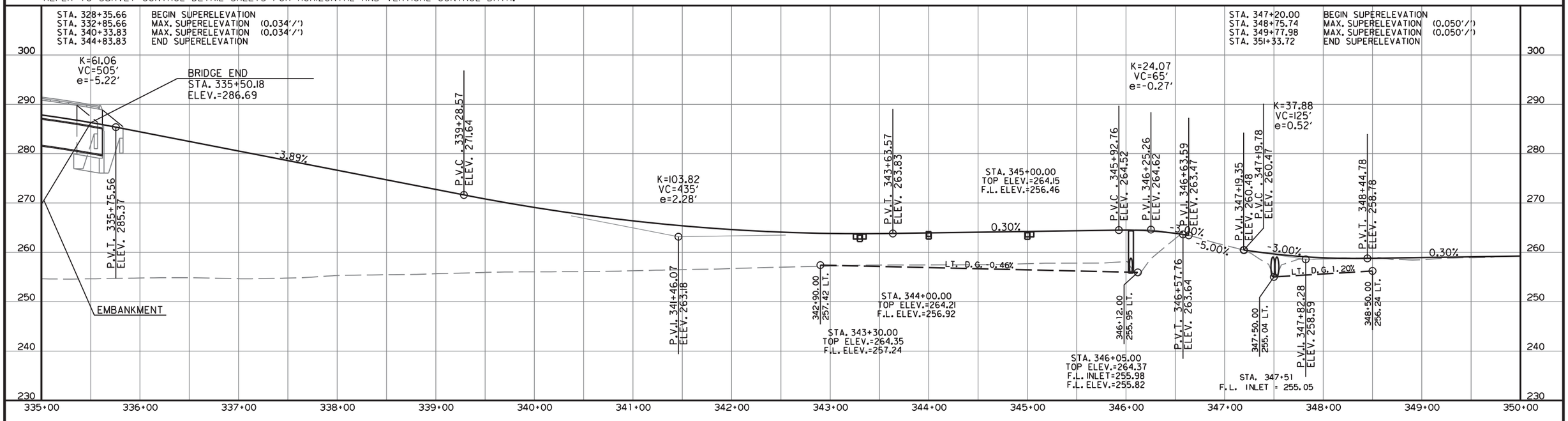
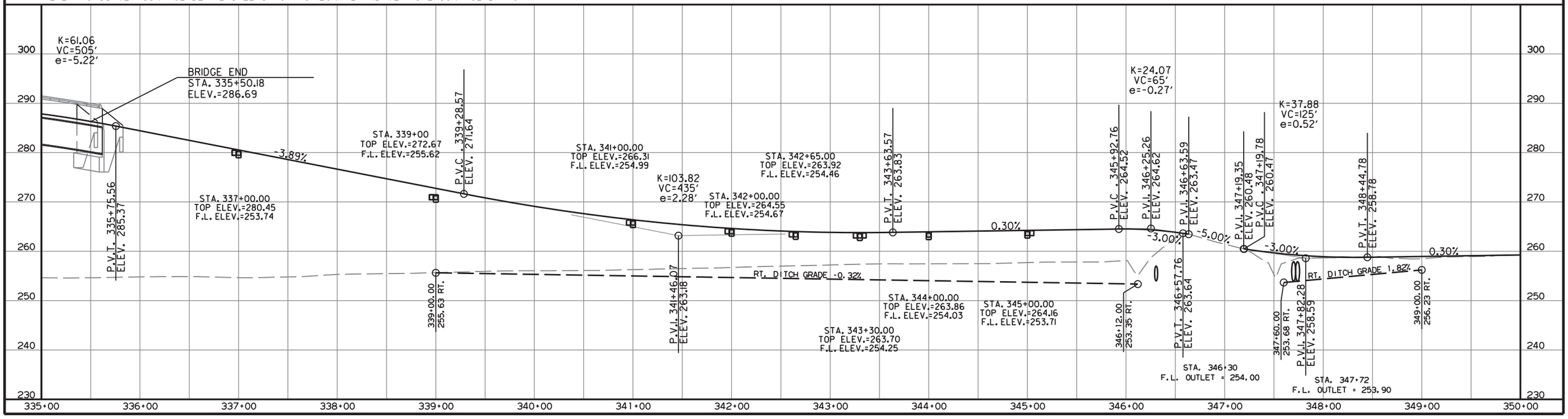
REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

LEFT SIDE OF HWY. 18S/MLK JR. DR.



REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

RIGHT SIDE OF HWY. 18S/MLK JR. DR.



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DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	207	418
		PLAN AND PROFILE SHEETS				

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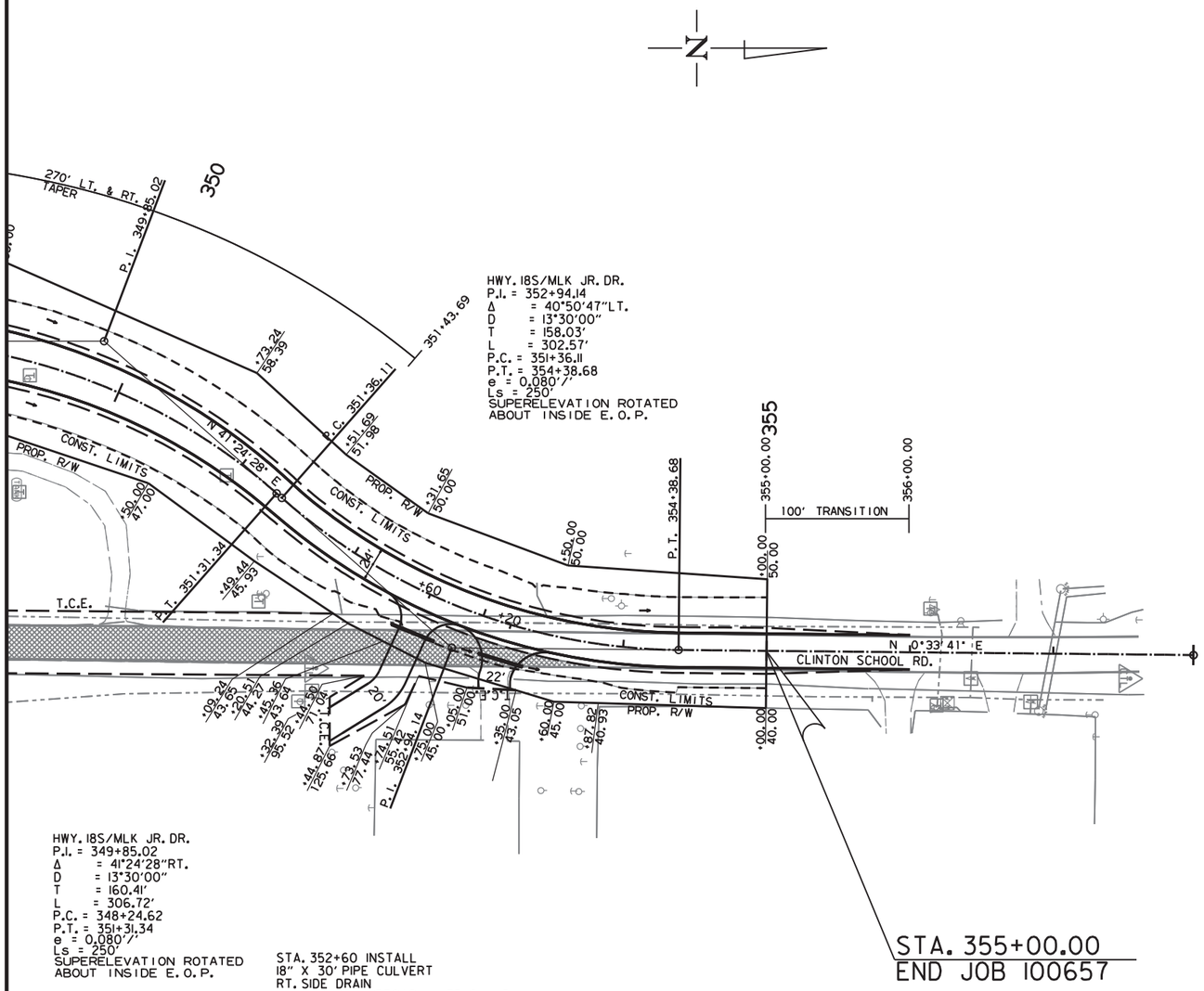

HT39710 5/6/2022
R100657.DGN

HWY. 18S/MLK JR. DR.

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	208	418
		PLAN AND PROFILE SHEETS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
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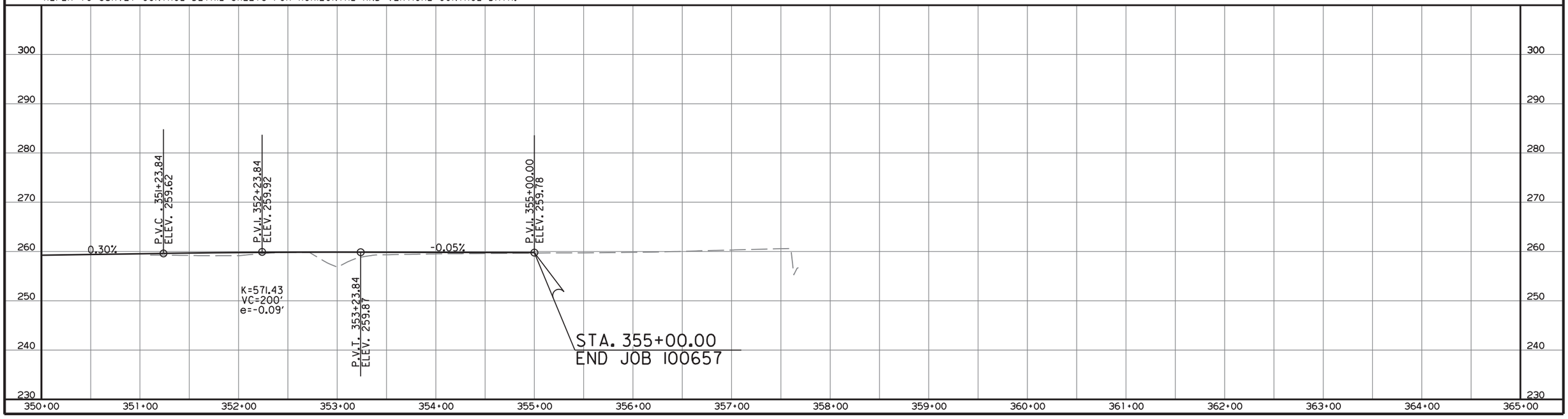
LEFT SIDE OF HWY. 18S/MLK JR. DR.

REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

RIGHT SIDE OF HWY. 18S/MLK JR. DR.



HT39710 5/6/2022
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DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
09-12-22		6	ARK.	100657	209	418
		PLAN AND PROFILE SHEETS				

STATE OF ARKANSAS
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SPECIAL FLOOD HAZARD AREA BOUNDARY

STA. 502+30 IN PLACE
UNKNOWN PIPE
LT. SIDE DRAIN
REMOVE AND INSTALL
24" X 36' R.C. PIPE CULVERT
CONSTRUCT APPROACH = 30 CU. YD.

STA. 504+40 INSTALL
24" X 56' R.C. PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 55 CU. YD.

STA. 506+06 IN PLACE
12" X 30' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE

STA. 506+65 IN PLACE
12" X 30' R.C. PIPE CULVERT
LT. SIDE DRAIN
REMOVE

STA. 507+75 IN PLACE
DBL. 24" X 44' C.M. PIPE CULVERT
REMOVE

STA. 507+86.06
C.W. POST TIE-IN
@ LT. E.O.P. HWY. 18S STA. 122+09.20
ELEV.=237.73

STA. 508+42.07
C.W. POST TIE-IN
@ RT. E.O.P. HWY. 18S STA. 122+10.38
ELEV.=237.45

C.L. C.W. POST STA. 508+14.07 =
C.L. HWY. 18S STA. 122+09.79
Δ = 90°00'00"

STA. 509+00 IN PLACE
DBL. 24" X 102' R.C. PIPE CULVERT
REMOVE

STA. 509+13 IN PLACE
DBL. 48" X 61' R.C. PIPE CULVERT
RT. SIDE DRAIN
REMOVE

STA. 509+82 INSTALL
DBL. 48" X 60' R.C. PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPROACH = 225 CU. YD.

STA. 502+44 IN PLACE
UNKNOWN PIPE
RT. SIDE DRAIN
REMOVE AND INSTALL
24" X 40' R.C. PIPE CULVERT
CONSTRUCT APPROACH = 30 CU. YD.

STA. 507+52 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 6.9 SQ. YDS.

STA. 509+64 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 7.3 SQ. YDS.

STA. 512+73.95
END C.W. POST CONST.

C.W. POST

REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

STA. 502+26.25
BEGIN C.W. POST
CONST.

STA. 507+86.06
C.W. POST TIE-IN
@ LT. E.O.P. HWY. 18S STA. 122+09.20
ELEV.=237.73

STA. 508+42.07
C.W. POST TIE-IN
@ RT. E.O.P. HWY. 18S STA. 122+10.38
ELEV.=237.45

GRADE DITCH
@ 0.16% AROUND RADIUS FROM
HERE TO MAIN LANE LT. D.G.
@ STA. 123+00.00
ELEV.=232.86

GRADE DITCH
@ -1.62% AROUND RADIUS FROM
HERE TO MAIN LANE RT. D.G.
@ STA. 122+95.03
ELEV.=232.30

STA. 507+75
EXIST. F.L. INLET=232.84
EXIST. F.L. OUTLET=231.98

STA. 508+75
EXIST. F.L. INLET=232.35

STA. 509+65
EXIST. F.L. OUTLET=231.57

HT39710 9/9/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	210	418
		PLAN AND PROFILE SHEETS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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KATHLEEN ST. CONNECTOR

STA. 650+11.84
BEGIN KATHLEEN ST. CONNECTOR CONST.

KATHLEEN ST. CONNECTOR
P.I. = 653+35.75
Δ = 86°10'45"LT.
D = 20°00'00"
T = 267.98'
L = 430.89'
P.C. = 650+67.77
P.T. = 654+98.66
e = 0.097'/'
Ls = 250'
SUPERELEVATION ROTATED ABOUT INSIDE E.O.P.

C.L. KATHLEEN ST. CONNECTOR STA. 656+13.02 =
C.L. HWY. 18S STA. 328+35.74
Δ = 90°00'00"

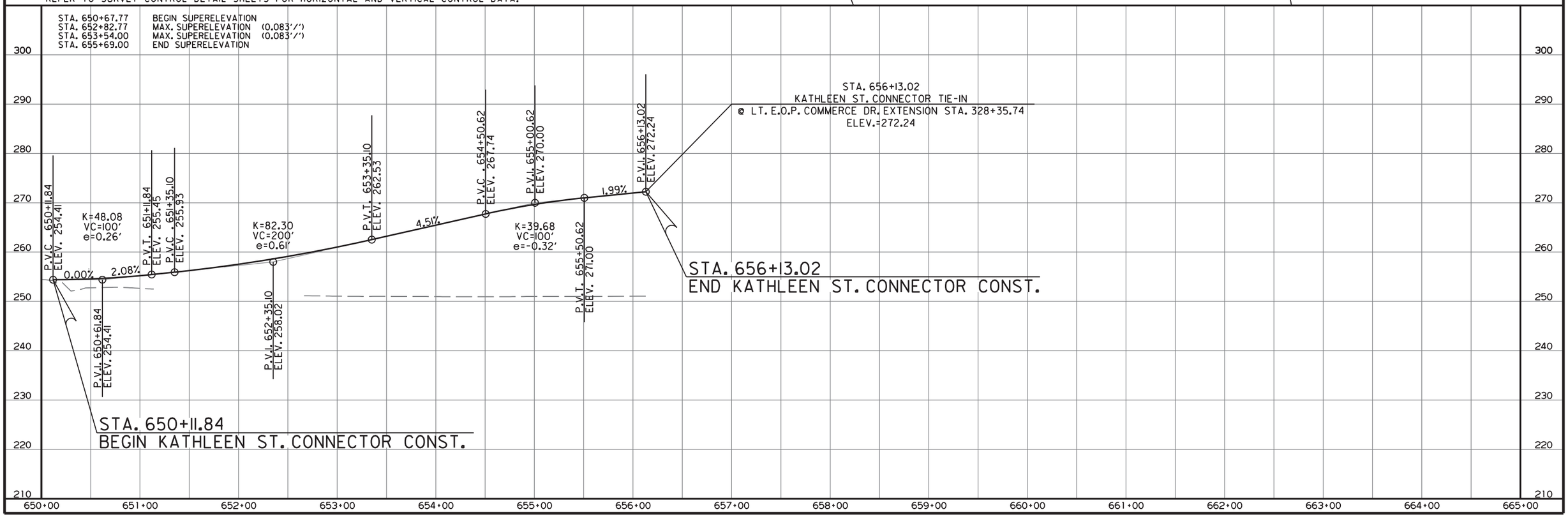
STA. 656+13.02
END KATHLEEN ST. CONNECTOR CONST.

FENCE				
STA.	STA.	SIDE	TYPE	LIN. FT.
650+45	654+50	LT.	A	332
350+47	354+91	RT.	A	544

STA. 650+30 INSTALL
18" X 60' R.C. PIPE CULVERT W/F.E.S. LT. AND RT.
18" R.C. PIPE (CLASS III)(TYPE 3) = 60 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 60 LIN. FT.
18" F.E.S. = 2 EACH

STA. 656+13.02
KATHLEEN ST. CONNECTOR TIE-IN
@ LT. E.O.P. MLK JR. DR. EXTENSION STA. 328+35.74
ELEV.=272.24

REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.



HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	211	418
		SUMMARY OF TRAFFIC SIGNAL QUANTITIES				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
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SUMMARY OF TRAFFIC SIGNAL QUANTITIES

ITEM NUMBER	ITEM	HWY. 18S/C.W. POST	HWY. 18S/HWY. 18	HWY. 18S/HWY. 49	QUANTITY	UNIT
SP & 701	SYSTEM LOCAL CONTROLLER TS2-TYPE 2, E-NET (8 PHASES)	1	2	1	4	EACH
SP	ETHERNET SWITCH, T100 HARDENED (8-PORT)	1	2	1	4	EACH
SP	E-NET CABLE (EXTERIOR CAT 5E)	90	75		165	LIN. FT.
SP	CELLULAR MODEM			1	1	EACH
SP	LOCAL RADIO (E-NET 5.8) WITH ANTENNA		1		1	EACH
704	VEHICLE DETECTOR-RACK MOUNT		4	4	8	EACH
SP	LOOP WIRING CLASS III (1C/16 A.W.G.)		956	956	1912	LIN. FT.
704	FEEDER WIRE		1830	1750	3580	LIN. FT.
SP & 706	TRAFFIC SIGNAL HEAD, LED, (3 SECTION, 1 WAY)	10	20	10	40	EACH
SP & 706	TRAFFIC SIGNAL HEAD, LED, (4 SECTION, 1 WAY)	2	8	4	14	EACH
SP & 707	COUNTDOWN PEDESTRIAN SIGNAL HEAD, LED	6	6	2	14	EACH
708	TRAFFIC SIGNAL CABLE (5C/14 A.W.G.)	1774	2853	1349	5976	LIN. FT.
708	TRAFFIC SIGNAL CABLE (7C/14 A.W.G.)	172	2354	330	2856	LIN. FT.
708	TRAFFIC SIGNAL CABLE (20C/14 A.W.G.)	581	890	558	2029	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/8 A.W.G., E.G.C.)	629	800	650	2079	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/12 A.W.G., E.G.C.)	230	200	220	650	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (2C/6 A.W.G.)	45	135	46	226	LIN. FT.
SP	ELECTRICAL CONDUCTORS FOR LUMINAIRES	778	1064	786	2628	LIN. FT.
709	GALVANIZED STEEL CONDUIT (2")	20	40	20	80	LIN. FT.
709	GALVANIZED STEEL CONDUIT (3")		60		60	LIN. FT.
710	NON-METALLIC CONDUIT (1")		264	324	588	LIN. FT.
710	NON-METALLIC CONDUIT (1.25")		80	80	160	LIN. FT.
710	NON-METALLIC CONDUIT (2")	20	690	477	1187	LIN. FT.
710	NON-METALLIC CONDUIT (3")	497	804	488	1789	LIN. FT.
SS & 711	CONCRETE PULL BOX (TYPE 2)	3	1		4	EACH
SS & 711	CONCRETE PULL BOX (TYPE 1 HD)		6	4	10	EACH
SS & 711	CONCRETE PULL BOX (TYPE 2 HD)	2	6	7	15	EACH
SS & 713	SPAN WIRE ASSEMBLY		1		1	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (38')			1	1	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (44')	1	1		2	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (46')		1	1	2	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (48')	1			1	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (50')	1			1	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (56')		1	1	2	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (62')		1		1	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (66')	1		1	2	EACH
SP	LED LUMINAIRE ASSEMBLY	4	4	4	12	EACH
SS & 715	TRAFFIC SIGNAL PEDESTAL POLE WITH FOUNDATION	2	3	2	7	EACH
SP	SERVICE POINT ASSEMBLY (2 CIRCUITS)	1	1	1	3	EACH
SP	REMOVAL OF TRAFFIC SIGNAL EQUIPMENT		0.67	0.33	1.00	LUMP SUM
716	TREATED WOOD POLE (CLASS 2, 45')		4		4	EACH
SP	18" STREET NAME SIGN	4	4	6	14	EACH
SP & 733	VIDEO DETECTOR (CLR)		8		8	EACH
SP & 733	VIDEO DETECTOR (IP)	8	6	6	20	EACH
733	VIDEO CABLE		1700		1700	LIN. FT.
SP & 733	VIDEO CABLE (EXTERIOR CAT 5E)	1668	1698	1275	4641	LIN. FT.
733	VIDEO MONITOR (CLR)		1		1	EACH
SP & 733	VIDEO MONITOR (CLR)	1	1	1	3	EACH
SP & 733	VIDEO PROCESSOR, EDGE CARD (2 CAMERA)		4		4	EACH
SP & 733	VEHICLE DETECTOR RACK (16 CHANNEL)	1	2	1	4	EACH
SP & 733	CENTRAL CONTROL UNIT (8 CHANNEL)	2	2	2	6	EACH
SP & 733	VIDEO PROCESSOR, EDGE CARD IP (2 CAMERA)	4	4	4	12	EACH

DATE: 05-05-2022 FILE NAME: t100657_job.dgn

LOCATION: I-555 - HWY. 49 (DR. MARTIN LUTHER KING JR. DR. EXTENSION)
CITY: JONESBORO
COUNTY: CRAIGHEAD
DISTRICT: 10 SCALE: N/A DRAWN BY: GWE

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	212	418
		TRAFFIC SIGNAL NOTES				

TRAFFIC SIGNAL NOTES:

1. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE NFPA 70 (CURRENT EDITION) NATIONAL ELECTRICAL CODE, NFPA 101 (CURRENT EDITION) LIFE SAFETY CODE, STATE ELECTRICAL CODE AND LOCAL ELECTRICAL CODE.

2. EXTEND GREEN EQUIPMENT GROUNDING CONDUCTOR (E.G.C.) FROM GROUND BAR AT MAIN BREAKER TO CONTROL PANEL AND TO FIRST POLE. SOLIDLY BOND E.G.C. TO GROUND LUG OF CONTROL CABINET AND TO POLE GROUND. ENSURE THAT ONLY ONE NEUTRAL-TO-GROUND BOND EXISTS IN THE SYSTEM AND THAT IT IS AT THE MAIN BREAKER.

3. ELECTRICAL SERVICE SHALL BE PROVIDED BY THE CITY/COUNTY TO A SERVICE POLE WITH EXTERNAL RAINTIGHT BREAKER (MAIN BREAKER), GALVANIZED STEEL SERVICE RISER, METER LOOP (IF REQUIRED), AND WEATHERHEAD AT A MUTUALLY ACCEPTABLE POINT WITHIN THE RIGHT-OF-WAY. IF THE SERVICE POINT IS OVER 10 FEET FROM THE CONTROLLER, THE CONTRACTOR SHALL PROVIDE AND INSTALL A SEPARATE TWO CIRCUIT EXTERNAL BREAKER (SECONDARY BREAKER) ON OR NEAR THE TRAFFIC SIGNAL CONTROLLER CABINET AND SHALL INSTALL CONDUIT, ELECTRICAL SERVICE WIRE (2c/#6 A.W.G. USE RATED, WITH GROUND TYPICAL), AND PERFORM WIRING TO TAP INTO THE CITY'S/ COUNTY'S MAIN BREAKER AS PART OF THIS CONTRACT. CONDUIT IS PAID FOR AS A SEPARATE ITEM OF THIS CONTRACT. TWO CIRCUIT BREAKERS, CONSIDERED SUBSIDIARY TO THE CONTROL EQUIPMENT, ARE NEEDED WHERE STREET LIGHTING IS INCLUDED. AS PART OF THE SIGNAL INSTALLATION, STREET LIGHTING CIRCUIT (2c/#12 A.W.G. UF RATED, TYPICAL) SHALL BE KEPT FROM THE CIRCUIT SERVING THE TRAFFIC SIGNAL CONTROL EQUIPMENT FROM THE POINT OF TIE-IN AT THE SECONDARY BREAKER PROVIDED BY THE CONTRACTOR.

4. CONTRACTOR SHALL CONNECT A SEPARATE NEUTRAL FOR EACH LOAD SWITCH REPRESENTED ON EACH SIGNAL POLE.

5. TRAFFIC CONTROLLER CABINET AND LAYOUT SHALL BE SUCH THAT IT IS NOT NECESSARY TO SHUT DOWN POWER OR REMOVE LOAD SWITCHES IN ORDER TO EASILY TEST OR MODIFY DETECTOR INPUTS TO THE CONTROLLER.

6. CONTROLLER CABINET SHALL BE WIRED SUCH THAT DURING FLASH OPERATIONS POWER TO THE LOAD SWITCHES CANNOT BACKFEED TO LOAD SWITCH POWER BUSS.

7. ALL PARTS OF THIS INSTALLATION SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, STANDARD DRAWINGS, AND WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION.

8. CONDUIT INSTALLED UNDER ROADWAY SURFACES SHALL BE INSTALLED BY PUSHING OR BORING METHODS. IF THE ENGINEER DETERMINES THIS IS NOT FEASIBLE, THEN A TRENCHING METHOD AS SHOWN IN THE STANDARD DRAWINGS MAY BE USED.

9. TRAFFIC SIGNAL POLES SHALL BE GALVANIZED. BACKPLATES SHALL BE SUPPLIED FOR ALL SIGNAL HEADS.

10. PAVEMENT MARKINGS SHOWN FOR REFERENCE ONLY. SEE PERMANENT PAVEMENT MARKING DETAILS.

11. FOUNDATION FOR ALL POLES SHALL BE EXTENDED IF NECESSARY TO ACCOMMODATE THE REQUIREMENTS FOR SIGNAL HEAD CLEARANCE ABOVE ROADWAY ONLY AT LOCATIONS WHERE THE GROUND ELEVATION AT THE POLE IS BELOW THE ELEVATION OF THE ROADWAY (SEE NOTES ON STANDARD DRAWING). PAYMENT WILL BE INCLUDED IN SECTION 714 TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, CURRENT EDITION.

12. ALL CONCRETE PULL BOXES SHALL BE (TYPE 2 HD) UNLESS OTHERWISE INDICATED. ALL CONDUIT SHALL BE THREE (3") INCH DIAMETER UNLESS SPECIFIED ON PLANS.

13. CONTRACTOR SHALL NOTIFY ALL EXISTING UTILITY OWNERS BEFORE BEGINNING WORK ON THIS PROJECT.

14. LED LUMINAIRE ASSEMBLIES SHALL HAVE A BUG RATING OF U0.

15. HARDWARE INPUTS MAY BE DETERMINED BY SUPPLIER. EACH DETECTOR OUTPUT SHALL INPUT THE CONTROLLER THROUGH A SEPARATE INPUT UNLESS OTHERWISE NOTED AND BE PROGRAMMED TO ACTUATE THE ASSOCIATED PHASE. COMBINATION (COMB.) DETECTORS SHALL ALSO BE PROGRAMMED TO PROVIDE VEHICLE COUNT/OCCUPANCY DATA.

16. THE LOCAL RADIO WITH ANTENNA SHALL BE COMPATIBLE WITH THE EXISTING CLOSED LOOP COORDINATION SYSTEM IN THE CITY/COUNTY.

17. TO DETERMINE UTILITY CLEARANCES ABOVE THE TRAFFIC SIGNAL POLE, REFER TO THE POLE SCHEDULE FOR VERTICAL SHAFT HEIGHT. WHERE THE POLE SCHEDULE INDICATES THAT A LUMINAIRE ARM WILL BE USED, THIRTY-EIGHT (38') FEET SHOULD BE USED TO DETERMINE UTILITY CLEARANCE ABOVE THE LUMINAIRE ARM. WHERE THE POLE SCHEDULE INDICATES A TRAFFIC SIGNAL POLE WITHOUT A LUMINAIRE ARM, A HEIGHT OF TWENTY-ONE (21') FEET SHOULD BE USED TO DETERMINE UTILITY CLEARANCE ABOVE THE TRAFFIC SIGNAL MAST ARM. AN ADDITIONAL SIX (6') FEET SHOULD BE USED DIRECTLY ABOVE "VIDEO DETECTOR" AT LOCATIONS SHOWN ON THE SIGNAL PLANS.

STATE OF ARKANSAS
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18. THE DESIRABLE MINIMUM DISTANCE FROM THE FACE OF ROADWAY CURB OR SHOULDER EDGE TO THE FACE OF NON-BREAKAWAY POLE OR OBSTRUCTION IS SIX (6') FEET. REFER TO TRAFFIC SIGNAL PLANS FOR SPECIFIC LOCATION OF POLES, CONTROLLER AND ANY OTHER NON-BREAKAWAY OBSTRUCTIONS. REFER TO "DESIGN PARAMETERS, MINIMUM CLEAR ZONE DISTANCE" FOR MINIMUM DISTANCE FROM THE EDGE OF TRAVELED WAY TO THE FACE OF A NON-BREAKAWAY POLE OR OBSTRUCTION. TRAFFIC SIGNAL POLES OR ANY OTHER NON-BREAKAWAY OBSTRUCTION SHALL NOT BE INSTALLED WITHIN THE CLEAR ZONE.

19. AS DETERMINED BY THE ENGINEER, FOUNDATION EMBEDMENT MAY BE DECREASED BY A MAXIMUM OF TWO FEET IF COMPETENT ROCK IS ENCOUNTERED PRIOR TO ACHIEVING PLAN EMBEDMENT AND AT LEAST HALF OF THE REMAINING PLAN EMBEDMENT LENGTH IS KEYED INTO COMPETENT ROCK.

20. CONNECTION OF TRAFFIC SIGNAL DISPLAY TO FIELD WIRING SHALL UTILIZE AN APPROVED TERMINAL STRIP BEHIND HAND-HOLE COVER AT BASE OF POLE. TERMINAL STRIP SHALL PROVIDE PROTECTION TO PREVENT EXPOSURE TO THE PUBLIC IN THE EVENT THAT POLE COVER IS MISSING. PAYMENT FOR TERMINAL STRIPS SHALL BE INCLUDED IN ITEM 714 TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, CURRENT EDITION.

21. CONTROLLER CABINET LAYOUT AND ORIENTATION SHALL CONFORM TO IMSA STANDARDS.

22. ONE VIDEO PROGRAMMNG MODULE SHALL BE PROVIDED FOR AIMING AND SETUP OF DETECTORS IF THE VIDEO SYSTEM CANNOT BE ADJUSTED THROUGH HARDWARE AND SOFTWARE PROVIDED BY ITEMS WITHIN THE JOB.

23. TRAFFIC SIGNAL CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER OR ASSIGNED DEPARTMENT PROJECT INSPECTOR EACH DAY PRIOR TO SIGNAL RELATED WORK. NO WORK ON TRAFFIC SIGNALS WILL BE ALLOWED OR APPROVED WITHOUT THIS PRIOR NOTIFICATION.

24. ALL STEEL POLES SHALL BE DESIGNED TO MEET THE AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, 4th EDITION (2001) WITH 2003 AND 2006 INTERIMS.

25. DOOR PANEL TEST PUSH BUTTONS SHALL ACTUATE INDICATED PHASES. DETECTOR ASSIGNMENTS AND/OR SIDE PANEL JUMPERS MAY REQUIRE MODIFICATION.

26. ALL SYSTEM DETECTOR RACKS AND ASSOCIATED EQUIPMENT SHALL BE PROTECTED BY THE MAIN CONTROLLER CABINET POWER SURGE PROTECTION.

27. IN PULL BOXES, POLE BASES, JUNCTION BOXES, AND CONTROLLER CABINETS, THE DIRECTION OF EACH CABLE RUN SHALL BE INDICATED BY ATTACHING A PERMANENT TAG OF RIGID PLASTIC OR NON-FERROUS METAL TO THE CONDUIT. TAGS SHALL BE EMBOSSED, STAMPED OR ENGRAVED WITH LETTERS 1/4" OR GREATER IN HEIGHT AND SECURED TO THE CONDUIT WITH NYLON OR PLASTIC TIES. IN INSTANCES WHERE THE CONDUIT OR CONDUIT ENTRANCES ARE NOT VISIBLE OR ACCESSIBLE, A DIRECTION TAG SHALL BE ATTACHED TO EACH CABLE.

28. THE CONTRACTOR SHALL PERFORM ALL WORK POSSIBLE THAT WILL MINIMIZE THE TIME THAT THE TRAFFIC SIGNAL IS OUT OF OPERATION. IF, IN THE OPINION OF THE ENGINEER, TRAFFIC CONDITIONS WARRANT, THE CONTRACTOR SHALL PROVIDE FLAGMEN TO DIRECT TRAFFIC WHILE THE TRAFFIC SIGNAL IS OUT OF OPERATION.

29. ALL NON-METALLIC CONDUIT RUNS SHALL HAVE BELL RING FITTINGS INSTALLED ON THE TERMINATING ENDS OF THE CONDUIT. THIS INCLUDES PULL BOXES, POLE BASES, AND TRAFFIC SIGNAL CABINETS.

30. ALL CONCRETE PULL BOXES SHALL BE SET ON A GRAVEL OR CRUSHED STONE BEDDING AS SPECIFIED IN SECTION 711, CONCRETE PULL BOX, OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EDITION OF 2014.

31. BEFORE FINAL ACCEPTANCE OF THE TRAFFIC SIGNAL, THE CONTRACTOR SHALL PROVIDE TWO (2) SETS OF LEDGER SIZE (11"X17") AS-BUILT TRAFFIC SIGNAL PLANS TO THE MAINTENANCE AUTHORITY AND ARDOT.

DATE: 05-05-2022 FILE NAME: tl00657_job.dgn

LOCATION:	I-555 - HWY. 49 (DR. MARTIN LUTHER KING JR. DR. EXTENSION)
CITY:	JONESBORO
COUNTY:	CRAIGHEAD
DISTRICT:	10 SCALE: N/A DRAWN BY: GWE

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	213	418
		TRAFFIC SIGNAL STREET NAME SIGNS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
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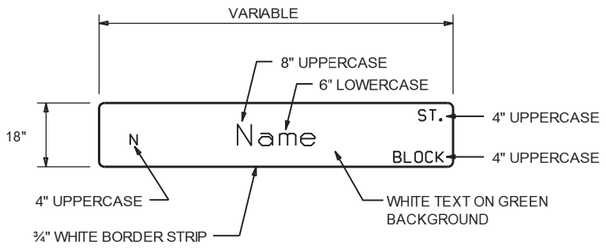
OVERHEAD STREET NAME MARKER STANDARD MAST ARM MOUNTED

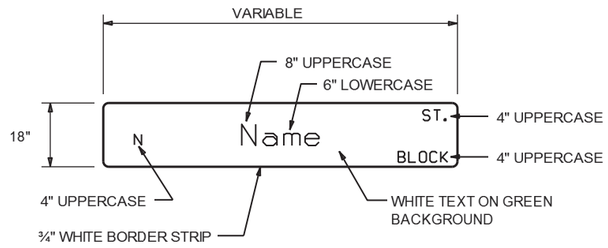
HIGHWAY 18S AND CW POST ROAD INTERSECTION



Dr Martin Luther King Jr DR. 3100 ← 2 SIGNS REQUIRED

CW Post DR. 5700 ← 2 SIGNS REQUIRED

HIGHWAY 18S AND HIGHWAY 18 INTERSECTION



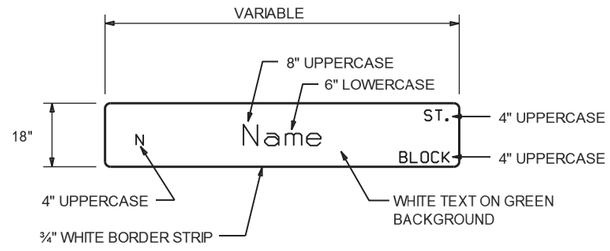
Dr Martin Luther King Jr DR. 1900 ← 1 SIGN REQUIRED

Dr Martin Luther King Jr DR. 2000 ← 1 SIGN REQUIRED

E Highland DR. 5700 ← 1 SIGN REQUIRED

E Highland DR. 5800 ← 1 SIGN REQUIRED

HIGHWAY 49 AND HIGHWAY 18S/CLINTON SCHOOL ROAD INTERSECTION



E Johnson AVE. ← 2 SIGNS REQUIRED

Dr Martin Luther King Jr DR. ← 2 SIGNS REQUIRED (MOUNTED TO BOTH SIDES OF THE MAST ARM ON POLE D)

Clinton School DR. ← 2 SIGNS REQUIRED (MOUNTED TO BOTH SIDES OF THE MAST ARM ON POLE A)

NOTES:

1. REFLECTIVE SHEETING SHALL COMPLY WITH ASTM 4956 TYPE 8 OR 9 REFLECTIVE SHEETING. SHEETING AND LEGEND SHALL BE APPLIED IN SUCH A MANNER TO PROVIDE WRINKLE AND BUBBLE FREE SURFACES. APPLICATION OF SHEETING IS CAUSE FOR REJECTION OF MATERIALS DUE TO WORKMANSHIP.
2. ALUMINUM SIGN BLANK SHALL BE ALLOY 6061-T6 OR 5052-H38. THE ALUMINUM SIGN SHALL BE ALSO ALODIZED. THE ALUMINUM SHEETING SHALL BE 0.100 INCH NOMINAL THICKNESS AND OF THE SIZE SHOWN WITH 1.5" CORNER RADII. PRIOR TO FABRICATION OF THE SIGNS, THE LAYOUT SHALL FIRST BE APPROVED BY AN AGENT OF THE CITY/ COUNTY.
3. WHEN CROSSROAD HAS TWO NAMES, THE SIGN FOR THE CROSSROAD TO THE LEFT MAY BE INSTALLED ON THE BACKSIDE OF THE MAST ARM ON THE NEARSIDE LEFT POLE. SEE STANDARD DRAWING SHEET FOR MORE INFORMATION FOR MOUNTING ON MAST ARM ASSEMBLY.
4. THE SERIES C 2000 STANDARD ALPHABET SHALL BE USED FOR ALL LETTERS.

DATE: 05-05-2022 FILE NAME: tl00657_job.dgn

LOCATION:	I-555 - HWY. 49 (DR. MARTIN LUTHER KING JR. DR. EXTENSION)
CITY:	JONESBORO
COUNTY:	CRAIGHEAD
DISTRICT:	10 SCALE: N/A DRAWN BY: GWE

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	214	418
		GROUNDING ARRAY DETAIL				

GROUNDING ARRAY
SINGLE-PORT FUSION WELDS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
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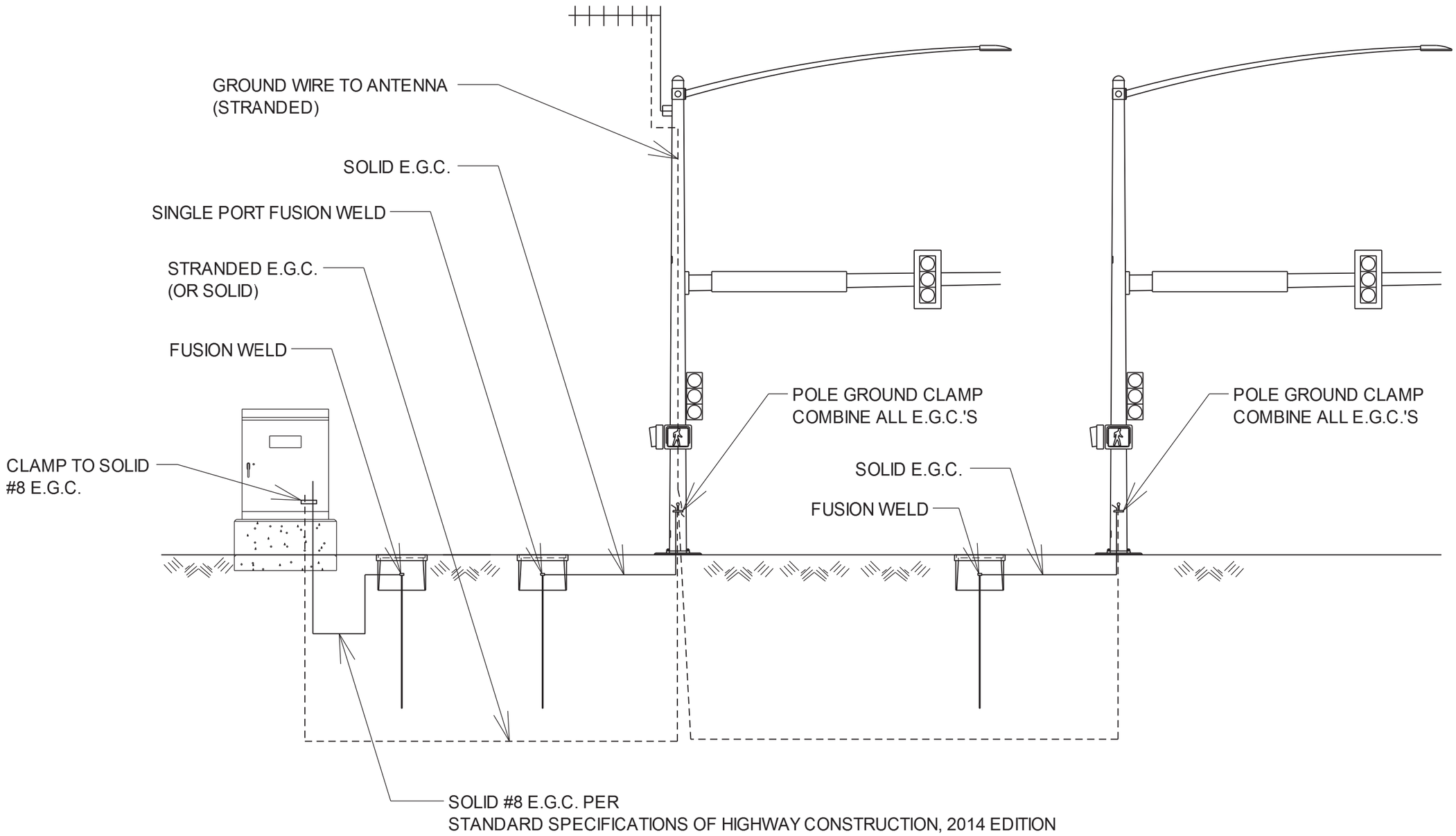

LOCATION:	I-555 - HWY. 49 (DR. MARTIN LUTHER KING JR. DR. EXTENSION)
CITY:	JONESBORO
COUNTY:	CRAIGHEAD
DISTRICT: 10	SCALE: N/A DRAWN BY: GWE

DATE: 05-05-2022 FILE NAME: t100657_job.dgn

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	215	418
		TRAFFIC SIGNAL QUANTITIES-HWY.18S/C.W. POST				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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TRAFFIC SIGNAL QUANTITIES

ITEM NUMBER	ITEM	QUANTITY	UNIT
SP & 701	SYSTEM LOCAL CONTROLLER TS2-TYPE 2, E-NET (8 PHASES)	1	EACH
SP	ETHERNET SWITCH, T100 HARDENED (8-PORT)	1	EACH
SP	E-NET CABLE (EXTERIOR CAT 5E)	90	LIN. FT.
SP & 706	TRAFFIC SIGNAL HEAD, LED, (3 SECTION, 1 WAY)	10	EACH
SP & 706	TRAFFIC SIGNAL HEAD, LED, (4 SECTION, 1 WAY)	2	EACH
SP & 707	COUNTDOWN PEDESTRIAN SIGNAL HEAD, LED	6	EACH
708	TRAFFIC SIGNAL CABLE (5C/14 A.W.G.)	1774	LIN. FT.
708	TRAFFIC SIGNAL CABLE (7C/14 A.W.G.)	172	LIN. FT.
708	TRAFFIC SIGNAL CABLE (20C/14 A.W.G.)	581	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/8 A.W.G., E.G.C.)	629	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/12 A.W.G., E.G.C.)	230	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (2C/6 A.W.G.)	45	LIN. FT.
SP	ELECTRICAL CONDUCTORS FOR LUMINAIRES	778	LIN. FT.
709	GALVANIZED STEEL CONDUIT (2")	20	LIN. FT.
710	NON-METALLIC CONDUIT (2")	20	LIN. FT.
710	NON-METALLIC CONDUIT (3")	497	LIN. FT.
SS & 711	CONCRETE PULL BOX (TYPE 2)	3	EACH
SS & 711	CONCRETE PULL BOX (TYPE 2 HD)	2	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (44')	1	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (48')	1	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (50')	1	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (66')	1	EACH
SP	LED LUMINAIRE ASSEMBLY	4	EACH
SS & 715	TRAFFIC SIGNAL PEDESTAL POLE WITH FOUNDATION	2	EACH
SP	SERVICE POINT ASSEMBLY (2 CIRCUITS)	1	EACH
SP	18" STREET NAME SIGN	4	EACH
SP & 733	VIDEO DETECTOR (IP)	8	EACH
SP & 733	VIDEO CABLE (EXTERIOR CAT 5E)	1668	LIN. FT.
SP & 733	VIDEO MONITOR (CLR)	1	EACH
SP & 733	VEHICLE DETECTOR RACK (16 CHANNEL)	1	EACH
SP & 733	CENTRAL CONTROL UNIT (8 CHANNEL)	2	EACH
SP & 733	VIDEO PROCESSOR, EDGE CARD IP (2 CAMERA)	4	EACH

PERMANENT TRAFFIC SIGNAL:
INSTALL ONE (1) LOCAL RADIO (E-NET 5.8) WITH ANTENNA FOR POINT TO POINT CONNECTION WITH THE LOCAL RADIO (E-NET 5.8) WITH ANTENNA AT THE HIGHWAY 18S AND HIGHWAY 18 INTERSECTION, REFER TO SYSTEM LOCAL CONTROLLER SPECIAL PROVISION FOR ETHERNET RADIO SPECIFICATIONS. (REFER TO PERMANENT TRAFFIC SIGNAL PLANS.)

DATE: 05-05-2022 FILE NAME: t100657_03.dgn

LOCATION: HWY. 18S/C.W. POST RD.
CITY: JONESBORO
COUNTY: CRAIGHEAD
DISTRICT: 10 SCALE: N/A DRAWN BY: GWE

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
09-12-22		6	ARK.	100657	216	418
		SIGNALIZATION PLAN SHEET				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
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PHASING DIAGRAM

SIGNAL FACES

12" LENSES

2 & 3
5 & 6
8 & 9
11 & 12

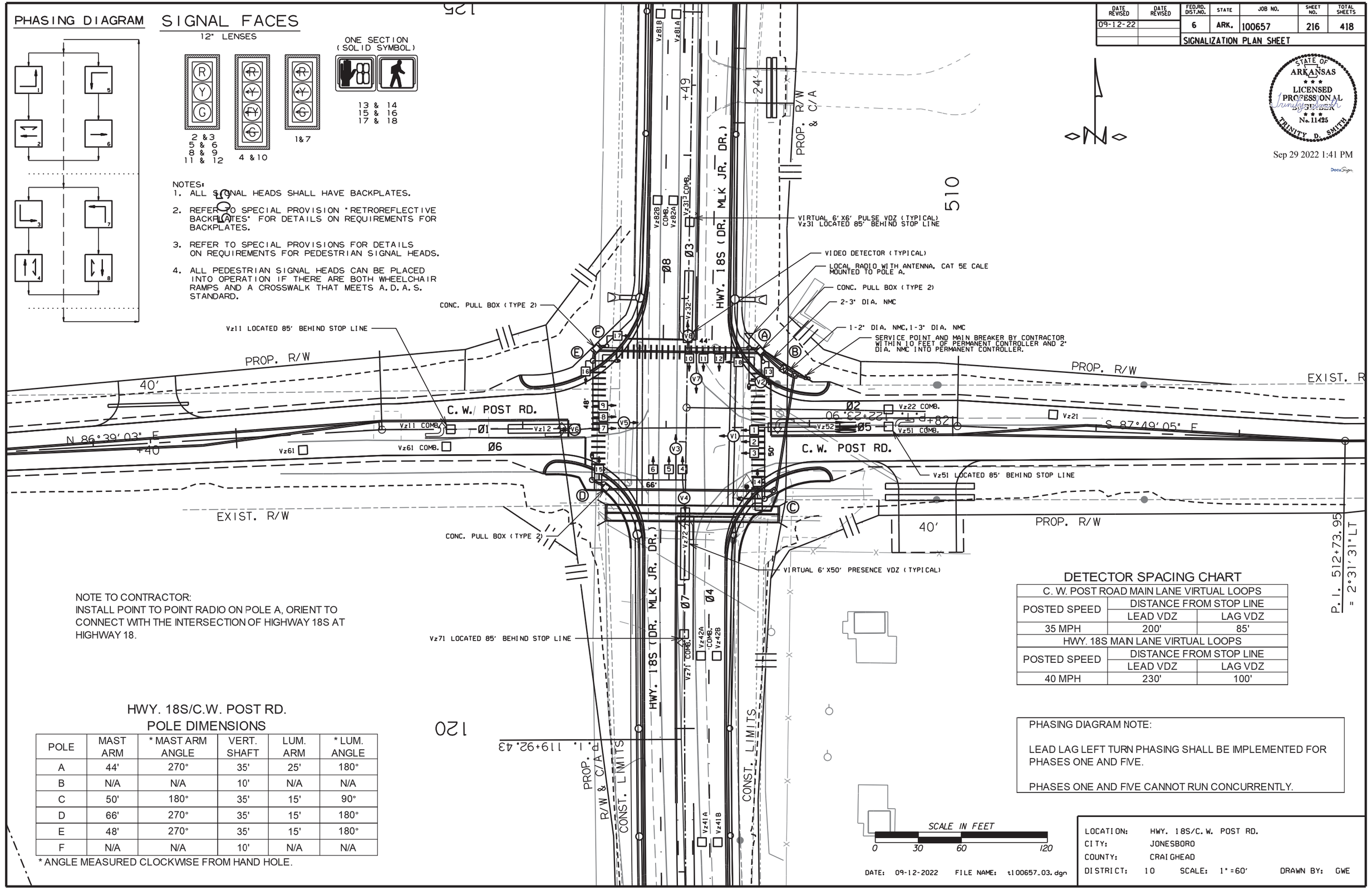
4 & 10

1 & 7

ONE SECTION (SOLID SYMBOL)

13 & 14
15 & 16
17 & 18

NOTES:
1. ALL SIGNAL HEADS SHALL HAVE BACKPLATES.
2. REFER TO SPECIAL PROVISION "RETROREFLECTIVE BACKPLATES" FOR DETAILS ON REQUIREMENTS FOR BACKPLATES.
3. REFER TO SPECIAL PROVISIONS FOR DETAILS ON REQUIREMENTS FOR PEDESTRIAN SIGNAL HEADS.
4. ALL PEDESTRIAN SIGNAL HEADS CAN BE PLACED INTO OPERATION IF THERE ARE BOTH WHEELCHAIR RAMPS AND A CROSSWALK THAT MEETS A.D.A.S. STANDARD.



NOTE TO CONTRACTOR:
INSTALL POINT TO POINT RADIO ON POLE A, ORIENT TO CONNECT WITH THE INTERSECTION OF HIGHWAY 18S AT HIGHWAY 18.

HWY. 18S/C.W. POST RD. POLE DIMENSIONS

POLE	MAST ARM	* MAST ARM ANGLE	VERT. SHAFT	LUM. ARM	* LUM. ANGLE
A	44'	270°	35'	25'	180°
B	N/A	N/A	10'	N/A	N/A
C	50'	180°	35'	15'	90°
D	66'	270°	35'	15'	180°
E	48'	270°	35'	15'	180°
F	N/A	N/A	10'	N/A	N/A

* ANGLE MEASURED CLOCKWISE FROM HAND HOLE.

DETECTOR SPACING CHART

C. W. POST ROAD MAIN LANE VIRTUAL LOOPS		
POSTED SPEED	DISTANCE FROM STOP LINE	
	LEAD VDZ	LAG VDZ
35 MPH	200'	85'
HWY. 18S MAIN LANE VIRTUAL LOOPS		
POSTED SPEED	DISTANCE FROM STOP LINE	
	LEAD VDZ	LAG VDZ
40 MPH	230'	100'

PHASING DIAGRAM NOTE:

LEAD LAG LEFT TURN PHASING SHALL BE IMPLEMENTED FOR PHASES ONE AND FIVE.

PHASES ONE AND FIVE CANNOT RUN CONCURRENTLY.

SCALE IN FEET
0 30 60 120

DATE: 09-12-2022 FILE NAME: t100657_03.dgn

LOCATION: HWY. 18S/C.W. POST RD.
CITY: JONESBORO
COUNTY: CRAIGHEAD
DISTRICT: 10 SCALE: 1"=60' DRAWN BY: GWE

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
09-12-22		6	ARK.	100657	217	418

SIGNALIZATION PLAN SHEET

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
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510

PROP. R/W

C. W. POST RD.

Vz11 COMB. Ø1 Vz12 V6

Vz61 Vz61 COMB. Ø6

Vz82B COMB. Vz82A Ø8

Vz31 COMB. Ø3

Vz32 V8

HWY. 18S (DR. MLK JR.)

44'

48'

66'

50'

V1 V2 V3 V4 V5 V7

Ø2 Vz22 COMB.

Vz52 Ø5 Vz51 COMB.

Vz21

S 87°

PROP. R/W

C. W. POST RD.

40'

PROP. R/W

IST. R/W

HWY. 18S (DR. MLK JR. DR.)

Vz72 Ø7 Vz71 COMB.

Ø4 Vz42A COMB. Vz42B

MITS

120

DESIGN PARAMETERS

POSTED SPEED LIMIT:
35 MPH EAST AND WEST APPROACH
40 MPH NORTH AND SOUTH APPROACH

NO BUS STOPS
NO RAILROAD TRACKS
YES EXISTING INTERCONNECTIONS
NO FIRE STATION
NO PARKING
NO SIGHT DISTANCE RESTRICTIONS

LOCATION OF STOP LINES SHOWN ON PERMANENT PAVEMENT MARKING DETAILS (SEE SEPARATE SHEET).

MINIMUM CLEAR ZONE DISTANCE
4 FEET BEHIND CURB

HWY. 18S/C.W. POST RD.
POLE LOCATIONS

POLE	LOCATION & STATION	OFFSET	X, Y COORDINATES
A	HWY. 18S - STA. 122+66.32	43' RT.	1720312.09, 539127.00
B	HWY. 18S - STA. 122+56.89	53' RT.	1720321.94, 539117.41
C	HWY. 18S - STA. 121+60.82	55' RT.	1720323.04, 539021.62
D	HWY. 18S - STA. 121+72.69	65' LT.	1720202.56, 539034.82
E	HWY. 18S - STA. 122+55.49	66' LT.	1720203.14, 539117.91
F	HWY. 18S - STA. 122+66.07	56' LT.	1720213.00, 539128.34

SCALE IN FEET
0 20 40 80

DATE: 09-12-2022 FILE NAME: t100657_03.dgn

LOCATION: HWY. 18S/C.W. POST RD.
CITY: JONESBORO
COUNTY: CRAIGHEAD
DISTRICT: 10 SCALE: 1"=40' DRAWN BY: GWE

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	218	418
		SIGNALIZATION PLAN SHEET				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
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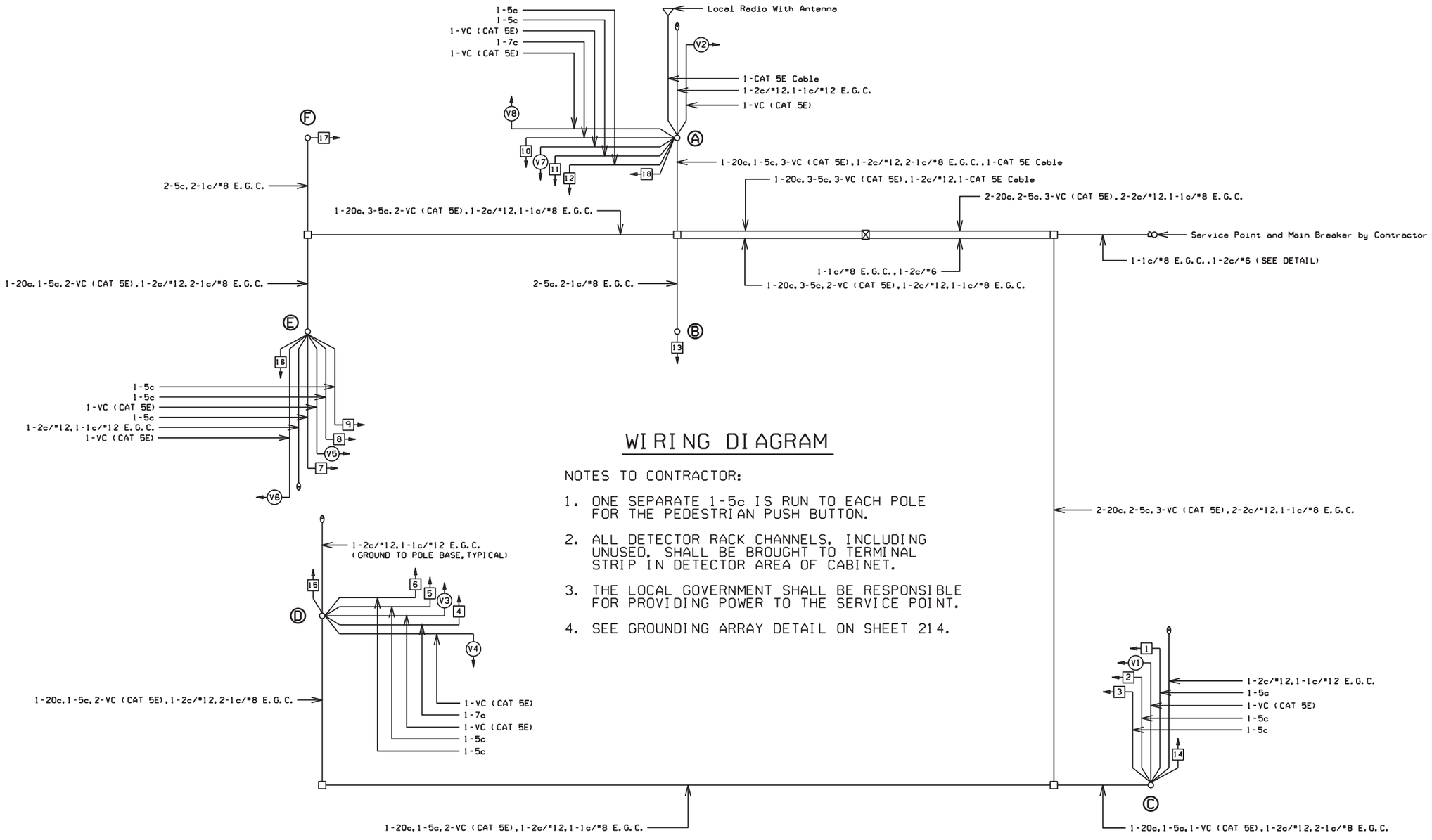


WIRING DIAGRAM

NOTES TO CONTRACTOR:

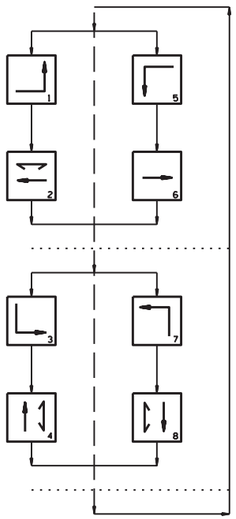
1. ONE SEPARATE 1-5c IS RUN TO EACH POLE FOR THE PEDESTRIAN PUSH BUTTON.
2. ALL DETECTOR RACK CHANNELS, INCLUDING UNUSED, SHALL BE BROUGHT TO TERMINAL STRIP IN DETECTOR AREA OF CABINET.
3. THE LOCAL GOVERNMENT SHALL BE RESPONSIBLE FOR PROVIDING POWER TO THE SERVICE POINT.
4. SEE GROUNDING ARRAY DETAIL ON SHEET 214.

DATE: 05-05-2022 FILE NAME: t100657_03.dgn

LOCATION:	HWY. 18S/C.W. POST RD.
CITY:	JONESBORO
COUNTY:	CRAIGHEAD
DISTRICT: 10	SCALE: N/A DRAWN BY: GWE

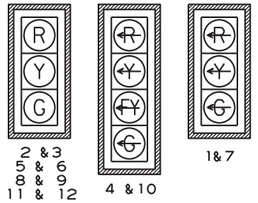
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	219	418
		SIGNALIZATION PLAN SHEET				

PHASING DIAGRAM



SIGNAL FACES

12" LENSES



ONE SECTION
(SOLID SYMBOL)

13 & 14
15 & 16
17 & 18

NOTES:
1. ALL SIGNAL HEADS SHALL HAVE BACKPLATES.
2. REFER TO SPECIAL PROVISION "RETROREFLECTIVE BACKPLATES" FOR DETAILS ON REQUIREMENTS FOR BACKPLATES.
3. REFER TO SPECIAL PROVISIONS FOR DETAILS ON REQUIREMENTS FOR PEDESTRIAN SIGNAL HEADS.
4. ALL PEDESTRIAN SIGNAL HEADS CAN BE PLACED INTO OPERATION IF THERE ARE BOTH WHEELCHAIR RAMPS AND A CROSSWALK THAT MEETS A.D.A.S. STANDARD.

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DETECTOR CHART

DETECTOR SYSTEM DESCRIPTION: JOB 100657											
HWY. 18S/C.W. POST RD. DETECTOR ASSIGNMENTS				HARDWARE INPUTS BY SUPPLIER			PROGRAM ASSIGNMENTS LOCAL		MASTER SYSTEM DETECTOR NUMBERS	COMMENTS	TUBE LENGTHS
DET. ID #	LOCATION DIRECTION	TYPE	DET. #	CAB. TRM. #	AMP CHN. #	CON. IMP. #	PHS	SYSTEM DET. #			
Vz11	EB LEFT TURN FAR	COMB.			1	V9	1	1		CAMERA V1	74"
Vz12	EB LEFT TURN	LOCAL			2	V1	1			CAMERA V1	74"
Vz21	WB ADVANCE	LOCAL			5	V2	2			CAMERA V2	23"
Vz22	WB NEAR	COMB.			6	V10	2	2		CAMERA V5	74"
Vz31	SB LEFT TURN FAR	COMB.			9	V11	3	3		CAMERA V3	74"
Vz32	SB LEFT TURN	LOCAL			10	V3	3			CAMERA V3	74"
Vz41 A&B	NB ADVANCE	LOCAL			13	V4	4			CAMERA V4	74"
Vz42 A&B	NB NEAR	COMB.			14	V12	4	4		CAMERA V7	74"
Vz51	WB LEFT TURN FAR	COMB.			7	V13	5	5		CAMERA V5	74"
Vz52	WB LEFT TURN	LOCAL			8	V5	5			CAMERA V5	74"
Vz61	EB ADVANCE	LOCAL			3	V6	6			CAMERA V6	74"
Vz62	EB NEAR	COMB.			4	V14	6	6		CAMERA V1	74"
Vz71	NB LEFT TURN FAR	COMB.			15	V15	7	7		CAMERA V7	74"
Vz72	NB LEFT TURN	LOCAL			16	V7	7			CAMERA V7	74"
Vz81 A&B	SB ADVANCE	LOCAL			11	V8	8			CAMERA V8	74"
Vz82 A&B	SB NEAR	COMB.			12	V16	8	8		CAMERA V3	74"
PB2 A&B	HWY. 18S N. LEG	PED.				P2	2				
PB4 A&B	C.W. POST RD. E. LEG	PED.				P4	4				
PB8 A&B	C.W. POST RD. W. LEG	PED.				P8	8				
					SPARE						

CONTROLLER INPUT ABBREVIATIONS:
V = VEHICLE INPUT
D = SYSTEM OR AUXILIARY INPUT
P = PEDESTRIAN INPUT

NOTE: "AMP CHN =" REFERS TO THE RACK OUTPUT POSITION.
THIS IS WIRED TO CONTROLLER INPUT DETECTOR NUMBER WHICH IS PROGRAMMED TO ACTUATE THE DESIGNATED PHASE.
EXAMPLE: V9 = SYSTEM DETECTOR 1, V10 = SYSTEM DETECTOR 2

INTERVAL CHART

SIGNAL FACES	HIGHWAY 18S AND C. W. POST ROAD 1+6	CLR.	2+5	CLR.	2+6	CLR.	3+7	CLR.	3+8	CLR.	4+7	CLR.	4+8	CLR.	FLASH SEQUENCE
1	~~←G~~	*	~~←R~~	~~←R~~	~~←R~~	~~←R~~	~~←R~~	~~←R~~	~~←R~~	~~←R~~	~~←R~~	~~←R~~	~~←R~~	~~←R~~	~~←R~~
2 &3	G	**	R	R	G	**	R	R	R	R	R	R	R	R	R
4	~~←R~~	~~←R~~	~~←R~~	~~←R~~	~~←R~~	~~←R~~	~~←G~~	*	~~←G~~	*	~~←FY~~	***	~~←FY~~	***	~~←R~~
5 & 6	R	R	R	R	R	R	R	R	G	**	R	R	G	**	R
7	~~←R~~	~~←R~~	~~←G~~	*	~~←R~~	~~←R~~	~~←R~~	~~←R~~	~~←R~~	~~←R~~	~~←R~~	~~←R~~	~~←R~~	~~←R~~	~~←R~~
8 & 9	R	R	G	**	G	**	R	R	R	R	R	R	R	R	R
10	~~←R~~	~~←R~~	~~←R~~	~~←R~~	~~←R~~	~~←R~~	~~←G~~	*	~~←FY~~	***	~~←G~~	*	~~←FY~~	***	~~←R~~
11 & 12	R	R	R	R	R	R	R	R	R	R	G	**	G	**	R
13 & 14	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	W	FDW	W	FDW	BLK
15 & 16	DW	DW	DW	DW	DW	DW	DW	DW	W	FDW	DW	DW	W	FDW	BLK
17 & 18	DW	DW	W	FDW	W	FDW	DW	DW	DW	DW	DW	DW	DW	DW	BLK

* DENOTES GREEN OR YELLOW ARROW DEPENDING ON NEXT PHASE
** DENOTES GREEN OR YELLOW BALL DEPENDING ON NEXT PHASE
*** DENOTES FLASHING YELLOW ARROW OR YELLOW ARROW DEPENDING ON NEXT PHASE

PHASING DIAGRAM NOTE:

LEAD LAG LEFT TURN PHASING SHALL BE IMPLEMENTED FOR PHASES ONE AND FIVE.

PHASES ONE AND FIVE CANNOT RUN CONCURRENTLY.

DATE: 05-05-2022 FILE NAME: t100657_03.dgn

LOCATION: HWY. 18S/C.W. POST RD.
CITY: JONESBORO
COUNTY: CRAIGHEAD
DISTRICT: 10 SCALE: N/A DRAWN BY: GWE

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	220	418

TRAFFIC SIGNAL QUANTITIES - HWY.18S/HWY.18

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
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STAGE 1 TRAFFIC SIGNAL QUANTITIES

ITEM NUMBER	ITEM	QUANTITY	UNIT
SP & 701	SYSTEM LOCAL CONTROLLER TS2-TYPE 2, E-NET (8 PHASES)	1	EACH
SP	ETHERNET SWITCH, T100 HARDENED (8-PORT)	1	EACH
SP & 706	TRAFFIC SIGNAL HEAD, LED, (3 SECTION, 1 WAY)	10	EACH
SP & 706	TRAFFIC SIGNAL HEAD, LED, (4 SECTION, 1 WAY)	4	EACH
708	TRAFFIC SIGNAL CABLE (7C/14 A.W.G.)	2022	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/8 A.W.G., E.G.C.)	60	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (2C/6 A.W.G.)	60	LIN. FT.
709	GALVANIZED STEEL CONDUIT (2")	20	LIN. FT.
709	GALVANIZED STEEL CONDUIT (3")	60	LIN. FT.
710	NON-METALLIC CONDUIT (2")	40	LIN. FT.
710	NON-METALLIC CONDUIT (3")	12	LIN. FT.
SS & 711	CONCRETE PULL BOX (TYPE 2 HD)	1	EACH
SS & 713	SPAN WIRE ASSEMBLY	1	EACH
SP	SERVICE POINT ASSEMBLY (2 CIRCUITS)	1	EACH
SP	REMOVAL OF TRAFFIC SIGNAL EQUIPMENT	0.34	LUMP SUM
716	TREATED WOOD POLE (CLASS 2, 45')	4	EACH
SP & 733	VIDEO DETECTOR (CLR)	8	EACH
733	VIDEO CABLE	1700	LIN. FT.
733	VIDEO MONITOR (CLR)	1	EACH
SP & 733	VIDEO PROCESSOR, EDGE CARD (2 CAMERA)	4	EACH
SP & 733	VEHICLE DETECTOR RACK (16 CHANNEL)	1	EACH

STAGE 1:

INSTALL ALL TEMPORARY TRAFFIC SIGNAL EQUIPMENT, INCLUDING THE PERMANENT SERVICE POINT ASSEMBLY (2 CIRCUITS) WITH ALL ASSOCIATED ITEMS AS SHOWN ON THE STAGE 1 TEMPORARY TRAFFIC SIGNAL PLANS AND REMOVE ALL EXISTING TRAFFIC SIGNAL EQUIPMENT. CONTACT THE CITY OF JONESBORO ENGINEERING DEPARTMENT TO COORDINATE THE DISCONNECTION OF THE EXISTING FIBER METRO CONNECTION AT THE EXISTING CONTROLLER CABINET PRIOR TO TURNING ON THE TEMPORARY TRAFFIC SIGNAL AND REMOVAL OF THE EXISTING TRAFFIC SIGNAL EQUIPMENT. THE FIBER METRO CONNECTION WILL BE UTITILIZED IN THE TEMPORARY CONTROLLER CABINET DURING STAGE CONSTRUCTION FOR COMMUNICATION TO THE CITY'S SYSTEM.

MAINTAIN THIS TRAFFIC SIGNAL CONFIGURATION AS SHOWN ON THE STAGE 1 AND 2 TRAFFIC SIGNAL PLANS.
(REFER TO MAINTENANCE OF TRAFFIC DETAILS.)

TRAFFIC SIGNAL QUANTITIES

ITEM NUMBER	ITEM	QUANTITY	UNIT
SP & 701	SYSTEM LOCAL CONTROLLER TS2-TYPE 2, E-NET (8 PHASES)	1	EACH
SP	ETHERNET SWITCH, T100 HARDENED (8-PORT)	1	EACH
SP	E-NET CABLE (EXTERIOR CAT 5E)	75	LIN. FT.
SP	LOCAL RADIO (E-NET 5.8) WITH ANTENNA	1	EACH
704	VEHICLE DETECTOR-RACK MOUNT	4	EACH
SP	LOOP WIRING CLASS III (1C/16 A.W.G.)	956	LIN. FT.
704	FEEDER WIRE	1830	LIN. FT.
SP & 706	TRAFFIC SIGNAL HEAD, LED, (3 SECTION, 1 WAY)	10	EACH
SP & 706	TRAFFIC SIGNAL HEAD, LED, (4 SECTION, 1 WAY)	4	EACH
SP & 707	COUNTDOWN PEDESTRIAN SIGNAL HEAD, LED	6	EACH
708	TRAFFIC SIGNAL CABLE (5C/14 A.W.G.)	2853	LIN. FT.
708	TRAFFIC SIGNAL CABLE (7C/14 A.W.G.)	332	LIN. FT.
708	TRAFFIC SIGNAL CABLE (20C/14 A.W.G.)	890	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/8 A.W.G., E.G.C.)	740	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/12 A.W.G., E.G.C.)	200	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (2C/6 A.W.G.)	75	LIN. FT.
SP	ELECTRICAL CONDUCTORS FOR LUMINAIRES	1064	LIN. FT.
709	GALVANIZED STEEL CONDUIT (2")	20	LIN. FT.
710	NON-METALLIC CONDUIT (1")	264	LIN. FT.
710	NON-METALLIC CONDUIT (1.25")	80	LIN. FT.
710	NON-METALLIC CONDUIT (2")	650	LIN. FT.
710	NON-METALLIC CONDUIT (3")	792	LIN. FT.
SS & 711	CONCRETE PULL BOX (TYPE 2)	1	EACH
SS & 711	CONCRETE PULL BOX (TYPE 1 HD)	6	EACH
SS & 711	CONCRETE PULL BOX (TYPE 2 HD)	5	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (44')	1	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (46')	1	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (56')	1	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (62')	1	EACH
SP	LED LUMINAIRE ASSEMBLY	4	EACH
SS & 715	TRAFFIC SIGNAL PEDESTAL POLE WITH FOUNDATION	3	EACH
SP	REMOVAL OF TRAFFIC SIGNAL EQUIPMENT	0.33	LUMP SUM
SP	18" STREET NAME SIGN	4	EACH
SP & 733	VIDEO DETECTOR (IP)	6	EACH
SP & 733	VIDEO CABLE (EXTERIOR CAT 5E)	1698	LIN. FT.
SP & 733	VIDEO MONITOR (CLR)	1	EACH
SP & 733	VEHICLE DETECTOR RACK (16 CHANNEL)	1	EACH
SP & 733	CENTRAL CONTROL UNIT (8 CHANNEL)	2	EACH
SP & 733	VIDEO PROCESSOR, EDGE CARD IP (2 CAMERA)	4	EACH

PERMANENT TRAFFIC SIGNAL:

THE TEMPORARY TRAFFIC SIGNAL INSTALLATION FOR STAGE 1 AND 2 SHALL REMAIN IN OPERATION UNTIL THE PERMANENT TRAFFIC SIGNAL IS COMPLETE AND OPERATIONAL. INSTALL THE PERMANENT TRAFFFIC SIGNAL, MAINTAIN THE SERVICE POINT ASSEMBLY (2 CIRCUITS) WITH ALL ASSOCIATED EQUIPMENT THAT WAS INSTALLED IN THE STAGE 1 TEMPORARY TRAFFIC SIGNAL PLANS. REMOVE THE TEMPORARY TRAFFIC SIGNAL COMPONENTS THAT WERE INSTALLED ON THE STAGE 1 TEMPORARY TRAFFIC SIGNAL PLANS. CONTACT THE CITY OF JONESBORO ENGINEERING DEPARTMENT TO COORDINATE THE DISCONNECTION OF THE EXISTING FIBER METRO CONNECTION AT THE TEMPORARY CONTROLLER CABINET AND CONNECTION INTO THE PERMANENT CONTROLLER CABINET PRIOR TO TURNING ON THE PERMANENT TRAFFIC SIGNAL AND REMOVAL OF THE TEMPORARY TRAFFIC SIGNAL EQUIPMENT. THE FIBER METRO CONNECTION WILL BE UTITILIZED IN THE PERMANENT CONTROLLER CABINET FOR COMMUNICATION TO THE CITYS SYSTEM. INSTALL ONE (1) LOCAL RADIO (E-NET 5.8) WITH ANTENNA FOR POINT TO POINT CONTECTION WITH THE LOCAL RADIO (E-NET 5.8) WITH ANTENNA AT THE HIGHWAY 18S AND C.W. POST INTERSECTION. REFER TO SYSTEM LOCAL CONTROLLER SPECIAL PROVISION FOR ETHERNET RADIO SPECIFICATIONS.

(REFER TO PERMANENT TRAFFIC SIGNAL PLANS.)

DATE: 05-05-2022 FILE NAME: t100657_01.dgn

LOCATION: HWY. 18S/HWY. 18
CITY: JONESBORO
COUNTY: CRAIGHEAD
DISTRICT: 10 SCALE: N/A DRAWN BY: GWE

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	221	418
		SIGNALIZATION PLAN SHEET				

STAGE 1 AND 2 PHASING DIAGRAM

STAGE 1 AND 2 SIGNAL FACES

12" LENSES

2, 3 & 13
5 & 6
8, 9 & 14
11 & 12

1, 4, 7, 10

NOTES:
1. ALL SIGNAL HEADS SHALL HAVE BACKPLATES.
2. REFER TO SPECIAL PROVISION "RETROREFLECTIVE BACKPLATES" FOR DETAILS ON REQUIREMENTS FOR BACKPLATES.

NOTE TO CONTRACTOR:
CONTACT THE CITY OF JONESBORO ENGINEERING DEPARTMENT FOR LOCATION OF EXISTING FIBER METRO LOCATION AND COORDINATE THE DISCONNECTION OF THE EXISTING FIBER METRO CONNECTION AT THE EXISTING CONTROLLER CABINET PRIOR TO TURNING ON THE TEMPORARY TRAFFIC SIGNAL AND REMOVAL OF THE EXISTING TRAFFIC SIGNAL EQUIPMENT. THE FIBER METRO CONNECTION WILL BE UTITILIZED IN THE TEMPORARY CONTROLLER CABINET DURING STAGE CONSTRUCTION FOR COMMUNICATION TO THE CITY'S SYSTEM.

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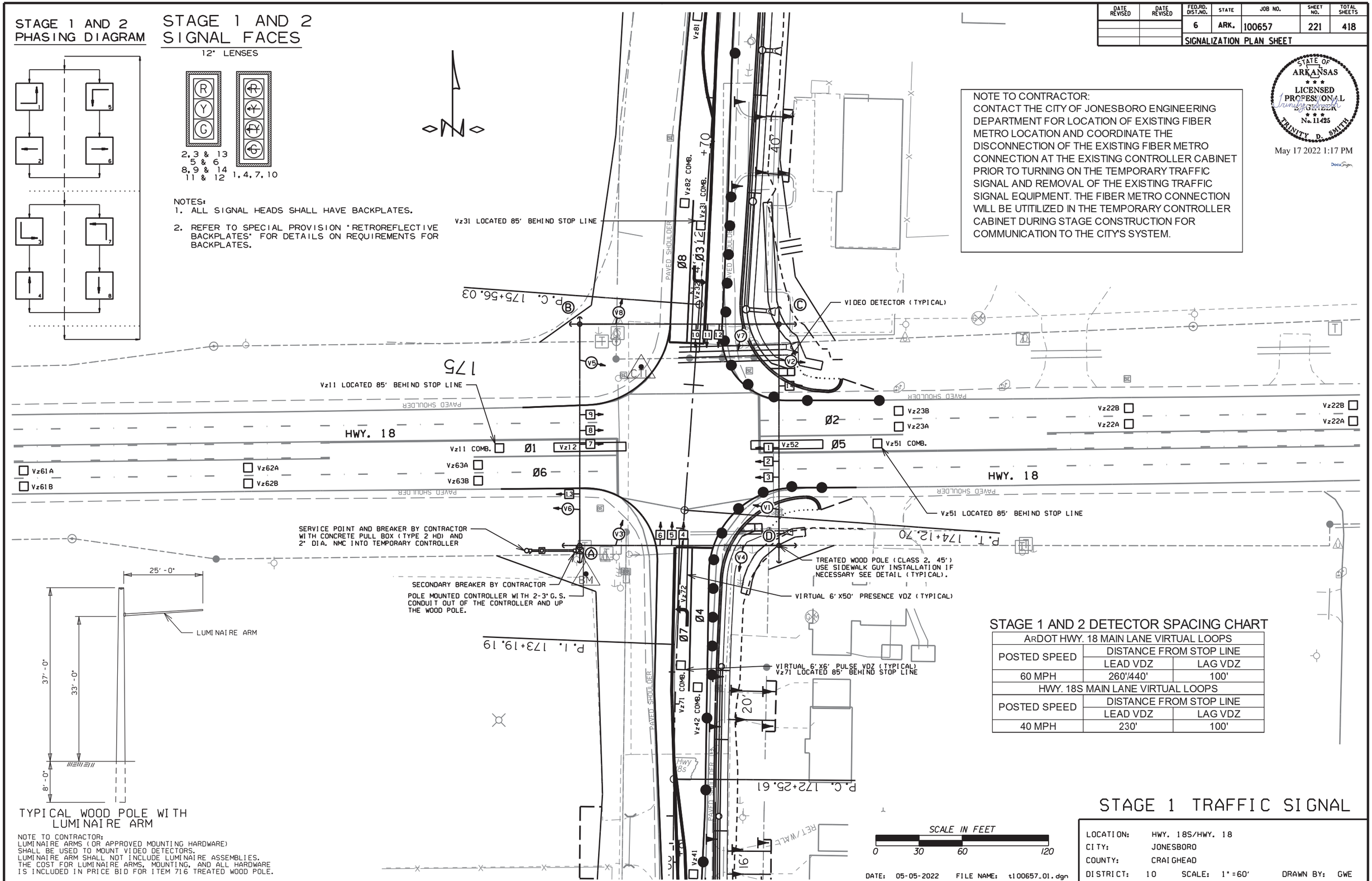

TYPICAL WOOD POLE WITH LUMINAIRE ARM

NOTE TO CONTRACTOR:
LUMINAIRE ARMS (OR APPROVED MOUNTING HARDWARE) SHALL BE USED TO MOUNT VIDEO DETECTORS. LUMINAIRE ARM SHALL NOT INCLUDE LUMINAIRE ASSEMBLIES. THE COST FOR LUMINAIRE ARMS, MOUNTING, AND ALL HARDWARE IS INCLUDED IN PRICE BID FOR ITEM 716 TREATED WOOD POLE.

STAGE 1 AND 2 DETECTOR SPACING CHART

ARDOT HWY. 18 MAIN LANE VIRTUAL LOOPS		
POSTED SPEED	DISTANCE FROM STOP LINE	
	LEAD VDZ	LAG VDZ
60 MPH	260'/440'	100'
HWY. 18S MAIN LANE VIRTUAL LOOPS		
POSTED SPEED	DISTANCE FROM STOP LINE	
	LEAD VDZ	LAG VDZ
40 MPH	230'	100'

STAGE 1 TRAFFIC SIGNAL

LOCATION: HWY. 18S/HWY. 18
CITY: JONESBORO
COUNTY: CRAIGHEAD
DISTRICT: 10 SCALE: 1"=60' DRAWN BY: GWE
DATE: 05-05-2022 FILE NAME: t100657_01.dgn

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	222	418
		SIGNALIZATION PLAN SHEET				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
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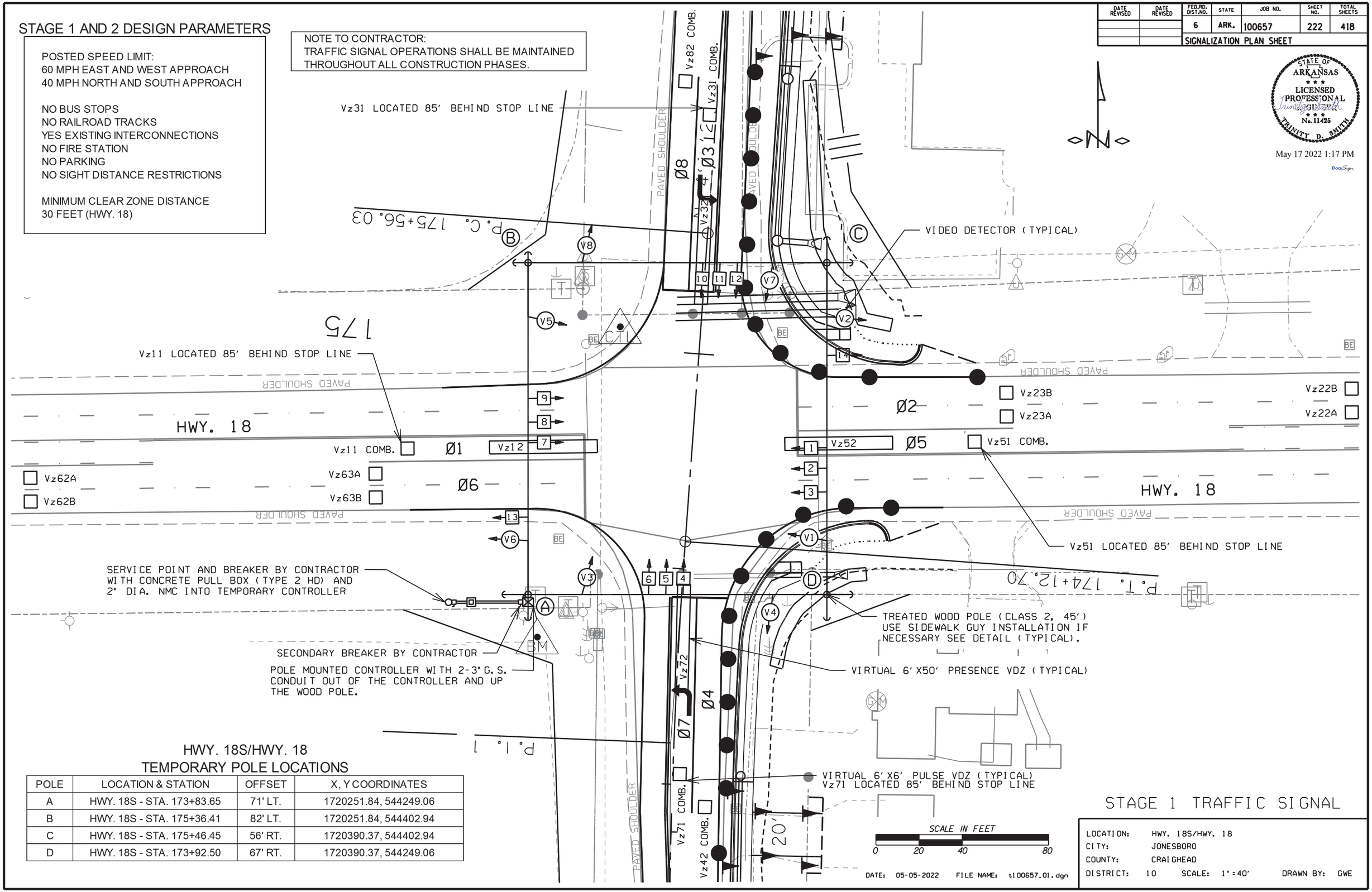
STAGE 1 AND 2 DESIGN PARAMETERS

POSTED SPEED LIMIT:
60 MPH EAST AND WEST APPROACH
40 MPH NORTH AND SOUTH APPROACH

NO BUS STOPS
NO RAILROAD TRACKS
YES EXISTING INTERCONNECTIONS
NO FIRE STATION
NO PARKING
NO SIGHT DISTANCE RESTRICTIONS

MINIMUM CLEAR ZONE DISTANCE
30 FEET (HWY. 18)

NOTE TO CONTRACTOR:
TRAFFIC SIGNAL OPERATIONS SHALL BE MAINTAINED THROUGHOUT ALL CONSTRUCTION PHASES.



HWY. 18S/HWY. 18
TEMPORARY POLE LOCATIONS

POLE	LOCATION & STATION	OFFSET	X, Y COORDINATES
A	HWY. 18S - STA. 173+83.65	71' LT.	1720251.84, 544249.06
B	HWY. 18S - STA. 175+36.41	82' LT.	1720251.84, 544402.94
C	HWY. 18S - STA. 175+46.45	56' RT.	1720390.37, 544402.94
D	HWY. 18S - STA. 173+92.50	67' RT.	1720390.37, 544249.06

STAGE 1 TRAFFIC SIGNAL

DATE: 05-05-2022 FILE NAME: t100657_01.dgn

LOCATION:	HWY. 18S/HWY. 18		
CITY:	JONESBORO		
COUNTY:	CRAIGHEAD		
DISTRICT:	10	SCALE: 1"=40'	DRAWN BY: GWE

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	223	418
		SIGNALIZATION PLAN SHEET				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
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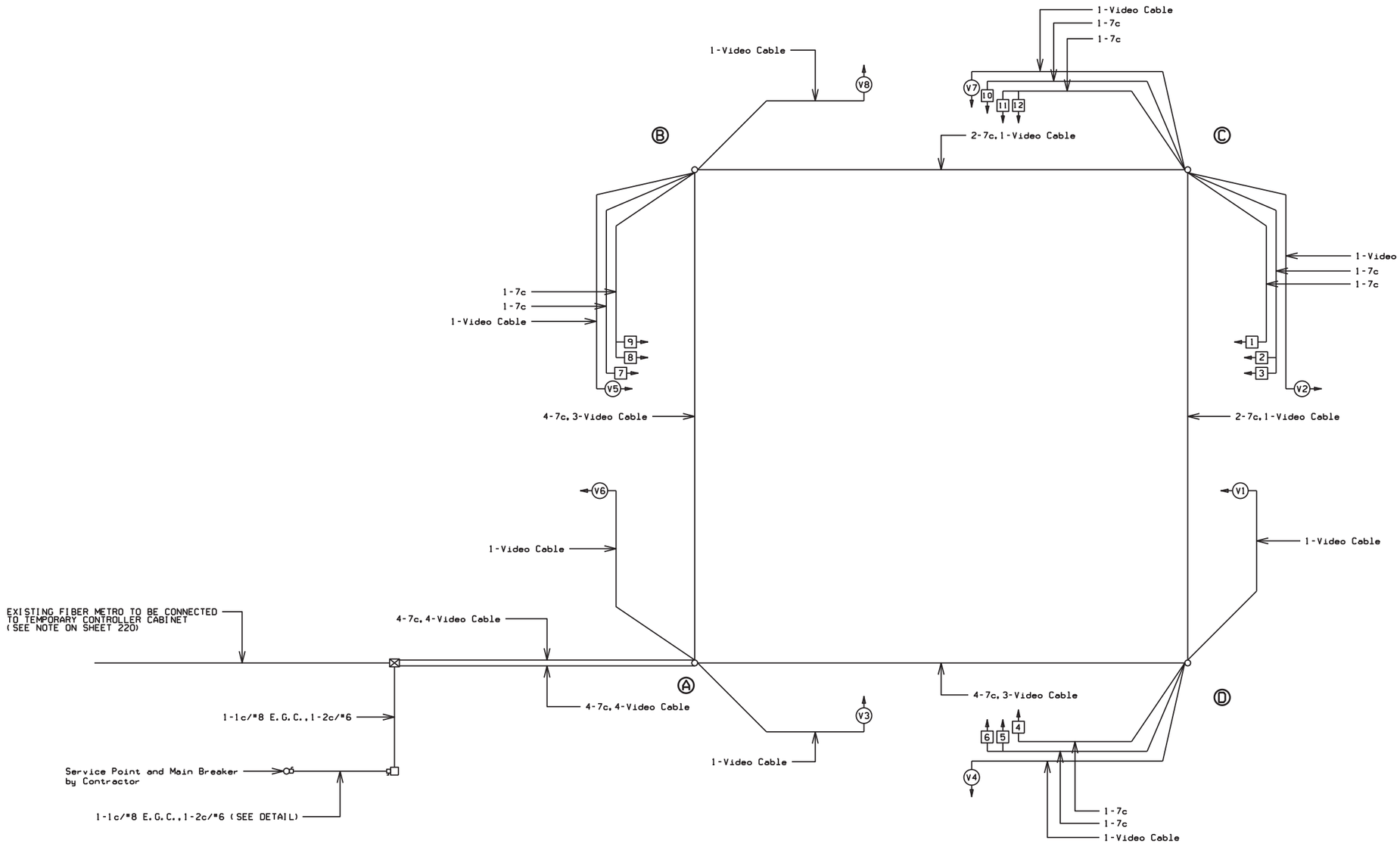

STAGES 1 AND 2 WIRING DIAGRAM

NOTES TO CONTRACTOR:

1. ALL DETECTOR RACK CHANNELS, INCLUDING UNUSED, SHALL BE BROUGHT TO TERMINAL STRIP IN DETECTOR AREA OF CABINET.
2. THE LOCAL GOVERNMENT SHALL BE RESPONSIBLE FOR PROVIDING POWER TO THE SERVICE POINT.

DATE: 05-05-2022 FILE NAME: t100657_01.dgn

LOCATION:	HWY. 18S/HWY. 18			
CITY:	JONESBORO			
COUNTY:	CRAIGHEAD			
DISTRICT:	10	SCALE: N/A	DRAWN BY:	GWE

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	224	418
		SIGNALIZATION PLAN SHEET				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
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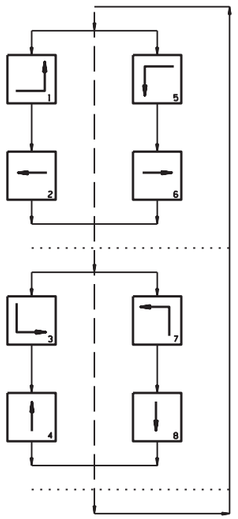
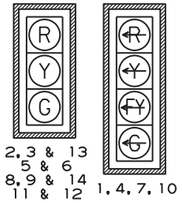
STAGE 1 AND 2 PHASING DIAGRAM



STAGE 1 AND 2 SIGNAL FACES

12" LENSES



2, 3 & 13
5 & 6
8, 9 & 14
11 & 12

1, 4, 7, 10

NOTES:
1. ALL SIGNAL HEADS SHALL HAVE BACKPLATES.
2. REFER TO SPECIAL PROVISION "RETROREFLECTIVE BACKPLATES" FOR DETAILS ON REQUIREMENTS FOR BACKPLATES.

STAGE 1 AND 2 DETECTOR CHART

DETECTOR SYSTEM DESCRIPTION: JOB 100657											
HWY. 18S/HWY. 18 DETECTOR ASSIGNMENTS				HARDWARE INPUTS BY SUPPLIER			PROGRAM ASSIGNMENTS			COMMENTS	TUBE LENGTHS
							LOCAL		MASTER SYSTEM DETECTOR NUMBERS		
DET. ID #	LOCATION DIRECTION	TYPE	DET. #	CAB. TRM. #	AMP CHN. #	CON. IMP. #	PHS	SYSTEM DET. #			
Vz11	EB LEFT TURN FAR	COMB.			1	V9	1	1		CAMERA V1	23"
Vz12	EB LEFT TURN	LOCAL			2	V1	1			CAMERA V1	23"
Vz21 A&B	WB ADVANCE	LOCAL			3	V2	2			CAMERA V2	23"
Vz22 A&B	WB INTERMEDIATE	LOCAL			3	V2	2			CAMERA V2	23"
Vz23 A&B	WB NEAR	COMB.			6	V10	2	2		CAMERA V5	23"
Vz31 A&B	SB LEFT TURN FAR	COMB.			9	V11	3	3		CAMERA V3	23"
Vz32 A&B	SB LEFT TURN	LOCAL			10	V3	3			CAMERA V3	23"
Vz41 A&B	NB ADVANCE	LOCAL			13	V4	4			CAMERA V4	23"
Vz42 A&B	NB NEAR	COMB.			14	V12	4	4		CAMERA V7	23"
Vz51	WB LEFT TURN FAR	COMB.			7	V13	5	5		CAMERA V5	23"
Vz52	WB LEFT TURN	LOCAL			8	V5	5			CAMERA V5	23"
Vz61 A&B	EB ADVANCE	LOCAL			5	V6	6			CAMERA V6	23"
Vz62 A&B	EB INTERMEDIATE	LOCAL			5	V6	6			CAMERA V6	23"
Vz62 A&B	EB NEAR	COMB.			4	V14	6	6		CAMERA V1	23"
Vz71	NB LEFT TURN FAR	COMB.			15	V15	7	7		CAMERA V7	23"
Vz72	NB LEFT TURN	LOCAL			16	V7	7			CAMERA V7	23"
Vz81 A&B	SB ADVANCE	LOCAL			11	V8	8			CAMERA V8	23"
Vz82 A&B	SB NEAR	COMB.			12	V16	8	8		CAMERA V3	23"
					SPARE						

CONTROLLER INPUT ABBREVIATIONS:
V = VEHICLE INPUT
D = SYSTEM OR AUXILIARY INPUT
P = PEDESTRIAN INPUT

NOTE: "AMP CHN =" REFERS TO THE RACK OUTPUT POSITION.
THIS IS WIRED TO CONTROLLER INPUT DETECTOR NUMBER WHICH IS PROGRAMMED TO ACTUATE THE DESIGNATED PHASE.
EXAMPLE: V9 = SYSTEM DETECTOR 1, V10 = SYSTEM DETECTOR 2

STAGE 1 AND 2 INTERVAL CHART

SIGNAL FACES	HIGHWAY 18S AND HIGHWAY 18																FLASH SEQUENCE
	1+5	CLR.	1+6	CLR.	2+5	CLR.	2+6	CLR.	3+7	CLR.	3+8	CLR.	4+7	CLR.	4+8	CLR.	
1	~~G~~	*	~~G~~	*	~~FY~~	***	~~FY~~	***	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~
2,3 & 13	R	R	G	**	R	R	G	**	R	R	R	R	R	R	R	R	R
4	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~G~~	*	~~G~~	*	~~FY~~	***	~~FY~~	***	~~R~~
5 & 6	R	R	R	R	R	R	R	R	R	R	G	**	R	R	G	**	R
7	~~G~~	*	~~FY~~	***	~~G~~	*	~~FY~~	***	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~
8,9 & 14	R	R	R	R	G	**	G	**	R	R	R	R	R	R	R	R	R
10	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~G~~	*	~~FY~~	***	~~G~~	*	~~FY~~	***	~~R~~
11 & 12	R	R	R	R	R	R	R	R	R	R	R	R	G	**	G	**	R

* DENOTES GREEN OR YELLOW ARROW DEPENDING ON NEXT PHASE
** DENOTES GREEN OR YELLOW BALL DEPENDING ON NEXT PHASE
*** DENOTES FLASHING YELLOW ARROW OR YELLOW ARROW DEPENDING ON NEXT PHASE

DATE: 05-05-2021 FILE NAME: t100657_01.dgn

LOCATION: HWY. 18S/HWY. 18
CITY: JONESBORO
COUNTY: CRAIGHEAD
DISTRICT: 10 SCALE: N/A DRAWN BY: GWE

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	225	418
		SIGNALIZATION PLAN SHEET				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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Vz31 LOCATED 85' BEHIND STOP LINE

Vz11 LOCATED 85' BEHIND STOP LINE

VIDEO DETECTOR (TYPICAL)

Vz51 LOCATED 85' BEHIND STOP LINE

SERVICE POINT AND BREAKER BY CONTRACTOR WITH CONCRETE PULL BOX (TYPE 2 HD) AND 2" DIA. NMC INTO TEMPORARY CONTROLLER

SECONDARY BREAKER BY CONTRACTOR

POLE MOUNTED CONTROLLER WITH 2-3" G.S. CONDUIT OUT OF THE CONTROLLER AND UP THE WOOD POLE.

TREATED WOOD POLE (CLASS 2, 45') USE SIDEWALK GUY INSTALLATION IF NECESSARY SEE DETAIL (TYPICAL).

VIRTUAL 6'X50' PRESENCE VDZ (TYPICAL)

VIRTUAL 6'X6' PULSE VDZ (TYPICAL) Vz71 LOCATED 85' BEHIND STOP LINE

NOTE TO CONTRACTOR:
TRAFFIC SIGNAL OPERATIONS SHALL BE MAINTAINED THROUGHOUT ALL CONSTRUCTION PHASES.

STAGE 2 TRAFFIC SIGNAL

SCALE IN FEET
0 30 60 120

LOCATION:	HWY. 18S/HWY. 18		
CITY:	JONESBORO		
COUNTY:	CRAIGHEAD		
DISTRICT:	10	SCALE: 1"=60'	DRAWN BY: GWE

DATE: 05-05-2022 FILE NAME: t100657_01.dgn

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	226	418
		SIGNALIZATION PLAN SHEET				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
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Vz31 LOCATED 85' BEHIND STOP LINE

Vz82 COMB.

Vz31 COMB.

Ø3

Ø8

Vz32

P.C. 175+56.03

C.D.P.

VIDEO DETECTOR (TYPICAL)

Vz11 LOCATED 85' BEHIND STOP LINE

175

PAVED SHOULDER

HWY. 18

Vz11 COMB.

Ø1

Vz12

Vz62A

Vz62B

Vz63A

Vz63B

Ø6

Ø2

Vz23B

Vz23A

Vz22B

Vz22A

Vz52

Ø5

Vz51 COMB.

Vz51 LOCATED 85' BEHIND STOP LINE

P.T. 174+12.70

SERVICE POINT AND BREAKER BY CONTRACTOR WITH CONCRETE PULL BOX (TYPE 2 HD) AND 2" DIA. NMC INTO TEMPORARY CONTROLLER

SECONDARY BREAKER BY CONTRACTOR

POLE MOUNTED CONTROLLER WITH 2-3" G.S. CONDUIT OUT OF THE CONTROLLER AND UP THE WOOD POLE.

TREATED WOOD POLE (CLASS 2, 45') USE SIDEWALK GUY INSTALLATION IF NECESSARY SEE DETAIL (TYPICAL).

VIRTUAL 6'X50' PRESENCE VDZ (TYPICAL)

P.I. 173+19.19

T. LIMITS

Vz72

Ø7

Ø4

+78

Vz71 COMB.

Vz42 COMB.

PAVED SHOULDER

VIRTUAL 6'X6' PULSE VDZ (TYPICAL)
Vz71 LOCATED 85' BEHIND STOP LINE

20'

NOTE TO CONTRACTOR:
TRAFFIC SIGNAL OPERATIONS SHALL BE MAINTAINED THROUGHOUT ALL CONSTRUCTION PHASES.

SCALE IN FEET
0 20 40 80

DATE: 05-05-2022 FILE NAME: t100657_01.dgn

STAGE 2 TRAFFIC SIGNAL

LOCATION: HWY. 18S/HWY. 18
CITY: JONESBORO
COUNTY: CRAIGHEAD
DISTRICT: 10 SCALE: 1"=40' DRAWN BY: GWE

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	227	418
		SIGNALIZATION PLAN SHEET				

PHASING DIAGRAM

SIGNAL FACES

12" LENSES

2, 3 & 13
5 & 6
8, 9 & 14
11 & 12

1, 4, 7, 10

ONE SECTION
(SOLID SYMBOL)

15 & 16
17 & 18
19 & 20

NOTES:
1. ALL SIGNAL HEADS SHALL HAVE BACKPLATES.
2. REFER TO SPECIAL PROVISION "RETROREFLECTIVE BACKPLATES" FOR DETAILS ON REQUIREMENTS FOR BACKPLATES.
3. REFER TO SPECIAL PROVISIONS FOR DETAILS ON REQUIREMENTS FOR PEDESTRIAN SIGNAL HEADS.
4. ALL PEDESTRIAN SIGNAL HEADS CAN BE PLACED INTO OPERATION IF THERE ARE BOTH WHEELCHAIR RAMPS AND A CROSSWALK THAT MEETS A.D.A.S. STANDARD.

DETECTOR SPACING CHART

ARDOT HWY. 18 MAIN LANE VIRTUAL LOOPS		
POSTED SPEED	DISTANCE FROM STOP LINE	
	LEAD VDZ	LAG VDZ
60 MPH	260'/440'	100'
HWY. 18S MAIN LANE VIRTUAL LOOPS		
POSTED SPEED	DISTANCE FROM STOP LINE	
	LEAD VDZ	LAG VDZ
40 MPH	230'	100'

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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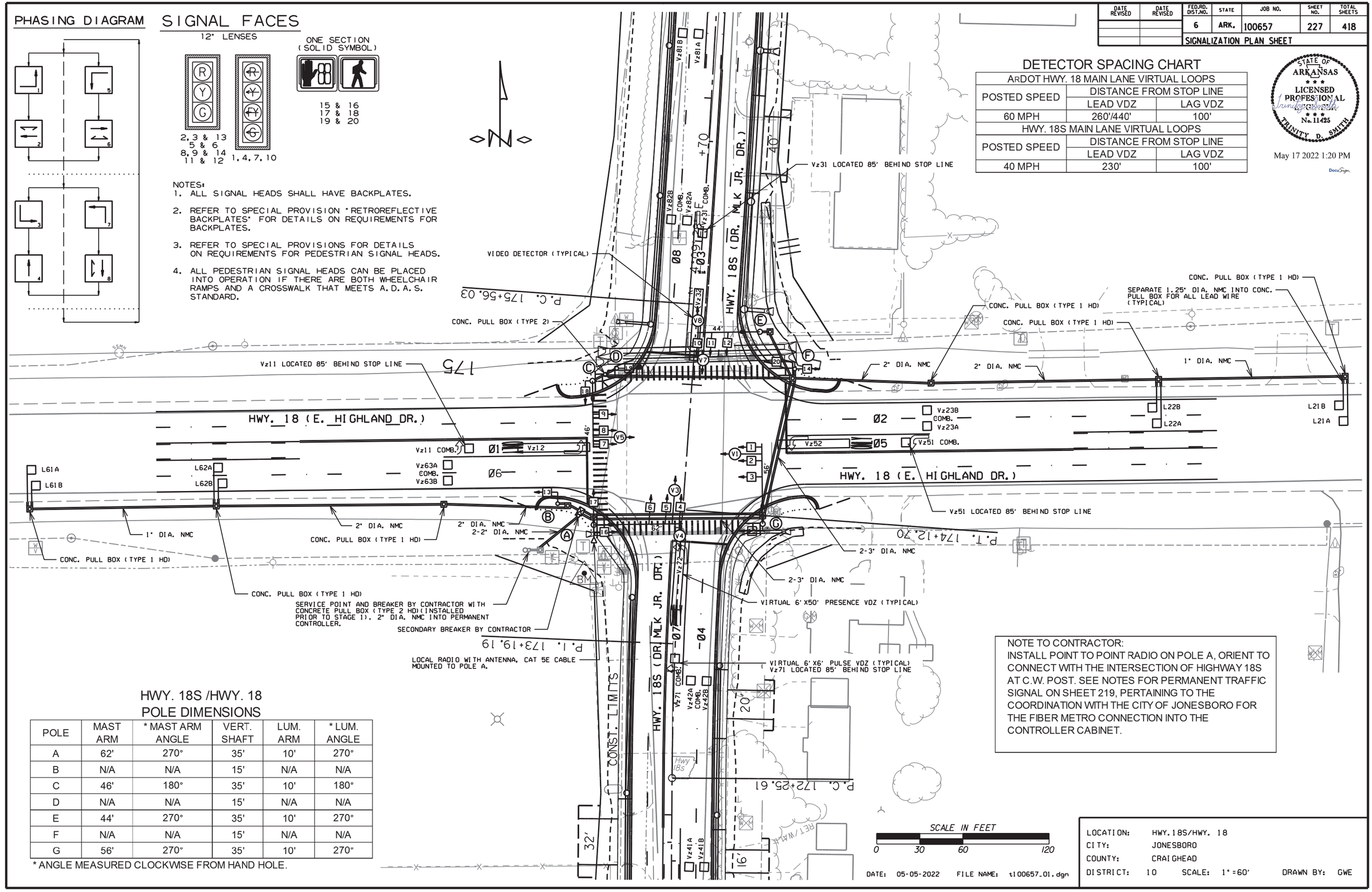

NOTE TO CONTRACTOR:
INSTALL POINT TO POINT RADIO ON POLE A, ORIENT TO CONNECT WITH THE INTERSECTION OF HIGHWAY 18S AT C.W. POST. SEE NOTES FOR PERMANENT TRAFFIC SIGNAL ON SHEET 219, PERTAINING TO THE COORDINATION WITH THE CITY OF JONESBORO FOR THE FIBER METRO CONNECTION INTO THE CONTROLLER CABINET.

HWY. 18S /HWY. 18 POLE DIMENSIONS

POLE	MAST ARM	* MAST ARM ANGLE	VERT. SHAFT	LUM. ARM	* LUM. ANGLE
A	62'	270°	35'	10'	270°
B	N/A	N/A	15'	N/A	N/A
C	46'	180°	35'	10'	180°
D	N/A	N/A	15'	N/A	N/A
E	44'	270°	35'	10'	270°
F	N/A	N/A	15'	N/A	N/A
G	56'	270°	35'	10'	270°

* ANGLE MEASURED CLOCKWISE FROM HAND HOLE.

SCALE IN FEET
0 30 60 120

DATE: 05-05-2022 FILE NAME: tl00657_01.dgn

LOCATION:	HWY.18S/HWY. 18			
CITY:	JONESBORO			
COUNTY:	CRAIGHEAD			
DISTRICT:	10	SCALE:	1"=60'	DRAWN BY: GWE

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	228	418
		SIGNALIZATION PLAN SHEET				

NOTE TO CONTRACTOR:
TRAFFIC SIGNAL OPERATIONS SHALL BE MAINTAINED THROUGHOUT ALL CONSTRUCTION PHASES.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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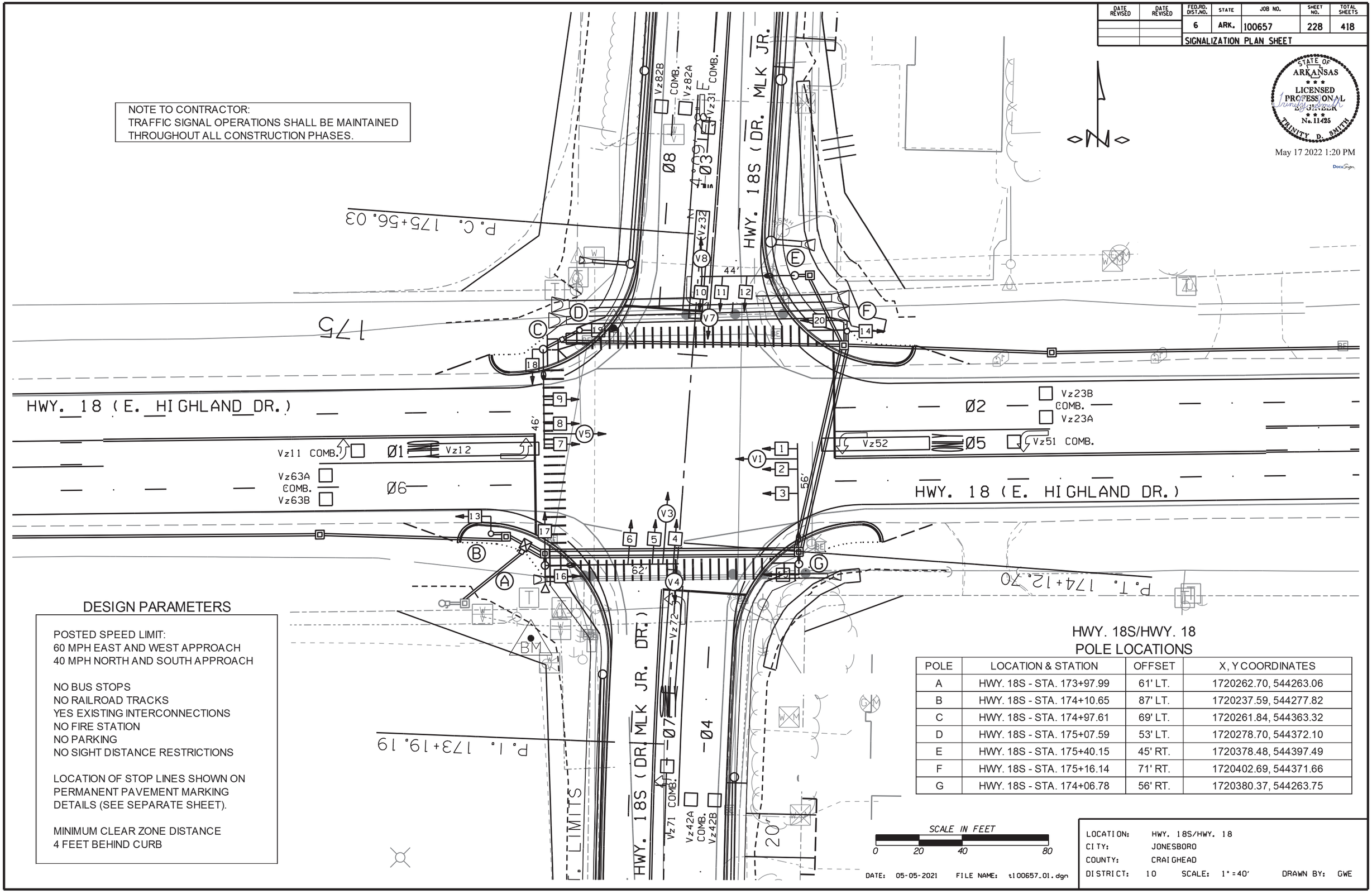

DESIGN PARAMETERS

POSTED SPEED LIMIT:
60 MPH EAST AND WEST APPROACH
40 MPH NORTH AND SOUTH APPROACH

NO BUS STOPS
NO RAILROAD TRACKS
YES EXISTING INTERCONNECTIONS
NO FIRE STATION
NO PARKING
NO SIGHT DISTANCE RESTRICTIONS

LOCATION OF STOP LINES SHOWN ON PERMANENT PAVEMENT MARKING DETAILS (SEE SEPARATE SHEET).

MINIMUM CLEAR ZONE DISTANCE
4 FEET BEHIND CURB

HWY. 18S/HWY. 18 POLE LOCATIONS

POLE	LOCATION & STATION	OFFSET	X, Y COORDINATES
A	HWY. 18S - STA. 173+97.99	61' LT.	1720262.70, 544263.06
B	HWY. 18S - STA. 174+10.65	87' LT.	1720237.59, 544277.82
C	HWY. 18S - STA. 174+97.61	69' LT.	1720261.84, 544363.32
D	HWY. 18S - STA. 175+07.59	53' LT.	1720278.70, 544372.10
E	HWY. 18S - STA. 175+40.15	45' RT.	1720378.48, 544397.49
F	HWY. 18S - STA. 175+16.14	71' RT.	1720402.69, 544371.66
G	HWY. 18S - STA. 174+06.78	56' RT.	1720380.37, 544263.75

SCALE IN FEET
0 20 40 80

DATE: 05-05-2021 FILE NAME: t100657_01.dgn

LOCATION: HWY. 18S/HWY. 18
CITY: JONESBORO
COUNTY: CRAIGHEAD
DISTRICT: 10 SCALE: 1"=40' DRAWN BY: GWE

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	229	418
		SIGNALIZATION PLAN SHEET				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
May 17 2022 1:20 PM
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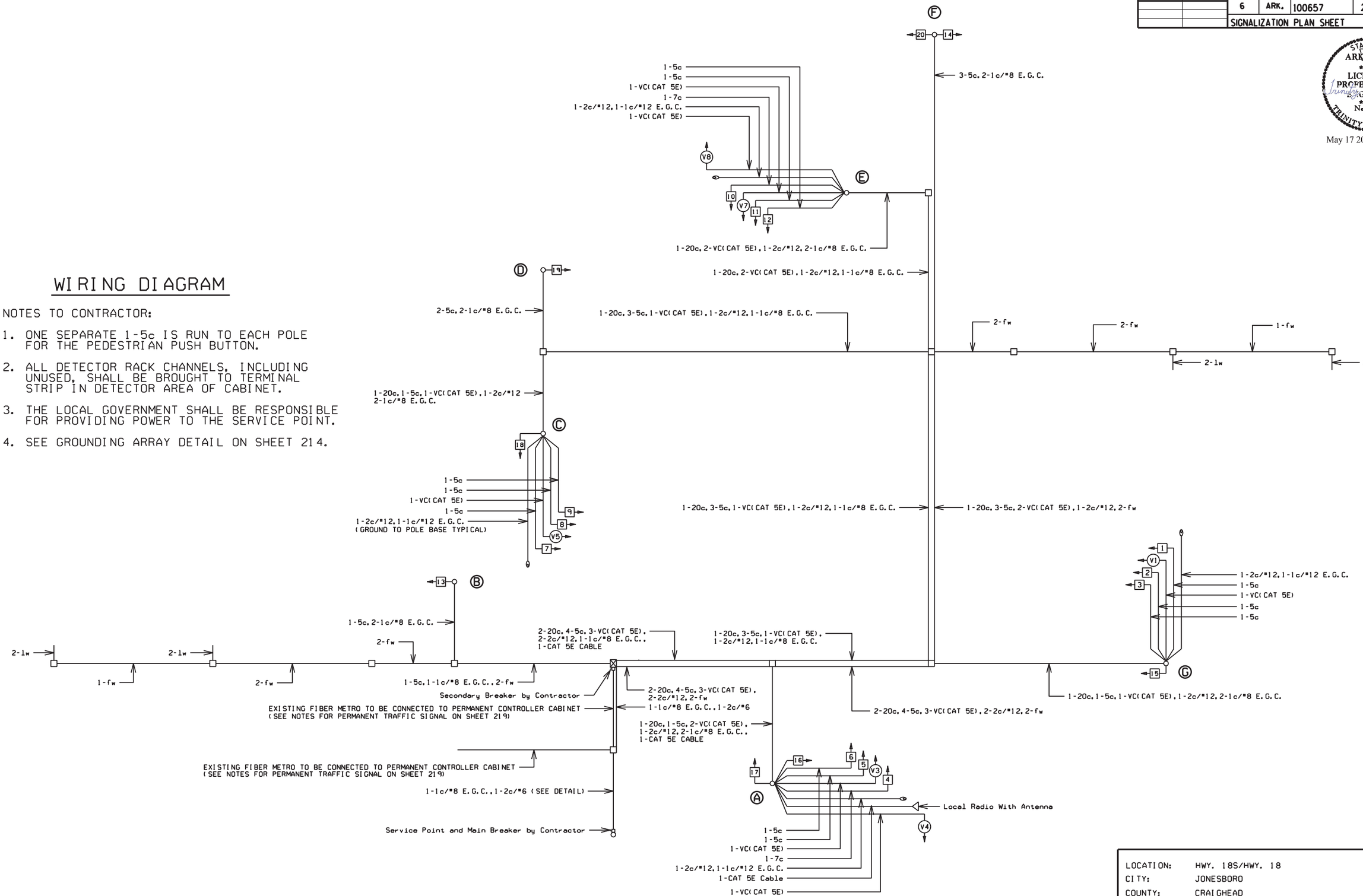
WIRING DIAGRAM

NOTES TO CONTRACTOR:

1. ONE SEPARATE 1-5c IS RUN TO EACH POLE FOR THE PEDESTRIAN PUSH BUTTON.
2. ALL DETECTOR RACK CHANNELS, INCLUDING UNUSED, SHALL BE BROUGHT TO TERMINAL STRIP IN DETECTOR AREA OF CABINET.
3. THE LOCAL GOVERNMENT SHALL BE RESPONSIBLE FOR PROVIDING POWER TO THE SERVICE POINT.
4. SEE GROUNDING ARRAY DETAIL ON SHEET 214.



LOCATION:	HWY. 18S/HWY. 18
CITY:	JONESBORO
COUNTY:	CRAIGHEAD
DISTRICT: 10	SCALE: N/A DRAWN BY: GWE

DATE: 05-05-2022 FILE NAME: t100657_01.dgn

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	230	418
		SIGNALIZATION PLAN SHEET				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
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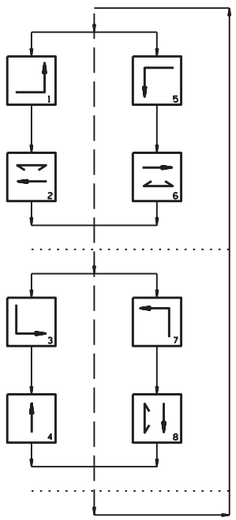
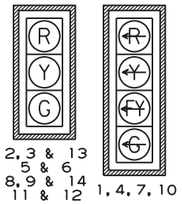
PHASING DIAGRAM



SIGNAL FACES

12" LENSES



2, 3 & 13
5 & 6
8, 9 & 14
11 & 12

1, 4, 7, 10

ONE SECTION
(SOLID SYMBOL)

15 & 16
17 & 18
19 & 20

NOTES:
1. ALL SIGNAL HEADS SHALL HAVE BACKPLATES.
2. REFER TO SPECIAL PROVISION "RETROREFLECTIVE BACKPLATES" FOR DETAILS ON REQUIREMENTS FOR BACKPLATES.
3. REFER TO SPECIAL PROVISIONS FOR DETAILS ON REQUIREMENTS FOR PEDESTRIAN SIGNAL HEADS.
4. ALL PEDESTRIAN SIGNAL HEADS CAN BE PLACED INTO OPERATION IF THERE ARE BOTH WHEELCHAIR RAMPS AND A CROSSWALK THAT MEETS A.D.A.S. STANDARD.

DETECTOR CHART

DETECTOR SYSTEM DESCRIPTION: JOB 100657											
HWY. 18S/HWY. 18 DETECTOR ASSIGNMENTS				HARDWARE INPUTS BY SUPPLIER			PROGRAM ASSIGNMENTS			COMMENTS	TUBE LENGTHS
							LOCAL		MASTER SYSTEM DETECTOR NUMBERS		
DET. ID #	LOCATION DIRECTION	TYPE	DET. #	CAB. TRM. #	AMP CHN. #	CON. IMP. #	PHS	SYSTEM DET. #			
Vz11	EB LEFT TURN FAR	COMB.			1	V9	1	1		CAMERA V1	46"
Vz12	EB LEFT TURN	LOCAL			2	V1	1			CAMERA V1	46"
L21 A&B	WB ADVANCE	LOCAL	2			V2	2			LOOP	
L22 A&B	WB INTERMEDIATE	LOCAL	26			V2	2			LOOP	
Vz23 A&B	WB NEAR	COMB.			6	V10	2	2		CAMERA V5	46"
Vz31	SB LEFT TURN FAR	COMB.			9	V11	3	3		CAMERA V3	37"
Vz32	SB LEFT TURN	LOCAL			10	V3	3			CAMERA V3	37"
Vz41 A&B	NB ADVANCE	LOCAL			13	V4	4			CAMERA V4	74"
Vz42 A&B	NB NEAR	COMB.			14	V12	4	4		CAMERA V7	74"
Vz51	WB LEFT TURN FAR	COMB.			7	V13	5	5		CAMERA V5	46"
Vz52	WB LEFT TURN	LOCAL			8	V5	5			CAMERA V5	46"
L61 A&B	EB ADVANCE	LOCAL	6			V6	6			LOOP	
L62 A&B	EB INTERMEDIATE	LOCAL	30			V6	6			LOOP	
Vz62 A&B	EB NEAR	COMB.			4	V14	6	6		CAMERA V1	46"
Vz71	NB LEFT TURN FAR	COMB.			15	V15	7	7		CAMERA V7	74"
Vz72	NB LEFT TURN	LOCAL			16	V7	7			CAMERA V7	74"
Vz81 A&B	SB ADVANCE	LOCAL			11	V8	8			CAMERA V8	37"
Vz82 A&B	SB NEAR	COMB.			12	V16	8	8		CAMERA V3	37"
PB2 A&B	HWY. 18S N. LEG	PED.				P2	2				
PB6 A&B	HWY. 18S S. LEG	PED.				P6	6				
PB8 A&B	HWY. 18 W. LEG	PED.				P8	8				
					SPARE 3 & 5						

CONTROLLER INPUT ABBREVIATIONS:
V = VEHICLE INPUT
D = SYSTEM OR AUXILIARY INPUT
P = PEDESTRIAN INPUT

NOTE: "AMP CHN =" REFERS TO THE RACK OUTPUT POSITION.
THIS IS WIRED TO CONTROLLER INPUT DETECTOR NUMBER WHICH IS PROGRAMMED TO ACTUATE THE DESIGNATED PHASE.
EXAMPLE: V9 = SYSTEM DETECTOR 1, V10 = SYSTEM DETECTOR 2

INTERVAL CHART

SIGNAL FACES	HIGHWAY 18S AND HIGHWAY 18																FLASH SEQUENCE
	1+5	CLR.	1+6	CLR.	2+5	CLR.	2+6	CLR.	3+7	CLR.	3+8	CLR.	4+7	CLR.	4+8	CLR.	
1	~~G~~	*	~~G~~	*	~~FY~~	***	~~FY~~	***	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~
2,3 & 13	R	R	G	**	R	R	G	**	R	R	R	R	R	R	R	R	R
4	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~G~~	*	~~G~~	*	~~FY~~	***	~~FY~~	***	~~R~~
5 & 6	R	R	R	R	R	R	R	R	R	R	G	**	R	R	G	**	R
7	~~G~~	*	~~FY~~	***	~~G~~	*	~~FY~~	***	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~
8,9 & 14	R	R	R	R	G	**	G	**	R	R	R	R	R	R	R	R	R
10	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~G~~	*	~~FY~~	***	~~G~~	*	~~FY~~	***	~~R~~
11 & 12	R	R	R	R	R	R	R	R	R	R	R	R	G	**	G	**	R
15 & 16	DW	DW	W	FDW	DW	DW	W	FDW	DW	DW	DW	DW	DW	DW	DW	DW	BLK
17 & 18	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	W	FDW	DW	DW	W	FDW	BLK
19 & 20	DW	DW	DW	DW	W	FDW	W	FDW	DW	DW	DW	DW	DW	DW	DW	DW	BLK

* DENOTES GREEN OR YELLOW ARROW DEPENDING ON NEXT PHASE
** DENOTES GREEN OR YELLOW BALL DEPENDING ON NEXT PHASE
*** DENOTES FLASHING YELLOW ARROW OR YELLOW ARROW DEPENDING ON NEXT PHASE

DATE: 05-05-2022 FILE NAME: tl00657_01.dgn

LOCATION: HWY. 18S/HWY. 18
CITY: JONESBORO
COUNTY: CRAIGHEAD
DISTRICT: 10 SCALE: N/A DRAWN BY: GWE

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	231	418
		TRAFFIC SIGNAL QUANTITIES-HWY.18S/HWY.49				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
TRINITY D. SMITH
No. 11425

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TRAFFIC SIGNAL QUANTITIES

ITEM NUMBER	ITEM	QUANTITY	UNIT
SP & 701	SYSTEM LOCAL CONTROLLER TS2-TYPE 2, E-NET (8 PHASES)	1	EACH
SP	ETHERNET SWITCH, T100 HARDENED (8-PORT)	1	EACH
SP	CELLULAR MODEM	1	EACH
704	VEHICLE DETECTOR-RACK MOUNT	4	EACH
SP	LOOP WIRING CLASS III (1C/16 A.W.G.)	956	LIN. FT.
704	FEEDER WIRE	1750	LIN. FT.
SP & 706	TRAFFIC SIGNAL HEAD, LED, (3 SECTION, 1 WAY)	10	EACH
SP & 706	TRAFFIC SIGNAL HEAD, LED, (4 SECTION, 1 WAY)	4	EACH
SP & 707	COUNTDOWN PEDESTRIAN SIGNAL HEAD, LED	2	EACH
708	TRAFFIC SIGNAL CABLE (5C/14 A.W.G.)	1349	LIN. FT.
708	TRAFFIC SIGNAL CABLE (7C/14 A.W.G.)	330	LIN. FT.
708	TRAFFIC SIGNAL CABLE (20C/14 A.W.G.)	558	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/8 A.W.G., E.G.C.)	650	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/12 A.W.G., E.G.C.)	220	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (2C/6 A.W.G.)	46	LIN. FT.
SP	ELECTRICAL CONDUCTORS FOR LUMINAIRES	786	LIN. FT.
709	GALVANIZED STEEL CONDUIT (2")	20	LIN. FT.
710	NON-METALLIC CONDUIT (1")	324	LIN. FT.
710	NON-METALLIC CONDUIT (1.25")	80	LIN. FT.
710	NON-METALLIC CONDUIT (2")	477	LIN. FT.
710	NON-METALLIC CONDUIT (3")	488	LIN. FT.
SS & 711	CONCRETE PULL BOX (TYPE 1 HD)	4	EACH
SS & 711	CONCRETE PULL BOX (TYPE 2 HD)	7	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (38')	1	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (46')	1	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (56')	1	EACH
SS & 714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (66')	1	EACH
SP	LED LUMINAIRE ASSEMBLY	4	EACH
SS & 715	TRAFFIC SIGNAL PEDESTAL POLE WITH FOUNDATION	2	EACH
SP	SERVICE POINT ASSEMBLY (2 CIRCUITS)	1	EACH
SP	REMOVAL OF TRAFFIC SIGNAL EQUIPMENT	0.33	LUMP SUM
SP	18" STREET NAME SIGN	6	EACH
SP & 733	VIDEO DETECTOR (IP)	6	EACH
SP & 733	VIDEO CABLE (EXTERIOR CAT 5E)	1275	LIN. FT.
SP & 733	VIDEO MONITOR (CLR)	1	EACH
SP & 733	VEHICLE DETECTOR RACK (16 CHANNEL)	1	EACH
SP & 733	CENTRAL CONTROL UNIT (8 CHANNEL)	2	EACH
SP & 733	VIDEO PROCESSOR, EDGE CARD IP (2 CAMERA)	4	EACH

PERMANENT TRAFFIC SIGNAL:
THE EXISTING TRAFFIC SIGNAL AT THE INTERSECTION OF HIGHWAY 49 AND CLINTON SCHOOL ROAD/WHITLEY ROAD IS TO BE REMOVED, WHEN THE NEW INTERSECTION OF HIGHWAY 49 AND CLINTON SCHOOL ROAD/DR. MARTIN LUTHER KING JR. DRIVE IS OPEN TO TRAFFIC AND THE TRAFFIC SIGNAL IS OPERATIONAL. THE EXISTING LOOPS SHALL BE MAINTAINED UNTIL THE DURING CONSTRUCTION OF THE NEW INTERSECTION, INSTALLATION OF THE NEW TRAFFIC SIGNAL, AND UNTIL THE EXISTING SIGNAL IS TURNED OFF. ANY DAMAGE TO THE EXISTING LOOPS, CONDUIT, PULL BOXES, AND FEEDER DURING CONSTRUCTION SHALL BE REPAIRED AT NO COST TO THE DEPARTMENT. ONCE THE NEW SIGNAL IS OPERATIONAL AND THE EXISTING CLINTON SCHOOL ROAD IS CLOSED, TURN OFF THE EXISTING TRAFFIC SIGNAL AND BAG ALL SIGNAL HEADS PRIOR TO ITS REMOVAL.
(REFER TO PERMANENT TRAFFIC SIGNAL PLANS.)

DATE: 05-05-2022 FILE NAME: t100657_02.dgn

LOCATION: HWY. 18S/HWY. 49
CITY: JONESBORO
COUNTY: CRAIGHEAD
DISTRICT: 10 SCALE: N/A DRAWN BY: GWE

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	232	418
		SIGNALIZATION PLAN SHEET				

STATE OF ARKANSAS
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PHASING DIAGRAM

SIGNAL FACES

12" LENSES

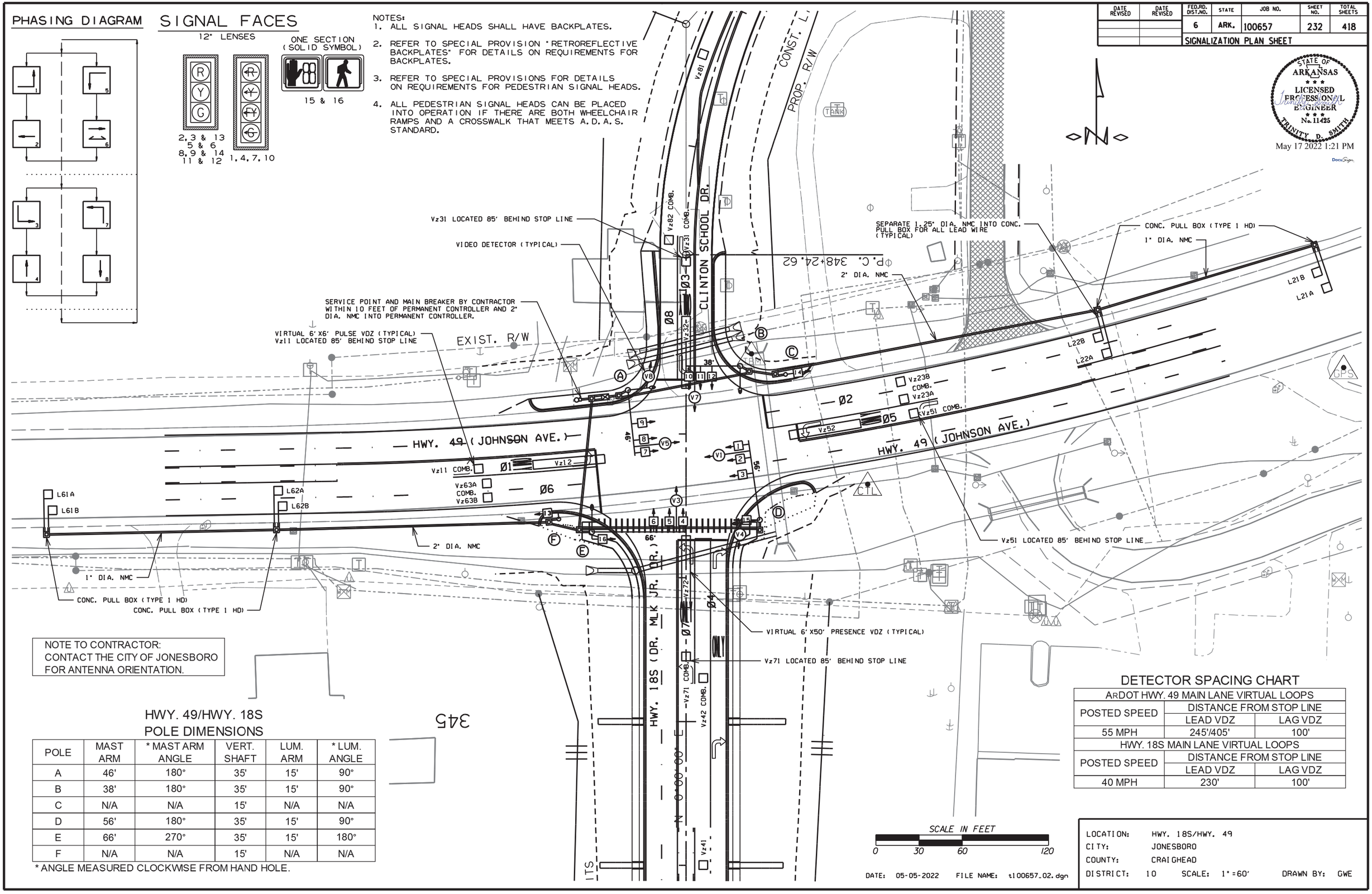
2, 3 & 13
5 & 6
8, 9 & 14
11 & 12

1, 4, 7, 10

ONE SECTION
(SOLID SYMBOL)

15 & 16

NOTES:
1. ALL SIGNAL HEADS SHALL HAVE BACKPLATES.
2. REFER TO SPECIAL PROVISION "RETROREFLECTIVE BACKPLATES" FOR DETAILS ON REQUIREMENTS FOR BACKPLATES.
3. REFER TO SPECIAL PROVISIONS FOR DETAILS ON REQUIREMENTS FOR PEDESTRIAN SIGNAL HEADS.
4. ALL PEDESTRIAN SIGNAL HEADS CAN BE PLACED INTO OPERATION IF THERE ARE BOTH WHEELCHAIR RAMPS AND A CROSSWALK THAT MEETS A.D.A.S. STANDARD.



NOTE TO CONTRACTOR:
CONTACT THE CITY OF JONESBORO FOR ANTENNA ORIENTATION.

345

HWY. 49/HWY. 18S POLE DIMENSIONS

POLE	MAST ARM	* MAST ARM ANGLE	VERT. SHAFT	LUM. ARM	* LUM. ANGLE
A	46'	180°	35'	15'	90°
B	38'	180°	35'	15'	90°
C	N/A	N/A	15'	N/A	N/A
D	56'	180°	35'	15'	90°
E	66'	270°	35'	15'	180°
F	N/A	N/A	15'	N/A	N/A

* ANGLE MEASURED CLOCKWISE FROM HAND HOLE.

DETECTOR SPACING CHART

ARDOT HWY. 49 MAIN LANE VIRTUAL LOOPS		
POSTED SPEED	DISTANCE FROM STOP LINE	
	LEAD VDZ	LAG VDZ
55 MPH	245'/405'	100'
HWY. 18S MAIN LANE VIRTUAL LOOPS		
POSTED SPEED	DISTANCE FROM STOP LINE	
	LEAD VDZ	LAG VDZ
40 MPH	230'	100'

SCALE IN FEET
0 30 60 120

DATE: 05-05-2022 FILE NAME: tl00657_02.dgn

LOCATION: HWY. 18S/HWY. 49
CITY: JONESBORO
COUNTY: CRAIGHEAD
DISTRICT: 10 SCALE: 1"=60' DRAWN BY: GWE

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	233	418
		SIGNALIZATION PLAN SHEET				

DESIGN PARAMETERS

POSTED SPEED LIMIT:
55 MPH EAST AND WEST APPROACH
40 MPH NORTH AND SOUTH APPROACH

NO BUS STOPS
NO RAILROAD TRACKS
YES EXISTING INTERCONNECTIONS
NO FIRE STATION
NO PARKING
NO SIGHT DISTANCE RESTRICTIONS

LOCATION OF STOP LINES SHOWN ON PERMANENT PAVEMENT MARKING DETAILS (SEE SEPARATE SHEET).

MINIMUM CLEAR ZONE DISTANCE
4 FEET BEHIND CURB

STATE OF ARKANSAS
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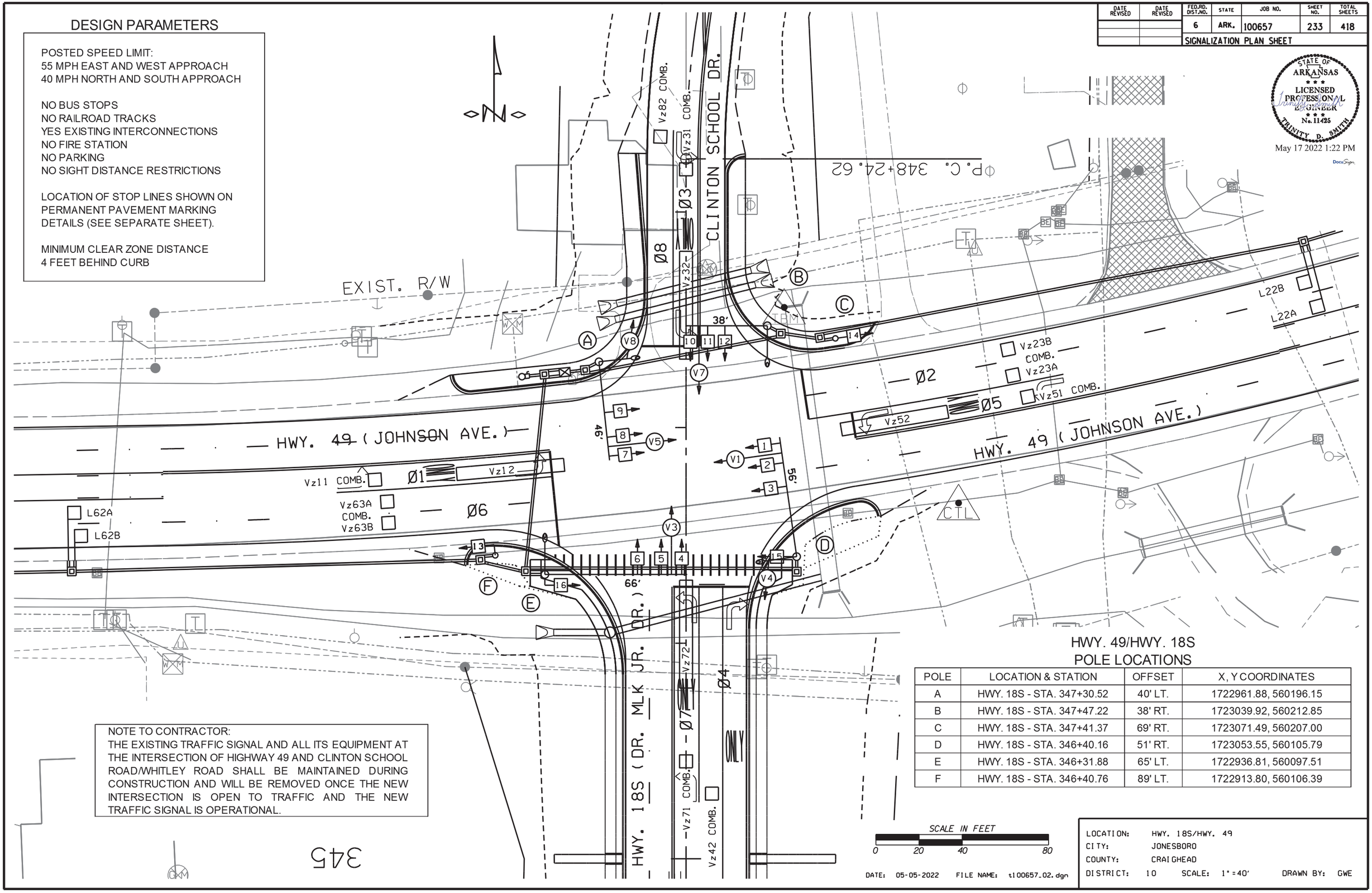

NOTE TO CONTRACTOR:
THE EXISTING TRAFFIC SIGNAL AND ALL ITS EQUIPMENT AT THE INTERSECTION OF HIGHWAY 49 AND CLINTON SCHOOL ROAD/WHITLEY ROAD SHALL BE MAINTAINED DURING CONSTRUCTION AND WILL BE REMOVED ONCE THE NEW INTERSECTION IS OPEN TO TRAFFIC AND THE NEW TRAFFIC SIGNAL IS OPERATIONAL.

345

HWY. 49/HWY. 18S
POLE LOCATIONS

POLE	LOCATION & STATION	OFFSET	X, Y COORDINATES
A	HWY. 18S - STA. 347+30.52	40' LT.	1722961.88, 560196.15
B	HWY. 18S - STA. 347+47.22	38' RT.	1723039.92, 560212.85
C	HWY. 18S - STA. 347+41.37	69' RT.	1723071.49, 560207.00
D	HWY. 18S - STA. 346+40.16	51' RT.	1723053.55, 560105.79
E	HWY. 18S - STA. 346+31.88	65' LT.	1722936.81, 560097.51
F	HWY. 18S - STA. 346+40.76	89' LT.	1722913.80, 560106.39

SCALE IN FEET
0 20 40 80

DATE: 05-05-2022 FILE NAME: t100657_02.dgn

LOCATION: HWY. 18S/HWY. 49
CITY: JONESBORO
COUNTY: CRAIGHEAD
DISTRICT: 10 SCALE: 1"=40' DRAWN BY: GWE

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	234	418
		SIGNALIZATION PLAN SHEET				

STATE OF ARKANSAS
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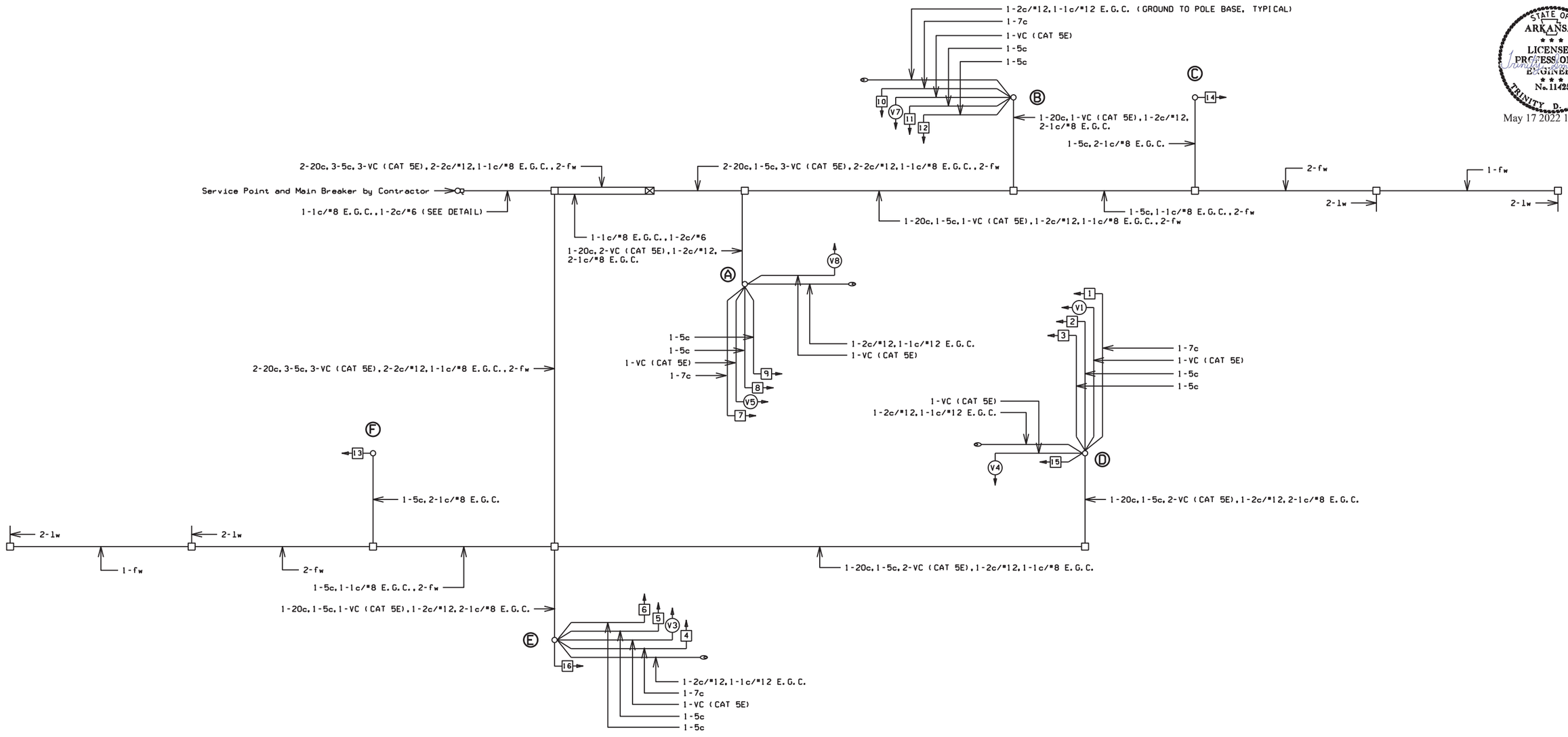


WIRING DIAGRAM

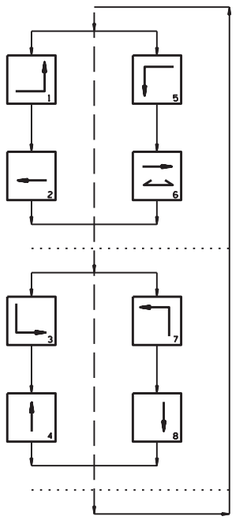
NOTES TO CONTRACTOR:

1. ONE SEPARATE 1-5c IS RUN TO EACH POLE FOR THE PEDESTRIAN PUSH BUTTON.
2. ALL DETECTOR RACK CHANNELS, INCLUDING UNUSED, SHALL BE BROUGHT TO TERMINAL STRIP IN DETECTOR AREA OF CABINET.
3. THE LOCAL GOVERNMENT SHALL BE RESPONSIBLE FOR PROVIDING POWER TO THE SERVICE POINT.
4. SEE GROUNDING ARRAY DETAIL ON SHEET 214.

DATE: 05-05-2022 FILE NAME: t100657_02.dgn

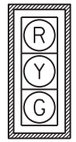
LOCATION:	HWY. 18S/HWY. 49			
CITY:	JONESBORO			
COUNTY:	CRAIGHEAD			
DISTRICT:	10	SCALE: N/A	DRAWN BY:	GWE

PHASING DIAGRAM

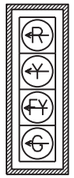


SIGNAL FACES

12" LENSES



2, 3 & 13
5 & 6
8, 9 & 14
11 & 12



1, 4, 7, 10

ONE SECTION
(SOLID SYMBOL)

15 & 16

NOTES:
1. ALL SIGNAL HEADS SHALL HAVE BACKPLATES.
2. REFER TO SPECIAL PROVISION "RETROREFLECTIVE BACKPLATES" FOR DETAILS ON REQUIREMENTS FOR BACKPLATES.
3. REFER TO SPECIAL PROVISIONS FOR DETAILS ON REQUIREMENTS FOR PEDESTRIAN SIGNAL HEADS.
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DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	235	418
		SIGNALIZATION PLAN SHEET				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11425
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DETECTOR CHART

DETECTOR SYSTEM DESCRIPTION: JOB 100657

HWY. 18S/HWY. 49 DETECTOR ASSIGNMENTS				HARDWARE INPUTS BY SUPPLIER			PROGRAM ASSIGNMENTS			COMMENTS	TUBE LENGTHS
							LOCAL		MASTER SYSTEM		
DET. ID #	LOCATION DIRECTION	TYPE	DET. #	CAB. TRM. #	AMP CHN. #	CON. IMP. #	PHS	SYSTEM DET. #	DETECTOR NUMBERS		
Vz11	EB LEFT TURN FAR	COMB.			1	V9	1	1		CAMERA V1	37"
Vz12	EB LEFT TURN	LOCAL			2	V1	1			CAMERA V1	37"
L21 A&B	WB ADVANCE	LOCAL	2			V2	2			LOOP	
L22 A&B	WB INTERMEDIATE	LOCAL	26			V2	2			LOOP	
Vz23 A&B	WB NEAR	COMB.			6	V10	2	2		CAMERA V5	37"
Vz31	SB LEFT TURN FAR	COMB.			9	V11	3	3		CAMERA V3	37"
Vz32	SB LEFT TURN	LOCAL			10	V3	3			CAMERA V3	37"
Vz41	NB ADVANCE	LOCAL			13	V4	4			CAMERA V4	23"
Vz42	NB NEAR	COMB.			14	V12	4	4		CAMERA V7	74"
Vz51	WB LEFT TURN FAR	COMB.			7	V13	5	5		CAMERA V5	37"
Vz52	WB LEFT TURN	LOCAL			8	V5	5			CAMERA V5	37"
L61 A&B	EB ADVANCE	LOCAL	6			V6	6			LOOP	
L62 A&B	EB INTERMEDIATE	LOCAL	30			V6	6			LOOP	
Vz63 A&B	EB NEAR	COMB.			4	V14	6	6		CAMERA V1	37"
Vz71	NB LEFT TURN FAR	COMB.			15	V15	7	7		CAMERA V7	74"
Vz72	NB LEFT TURN	LOCAL			16	V7	7			CAMERA V7	74"
Vz81	SB ADVANCE	LOCAL			11	V8	8			CAMERA V8	23"
Vz82	SB NEAR	COMB.			12	V16	8	8		CAMERA V3	37"
PB6 A&B	HWY. 18S S. LEG	PED.				P6	6				
					SPARE 3 & 5						

CONTROLLER INPUT ABBREVIATIONS:
V = VEHICLE INPUT
D = SYSTEM OR AUXILIARY INPUT
P = PEDESTRIAN INPUT

NOTE: "AMP CHN =" REFERS TO THE RACK OUTPUT POSITION.
THIS IS WIRED TO CONTROLLER INPUT DETECTOR NUMBER WHICH IS PROGRAMMED TO ACTUATE THE DESIGNATED PHASE.
EXAMPLE: V9 = SYSTEM DETECTOR 1, V10 = SYSTEM DETECTOR 2

INTERVAL CHART

SIGNAL FACES	HIGHWAY 18S AND HIGHWAY 49																FLASH SEQUENCE
	1+5	CLR.	1+6	CLR.	2+5	CLR.	2+6	CLR.	3+7	CLR.	3+8	CLR.	4+7	CLR.	4+8	CLR.	
1	~~←G~~	*	~~←G~~	*	~~←FY~~	***	~~←FY~~	***	~~←R~~	~~←R~~	~~←R~~	~~←R~~	~~←R~~	~~←R~~	~~←R~~	~~←R~~	~~←R~~
2, 3 & 13	R	R	G	**	R	R	G	**	R	R	R	R	R	R	R	R	R
4	~~←R~~	~~←R~~	~~←R~~	~~←R~~	~~←R~~	~~←R~~	~~←R~~	~~←R~~	~~←G~~	*	~~←G~~	*	~~←FY~~	***	~~←FY~~	***	~~←R~~
5 & 6	R	R	R	R	R	R	R	R	R	R	G	**	R	R	G	**	R
7	~~←G~~	*	~~←FY~~	***	~~←G~~	*	~~←FY~~	***	~~←R~~	~~←R~~	~~←R~~	~~←R~~	~~←R~~	~~←R~~	~~←R~~	~~←R~~	~~←R~~
8,9 & 14	R	R	R	R	G	**	G	**	R	R	R	R	R	R	R	R	R
10	~~←R~~	~~←R~~	~~←R~~	~~←R~~	~~←R~~	~~←R~~	~~←R~~	~~←R~~	~~←G~~	*	~~←FY~~	***	~~←G~~	*	~~←FY~~	***	~~←R~~
11 & 12	R	R	R	R	R	R	R	R	R	R	R	R	G	**	G	**	R
15 & 16	DW	DW	W	FDW	DW	DW	W	FDW	DW	DW	DW	DW	DW	DW	DW	DW	BLK

* DENOTES GREEN OR YELLOW ARROW DEPENDING ON NEXT PHASE
** DENOTES GREEN OR YELLOW BALL DEPENDING ON NEXT PHASE
*** DENOTES FLASHING YELLOW ARROW OR YELLOW ARROW DEPENDING ON NEXT PHASE

DATE: 05-05-2022 FILE NAME: t100657_02.dgn

LOCATION: HWY. 18S/HWY. 49
CITY: JONESBORO
COUNTY: CRAIGHEAD
DISTRICT: 10 SCALE: N/A DRAWN BY: GWE

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		236	418
				JOB NO.		100657		
				07533 -		LAYOUT 63961	-	

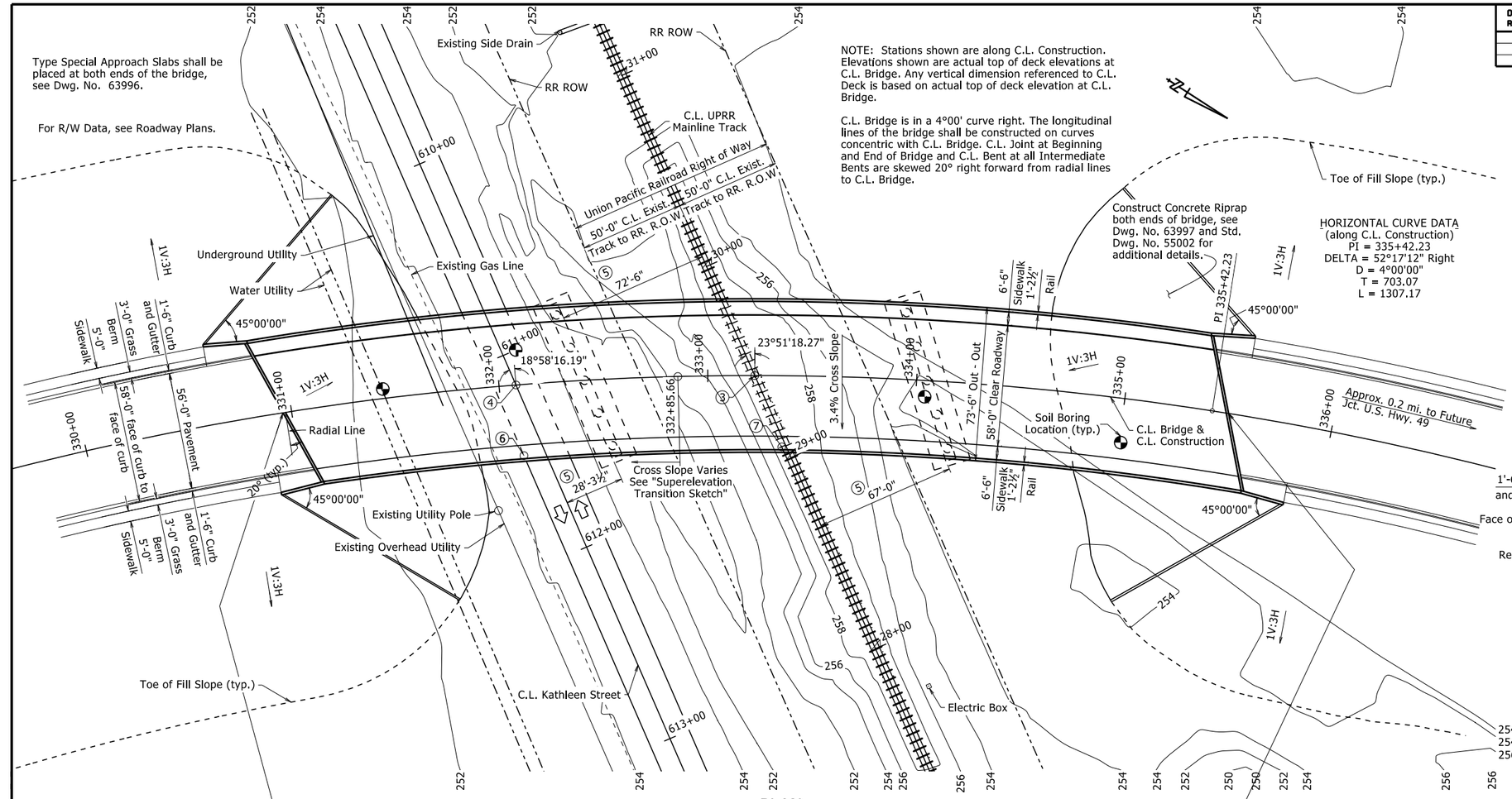
Type Special Approach Slabs shall be placed at both ends of the bridge, see Dwg. No. 63996.

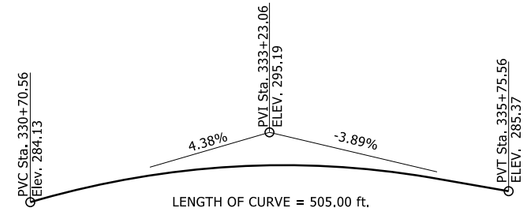
For R/W Data, see Roadway Plans.

NOTE: Stations shown are along C.L. Construction. Elevations shown are actual top of deck elevations at C.L. Bridge. Any vertical dimension referenced to C.L. Deck is based on actual top of deck elevation at C.L. Bridge.

C.L. Bridge is in a 4°00' curve right. The longitudinal lines of the bridge shall be constructed on curves concentric with C.L. Bridge. C.L. Joint at Beginning and End of Bridge and C.L. Bent at all Intermediate Bents are skewed 20° right forward from radial lines to C.L. Bridge.

HORIZONTAL CURVE DATA
(along C.L. Construction)
PI = 335+42.23
DELTA = 52°17'12" Right
D = 4°00'00"
T = 703.07
L = 1307.17

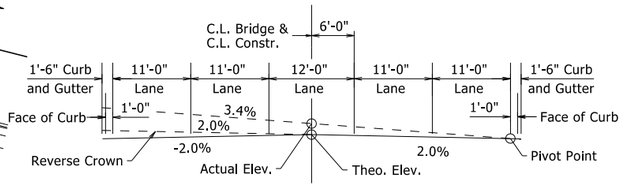




LENGTH OF CURVE = 505.00 ft.

VERTICAL ALIGNMENT DATA

Theoretical Elevation Along Profile Grade Line



Begin. Superelevation Sta. 328+35.66
Reverse Crown Sta. 331+00.37
Max. Superelevation Sta. 332+85.66

SUPERELEVATION TRANSITION SKETCH

LOOKING AHEAD

1 Chain Link Fence Location		
Station Location	Left Rail	Right Rail
Beginning	Sta. 332+47.54	Sta. 332+72.30
End	Sta. 333+73.72	Sta. 334+00.67

Bent No.	"A"	"B"
2	7'-6³⁄₁₆"	38'-0"
3	7'-11¹¹⁄₁₆"	38'-0"

"A" = C.L. Deck at C.L. Bent to Low Side Top of Cap

"B" = Low Side Top of Cap to Bottom of Footing

See Dwg. No. 63962 for Soil Borings and Boring Logs.

1. Chain Link Fence to be placed on both sides of Bridge over railroad right-of-way, see Dwg. Nos. 63991, 63992, & 63995 for details.
2. Type "H2" Metal Bridge Railing on top of Bridge Traffic Rail, on both sides of Bridge, see Dwg. Nos. 63991 and 63992 and Std. Dwg. No. 55015 for details.
3. Intersection of C.L. Construction and UPRR Track at Sta. 333+22.49. Approx. Railroad Mile Post 118.85 (Sta. 29+43).
4. Intersection of C.L. Construction at Sta. 332+08.11 and C.L. Kathleen Street at Sta. 611+15.38.
5. Minimum horizontal clearance at face of bent cap.
6. Point of minimum vertical clearance Kathleen Street. 34.0' Right of Sta. 332+09.25.
7. Point of minimum vertical clearance UPRR Mainline Track. 34.0' Right of Sta. 333+40.18.
8. Ashlar Stone Pattern, See SP Job No. 100657 "ARCHITECTURAL FINISH".

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SHEET 1 OF 2
LAYOUT OF BRIDGE
HIGHWAY 18 OVER UPRR & KATHLEEN STREET
I-555 - HWY. 49 (DR. MARTIN LUTHER KING JR. DR. EXTENSION) (JONESBORO) (S)
CRAIGHEAD COUNTY

ROUTE 18 SEC. 4S

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: MCB DATE: 04/01/2020 FILENAME: bl00657_l1.dgn
CHECKED BY: JWP DATE: 01/11/2021 SCALE: 1" = 30'-0
DESIGNED BY: MCB DATE: 12/2019

BRIDGE NO. 07533 DRAWING NO 63961

PRINT DATE: 9/3/2021

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
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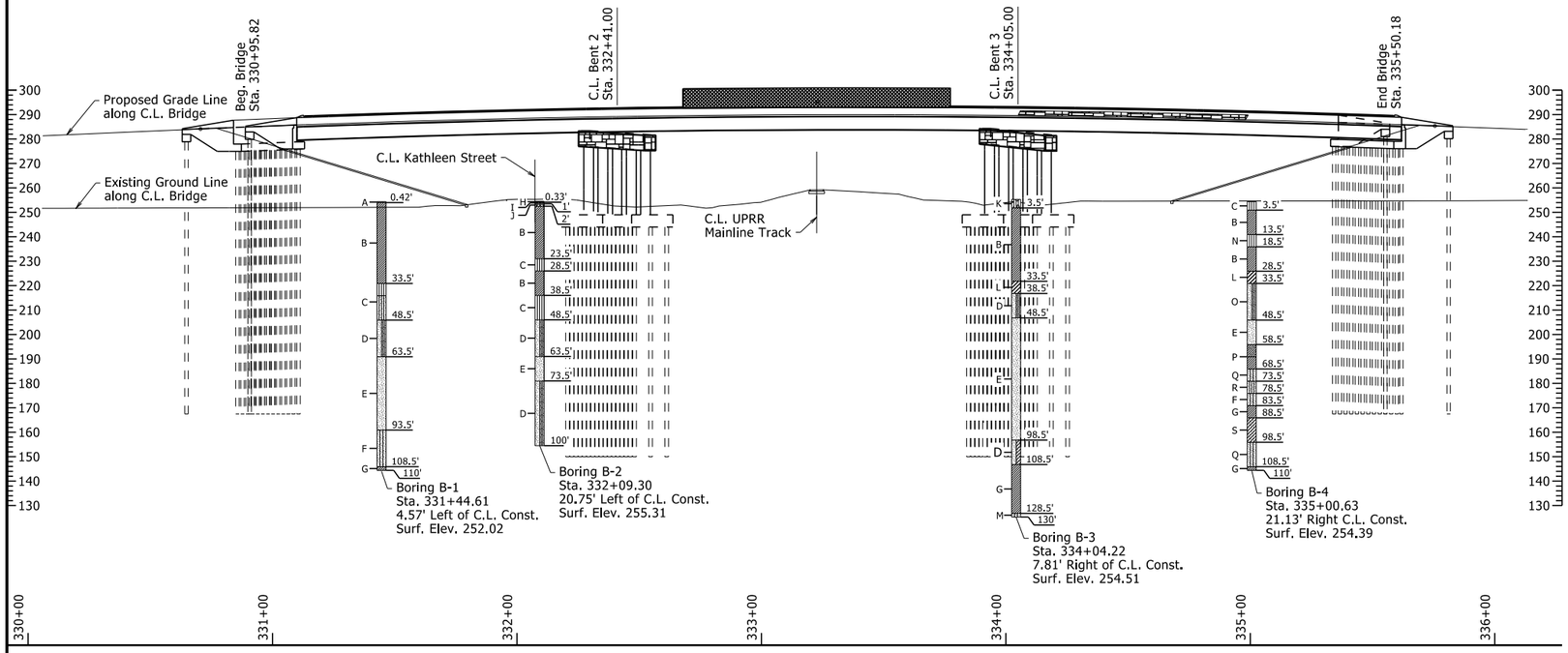
				JOB NO.		100657		
				①	07533 -	LAYOUT	- 63962	



SOIL BORING ELEVATION

BORING LEGEND

A - TOPSOIL: 5 inches
B - Medium stiff to very stiff, brown and gray lean clay (CL)
C - Soft to stiff, gray SILT (ML)
D - Loose to medium dense, brown sand with silt (SP-SM)
E - Loose to medium dense, brown sand (SP)
F - Medium dense, gray silty sand (SM)
G - Stiff, gray lean clay (CL)
H - ASPHALT: 4 inches
I - BASE MATERIAL: 8 inches crushed rock
J - SUBBASE MATERIAL: Sand and gravel
K - FILL: Very stiff, brown and gray silt, some gravel and sand (ML)
L - Soft, gray fat clay (CH)
M - Very dense, brown silty sand (SM)
N - Very stiff, brown and gray silt (ML)
O - Loose to very loose, gray and brown sand with silt (SP-SM)
P - Medium stiff to stiff, brown lean clay, trace to with sand (CL)
Q - Dense, brown and gray silty sand (SM)
R - Very stiff, gray sandy silt (ML)
S - Medium dense to loose, gray clayey sand (SC)

N VALUES

Boring B-1	Boring B-2	Boring B-3	Boring B-4
4.0-5.0, N=5	1.5-2.5, N=5	1.5-2.5, N=14	1.5-2.5, N=14
6.5-7.5, N=8	6.5-7.5, N=9	4.0-5.0, N=14	4.0-5.0, N=20
14.0-15.0, N=17	9.0-10.0, N=8	6.5-7.5, N=11	6.5-7.5, N=23
19.0-20.0, N=10	14.0-15.0, N=17	9.0-10.0, N=6	9.0-10.0, N=18
29.0-30.0, N=3	19.0-20.0, N=18	14.0-15.0, N=15	14.0-15.0, N=17
34.0-35.0, N=4	24.0-25.0, N=7	19.0-20.0, N=17	19.0-20.0, N=23
39.0-40.0, N=12	29.0-30.0, N=6	24.0-25.0, N=9	24.0-25.0, N=8
49.0-50.0, N=18	34.0-35.0, N=5	29.0-30.0, N=8	29.0-30.0, N=6
54.0-55.0, N=14	39.0-40.0, N=6	34.0-35.0, N=3	34.0-35.0, N=5
59.0-60.0, N=17	44.0-45.0, N=2	39.0-40.0, N=8	39.0-40.0, N=1
64.0-65.0, N=15	49.0-50.0, N=12	44.0-45.0, N=9	44.0-45.0, N=9
69.0-70.0, N=17	54.0-55.0, N=8	49.0-50.0, N=9	49.0-50.0, N=9
74.0-75.0, N=18	59.0-60.0, N=13	54.0-55.0, N=12	54.0-55.0, N=13
79.0-80.0, N=19	64.0-65.0, N=12	64.0-65.0, N=16	59.0-60.0, N=5
84.0-85.0, N=17	69.0-70.0, N=15	69.0-70.0, N=10	64.0-65.0, N=13
89.0-90.0, N=20	74.0-75.0, N=20	74.0-75.0, N=18	69.0-70.0, N=33
94.0-95.0, N=19	79.0-80.0, N=19	79.0-80.0, N=22	74.0-75.0, N=23
99.0-100.0, N=20	84.0-85.0, N=19	84.0-85.0, N=21	79.0-80.0, N=16
109.0-110.0, N=15	89.0-90.0, N=18	89.0-90.0, N=20	84.0-85.0, N=10
	94.0-95.0, N=17	94.0-95.0, N=15	89.0-90.0, N=29
	99.0-100.0, N=20	99.0-100.0, N=21	94.0-95.0, N=6
		109.0-110.0, N=12	99.0-100.0, N=42
		119.0-120.0, N=13	109.0-110.0, N=10
		129.0-130.0, N=59	

GENERAL NOTES:

BENCH MARK: Vertical Control Data are shown on the Survey Control Data Sheets.

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 Eighth Edition (2017).

LIVE LOADING: HL-93

SEISMIC ZONE: 4 SD_1: 0.548 Site Class: D Seismic Operational Classification: Essential

MATERIALS AND STRENGTHS:

Class S(AE) Concrete (superstructure)	f 'c = 4,000 psi
Class S Concrete (substructure)	f 'c = 3,500 psi
Reinforcing Steel (AASHTO M 31 or M 322, Type A)	fy = 60,000 psi
Structural Steel (ASTM A709, Gr. 36)	Fy = 36,000 psi
Structural Steel (ASTM A709, Gr. 50 or Gr. 50W)	Fy = 50,000 psi

BORING LOGS: Boring logs may be obtained from the Construction Contract Procurement Section of the Program Management Division.

STEEL SHELL PILING: Piling in Bents 1 through 4 shall be 18" diameter concrete filled steel shell piles and shall be driven to a minimum ultimate bearing capacity of 300 tons per pile. All piling shall be driven with an approved air, steam, or diesel hammer to a minimum tip elevation of 167.5 or lower at Bents 1 and 4, and to a minimum tip elevation of 150.0 or lower at Bents 2 and 3. Piling in end bents shall be driven after embankment to bottom of cap is in place. Water jetting will be required to Elev. 195.0 at Bents 1 through 4. Water jetting will not be paid for directly, but will be considered incidental to "Steel Shell Piling (_" Dia.)". Lengths of piling shown are assumed for estimating quantities only. Actual lengths are to be determined in the field. No additional payment will be made for cut-off or build-up. Test piles are not required but may be driven for the Contractor's information in accordance with Subsection 805.08(g). No piles will be paid for as test piles.

DRIVING SYSTEM: The driving system approval and the ultimate bearing capacity determination for piling shall be based on the requirements of Subsection 805.09(b), "Method B Wave Equation Analysis (WEAP)". It is estimated that the minimum rated hammer energy required to obtain the ultimate bearing capacity for all piles will be 40,000 foot pounds per blow.

PILE FOOTINGS: The top of the footings at Bents 2 and 3 shall be set a minimum of 2.0' below natural ground or at the elevations shown on the plans, whichever is lower. Foundations for footings shall be prepared in accordance with Subsection 801.04. Foundation piles shall not be driven until after the excavation to bottom of footing is complete. Excavations shall be backfilled and compacted to the level of the existing ground in accordance with Subsection 801.08.

PAINTING: All Grade 50W structural steel surfaces, except galvanized members, surfaces in contact with concrete, and the expansion device, within ten feet of bridge deck expansion joints shall be painted as specified in Subsection 807.75. The color of paint shall be Brown equal or close to Federal Std. 595B, Color Chip No. 30070 and as approved by the Engineer. The finish system may be applied in the shop. Any damage to the paint system occurring during transport or installation shall be corrected according to the manufacturer's recommendations at no cost to the Department. ASTM F3125, Grade A325 Type 3 bolts shall be used within these painted zones and shall be painted.

BRIDGE DECK: The concrete bridge deck, except sidewalks, shall be given a tine finish as specified for final finishing in Subsection 802.19 for Class 5 Tined Bridge Roadway Surface Finish. Sidewalks shall be given a Class 6 Broomed Finish.

PROTECTIVE SURFACE TREATMENT: Class 1 Protective Surface Treatment shall be applied to the roadway surface, sidewalk surface (including curbing), and to the roadway face and top of the concrete bridge rails.

DETAIL DRAWINGS:	DRAWING NOS.
Bent 1	63965-63968
Intermediate Bents	63969-63972
Bent 4	63973-63976
Elastomeric Bearings	63977
452'-0" Cont. Plate Girder Unit	63978-63993
Deck Drains	63994
Curved Chain Link Fence	63995
Type Special Approach Slab	63996
Concrete Riprap	63997
General Notes For Steel Bridge Structures	55006
Details For Steel Bridge Structures	55007
Poured Silicone Joints	55008
Type H2 Railing	55015
Concrete Filled Steel Shell Piling	55021
Bridge Traffic Rail	55070

MAINTENANCE OF TRAFFIC: See Roadway Plans.

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SHEET 2 OF 2
LAYOUT OF BRIDGE
HIGHWAY 18 OVER UPRR & KATHLEEN STREET
I-555 - HWY. 49 (DR. MARTIN LUTHER KING JR. DR. EXTENSION) (JONESBORO) (S)
CRAIGHEAD COUNTY

ROUTE 18 SEC. 4S
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: MCB DATE: 04/01/2020 FILENAME: b100657_L1.dgn
CHECKED BY: JWP DATE: 01/11/2021 SCALE: 1" = 30'-0
DESIGNED BY: MCB DATE: 12/2019
BRIDGE NO. 07533 DRAWING NO. 63962

PRINT DATE: 9/3/2021

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
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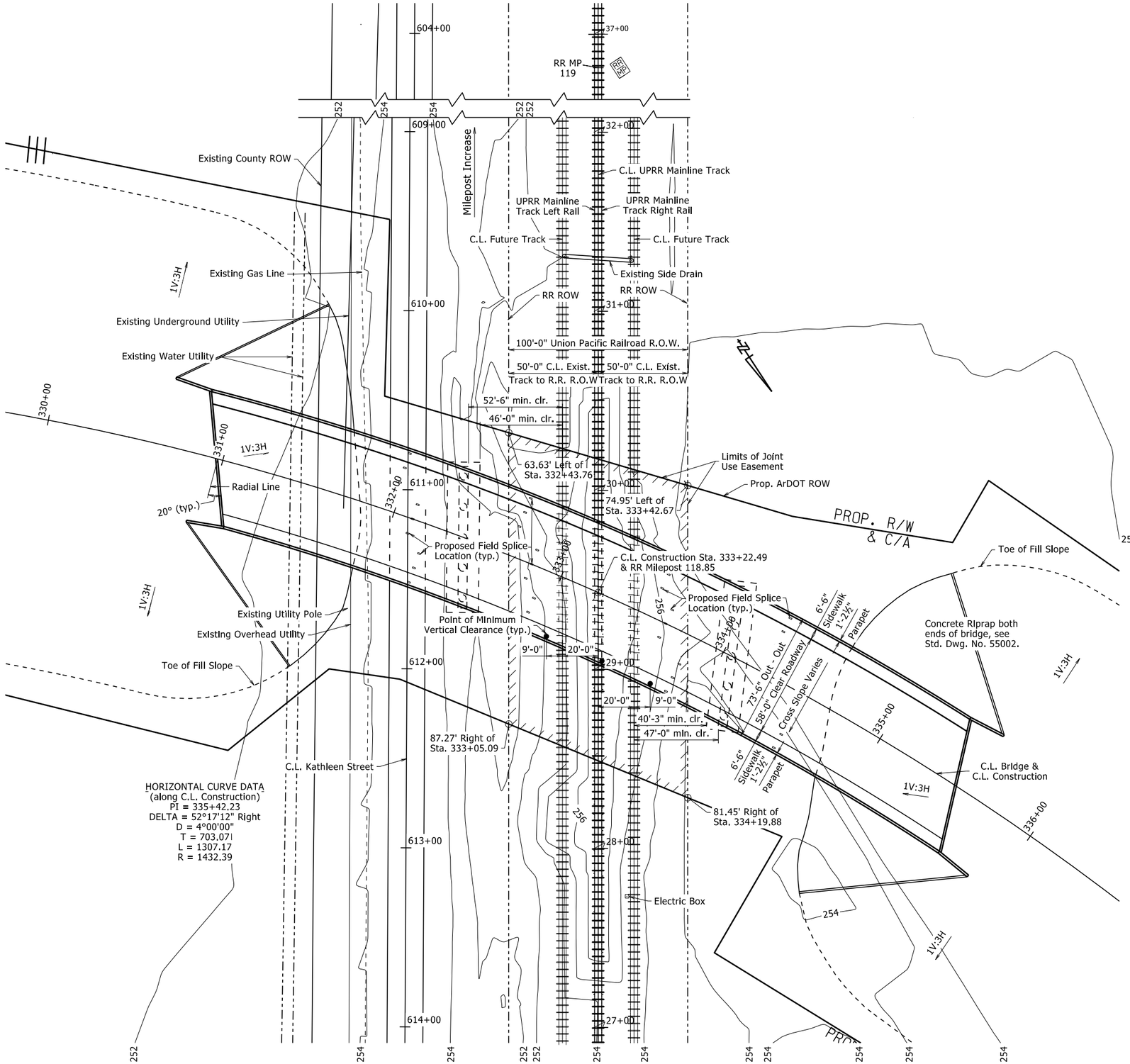
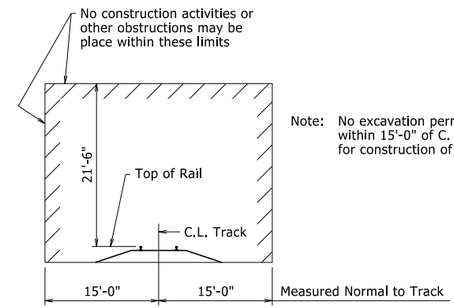
				JOB NO.		100657		
				①	07533 -	EXHIBIT A - 63963		



GENERAL NOTES:

1. The Site shall be accessed without crossing tracks except at existing road crossings, unless explicit approvals have been obtained from the Railroad.
2. The elevation of the existing top-of-rail profile shall be verified before beginning construction. All discrepancies shall be brought to the attention of the Railroad prior to construction.
3. Currently there are no known utilities on the Railroad right-of-way. UPRR "Call Before You Dig" 1-800-336-9193 shall be contacted prior to construction.
4. Construction shall comply with requirements noted in Special Provision "Insurance, Construction, and Flagging Requirements on Railroad Property (UPRR)", including the use of permanent steel deck pans over the railroad right of way.
5. The proposed grade separation project shall not change the quantity and/or characteristics of the flow in the Railroad ditches and/or drainage structures. Existing drainage patterns will be maintained. Closed parapet railing (no deck drains) are typical on both sides of the bridge deck over the Railroad right-of-way.
6. The Contractor must submit a proposed method of erosion and sediment control and have the method approved by the Railroad prior to beginning any grading on the project site.
7. Temporary construction clearances, including falsework clearances, shall comply with the details shown in "Minimum Construction Clearance Envelope". All unauthorized equipment, materials, and personnel shall remain outside this envelope, except during designated track windows.
8. All shoring systems that impact the Railroad's operations and/or supports the Railroad's embankment shall be designed and constructed per the Railroad temporary shoring requirements.
9. Erection over the Railroad right-of-way shall be designed to cause no interruption to all Railroad operations. Falsework will not be allowed in the Railroad right-of-way without Railroad approval.
10. All personnel must clear the area within 25 feet of track and secure all equipment during the approach and passage of a train. All work within 50 feet of track must cease during the approach and passage of a train.
11. All permanent clearances shall be verified before project closeout.
12. All demolition within the Railroad right-of-way and/or demolition that may impact the Railroad tracks or operations shall comply with the Railroad demolition requirements.
13. "The State shall not plow ice, snow, or sleet over the sides of the structure. In consideration of this practice, the Carrier waives its request for the State to attach splash boards to sides of the structure." This statement is in the State-Railroad Agreement.



Note: No excavation permitted within 15'-0" of C. L. Track for construction of new bridges.

MINIMUM CONSTRUCTION CLEARANCE ENVELOPE

Normal to Track
No Scale

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BRIDGE ENGINEER

SHEET 1 OF 2
RAILROAD EXHIBIT A
HIGHWAY 18 OVER UPRR & KATHLEEN ST.
JONESBORO SUBDIVISION MILEPOST 118.85
LATITUDE: 35.8607° N LONGITUDE: 90.6136° W
I-555 - HWY. 49 (DR. MARTIN LUTHER KING JR. DR. EXTENSION) (JONESBORO) (S)
CRAIGHEAD COUNTY

ROUTE 18 SEC. 4S

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: MCB DATE: 04/01/2020 FILENAME: b100657_L1.dgn
CHECKED BY: SWP DATE: 09/01/2020 SCALE: 1" = 30'-0"
DESIGNED BY: MCB DATE: 03/2020
BRIDGE NO. 07533 DRAWING NO. 63963

PRINT DATE: 9/3/2021

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
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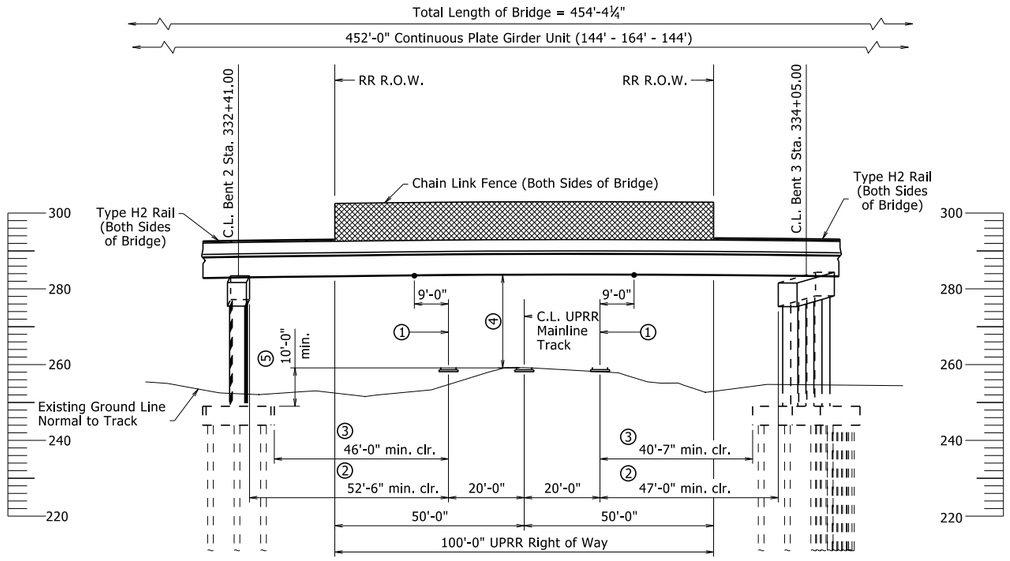
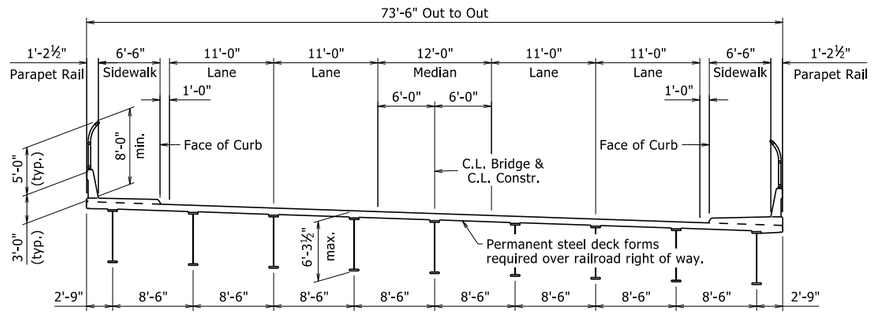
				JOB NO.		100657		
				①	07533 -	EXHIBIT A - 63964		



Note: All horizontal dimmensions are measured normal to centerline of tracks.

SECTION NORMAL TO TRACK

Looking in direction of Milepost Increase
No Scale



Note: No open deck drains will be used over railroad ROW.

TYPICAL SECTION

Looking Ahead
No Scale

TABLE OF VARIABLES

Track	Location	Min. Vert. Clear.
UPRR Mainline Track	29'-0" Left of C.L. Track	23'-8"
	At Left Rail	23'-9"
	29'-0" Right of C.L. Track	23'-8"

Note: Minimum vertical clearances shown are after all permanent dead loads are applied to the structure and are measured to the lowest steel girder element at the location indicated, including field splice elements where applicable. Future track top of rail elevations are assumed equal to adjacent existing track top of rail elevations.

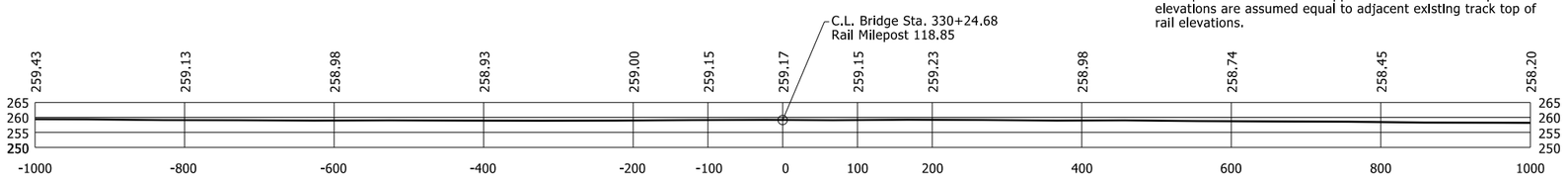
① C.L. Future Track

② Min. Horizontal Clearance to face of bent cap.

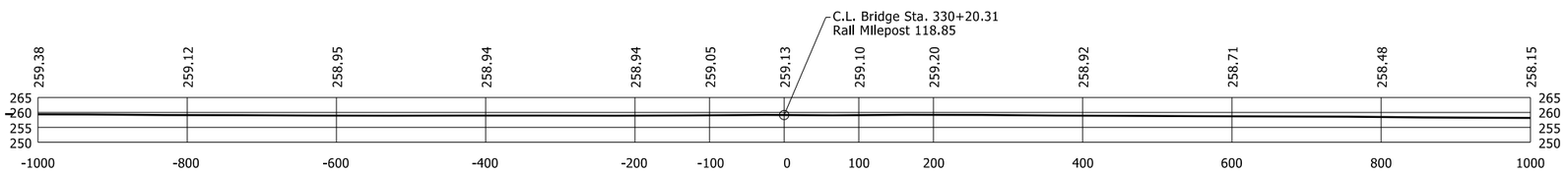
③ Min. Horizontal Clearance to face of footing.

④ Min. Vertical Clearance to top of rail. See "TABLE OF VARIABLES" for details.

⑤ Base of rail to top of footing. All footings are located outside of UPRR ROW.



PROFILE ALONG TOP OF RIGHT RAIL



PROFILE ALONG TOP OF LEFT RAIL

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No. 9235
CHARLES R. ELLIS
BRIDGE ENGINEER

SHEET 2 OF 2
RAILROAD EXHIBIT A
HIGHWAY 18 OVER UPRR & KATHLEEN ST.
JONESBORO SUBDIVISION MILEPOST 118.85
LATITUDE: 35.8607° N LONGITUDE: 90.6136° W
I-555 - HWY. 49 (DR. MARTIN LUTHER KING JR. DR. EXTENSION) (JONESBORO) (S)
CRAIGHEAD COUNTY

ROUTE 18 SEC. 4S

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: MCB DATE: 04/01/2020 FILENAME: b100657_L1.dgn
CHECKED BY: SWP DATE: 09/01/2020 SCALE: No Scale
DESIGNED BY: MCB DATE: 03/2020

BRIDGE NO. 07533 DRAWING NO. 63964

PRINT DATE: 9/3/2021

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				JOB NO.		100657		
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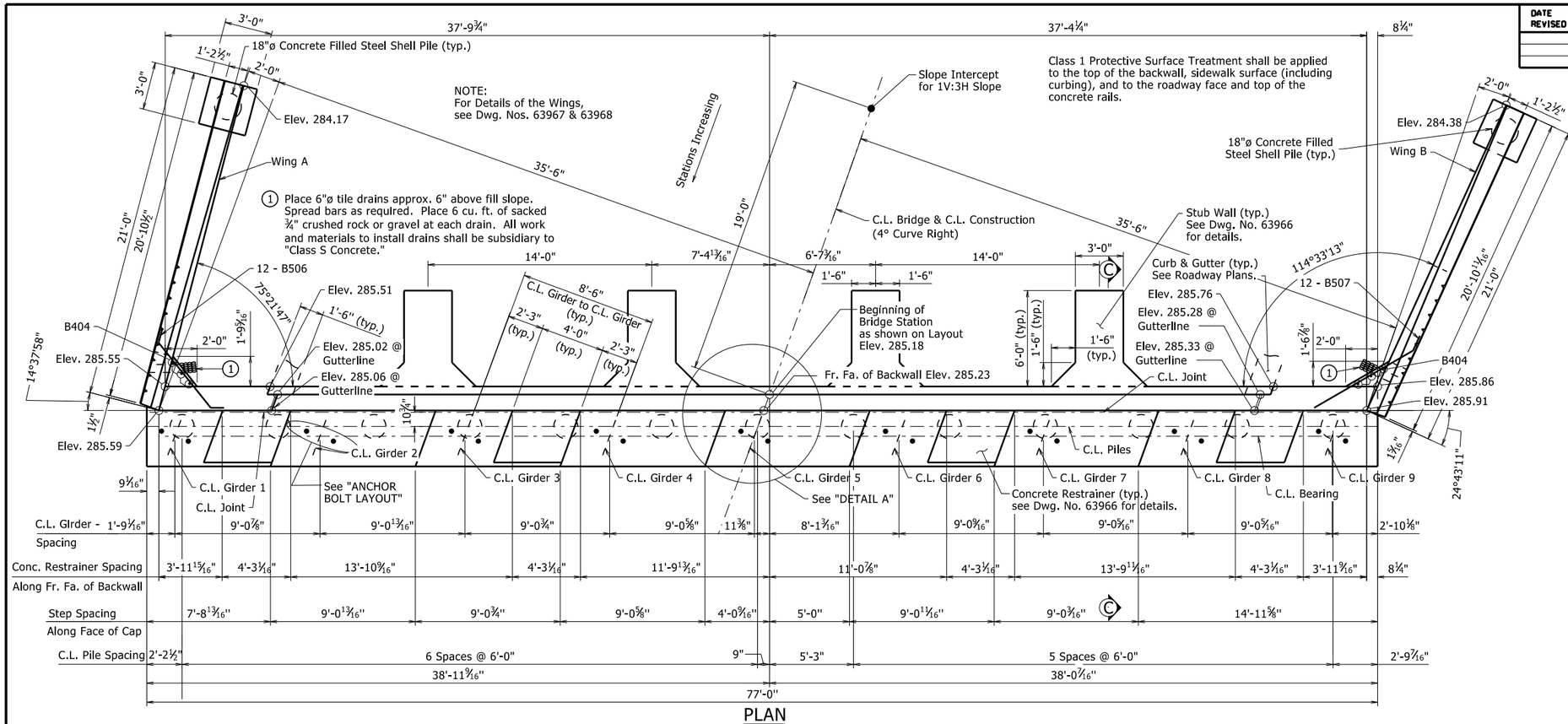
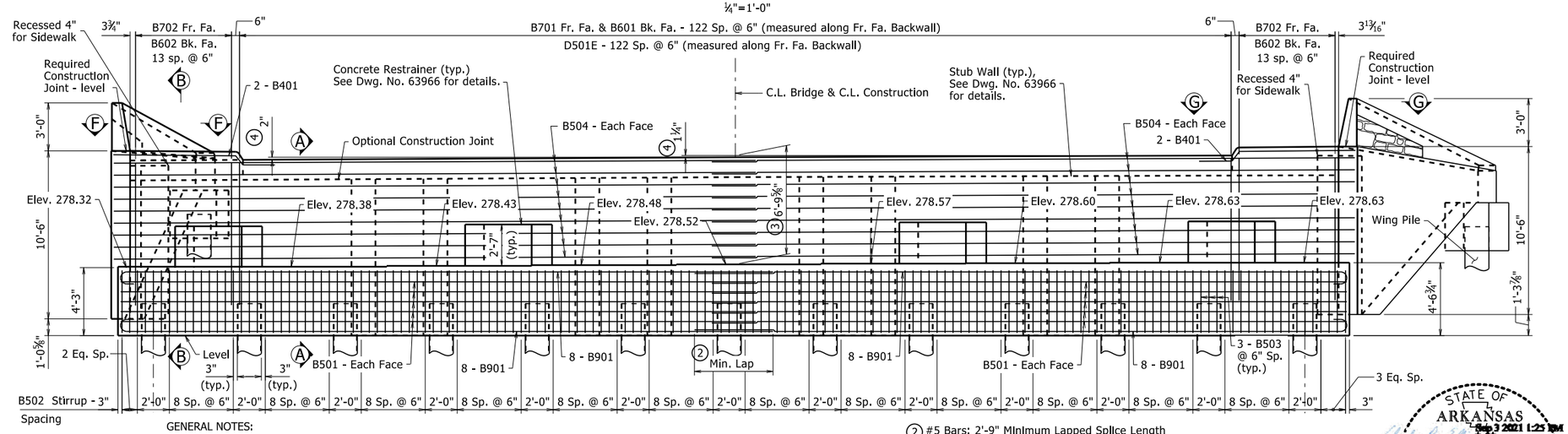


PLAN

¼"=1'-0"



ELEVATION

Looking Back

¼"=1'-0"

GENERAL NOTES:

For General Notes, see Std. Dwg. No. 55006.

For Joint Details see Std. Dwg. No. 55008 & "SIDEWALK SECTION THRU JOINT AT END BENT" on Dwg No. 63979.

Structural steel in Bent 1 shall be ASTM A709, Gr. 50W and shall be paid for as "Structural Steel in Plate Girder Spans (A709, Gr. 50W)".

All piling shall be Grade 3 (F_y = 45 ksi). For details of steel piling, see Std. Dwg. No. 55020.

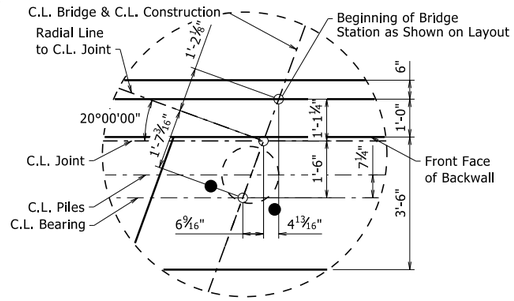
For additional information, see Layout.

② #5 Bars: 2'-9" Minimum Lapped Splice Length
#9 Bars: 4'-11" Minimum Lapped Splice Length

③ C.L. Bridge @ Front Face of Backwall

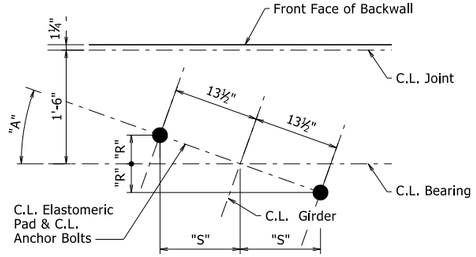
④ Top of Backwall at C.L. Bridge to Gutterline

No portion of the backwall shall be poured before the girders are in place. The portion of the backwall above the optional construction joint at the paving bracket shall not be placed until the adjacent deck pour has been made. Refer to the "EXPANSION DEVICE INSTALLATION AT END BENTS" note on Std. Dwg. No. 55008. No heavy construction equipment shall be allowed within 10' of the backwall before the deck concrete placement for the adjacent span has been completed.



DETAIL A

½" = 1'-0"



For Details of Elastomeric Bearings, see Dwg. No. 63977.

ANCHOR BOLT LAYOUT

NO SCALE

	"A"	"S"	"R"
Girder 1	20°34'25"	12⅝"	4¾"
Girder 2	20°26'37"	12⅝"	4¹¹⁄₁₆"
Girder 3	20°18'55"	12¹¹⁄₁₆"	4¹¹⁄₁₆"
Girder 4	20°11'20"	12¹¹⁄₁₆"	4¹¹⁄₁₆"
Girder 5	20°03'36"	12¹¹⁄₁₆"	4⅝"
Girder 6	19°56'27"	12¹¹⁄₁₆"	4⅝"
Girder 7	19°49'07"	12¹¹⁄₁₆"	4⁹⁄₁₆"
Girder 8	19°41'54"	12¹¹⁄₁₆"	4⁹⁄₁₆"
Girder 9	19°34'46"	12¾"	4½"

See Dwg. No. 63966 for "SECTION A-A", "SECTION B-B", and "SECTION C-C" for placement of reinforcing.

See Dwg. No. 63966 for "LAYOUT OF PILES", "SIDEWALK & CURB DETAIL","STUB WALL DETAIL" and "PLAN OF CONCRETE RESTRAINER".

See Dwg. No. 63968 for "VIEW F-F" and "VIEW G-G" for placement of reinforcing.

STATE OF ARKANSAS
Sep 3 2021 1:25 PM
LICENSED PROFESSIONAL ENGINEER
No. 9235
CHARLES R. ELLIS
BRIDGE ENGINEER

SHEET 1 OF 4

DETAILS OF BENT NO. 1

HIGHWAY 18 OVER UPRR & KATHLEEN STREET

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: SWP DATE: 02-01-2021 FILENAME: b100657_b1.dgn

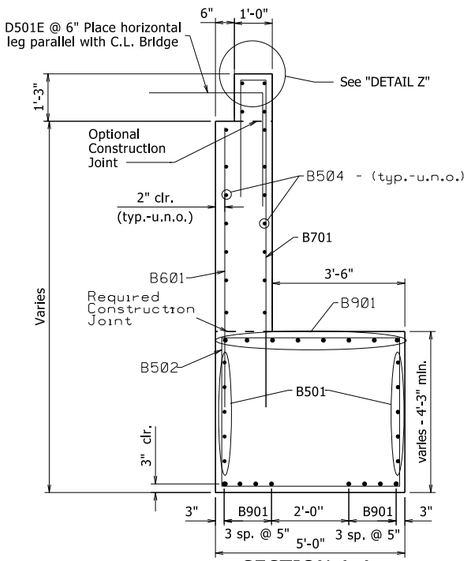
CHECKED BY: MCB DATE: 02/16/2021 SCALE: AS NOTED

DESIGNED BY: MCB DATE: 01-2021

BRIDGE NO. 07533 DRAWING NO. 63965

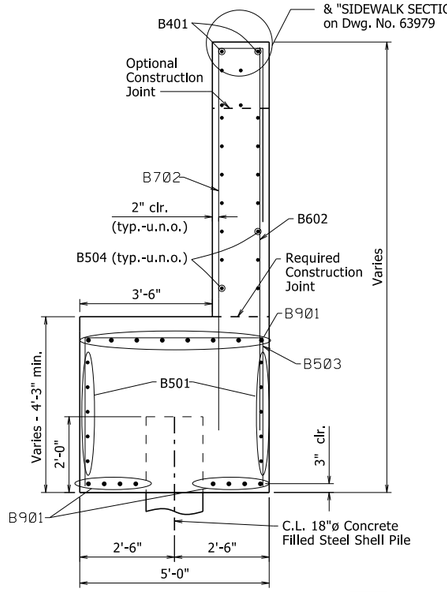
PRINT DATE: 9/3/2021

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		241	418
				JOB NO.		100657		
				1	07533 - END BENT 1 - 63966			



SECTION A-A

½"=1'-0"



SECTION B-B

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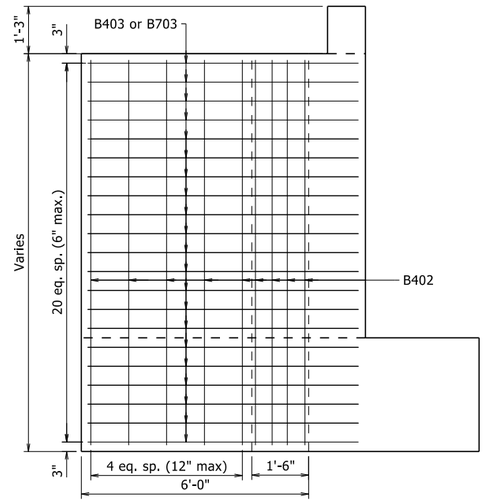
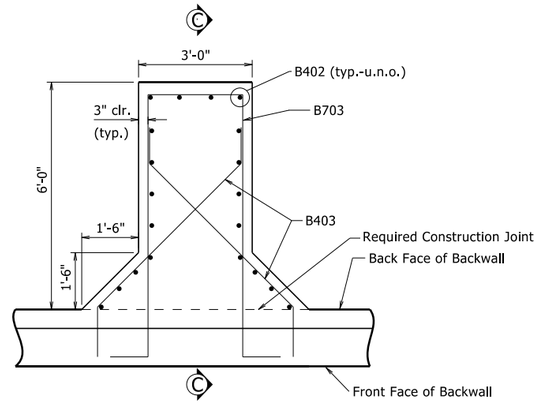


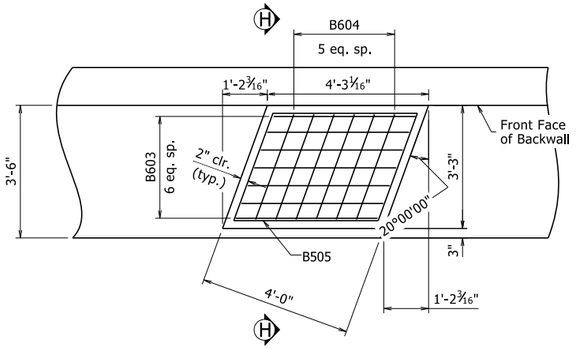
SECTION C-C

½"=1'-0"



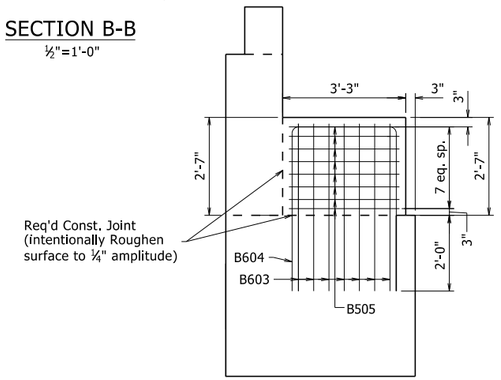
STUB WALL DETAIL

½"=1'-0"



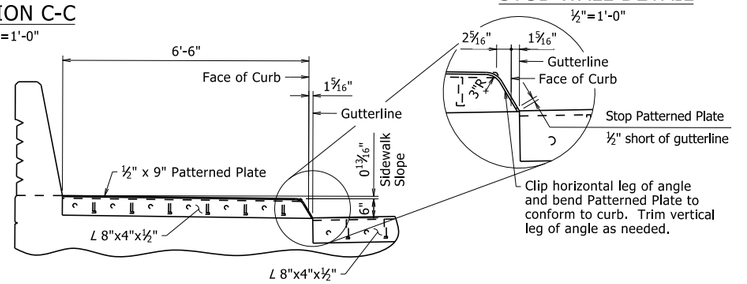
PLAN OF CONCRETE RESTRAINER

½"=1'-0"



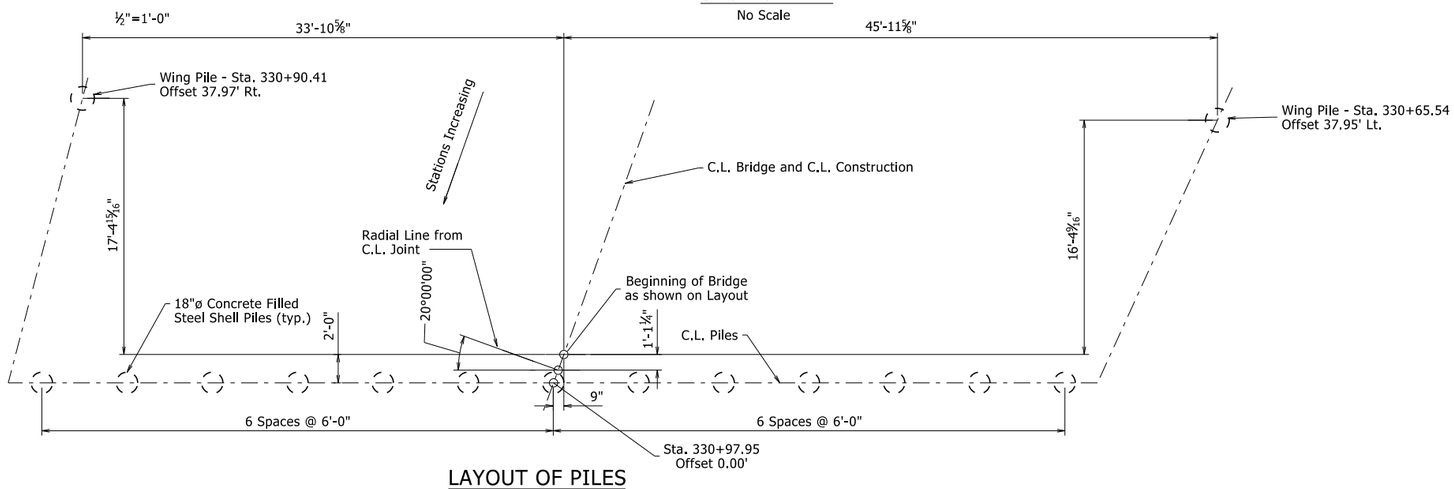
SECTION H-H

No Scale



SIDEWALK & CURB DETAIL

NO SCALE



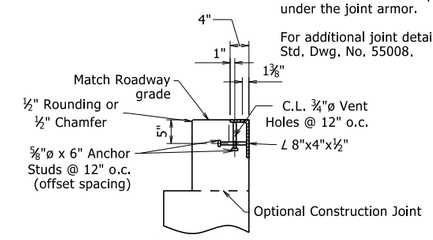
LAYOUT OF PILES

No Scale

NOTES: Transverse spacing between vertical anchor studs and vent holes shall be 6".

Concrete shall be hand packed under the joint armor.

For additional joint details, see Std. Dwg. No. 55008.



DETAIL Z

NO SCALE

STATE OF ARKANSAS
Aug 3 2021 1:25 PM
LICENSED PROFESSIONAL ENGINEER
No. 9235
CHARLES R. ELLIS
BRIDGE ENGINEER

SHEET 2 OF 4
DETAILS OF BENT NO. 1
HIGHWAY 18 OVER UPRR & KATHLEEN STREET

ROUTE SEC.

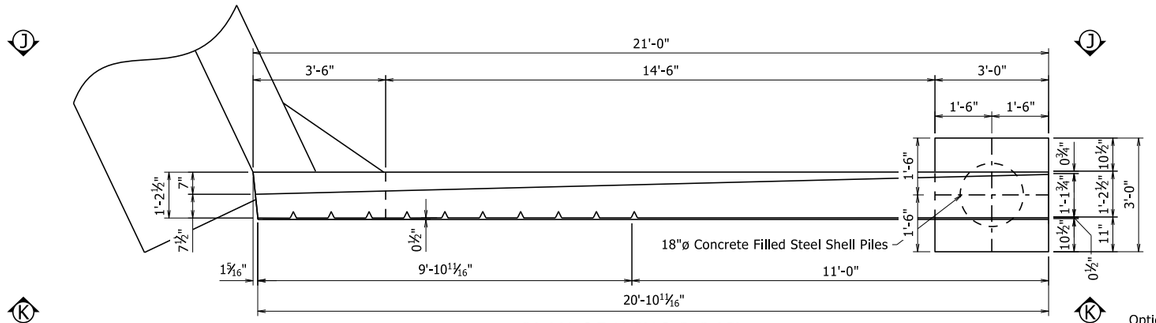
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: JWP DATE: 02-15-2021
CHECKED BY: MCB DATE: 02/16/2021
DESIGNED BY: MCB DATE: 01-2021
FILENAME: b100657_b1.dgn
SCALE: AS NOTED

BRIDGE NO. 07533 DRAWING NO. 63966

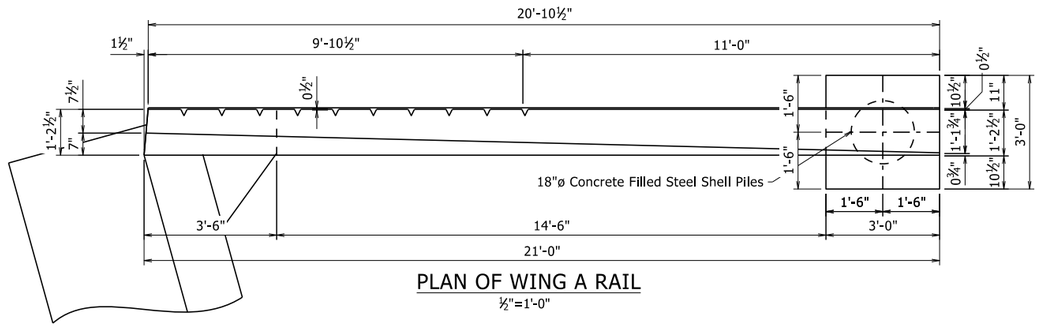
PRINT DATE: 9/3/2021

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		242	418
				JOB NO.		100657		
				07533 -	END BENT 1	- 63967		



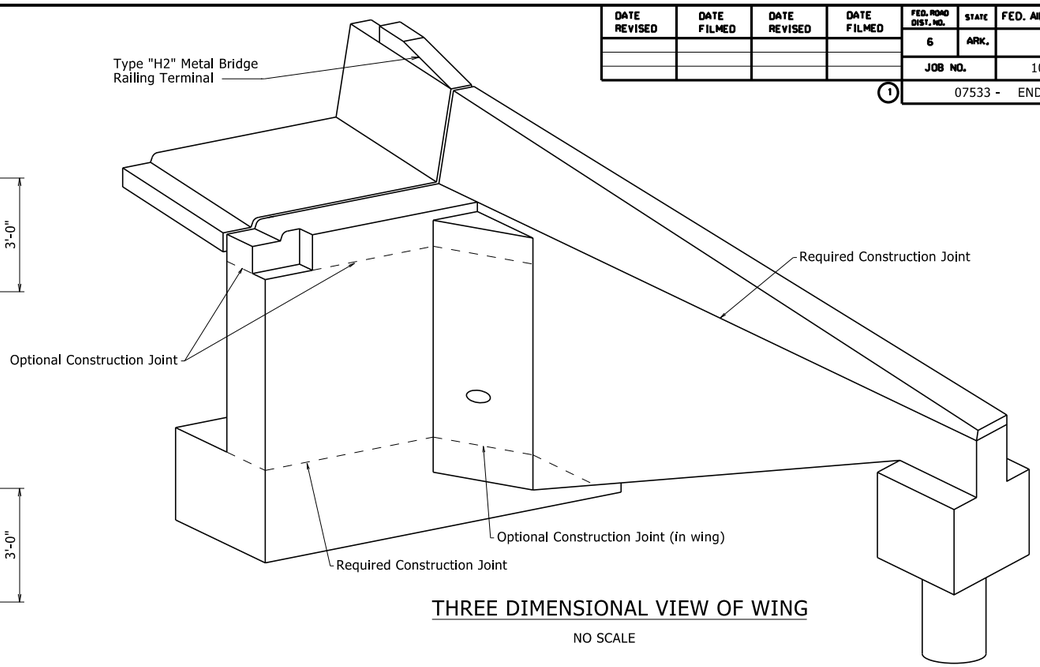
PLAN OF WING B RAIL

½"=1'-0"



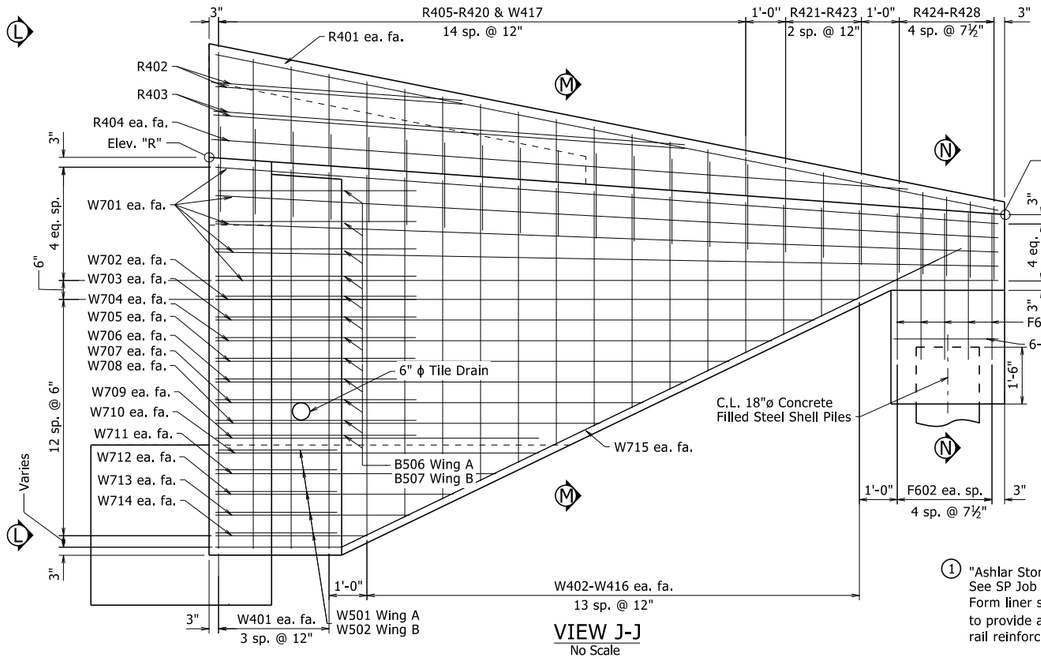
PLAN OF WING A RAIL

½"=1'-0"



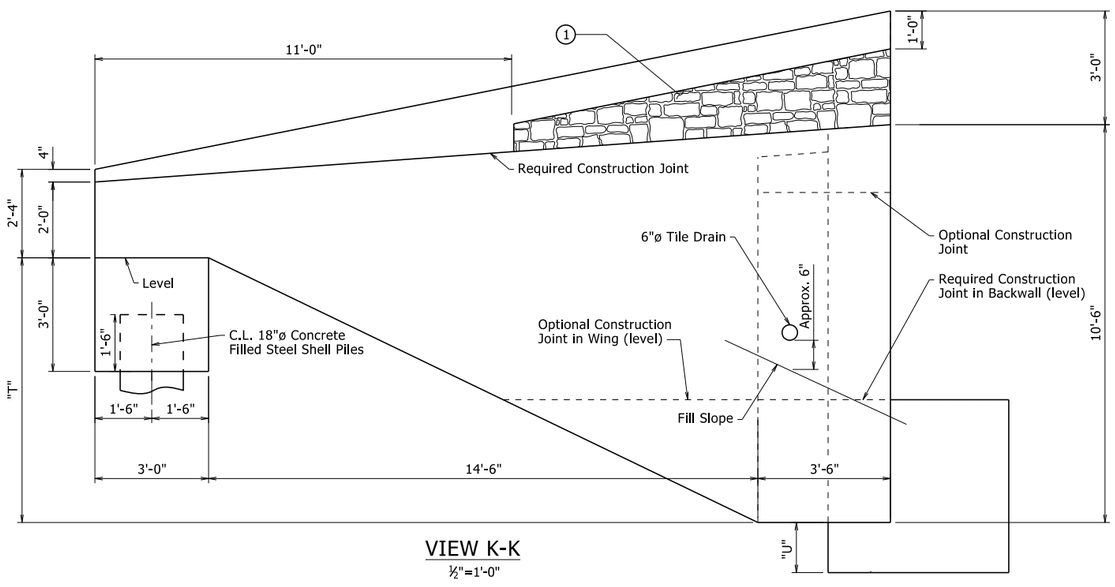
THREE DIMENSIONAL VIEW OF WING

NO SCALE



VIEW J-J

No Scale



VIEW K-K

½"=1'-0"

(1) "Ashlar Stone" Pattern Form Liner
See SP Job 100657 "Architectural Finish".
Form liner shall be max. depth of 1½"
to provide a min. clearance of 1½" to
rail reinforcing.

TABLE OF VARIABLES

WING	ELEV. "R"	ELEV. "S"	"T"	"U"
A	285.59	284.17	7'-0¹⁵⁄₁₆"	1'-0⅝"
B	285.91	284.38	6'-11⅝"	1'-3⅜"

NOTE:

See Drawing No. 63968 for "VIEW L-L",
"SECTION M-M" & "SECTION N-N"

STATE OF ARKANSAS
Sep 3 2021 1:25 PM
Charles R. Ellis
LICENSED PROFESSIONAL ENGINEER
No. 9235
CHARLES R. ELLIS
BRIDGE ENGINEER

SHEET 3 OF 4
DETAILS OF BENT NO. 1
HIGHWAY 18 OVER UPRR & KATHLEEN STREET

ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: JWP DATE: 02-15-2021 FILENAME: b100657_b1.dgn
CHECKED BY: MCB DATE: 02/16/2021 SCALE: AS NOTED
DESIGNED BY: MCB DATE: 01-2021
BRIDGE NO. 07533 DRAWING NO. 63967

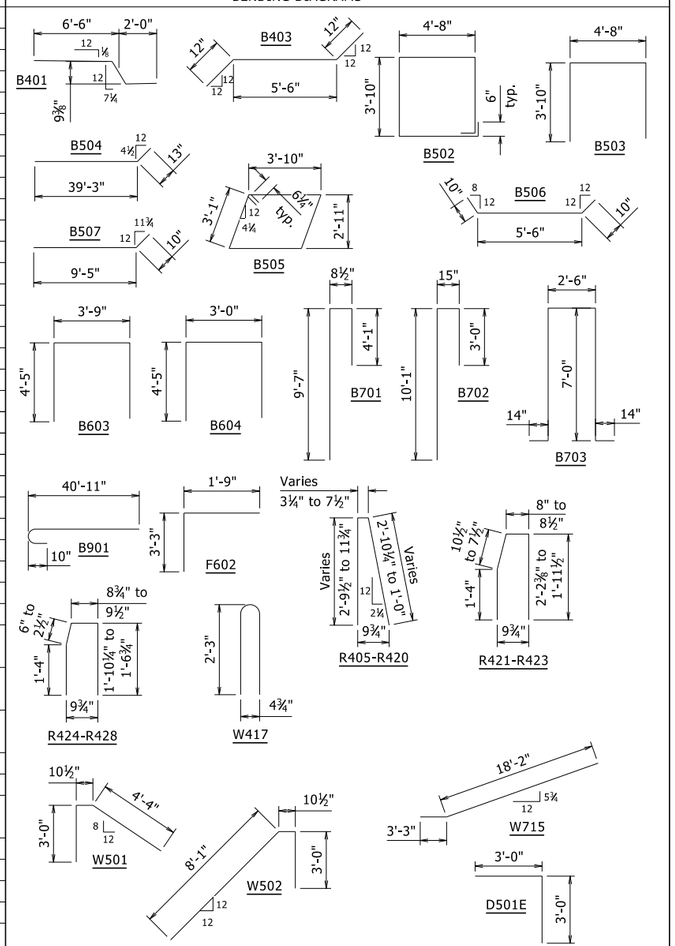
PRINT DATE: 9/3/2021

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		243	418
				JOB NO.		100657		
				①	07533 -	END BENT 1	- 63968	

BAR LIST

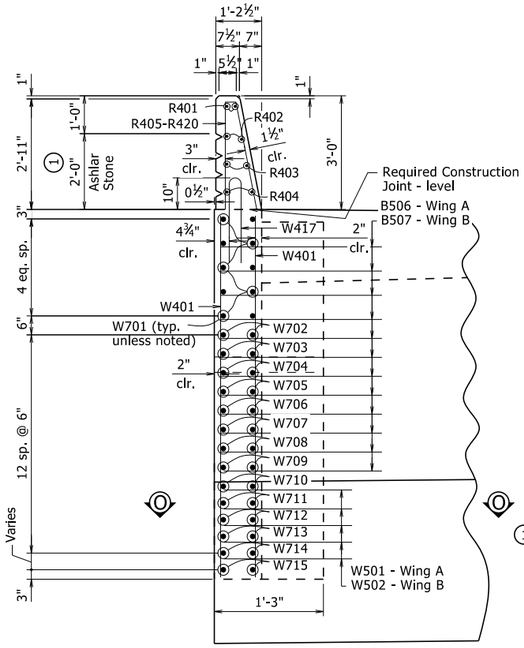
MARK	NO. REQ'D	LENGTH	P.D.
B401	4	8'-9"	3"
B402	80	10'-2"	Str.
B403	168	7'-6"	3"
B404	6	10'-2"	Str.
B501	20	40'-0"	Str.
B502	115	17'-6"	2½"
B503	39	12'-2"	2½"
B504	36	40'-4"	3¾"
B505	32	14'-6"	2½"
B506	12	7'-0"	3¾"
B507	12	10'-3"	3¾"
B601	123	8'-4"	Str.
B602	28	10'-1"	Str.
B603	28	12'-4"	4½"
B604	24	11'-7"	4½"
B701	123	14'-0"	5¼"
B702	28	13'-11"	5¼"
B703	84	18'-5"	5¼"
B901	32	42'-2"	9"
D501E	123	5'-11"	3¾"
F601	12	2'-8"	Str.
F602	20	4'-11"	4½"
R401	4	20'-11"	Str.
R402	4	6'-7"	Str.
R403	4	12'-5"	Str.
R404	4	18'-5"	Str.
R405 - R420	4 ea.	5'-10" - 2'-6"	2"
R421 - R423	4 ea.	5'-0" - 4'-7"	2"
R424 - R428	4 ea.	4'-4" 3'-10"	2"
W401	16	10'-2"	Str.
W402 - W416	4 ea.	9'-5" - 2'-4"	Str.
W417	30	4'-8"	3¾"
W501	5	8'-1"	3¾"
W502	5	11'-10"	3¾"
W701	20	20'-8"	Str.
W702 - W714	4 ea.	16'-11" - 4'-6"	Str.
W715	4	21'-5"	5¼"

BENDING DIAGRAMS

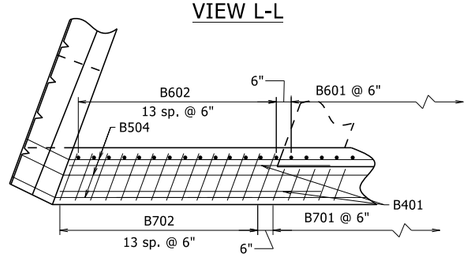


Dimensions are out to out of bars.

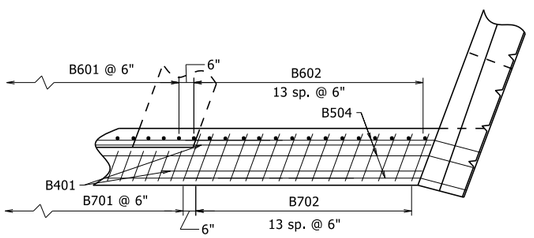
Bars with an "E" suffix are to be epoxy coated.



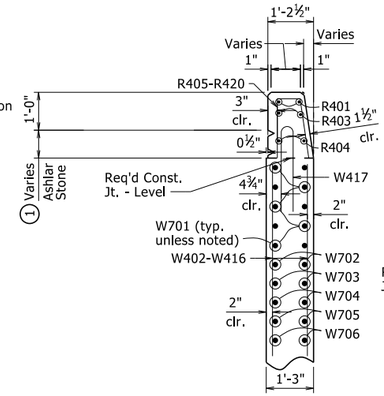
VIEW L-L



VIEW F-F
NO SCALE

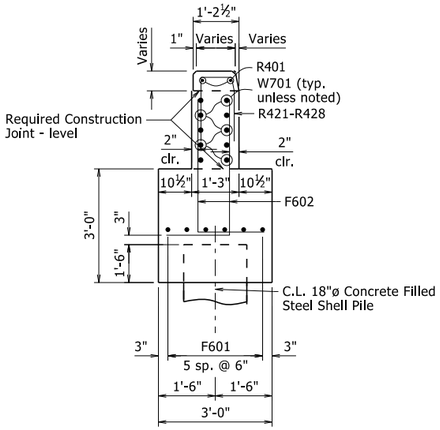


VIEW G-G
NO SCALE

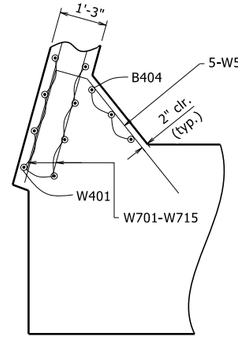


SECTION M-M

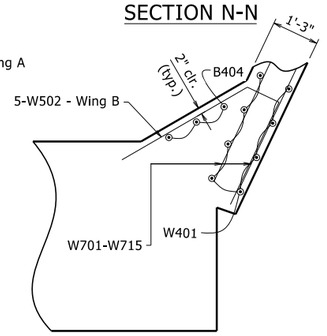
① "Ashlar Stone" Pattern Form Liner See SP Job 100657" Architectural Finish". Form liner shall be max. depth of 1½" to provide a min. clearance of 1½" to rail reinforcing.



SECTION N-N



SECTION O-O
Wing A



SECTION O-O
Wing B

STATE OF ARKANSAS
Sep 3 2021 1:25 PM
LICENSED PROFESSIONAL ENGINEER
No. 9235
CHARLES R. ELLIS
BRIDGE ENGINEER

SHEET 4 OF 4
DETAILS OF BENT NO. 1
HIGHWAY 18 OVER UPRR & KATHLEEN STREET

ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: JWP DATE: 02-15-2021
CHECKED BY: MCB DATE: 02/16/2021
DESIGNED BY: MCB DATE: 01-2021
FILENAME: b100657_b1.dgn
SCALE: No Scale

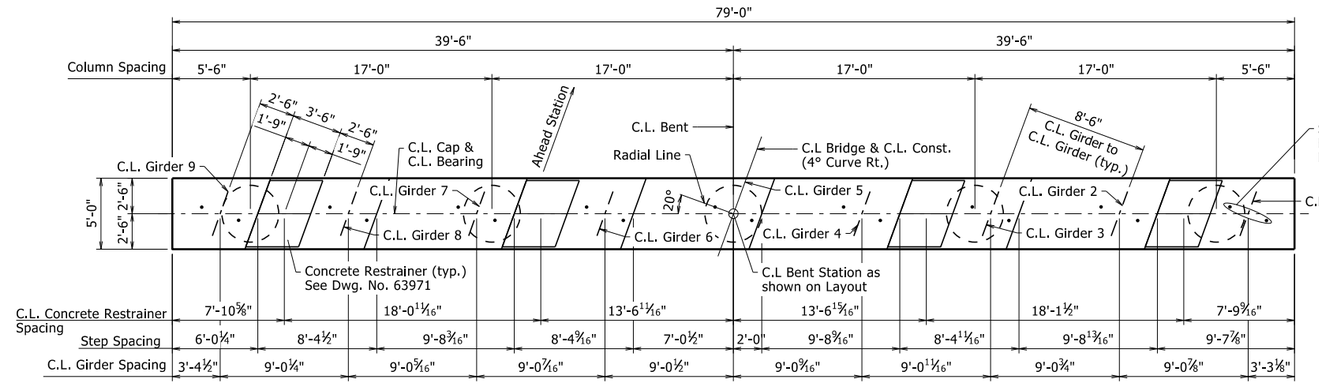
BRIDGE NO. 07533 DRAWING NO. 63968

PRINT DATE: 9/3/2021

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	ARK.		244	418
JOB NO.		100657		

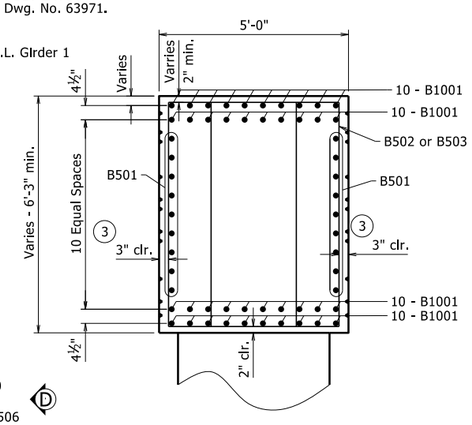
① 07533 - INT. BENT - 63969



PLAN - BENT 2

Notes:
For General Notes, See Std. Dwg. No. 55006.
For "SECTION C-C" and "VIEW D-D", See Dwg. No. 63971.

③ Form liner relief shall be a maximum of 1" to provide a minimum clear cover of 2".

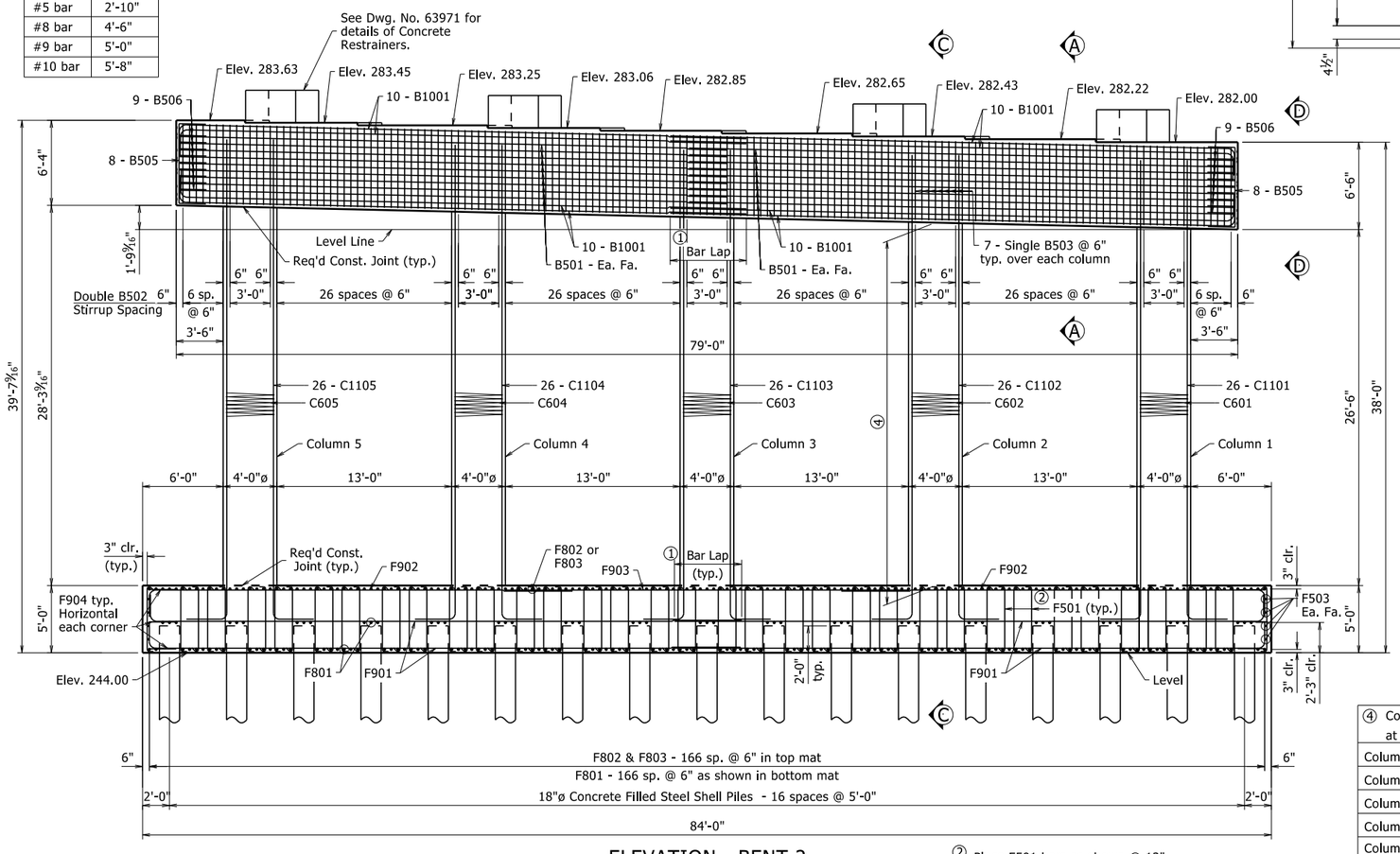


SECTION A-A
½" = 1'-0"

BAR LIST - BENT 2

MARK	NO. REQ'D	LENGTH	A	B	P.D.
B501	36	40'-9"			Str.
B502	244	18'-6"			2½"
B503	35	16'-2"	4'-6"	5'-11"	2½"
B504	20	16'-6"			3¾"
B505	16	9'-8"	5'-10"	2'-0"	2½"
B506	18	8'-3"	4'-5"	2'-0"	2½"
B601	40	11'-6"	3'-3"	4'-3"	4½"
B602	24	12'-8"	4'-5"	4'-3"	4½"
B1001	80	43'-9"	1'-10"	42'-2"	10"
C601	1	1154'-6"			Spiral
C602	1	1165'-7"			Spiral
C603	1	1176'-8"			Spiral
C604	1	1198'-9"			Spiral
C605	1	1209'-10"			Spiral
C606	95	12'-11"			4½"
C1101	26	35'-10"	2'-0"	34'-2"	11¼'
C1102	26	36'-3"	2'-0"	34'-7"	11¼"
C1103	26	36'-10"	2'-0"	35'-2"	11¼"
C1104	26	37'-0"	2'-0"	35'-4"	11¼"
C1105	26	37'-5"	2'-0"	35'-9"	11¼"
F501	1240	6'-0"			3¾"
F502	16	43'-3"			Str.
F503	8	17'-6"			Str.
F801	167	19'-9"	1'-4"	17'-6"	6"
F802	167	8'-2"	1'-4"	7'-0"	6"
F803	167	16'-2"	1'-4"	15'-0"	6"
F901	70	45'-9"	1'-8"	44'-4"	9"
F902	70	33'-2"	1'-8"	31'-9"	9"
F903	35	30'-2"			Str.
F904	12	9'-9"			9"

① Min. Bar Lap	
#5 bar	2'-10"
#8 bar	4'-6"
#9 bar	5'-0"
#10 bar	5'-8"

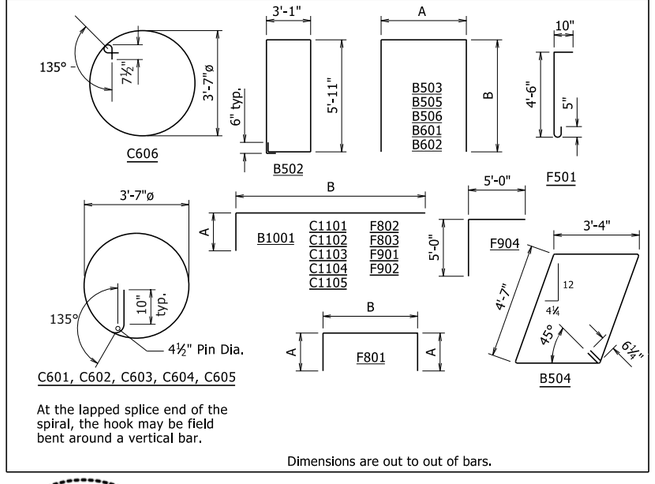


ELEVATION - BENT 2
Looking Ahead

④ Column Height at C.L. Column	
Column 1	26'-7½"
Column 2	27'-0⅛"
Column 3	27'-4¾"
Column 4	27'-9⅜"
Column 5	28'-2"

② Place F501 bars as shown @ 12" spacing in both directions. F501 bars not needed in area of spiral reinforcing and piling. See "PARTIAL FOOTING PLAN" Dwg. No. 63972.

BENDING DIAGRAMS



At the lapped splice end of the spiral, the hook may be field bent around a vertical bar.

Dimensions are out to out of bars.

STATE OF ARKANSAS
Dec 3 2021 1:25 PM
LICENSED PROFESSIONAL ENGINEER
No. 9235
CHARLES R. ELLIS
BRIDGE ENGINEER

SHEET 1 OF 4
DETAILS OF INTERMEDIATE BENTS
HIGHWAY 18 OVER UPRR & KATHLEEN STREET

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: MCB DATE: 01/26/21
CHECKED BY: JWP DATE: 02/13/21
DESIGNED BY: MCB DATE: 12/2020
FILENAME: b100657_b2.dgn
SCALE: 3/16" = 1'-0" or as noted
BRIDGE NO. 07533
DRAWING NO. 63969

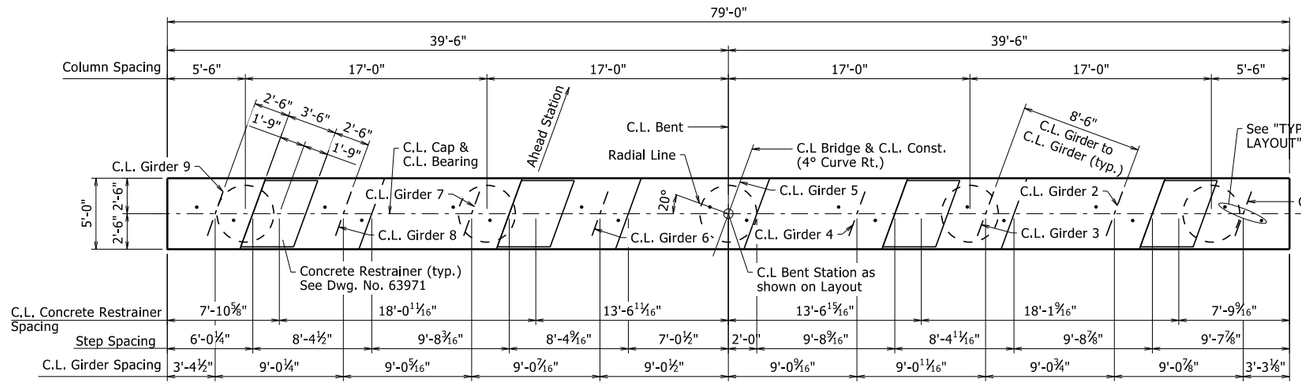
PRINT DATE: 9/3/2021

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		245	418
				JOB NO.		100657		
				①		07533 - INT. BENT - 63970		

BAR LIST - BENT 3

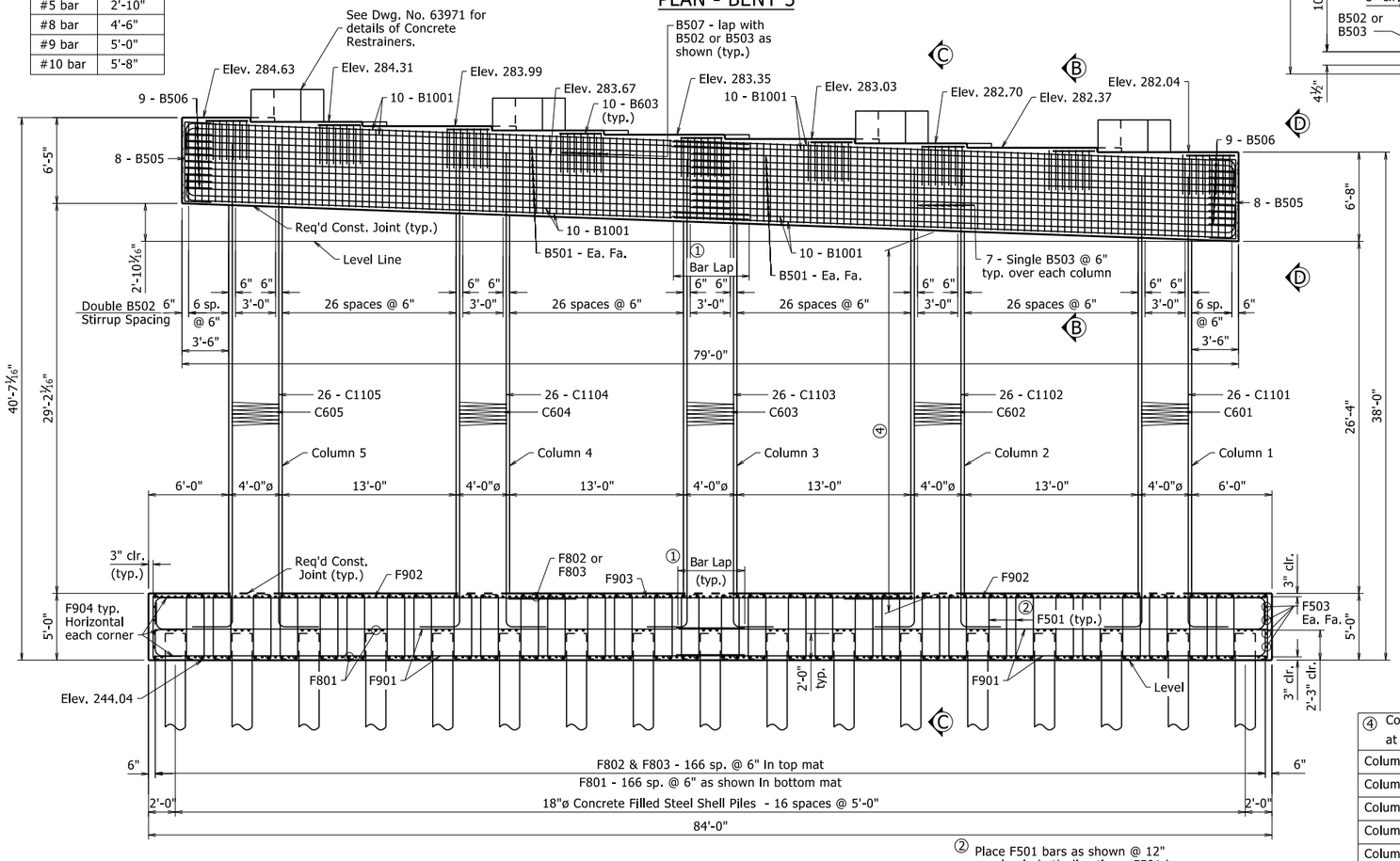
MARK	NO. REQ'D	LENGTH	A	B	P.D.
B501	36	40'-9"			Str.
B502	244	18'-6"			2½"
B503	35	16'-2"	4'-6"	5'-11"	2½"
B504	20	16'-6"			3¾"
B505	16	7'-8"	5'-10"	2'-0"	2½"
B506	18	8'-3"	4'-5"	2'-0"	2½"
B507	63	8'-7"	4'-9"	2'-0"	3¾"
B601	40	11'-6"	3'-3"	4'-3"	4½"
B602	24	12'-6"	4'-5"	4'-3"	4½"
B603	90	3'-2"			Str.
B1001	80	43'-9"	1'-10"	42'-3"	10"
C601	1	1143'-5"			Spiral
C602	1	1176'-8"			Spiral
C603	1	1198'-9"			Spiral
C604	1	1220'-11"			Spiral
C605	1	1243'-0"			Spiral
C606	95	12'-11"			4½"
C1101	26	35'-8"	2'-0"	34'-0"	11¼"
C1102	26	36'-5"	2'-0"	34'-9"	11¼"
C1103	26	37'-0"	2'-0"	35'-4"	11¼"
C1104	26	37'-7"	2'-0"	35'-11"	11¼"
C1105	26	38'-3"	2'-0"	36'-7"	11¼"
F501	1240	6'-0"			3¾"
F502	16	43'-3"			Str.
F503	8	17'-6"			Str.
F801	167	19'-9"	1'-4"	17'-6"	6"
F802	167	8'-2"	1'-4"	7'-0"	6"
F803	167	16'-2"	1'-4"	15'-0"	6"
F901	70	45'-9"	1'-8"	44'-4"	9"
F902	70	33'-2"	1'-8"	31'-9"	9"
F903	35	30'-2"			Str.
F904	12	9'-9"			9"

Notes:
For General Notes, See Std. Dwg. No. 55006.
For "SECTION C-C" and "VIEW D-D", See Dwg. No. 63971.



① Min. Bar Lap	
#5 bar	2'-10"
#8 bar	4'-6"
#9 bar	5'-0"
#10 bar	5'-8"

PLAN - BENT 3

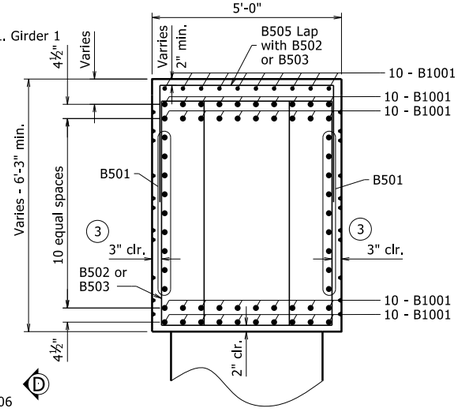


ELEVATION - BENT 3

Looking Ahead

④ Column Height at C.L. Column	
Column 1	26'-5½"
Column 2	27'-1¹¹⁄₁₆"
Column 3	27'-9⅛"
Column 4	28'-4⅜"
Column 5	28'-11¹¹⁄₁₆"

② Place F501 bars as shown @ 12" spacing in both directions. F501 bars not needed in area of spiral reinforcing and piling. See "PARTIAL FOOTING PLAN" Dwg. No. 63972.

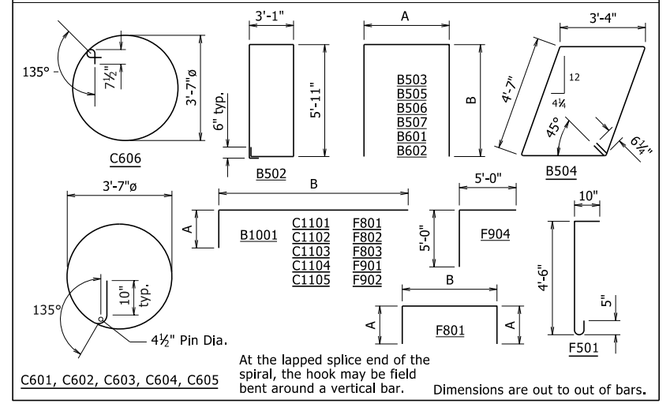


SECTION B-B

½" = 1'-0"

③ Form liner relief shall be a maximum of 1" to provide a minimum clear cover of 2".

BENDING DIAGRAMS



C601, C602, C603, C604, C605

At the lapped splice end of the spiral, the hook may be field bent around a vertical bar.

Dimensions are out to out of bars.

STATE OF ARKANSAS
Dec 3 2021 1:26 PM
LICENSED PROFESSIONAL ENGINEER
No. 9235
CHARLES R. ELLIS
BRIDGE ENGINEER

SHEET 2 OF 4
DETAILS OF INTERMEDIATE BENTS
HIGHWAY 18 OVER UPRR & KATHLEEN STREET

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: MCB DATE: 01/26/21
CHECKED BY: JWP DATE: 02/13/21
DESIGNED BY: MCB DATE: 12/2020
FILENAME: b100657_b2.dgn
SCALE: 3/16" = 1'-0" or as noted

BRIDGE NO. 07533 DRAWING NO. 63970

PRINT DATE: 9/3/2021

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
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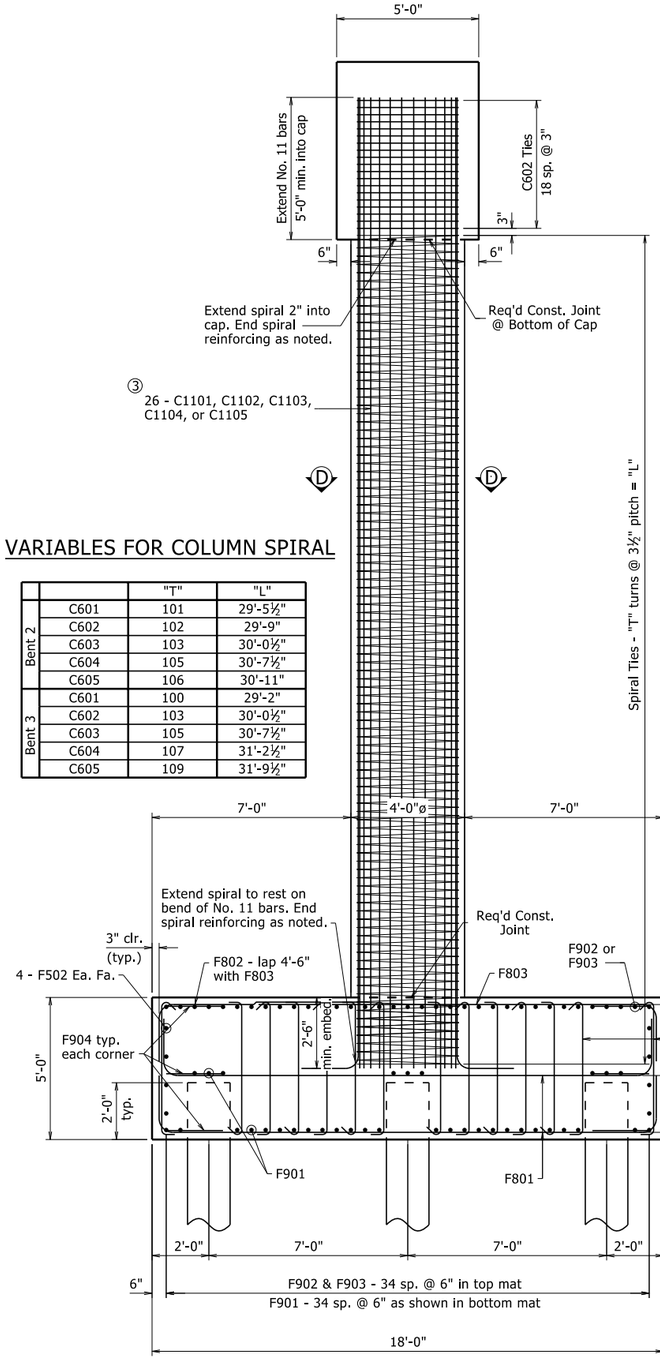
				JOB NO.		100657		
				①	07533 -	INT. BENT - 63971		

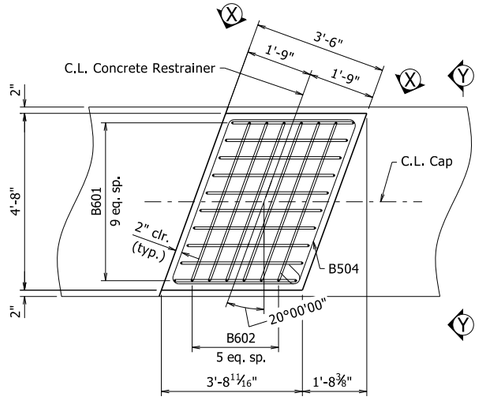


SECTION C-C

⅜" = 1'-0"

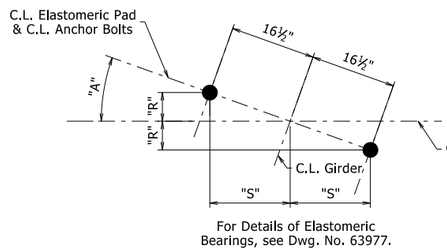
VARIABLES FOR COLUMN SPIRAL

		"T"	"L"
Bent 2	C601	101	29'-5½"
	C602	102	29'-9"
	C603	103	30'-0½"
	C604	105	30'-7½"
	C605	106	30'-11"
Bent 3	C601	100	29'-2"
	C602	103	30'-0½"
	C603	105	30'-7½"
	C604	107	31'-2½"
	C605	109	31'-9½"



PLAN OF CONCRETE RESTRAINER

½" = 1'-0"



For Details of Elastomeric Bearings, see Dwg. No. 63977.

ANCHOR BOLT LAYOUT

No Scale

VARIABLES FOR ANCHOR BOLT LAYOUT

	"A"	"S"	"R"
Girder 1	20°30'28"	15 7/16"	5 13/16"
Girder 2	20°22'42"	15 7/16"	5¾"
Girder 3	20°15'02"	15½"	5 11/16"
Girder 4	20°07'01"	15½"	5 11/16"
Girder 5	20°00'00"	15½"	5⅝"
Girder 6	19°52'37"	15½"	5⅝"
Girder 7	19°45'27"	15½"	5 9/16"
Girder 8	19°38'45"	15 9/16"	5 9/16"
Girder 9	19°31'22"	15 9/16"	5 ½"

GENERAL NOTES:

For General Notes, see Std. Dwg. No. 55006.

All piling shall be Grade 3 (Fy = 45 ksi). For details of steel piling, see Std. Dwg. No. 55020.

For additional information, see Layout.

NOTES FOR SPIRAL REINFORCING:

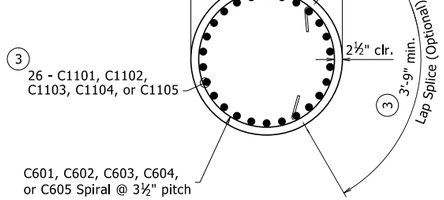
Spiral reinforcing shall be plain round or deformed steel bars meeting the requirements of AASHTO M 31 or M 322, Type A, with mill test reports (Grade 60) or shall be cold drawn wire meeting the requirements of AASHTO M 32 or M 225 (Grade 70) with a minimum diameter of 0.75".

Spiral reinforcement shall be paid for at the contract unit price bid per pound for "Reinforcing Steel - Bridge (Grade 60)". No additional payment shall be made for spacers, additional splices or bracing needed for assembly, shipping, handling, or erecting.

The Contractor may elect to use a different number of spiral lapped splices per column. In no case shall a spiral be lapped within 5'-0" of the top or bottom of the column.

Splices in spiral reinforcement shall be lapped a mininum of 60 bar diameters.

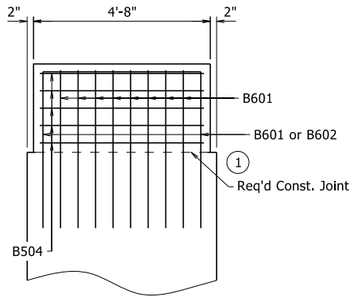
Spiral reinforcement at lapped splices shall be terminated by a 135° hook with a 10" tail around a vertical bar. Hook may be field bent (with 4½" Pin Dia.). Ends of spirals not lapped shall be terminated with 1½ turns and a 135° hook with an 10" tail around a vertical bar.



SECTION D-D

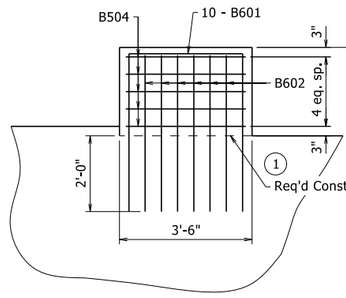
½" = 1'-0"

③ Lapped splices will not be permitted for the longitudinal column reinforcing (C1101, C1102, C1103, C1104, & C1105). The Contractor may submit a request to the Engineer for approval to use mechanical couplers near the mid-height of the column. All work and materials to use mechanical couplers will not be paid for directly, but will be considered subsidiary to the item "Reinforcing Steel - Bridge (Grade 60)".



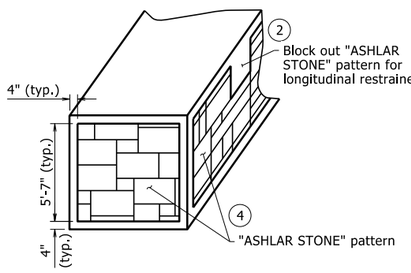
VIEW Y-Y

½" = 1'-0"



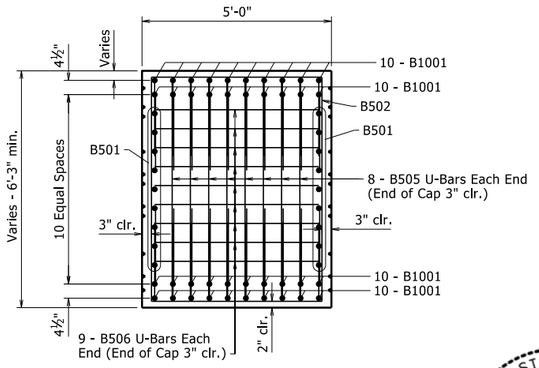
VIEW X-X

½" = 1'-0"



CAP-ISOMETRIC VIEW

No Scale



VIEW D-D

½" = 1'-0"

① All Concrete Restrainer construction joints shall be intentionally roughened to ¼" amplitude.

② "ASHLAR STONE" pattern shall be blocked out 1" clear on all sides of the longitudinal restrainer bearing areas.

④ "ASHLAR STONE" pattern form liner. See SP Job 100657 "Architectural Finish". Form liner relief shall be a maximum depth of 1" to provide a minimum clear cover of 2" to reinforcing.

STATE OF ARKANSAS
Sep 3 2021 1:26 PM
Charles R. Ellis
LICENSED PROFESSIONAL ENGINEER
No. 9235
CHARLES R. ELLIS

BRIDGE ENGINEER

SHEET 3 OF 4
DETAILS OF INTERMEDIATE BENTS
HIGHWAY 18 OVER UPRR & KATHLEEN STREET

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: MCB DATE: 01/26/21 FILENAME: b100657_b2.dgn
CHECKED BY: JWP DATE: 02/13/21 SCALE: AS NOTED
DESIGNED BY: MCB DATE: 12/2020

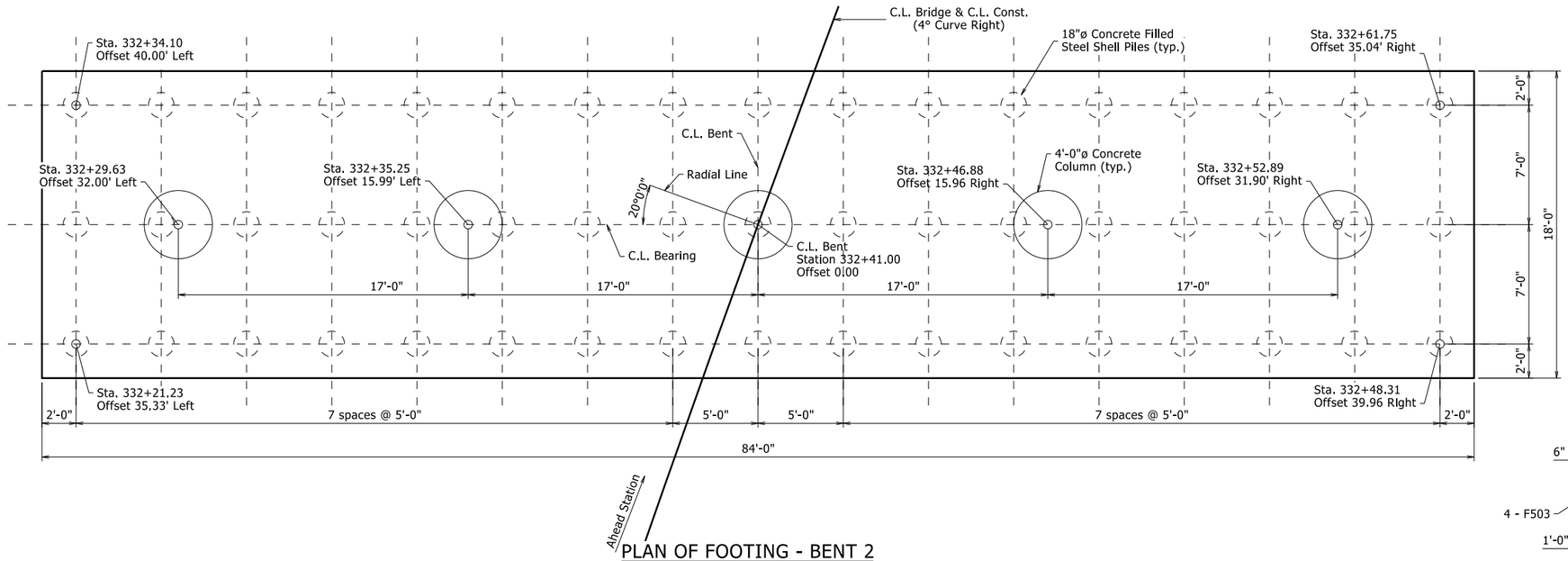
BRIDGE NO. 07533 DRAWING NO. 63971

PRINT DATE: 9/3/2021

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

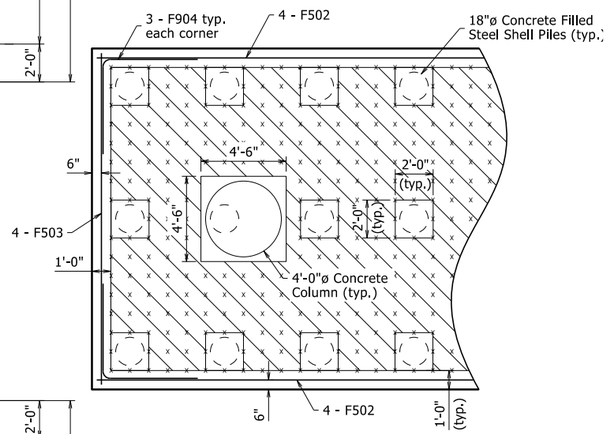
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	ARK.		247	418
JOB NO.		100657		

1 07533 - INT. BENT - 63972



PLAN OF FOOTING - BENT 2

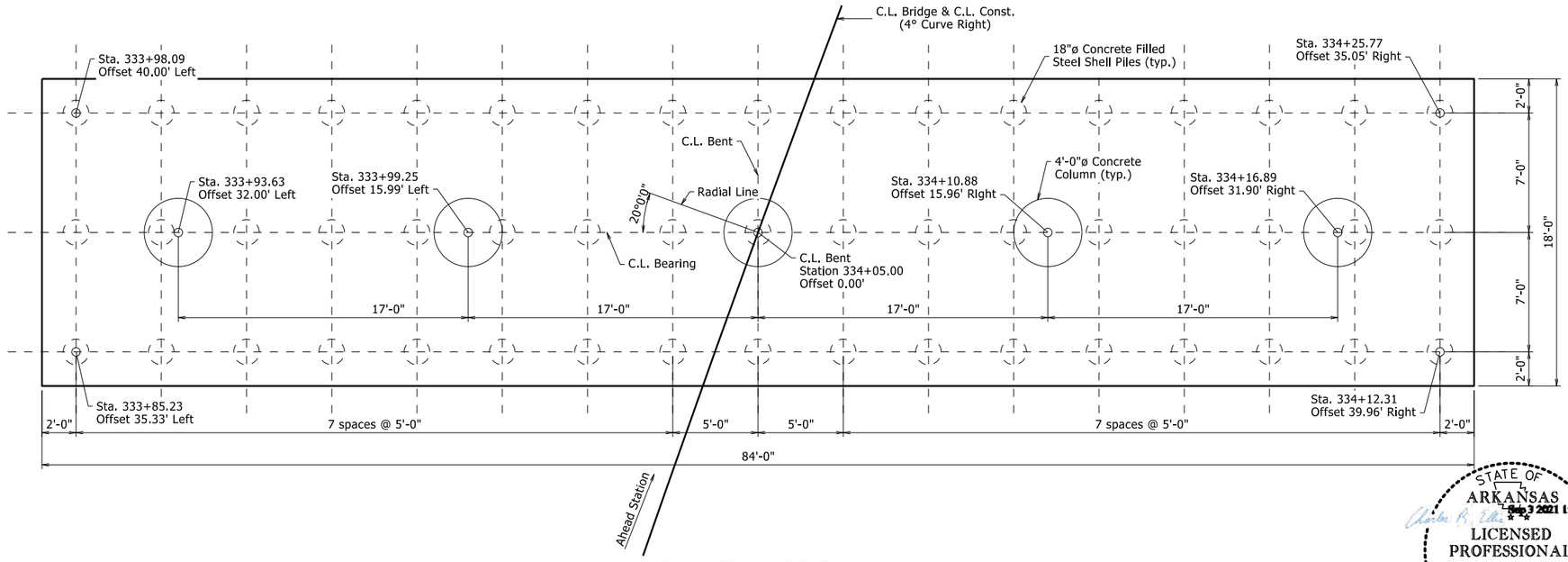
¼" = 1'-0"



Place F501 bars within hatched area at 12" max. spacing in both directions.

PARTIAL FOOTING PLAN

¼" = 1'-0"



PLAN OF FOOTING - BENT 3

¼" = 1'-0"

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9-3-2021 1:26 PM
LICENSED PROFESSIONAL ENGINEER
No. 9235
CHARLES R. ELLIS

BRIDGE ENGINEER

SHEET 4 OF 4
DETAILS OF INTERMEDIATE BENTS
HIGHWAY 18 OVER UPRR & KATHLEEN STREET

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: MCB	DATE: 01/26/21	FILENAME: b100657_b2.dgn	
CHECKED BY: JWP	DATE: 02/13/21	SCALE: AS NOTED	
DESIGNED BY: MCB	DATE: 12/2020		

BRIDGE NO. 07533 DRAWING NO. 63972

PRINT DATE: 9/3/2021

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
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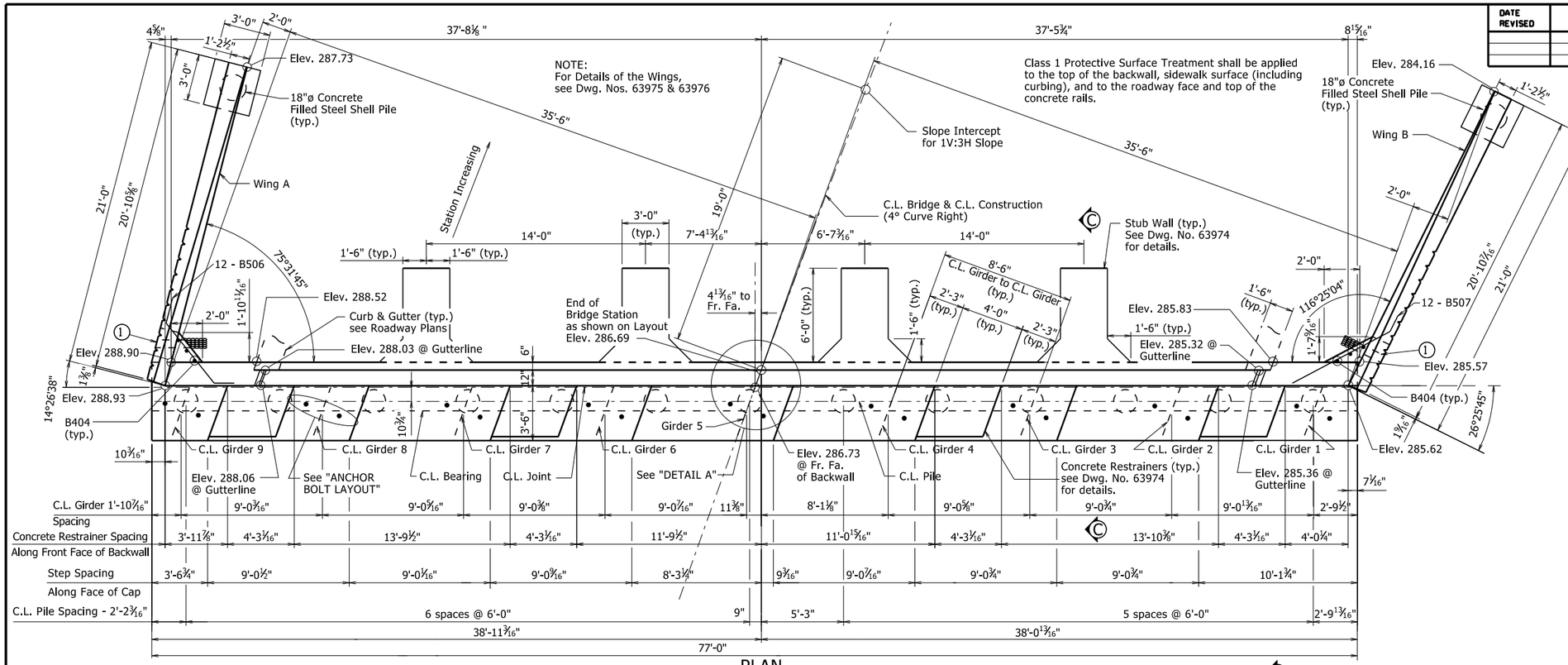
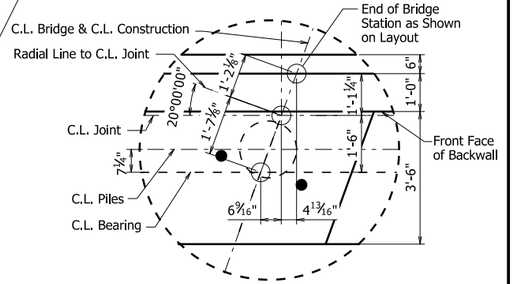
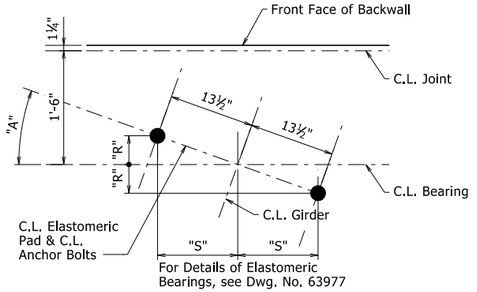
				①	07533 - END BENT 4 - 63973			



PLAN

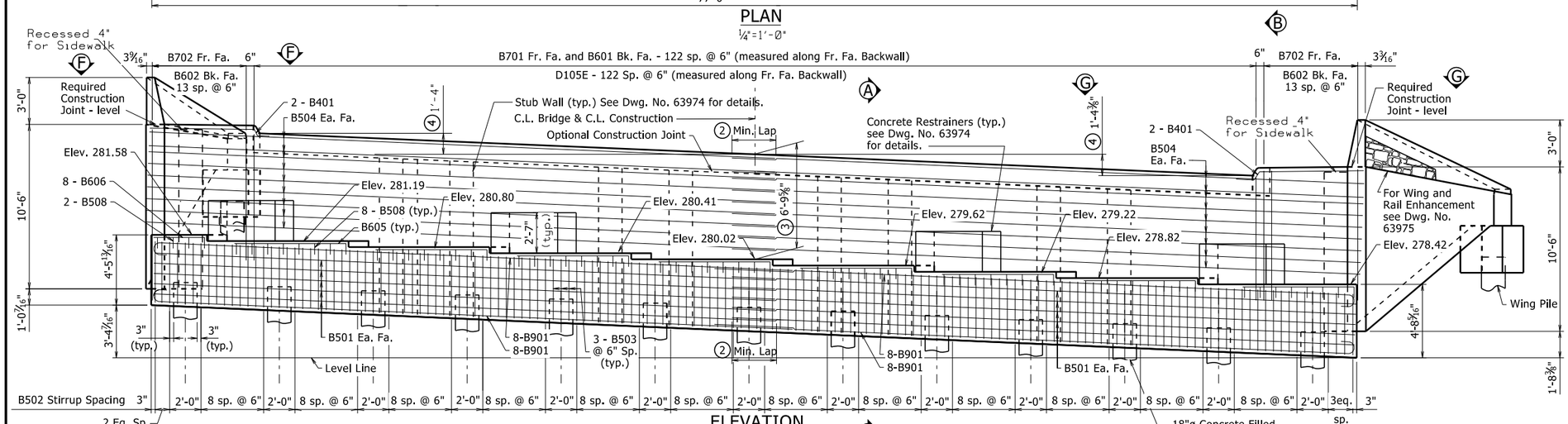


DETAIL A
½" = 1'-0"



ANCHOR BOLT LAYOUT
NO SCALE

	"A"	"S"	"R"
Girder 1	20°26'32"	12⅝"	4¹⁄₁₆"
Girder 2	20°18'48"	12¹⁄₁₆"	4¹⁄₁₆"
Girder 3	20°11'09"	12¹⁄₁₆"	4¹⁄₁₆"
Girder 4	20°03'37"	12¹⁄₁₆"	4⅝"
Girder 5	19°56'10"	12¹⁄₁₆"	4⅝"
Girder 6	19°48'49"	12¹⁄₁₆"	4⅜"
Girder 7	19°41'33"	12¹⁄₁₆"	4⅜"
Girder 8	19°34'23"	12¾"	4½"
Girder 9	19°27'18"	12¾"	4½"



ELEVATION
Looking Ahead
¼"=1'-0"

GENERAL NOTES:

For General Notes, see Std. Dwg. No. 55006.

For Joint Details see Std. Dwg. No. 55008 & "SIDEWALK SECTION THRU JOINT AT END BENT" on Dwg No. 63979.

Structural steel In Bent 4 shall be ASTM A709, Gr. 50W and shall be paid for as "Structural Steel in Plate Girder Spans (A709, Gr. 50W)".

All piling shall be Grade 3 (Fy = 45 ksi). For details of steel piling, see Std. Dwg. No. 55020.

For additional information, see Layout.

NOTES:

① Place 6"ø tile drains approx. 6" above fill slope. Spread bars as required. Place 6 cu. ft. of sacked ¾" crushed rock or gravel at each drain. All work and materials to install drains shall be subsidiary to "Class S Concrete."

② #5 Bars: 2'-9" Minimum Lapped Splice Length.
#9 Bars: 4'-11" Minimum Lapped Splice length

③ Measured at C.L. Bridge at Front Face of Backwall.

④ Top of Backwall at C.L. Bridge to Gutterline

No portion of the backwall shall be poured before the girders are in place. The portion of the backwall above the optional construction joint at the paving bracket shall not be placed until the adjacent deck pour has been made. Refer to the "EXPANSION DEVICE INSTALLATION AT END BENTS" note on Std. Dwg. No. 55008. No heavy construction equipment shall be allowed within 10' of the backwall before the deck concrete placement for the adjacent span has been completed.

See Dwg. No. 63974 for "SECTION A-A", "SECTION B-B, "VIEW C-C" for placement of reinforcing.

See Dwg. No. 63976 for "VIEW F-F", "VIEW G-G" for placement of reinforcing.

See Dwg. No. 63974 for "LAYOUT OF PILES", "SIDEWALK & CURB DETAIL", "STUB WALL DETAIL" and "PLAN OF CONCRETE RESTRAINER".

STATE OF ARKANSAS
Sep 3 2021 1:26 PM
Charles R. Ellis
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SHEET 1 OF 4
DETAILS OF BENT NO. 4
HIGHWAY 18 OVER UPRR & KATHLEEN STREET

ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: EDO DATE: 01/26/21
CHECKED BY: MCB DATE: 02/18/21
DESIGNED BY: MCB DATE: 12/2020
FILENAME: b100657_b4.dgn
SCALE: AS NOTED

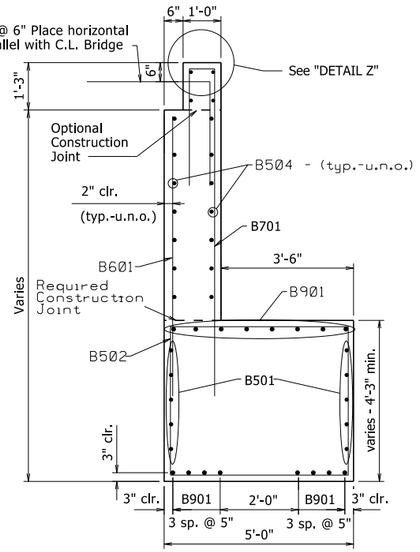
BRIDGE NO. 07533 DRAWING NO. 63973

PRINT DATE: 9/3/2021

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		249	418
				JOB NO.		100657		
				07533 -		END BENT 4 - 63974		

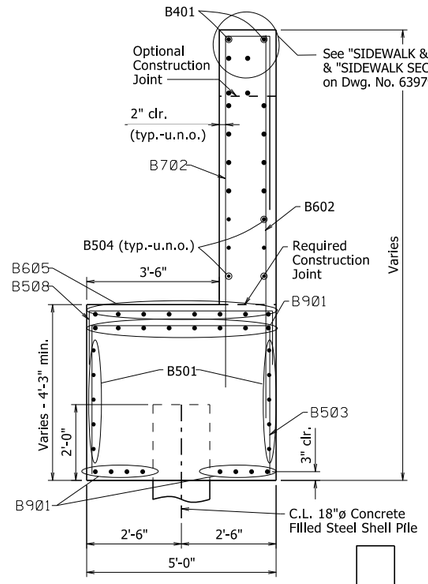
1

D501E @ 6" Place horizontal leg parallel with C.L. Bridge



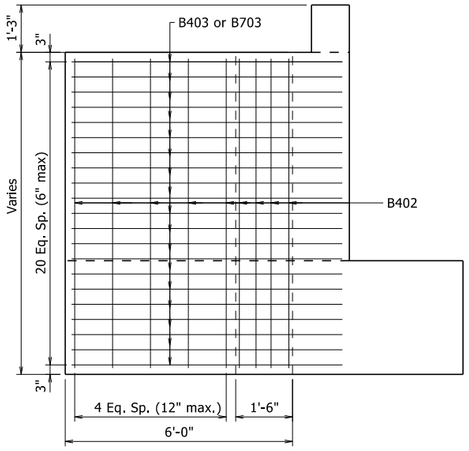
SECTION A-A

½"=1'-0"



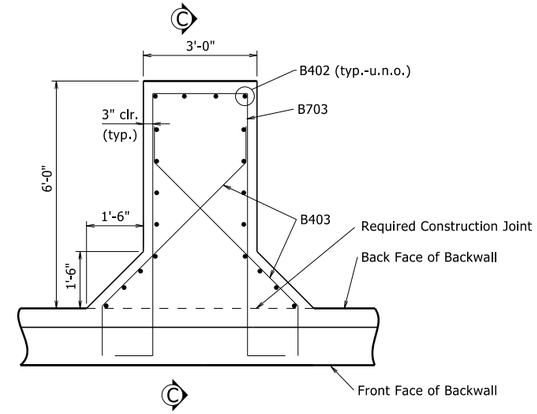
SECTION B-B

½"=1'-0"



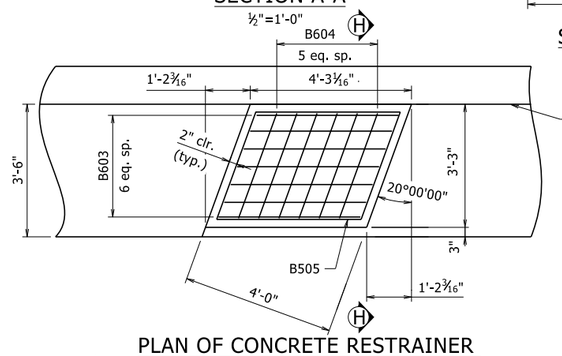
SECTION C-C

½"=1'-0"



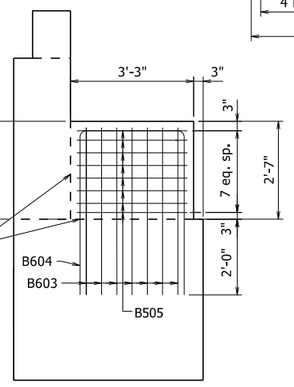
STUB WALL DETAIL

½"=1'-0"



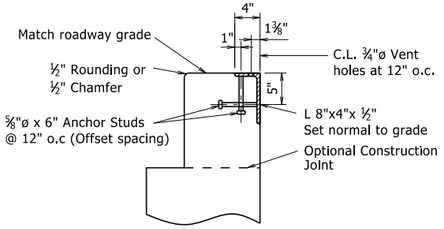
PLAN OF CONCRETE RESTRAINER

½"=1'-0"



SECTION H-H

NO SCALE



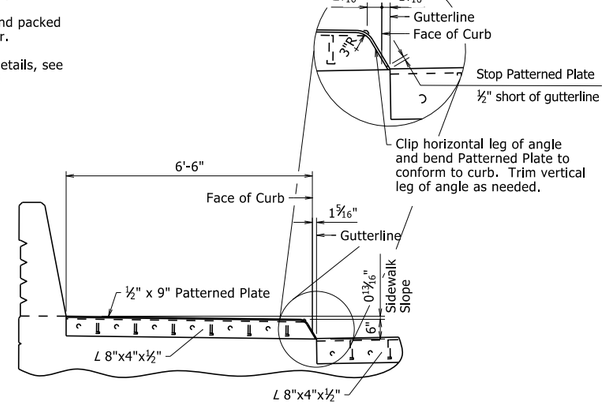
DETAIL Z

No Scale

NOTE:
Transverse spacing between vertical anchor studs and vent holes shall be 6".

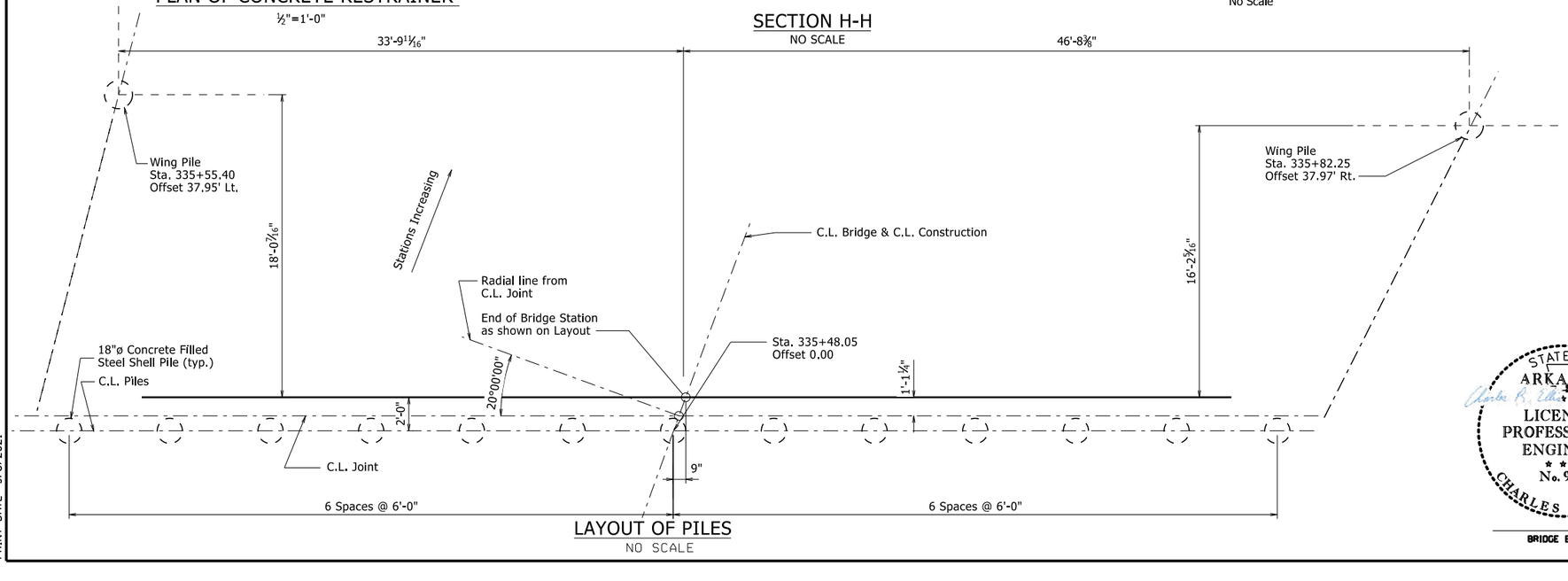
Concrete shall be hand packed under the joint armor.

For additional joint details, see Std. Dwg. No. 55008



SIDEWALK & CURB DETAIL

NO SCALE



LAYOUT OF PILES

NO SCALE

STATE OF ARKANSAS
3 2021 1:25 PM
LICENSED PROFESSIONAL ENGINEER
No. 9235
CHARLES R. ELLIS
BRIDGE ENGINEER

SHEET 2 OF 4
DETAILS OF BENT NO. 4
HIGHWAY 18 OVER UPRR & KATHLEEN STREET

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: EDO DATE: 1/26/21
CHECKED BY: MCB DATE: 2/18/21
DESIGNED BY: MCB DATE: 12/2020
FILENAME: b100657_b4.dgn
SCALE: AS NOTED

BRIDGE NO. 07533 DRAWING NO. 63974

PRINT DATE: 9/3/2021

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
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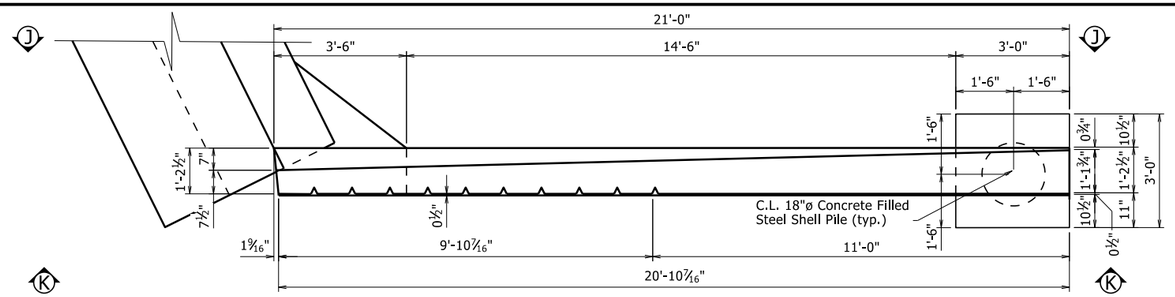
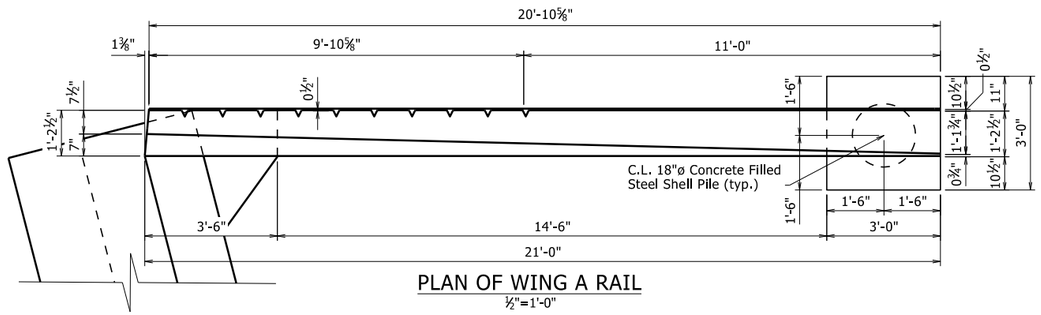
				JOB NO.		100657		
				①	07533 -	END BENT 4	- 63975	



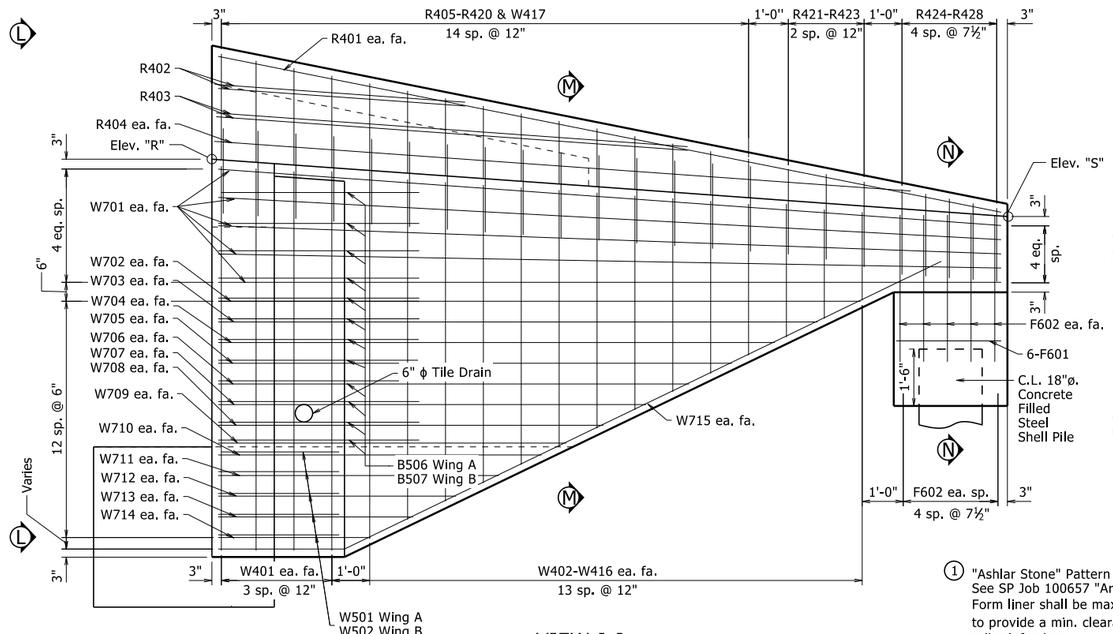
PLAN OF WING B RAIL

½"=1'-0"



PLAN OF WING A RAIL

½"=1'-0"



VIEW J-J

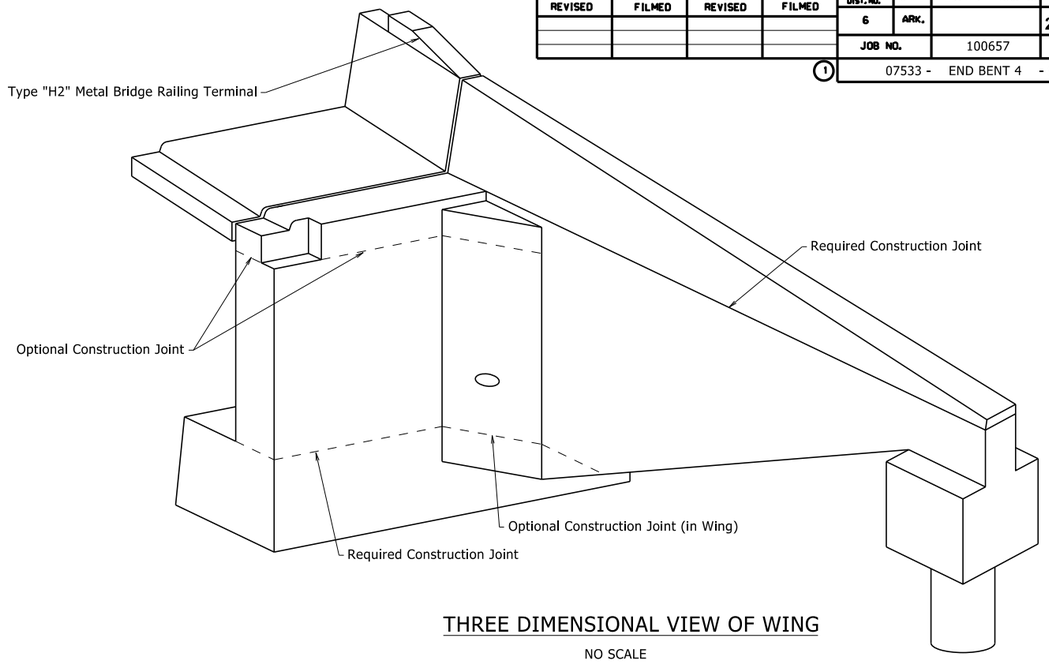
½"=1'-0"

TABLE OF VARIABLES

WING	ELEV. "R"	ELEV. "S"	"T"	"U"
A	288.90	287.73	7'-4"	1'-0 7/16"
B	285.62	284.16	7'-0½"	1'-8⅜"

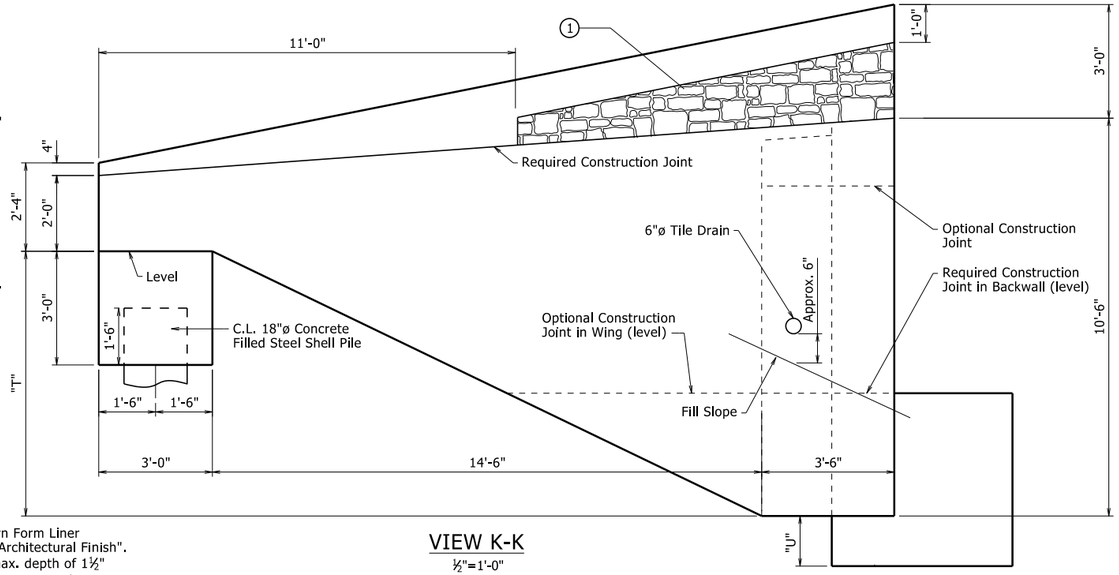
NOTE:

See Drawing No. 63976 for "VIEW L-L", "SECTION M-M" & "SECTION N-N"



THREE DIMENSIONAL VIEW OF WING

NO SCALE



① "Ashlar Stone" Pattern Form Liner See SP Job 100657 "Architectural Finish". Form liner shall be max. depth of 1½" to provide a min. clearance of 1½" to rail reinforcing.

VIEW K-K

½"=1'-0"

STATE OF ARKANSAS
Sep 3 2021 1:26 PM
LICENSED PROFESSIONAL ENGINEER
No. 9235
CHARLES R. ELLIS
BRIDGE ENGINEER

SHEET 3 OF 4

DETAILS OF BENT NO. 4

HIGHWAY 18 OVER UPRR & KATHLEEN STREET

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: EDO DATE: 01/26/21 FILENAME: b100657_b4.dgn

CHECKED BY: MCB DATE: 02/18/21 SCALE: AS NOTED

DESIGNED BY: MCB DATE: 12/2020

BRIDGE NO. 07533 DRAWING NO. 63975

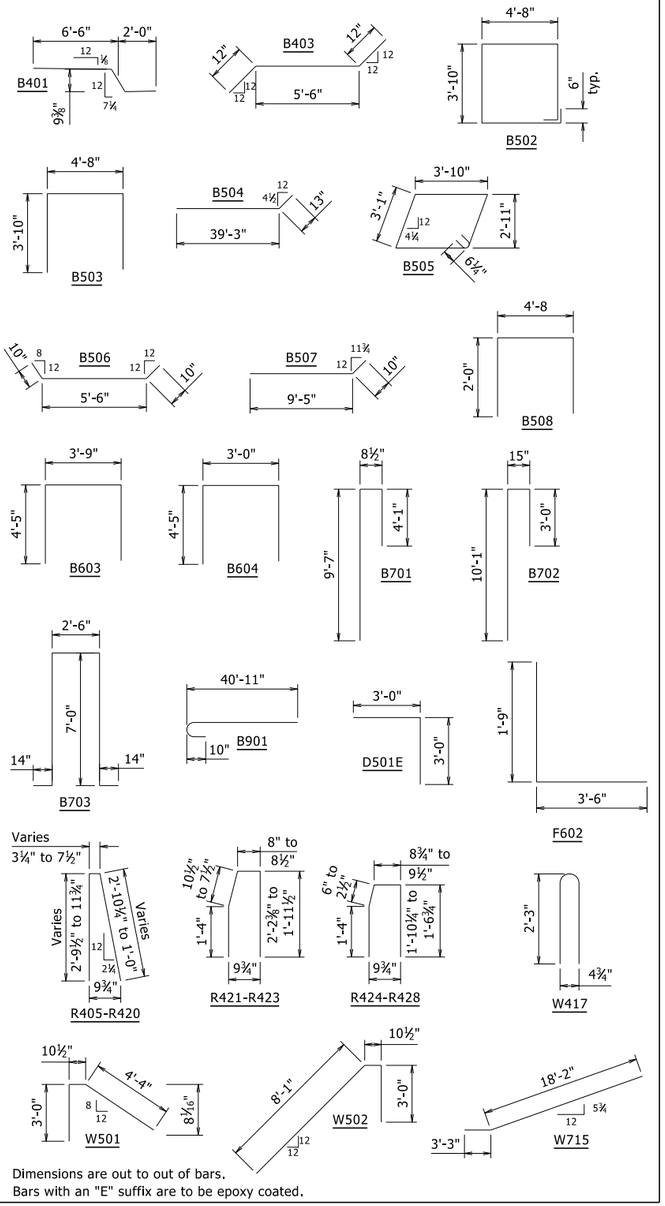
PRINT DATE: 9/3/2021

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		251	418
				JOB NO.		100657		
				①	07533 -	END BENT 4	- 63976	

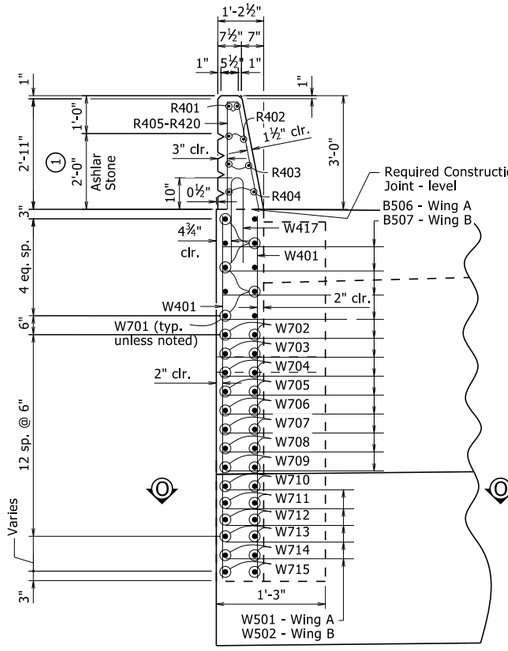
BAR LIST

MARK	NO. REQ'D	LENGTH	P.D.
B401	4	8'-9"	3"
B402	80	10'-2"	Str.
B403	168	7'-6"	3"
B404	6	10'-2"	Str.
B501	20	40'-0"	Str.
B502	115	17'-6"	2½"
B503	39	12'-2"	2½"
B504	36	40'-4"	3¾"
B505	32	14'-6"	2½"
B506	12	7'-0"	3¾"
B507	12	10'-3"	3¾"
B508	66	8'-5"	2½"
B601	123	8'-4"	Str.
B602	28	10'-1"	Str.
B603	28	12'-4"	4½"
B604	24	11'-7"	4½"
B605	64	8'-0"	Str.
B606	8	3'-2"	Str.
B701	123	14'-0"	5¼"
B702	28	13'-11"	5¼"
B703	84	18'-5"	5¼"
B901	32	42'-2"	9"
D501E	123	5'-11"	3¾"
F601	12	2'-8"	Str.
F602	20	5'-1"	4½"
R401	4	20'-11"	Str.
R402	4	6'-7"	Str.
R403	4	12'-5"	Str.
R404	4	18'-5"	Str.
R405 - R420	4 ea.	5'-10" - 2'-6"	2"
R421 - R423	4 ea.	5'-0" - 4'-7"	2"
R424 - R428	4 ea.	4'-4" 3'-10"	2"
W401	16	10'-2"	Str.
W402 - W416	4 ea.	9'-5" - 2'-4"	Str.
W417	30	4'-8"	3¾"
W501	5	8'-1"	3¾"
W502	5	11'-10"	3¾"
W701	20	20'-8"	Str.
W702 - W714	4 ea.	16'-11" - 4'-6"	Str.
W715	4	21'-5"	5¼"

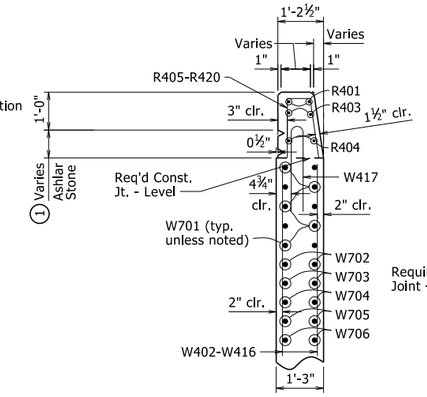
BENDING DIAGRAMS



Dimensions are out to out of bars.
Bars with an "E" suffix are to be epoxy coated.

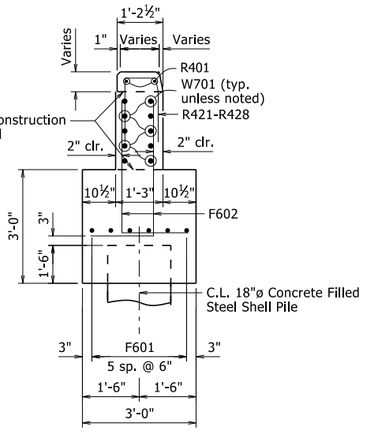


VIEW L-L

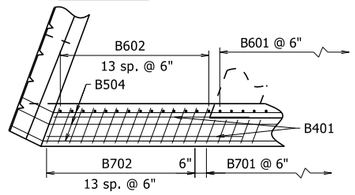


SECTION M-M

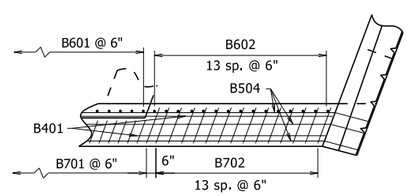
① "Ashlar Stone" Pattern Form Liner
See SP Job 100657" Architectural Finish".
Form liner shall be max. depth of 1½"
to provide a min. clearance of 1½" to
rall reinforcing.



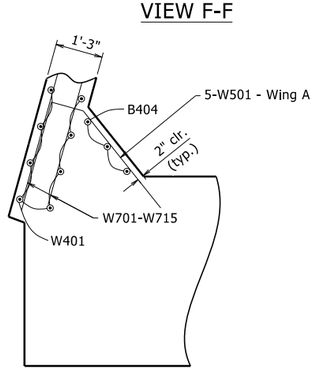
SECTION N-N



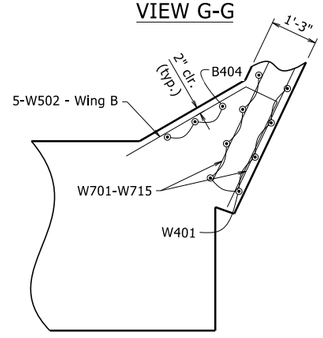
VIEW F-F



VIEW G-G



SECTION O-O
Wing A



SECTION O-O
Wing A

BRIDGE ENGINEER

SHEET 4 OF 4
DETAILS OF BENT NO. 4
HIGHWAY 18 OVER UPRR & KATHLEEN STREET

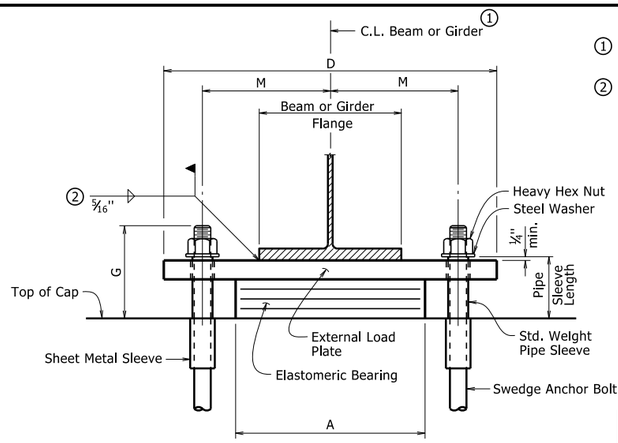
ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: EDO DATE: 01/26/21
CHECKED BY: MCB DATE: 2/18/21
DESIGNED BY: MCB DATE: 12/2020
FILENAME: b100657_b4.dgn
SCALE: No Scale

BRIDGE NO. 07533
DRAWING NO. 63976

PRINT DATE: 9/3/2021

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		252	418
				JOB NO.		100657		
				①	07533 - ELASTO. BEARINGS - 63977			



FRONT VIEW

Bents 1 & 4

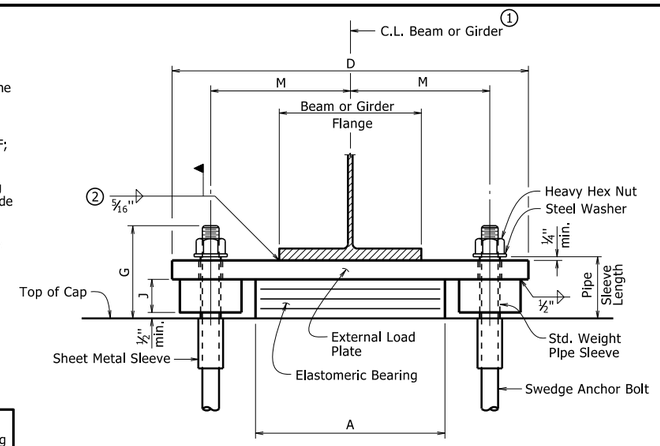
① C.L. Elastomeric Pad shall be aligned with C.L. Beam or Girder.

② Unless otherwise approved by the Engineer, welding of the external load plate at expansion bearings to the beam or girder will be allowed only when: 1) the approximate average air temperature during the 24 hour period immediately preceding welding is between 40°F and 80°F; and 2) the slots in the external load plate are positioned to center on the anchor bolts; and 3) no horizontal deformation of the elastomeric pad is evident. If welding at other temperatures is required, the Engineer will provide adjustment data.

Care shall be taken to ensure that the external load plate is in full and complete contact with the beam or girder flange before welding begins.

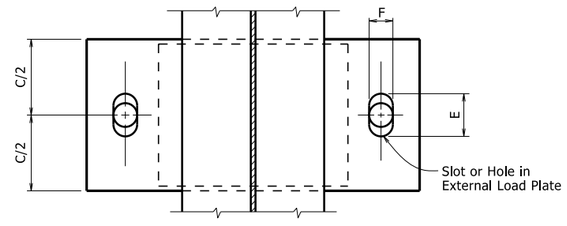
The direction of bevel of the external load plate may not be accurately depicted with respect to Ta and Tb values shown in the "Table of Fabricator Variables".

Prior to erection of the beams or girders, the Contractor shall verify the orientation of the bearing with respect to Ta and Tb.



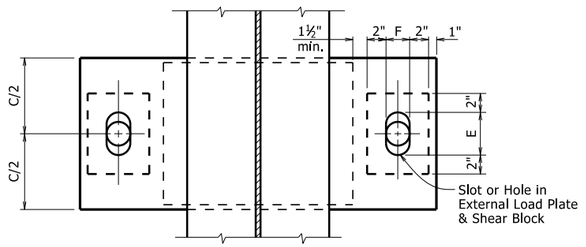
FRONT VIEW - BENTS WITH SHEAR BLOCKS

Bents 2 & 3



PLAN VIEW

Bents 1 & 4

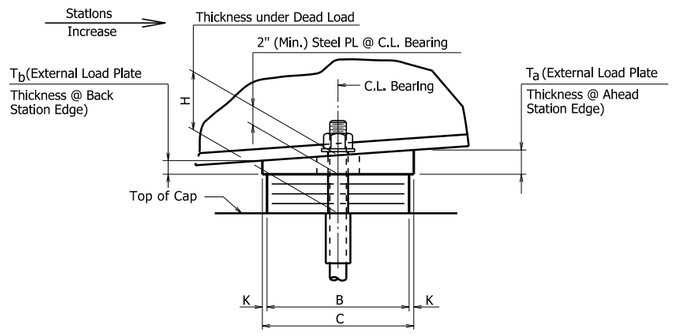


PLAN VIEW - BENTS WITH SHEAR BLOCKS

Bents 2 & 3

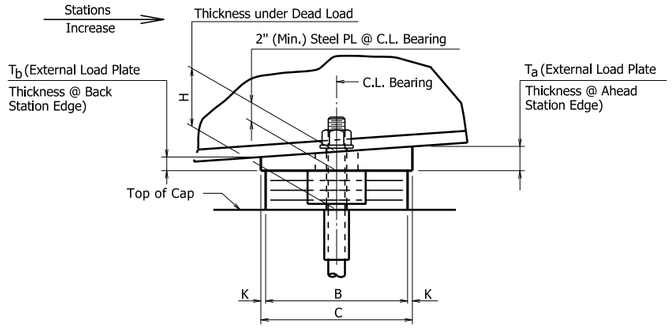
④ TABLE OF VARIABLES

LOCATION			
BENT NO(S).	BEAM OR GIRDER NO.	T_a	T_b
1	1 & 2	2.28	1.72
1	3, 4, & 5	2.29	1.71
1	6 & 7	2.30	1.70
1	8	2.31	1.69
1	9	2.52	1.9
2	1	2.10	1.90
2	2 & 3	2.11	1.89
2	4, 5, & 6	2.12	1.88
2	7, 8, & 9	2.13	1.87
3	1	1.90	2.10
3	2, 3, & 4	1.91	2.09
3	5 & 6	1.92	2.08
3	7, 8, & 9	1.93	2.07
4	1 & 2	1.73	2.27
4	3, 4, & 5	1.74	2.26
4	6, 7, & 8	1.75	2.25
4	9	1.76	2.24



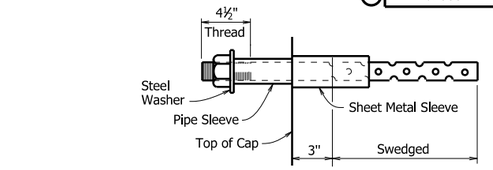
SIDE VIEW

Bents 1 & 4



SIDE VIEW - BENTS WITH SHEAR BLOCKS

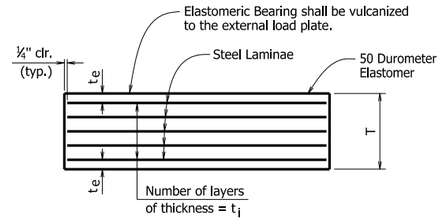
Bents 2 & 3



ANCHOR BOLT DETAIL

Anchor Bolts may be cast in place or drilled and grouted into place. If Anchor Bolts are to be cast in place, the Galvanized Sheet Metal Sleeves will not be required.

If Anchor Bolts are to be drilled and grouted in place, the Galvanized Sheet Metal Sleeves shall be cast in place as shown. Sleeves shall be dry packed with styrofoam, urethane foam or approved equal prior to pouring of concrete. After pouring of the cap and prior to erection of Structural Steel, the dry pack shall be removed and holes for the anchor bolts shall be accurately drilled into the concrete. Bolts placed in drilled holes shall be accurately set and fixed using a QPL approved epoxy or non-shrink grout that completely fills the holes. Galvanized Sheet Metal Sleeves shall meet the requirements of ASTM 653, CS Type B or approved equivalent, be of minimum 16 gage thickness, and be galvanized according to ASTM B695, Class 50. Sheet Metal Sleeves will not be paid for directly, but will be considered subsidiary to the item "Structural Steel in Plate Girder Spans (A709, Gr. 50W)".



t_e = Thickness of elastomer cover on top and bottom of pad

t_i = Thickness of elastomer between steel laminae

N = Number of elastomer layers of thickness t_i

ELASTOMERIC BEARING

GENERAL NOTES

Elastomeric Bearings shall conform to Section 808 and shall be paid for at the unit price bid for "Elastomeric Bearings".

External load plates and shear blocks shall conform to ASTM A709, Grade 50W. Pipe sleeves shall be ASTM A500, Grade B, and shall be galvanized to conform to AASHTO M 232, Class C or ASTM B695, Class 50.

External load plates and shear blocks shall be completely fabricated (including bevel, bolt holes and all shop welding) and shall be cleaned before vulcanizing to the elastomeric bearing. The surface in contact with the elastomeric bearing shall be cleaned in accordance with Subsection 808.03. Other surfaces shall be blast cleaned in accordance with Subsection 807.84(b) for painted steel and 807.84(e) for unpainted Grade 50W steel.

Anchor Bolts, Washers and Nuts shall conform to Subsection 807.07. The anchor bolt grade of steel shall be as specified in the "Table of Fabricator Variables". Indentations shall be circular with rounded bottoms and staggered as shown in the details.

Pipe Sleeves, Anchor Bolts, Washers and Nuts shall be paid for at the unit price bid for "Structural Steel in Plate Girder Spans (A709, Gr. 50W)",External load plates and shear blocks will not be measured or paid for separately, but will be considered incidental to the unit price bid for "Elastomeric Bearings".

Bearings shall be seated in accordance with Subsection 808.08. This work and materials are considered subsidiary to the item "Elastomeric Bearings" and will not be paid for directly.

TABLE OF FABRICATOR VARIABLES

③ Maximum Design Load = Service 1 Limit State

BRIDGE NO.	LOCATION		BEARING TYPE	NO. of BEARINGS EACH BENT	③ MAXIMUM DESIGN LOAD (KIPS)	ELASTOMERIC PAD							EXTERNAL LOAD PLATE									ANCHOR BOLT				
	BENT NO(S).	BEAM OR GIRDER NO.				G	H	A	B	N	t_i	t_e	NO. & THICKESS OF STEEL LAMINAE	T	C	D	E	F	J	K	M	T_a	T_b	ANCHOR BOLT (Ø x L)	GRADE	PIPE SLEEVE SIZE (Ø x L)	SHEET METAL SLEEVE SIZE (Ø x L)	STEEL WASHER SIZE (O.D.)
07533	1	1-8	Exp.	8	195	10½"	6 3/16"	20"	14"	6	½"	¼"	7 @ 12 ga.	4¼"	15"	34"	8¾"	3¾"	NA	½"	13½"	④	④	2¾"Ø x 40"	55	3"Ø x 6½"	5"Ø x 6"	5"
	1	9	Exp.	1	195	10½"	6⅜"	20"	14"	6	½"	¼"	7 @ 12 ga.	4¼"	15"	34"	8¾"	3¾"	NA	½"	13½"	④	④	2¾"Ø x 40"	55	3"Ø x 6⅜"	5"Ø x 6"	5"
	2	All	Fix	9	522	8¼"	4⅜"	22"	14"	3	½"	¼"	4 @ 12 ga.	2 7/16"	15"	42¾"	3¾"	3¾"	1⅞"	½"	16½"	④	④	2½"Ø x 35"	55	3"Ø x 4⅜"	4"Ø x 6"	4½"
	3	All	Fix	9	522	8¼"	4⅜"	22"	14"	3	½"	¼"	4 @ 12 ga.	2 7/16"	15"	42¾"	3¾"	3¾"	1⅞"	½"	16½"	④	④	2½"Ø x 35"	55	3"Ø x 4⅜"	4"Ø x 6"	4½"
	4	All	Exp.	9	195	10½"	6 3/16"	20"	14"	6	½"	¼"	7 @ 12 ga.	4¼"	15"	34"	8¾"	3¾"	NA	½"	13½"	④	④	2¾"Ø x 40"	55	3"Ø x 6½"	5"Ø x 6"	5"

PRINT DATE: 9/3/2021

STATE OF ARKANSAS
Sep 3 2021 1:27 PM
LICENSED PROFESSIONAL ENGINEER
No. 9235
CHARLES R. ELLIS
BRIDGE ENGINEER

DETAILS OF ELASTOMERIC BEARINGS HIGHWAY 18 OVER UPRR & KATHLEEN STREET

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: JWP DATE: 1/2021 FILENAME: b100657_e1.dgn

CHECKED BY: MCB DATE: 02/11/2021 SCALE: NO SCALE

DESIGNED BY: JWP DATE: 1/2021

BRIDGE NO. 07533 DRAWING NO. 63977

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
10-19-2022				6	ARK.		253	418
				JOB NO.		100657		
				①		07533 - SPAN DETAILS - 63978		

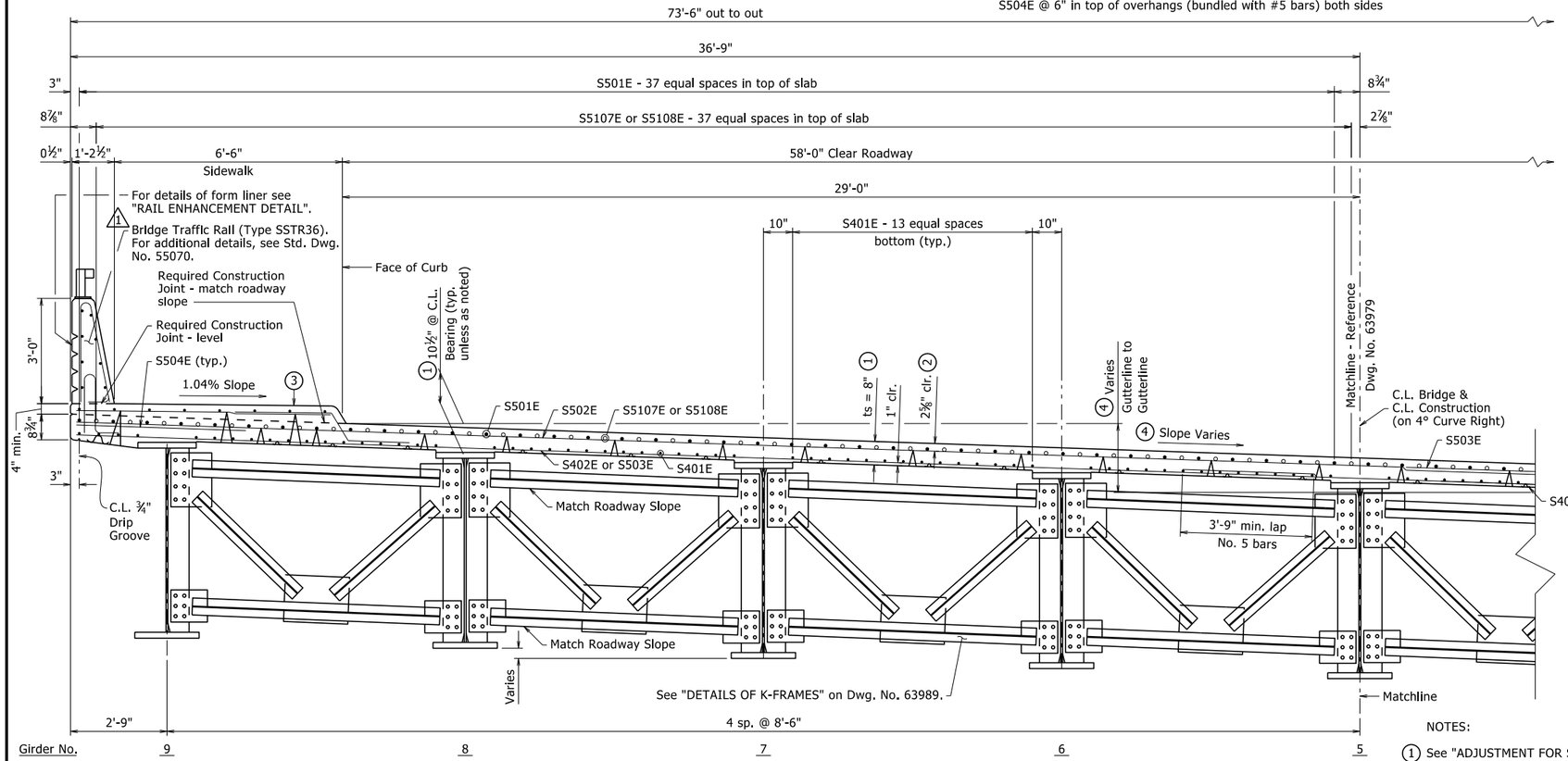
Class 1 Protective Surface Treatment shall be applied to the sidewalk surface (including curbing), to the roadway face & top of the concrete parapet rail, and to the roadway surface.

Bar positions and clearances from the forms shall be maintained by means of stays, ties, hangers, or other approved devices sufficient in size and number to prevent displacement during construction, per Subsection 804.06. Placement of slab bolsters or hi-chairs with full-length lower runners directly on removable deck forms will not be allowed.

Slab Reinforcing

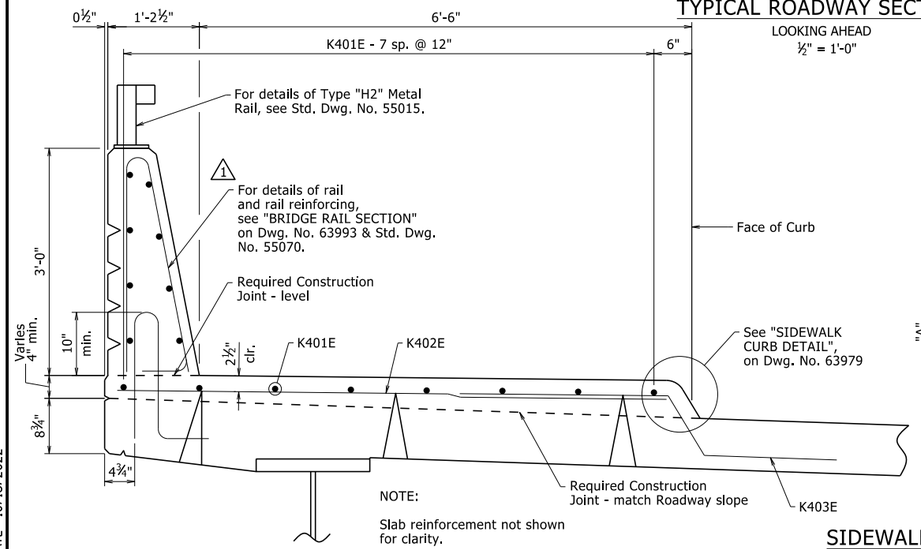
Longitudinal: S501E, S5107E, & S5108E in top (place as shown), S401E in bottom (place as shown), see "REINFORCING PLAN & DECK POURING SEQUENCE", Dwg. Nos. 63991 & 63992.

Transverse: S502E lapped with S503E @ 6" o.c. in top
S402E lapped with S403E @ 12" o.c. in bottom — Alternate
S502E lapped with S503E @ 12" o.c. in bottom
S504E @ 6" in top of overhangs (bundled with #5 bars) both sides



TYPICAL ROADWAY SECTION

LOOKING AHEAD
½" = 1'-0"



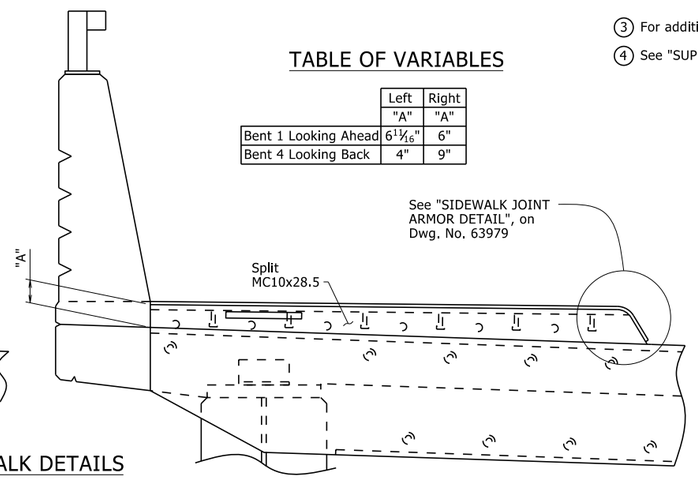
SIDEWALK DETAILS

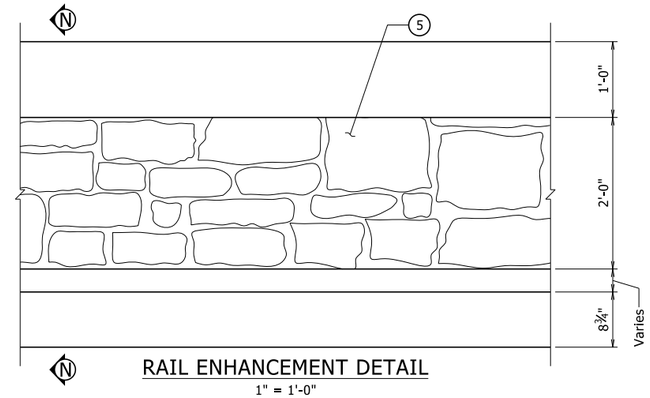
NO SCALE

Bent 1 shown, Bent 4 similar.

TABLE OF VARIABLES

	Left "A"	Right "A"
Bent 1 Looking Ahead	6 1/16"	6"
Bent 4 Looking Back	4"	9"

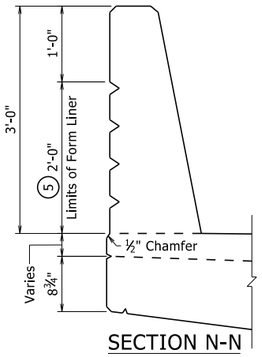




RAIL ENHANCEMENT DETAIL

1" = 1'-0"

⑤ "Ashlar Stone" Pattern Form Liner See SP Job 100657 "Architectural Finish". Form liner shall be max. depth of 1½" to provide a min. clearance of 1½" to rail reinforcing.



SECTION N-N

1" = 1'-0"

NOTES:

① See "ADJUSTMENT FOR SLAB THICKNESS TOLERANCE" on Std. Dwg. No. 55007.

② Tolerance Minus = ¼":
Plus = to the amount of slab thickness used to meet slab thickness tolerance
See "ADJUSTMENT FOR SLAB THICKNESS TOLERANCE" on Std. Dwg. No. 55007.

③ For additional information see "SIDEWALK DETAILS".

④ See "SUPERELEVATION TRANSITION SKETCH", on Dwg. No. 63961.

⚠1 Revised R401E bar based on changes to Std. Dwg. 55070
Rev. by JWP 10/12/2022
Ck. by MCB 10/18/2022

STATE OF ARKANSAS
Oct 18 2022 2:32 PM
Charles R. Ellis
LICENSED PROFESSIONAL ENGINEER
No. 9235
CHARLES R. ELLIS
BRIDGE ENGINEER

SHEET 1 OF 16
DETAILS 0F 452'-0" CONTINUOUS PLATE GIRDER UNIT
HIGHWAY 18 OVER UPRR & KATHLEEN STREET

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: CGP DATE: 10/26/2020 FILENAME: b100657_s1.dgn
CHECKED BY: JWP DATE: 01/13/2021 SCALE: AS NOTED
DESIGNED BY: JWP DATE: 11/2020

BRIDGE NO. 07533 DRAWING NO. 63978

PRINT DATE: 10/18/2022

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
10-19-2022				6	ARK.		254	418
				JOB NO.		100657		
				①		07533 - SPAN DETAILS - 63979		

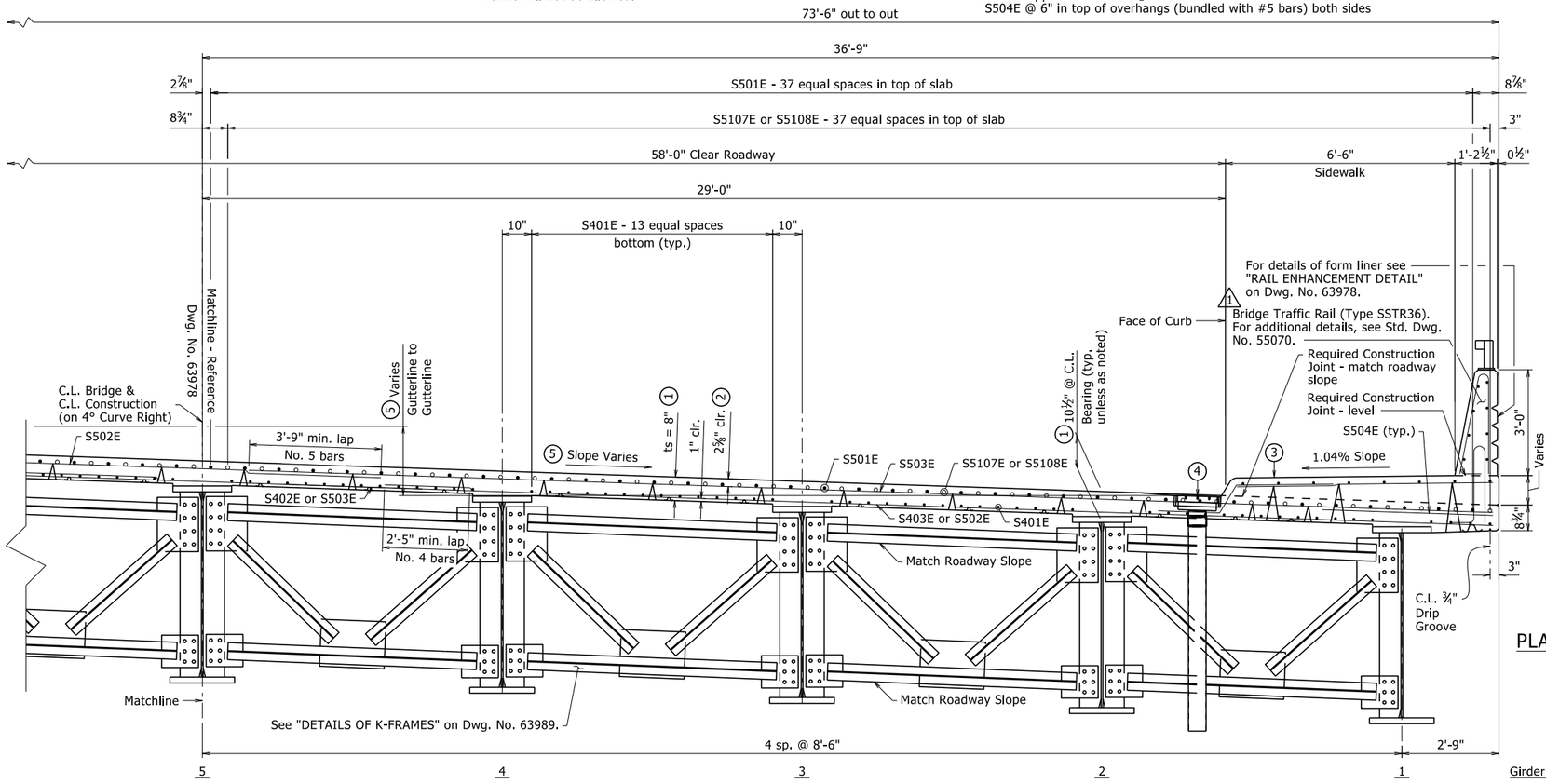
Class 1 Protective Surface Treatment shall be applied to the sidewalk surface (including curbing), to the roadway face & top of the concrete parapet rail, and to the roadway surface.

Bar positions and clearances from the forms shall be maintained by means of stays, ties, hangers, or other approved devices sufficient in size and number to prevent displacement during construction, per Subsection 804.06. Placement of slab bolsters or hi-chairs with full-length lower runners directly on removable deck forms will not be allowed.

Slab Reinforcing

Longitudinal: S501E, S5107E, & S5108E in top (place as shown), S401E in bottom (place as shown), see "REINFORCING PLAN & DECK POURING SEQUENCE", Dwg. Nos. 63991 & 63992.

Transverse: S502E lapped with S503E @ 6" o.c. in top
S402E lapped with S403E @ 12" o.c. in bottom — Alternate
S502E lapped with S503E @ 12" o.c. in bottom
S504E @ 6" in top of overhangs (bundled with #5 bars) both sides

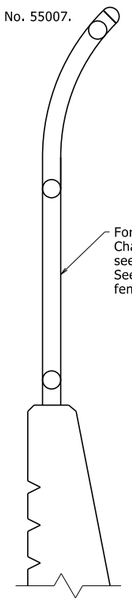


TYPICAL ROADWAY SECTION

LOOKING AHEAD
½" = 1'-0"

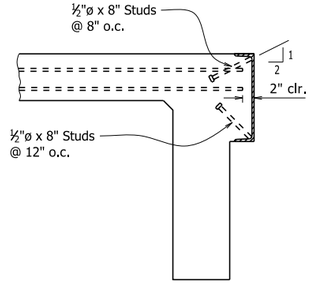
NOTES:

1. See "ADJUSTMENT FOR SLAB THICKNESS TOLERANCE" on Std. Dwg. No. 55007.
2. Tolerance Minus = ¼":
   Plus = to the amount of slab thickness used to meet slab thickness tolerance
   See "ADJUSTMENT FOR SLAB THICKNESS TOLERANCE" on Std. Dwg. No. 55007.
3. For additional information see "SIDEWALK DETAILS".
4. For details of Deck Drains, see Dwg. No. 63994.
5. See "SUPERELEVATION TRANSITION SKETCH", on Dwg. No. 63961.



FENCE DETAIL

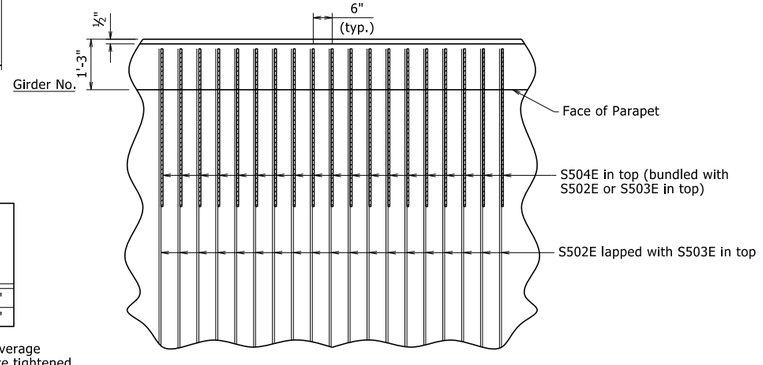
NO SCALE



As an alternate to ⅝"ø studs, ½"ø x 8" studs spaced as shown may be used. Use weight of ⅝"ø stud as basis of measurement of structural steel in anchors.

DETAILS OF ALTERNATE ANCHORS AND PLACEMENT OF LONGITUDINAL REINFORCEMENT

NO SCALE



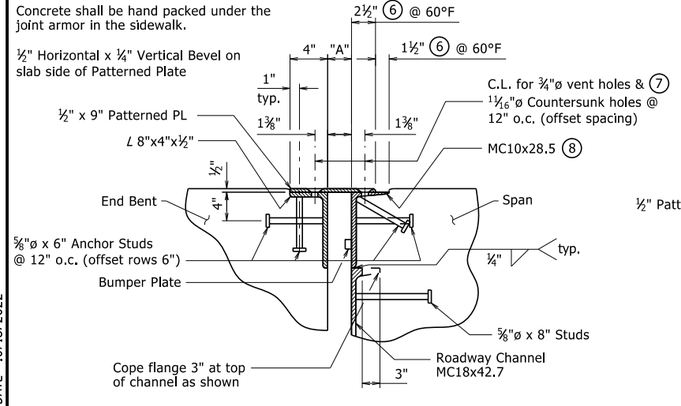
REBAR DETAIL

NO SCALE

NOTES:

Patterned Plate shall be ASTM A709, Gr. 50W.

Concrete shall be hand packed under the joint armor in the sidewalk.

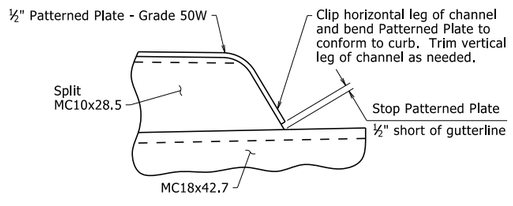


SIDEWALK SECTION THRU JOINT AT END BENT

NO SCALE

7 Countersunk 1¹⁄₁₆"ø holes in ½" Patterned Plate. Tap 4" leg of channel & angle for ASTM A449 ⅝"ø screws @ 12" o.c. Install screws in the shop and ship as a unit. Screws on the span to be removed. Screws on the Backwall to remain in place after erection. See "Expansion Device Installation" on Std. Dwg. No. 55008.

8 Trim vertical leg of MC10x28.5 as needed due to cross slope to match top surface of MC18x42.7.



SIDEWALK JOINT ARMOR DETAIL

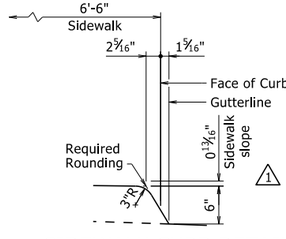
NO SCALE

TABLE OF SILICONE JOINT DATA

For details of poured silicone joint, see Std. Dwg. No. 55008.

Bent Number	"A" Width Perpendicular to Joint at 24 Hour Average Temperature 6 of:			"B" Perpendicular to Joint at 60°F	Bumper Plate Size
	40°F	60°F	80°F		
1	2⅞"	2½"	2³⁄₁₆"	2½"	1" x 1¼" x 12"
4	2⅞"	2½"	2³⁄₁₆"	2½"	1" x 1¼" x 12"

6 The temperature used to set the joint opening shall be the approximate average air temperature during the 24 hour period immediately before the bolts are tightened. The Engineer shall establish the temperature. Interpolation of the table may be necessary.



SIDEWALK CURB DETAIL

NO SCALE

1 Revised R401E bar based on changes to Std. Dwg. 55070
Rev. by JWP 10/12/2022
Ck. by MCB 10/18/2022

STATE OF ARKANSAS
Oct 18 2022 2:32 PM
LICENSED PROFESSIONAL ENGINEER
No. 9235
CHARLES R. ELLIS
BRIDGE ENGINEER

SHEET 2 OF 16
DETAILS OF 452'-0" CONTINUOUS PLATE GIRDER UNIT
HIGHWAY 18 OVER UPRR & KATHLEEN STREET

ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY:	CGP	DATE:	10/26/2020	FILENAME:	b100657_s1.dgn
CHECKED BY:	JWP	DATE:	01/13/2021	SCALE:	AS NOTED
DESIGNED BY:	JWP	DATE:	11/2020		

BRIDGE NO. 07533 DRAWING NO. 63979

PRINT DATE: 10/18/2022

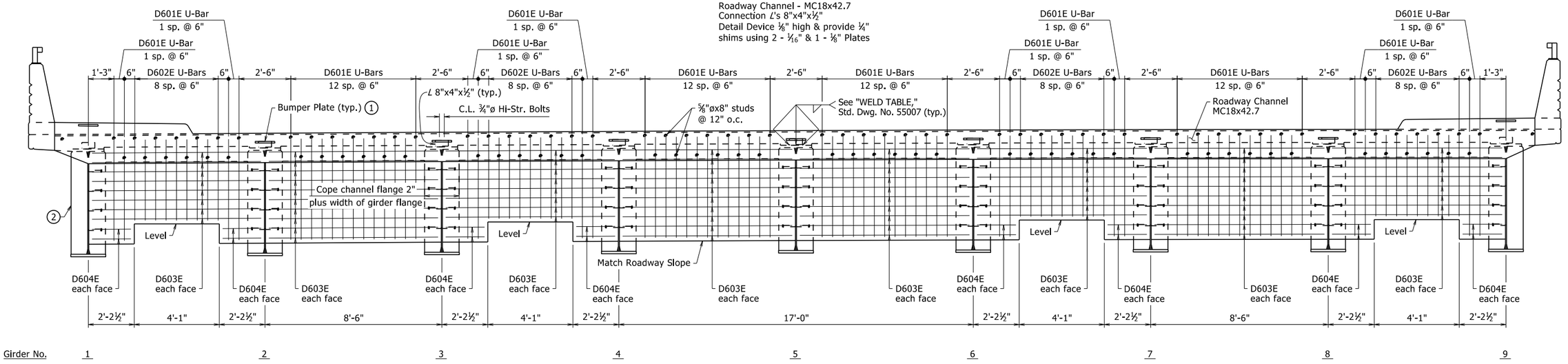
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		255	418
				JOB NO.		100657		
				①	07533 - SPAN DETAILS - 63980			

① For size of Bumper Plate, see "TABLE OF SILICONE JOINT DATA", on Dwg. No. 63979.

② See "FRAMING PLAN" on Dwg. Nos. 63986 & 63987 for locations of Bearing Stiffeners.

Expansion Device:

Roadway Channel - MC18x42.7
Connection L's 8"x4"x½"
Detail Device ⅛" high & provide ¼" shims using 2 - 1/16" & 1 - ⅛" Plates

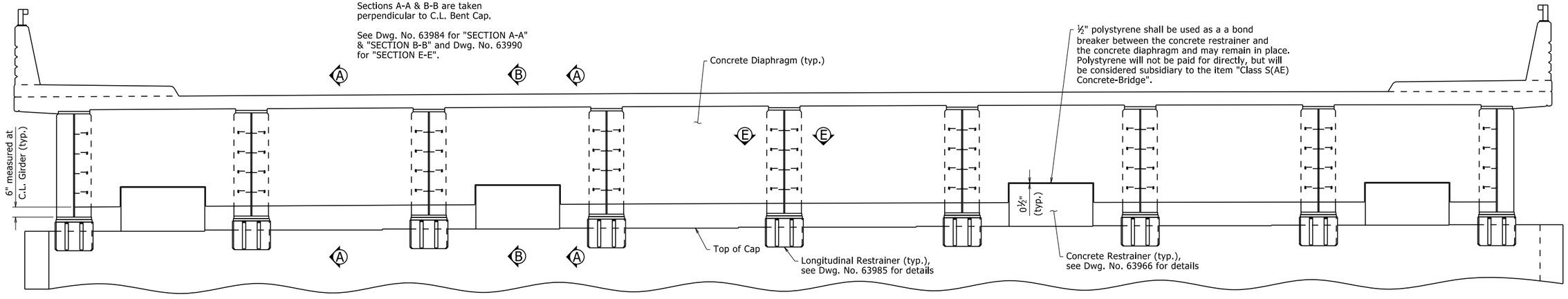


ROADWAY SECTION AT BENT 1
LOOKING BACK

NOTES:

Sections A-A & B-B are taken perpendicular to C.L. Bent Cap.

See Dwg. No. 63984 for "SECTION A-A" & "SECTION B-B" and Dwg. No. 63990 for "SECTION E-E".



ROADWAY SECTION AT BENT 1 SHOWING CONCRETE RESTRAINERS
LOOKING BACK

STATE OF ARKANSAS
Sep 3 2021 1:27 PM
LICENSED PROFESSIONAL ENGINEER
No. 9235
CHARLES R. ELLIS
BRIDGE ENGINEER

SHEET 3 OF 16
DETAILS OF 452'-0" CONTINUOUS PLATE GIRDER UNIT
HIGHWAY 18 OVER UPRR & KATHLEEN STREET

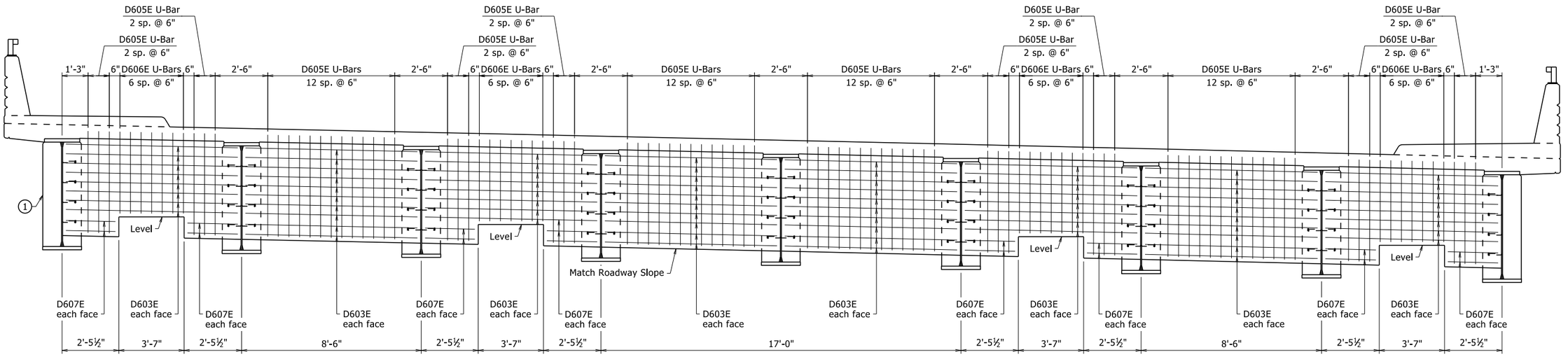
ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: CGP DATE: 10/26/2020 FILENAME: b100657_s1.dgn
CHECKED BY: MCB DATE: 01/13/2021 SCALE: NO SCALE
DESIGNED BY: MCB DATE: 11/2020
BRIDGE NO. 07533 DRAWING NO. 63980

PRINT DATE: 9/3/2021

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		256	418
				JOB NO.		100657		
				①	07533 - SPAN DETAILS - 63981			

① See "FRAMING PLAN" on Dwg. Nos. 63986 & 63987 for locations of Bearing Stiffeners.

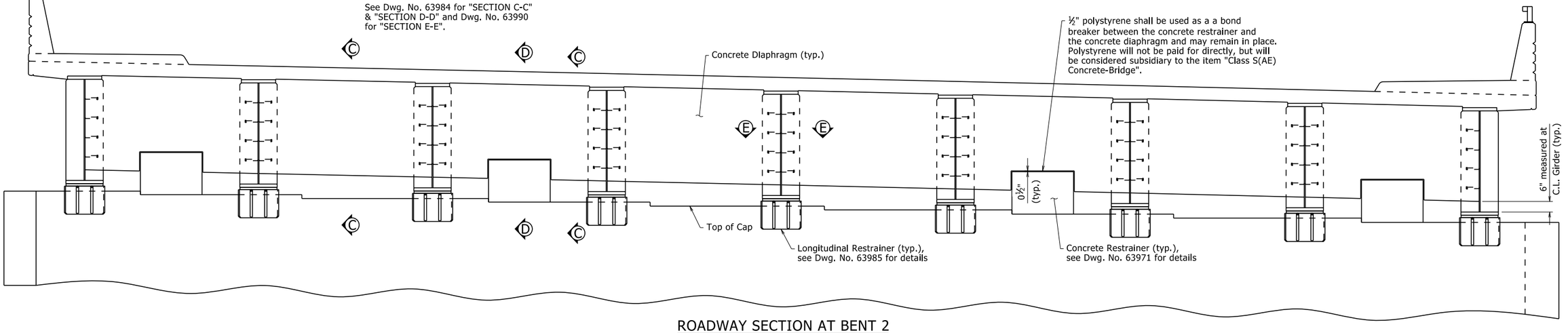


ROADWAY SECTION AT BENT 2
LOOKING AHEAD

NOTES:

Sections C-C & D-D are taken perpendicular to C.L. Bent Cap.

See Dwg. No. 63984 for "SECTION C-C" & "SECTION D-D" and Dwg. No. 63990 for "SECTION E-E".



ROADWAY SECTION AT BENT 2
SHOWING CONCRETE RESTRAINERS
LOOKING AHEAD

STATE OF ARKANSAS
Sep 3 2021 1:27 PM
Charles R. Ellis
LICENSED PROFESSIONAL ENGINEER
No. 9235
CHARLES R. ELLIS
BRIDGE ENGINEER

SHEET 4 OF 16
DETAILS OF 452'-0" CONTINUOUS PLATE GIRDER UNIT
HIGHWAY 18 OVER UPRR & KATHLEEN STREET

ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

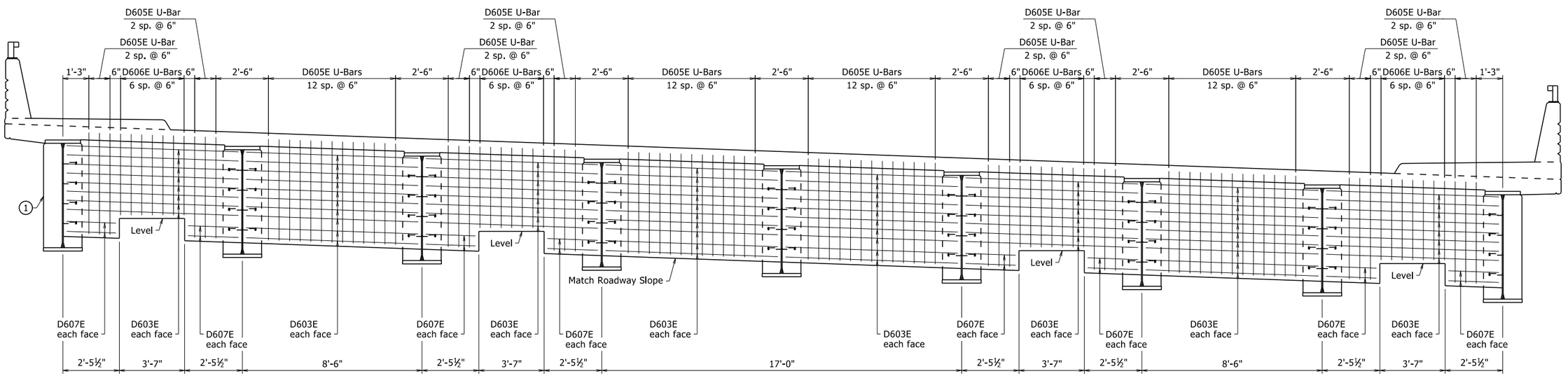
DRAWN BY: CGP DATE: 10/26/2020 FILENAME: b100657_s1.dgn
CHECKED BY: MCB DATE: 01/13/2021 SCALE: NO SCALE
DESIGNED BY: MCB DATE: 11/2020

BRIDGE NO. 07533 DRAWING NO. 63981

PRINT DATE: 9/3/2021

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		257	418
				JOB NO.		100657		
				①	07533 - SPAN DETAILS - 63982			

① See "FRAMING PLAN" on Dwg. Nos. 63986 & 63987 for locations of Bearing Stiffeners.



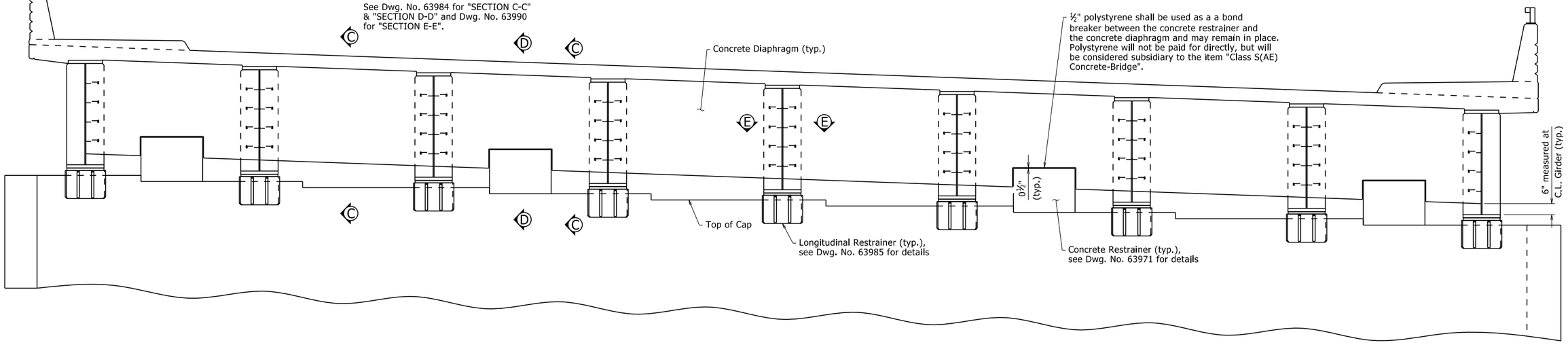
NOTES:

Sections C-C & D-D are taken perpendicular to C.L. Bent Cap.

See Dwg. No. 63984 for "SECTION C-C" & "SECTION D-D" and Dwg. No. 63990 for "SECTION E-E".

ROADWAY SECTION AT BENT 3

LOOKING AHEAD



ROADWAY SECTION AT BENT 3 SHOWING CONCRETE RESTRAINERS

LOOKING AHEAD

STATE OF ARKANSAS
Sep 3 2021 1:27 PM
LICENSED PROFESSIONAL ENGINEER
No. 9235
CHARLES R. ELLIS
BRIDGE ENGINEER

SHEET 5 OF 16
DETAILS OF 452'-0" CONTINUOUS PLATE GIRDER UNIT
HIGHWAY 18 OVER UPRR & KATHLEEN STREET

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: CGP DATE: 10/26/2020 FILENAME: b100657_s1.dgn
CHECKED BY: MCB DATE: 01/13/2021 SCALE: NO SCALE
DESIGNED BY: MCB DATE: 11/2020

BRIDGE NO. 07533 DRAWING NO. 63982

PRINT DATE: 9/3/2021

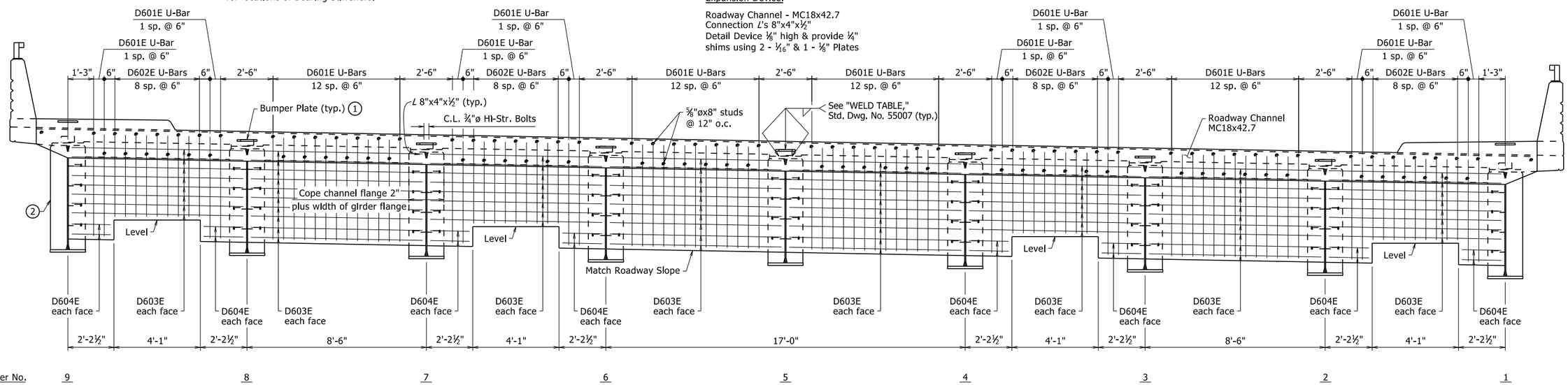
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
10-19-2022				6	ARK.	100657	258	418
				JOB NO.		1 ~~CGP~~		
						1 07533 - SPAN DETAILS - 63983		

(1) For size of Bumper Plate, see "TABLE OF SILICONE JOINT DATA", on Dwg. No. 63979.

(2) See "FRAMING PLAN" on Dwg. Nos. 63986 & 63987 for locations of Bearing Stiffeners.

Expansion Device:

Roadway Channel - MC18x42.7
Connection L's 8"x4"x½"
Detail Device ⅛" high & provide ¼" shims using 2 - 1/16" & 1 - ⅛" Plates



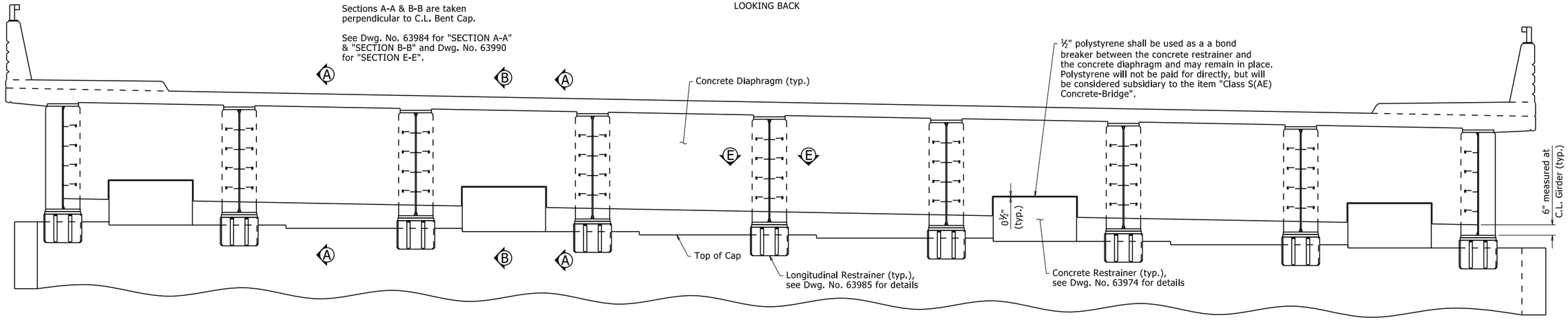
ROADWAY SECTION AT BENT 4

LOOKING BACK

NOTES:

Sections A-A & B-B are taken perpendicular to C.L. Bent Cap.

See Dwg. No. 63984 for "SECTION A-A" & "SECTION B-B" and Dwg. No. 63990 for "SECTION E-E".



ROADWAY SECTION AT BENT 4 SHOWING CONCRETE RESTRAINERS

LOOKING BACK

1 Revised Job Number in Title Block
Rev. by JWP 10/12/2022
Ck. by MCB 10/18/2022

STATE OF ARKANSAS
Oct 18 2022 2:32 PM
LICENSED PROFESSIONAL ENGINEER
No. 9235
CHARLES R. ELLIS
BRIDGE ENGINEER

SHEET 6 OF 16
DETAILS OF 452'-0" CONTINUOUS PLATE GIRDER UNIT
HIGHWAY 18 OVER UPRR & KATHLEEN STREET

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

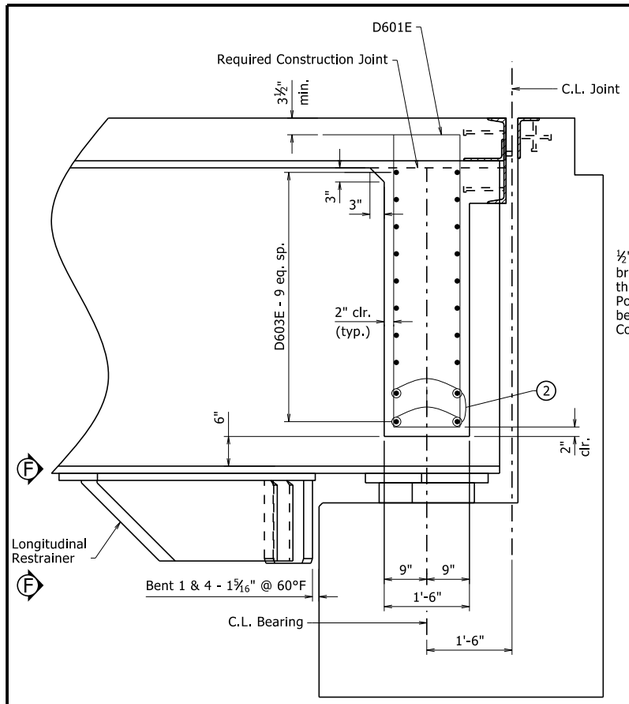
DRAWN BY: CGP DATE: 10/26/2020
CHECKED BY: JWP DATE: 01/13/2021
DESIGNED BY: MCB DATE: 11/2020
FILENAME: b100657_s1.dgn
SCALE: NO SCALE

BRIDGE NO. 07533 DRAWING NO. 63983

PRINT DATE: 10/18/2022

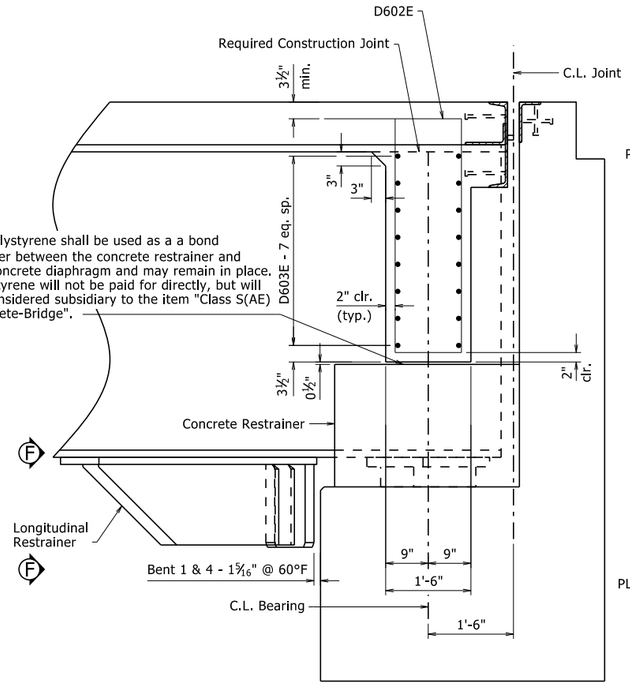
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		259	418
				JOB NO.		100657		

1 07533 - SPAN DETAILS - 63984



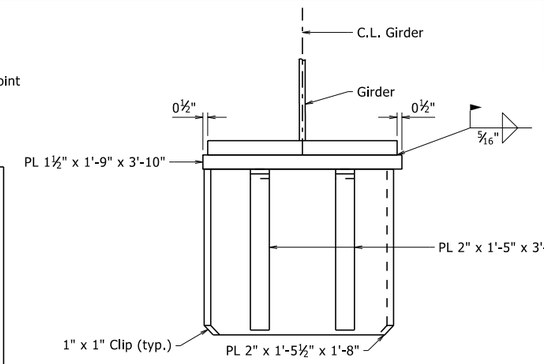
SECTION A-A

¾" = 1'-0"



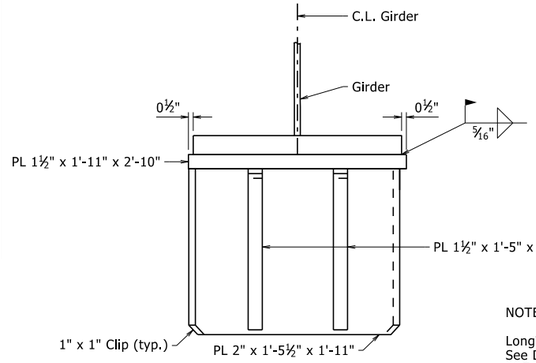
SECTION B-B

¾" = 1'-0"



VIEW F-F

1½" = 1'-0"

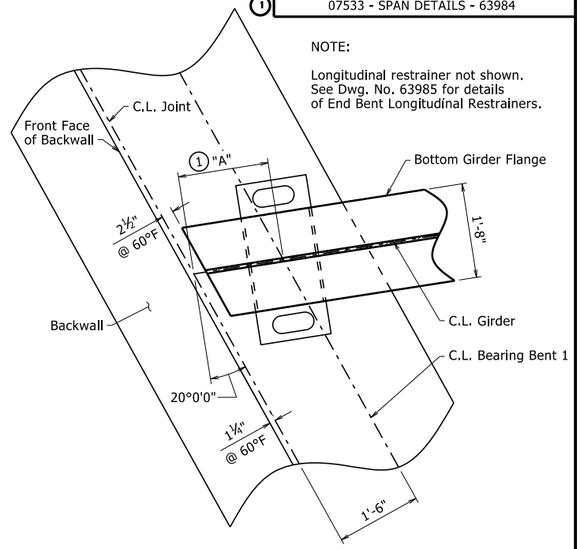


VIEW G-G

1½" = 1'-0"

NOTE:

Longitudinal restrainer not shown. See Dwg. No. 63985 for details of End Bent Longitudinal Restrainers.



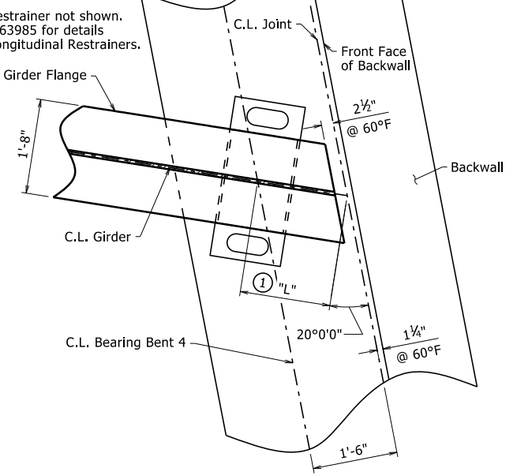
PLAN OF BENT 1 BEARING

¾" = 1'-0"

1 Measured along C.L. Girder. See table on Dwg. No. 63988 for variables "A" & "L".

NOTE:

Longitudinal restrainer not shown. See Dwg. No. 63985 for details of End Bent Longitudinal Restrainers.

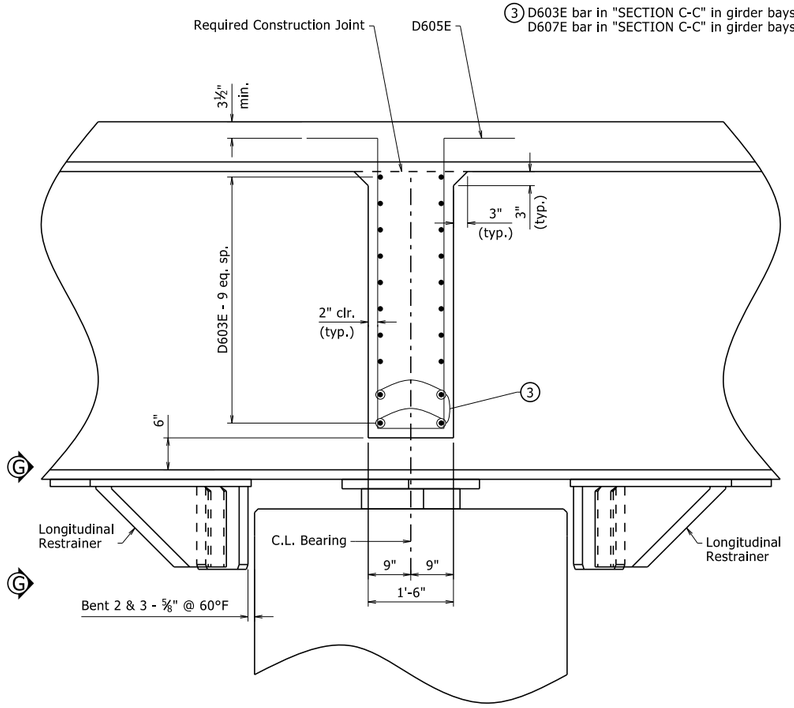


PLAN OF BENT 4 BEARING

¾" = 1'-0"

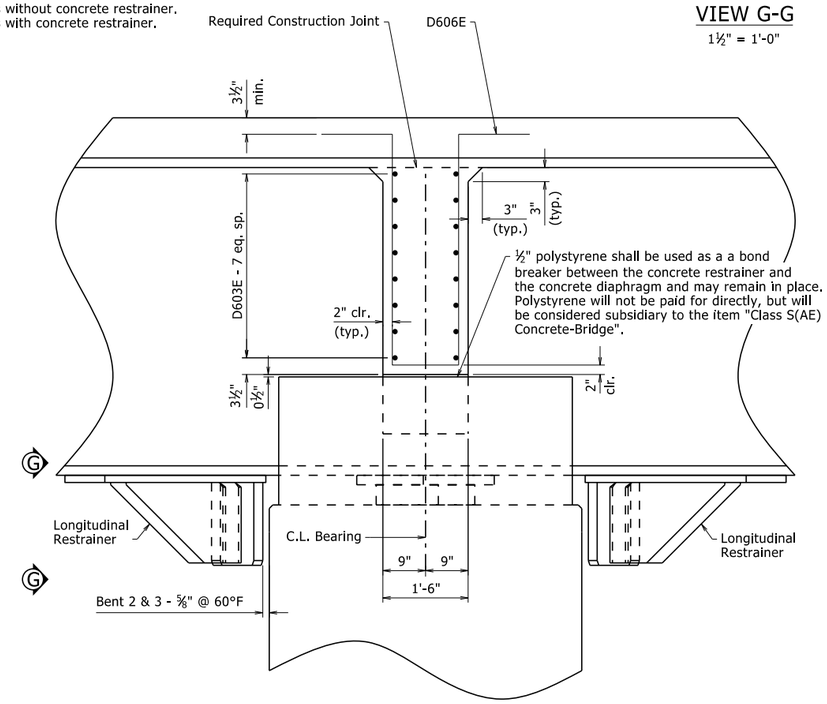
2 D603E bar in "SECTION A-A" in girder bays without concrete restrainer.
D604E bar in "SECTION A-A" in girder bays with concrete restrainer.

3 D603E bar in "SECTION C-C" in girder bays without concrete restrainer.
D607E bar in "SECTION C-C" in girder bays with concrete restrainer.



SECTION C-C

¾" = 1'-0"



SECTION D-D

¾" = 1'-0"

STATE OF ARKANSAS
Dec 3 2021 1:26 PM
LICENSED PROFESSIONAL ENGINEER
No. 9235
CHARLES R. ELLIS
BRIDGE ENGINEER

SHEET 7 OF 16
DETAILS OF 452'-0" CONTINUOUS PLATE GIRDER UNIT
HIGHWAY 18 OVER UPRR & KATHLEEN STREET

ROUTE SEC.

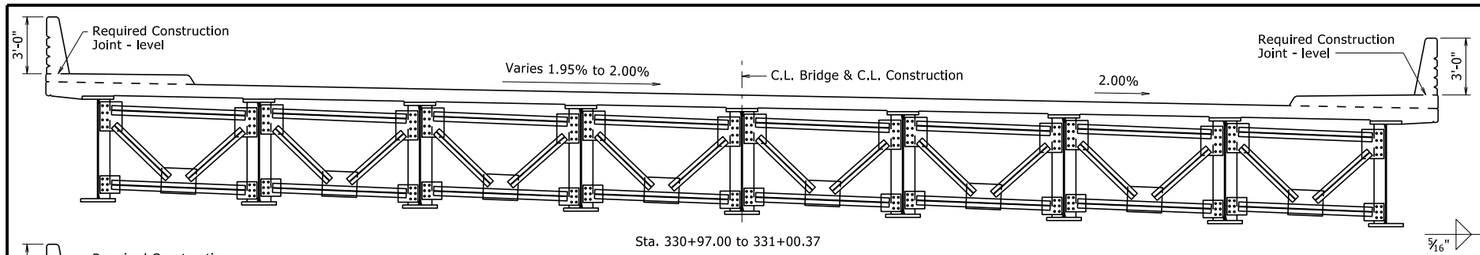
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: CGP DATE: 10/26/2020
CHECKED BY: JWP DATE: 01/13/2021
DESIGNED BY: JWP DATE: 11/2020
FILENAME: b100657_s1.dgn
SCALE: AS NOTED

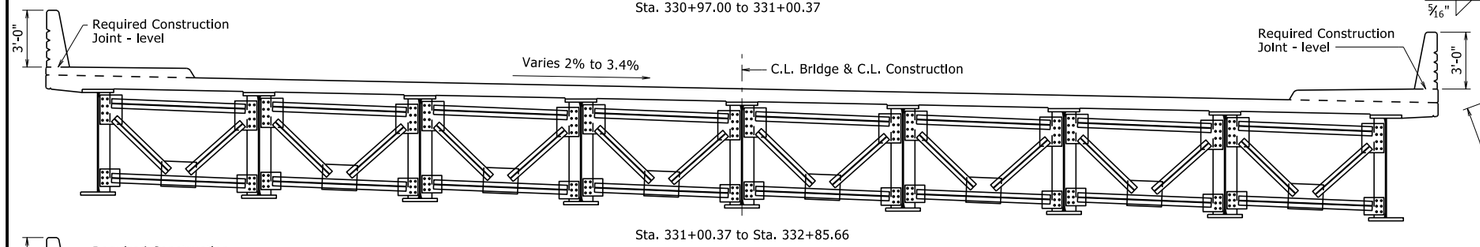
BRIDGE NO. 07533 DRAWING NO. 63984

PRINT DATE: 9/3/2021

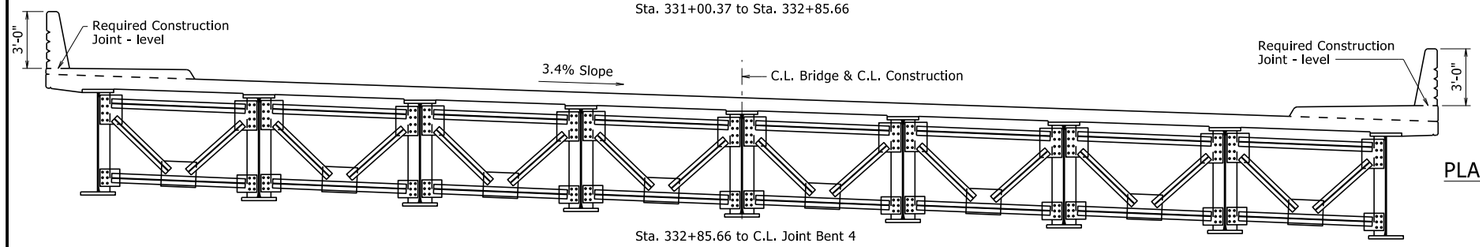
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		260	418
				JOB NO.		100657		
				①		07533 - SPAN DETAILS - 63985		



Sta. 330+97.00 to 331+00.37



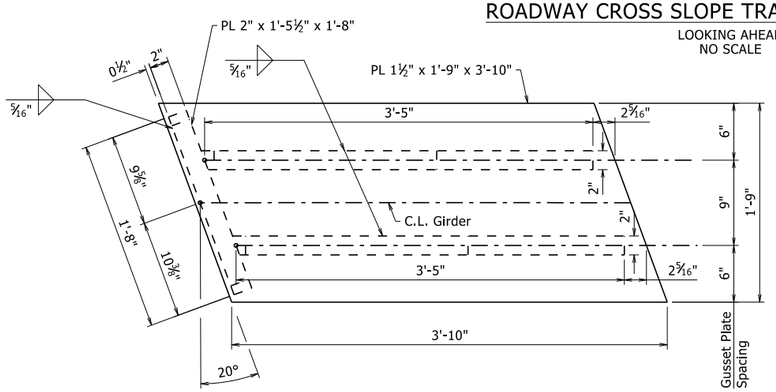
Sta. 331+00.37 to Sta. 332+85.66



Sta. 332+85.66 to C.L. Joint Bent 4

ROADWAY CROSS SLOPE TRANSITION SECTIONS

LOOKING AHEAD
NO SCALE

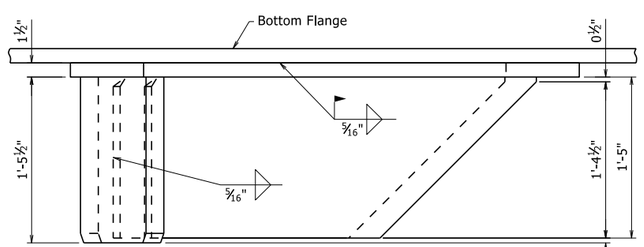


NOTE:

See "SUPERELEVATION TRANSITION SKETCH, on Dwg. No. 63961.

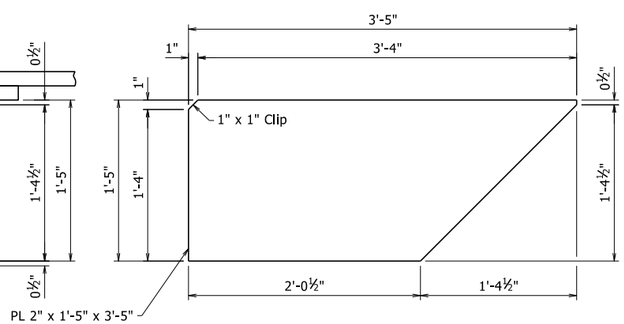
PLAN OF END BENT LONGITUDINAL RESTRAINER

1½" = 1'-0"



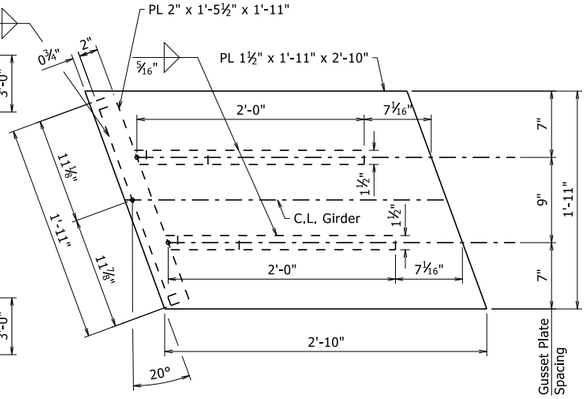
ELEVATION OF END BENT LONGITUDINAL RESTRAINER

ELEVATION VIEW
1½" = 1'-0"



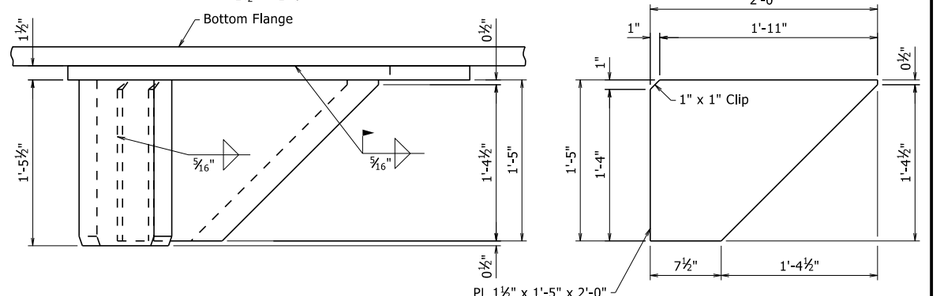
GUSSET PLATE

1½" = 1'-0"



PLAN OF INTERMEDIATE BENT LONGITUDINAL RESTRAINER

1½" = 1'-0"



ELEVATION OF INTERMEDIATE BENT LONGITUDINAL RESTRAINER

ELEVATION VIEW
1½" = 1'-0"

GUSSET PLATE

1½" = 1'-0"

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Sep 3 2021 1:28 PM
LICENSED PROFESSIONAL ENGINEER
No. 9235
CHARLES R. ELLIS

BRIDGE ENGINEER

SHEET 8 OF 16
DETAILS OF 452'-0" CONTINUOUS
PLATE GIRDER UNIT
HIGHWAY 18 OVER UPRR & KATHLEEN STREET

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: CGP DATE: 10/26/2020
CHECKED BY: JWP DATE: 01/13/2021
DESIGNED BY: JWP DATE: 11/2020
FILENAME: b100657_s1.dgn
SCALE: AS NOTED

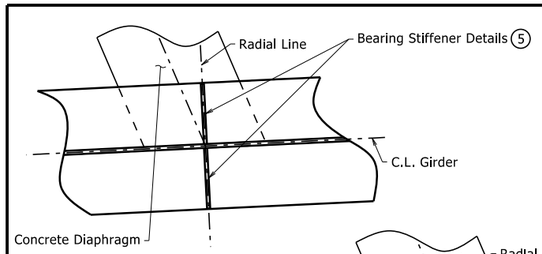
BRIDGE NO. 07533 DRAWING NO. 63985

PRINT DATE: 9/3/2021

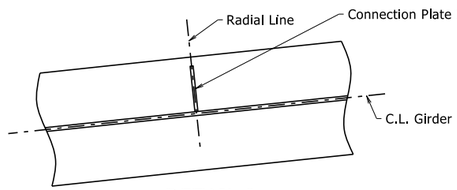
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	ARK.		261	418
JOB NO.		100657		

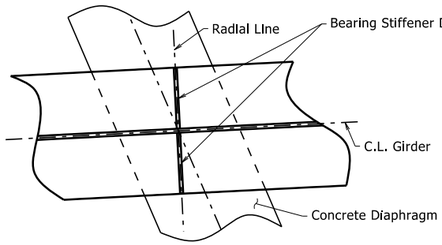
1 07533 - SPAN DETAILS - 63986



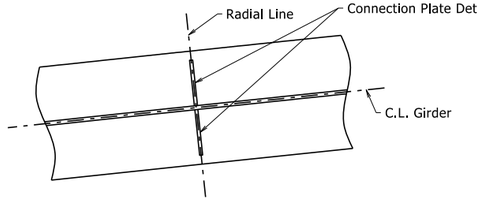
DETAIL H
1"=1'-0"



DETAIL J
1"=1'-0"



DETAIL I
1"=1'-0"



DETAIL K
1"=1'-0"

1. Measured along C.L. Bridge
2. Measured perpendicular to C.L. of Joint.
3. Reference "TYPICAL GIRDER ELEVATION", on Dwg. No. 63988 for Field Splice locations.
4. For details see "BEARING STIFFENER DETAILS", on Dwg. No. 63990 & "DETAIL H".
5. For details see "BEARING STIFFENER DETAILS", on Dwg. No. 63990 & "DETAIL I".
6. For details see "K-FRAME CONNECTION DETAILS", on Dwg No. 63990 & "DETAIL J".
7. For details see "K-FRAME CONNECTION DETAILS", on Dwg. No. 63990 & "DETAIL K".
8. Locate drip plate 5'-0" from C.L. Bearing, see "BOTTOM FLANGE DRIP PLATE" on Std. Dwg. No. 55007. Stop weld 1" from face of web.

FRAMING PLAN
1/8" = 1'-0"

NOTES:

All structural steel shall be ASTM A709, Gr. 50W unless otherwise noted and shall be paid for as "Structural Steel in Plate Girder Spans (ASTM A709, Gr. 50W)".

Plate Girders are concentric to C.L. Bridge. K-Frames and C.L. Field Splices are radial. Concrete Diaphragms are along C.L. of Bents.

Bolted field splices may be eliminated or shop welded splices may be substituted with the approval of the Engineer. Payment will be made on the basis of plan quantities.

For additional information, see Layout.

For General Notes, see Std. Dwg. No. 55006.

See Std. Dwg. No. 55007 for additional details.

For locations of Field Splices, see Dwg. No. 63988.

For Details of Field Splice, see Dwg. No. 63989.

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Charles R. Ellis
LICENSED PROFESSIONAL ENGINEER
No. 9235
CHARLES R. ELLIS
BRIDGE ENGINEER

SHEET 9 OF 16
DETAILS OF 452'-0" CONTINUOUS PLATE GIRDER UNIT
HIGHWAY 18 OVER UPRR & KATHLEEN STREET

ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: CGP DATE: 10/26/2020
CHECKED BY: JWP DATE: 01/13/2021
DESIGNED BY: JWP DATE: 11/2020
FILENAME: b100657_s1.dgn
SCALE: AS NOTED

BRIDGE NO. 07533 DRAWING NO. 63986

PRINT DATE: 9/3/2021

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		262	418
				JOB NO.		100657		
				①		07533 - SPAN DETAILS - 63987		

NOTES:

All structural steel shall be ASTM A709, Gr. 50W unless otherwise noted and shall be paid for as "Structural Steel in Plate Girder Spans (ASTM A709, Gr. 50W)".

Plate Girders are concentric to C.L. Bridge. K-Frames and C.L. Field Splices are radial. Concrete Diaphragms are along C.L. of Bents.

Bolted field splices may be eliminated or shop welded splices may be substituted with the approval of the Engineer. Payment will be made on the basis of plan quantities.

For additional information, see Layout.

For General Notes, see Std. Dwg. No. 55006.

See Std. Dwg. No. 55007 for additional details.

For locations of Field Splices, see Dwg. No. 63988.

For Details of Field Splice, see Dwg. No. 63989.

(1) Measured along C.L. Bridge

(2) Measured perpendicular to C.L. of Joint.

(3) Reference "TYPICAL GIRDER ELEVATION", on Dwg. No. 63988 for Field Splice locations.

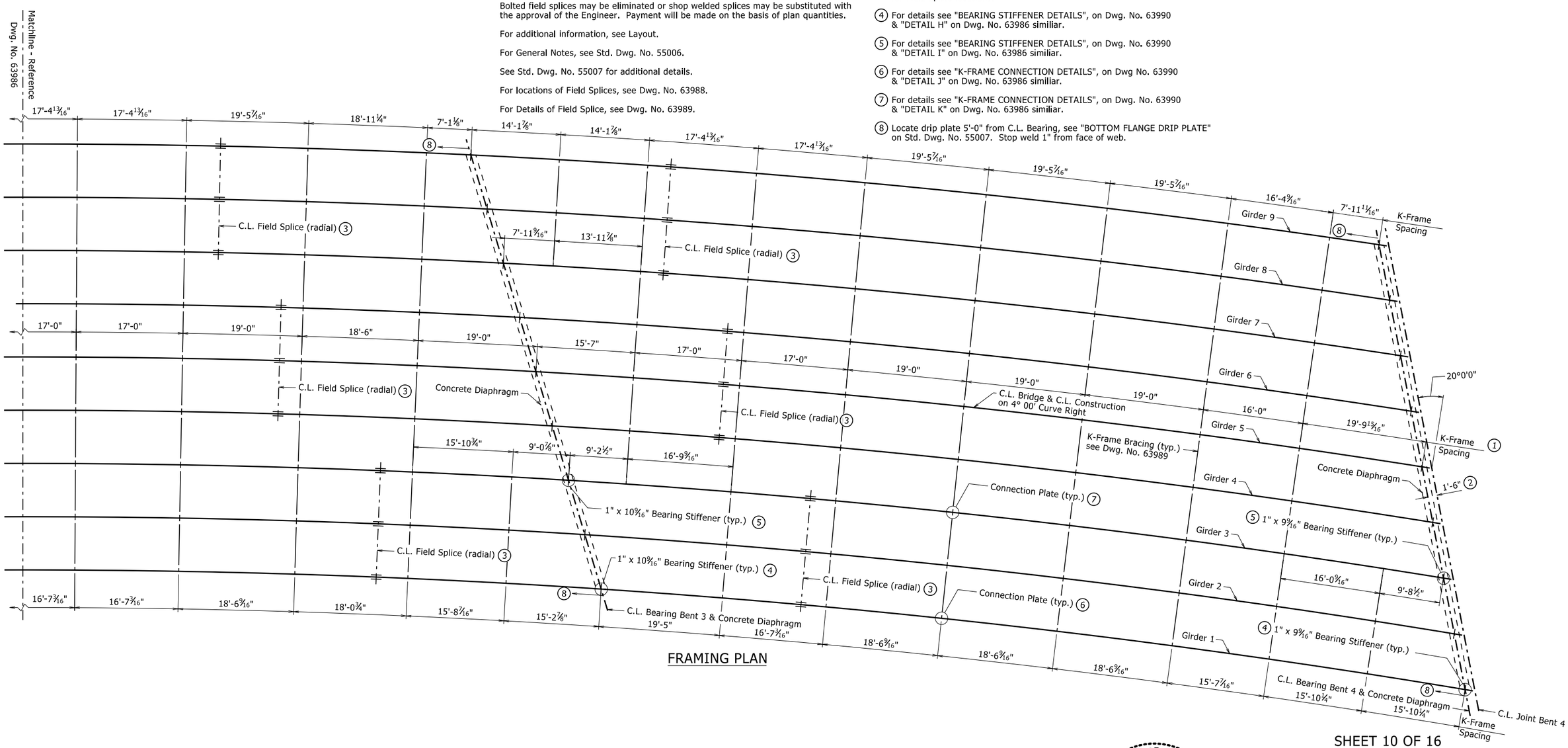
(4) For details see "BEARING STIFFENER DETAILS", on Dwg. No. 63990 & "DETAIL H" on Dwg. No. 63986 similiar.

(5) For details see "BEARING STIFFENER DETAILS", on Dwg. No. 63990 & "DETAIL I" on Dwg. No. 63986 similiar.

(6) For details see "K-FRAME CONNECTION DETAILS", on Dwg No. 63990 & "DETAIL J" on Dwg. No. 63986 similiar.

(7) For details see "K-FRAME CONNECTION DETAILS", on Dwg. No. 63990 & "DETAIL K" on Dwg. No. 63986 similiar.

(8) Locate drip plate 5'-0" from C.L. Bearing, see "BOTTOM FLANGE DRIP PLATE" on Std. Dwg. No. 55007. Stop weld 1" from face of web.



FRAMING PLAN

STATE OF ARKANSAS
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LICENSED PROFESSIONAL ENGINEER
No. 9235
CHARLES R. ELLIS
BRIDGE ENGINEER

SHEET 10 OF 16
DETAILS OF 452'-0" CONTINUOUS PLATE GIRDER UNIT
HIGHWAY 18 OVER UPRR & KATHLEEN STREET

ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: CGP DATE: 10/26/2020
CHECKED BY: JWP DATE: 01/13/2021
DESIGNED BY: JWP DATE: 11/2020
FILENAME: b100657_s1.dgn
SCALE: 1/8" = 1'-0"

BRIDGE NO. 07533 DRAWING NO. 63987

PRINT DATE: 9/3/2021

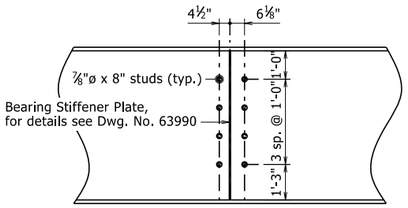
Girder No.	"A"	"B"	"B" stud spacing	"C"	"C" stud spacing	"D"	"D" stud spacing	"E"	"E" stud spacing	"F"	"F" stud spacing	"G"	"G" stud spacing	"H"	"H" stud spacing
1	1'-7¼"	55'-7 1/16"	52 eq. sp.	49'-0 7/16"	52 eq. sp.	29'-7¾"	28 eq. sp.	33'-7¾"	38 eq. sp.	41'-8⅜"	39 eq. sp.	41'-8 7/16"	45 eq. sp.	33'-7¾"	32 eq. sp.
2	1'-7 3/16"	55'-11⅛"	52 eq. sp.	52'-6 7/16"	52 eq. sp.	26'-8"	28 eq. sp.	37'-0½"	38 eq. sp.	38'-9 5/16"	39 eq. sp.	45'-1 15/16"	45 eq. sp.	30'-8¼"	32 eq. sp.
3	1'-7 3/16"	56'-3 3/16"	52 eq. sp.	56'-0 7/16"	52 eq. sp.	23'-8 3/16"	28 eq. sp.	40'-5¼"	38 eq. sp.	35'-10¼"	39 eq. sp.	48'-7⅜"	45 eq. sp.	27'-8¾"	32 eq. sp.
4	1'-7 3/16"	56'-7¼"	46 eq. sp.	49'-8 1/16"	46 eq. sp.	30'-6¾"	25 eq. sp.	35'-3 11/16"	34 eq. sp.	41'-5½"	34 eq. sp.	35'-4⅛"	34 eq. sp.	41'-6"	34 eq. sp.
5	1'-7 3/16"	56'-11 5/16"	46 eq. sp.	53'-1¼"	46 eq. sp.	27'-7¾"	25 eq. sp.	38'-7¾"	34 eq. sp.	38'-7 3/16"	34 eq. sp.	38'-8 5/16"	34 eq. sp.	38'-7¾"	34 eq. sp.
6	1'-7⅛"	57'-3⅜"	46 eq. sp.	56'-6 7/16"	46 eq. sp.	24'-8¾"	25 eq. sp.	41'-11¾"	34 eq. sp.	35'-8⅞"	34 eq. sp.	42'-0½"	34 eq. sp.	35'-9 9/16"	34 eq. sp.
7	1'-7⅛"	57'-7½"	50 eq. sp.	46'-5¾"	46 eq. sp.	37'-7 15/16"	33 eq. sp.	31'-1 13/16"	33 eq. sp.	47'-0½"	41 eq. sp.	35'-1½"	36 eq. sp.	43'-2 9/16"	40 eq. sp.
8	1'-7⅛"	57'-11½"	50 eq. sp.	49'-9 15/16"	46 eq. sp.	32'-5 1/16"	33 eq. sp.	34'-4 13/16"	33 eq. sp.	44'-3¼"	41 eq. sp.	38'-4⅞"	36 eq. sp.	40'-5⅜"	40 eq. sp.
9	1'-7⅛"	58'-4"	50 eq. sp.	53'-2 1/16"	46 eq. sp.	32'-0"	33 eq. sp.	37'-7¾"	33 eq. sp.	41'-0½"	41 eq. sp.	41'-8¼"	36 eq. sp.	37'-7¾"	40 eq. sp.

Girder No.	"I"	"I" stud spacing	"J"	"J" stud spacing	"K"	"K" stud spacing	"L"	"M"	"N"	"O"	"P"	"Q"	"R"	"S"
1	29'-7¾"	34 eq. sp.	49'-0 7/16"	43 eq. sp.	55'-7 1/16"	49 eq. sp.	1'-7 3/16"	140'-7"	160'-1 5/16"	32'-0"	36'-0"	88'-1 5/16"	36'-0"	32'-0"
2	33'-0¼"	34 eq. sp.	46'-1 15/16"	43 eq. sp.	55'-11⅜"	49 eq. sp.	1'-7 3/16"	141'-5¼"	161'-0 15/16"	29'-0 3/16"	39'-4¾"	88'-7¾"	33'-0½"	35'-4½"
3	36'-4⅝"	34 eq. sp.	43'-3 7/16'	43 eq. sp.	56'-3¾"	49 eq. sp.	1'-7 3/16"	142'-3½"	162'-0⅝"	26'-0 7/16"	42'-9½"	89'-2⅛"	30'-1"	38'-8⅞"
4	24'-4½"	27 eq. sp.	55'-9 9/16"	45 eq. sp.	56'-8 1/16"	46 eq. sp.	1'-7 3/16"	143'-1¾"	163'-0 9/16"	32'-11"	37'-7 15/16"	81'-6 3/16"	43'-10¼"	26'-8¾"
5	27'-7¾"	27 eq. sp.	53'-0 3/16"	45 eq. sp.	57'-0⅜"	46 eq. sp.	1'-7⅛"	144'-0"	164'-0"	30'-0"	41'-0"	82'-0"	41'-0"	30'-0"
6	30'-11"	27 eq. sp.	50'-2⅞"	45 eq. sp.	57'-4¾"	46 eq. sp.	1'-7⅛"	144'-10¼"	164'-11 11/16"	27'-1"	44'-4"	82'-5 13/16"	38'-1 13/16"	33'-3⅛"
7	23'-2 15/16"	28 eq. sp.	58'-4⅞"	54 eq. sp.	57'-9 1/16"	51 eq. sp.	1'-7⅛"	145'-8½"	165'-11⅜"	37'-7⅞"	33'-6 1/16"	86'-10½"	45'-6 13/16"	25'-7 3/16"
8	26'-5⅜"	28 eq. sp.	55'-8 1/16"	54 eq. sp.	58'-1⅜"	51 eq. sp.	1'-7⅛"	146'-6¾"	166'-11 1/16"	34'-9 15/16"	36'-9 1/16"	87'-4⅝"	42'-9⅜"	28'-9⅝"
9	29'-7¾"	28 eq. sp.	53'-0"	54 eq. sp.	58'-5 1/16"	51 eq. sp.	1'-7 1/16"	147'-5"	167'-10 1/16"	32'-0"	40'-0"	87'-10 1/16"	40'-0"	32'-0"

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	ARK.		263	418
JOB NO.		100657		

① 07533 - SPAN DETAILS - 63988



DETAIL L
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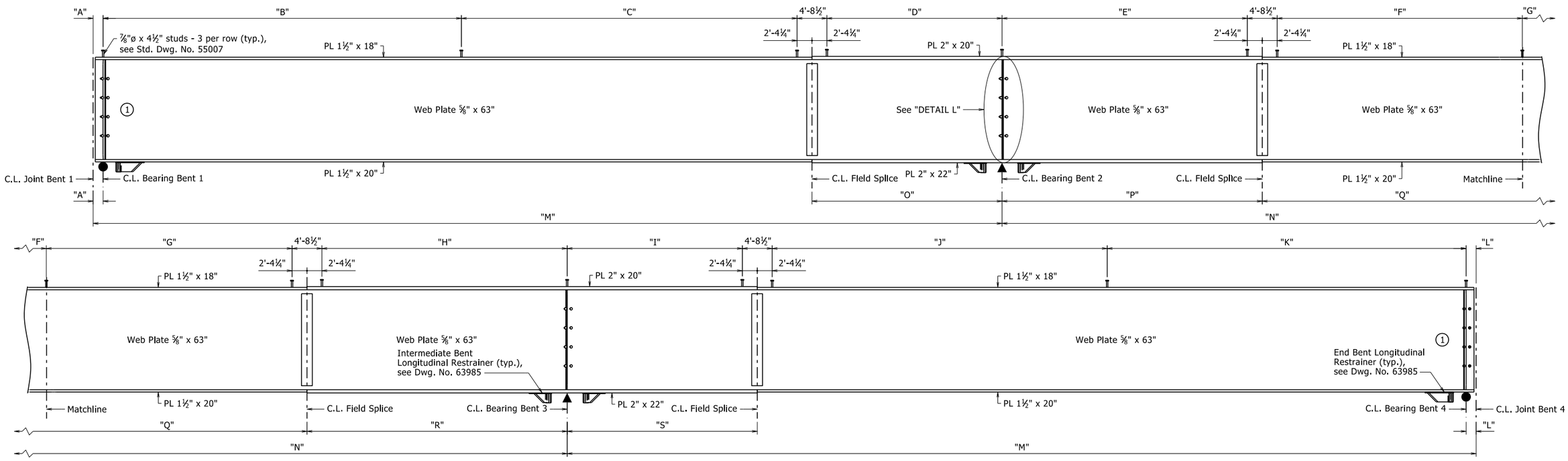

TYPICAL GIRDER ELEVATION
⅛" = 1'-0"

① For painting of Girder ends, see General Notes on Layout, Dwg No. 63961.

② Measured along girder from C.L. Bearing at Bent 1.

② TABLE FOR TENSION ZONES

Girder No.	Top Flange Tension Zones	Bottom Flange Tension Zones
ALL	87'-7" to 222'-4" = 134'-9" & 235'-6" to 370'-6" = 135'-0"	C.L. Bearing Bent 1 to 121'-0" = Varies, 164'-2" to 287'-1" = 122'-11" & 323'-3" to C.L. Bearing Bent 4 = Varies

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Charles R. Ellis
LICENSED PROFESSIONAL ENGINEER
No. 9235
CHARLES R. ELLIS
BRIDGE ENGINEER

SHEET 11 OF 16
DETAILS OF 452'-0" CONTINUOUS PLATE GIRDER UNIT
HIGHWAY 18 OVER UPRR & KATHLEEN STREET

ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: CGP DATE: 10/26/2020 FILENAME: b100657_s1.dgn
CHECKED BY: JWP DATE: 01/13/2021 SCALE: AS NOTED
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BRIDGE NO. 07533 DRAWING NO. 63988

PRINT DATE: 9/3/2021

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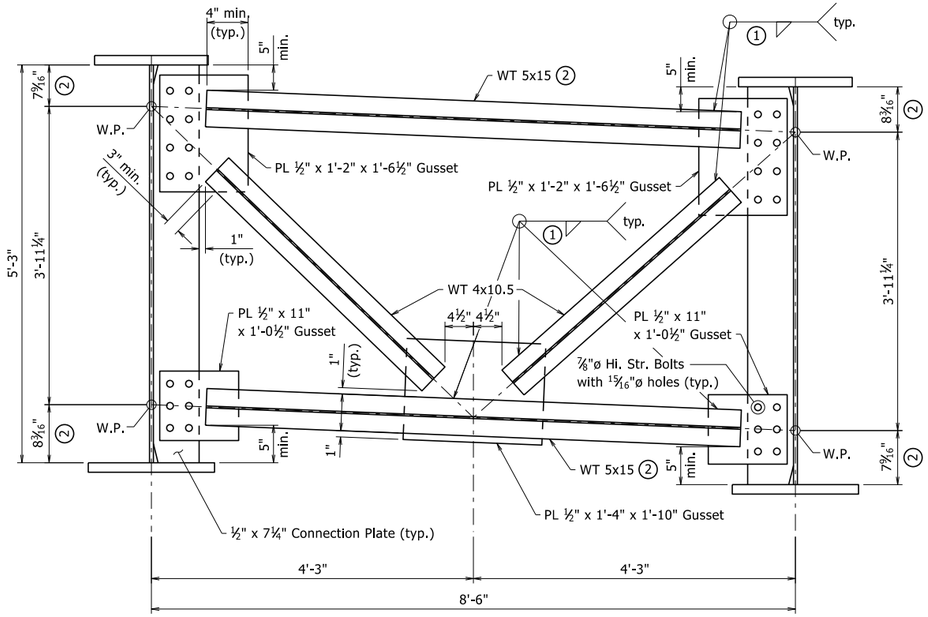
				6	ARK.		264	418
				JOB NO.		100657		
				(1)		07533 - SPAN DETAILS - 63989		



DETAIL OF K-FRAMES

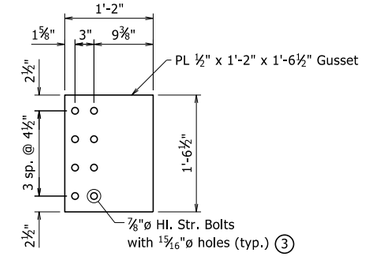
NOTES:

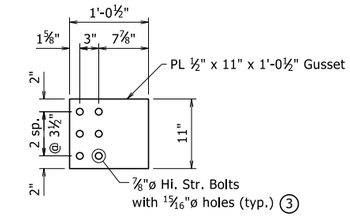
(1) See "WELD TABLE", Std. Dwg. No. 55007.

(2) WT 5x15 are to match roadway slope. Distance from flange to W.P. varies with roadway slope. The C.G. of the bottom chord shall pass through the C.G. of the bottom chord bolt group. Dimensions shown are applicable for a roadway slope of 3.4%.

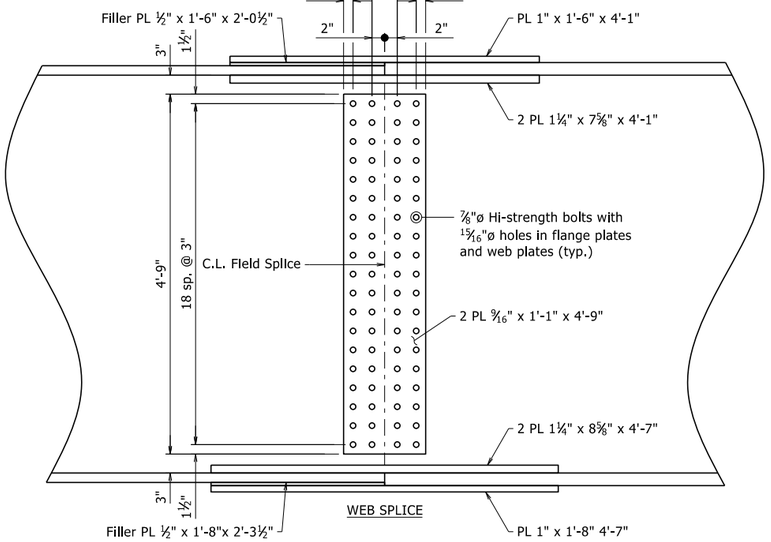
(3) Oversized holes will not be allowed on K-Frame connections.

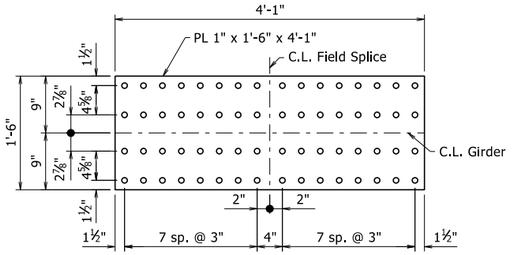
W.P. = Working Point

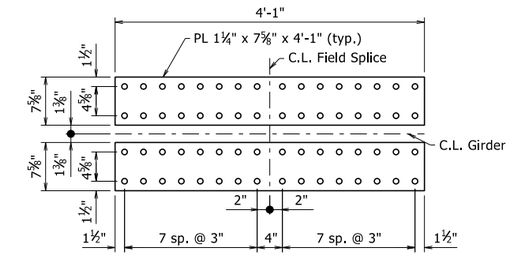


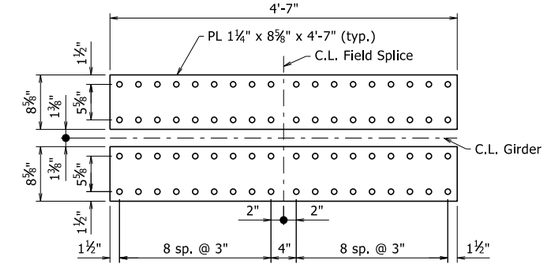


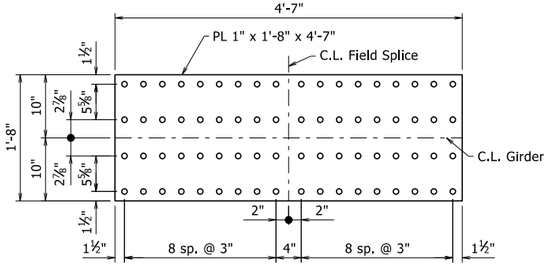
DETAILS OF GUSSET PLATES











DETAILS OF FIELD SPLICE

STATE OF ARKANSAS
Sep 3 2021 1:29 PM
LICENSED PROFESSIONAL ENGINEER
No. 9235
CHARLES R. ELLIS
BRIDGE ENGINEER

SHEET 12 OF 16
DETAILS OF 452'-0" CONTINUOUS PLATE GIRDER UNIT
HIGHWAY 18 OVER UPRR & KATHLEEN STREET

ROUTE SEC.

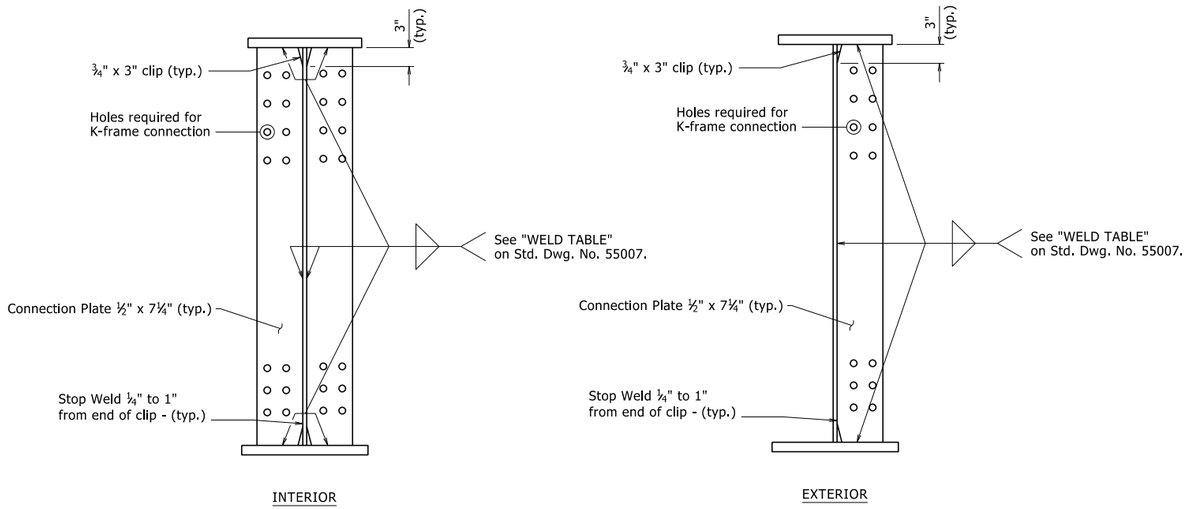
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: CGP DATE: 10/26/2020
CHECKED BY: JWP DATE: 01/13/2021
DESIGNED BY: JWP DATE: 11/2020
FILENAME: b100657_s1.dgn
SCALE: 1" = 1'-0"

BRIDGE NO. 07533 DRAWING NO. 63989

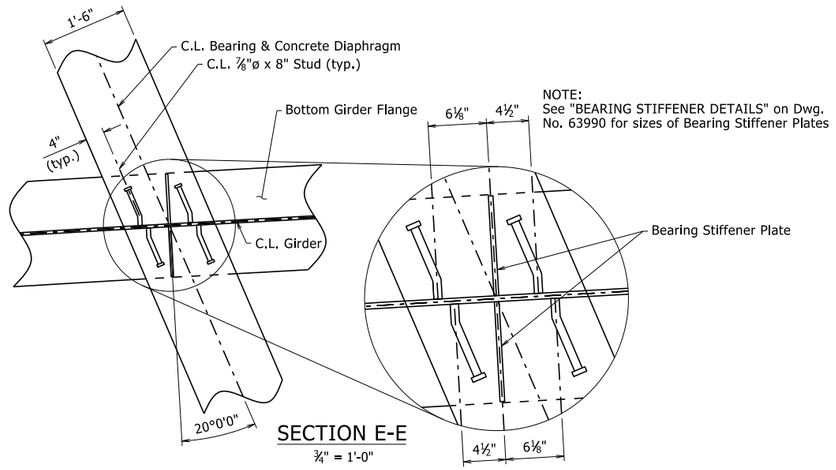
PRINT DATE: 9/3/2021

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		265	418
				JOB NO.		100657		
				①		07533 - SPAN DETAILS - 63990		



K-FRAME CONNECTION DETAILS

No Scale



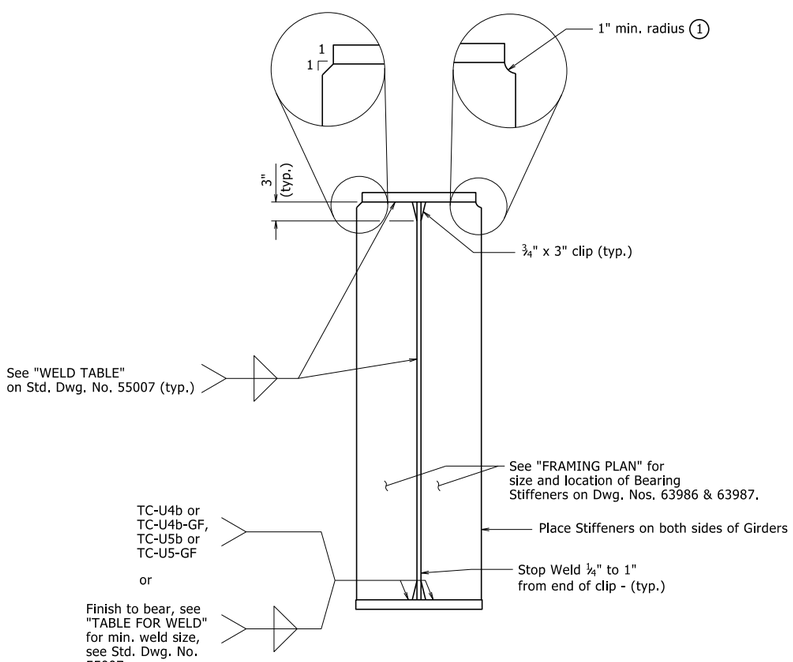
NOTE:
See "BEARING STIFFENER DETAILS" on Dwg. No. 63990 for sizes of Bearing Stiffener Plates

SECTION E-E

¾" = 1'-0"

NOTE:

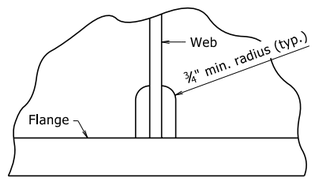
① If permanent steel bridge deck forms are used, the Fabricator shall clip plates as necessary to accommodate the deck form supports.



NOTE: All bearing stiffeners shall be vertical in their final position.

BEARING STIFFENER DETAILS

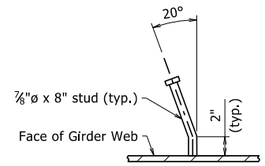
No Scale



For Bearing Stiffeners and K-Frame Connection Plates. Height and width of clip shall be as noted in the plans.

ALTERNATE CLIP DETAIL

No Scale



STUD DETAIL AT DIAPHRAGM

NO SCALE

STATE OF ARKANSAS
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SHEET 13 OF 16
DETAILS OF 452'-0" CONTINUOUS PLATE GIRDER UNIT
HIGHWAY 18 OVER UPRR & KATHLEEN STREET

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

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FILENAME: b100657_s1.dgn
SCALE: AS NOTED

BRIDGE NO. 07533 DRAWING NO. 63990

PRINT DATE: 9/3/2021

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		266	418
				JOB NO.		100657		
				(1)	07533 - SPAN DETAILS - 63991			

NOTES:

Pours with same number may be placed simultaneously or separately. The Contractor must obtain approval from the Engineer for any deviations from the pouring sequence shown. Any deviations, if approved, may require adjustment to the deflections provided. All concrete diaphragms shall be poured 72 hours before the slab pours. All Pour(s) 1 shall be placed before Pour(s) 2 can be placed. A minimum of 48 hours shall elapse between the end of a pour and the start of the next pour. A minimum of 72 hours shall elapse between the end of a pour and the start of an adjacent pour. A minimum of 72 hours shall elapse between the completion of the bridge deck pour and the start of the sidewalk pour. A minimum of 72 hours shall elapse between the end of the sidewalk pour and the start of the railing pour. Any sidewalk or railing pours made before the entire slab has been placed must be approved by the Engineer. No deviation from the pouring sequence shown.

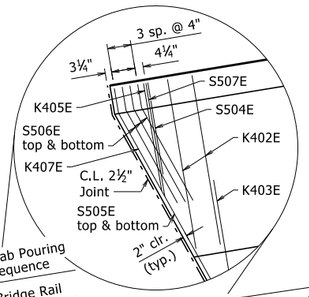
Concrete in bridge superstructure shall be placed, consolidated, and screeded off for the entire pour before any concrete has taken its initial set. This may require the use of a retarding agent.

Required slab joints and pouring sequence construction joints shall align with rail joints at base of rail.

Unless noted otherwise, spacing shown for all transverse reinforcing is measured along C.L. Bridge. All transverse reinforcing shall be placed on lines radial to C.L. Bridge.

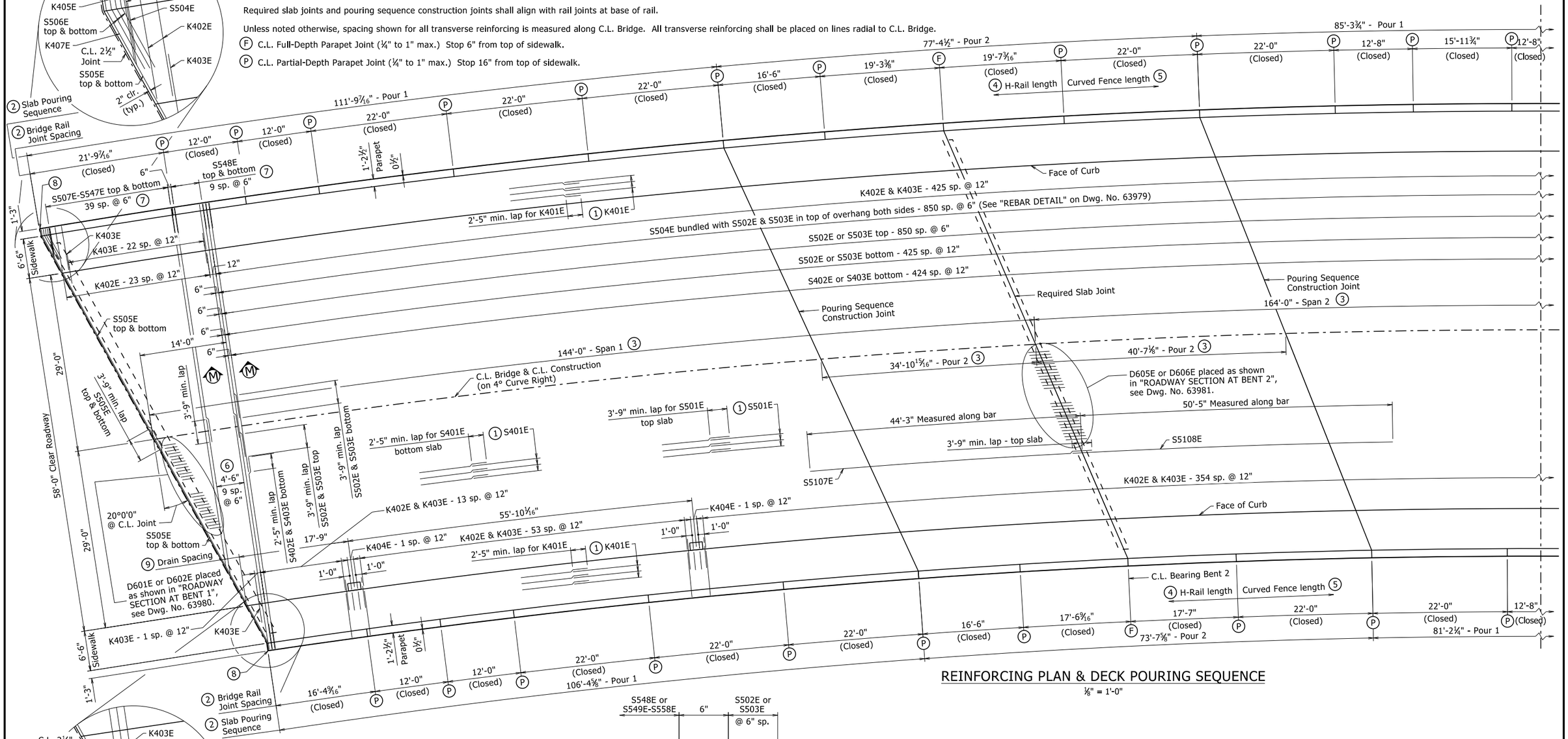
(F) C.L. Full-Depth Parapet Joint (¼" to 1" max.) Stop 6" from top of sidewalk.

(P) C.L. Partial-Depth Parapet Joint (¼" to 1" max.) Stop 16" from top of sidewalk.



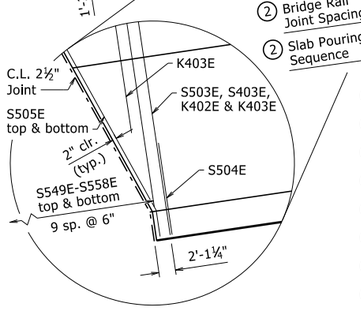
(2) Slab Pouring Sequence

(2) Bridge Rail Joint Spacing



REINFORCING PLAN & DECK POURING SEQUENCE

⅛" = 1'-0"



(1) Placed as shown in "TYPICAL ROADWAY SECTION", Dwg. Nos. 63978 & 63979.

(2) Measured along front face at base of rail.

(3) Measured along C.L. Bridge.

(4) See Std. Dwg. No. 55015 for H2 Rail details.

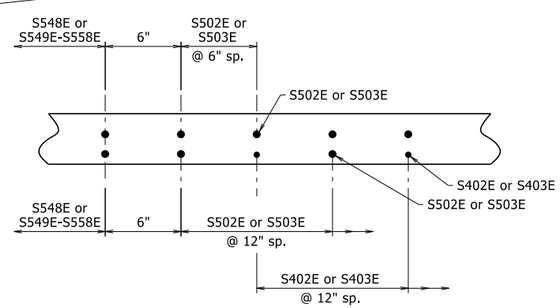
(5) See Dwg. No. 63995 & Layout for Curved Fence details.

(6) Bar spacing for S549E-S558E.

(7) S504E bundled with these bars.

(8) See "DETAIL X" on Std. Dwg. No. 55015 for Type H2 Rail transition.

(9) Measured along face of curb.



SECTION M-M

NO SCALE

STATE OF ARKANSAS
Sep 3 2021 1:29 PM
LICENSED PROFESSIONAL ENGINEER
No. 9235
CHARLES R. ELLIS

BRIDGE ENGINEER

SHEET 14 OF 16
DETAILS OF 452'-0" CONTINUOUS PLATE GIRDER UNIT
HIGHWAY 18 OVER UPRR & KATHLEEN STREET

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

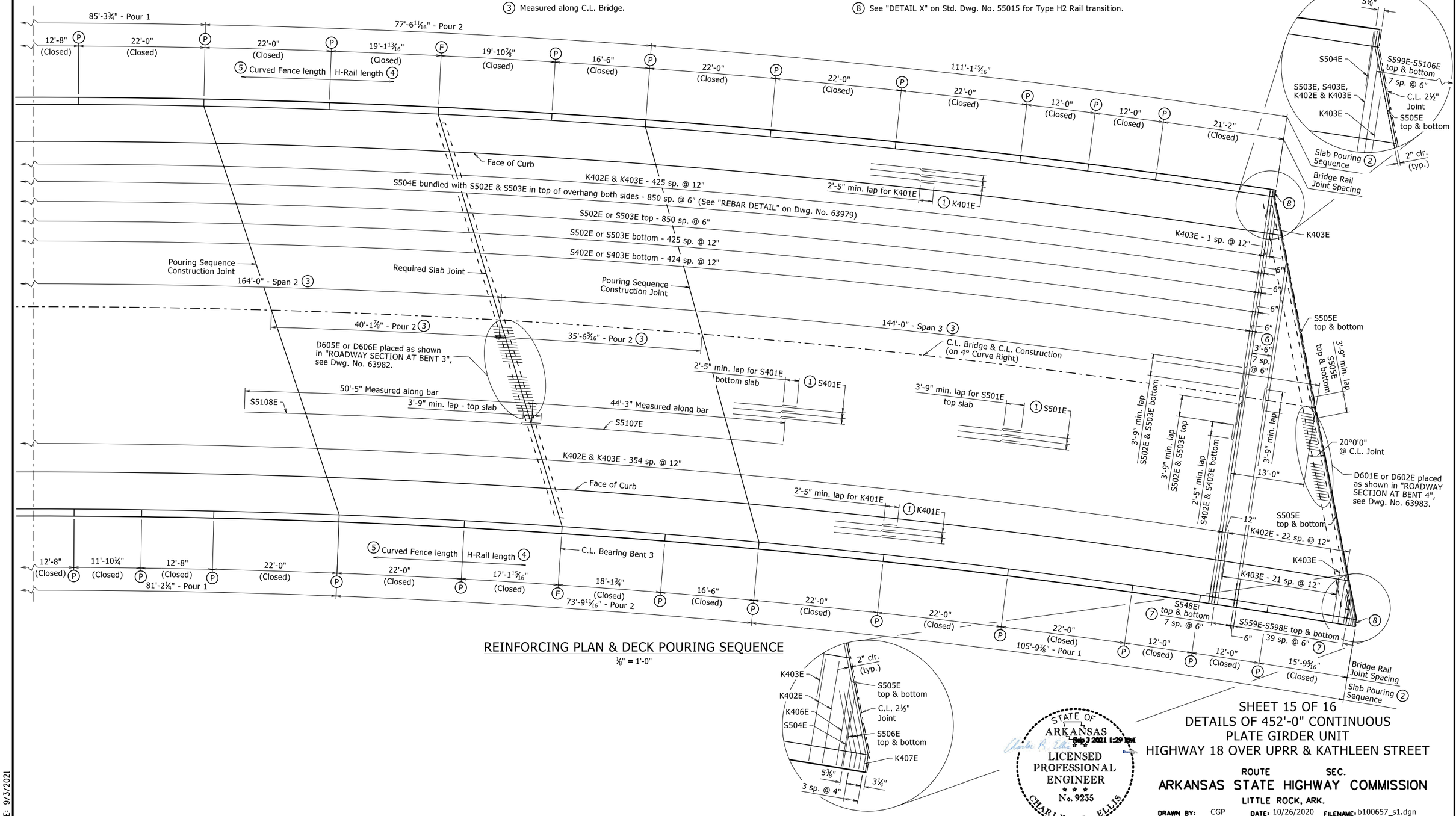
DRAWN BY: CGP DATE: 10/26/2020 FILENAME: b100657_s1.dgn
CHECKED BY: JWP DATE: 01/13/2021 SCALE: AS NOTED
DESIGNED BY: JWP DATE: 11/2020

BRIDGE NO. 07533 DRAWING NO. 63991

PRINT DATE: 9/3/2021

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		267	418
				JOB NO.		100657		
				1	07533 - SPAN DETAILS - 63992			

(F) C.L. Full-Depth Parapet Joint (¼" to 1" max.) Stop 6" from top of sidewalk.
(P) C.L. Partial-Depth Parapet Joint (¼" to 1" max.) Stop 16" from top of sidewalk.
(1) Placed as shown in "TYPICAL ROADWAY SECTION", Dwg. Nos. 63978 & 63979.
(2) Measured along front face at base of rail.
(3) Measured along C.L. Bridge.
(4) See Std. Dwg. No. 55015 for H2 Rail details.
(5) See Dwg. No. 63995 & Layout for Curved Fence details.
(6) Bar Spacing for S599E-S5106E.
(7) S504E bundled with these bars.
(8) See "DETAIL X" on Std. Dwg. No. 55015 for Type H2 Rail transition.



REINFORCING PLAN & DECK POURING SEQUENCE

⅛" = 1'-0"

STATE OF ARKANSAS
Sep 3 2021 1:29 PM
LICENSED PROFESSIONAL ENGINEER
No. 9235
CHARLES R. ELLIS
BRIDGE ENGINEER

SHEET 15 OF 16
DETAILS OF 452'-0" CONTINUOUS PLATE GIRDER UNIT
HIGHWAY 18 OVER UPRR & KATHLEEN STREET

ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: CGP DATE: 10/26/2020 FILENAME: b100657_s1.dgn
CHECKED BY: JWP DATE: 01/13/2021 SCALE: AS NOTED
DESIGNED BY: JWP DATE: 11/2020
BRIDGE NO. 07533 DRAWING NO. 63992

PRINT DATE: 9/3/2021

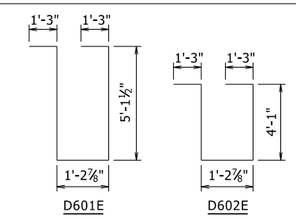
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
10-19-2022				6	ARK.		268	418
				JOB NO.		100657		

1 07533 - SPAN DETAILS - 63993

BAR LIST

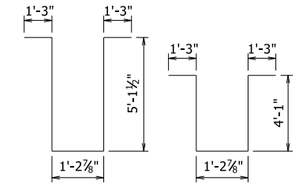
MARK	NO. REQ'D	LENGTH	P.D.
D601E	136	13'-4"	4½"
D602E	72	11'-3"	4½"
D603E	576	8'-8"	Str.
D604E	64	1'-11"	Str.
D605E	152	13'-4"	4½"
D606E	56	11'-3"	4½"
D607E	64	2'-3"	Str.
H401E	12	2'-11"	2"
H402E	4	3'-7"	2"
K401E	176	44'-4"	Str.
K402E	896	7'-3"	Str.
K403E	896	5'-5"	2"
K404E	4	4'-6"	2"
K405E	1	4'-7"	Str.
K406E	1	6'-3"	Str.
K407E	2	7'-4"	2"
		6'-4"	
R401E	1813	1 ~~5'-11"~~	2½"
R402E	176	5'-6"	Str.
R403E	1813	3'-6"	3"
R404E	8	11'-6"	Str.
R405E	64	11'-8"	Str.
R406E	32	12'-4"	Str.
R407E	8	15'-5"	Str.
R408E	8	15'-8"	Str.
R409E	8	16'-0"	Str.
R410E	32	16'-2"	Str.
R411E	8	16'-10"	Str.
R412E	8	17'-2"	Str.
R413E	8	17'-3"	Str.
R414E	8	17'-10"	Str.
R415E	8	18'-10"	Str.
R416E	8	18'-11"	Str.
R417E	8	19'-3"	Str.
R418E	8	19'-7"	Str.
R419E	8	20'-10"	Str.
R420E	8	21'-5"	Str.
R421E	160	21'-8"	Str.
S401E	1320	44'-4"	Str.
S402E	425	44'-2"	Str.
S403E	425	31'-5"	Str.
S501E	684	54'-10"	Str.
S502E	1277	41'-8"	Str.
S503E	1277	35'-4"	Str.
S504E	1801	4'-10"	Str.
S505E	8	40'-10"	3¾"
S506E	12	5'-7"	3¾"
S507E - S547E	2 ea.	4'-11"- 58'-9"	Str.
S548E	36	38'-6"	Str.
S549E - S558E	2 ea.	25'-5"- 37'-3"	Str.
S559E - S598E	2 ea.	5'-0"- 59'-11"	Str.
S599E - S5106E	2 ea.	26'-4"- 36'-5"	Str.
S5107E	76	45'-10"	Str.
S5108E	76	52'-0"	Str.

BENDING DIAGRAMS



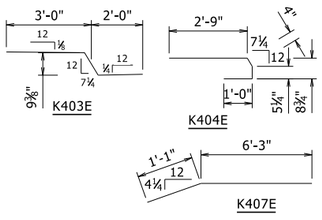
NOTE:

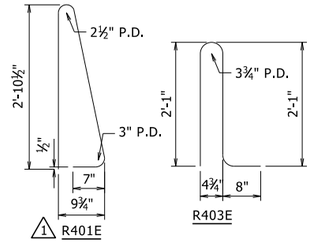
See Std. Dwg No. 55015 for bending diagrams of bars with an "H" prefix.

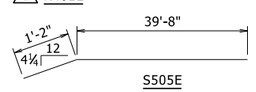


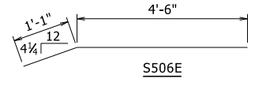
NOTE:

See Std. Dwg. No. 55070 for location of bars with an "R" prefix.





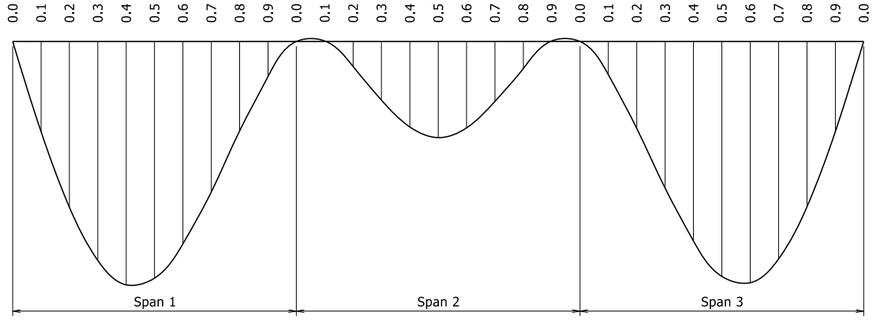




Dimensions are out to out of bars.
Bars with an "E" suffix are to be epoxy coated.

Span	Point of Deflection	Structural Steel									Structural Steel + Slab								
		Girder 1	Girder 2	Girder 3	Girder 4	Girder 5	Girder 6	Girder 7	Girder 8	Girder 9	Girder 1	Girder 2	Girder 3	Girder 4	Girder 5	Girder 6	Girder 7	Girder 8	Girder 9
1	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0.1	0.21	0.223	0.235	0.245	0.253	0.258	0.265	0.278	0.295	0.766	0.851	0.916	0.965	1.002	1.014	1.026	1.05	1.084
	0.2	0.384	0.413	0.433	0.448	0.459	0.474	0.49	0.513	0.54	1.408	1.572	1.691	1.767	1.819	1.864	1.899	1.942	1.99
	0.3	0.506	0.542	0.568	0.592	0.608	0.623	0.645	0.674	0.712	1.859	2.066	2.221	2.34	2.41	2.457	2.505	2.555	2.628
	0.4	0.56	0.6	0.631	0.652	0.671	0.69	0.713	0.745	0.79	2.059	2.292	2.471	2.584	2.666	2.725	2.777	2.835	2.921
	0.5	0.544	0.579	0.608	0.63	0.649	0.67	0.693	0.724	0.766	2.009	2.217	2.389	2.507	2.592	2.657	2.709	2.762	2.842
	0.6	0.463	0.491	0.516	0.537	0.556	0.571	0.593	0.619	0.652	1.72	1.889	2.036	2.152	2.232	2.279	2.329	2.376	2.432
	0.7	0.337	0.355	0.376	0.394	0.404	0.418	0.432	0.453	0.482	1.265	1.381	1.5	1.592	1.642	1.683	1.711	1.755	1.812
	0.8	0.195	0.208	0.219	0.227	0.236	0.242	0.253	0.268	0.283	0.744	0.82	0.888	0.936	0.979	0.989	1.016	1.055	1.081
	0.9	0.071	0.076	0.08	0.085	0.086	0.089	0.097	0.095	0.108	0.282	0.312	0.337	0.361	0.374	0.377	0.4	0.386	0.427
2	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0.1	0.02	0.019	0.02	0.02	0.017	0.017	0.015	0.013	0.01	0.023	0.02	0.022	0.022	0.014	0.018	0.004	-0.014	-0.037
	0.2	0.106	0.11	0.115	0.116	0.114	0.114	0.113	0.113	0.109	0.273	0.303	0.323	0.327	0.329	0.339	0.318	0.281	0.235
	0.3	0.209	0.221	0.229	0.232	0.234	0.24	0.236	0.236	0.236	0.592	0.663	0.705	0.72	0.735	0.758	0.718	0.667	0.607
	0.4	0.29	0.307	0.318	0.325	0.33	0.334	0.335	0.336	0.336	0.849	0.947	1.013	1.048	1.069	1.075	1.042	0.983	0.906
	0.5	0.32	0.338	0.351	0.361	0.368	0.371	0.373	0.374	0.377	0.947	1.056	1.135	1.182	1.203	1.198	1.164	1.101	1.026
	0.6	0.291	0.305	0.318	0.328	0.335	0.338	0.339	0.339	0.342	0.855	0.95	1.029	1.077	1.092	1.08	1.043	0.983	0.915
	0.7	0.21	0.22	0.23	0.237	0.243	0.245	0.244	0.243	0.244	0.6	0.672	0.734	0.765	0.778	0.758	0.72	0.674	0.617
	0.8	0.107	0.113	0.117	0.119	0.123	0.123	0.122	0.123	0.12	0.283	0.324	0.354	0.371	0.378	0.347	0.32	0.3	0.254
	0.9	0.021	0.023	0.022	0.026	0.024	0.021	0.024	0.024	0.012	0.029	0.041	0.046	0.062	0.05	0.023	0.019	0.012	-0.038
3	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0.1	0.068	0.075	0.077	0.078	0.082	0.083	0.086	0.092	0.1	0.265	0.3	0.314	0.326	0.35	0.363	0.376	0.391	0.412
	0.2	0.196	0.206	0.215	0.221	0.226	0.231	0.239	0.252	0.268	0.734	0.8	0.853	0.892	0.927	0.965	0.991	1.022	1.059
	0.3	0.336	0.356	0.373	0.383	0.392	0.407	0.417	0.437	0.46	1.236	1.363	1.461	1.525	1.583	1.66	1.688	1.734	1.776
	0.4	0.462	0.489	0.51	0.531	0.545	0.557	0.576	0.6	0.631	1.689	1.856	1.982	2.099	2.178	2.238	2.299	2.349	2.405
	0.5	0.54	0.574	0.605	0.623	0.639	0.656	0.675	0.704	0.748	1.971	2.169	2.343	2.452	2.541	2.617	2.675	2.732	2.825
	0.6	0.561	0.597	0.623	0.643	0.66	0.676	0.701	0.731	0.771	2.044	2.249	2.407	2.527	2.615	2.685	2.762	2.822	2.898
	0.7	0.506	0.538	0.563	0.582	0.598	0.615	0.633	0.66	0.697	1.842	2.024	2.173	2.284	2.366	2.432	2.487	2.541	2.611
	0.8	0.385	0.408	0.429	0.445	0.456	0.468	0.481	0.501	0.531	1.399	1.532	1.654	1.743	1.802	1.847	1.884	1.924	1.984
	0.9	0.209	0.221	0.234	0.243	0.249	0.254	0.26	0.272	0.29	0.758	0.829	0.903	0.952	0.981	1.003	1.017	1.045	1.08
	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Span	Point of Deflection	Structural Steel + Slab + Parapet + Sidewalk								
		Girder 1	Girder 2	Girder 3	Girder 4	Girder 5	Girder 6	Girder 7	Girder 8	Girder 9
1	0.0	0	0	0	0	0	0	0	0	0
	0.1	0.938	0.978	1.018	1.055	1.091	1.112	1.15	1.224	1.325
	0.2	1.723	1.81	1.879	1.931	1.979	2.043	2.128	2.262	2.431
	0.3	2.274	2.382	2.47	2.557	2.621	2.692	2.805	2.973	3.211
	0.4	2.518	2.645	2.749	2.823	2.899	2.984	3.106	3.295	3.568
	0.5	2.456	2.56	2.658	2.738	2.817	2.907	3.026	3.205	3.47
	0.6	2.098	2.181	2.264	2.349	2.424	2.491	2.597	2.751	2.967
	0.7	1.538	1.592	1.667	1.736	1.781	1.837	1.904	2.026	2.206
	0.8	0.898	0.943	0.985	1.019	1.06	1.077	1.126	1.212	1.311
	0.9	0.335	0.356	0.372	0.392	0.403	0.409	0.441	0.438	0.514
2	0.0	0	0	0	0	0	0	0	0	0
	0.1	0.056	0.034	0.031	0.029	0.019	0.024	0.014	0.005	-0.008
	0.2	0.394	0.376	0.372	0.366	0.366	0.38	0.374	0.37	0.367
	0.3	0.813	0.808	0.805	0.8	0.81	0.844	0.831	0.838	0.86
	0.4	1.145	1.15	1.154	1.161	1.175	1.194	1.199	1.218	1.253
	0.5	1.27	1.282	1.293	1.308	1.321	1.329	1.336	1.358	1.41
	0.6	1.151	1.158	1.175	1.193	1.2	1.198	1.197	1.214	1.267
	0.7	0.82	0.826	0.842	0.849	0.856	0.843	0.829	0.839	0.878
	0.8	0.403	0.408	0.411	0.414	0.418	0.389	0.373	0.385	0.396
	0.9	0.061	0.063	0.059	0.072	0.058	0.03	0.029	0.03	-0.008
3	0.0	0	0	0	0	0	0	0	0	0
	0.1	0.318	0.339	0.344	0.353	0.378	0.394	0.416	0.447	0.488
	0.2	0.895	0.914	0.942	0.971	1.004	1.052	1.103	1.179	1.274
	0.3	1.513	1.565	1.619	1.662	1.718	1.813	1.883	2.009	2.152
	0.4	2.07	2.139	2.201	2.29	2.366	2.448	2.568	2.725	2.926
	0.5	2.417	2.505	2.606	2.677	2.762	2.864	2.99	3.171	3.445
	0.6	2.507	2.603	2.68	2.761	2.843	2.94	3.087	3.275	3.537
	0.7	2.259	2.345	2.422	2.497	2.574	2.663	2.779	2.947	3.189
	0.8	1.716	1.777	1.844	1.906	1.961	2.023	2.104	2.229	2.425
	0.9	0.93	0.963	1.007	1.042	1.068	1.098	1.135	1.209	1.32
	0.0	0	0	0	0	0	0	0	0	0



DEAD LOAD DEFLECTION DIAGRAM

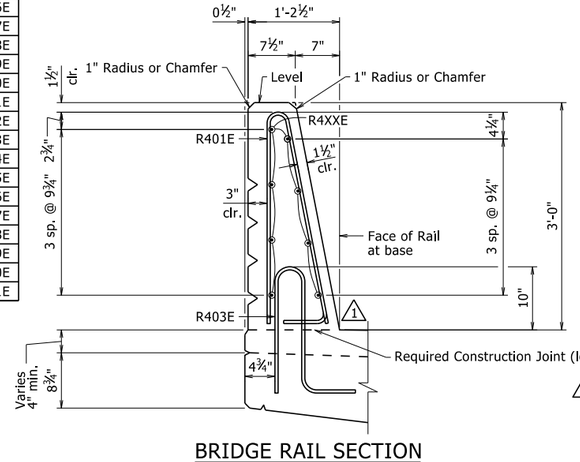
Note:
Camber for Dead Load Deflection +/- inch tolerance. Deflections shown are along centerline of beam/girder from the plane perpendicular to the web extending from C.L. Bearing to C.L. Bearing. Negative sign (-) indicates point above plane. Vertical curve corrections not included. Superelevation transition corrections not included.

Dead load deflections shown include an assumed loading of 18 psf to account for stay-in-place metal deck forms. Revisions to the deflection table may be necessary upon review of the Contractor's submitted forming details or any approved changes to the pouring sequence shown in "REINFORCING PLAN & DECK POURING SEQUENCE" on Dwg. Nos. 63991 & 63992.

TABLE OF VARIABLES

(for use with Std. Dwg. No. 55070)

Closed Rail Panels		
Panel Length	A	R4XXE
11'-10¼"	23	R404E
12'-0"	23	R405E
12'-8"	24	R406E
15'-9⁵⁄₁₆"	31	R407E
15'-11¾"	31	R408E
16'-4⁵⁄₁₆"	32	R409E
16'-6"	32	R410E
17'-1¹³⁄₁₆"	34	R411E
17'-6⁵⁄₁₆"	35	R412E
17'-7"	35	R413E
18'-1¾"	36	R414E
19'-1¹³⁄₁₆"	38	R415E
19'-3⅜"	38	R416E
19'-7⁵⁄₁₆"	38	R417E
19'-10⅞"	39	R418E
21'-2"	42	R419E
21'-9⁵⁄₁₆"	43	R420E
22'-0"	43	R421E



BRIDGE RAIL SECTION

1" = 1'-0"

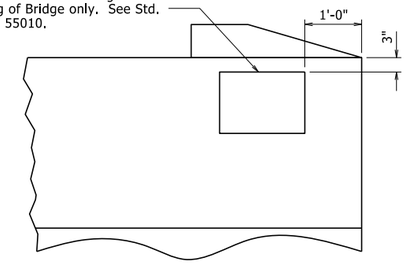
NOTE:

See "REINFORCING PLAN & DECK POURING SEQUENCE" on Dwg. Nos. 63991 & 63992 for rail panel lengths.
See "BAR LIST" for rebar quantities.
See "TABLE OF VARIABLES" for rail rebar information.
See Std. Dwg. No. 55070 for details of rail reinforcing and "A" designation.

1 Revised R401E bar based on changes to Std. Dwg. 55070
Rev. by JWP 10/12/2022
Ck. by MCB 10/18/2022

STATE OF ARKANSAS
Digitally signed by Charles R. Ellis, Little Rock
Oct 18 2022 2:32 PM
LICENSED PROFESSIONAL ENGINEER
No. 9235
CHARLES R. ELLIS
BRIDGE ENGINEER

Place Type D Bridge Name Plate on front face of span rail approximately 1'-0" from end of rail on right side Beginning of Bridge only. See Std. Dwg. No. 55010.



NAME PLATE DETAIL

NO SCALE

SHEET 16 OF 16
DETAILS OF 452'-0" CONTINUOUS PLATE GIRDER UNIT
HIGHWAY 18 OVER UPRR & KATHLEEN STREET

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: CGP DATE: 10/26/2020 FILENAME: b100657_s1.dgn
CHECKED BY: JWP DATE: 01/13/2021 SCALE: NO SCALE
DESIGNED BY: JWP DATE: 11/2020

BRIDGE NO. 07533 DRAWING NO. 63993

PRINT DATE: 10/18/2022

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
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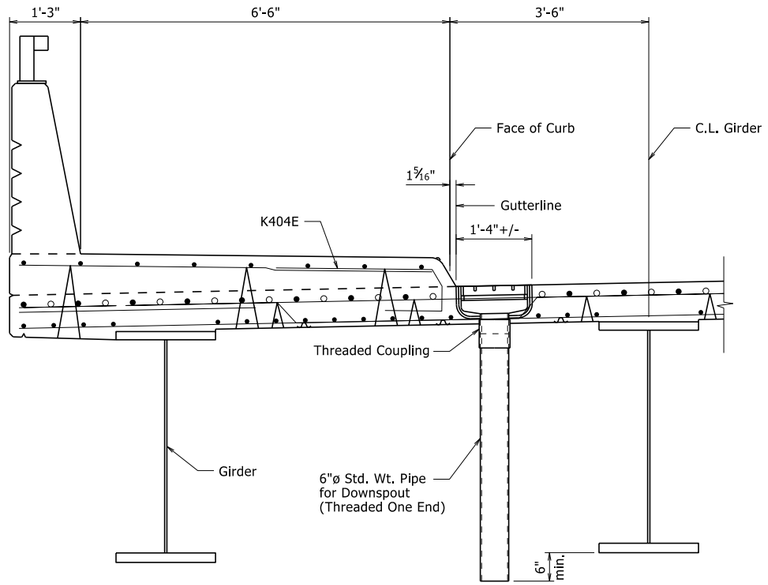
				JOB NO.		100657		
				①	07533 - DECK DRAINS - 63994			



SECTION AT DECK DRAIN

LOOKING BACK

GENERAL NOTES:

For Location of Deck Drains, see Dwg. Nos. 63979 & 63991.

Drain location may be adjusted to clear diaphragm connections.

Standard Weight Pipe for Deck Drains shall conform to ASTM A500 or A501. All other structural steel shall be ASTM A709, Gr. 36. After fabrication, all structural steel in drains shall be Galvanized in accordance with AASHTO M 111. Steel Fasteners shall be Galvanized in accordance with AASHTO M 232, Class C or ASTM B695, Class 50.

Structural Steel in Deck Drains shall not be paid for directly, but shall be considered subsidiary to the item "Structural Steel in Plate Girder Spans (A709, Gr. 50W)".

Top longitudinal reinforcing steel in the slab shall be cut as shown to install the deck drains. Two additional No. 4 x 5'-6" straight bars shall be placed longitudinally on each side of the drain.

Top and bottom transverse reinforcing steel in the slab shall be cut as required (up to a maximum of three bars per mat) to install the deck drain. Two additional No. 6 x 9'-6" straight bars shall be placed transversely per mat on each side of the drain.

One additional No. 4 x 4'-0" straight bar shall be placed at a 45° angle to each corner in both top and bottom mats.

Repair all cut or damaged epoxy bars in accordance with the Standard Specifications.

All additional Reinforcing Steel placed around deck drains shall be epoxy-coated and shall be paid for at the unit price bid for "Epoxy Coated Reinforcing Steel (Grade 60)".

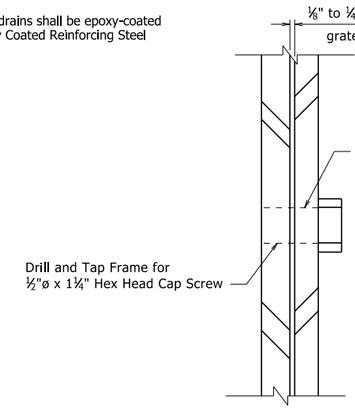
NOTE:
A Pre-Manufactured Grate or Grate and Frame may be submitted for approval of the Engineer in place of the steel fabrication shown in the Plans. Grate shall have an AASHTO-AGC-ARTBA Type 5 or 6 Configuration and shall be designed for a 16,000 lb. wheel load.

BAR LIST FOR ONE DRAIN

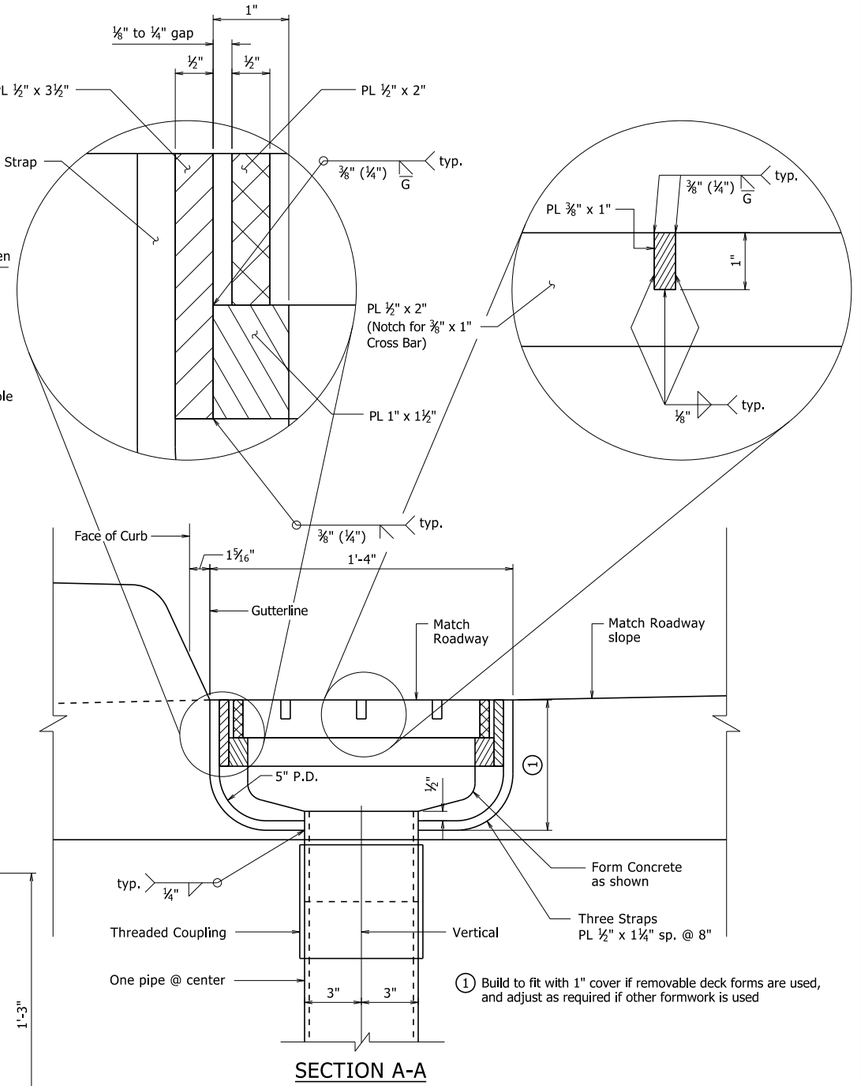
(FOR INFORMATION ONLY)

Mark	No. Req'd	Length
X401E	8	4'-0"
X402E	8	5'-6"
X601E	8	9'-6"

Bars designated with an "E" suffix are to be epoxy coated.

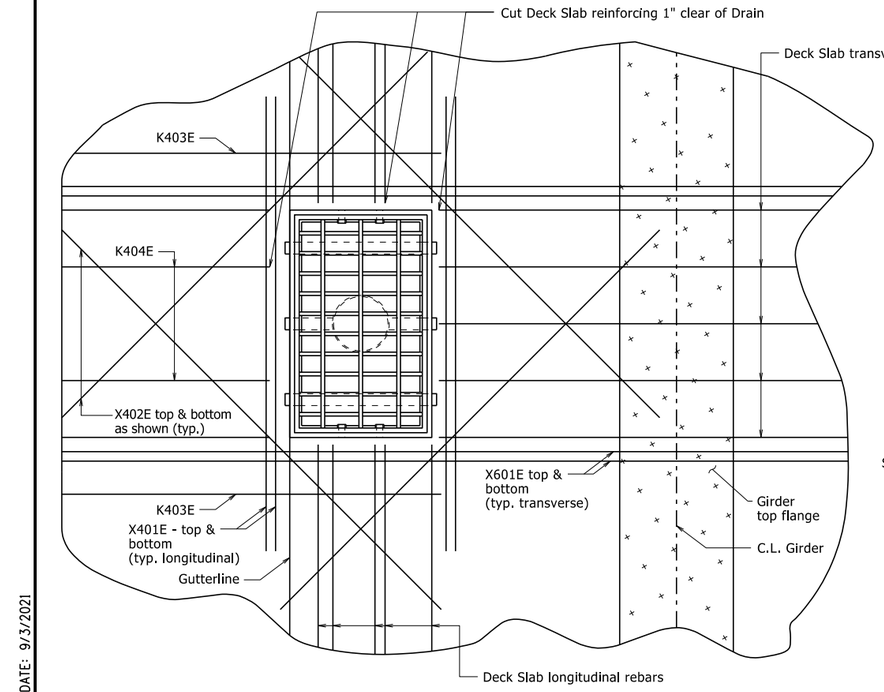


DETAIL A

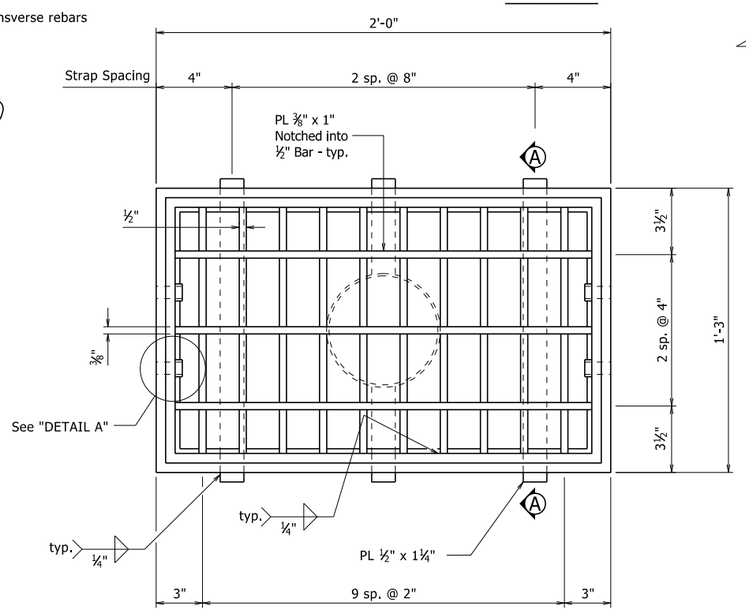


① Build to fit with 1" cover if removable deck forms are used, and adjust as required if other formwork is used

SECTION A-A



PLAN OF REINFORCING AT DECK DRAINS



PLAN

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 9235
CHARLES R. ELLIS
Date 3 2021 1:30 PM
BRIDGE ENGINEER

DETAILS OF DECK DRAINS
HIGHWAY 18 OVER UPRR & KATHLEEN STREET

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: CGP	DATE: 10/26/2020	FILENAME: b100657_dd.dgn	
CHECKED BY: JWP	DATE: 01/13/2021	SCALE: NO SCALE	
DESIGNED BY: JWP	DATE: 11/2020		

BRIDGE NO. 07533 DRAWING NO. 63994

PRINT DATE: 9/3/2021

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
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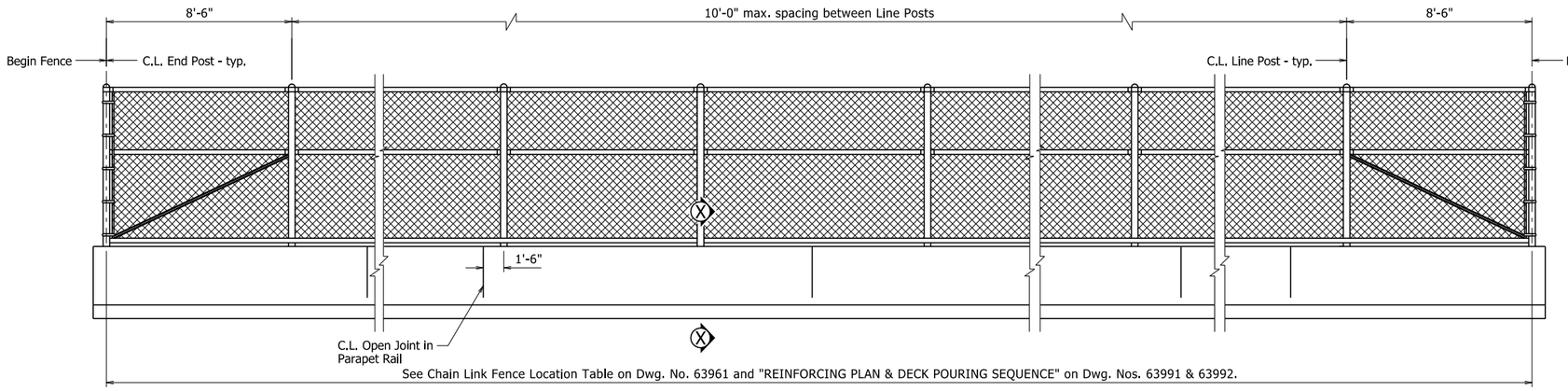
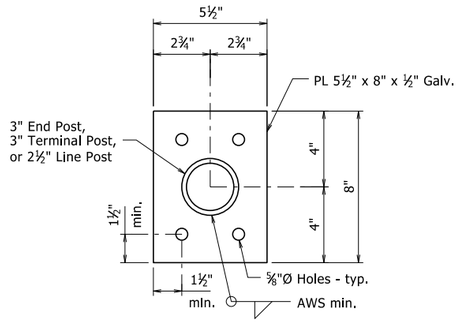
				JOB NO.		100657		
				1	07533 - CHAIN LINK FENCE - 63995			

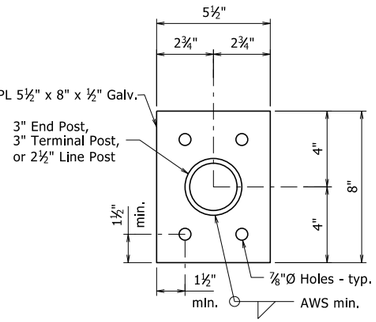


LONGITUDINAL VIEW OF CHAIN LINK FENCE

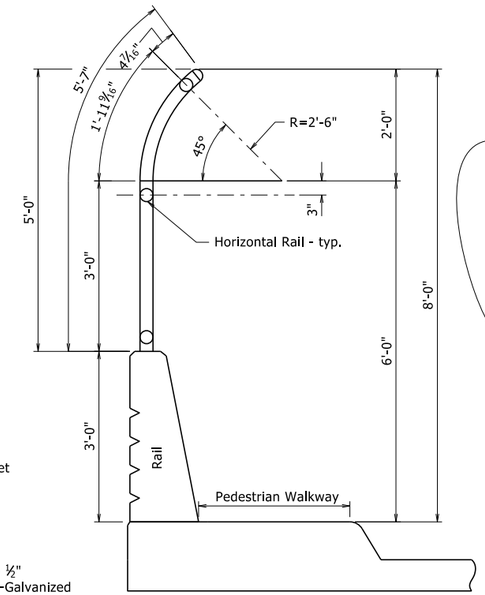
NOTES:
The fence location, total length and parapet panel spacing shall be as specified in the plans.



VIEW Y-Y

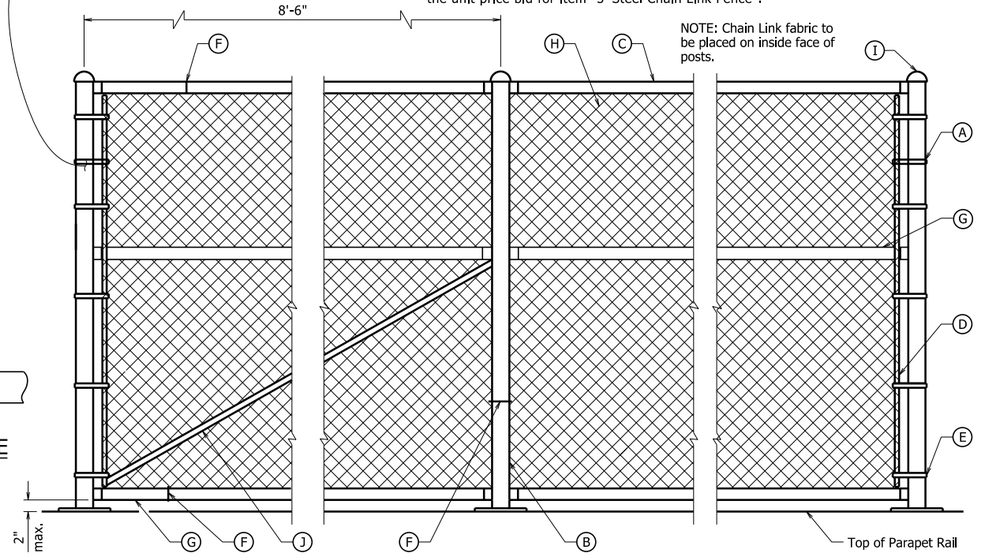


VIEW Z-Z

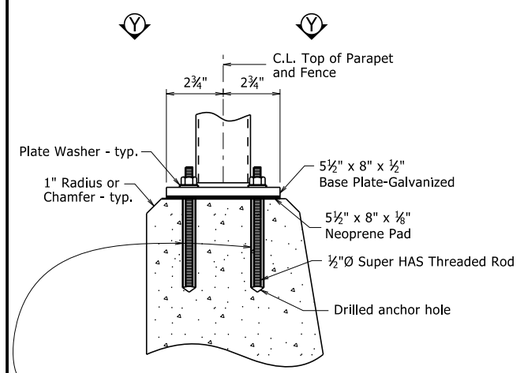


CURVED CHAIN LINK FENCE

All metal bridge fencing shall receive a powder coating finish. The color shall be Dark Bronze as approved by the Engineer. This work will be considered subsidiary to the item "5' Steel Chain Link Fence".



DETAILS OF CHAIN LINK FENCE

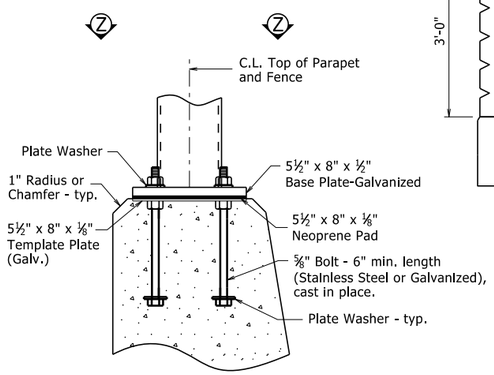


(1) HILTI HIT RE 500 Epoxy Adhesive Anchor System with 4½" embedment or approved equal.

(1) The HILTI Adhesive Anchor System shall be installed in accordance with Manufacturer's recommendations.

SECTION X-X

DETAILS OF ALTERNATE POST ANCHOR SYSTEM
(EPOXY ADHESIVE ANCHORS)



SECTION X-X

DETAILS OF POST ANCHOR SYSTEM

GENERAL NOTES

Fence layout shall conform to the vertical and horizontal bridge alignments. Fence posts shall be set plumb (true vertical position). Parapet rail concrete shall be at least 7 days old before stretching and securing fabric to posts.

Cast-in-place anchor bolts, nuts, and washers shall be galvanized high-strength steel or stainless steel. Mixing of galvanized and stainless steel fasteners will not be permitted.

High-Strength Steel:
Cast-in-place anchor bolts shall conform to ASTM F3125, Grade A325, Type 1.
Nuts shall conform to ASTM A563, Grade DH or AASHTO M 292, Grade 2H.
Washers shall conform to ASTM F436.
Plate Washers shall conform to ASTM A709, Grade 36.
Template Plates shall conform to ASTM A709, Grade 36.
Anchor bolts, nuts, washers, and plate washers shall be galvanized in accordance with AASHTO M 232, Class C or ASTM B695, Class 50.

Stainless Steel:
Cast-in-place anchor bolts shall conform to ASTM A193, Grade B8, Class 2 or A320, Grade B8, Class 2 with a minimum yield strength of 80,000 psi.
Nuts shall conform to ASTM A194, Grade 8.
Washers shall conform to ASTM A240, Type 302.
Plate Washers shall conform to ASTM A240, Type 302.
Template Plates shall conform to ASTM A240, Type 302.

Threads on bolts and nuts shall conform to American Standard Coarse Series, Class 2 FIT, ASA Specification B1.1. Plate washers shall have dimensions meeting the requirements of ANSI/ASME B18.22.1, Type A plain washer (Wide Series) unless otherwise noted.

Base plates shall conform to ASTM A709, Grade 36 and shall be galvanized after fabrication in accordance with Subsection 806.02(c). Galvanized surfaces shall be prepared in accordance with Subsection 807.87. Base plates shall not be placed upon areas that are improperly finished, deformed or irregular. Neoprene pads shall conform to the requirements of Subsection 807.15(b).

Chain Link Fence attached to bridge shall be paid for as "5' Steel Chain Link Fence". Material for chain link fence shall comply with AASHTO M181 Type I, Class D; Type II; or Type III. Steel members for posts, rails, expansion sleeves, and gate frames may be either Grade 1 or Grade 2. Hardware and fittings shall comply with ASTM F 626. Any miscellaneous hardware or fittings not mentioned shall be galvanized according to AASHTO M 111 or M 232. For additional details of Chain Link Fence, see Standard Drawing WF-3 and Section 619. Neoprene pad, template plates, and anchor systems shall not be paid for directly, but shall be considered incidental to the unit price bid for item "5' Steel Chain Link Fence".

(A) END POST: 3" O.D.
(B) LINE POST: 2½" O.D.
(C) HORIZONTAL TOP RAIL: 1⅝" O.D.
(D) TENSION BAR: 3/16" x ¾" Bar
(E) TENSION BAR BAND: ¾" x 0.074 w/5/16"Ø x 1¼" Bolt (1 Band Top and Bottom w/15" max. spaces)
(F) TIE WIRE: 9 Ga. Aluminum
(G) HORIZONTAL RAIL: 1⅝" O.D.
(H) FABRIC: 9 Ga. 2" Mesh w/Knocklug or Twisting Selvage
(I) CAPS: All post shall be capped and shall conform to ASTM F 626
(J) TRUSS ROD: Min. of 5/16" round with Tighteners and Fittings

STATE OF ARKANSAS
Sep 3 2021 1:30 PM
LICENSED PROFESSIONAL ENGINEER
No. 9235
CHARLES R. ELLIS
BRIDGE ENGINEER

DETAILS OF CURVED CHAIN LINK FENCE HIGHWAY 18 OVER UPRR & KATHLEEN STREET

ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: CGP DATE: 10/26/2020 FILENAME: b100657_cf.dgn
CHECKED BY: JWP DATE: 01/13/2021 SCALE: NO SCALE
DESIGNED BY: JWP DATE: 11/2020
BRIDGE NO. 07533 DRAWING NO. 63995

PRINT DATE: 9/3/2021

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
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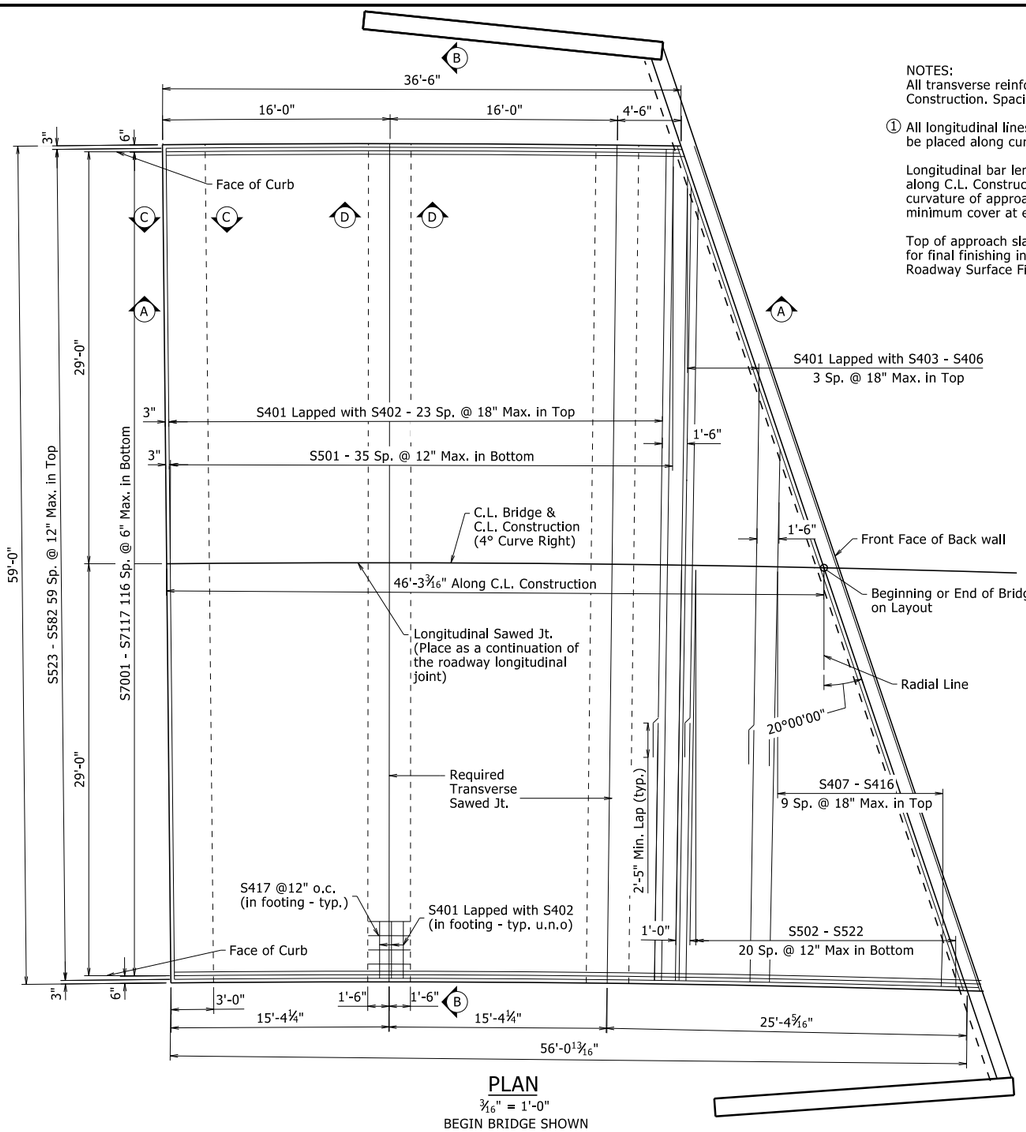
				JOB NO.		100657		
				①	07533 - TYPE SPECIAL APP. SLAB - 63996			



PLAN

3/16" = 1'-0"

BEGIN BRIDGE SHOWN
END BRIDGE SIMILAR

NOTES:
All transverse reinforcing shall be placed on lines radial to C.L. Construction. Spacing is measured along C.L. Construction.

① All longitudinal lines and logitudinal slab reinforcing shall be placed along curves concentric with C.L. Construction.

Longitudinal bar lengths shown are based on approach slab length along C.L. Construction. Actual bar lengths will vary due to curvature of approach slab. Fabricate bar lengths to provide 2" minimum cover at each end.

Top of approach slab shall be given a tined finish as specified for final finishing in Subsection 802.19 for Class 5 Tined Bridge Roadway Surface Finish.

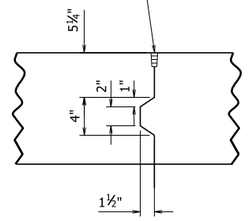
GENERAL NOTES

All concrete shall be Class S (AE) with a minimum 28 day compressive strength f'c = 4,000 psi and shall be poured in the dry.

All reinforcing steel shall be Grade 60 (yield strength = 60,000 psi) conforming to AASHTO M 31 or M 322, Type A, with mill test reports.

Approach Slabs will be measured and paid for in accordance with Section 504.

1/2' x 1" Poured Jt. Sealer (Type 3 or 4) per Subsection 501.02(h)(2)
Backer rod is not required.

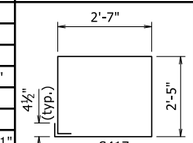


DETAILS OF LONGITUDINAL CONSTRUCTION JOINT

NO SCALE

BAR LIST PER SLAB

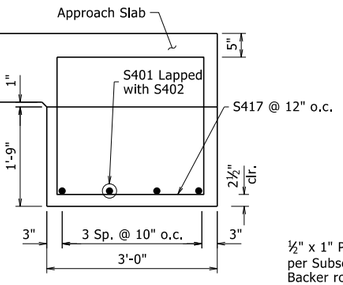
Mark	NO. REQ'D	LENGTH	BENDING DIAGRAMS
S401	40	40'-0"	
S402	36	21'-1"	
S403-S406	1 Ea.	6'-7" to 19'-4"	
S407-S416	1 Ea.	5'-8" to 39'-11"	
S417	180	10'-4"	
S501	36	58'-8"	
S502-S522	1 Ea.	1'-11" to 56'-11"	
① S523-S582	1 Ea.	36'-2" to 55'-7"	
① S7001-S7117	1 Ea.	36'-3" to 55'-6"	



QUANTITIES

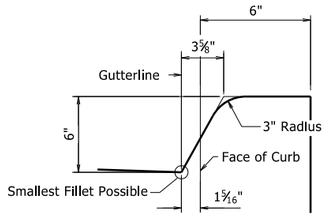
(For information only)

Reinforcing Steel (Lbs.)	Concrete (Cu. Yds.)
20,340	166.89



SECTION C-C

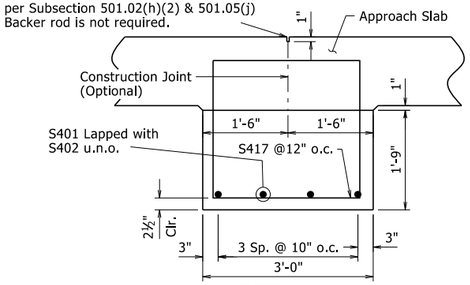
NO SCALE



TYPICAL CURB DETAIL

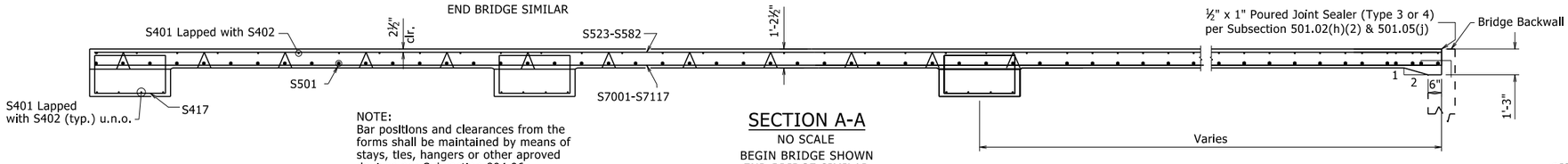
NO SCALE

½" x 1" Poured Jt. Sealer (Type 3 or 4) per Subsection 501.02(h)(2) & 501.05(j)
Backer rod is not required.



SECTION D-D

NO SCALE

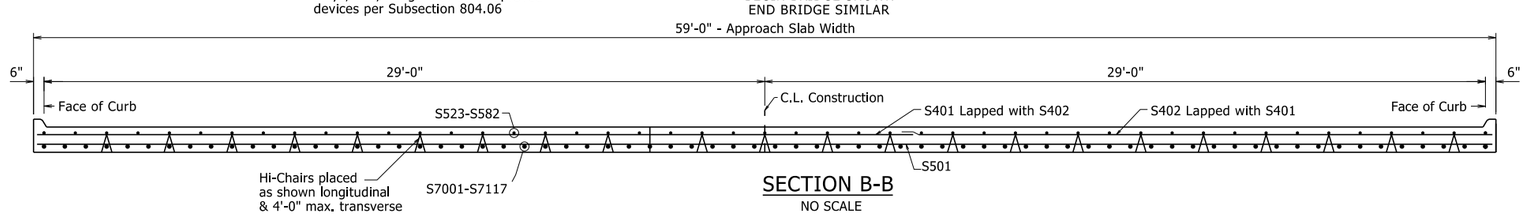


NOTE:
Bar positions and clearances from the forms shall be maintained by means of stays, ties, hangers or other aproved devices per Subsection 804.06

SECTION A-A

NO SCALE

BEGIN BRIDGE SHOWN
END BRIDGE SIMILAR



SECTION B-B

NO SCALE

STATE OF ARKANSAS
Dec 3 2021 1:30 PM
LICENSED PROFESSIONAL ENGINEER
No. 9235
CHARLES R. ELLIS
BRIDGE ENGINEER

DETAILS OF TYPE SPECIAL APPROACH SLAB

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

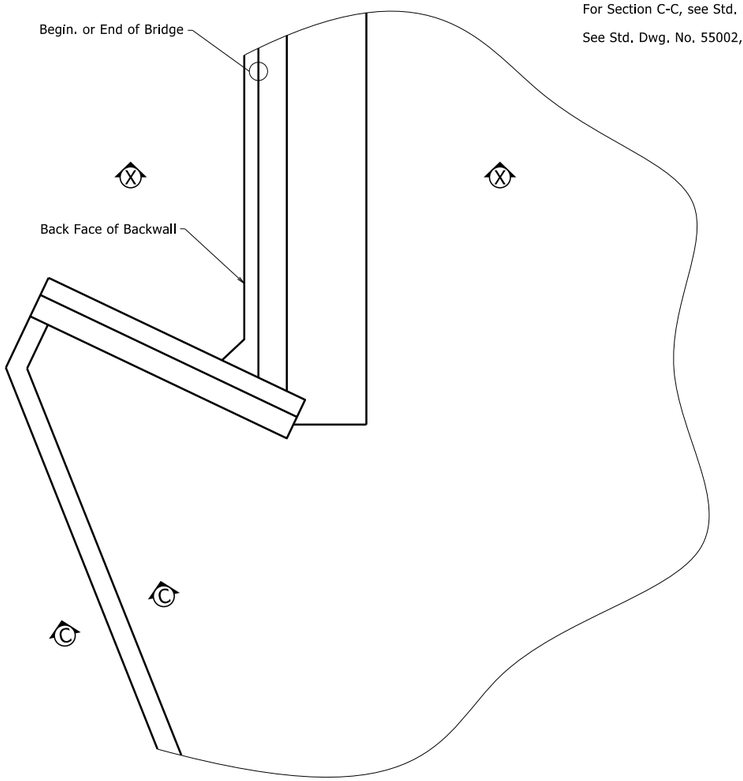
LITTLE ROCK, ARK.

DRAWN BY:	RD	DATE:	1/25/2021	FILENAME:	b100657_as.dgn
CHECKED BY:	JWP	DATE:	1/28/2021	SCALE:	As Noted
DESIGNED BY:	RD	DATE:	1/25/2021		

BRIDGE NO. 07533 DRAWING NO. 63996

PRINT DATE: 9/3/2021

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		272	418
				JOB NO.		100657		
				①		07533 - CONCRETE RIPRAP - 63997		

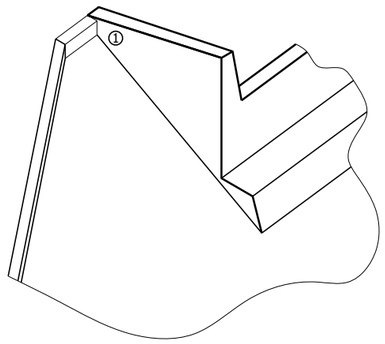


PLAN

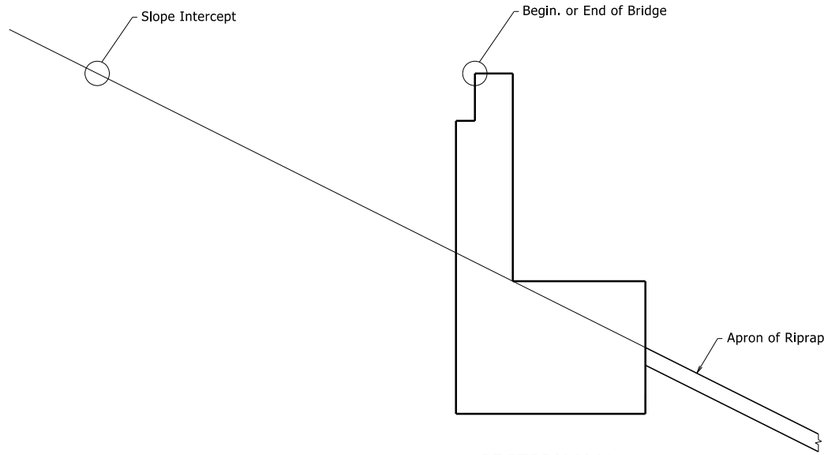
For Section C-C, see Std. Dwg. No. 55002.

See Std. Dwg. No. 55002, layout, and end bent plans for additional information.

① Match curb to wing rail height.



THREE DIMENSION VIEW OF CONCRETE RIPRAP



SECTION X-X

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 9235
CHARLES R. ELLIS
Sep 3 2021 1:31 PM
BRIDGE ENGINEER

DETAILS OF CONCRETE RIPRAP
HIGHWAY 18 OVER UPRR & KATHLEEN STREET

ROUTE SEC.

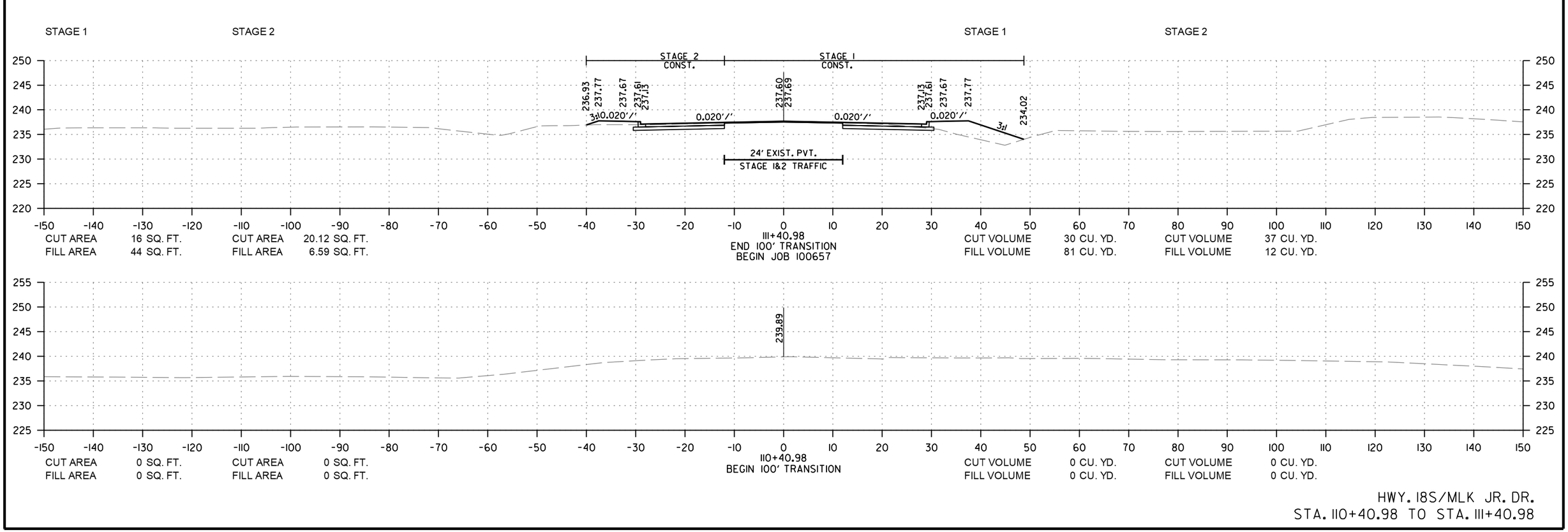
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: JWP DATE: 7/01/2021 FILENAME: b100657_cr1.dgn
CHECKED BY: MCB DATE: 8/25/2021 SCALE: No Scale
DESIGNED BY: STD DATE: –

BRIDGE NO. 07533 DRAWING NO. 63997

PRINT DATE: 9/3/2021

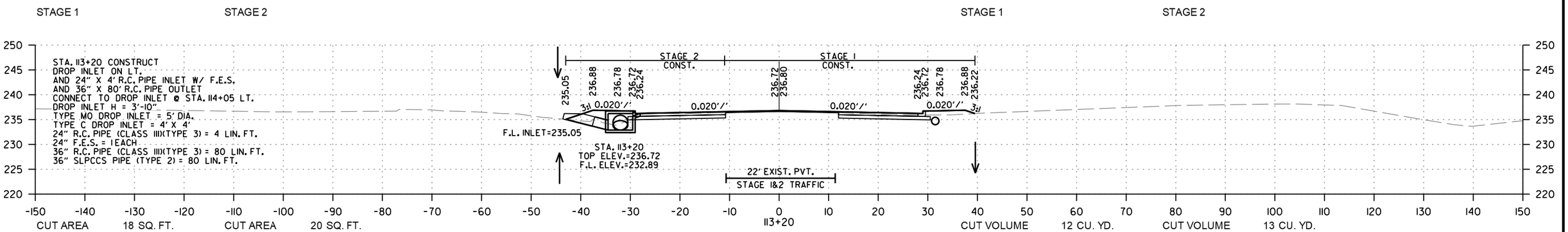
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	273	418
		CROSS SECTIONS				

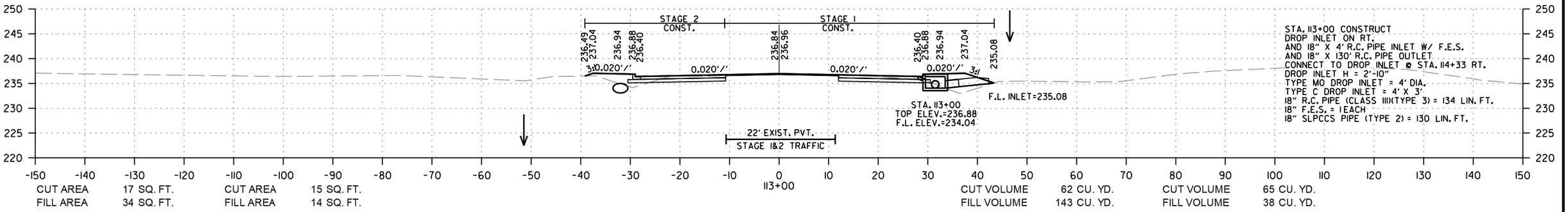


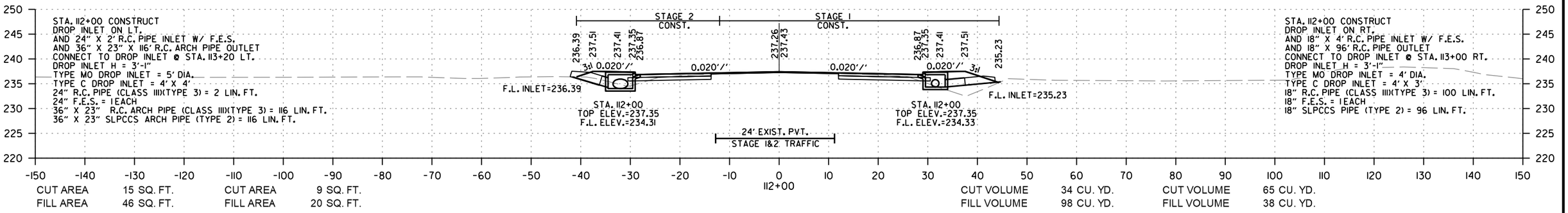
HWY. 18S/MLK JR. DR.
STA. 110+40.98 TO STA. 111+40.98

HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	274	418
		CROSS SECTIONS				



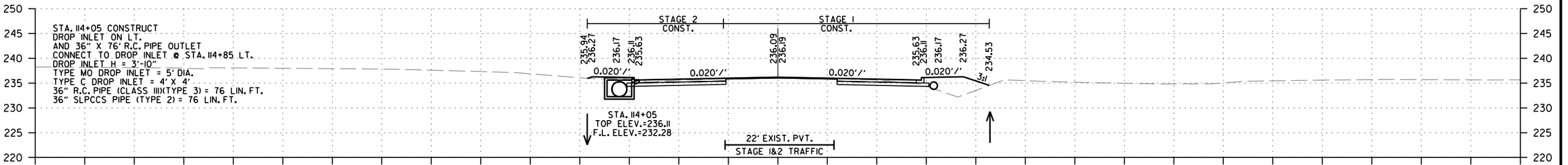


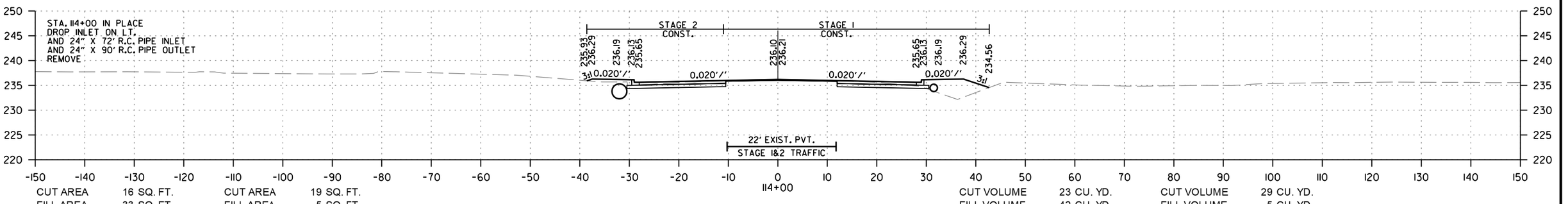


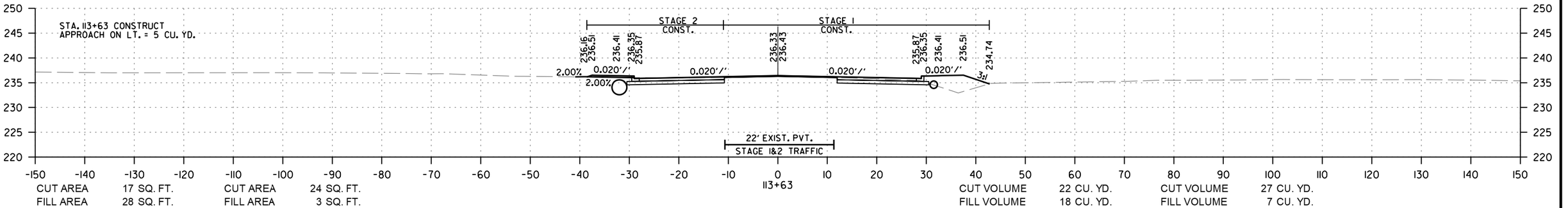
HWY. 18S/MLK JR. DR.
STA. 112+00 TO STA. 113+20

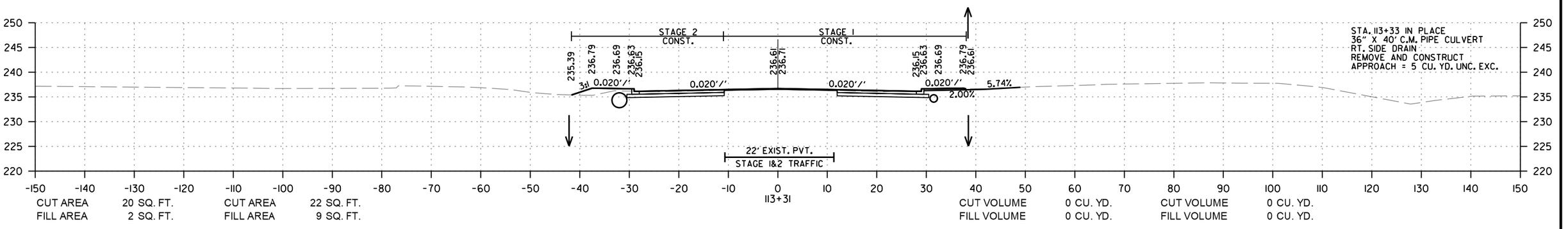
HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	275	418
		CROSS SECTIONS				





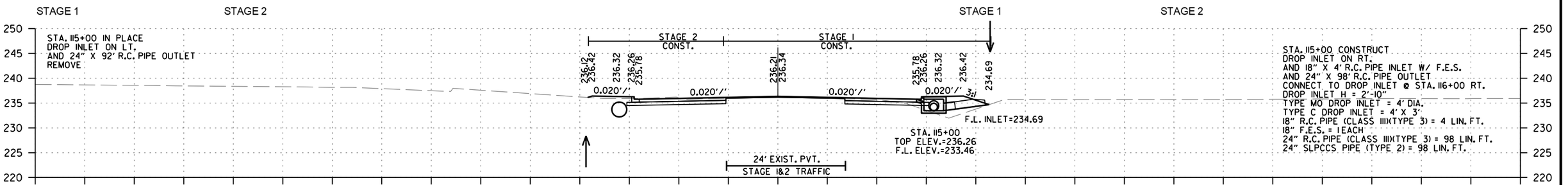


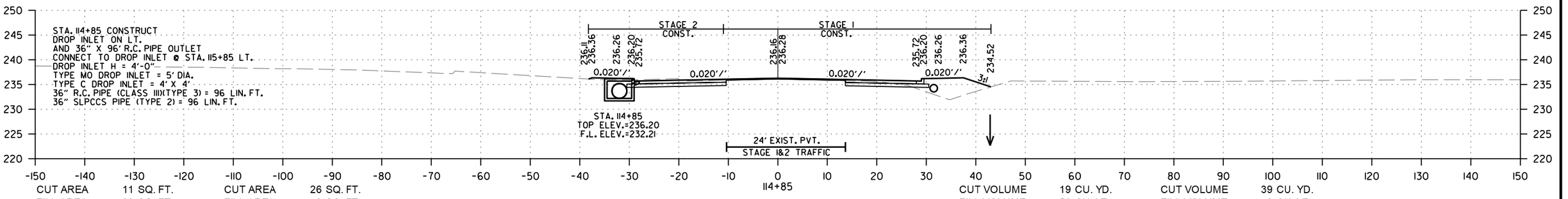


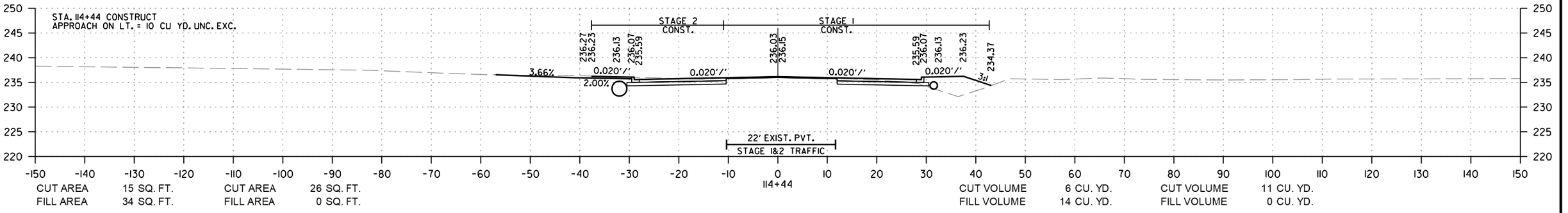
HWY. 18S/MLK JR. DR.
STA. 113+31 TO STA. 114+05

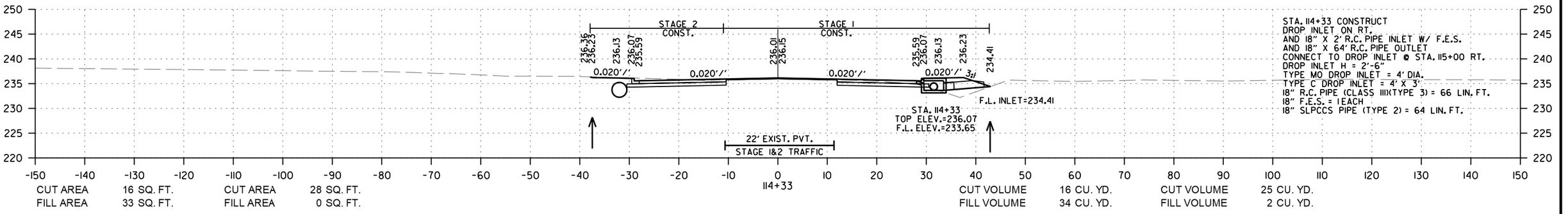
HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	276	418
		CROSS SECTIONS				





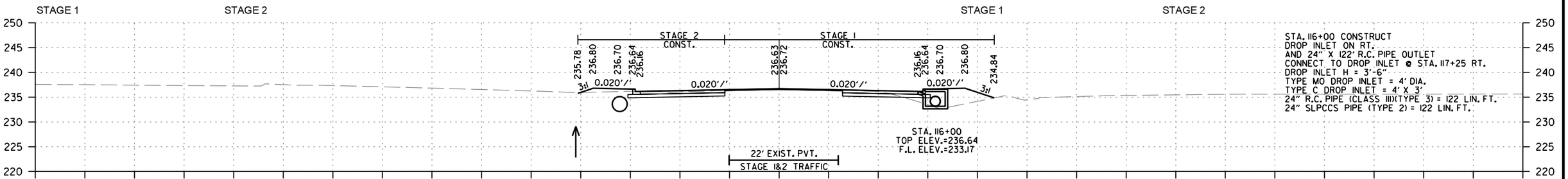


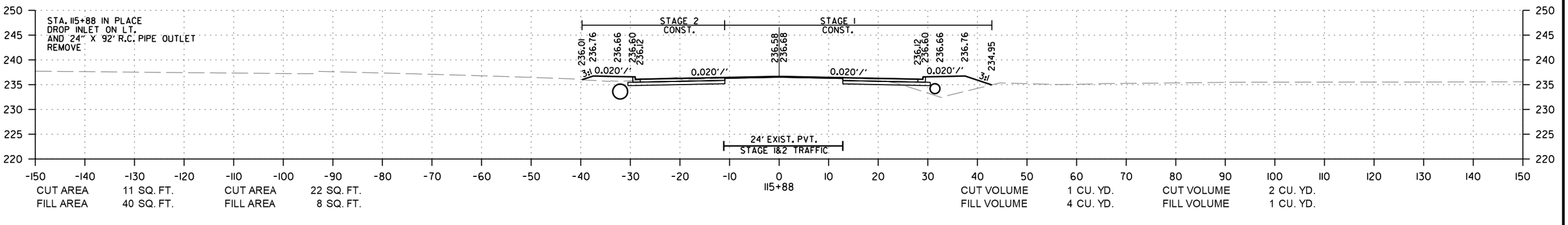


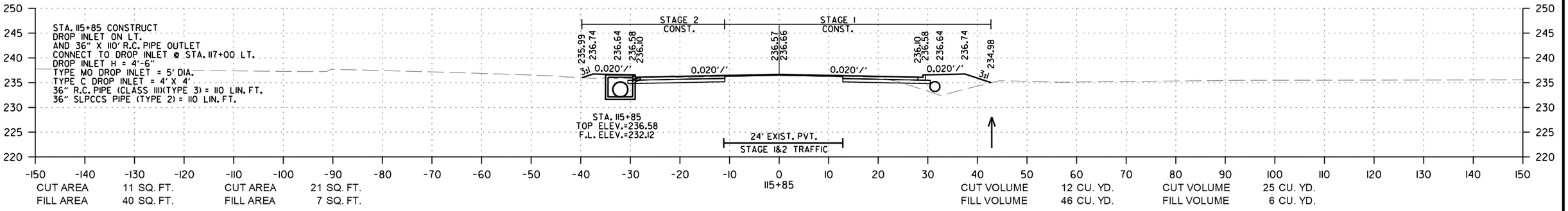
HWY. 18S/MLK JR. DR.
STA. 114+33 TO STA. 115+00

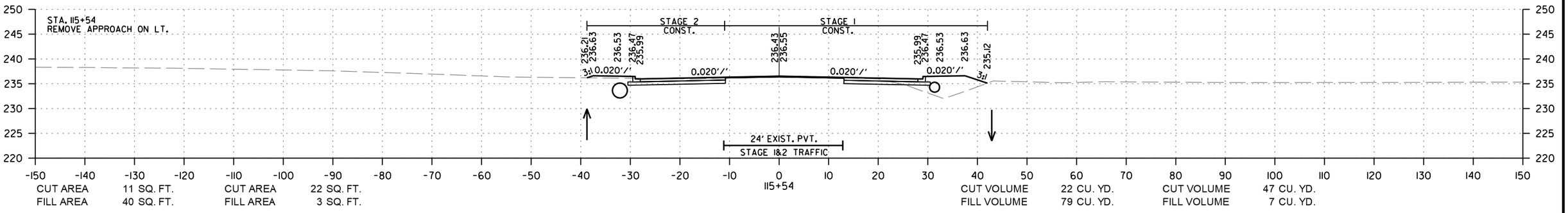
HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	277	418
		CROSS SECTIONS				





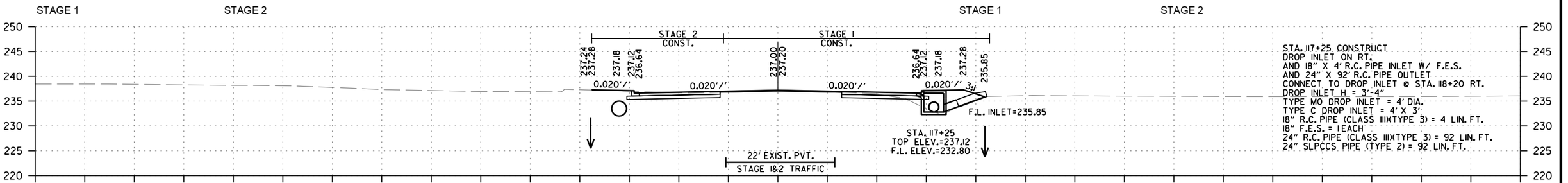


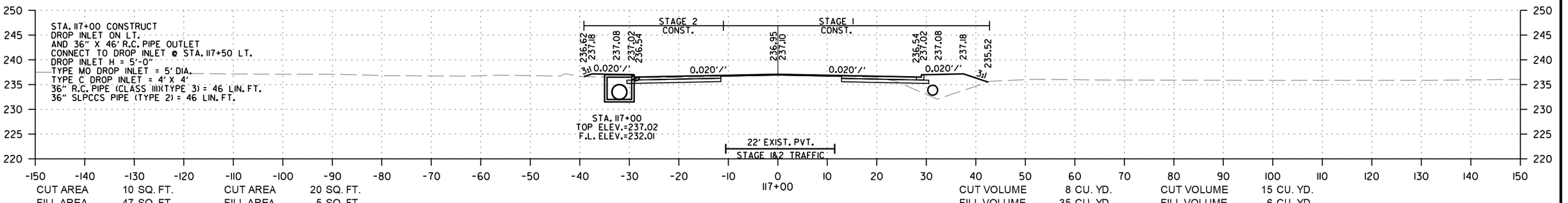


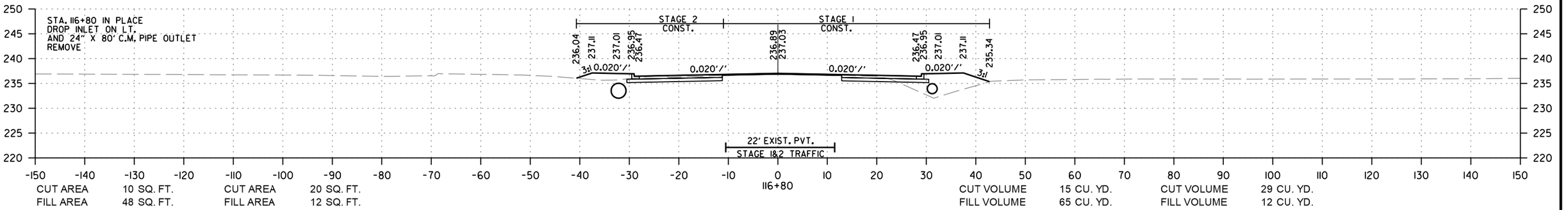
HWY. 18S/MLK JR. DR.
STA. 115+54 TO STA. 116+00

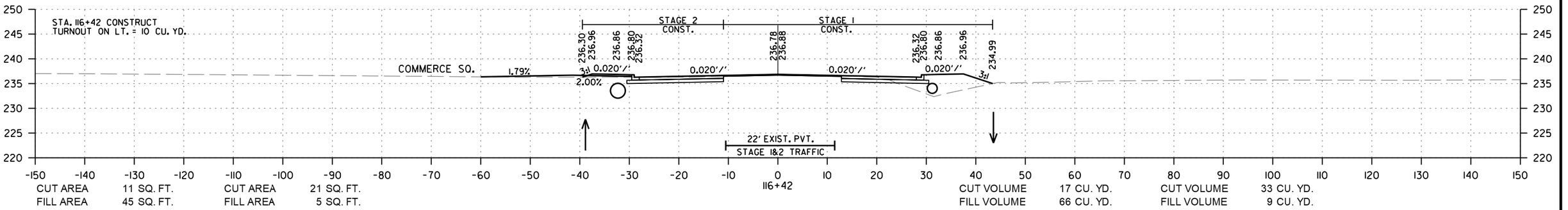
HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	278	418
		CROSS SECTIONS				





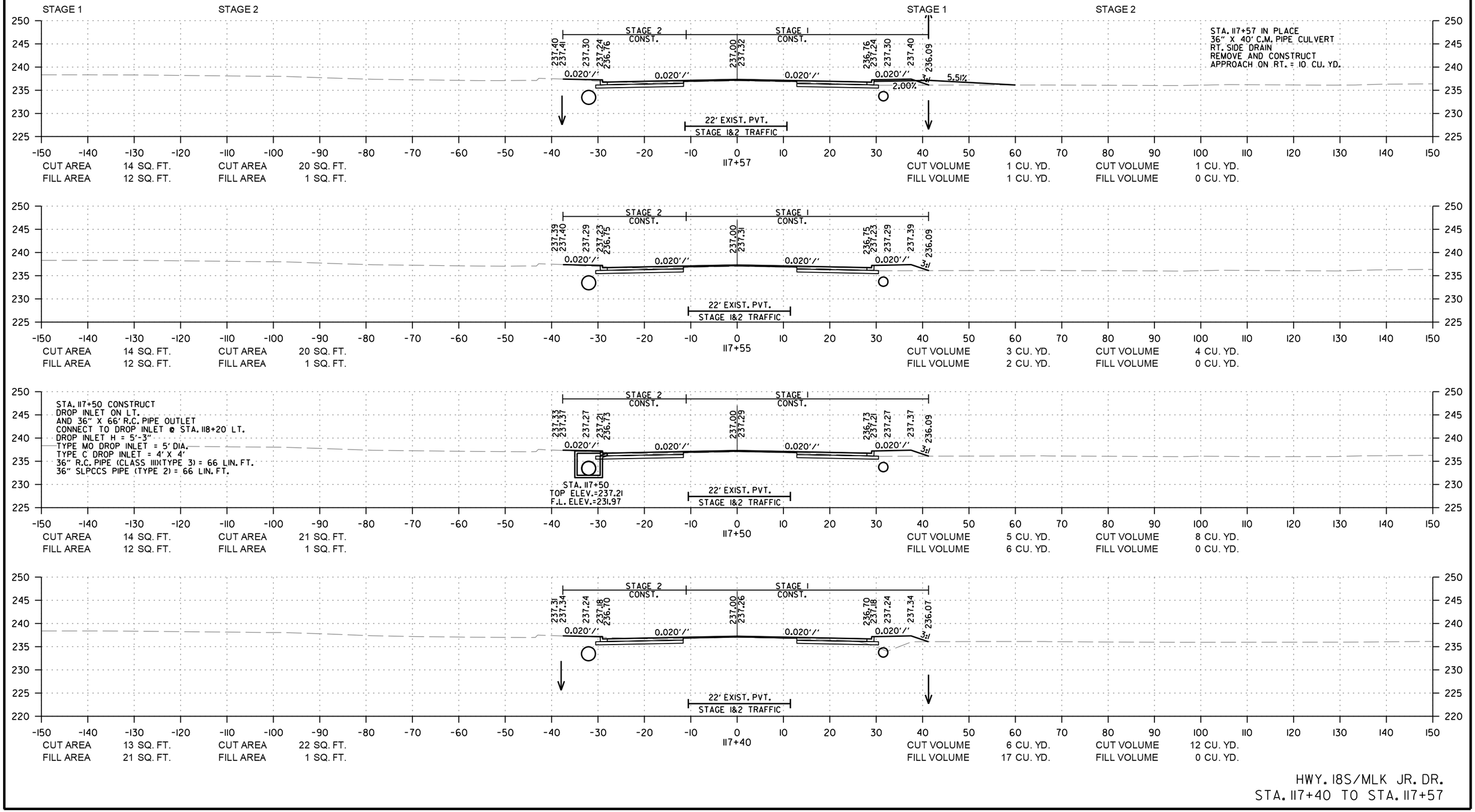




HWY. 18S/MLK JR. DR.
STA. 116+42 TO STA. 117+25

HT39710 5/6/2022
R100657.DGN

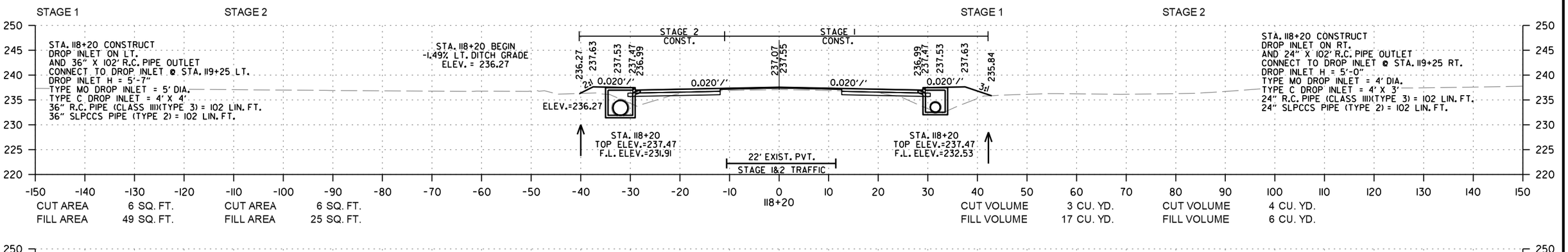
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	279	418
		CROSS SECTIONS				

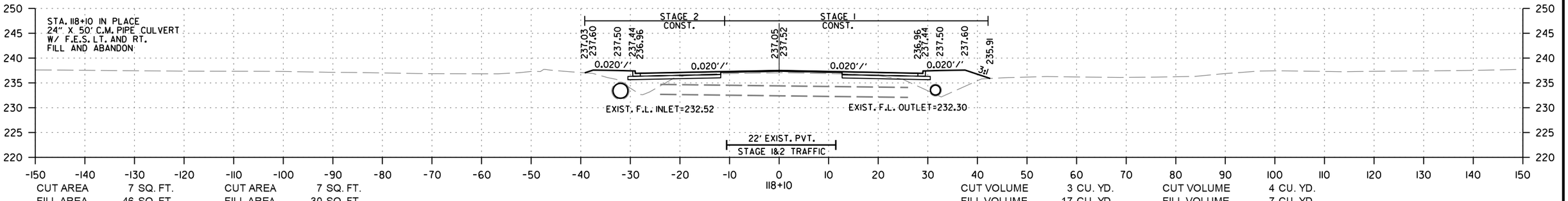


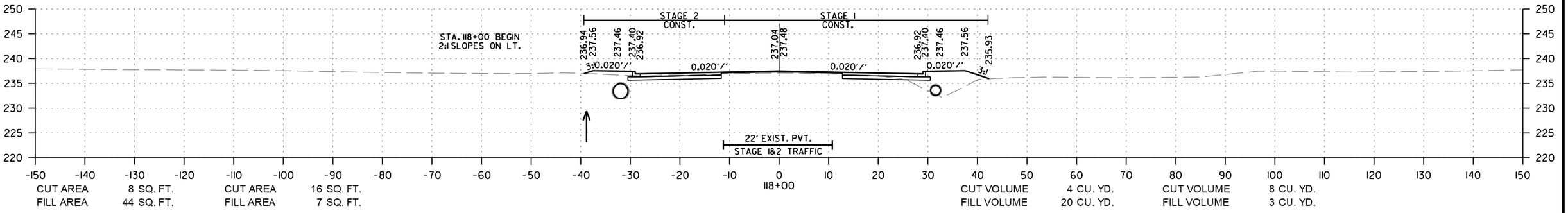
HWY. 18S/MLK JR. DR.
STA. 117+40 TO STA. 117+57

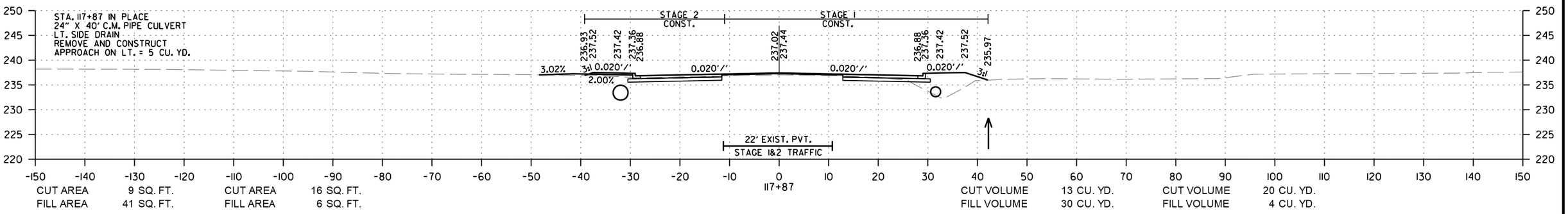
HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	280	418
		CROSS SECTIONS				





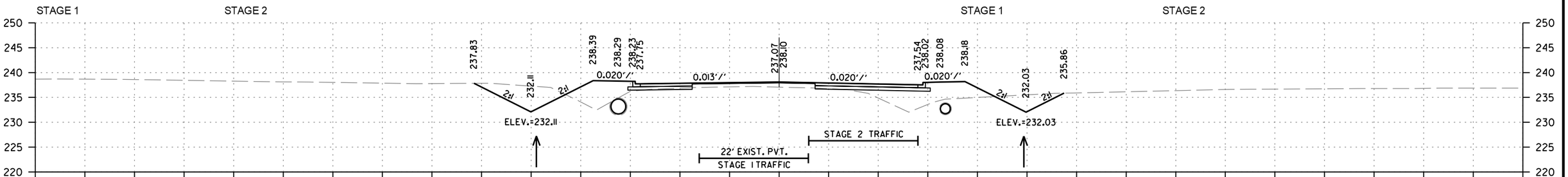




HWY. 18S/MLK JR. DR.
STA. 117+87 TO STA. 118+20

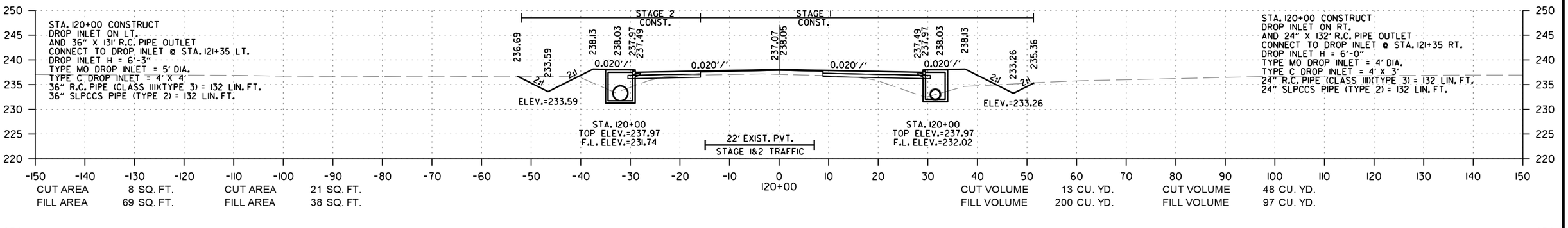
HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	281	418
		CROSS SECTIONS				



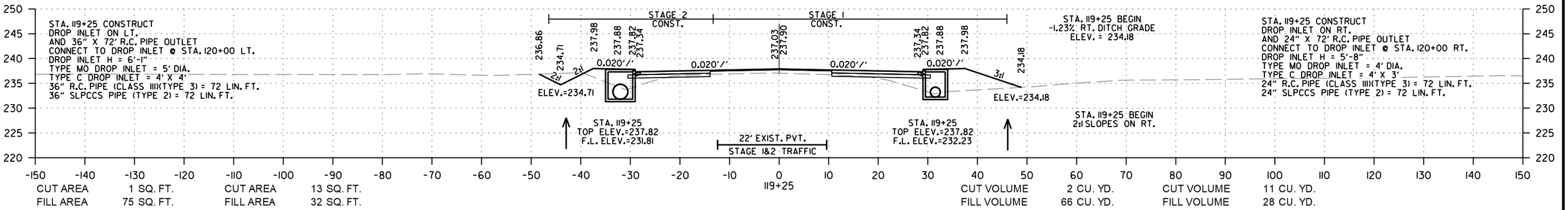
CUT AREA	25 SQ. FT.	CUT AREA	53 SQ. FT.
FILL AREA	72 SQ. FT.	FILL AREA	47 SQ. FT.

CUT VOLUME	61 CU. YD.	CUT VOLUME	138 CU. YD.
FILL VOLUME	261 CU. YD.	FILL VOLUME	158 CU. YD.



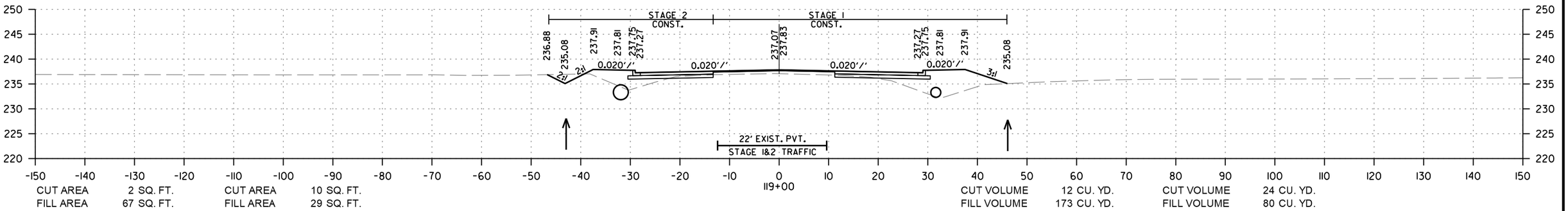
CUT AREA	8 SQ. FT.	CUT AREA	21 SQ. FT.
FILL AREA	69 SQ. FT.	FILL AREA	38 SQ. FT.

CUT VOLUME	13 CU. YD.	CUT VOLUME	48 CU. YD.
FILL VOLUME	200 CU. YD.	FILL VOLUME	97 CU. YD.



CUT AREA	1 SQ. FT.	CUT AREA	13 SQ. FT.
FILL AREA	75 SQ. FT.	FILL AREA	32 SQ. FT.

CUT VOLUME	2 CU. YD.	CUT VOLUME	11 CU. YD.
FILL VOLUME	66 CU. YD.	FILL VOLUME	28 CU. YD.



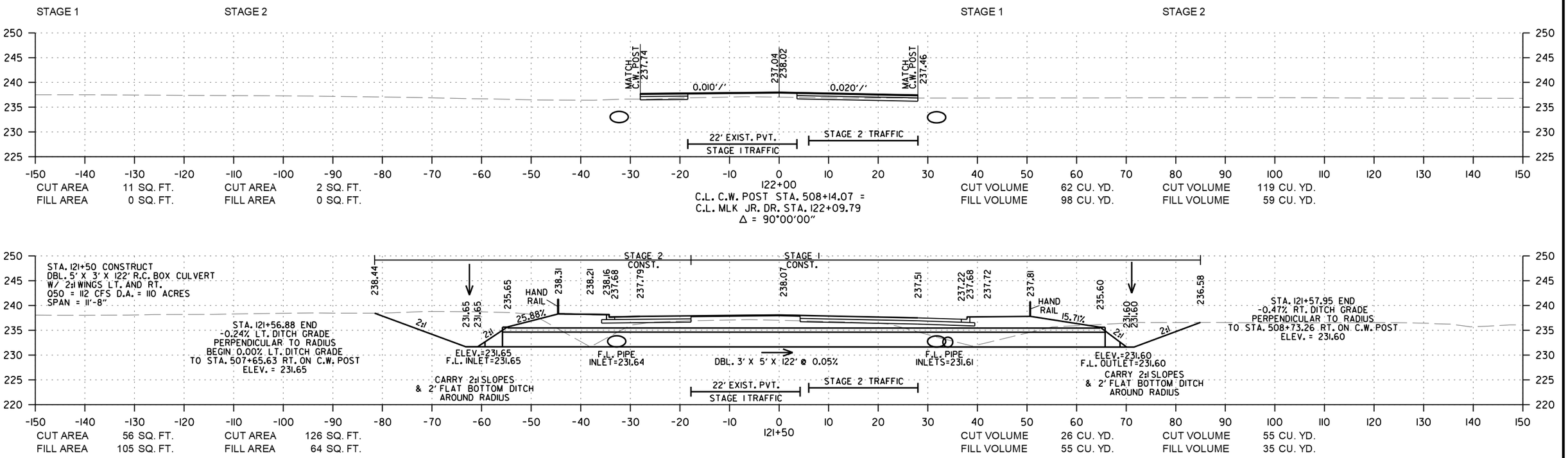
CUT AREA	2 SQ. FT.	CUT AREA	10 SQ. FT.
FILL AREA	67 SQ. FT.	FILL AREA	29 SQ. FT.

CUT VOLUME	12 CU. YD.	CUT VOLUME	24 CU. YD.
FILL VOLUME	173 CU. YD.	FILL VOLUME	80 CU. YD.

HWY. 18S/MLK JR. DR.
STA. 119+00 TO STA. 121+00

HT39710 5/6/2022
R100657.DGN

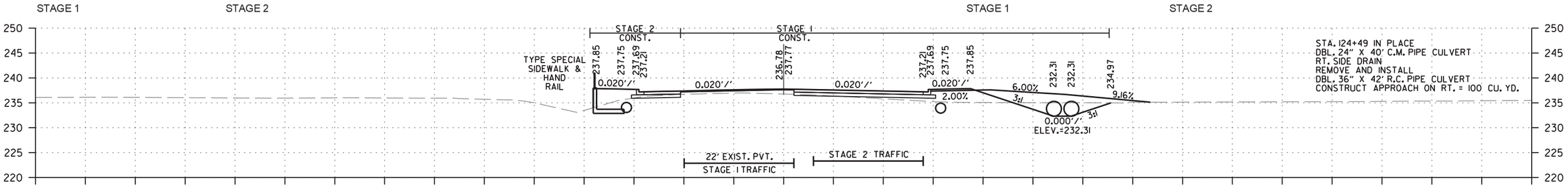
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	282	418
		CROSS SECTIONS				

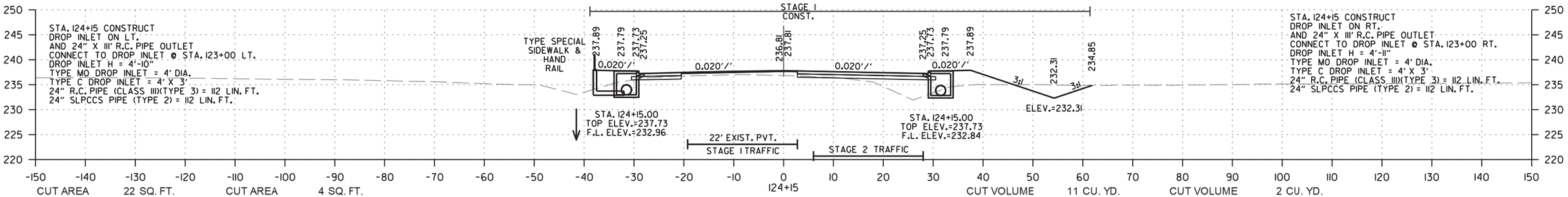


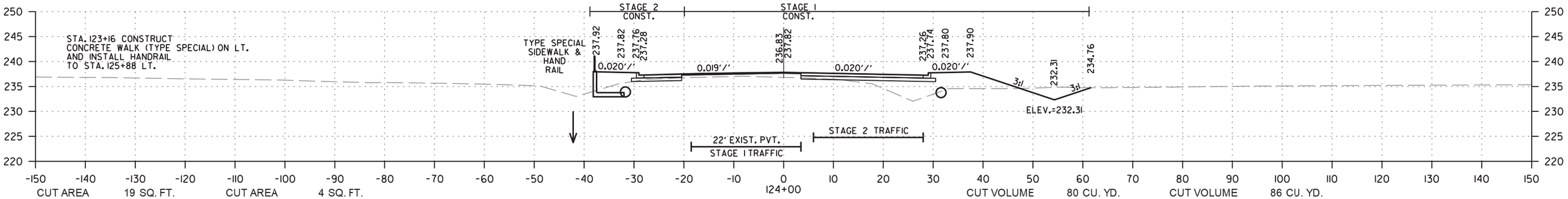
HWY. 18S/MLK JR. DR.
STA. 121+35 TO STA. 122+00

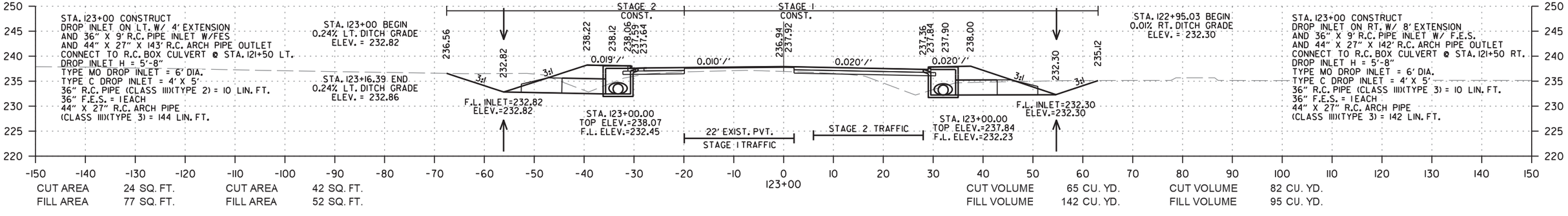
HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
09-12-22		6	ARK.	100657	283	418
		CROSS SECTIONS				





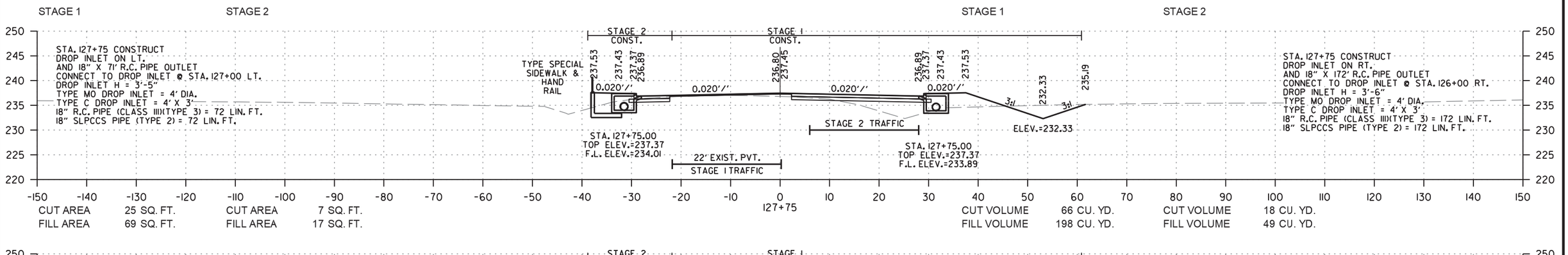


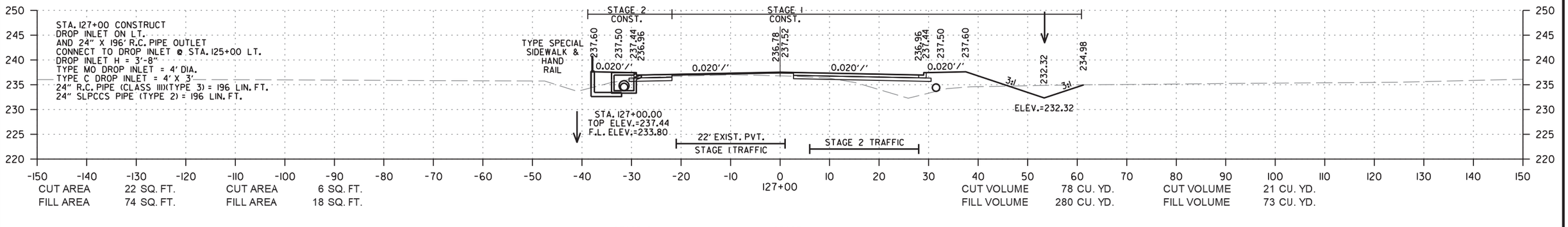


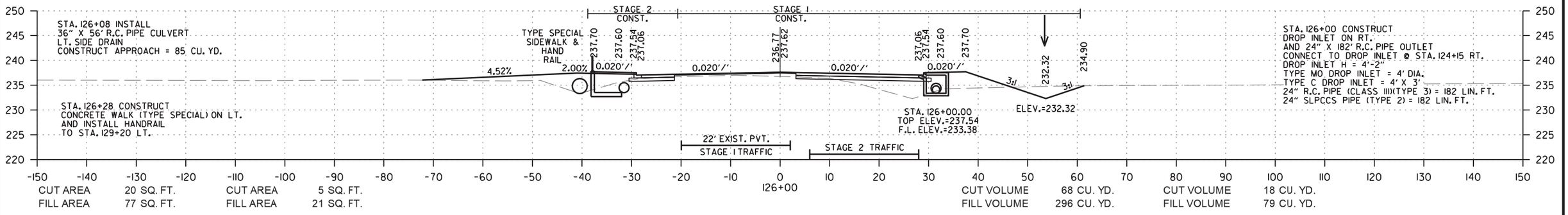
HWY. 18S/MLK JR. DR.
STA. 123+00 TO STA. 124+49

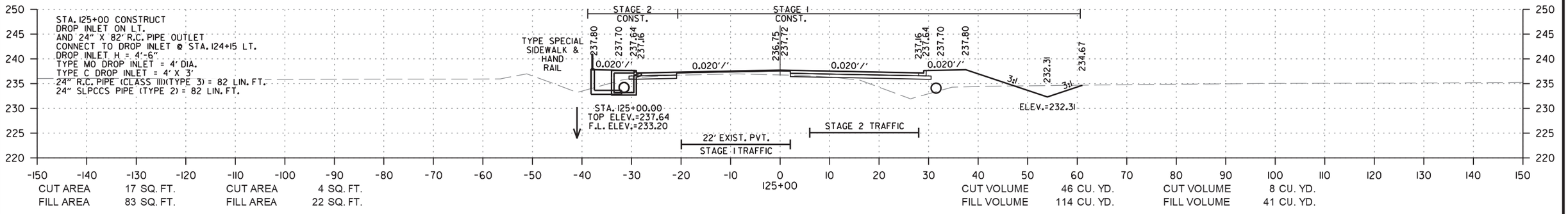
HT39710 9/9/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
09-12-22		6	ARK.	100657	284	418
		CROSS SECTIONS				





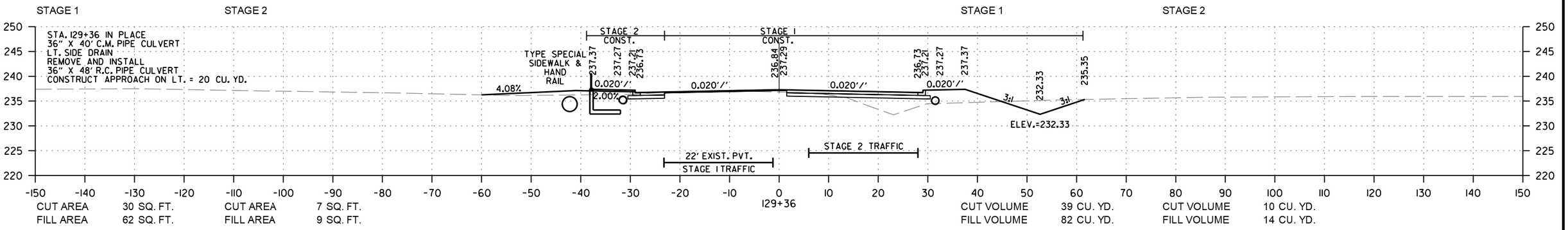


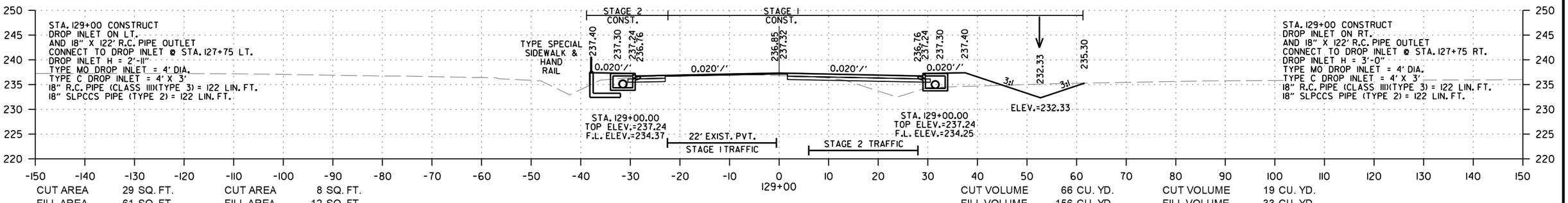


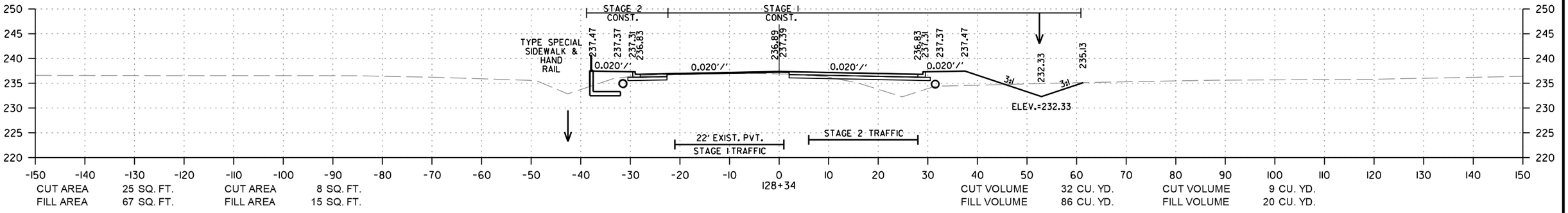
HWY. 18S/MLK JR. DR.
STA. 125+00 TO STA. 127+75

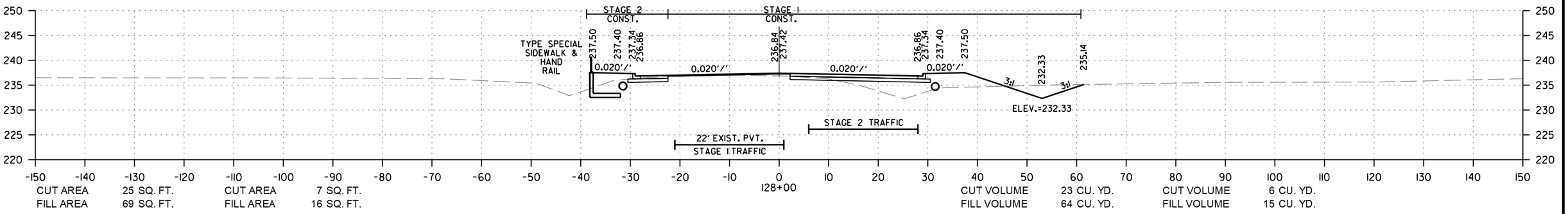
HT39710 9/9/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	285	418
		CROSS SECTIONS				





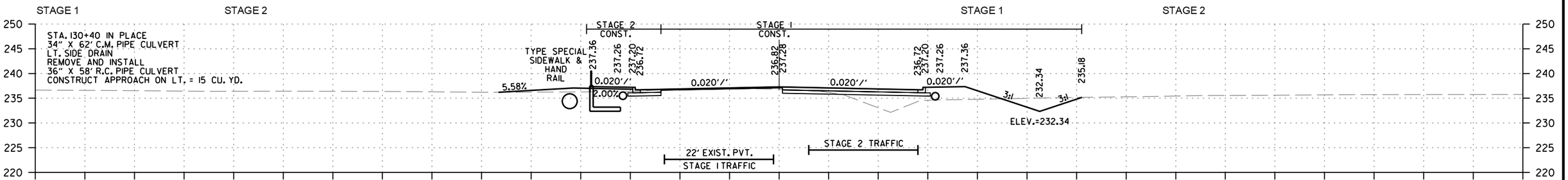


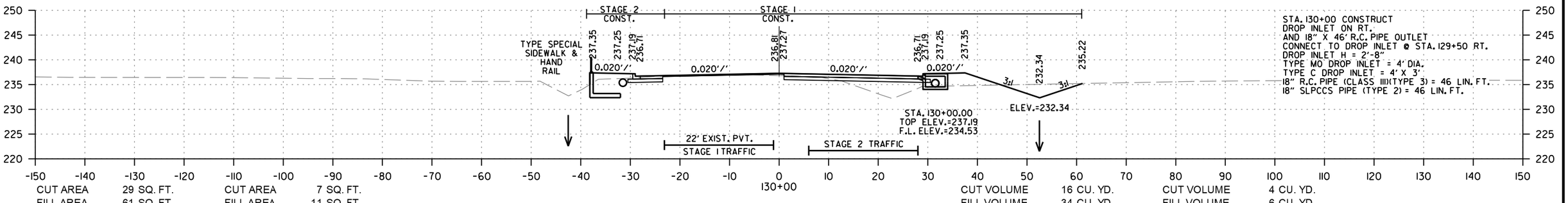


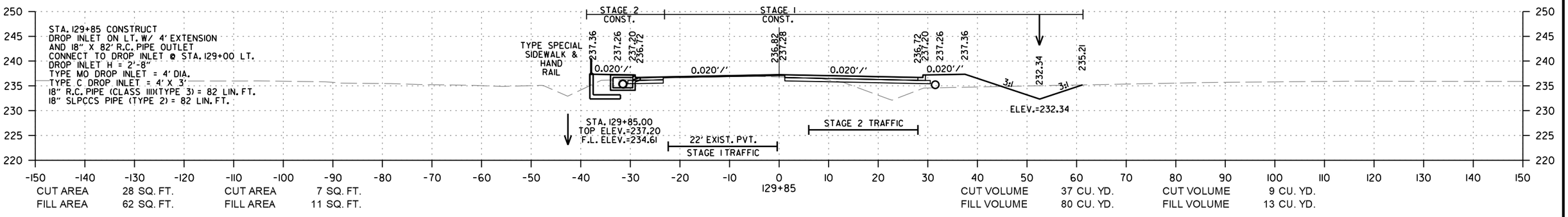
HWY. 18S/MLK JR. DR.
STA. 128+00 TO STA. 129+36

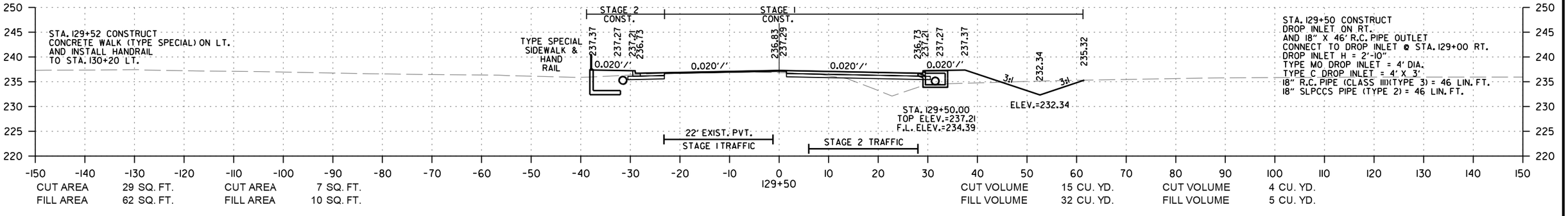
HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	286	418
		CROSS SECTIONS				





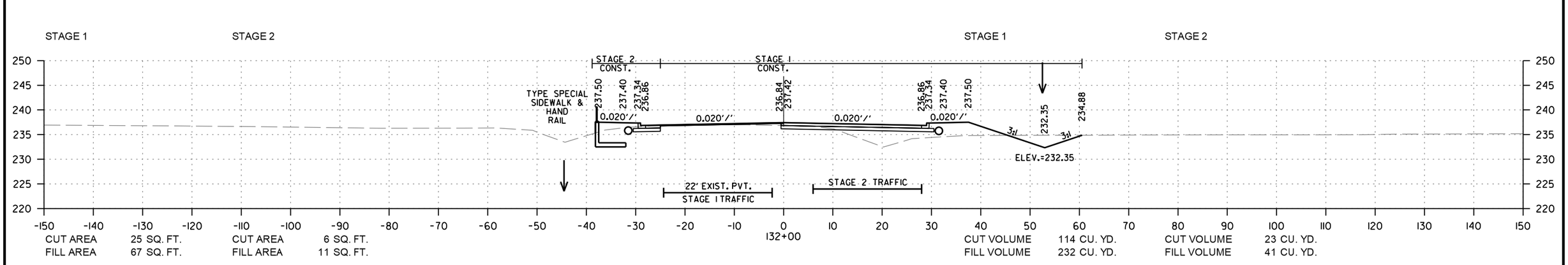




HWY. 18S/MLK JR. DR.
STA. 129+50 TO STA. 130+40

HT39710 5/6/2022
R100657.DGN

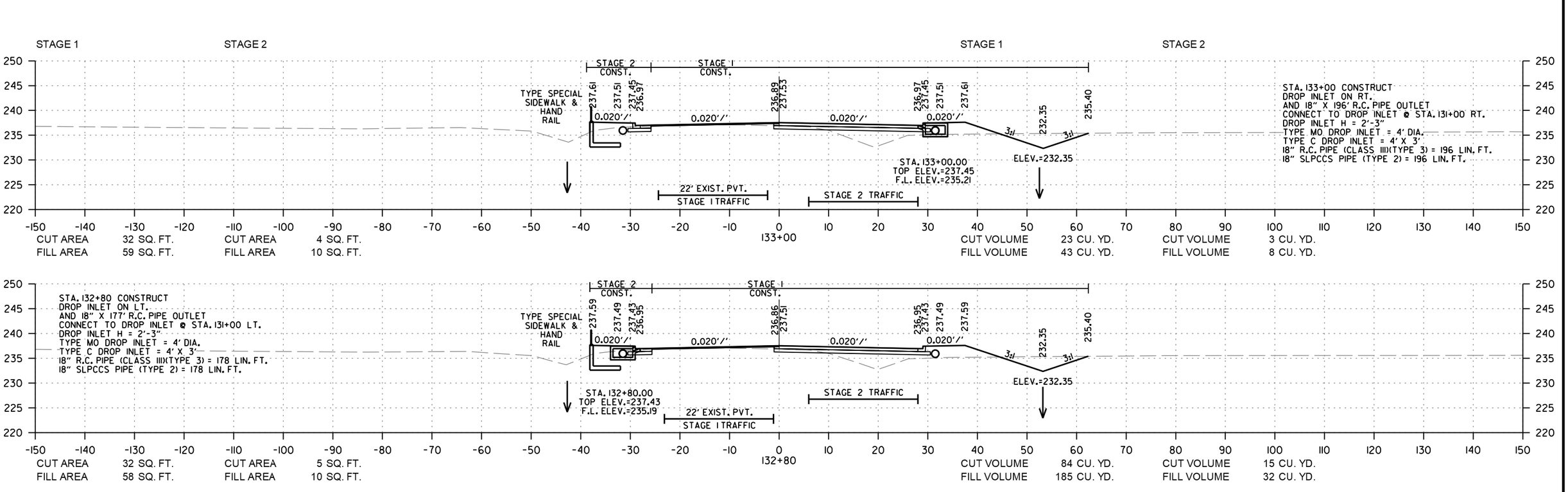
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	287	418
		CROSS SECTIONS				



HWY. 18S/MLK JR. DR.
STA. 131+00 TO STA. 132+00

HT39710 5/6/2022
R100657.DGN

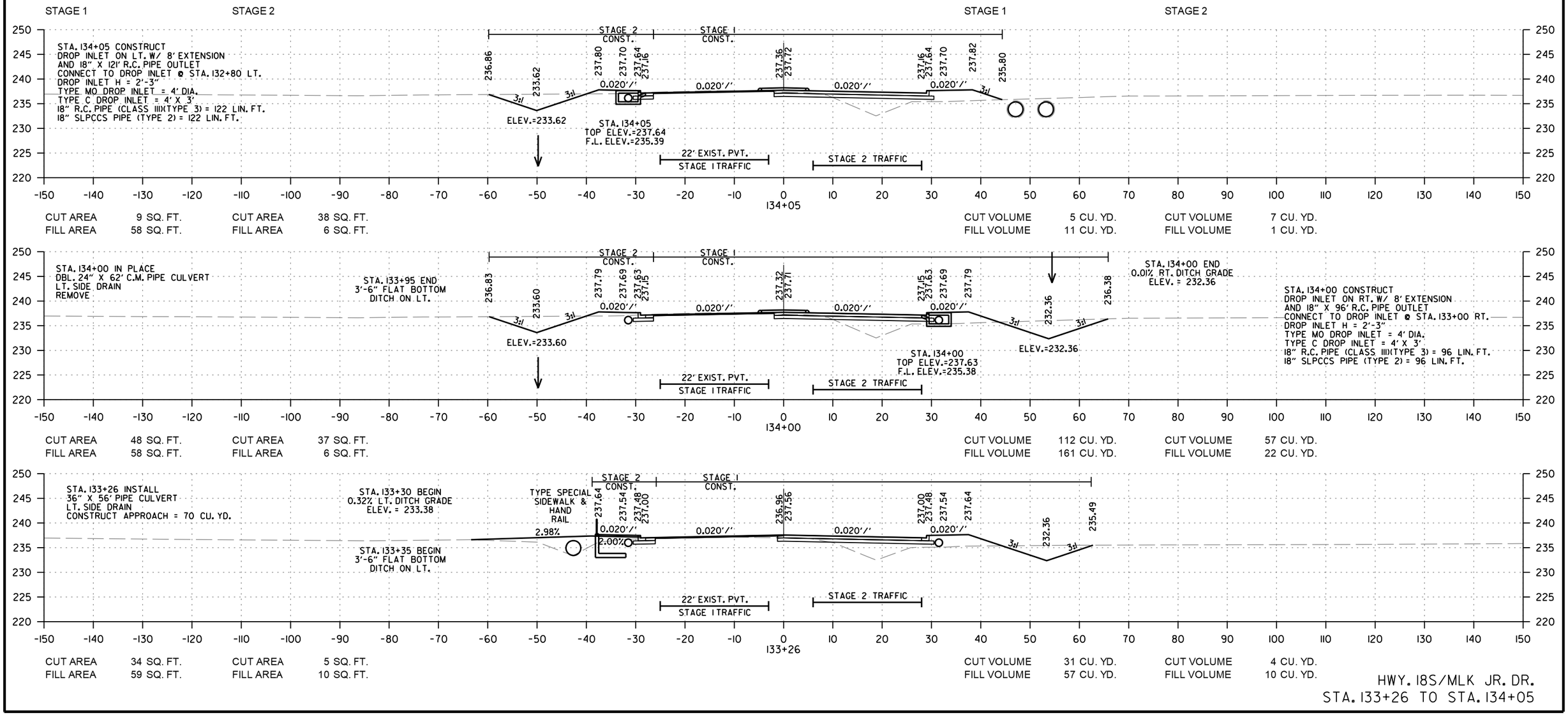
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	288	418
		CROSS SECTIONS				



HWY. 18S/MLK JR. DR.
STA. 132+80 TO STA. 133+00

HT39710 5/6/2022
R100657.DGN

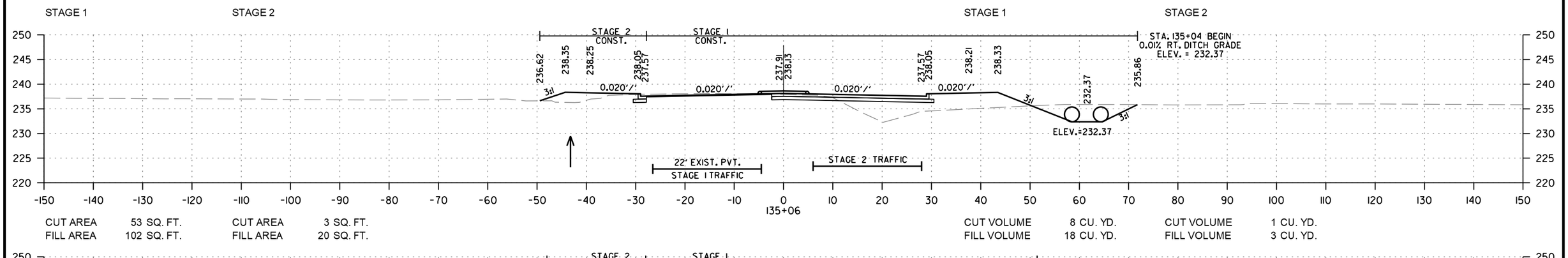
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	289	418
		CROSS SECTIONS				

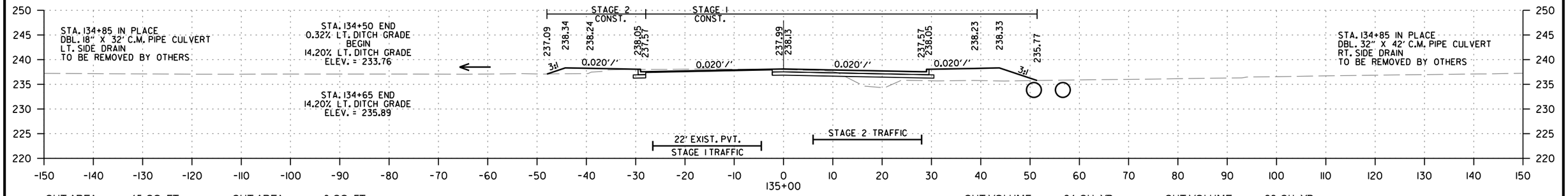


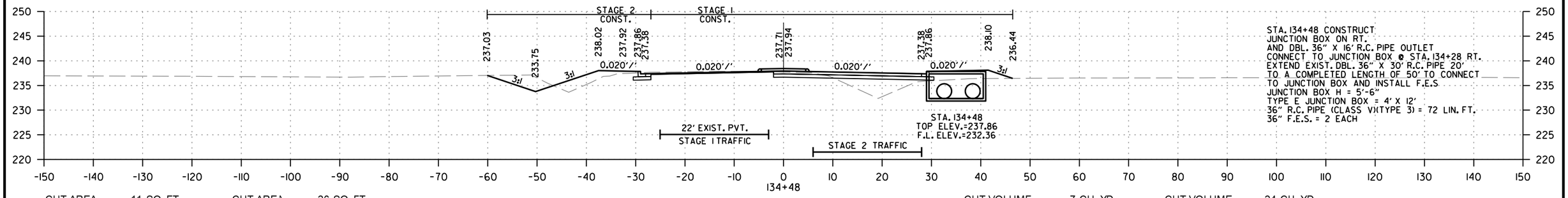
HWY. 18S/MLK JR. DR.
STA. 133+26 TO STA. 134+05

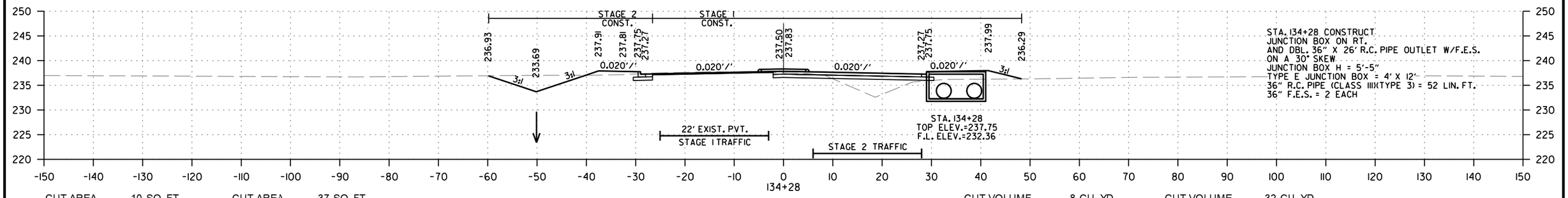
HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	290	418
		CROSS SECTIONS				





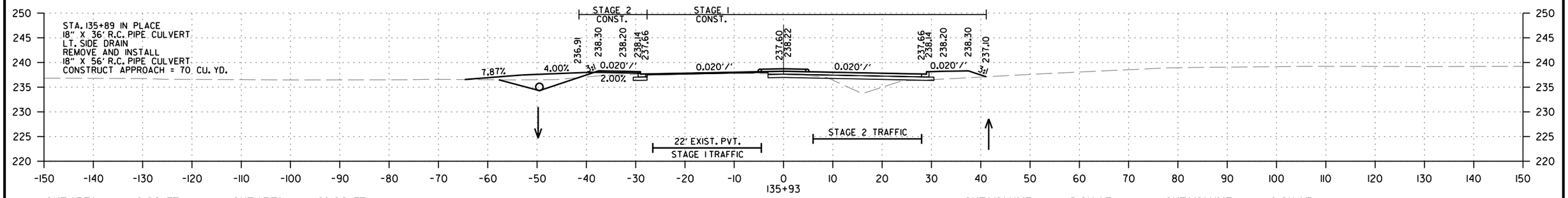




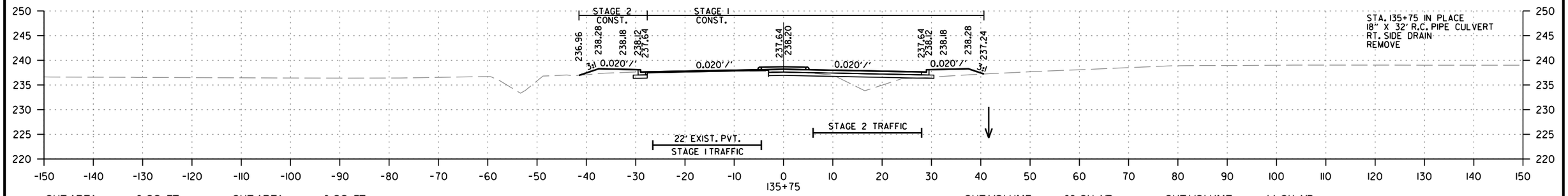
HWY. 18S/MLK JR. DR.
STA. 134+28 TO STA. 135+06

HT39710 5/6/2022
R100657.DGN

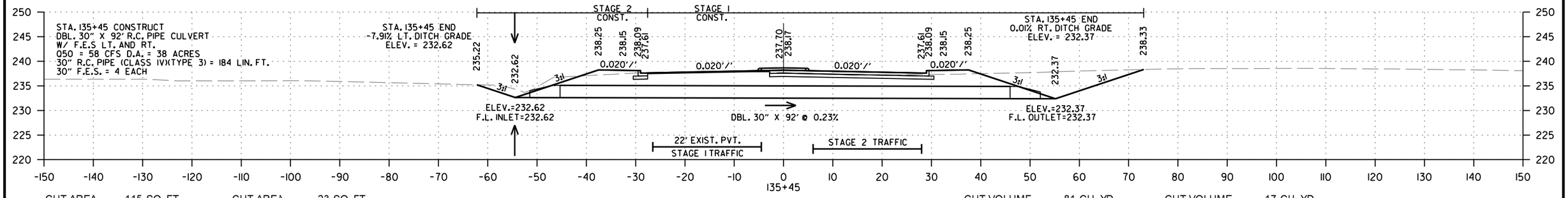
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	291	418
		CROSS SECTIONS				



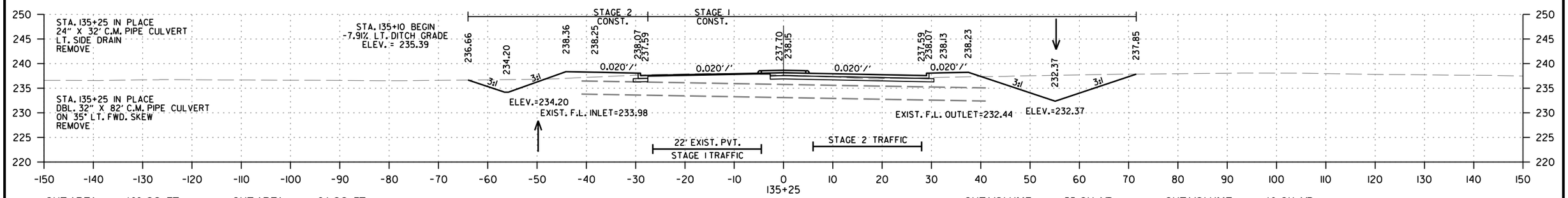
CUT AREA	6 SQ. FT.	CUT AREA	20 SQ. FT.	CUT VOLUME	5 CU. YD.	CUT VOLUME	8 CU. YD.
FILL AREA	37 SQ. FT.	FILL AREA	8 SQ. FT.	FILL VOLUME	23 CU. YD.	FILL VOLUME	5 CU. YD.



CUT AREA	8 SQ. FT.	CUT AREA	3 SQ. FT.	CUT VOLUME	68 CU. YD.	CUT VOLUME	14 CU. YD.
FILL AREA	32 SQ. FT.	FILL AREA	8 SQ. FT.	FILL VOLUME	22 CU. YD.	FILL VOLUME	9 CU. YD.



CUT AREA	115 SQ. FT.	CUT AREA	23 SQ. FT.	CUT VOLUME	81 CU. YD.	CUT VOLUME	17 CU. YD.
FILL AREA	7 SQ. FT.	FILL AREA	8 SQ. FT.	FILL VOLUME	6 CU. YD.	FILL VOLUME	9 CU. YD.

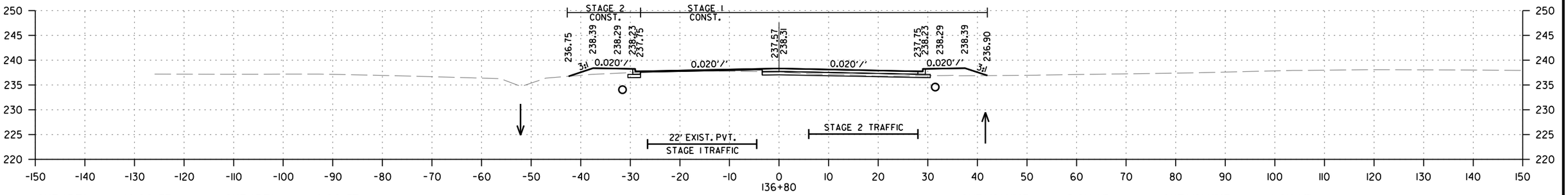


CUT AREA	103 SQ. FT.	CUT AREA	24 SQ. FT.	CUT VOLUME	55 CU. YD.	CUT VOLUME	10 CU. YD.
FILL AREA	8 SQ. FT.	FILL AREA	16 SQ. FT.	FILL VOLUME	39 CU. YD.	FILL VOLUME	13 CU. YD.

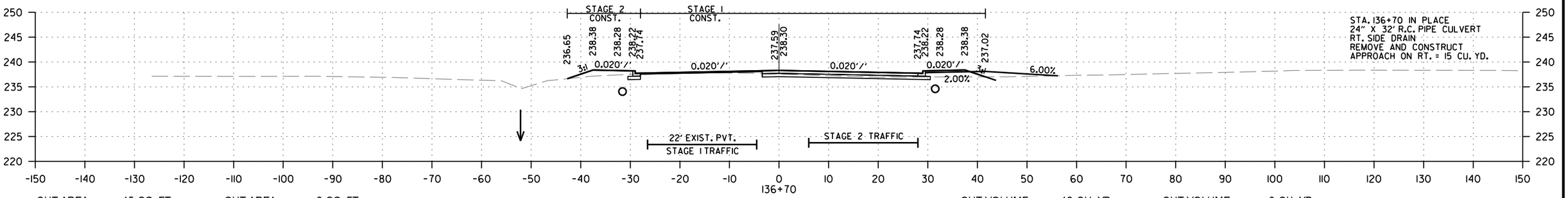
HWY. 18S/MLK JR. DR.
STA. 135+25 TO STA. 135+95

HT39710 5/6/2022
R100657.DGN

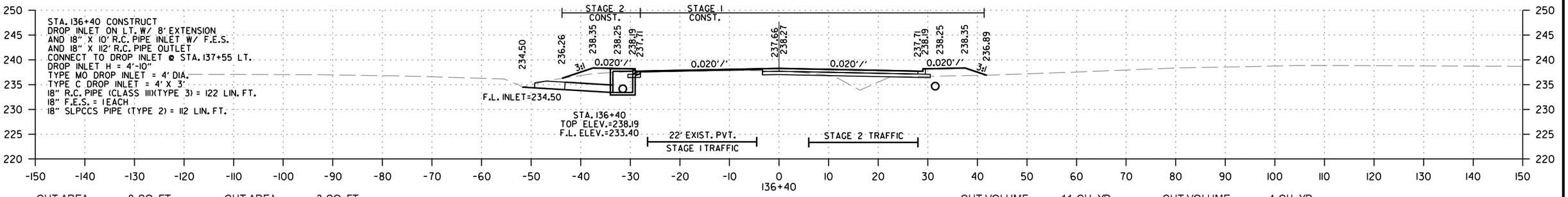
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	292	418
		CROSS SECTIONS				



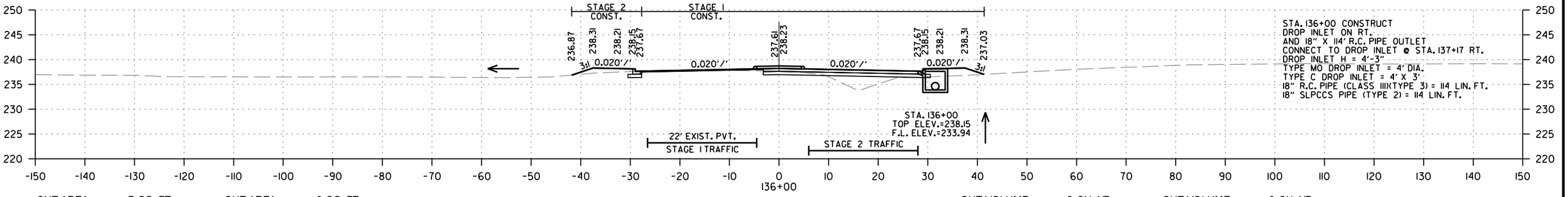
CUT AREA	10 SQ. FT.	CUT AREA	2 SQ. FT.	CUT VOLUME	5 CU. YD.	CUT VOLUME	1 CU. YD.
FILL AREA	15 SQ. FT.	FILL AREA	11 SQ. FT.	FILL VOLUME	5 CU. YD.	FILL VOLUME	4 CU. YD.



CUT AREA	15 SQ. FT.	CUT AREA	2 SQ. FT.	CUT VOLUME	12 CU. YD.	CUT VOLUME	3 CU. YD.
FILL AREA	13 SQ. FT.	FILL AREA	11 SQ. FT.	FILL VOLUME	25 CU. YD.	FILL VOLUME	12 CU. YD.



CUT AREA	8 SQ. FT.	CUT AREA	3 SQ. FT.	CUT VOLUME	11 CU. YD.	CUT VOLUME	4 CU. YD.
FILL AREA	32 SQ. FT.	FILL AREA	10 SQ. FT.	FILL VOLUME	50 CU. YD.	FILL VOLUME	14 CU. YD.

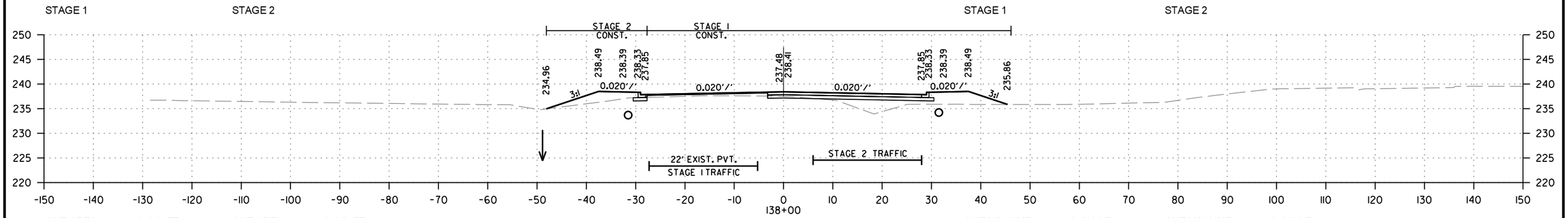


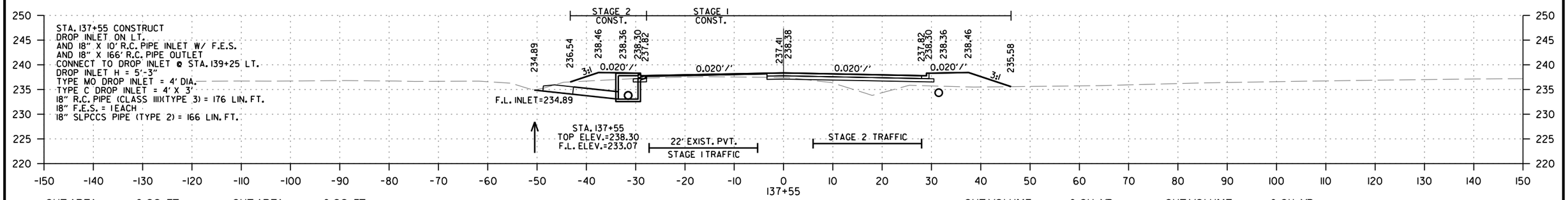
CUT AREA	7 SQ. FT.	CUT AREA	3 SQ. FT.	CUT VOLUME	2 CU. YD.	CUT VOLUME	3 CU. YD.
FILL AREA	37 SQ. FT.	FILL AREA	8 SQ. FT.	FILL VOLUME	10 CU. YD.	FILL VOLUME	2 CU. YD.

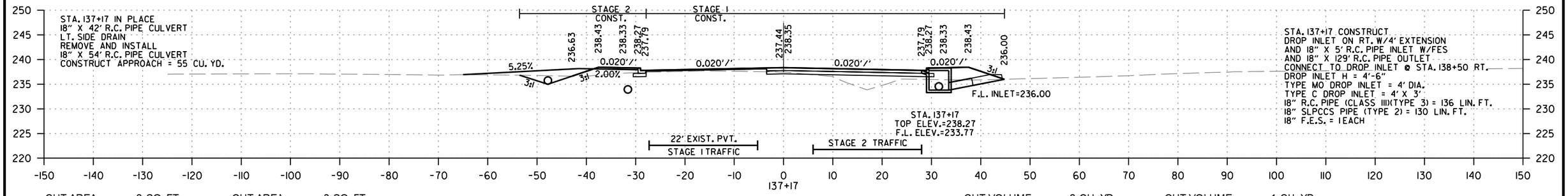
HWY. 18S/MLK JR. DR.
STA. 136+00 TO STA. 136+80

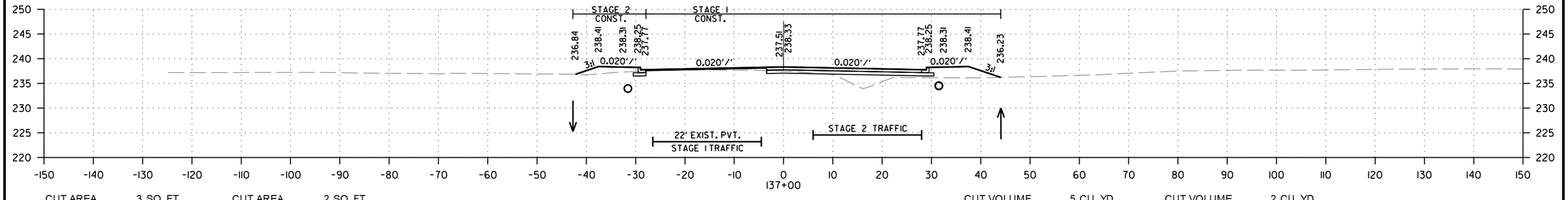
HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	293	418
		CROSS SECTIONS				





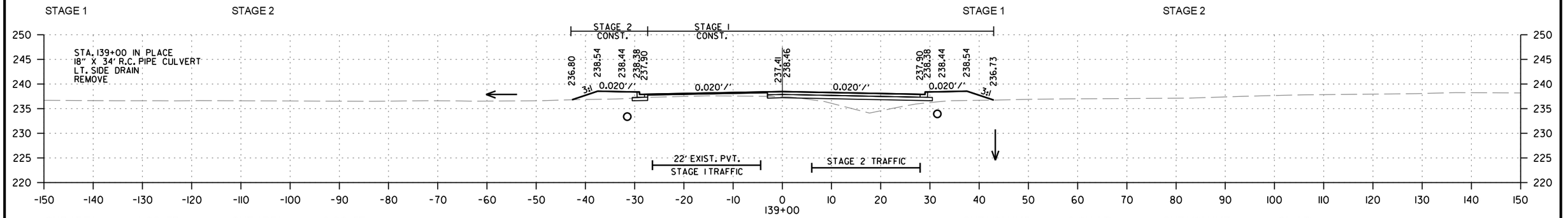




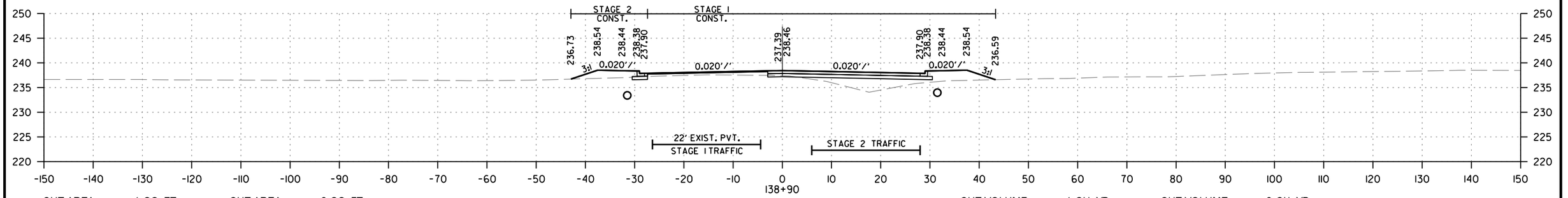
HWY. 18S/MLK JR. DR.
STA. 137+00 TO STA. 138+00

HT39710 5/6/2022
R100657.DGN

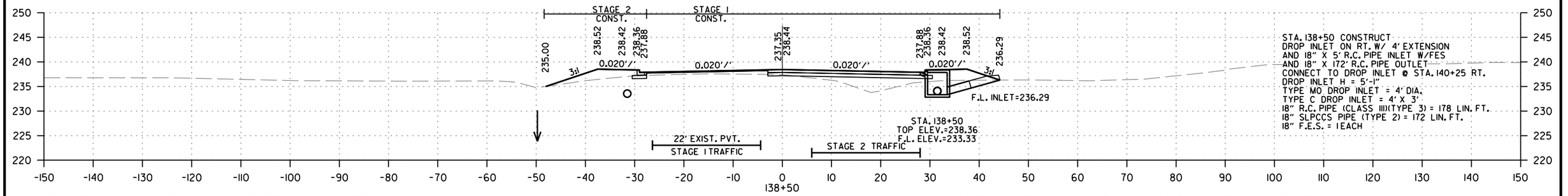
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	294	418
		CROSS SECTIONS				



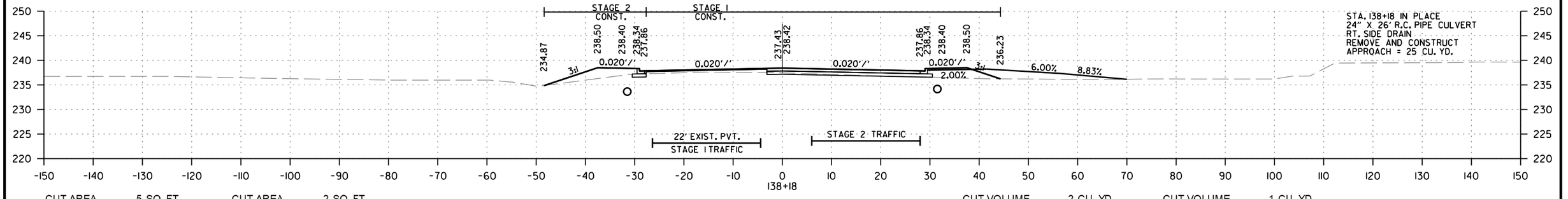
CUT AREA 1 SQ. FT. CUT AREA 2 SQ. FT. CUT VOLUME 0 CU. YD. CUT VOLUME 1 CU. YD.
FILL AREA 55 SQ. FT. FILL AREA 16 SQ. FT. FILL VOLUME 21 CU. YD. FILL VOLUME 6 CU. YD.



CUT AREA 1 SQ. FT. CUT AREA 2 SQ. FT. CUT VOLUME 1 CU. YD. CUT VOLUME 2 CU. YD.
FILL AREA 59 SQ. FT. FILL AREA 16 SQ. FT. FILL VOLUME 90 CU. YD. FILL VOLUME 29 CU. YD.



CUT AREA 1 SQ. FT. CUT AREA 2 SQ. FT. CUT VOLUME 3 CU. YD. CUT VOLUME 2 CU. YD.
FILL AREA 62 SQ. FT. FILL AREA 23 SQ. FT. FILL VOLUME 50 CU. YD. FILL VOLUME 29 CU. YD.

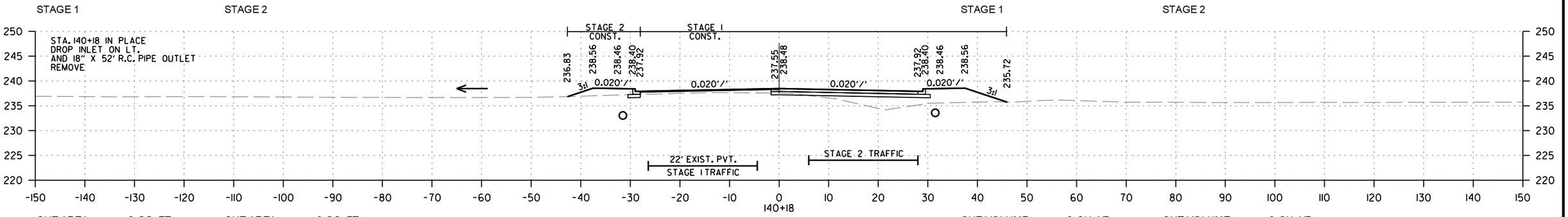


CUT AREA 5 SQ. FT. CUT AREA 2 SQ. FT. CUT VOLUME 2 CU. YD. CUT VOLUME 1 CU. YD.
FILL AREA 22 SQ. FT. FILL AREA 25 SQ. FT. FILL VOLUME 27 CU. YD. FILL VOLUME 16 CU. YD.

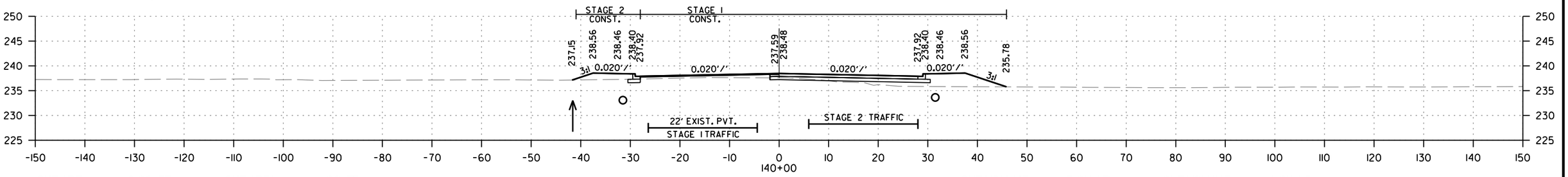
HWY. 18S/MLK JR. DR.
STA. 138+18 TO STA. 139+00

HT39710 5/6/2022
R100657.DGN

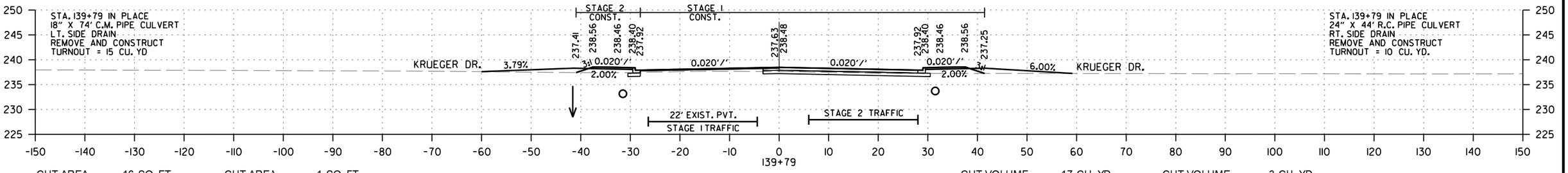
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	295	418
		CROSS SECTIONS				



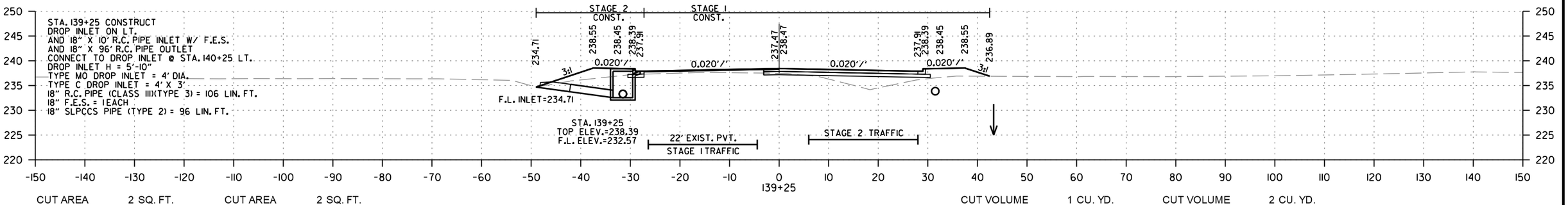
CUT AREA	2 SQ. FT.	CUT AREA	0 SQ. FT.	CUT VOLUME	2 CU. YD.	CUT VOLUME	0 CU. YD.
FILL AREA	68 SQ. FT.	FILL AREA	14 SQ. FT.	FILL VOLUME	37 CU. YD.	FILL VOLUME	8 CU. YD.



CUT AREA	3 SQ. FT.	CUT AREA	1 SQ. FT.	CUT VOLUME	7 CU. YD.	CUT VOLUME	1 CU. YD.
FILL AREA	42 SQ. FT.	FILL AREA	12 SQ. FT.	FILL VOLUME	21 CU. YD.	FILL VOLUME	8 CU. YD.



CUT AREA	16 SQ. FT.	CUT AREA	1 SQ. FT.	CUT VOLUME	17 CU. YD.	CUT VOLUME	3 CU. YD.
FILL AREA	12 SQ. FT.	FILL AREA	10 SQ. FT.	FILL VOLUME	61 CU. YD.	FILL VOLUME	34 CU. YD.

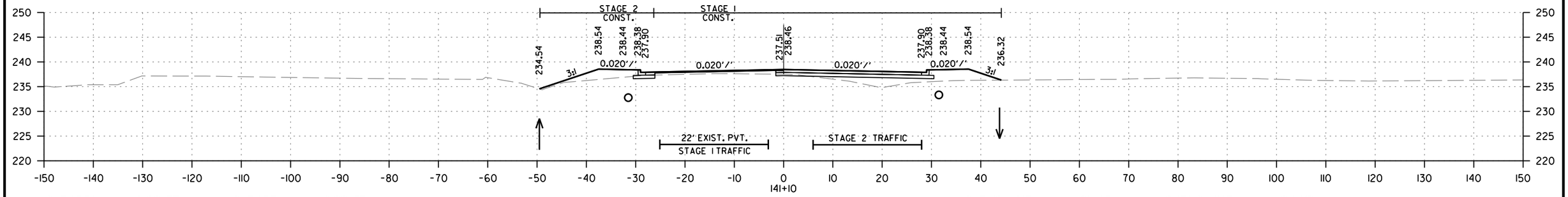


CUT AREA	2 SQ. FT.	CUT AREA	2 SQ. FT.	CUT VOLUME	1 CU. YD.	CUT VOLUME	2 CU. YD.
FILL AREA	48 SQ. FT.	FILL AREA	24 SQ. FT.	FILL VOLUME	48 CU. YD.	FILL VOLUME	19 CU. YD.

HWY. 18S/MLK JR. DR.
STA. 139+25 TO STA. 140+18

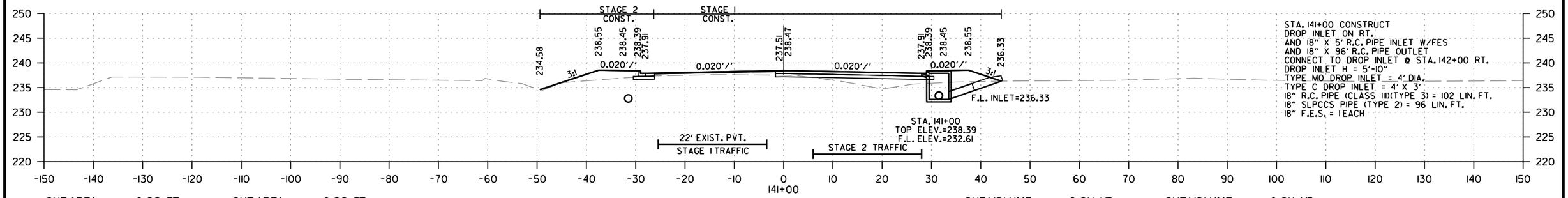
HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	296	418
		CROSS SECTIONS				



CUT AREA 2 SQ. FT. CUT AREA 3 SQ. FT.
FILL AREA 50 SQ. FT. FILL AREA 23 SQ. FT.

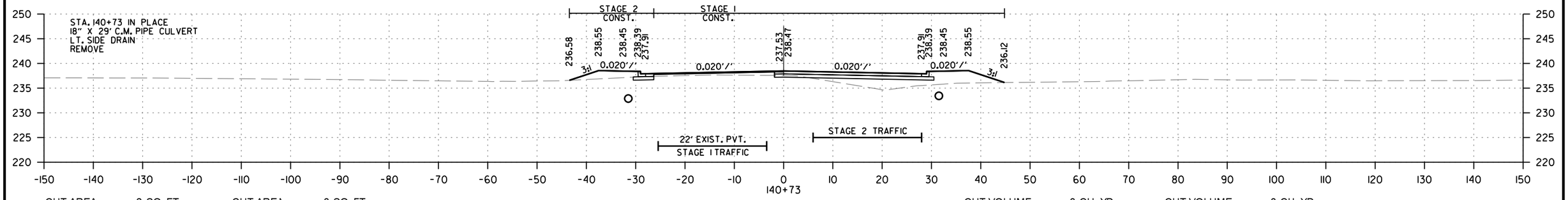
CUT VOLUME 1 CU. YD. CUT VOLUME 1 CU. YD.
FILL VOLUME 19 CU. YD. FILL VOLUME 8 CU. YD.



STA. 141+00 CONSTRUCT
DROP INLET ON RT.
AND 18" X 5' R.C. PIPE INLET W/FES
AND 18" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 142+00 RT.
DROP INLET H = 5'-10"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 102 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.
18" F.E.S. = 1 EACH

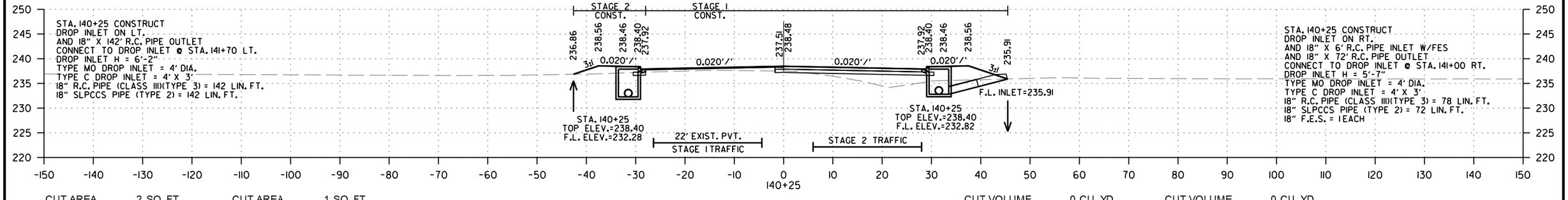
CUT AREA 2 SQ. FT. CUT AREA 3 SQ. FT.
FILL AREA 53 SQ. FT. FILL AREA 21 SQ. FT.

CUT VOLUME 2 CU. YD. CUT VOLUME 3 CU. YD.
FILL VOLUME 57 CU. YD. FILL VOLUME 19 CU. YD.



CUT AREA 2 SQ. FT. CUT AREA 3 SQ. FT.
FILL AREA 60 SQ. FT. FILL AREA 16 SQ. FT.

CUT VOLUME 3 CU. YD. CUT VOLUME 3 CU. YD.
FILL VOLUME 115 CU. YD. FILL VOLUME 28 CU. YD.



STA. 140+25 CONSTRUCT
DROP INLET ON RT.
AND 18" X 6' R.C. PIPE INLET W/FES
AND 18" X 72' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 141+00 RT.
DROP INLET H = 5'-7"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 78 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 72 LIN. FT.
18" F.E.S. = 1 EACH

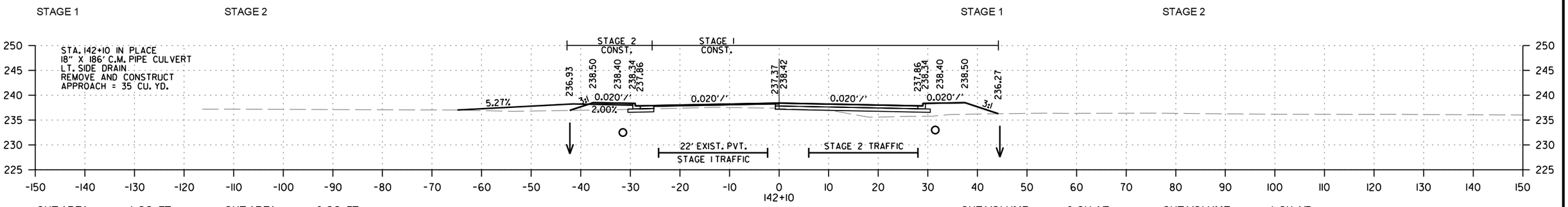
CUT AREA 2 SQ. FT. CUT AREA 1 SQ. FT.
FILL AREA 68 SQ. FT. FILL AREA 15 SQ. FT.

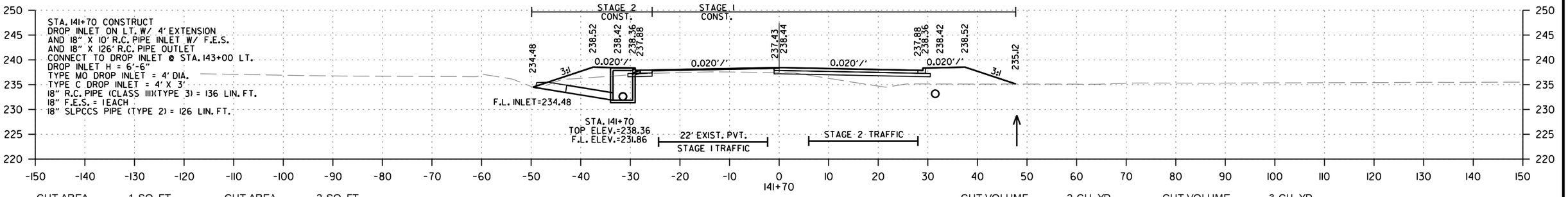
CUT VOLUME 0 CU. YD. CUT VOLUME 0 CU. YD.
FILL VOLUME 18 CU. YD. FILL VOLUME 4 CU. YD.

HWY. 18S/MLK JR. DR.
STA. 140+25 TO STA. 141+10

HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	297	418
		CROSS SECTIONS				

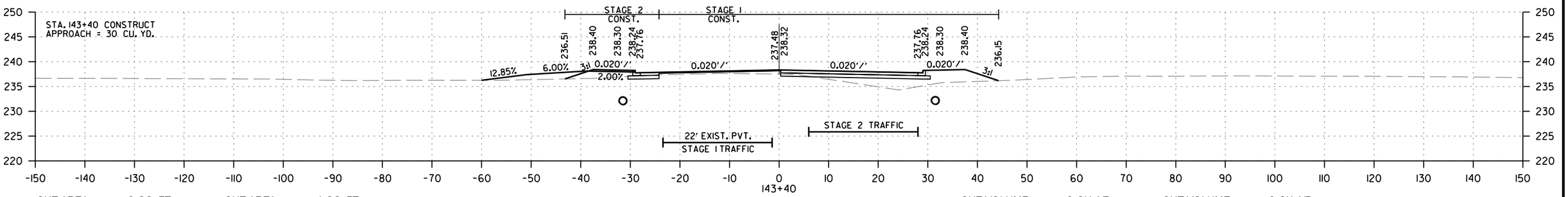




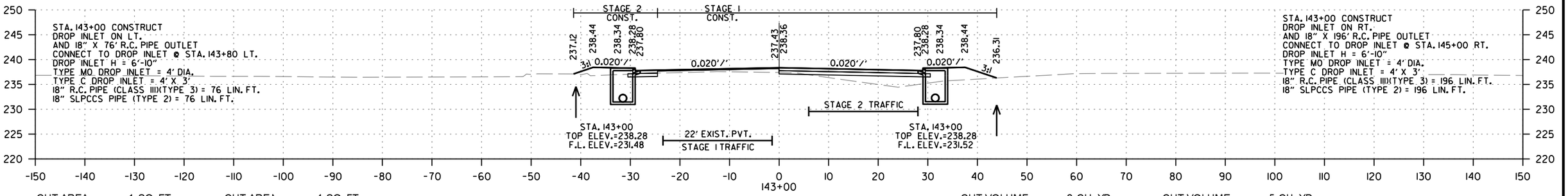
HWY. 18S/MLK JR. DR.
STA. 141+35 TO STA. 142+10

HT39710 5/6/2022
R100657.DGN

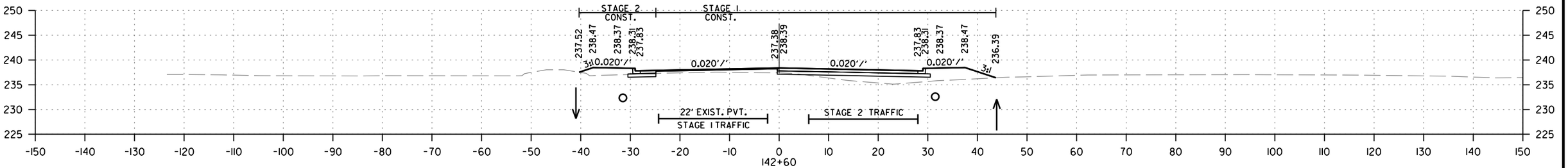
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	298	418
		CROSS SECTIONS				



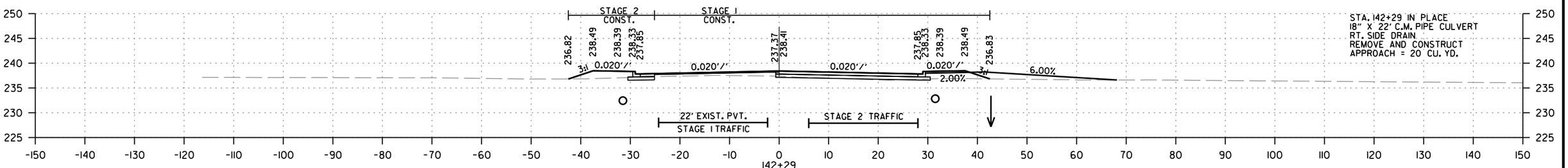
CUT AREA	2 SQ. FT.	CUT AREA	4 SQ. FT.
FILL AREA	58 SQ. FT.	FILL AREA	17 SQ. FT.
CUT VOLUME	2 CU. YD.	CUT VOLUME	6 CU. YD.
FILL VOLUME	87 CU. YD.	FILL VOLUME	23 CU. YD.



CUT AREA	1 SQ. FT.	CUT AREA	4 SQ. FT.
FILL AREA	59 SQ. FT.	FILL AREA	14 SQ. FT.
CUT VOLUME	2 CU. YD.	CUT VOLUME	5 CU. YD.
FILL VOLUME	82 CU. YD.	FILL VOLUME	21 CU. YD.



CUT AREA	1 SQ. FT.	CUT AREA	3 SQ. FT.
FILL AREA	51 SQ. FT.	FILL AREA	14 SQ. FT.
CUT VOLUME	2 CU. YD.	CUT VOLUME	4 CU. YD.
FILL VOLUME	39 CU. YD.	FILL VOLUME	16 CU. YD.

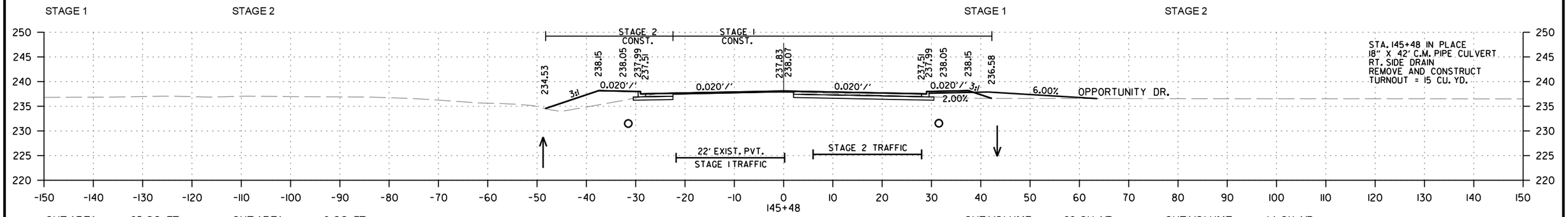


CUT AREA	2 SQ. FT.	CUT AREA	3 SQ. FT.
FILL AREA	17 SQ. FT.	FILL AREA	15 SQ. FT.
CUT VOLUME	1 CU. YD.	CUT VOLUME	2 CU. YD.
FILL VOLUME	21 CU. YD.	FILL VOLUME	10 CU. YD.

HWY. 18S/MLK JR. DR.
STA. 142+29 TO STA. 143+40

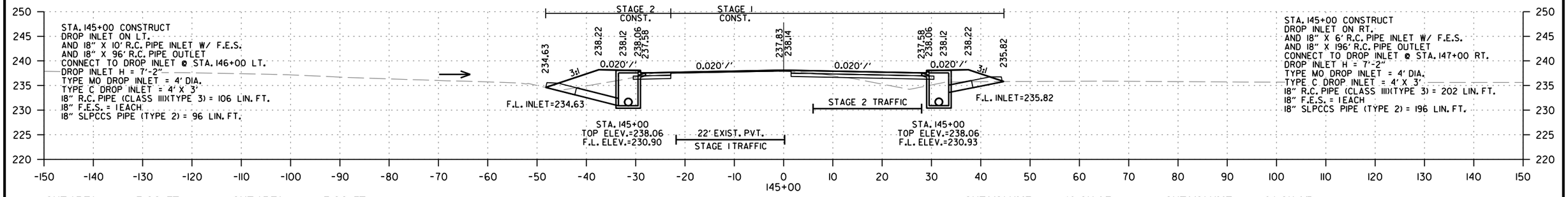
H139710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	299	418
		CROSS SECTIONS				



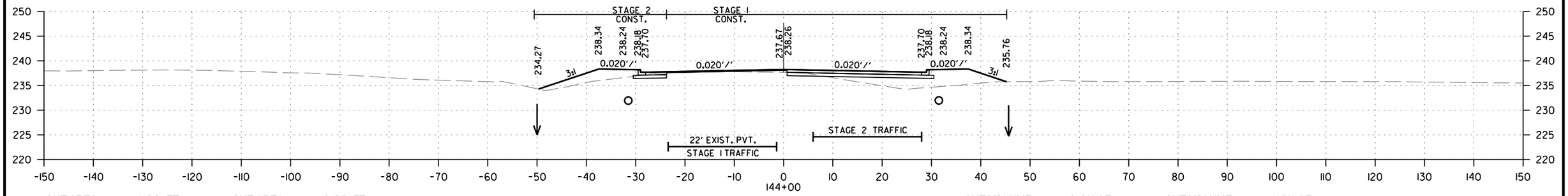
CUT AREA 25 SQ. FT. CUT AREA 8 SQ. FT.
FILL AREA 14 SQ. FT. FILL AREA 36 SQ. FT.

CUT VOLUME 28 CU. YD. CUT VOLUME 14 CU. YD.
FILL VOLUME 56 CU. YD. FILL VOLUME 65 CU. YD.



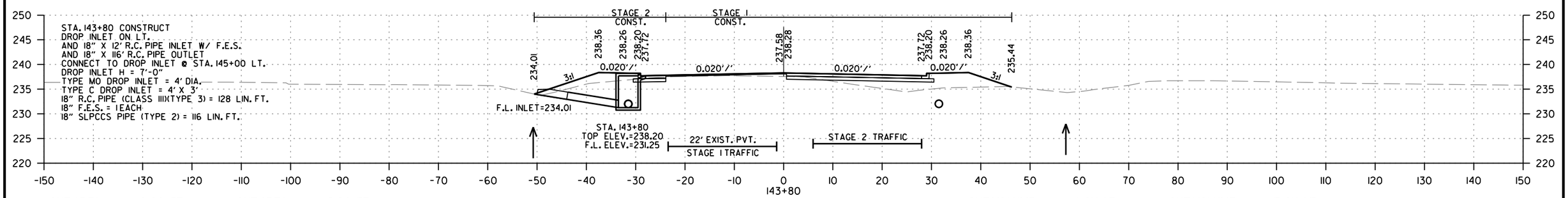
CUT AREA 7 SQ. FT. CUT AREA 7 SQ. FT.
FILL AREA 49 SQ. FT. FILL AREA 36 SQ. FT.

CUT VOLUME 19 CU. YD. CUT VOLUME 24 CU. YD.
FILL VOLUME 213 CU. YD. FILL VOLUME 126 CU. YD.



CUT AREA 4 SQ. FT. CUT AREA 6 SQ. FT.
FILL AREA 67 SQ. FT. FILL AREA 32 SQ. FT.

CUT VOLUME 2 CU. YD. CUT VOLUME 4 CU. YD.
FILL VOLUME 48 CU. YD. FILL VOLUME 22 CU. YD.



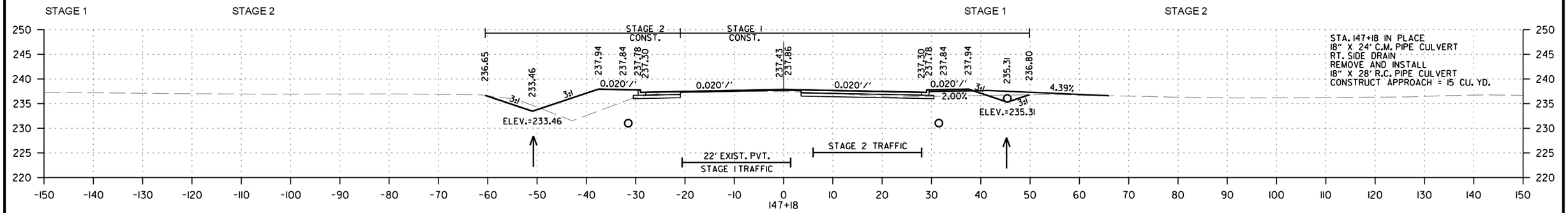
CUT AREA 3 SQ. FT. CUT AREA 5 SQ. FT.
FILL AREA 62 SQ. FT. FILL AREA 28 SQ. FT.

CUT VOLUME 4 CU. YD. CUT VOLUME 7 CU. YD.
FILL VOLUME 89 CU. YD. FILL VOLUME 33 CU. YD.

HWY. 18S/MLK JR. DR.
STA. 143+80 TO STA. 145+48

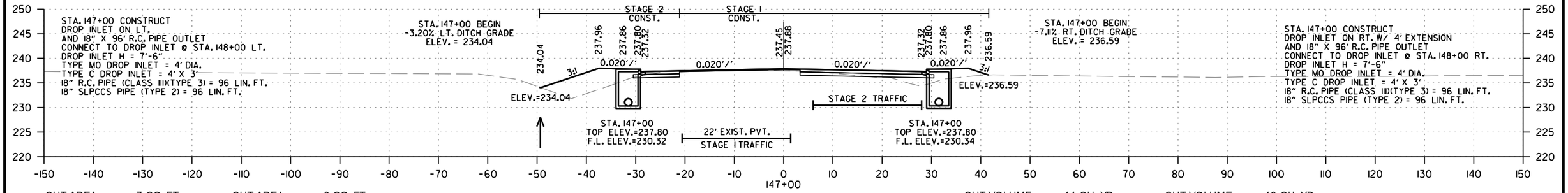
HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	300	418
		CROSS SECTIONS				



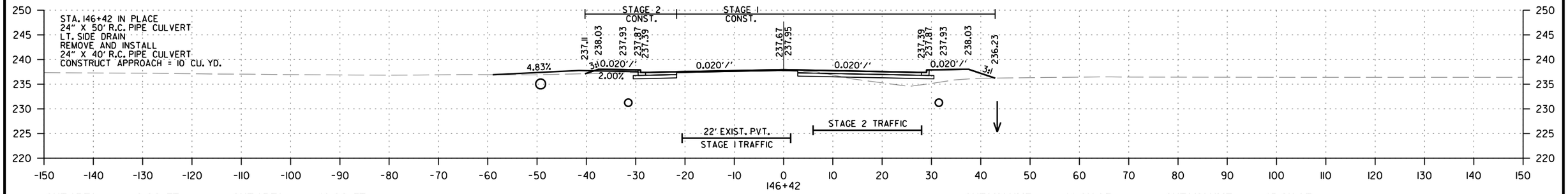
CUT AREA 18 SQ. FT. CUT AREA 17 SQ. FT.
FILL AREA 13 SQ. FT. FILL AREA 61 SQ. FT.

CUT VOLUME 8 CU. YD. CUT VOLUME 8 CU. YD.
FILL VOLUME 14 CU. YD. FILL VOLUME 40 CU. YD.



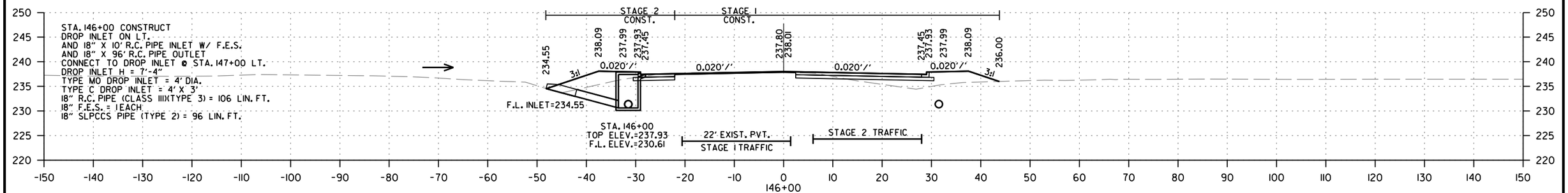
CUT AREA 7 SQ. FT. CUT AREA 8 SQ. FT.
FILL AREA 28 SQ. FT. FILL AREA 59 SQ. FT.

CUT VOLUME 14 CU. YD. CUT VOLUME 19 CU. YD.
FILL VOLUME 74 CU. YD. FILL VOLUME 71 CU. YD.



CUT AREA 6 SQ. FT. CUT AREA 10 SQ. FT.
FILL AREA 40 SQ. FT. FILL AREA 7 SQ. FT.

CUT VOLUME 11 CU. YD. CUT VOLUME 15 CU. YD.
FILL VOLUME 66 CU. YD. FILL VOLUME 32 CU. YD.



CUT AREA 8 SQ. FT. CUT AREA 9 SQ. FT.
FILL AREA 44 SQ. FT. FILL AREA 35 SQ. FT.

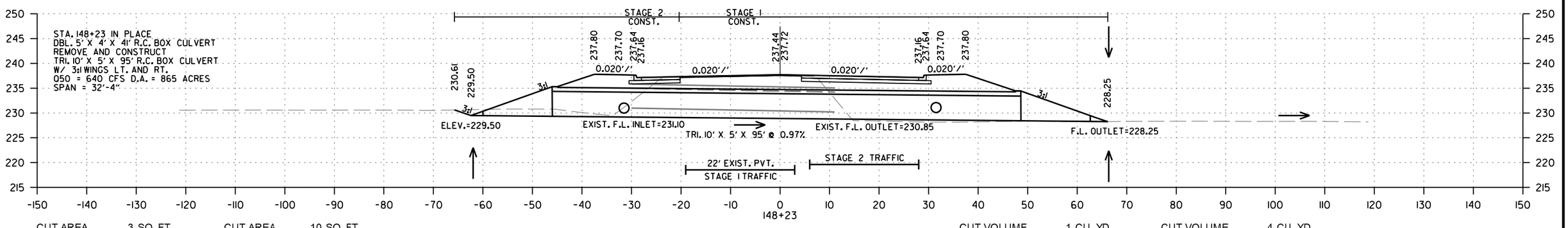
CUT VOLUME 31 CU. YD. CUT VOLUME 17 CU. YD.
FILL VOLUME 56 CU. YD. FILL VOLUME 69 CU. YD.

HWY. 18S/MLK JR. DR.
STA. 146+00 TO STA. 147+18

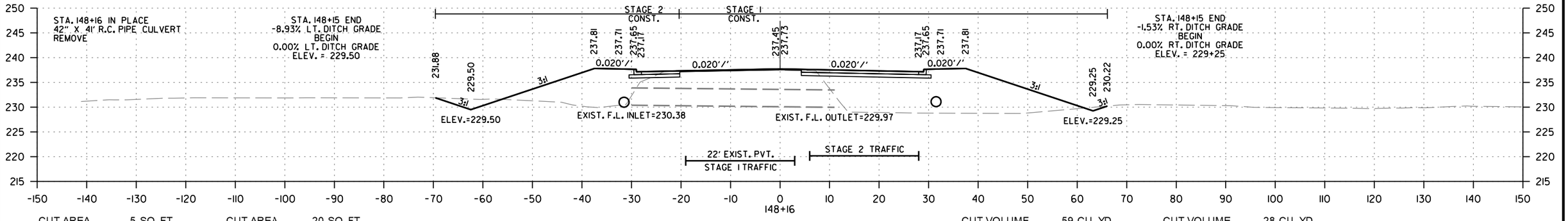
HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	301	418
		CROSS SECTIONS				

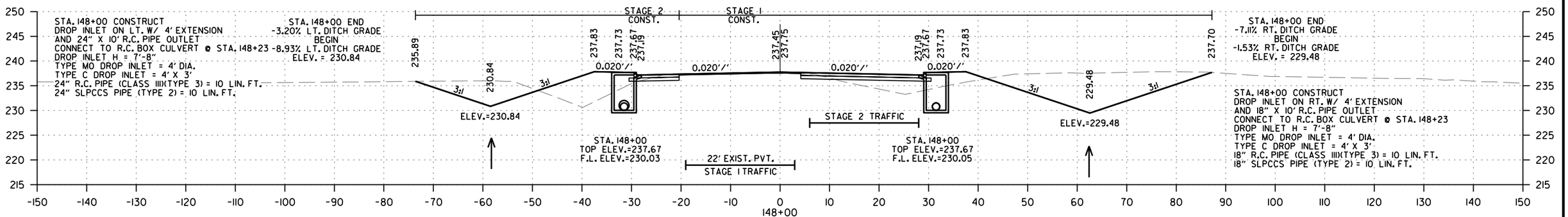
STAGE 1 STAGE 2 STAGE 1 STAGE 2



CUT AREA	3 SQ. FT.	CUT AREA	10 SQ. FT.	CUT VOLUME	1 CU. YD.	CUT VOLUME	4 CU. YD.
FILL AREA	351 SQ. FT.	FILL AREA	143 SQ. FT.	FILL VOLUME	87 CU. YD.	FILL VOLUME	35 CU. YD.



CUT AREA	5 SQ. FT.	CUT AREA	20 SQ. FT.	CUT VOLUME	59 CU. YD.	CUT VOLUME	28 CU. YD.
FILL AREA	320 SQ. FT.	FILL AREA	130 SQ. FT.	FILL VOLUME	111 CU. YD.	FILL VOLUME	61 CU. YD.

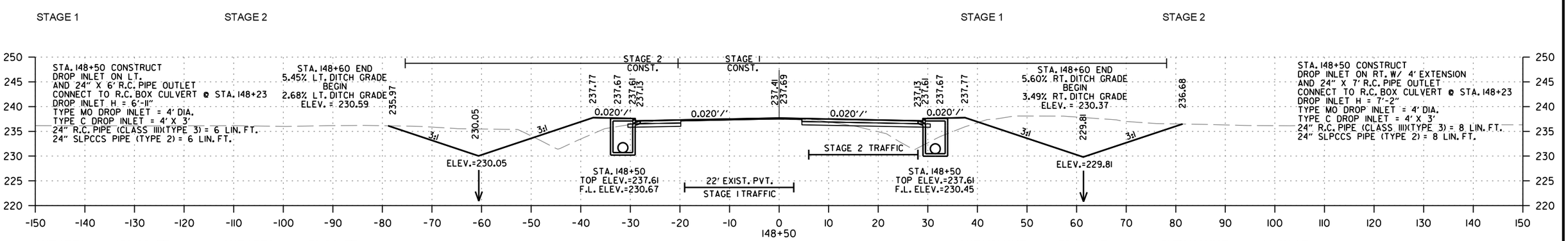


CUT AREA	193 SQ. FT.	CUT AREA	75 SQ. FT.	CUT VOLUME	320 CU. YD.	CUT VOLUME	140 CU. YD.
FILL AREA	56 SQ. FT.	FILL AREA	75 SQ. FT.	FILL VOLUME	105 CU. YD.	FILL VOLUME	208 CU. YD.

HWY. 18S/MLK JR. DR.
STA. 148+00 TO STA. 148+23

HT39710 5/6/2022
R100657.DGN

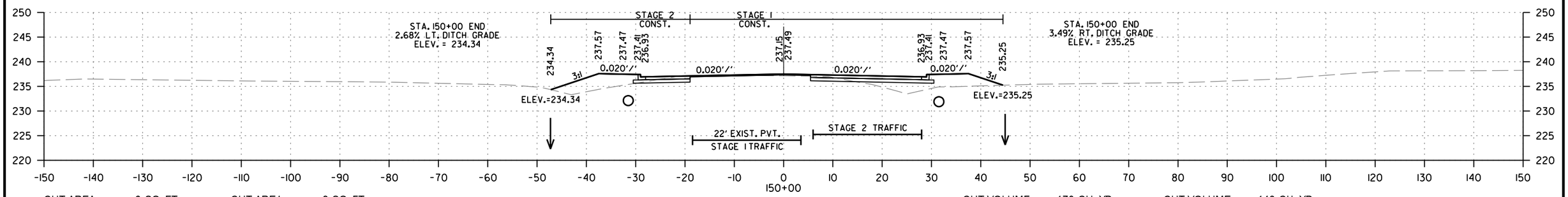
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	302	418
		CROSS SECTIONS				

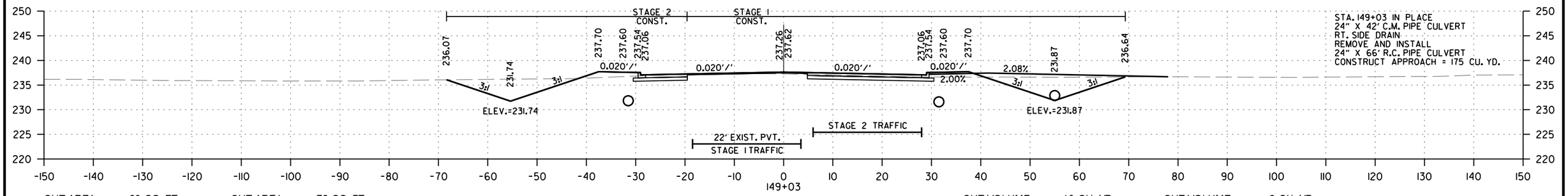


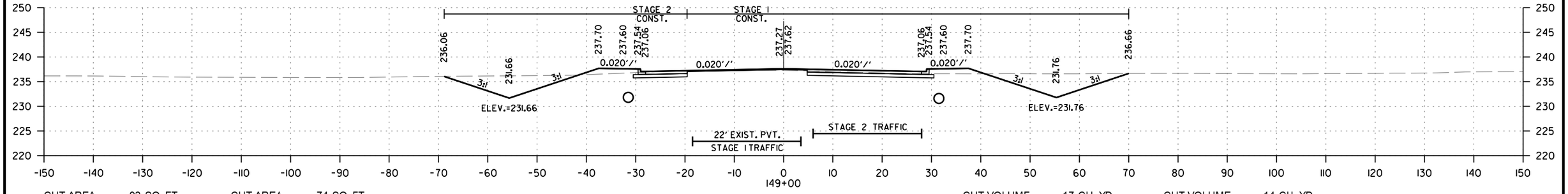
HWY. 18S/MLK JR. DR.
STA. 148+30 TO STA. 148+50

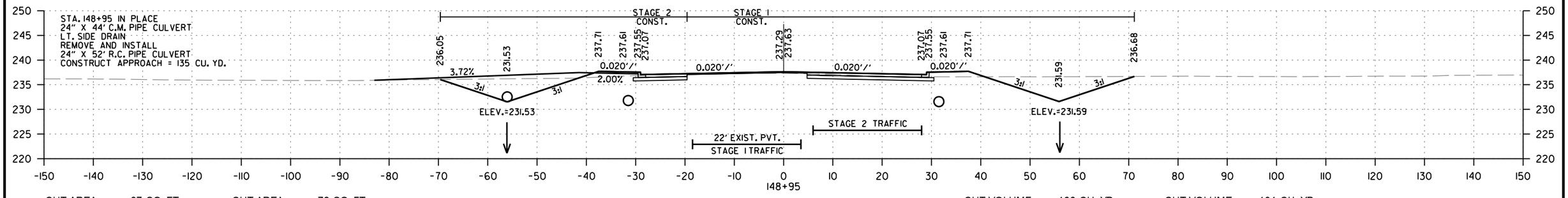
H139710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	303	418
		CROSS SECTIONS				







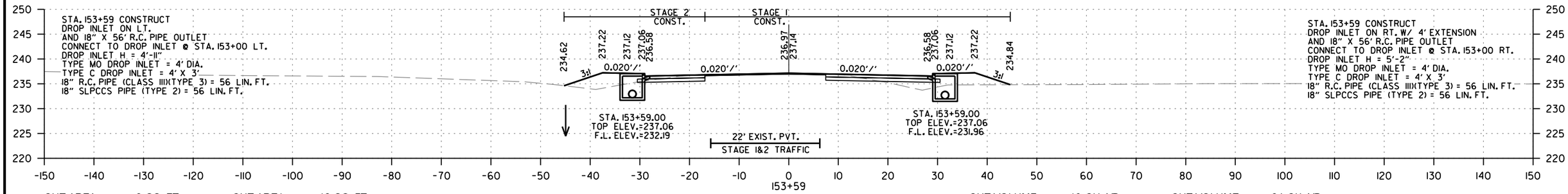


HWY. 18S/MLK JR. DR.
STA. 148+95 TO STA. 150+00

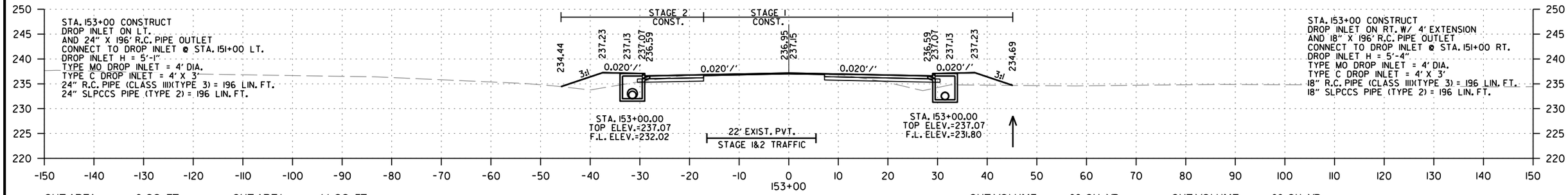
HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	304	418
		CROSS SECTIONS				

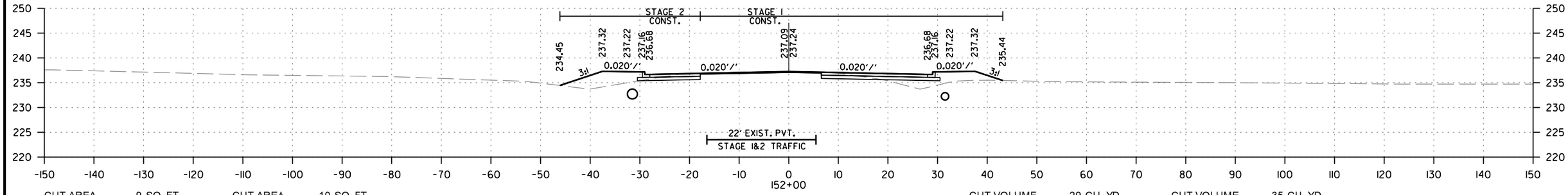
STAGE 1 STAGE 2 STAGE 1 STAGE 2



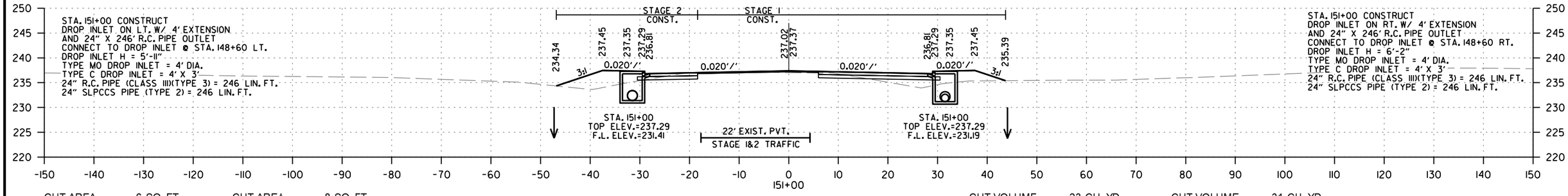
CUT AREA	8 SQ. FT.	CUT AREA	12 SQ. FT.	CUT VOLUME	19 CU. YD.	CUT VOLUME	24 CU. YD.
FILL AREA	37 SQ. FT.	FILL AREA	31 SQ. FT.	FILL VOLUME	76 CU. YD.	FILL VOLUME	72 CU. YD.



CUT AREA	8 SQ. FT.	CUT AREA	11 SQ. FT.	CUT VOLUME	32 CU. YD.	CUT VOLUME	39 CU. YD.
FILL AREA	39 SQ. FT.	FILL AREA	33 SQ. FT.	FILL VOLUME	132 CU. YD.	FILL VOLUME	125 CU. YD.



CUT AREA	9 SQ. FT.	CUT AREA	10 SQ. FT.	CUT VOLUME	29 CU. YD.	CUT VOLUME	35 CU. YD.
FILL AREA	32 SQ. FT.	FILL AREA	35 SQ. FT.	FILL VOLUME	128 CU. YD.	FILL VOLUME	135 CU. YD.

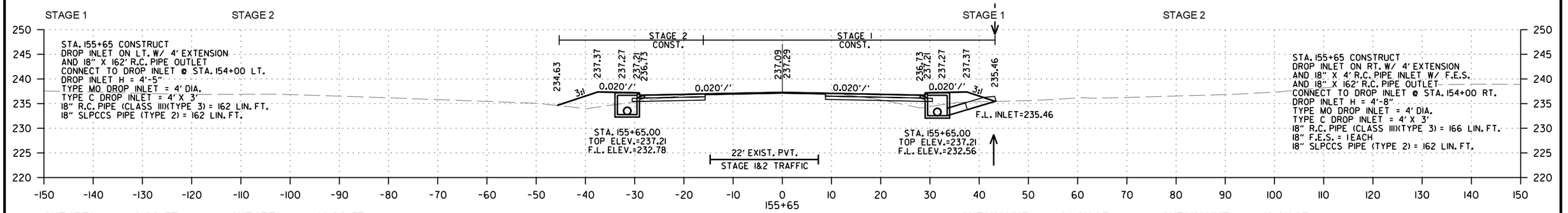


CUT AREA	6 SQ. FT.	CUT AREA	8 SQ. FT.	CUT VOLUME	23 CU. YD.	CUT VOLUME	31 CU. YD.
FILL AREA	37 SQ. FT.	FILL AREA	38 SQ. FT.	FILL VOLUME	157 CU. YD.	FILL VOLUME	144 CU. YD.

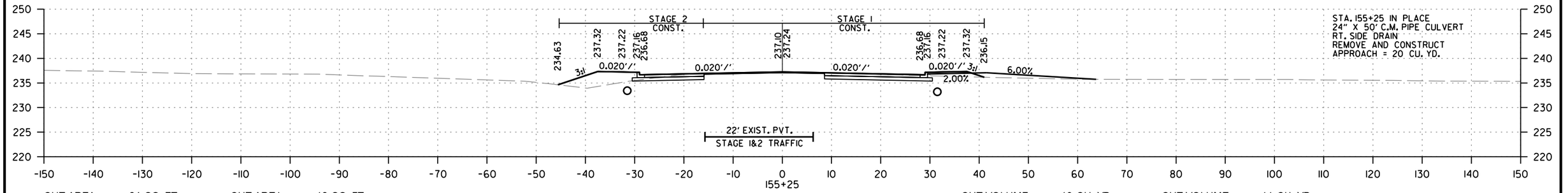
HWY. 18S/MLK JR. DR.
STA. 151+00 TO STA. 153+59

HT39710 5/6/2022
R100657.DGN

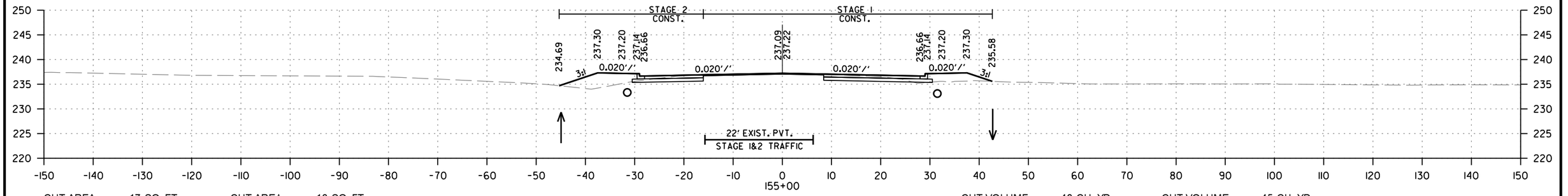
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	305	418
		CROSS SECTIONS				



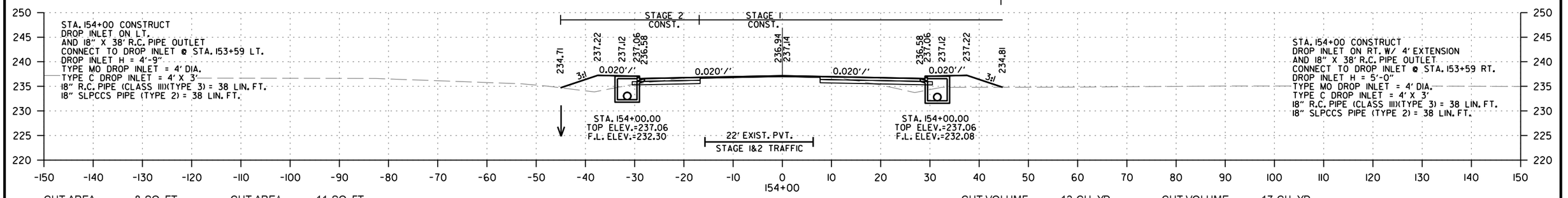
CUT AREA	9 SQ. FT.	CUT AREA	10 SQ. FT.	CUT VOLUME	24 CU. YD.	CUT VOLUME	16 CU. YD.
FILL AREA	31 SQ. FT.	FILL AREA	33 SQ. FT.	FILL VOLUME	30 CU. YD.	FILL VOLUME	48 CU. YD.



CUT AREA	24 SQ. FT.	CUT AREA	12 SQ. FT.	CUT VOLUME	19 CU. YD.	CUT VOLUME	11 CU. YD.
FILL AREA	9 SQ. FT.	FILL AREA	32 SQ. FT.	FILL VOLUME	12 CU. YD.	FILL VOLUME	29 CU. YD.



CUT AREA	17 SQ. FT.	CUT AREA	13 SQ. FT.	CUT VOLUME	46 CU. YD.	CUT VOLUME	45 CU. YD.
FILL AREA	17 SQ. FT.	FILL AREA	31 SQ. FT.	FILL VOLUME	102 CU. YD.	FILL VOLUME	115 CU. YD.

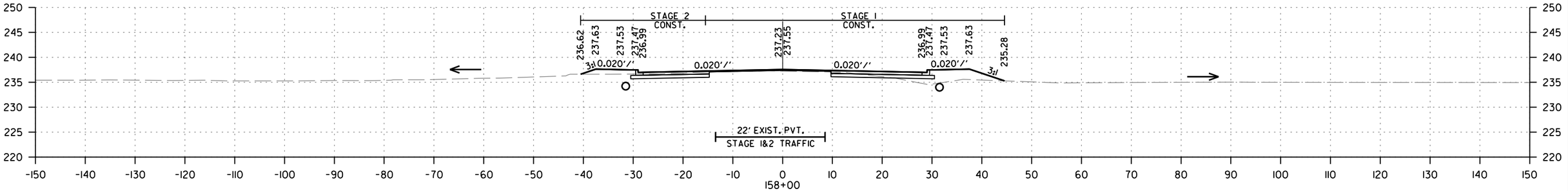


CUT AREA	8 SQ. FT.	CUT AREA	11 SQ. FT.	CUT VOLUME	12 CU. YD.	CUT VOLUME	17 CU. YD.
FILL AREA	38 SQ. FT.	FILL AREA	31 SQ. FT.	FILL VOLUME	59 CU. YD.	FILL VOLUME	49 CU. YD.

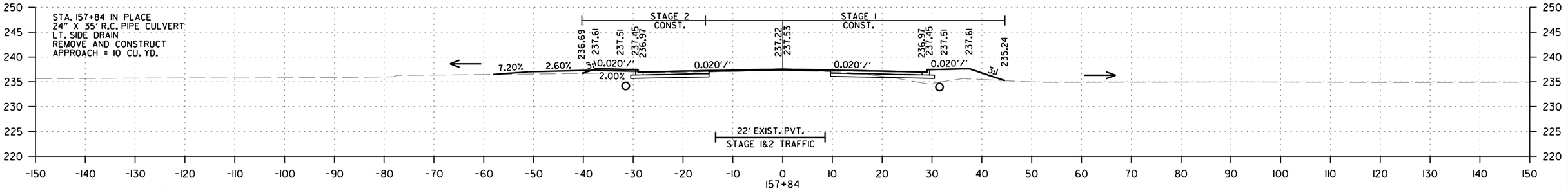
HWY. 18S/MLK JR. DR.
STA. 154+00 TO STA. 155+65

HT39710 5/6/2022
R100657.DGN

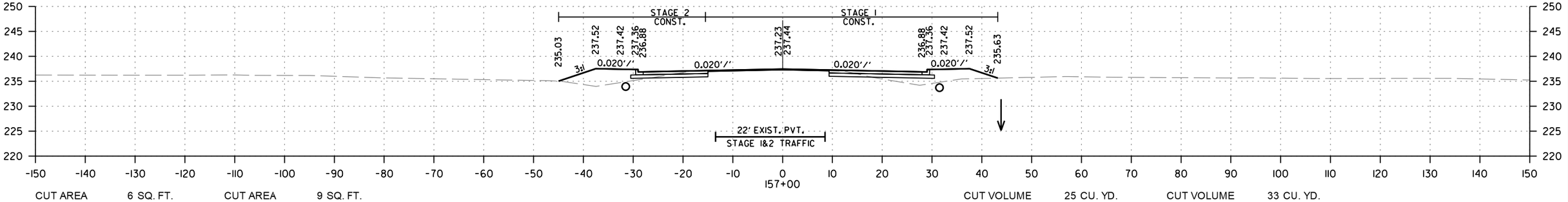
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	306	418
		CROSS SECTIONS				



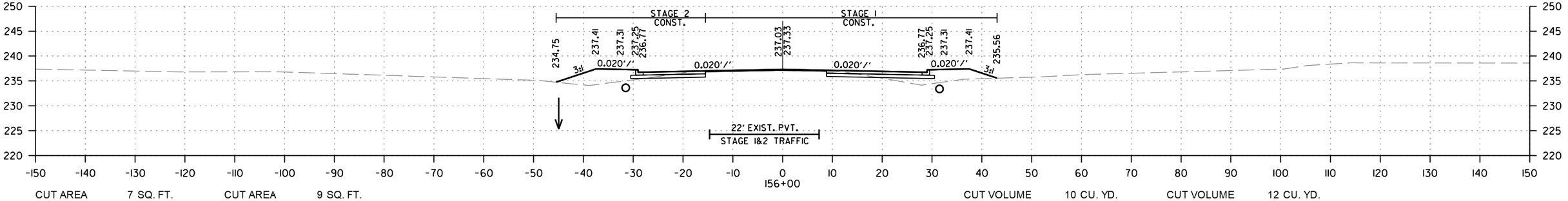
CUT AREA	7 SQ. FT.	CUT AREA	15 SQ. FT.	CUT VOLUME	4 CU. YD.	CUT VOLUME	9 CU. YD.
FILL AREA	30 SQ. FT.	FILL AREA	9 SQ. FT.	FILL VOLUME	18 CU. YD.	FILL VOLUME	5 CU. YD.



CUT AREA	7 SQ. FT.	CUT AREA	16 SQ. FT.	CUT VOLUME	21 CU. YD.	CUT VOLUME	39 CU. YD.
FILL AREA	29 SQ. FT.	FILL AREA	7 SQ. FT.	FILL VOLUME	98 CU. YD.	FILL VOLUME	67 CU. YD.



CUT AREA	6 SQ. FT.	CUT AREA	9 SQ. FT.	CUT VOLUME	25 CU. YD.	CUT VOLUME	33 CU. YD.
FILL AREA	33 SQ. FT.	FILL AREA	36 SQ. FT.	FILL VOLUME	121 CU. YD.	FILL VOLUME	129 CU. YD.

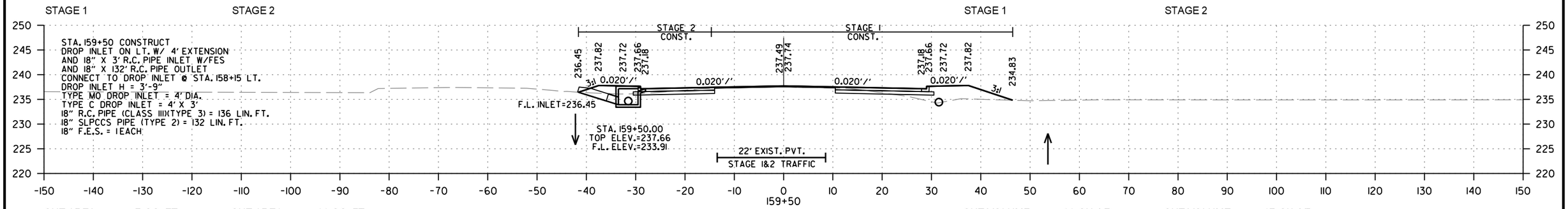


CUT AREA	7 SQ. FT.	CUT AREA	9 SQ. FT.	CUT VOLUME	10 CU. YD.	CUT VOLUME	12 CU. YD.
FILL AREA	32 SQ. FT.	FILL AREA	34 SQ. FT.	FILL VOLUME	41 CU. YD.	FILL VOLUME	43 CU. YD.

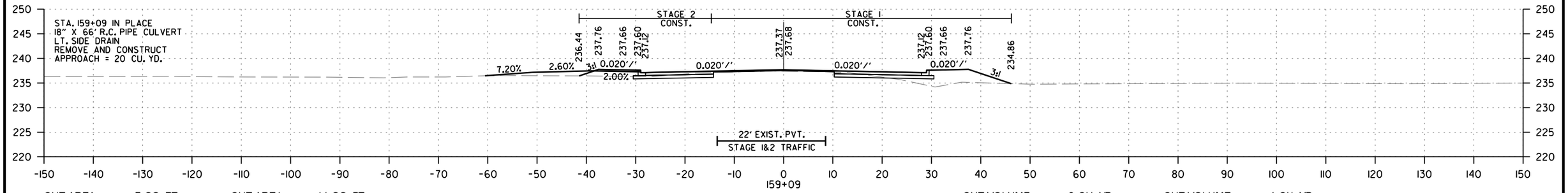
HWY. 18S/MLK JR. DR.
STA. 156+00 TO STA. 158+00

HT39710 5/6/2022
R100657.DGN

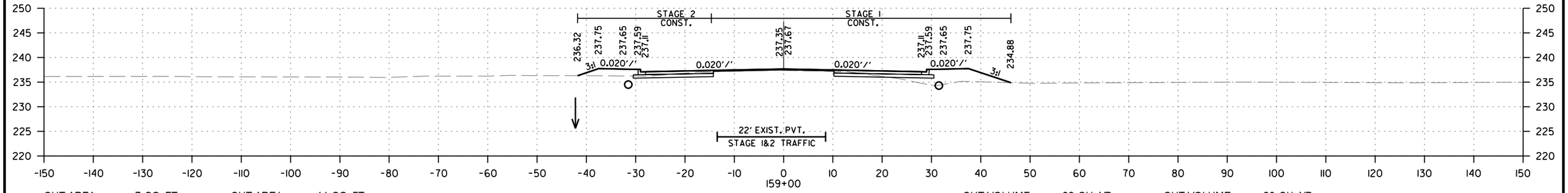
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	307	418
		CROSS SECTIONS				



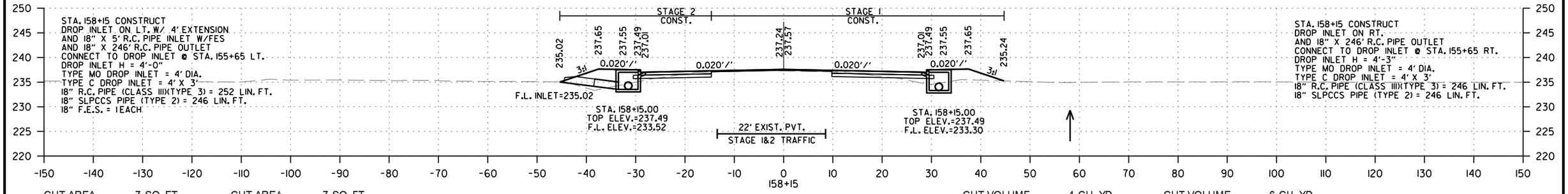
CUT AREA	7 SQ. FT.	CUT AREA	11 SQ. FT.	CUT VOLUME	11 CU. YD.	CUT VOLUME	17 CU. YD.
FILL AREA	40 SQ. FT.	FILL AREA	16 SQ. FT.	FILL VOLUME	60 CU. YD.	FILL VOLUME	22 CU. YD.



CUT AREA	7 SQ. FT.	CUT AREA	11 SQ. FT.	CUT VOLUME	2 CU. YD.	CUT VOLUME	4 CU. YD.
FILL AREA	40 SQ. FT.	FILL AREA	13 SQ. FT.	FILL VOLUME	13 CU. YD.	FILL VOLUME	5 CU. YD.



CUT AREA	7 SQ. FT.	CUT AREA	11 SQ. FT.	CUT VOLUME	22 CU. YD.	CUT VOLUME	29 CU. YD.
FILL AREA	39 SQ. FT.	FILL AREA	14 SQ. FT.	FILL VOLUME	111 CU. YD.	FILL VOLUME	91 CU. YD.

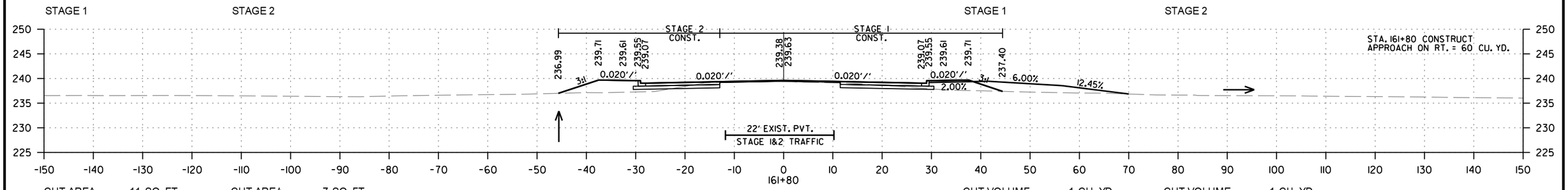


CUT AREA	7 SQ. FT.	CUT AREA	7 SQ. FT.	CUT VOLUME	4 CU. YD.	CUT VOLUME	6 CU. YD.
FILL AREA	31 SQ. FT.	FILL AREA	44 SQ. FT.	FILL VOLUME	17 CU. YD.	FILL VOLUME	15 CU. YD.

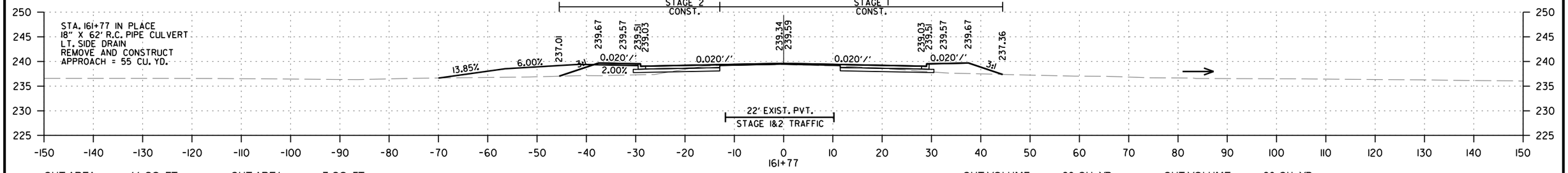
HWY. 18S/MLK JR. DR.
STA. 158+15 TO STA. 159+50

HT39710 5/6/2022
R100657.DGN

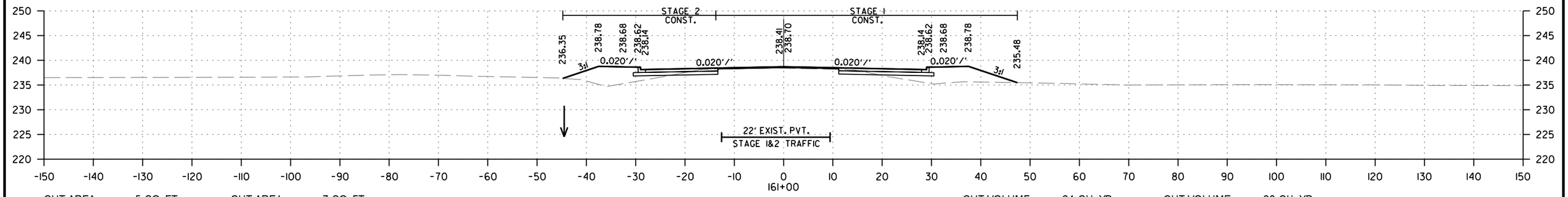
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	308	418
		CROSS SECTIONS				



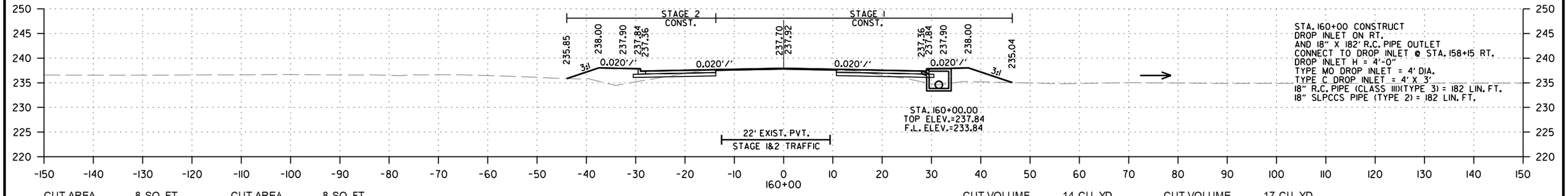
CUT AREA	11 SQ. FT.	CUT AREA	7 SQ. FT.	CUT VOLUME	1 CU. YD.	CUT VOLUME	1 CU. YD.
FILL AREA	22 SQ. FT.	FILL AREA	32 SQ. FT.	FILL VOLUME	2 CU. YD.	FILL VOLUME	3 CU. YD.



CUT AREA	11 SQ. FT.	CUT AREA	7 SQ. FT.	CUT VOLUME	23 CU. YD.	CUT VOLUME	20 CU. YD.
FILL AREA	22 SQ. FT.	FILL AREA	31 SQ. FT.	FILL VOLUME	101 CU. YD.	FILL VOLUME	105 CU. YD.



CUT AREA	5 SQ. FT.	CUT AREA	7 SQ. FT.	CUT VOLUME	24 CU. YD.	CUT VOLUME	26 CU. YD.
FILL AREA	49 SQ. FT.	FILL AREA	43 SQ. FT.	FILL VOLUME	164 CU. YD.	FILL VOLUME	142 CU. YD.

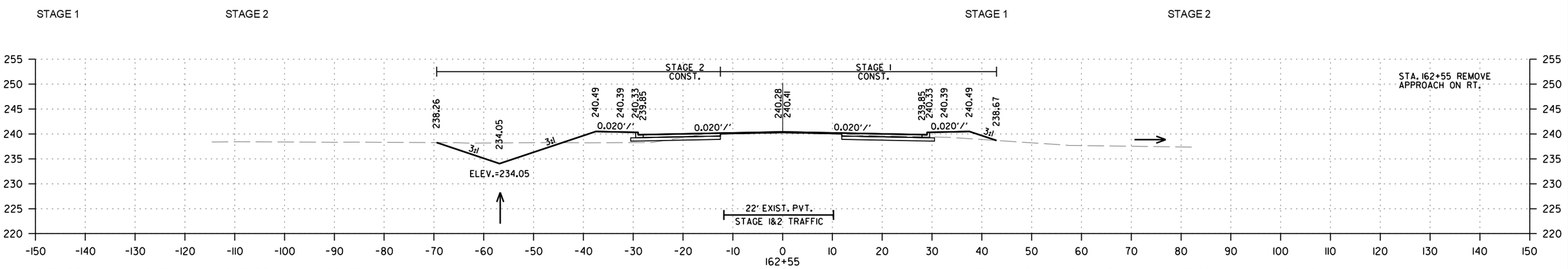


CUT AREA	8 SQ. FT.	CUT AREA	8 SQ. FT.	CUT VOLUME	14 CU. YD.	CUT VOLUME	17 CU. YD.
FILL AREA	40 SQ. FT.	FILL AREA	34 SQ. FT.	FILL VOLUME	73 CU. YD.	FILL VOLUME	45 CU. YD.

HWY. 18S/MLK JR. DR.
STA. 160+00 TO STA. 161+80

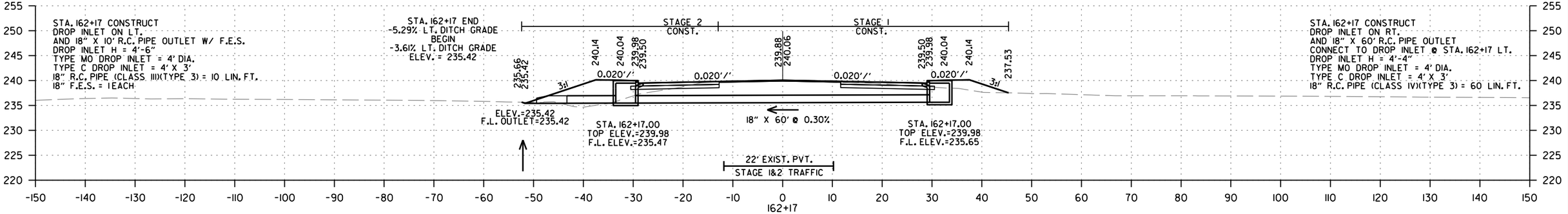
HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	309	418
		CROSS SECTIONS				



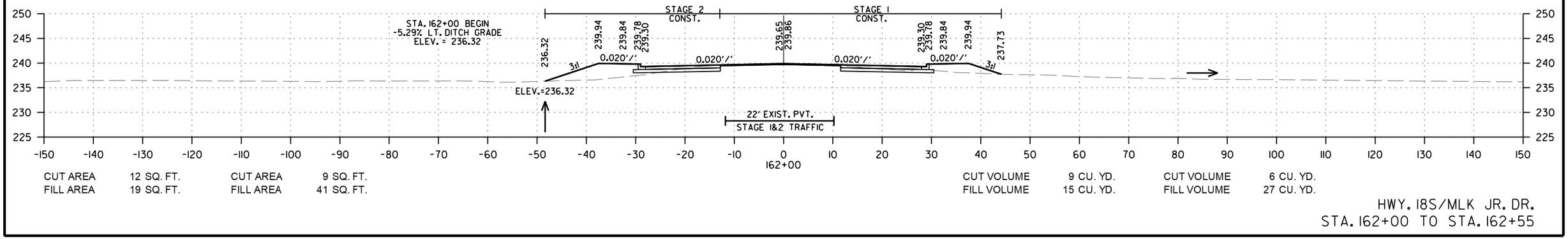
CUT AREA 16 SQ. FT. CUT AREA 61 SQ. FT.
FILL AREA 13 SQ. FT. FILL AREA 26 SQ. FT.

CUT VOLUME 23 CU. YD. CUT VOLUME 48 CU. YD.
FILL VOLUME 25 CU. YD. FILL VOLUME 69 CU. YD.



CUT AREA 16 SQ. FT. CUT AREA 7 SQ. FT.
FILL AREA 22 SQ. FT. FILL AREA 72 SQ. FT.

CUT VOLUME 9 CU. YD. CUT VOLUME 5 CU. YD.
FILL VOLUME 13 CU. YD. FILL VOLUME 36 CU. YD.



CUT AREA 12 SQ. FT. CUT AREA 9 SQ. FT.
FILL AREA 19 SQ. FT. FILL AREA 41 SQ. FT.

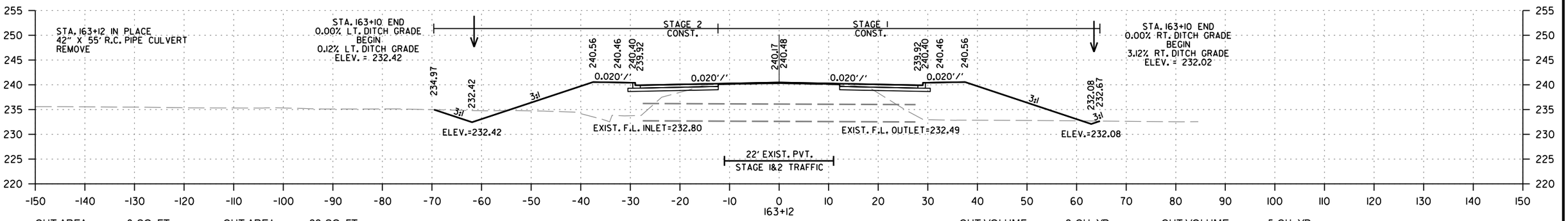
CUT VOLUME 9 CU. YD. CUT VOLUME 6 CU. YD.
FILL VOLUME 15 CU. YD. FILL VOLUME 27 CU. YD.

HWY. 18S/MLK JR. DR.
STA. 162+00 TO STA. 162+55

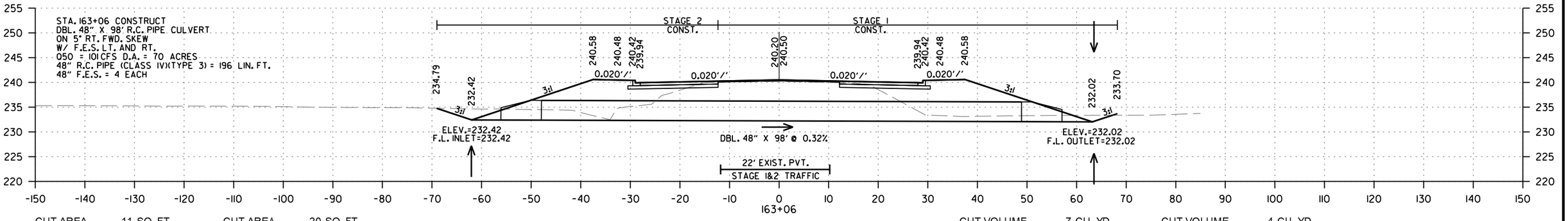
HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	310	418
		CROSS SECTIONS				

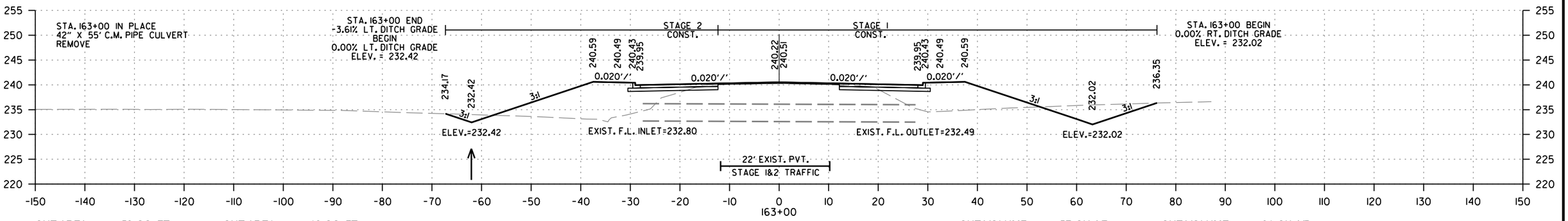
STAGE 1 STAGE 2 STAGE 1 STAGE 2



CUT AREA 6 SQ. FT. CUT AREA 22 SQ. FT. CUT VOLUME 2 CU. YD. CUT VOLUME 5 CU. YD.
FILL AREA 182 SQ. FT. FILL AREA 134 SQ. FT. FILL VOLUME 38 CU. YD. FILL VOLUME 30 CU. YD.



CUT AREA 11 SQ. FT. CUT AREA 20 SQ. FT. CUT VOLUME 7 CU. YD. CUT VOLUME 4 CU. YD.
FILL AREA 164 SQ. FT. FILL AREA 131 SQ. FT. FILL VOLUME 30 CU. YD. FILL VOLUME 32 CU. YD.

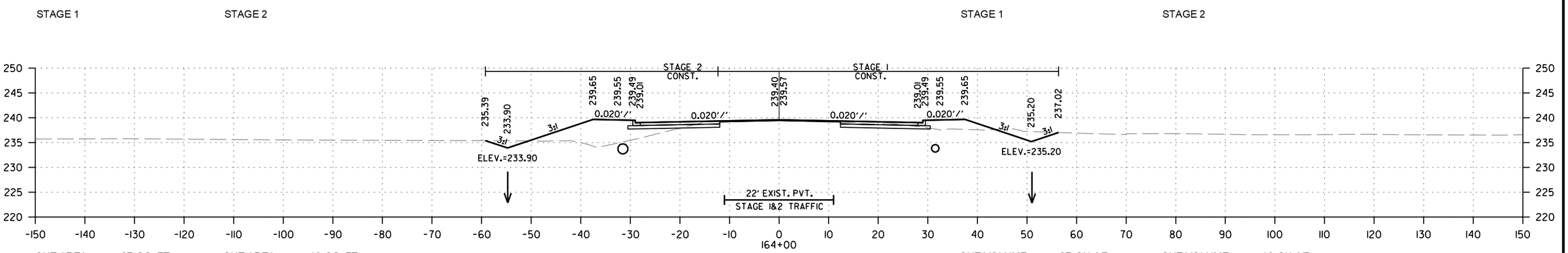


CUT AREA 52 SQ. FT. CUT AREA 12 SQ. FT. CUT VOLUME 57 CU. YD. CUT VOLUME 61 CU. YD.
FILL AREA 109 SQ. FT. FILL AREA 155 SQ. FT. FILL VOLUME 101 CU. YD. FILL VOLUME 151 CU. YD.

HWY. 18S/MLK JR. DR.
STA. 163+00 TO STA. 163+12

HT39710 5/6/2022
R100657.DGN

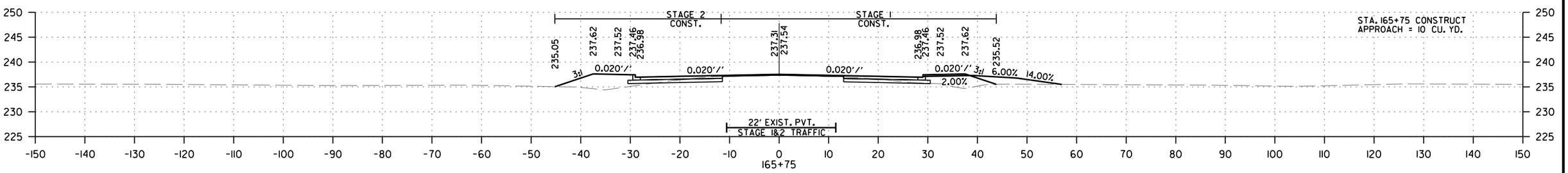
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	311	418
		CROSS SECTIONS				



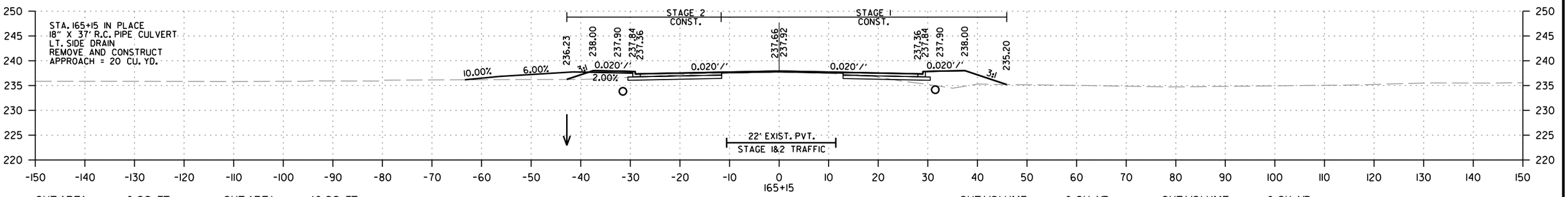
HWY. 18S/MLK JR. DR.
STA. 163+35 TO STA. 164+00

H139710 5/6/2022
R100657.DGN

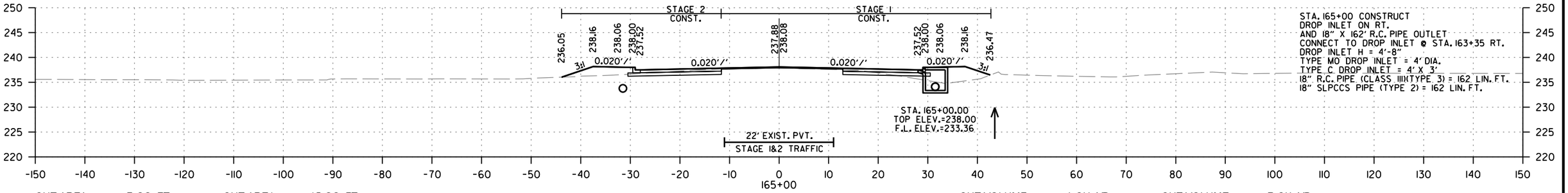
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	312	418
		CROSS SECTIONS				



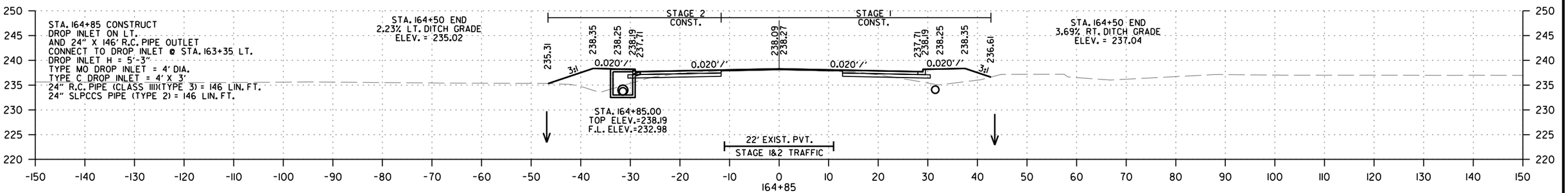
CUT AREA	9 SQ. FT.	CUT AREA	9 SQ. FT.	CUT VOLUME	17 CU. YD.	CUT VOLUME	28 CU. YD.
FILL AREA	26 SQ. FT.	FILL AREA	34 SQ. FT.	FILL VOLUME	72 CU. YD.	FILL VOLUME	56 CU. YD.



CUT AREA	6 SQ. FT.	CUT AREA	16 SQ. FT.	CUT VOLUME	3 CU. YD.	CUT VOLUME	9 CU. YD.
FILL AREA	39 SQ. FT.	FILL AREA	16 SQ. FT.	FILL VOLUME	20 CU. YD.	FILL VOLUME	10 CU. YD.



CUT AREA	7 SQ. FT.	CUT AREA	15 SQ. FT.	CUT VOLUME	4 CU. YD.	CUT VOLUME	7 CU. YD.
FILL AREA	34 SQ. FT.	FILL AREA	18 SQ. FT.	FILL VOLUME	19 CU. YD.	FILL VOLUME	19 CU. YD.

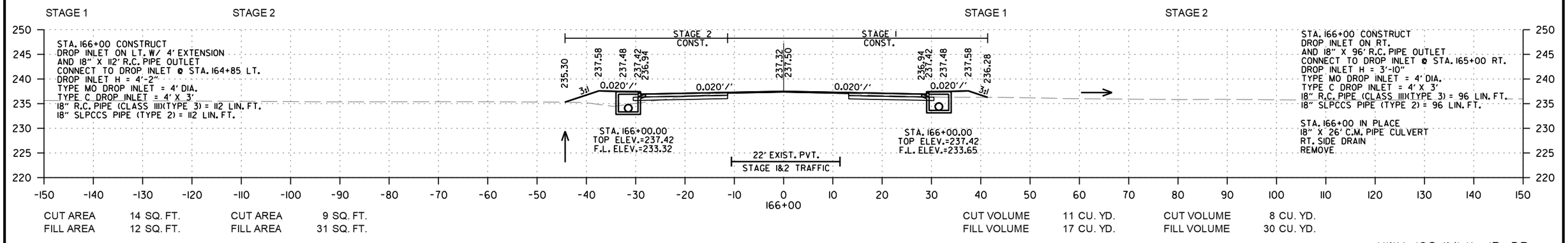


CUT AREA	7 SQ. FT.	CUT AREA	10 SQ. FT.	CUT VOLUME	53 CU. YD.	CUT VOLUME	36 CU. YD.
FILL AREA	33 SQ. FT.	FILL AREA	50 SQ. FT.	FILL VOLUME	85 CU. YD.	FILL VOLUME	202 CU. YD.

HWY. 18S/MLK JR. DR.
STA. 164+85 TO STA. 165+75

HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	313	418
		CROSS SECTIONS				

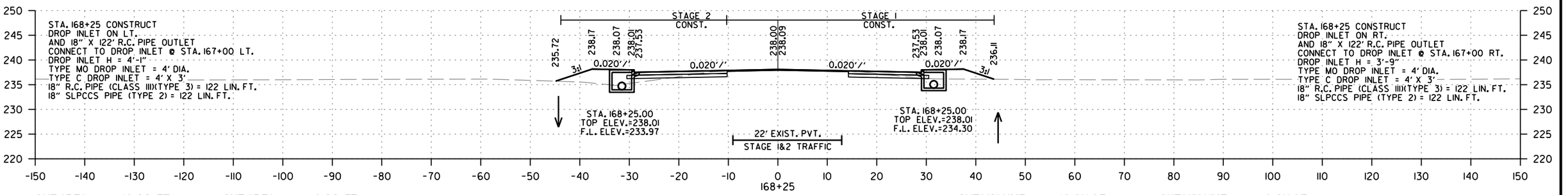


CUT AREA	14 SQ. FT.	CUT AREA	9 SQ. FT.	CUT VOLUME	11 CU. YD.	CUT VOLUME	8 CU. YD.
FILL AREA	12 SQ. FT.	FILL AREA	31 SQ. FT.	FILL VOLUME	17 CU. YD.	FILL VOLUME	30 CU. YD.

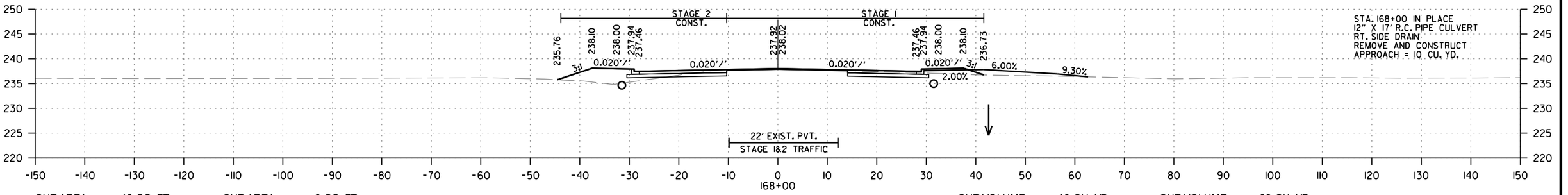
HWY. 18S/MLK JR. DR.
STA. 166+00 TO STA. 166+00

HT39710 5/6/2022
R100657.DGN

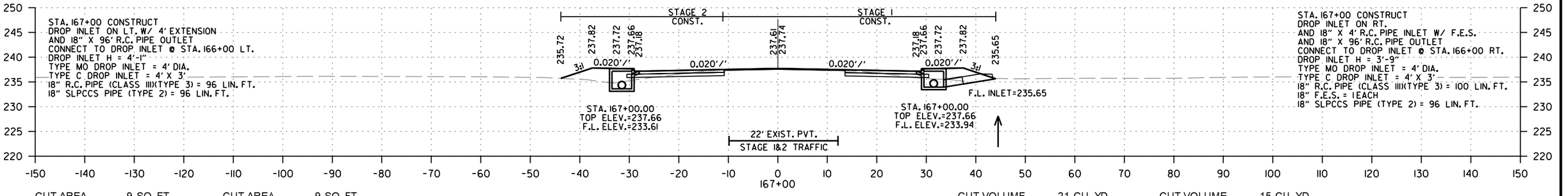
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	314	418
		CROSS SECTIONS				



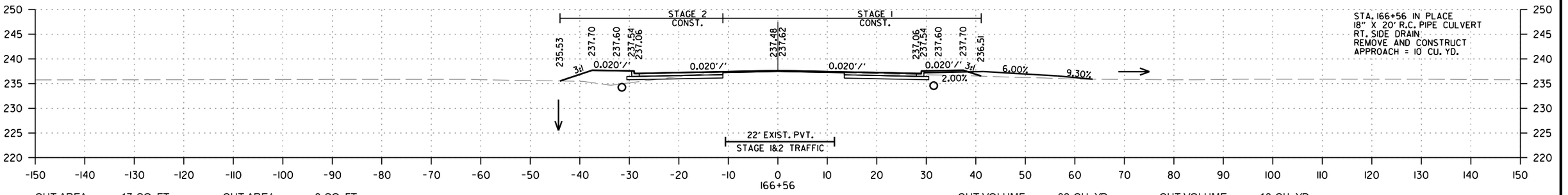
CUT AREA	10 SQ. FT.	CUT AREA	8 SQ. FT.	CUT VOLUME	12 CU. YD.	CUT VOLUME	8 CU. YD.
FILL AREA	21 SQ. FT.	FILL AREA	37 SQ. FT.	FILL VOLUME	15 CU. YD.	FILL VOLUME	33 CU. YD.



CUT AREA	16 SQ. FT.	CUT AREA	9 SQ. FT.	CUT VOLUME	46 CU. YD.	CUT VOLUME	33 CU. YD.
FILL AREA	11 SQ. FT.	FILL AREA	35 SQ. FT.	FILL VOLUME	71 CU. YD.	FILL VOLUME	121 CU. YD.



CUT AREA	9 SQ. FT.	CUT AREA	9 SQ. FT.	CUT VOLUME	21 CU. YD.	CUT VOLUME	15 CU. YD.
FILL AREA	28 SQ. FT.	FILL AREA	30 SQ. FT.	FILL VOLUME	30 CU. YD.	FILL VOLUME	49 CU. YD.

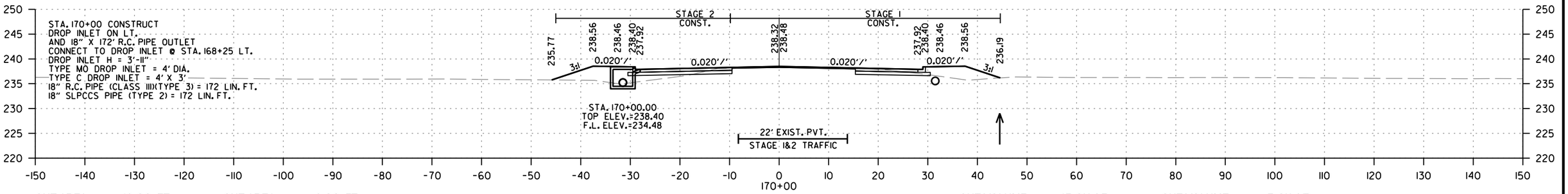


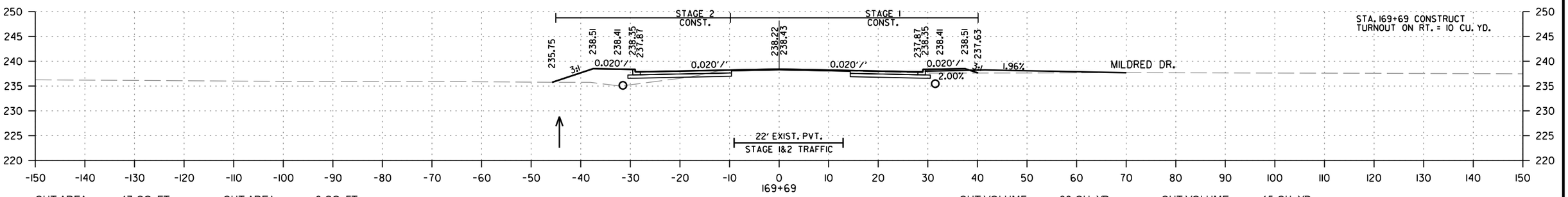
CUT AREA	17 SQ. FT.	CUT AREA	8 SQ. FT.	CUT VOLUME	32 CU. YD.	CUT VOLUME	18 CU. YD.
FILL AREA	9 SQ. FT.	FILL AREA	30 SQ. FT.	FILL VOLUME	22 CU. YD.	FILL VOLUME	64 CU. YD.

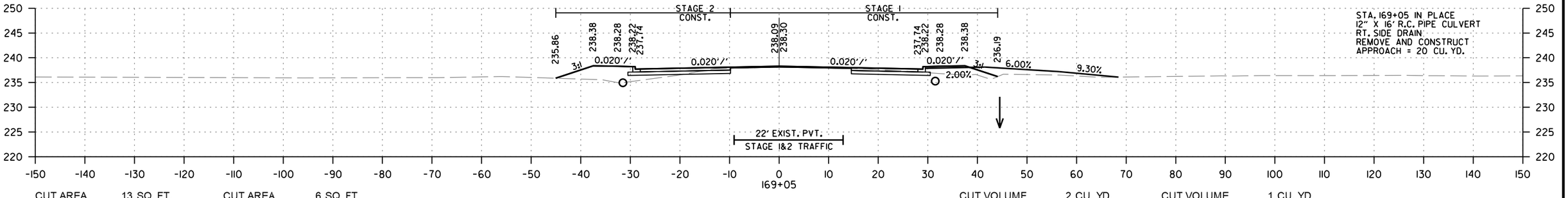
HWY. 18S/MLK JR. DR.
STA. 166+56 TO STA. 168+25

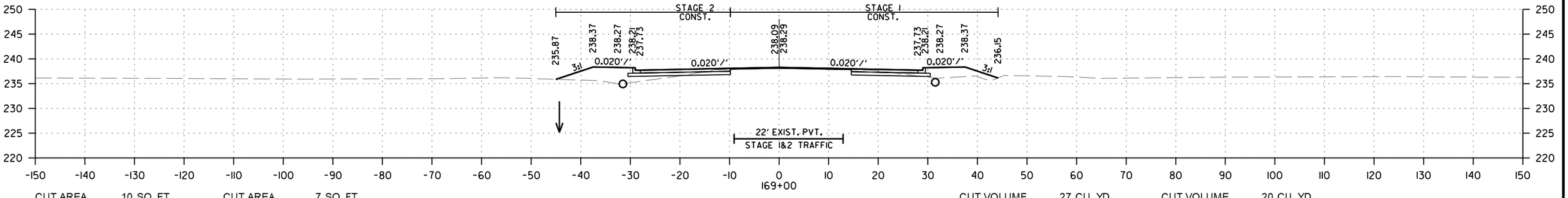
HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	315	418
		CROSS SECTIONS				





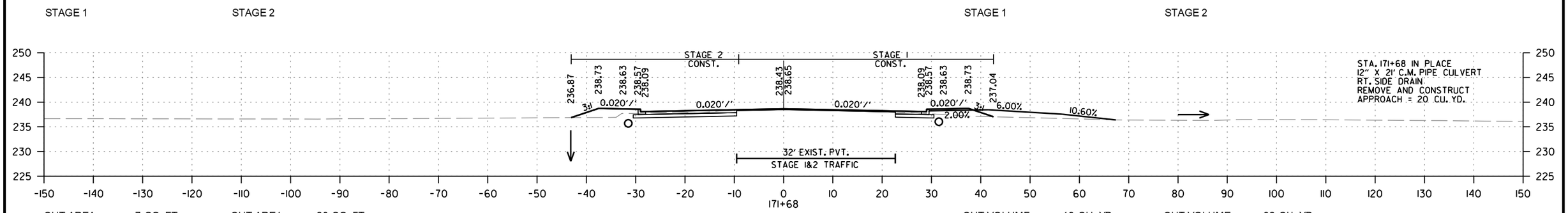


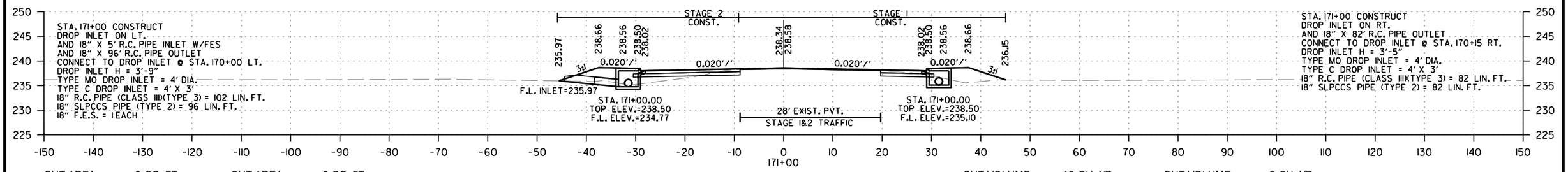


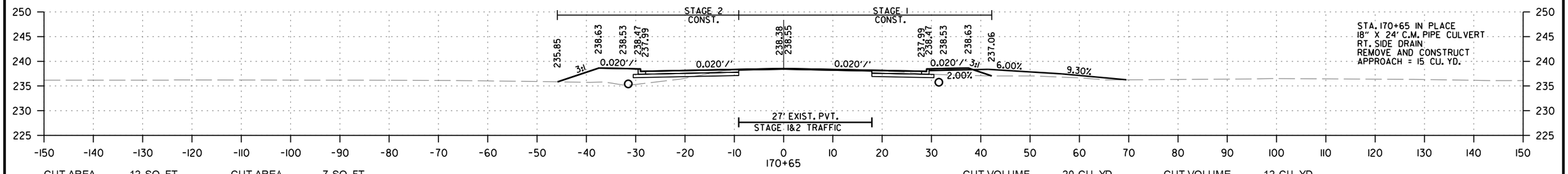
HWY. 18S/MLK JR. DR.
STA. 169+00 TO STA. 170+00

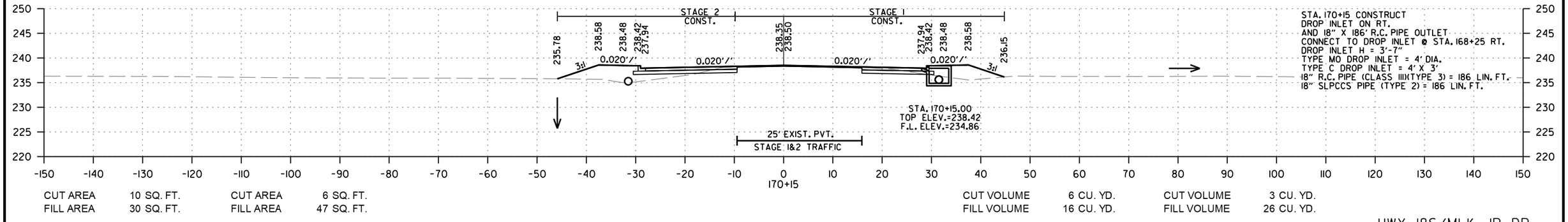
HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	316	418
		CROSS SECTIONS				





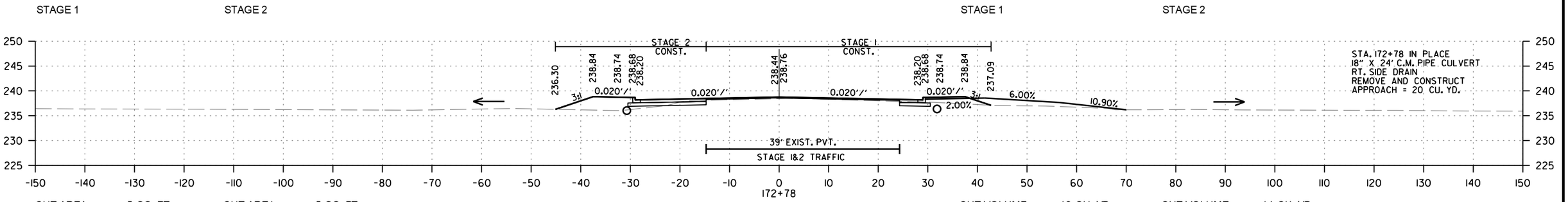




HWY. 18S/MLK JR. DR.
STA. 170+15 TO STA. 171+68

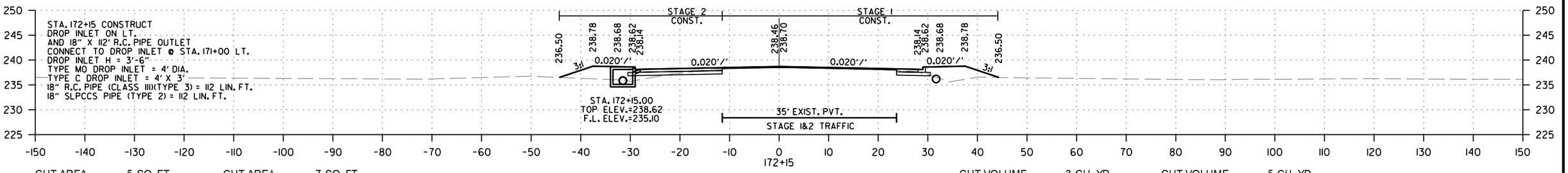
HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	317	418
		CROSS SECTIONS				



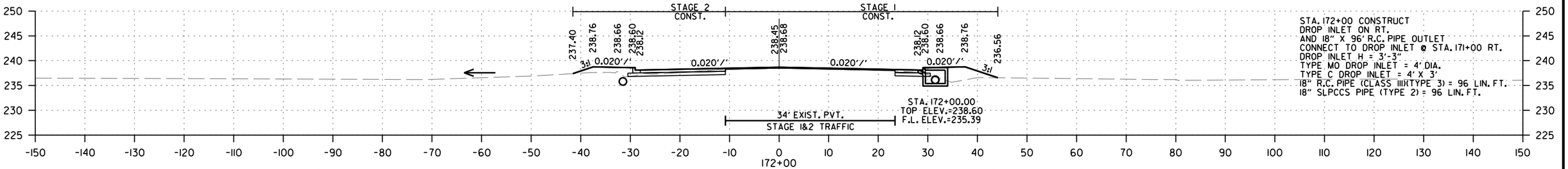
CUT AREA 5 SQ. FT. CUT AREA 5 SQ. FT.
FILL AREA 13 SQ. FT. FILL AREA 33 SQ. FT.

CUT VOLUME 12 CU. YD. CUT VOLUME 14 CU. YD.
FILL VOLUME 47 CU. YD. FILL VOLUME 77 CU. YD.



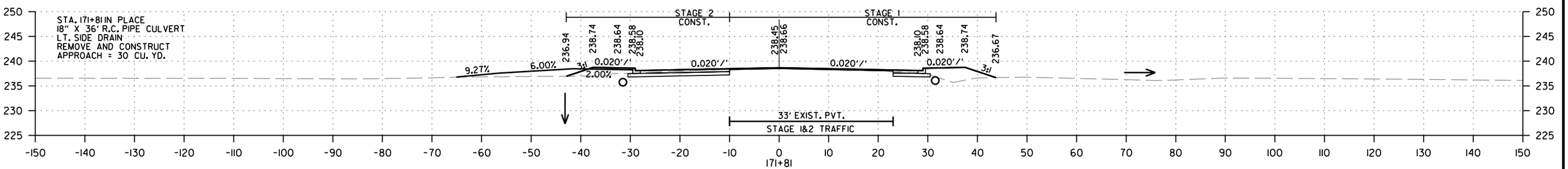
CUT AREA 5 SQ. FT. CUT AREA 7 SQ. FT.
FILL AREA 27 SQ. FT. FILL AREA 33 SQ. FT.

CUT VOLUME 3 CU. YD. CUT VOLUME 5 CU. YD.
FILL VOLUME 15 CU. YD. FILL VOLUME 12 CU. YD.



CUT AREA 5 SQ. FT. CUT AREA 12 SQ. FT.
FILL AREA 26 SQ. FT. FILL AREA 12 SQ. FT.

CUT VOLUME 4 CU. YD. CUT VOLUME 11 CU. YD.
FILL VOLUME 18 CU. YD. FILL VOLUME 10 CU. YD.



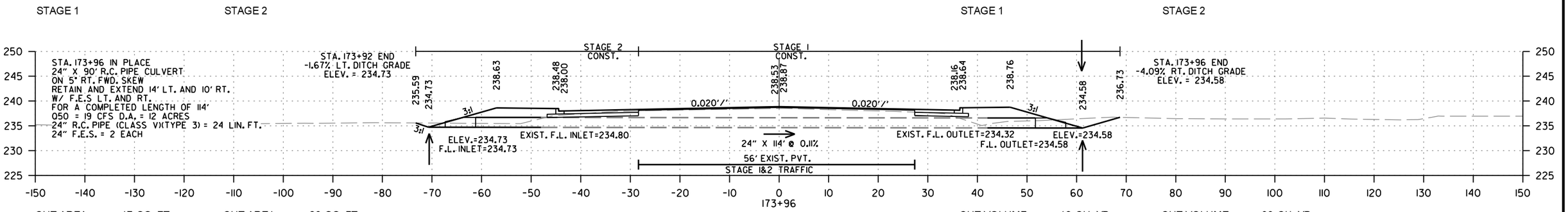
CUT AREA 6 SQ. FT. CUT AREA 20 SQ. FT.
FILL AREA 25 SQ. FT. FILL AREA 16 SQ. FT.

CUT VOLUME 3 CU. YD. CUT VOLUME 9 CU. YD.
FILL VOLUME 9 CU. YD. FILL VOLUME 8 CU. YD.

HWY. 18S/MLK JR. DR.
STA. 171+81 TO STA. 172+78

H139710 5/6/2022
R100657.DGN

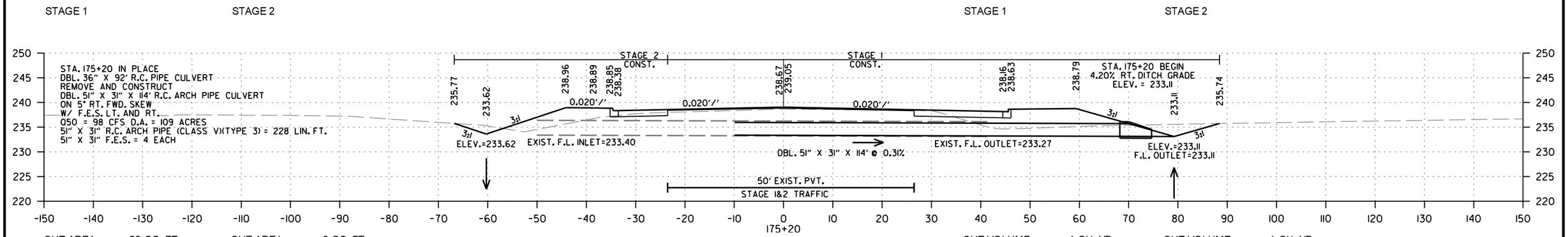
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	318	418
		CROSS SECTIONS				



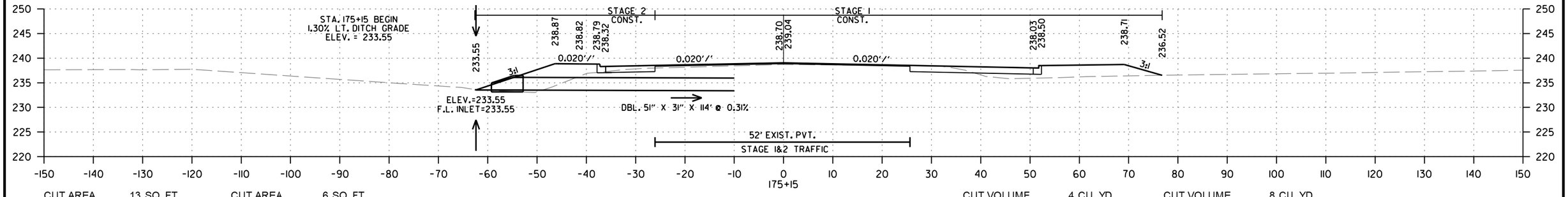
HWY. 18S/MLK JR. DR.
STA. 173+00 TO STA. 173+96

H139710 5/6/2022
R100657.DGN

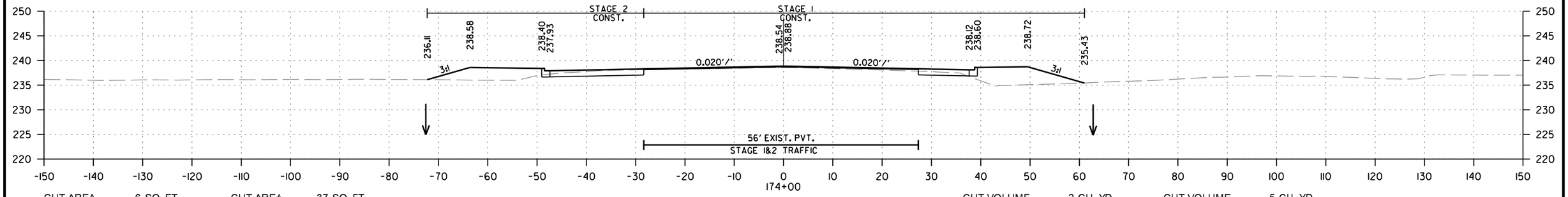
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	319	418
		CROSS SECTIONS				



CUT AREA	28 SQ. FT.	CUT AREA	6 SQ. FT.	CUT VOLUME	4 CU. YD.	CUT VOLUME	1 CU. YD.
FILL AREA	89 SQ. FT.	FILL AREA	63 SQ. FT.	FILL VOLUME	14 CU. YD.	FILL VOLUME	16 CU. YD.



CUT AREA	13 SQ. FT.	CUT AREA	6 SQ. FT.	CUT VOLUME	4 CU. YD.	CUT VOLUME	8 CU. YD.
FILL AREA	60 SQ. FT.	FILL AREA	113 SQ. FT.	FILL VOLUME	17 CU. YD.	FILL VOLUME	40 CU. YD.



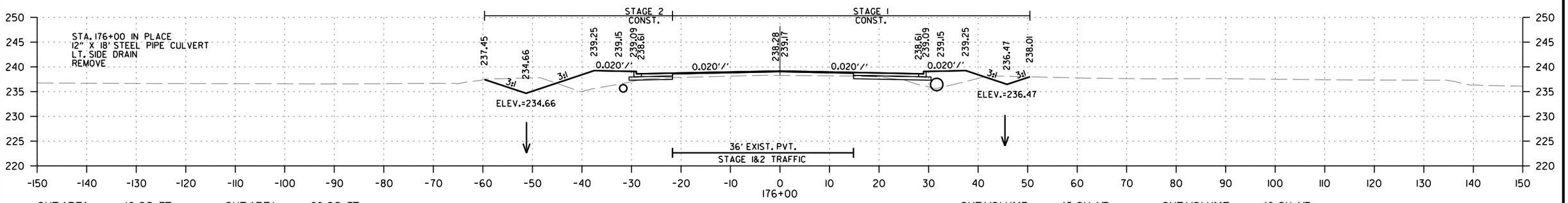
CUT AREA	6 SQ. FT.	CUT AREA	37 SQ. FT.	CUT VOLUME	2 CU. YD.	CUT VOLUME	5 CU. YD.
FILL AREA	58 SQ. FT.	FILL AREA	46 SQ. FT.	FILL VOLUME	7 CU. YD.	FILL VOLUME	7 CU. YD.

HWY. 18S/MLK JR. DR.
STA. 174+00 TO STA. 175+20

HT39710 5/6/2022
R100657.DGN

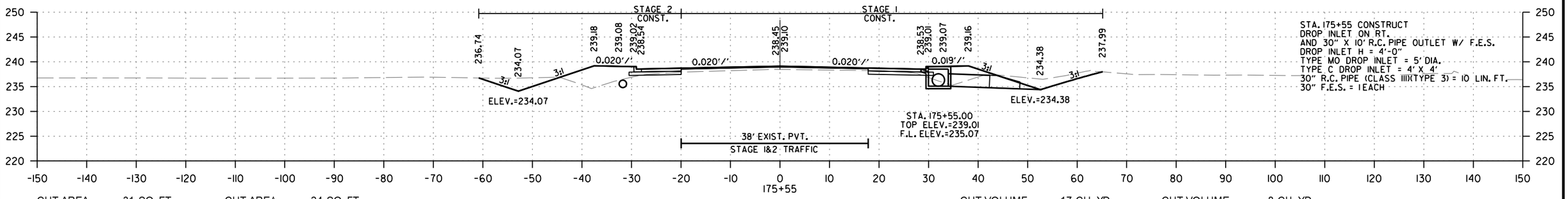
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	320	418
		CROSS SECTIONS				

STAGE 1 STAGE 2 STAGE 1 STAGE 2



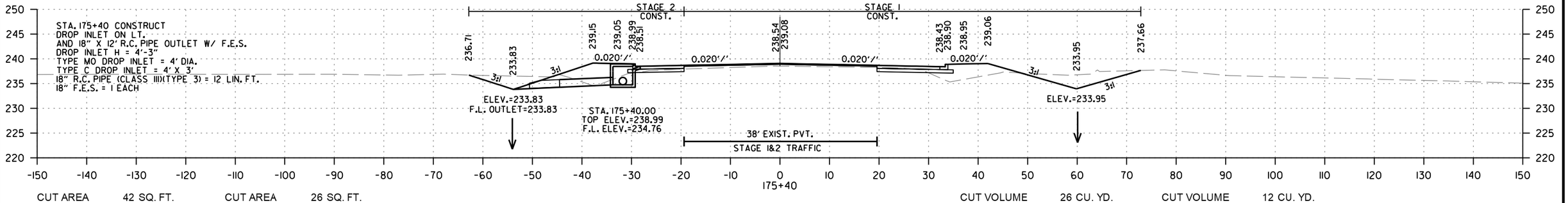
CUT AREA	12 SQ. FT.	CUT AREA	26 SQ. FT.
FILL AREA	30 SQ. FT.	FILL AREA	40 SQ. FT.

CUT VOLUME	45 CU. YD.	CUT VOLUME	43 CU. YD.
FILL VOLUME	53 CU. YD.	FILL VOLUME	67 CU. YD.



CUT AREA	31 SQ. FT.	CUT AREA	24 SQ. FT.
FILL AREA	31 SQ. FT.	FILL AREA	41 SQ. FT.

CUT VOLUME	17 CU. YD.	CUT VOLUME	8 CU. YD.
FILL VOLUME	33 CU. YD.	FILL VOLUME	29 CU. YD.



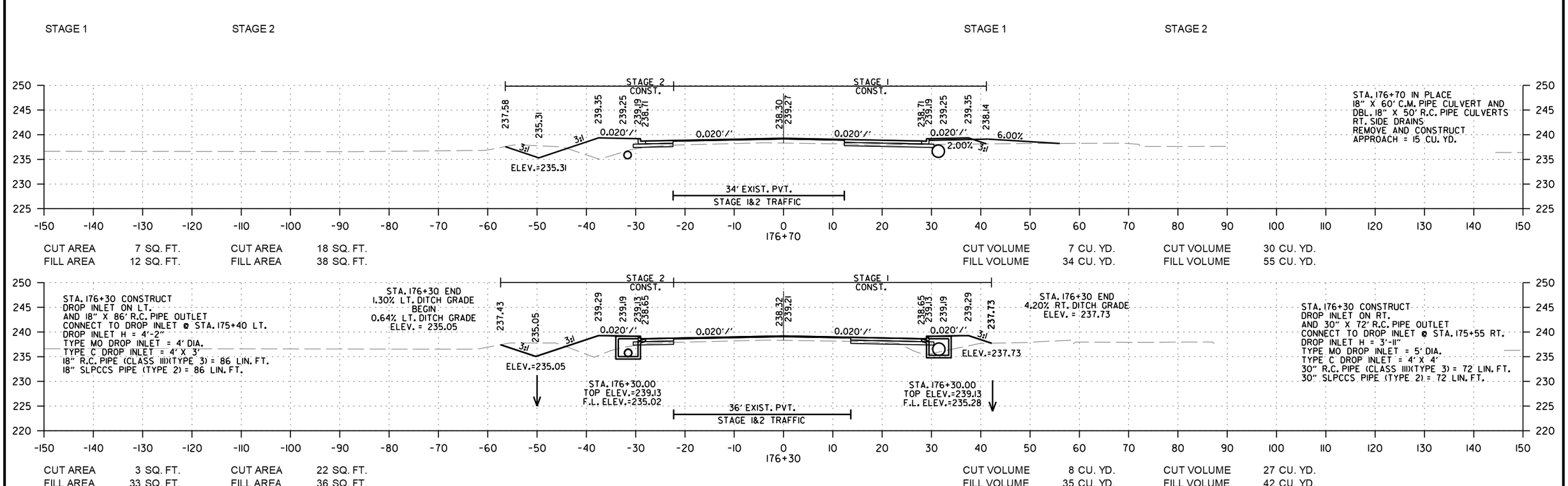
CUT AREA	42 SQ. FT.	CUT AREA	26 SQ. FT.
FILL AREA	33 SQ. FT.	FILL AREA	41 SQ. FT.

CUT VOLUME	26 CU. YD.	CUT VOLUME	12 CU. YD.
FILL VOLUME	45 CU. YD.	FILL VOLUME	38 CU. YD.

HWY. 18S/MLK JR. DR.
STA. 175+40 TO STA. 176+00

HT39710 5/6/2022
R100657.DGN

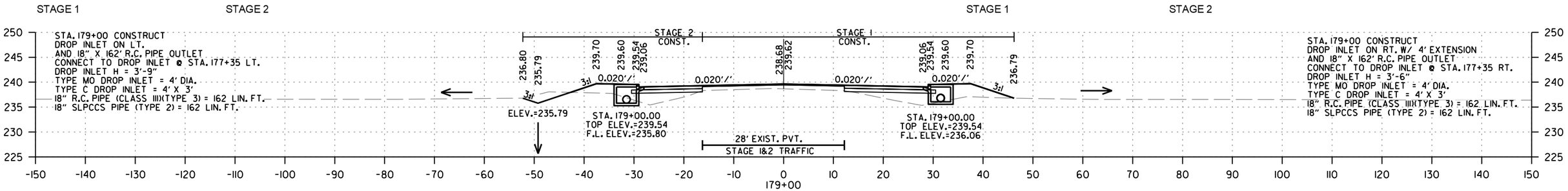
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	321	418
		CROSS SECTIONS				



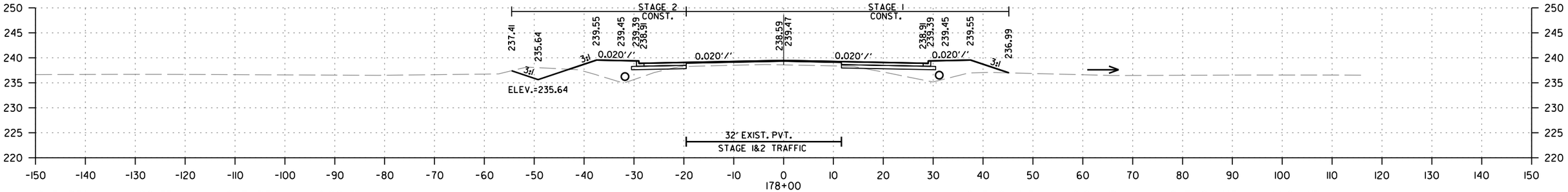
HWY. 18S/MLK JR. DR.
STA. 176+30 TO STA. 176+70

HT39710 5/6/2022
R100657.DGN

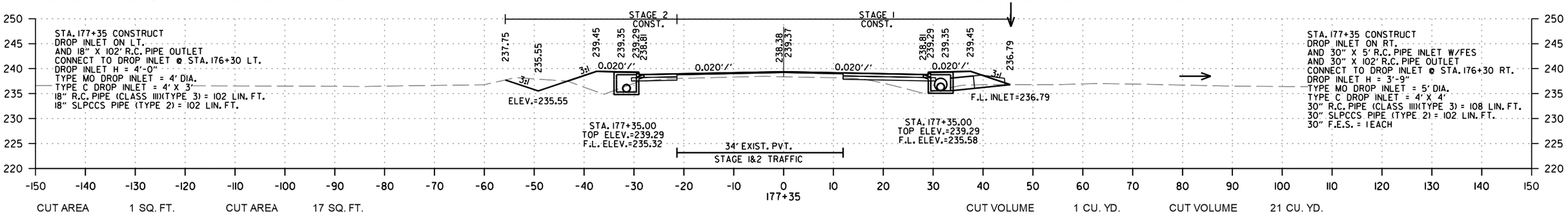
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	322	418
		CROSS SECTIONS				



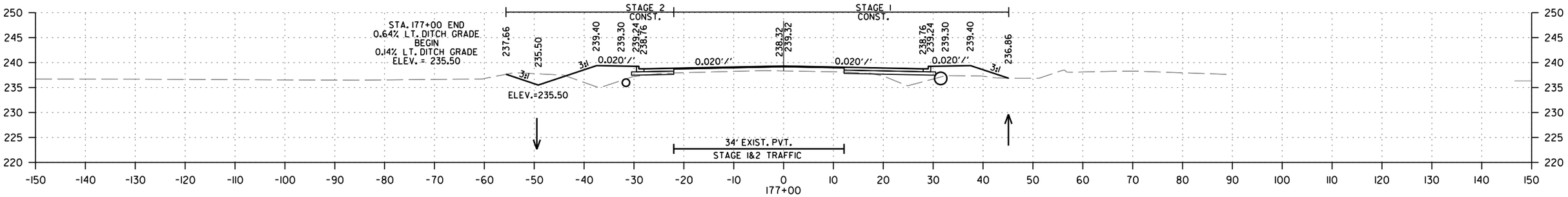
CUT AREA	0 SQ. FT.	CUT AREA	10 SQ. FT.	CUT VOLUME	2 CU. YD.	CUT VOLUME	47 CU. YD.
FILL AREA	58 SQ. FT.	FILL AREA	41 SQ. FT.	FILL VOLUME	203 CU. YD.	FILL VOLUME	154 CU. YD.



CUT AREA	1 SQ. FT.	CUT AREA	16 SQ. FT.	CUT VOLUME	3 CU. YD.	CUT VOLUME	40 CU. YD.
FILL AREA	52 SQ. FT.	FILL AREA	43 SQ. FT.	FILL VOLUME	125 CU. YD.	FILL VOLUME	99 CU. YD.



CUT AREA	1 SQ. FT.	CUT AREA	17 SQ. FT.	CUT VOLUME	1 CU. YD.	CUT VOLUME	21 CU. YD.
FILL AREA	52 SQ. FT.	FILL AREA	40 SQ. FT.	FILL VOLUME	59 CU. YD.	FILL VOLUME	51 CU. YD.



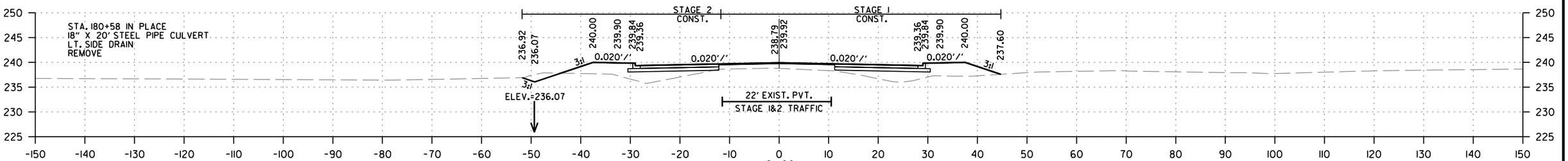
CUT AREA	1 SQ. FT.	CUT AREA	16 SQ. FT.	CUT VOLUME	4 CU. YD.	CUT VOLUME	19 CU. YD.
FILL AREA	38 SQ. FT.	FILL AREA	39 SQ. FT.	FILL VOLUME	28 CU. YD.	FILL VOLUME	43 CU. YD.

HWY. 18S/MLK JR. DR.
STA. 177+00 TO STA. 179+00

H139710 5/6/2022
R100657.DGN

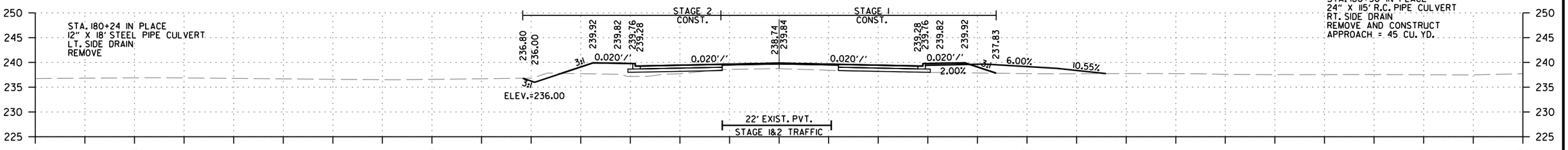
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	323	418
		CROSS SECTIONS				

STAGE 1 STAGE 2 STAGE 1 STAGE 2



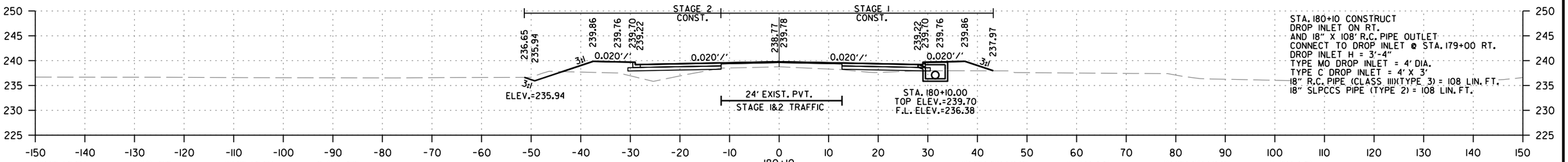
CUT AREA 0 SQ. FT. CUT AREA 7 SQ. FT.
FILL AREA 56 SQ. FT. FILL AREA 49 SQ. FT.

CUT VOLUME 0 CU. YD. CUT VOLUME 11 CU. YD.
FILL VOLUME 71 CU. YD. FILL VOLUME 76 CU. YD.



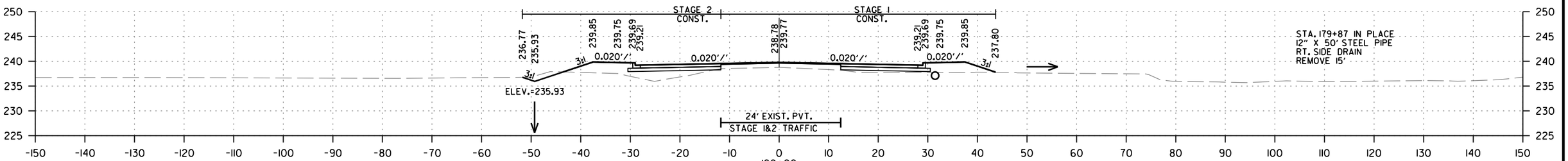
CUT AREA 0 SQ. FT. CUT AREA 5 SQ. FT.
FILL AREA 21 SQ. FT. FILL AREA 33 SQ. FT.

CUT VOLUME 0 CU. YD. CUT VOLUME 8 CU. YD.
FILL VOLUME 33 CU. YD. FILL VOLUME 57 CU. YD.



CUT AREA 0 SQ. FT. CUT AREA 5 SQ. FT.
FILL AREA 24 SQ. FT. FILL AREA 45 SQ. FT.

CUT VOLUME 0 CU. YD. CUT VOLUME 2 CU. YD.
FILL VOLUME 9 CU. YD. FILL VOLUME 17 CU. YD.



CUT AREA 0 SQ. FT. CUT AREA 6 SQ. FT.
FILL AREA 27 SQ. FT. FILL AREA 45 SQ. FT.

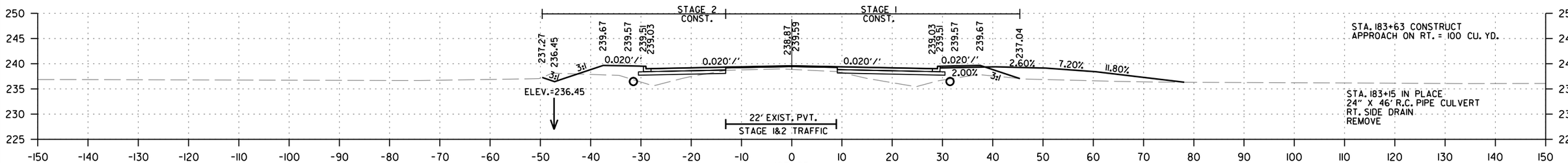
CUT VOLUME 0 CU. YD. CUT VOLUME 29 CU. YD.
FILL VOLUME 158 CU. YD. FILL VOLUME 158 CU. YD.

HWY. 18S/MLK JR. DR.
STA. 180+00 TO STA. 181+00

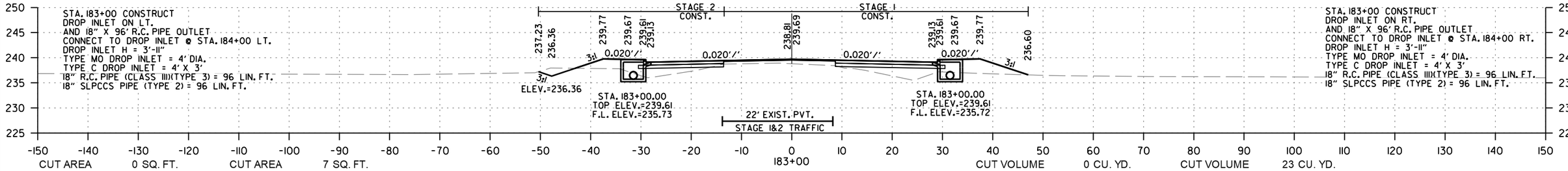
H139710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	324	418
		CROSS SECTIONS				

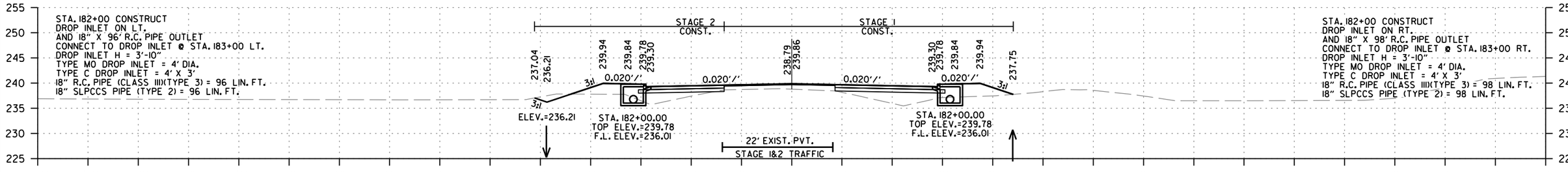
STAGE 1 STAGE 2 STAGE 1 STAGE 2



CUT AREA	0 SQ. FT.	CUT AREA	7 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	15 CU. YD.
FILL AREA	59 SQ. FT.	FILL AREA	38 SQ. FT.	FILL VOLUME	138 CU. YD.	FILL VOLUME	88 CU. YD.



CUT AREA	0 SQ. FT.	CUT AREA	7 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	23 CU. YD.
FILL AREA	59 SQ. FT.	FILL AREA	38 SQ. FT.	FILL VOLUME	221 CU. YD.	FILL VOLUME	149 CU. YD.

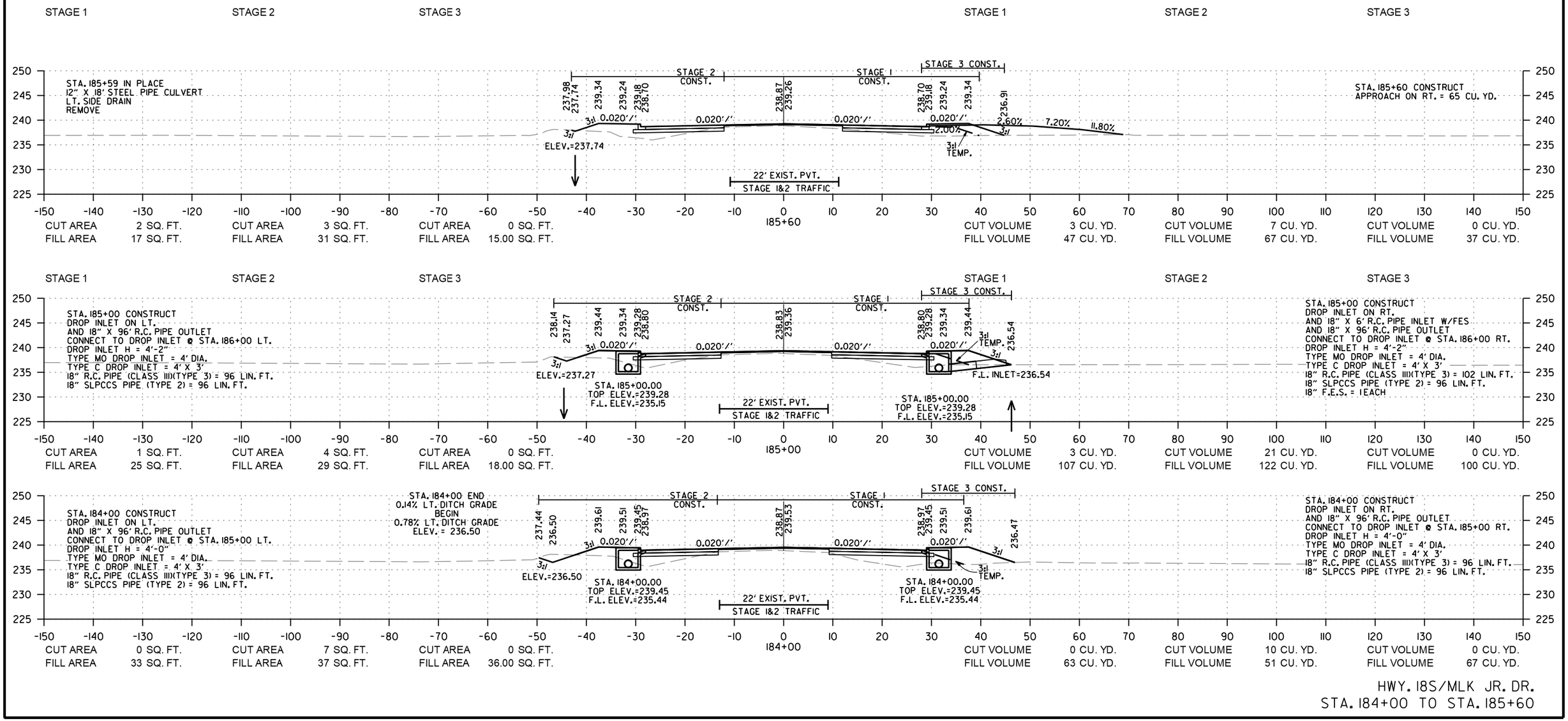


CUT AREA	0 SQ. FT.	CUT AREA	6 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	22 CU. YD.
FILL AREA	60 SQ. FT.	FILL AREA	43 SQ. FT.	FILL VOLUME	215 CU. YD.	FILL VOLUME	170 CU. YD.

HWY. 18S/MLK JR. DR.
STA. 182+00 TO STA. 183+63

HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	325	418
		CROSS SECTIONS				

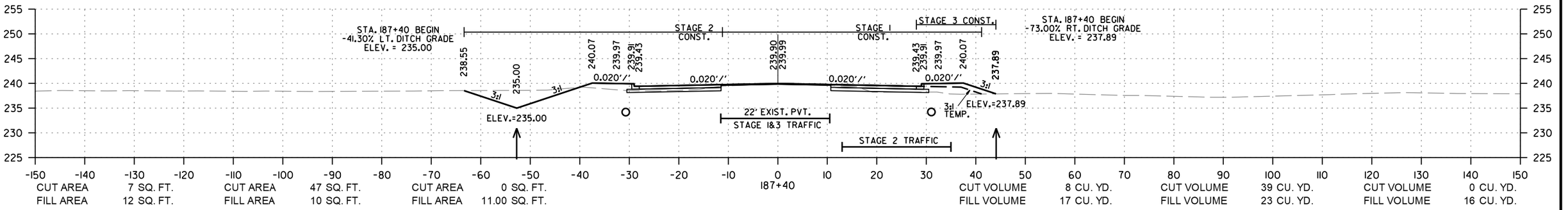


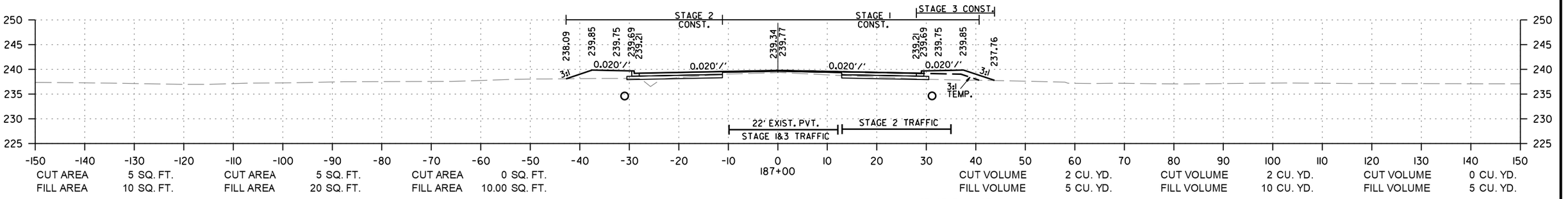
HWY. 18S/MLK JR. DR.
STA. 184+00 TO STA. 185+60

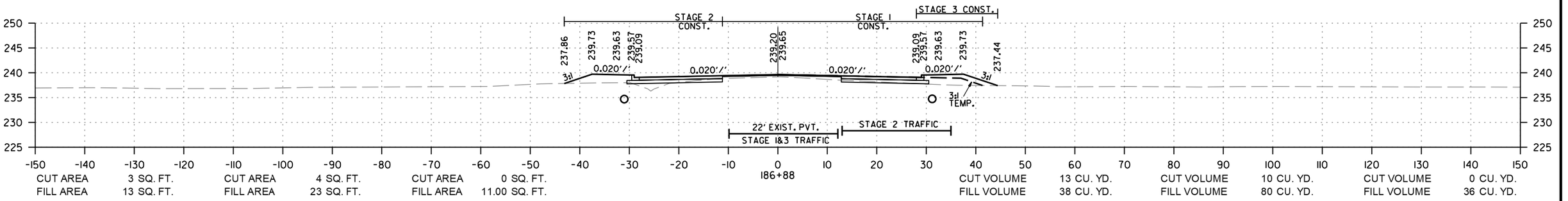
HT39710 5/6/2022
R100657.DGN

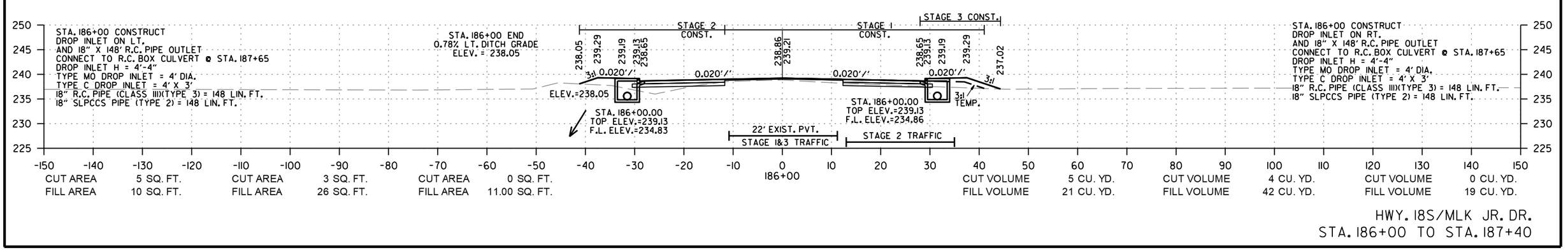
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	326	418
		CROSS SECTIONS				

STAGE 1 STAGE 2 STAGE 3 STAGE 1 STAGE 2 STAGE 3





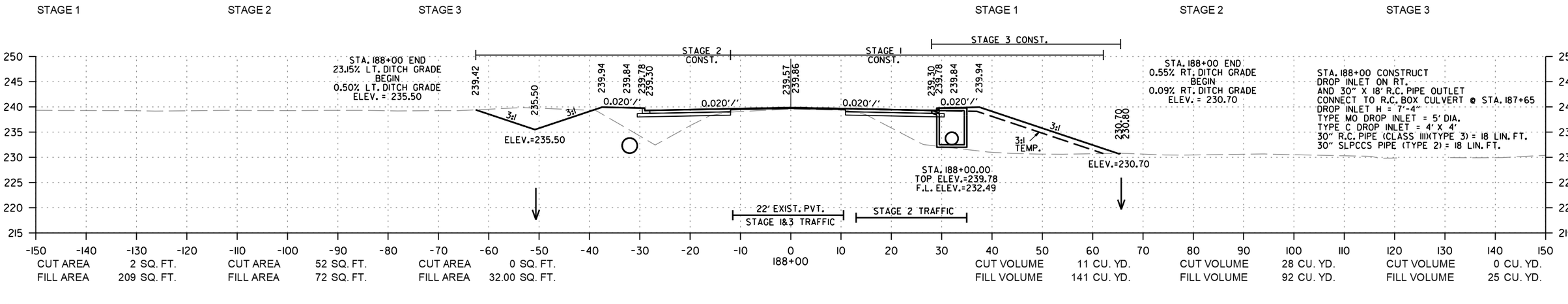


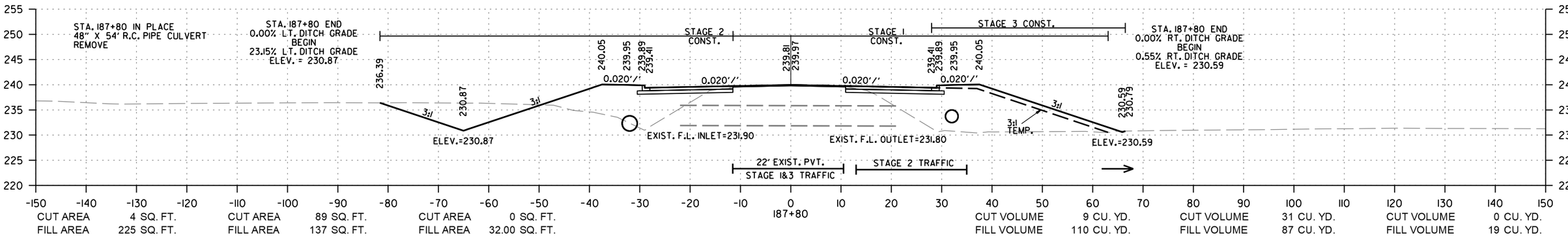


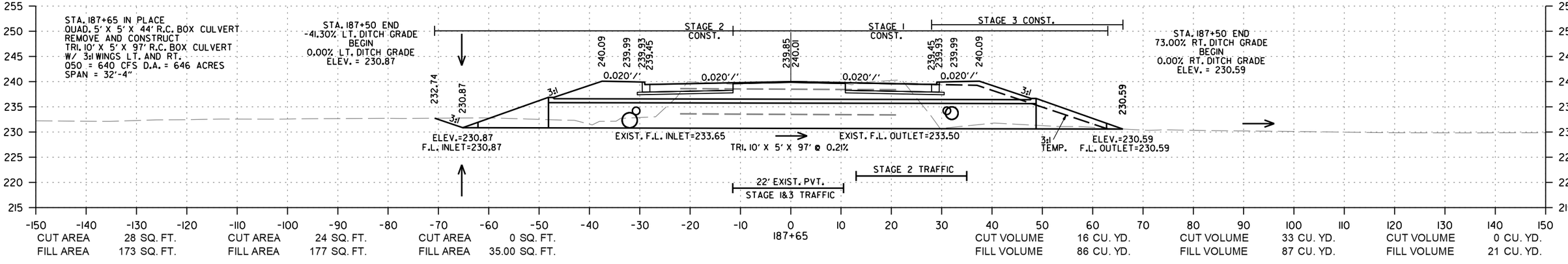
HWY. 18S/MLK JR. DR.
STA. 186+00 TO STA. 187+40

H139710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	327	418
		CROSS SECTIONS				







HWY. 18S/MLK JR. DR.
STA. 187+65 TO STA. 188+00

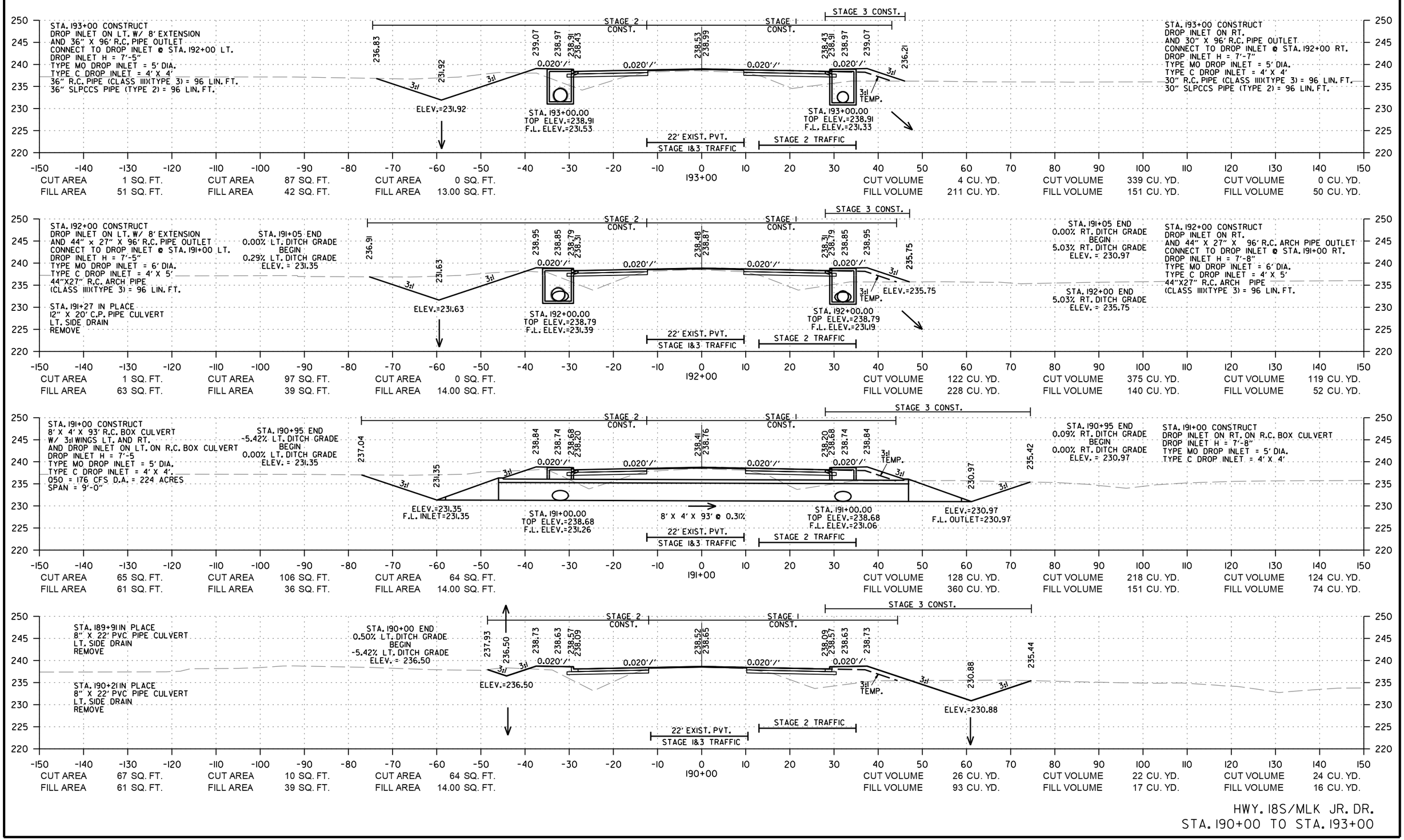
HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	328	418
		CROSS SECTIONS				

HWY. 18S/MLK JR. DR.
STA. 188+20 TO STA. 189+80

HT39710 5/6/2022
R100657.DGN

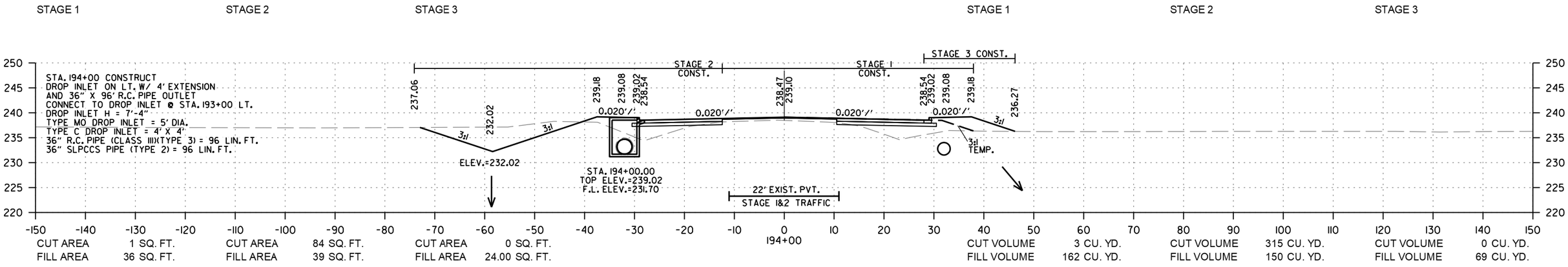
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	329	418
		CROSS SECTIONS				



HWY. 18S/MLK JR. DR.
STA. 190+00 TO STA. 193+00

HT39710 5/6/2022
R100657.DGN

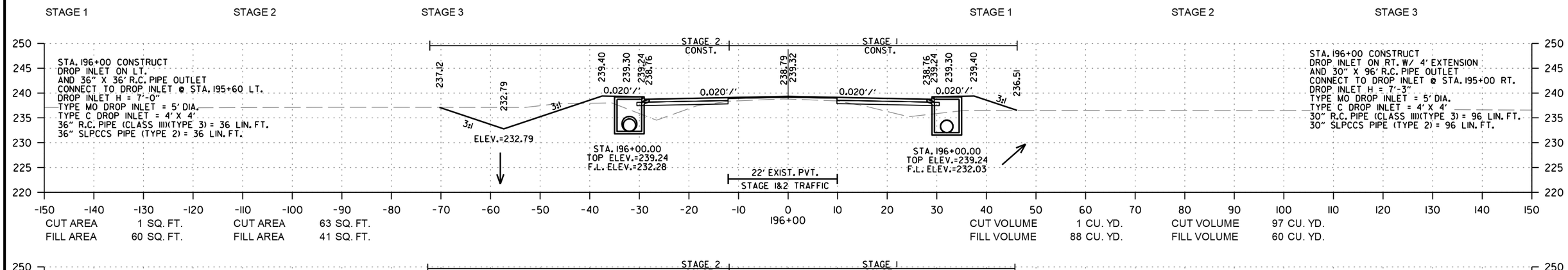
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	330	418
		CROSS SECTIONS				

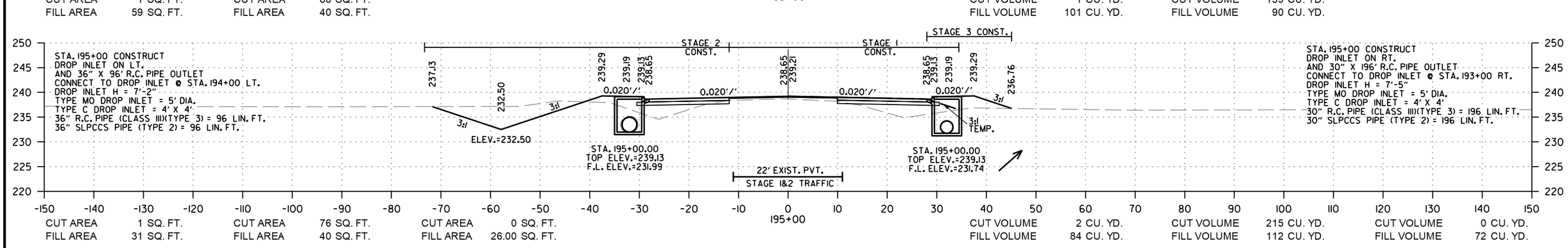


HWY. 18S/MLK JR. DR.
STA. 194+00 TO STA. 194+00

HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	331	418
		CROSS SECTIONS				



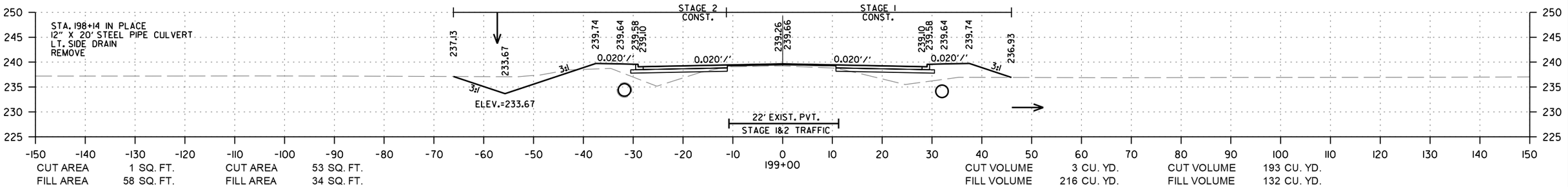


HWY. 18S/MLK JR. DR.
STA. 194+25 TO STA. 196+00

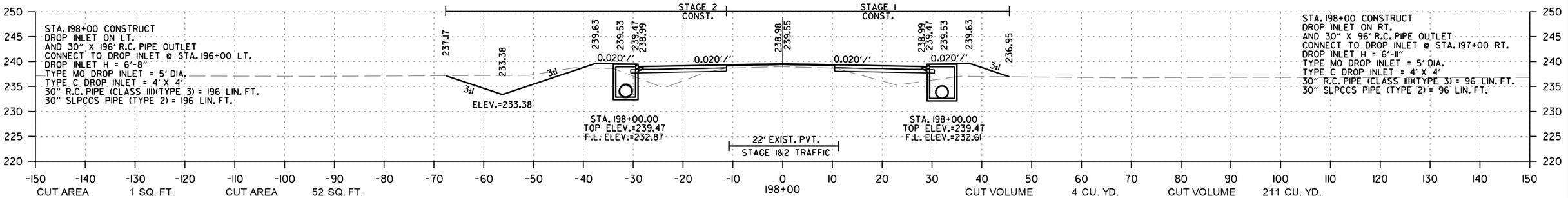
HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	332	418
		CROSS SECTIONS				

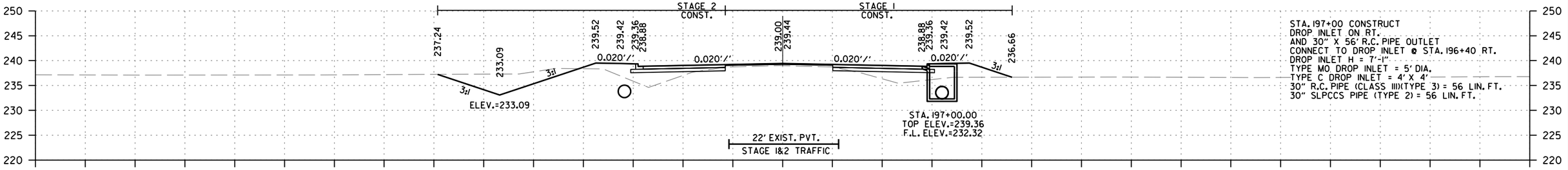
STAGE 1 STAGE 2 STAGE 1 STAGE 2



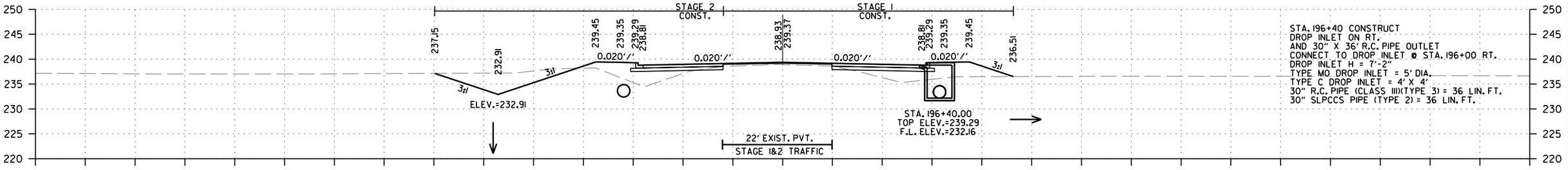
CUT AREA	1 SQ. FT.	CUT AREA	53 SQ. FT.	CUT VOLUME	3 CU. YD.	CUT VOLUME	193 CU. YD.
FILL AREA	58 SQ. FT.	FILL AREA	34 SQ. FT.	FILL VOLUME	216 CU. YD.	FILL VOLUME	132 CU. YD.



CUT AREA	1 SQ. FT.	CUT AREA	52 SQ. FT.	CUT VOLUME	4 CU. YD.	CUT VOLUME	211 CU. YD.
FILL AREA	58 SQ. FT.	FILL AREA	37 SQ. FT.	FILL VOLUME	213 CU. YD.	FILL VOLUME	141 CU. YD.



CUT AREA	1 SQ. FT.	CUT AREA	63 SQ. FT.	CUT VOLUME	3 CU. YD.	CUT VOLUME	140 CU. YD.
FILL AREA	57 SQ. FT.	FILL AREA	39 SQ. FT.	FILL VOLUME	130 CU. YD.	FILL VOLUME	92 CU. YD.



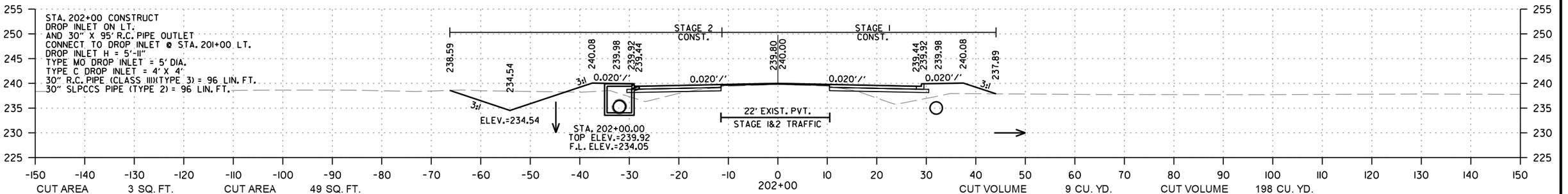
CUT AREA	1 SQ. FT.	CUT AREA	64 SQ. FT.	CUT VOLUME	2 CU. YD.	CUT VOLUME	93 CU. YD.
FILL AREA	60 SQ. FT.	FILL AREA	43 SQ. FT.	FILL VOLUME	89 CU. YD.	FILL VOLUME	62 CU. YD.

HWY. 18S/MLK JR. DR.
STA. 196+40 TO STA. 199+00

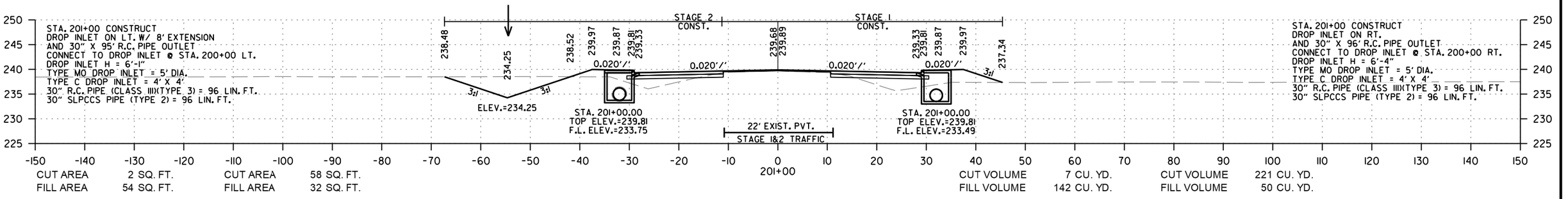
HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	333	418
		CROSS SECTIONS				

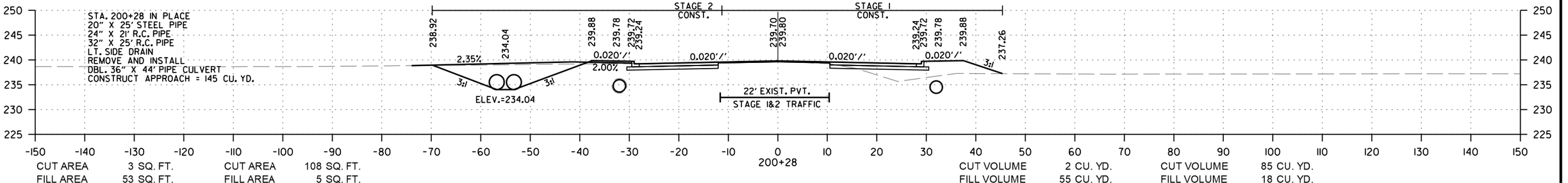
STAGE 1 STAGE 2 STAGE 1 STAGE 2



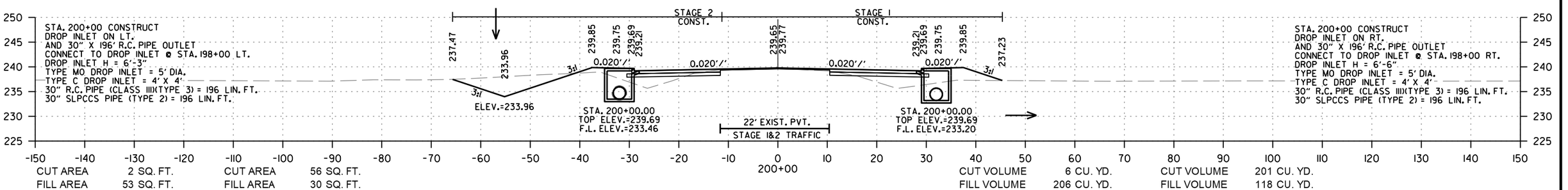
CUT AREA	3 SQ. FT.	CUT AREA	49 SQ. FT.	CUT VOLUME	9 CU. YD.	CUT VOLUME	198 CU. YD.
FILL AREA	47 SQ. FT.	FILL AREA	31 SQ. FT.	FILL VOLUME	186 CU. YD.	FILL VOLUME	118 CU. YD.



CUT AREA	2 SQ. FT.	CUT AREA	58 SQ. FT.	CUT VOLUME	7 CU. YD.	CUT VOLUME	221 CU. YD.
FILL AREA	54 SQ. FT.	FILL AREA	32 SQ. FT.	FILL VOLUME	142 CU. YD.	FILL VOLUME	50 CU. YD.



CUT AREA	3 SQ. FT.	CUT AREA	108 SQ. FT.	CUT VOLUME	2 CU. YD.	CUT VOLUME	85 CU. YD.
FILL AREA	53 SQ. FT.	FILL AREA	5 SQ. FT.	FILL VOLUME	55 CU. YD.	FILL VOLUME	18 CU. YD.

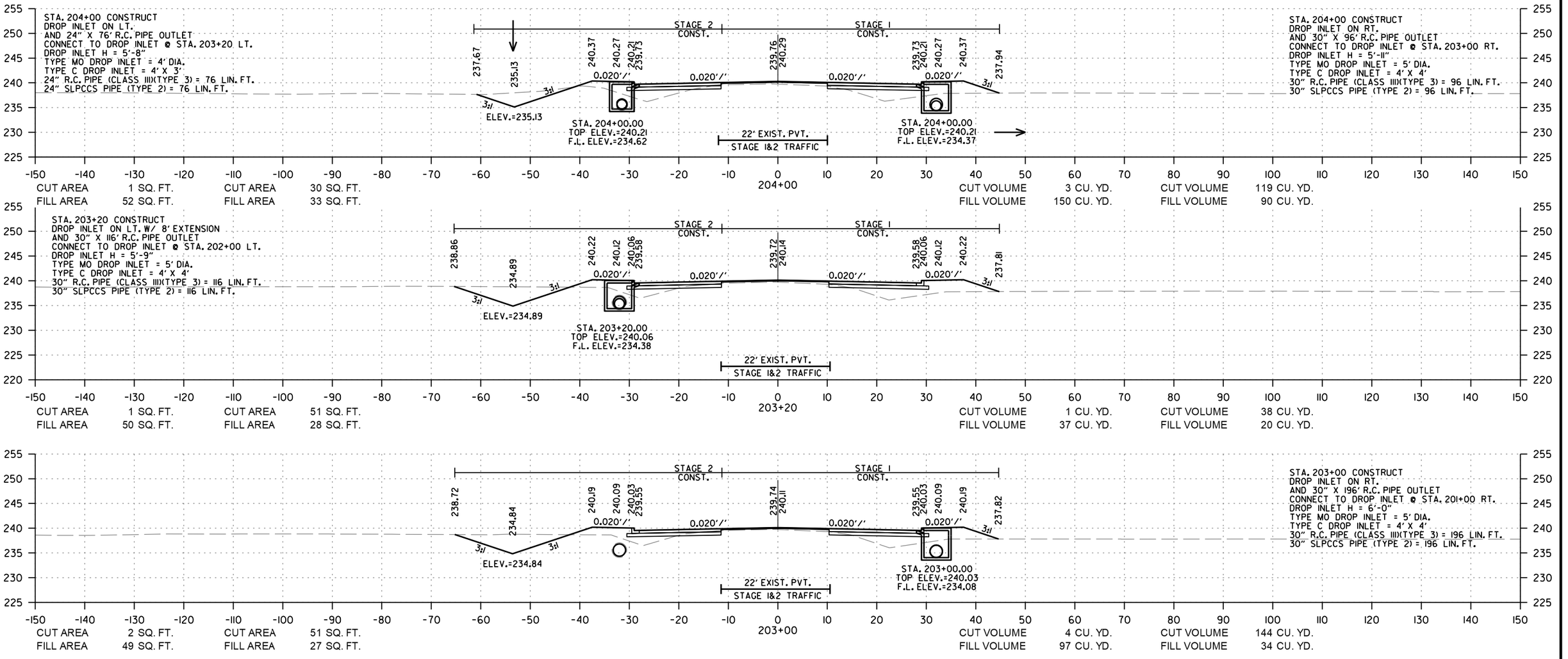


CUT AREA	2 SQ. FT.	CUT AREA	56 SQ. FT.	CUT VOLUME	6 CU. YD.	CUT VOLUME	201 CU. YD.
FILL AREA	53 SQ. FT.	FILL AREA	30 SQ. FT.	FILL VOLUME	206 CU. YD.	FILL VOLUME	118 CU. YD.

HWY. 18S/MLK JR. DR.
STA. 200+00 TO STA. 202+00

HT39710 5/6/2022
R100657.DGN

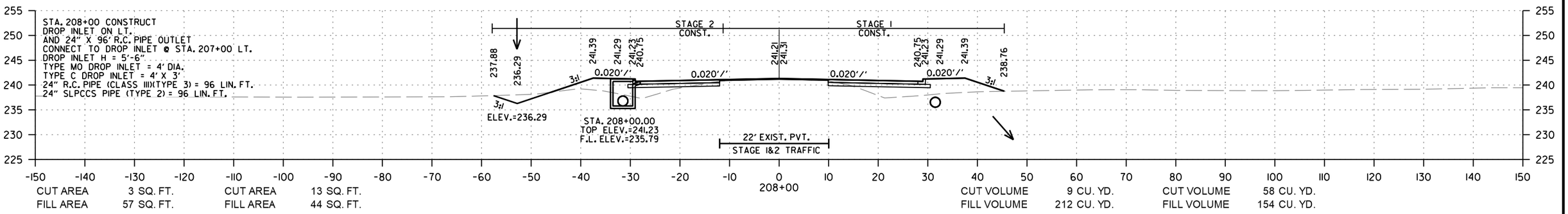
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	334	418
		CROSS SECTIONS				

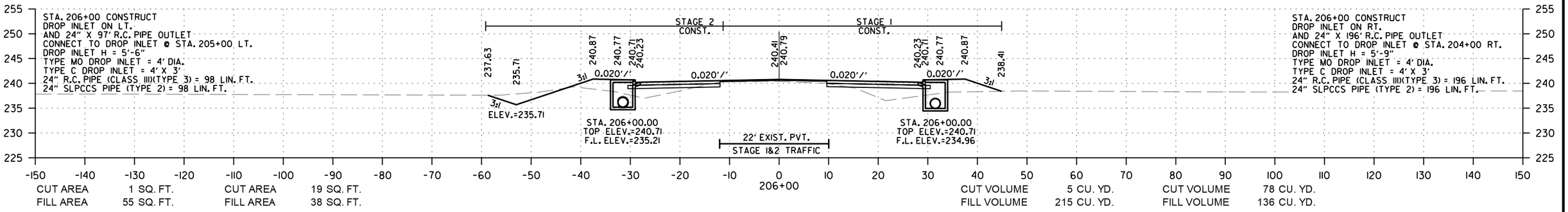


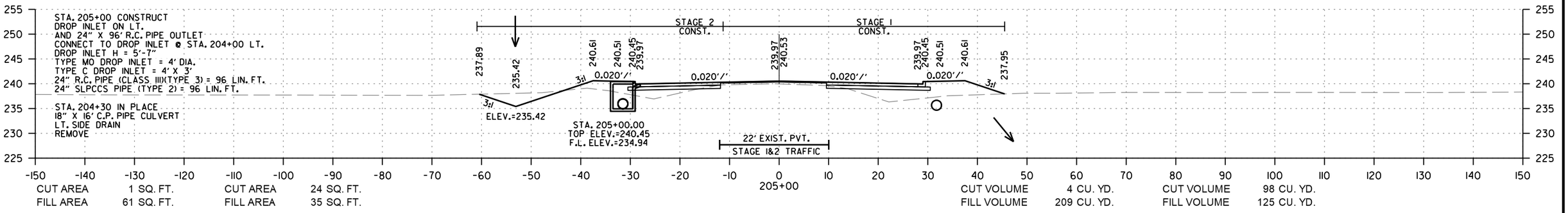
HWY. 18S/MLK JR. DR.
STA. 202+45 TO STA. 204+00

HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	335	418
		CROSS SECTIONS				



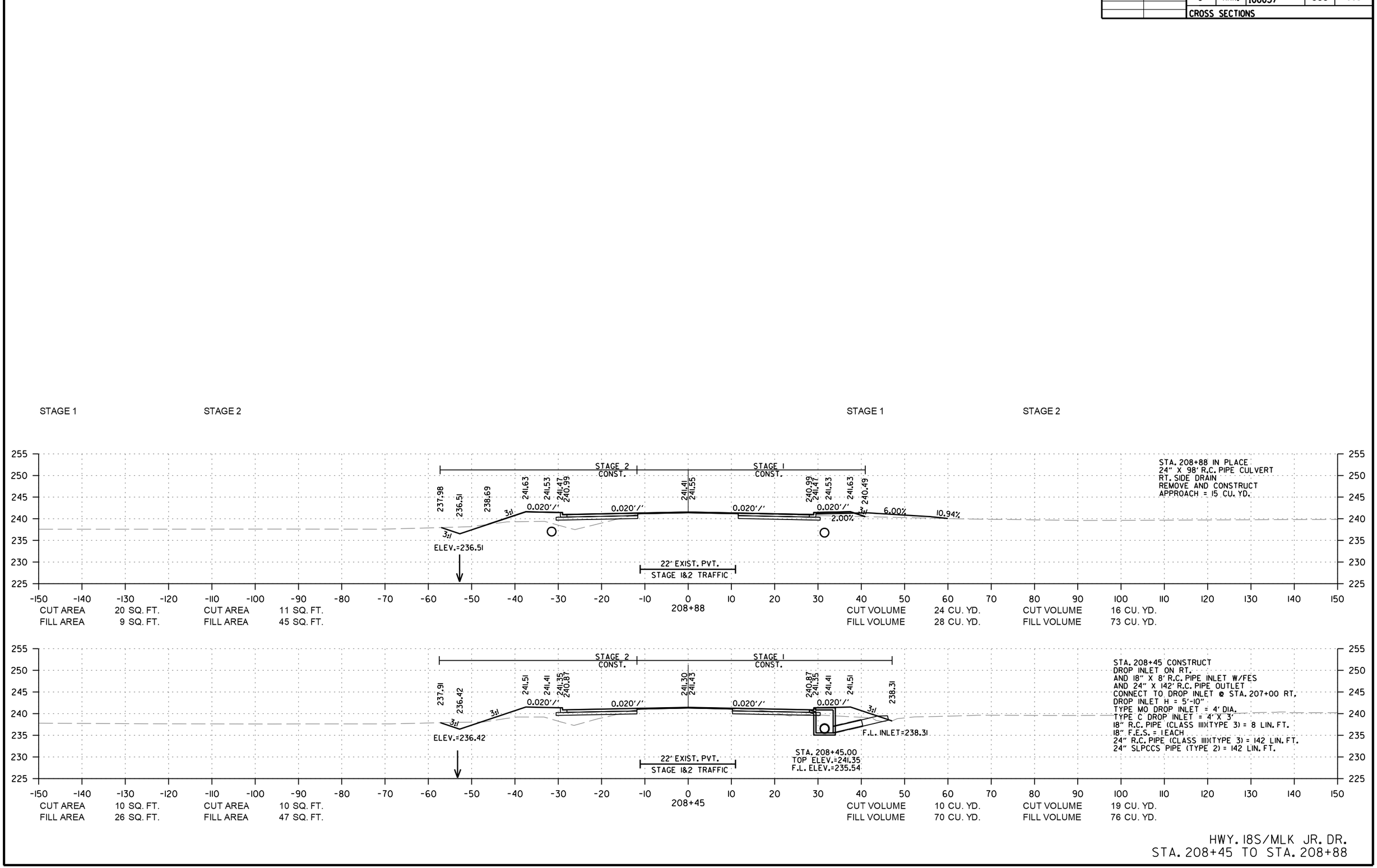




HWY. 18S/MLK JR. DR.
STA. 205+00 TO STA. 208+00

HT39710 5/6/2022
R100657.DGN

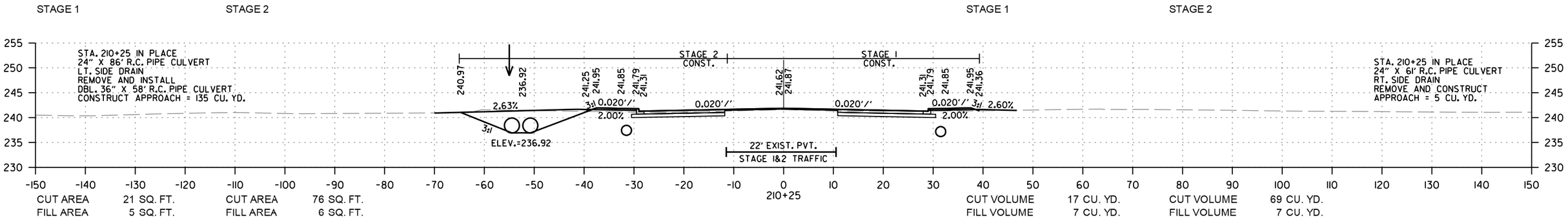
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	336	418
		CROSS SECTIONS				

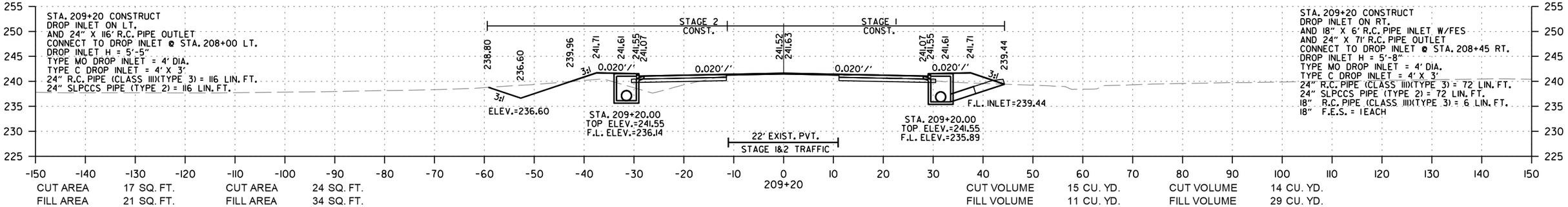


HWY. 18S/MLK JR. DR.
STA. 208+45 TO STA. 208+88

HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	337	418
		CROSS SECTIONS				

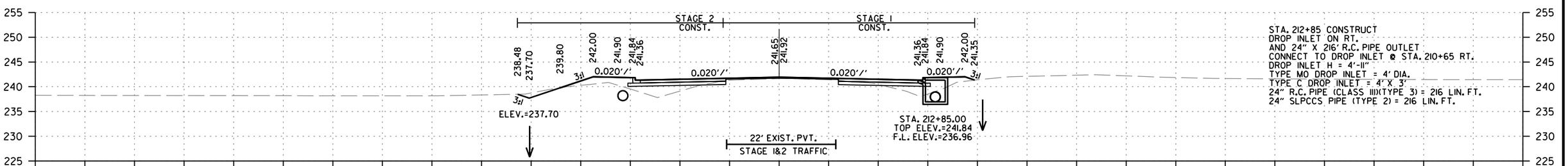


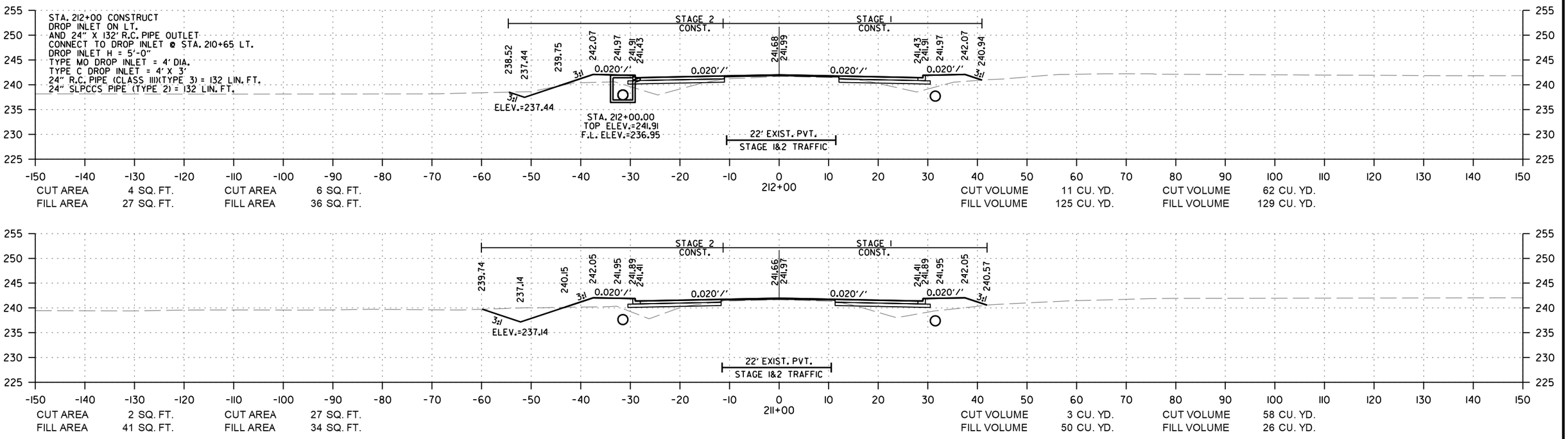


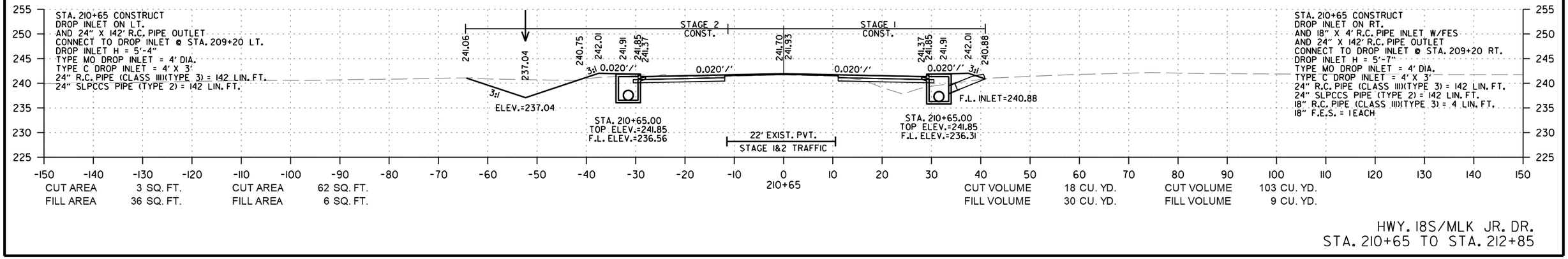
HWY. 18S/MLK JR. DR.
STA. 209+00 TO STA. 210+25

HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	338	418
		CROSS SECTIONS				



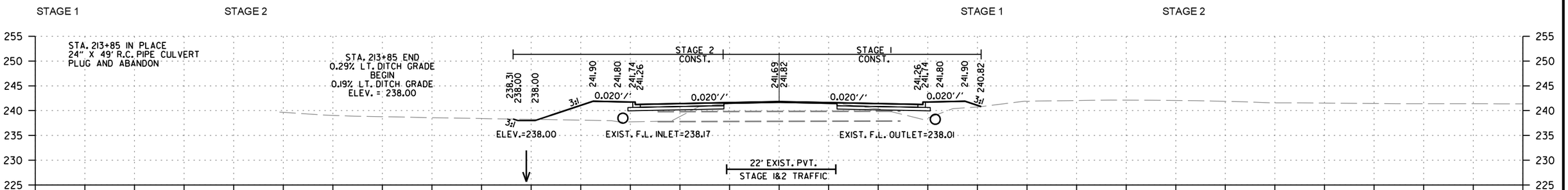


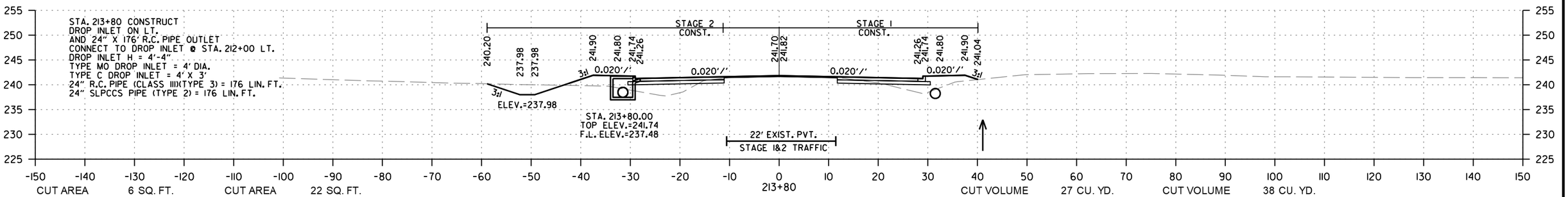


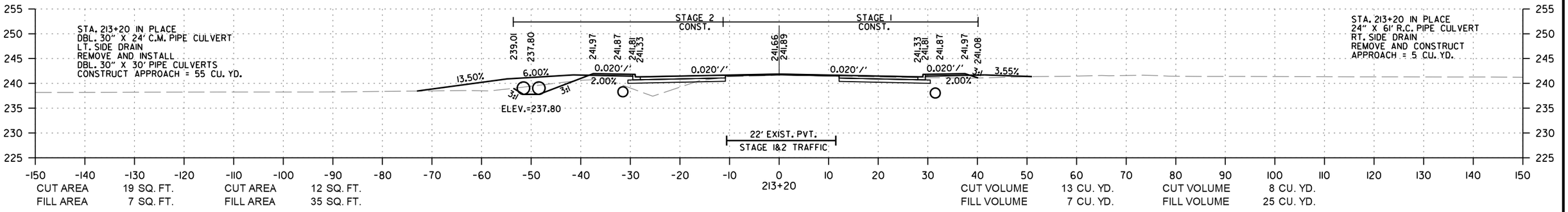
HWY. 18S/MLK JR. DR.
STA. 210+65 TO STA. 212+85

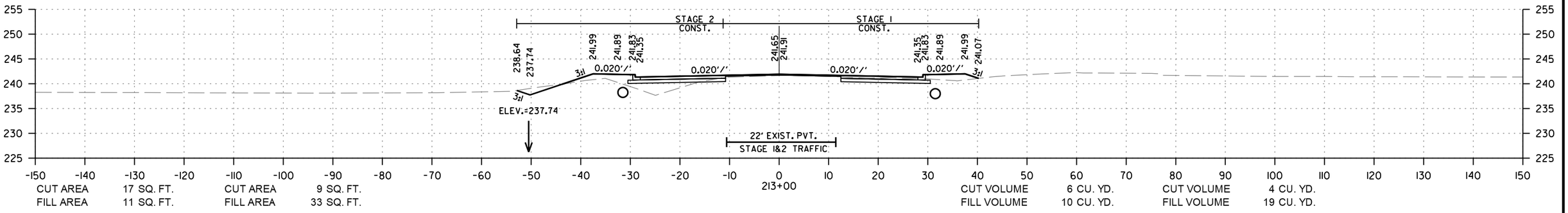
HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	339	418
		CROSS SECTIONS				







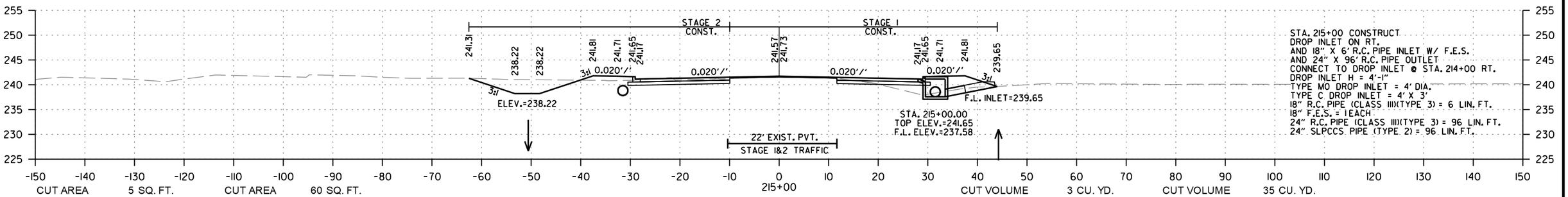


HWY. 18S/MLK JR. DR.
STA. 213+00 TO STA. 213+85

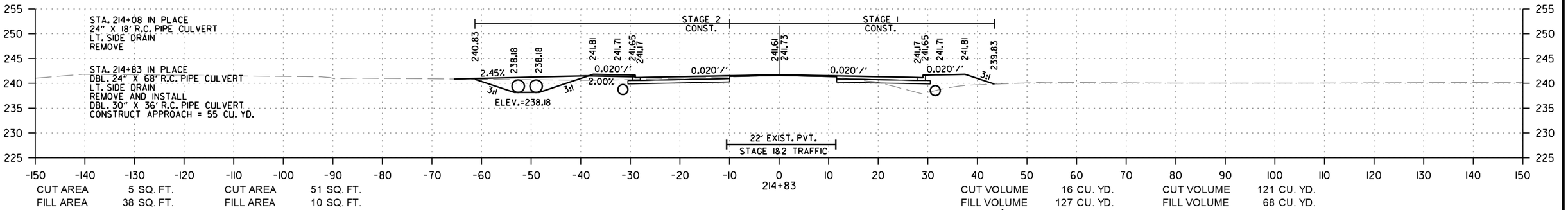
HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	340	418
		CROSS SECTIONS				

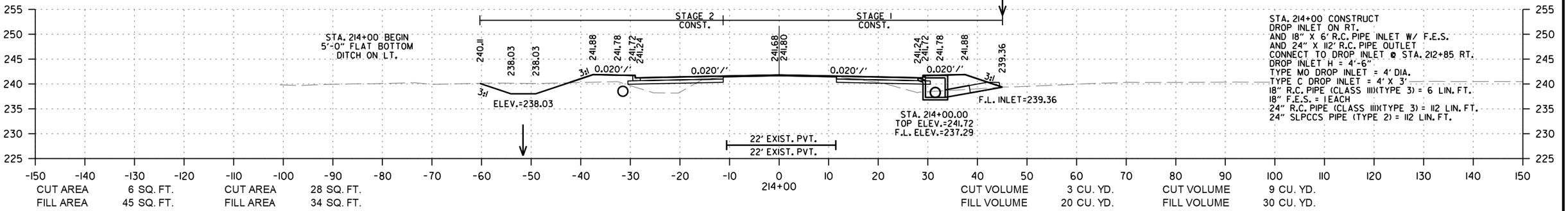
STAGE 1 STAGE 2 STAGE 1 STAGE 2



CUT AREA 5 SQ. FT. CUT AREA 60 SQ. FT. CUT VOLUME 3 CU. YD. CUT VOLUME 35 CU. YD.
FILL AREA 42 SQ. FT. FILL AREA 8 SQ. FT. FILL VOLUME 25 CU. YD. FILL VOLUME 6 CU. YD.



CUT AREA 5 SQ. FT. CUT AREA 51 SQ. FT. CUT VOLUME 16 CU. YD. CUT VOLUME 121 CU. YD.
FILL AREA 38 SQ. FT. FILL AREA 10 SQ. FT. FILL VOLUME 127 CU. YD. FILL VOLUME 68 CU. YD.

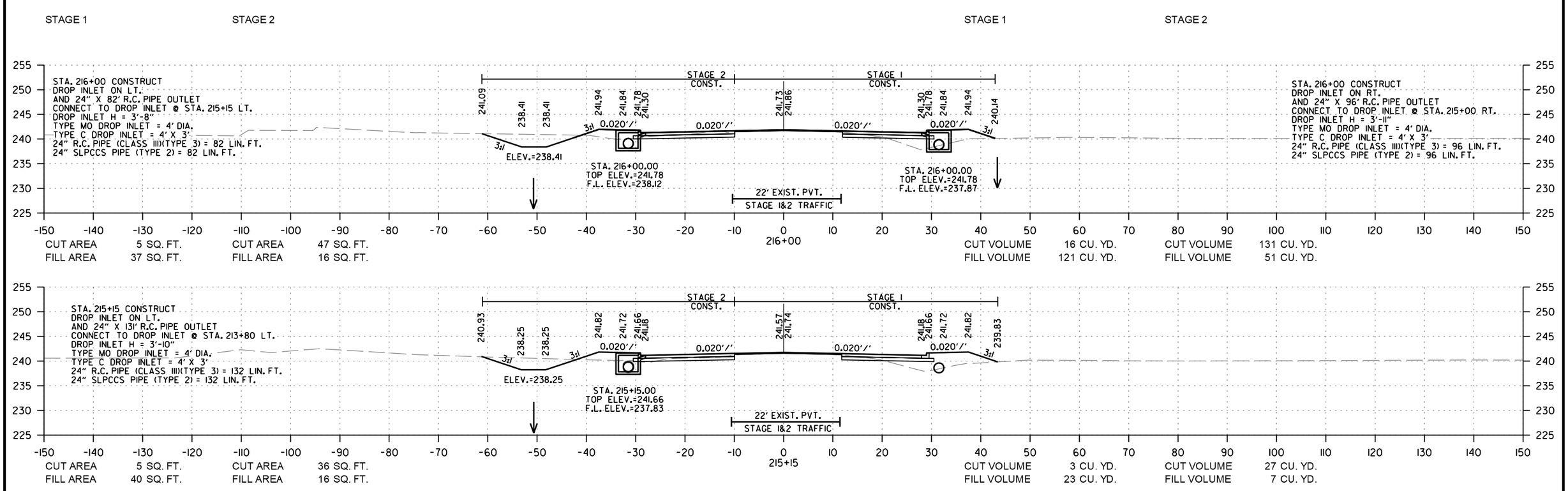


CUT AREA 6 SQ. FT. CUT AREA 28 SQ. FT. CUT VOLUME 3 CU. YD. CUT VOLUME 9 CU. YD.
FILL AREA 45 SQ. FT. FILL AREA 34 SQ. FT. FILL VOLUME 20 CU. YD. FILL VOLUME 30 CU. YD.

HWY. 18S/MLK JR. DR.
STA. 214+00 TO STA. 215+00

HT39710 5/6/2022
R100657.DGN

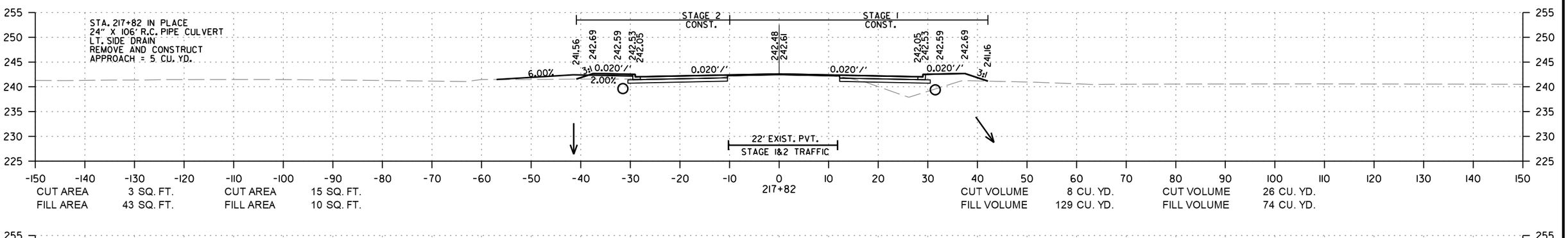
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	341	418
		CROSS SECTIONS				

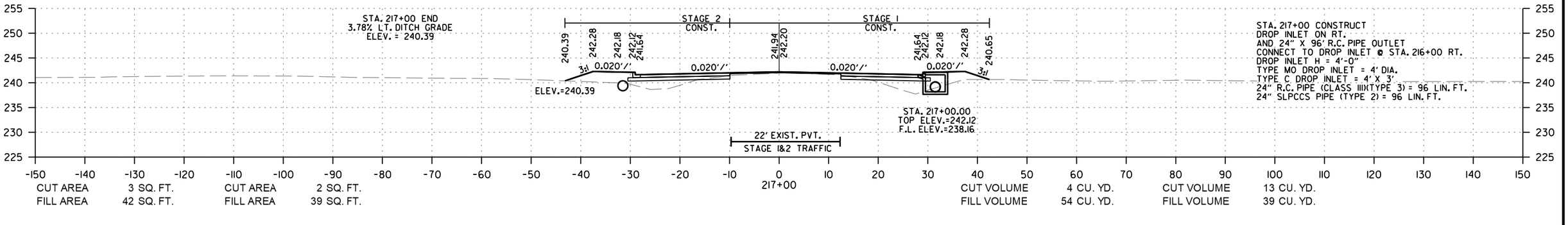


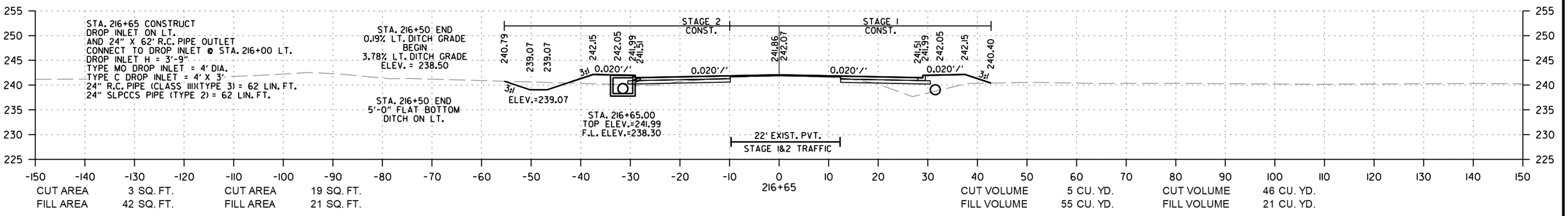
HWY. 18S/MLK JR. DR.
STA. 215+15 TO STA. 216+00

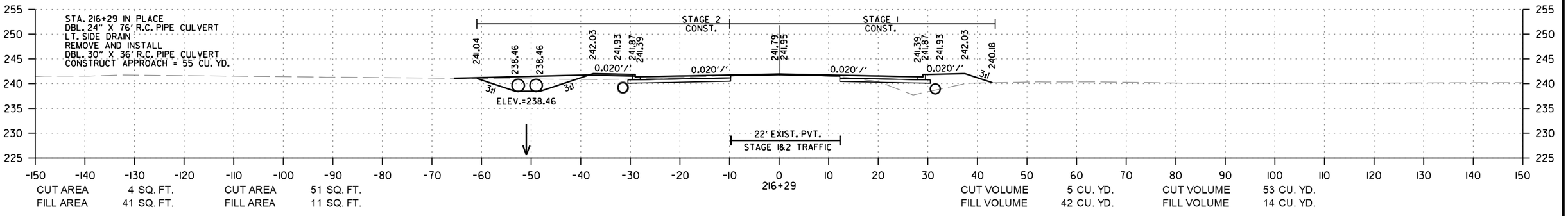
HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	342	418
		CROSS SECTIONS				





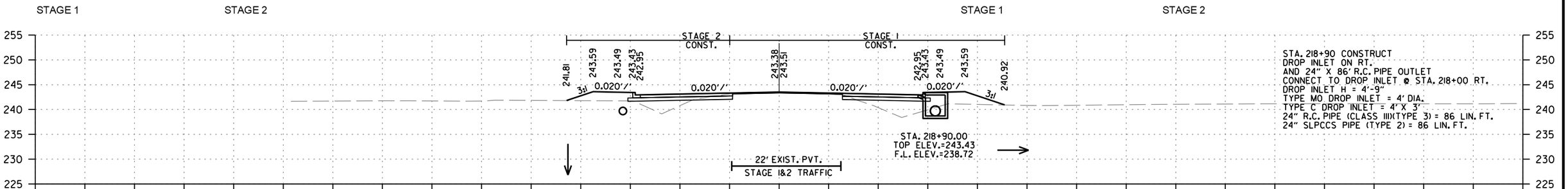


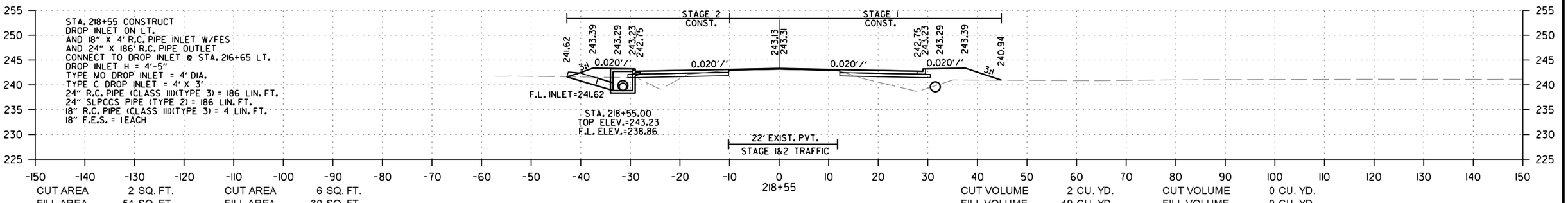


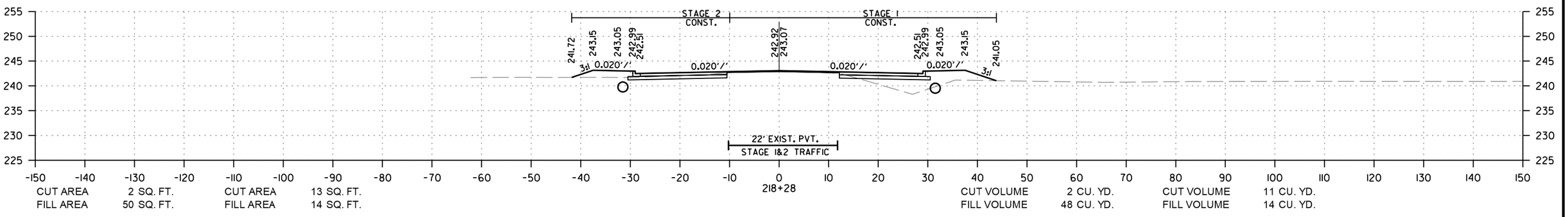
HWY. 18S/MLK JR. DR.
STA. 216+29 TO STA. 217+82

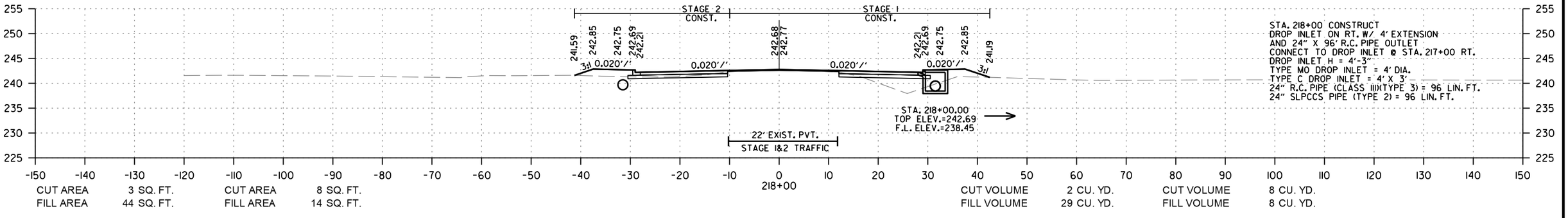
HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	343	418
		CROSS SECTIONS				





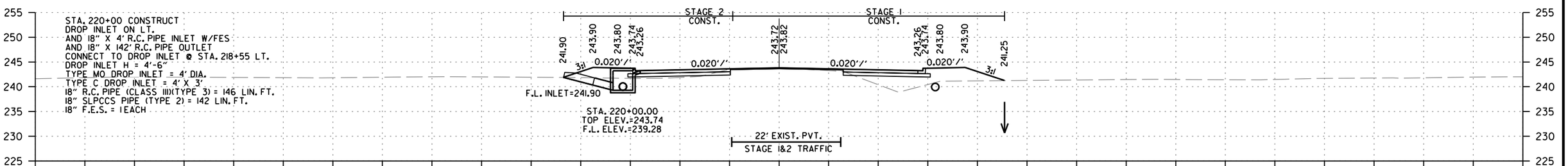


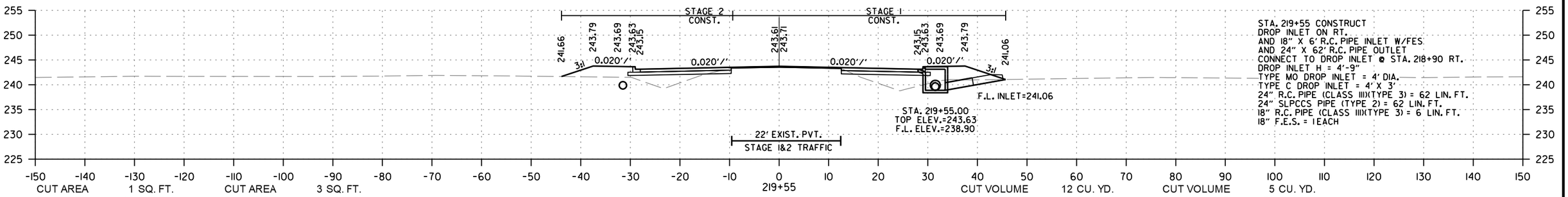


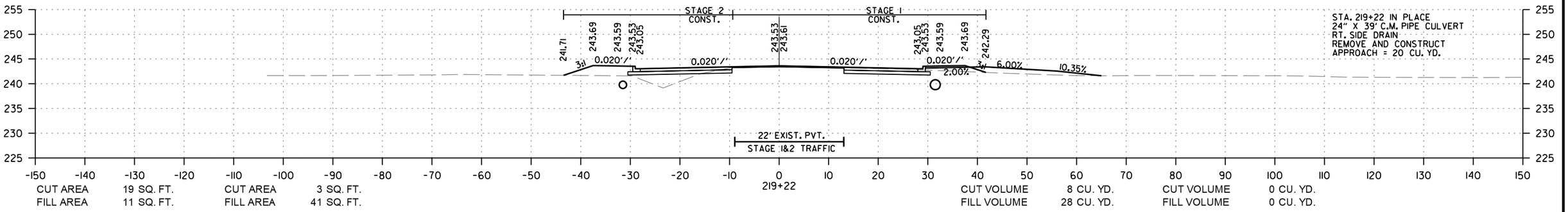
HWY. 18S/MLK JR. DR.
STA. 218+00 TO STA. 218+90

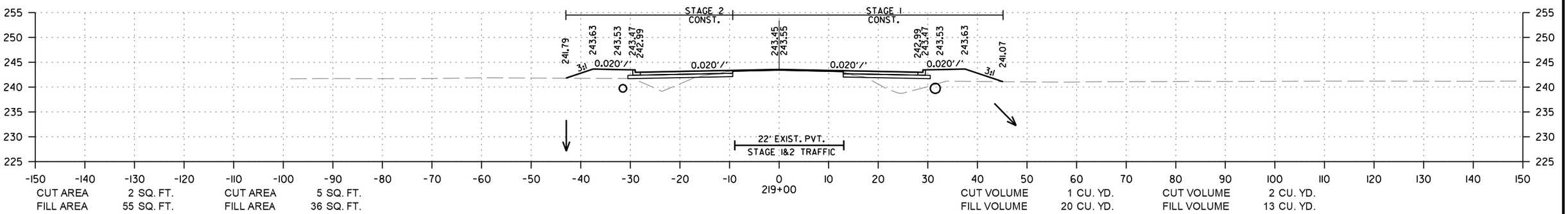
HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	344	418
		CROSS SECTIONS				





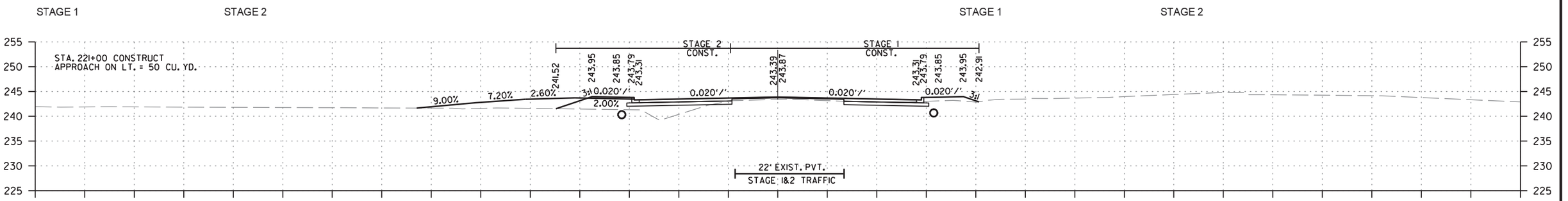


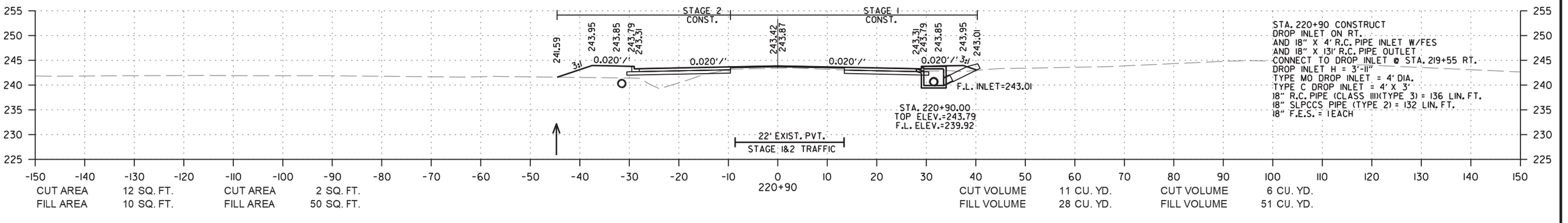


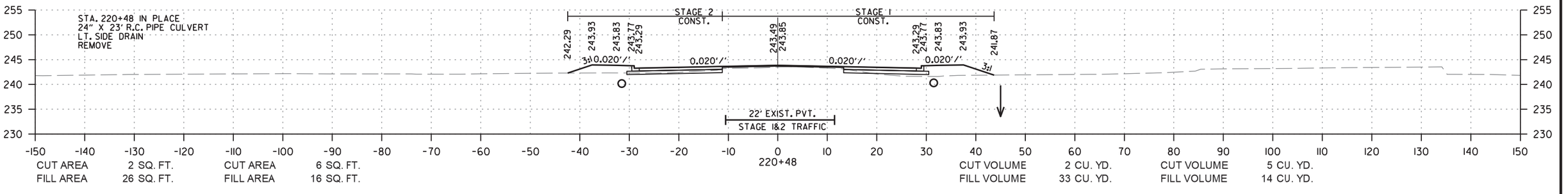
HWY. 18S/MLK JR. DR.
STA. 219+00 TO STA. 220+00

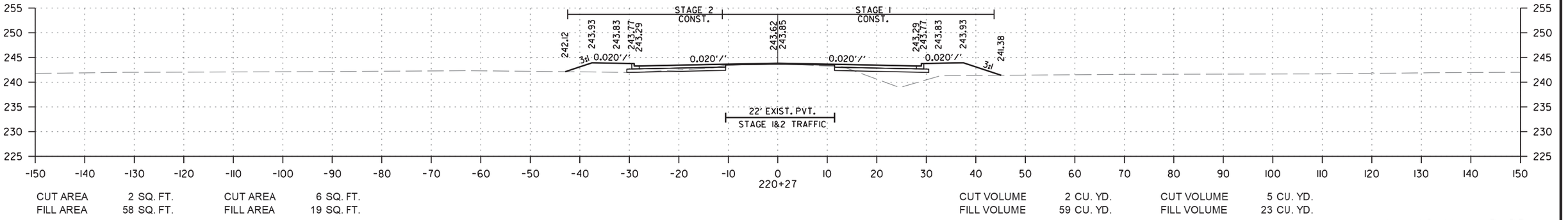
HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
09-12-22		6	ARK.	100657	345	418
		CROSS SECTIONS				





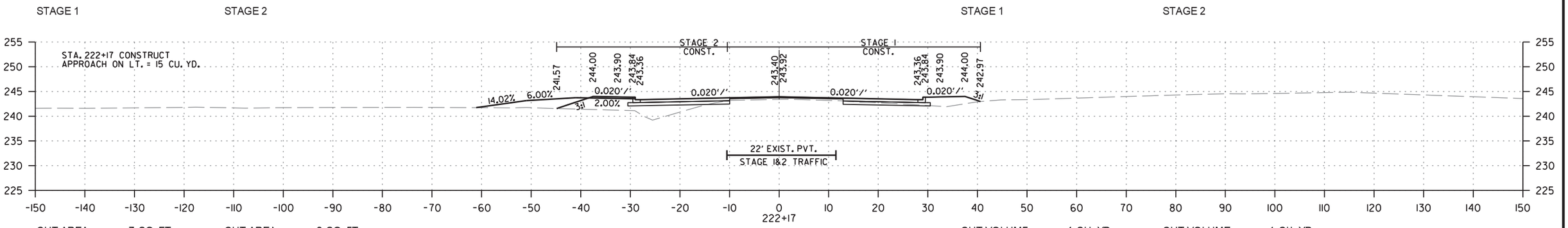


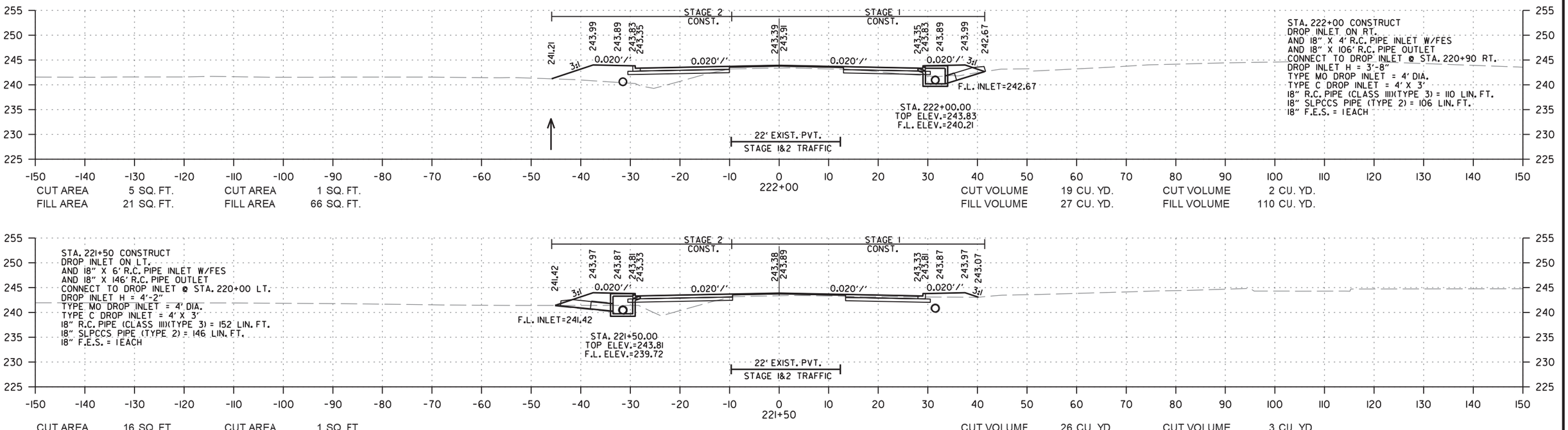


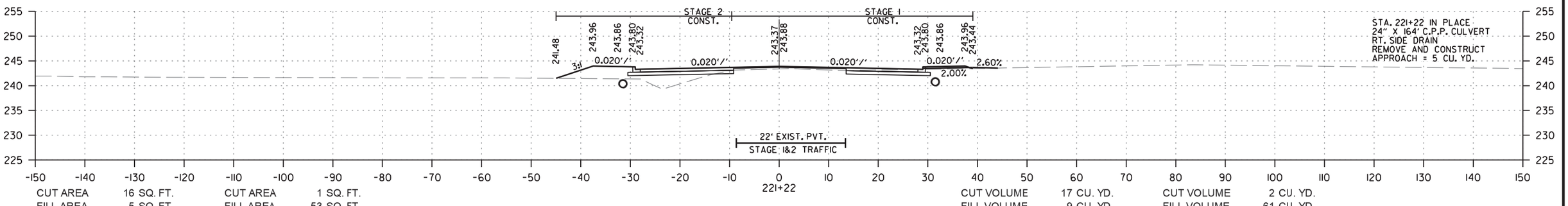
HWY. 18S/MLK JR. DR.
STA. 220+27 TO STA. 221+00

HT39710 9/9/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
09-12-22		6	ARK.	100657	346	418
		CROSS SECTIONS				



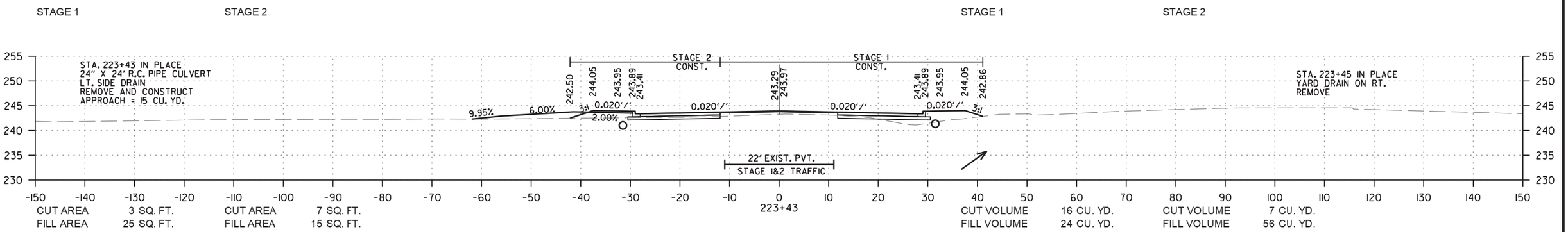


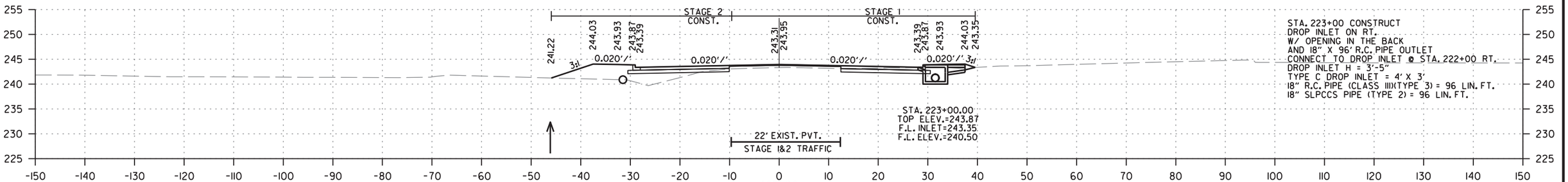


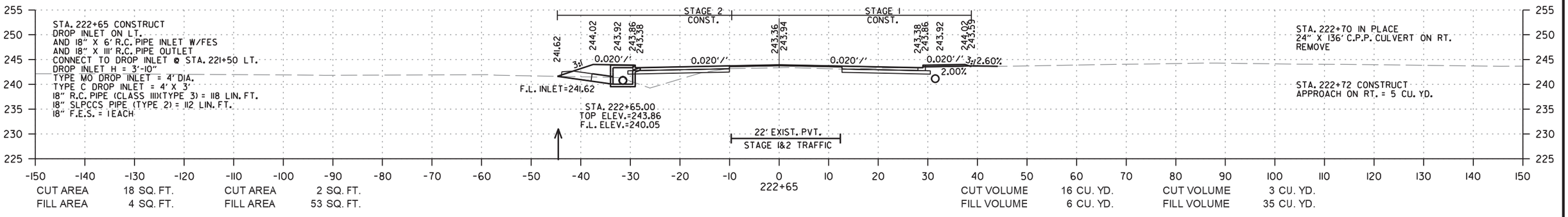
HWY. 18S/MLK JR. DR.
STA. 221+22 TO STA. 222+17

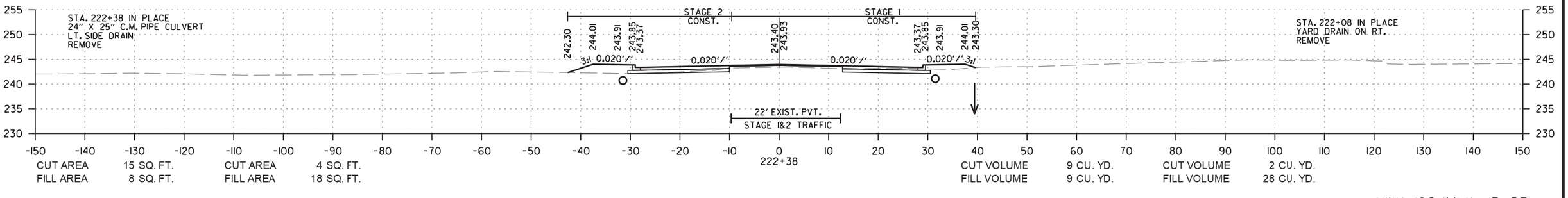
HT39710 9/9/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
09-12-22		6	ARK.	100657	347	418
		CROSS SECTIONS				





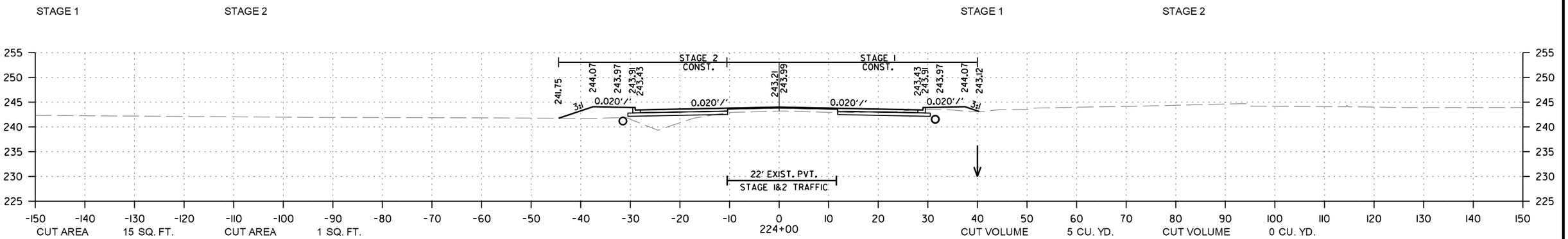


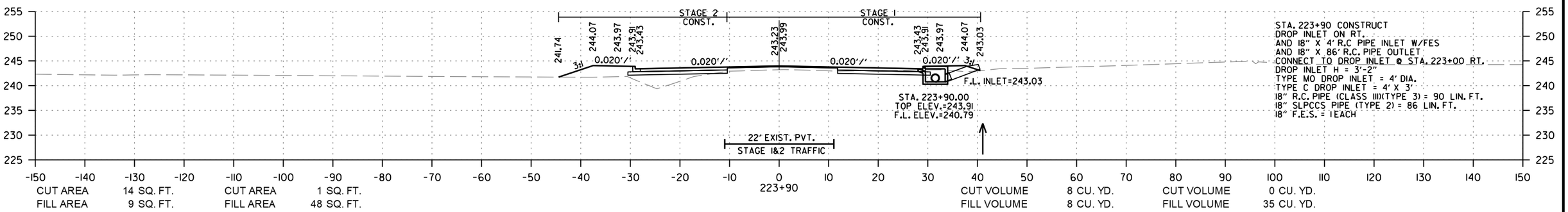


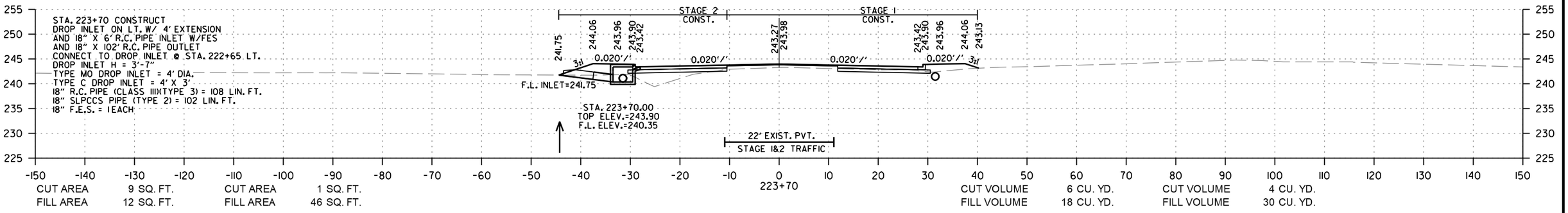
HWY. 18S/MLK JR. DR.
STA. 222+38 TO STA. 223+43

HT39710 9/9/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	348	418
		CROSS SECTIONS				





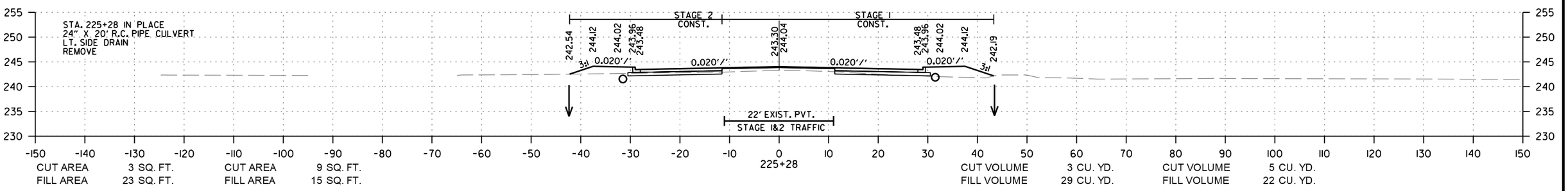


HWY. 18S/MLK JR. DR.
STA. 223+70 TO STA. 224+00

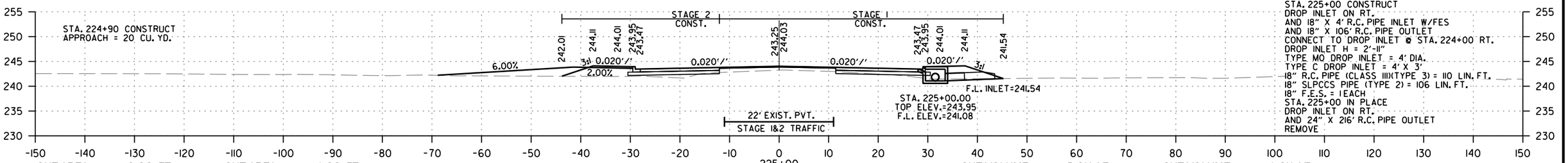
HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	349	418
		CROSS SECTIONS				

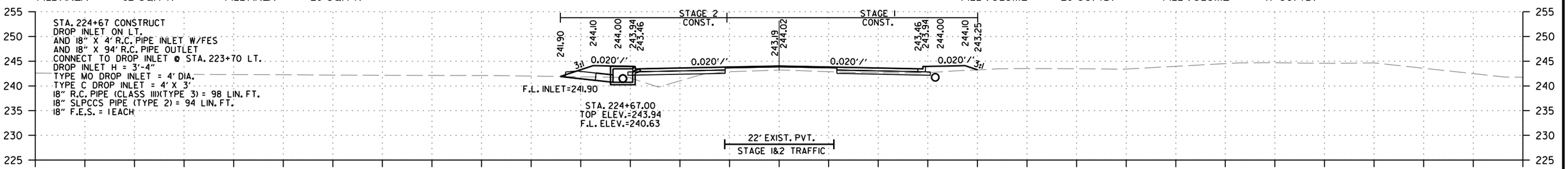
STAGE 1 STAGE 2 STAGE 1 STAGE 2



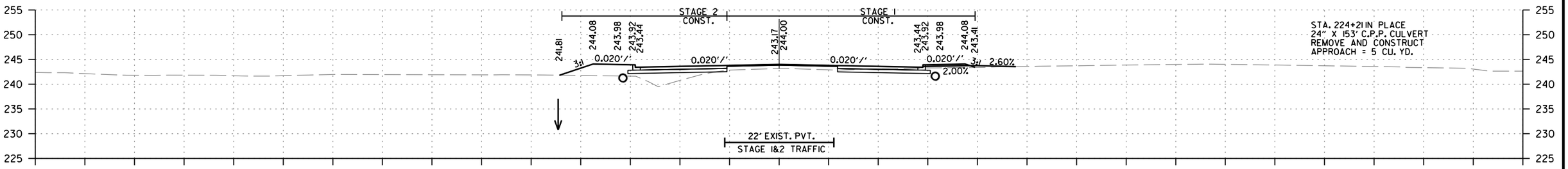
CUT AREA 3 SQ. FT. CUT AREA 9 SQ. FT. CUT VOLUME 3 CU. YD. CUT VOLUME 5 CU. YD.
FILL AREA 23 SQ. FT. FILL AREA 15 SQ. FT. FILL VOLUME 29 CU. YD. FILL VOLUME 22 CU. YD.



CUT AREA 2 SQ. FT. CUT AREA 1 SQ. FT. CUT VOLUME 5 CU. YD. CUT VOLUME 1 CU. YD.
FILL AREA 32 SQ. FT. FILL AREA 28 SQ. FT. FILL VOLUME 26 CU. YD. FILL VOLUME 47 CU. YD.



CUT AREA 6 SQ. FT. CUT AREA 0 SQ. FT. CUT VOLUME 17 CU. YD. CUT VOLUME 1 CU. YD.
FILL AREA 10 SQ. FT. FILL AREA 48 SQ. FT. FILL VOLUME 14 CU. YD. FILL VOLUME 82 CU. YD.

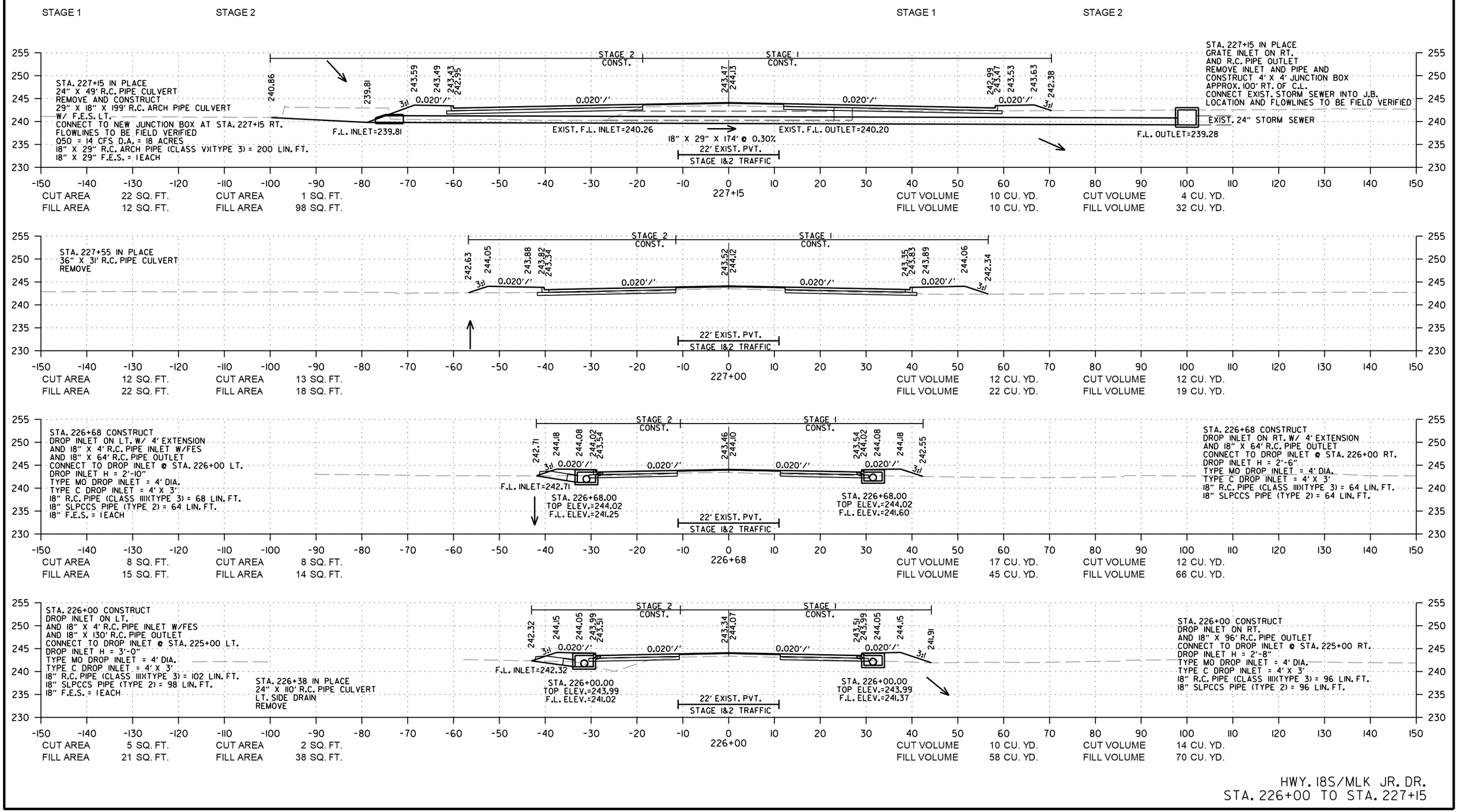


CUT AREA 14 SQ. FT. CUT AREA 0 SQ. FT. CUT VOLUME 11 CU. YD. CUT VOLUME 0 CU. YD.
FILL AREA 6 SQ. FT. FILL AREA 48 SQ. FT. FILL VOLUME 5 CU. YD. FILL VOLUME 38 CU. YD.

HWY. 18S/MLK JR. DR.
STA. 224+21 TO STA. 225+28

HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	350	418
		CROSS SECTIONS				

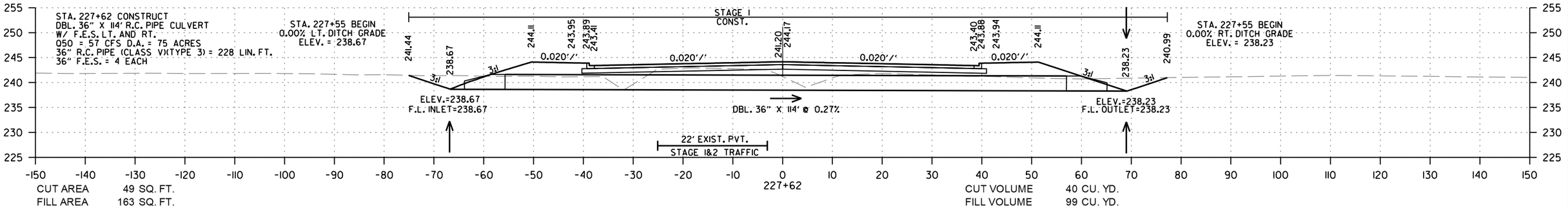


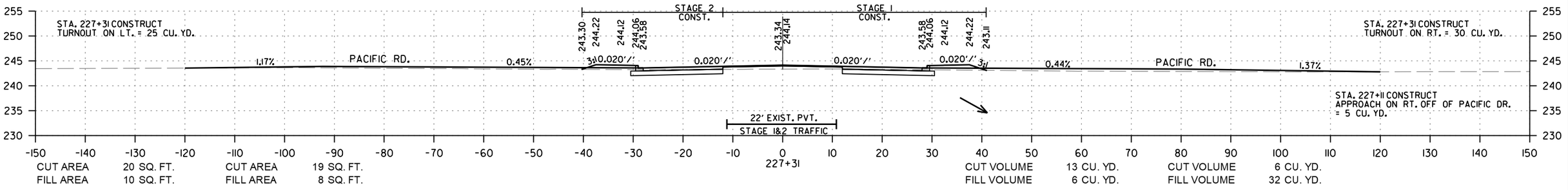
HWY. 18S/MLK JR. DR.
STA. 226+00 TO STA. 227+15

H139710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	351	418
		CROSS SECTIONS				

STAGE 1 STAGE 2 STAGE 1 STAGE 2





HWY. 18S/MLK JR. DR.
STA. 227+31 TO STA. 227+62

HT39710 5/6/2022
R100657.DGN

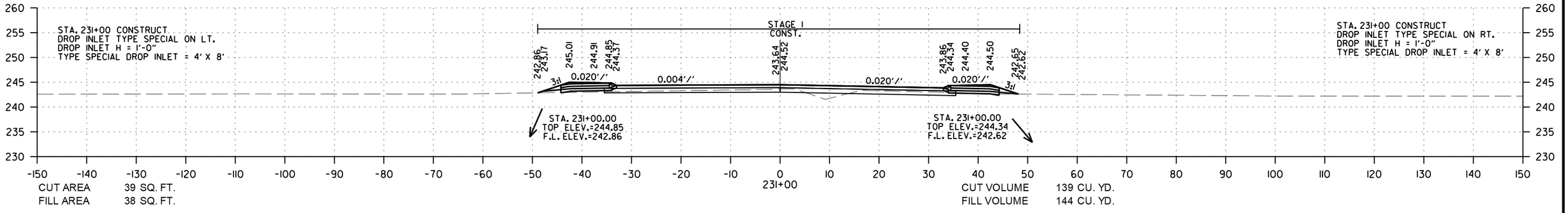
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	352	418
		CROSS SECTIONS				

STAGE 1

STA. 231+00 CONSTRUCT
DROP INLET TYPE SPECIAL ON LT.
DROP INLET H = 1'-0"
TYPE SPECIAL DROP INLET = 4' X 8'

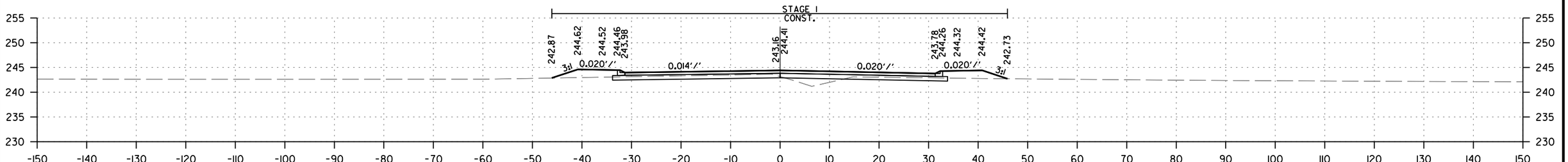
STAGE 1

STA. 231+00 CONSTRUCT
DROP INLET TYPE SPECIAL ON RT.
DROP INLET H = 1'-0"
TYPE SPECIAL DROP INLET = 4' X 8'



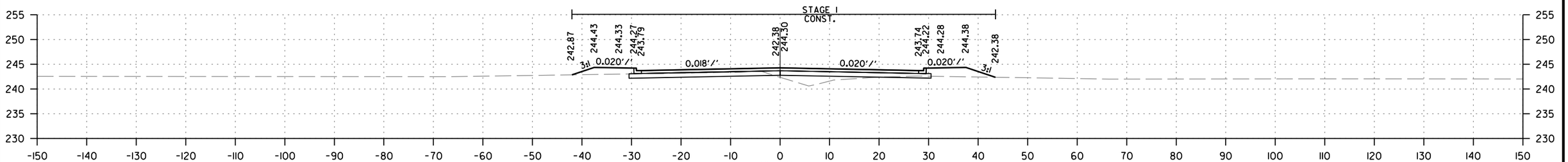
CUT AREA 39 SQ. FT.
FILL AREA 38 SQ. FT.

CUT VOLUME 139 CU. YD.
FILL VOLUME 144 CU. YD.



CUT AREA 36 SQ. FT.
FILL AREA 40 SQ. FT.

CUT VOLUME 114 CU. YD.
FILL VOLUME 168 CU. YD.



CUT AREA 26 SQ. FT.
FILL AREA 51 SQ. FT.

CUT VOLUME 89 CU. YD.
FILL VOLUME 203 CU. YD.

STA. 228+00 CONSTRUCT
DROP INLET TYPE SPECIAL ON LT.
W/ 8' EXTENSION
DROP INLET H = 1'-0"
TYPE SPECIAL DROP INLET = 4' X 8'

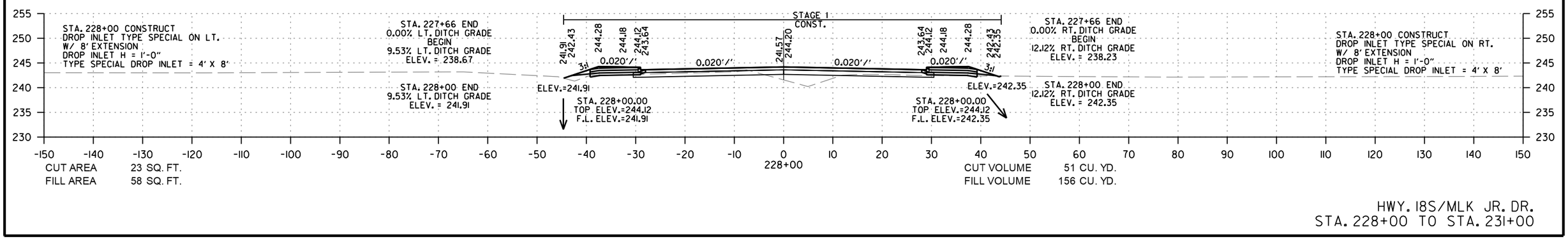
STA. 227+66 END
0.00% LT. DITCH GRADE
BEGIN
9.53% LT. DITCH GRADE
ELEV. = 238.67

STA. 228+00 END
9.53% LT. DITCH GRADE
ELEV. = 241.91

STA. 227+66 END
0.00% RT. DITCH GRADE
BEGIN
12.12% RT. DITCH GRADE
ELEV. = 238.23

STA. 228+00 END
12.12% RT. DITCH GRADE
ELEV. = 242.35

STA. 228+00 CONSTRUCT
DROP INLET TYPE SPECIAL ON RT.
W/ 8' EXTENSION
DROP INLET H = 1'-0"
TYPE SPECIAL DROP INLET = 4' X 8'



CUT AREA 23 SQ. FT.
FILL AREA 58 SQ. FT.

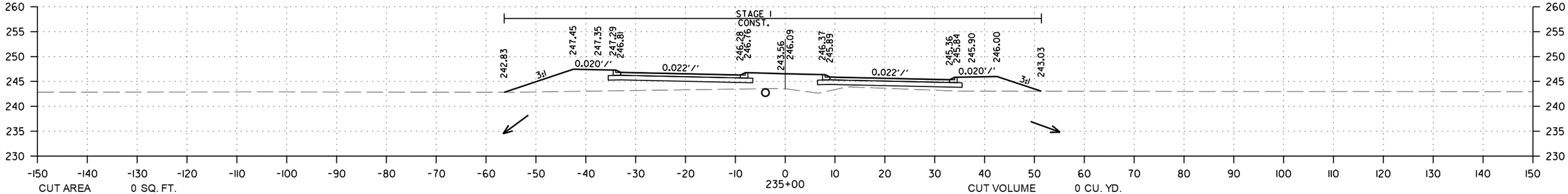
CUT VOLUME 51 CU. YD.
FILL VOLUME 156 CU. YD.

HWY. 18S/MLK JR. DR.
STA. 228+00 TO STA. 231+00

H139710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	353	418
		CROSS SECTIONS				

STAGE 1

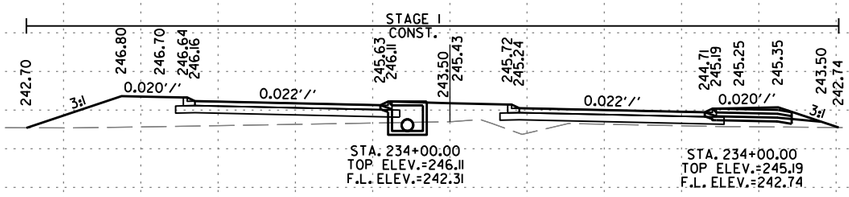


235+00

CUT AREA 0 SQ. FT.
FILL AREA 211 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 702 CU. YD.

STA. 234+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 18" X 198' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 236+00 M.
DROP INLET H = 3'-10"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III(TYPE 3) = 198 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 198 LIN. FT.



STA. 234+00.00
TOP ELEV.=246.11
F.L. ELEV.=242.31

STA. 234+00.00
TOP ELEV.=245.19
F.L. ELEV.=242.74

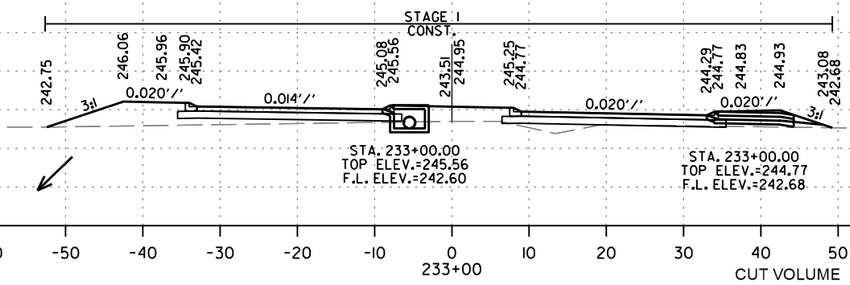
STA. 234+00 CONSTRUCT
DROP INLET TYPE SPECIAL ON RT.
W/ 4' EXTENSION
DROP INLET H = 1'-0"
TYPE SPECIAL DROP INLET = 4' X 8'

234+00

CUT AREA 0 SQ. FT.
FILL AREA 168 SQ. FT.

CUT VOLUME 10 CU. YD.
FILL VOLUME 102 CU. YD.

STA. 233+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 18" X 98' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 234+00 M.
DROP INLET H = 3'-0"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III(TYPE 3) = 98 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.



STA. 233+00.00
TOP ELEV.=245.56
F.L. ELEV.=242.60

STA. 233+00.00
TOP ELEV.=244.77
F.L. ELEV.=242.68

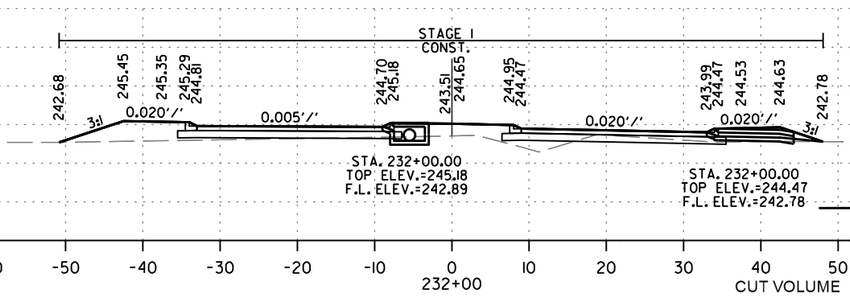
STA. 233+00 CONSTRUCT
DROP INLET TYPE SPECIAL ON RT.
DROP INLET H = 1'-0"
TYPE SPECIAL DROP INLET = 4' X 8'

233+00

CUT AREA 1 SQ. FT.
FILL AREA 111 SQ. FT.

CUT VOLUME 23 CU. YD.
FILL VOLUME 361 CU. YD.

STA. 232+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 18" X 98' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 233+00 M.
DROP INLET H = 2'-4"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III(TYPE 3) = 98 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.



STA. 232+00.00
TOP ELEV.=245.18
F.L. ELEV.=242.89

STA. 232+00.00
TOP ELEV.=244.47
F.L. ELEV.=242.78

STA. 232+00 CONSTRUCT
DROP INLET TYPE SPECIAL ON RT.
DROP INLET H = 1'-0"
TYPE SPECIAL DROP INLET = 4' X 8'

232+00

CUT AREA 12 SQ. FT.
FILL AREA 84 SQ. FT.

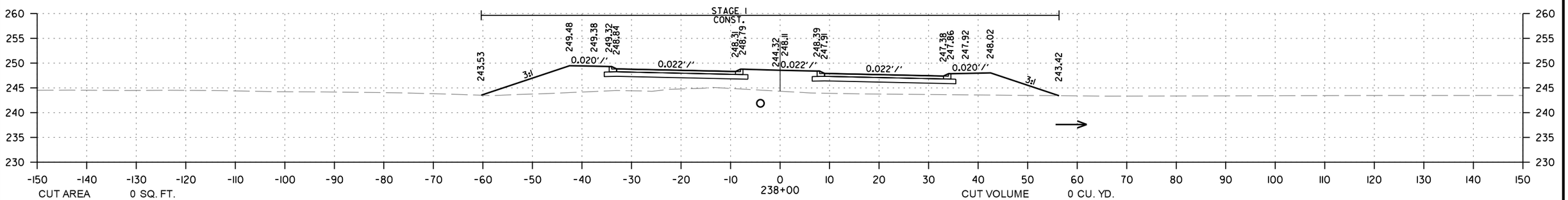
CUT VOLUME 94 CU. YD.
FILL VOLUME 225 CU. YD.

HWY. 18S/MLK JR. DR.
STA. 232+00 TO STA. 235+00

HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	354	418
		CROSS SECTIONS				

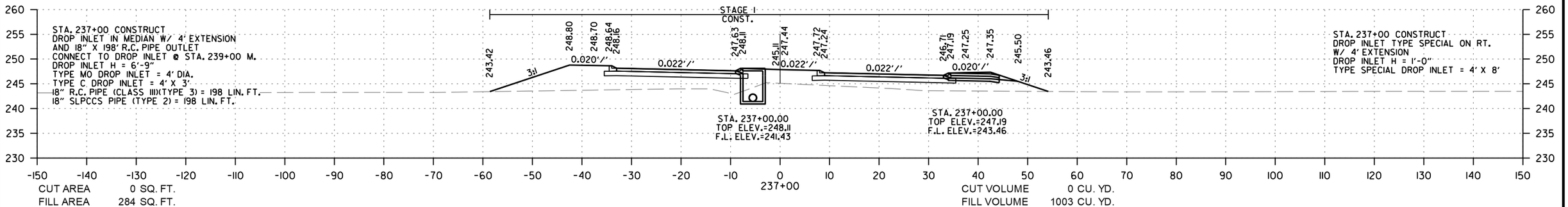
STAGE 1



CUT AREA 0 SQ. FT.
FILL AREA 346 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 1168 CU. YD.

STA. 237+00 CONSTRUCT
DROP INLET IN MEDIAN W/ 4' EXTENSION
AND 18" X 198' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 239+00 M.
DROP INLET H = 6'-9"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III(TYPE 3) = 198 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 198 LIN. FT.



STA. 237+00.00
TOP ELEV.=248.11
F.L. ELEV.=241.43

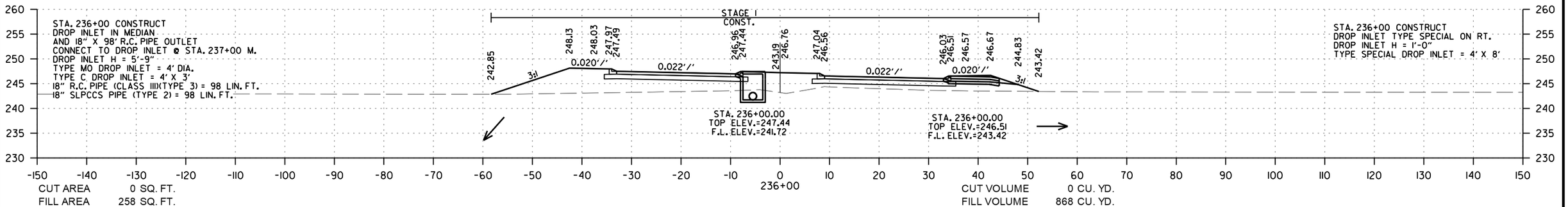
STA. 237+00.00
TOP ELEV.=247.19
F.L. ELEV.=243.46

STA. 237+00 CONSTRUCT
DROP INLET TYPE SPECIAL ON RT.
W/ 4' EXTENSION
DROP INLET H = 1'-0"
TYPE SPECIAL DROP INLET = 4' X 8'

CUT AREA 0 SQ. FT.
FILL AREA 284 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 1003 CU. YD.

STA. 236+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 18" X 98' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 237+00 M.
DROP INLET H = 5'-9"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III(TYPE 3) = 98 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.



STA. 236+00.00
TOP ELEV.=247.44
F.L. ELEV.=241.72

STA. 236+00.00
TOP ELEV.=246.51
F.L. ELEV.=243.42

STA. 236+00 CONSTRUCT
DROP INLET TYPE SPECIAL ON RT.
DROP INLET H = 1'-0"
TYPE SPECIAL DROP INLET = 4' X 8'

CUT AREA 0 SQ. FT.
FILL AREA 258 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 868 CU. YD.

HWY. 18S/MLK JR. DR.
STA. 236+00 TO STA. 238+00

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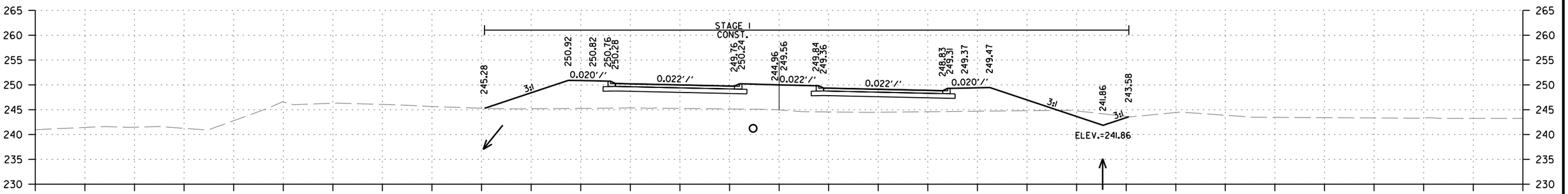
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	355	418
		CROSS SECTIONS				

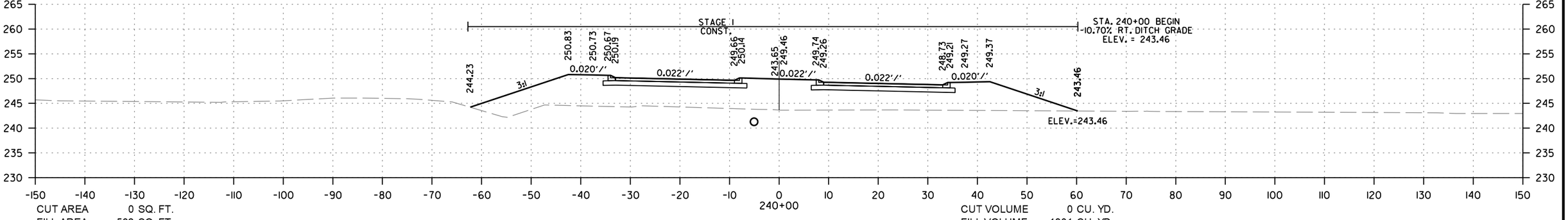
STAGE 1



CUT AREA 17 SQ. FT.
FILL AREA 407 SQ. FT.

CUT VOLUME 5 CU. YD.
FILL VOLUME 261 CU. YD.

STAGE 1

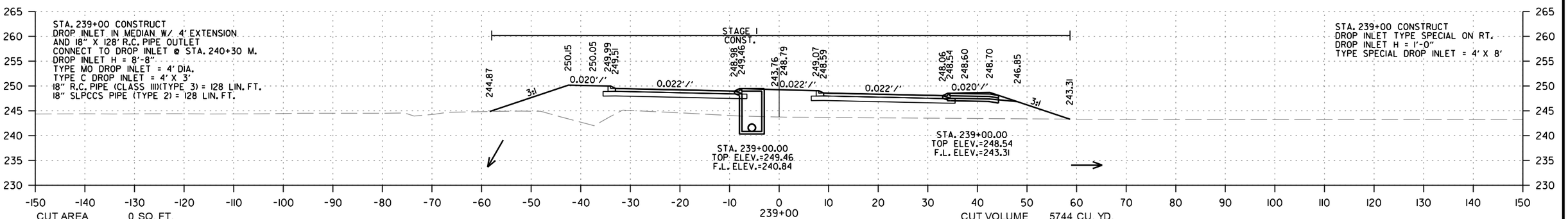


CUT AREA 0 SQ. FT.
FILL AREA 532 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 1801 CU. YD.

STA. 239+00 CONSTRUCT
DROP INLET IN MEDIAN W/ 4' EXTENSION
AND 18" X 128' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 240+30 M.
DROP INLET H = 8'-8"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 128 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 128 LIN. FT.

STA. 239+00 CONSTRUCT
DROP INLET TYPE SPECIAL ON RT.
DROP INLET H = 1'-0"
TYPE SPECIAL DROP INLET = 4' X 8'



CUT AREA 0 SQ. FT.
FILL AREA 441 SQ. FT.

CUT VOLUME 5744 CU. YD.
FILL VOLUME 24493 CU. YD.

HWY. 18S/MLK JR. DR.
STA. 239+00 TO STA. 240+15

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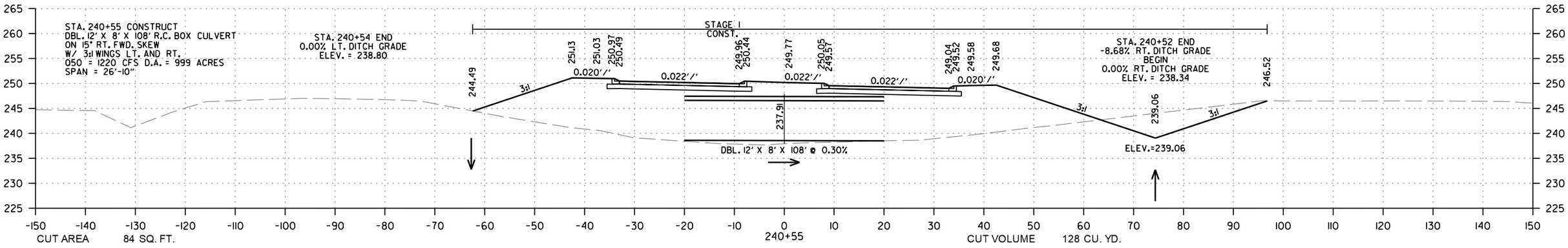
R100657.DGN

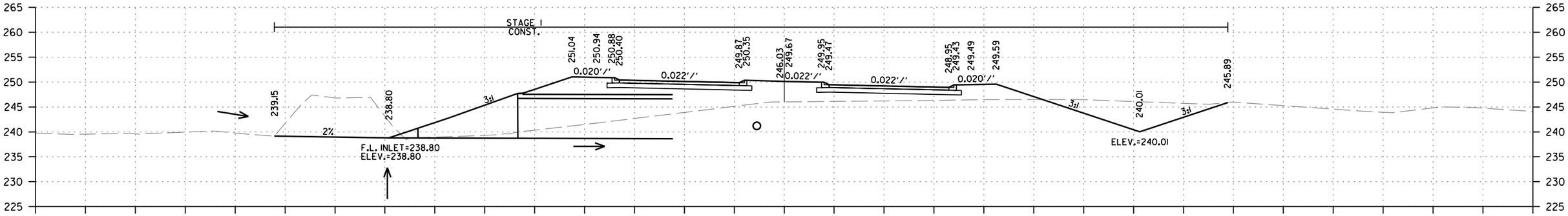
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	356	418
		CROSS SECTIONS				

STAGE 1



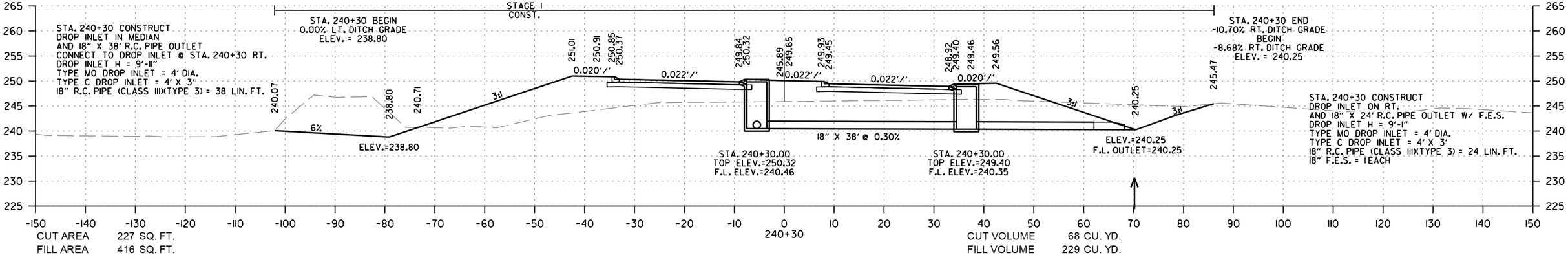
CUT AREA 84 SQ. FT.
FILL AREA 1064 SQ. FT.

CUT VOLUME 128 CU. YD.
FILL VOLUME 595 CU. YD.



CUT AREA 262 SQ. FT.
FILL AREA 542 SQ. FT.

CUT VOLUME 45 CU. YD.
FILL VOLUME 89 CU. YD.



CUT AREA 227 SQ. FT.
FILL AREA 416 SQ. FT.

CUT VOLUME 68 CU. YD.
FILL VOLUME 229 CU. YD.

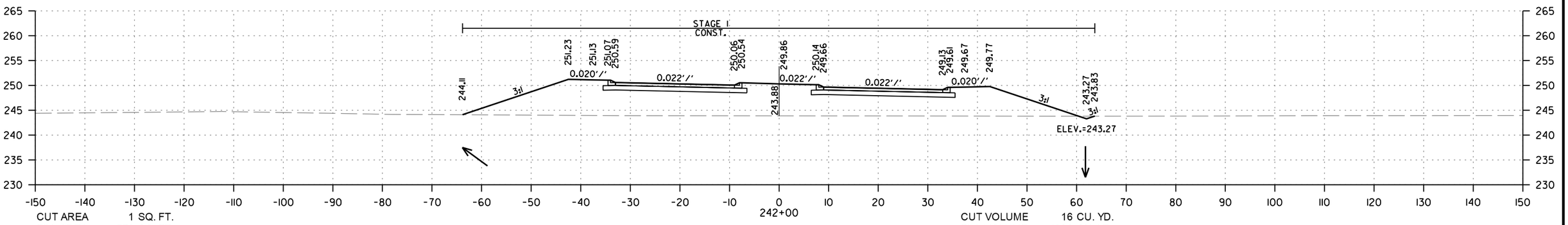
HWY. 18S/MLK JR. DR.
STA. 240+30 TO STA. 240+55

HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	357	418
		CROSS SECTIONS				

STAGE 1

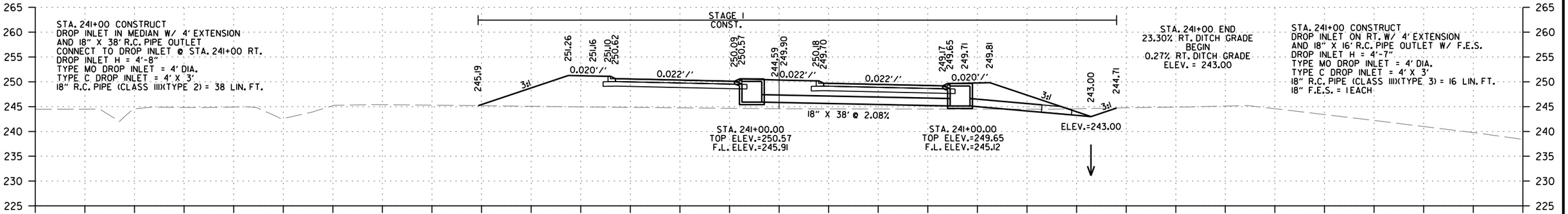
STAGE 1



CUT AREA 1 SQ. FT.
FILL AREA 570 SQ. FT.

CUT VOLUME 16 CU. YD.
FILL VOLUME 1939 CU. YD.

STA. 241+00 CONSTRUCT
DROP INLET IN MEDIAN W/ 4' EXTENSION
AND 18" X 38' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 241+00 RT.
DROP INLET H = 4'-8"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 2) = 38 LIN. FT.

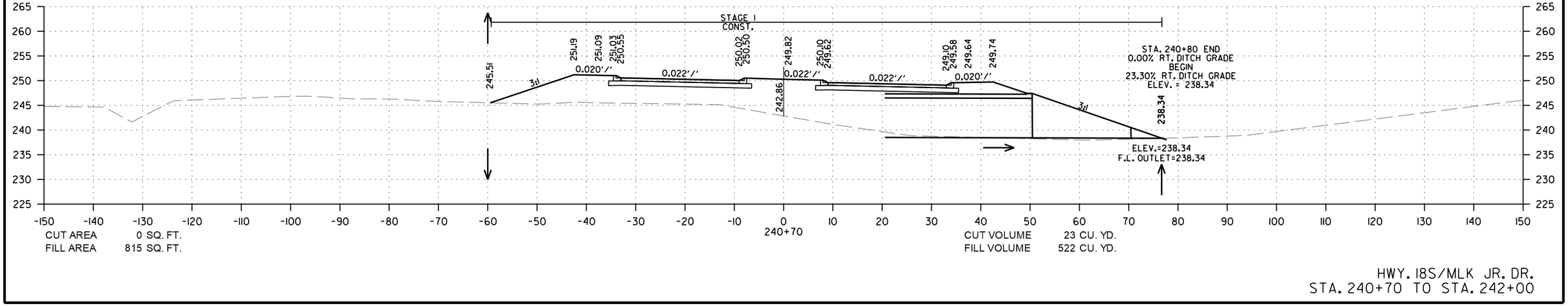


CUT AREA 8 SQ. FT.
FILL AREA 477 SQ. FT.

CUT VOLUME 4 CU. YD.
FILL VOLUME 718 CU. YD.

STA. 241+00 END
23.30% RT. DITCH GRADE
BEGIN
0.27% RT. DITCH GRADE
ELEV. = 243.00

STA. 241+00 CONSTRUCT
DROP INLET ON RT. W/ 4' EXTENSION
AND 18" X 16' R.C. PIPE OUTLET W/ F.E.S.
DROP INLET H = 4'-7"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 16 LIN. FT.
18" F.E.S. = 1EACH



CUT AREA 0 SQ. FT.
FILL AREA 815 SQ. FT.

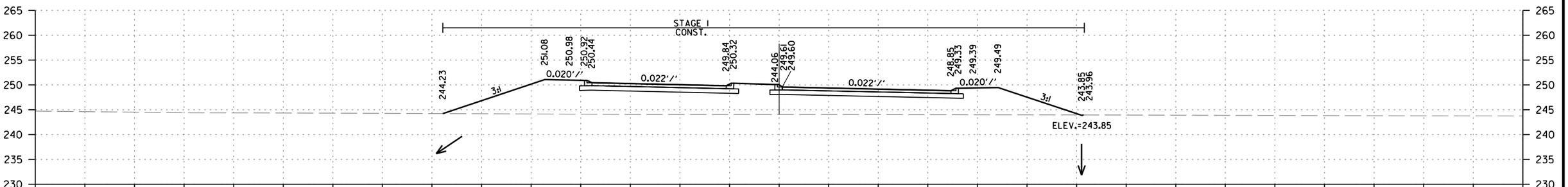
CUT VOLUME 23 CU. YD.
FILL VOLUME 522 CU. YD.

HWY. 18S/MLK JR. DR.
STA. 240+70 TO STA. 242+00

HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	358	418
		CROSS SECTIONS				

STAGE 1



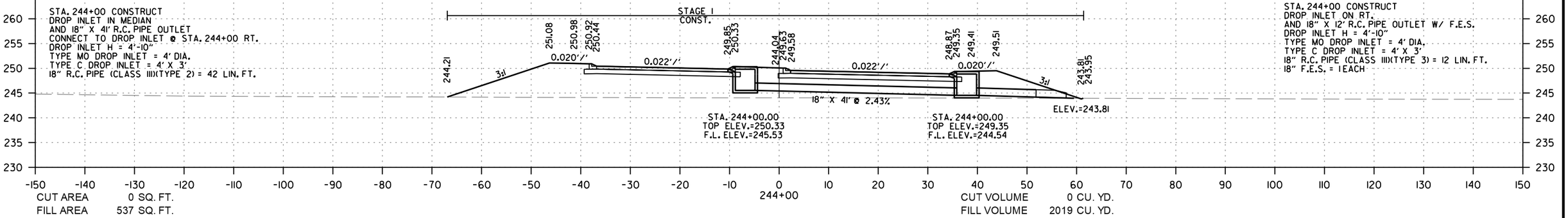
CUT AREA 0 SQ. FT.
FILL AREA 536 SQ. FT.

244+15

CUT VOLUME 0 CU. YD.
FILL VOLUME 298 CU. YD.

STAGE 1

STA. 244+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 18" X 41' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 244+00 RT.
DROP INLET H = 4'-10"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III(TYPE 2) = 42 LIN. FT.



STA. 244+00.00
TOP ELEV.=250.33
F.L. ELEV.=245.53

STA. 244+00.00
TOP ELEV.=249.35
F.L. ELEV.=244.54

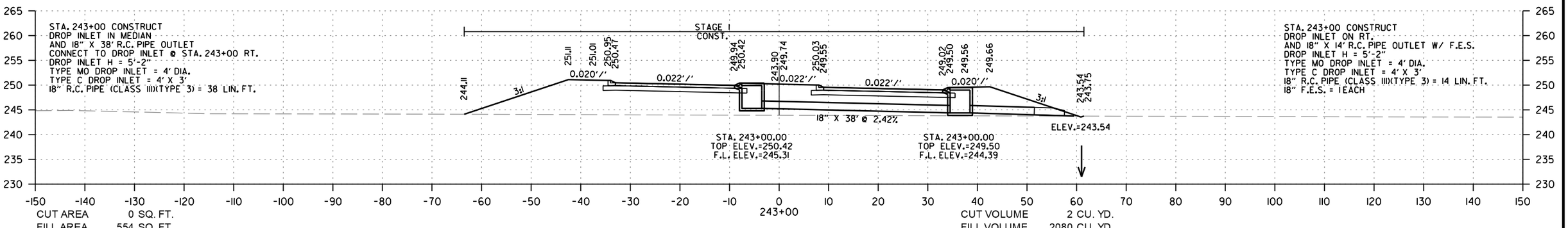
STA. 244+00 CONSTRUCT
DROP INLET ON RT.
AND 18" X 12' R.C. PIPE OUTLET W/ F.E.S.
DROP INLET H = 4'-10"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III(TYPE 3) = 12 LIN. FT.
18" F.E.S. = 1 EACH

CUT AREA 0 SQ. FT.
FILL AREA 537 SQ. FT.

244+00

CUT VOLUME 0 CU. YD.
FILL VOLUME 2019 CU. YD.

STA. 243+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 18" X 38' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 243+00 RT.
DROP INLET H = 5'-2"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III(TYPE 3) = 38 LIN. FT.



STA. 243+00.00
TOP ELEV.=250.42
F.L. ELEV.=245.31

STA. 243+00.00
TOP ELEV.=249.50
F.L. ELEV.=244.39

STA. 243+00 CONSTRUCT
DROP INLET ON RT.
AND 18" X 14' R.C. PIPE OUTLET W/ F.E.S.
DROP INLET H = 5'-2"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III(TYPE 3) = 14 LIN. FT.
18" F.E.S. = 1 EACH

CUT AREA 0 SQ. FT.
FILL AREA 554 SQ. FT.

243+00

CUT VOLUME 2 CU. YD.
FILL VOLUME 2080 CU. YD.

HWY. 18S/MLK JR. DR.
STA. 243+00 TO STA. 244+15

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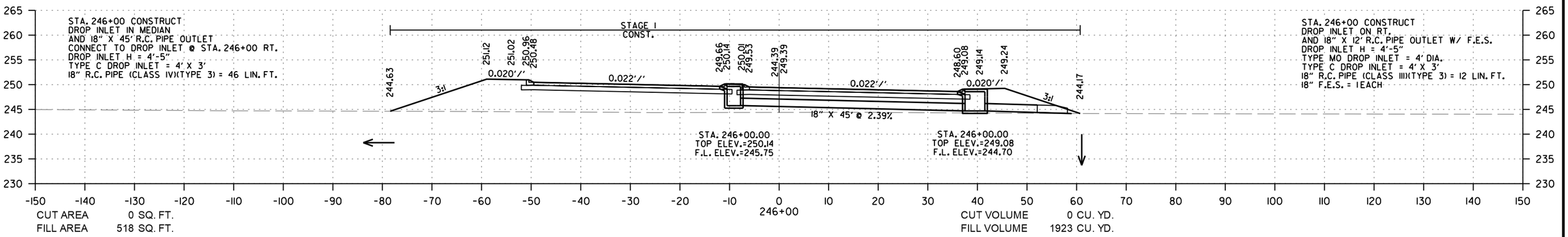
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	359	418
		CROSS SECTIONS				

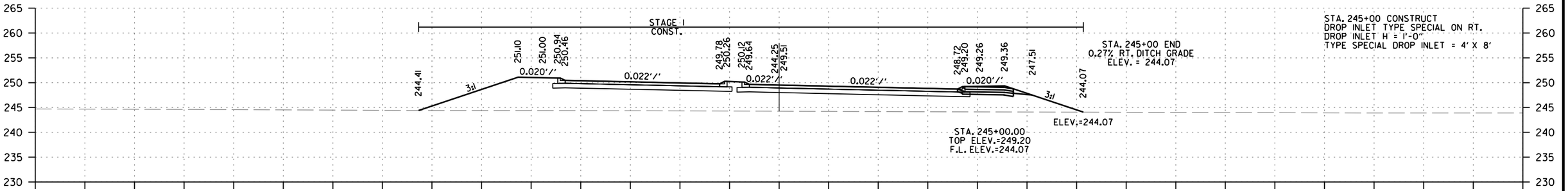
STAGE 1

STAGE 1



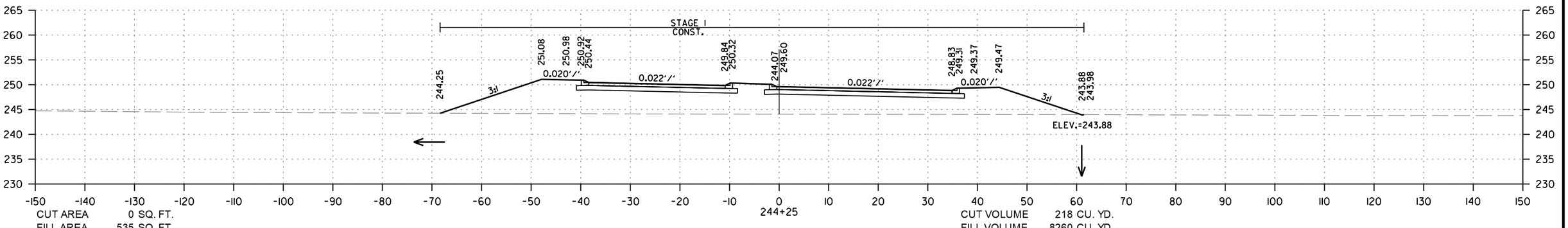
CUT AREA 0 SQ. FT.
FILL AREA 518 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 1923 CU. YD.



CUT AREA 0 SQ. FT.
FILL AREA 520 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 1465 CU. YD.



CUT AREA 0 SQ. FT.
FILL AREA 535 SQ. FT.

CUT VOLUME 218 CU. YD.
FILL VOLUME 8260 CU. YD.

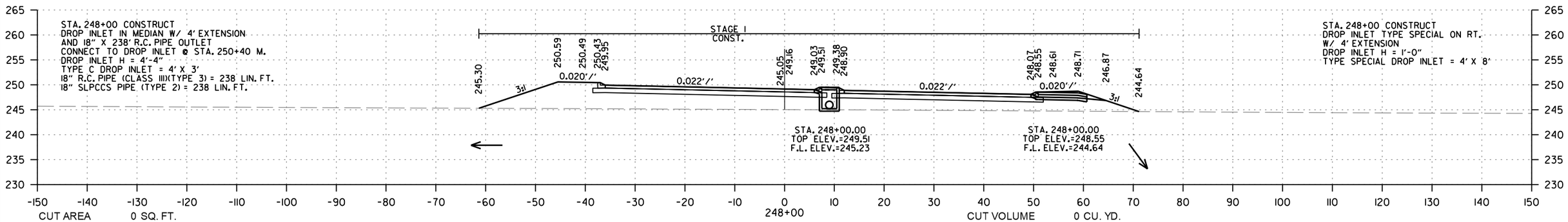
HWY. 18S/MLK JR. DR.
STA. 244+25 TO STA. 246+00

H139710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	360	418
		CROSS SECTIONS				

STAGE 1

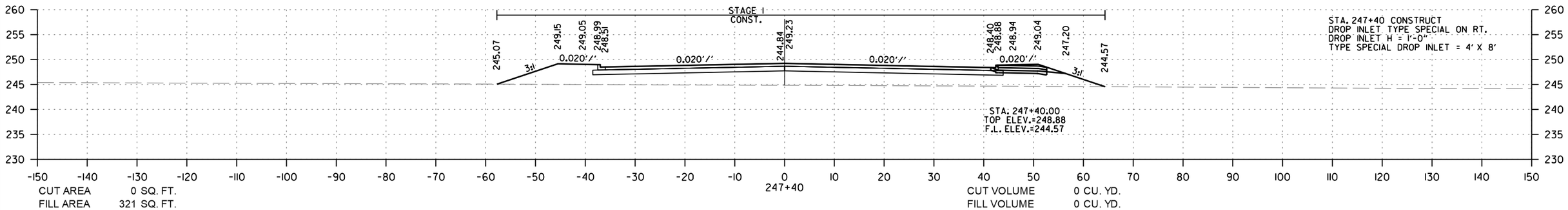
STA. 248+00 CONSTRUCT
DROP INLET IN MEDIAN W/ 4' EXTENSION
AND 18" X 238' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 250+40 M.
DROP INLET H = 4'-4"
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III(TYPE 3) = 238 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 238 LIN. FT.



STA. 248+00 CONSTRUCT
DROP INLET TYPE SPECIAL ON RT.
W/ 4' EXTENSION
DROP INLET H = 1'-0"
TYPE SPECIAL DROP INLET = 4' X 8'

CUT AREA 0 SQ. FT.
FILL AREA 365 SQ. FT.

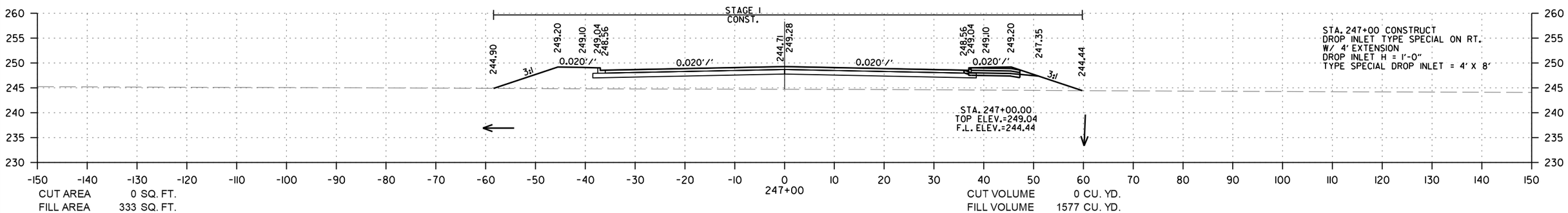
CUT VOLUME 0 CU. YD.
FILL VOLUME 762 CU. YD.



STA. 247+40 CONSTRUCT
DROP INLET TYPE SPECIAL ON RT.
DROP INLET H = 1'-0"
TYPE SPECIAL DROP INLET = 4' X 8'

CUT AREA 0 SQ. FT.
FILL AREA 321 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 0 CU. YD.



STA. 247+00 CONSTRUCT
DROP INLET TYPE SPECIAL ON RT.
W/ 4' EXTENSION
DROP INLET H = 1'-0"
TYPE SPECIAL DROP INLET = 4' X 8'

CUT AREA 0 SQ. FT.
FILL AREA 333 SQ. FT.

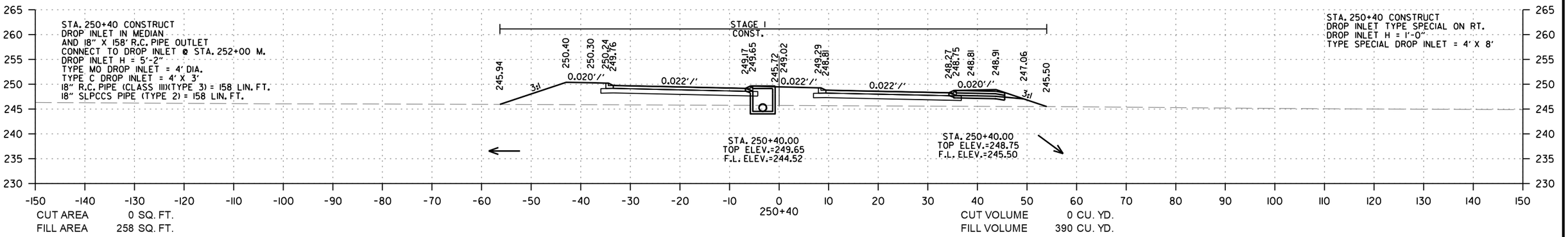
CUT VOLUME 0 CU. YD.
FILL VOLUME 1577 CU. YD.

HWY. 18S/MLK JR. DR.
STA. 247+00 TO STA. 248+00

HT39710 5/6/2022
R100657.DGN

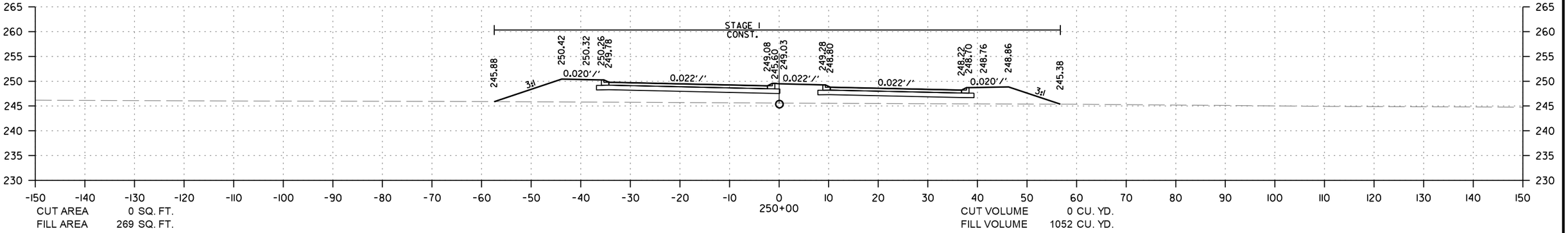
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	361	418
		CROSS SECTIONS				

STAGE 1



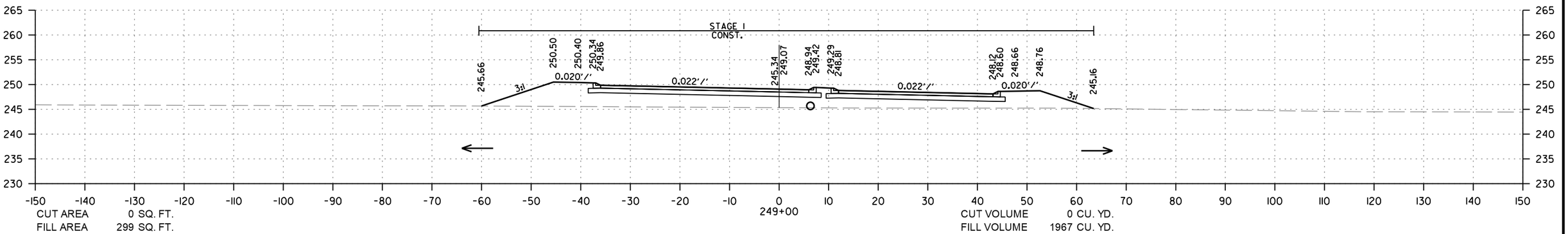
CUT AREA 0 SQ. FT.
FILL AREA 258 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 390 CU. YD.



CUT AREA 0 SQ. FT.
FILL AREA 269 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 1052 CU. YD.



CUT AREA 0 SQ. FT.
FILL AREA 299 SQ. FT.

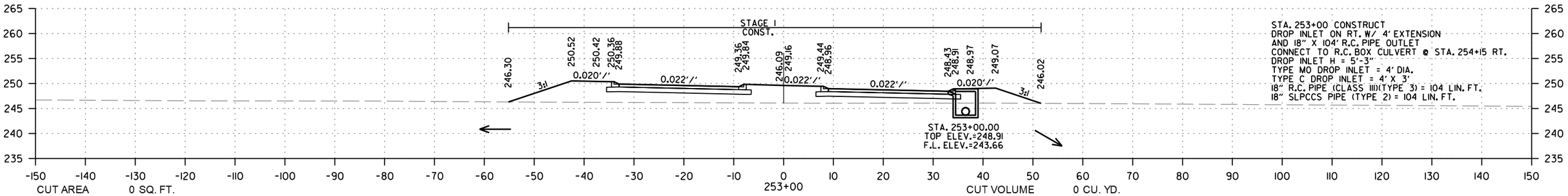
CUT VOLUME 0 CU. YD.
FILL VOLUME 1967 CU. YD.

HWY. 18S/MLK JR. DR.
STA. 249+00 TO STA. 250+40

H139710 5/6/2022
R100657.DGN

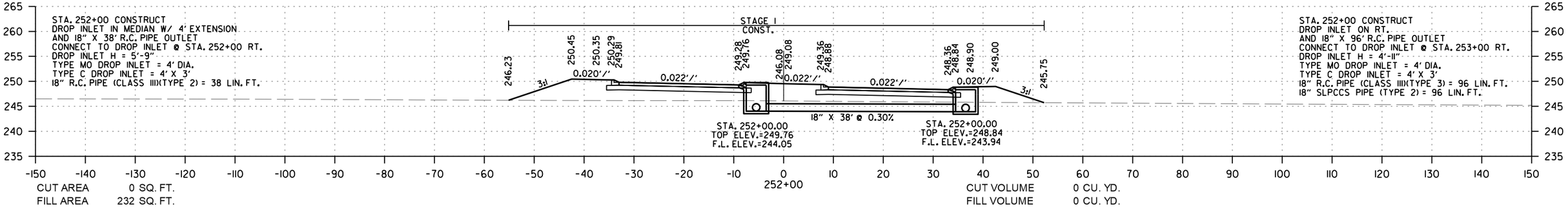
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	362	418
		CROSS SECTIONS				

STAGE 1



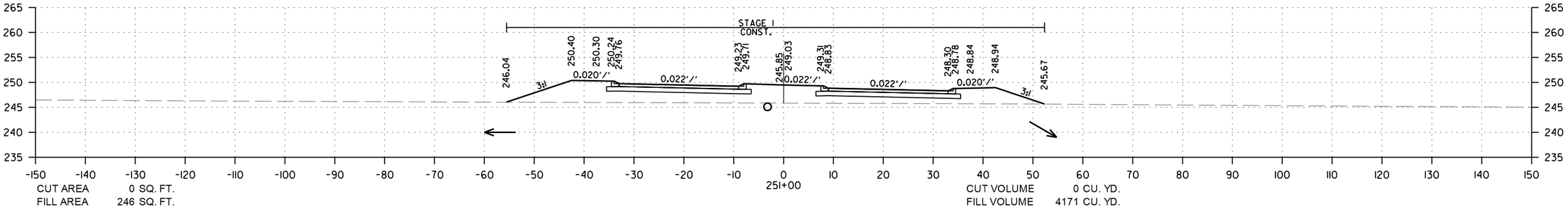
CUT AREA 0 SQ. FT.
FILL AREA 230 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 857 CU. YD.



CUT AREA 0 SQ. FT.
FILL AREA 232 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 0 CU. YD.



CUT AREA 0 SQ. FT.
FILL AREA 246 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 4171 CU. YD.

HWY. 18S/MLK JR. DR.
STA. 251+00 TO STA. 253+00

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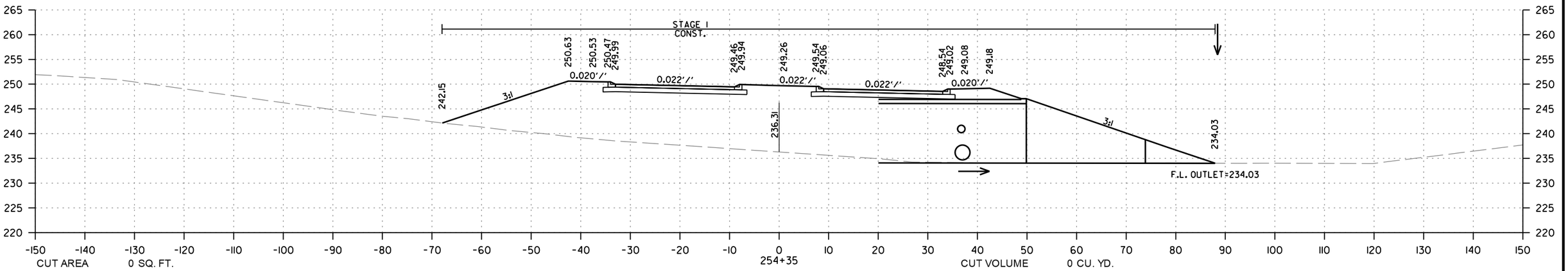
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	363	418
		CROSS SECTIONS				

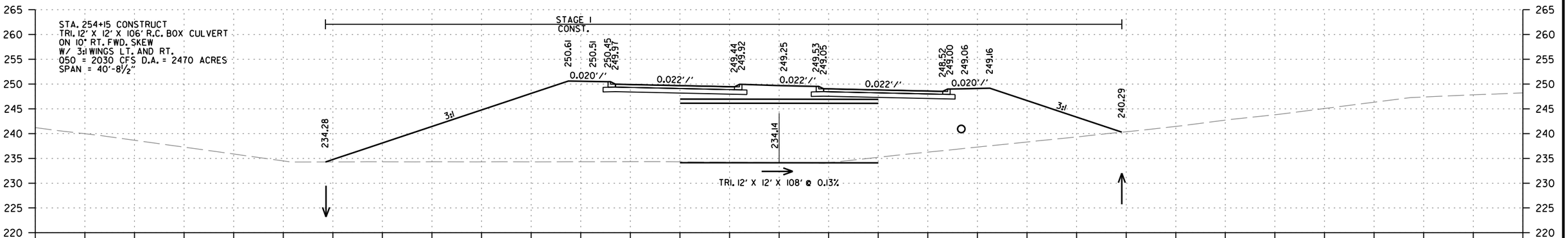
STAGE 1



CUT AREA 0 SQ. FT.
FILL AREA 1518 SQ. FT.

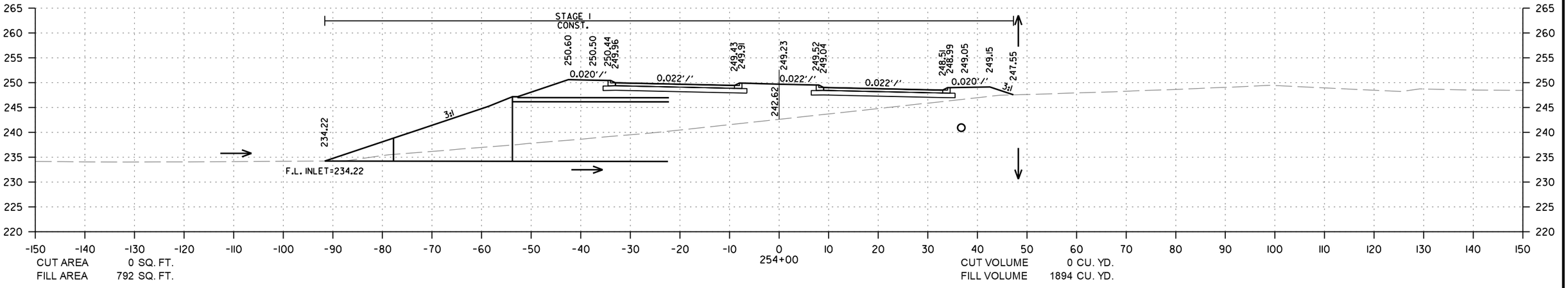
CUT VOLUME 0 CU. YD.
FILL VOLUME 1195 CU. YD.

STA. 254+15 CONSTRUCT
TRI. 12' X 12' X 106' R.C. BOX CULVERT
ON 10° RT. FWD. SKEW
W/ 3:1 WINGS LT. AND RT.
Q50 = 2030 CFS D.A. = 2470 ACRES
SPAN = 40'-8½"



CUT AREA 0 SQ. FT.
FILL AREA 1707 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 694 CU. YD.



CUT AREA 0 SQ. FT.
FILL AREA 792 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 1894 CU. YD.

HWY. 18S/MLK JR. DR.
STA. 254+00 TO STA. 254+35

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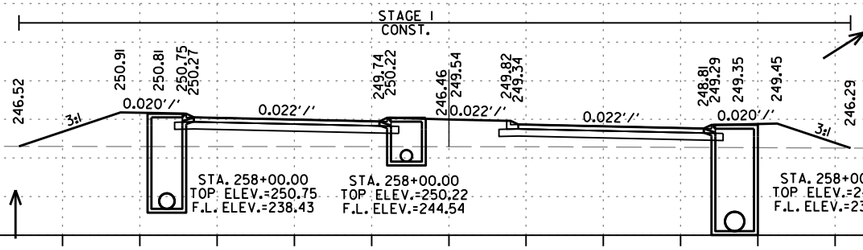
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	364	418
		CROSS SECTIONS				

STAGE 1

STA. 258+00 CONSTRUCT
DROP INLET ON LT.
AND 24" X 300' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 255+00 LT.
DROP INLET H = 12'-4"
TYPE MO DROP INLET = 4' DIA.
24" R.C. PIPE (CLASS III)(TYPE 3) = 300 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 300 LIN. FT.

STA. 258+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 18" X 98' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 257+00 M.
DROP INLET H = 5'-9"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 98 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.



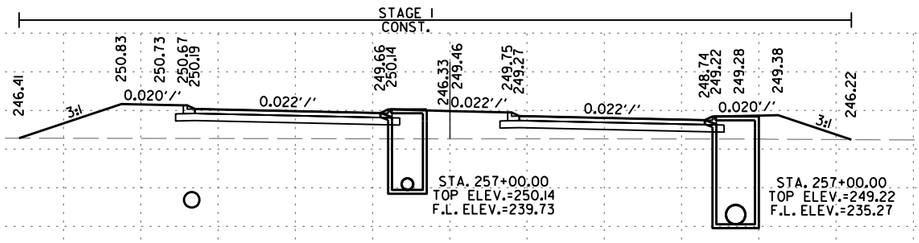
STA. 258+00 CONSTRUCT
DROP INLET ON RT. W/ 4' EXTENSION
AND 30" X 94' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 257+00 RT.
DROP INLET H = 13'-9"
TYPE MO DROP INLET = 5' DIA.
30" R.C. PIPE (CLASS III)(TYPE 3) = 94 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 94 LIN. FT.

CUT AREA 0 SQ. FT.
FILL AREA 239 SQ. FT.

258+00

CUT VOLUME 0 CU. YD.
FILL VOLUME 889 CU. YD.

STA. 257+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 18" X 198' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 255+00 M.
DROP INLET H = 10'-5"
TYPE MO DROP INLET = 4' DIA.
18" R.C. PIPE (CLASS III)(TYPE 3) = 198 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 198 LIN. FT.

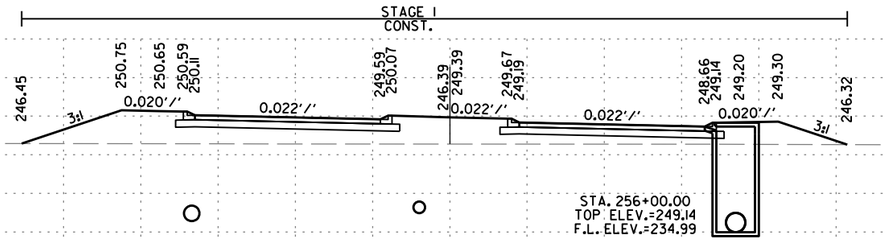


STA. 257+00 CONSTRUCT
DROP INLET ON RT.
AND 30" X 94' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 256+00 RT.
DROP INLET H = 14'-0"
TYPE MO DROP INLET = 5' DIA.
30" R.C. PIPE (CLASS III)(TYPE 3) = 94 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 94 LIN. FT.

CUT AREA 0 SQ. FT.
FILL AREA 241 SQ. FT.

257+00

CUT VOLUME 0 CU. YD.
FILL VOLUME 867 CU. YD.



STA. 256+00 CONSTRUCT
DROP INLET ON RT.
AND 30" X 94' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 255+00 RT.
DROP INLET H = 14'-2"
TYPE MO DROP INLET = 5' DIA.
30" R.C. PIPE (CLASS III)(TYPE 3) = 94 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 94 LIN. FT.

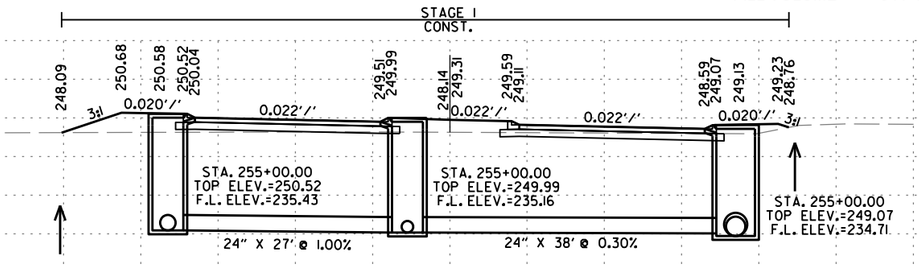
CUT AREA 0 SQ. FT.
FILL AREA 227 SQ. FT.

256+00

CUT VOLUME 39 CU. YD.
FILL VOLUME 541 CU. YD.

STA. 255+00 CONSTRUCT
DROP INLET ON LT.
AND 24" X 27' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 255+00 M.
DROP INLET H = 15'-1"
TYPE MO DROP INLET = 4' DIA.
24" R.C. PIPE (CLASS III)(TYPE 2) = 28 LIN. FT.

STA. 255+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 24" X 38' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 255+00 RT.
DROP INLET H = 14'-10"
TYPE MO DROP INLET = 4' DIA.
24" R.C. PIPE (CLASS III)(TYPE 2) = 38 LIN. FT.



STA. 255+00 CONSTRUCT
DROP INLET ON RT.
AND 36" X 52' R.C. PIPE OUTLET
CONNECT TO R.C. BOX CULVERT @ STA. 254+15 RT.
DROP INLET H = 14'-5"
TYPE MO DROP INLET = 5' DIA.
36" R.C. PIPE (CLASS III)(TYPE 3) = 52 LIN. FT.
36" SLPCCS PIPE (TYPE 2) = 52 LIN. FT.

CUT AREA 21 SQ. FT.
FILL AREA 65 SQ. FT.

255+00

CUT VOLUME 26 CU. YD.
FILL VOLUME 1906 CU. YD.

HWY. 18S/MLK JR. DR.
STA. 255+00 TO STA. 258+00

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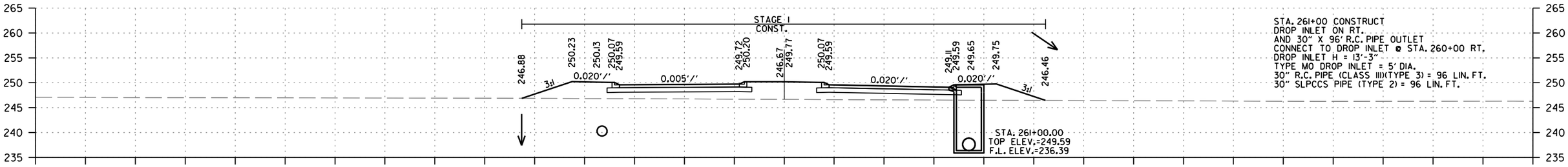
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	365	418
		CROSS SECTIONS				

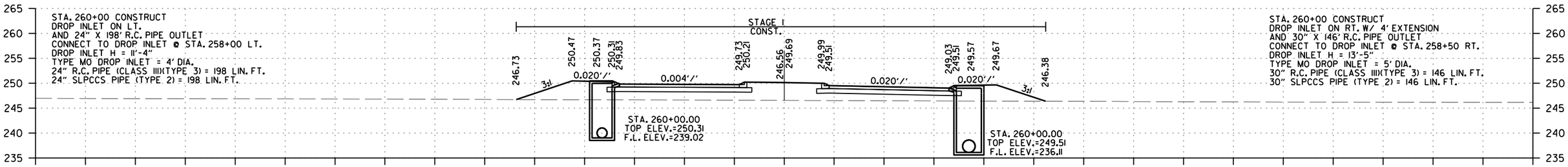
STAGE 1



CUT AREA 0 SQ. FT.
FILL AREA 206 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 791 CU. YD.

STA. 261+00 CONSTRUCT
DROP INLET ON RT.
AND 30" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 260+00 RT.
DROP INLET H = 13'-3"
TYPE MO DROP INLET = 5' DIA.
30" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

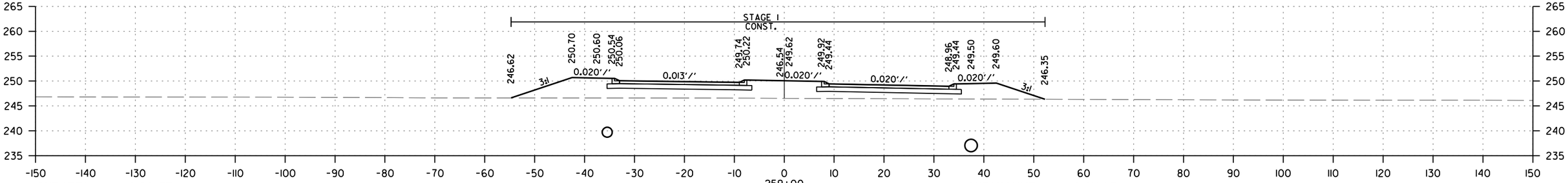


STA. 260+00 CONSTRUCT
DROP INLET ON LT.
AND 24" X 198' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 258+00 LT.
DROP INLET H = 11'-4"
TYPE MO DROP INLET = 4' DIA.
24" R.C. PIPE (CLASS III)(TYPE 3) = 198 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 198 LIN. FT.

CUT AREA 0 SQ. FT.
FILL AREA 221 SQ. FT.

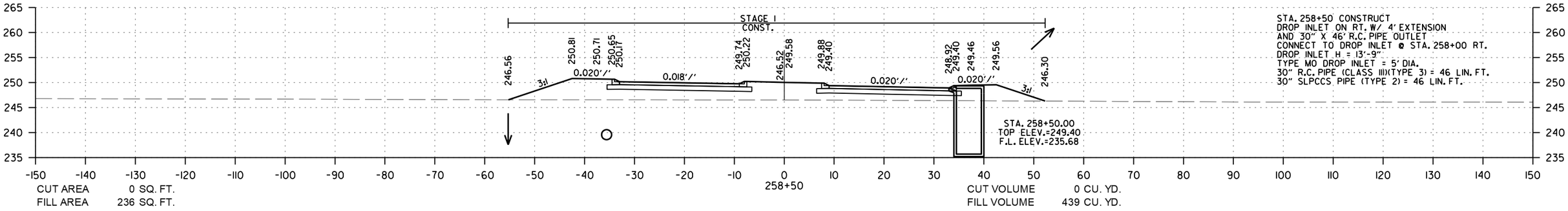
CUT VOLUME 0 CU. YD.
FILL VOLUME 833 CU. YD.

STA. 260+00 CONSTRUCT
DROP INLET ON RT. W/ 4' EXTENSION
AND 30" X 146' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 258+50 RT.
DROP INLET H = 13'-5"
TYPE MO DROP INLET = 5' DIA.
30" R.C. PIPE (CLASS III)(TYPE 3) = 146 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 146 LIN. FT.



CUT AREA 0 SQ. FT.
FILL AREA 229 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 430 CU. YD.



CUT AREA 0 SQ. FT.
FILL AREA 236 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 439 CU. YD.

STA. 258+50 CONSTRUCT
DROP INLET ON RT. W/ 4' EXTENSION
AND 30" X 46' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 258+00 RT.
DROP INLET H = 13'-9"
TYPE MO DROP INLET = 5' DIA.
30" R.C. PIPE (CLASS III)(TYPE 3) = 46 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 46 LIN. FT.

HWY. 18S/MLK JR. DR.
STA. 258+50 TO STA. 261+00

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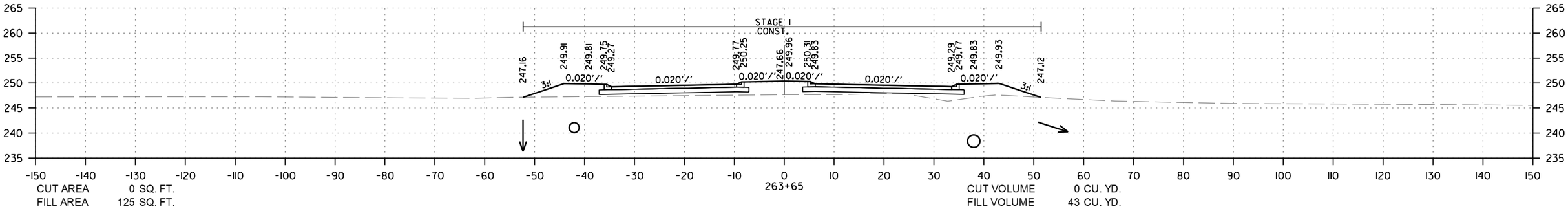
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	366	418
		CROSS SECTIONS				

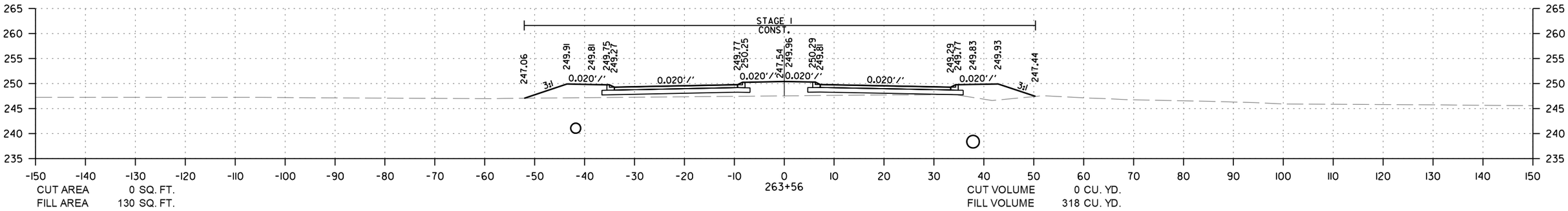
STAGE 1



CUT AREA 0 SQ. FT.
FILL AREA 125 SQ. FT.

263+65

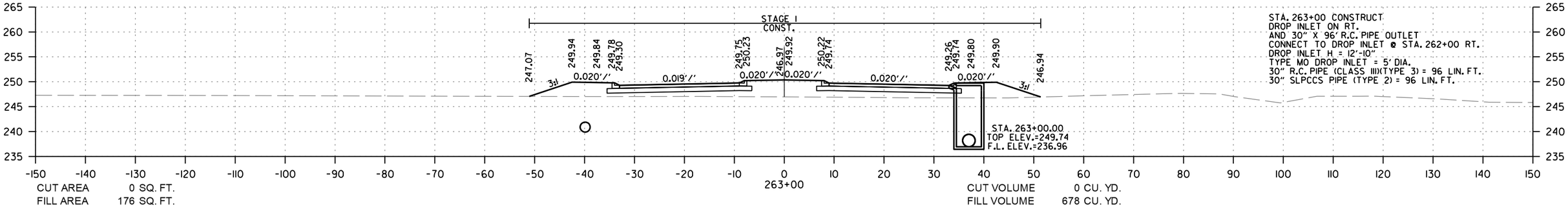
CUT VOLUME 0 CU. YD.
FILL VOLUME 43 CU. YD.



CUT AREA 0 SQ. FT.
FILL AREA 130 SQ. FT.

263+56

CUT VOLUME 0 CU. YD.
FILL VOLUME 318 CU. YD.

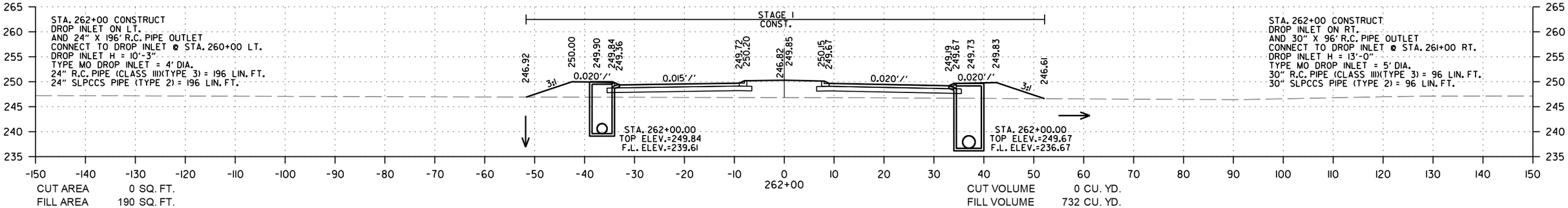


STA. 263+00 CONSTRUCT
DROP INLET ON RT.
AND 30" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 262+00 RT.
DROP INLET H = 12'-10"
TYPE MO DROP INLET = 5' DIA.
30" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

CUT AREA 0 SQ. FT.
FILL AREA 176 SQ. FT.

263+00

CUT VOLUME 0 CU. YD.
FILL VOLUME 678 CU. YD.



STA. 262+00 CONSTRUCT
DROP INLET ON LT.
AND 24" X 196' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 260+00 LT.
DROP INLET H = 10'-3"
TYPE MO DROP INLET = 4' DIA.
24" R.C. PIPE (CLASS III)(TYPE 3) = 196 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 196 LIN. FT.

STA. 262+00 CONSTRUCT
DROP INLET ON RT.
AND 30" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 261+00 RT.
DROP INLET H = 13'-0"
TYPE MO DROP INLET = 5' DIA.
30" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

CUT AREA 0 SQ. FT.
FILL AREA 190 SQ. FT.

262+00

CUT VOLUME 0 CU. YD.
FILL VOLUME 732 CU. YD.

HWY. 18S/MLK JR. DR.
STA. 262+00 TO STA. 263+65

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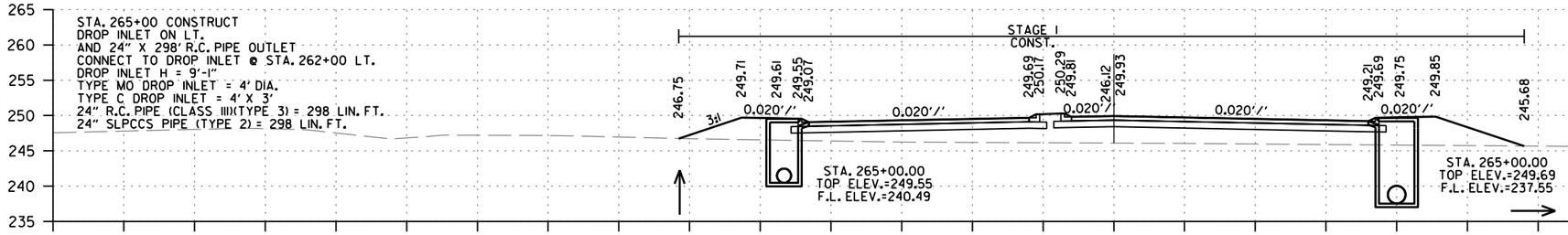
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	367	418
		CROSS SECTIONS				

STAGE 1

STA. 265+00 CONSTRUCT
DROP INLET ON LT.
AND 24" X 298' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 262+00 LT.
DROP INLET H = 9'-1"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 298 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 298 LIN. FT.

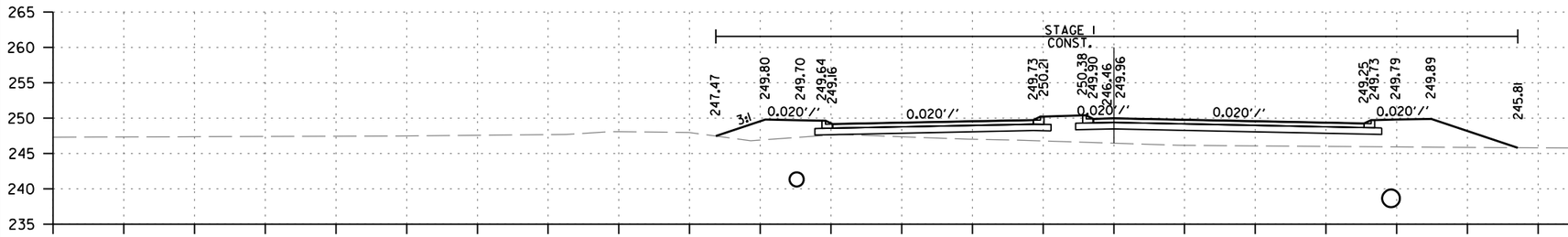


265+00
CUT AREA 0 SQ. FT.
FILL AREA 254 SQ. FT.

STAGE 1

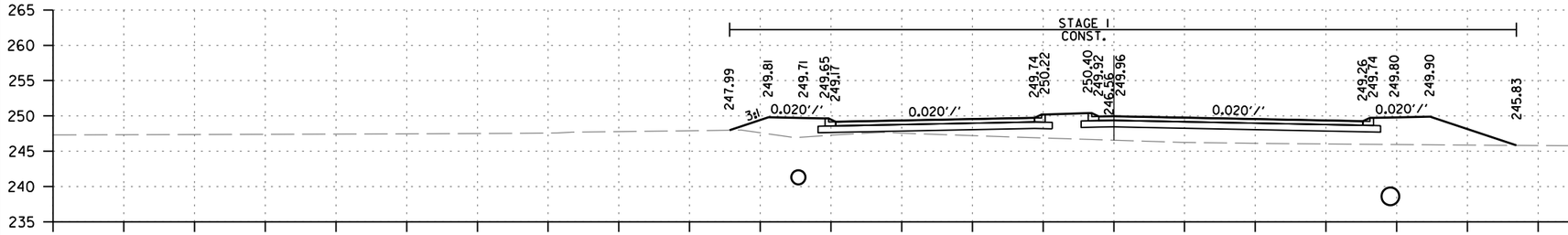
STA. 265+00 CONSTRUCT
DROP INLET ON RT.
AND 30" X 196' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 263+00 RT.
DROP INLET H = 12'-2"
TYPE MO DROP INLET = 5' DIA.
30" R.C. PIPE (CLASS III)(TYPE 3) = 196 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 196 LIN. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 452 CU. YD.



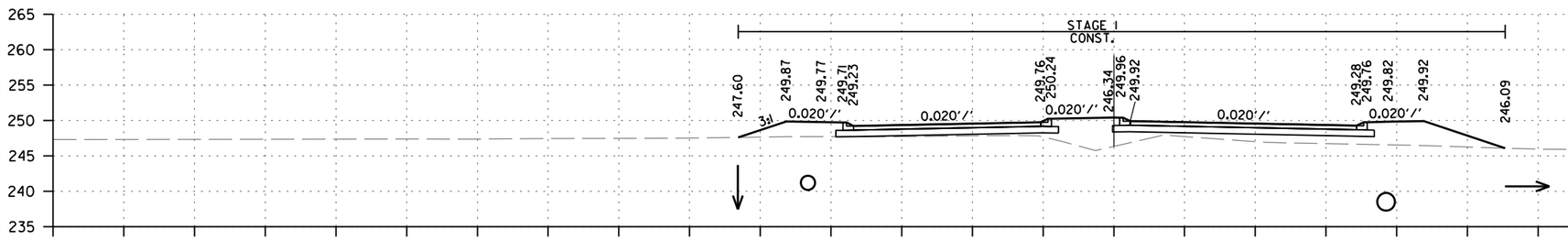
264+47
CUT AREA 0 SQ. FT.
FILL AREA 206 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 52 CU. YD.



264+40
CUT AREA 0 SQ. FT.
FILL AREA 197 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 254 CU. YD.



264+00
CUT AREA 0 SQ. FT.
FILL AREA 145 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 175 CU. YD.

HWY. 18S/MLK JR. DR.
STA. 264+00 TO STA. 265+00

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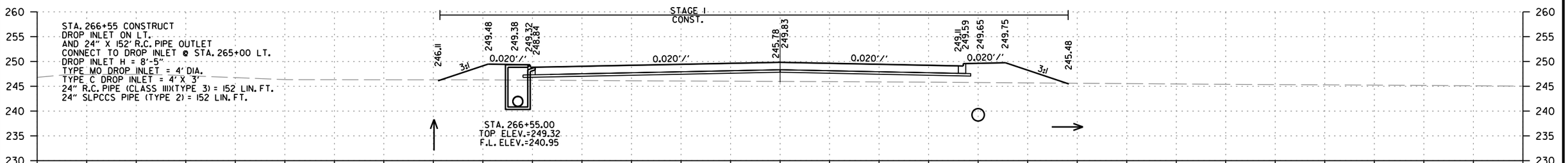
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	368	418
		CROSS SECTIONS				

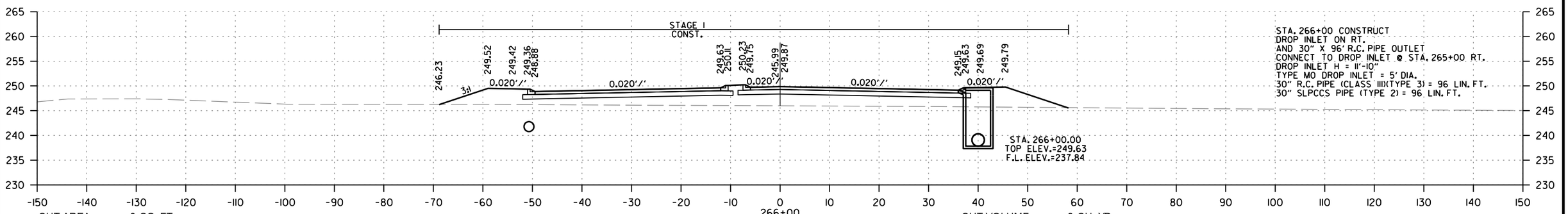
STAGE 1

STAGE 1



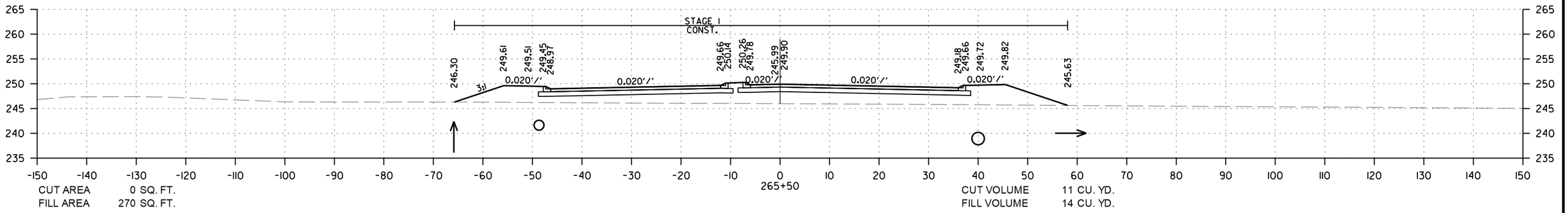
CUT AREA 0 SQ. FT.
FILL AREA 280 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 427 CU. YD.



CUT AREA 0 SQ. FT.
FILL AREA 139 SQ. FT.

CUT VOLUME 9 CU. YD.
FILL VOLUME 19 CU. YD.



CUT AREA 0 SQ. FT.
FILL AREA 270 SQ. FT.

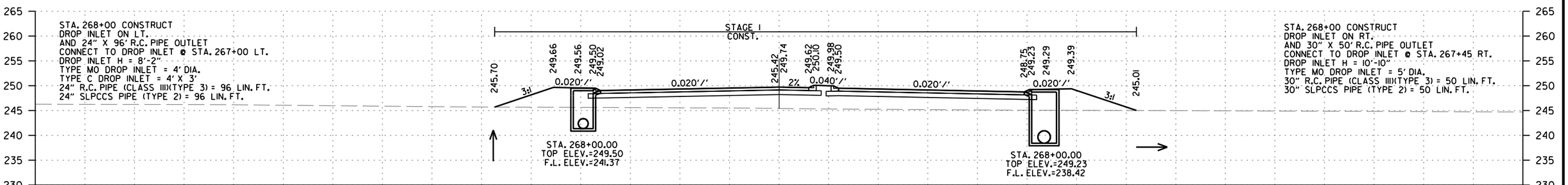
CUT VOLUME 11 CU. YD.
FILL VOLUME 14 CU. YD.

HWY. 18S/MLK JR. DR.
STA. 265+50 TO STA. 266+55

HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	369	418
		CROSS SECTIONS				

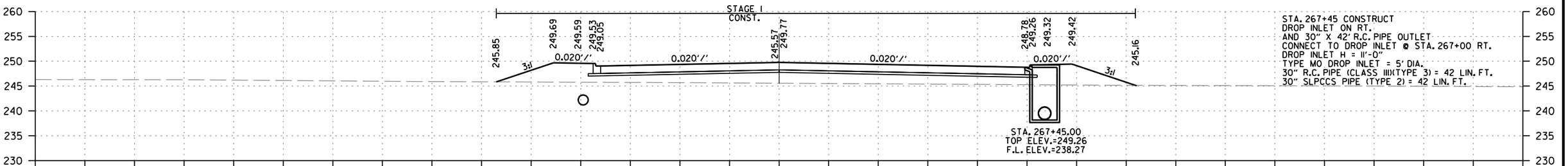
STAGE 1



CUT AREA 0 SQ. FT.
FILL AREA 335 SQ. FT.

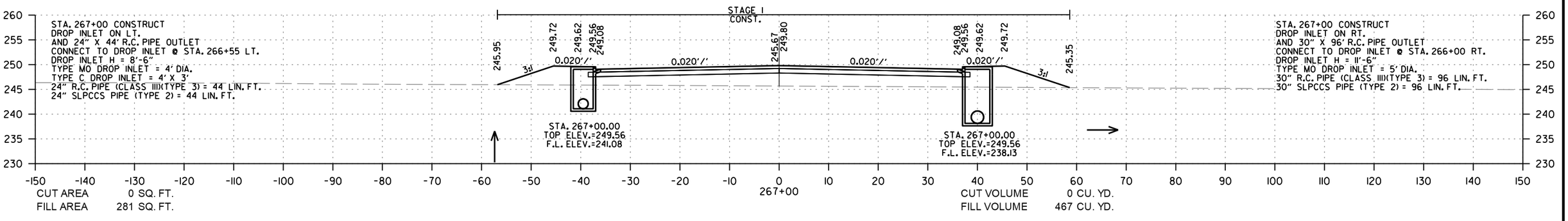
CUT VOLUME 0 CU. YD.
FILL VOLUME 651 CU. YD.

STAGE 1



CUT AREA 0 SQ. FT.
FILL AREA 304 SQ. FT.

CUT VOLUME 20 CU. YD.
FILL VOLUME 1685 CU. YD.



CUT AREA 0 SQ. FT.
FILL AREA 281 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 467 CU. YD.

HWY. 18S/MLK JR. DR.
STA. 267+00 TO STA. 268+00

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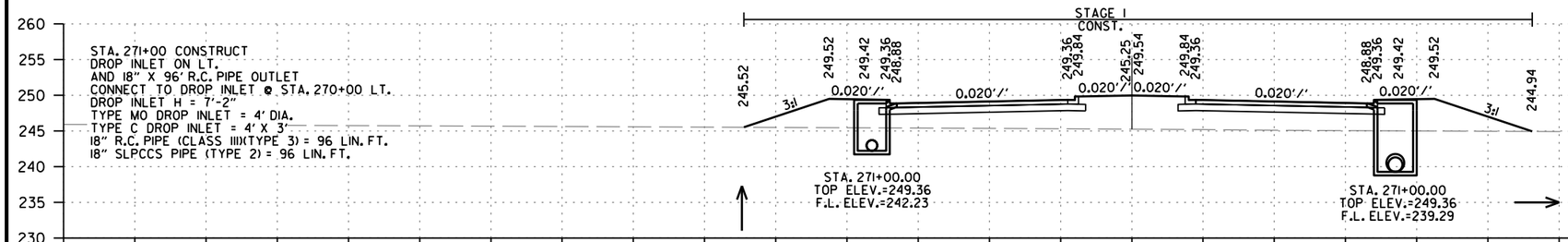
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	370	418
		CROSS SECTIONS				

STAGE 1

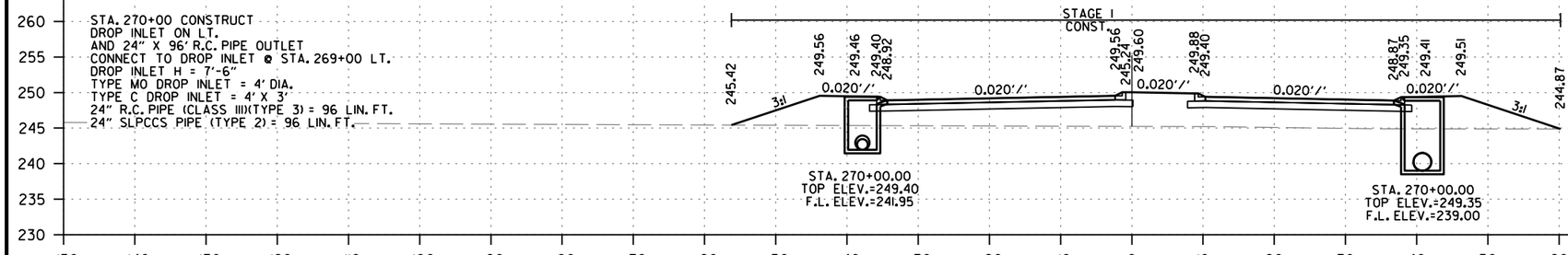
STA. 271+00 CONSTRUCT
DROP INLET ON LT.
AND 18" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 270+00 LT.
DROP INLET H = 7'-2"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.



STA. 271+00 CONSTRUCT
DROP INLET ON RT.
AND 30" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 270+00 RT.
DROP INLET H = 10'-1"
TYPE MO DROP INLET = 5' DIA.
30" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

271+00
CUT AREA 0 SQ. FT.
FILL AREA 318 SQ. FT.
CUT VOLUME 0 CU. YD.
FILL VOLUME 1201 CU. YD.

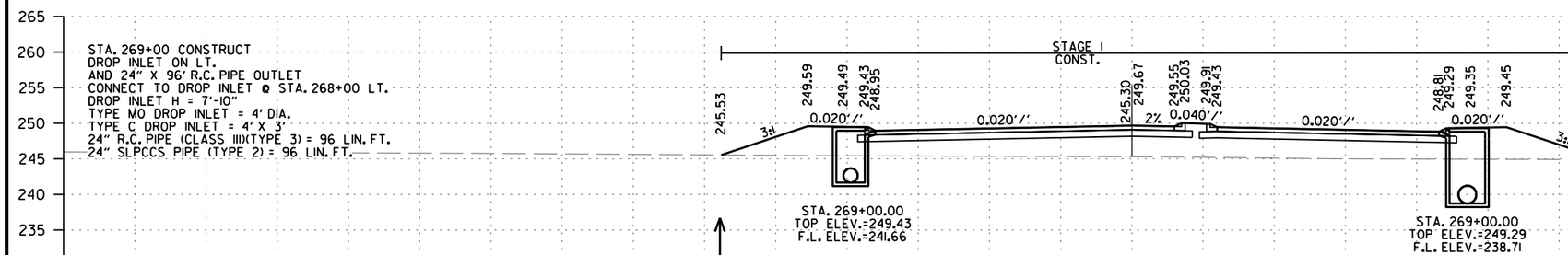
STA. 270+00 CONSTRUCT
DROP INLET ON LT.
AND 24" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 269+00 LT.
DROP INLET H = 7'-6"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.



STA. 270+00 CONSTRUCT
DROP INLET ON RT.
AND 30" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 269+00 RT.
DROP INLET H = 10'-5"
TYPE MO DROP INLET = 5' DIA.
30" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

270+00
CUT AREA 0 SQ. FT.
FILL AREA 331 SQ. FT.
CUT VOLUME 0 CU. YD.
FILL VOLUME 1232 CU. YD.

STA. 269+00 CONSTRUCT
DROP INLET ON LT.
AND 24" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 268+00 LT.
DROP INLET H = 7'-10"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.



STA. 269+00 CONSTRUCT
DROP INLET ON RT.
AND 30" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 268+00 RT.
DROP INLET H = 10'-7"
TYPE MO DROP INLET = 5' DIA.
30" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

269+00
CUT AREA 0 SQ. FT.
FILL AREA 335 SQ. FT.
CUT VOLUME 0 CU. YD.
FILL VOLUME 1240 CU. YD.

HWY. 18S/MLK JR. DR.
STA. 269+00 TO STA. 271+00

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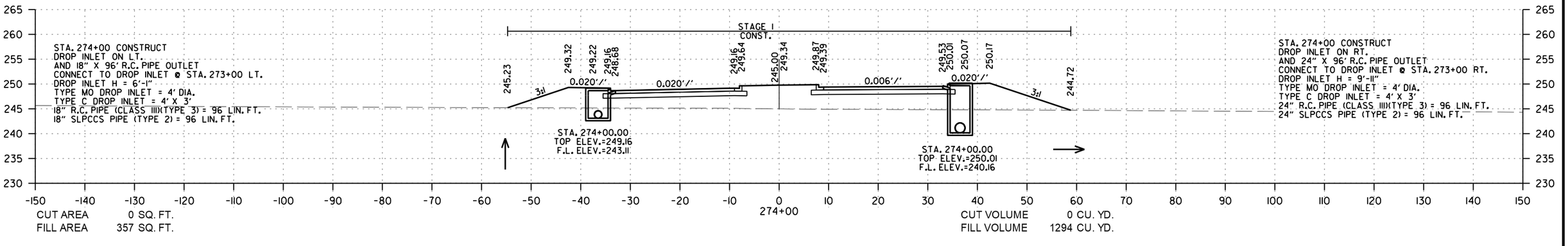
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	371	418
		CROSS SECTIONS				

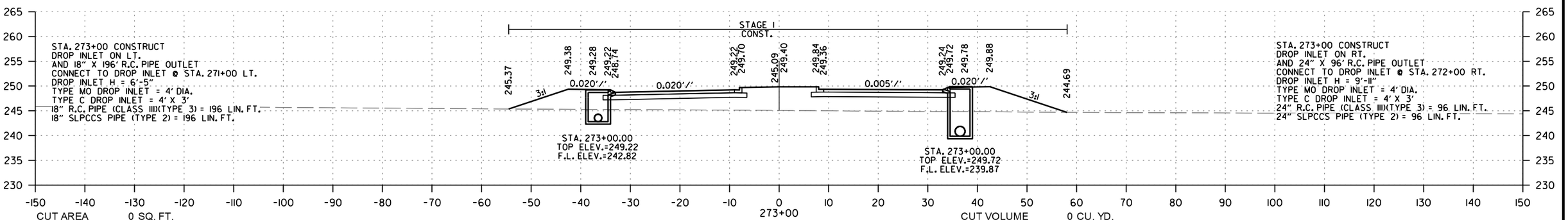
STAGE 1

STAGE 1



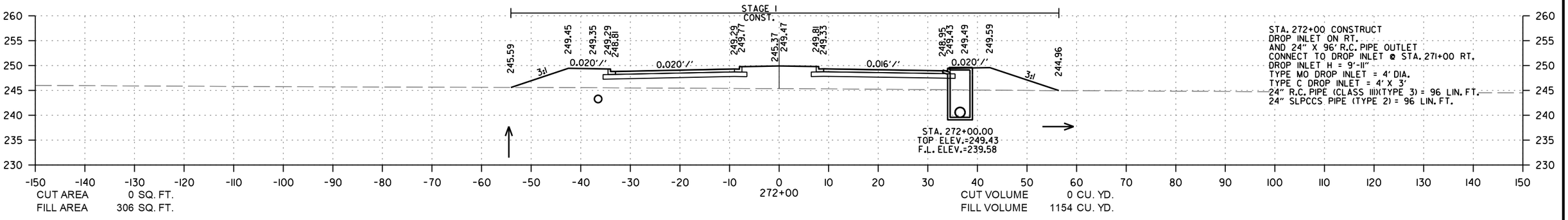
CUT AREA 0 SQ. FT.
FILL AREA 357 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 1294 CU. YD.



CUT AREA 0 SQ. FT.
FILL AREA 342 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 1199 CU. YD.



CUT AREA 0 SQ. FT.
FILL AREA 306 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 1154 CU. YD.

HWY. 18S/MLK JR. DR.
STA. 272+00 TO STA. 274+00

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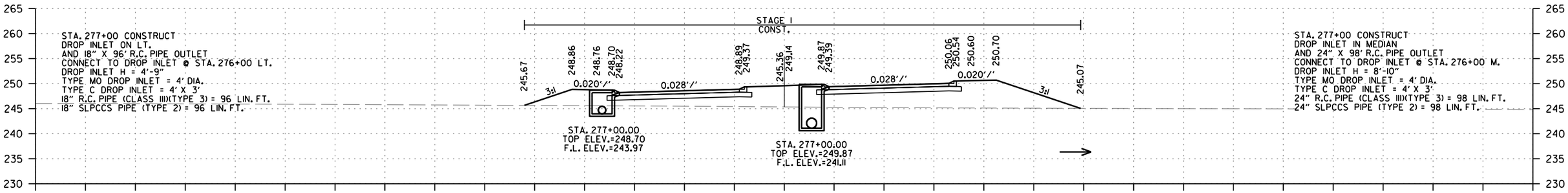
R100657.DGN

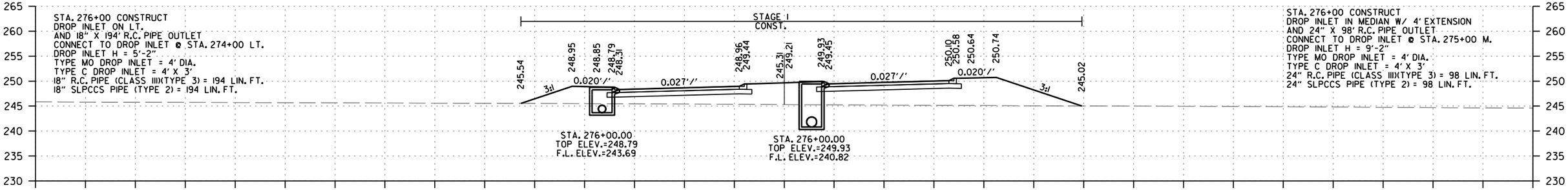
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	372	418
		CROSS SECTIONS				

STAGE 1



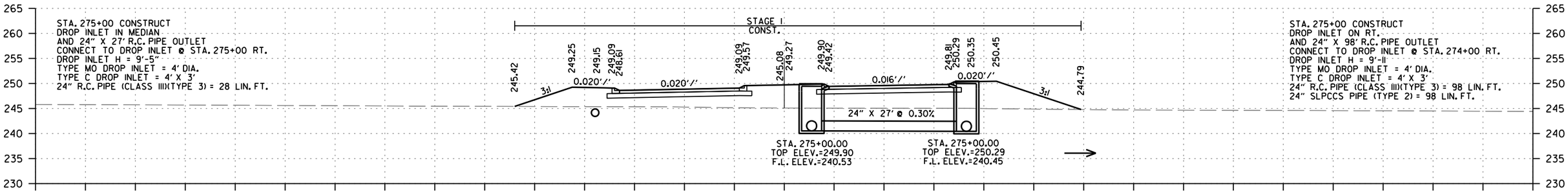
CUT AREA 0 SQ. FT.
FILL AREA 315 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 1191 CU. YD.



CUT AREA 0 SQ. FT.
FILL AREA 329 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 1252 CU. YD.



CUT AREA 0 SQ. FT.
FILL AREA 347 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 1305 CU. YD.

HWY. 18S/MLK JR. DR.
STA. 275+00 TO STA. 277+00

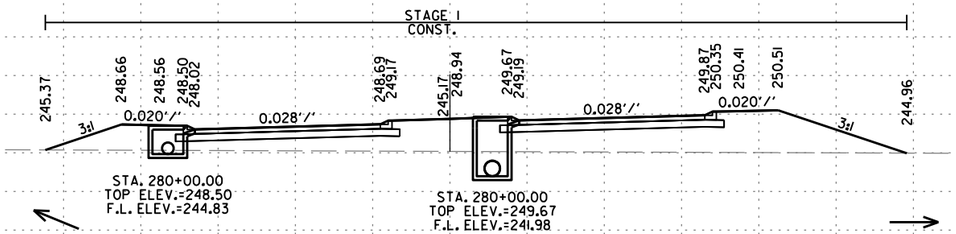
H139710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	373	418
		CROSS SECTIONS				

STAGE 1

STAGE 1

STA. 280+00 CONSTRUCT
DROP INLET ON LT.
AND 18" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 279+00 LT.
DROP INLET H = 3'-8"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.



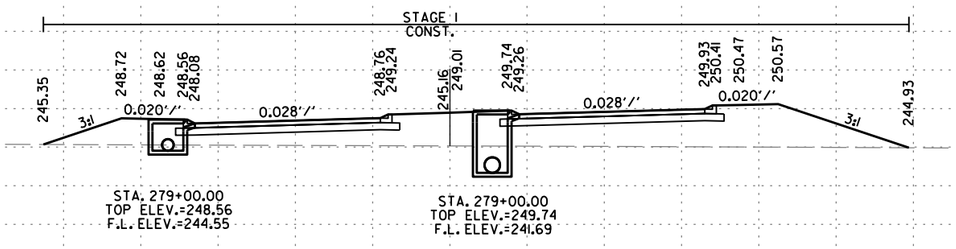
STA. 280+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 24" X 98' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 279+00 M.
DROP INLET H = 7'-9"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 98 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.

CUT AREA 0 SQ. FT.
FILL AREA 0 SQ. FT.

280+00

CUT VOLUME 0 CU. YD.
FILL VOLUME 597 CU. YD.

STA. 279+00 CONSTRUCT
DROP INLET ON LT.
AND 18" X 194' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 277+00 LT.
DROP INLET H = 4'-0"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 194 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 194 LIN. FT.

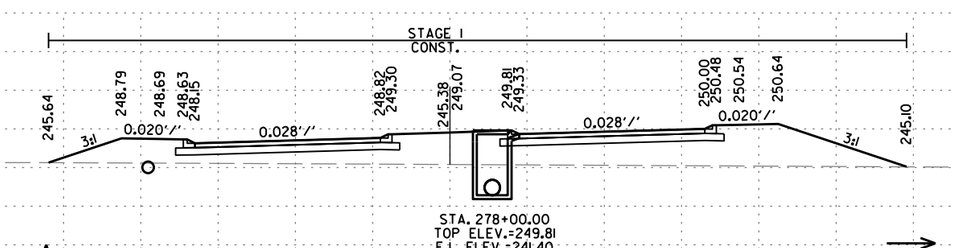


STA. 279+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 24" X 98' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 278+00 M.
DROP INLET H = 8'-1"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 98 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.

CUT AREA 0 SQ. FT.
FILL AREA 322 SQ. FT.

279+00

CUT VOLUME 0 CU. YD.
FILL VOLUME 1163 CU. YD.



STA. 278+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 24" X 98' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 277+00 M.
DROP INLET H = 8'-5"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 98 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.

CUT AREA 0 SQ. FT.
FILL AREA 306 SQ. FT.

278+00

CUT VOLUME 0 CU. YD.
FILL VOLUME 1149 CU. YD.

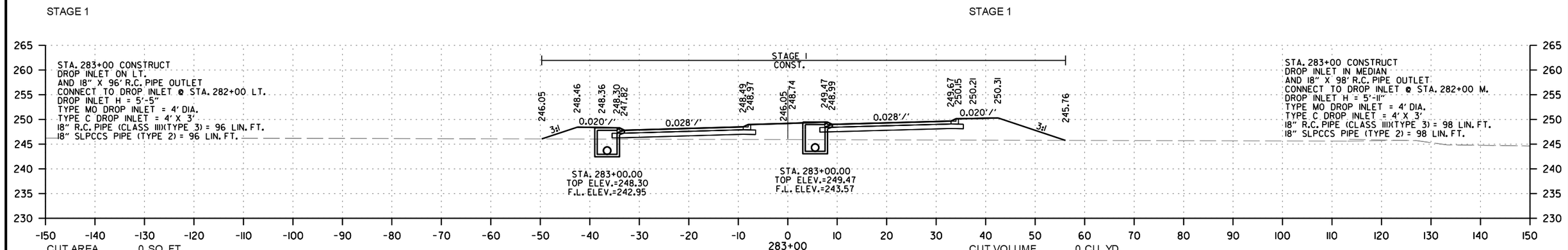
HWY. 18S/MLK JR. DR.
STA. 278+00 TO STA. 280+00

HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	374	418
		CROSS SECTIONS				

STAGE 1

STA. 283+00 CONSTRUCT
DROP INLET ON LT.
AND 18" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 282+00 LT.
DROP INLET H = 5'-5"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III(TYPE 3) = 96 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

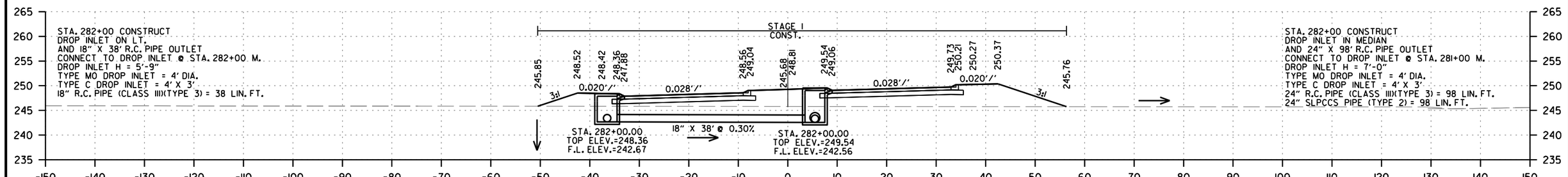


CUT AREA 0 SQ. FT.
FILL AREA 0 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 0 CU. YD.

STA. 283+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 18" X 98' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 282+00 M.
DROP INLET H = 5'-11"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III(TYPE 3) = 98 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.

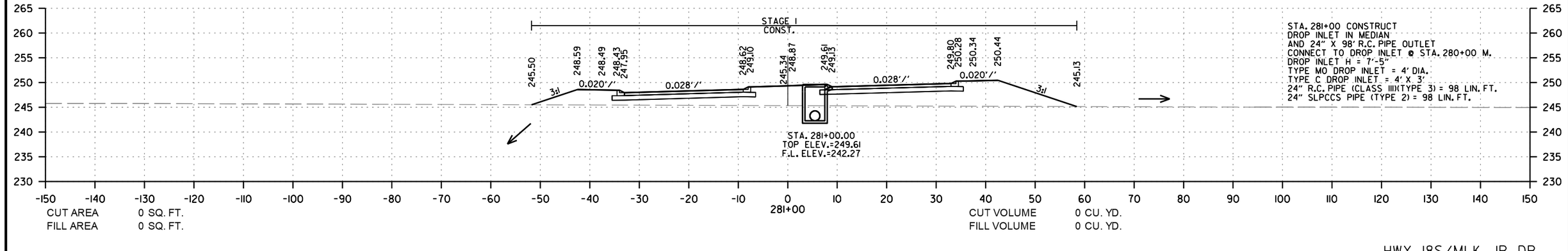
STA. 282+00 CONSTRUCT
DROP INLET ON LT.
AND 18" X 38' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 282+00 M.
DROP INLET H = 5'-9"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III(TYPE 3) = 38 LIN. FT.



CUT AREA 0 SQ. FT.
FILL AREA 0 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 0 CU. YD.

STA. 282+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 24" X 98' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 281+00 M.
DROP INLET H = 7'-0"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III(TYPE 3) = 98 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.



CUT AREA 0 SQ. FT.
FILL AREA 0 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 0 CU. YD.

STA. 281+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 24" X 98' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 280+00 M.
DROP INLET H = 7'-5"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III(TYPE 3) = 98 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.

HWY. 18S/MLK JR. DR.
STA. 281+00 TO STA. 283+00

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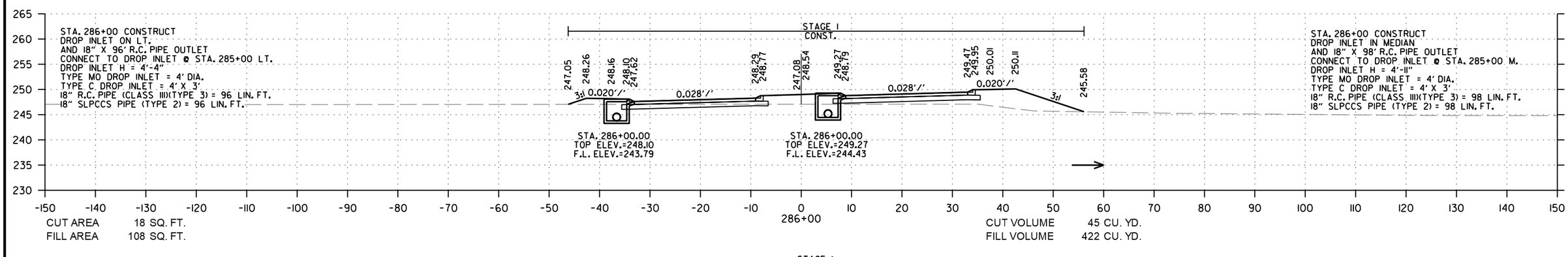
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	375	418
		CROSS SECTIONS				

STAGE 1

STA. 286+00 CONSTRUCT
DROP INLET ON LT.
AND 18" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 285+00 LT.
DROP INLET H = 4'-4"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III(TYPE 3) = 96 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.



CUT AREA 18 SQ. FT.
FILL AREA 108 SQ. FT.

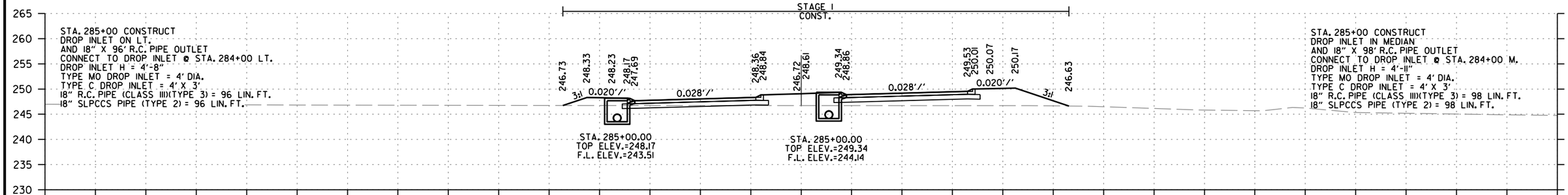
286+00

CUT VOLUME 45 CU. YD.
FILL VOLUME 422 CU. YD.

STAGE 1

STA. 286+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 18" X 98' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 285+00 M.
DROP INLET H = 4'-11"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III(TYPE 3) = 98 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.

STA. 285+00 CONSTRUCT
DROP INLET ON LT.
AND 18" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 284+00 LT.
DROP INLET H = 4'-8"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III(TYPE 3) = 96 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

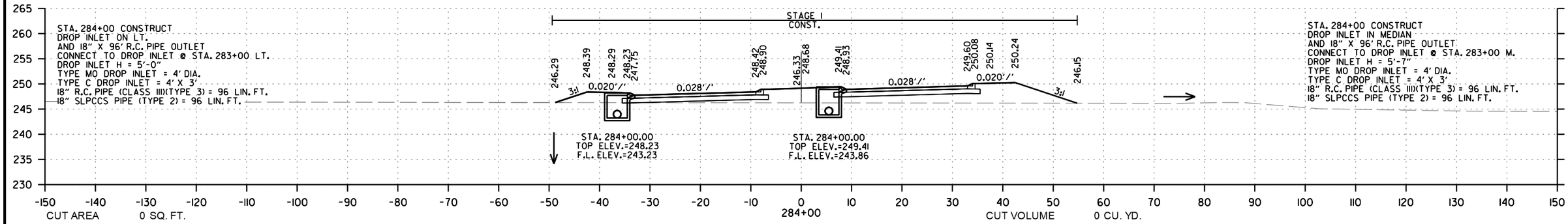


CUT AREA 7 SQ. FT.
FILL AREA 120 SQ. FT.

285+00

CUT VOLUME 12 CU. YD.
FILL VOLUME 224 CU. YD.

STA. 284+00 CONSTRUCT
DROP INLET ON LT.
AND 18" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 283+00 LT.
DROP INLET H = 5'-0"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III(TYPE 3) = 96 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.



CUT AREA 0 SQ. FT.
FILL AREA 0 SQ. FT.

284+00

CUT VOLUME 0 CU. YD.
FILL VOLUME 1 CU. YD.

STA. 284+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 18" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 283+00 M.
DROP INLET H = 5'-7"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III(TYPE 3) = 96 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

HWY. 18S/MLK JR. DR.
STA. 284+00 TO STA. 286+00

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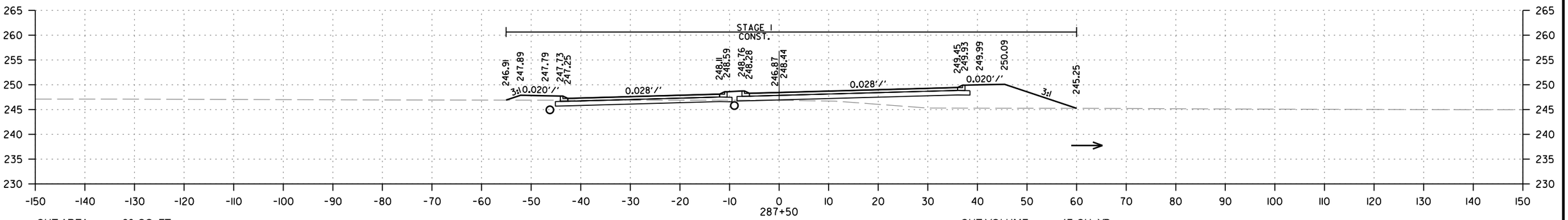
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	376	418
		CROSS SECTIONS				

STAGE 1

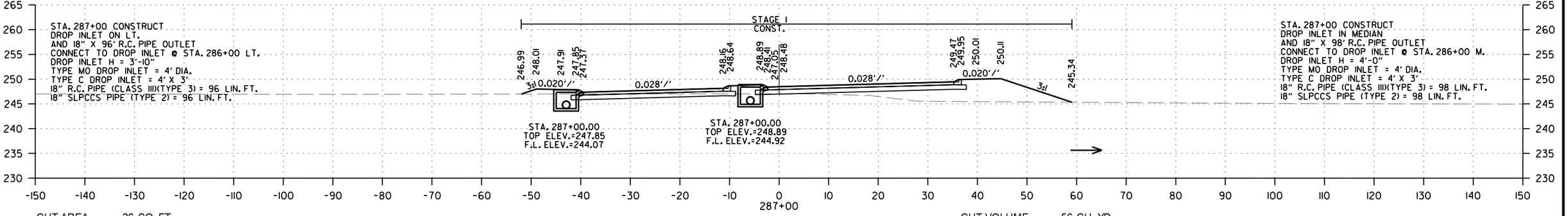


CUT AREA 26 SQ. FT.
FILL AREA 136 SQ. FT.

CUT VOLUME 47 CU. YD.
FILL VOLUME 245 CU. YD.

STAGE 1

STA. 287+00 CONSTRUCT
DROP INLET ON LT.
AND 18" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 286+00 LT.
DROP INLET H = 3'-10"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.



STA. 287+00.00
TOP ELEV.=247.85
F.L. ELEV.=244.07

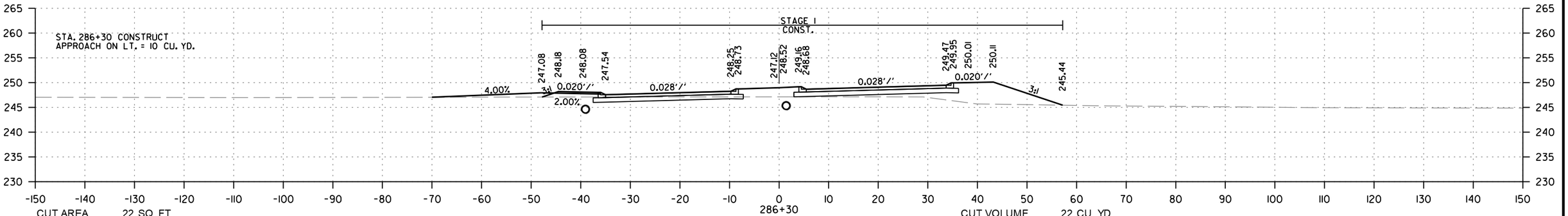
STA. 287+00.00
TOP ELEV.=248.89
F.L. ELEV.=244.92

STA. 287+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 18" X 98' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 286+00 M.
DROP INLET H = 4'-0"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 98 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.

CUT AREA 26 SQ. FT.
FILL AREA 128 SQ. FT.

CUT VOLUME 56 CU. YD.
FILL VOLUME 306 CU. YD.

STA. 286+30 CONSTRUCT
APPROACH ON LT. = 10 CU. YD.



CUT AREA 22 SQ. FT.
FILL AREA 111 SQ. FT.

CUT VOLUME 22 CU. YD.
FILL VOLUME 121 CU. YD.

HWY. 18S/MLK JR. DR.
STA. 286+30 TO STA. 287+50

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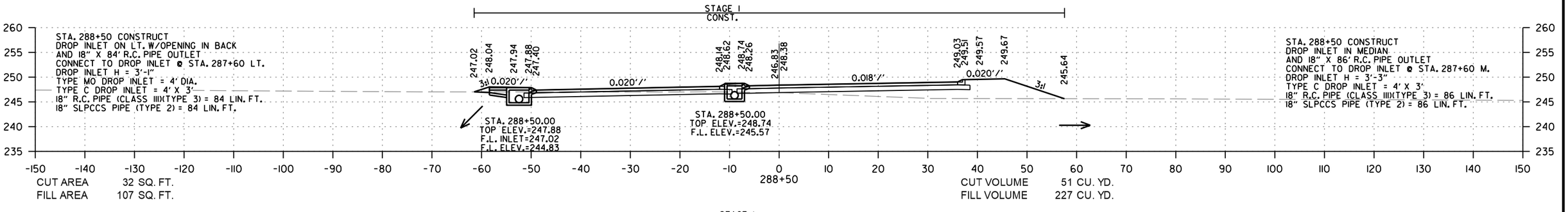
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	377	418
		CROSS SECTIONS				

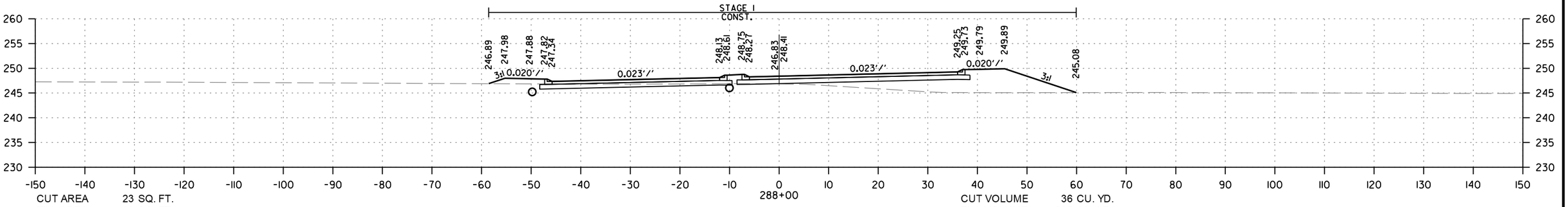
STAGE 1



CUT AREA 32 SQ. FT.
FILL AREA 107 SQ. FT.

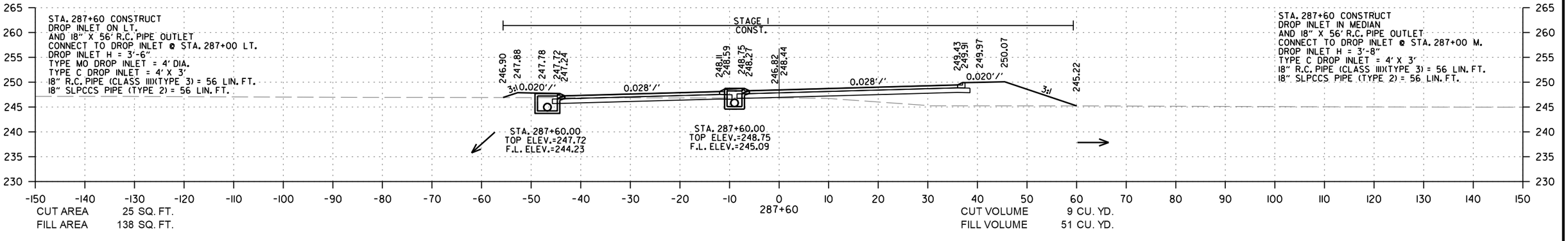
CUT VOLUME 51 CU. YD.
FILL VOLUME 227 CU. YD.

STAGE 1



CUT AREA 23 SQ. FT.
FILL AREA 139 SQ. FT.

CUT VOLUME 36 CU. YD.
FILL VOLUME 205 CU. YD.



CUT AREA 25 SQ. FT.
FILL AREA 138 SQ. FT.

CUT VOLUME 9 CU. YD.
FILL VOLUME 51 CU. YD.

HWY. 18S/MLK JR. DR.
STA. 287+60 TO STA. 288+50

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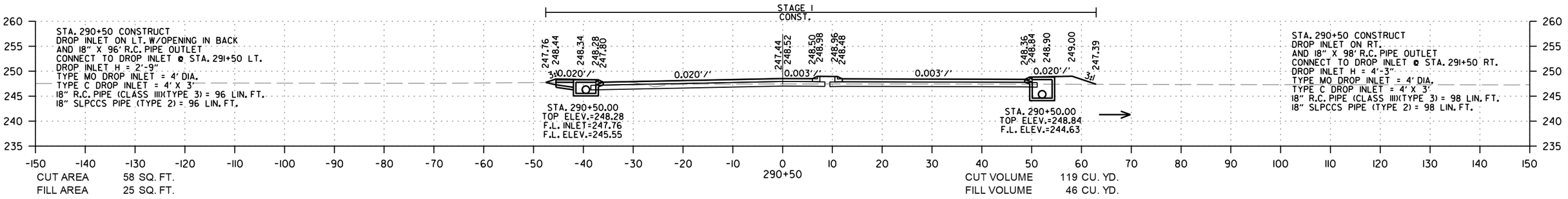
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	378	418
		CROSS SECTIONS				

STAGE 1

STA. 290+50 CONSTRUCT
DROP INLET ON LT. W/OPENING IN BACK
AND 18" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 291+50 LT.
DROP INLET H = 2'-9"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

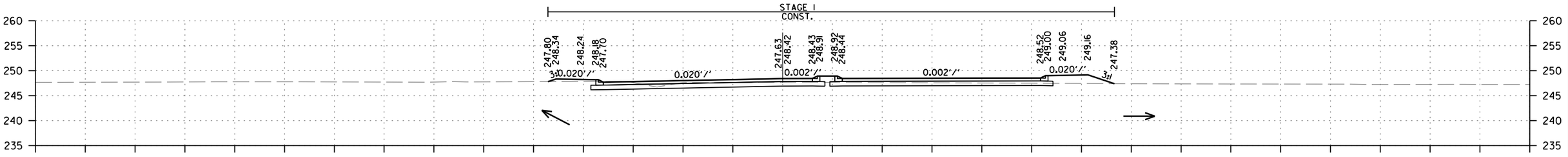


CUT AREA 58 SQ. FT.
FILL AREA 25 SQ. FT.

CUT VOLUME 119 CU. YD.
FILL VOLUME 46 CU. YD.

STAGE 1

STA. 290+50 CONSTRUCT
DROP INLET ON RT.
AND 18" X 98' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 291+50 RT.
DROP INLET H = 4'-3"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 98 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.

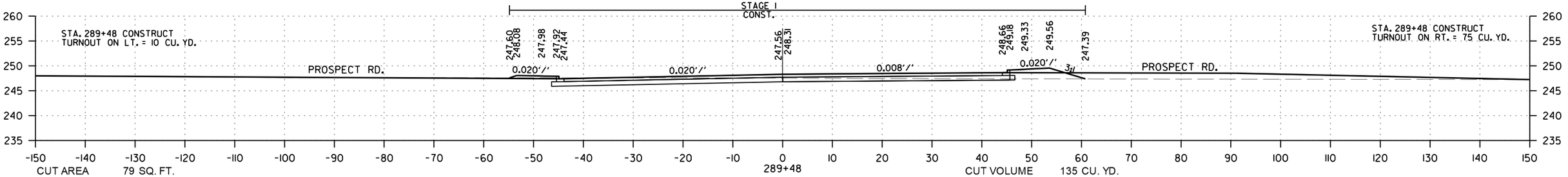


CUT AREA 71 SQ. FT.
FILL AREA 25 SQ. FT.

CUT VOLUME 145 CU. YD.
FILL VOLUME 49 CU. YD.

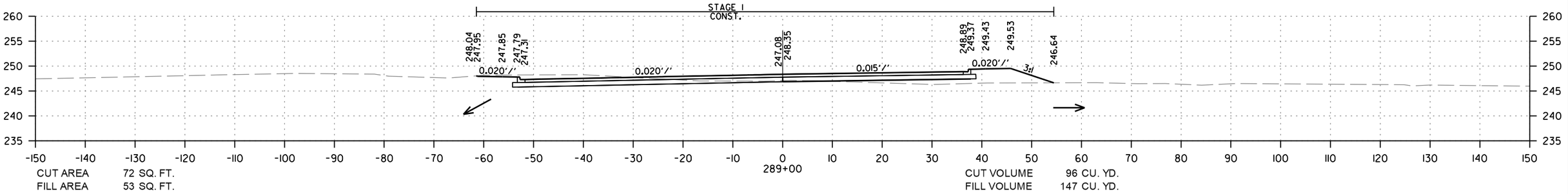
STA. 289+48 CONSTRUCT
TURNOUT ON LT. = 10 CU. YD.

STA. 289+48 CONSTRUCT
TURNOUT ON RT. = 75 CU. YD.



CUT AREA 79 SQ. FT.
FILL AREA 26 SQ. FT.

CUT VOLUME 135 CU. YD.
FILL VOLUME 70 CU. YD.



CUT AREA 72 SQ. FT.
FILL AREA 53 SQ. FT.

CUT VOLUME 96 CU. YD.
FILL VOLUME 147 CU. YD.

HWY. 18S/MLK JR. DR.
STA. 289+00 TO STA. 290+50

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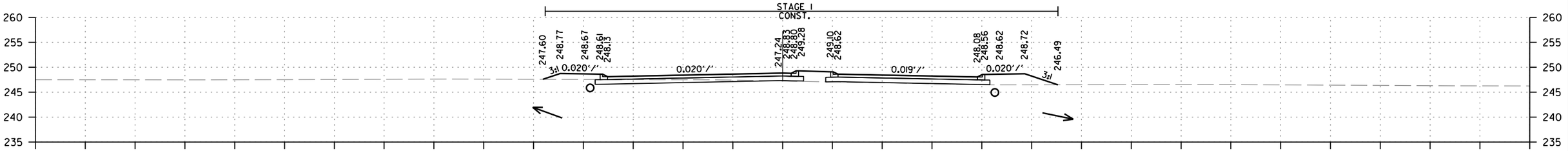
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	379	418
		CROSS SECTIONS				

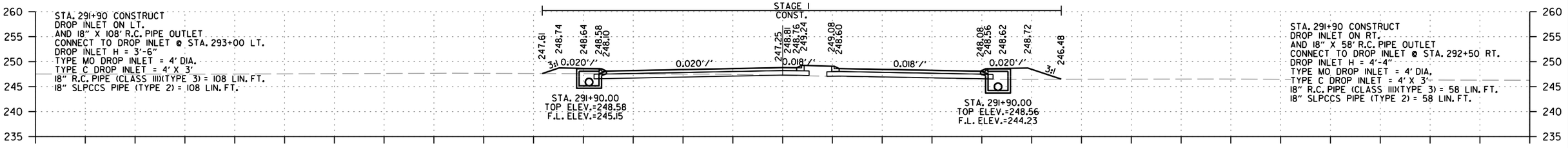
STAGE 1



CUT AREA 19 SQ. FT.
FILL AREA 49 SQ. FT.

CUT VOLUME 7 CU. YD.
FILL VOLUME 18 CU. YD.

STA. 291+90 CONSTRUCT
DROP INLET ON LT.
AND 18" X 108' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 293+00 LT.
DROP INLET H = 3'-6"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 108 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 108 LIN. FT.



STA. 291+90.00
TOP ELEV.=248.58
F.L. ELEV.=245.15

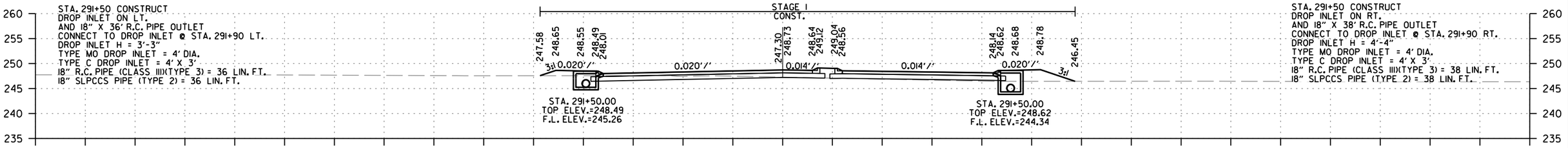
STA. 291+90.00
TOP ELEV.=248.56
F.L. ELEV.=244.23

CUT AREA 21 SQ. FT.
FILL AREA 46 SQ. FT.

CUT VOLUME 35 CU. YD.
FILL VOLUME 65 CU. YD.

STA. 291+90 CONSTRUCT
DROP INLET ON RT.
AND 18" X 58' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 292+50 RT.
DROP INLET H = 4'-4"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 58 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 58 LIN. FT.

STA. 291+50 CONSTRUCT
DROP INLET ON LT.
AND 18" X 36' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 291+90 LT.
DROP INLET H = 3'-3"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 36 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 36 LIN. FT.



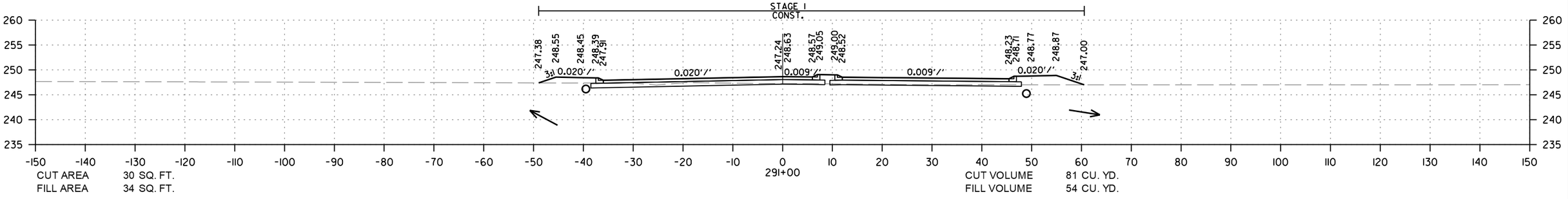
STA. 291+50.00
TOP ELEV.=248.49
F.L. ELEV.=245.26

STA. 291+50.00
TOP ELEV.=248.62
F.L. ELEV.=244.34

CUT AREA 26 SQ. FT.
FILL AREA 42 SQ. FT.

CUT VOLUME 52 CU. YD.
FILL VOLUME 70 CU. YD.

STA. 291+50 CONSTRUCT
DROP INLET ON RT.
AND 18" X 38' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 291+90 RT.
DROP INLET H = 4'-4"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 38 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 38 LIN. FT.



CUT AREA 30 SQ. FT.
FILL AREA 34 SQ. FT.

CUT VOLUME 81 CU. YD.
FILL VOLUME 54 CU. YD.

HWY. 18S/MLK JR. DR.
STA. 291+00 TO STA. 292+00

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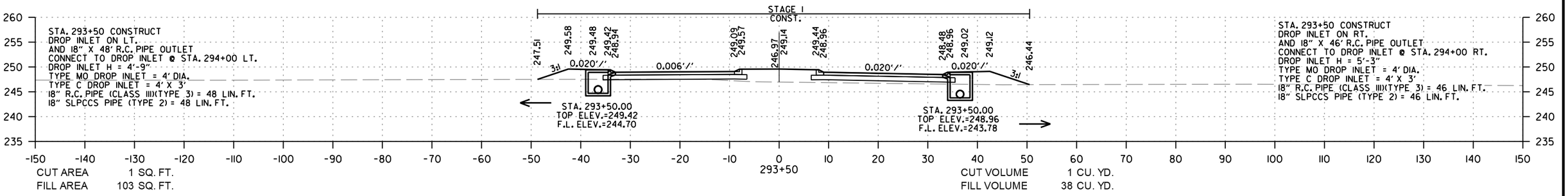
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	380	418
		CROSS SECTIONS				

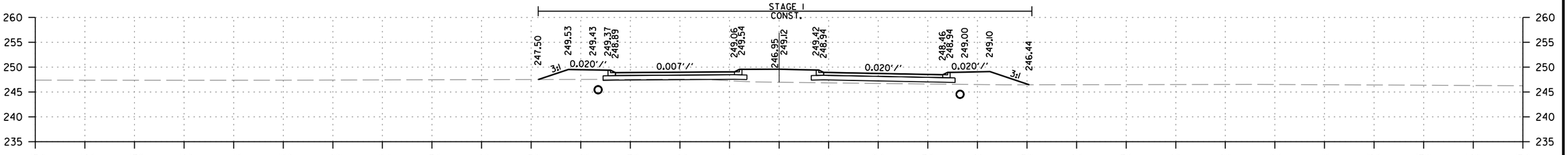
STAGE 1

STAGE 1



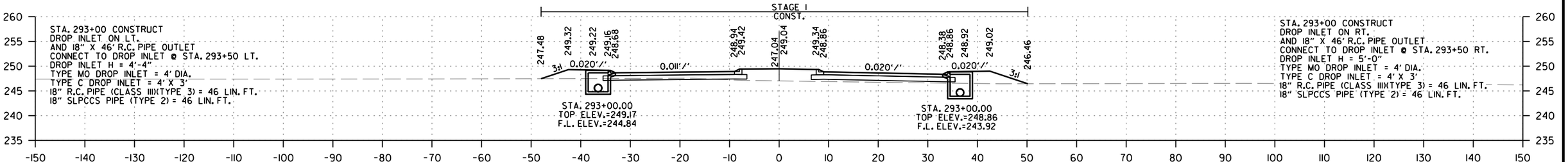
CUT AREA 1 SQ. FT.
FILL AREA 103 SQ. FT.

CUT VOLUME 1 CU. YD.
FILL VOLUME 38 CU. YD.



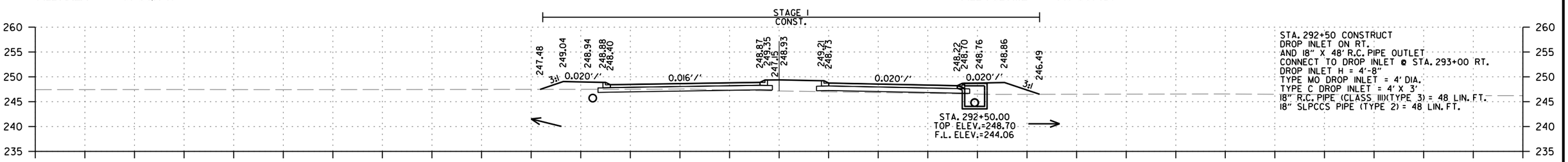
CUT AREA 2 SQ. FT.
FILL AREA 102 SQ. FT.

CUT VOLUME 6 CU. YD.
FILL VOLUME 143 CU. YD.



CUT AREA 6 SQ. FT.
FILL AREA 91 SQ. FT.

CUT VOLUME 16 CU. YD.
FILL VOLUME 149 CU. YD.



CUT AREA 11 SQ. FT.
FILL AREA 69 SQ. FT.

CUT VOLUME 28 CU. YD.
FILL VOLUME 109 CU. YD.

HWY. 18S/MLK JR. DR.
STA. 292+50 TO STA. 293+50

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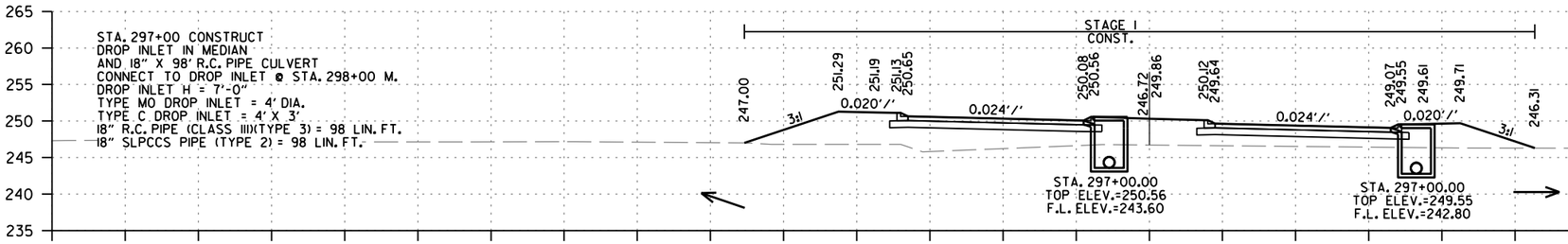
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	381	418
		CROSS SECTIONS				

STAGE 1

STA. 297+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 18" X 98' R.C. PIPE CULVERT
CONNECT TO DROP INLET @ STA. 298+00 M.
DROP INLET H = 7'-0"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 98 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.



CUT AREA 0 SQ. FT.
FILL AREA 264 SQ. FT.

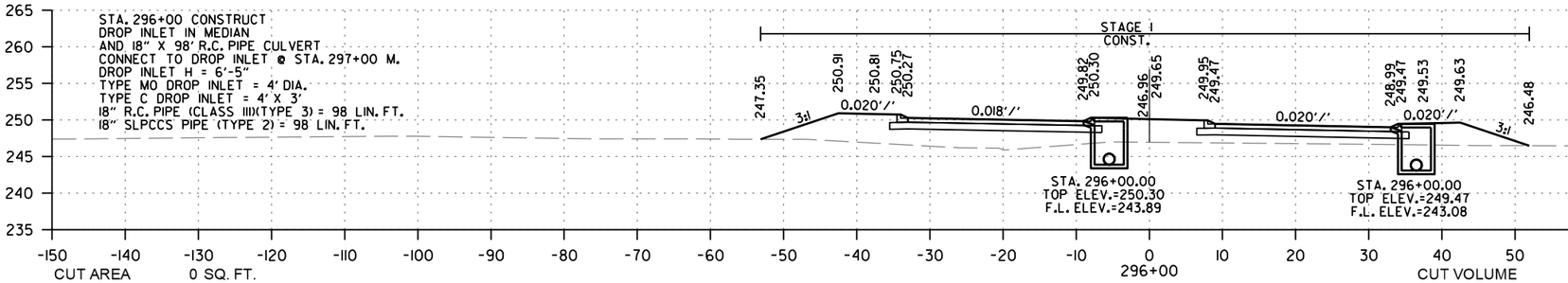
297+00

CUT VOLUME 0 CU. YD.
FILL VOLUME 897 CU. YD.

STAGE 1

STA. 297+00 CONSTRUCT
DROP INLET ON RT.
AND 18" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 298+00 RT.
DROP INLET H = 6'-9"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 296+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 18" X 98' R.C. PIPE CULVERT
CONNECT TO DROP INLET @ STA. 297+00 M.
DROP INLET H = 6'-5"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 98 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.



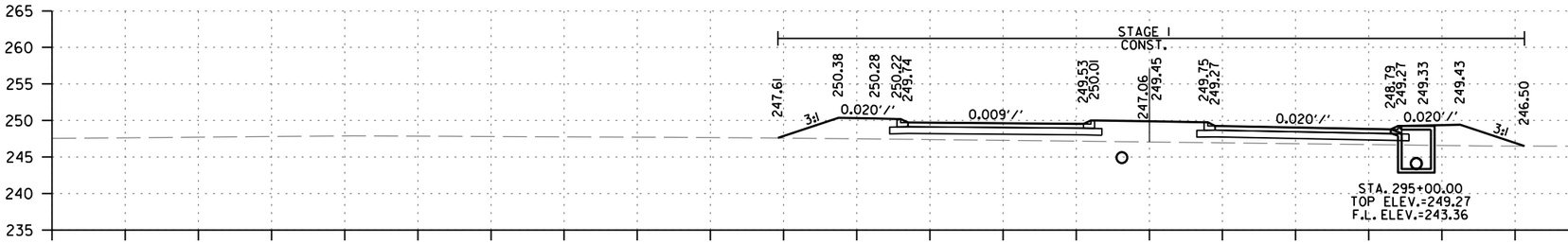
CUT AREA 0 SQ. FT.
FILL AREA 220 SQ. FT.

296+00

CUT VOLUME 0 CU. YD.
FILL VOLUME 685 CU. YD.

STA. 296+00 CONSTRUCT
DROP INLET ON RT.
AND 18" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 297+00 RT.
DROP INLET H = 6'-5"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 295+00 CONSTRUCT
DROP INLET ON RT.
AND 18" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 296+00 RT.
DROP INLET H = 5'-11"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.



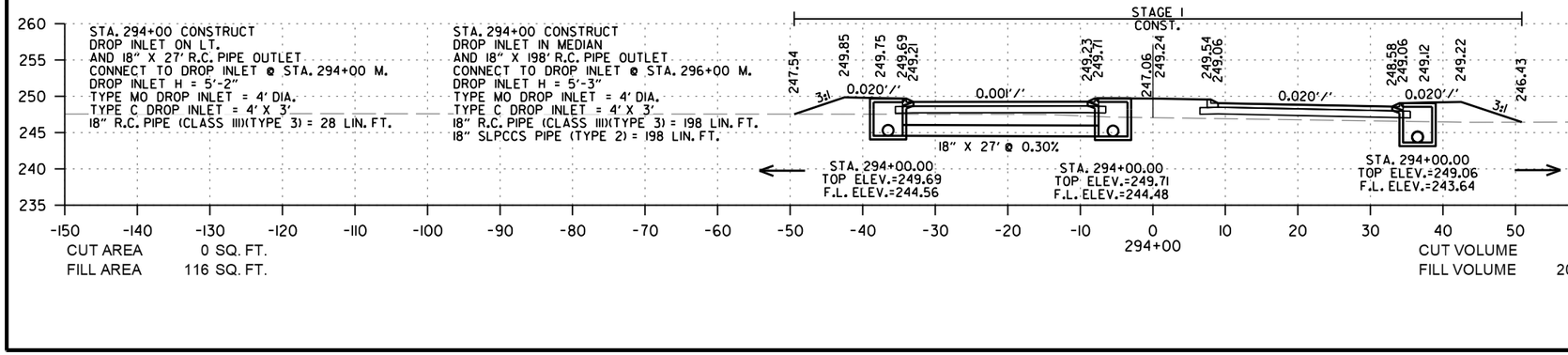
CUT AREA 0 SQ. FT.
FILL AREA 150 SQ. FT.

295+00

CUT VOLUME 0 CU. YD.
FILL VOLUME 0 CU. YD.

STA. 294+00 CONSTRUCT
DROP INLET ON LT.
AND 18" X 27' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 294+00 M.
DROP INLET H = 5'-2"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 28 LIN. FT.

STA. 294+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 18" X 198' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 296+00 M.
DROP INLET H = 5'-3"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 198 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 198 LIN. FT.



CUT AREA 0 SQ. FT.
FILL AREA 116 SQ. FT.

294+00

CUT VOLUME 1 CU. YD.
FILL VOLUME 204 CU. YD.

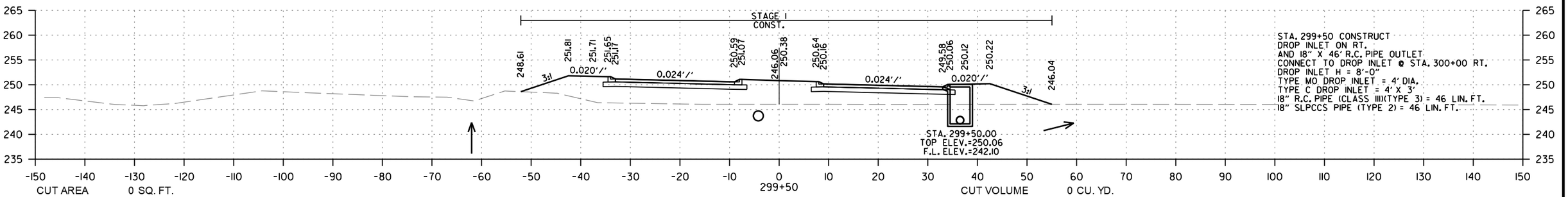
STA. 294+00 CONSTRUCT
DROP INLET ON RT.
AND 18" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 295+00 RT.
DROP INLET H = 5'-6"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

HWY. 18S/MLK JR. DR.
STA. 294+00 TO STA. 297+00

HT39710 5/6/2022
R100657.DGN

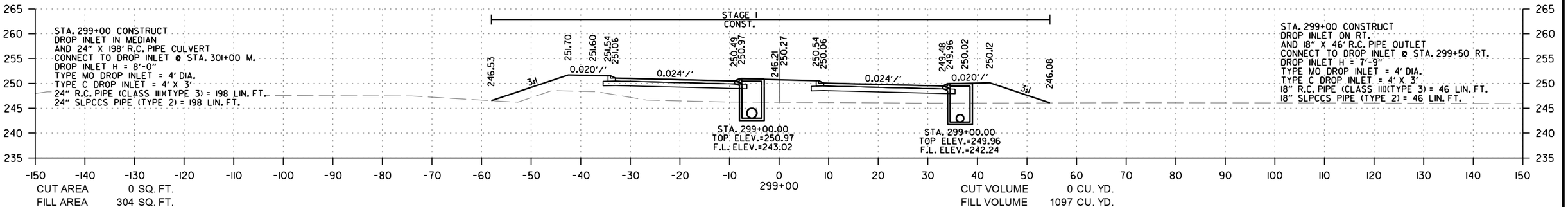
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	382	418
		CROSS SECTIONS				

STAGE 1



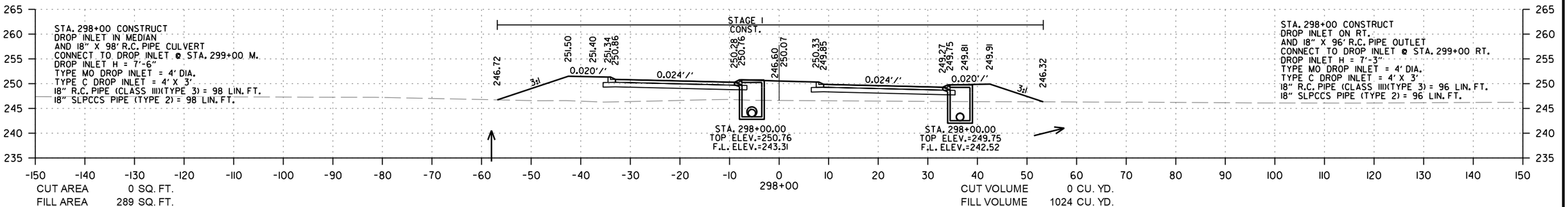
CUT AREA 0 SQ. FT.
FILL AREA 333 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 590 CU. YD.



CUT AREA 0 SQ. FT.
FILL AREA 304 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 1097 CU. YD.



CUT AREA 0 SQ. FT.
FILL AREA 289 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 1024 CU. YD.

HWY. 18S/MLK JR. DR.
STA. 298+00 TO STA. 299+50

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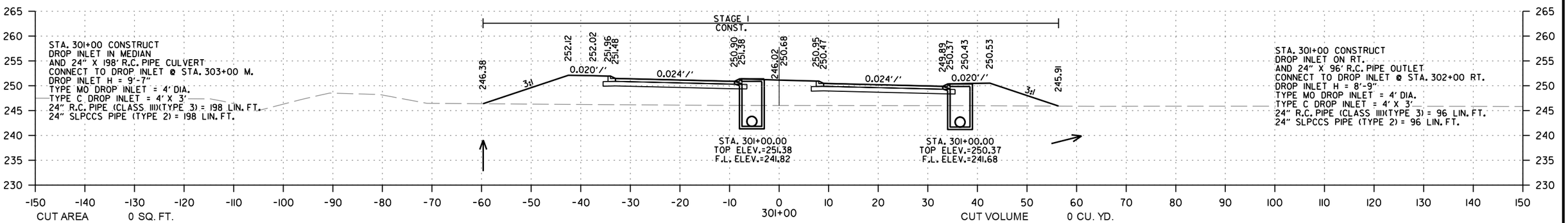
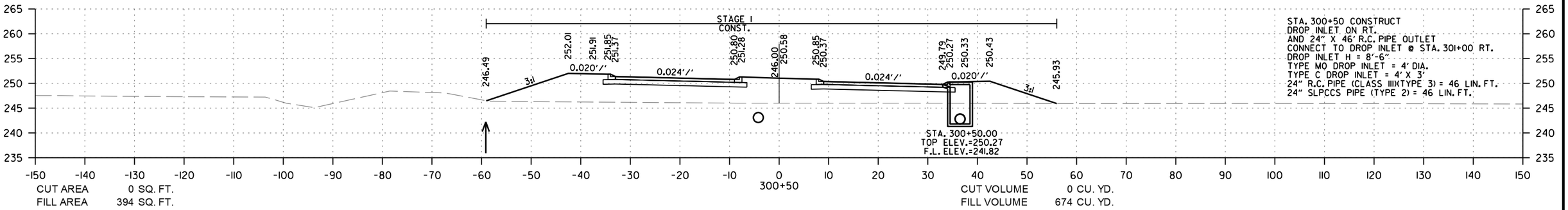
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	383	418
		CROSS SECTIONS				

STAGE 1



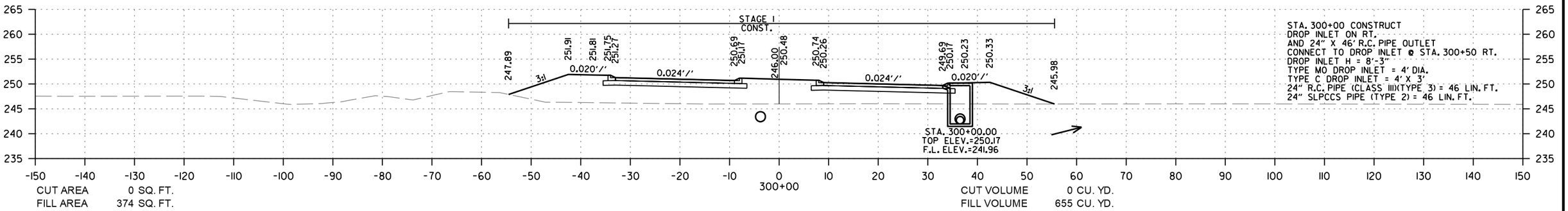
CUT AREA 0 SQ. FT.
FILL AREA 407 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 723 CU. YD.



CUT AREA 0 SQ. FT.
FILL AREA 394 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 674 CU. YD.



CUT AREA 0 SQ. FT.
FILL AREA 374 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 655 CU. YD.

HWY. 18S/MLK JR. DR.
STA. 300+00 TO STA. 301+00

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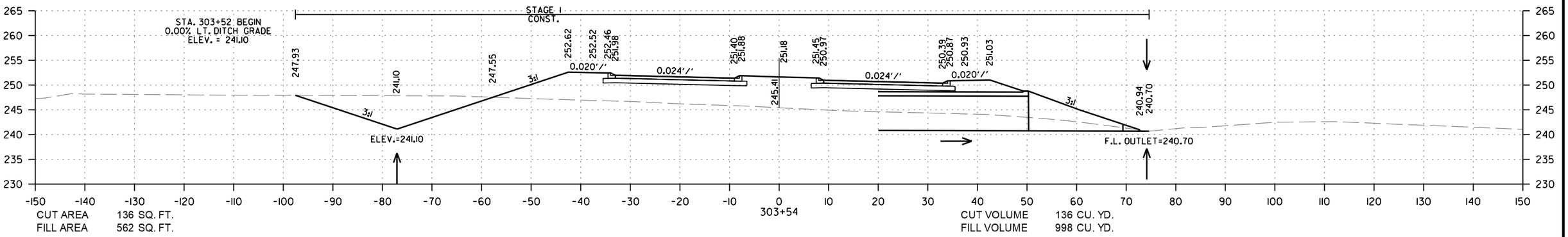
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	384	418
		CROSS SECTIONS				

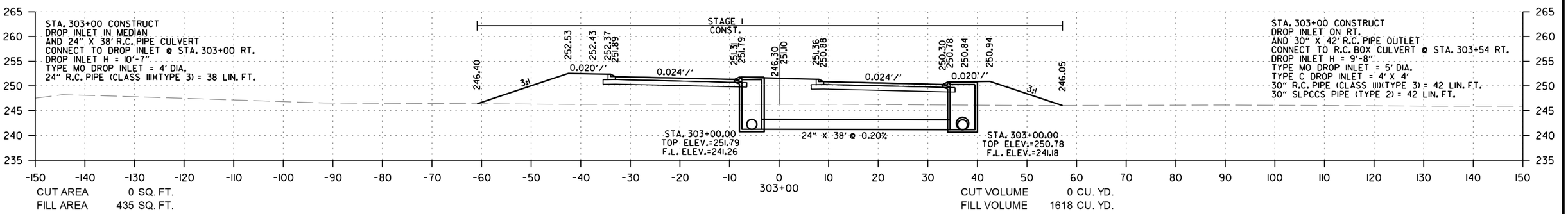
STAGE 1



CUT AREA 136 SQ. FT.
FILL AREA 562 SQ. FT.

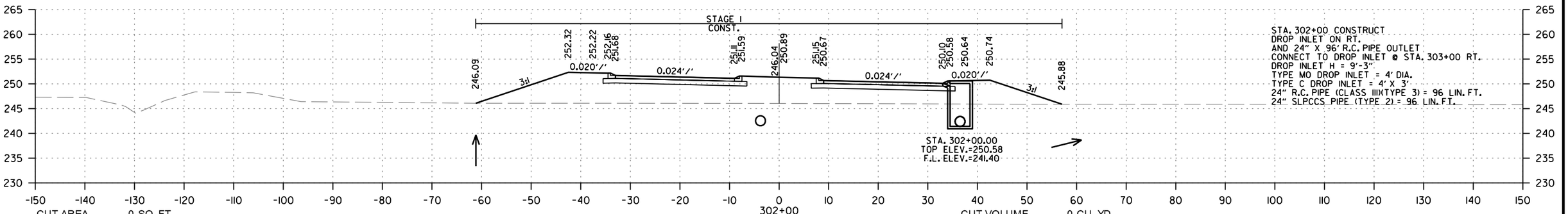
CUT VOLUME 136 CU. YD.
FILL VOLUME 998 CU. YD.

STAGE 1



CUT AREA 0 SQ. FT.
FILL AREA 435 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 1618 CU. YD.



CUT AREA 0 SQ. FT.
FILL AREA 438 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 1565 CU. YD.

HWY. 18S/MLK JR. DR.
STA. 302+00 TO STA. 303+54

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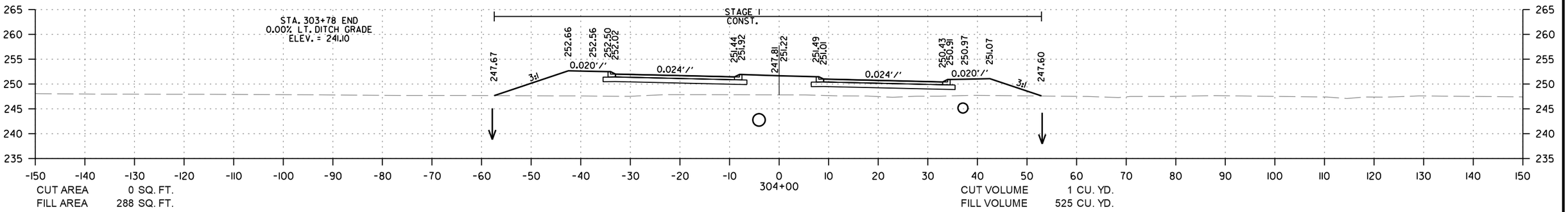
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	385	418
		CROSS SECTIONS				

STAGE 1

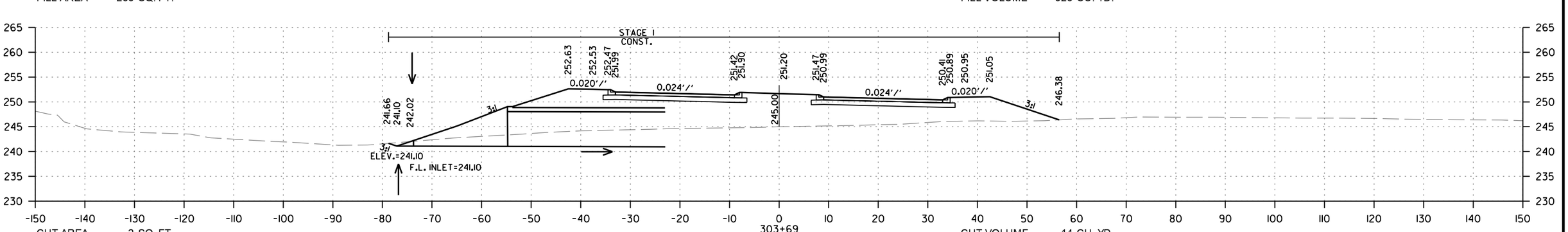


CUT AREA 0 SQ. FT.
FILL AREA 288 SQ. FT.

304+00

STAGE 1

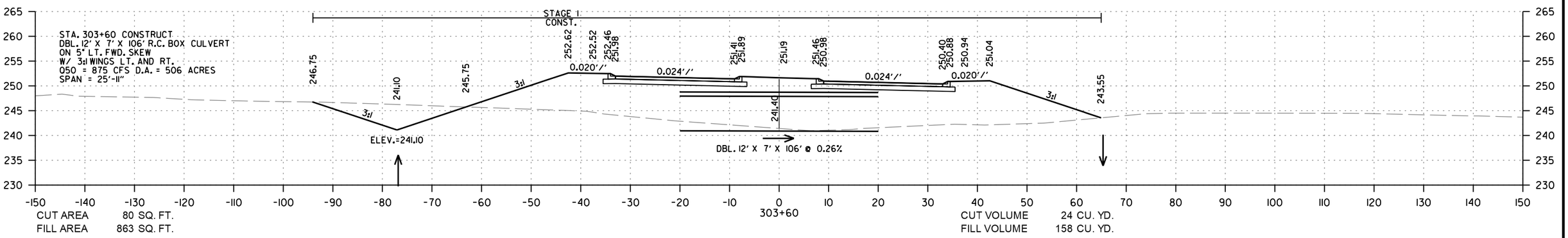
CUT VOLUME 1 CU. YD.
FILL VOLUME 525 CU. YD.



CUT AREA 2 SQ. FT.
FILL AREA 627 SQ. FT.

303+69

CUT VOLUME 14 CU. YD.
FILL VOLUME 248 CU. YD.



CUT AREA 80 SQ. FT.
FILL AREA 863 SQ. FT.

303+60

CUT VOLUME 24 CU. YD.
FILL VOLUME 158 CU. YD.

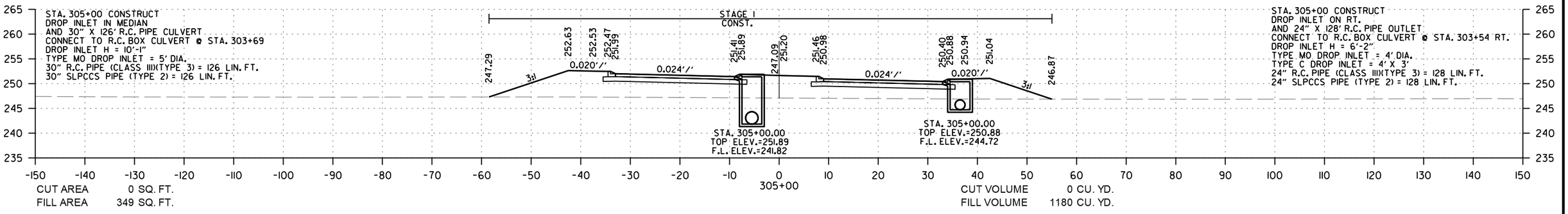
HWY. 18S/MLK JR. DR.
STA. 303+60 TO STA. 304+00

H139710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	386	418
		CROSS SECTIONS				

STAGE 1

STAGE 1



CUT AREA 0 SQ. FT.
FILL AREA 349 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 1180 CU. YD.

HWY. 18S/MLK JR. DR.
STA. 305+00 TO STA. 305+00

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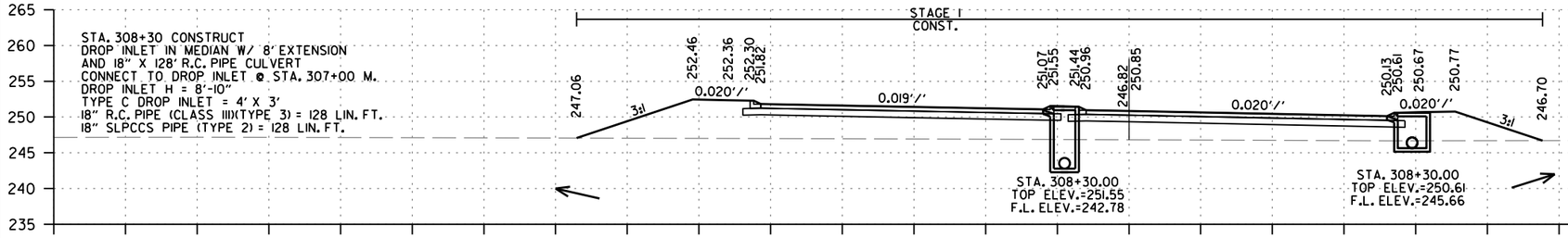
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	387	418
		CROSS SECTIONS				

STAGE 1

STA. 308+30 CONSTRUCT
DROP INLET IN MEDIAN W/ 8' EXTENSION
AND 18" X 128' R.C. PIPE CULVERT
CONNECT TO DROP INLET @ STA. 307+00 M.
DROP INLET H = 8'-10"
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 128 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 128 LIN. FT.



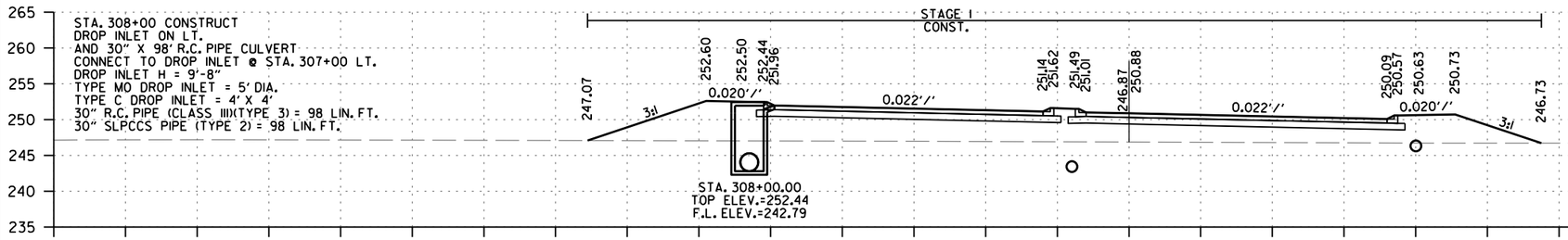
CUT AREA 0 SQ. FT.
FILL AREA 385 SQ. FT.

STAGE 1

STA. 308+30 CONSTRUCT
DROP INLET ON RT.
AND 18" X 126' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 307+00 RT.
DROP INLET H = 5'-0"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 126 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 126 LIN. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 426 CU. YD.

STA. 308+00 CONSTRUCT
DROP INLET ON LT.
AND 30" X 98' R.C. PIPE CULVERT
CONNECT TO DROP INLET @ STA. 307+00 LT.
DROP INLET H = 9'-8"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
30" R.C. PIPE (CLASS III)(TYPE 3) = 98 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.

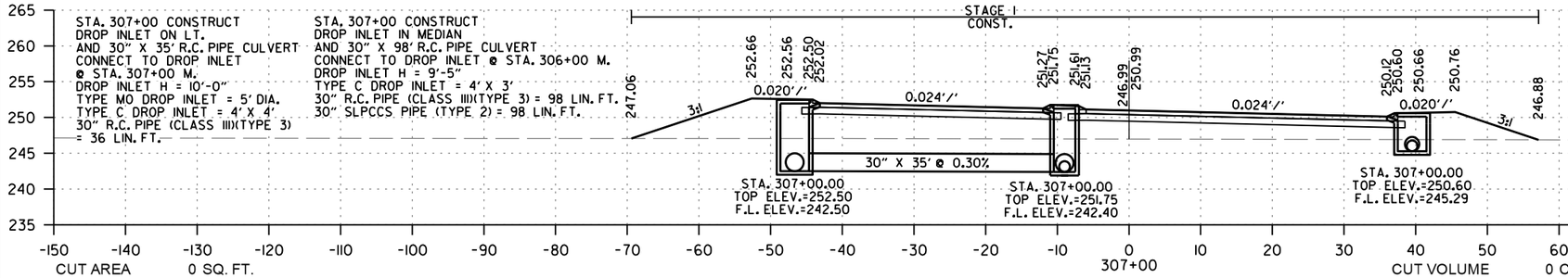


CUT AREA 0 SQ. FT.
FILL AREA 382 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 1369 CU. YD.

STA. 307+00 CONSTRUCT
DROP INLET ON LT.
AND 30" X 35' R.C. PIPE CULVERT
CONNECT TO DROP INLET
@ STA. 307+00 M.
DROP INLET H = 10'-0"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
30" R.C. PIPE (CLASS III)(TYPE 3)
= 36 LIN. FT.

STA. 307+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 30" X 98' R.C. PIPE CULVERT
CONNECT TO DROP INLET @ STA. 306+00 M.
DROP INLET H = 9'-5"
TYPE C DROP INLET = 4' X 3'
30" R.C. PIPE (CLASS III)(TYPE 3) = 98 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.

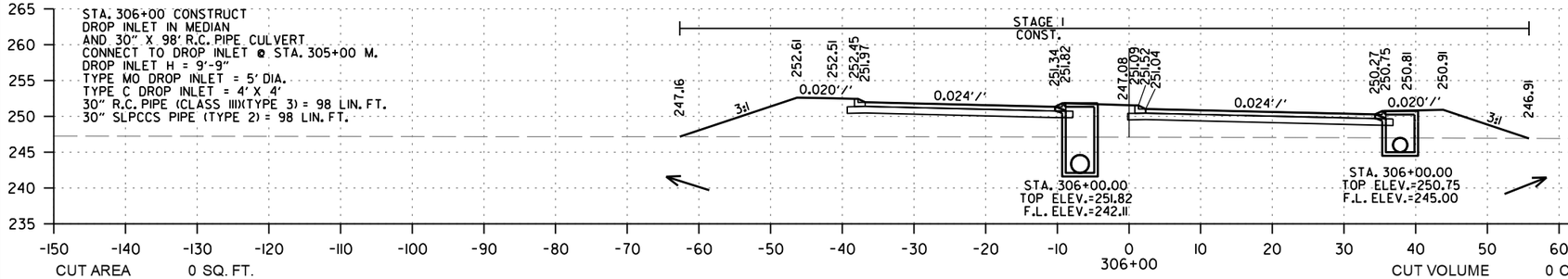


CUT AREA 0 SQ. FT.
FILL AREA 358 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 1303 CU. YD.

STA. 307+00 CONSTRUCT
DROP INLET ON RT.
AND 24" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 306+00 RT.
DROP INLET H = 5'-4"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 306+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 30" X 98' R.C. PIPE CULVERT
CONNECT TO DROP INLET @ STA. 305+00 M.
DROP INLET H = 9'-9"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
30" R.C. PIPE (CLASS III)(TYPE 3) = 98 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.



CUT AREA 0 SQ. FT.
FILL AREA 345 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 0 CU. YD.

STA. 306+00 CONSTRUCT
DROP INLET ON RT.
AND 24" X 96' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 305+00 RT.
DROP INLET H = 5'-9"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

HWY. 18S/MLK JR. DR.
STA. 306+00 TO STA. 308+30

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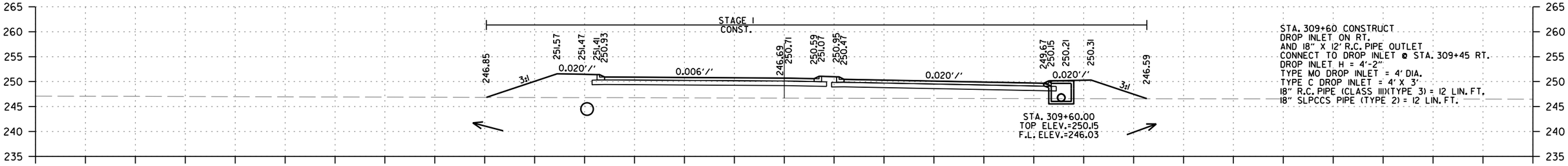
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	388	418
		CROSS SECTIONS				

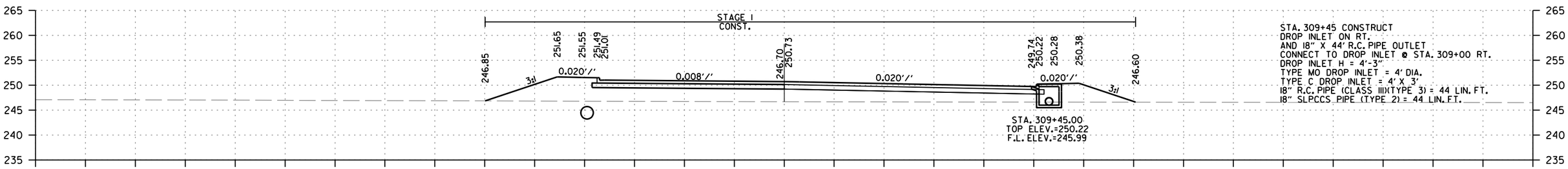
STAGE 1



STA. 309+60 CONSTRUCT
DROP INLET ON RT.
AND 18" X 12' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 309+45 RT.
DROP INLET H = 4'-2"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III(TYPE 3) = 12 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 12 LIN. FT.

CUT AREA 0 SQ. FT.
FILL AREA 329 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 192 CU. YD.

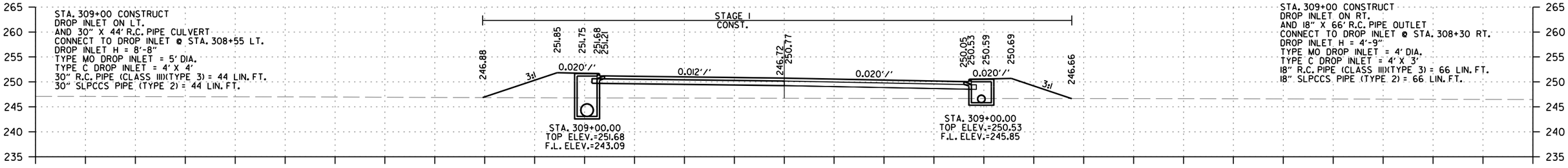


STA. 309+45 CONSTRUCT
DROP INLET ON RT.
AND 18" X 44' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 309+00 RT.
DROP INLET H = 4'-3"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III(TYPE 3) = 44 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 44 LIN. FT.

CUT AREA 0 SQ. FT.
FILL AREA 361 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 594 CU. YD.

STA. 309+00 CONSTRUCT
DROP INLET ON LT.
AND 30" X 44' R.C. PIPE CULVERT
CONNECT TO DROP INLET @ STA. 308+55 LT.
DROP INLET H = 8'-8"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
30" R.C. PIPE (CLASS III(TYPE 3) = 44 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 44 LIN. FT.

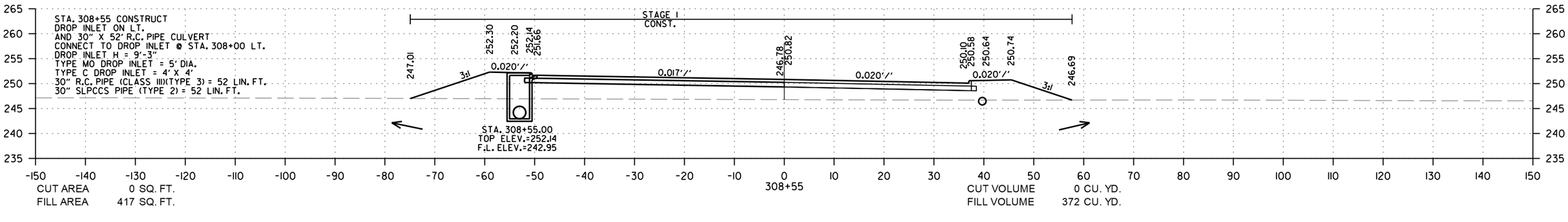


STA. 309+00 CONSTRUCT
DROP INLET ON RT.
AND 18" X 66' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 308+30 RT.
DROP INLET H = 4'-9"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III(TYPE 3) = 66 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 66 LIN. FT.

CUT AREA 0 SQ. FT.
FILL AREA 351 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 641 CU. YD.

STA. 308+55 CONSTRUCT
DROP INLET ON LT.
AND 30" X 52' R.C. PIPE CULVERT
CONNECT TO DROP INLET @ STA. 308+00 LT.
DROP INLET H = 9'-3"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
30" R.C. PIPE (CLASS III(TYPE 3) = 52 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 52 LIN. FT.



CUT AREA 0 SQ. FT.
FILL AREA 417 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 372 CU. YD.

HWY. 18S/MLK JR. DR.
STA. 308+55 TO STA. 309+60

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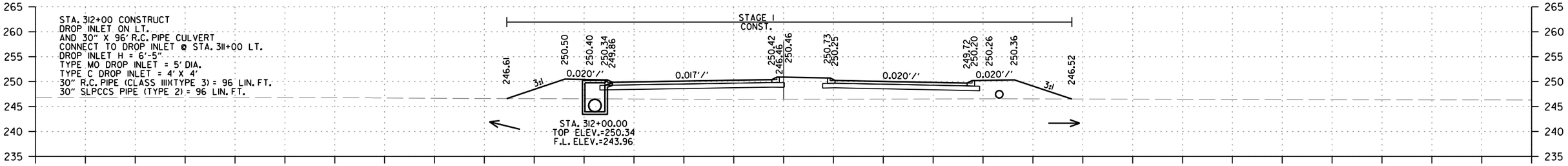
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	389	418
		CROSS SECTIONS				

STAGE 1

STA. 312+00 CONSTRUCT
DROP INLET ON LT.
AND 30" X 96' R.C. PIPE CULVERT
CONNECT TO DROP INLET @ STA. 311+00 LT.
DROP INLET H = 6'-5"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
30" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.



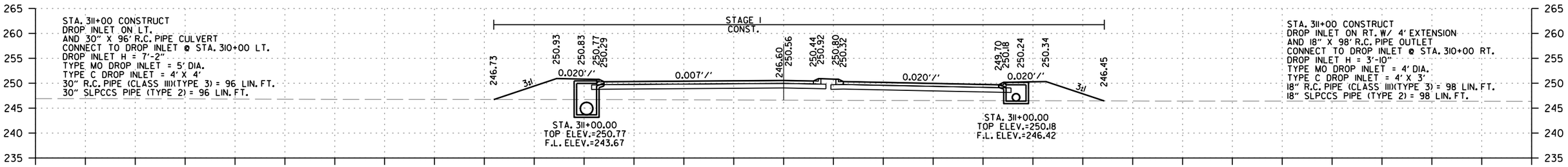
CUT AREA 0 SQ. FT.
FILL AREA 278 SQ. FT.

312+00

CUT VOLUME 0 CU. YD.
FILL VOLUME 1054 CU. YD.

STAGE 1

STA. 311+00 CONSTRUCT
DROP INLET ON LT.
AND 30" X 96' R.C. PIPE CULVERT
CONNECT TO DROP INLET @ STA. 310+00 LT.
DROP INLET H = 7'-2"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
30" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.



CUT AREA 0 SQ. FT.
FILL AREA 291 SQ. FT.

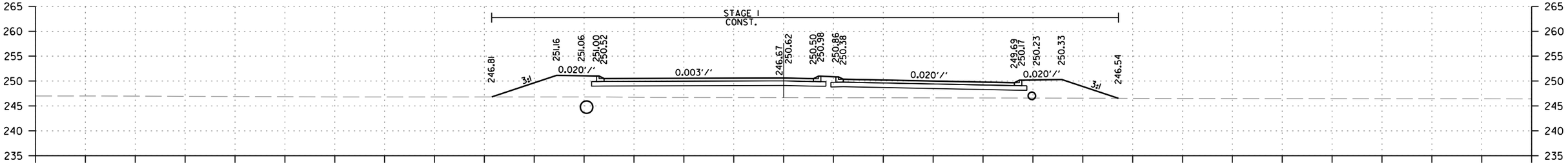
311+00

CUT VOLUME 0 CU. YD.
FILL VOLUME 547 CU. YD.

STA. 311+00 CONSTRUCT
DROP INLET ON RT. W/ 4' EXTENSION
AND 18" X 98' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 310+00 RT.
DROP INLET H = 3'-10"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 98 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.

STAGE 1

STA. 310+50 CONSTRUCT
DROP INLET ON LT.
AND 30" X 96' R.C. PIPE CULVERT
CONNECT TO DROP INLET @ STA. 310+00 LT.
DROP INLET H = 7'-11"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
30" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.



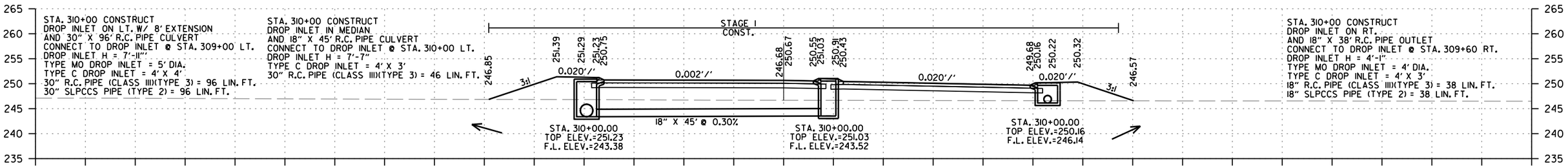
CUT AREA 0 SQ. FT.
FILL AREA 300 SQ. FT.

310+50

CUT VOLUME 0 CU. YD.
FILL VOLUME 569 CU. YD.

STA. 310+00 CONSTRUCT
DROP INLET ON LT. W/ 8' EXTENSION
AND 30" X 96' R.C. PIPE CULVERT
CONNECT TO DROP INLET @ STA. 309+00 LT.
DROP INLET H = 7'-11"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
30" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.

STA. 310+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 18" X 45' R.C. PIPE CULVERT
CONNECT TO DROP INLET @ STA. 310+00 LT.
DROP INLET H = 7'-7"
TYPE C DROP INLET = 4' X 3'
30" R.C. PIPE (CLASS III)(TYPE 3) = 46 LIN. FT.



CUT AREA 0 SQ. FT.
FILL AREA 315 SQ. FT.

310+00

CUT VOLUME 0 CU. YD.
FILL VOLUME 477 CU. YD.

STA. 310+00 CONSTRUCT
DROP INLET ON RT.
AND 18" X 38' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 309+60 RT.
DROP INLET H = 4'-1"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 38 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 38 LIN. FT.

HWY. 18S/MLK JR. DR.
STA. 310+00 TO STA. 312+00

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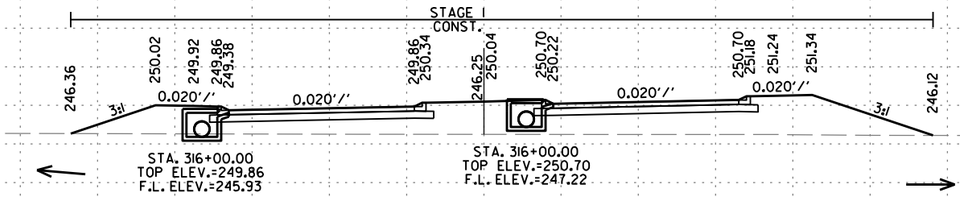
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	390	418
		CROSS SECTIONS				

STAGE 1

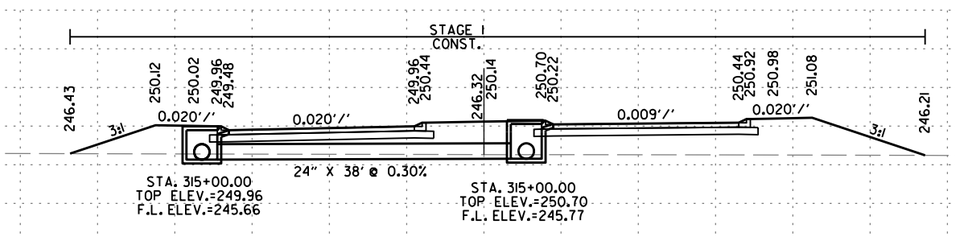
STA. 316+00 CONSTRUCT
DROP INLET ON LT.
AND 24" X 94' R.C. PIPE CULVERT
CONNECT TO DROP INLET @ STA. 315+00 LT.
DROP INLET H = 4'-0"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 94 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 94 LIN. FT.



STA. 316+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 24" X 98' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 315+00 M.
DROP INLET H = 3'-6"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS V)(TYPE 3) = 98 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.

316+00
CUT AREA 0 SQ. FT.
FILL AREA 314 SQ. FT.
CUT VOLUME 0 CU. YD.
FILL VOLUME 1141 CU. YD.

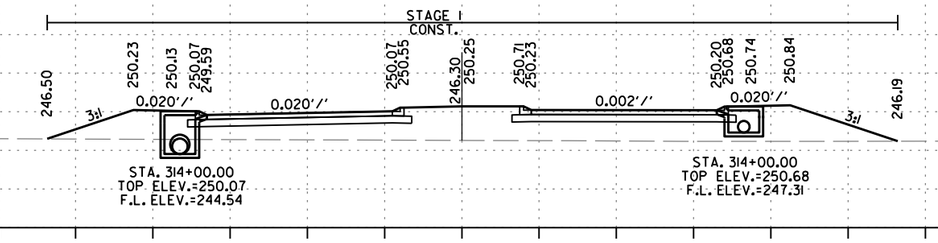
STA. 315+00 CONSTRUCT
DROP INLET ON LT.
AND 24" X 96' R.C. PIPE CULVERT
CONNECT TO DROP INLET @ STA. 314+00 LT.
DROP INLET H = 4'-4"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.



STA. 315+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 24" X 38' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 315+00 LT.
DROP INLET H = 5'-0"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS V)(TYPE 3) = 38 LIN. FT.

315+00
CUT AREA 0 SQ. FT.
FILL AREA 302 SQ. FT.
CUT VOLUME 0 CU. YD.
FILL VOLUME 1119 CU. YD.

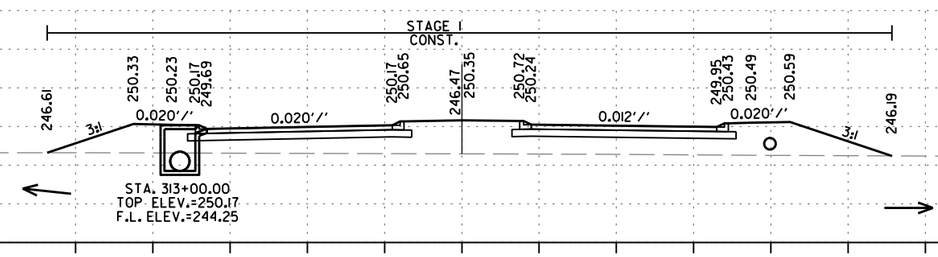
STA. 314+00 CONSTRUCT
DROP INLET ON LT.
AND 30" X 96' R.C. PIPE CULVERT
CONNECT TO DROP INLET @ STA. 313+00 LT.
DROP INLET H = 5'-7"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
30" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.



STA. 314+00 CONSTRUCT
DROP INLET ON RT.
AND 18" X 298' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 311+00 RT.
DROP INLET H = 3'-5"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 298 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 298 LIN. FT.

314+00
CUT AREA 0 SQ. FT.
FILL AREA 302 SQ. FT.
CUT VOLUME 0 CU. YD.
FILL VOLUME 1085 CU. YD.

STA. 313+00 CONSTRUCT
DROP INLET ON LT.
AND 30" X 96' R.C. PIPE CULVERT
CONNECT TO DROP INLET @ STA. 312+00 LT.
DROP INLET H = 6'-0"
TYPE MO DROP INLET = 5' DIA.
TYPE C DROP INLET = 4' X 4'
30" R.C. PIPE (CLASS III)(TYPE 3) = 96 LIN. FT.
30" SLPCCS PIPE (TYPE 2) = 96 LIN. FT.



313+00
CUT AREA 0 SQ. FT.
FILL AREA 284 SQ. FT.
CUT VOLUME 0 CU. YD.
FILL VOLUME 1040 CU. YD.

HWY. 18S/MLK JR. DR.
STA. 313+00 TO STA. 316+00

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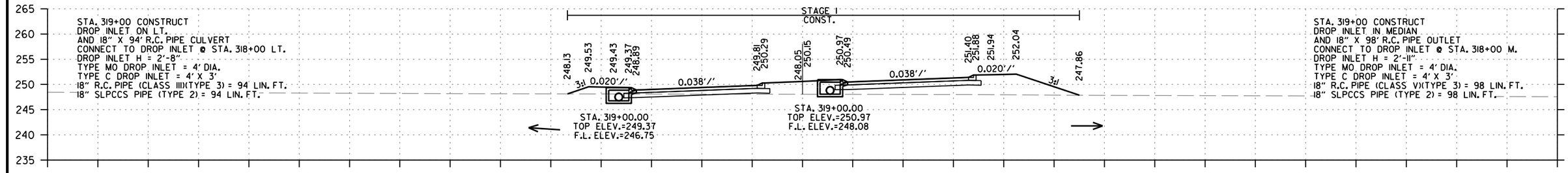
		6	ARK.	100657	391	418
		CROSS SECTIONS				

STAGE 1

STA. 319+00 CONSTRUCT
DROP INLET ON LT.
AND 18" X 94' R.C. PIPE CULVERT
CONNECT TO DROP INLET @ STA. 318+00 LT.
DROP INLET H = 2'-8"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 94 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 94 LIN. FT.

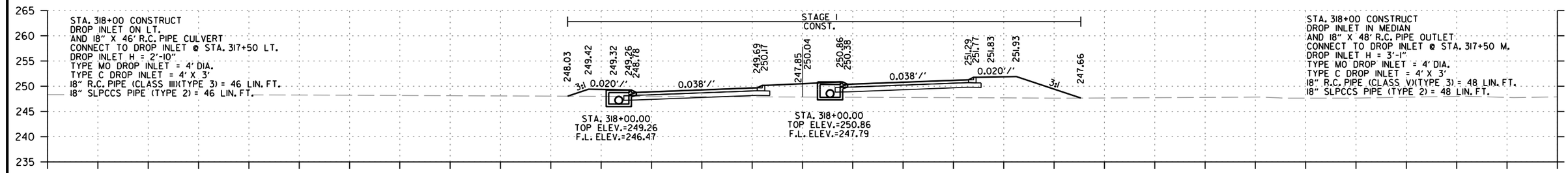


CUT AREA 8 SQ. FT.
FILL AREA 146 SQ. FT.

CUT VOLUME 29 CU. YD.
FILL VOLUME 558 CU. YD.

STA. 319+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 18" X 98' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 318+00 M.
DROP INLET H = 2'-11"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS V)(TYPE 3) = 98 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.

STA. 318+00 CONSTRUCT
DROP INLET ON LT.
AND 18" X 46' R.C. PIPE CULVERT
CONNECT TO DROP INLET @ STA. 317+50 LT.
DROP INLET H = 2'-10"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 46 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 46 LIN. FT.

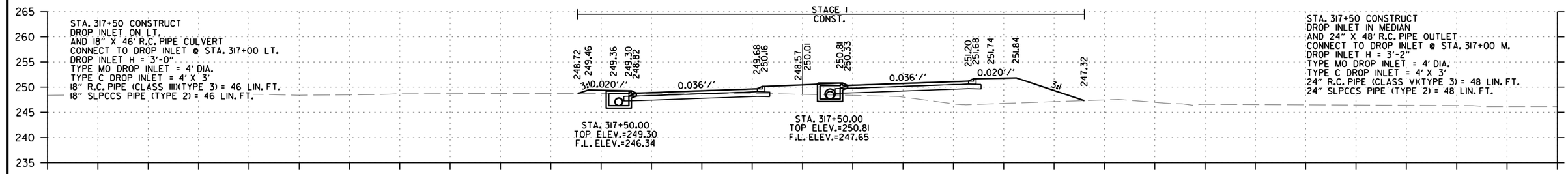


CUT AREA 8 SQ. FT.
FILL AREA 155 SQ. FT.

CUT VOLUME 32 CU. YD.
FILL VOLUME 283 CU. YD.

STA. 318+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 18" X 48' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 317+50 M.
DROP INLET H = 3'-1"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS V)(TYPE 3) = 48 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 48 LIN. FT.

STA. 317+50 CONSTRUCT
DROP INLET ON LT.
AND 18" X 46' R.C. PIPE CULVERT
CONNECT TO DROP INLET @ STA. 317+00 LT.
DROP INLET H = 3'-0"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
18" R.C. PIPE (CLASS III)(TYPE 3) = 46 LIN. FT.
18" SLPCCS PIPE (TYPE 2) = 46 LIN. FT.

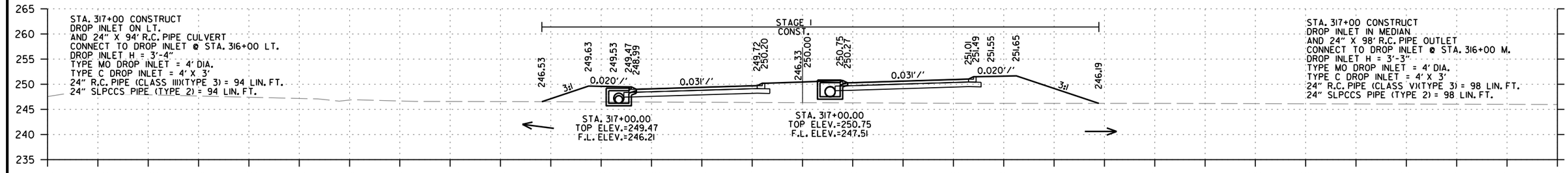


CUT AREA 27 SQ. FT.
FILL AREA 150 SQ. FT.

CUT VOLUME 25 CU. YD.
FILL VOLUME 419 CU. YD.

STA. 317+50 CONSTRUCT
DROP INLET IN MEDIAN
AND 24" X 48' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 317+00 M.
DROP INLET H = 3'-2"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS V)(TYPE 3) = 48 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 48 LIN. FT.

STA. 317+00 CONSTRUCT
DROP INLET ON LT.
AND 24" X 94' R.C. PIPE CULVERT
CONNECT TO DROP INLET @ STA. 316+00 LT.
DROP INLET H = 3'-4"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS III)(TYPE 3) = 94 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 94 LIN. FT.



CUT AREA 0 SQ. FT.
FILL AREA 302 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 1140 CU. YD.

STA. 317+00 CONSTRUCT
DROP INLET IN MEDIAN
AND 24" X 98' R.C. PIPE OUTLET
CONNECT TO DROP INLET @ STA. 316+00 M.
DROP INLET H = 3'-3"
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 3'
24" R.C. PIPE (CLASS V)(TYPE 3) = 98 LIN. FT.
24" SLPCCS PIPE (TYPE 2) = 98 LIN. FT.

HWY. 18S/MLK JR. DR.
STA. 317+00 TO STA. 319+00

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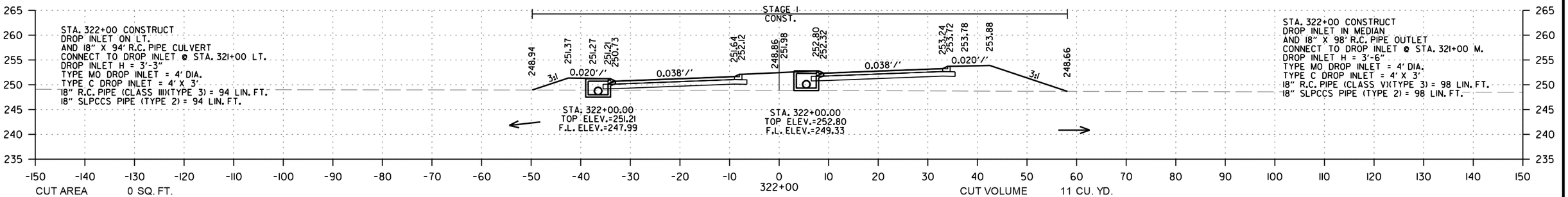
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	392	418
		CROSS SECTIONS				

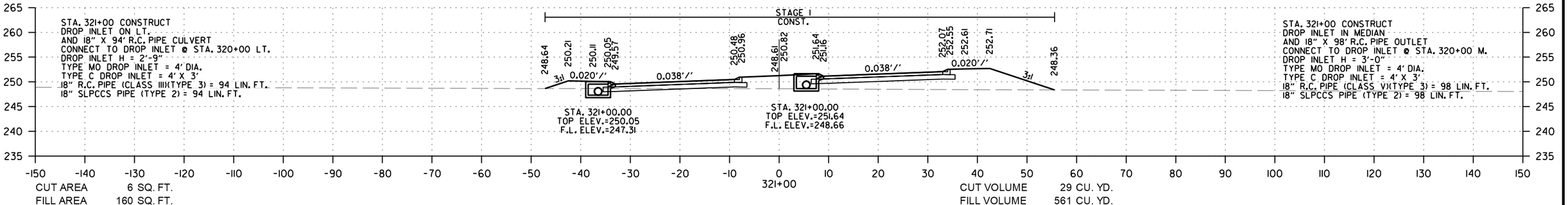
STAGE 1

STAGE 1



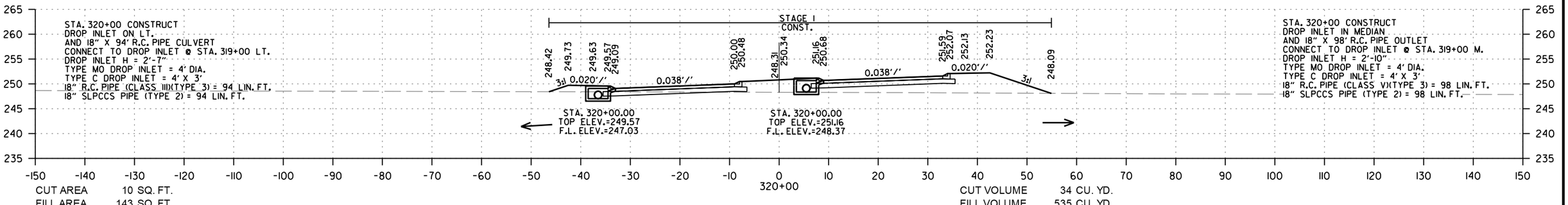
CUT AREA 0 SQ. FT.
FILL AREA 247 SQ. FT.

CUT VOLUME 11 CU. YD.
FILL VOLUME 754 CU. YD.



CUT AREA 6 SQ. FT.
FILL AREA 160 SQ. FT.

CUT VOLUME 29 CU. YD.
FILL VOLUME 561 CU. YD.



CUT AREA 10 SQ. FT.
FILL AREA 143 SQ. FT.

CUT VOLUME 34 CU. YD.
FILL VOLUME 535 CU. YD.

HWY. 18S/MLK JR. DR.
STA. 320+00 TO STA. 322+00

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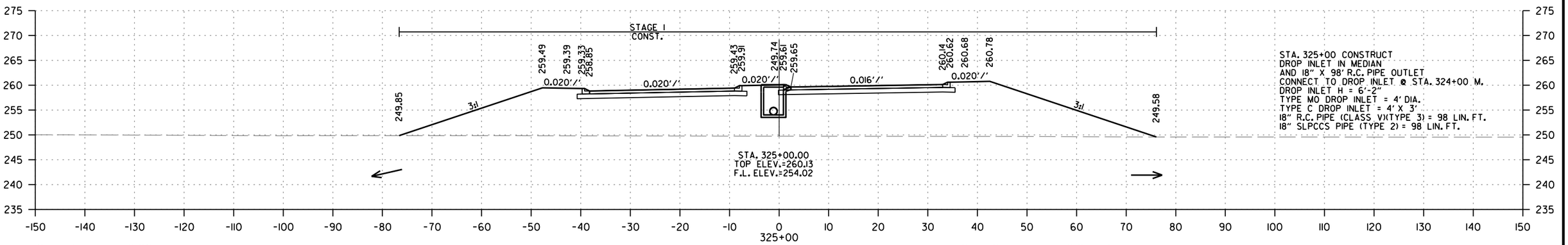
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	393	418
		CROSS SECTIONS				

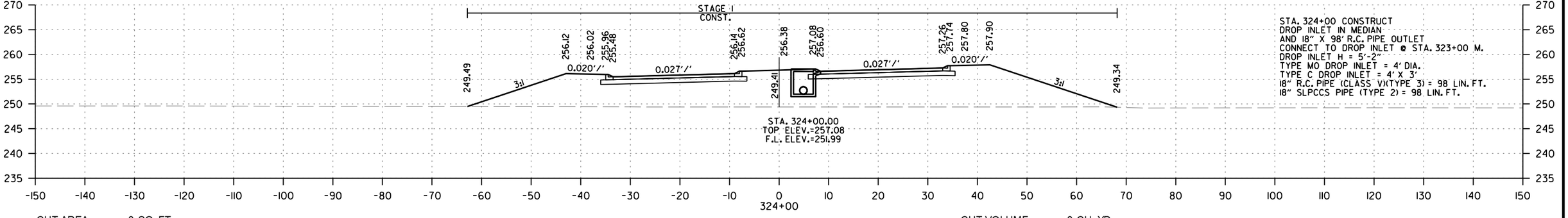
STAGE 1



CUT AREA 0 SQ. FT.
FILL AREA 1116 SQ. FT.

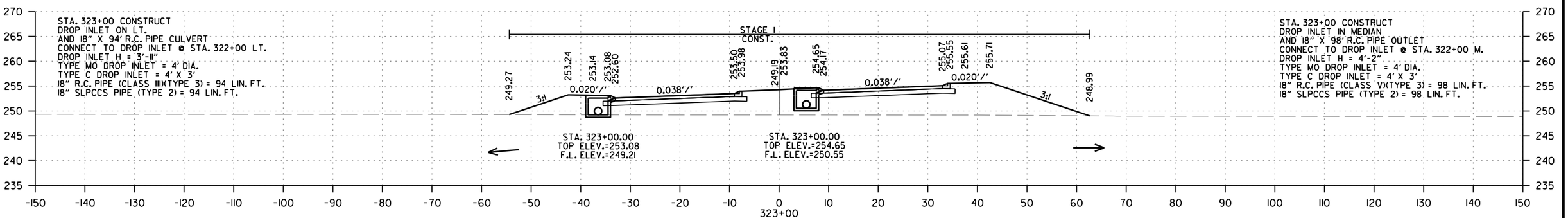
CUT VOLUME 0 CU. YD.
FILL VOLUME 3361 CU. YD.

STAGE 1



CUT AREA 0 SQ. FT.
FILL AREA 698 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 2064 CU. YD.



CUT AREA 0 SQ. FT.
FILL AREA 416 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 1228 CU. YD.

HWY. 18S/MLK JR. DR.
STA. 323+00 TO STA. 325+00

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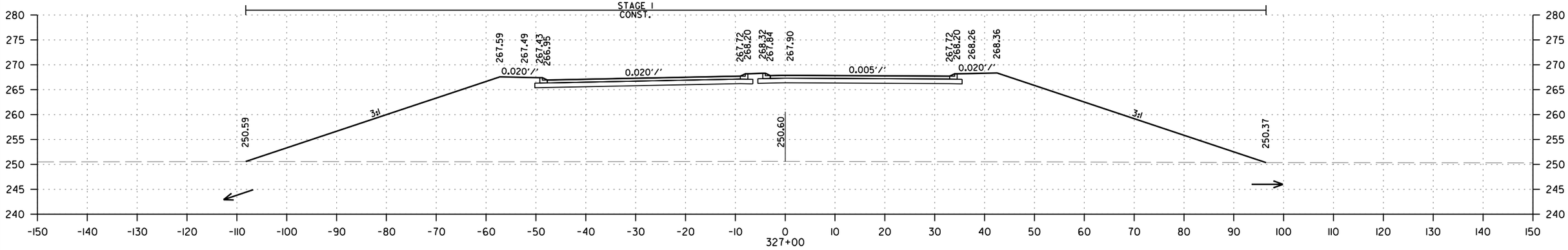
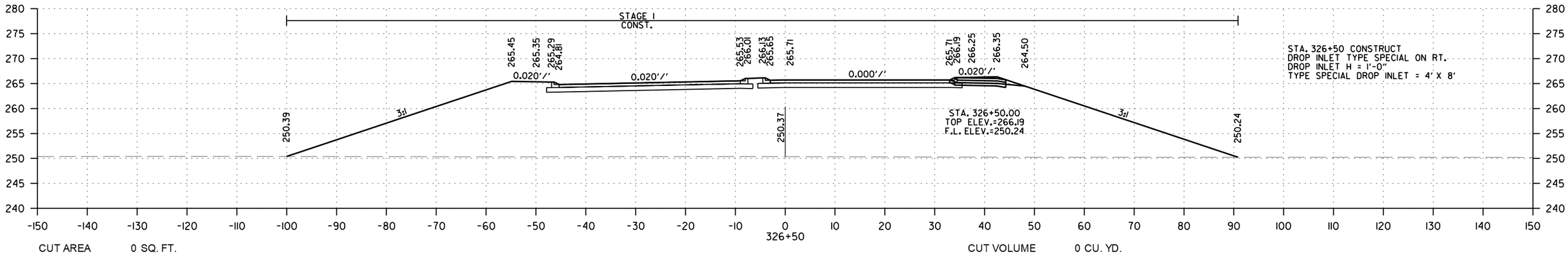
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	394	418
		CROSS SECTIONS				

STAGE 1



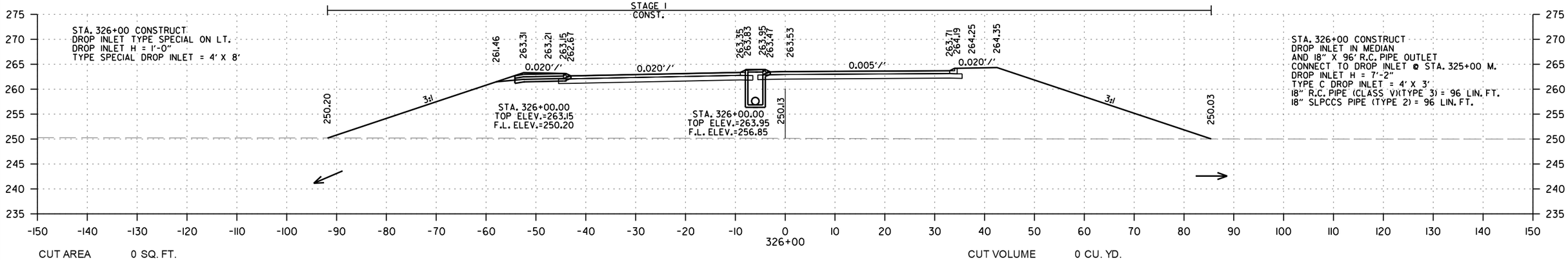
CUT AREA 0 SQ. FT.
FILL AREA 2495 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 4243 CU. YD.



CUT AREA 0 SQ. FT.
FILL AREA 2088 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 3517 CU. YD.



CUT AREA 0 SQ. FT.
FILL AREA 1710 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 5235 CU. YD.

HWY. 18S/MLK JR. DR.
STA. 326+00 TO STA. 327+00

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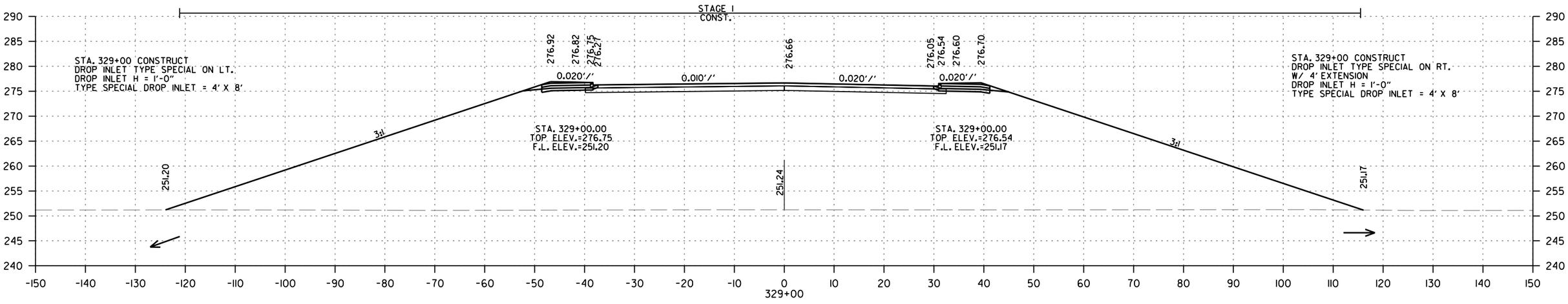
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	395	418
		CROSS SECTIONS				

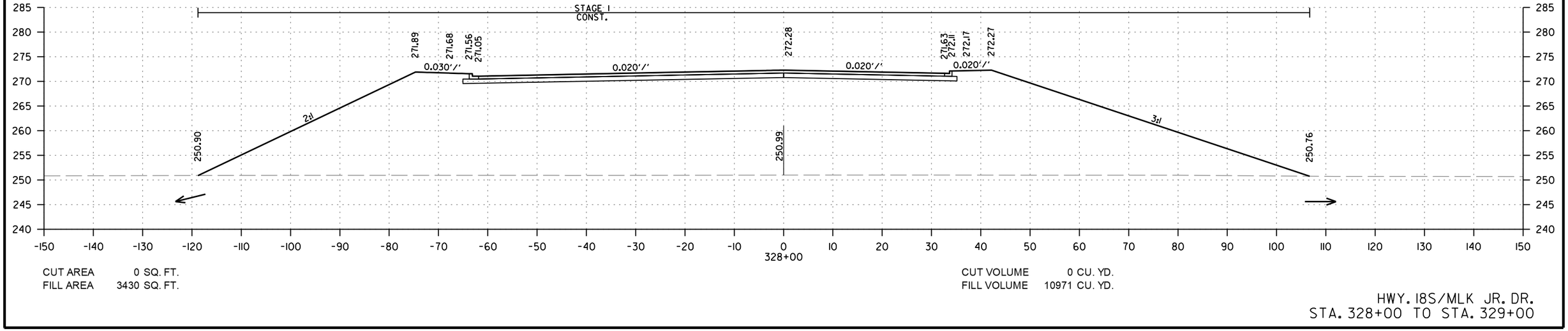
STA. 328+35.74 COMMERCE DR. EXTENSION =
STA. 656+13.02 KATHLEEN ST. CONNECTOR
Δ = 90°00'00"

STAGE 1



CUT AREA 0 SQ. FT.
FILL AREA 3961 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 13686 CU. YD.



CUT AREA 0 SQ. FT.
FILL AREA 3430 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 10971 CU. YD.

HWY. 18S/MLK JR. DR.
STA. 328+00 TO STA. 329+00

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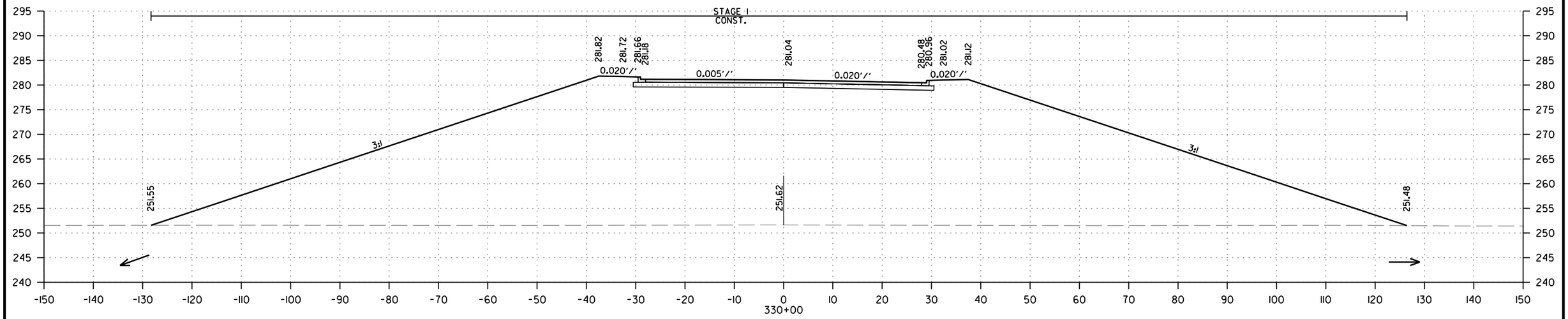
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	396	418
		CROSS SECTIONS				

STAGE 1

STAGE 1



CUT AREA 0 SQ. FT.
FILL AREA 4807 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 16237 CU. YD.

HWY. 18S/MLK JR. DR.
STA. 330+00 TO STA. 330+00

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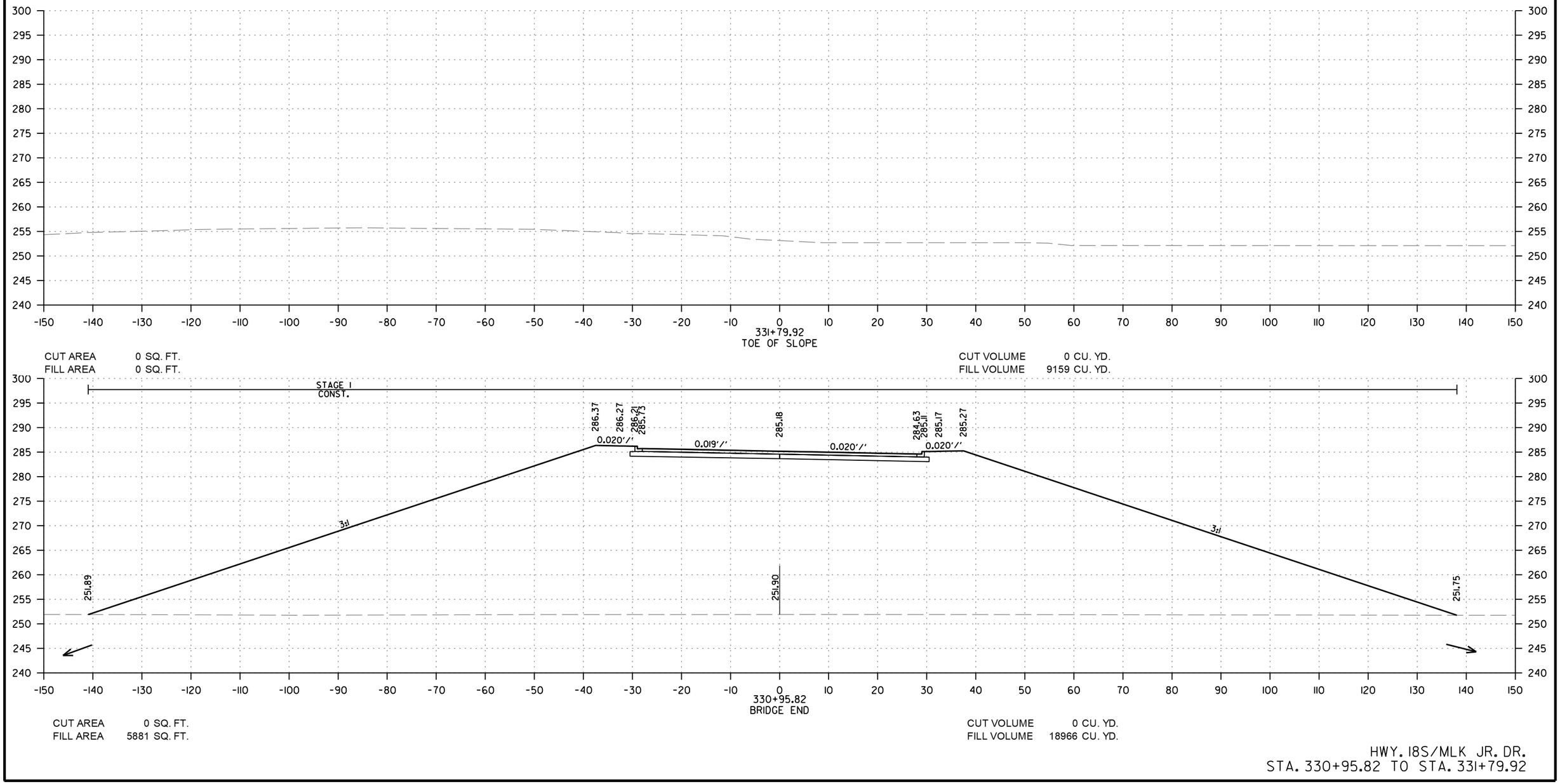
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	397	418
		CROSS SECTIONS				

STAGE 1

STAGE 1



CUT AREA 0 SQ. FT.
FILL AREA 0 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 9159 CU. YD.

CUT AREA 0 SQ. FT.
FILL AREA 5881 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 18966 CU. YD.

HWY. 18S/MLK JR. DR.
STA. 330+95.82 TO STA. 331+79.92

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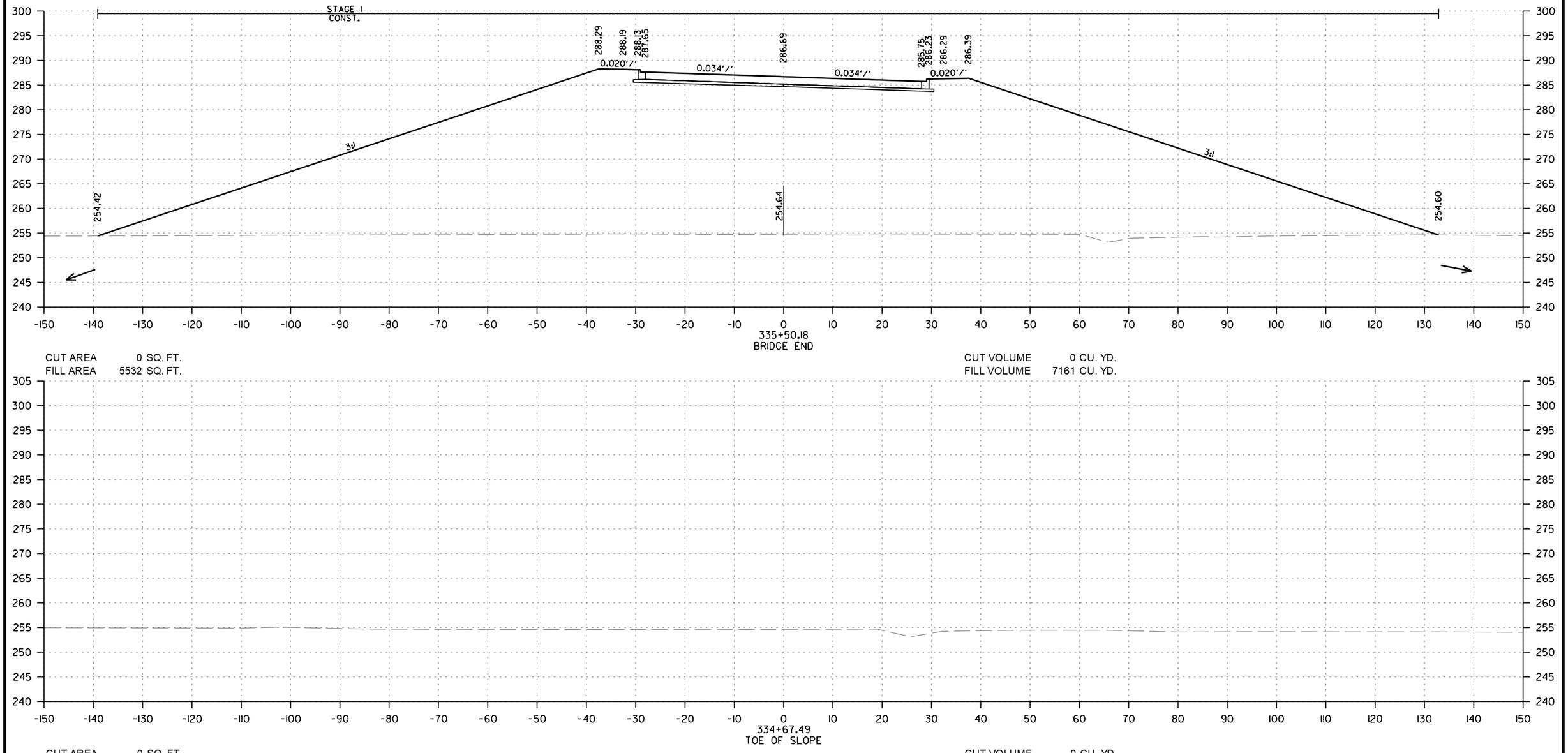
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	398	418
		CROSS SECTIONS				

STAGE 1

STAGE 1



CUT AREA 0 SQ. FT.
FILL AREA 5532 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 7161 CU. YD.

CUT AREA 0 SQ. FT.
FILL AREA 0 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 0 CU. YD.

HWY. 18S/MLK JR. DR.
STA. 334+67.49 TP STA. 335+50.18

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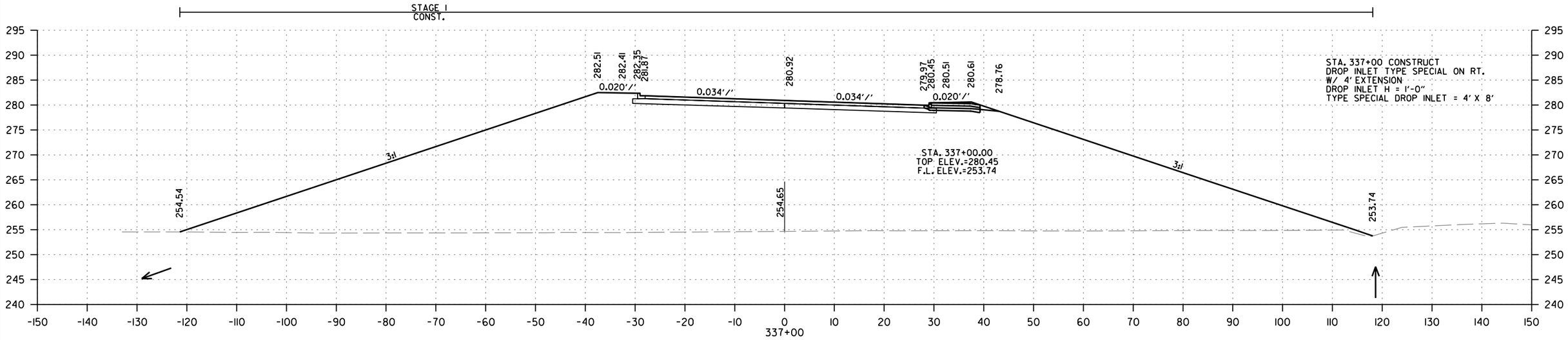
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	399	418
		CROSS SECTIONS				

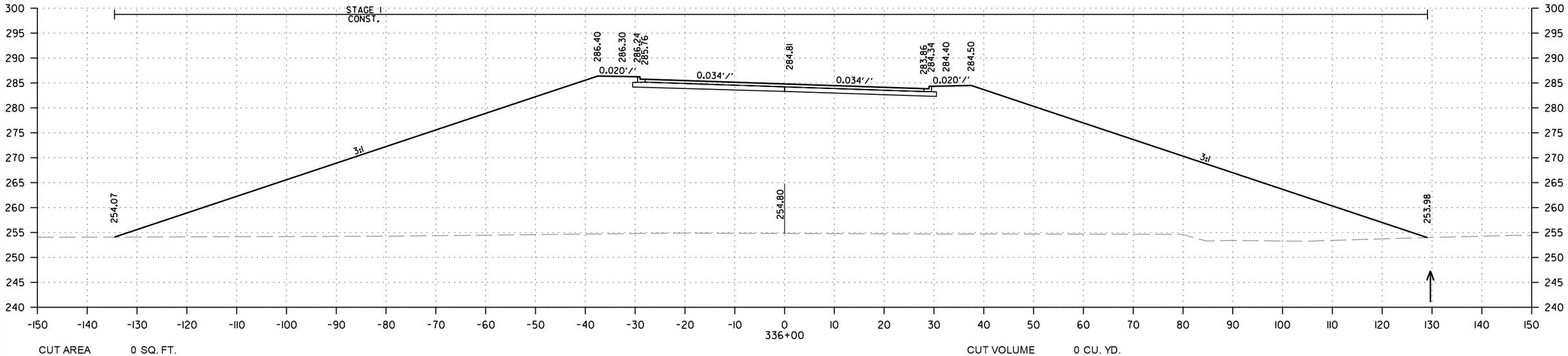
STAGE 1

STAGE 1



CUT AREA 0 SQ. FT.
FILL AREA 4076 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 17003 CU. YD.



CUT AREA 0 SQ. FT.
FILL AREA 5105 SQ. FT.

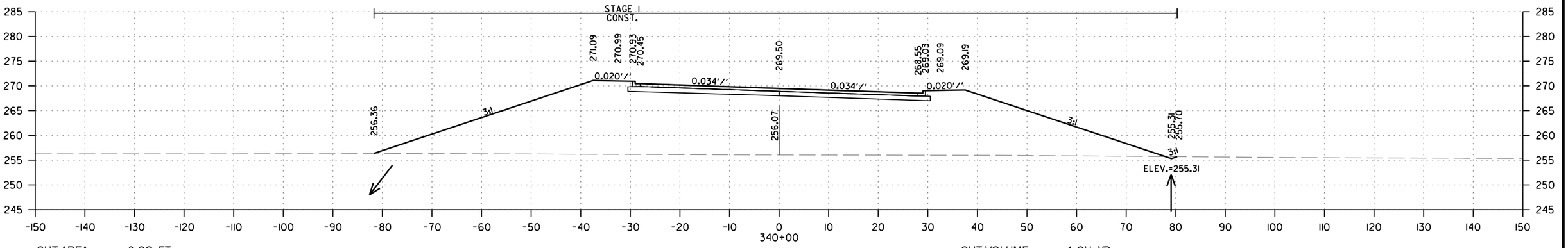
CUT VOLUME 0 CU. YD.
FILL VOLUME 9813 CU. YD.

HWY. 18S/MLK JR. DR.
STA. 336+00 TO STA. 337+00

HT39710 5/6/2022
R100657.DGN

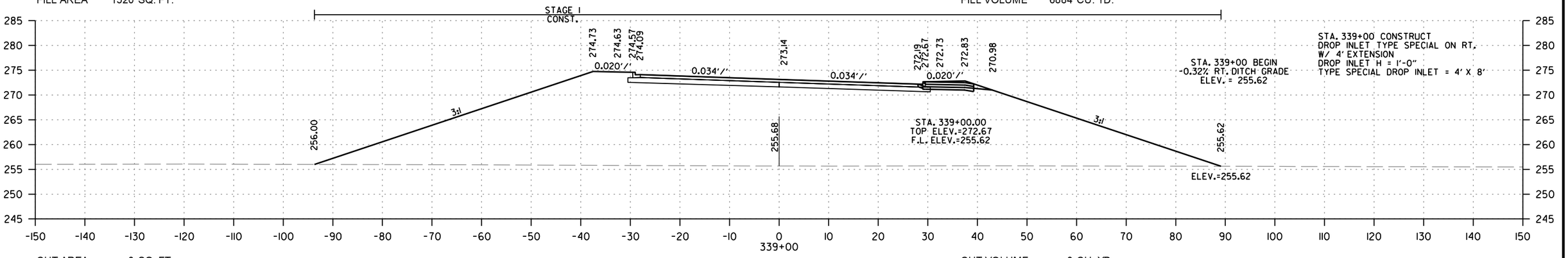
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	400	418
		CROSS SECTIONS				

STAGE 1



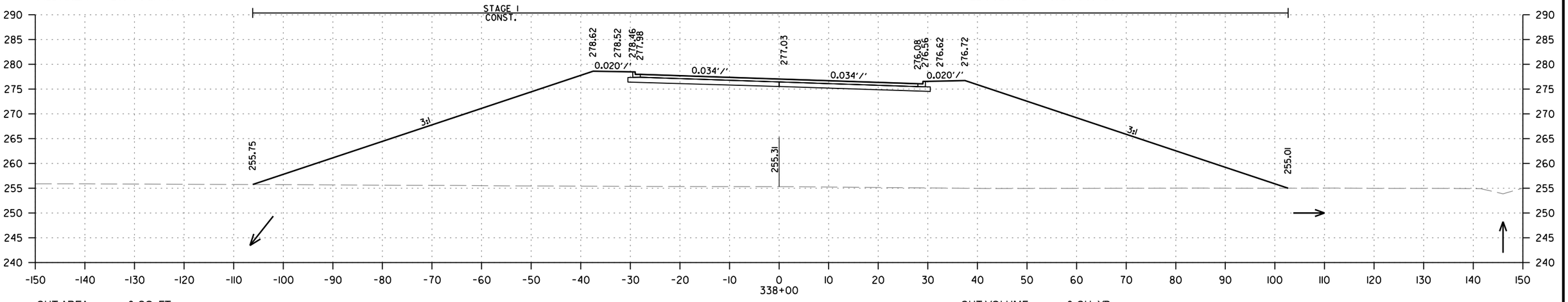
CUT AREA 0 SQ. FT.
FILL AREA 1520 SQ. FT.

CUT VOLUME 1 CU. YD.
FILL VOLUME 6884 CU. YD.



CUT AREA 0 SQ. FT.
FILL AREA 2197 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 9728 CU. YD.



CUT AREA 0 SQ. FT.
FILL AREA 3056 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 13208 CU. YD.

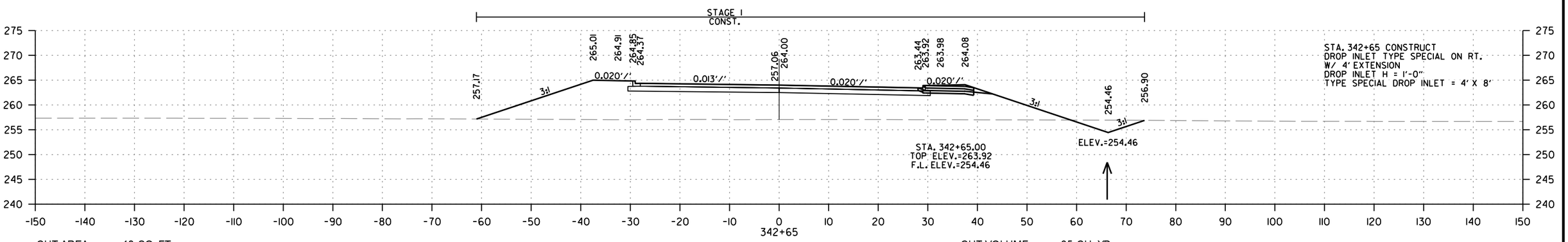
HWY. 18S/MLK JR. DR.
STA. 338+00 TO STA. 340+00

HT39710 5/6/2022
RI00657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	401	418
		CROSS SECTIONS				

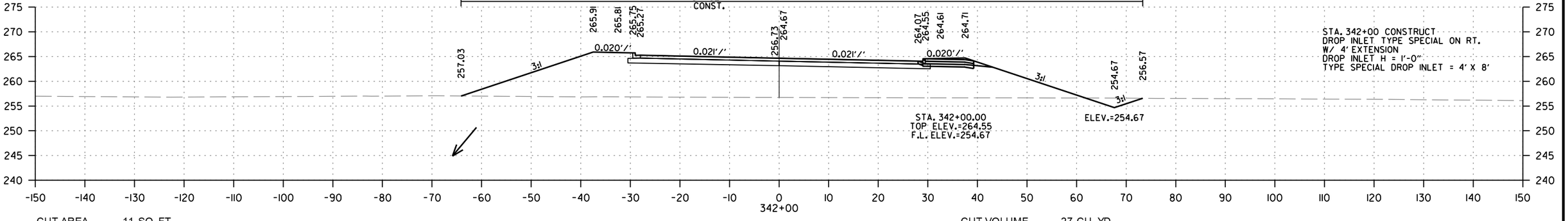
STAGE 1

STAGE 1



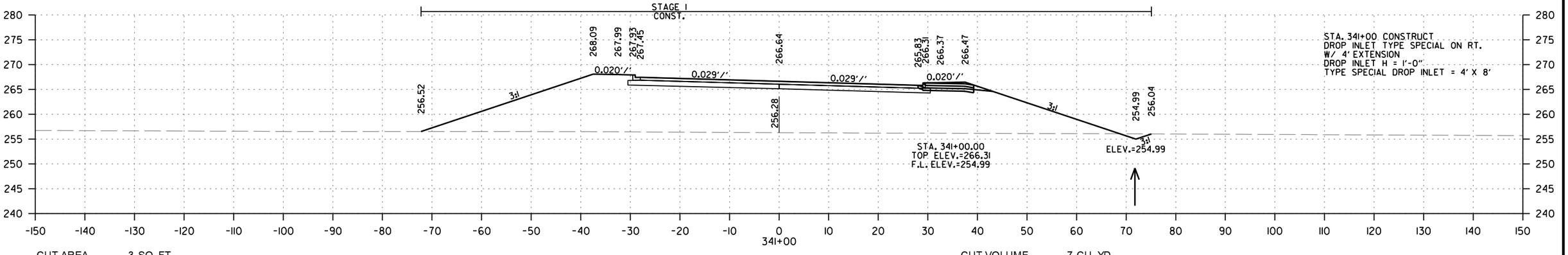
CUT AREA 18 SQ. FT.
FILL AREA 603 SQ. FT.

CUT VOLUME 35 CU. YD.
FILL VOLUME 1605 CU. YD.



CUT AREA 11 SQ. FT.
FILL AREA 731 SQ. FT.

CUT VOLUME 27 CU. YD.
FILL VOLUME 3307 CU. YD.



CUT AREA 3 SQ. FT.
FILL AREA 1055 SQ. FT.

CUT VOLUME 7 CU. YD.
FILL VOLUME 4768 CU. YD.

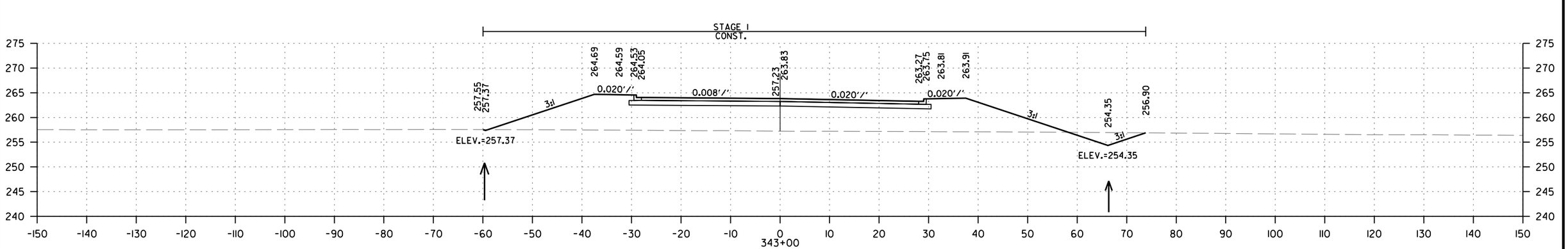
HWY. 18S/MLK JR. DR.
STA. 341+00 TO STA. 342+65

H139710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	402	418
		CROSS SECTIONS				

STAGE 1

STAGE 1



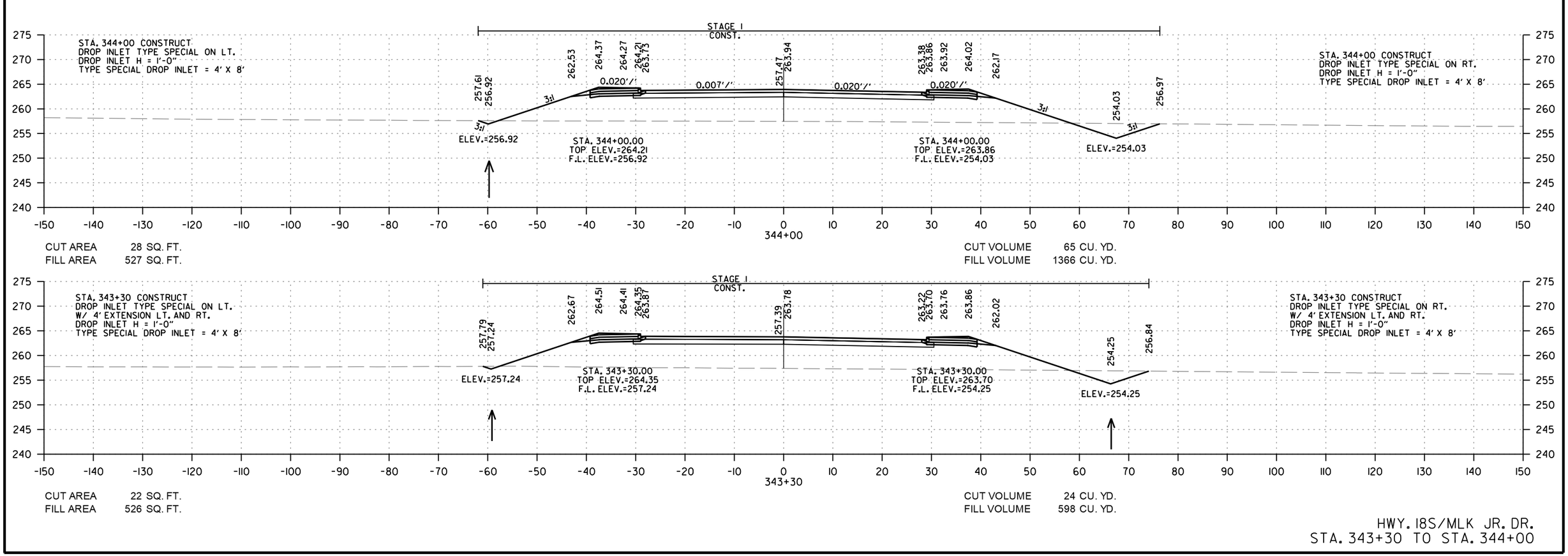
HWY. 18S/MLK JR. DR.
STA. 342+90 TO STA. 343+00

H139710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	403	418
		CROSS SECTIONS				

STAGE 1

STAGE 1



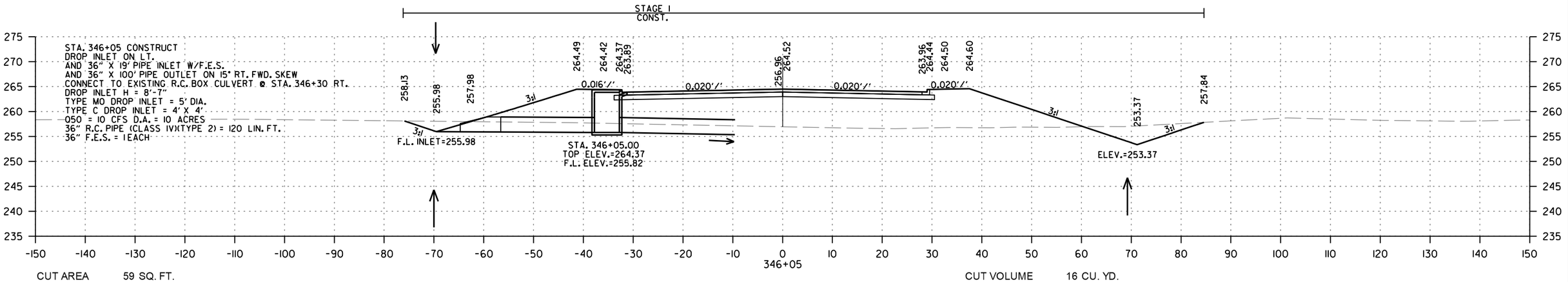
HWY. 18S/MLK JR. DR.
STA. 343+30 TO STA. 344+00

HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	404	418
		CROSS SECTIONS				

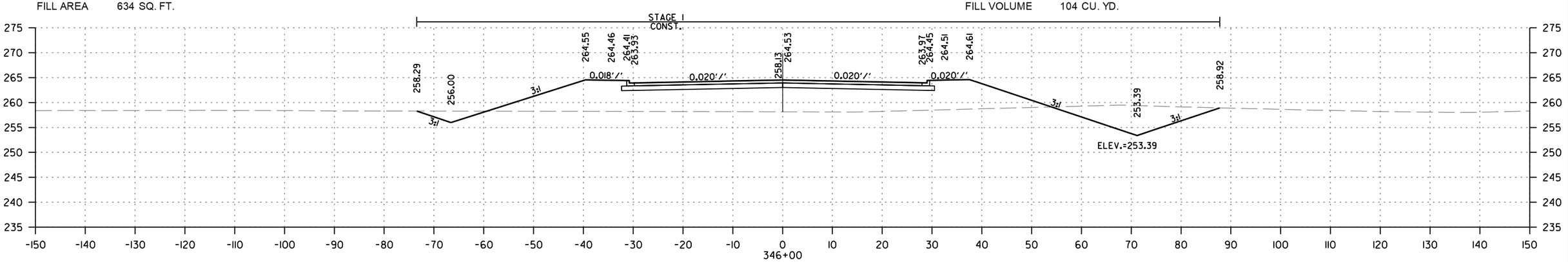
STAGE 1

STAGE 1



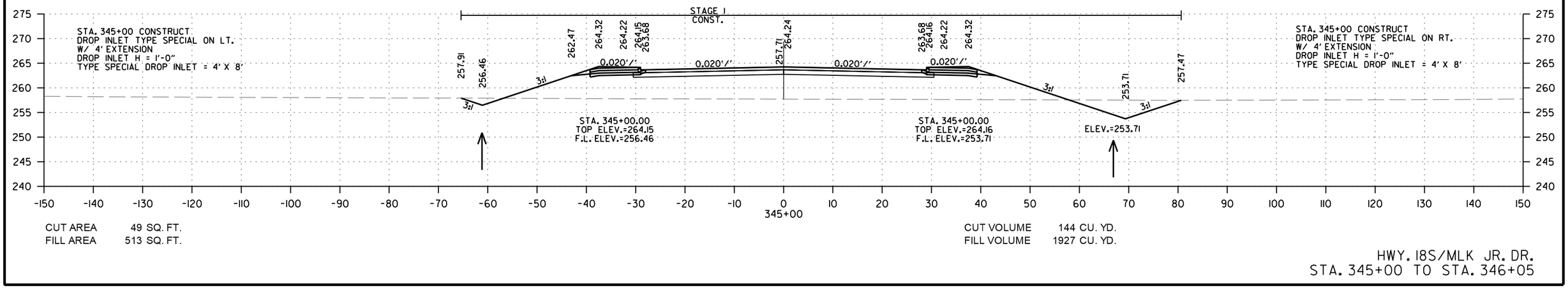
CUT AREA 59 SQ. FT.
FILL AREA 634 SQ. FT.

CUT VOLUME 16 CU. YD.
FILL VOLUME 104 CU. YD.



CUT AREA 118 SQ. FT.
FILL AREA 485 SQ. FT.

CUT VOLUME 310 CU. YD.
FILL VOLUME 1848 CU. YD.



CUT AREA 49 SQ. FT.
FILL AREA 513 SQ. FT.

CUT VOLUME 144 CU. YD.
FILL VOLUME 1927 CU. YD.

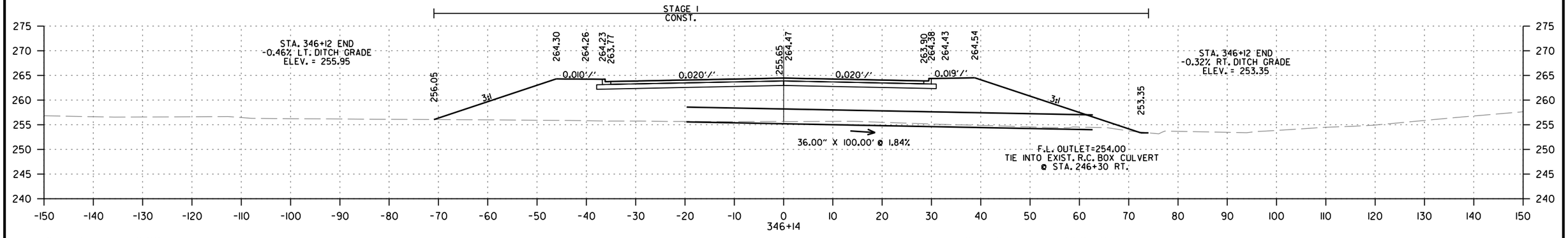
HWY. 18S/MLK JR. DR.
STA. 345+00 TO STA. 346+05

H139710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	405	418
		CROSS SECTIONS				

STAGE 1

STAGE 1



CUT AREA 0 SQ. FT.
FILL AREA 884 SQ. FT.

CUT VOLUME 10 CU. YD.
FILL VOLUME 253 CU. YD.

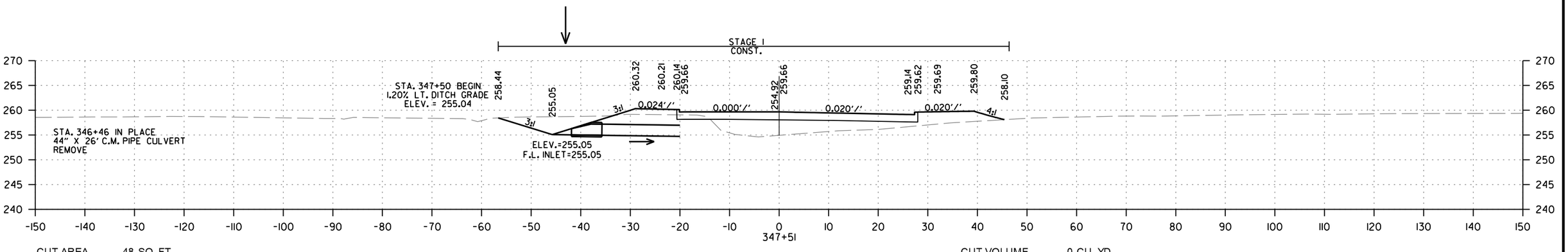
HWY. 18S/MLK JR. DR.
STA. 346+14 TO STA. 346+14

HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	406	418
		CROSS SECTIONS				

STAGE 1

STAGE 1



CUT AREA 48 SQ. FT.
FILL AREA 140 SQ. FT.

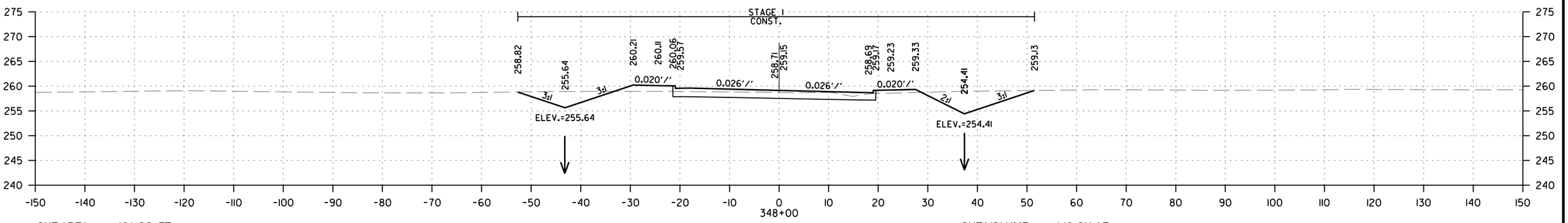
CUT VOLUME 0 CU. YD.
FILL VOLUME 0 CU. YD.

CLINTON SCHOOL RD.
STA. 347+51 TO STA. 347+51

HT39710 5/6/2022
R100657.DGN

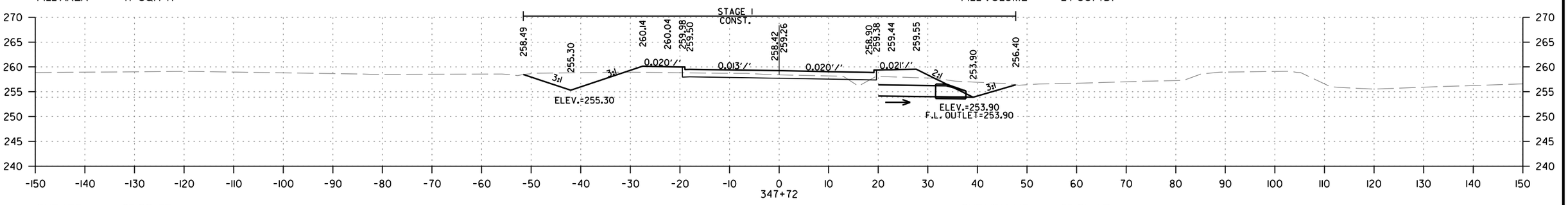
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	407	418
		CROSS SECTIONS				

STAGE 1



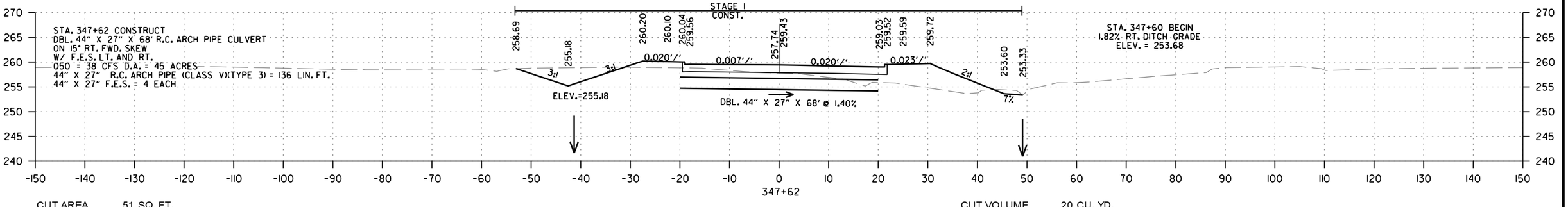
CUT AREA 131 SQ. FT.
FILL AREA 17 SQ. FT.

CUT VOLUME 113 CU. YD.
FILL VOLUME 24 CU. YD.



CUT AREA 87 SQ. FT.
FILL AREA 30 SQ. FT.

CUT VOLUME 26 CU. YD.
FILL VOLUME 26 CU. YD.



CUT AREA 51 SQ. FT.
FILL AREA 108 SQ. FT.

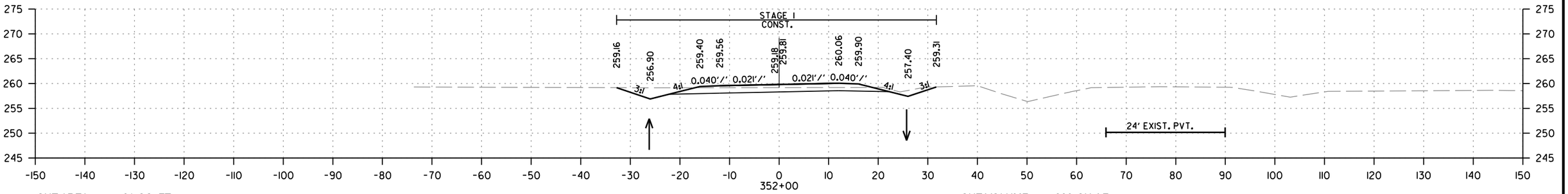
CUT VOLUME 20 CU. YD.
FILL VOLUME 51 CU. YD.

CLINTON SCHOOL RD.
STA. 347+62 TO STA. 348+00

HT39710 5/6/2022
R100657.DGN

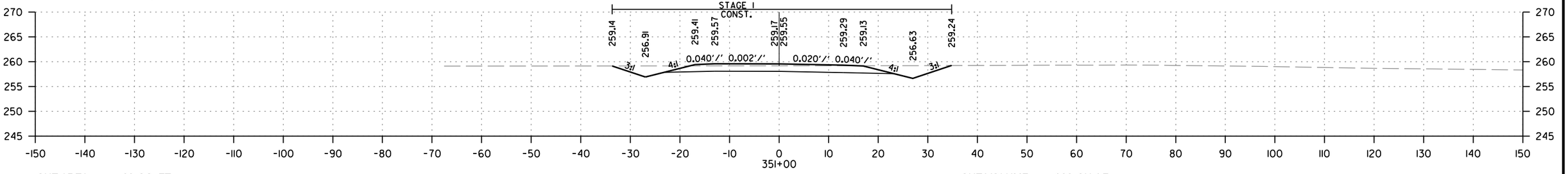
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	408	418
		CROSS SECTIONS				

STAGE 1



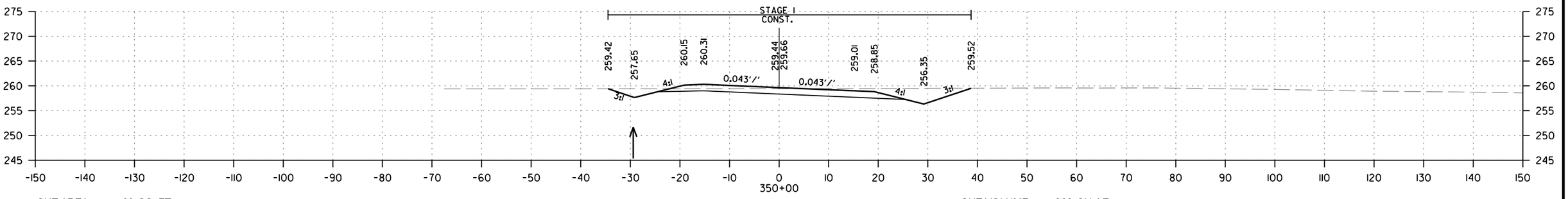
CUT AREA 61 SQ. FT.
FILL AREA 0 SQ. FT.

CUT VOLUME 280 CU. YD.
FILL VOLUME 0 CU. YD.



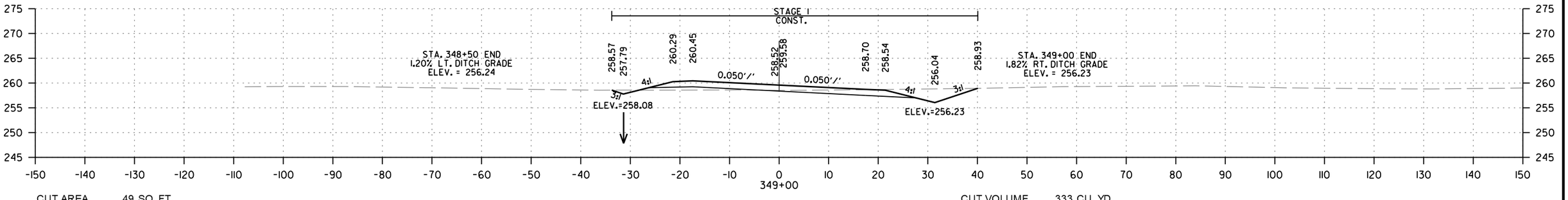
CUT AREA 90 SQ. FT.
FILL AREA 0 SQ. FT.

CUT VOLUME 338 CU. YD.
FILL VOLUME 0 CU. YD.



CUT AREA 93 SQ. FT.
FILL AREA 0 SQ. FT.

CUT VOLUME 263 CU. YD.
FILL VOLUME 18 CU. YD.



CUT AREA 49 SQ. FT.
FILL AREA 10 SQ. FT.

CUT VOLUME 333 CU. YD.
FILL VOLUME 51 CU. YD.

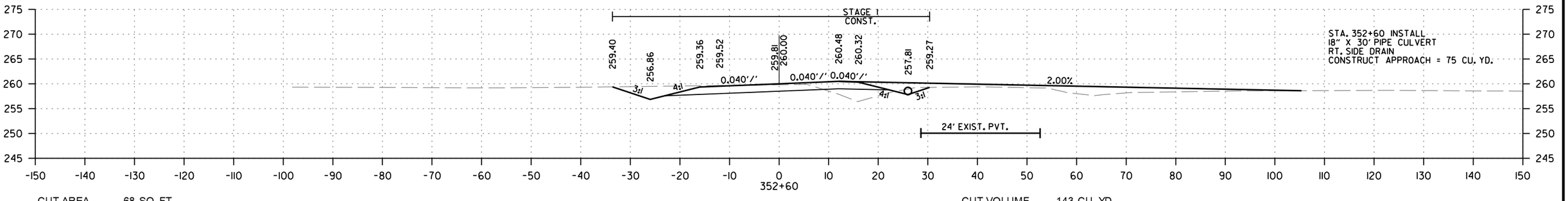
CLINTON SCHOOL RD.
STA. 349+00 TO STA. 352+00

HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	409	418
		CROSS SECTIONS				

STAGE 1

STAGE 1



CUT AREA 68 SQ. FT.
FILL AREA 19 SQ. FT.

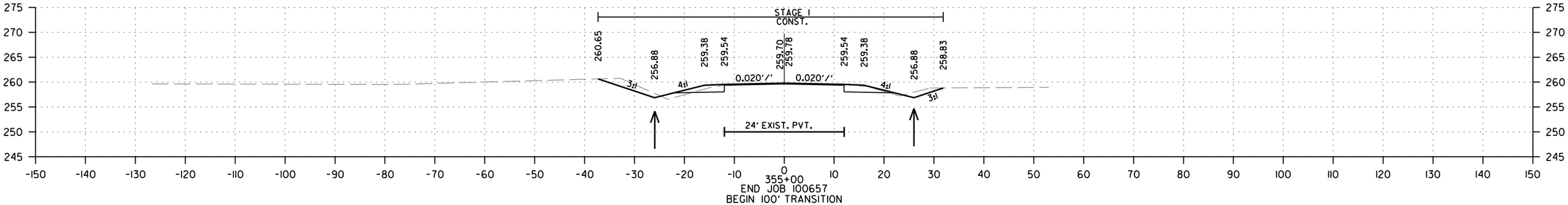
CUT VOLUME 143 CU. YD.
FILL VOLUME 21 CU. YD.

STA. 352+60 TO STA. 352+60

HT39710 5/6/2022
R100657.DGN

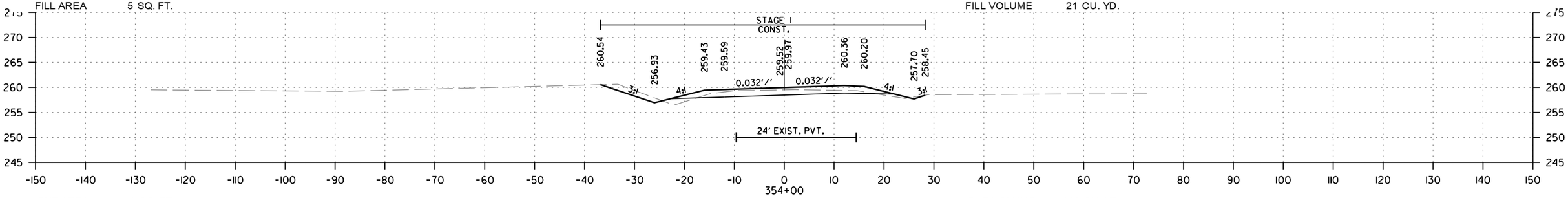
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	410	418
		CROSS SECTIONS				

STAGE 1



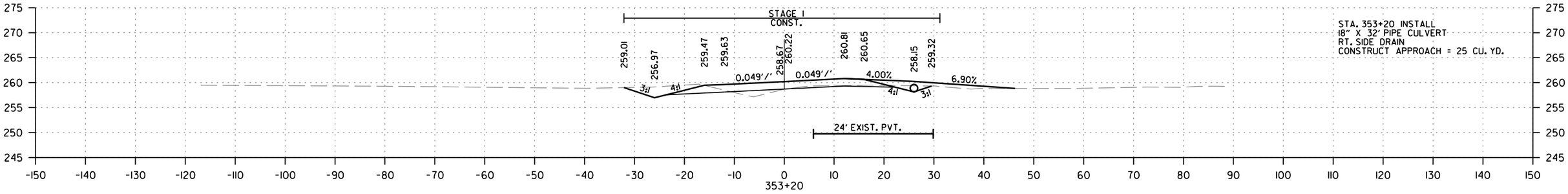
CUT AREA 34 SQ. FT.
FILL AREA 5 SQ. FT.

CUT VOLUME 140 CU. YD.
FILL VOLUME 21 CU. YD.



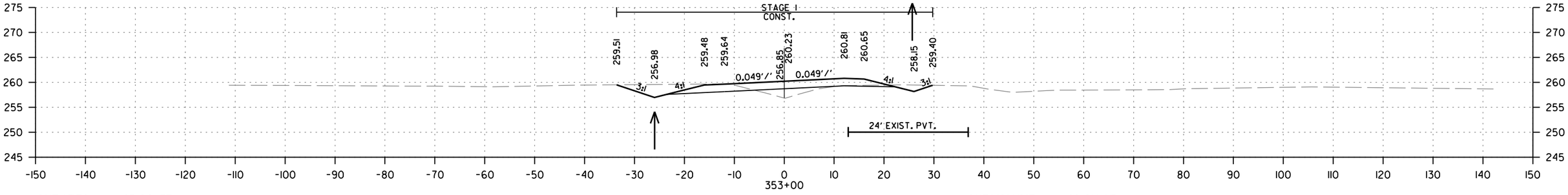
CUT AREA 41 SQ. FT.
FILL AREA 7 SQ. FT.

CUT VOLUME 118 CU. YD.
FILL VOLUME 20 CU. YD.



CUT AREA 39 SQ. FT.
FILL AREA 7 SQ. FT.

CUT VOLUME 38 CU. YD.
FILL VOLUME 8 CU. YD.



CUT AREA 65 SQ. FT.
FILL AREA 14 SQ. FT.

CUT VOLUME 98 CU. YD.
FILL VOLUME 24 CU. YD.

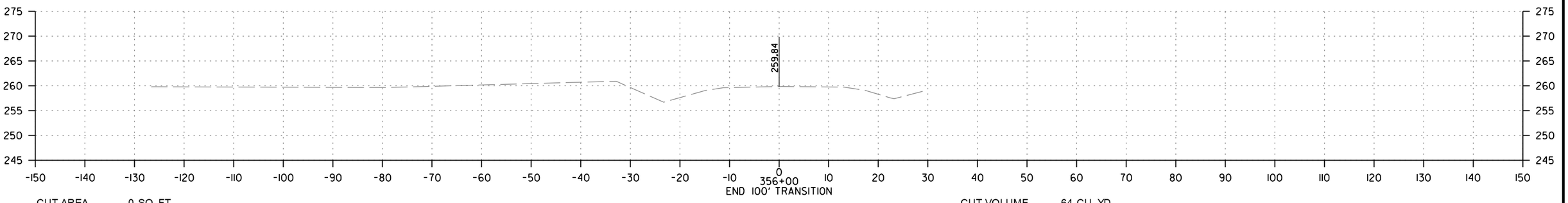
CLINTON SCHOOL RD.
STA. 353+00 TO STA. 355+00

HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	411	418
		CROSS SECTIONS				

STAGE 1

STAGE 1



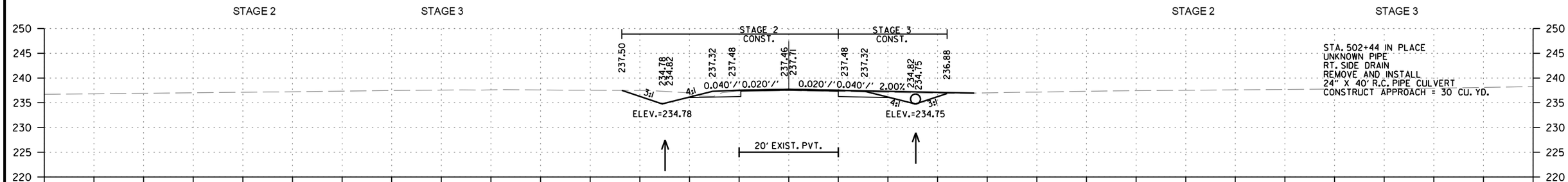
CUT AREA 0 SQ. FT.
FILL AREA 0 SQ. FT.

CUT VOLUME 64 CU. YD.
FILL VOLUME 8 CU. YD.

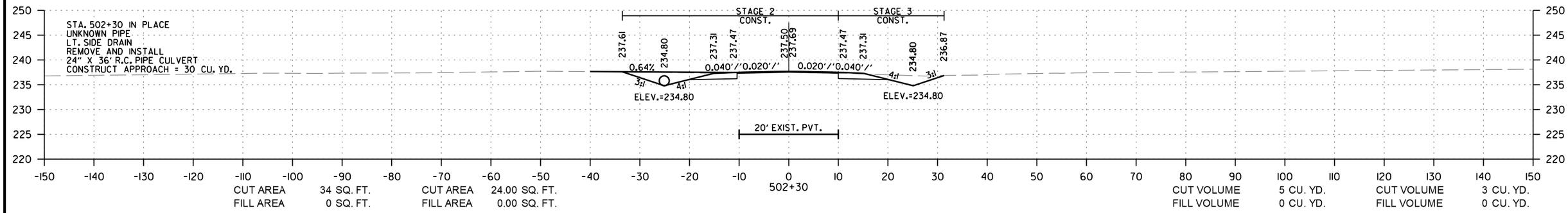
CLINTON SCHOOL RD.
STA. 356+00 TO STA. 356+00

HT39710 5/6/2022
R100657.DGN

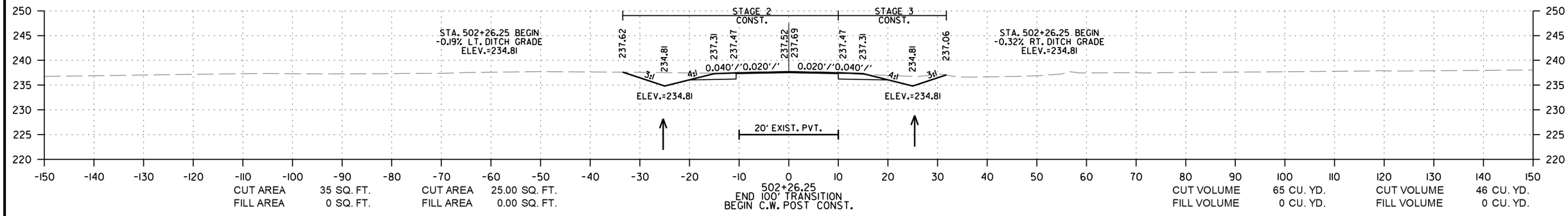
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	412	418
		CROSS SECTIONS				



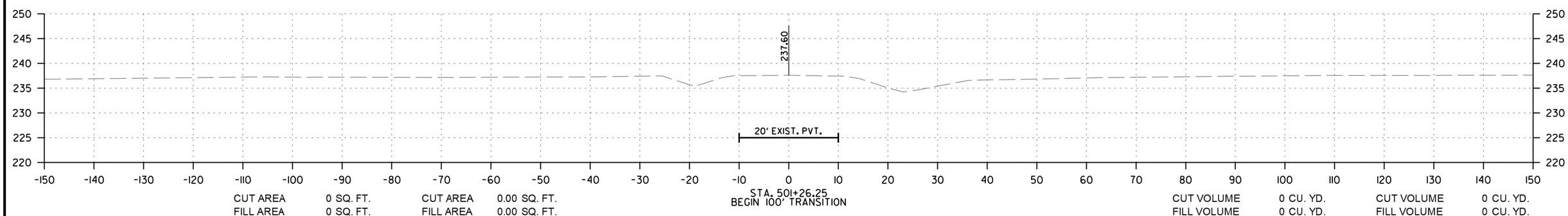
CUT AREA	26 SQ. FT.	CUT AREA	26.00 SQ. FT.	CUT VOLUME	16 CU. YD.	CUT VOLUME	13 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	0.00 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	0 CU. YD.



CUT AREA	34 SQ. FT.	CUT AREA	24.00 SQ. FT.	CUT VOLUME	5 CU. YD.	CUT VOLUME	3 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	0.00 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	0 CU. YD.



CUT AREA	35 SQ. FT.	CUT AREA	25.00 SQ. FT.	CUT VOLUME	65 CU. YD.	CUT VOLUME	46 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	0.00 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	0 CU. YD.

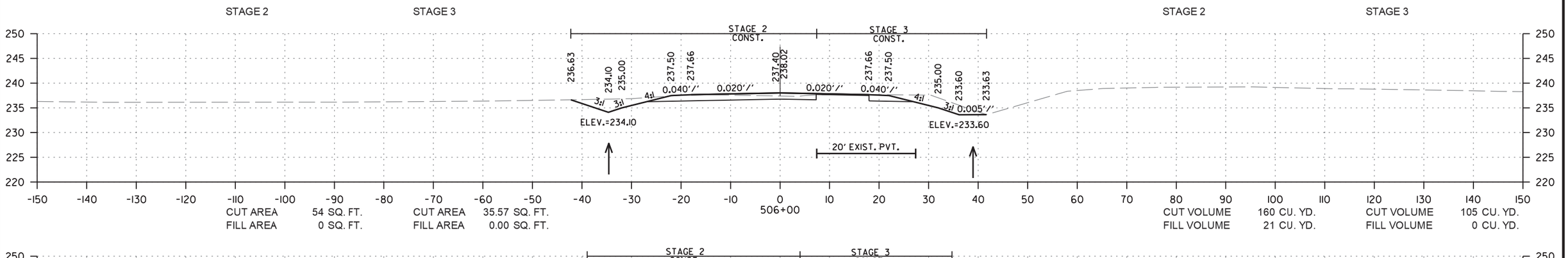


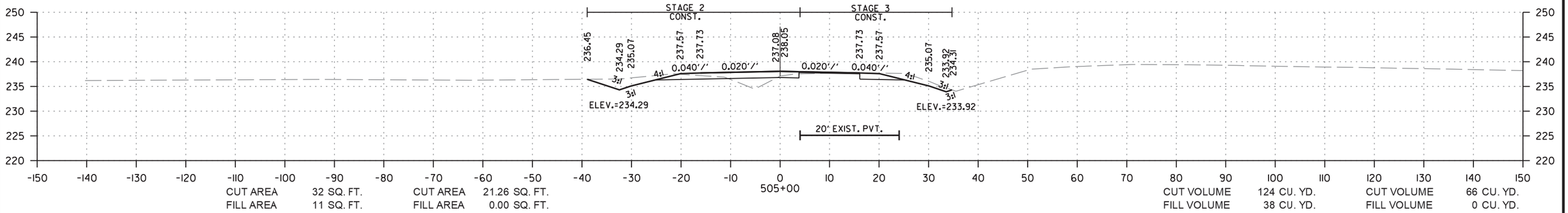
CUT AREA	0 SQ. FT.	CUT AREA	0.00 SQ. FT.	CUT VOLUME	0 CU. YD.	CUT VOLUME	0 CU. YD.
FILL AREA	0 SQ. FT.	FILL AREA	0.00 SQ. FT.	FILL VOLUME	0 CU. YD.	FILL VOLUME	0 CU. YD.

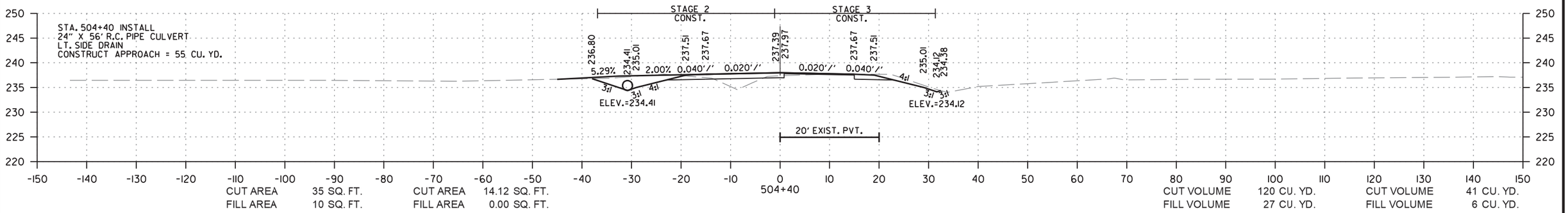
C.W. POST
STA. 501+26.25 TO STA. 502+44

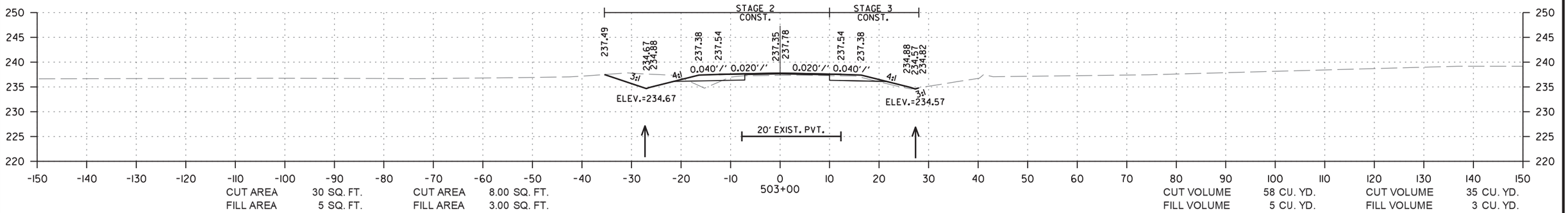
HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
09-12-22		6	ARK.	100657	413	418
		CROSS SECTIONS				







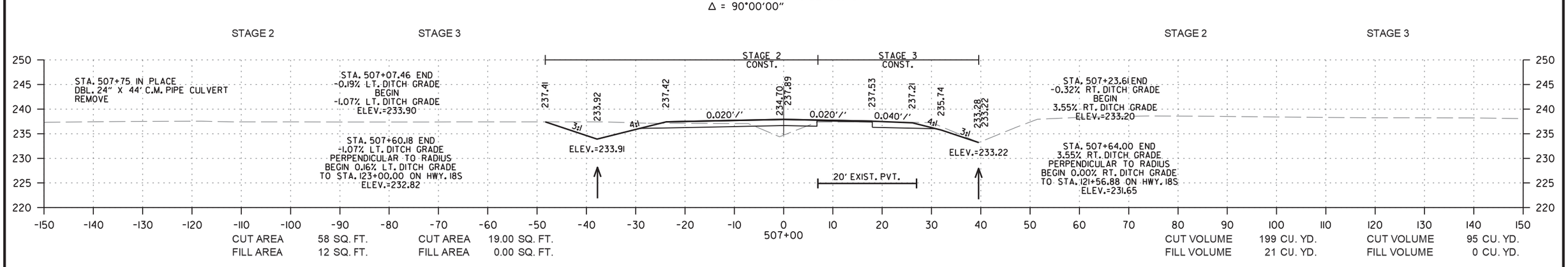


C.W. POST
STA. 503+00 TO STA. 506+00

HT39710 9/9/2022
RI00657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
09-12-22		6	ARK.	100657	414	418
		CROSS SECTIONS				

C.L. C.W. POST STA. 508+14.07 =
C.L. HWY. 18S STA. 122+09.79
Δ = 90°00'00"

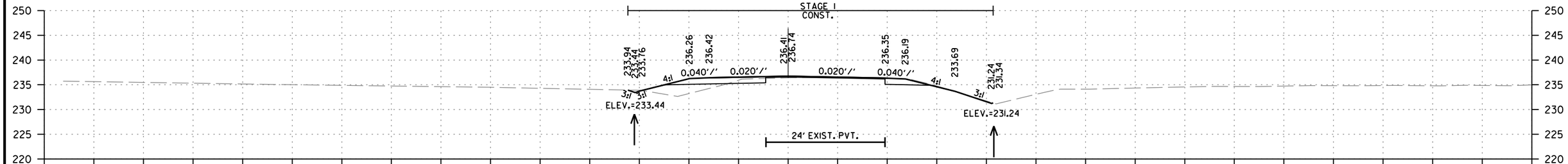


C.W. POST
STA. 506+06 TO STA. 507+00

HT39710 9/9/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	415	418
		CROSS SECTIONS				

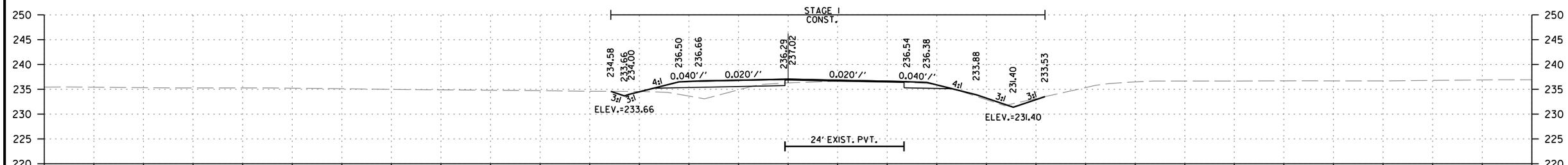
STAGE 1



CUT AREA 18 SQ. FT.
FILL AREA 23 SQ. FT.

5II+00

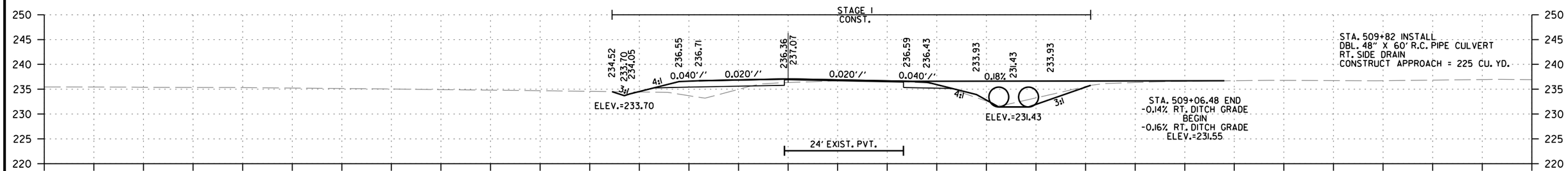
CUT VOLUME 63 CU. YD.
FILL VOLUME 96 CU. YD.



CUT AREA 16 SQ. FT.
FILL AREA 29 SQ. FT.

510+00

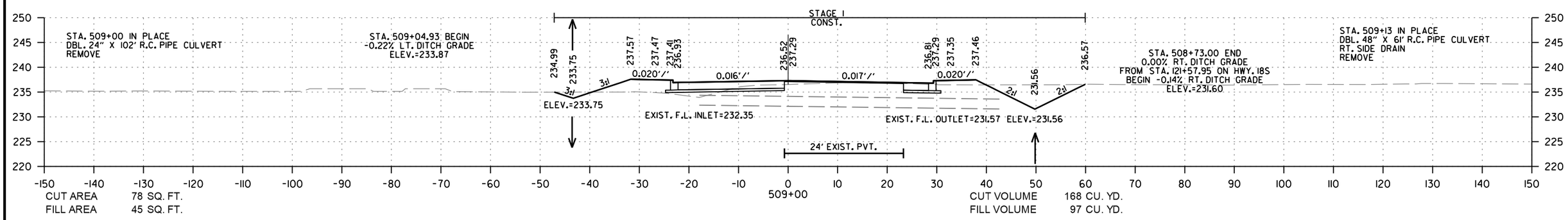
CUT VOLUME 14 CU. YD.
FILL VOLUME 20 CU. YD.



CUT AREA 27 SQ. FT.
FILL AREA 30 SQ. FT.

509+82

CUT VOLUME 160 CU. YD.
FILL VOLUME 114 CU. YD.



CUT AREA 78 SQ. FT.
FILL AREA 45 SQ. FT.

509+00

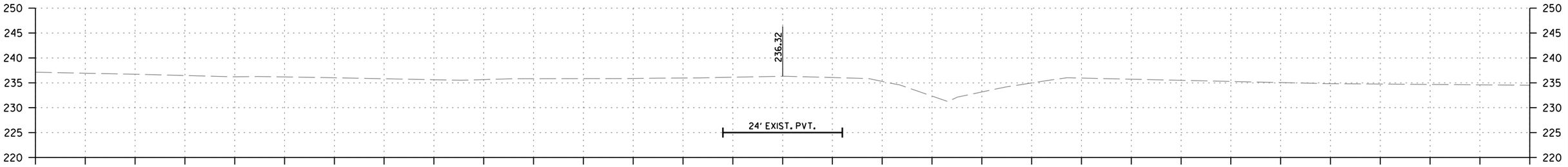
CUT VOLUME 168 CU. YD.
FILL VOLUME 97 CU. YD.

C.W. POST
STA. 509+00 TO STA. 511+00

HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	416	418
		CROSS SECTIONS				

STAGE 1

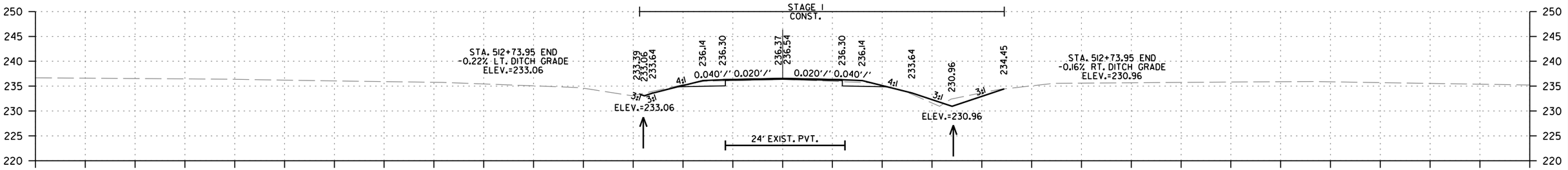


CUT AREA 0 SQ. FT.
FILL AREA 0 SQ. FT.

513+73.95
END 100' TRANSITION

STAGE 1

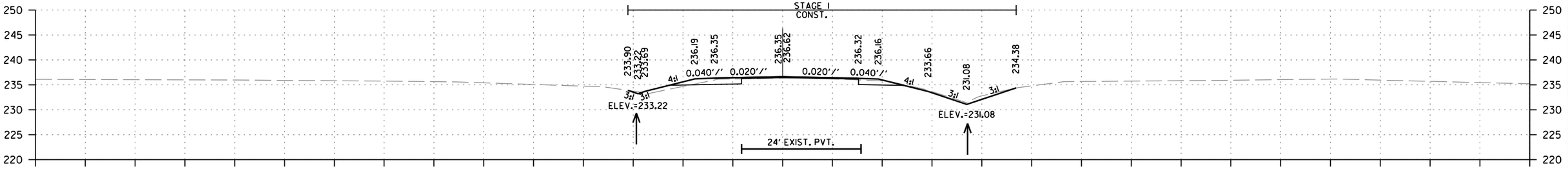
CUT VOLUME 48 CU. YD.
FILL VOLUME 7 CU. YD.



CUT AREA 26 SQ. FT.
FILL AREA 4 SQ. FT.

512+73.95
END C.W. POST CONST.
BEGIN 100' TRANSITION

CUT VOLUME 66 CU. YD.
FILL VOLUME 16 CU. YD.



CUT AREA 22 SQ. FT.
FILL AREA 8 SQ. FT.

512+00

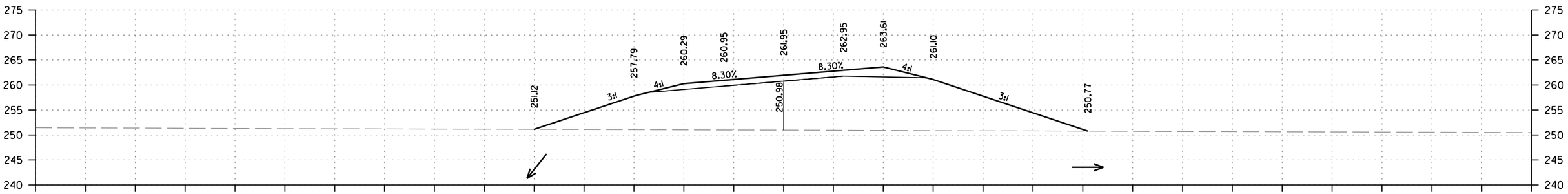
CUT VOLUME 75 CU. YD.
FILL VOLUME 57 CU. YD.

C.W. POST
STA. 512+00 TO STA. 513+73.95

HT39710 5/6/2022
RI00657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	417	418
		CROSS SECTIONS				

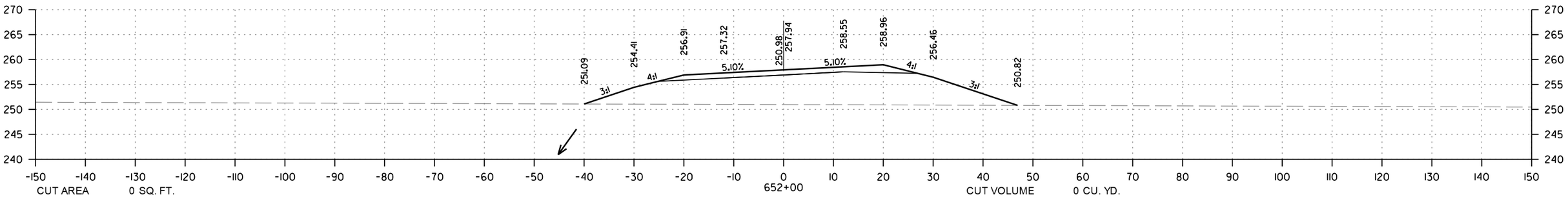
STAGE 1



CUT AREA 0 SQ. FT.
FILL AREA 800 SQ. FT.

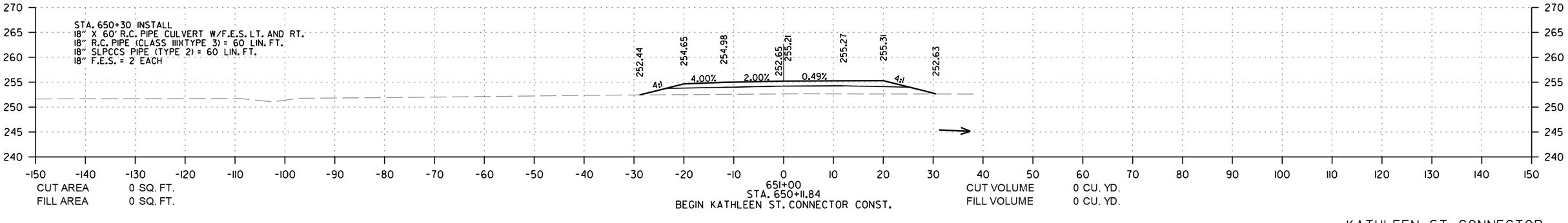
STAGE 1

CUT VOLUME 0 CU. YD.
FILL VOLUME 2233 CU. YD.



CUT AREA 0 SQ. FT.
FILL AREA 406 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 900 CU. YD.



CUT AREA 0 SQ. FT.
FILL AREA 0 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 0 CU. YD.

KATHLEEN ST. CONNECTOR
STA. 651+00 TO STA. 653+00

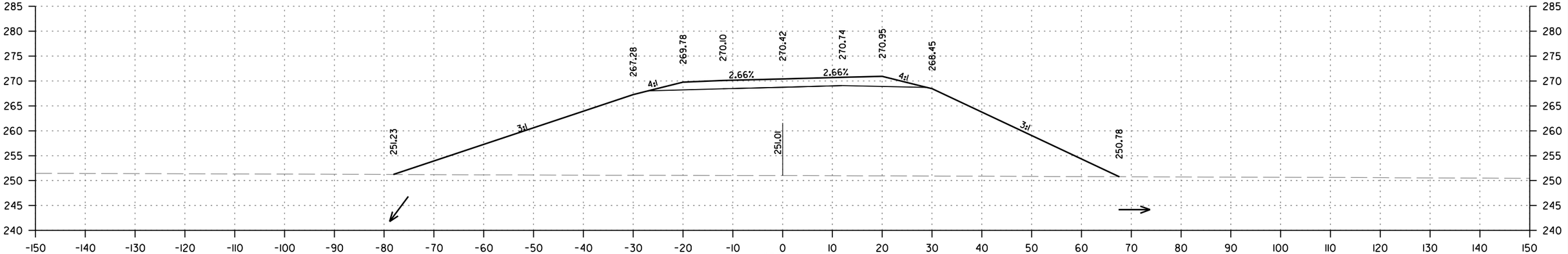
HT39710 5/6/2022
R100657.DGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	100657	418	418
		CROSS SECTIONS				

STA. 656+13.02
KATHLEEN ST. CONNECTOR TIE-IN
@ LT. E.O.P. COMMERCE DR. EXTENSION STA. 328+35.74
ELEV.=272.24

STA. 656+13.02
END KATHLEEN ST. CONNECTOR CONST.

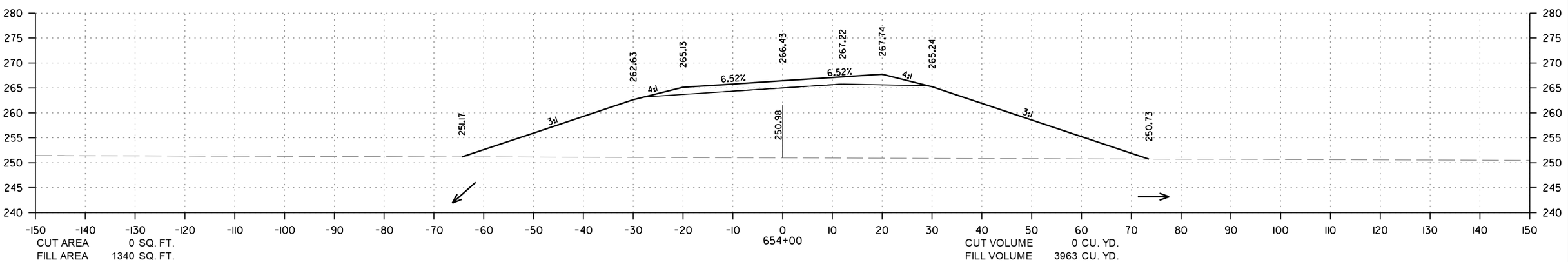
STAGE 1



CUT AREA 0 SQ. FT.
FILL AREA 1776 SQ. FT.

CUT VOLUME 0 CU. YD.
FILL VOLUME 5770 CU. YD.

STAGE 1



CUT AREA 0 SQ. FT.
FILL AREA 1340 SQ. FT.

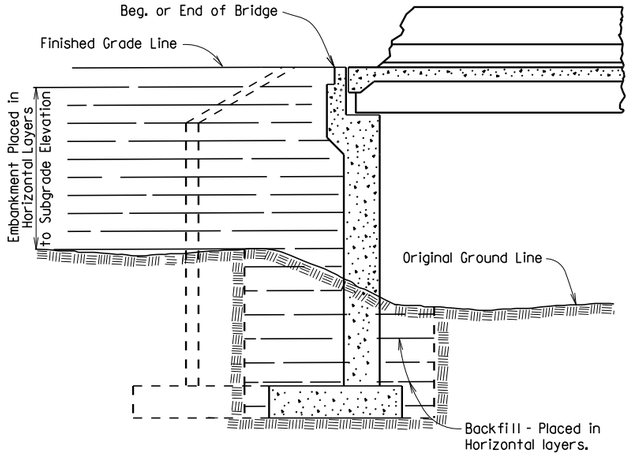
CUT VOLUME 0 CU. YD.
FILL VOLUME 3963 CU. YD.

KATHLEEN ST. CONNECTOR
STA. 654+00 TO STA. 655+00

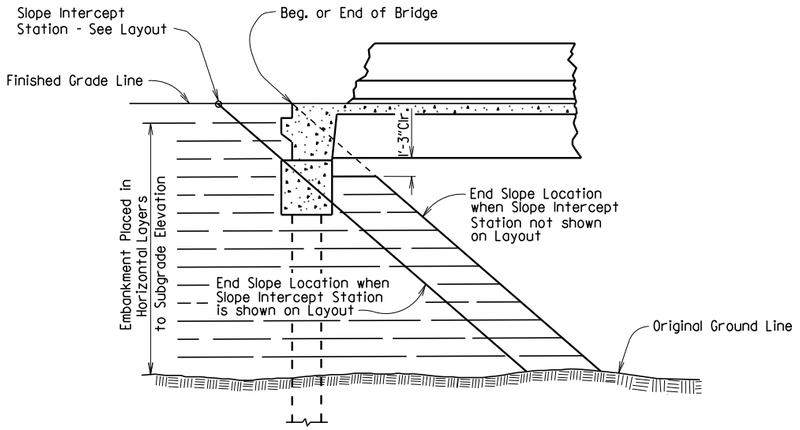
HT39710 5/6/2022
R100657.DGN

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.				

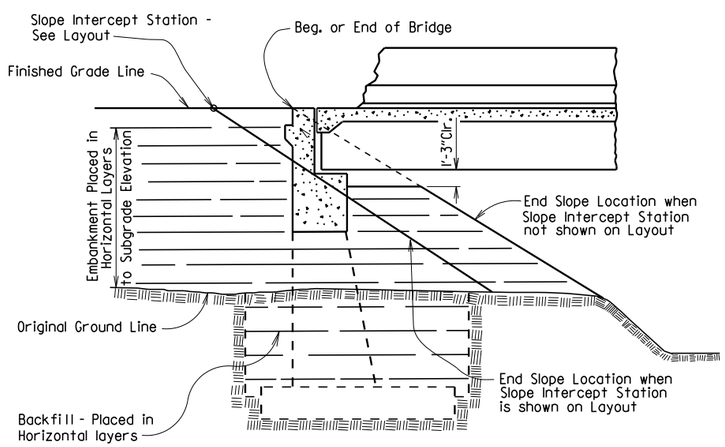
1 EMBANKMENT & BACKFILL 55000



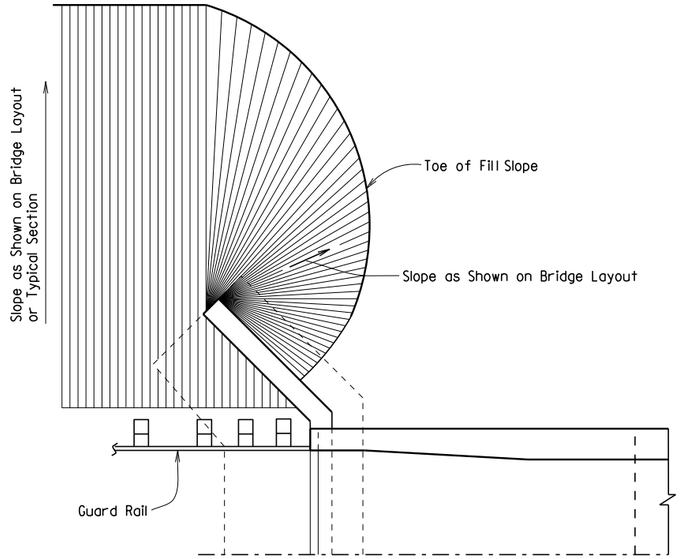
EMBANKMENT CONSTRUCTION AND FOOTING BACKFILL AT VERTICAL WALL ABUTMENTS



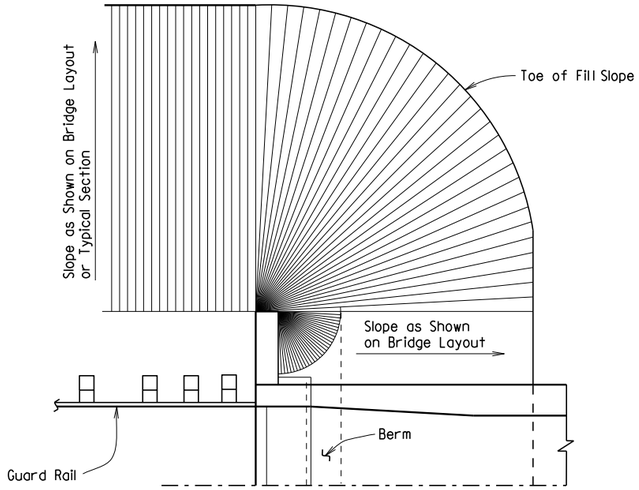
EMBANKMENT CONSTRUCTION AT SPILL-THROUGH PILE END BENTS



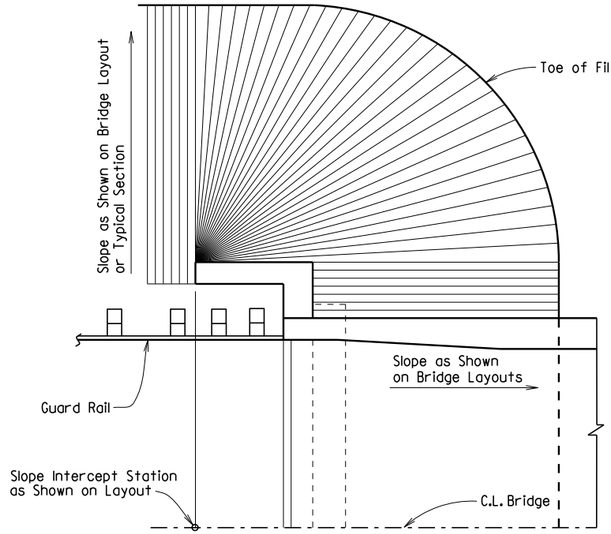
EMBANKMENT CONSTRUCTION AND FOOTING BACKFILL AT SPILL-THROUGH END BENTS



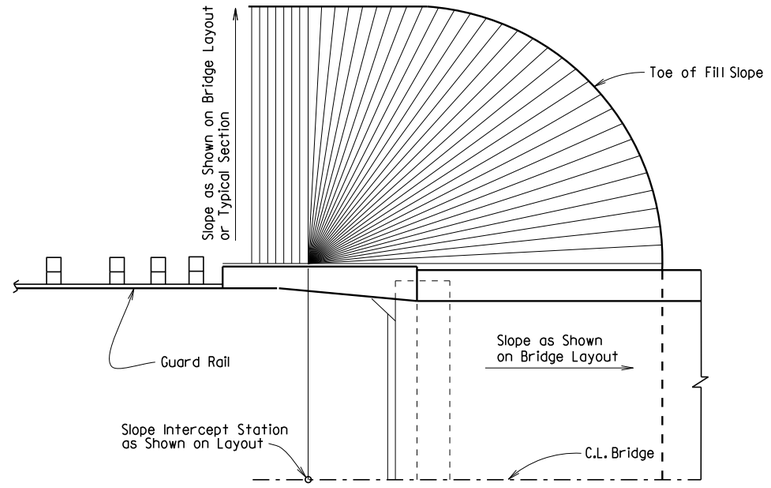
VERTICAL WALL ABUTMENTS



SPILL-THROUGH END BENTS WITH STUB WING



SPILL-THROUGH END BENTS WITH TURNBACK WING



SPILL-THROUGH END BENTS WITH TRANSITION WING

METHOD OF DETERMINING FILL SLOPE LOCATION AT BRIDGE ENDS

GENERAL NOTES

The Bridge End Embankment shall be defined as a section of embankment, not less than 20 feet long adjacent to the bridge end, together with the side slopes and slopes under the bridge end including around the end of wingwalls. Embankment adjacent to structures shall be constructed in 6 inch horizontal layers (loose measure) and compacted by the use of mechanical equipment to the satisfaction of the Engineer. Refer to Subsections 210.09, 210.10 and 801.08 for construction requirements.

STANDARD DETAILS FOR EMBANKMENT CONSTRUCTION AND BACKFILL AT BRIDGE ENDS

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: KDH DATE: 2-27-2014 FILENAME: b55000.dgn

CHECKED BY: BEF DATE: 2-27-2014 SCALE: NO SCALE

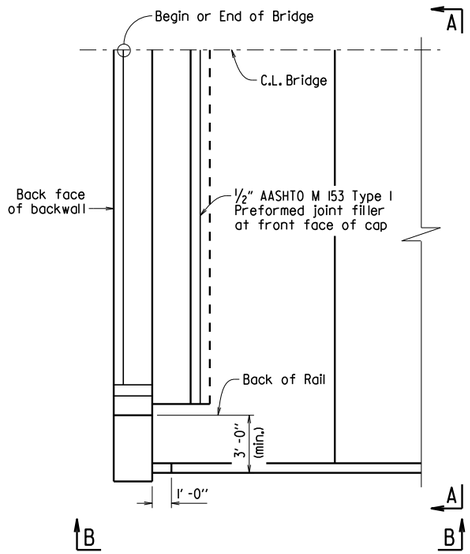
DESIGNED BY: STD. DATE: -

DRAWING NO. 55000

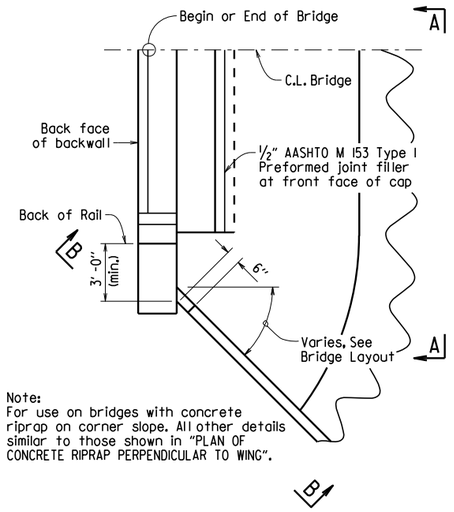
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.				

① CONCRETE RIPRAP 55002

Note:
Sloped surfaces of concrete riprap to be marked off into blocks (construction joints optional) with an approved grooving tool, spacing the grooved lines about 5' apart.



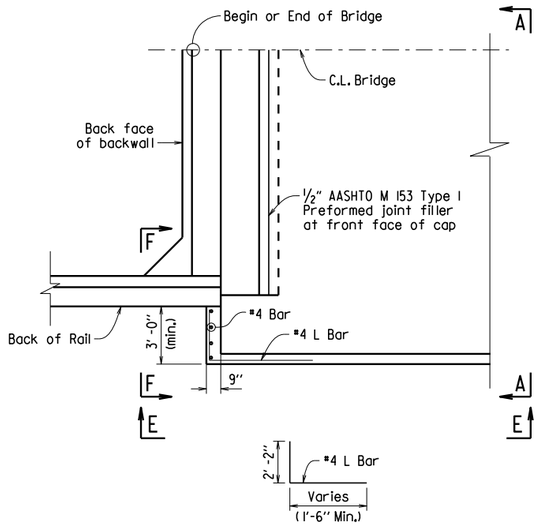
PLAN OF CONCRETE RIPRAP PERPENDICULAR TO WING
¼" = 1'-0"



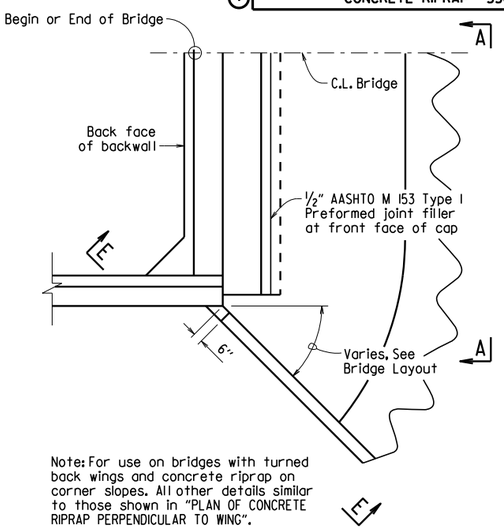
Note:
For use on bridges with concrete riprap on corner slope. All other details similar to those shown in "PLAN OF CONCRETE RIPRAP PERPENDICULAR TO WING".

PLAN OF CONCRETE RIPRAP AT ANGLE TO WING
¼" = 1'-0"

Note:
For use on bridges with turned back wings. All other details similar to those shown in "PLAN OF CONCRETE RIPRAP PERPENDICULAR TO WING".



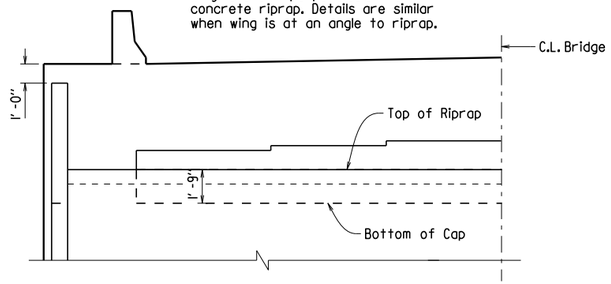
PLAN OF CONCRETE RIPRAP PERPENDICULAR TO TURNED BACK WING
¼" = 1'-0"



Note: For use on bridges with turned back wings and concrete riprap on corner slopes. All other details similar to those shown in "PLAN OF CONCRETE RIPRAP PERPENDICULAR TO WING".

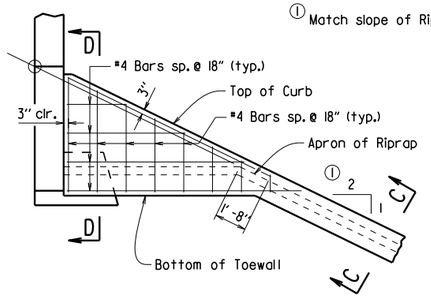
PLAN OF CONCRETE RIPRAP AT ANGLE FROM TURNED BACK WING
¼" = 1'-0"

Note:
Wing is shown perpendicular to concrete riprap. Details are similar when wing is at an angle to riprap.

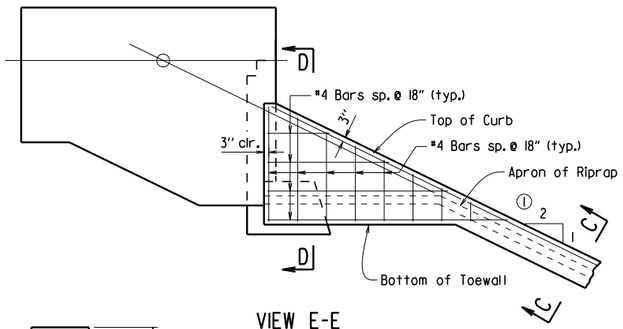


VIEW A-A
¼" = 1'-0"

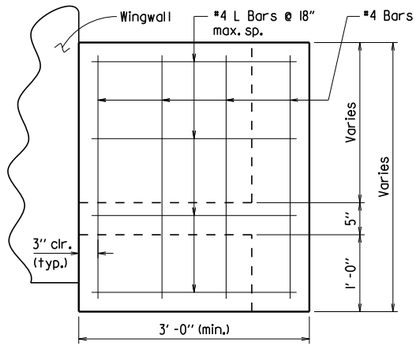
① Match slope of Riprap Apron.



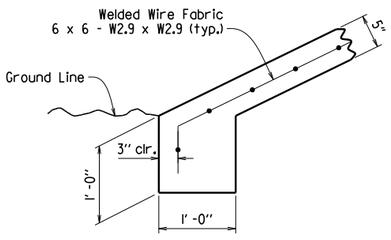
VIEW B-B
¼" = 1'-0"



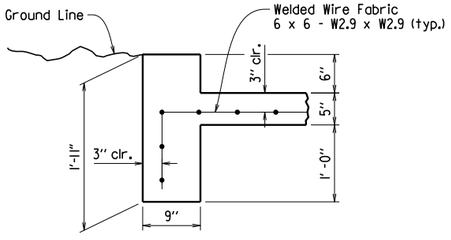
VIEW E-E
¼" = 1'-0"



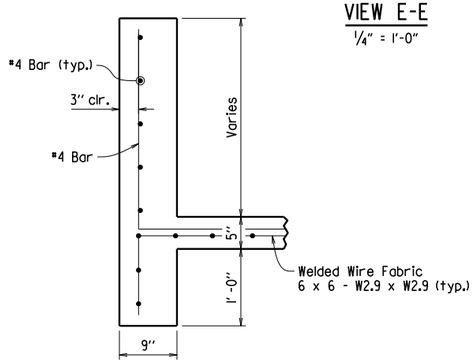
VIEW F-F
1" = 1'-0"



TOE OF CONCRETE RIPRAP
1" = 1'-0"



SECTION C-C
1" = 1'-0"



SECTION D-D
1" = 1'-0"

GENERAL NOTES

All concrete shall be Class A with a minimum compressive strength, f'c = 2,100 psi.

Welded wire fabric shall conform to AASHTO M55 or M221.

STANDARD DETAILS FOR CONCRETE RIPRAP

ARKANSAS STATE HIGHWAY COMMISSION

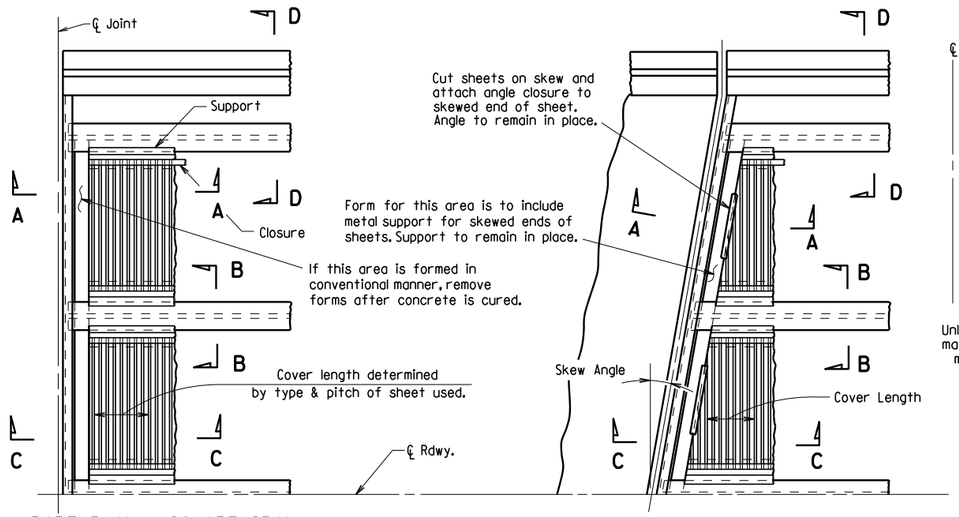
LITTLE ROCK, ARK.

DRAWN BY: ACP DATE: 2/27/2014
CHECKED BY: BEF DATE: 2/27/2014
DESIGNED BY: Std. DATE: ---
FILENAME: b55002.dgn
SCALE: AS SHOWN

DRAWING NO. 55002

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3/24/16				6	ARK.			
				JOB NO.				

① BRIDGE DECK FORMS 55005

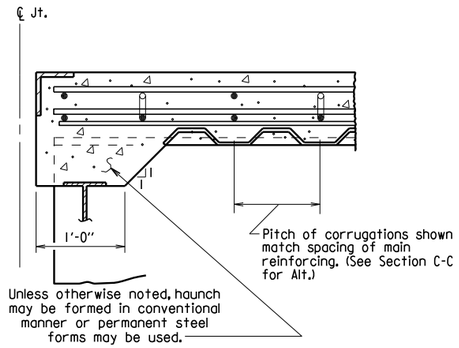


PART PLAN - SQUARE SPAN

3/8" = 1'-0"

PART PLAN - SKEWED SPAN

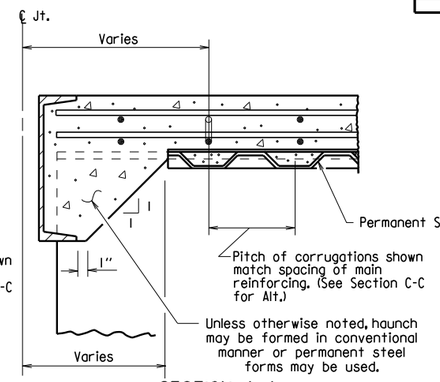
3/8" = 1'-0"



SECTION A-A

N.T.S.

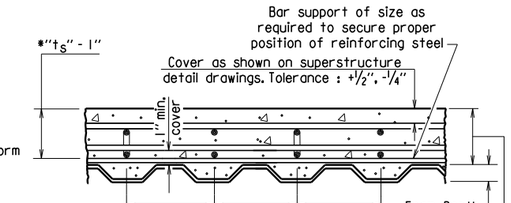
(Angle at end of span)



SECTION A-A

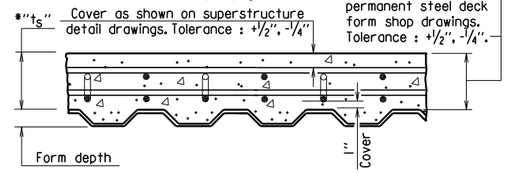
N.T.S.

(Channel at end of span)



SECTION C-C

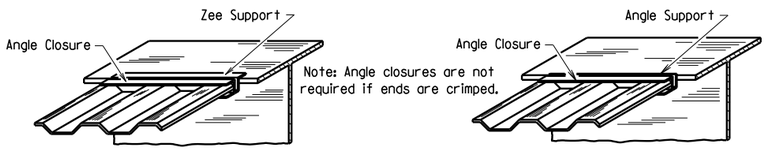
1" = 1'-0"



SECTION C-C - ALTERNATE

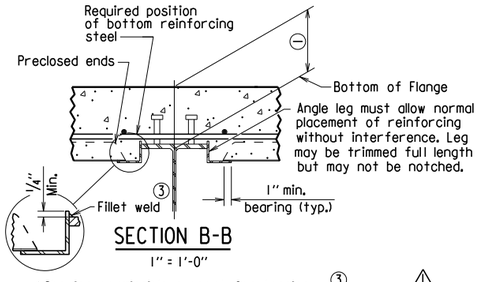
1" = 1'-0"

(Applicable when corrugations do not match spacing of main reinforcement)



SKETCH OF PERMISSIBLE SUPPORTS

N.T.S.

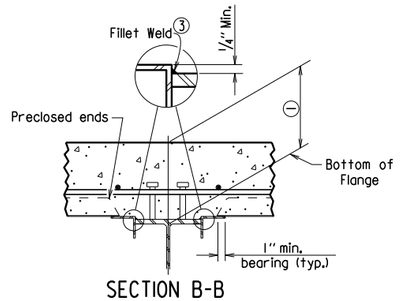


SECTION B-B

1" = 1'-0"

(Showing permissible support for tension flange where shear connectors are used, and for all compression flanges)

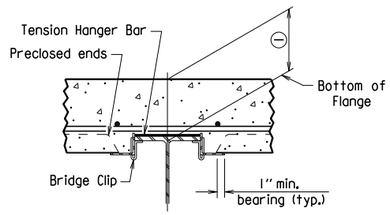
③ ⚠ Minimum weld: 1/8" x 1" @ 18". More weld may be required; maximum length per weld = 1 1/2" (typ.)



SECTION B-B

1" = 1'-0"

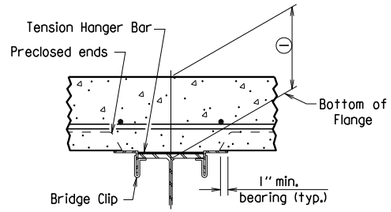
(Showing permissible support for tension flange where shear connectors are used and for all compression flanges)



SECTION B-B

1" = 1'-0"

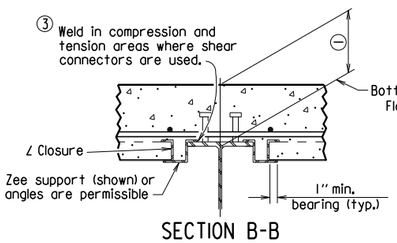
(Showing permissible support for tension flange where shear connectors are not used)



SECTION B-B

1" = 1'-0"

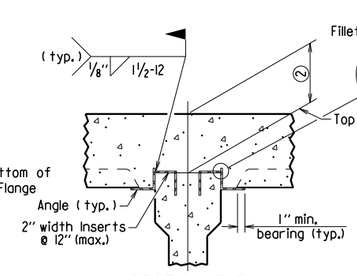
(Showing permissible support for tension flange where shear connectors are not used)



SECTION B-B

1" = 1'-0"

(Showing ∠ Closure)

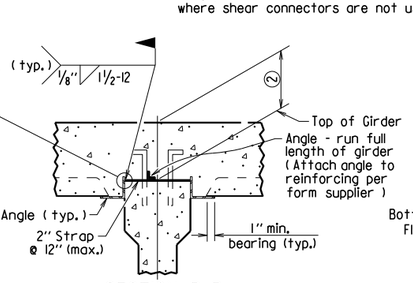


SECTION B-B

(FOR CONCRETE GIRDERS)

1" = 1'-0"

(Showing support by Insert cast in girder)

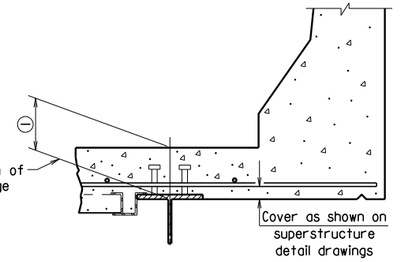


SECTION B-B

(FOR CONCRETE GIRDERS)

1" = 1'-0"

(Showing support by Strap)



SECTION D-D

1" = 1'-0"

Note: Only Bottom Reinforcing is shown.

① Distance from top of slab to bottom of top flange as measured at centerline girder and as shown on superstructure detail drawings. This dimension may vary within the following limits to maintain the grade and slab thickness tolerances : Minimum - occurs when either the top flange or the support angle leg contacts the bottom reinforcing steel; Maximum = t_S + 1 3/4" + flange thickness. See Section C-C for slab thickness tolerance between adjacent girder flanges.

② Distance from top of slab to top of girder as measured at centerline girder and as shown on superstructure detail drawings. This dimension may vary within the following limits to maintain the grade and slab thickness tolerances : Minimum - occurs when either the top of girder or the support angle leg contacts the bottom reinforcing steel; Maximum - value shown on the superstructure detail drawings when removable forms are used. See Section C-C for slab thickness tolerance between adjacent girder flanges.

⚠ Revised weld dimension by KWY, Ck'd. by BEF, 3/24/16.

*t_S = slab thickness as shown on superstructure detail drawings.

GENERAL NOTES

Permanent steel deck forms may be used at the Contractor's option and shall be at no additional cost to the Department. Such use may result in changes to the dead load deflection of the girder. Any cost for adjustments due to a change in the dead load deflection will be borne by the Contractor. Payment for deck concrete and structural steel will not be increased due to use of permanent steel deck forms.

Permanent steel deck forms shall conform to Subsection 802.14(b). Detailed plans, including detailed calculations and manufacturer's technical brochure, shall be submitted to and approved by the Engineer before work of forming the bridge deck is started.

Welding of form supports to the tension flange of steel girders will be permitted only in areas where shear connectors are used. When welding is not allowed, the method of fastening Z or ∠ supports to the flange must be approved by the Engineer.

Form sheets shall be fastened to supporting members and to each other with galvanized metal screws sufficient in size and number to provide a secure attachment. Alternate methods of attachment must be approved by the Engineer.

When the pitch of form corrugations match the reinforcing spacing, transversely align form sheets across the bridge to maintain the correct orientation of continuous reinforcing bars in the corrugations.

Bar support rods, when used, shall be sized and spaced to adequately support the bottom reinforcing mat at the required position.

High chairs shall be sized to support the top mat of reinforcing at the proper position. High chairs shall be placed at locations shown on the detail drawings.

Specifications: Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction (2014 Edition), with applicable Supplemental Specifications and Special Provisions.

STANDARD DETAILS FOR PERMANENT STEEL BRIDGE DECK FORMS FOR STEEL & CONCRETE GIRDER SPANS

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: KDH DATE: 2-27-2014 FILENAME: b55005.dgn

CHECKED BY: BEF DATE: 2-27-2014 SCALE: NONE

DESIGNED BY: STD. DATE: —

DRAWING NO. 55005

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.				
						GENERAL NOTES		55006

GENERAL NOTES

These GENERAL NOTES are applicable unless otherwise shown in the Plan Details, Special Provisions, or Supplemental Specifications.

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 Specifications.

DESIGN SPECIFICATIONS: See Bridge Layout(s).

SUPERSTRUCTURE NOTES:

MATERIALS AND STRENGTHS:

Class S(AE) Concrete	f'c =	4,000 psi
Reinforcing Steel (Gr. 60, AASHTO M 31 or M 322, Type A)	fy =	60,000 psi
Structural Steel (AASHTO M 270, Gr. 36)	Fy =	36,000 psi
Structural Steel (AASHTO M 270, Gr. 50)	Fy =	50,000 psi
Structural Steel (AASHTO M 270, Gr. 50W)	Fy =	50,000 psi
Structural Steel (AASHTO M 270, Gr. HPS70W)	Fy =	70,000 psi

See Plan Details for Grade(s) of Structural Steel required.

CONCRETE:

All concrete shall be Class S(AE) with a minimum 28 day compressive strength f'c = 4,000 psi. Concrete shall be poured in the dry and all exposed corners shall be chamfered ¾" unless otherwise noted.

The superstructure details shown are for use when removable deck forming is used and are the basis for measurement of Class S(AE) Concrete. See Standard Drawing No. 55005 for allowable modifications and for tolerances when Permanent Steel Bridge Deck Forms are used.

Use of a longitudinal screed is not permitted on any span of a bridge deck with horizontal curvature.

The concrete deck (roadway surface) shall be given a tine finish in accordance with Subsection 802.19 for Class 5 Tined Bridge Roadway Surface Finish. Sidewalks shall receive a broomed finish as specified for final finishing in Subsection 802.19 for Class 6 Broomed Finish. Movement of the finishing machine across new concrete shall be on planks placed on the surface and shall be prohibited for 72 hours after finishing the pour. Sufficient concrete must be placed ahead of the strike-off to fully load the beam or girder. When permitted, the use of a longitudinal strike-off will require that a vertical camber adjustment be made in the strike-off to account for the future dead load deflection due to any railings, median barrier, and sidewalks.

REINFORCING STEEL:

All reinforcing steel shall be Grade 60 conforming to AASHTO M 31 or M 322, Type A, with mill test reports and shall be epoxy coated. The reinforcing steel is to be accurately located in the forms and firmly held in place by steel wire supports, sufficient in number and size to prevent displacement during the course of construction. The wire supports will not be paid for directly, but will be considered subsidiary to the item "Epoxy Coated Reinforcing Steel (Grade 60)".

STRUCTURAL STEEL (COMMON TO W-BEAMS AND PLATE GIRDERS):

Structural steel shall be AASHTO M 270 with grade and payment as specified in the plans. Grade 50W steel shall not be painted and all exposed surfaces shall be cleaned in accordance with Subsection 807.84(e). Grade 36 and Grade 50 steel shall be painted unless otherwise noted and all exposed surfaces shall be cleaned in accordance with Subsection 807.84. Structural steel completely embedded in concrete may be AASHTO M 270, Gr. 36, Gr. 50 or Gr. 50W unless otherwise noted.

Drawings show general features of design only. Shop drawings shall be made in accordance with the specifications, submitted and approval secured before fabrication is begun.

Requests for substitution of structural steel shapes shown with shapes of greater size must be submitted by the Contractor to the Engineer for approval. Steels of equal or greater strengths will be accepted only when shown on the approved shop drawings. Payment will be based on the basis of shapes and materials shown in the plans, and no additional compensation will be made for any adjustments due to substitutions.

All welding that is to be done during fabrication of structural steel, including temporary welds, shall be detailed on the shop drawings and submitted for approval. If additional welds are required, whether permanent or temporary, a formal request with detailed drawings shall be submitted to the Engineer for approval; however, additional welds used for attaching falsework support devices or screed rail supports to the structural steel that do not exceed the limitations of Subsection 802.13 will not require approval prior to construction. All welding shall conform to Subsection 807.26.

Unless otherwise noted, field connections shall be bolted with ¾" ø high-strength bolts using 13/16 " ø open holes. Holes for ¾" ø high-strength bolts may be 15/16 " ø if a washer is supplied for use under both the nut and head of the bolt. The use of oversized holes will not be allowed on main members unless otherwise noted. Bolts shall be placed with heads on the outside face of the exterior beam or girder webs and on the bottom of the beam or girder flanges.

All stud shear connectors shall be granular flux filled, solid fluxed, or equal and shall be automatically end welded in accordance with recommendations of the Manufacturer.

When painting is required, all structural steel except galvanized steel and steel completely encased in concrete shall be painted in accordance with Subsection 807.75. The color of paint shall be as specified in the plans.

STRUCTURAL STEEL (W-BEAMS):

All beams and field splice plates, and all diaphragms and connection plates attached to horizontally curved beams are considered main load carrying members and shall meet the Longitudinal Charpy V-Notch Test specified in Subsection 807.05. This work and material will not be paid for directly, but shall be considered subsidiary to the item "Structural Steel in Beam Spans (M 270, Gr. ___)".

All beams in continuous units and simple spans with field splices shall be blocked in their true position in the shop in groups as specified in Subsection 807.54(b)(2) with the webs horizontal. The camber, length of sections, distance between bearings, and openings of joints shall be measured and this information shall become part of the permanent records. The component parts shall be match marked in this assembly and these marks shall be shown on the erection diagram.

All beams in simple spans without field splices shall be blocked in their true position with webs horizontal. The camber, distance between bearings, and openings of joints shall be measured and this information shall become part of the permanent records.

Flange field splice plates shall be cut and fabricated so that the primary direction of rolling is parallel to the direction of the main tensile and/or compressive stresses.

All beam dimensions are based on a temperature of 60 degrees F. A tolerance of ¼" +/- is allowed for camber.

Bent plate diaphragms for horizontally curved beams shall be cut and fabricated so that the primary direction of rolling is parallel to the direction of the main tensile and/or compressive stresses. Bent plate diaphragms for straight beams may be cut and fabricated in accordance with Subsection 807.35 or as required for horizontally curved beams.

Unless otherwise noted, diaphragms shall be installed as beams are erected. All bolts in diaphragms and field splices shall be installed and tightened in accordance with Subsection 807.71 prior to pouring the concrete deck.

STRUCTURAL STEEL (PLATE GIRDERS):

All references to cross-frames shall include "X" or "K" types.

All girder web and flange plates, all field splice plates, and all diaphragms, cross-frames and connection plates attached to horizontally curved girders are considered main load carrying members and shall meet the Longitudinal Charpy V-Notch Test specified in Subsection 807.05. This work and material will not be paid for directly, but shall be considered subsidiary to the item "Structural Steel in Plate Girder Spans (M 270, Gr. ___)".

All girders in continuous units and simple spans with field splices shall be assembled in the shop as specified in Subsection 807.54(b)(2) and blocked in their true position with webs horizontal. The camber, length of sections, distance between bearings, and openings of joints shall be measured and this information shall become part of the permanent records. The component parts shall be match marked in this assembly and these marks shall be shown on the erection diagram.

All girders in simple spans without field splices shall be blocked in their true position with webs horizontal. The camber, distance between bearings, and openings of joints shall be measured and this information shall become part of the permanent records.

Web and flange plates for main members and flange splice plates for main members shall be cut and fabricated so that the primary direction of rolling is parallel to the direction of the main tensile and/or compressive stresses.

Girder webs may be made by shop splicing with minimum lengths of 25 feet for sections. Flange plates longer than 50 feet may be made by shop splicing with minimum lengths of 25 feet for sections. No additional payment will be made for shop welded splices.

All girder dimensions are based on a temperature of 60 degrees F. A tolerance of ¼" +/- is allowed for camber.

Groove welds in web and flange plates shall be Quality Control (Q.C.) tested by nondestructive testing, as required in Subsection 807.23(b). Fillet welds at flange to web plate connections shall be Q.C. tested by the magnetic particle method. All Q.C. testing shall be considered subsidiary to the item "Structural Steel in Plate Girder Spans (M 270, Gr. ___)".

Bent plate diaphragms for horizontally curved girders shall be cut and fabricated so that the primary direction of rolling is parallel to the direction of the main tensile and/or compressive stresses. Bent plate diaphragms for straight girders may be cut and fabricated in accordance with Subsection 807.35 or as required for horizontally curved girders.

Unless otherwise noted, cross-frames and diaphragms shall be installed as girders are erected. All bolts in cross-frames, diaphragms, and field splices shall be installed and tightened in accordance with Subsection 807.71 prior to pouring the concrete deck.

SUBSTRUCTURE NOTES:

CONCRETE:

Unless otherwise noted, concrete in caps, columns and footings (except seal footings) shall be Class "S" with a minimum 28 day compressive strength f'c = 3,500 psi and shall be poured in the dry. Seal Concrete for footings shall have a minimum 28 day compressive strength f'c = 2,100 psi.

Concrete in drilled shafts shall be Class "S" as modified by Job SP "Drilled Shaft Foundations".

All exposed corners shall be chamfered ¾" unless otherwise noted.

REINFORCING STEEL:

All reinforcing steel shall be Grade 60 (yield strength = 60,000 psi) conforming to AASHTO M 31 or M 322, Type A, with mill test reports.

Top reinforcing bars in cap shall be properly placed to avoid interference with anchor bolts or sheet metal sleeves.

STRUCTURAL STEEL:

Structural steel in end bents shall be AASHTO M 270 with grade and payment as specified in the plans.

FOR ADDITIONAL INFORMATION AND NOTES, SEE LAYOUT(S) AND PLAN DETAILS.

STANDARD GENERAL NOTES
FOR STEEL BRIDGE STRUCTURES

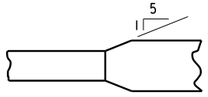
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: A.M.S. DATE: 9-2-2015 FILENAME: b55006.dgn
CHECKED BY: B.E.F. DATE: 9-2-2015 SCALE: NO SCALE
DESIGNED BY: STD. DATE:

DRAWING NO. 55006

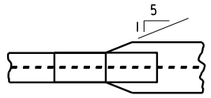
PRINT DATE: 11/7/2019

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.				
				①	STEEL BRIDGE STRUCTURES 55007			

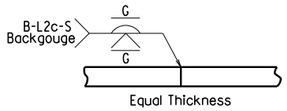


Plan-Unequal Width (Flg.)

FLANGE SPLICE

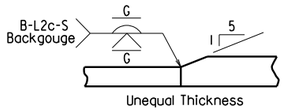


FLANGE SPLICE AT UNEQUAL BOTTOM FLANGE WIDTHS



Equal Thickness

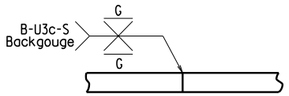
WEB & FLANGE SPLICE



Unequal Thickness

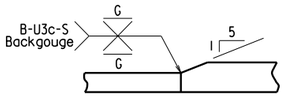
FLANGE SPLICE

(Use when Base Metal Thickness is Equal to or Less than 2")



Equal Thickness

WEB & FLANGE SPLICE

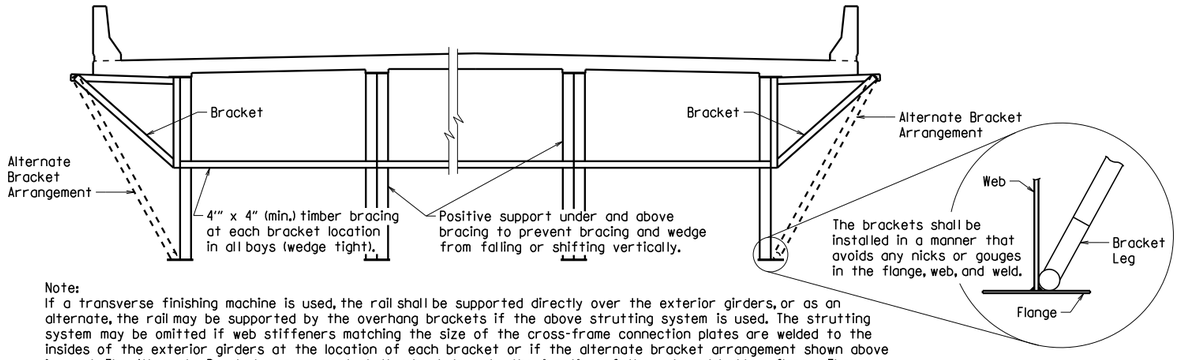


Unequal Thickness

FLANGE SPLICE

(Use when Base Metal Thickness is Greater than 2")

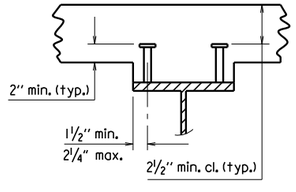
DETAILS OF WELDED SPLICES FOR PLATE GIRDERS



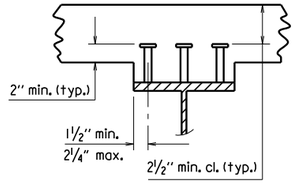
Note:
If a transverse finishing machine is used, the rail shall be supported directly over the exterior girders, or as an alternate, the rail may be supported by the overhang brackets if the above strutting system is used. The strutting system may be omitted if web stiffeners matching the size of the cross-frame connection plates are welded to the insides of the exterior girders at the location of each bracket or if the alternate bracket arrangement shown above is used. The Alternate Bracket arrangement shall extend down to the junction of the web and bottom flange. The stiffener shall conform to the details for cross frame connection plates shown on the plans. No direct payment will be made for brackets, timber bracing, supports, or welded stiffeners. Payment shall be subsidiary to "Structural Steel in Plate Girder Spans (___)".

SCREED RAIL SUPPORT FOR PLATE GIRDERS

(USE WHEN WEB DEPTHS ARE 48" OR GREATER)



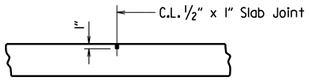
2 STUDS PER ROW



3 STUDS PER ROW

Stud Shear Connectors shall be automatically end welded to the beam or girder flange in accordance with the recommendations of the Manufacturer. See plan details for number and size.

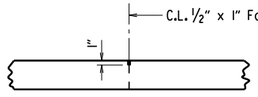
SHEAR CONNECTOR DETAIL



Use Type 3 or 4 Joint Sealer. See Subsections 501.02(h) and 501.05(j). Backer Rod filler will not be required. Joint Sealer shall be measured and paid for as Class S(AE) Concrete-Bridge. Slab Joints shall extend to the outside edge of the deck slab and shall align with open joints at the front face of the parapet. Slab joints shall be installed before the parapet railing is poured. If slab joints are to be sawed, they shall be sawed as soon as the concrete has sufficiently set to allow sawing of the joint without damage to the slab. Slab joints shall be placed at all pouring sequence construction joints and required slab joint locations. The joint sealer shall extend across the deck from gutterline to gutterline.

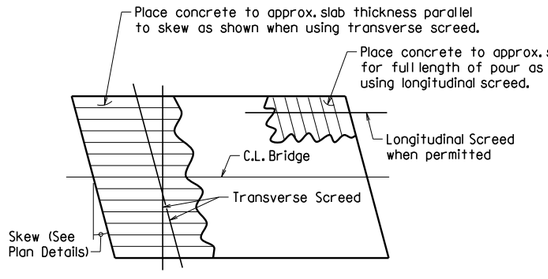
ADDITIONAL NOTES IF SIDEWALKS OR RAISED MEDIANS ARE REQUIRED:
Slab Joints shall be installed before the sidewalk or raised median is poured. After installation of the joint in the sidewalk or raised median and prior to pouring the parapet rail, the joint sealer shall be placed extending across the deck slab from gutterline to gutterline and acrosss the top of the sidwalk or raised median to the edge of the slab. No joint sealer shall be placed on the deck slab under the sidewalk or raised median.

TRANSVERSE SLAB JOINT DETAIL



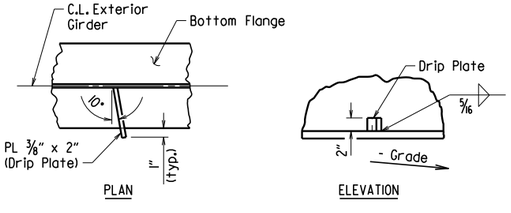
Use ½" x 1" Type 3 or 4 Joint Sealer. See Subsections 501.02(h) and 501.05(j). Backer Rod filler will not be required. Joint sealer shall be measured and paid for as Class S(AE) Concrete-Bridge. This joint shall be formed. Seal color shall be gray or other color similar to concrete.

LONGITUDINAL CONSTRUCTION JOINT



Note: At the Contractor's option, the transverse screed may be placed parallel to the skew or perpendicular to C. L. Bridge.

CONCRETE PLACEMENT PROCEDURE FOR BRIDGES WITH SKEW



PLAN

ELEVATION

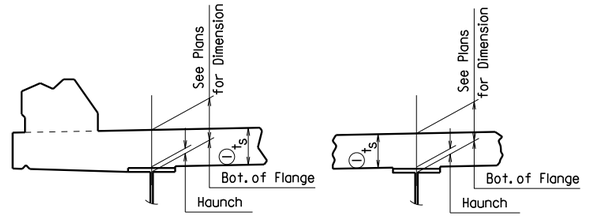
Drip Plate to be welded to the outer side of the bottom flange of the exterior girders.

Locate drip plate 5'-0" from C.L. Bearing on high side of each Bent, unless otherwise noted in the plans.

BOTTOM FLANGE DRIP PLATE

(USE WHEN WEB DEPTHS ARE 54" OR GREATER AND UNIT OR SPAN IS NOT IN LEVEL GRADE)

t_s = slab thickness. See "Typical Roadway Section" in the plans.



EXTERIOR BEAM OR GIRDER

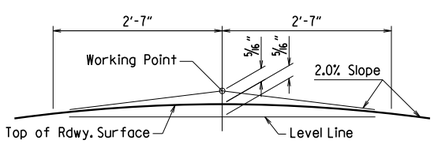
INTERIOR BEAM OR GIRDER

① Tolerance when removable deck forming is used is + ½", - ¼". Haunch forming is required and shall be adjusted to maintain slab thickness tolerance.

NOTES:
Haunch dimension may vary within the following limits to maintain the grade and slab thickness tolerance: Minimum occurs when top flange contacts bottom reinforcing steel; Maximum = top flange thickness plus 1¾" unless otherwise noted in the plans. No increase in concrete and structural steel quantities will be made to maintain tolerances.

Tolerances shown are applicable only when removable deck forming is used. See Std. Dwg. No. 55005 for tolerances when permanent steel deck forms are used. Payment for concrete shall be based on removable deck forming.

ADJUSTMENT FOR SLAB THICKNESS TOLERANCE



NOTE: Working Point matches Theoretical Roadway Grade.

ROUNDING DETAIL

BRIDGES IN NORMAL CROWN

WELD TABLE

Material Thickness of Thicker Part Joined (Inches)	Minimum Size of Fillet Weld (Inches)	Single Pass Weld Must Be Used
To ¾" Inclusive	¼"	
Over ¾"	⅝"	

NOTE: When a fillet weld size, as shown on the plans, is larger than the minimum, the first pass shall be that specified for minimum size of fillet weld.

SECTION AND SUBSECTION REFER TO THE ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (2014 EDITION).

THESE DETAILS ARE APPLICABLE UNLESS OTHERWISE SHOWN IN THE PLAN DETAILS, SPECIAL PROVISIONS, OR SUPPLEMENTAL SPECIFICATIONS.

STANDARD DETAILS FOR STEEL BRIDGE STRUCTURES

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

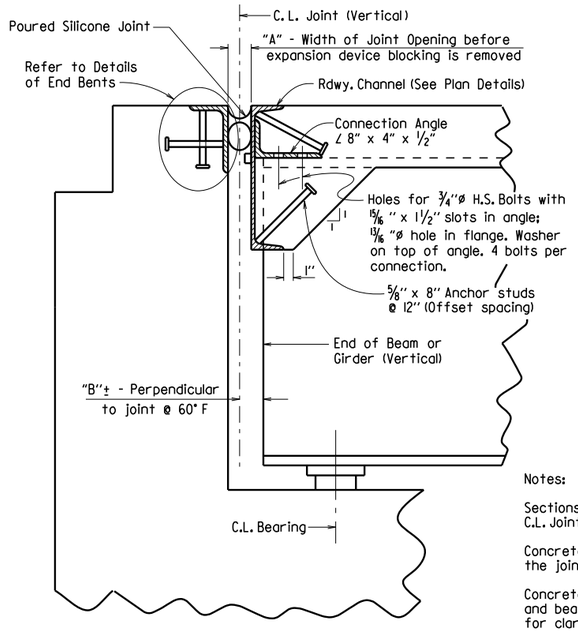
DRAWN BY: JYP DATE: 2/11/2016 FILENAME: b55007.dgn

CHECKED BY: AMS DATE: 2/11/2016 SCALE: No Scale

DESIGNED BY: STD. DATE: —

DRAWING NO. 55007

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.				
				①		POURED SILICONE JOINT		55008



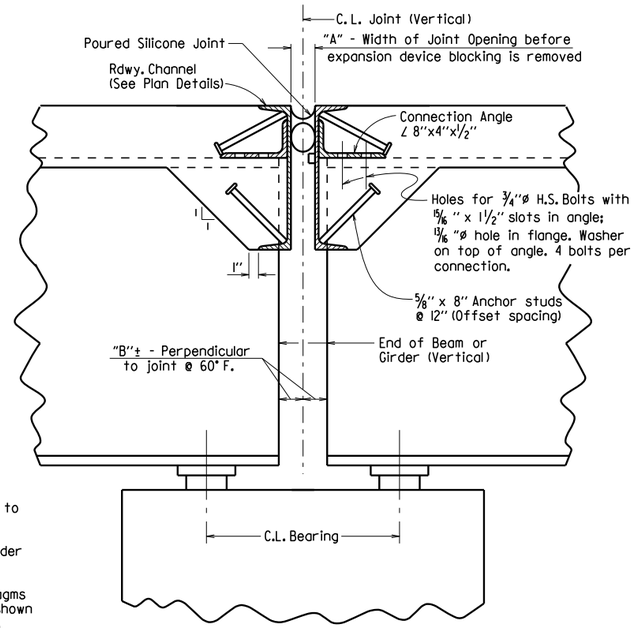
SECTION THRU JOINT AT END BENT

Notes:

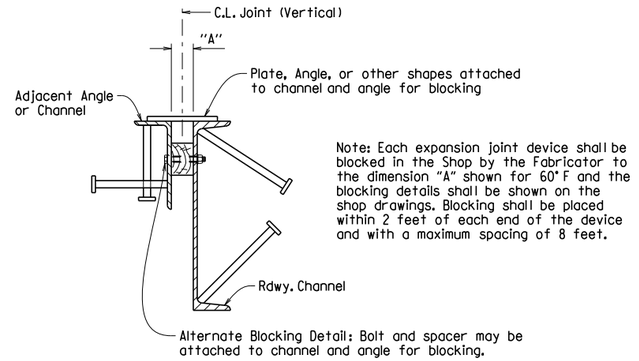
Sections are taken perpendicular to C.L. Joint.

Concrete shall be hand packed under the joint armor.

Concrete diaphragms, steel diaphragms and bearing stiffeners are not shown for clarity. See plans for details.



SECTION THRU JOINT AT INTERMEDIATE BENT



Note: Each expansion joint device shall be blocked in the Shop by the Fabricator to the dimension "A" shown for 60° F and the blocking details shall be shown on the shop drawings. Blocking shall be placed within 2 feet of each end of the device and with a maximum spacing of 8 feet.

DETAILS FOR BLOCKING EXPANSION JOINT DEVICE

EXPANSION DEVICE INSTALLATION AT END BENTS:

The Contractor may elect to install the expansion device using one of the following two alternatives:

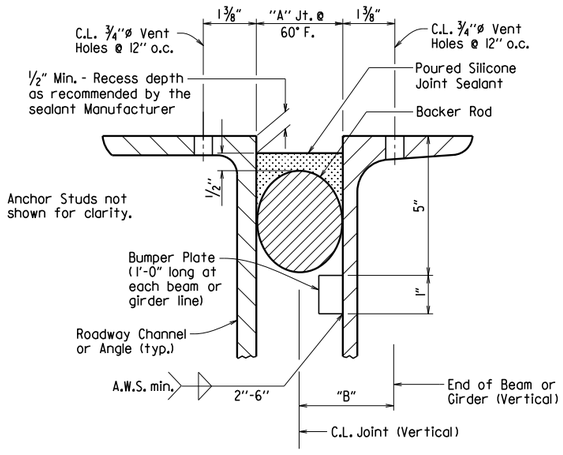
1) The concrete span pour adjacent to joint shall be placed before the end bent backwall is placed. After the end bent backwall forms are in place and the beams or girders erected, the blocked expansion device shall be installed and adjusted for grade. All connection bolts shall be fully tightened prior to placing the deck concrete adjacent to the bent. Immediately prior to pouring the backwall concrete, the blocking shall be removed, and the opening adjusted for temperature and grade.

2) The backwall shall be poured to the optional construction joint after beams or girders are erected. The blocked expansion device shall be installed and adjusted for grade. All connection bolts shall be fully tightened prior to placing the deck concrete adjacent to the bent. Immediately prior to pouring the remainder of the backwall concrete, the blocking shall be removed and the opening adjusted for temperature and grade.

EXPANSION DEVICE INSTALLATION AT INTERMEDIATE BENTS:

After all beams or girders on each side of the joint are erected the blocked expansion device shall be installed and adjusted for grade. Deck concrete shall be placed for the entire unit or span on one side of the joint before deck concrete on the other side is placed. Connection bolts for the first side to have deck concrete placed shall be completely bolted. Bolts on the other side shall be loosely installed so that thermal and rotational movements will not be restricted during concrete placement on the first side.

Connection bolts on the second side shall remain loose until the concrete pour adjacent to the joint is to be placed. Immediately prior to pouring the span concrete on the second side, the blocking shall be removed, the joint adjusted for temperature and grade, and the connection bolts tightened.



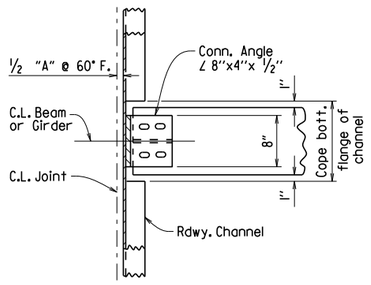
DETAIL OF POURED SILICONE JOINT

Silicone joint material and installation shall conform to Section 809. The temperature limitations recommended by the sealant Manufacturer shall be observed. The sealant shall be installed only when the average 24 hour air temperature is between 40° and 80° F.

Use an appropriately sized backer rod at the depth shown in the Manufacturer's literature based on the joint width at the time of sealing. Unless otherwise noted, do not install more backer rod than can be sealed in the same day.

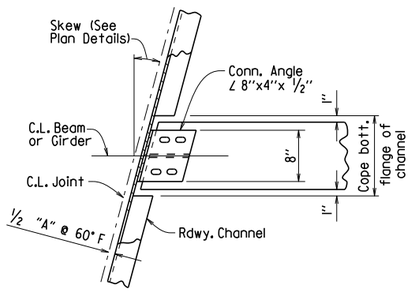
The Contractor shall verify separation of the backer rod from the joint material after the joint material has set.

When bridge deck is constructed in stages, backer rods shall be extended beyond length of poured joint in initial construction stage so that the two pieces can be properly spliced together prior to installing sealant in subsequent stages. Manufacturer's recommendations shall be followed to prevent sealant from "running out of joint" during stage construction.



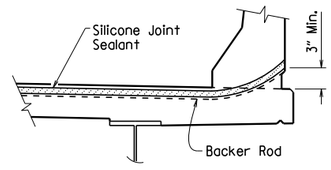
CHANNEL CONNECTION DETAIL

BENTS WITHOUT SKEW

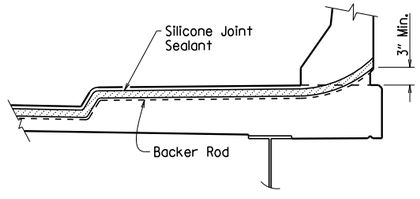


CHANNEL CONNECTION DETAIL

BENTS WITH SKEW



JOINT SEAL PLACEMENT AT RAIL



JOINT SEAL PLACEMENT AT SIDEWALK

SECTION AND SUBSECTION REFER TO THE ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (2014 EDITION).

THESE DETAILS ARE APPLICABLE UNLESS OTHERWISE SHOWN IN THE PLAN DETAILS, SPECIAL PROVISIONS, OR SUPPLEMENTAL SPECIFICATIONS. SEE "TABLE OF SILICONE JOINT DATA" IN PLAN DETAILS FOR VARIABLES "A" AND "B", AND BUMPER PLATE SIZE.

STANDARD DETAILS FOR POURED SILICONE JOINTS

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: A.C.P. DATE: 2/11/2016 FILENAME: b55008.dgn

CHECKED BY: A.M.S. DATE: 2/11/2016 SCALE: No Scale

DESIGNED BY: STD. DATE: —

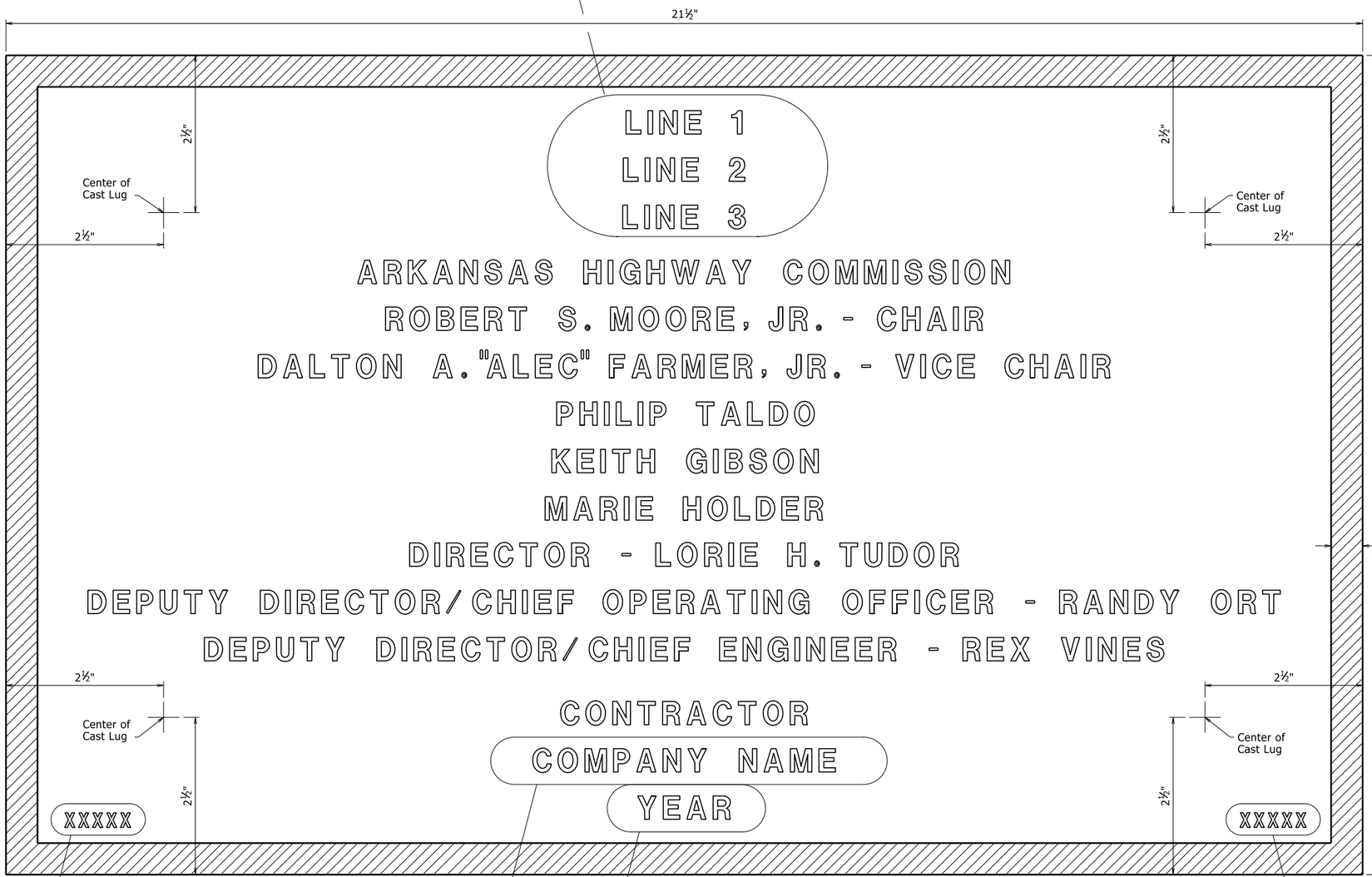
DRAWING NO. 55008

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
12-1-14		1-15-19		6	ARK.			
1-14-15		3-24-2020		JOB NO.				
1-17-17		5-11-2021						

1 TYPE D NAME PLATE - 55010

The name of the bridge as shown on the plans shall be placed on Lines 1-3 using ⅛" raised letters and numerals ⅜" high.

	Example 1	Example 2	Example 3	Example 4
Line 1	Red River	Southern	Saline	
Line 2	Relief	Railroad	River	Highway 5
Line 3		Overpass	Relief	



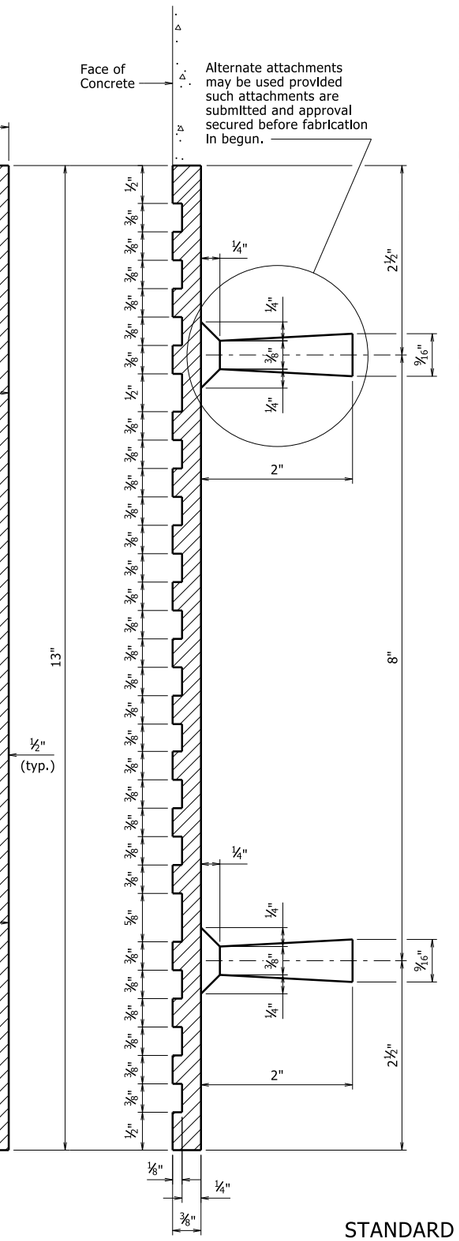
Place the design live loading here using ⅛" raised letters and numerals ¼" high. Examples: HS20, HL-93

Place the Year in which Contract was awarded here using ⅛" raised numerals ⅜" high. Example: 2001

Place the name of the company awarded the construction contract here using ⅛" raised letters and numerals ⅜" high. Example: ABCD CONSTRUCTION, INC.

Place the Bridge number here using ⅛" raised letters and numerals ¼" high. Examples: A1234, 05432

TYPICAL BRIDGE NAME PLATE



GENERAL NOTES

Specifications: Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction, (2014 Edition) with applicable Supplemental Specifications and Special Provisions.

Name plates shall be cast bronze and shall meet the material requirements as specified in Section 812.

Body of plate shall be ¼" thick and shall include four tapering cone lugs ⅜" to 9/16" x 2" long. The border and all lettering shall be raised ⅛" above the face of plate and shall be polished.

All lettering shall be plain gothic, square cut and not tapered.

The number of plates required and the location and name on the plate for each bridge shall be as designated on the plans.

6 Revised Deputy Director/ Chief Engineer
5-11-2021 CGP Checked By: CRE

5 Revised Director, Deputy Director/Chief Operating Officer, Chair, Vice Chair and added New Commissioner
3-24-2020 CGP Checked By: CRE

4 Revised Chair and Vice Chair Added New Commissioner
1-15-19 CGP Checked By: CRE

3 Added New Commissioner
1-17-17 KDH Checked By: CRE

2 Revised Chair and Vice Chair Added New Commissioner
1-14-15 KDH Checked By: CRE

1 Revised Deputy Director/ Chief Engineer Added Deputy Director/ Chief Operating Officer
12-1-14 KDH Checked By: CRE

STANDARD DETAILS FOR
TYPE D BRIDGE NAME PLATE

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

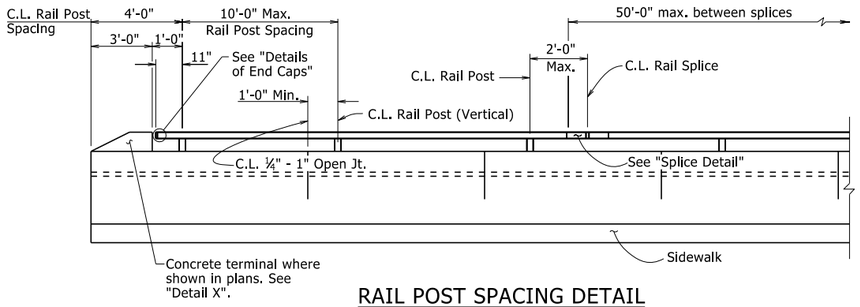
DRAWN BY: KDH DATE: 2-27-2014 FILENAME: b55010.dgn
CHECKED BY: BEF DATE: 2-27-2014 SCALE: NO SCALE
DESIGNED BY: STD. DATE:

DRAWING NO. 55010

PRINT DATE: 5/11/2021

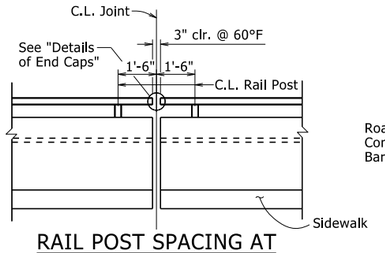
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.				

(1) TYPE H2 RAILING - 55015

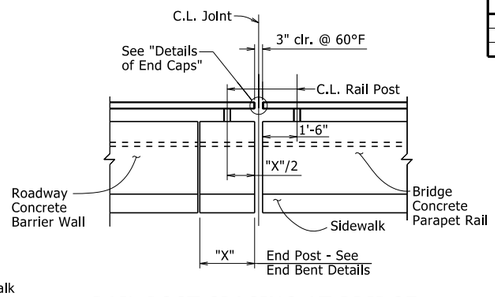


RAIL POST SPACING DETAIL

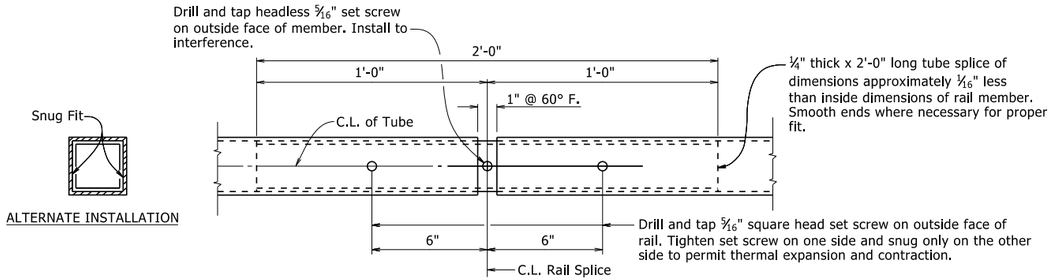
(Horizontal dimensions are along face of rail)



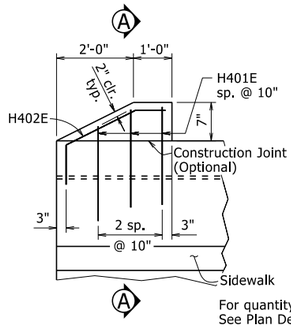
RAIL POST SPACING AT EXPANSION JOINTS



RAIL POST SPACING AT BRIDGE ENDS WITH CONCRETE BARRIER WALL

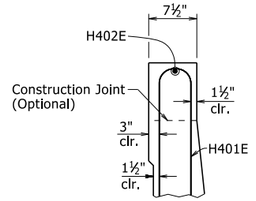


SPLICE DETAIL

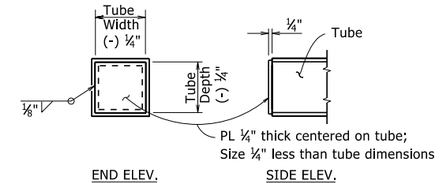


DETAIL X

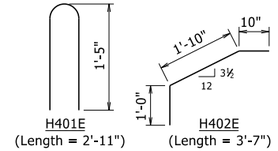
For quantity of reinforcing steel, See Plan Details.



SECTION A-A



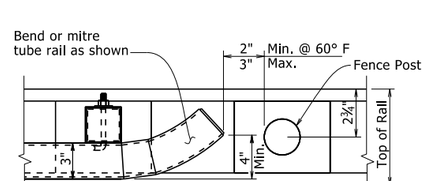
DETAILS OF END CAPS



Pin diameter for bending is 2". Bars shall be epoxy coated.

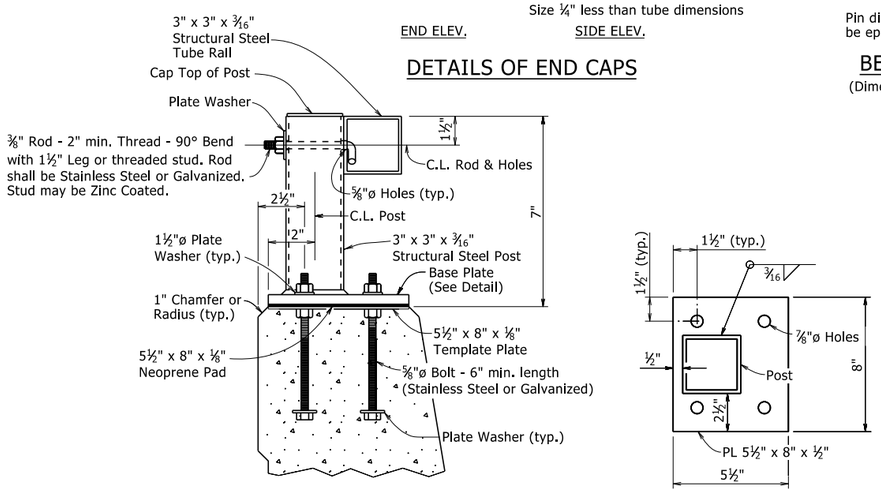
BENDING DIAGRAMS

(Dimensions are Out-to-Out of Bars)



DETAILS OF RAIL TERMINUS AT FENCE POST

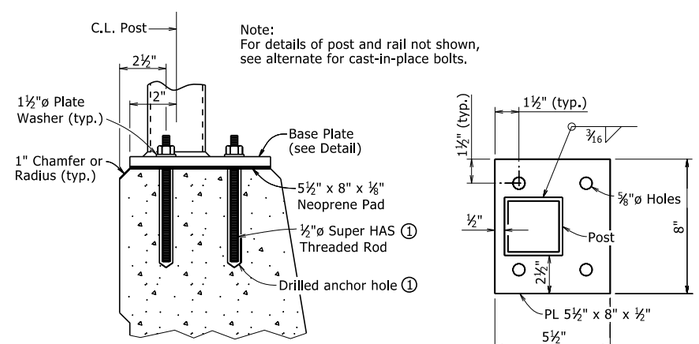
(When Chain Link Fence is Required)



BASE PLATE

DETAILS OF POST ANCHOR SYSTEM

(Cast-in-Place Bolts)



BASE PLATE

① HILTI HIT RE 500 Epoxy Adhesive Anchor System with 4½" embedment or approved equal.

The Hilti Epoxy Adhesive Anchor System (or approved equal) shall be installed in accordance with Manufacturer's recommendations.

DETAILS OF ALTERNATE POST ANCHOR SYSTEM

(Epoxy Adhesive Anchors)

MATERIALS:

Rail tubing, posts, end caps, and base plates shall conform to ASTM A709, Grade 36 or ASTM A500-Grade B, and shall be galvanized after fabrication in accordance with Subsection 806.02(c). When required elsewhere in the plans, steel rail members shall receive a powder coating process after galvanizing. Galvanized surfaces shall be prepared in accordance with Subsection 807.87 and the manufacturer's recommendations prior to application of the powder coating process.

The powder coating process shall be a two coat system applied using electrostatic spray. The base coat shall be a thermosetting epoxy powder with a minimum thickness of 2 to 4 mils. The top coat shall be tough polyester powder with a minimum thickness of 2 to 4 mils. The color shall be as shown in the plans. Coated galvanized framework shall have a salt spray resistance of 3,000 hours using ASTM B117 without loss of adhesion. The powder coating process shall be in accordance with manufacturer's recommendations. Any damage to the powder coated finish shall be repaired with a compatible touch-up system in accordance with the manufacturer's recommendations and to the satisfaction of the Engineer at the Contractor's expense.

Cast-in-place anchor bolts, nuts, washers, and set screws shall be galvanized high-strength steel or stainless steel. Mixing of galvanized and stainless steel fasteners will not be permitted.

High-Strength Steel:
Cast-in-place anchor bolts shall conform to ASTM F3125, Grade A325, Type 1.
Nuts shall conform to ASTM A563, Grade DH or AASHTO M 292, Grade 2H.
Washers shall conform to ASTM F436.
Plate Washers shall conform to ASTM A709, Grade 36.
Template Plates shall conform to ASTM A709, Grade 36.
Splice Set Screws shall conform to ASTM A307, Grade A.
Anchor bolts, nuts, washers, plate washers, and set screws shall be galvanized in accordance with AASHTO M 232, Class C or ASTM B695, Class 50.

Stainless Steel:
Cast-in-place anchor bolts shall conform to ASTM A193, Grade B8, Class 2 or A320, Grade B8, Class 2 with a minimum yield strength of 80,000 psi.
Nuts shall conform to ASTM A194, Grade 8.
Washers shall conform to ASTM A240, Type 302.
Plate Washers shall conform to ASTM A240, Type 302.
Template Plates shall conform to ASTM A240, Type 302.
Splice Set Screws shall conform to ASTM A193, Grade B8, Class 1 or A320, Grade B8, Class 1.

Threads on bolts, screws, and nuts shall conform to American Standard Coarse Series, Class 2 FIT, ASA Specification B1.1. Plate washers shall have dimensions meeting the requirements of ANSI/ASME B18.22.1, Type A plain washer (Wide Series) unless otherwise noted. Neoprene pads shall conform to the requirements of Subsection 807.15(b).

GENERAL NOTES FOR BRIDGE RAILING:

Rail layout shall conform to vertical and horizontal alignment of bridge. All posts shall be vertical. Rail sections shall be fabricated to attach to at least three posts.

Base plates shall not be placed upon areas that are improperly finished, deformed or irregular.

Bridge railing, including posts, templates, and base plates, fasteners, and neoprene pads shall be paid for at the contract unit price bid per linear foot for "Metal Bridge Railing (Type H2)". When required elsewhere in the plans, powdered coating finish and repair of powdered coating finish shall be considered subsidiary to the item "Metal Bridge Railing (Type H2)".

Shop drawings showing details of railing shall be submitted and approval secured prior to fabrication.

SECTION AND SUBSECTION REFER TO THE ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (2014 EDITION).

THESE DETAILS ARE APPLICABLE UNLESS OTHERWISE SHOWN IN THE PLAN DETAILS, SPECIAL PROVISIONS, OR SUPPLEMENTAL SPECIFICATIONS.

STANDARD DETAILS FOR TYPE H2 RAILING

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

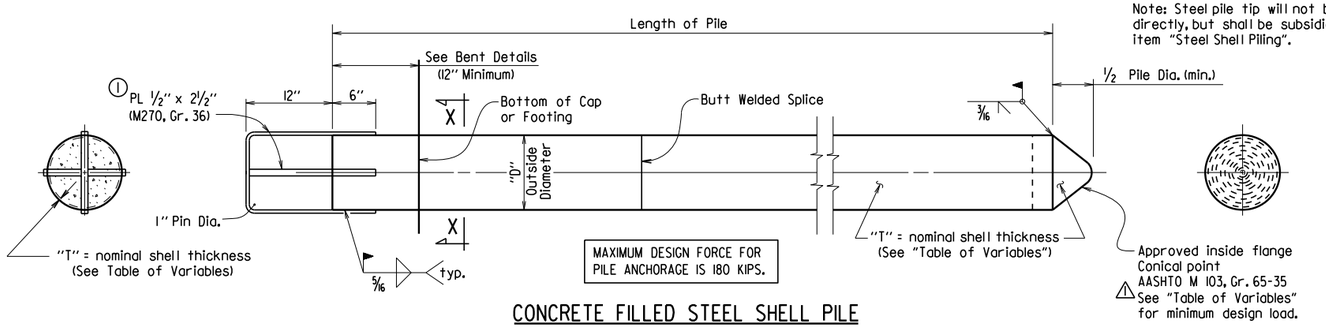
DRAWN BY:	KJT	DATE:	6/25/2020	FILENAME:	b55015.dgn
CHECKED BY:	KWY	DATE:	6/25/2020	SCALE:	No Scale
DESIGNED BY:	STD.	DATE:	-		

DRAWING NO. 55015

PRINT DATE: 4/6/2021

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3/24/16				6	ARK.			
				JOB NO.				

(1) STEEL SHELL PILES 55021

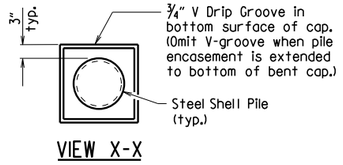


Note: Steel pile tip will not be paid for directly, but shall be subsidiary to the item "Steel Shell Piling".

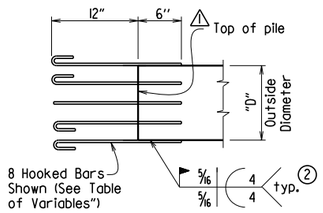
CONCRETE FILLED STEEL SHELL PILE

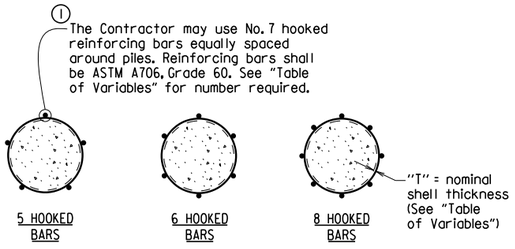
(1) Pile anchorage shall be placed to minimize interference with anchor bolts and reinforcing in cap or footing.

(2) Welding shall comply with ANSI/AWS D1.4 Structural Welding Code-Reinforcing Steel and applicable portions of ANSI/AWS D1.5 Bridge Welding Code.



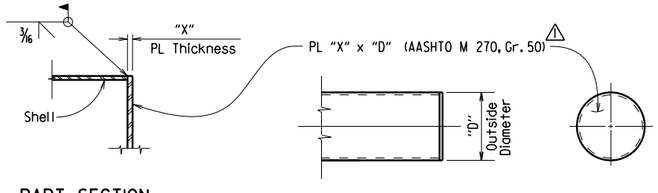
VIEW X-X





ALTERNATE PILE ANCHORAGE DETAIL

Note: Hooked bars shall be oriented to provide the required concrete clearances shown in the plans.

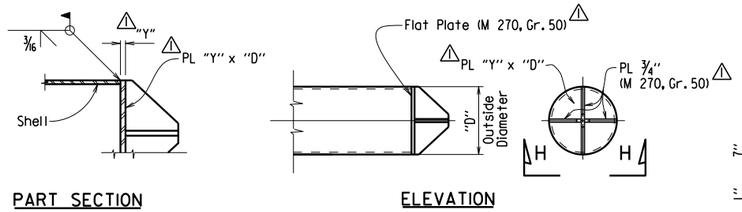


PART SECTION

ELEVATION

ALTERNATE FLAT TIP DETAIL

Note: The alternate flat tip detail shall not be used on steel shell piling to be driven through embankments constructed with internal geosynthetic reinforcement.



PART SECTION

ELEVATION

VIEW H-H

ALTERNATE VANED TIP DETAIL

GENERAL NOTES FOR CONCRETE FILLED STEEL SHEEL PILES:

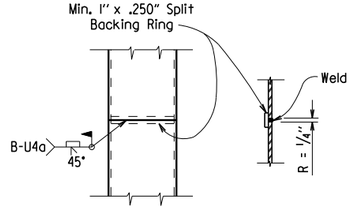
Steel shells shall conform ASTM A252, Grade 3 (Fy = 45,000 psi.)

Concrete used for filling of steel shell shall be Class S with a minimum 28-day compressive strength, f'c = 3,500 psi. and shall be poured in the dry.

Steel shell piling that extends above the ground and is not protected by pile encasement shall be painted in accordance with Subsection 805.02.

See Bridge Layout for size and estimated length of steel shell piles and for driving information.

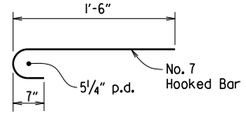
Concrete, structural steel, reinforcing steel (including welding), and painting shall not be paid for directly, but shall be considered subsidiary to the item "Steel Shell Piling".



TYPICAL SPLICE DETAILS

TABLE OF VARIABLES

OUTSIDE DIAMETER "D"	NOMINAL SHELL THICKNESS "T"	⚠ PLATE THICKNESS "X"	⚠ PLATE THICKNESS "Y"	NO. OF HOOKED BARS FOR ALTERNATE PILE ANCHORAGE	⚠ MINIMUM CONICAL TIP DESIGN LOAD (KIPS)
14"	0.50"	2 1/4"	1 1/2"	5	859
16"	0.50"	2 1/4"	1 1/2"	5	986
18"	0.50"	2 1/2"	1 1/2"	6	1,114
20"	0.50"	2 1/2"	1 3/4"	6	1,241
24"	0.50"	2 3/4"	1 3/4"	8	1,495



HOOKED BAR DETAIL

⚠ Revised and added various details by KWY, Ck'd. by BEF, 3/24/16.

GENERAL NOTES FOR PILE ENCASEMENTS:

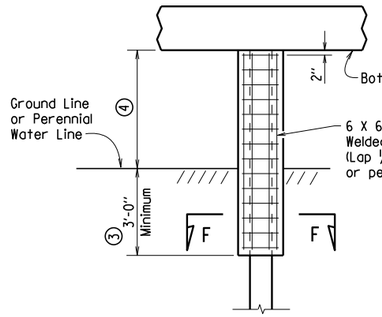
⚠ See Bridge Layout for additional notes, any pile encasement restrictions and required location of pile encasements.

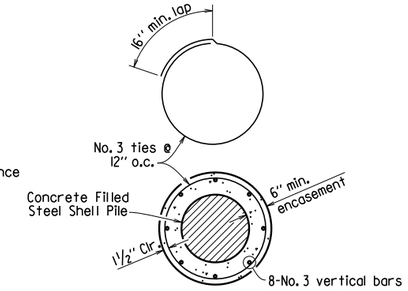
Concrete shall be Class S with a minimum 28-day compressive strength, f'c = 3,500 psi. If concrete cannot be placed in the dry, Seal Concrete may be used from top to bottom of encasement.

Reinforcing steel shall be Grade 60 conforming to AASHTO M 31 or M 322, Type A.

Welded wire fabric shall conform to AASHTO M 55 or M 221.

Concrete, welded wire fabric or reinforcing steel, and galvanized pipe shall not be paid for directly, but shall be considered subsidiary to the item "Pile Encasement".





SECTION F-F (REINF. ALTERNATE)

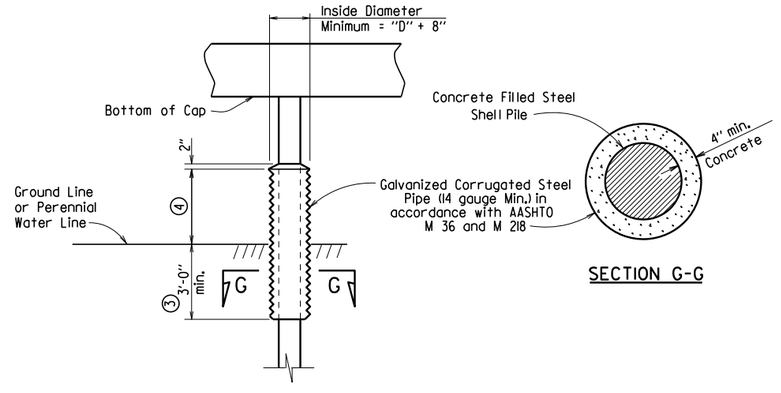
PILE ENCASEMENT DETAIL FOR STEEL SHELL PILES

(5) (Shown with Encasement to Bottom of Cap)

(3) Unless otherwise noted on Bridge Layout.

(4) See Bridge Layout for height of pile encasement (3'-0" Minimum).

(5) Pile encasement, when not extended to bottom of cap, shall have 2" concrete taper for water runoff as shown in the detail for partial height encasement.



SECTION G-G

ALTERNATE PILE ENCASEMENT DETAIL FOR STEEL SHELL PILES

(Shown with Partial Height Encasement)

This document was originally issued and sealed by Charles R. Ellis, PE No. 9235, on March 24, 2016. This copy is not a signed and sealed document.

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 9235
CHARLES R. ELLIS

BRIDGE ENGINEER

STANDARD DETAILS FOR CONCRETE FILLED STEEL SHELL PILES AND PILE ENCASEMENTS

ARKANSAS STATE HIGHWAY COMMISSION

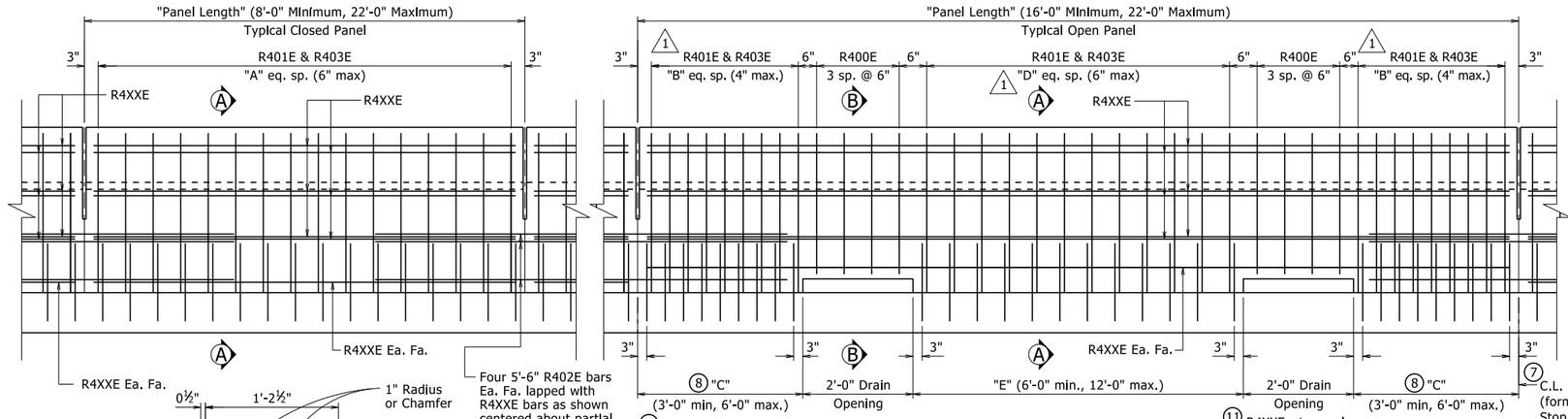
LITTLE ROCK, ARK.

DRAWN BY:	A.M.S.	DATE:	2/27/2014	FILENAME:	b55021.dgn
CHECKED BY:	B.E.F.	DATE:	2/27/2014	SCALE:	NO SCALE
DESIGNED BY:	STD.	DATE:	—		

DRAWING NO. 55021

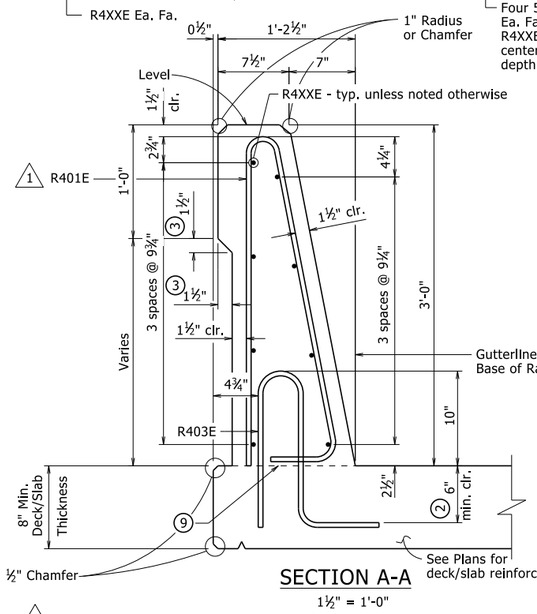
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
09/27/2022				6	ARK.			
				JOB NO.				

TYPE SSTR36 - 55070



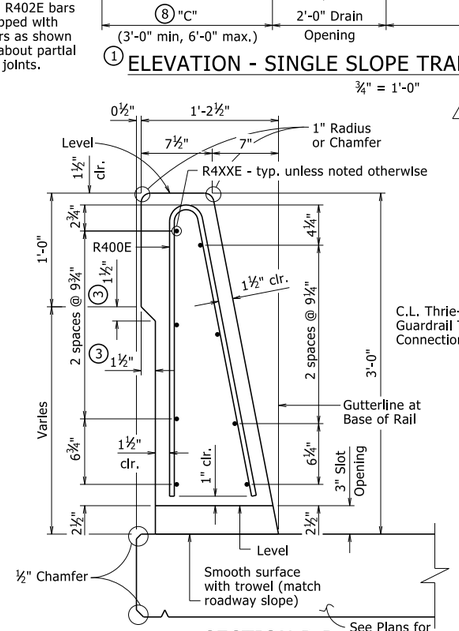
(1) ELEVATION - SINGLE SLOPE TRAFFIC RAIL

¾" = 1'-0"



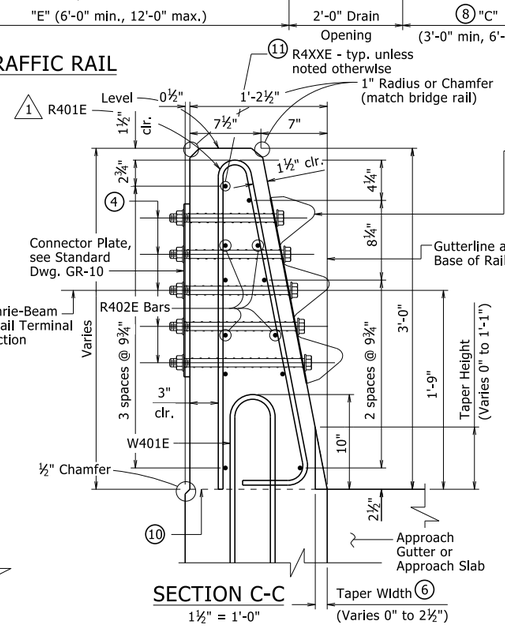
SECTION A-A

1½" = 1'-0"



SECTION B-B

1½" = 1'-0"



SECTION C-C

1½" = 1'-0"

(9) Required Construction Joint. Level where water flows away from rail, match roadway slope where water flows toward rail.

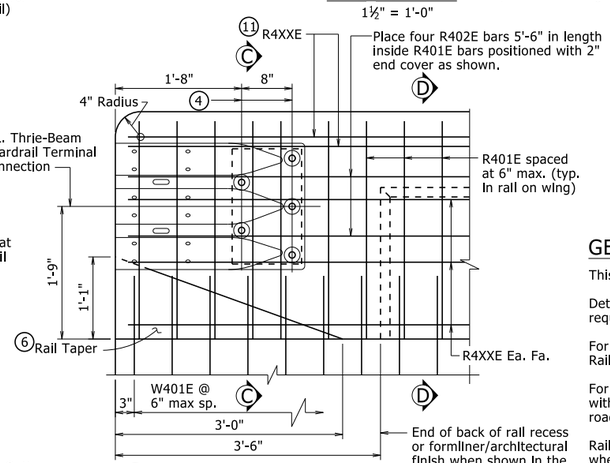
(10) Top of Abutment Wing & Required Construction Joint (match bridge deck/slab construction joint slope). See Plans for Wing reinforcing.

(11) These bars will not be included in the "Table of Variables". See Plans for details.

Bolt Special End Shoe to face of rail as shown. Tapered washers are not required between the head of the bolts and the sloped face of the rail. Tighten the five terminal connection bolts in a well distributed pattern to prevent damage or distortion of the thrie-beam connection. Cut bolts off after installation so as to extend no more than ¾" beyond nut. Paint ends of cut-off bolts with zinc-rich paint. This work and material will not be paid for directly but shall be considered subsidiary to associated contract items.

SECTION D-D

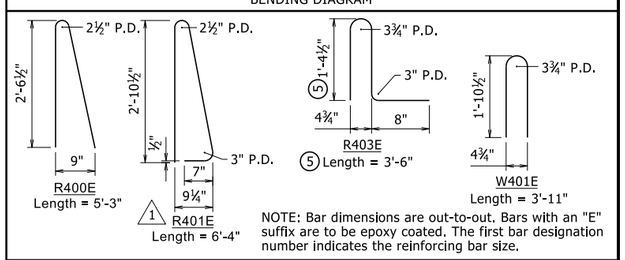
1½" = 1'-0"



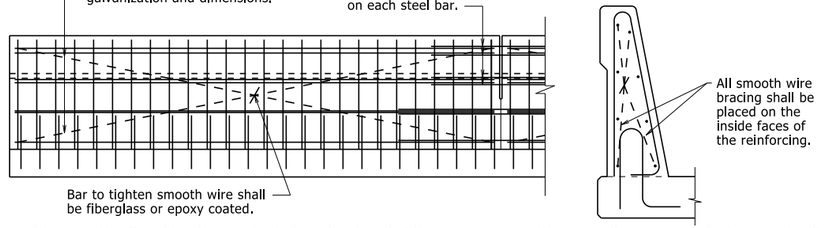
(1) RAIL TERMINUS DETAILS

1" = 1'-0"

BENDING DIAGRAM



NOTE: Bar dimensions are out-to-out. Bars with an "E" suffix are to be epoxy coated. The first bar designation number indicates the reinforcing bar size.



The extruded rail shall conform to the horizontal and vertical lines shown on the plans or as directed by the Engineer and shall present a smooth, uniform appearance and texture. Unless otherwise noted, exposed surfaces may be given a light brush finish or a Class 3, Textured Coating Finish in place of Class 2, Rubbed Finish.

All panels shall be braced as required to prevent racking.

Slip forming will not be allowed on bridges where formliner with architectural treatment is used unless approval from the Engineer is obtained.

TABLE OF VARIABLES

Closed Rail Panels			Open Rail Panels					
Panel Length	A	R4XXE	Panel Length	B	C	D	E	R4XXE

See Plans for table with values.

GENERAL NOTES

This rail has been successfully evaluated by full-scale crash test to meet MASH TL-4 criteria.

Details shown are general for bridges without sidewalks. See Plans for additional details and requirements specific to bridges with sidewalks.

For Table of Variables, Rail Bar List, locations of Full and Partial Depth Rail Joints, and Wing & Rail Bar Lists, see Plans.

For location of drain openings, see Plans. Drain openings shown are not applicable for bridges with sidewalks. Drain openings will not be allowed over Railroad Right of Way, travelled roadways, and protected waterways.

Rail Terminus details, including Rail Taper, are not applicable for bridges with sidewalks or when bridge railing is continuous with roadway railing.

Scales shown are for 22"x34" drawings. When using 11"x17" drawings, reduce scale by one half.

(1) Modified bending diagram and spacing for R401E bar.

By: CGP, Checked by: CMW 09/27/2022

No Scale

This document was originally issued and sealed by Charles R. Ellis, PE No. 9235, on November 5, 2020. This copy is not a signed and sealed document.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 9235
CHARLES R. ELLIS

BRIDGE ENGINEER

THESE DETAILS ARE APPLICABLE UNLESS OTHERWISE SHOWN IN THE PLAN DETAILS, SPECIAL PROVISIONS, OR SUPPLEMENTAL SPECIFICATIONS.

STANDARD DETAILS FOR BRIDGE TRAFFIC RAIL TYPE SSTR36

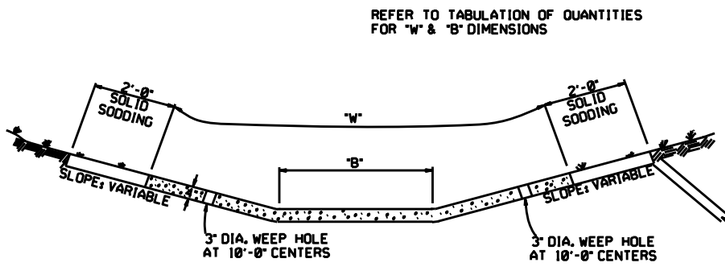
ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: KWY DATE: 11/5/2020 FILENAME: b55070.dgn
CHECKED BY: LJB DATE: 11/5/2020 SCALE: As Noted
DESIGNED BY: STD. DATE: -----

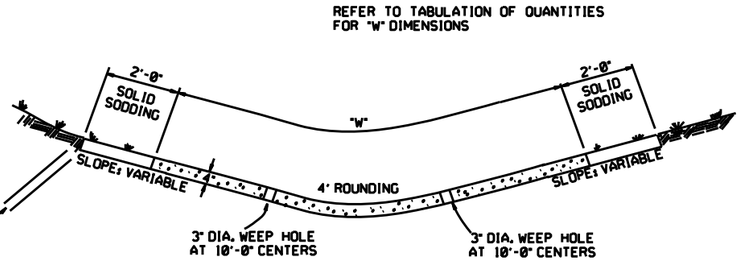
DRAWING NO. 55070

PRINT DATE: 10/6/2022



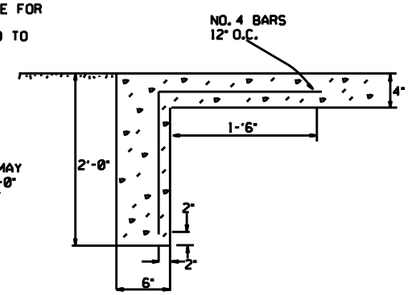
TYPE A

EXCAVATE TO NEAT LINES TO CONSTRUCT DITCH PAVING AND SOLID SODDING.



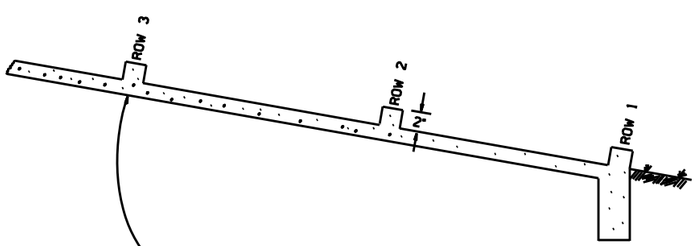
TYPE B

THE STEEL AND ADDITIONAL CONCRETE FOR THE WALLS SHALL NOT BE PAID FOR DIRECTLY, BUT SHALL BE CONSIDERED TO BE INCLUDED IN THE PRICE BID FOR "CONCRETE DITCH PAVING."



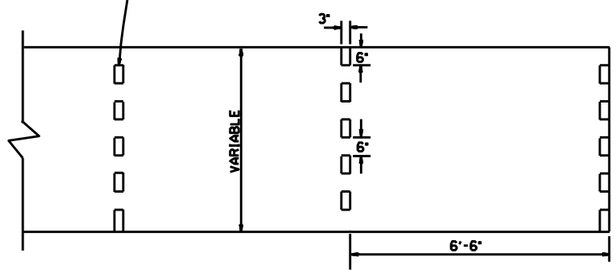
TOE WALL DEPTH MAY BE ALTERED TO 1'-0" WHEN DIRECTED BY THE ENGINEER IN ROCK EXCAVATION

TOE WALL DETAIL FOR CONCRETE DITCH PAVING



NUMBER OF ELEMENTS PER ROW VARIES WITH WIDTH OF PAVING SPECIFIED

ENERGY DISSIPATORS TO BE USED FOR THE ENTIRE LENGTH OF DITCH WHEN SLOPE OF DITCH PAVING EXCEEDS 7%. THE DISSIPATORS WILL NOT BE PAID FOR DIRECTLY, BUT SHALL BE CONSIDERED TO BE INCLUDED IN THE PRICE BID FOR CONCRETE DITCH PAVING.



ENERGY DISSIPATORS
(NO SCALE)

GENERAL NOTES:

THE FULL WIDTH OF EACH SECTION SHALL BE POURED MONOLITHICALLY.

TOE WALLS TO BE CONSTRUCTED FULL WIDTH AT EACH END OF DITCH PAVING, AND POURED MONOLITHICALLY.

SOLID SOD ALONG DITCH PAVING TO BE PLACED WITHIN 14 DAYS OF DITCH PAVING CONSTRUCTION.

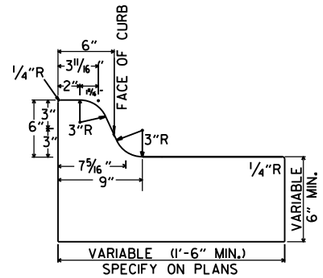
1" WIDE TRANSVERSE EXPANSION JOINTS SHALL BE PLACED IN CONCRETE DITCH PAVING AT 45° INTERVALS. THE SPACE SHALL BE FILLED WITH APPROVED JOINT FILLER COMPLYING WITH AASHTO M213.

DATE	REVISION	DATE FILM'D
12-8-16	CORRECTED ENERGY DISSIPATOR DRAWING AND NOTE	
11-17-10	ADDED GENERAL NOTE	
6-2-94	ADDED GENERAL NOTE ABOUT SOLID SODDING	
11-30-8	ELIMINATED MIN. ROWS OF ELEMENTS	111-30-89
7-15-88	REVISED DISSIPATOR NOTE	653-7-15-88
4-3-87	REVISED ENERGY DISSIPATOR	671-4-3-87
1-9-87	MODIFIED NOTE ON ENERGY DISS.	532-1-9-87
11-3-86	ADDED NOTE TO ENERGY DISS.	599-12-1-86
11-1-84	ENERGY DISSIPATOR DETAILS ADDED	508-11-1-84
11-1-84	EXCAVATION DETAILS ADDED TYPED A & B	
10-2-72	REVISED AND REDRAWN	508-10-2-72

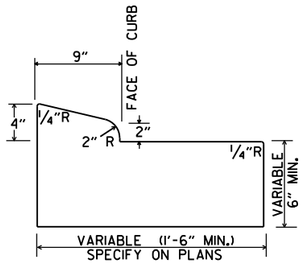
ARKANSAS STATE HIGHWAY COMMISSION

CONCRETE DITCH PAVING

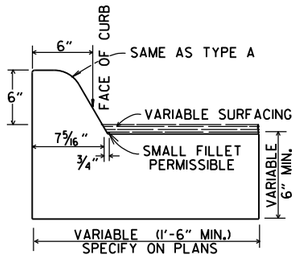
STANDARD DRAWING CDP-1



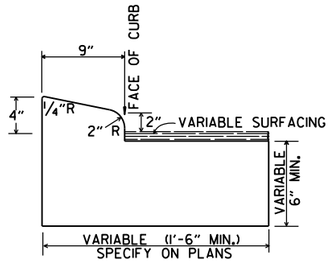
TYPE A



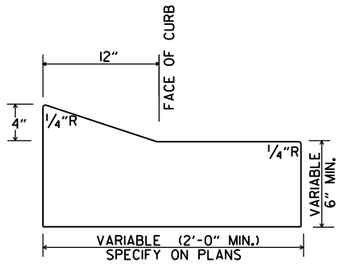
TYPE B-1



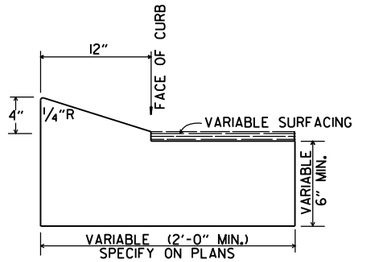
TYPE C



TYPE B-2

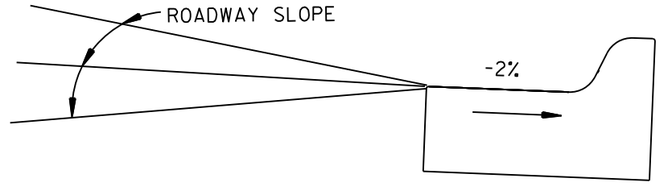


TYPE E-1



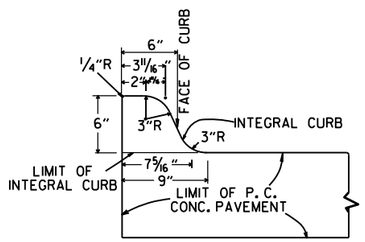
TYPE E-2

CONCRETE COMBINATION CURB AND GUTTER

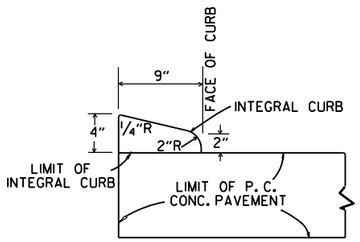


DETAIL OF GUTTER SLOPE

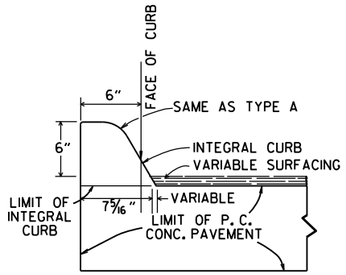
GUTTER SHALL BE CONSTRUCTED ON 2% SLOPE AWAY FROM ROADWAY, REGARDLESS OF ROADWAY SLOPE.



TYPE A

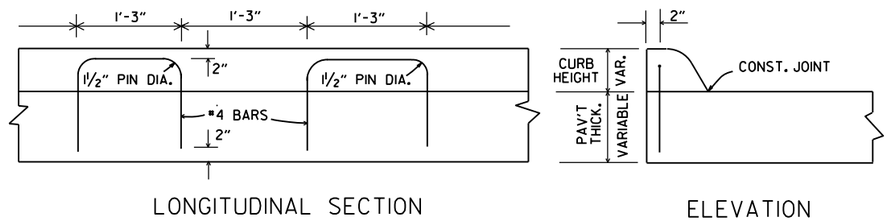


TYPE B



TYPE C

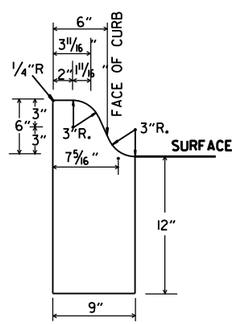
INTEGRAL CURB



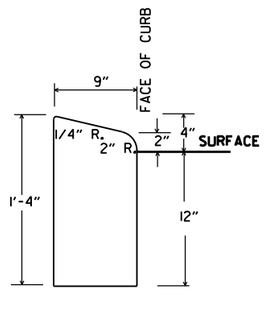
LONGITUDINAL SECTION

ELEVATION

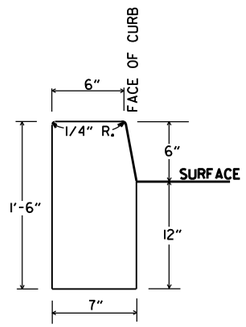
ALTERNATE CONSTRUCTION METHOD FOR INTEGRAL CURB



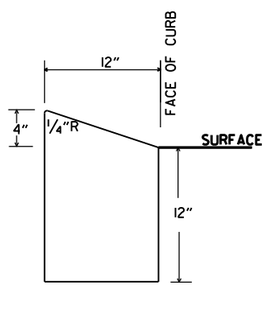
TYPE A



TYPE B

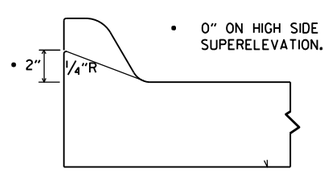


TYPE D



TYPE E

CONCRETE CURB



NOTE: USE MODIFIED CURB AS SPECIFIED ON STD. DR-1. COMPENSATION FOR MODIFIED CURB WILL BE CONSIDERED INCLUDED IN THE PRICE BID FOR THE TYPE OF CURB OR CURB AND GUTTER SPECIFIED.

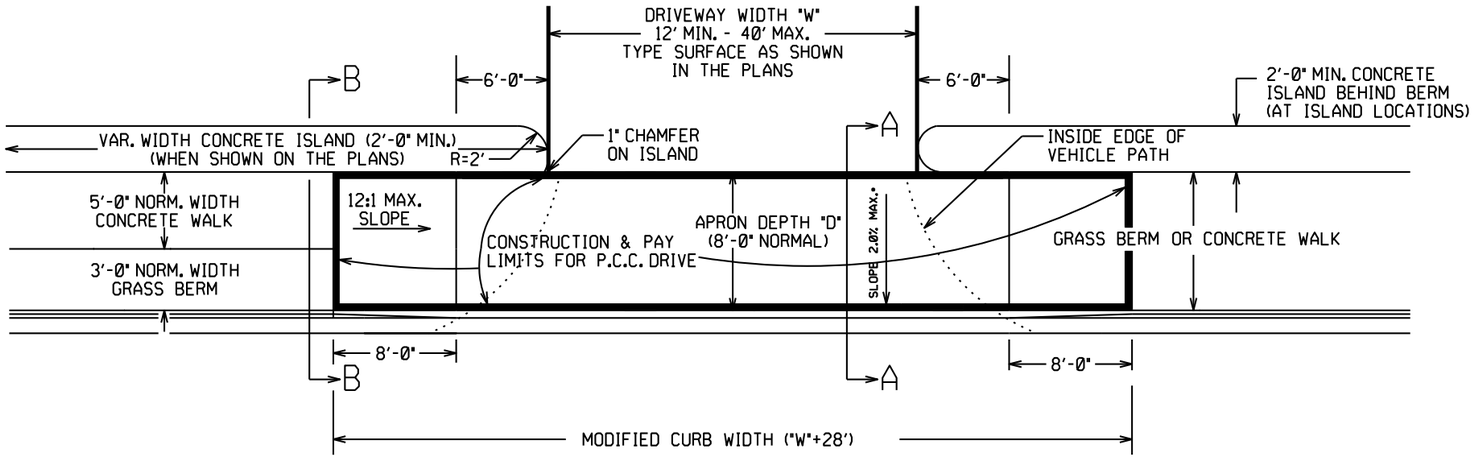
DETAILS OF MODIFIED CURB

DATE	REVISION	DATE FILMED
11-29-07	REVISED GUTTER SLOPE & MODIFIED CURB DETAILS	
11-10-05	ADDED DETAILS OF TYPE E CURBS	
11-16-01	REVISED CONCRETE CURB TYPE B	
11-18-98	REVISED MODIFIED CURB	
6-2-94	ADDED NOTE TO SPECIAL MODIFIED CURB	
8-5-93	CORRECTED GUTTER SLOPE	8-5-93
10-1-92	ADDED DETAILS OF GUTTER SLOPE	10-1-92
5-24-90	ADDED DETAILS OF MODIFIED CURB	5-24-90
11-30-89	VARIBLE DEPTH TYPE A & B I	11-30-89
7-15-88	REVISED MODIFIED CURB	630-7-15-88
11-1-73	REVISED MODIFIED CURB	500-11-1-73
10-2-72	REVISED AND REDRAWN	512-10-2-72

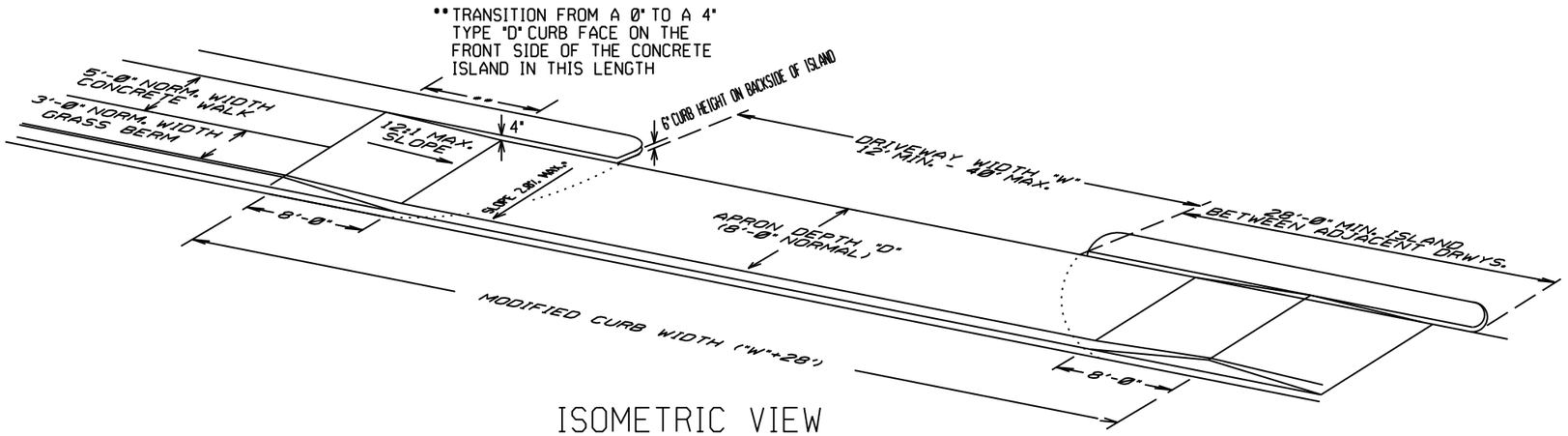
ARKANSAS STATE HIGHWAY COMMISSION

CURBING DETAILS

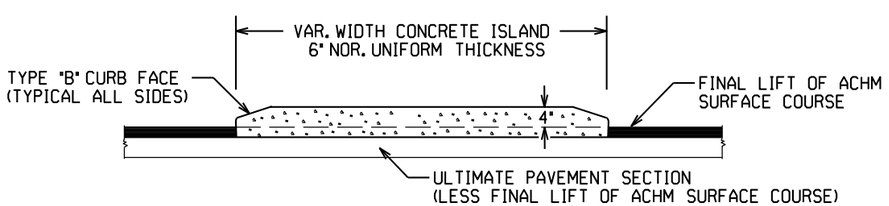
STANDARD DRAWING CG-1



PLAN VIEW



ISOMETRIC VIEW

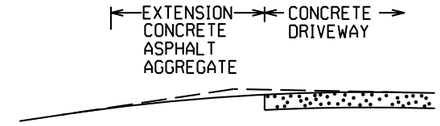


CURBED ISLANDS FOR CHANNELIZATION

CONCRETE ISLAND NOTES:

1. REFER TO PLANS FOR TYPE OF CURB FACE TO BE USED. NO DIRECT PAYMENT WILL BE MADE FOR THE CURB FACES SHOWN ON THE ISLAND DETAILS. PAYMENT FOR THE CURB FACE WILL BE INCLUDED IN THE UNIT PRICE BID FOR THE ITEM "CONCRETE ISLAND".

2. TRANSVERSE EXPANSION JOINTS, NOT LESS THAN 1/2" WIDE, SHALL BE PLACED AT MINIMUM INTERVAL OF 45'. TRANSVERSE JOINT SHALL BE CONSTRUCTED USING A JOINT FILLER COMPLYING WITH AASHTO M213.



EXTENSION TYPICAL SECTIONS

1: CONCRETE - 6" P.C. CONCRETE DRIVEWAY

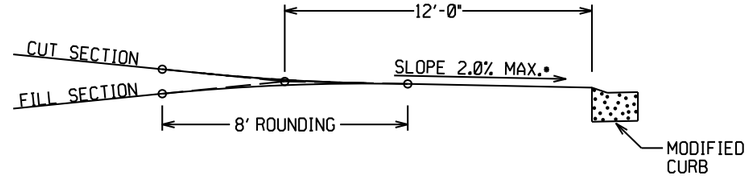
2: ASPHALT - 2" ACHM SURFACE COURSE (1/2")
4" ACHM BINDER COURSE (1") OR
4" ACHM BASE COURSE (1-1/2")

3: ASPHALT - 2" ACHM SURFACE COURSE (1/2")
7" AGGREGATE BASE COURSE

4: AGGREGATE - 6" AGGREGATE BASE COURSE

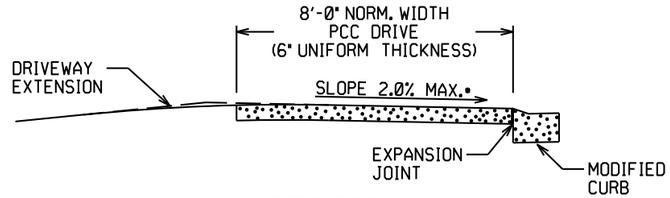
THE TYPE OF EXTENSION SHALL BE AS SHOWN IN THE PLANS. THE CONTRACTOR MAY, WITH THE APPROVAL OF THE ENGINEER, SUBSTITUTE A LOWER NUMBERED TYPE OF EXTENSION IN LIEU OF THE TYPE SPECIFIED IN THE PLANS, BUT AT NO ADDITIONAL COST TO THE DEPARTMENT.

DRIVEWAY EXTENSION DETAILS

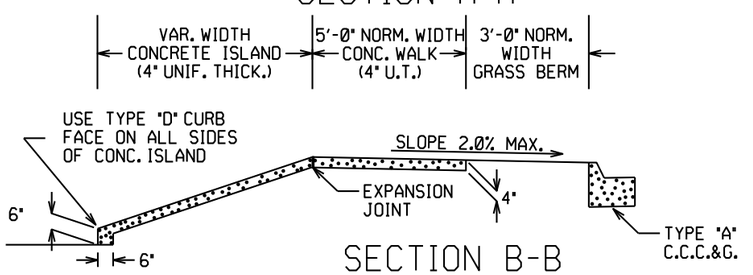


DRIVEWAY VERTICAL ALIGNMENT DETAILS

• NOTE: DRIVEWAYS MAY NOT BE SLOPED AWAY FROM THE ROADWAY UNLESS APPROVED BY THE ENGINEER.



SECTION A-A



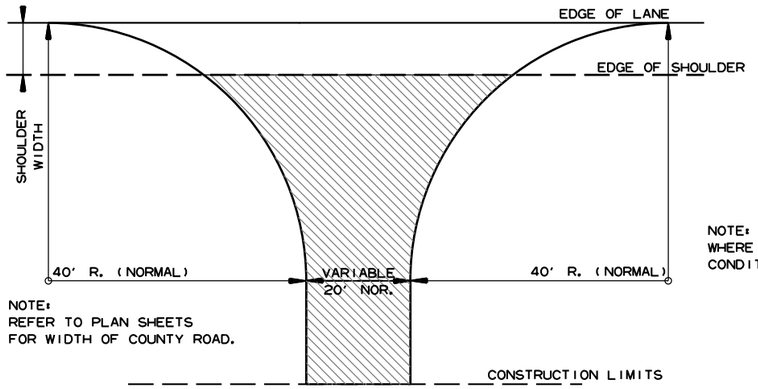
SECTION B-B
CURBED ISLAND BEHIND WALK

DATE REV	DATE FILMED	DESCRIPTION
5-19-22		REVISED ISLAND NOTES
11-07-19		REVISED WALK DETAILS
2-27-14		REVISED PLAN & ISOMETRIC VIEW
11-29-07		ADDED CHANNELIZATION ISLAND WITH TYPE C CURB FACE & REVISED DRIVEWAY SLOPE NOTE & VERTICAL ALIGNMENT DETAIL
11-10-05		REV. APRON SLOPE & DEPTH OF AGG. BASE.
8-22-02		ADDED ISLAND DETAILS & NOTES
3-30-00		REV. MOD. CURB WIDTH & TRANS. NOTE
11-19-98		REVISED NOTES
11-18-98		REDRAWN AND REISSUED

ARKANSAS STATE HIGHWAY COMMISSION

DETAILS OF DRIVEWAYS & ISLANDS

STANDARD DRAWING DR-1

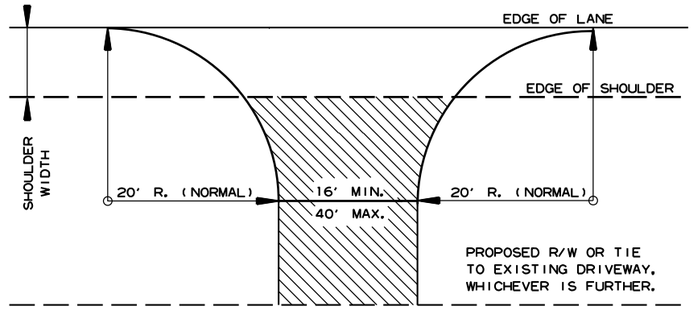


NOTE:
REFER TO PLAN SHEETS
FOR WIDTH OF COUNTY ROAD.

NOTE: TURNOUTS SHALL BE MODIFIED WHERE NECESSARY TO MEET LOCAL CONDITIONS AS DIRECTED BY THE ENGINEER.

ACHM SURFACE COURSE (1/2")
(220 LBS. PER SQ. YD.) AND
AGGREGATE BASE COURSE (CLASS 7)
7" COMP. DEPTH, UNLESS OTHERWISE
SPECIFIED IN PLANS.

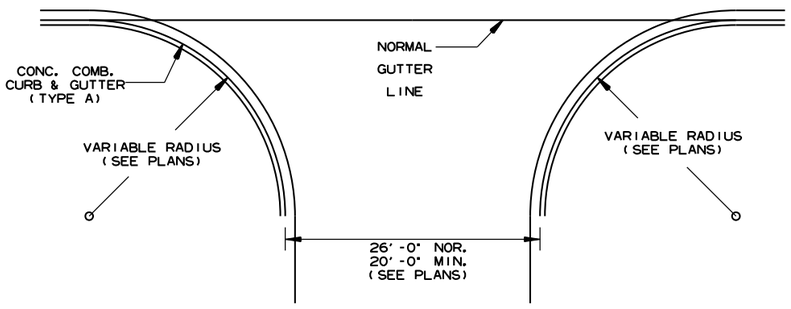
DETAIL FOR COUNTY ROAD TURNOUTS OPEN SHOULDER SECTION



NOTE: TURNOUTS AND PRIVATE DRIVES SHALL BE MODIFIED WHERE NECESSARY TO MEET LOCAL CONDITIONS AS DIRECTED BY THE ENGINEER.

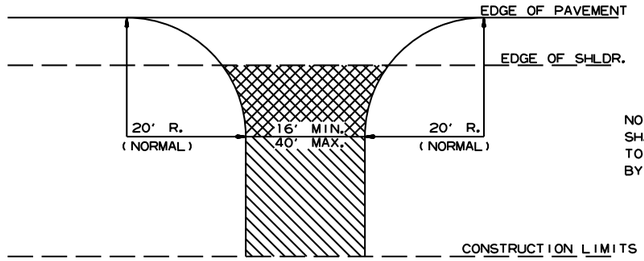
ACHM SURFACE COURSE (1/2")
(220 LBS. PER SQ. YD.) AND
AGGREGATE BASE COURSE (CLASS 7)
7" COMP. DEPTH IF ASPHALT OR
GRAVEL DRIVE EXISTING; OR 6"
CONCRETE IF CONCRETE DRIVE
EXISTING.

DETAIL FOR DRIVEWAY TURNOUTS OPEN SHOULDER SECTION (ARTERIALS)



NOTE:
PAVEMENT STRUCTURE FOR STATE HIGHWAYS, CITY STREETS,
& COUNTY ROADS TO BE SAME AS MAIN LANES.

DETAIL OF TURNOUTS, ASPHALT STREETS, COUNTY ROADS & STATE HIGHWAYS CURB & GUTTER SECTION



NOTE: TURNOUTS AND PRIVATE DRIVES SHALL BE MODIFIED WHERE NECESSARY TO MEET LOCAL CONDITIONS AS DIRECTED BY THE ENGINEER.

ASPHALT CONCRETE HOT MIX SURFACE
COURSE (220 LBS. PER SQ. YD.)
AGGREGATE BASE COURSE (CLASS 7)
7" COMP. DEPTH IF ASPHALT DRIVE EXIST OR
6" CONCRETE IF CONCRETE DRIVE EXIST.

AGGREGATE BASE COURSE (CLASS 7)
9" COMP. DEPTH OR CONFORM
TO EXISTING DRIVEWAY

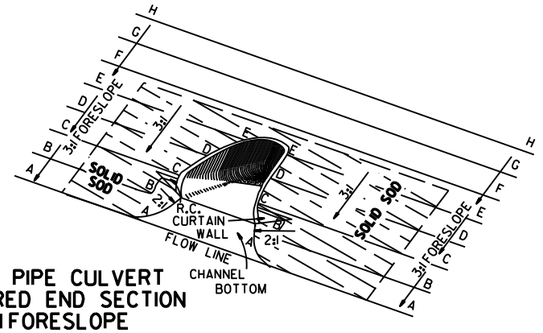
DETAIL FOR DRIVEWAY TURNOUTS (COLLECTORS)

DATE REV	DATE FILMED	DESCRIPTION
5-19-22		ISSUED

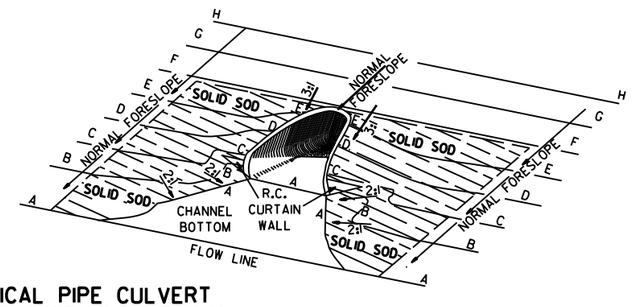
ARKANSAS STATE HIGHWAY COMMISSION

DETAILS OF DRIVEWAYS & STREET TURNOUTS

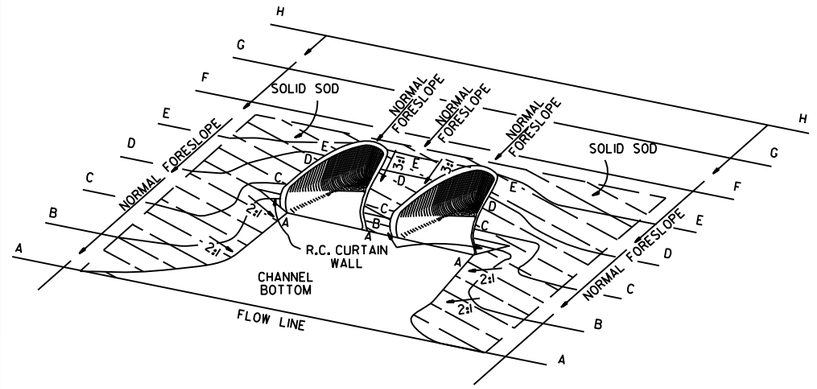
STANDARD DRAWING DR-2



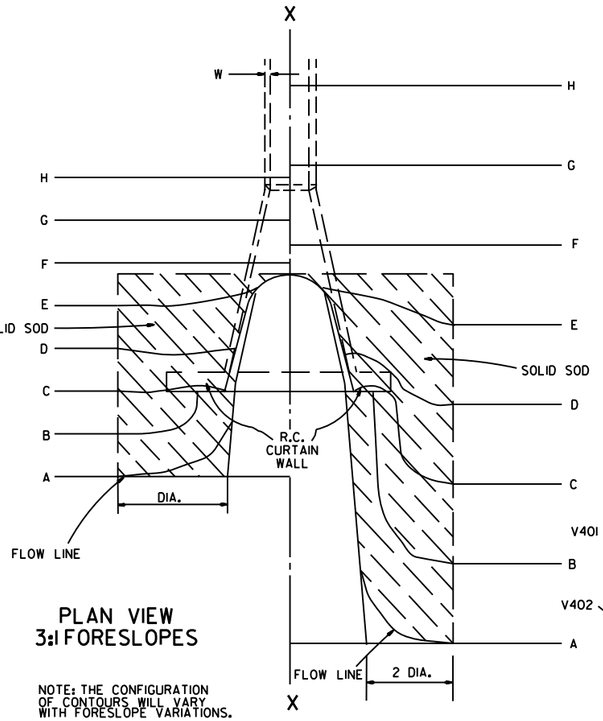
TYPICAL PIPE CULVERT
WITH FLARED END SECTION
& 3:1 FORESLOPE



TYPICAL PIPE CULVERT
WITH FLARED END SECTION
& FLATTENED ADJACENT SLOPES



TYPICAL MULTIPLE PIPE CULVERT
WITH FLARED END SECTIONS
& FLATTENED ADJACENT SLOPES



PLAN VIEW
3:1 FORESLOPES

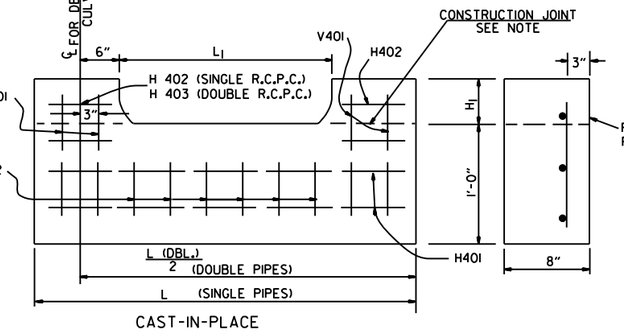
NOTE: THE CONFIGURATION OF CONTOURS WILL VARY WITH FORESLOPE VARIATIONS.

PLAN VIEW
FLATTENED FORESLOPES

R.C. CURTAIN WALL
DIMENSIONS & QUANTITIES

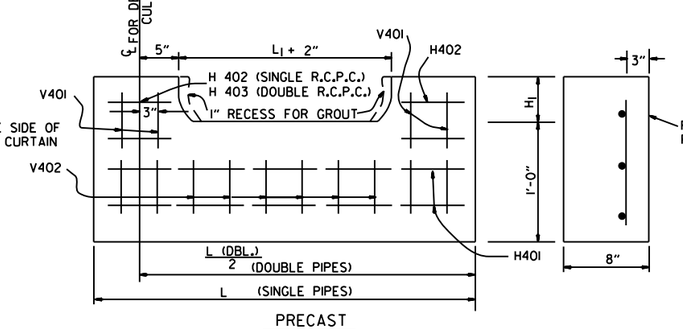
PIPE DIA.	H_1	L_1	L	L (DBL.)/2	SINGLE R.C.P.C. CONC.	SINGLE R.C.P.C. REINF. STEEL	DOUBLE R.C.P.C. CONC.	DOUBLE R.C.P.C. REINF. STEEL
					CU. YDS.	LBS.	CU. YDS.	LBS.
18"	1'-11½"	3'-5"	8'-0"	6'-3"	0.31	27.7	0.45	39.5
24"	1'-0½"	4'-6"	9'-6"	7'-6"	0.37	33.4	0.53	48.0
30"	1'-3½"	5'-7"	11'-0"	9'-0"	0.45	39.0	0.67	59.0
36"	1'-7"	6'-8"	13'-0"	10'-6"	0.58	52.6	0.83	73.9
42"	2'-1½"	7'-3"	15'-6"	12'-0"	0.82	77.1	1.10	100.7
48"	2'-5"	7'-10"	17'-0"	13'-0"	0.98	94.9	1.27	120.4
54"	2'-9½"	8'-5"	18'-6"	14'-0"	1.16	115.8	1.47	143.7
60"	3'-4"	9'-0"	20'-6"	15'-6"	1.47	149.7	1.84	180.3
72"	4'-5"	10'-2"	25'-6"	18'-6"	2.31	232.6	2.73	271.0

NOTE: QUANTITIES SHOWN ARE FOR ONE (1) CURTAIN WALL.



CAST-IN-PLACE

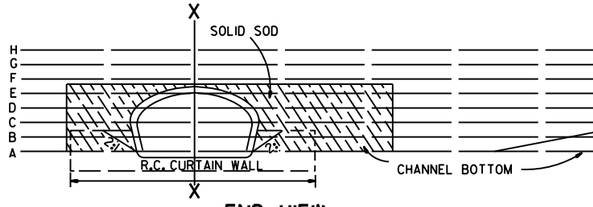
NOTE: THE PORTION OF THE R.C. CURTAIN WALL BENEATH THE FLARED END SECTION (LOWER 1'-0") SHALL BE PLACED MONOLITHICALLY. THE FLARED END SECTION SHALL THEN BE SET IN PLACE & THE REMAINING PORTIONS OF THE R.C. CURTAIN WALL PLACED.



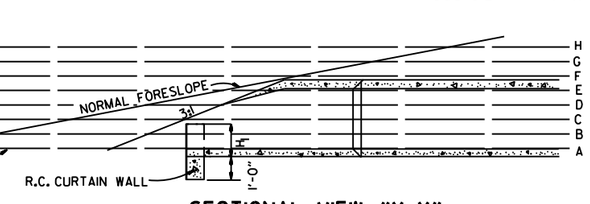
PRECAST

NOTE: THE PRECAST CURTAIN WALL WILL BE SET AND BACKFILLED WITH COMPACTED MATERIAL. THE FLARED END SECTION SHALL THEN BE SET IN PLACE AND THE 1" RECESS FILLED WITH GROUT. WHERE "L" EXCEEDS 11' THE CURTAIN WALL MAY BE CAST IN TWO (2) OR MORE SECTIONS. THE METHOD OF JOINING THE SECTIONS FOR INSTALLATION SHALL BE APPROVED BY THE ENGINEER.

R.C. CURTAIN WALL DETAILS



END VIEW



SECTIONAL VIEW "X-X"

REINFORCING STEEL SCHEDULE

PIPE DIA.	SINGLE R.C. PIPE CULVERT H401 L	H401 NO.	H402 L	H402 NO.	V401 L	V401 NO.	V402 L	V402 NO.	DOUBLE R.C. PIPE CULVERT H401 L	H401 NO.	H402 L	H402 NO.	H403 L	H403 NO.	V401 L	V401 NO.	V402 L	V402 NO.
18"	7'-8"	2	1'-11½"	4	1'-7½"	8	8"	8	12'-2"	2	1'-11½"	4	8"	2	1'-7½"	10	8"	14
24"	9'-2"	2	2'-2"	4	1'-8½"	10	8"	9	14'-8"	2	2'-2"	4	8"	2	1'-8½"	12	8"	18
30"	10'-8"	2	2'-4½"	4	1'-11½"	10	8"	12	17'-8"	2	2'-4½"	4	8"	2	1'-11½"	14	8"	22
36"	12'-8"	2	2'-10"	6	2'-3"	12	8"	14	20'-8"	2	2'-10"	6	8"	3	2'-3"	14	8"	28
42"	15'-2"	2	3'-9½"	8	2'-9½"	16	8"	15	23'-8"	2	3'-9½"	8	8"	4	2'-9½"	18	8"	30
48"	16'-8"	2	4'-3"	10	3'-1"	18	8"	16	25'-8"	2	4'-3"	10	8"	5	3'-1"	20	8"	32
54"	18'-2"	2	4'-8½"	12	3'-5½"	20	8"	17	27'-8"	2	4'-9"	12	8"	6	3'-5½"	22	8"	34
60"	20'-2"	2	5'-5"	14	4'-0"	24	8"	18	30'-8"	2	5'-5"	14	8"	7	4'-0"	26	8"	36
72"	25'-2"	2	7'-4"	18	5'-1"	30	8"	20	36'-8"	2	7'-4"	18	8"	9	5'-1"	33	8"	40

ALL REINFORCING STEEL #4 BARS @ 6" O.C.

SOLID SODDING

PIPE DIA.	SINGLE R.C.P.C. 3:1	4:1	6:1	DOUBLE R.C.P.C. 3:1	4:1	6:1
	SQ. YDS.			SQ. YDS.		
18"	5	7	12	6	8	13
24"	8	12	19	9	13	20
30"	13	18	29	14	19	30
36"	17	26	41	18	28	43
42"	23	35	55	25	37	57
48"	29	46	68	31	48	70
54"	35	57	85	37	59	87
60"	45	62	104	48	65	107
72"	64	92	156	67	95	159

NOTE: QUANTITIES SHOWN ABOVE ARE FOR ONE (1) END OF F.E.S.

GENERAL NOTES

1. A CAST-IN-PLACE OR PRECAST CURTAIN WALL MAY BE USED. PAYMENT FOR THE CURTAIN WALL SHALL BE CONSIDERED TO BE INCLUDED IN THE UNIT PRICE BID EACH FOR FLARED END SECTIONS OF THE SEVERAL SIZES, WHICH PRICE SHALL BE FULL COMPENSATION FOR FURNISHING ALL MATERIALS INCLUDING REINFORCING STEEL AND CONCRETE: FOR FORMS, MIXING AND PLACING; FOR EXCAVATION AND BACKFILL, AND FOR ALL LABOR, TOOLS, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE WORK.
2. ALL EXPOSED EDGES SHALL BE CHAMFERED ¾".
3. CONCRETE FOR CURTAIN WALL SHALL MEET THE REQUIREMENTS FOR CLASS A OR S CONCRETE AS PROVIDED IN SECTION 802 OF THE STANDARD SPECIFICATIONS OR FOR PAVING CONCRETE AS PROVIDED IN SECTION 501 OF THE STANDARD SPECIFICATIONS.
4. WELDED WIRE MESH 3 x 3 W10 x W10 MAY BE USED IN LIEU OF REINFORCING BARS.

DATE	REVISION	FILMED
10-18-96	ADDED NOTE TO SOLID SODDING	
10-12-95	CORRECTED SPELLING	
11- 3-94	ADDED GENERAL NOTE NO. 4	
8-15-91	REV. CURTAIN WALL QUANT. STEEL SCH. & SOLID SOD QUANT.	
3-2-81	ALLOW PRECAST IN 2 OR MORE PIECES CHAMFER EDGES	
5-15-80	ADDED PRECAST WALL & GENERAL NOTES	
10-2-72	REVISED AND REDRAWN	

ARKANSAS STATE HIGHWAY COMMISSION

FLARED END SECTION

STANDARD DRAWING FES-1

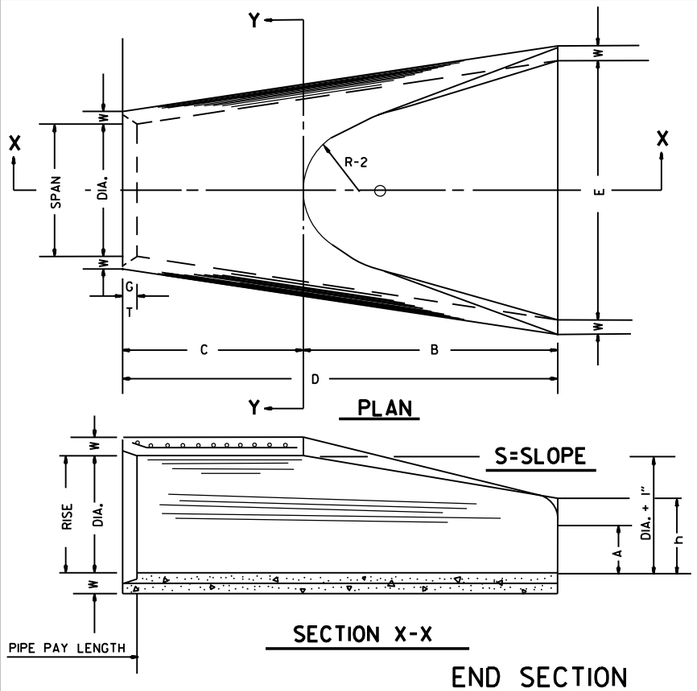
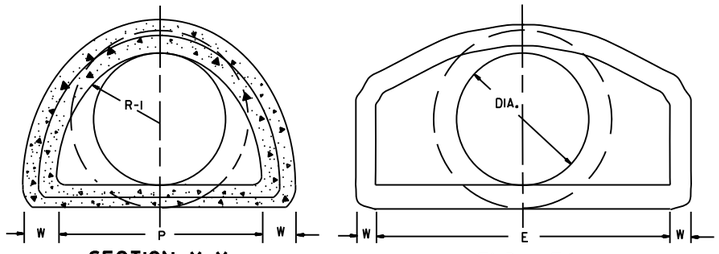


TABLE OF DIMENSIONS

DIA.	WALL	A	B	C	D	E	S	DIA. + 1"	P	R-1	R-2	G-T	WT.	h
18"	2½"	9"	2'-3"	3'-10"	6'-1"	3'-0"	3:1	19"	29"	15½"	12"	2"	1000	1'-0½"
24"	3"	9½"	3'-7½"	2'-6"	6'-1½"	4'-0"	3:1	25"	33 3/16"	16 15/16"	14"	2½"	1600	1'-1½"
30"	3½"	1'-0"	4'-6"	1'-7 3/4"	6'-1 3/4"	5'-0"	3:1	31"	37"	18½"	15"	3¼"	1940	1'-4 5/8"
36"	4"	1'-3"	5'-3"	2'-10 3/4"	8'-1 3/4"	6'-0"	3:1	37"	47 13/16"	24 5/16"	20"	3½"	4100	1'-8"
42"	4½"	1'-9"	5'-3"	2'-11"	8'-2"	6'-6"	3:1	43"	53⅞"	27½"	22"	3½"	5380	2'-2½"
48"	5"	2'-0"	6'-0"	2'-2"	8'-2"	7'-0"	3:1	49"	56½"	28½"	22"	3½"	6550	2'-6"
54"	5½"	2'-4"	6'-6"	1'-10"	8'-4"	7'-6"	3:1	55"	65½"	33⅛"	24"	4"	8750	2'-10½"
60"	6"	2'-10"	6'-6"	1'-10"	8'-4"	8'-0"	3:1	61"	72½"	36 11/16"	24"	4"	9270	3'-5"
72"	7"	3'-10"	6'-6"	1'-10"	8'-4"	9'-0"	3:1	73"	77 13/16"	38 15/16"	24"	5"	13250	4'-6"

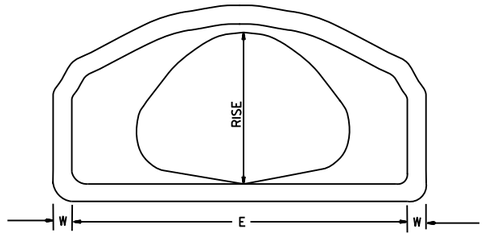


NOTE: TONGUE END ON UPSTREAM SECTION
GROOVE END ON DOWNSTREAM SECTION

ARCH PIPE

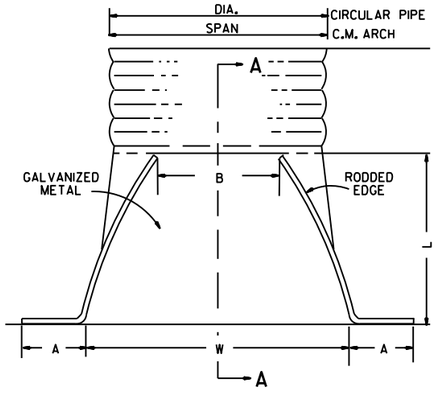
EQUIV. DIA.	• SPAN AASHTO M 206	• SPAN AHD NOMINAL	• RISE AASHTO M 206	• RISE AHD NOMINAL	W	A	B	C	D	E	P	R2	G-T	S
	INCHES													
15	18	18	11	11	2"	4"	2'-0"	4'-0"	6'-0"	3'-0"	29"	12"	1½"	2½:1
18	22	22	13½	14	2½"	5"	2'-0"	4'-1"	6'-1"	3'-6"	32⅛"	13"	2½"	2½:1
21	26	26	15½	16	2¾"	7"	2'-3"	3'-10"	6'-1"	4'-0"	34⅛"	14"	2½"	2½:1
24	28½	29	18	18	3"	9"	2'-3"	3'-10"	6'-1"	5'-0"	36 11/16"	15"	2½"	2½:1
30	36¼	36	22½	23	3½"	10"	3'-1"	3'-0½"	6'-1½"	6'-0"	47 11/16"	20"	3"	2½:1
36	43¾	44	26⅜	27	4"	10½"	4'-0"	2'-1½"	6'-1½"	6'-6"	54 5/16"	22"	3½"	2½:1
42	51⅛	51	31 5/16	31	4½"	11½"	4'-7"	1-10¼"	6'-5¼"	7'-2"	59½"	23"	3¾"	2½:1
48	58½	59	36	36	5"	1'-3"	5'-3"	2'-10¾"	8'-1¾"	7'-10"	70 5/16"	24"	4¼"	2½:1
54	65	65	40	40	5½"	1'-7"	5'-3"	2'-11"	8'-2"	8'-6"	72 1/16"	24"	4¾"	2¼:1
60	73	73	45	45	6"	1'-10"	5'-6"	2'-8"	8'-2"	9'-0"	77 1/16"	24"	5"	2¼:1

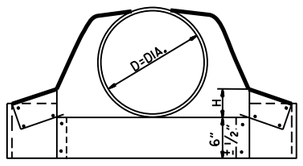
• THE MEASURED SPAN AND RISE SHALL NOT VARY MORE THAN ± 2 PER CENT FROM THE VALUES SPECIFIED BY AASHTO M 206.

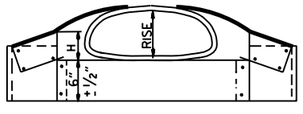


END VIEW
CONCRETE ARCH PIPE

END SECTION FOR REINFORCED CONCRETE PIPE CULVERTS







CIRCULAR PIPE

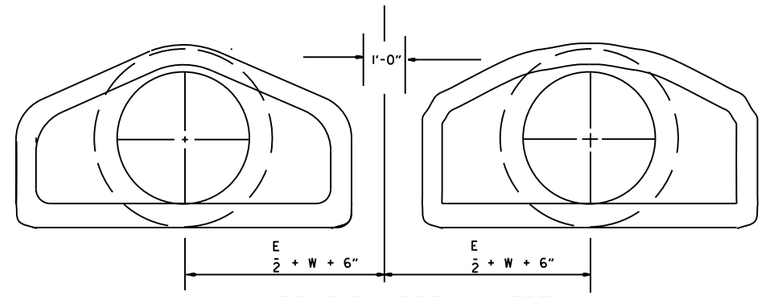
D. DIA.	GAUGE	A 1" ±	B. MAX.	H 1" ±	L 1½" ±	W 2" ±	S
		INCHES					
12	16	6	6	6	21	24	2½:1
15	16	7	8	6	26	30	2½:1
18	16	8	10	6	31	36	2½:1
21	16	9	12	6	36	42	2½:1
24	16	10	13	6	41	48	2½:1
30	14	12	16	8	51	60	2½:1
36	14	14	19	9	60	72	2½:1
42	12	16	22	11	69	84	2½:1
48	12	18	27	12	78	90	2½:1
54	12	18	30	12	84	102	2:1
60	12	18	33	12	87	114	1¾:1
66	12	18	36	12	87	120	1½:1
72	12	18	39	12	87	126	1 1/3:1

C.M. ARCH PIPE

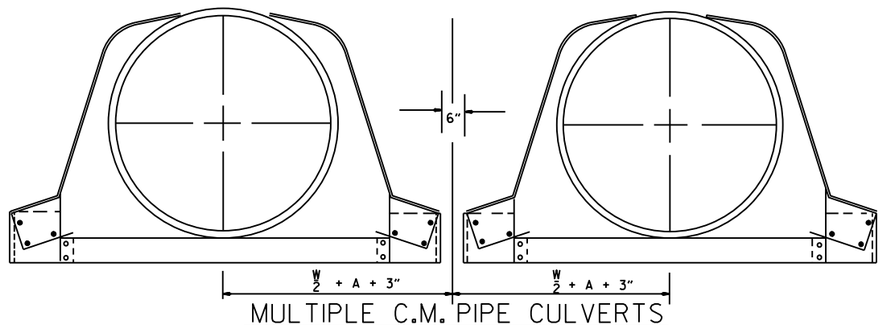
EQUIV. DIA.	SPAN	RISE	A 1" ±	B. MAX.	H 1" ±	L 1½" ±	W 2" ±	S	GAUGE
	INCHES								
15"	17	13	7	9	6	19	30	2½:1	16
18"	21	15	7	10	6	23	36	2½:1	16
21"	24	18	8	12	6	28	42	2½:1	16
24"	28	20	9	14	6	32	48	2½:1	16
30"	35	24	10	16	6	39	60	2½:1	14
36"	42	29	12	18	8	46	75	2½:1	14
42"	49	33	13	21	9	53	85	2½:1	12
48"	57	38	18	26	12	63	90	2½:1	12
54"	64	43	18	30	12	70	102	2¼:1	12
60"	71	47	18	33	12	77	114	2¼:1	12

NOTE: ALTERNATE CONNECTIONS TO THE PIPE CULVERTS, IN ACCORDANCE WITH MANUFACTURER'S STANDARD PRACTICES, MAY BE MADE SUBJECT TO THE APPROVAL OF THE ENGINEER.

END SECTIONS FOR CORRUGATED METAL PIPE CULVERTS



MULTIPLE R.C. PIPE CULVERTS



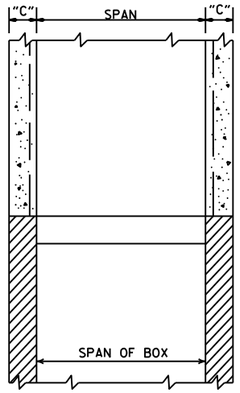
MULTIPLE C.M. PIPE CULVERTS

DATE	REVISION	FILMED
10-18-96	REVISED ASTM REF. TO AASHTO	
5-15-80	REVISED DISTANCE BETWEEN MULTIPLE R.C.P. F.E.S.	664-5-15-80
7-14-78	C.M. ARCH SIZES TO CONFORM WITH AASHTO SIZES	752-7-14-78
8-22-75	ADDED MULTIPLE PIPE CULVERTS	517-8-22-75
12-5-74	REMOVED NOTE RE REINF. FOR R.C. F.E.S.	500-12-5-74
5-24-73	CMP END SECTION, SHOW PIPE PAY LENGTH	627-5-24-73
10-2-72	REVISED AND REDRAWN	760-10-2-72

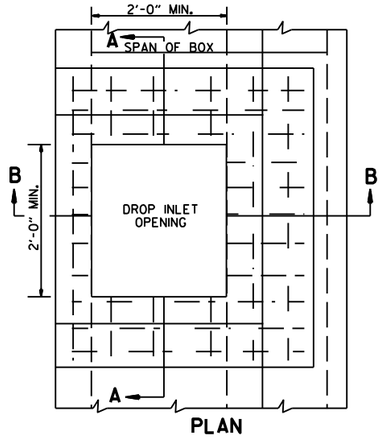
ARKANSAS STATE HIGHWAY COMMISSION

FLARED END SECTION

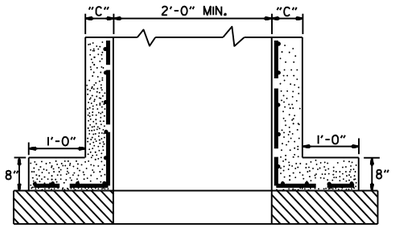
STANDARD DRAWING FES-2



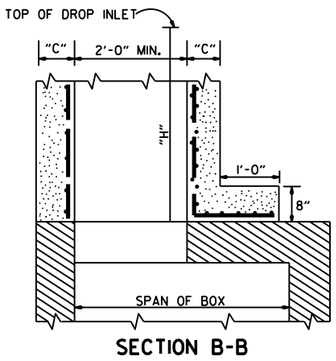
SECTION B-B



PLAN

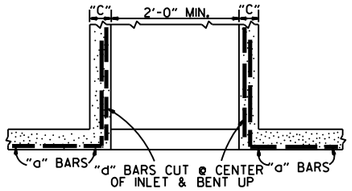


SECTION A-A

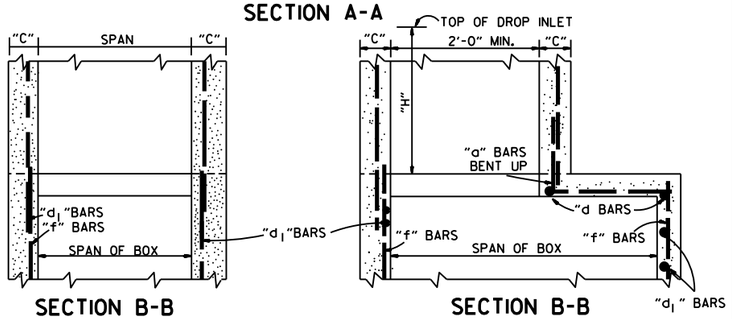


SECTION B-B

METHOD OF CONSTRUCTING DROP INLET ON EXISTING R.C. BOX CULVERT



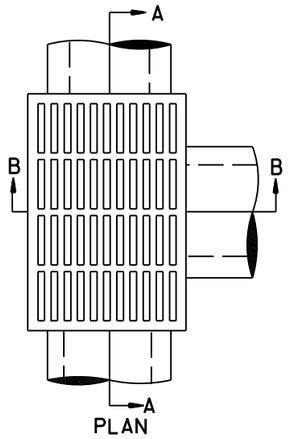
SECTION A-A



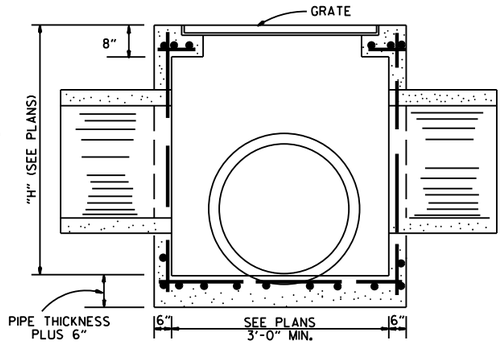
SECTION B-B SECTION B-B

METHOD OF CONSTRUCTING DROP INLET ON NEW R.C. BOX CULVERT

NOTE: "C" DIMENSIONS AND REINFORCING BAR SIZES, SHALL CONFORM TO THOSE SHOWN ON STANDARD DRAWING FOR DROP INLET.

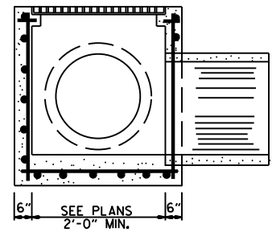


PLAN



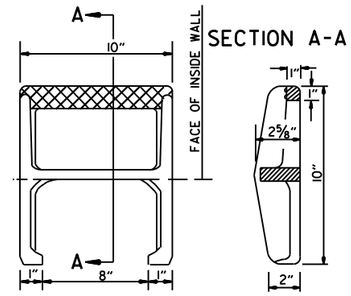
SECTION A-A

NOTE: REINF. BARS TO BE #4 BARS ON 6" CTRS. WITH 1½" MIN. COVER. THIS TYPE DROP INLET TO BE USED WHERE NOT SUBJECTED TO TRAFFIC.



SECTION B-B

DROP INLET (TYPE E)

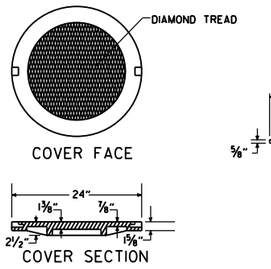


APPROX. WEIGHT = 11 LBS. (CAST IRON)

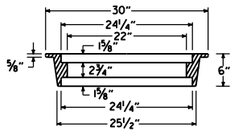
PLAN

NOTE: THIS DETAIL IS TYPICAL. OTHERS MAY BE USED WITH PRIOR APPROVAL OF THE ENGINEER.

DETAIL OF STEP FOR DROP INLET



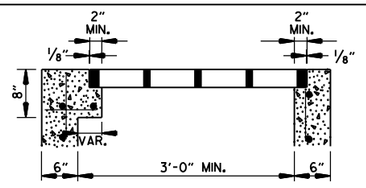
COVER SECTION



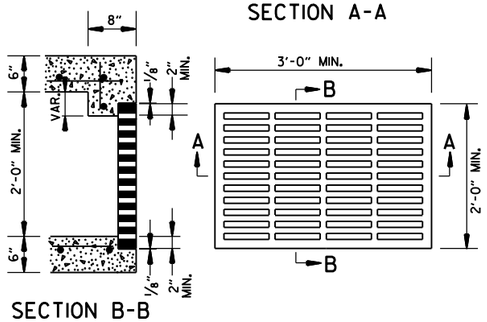
RING SECTION

APPROXIMATE TOTAL WEIGHT = 333 LBS.

HEAVY DUTY RING & COVER



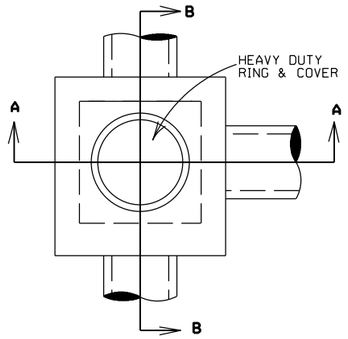
SECTION A-A



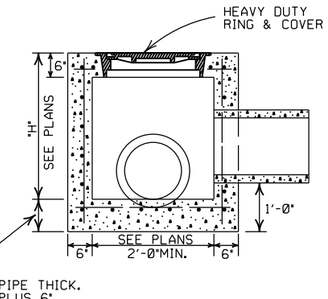
SECTION B-B

APPROXIMATE MINIMUM WATERWAY OPENING = 260 SQ. IN.

GRATE FOR TYPE E DROP INLET

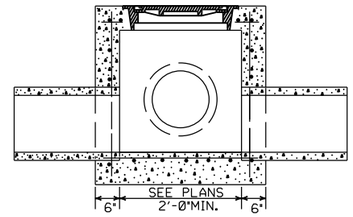


PLAN



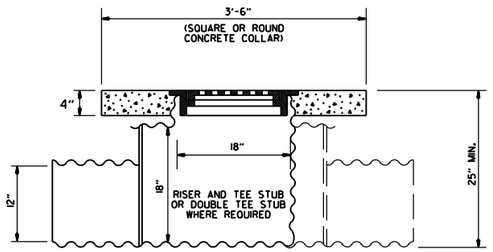
SECTION A-A

NOTE: REINF. BARS TO BE #4 BARS ON 6" CTRS. WITH 1½" MIN. COVER. THIS TYPE JUNCTION BOX TO BE USED WHERE NOT SUBJECTED TO TRAFFIC.

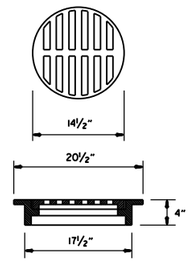


SECTION B-B

JUNCTION BOX (TYPE E)



NOTE: CONCRETE COLLAR TO BE CAST IN PLACE. 12" PIPE CULVERTS TO BE MEASURED AND PAID FOR AS " 12" SIDE DRAIN ".



USE NEENAH R-5901-C OR EQUIVALENT BICYCLE SAFE FRAME AND GRATE

DETAIL OF YARD DRAIN

GENERAL NOTES:

1. ALL EXPOSED CORNERS SHALL BE ¾" CHAMFERED.
2. STEPS SHALL BE INSTALLED ON 16" CENTERS ON ALL INLETS 4'-0" HIGH OR OVER, OR AS APPROVED BY THE ENGINEER.
3. EXPANSION JOINT MATERIAL SHALL BE ¾" PREFORMED FIBER.
4. GRATE OR GRATE AND FRAME SHALL BE CONSTRUCTED OF CAST IRON AND SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR GRAY IRON CASTINGS AASHTO M 105 CLASS 35B. GRATE MAY BE USED WITHOUT FRAME.
5. GRATE AND FRAME SHALL NOT BE PAINTED.
6. GRATE SHALL BE BICYCLE SAFE.
7. HEAVY DUTY RING SHALL ALWAYS BE INSTALLED WITH FLANGE ON TOP.
8. HEAVY DUTY RING AND COVER SHALL BE CONSTRUCTED OF CAST IRON AND SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR GRAY IRON CASTINGS AASHTO M105 CLASS 35B & AASHTO M306.
9. HEAVY DUTY RING AND COVER SHALL NOT BE PAINTED.
10. DIMENSIONS SHOWN FOR RING AND COVER ARE TYPICAL. THE CONTRACTOR MAY SUBSTITUTE SIMILAR CASTINGS WITH THE APPROVAL OF THE ENGINEER. REQUESTING APPROVAL FOR CASTING DESIGNS MAY BE MADE BY REFERRING TO PREVIOUSLY APPROVED DRAWINGS.

DATE REV.	REVISION	DATE FILMED
11-16-01	ADDED NOTE 10	
1-12-00	REVISED HEAVY DUTY RING & COVER	
7-02-98	CHANGED GRATE DETAIL, DELETED DI(TYPE D), REPLACED RING & COVER W/HEAVY DUTY RING & COVER, ADDED JUNCTION BOX (TYPE E)	
6-26-97	ADDED DIMENSION TO TYPE IV-A	
10-18-96	ADDED DETAIL OF YARD DRAIN	
8-15-91	DELETE TYPE IV GRATE	
7-15-88	REVISED STEP DETAIL	
5-20-83	REVISED DETAILS OF GRATES (TYPE IV & IV-A)	
2-4-83	ADDED GENERAL NOTE NO. 4	
3-2-81	ADDED TYPE IV-A GRATE	
5-22-74	DELETED INLET (TYPE F) & GRATE (TYPE III)	
10-2-72	REVISED AND REDRAWN	

ARKANSAS STATE HIGHWAY COMMISSION

DETAILS OF DROP INLETS & JUNCTION BOXES

STANDARD DRAWING FPC-9

4'-0" LENGTH DROP INLET

PIPE SIZE	MIN. WIDTH	HEIGHT 5'-0" CLASS A CONC.	HEIGHT 5'-0" REINF. STEEL	PLUS OR MINUS PER LIN. FT. OF HEIGHT CLASS A CONC.	PLUS OR MINUS PER LIN. FT. OF HEIGHT REINF. STEEL
		CU. YDS.	POUNDS	CU. YDS.	POUNDS
18"	2'-6"	1.77	156	0.28	22
24"	2'-6"	1.79	156	0.28	22
30"	3'-2"	2.39	205	0.30	26
36"	3'-8"	2.63	236	0.32	28
42"	4'-4"	2.95	250	0.34	30
48"	4'-10"	3.21	265	0.36	32

NOTE: QUANTITIES ARE APPROXIMATE AND ARE SHOWN FOR BIDDER INFORMATION ONLY.

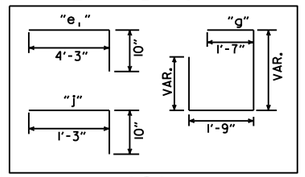
DROP INLET EXTENSION

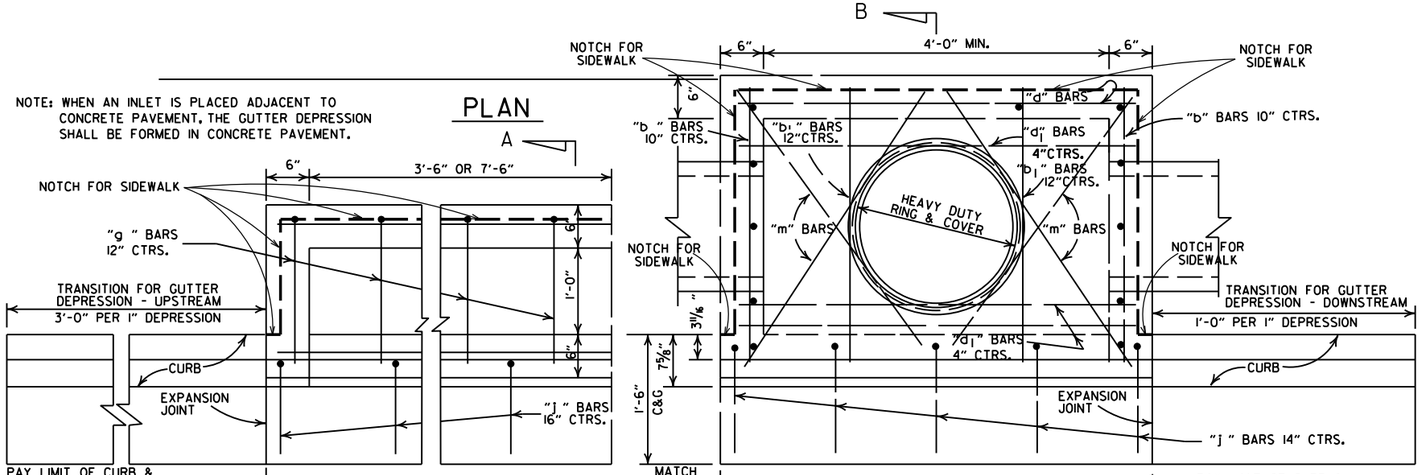
4'-0" CLASS A CONC.	4'-0" REINF. STEEL	8'-0" CLASS A CONC.	8'-0" REINF. STEEL
CU. YDS.	POUNDS	CU. YDS.	POUNDS
0.58	38	0.87	72
DEDUCT FROM QUANTITY COMPUTED FOR EACH EXTENSION ADDED.			
0.04	3		

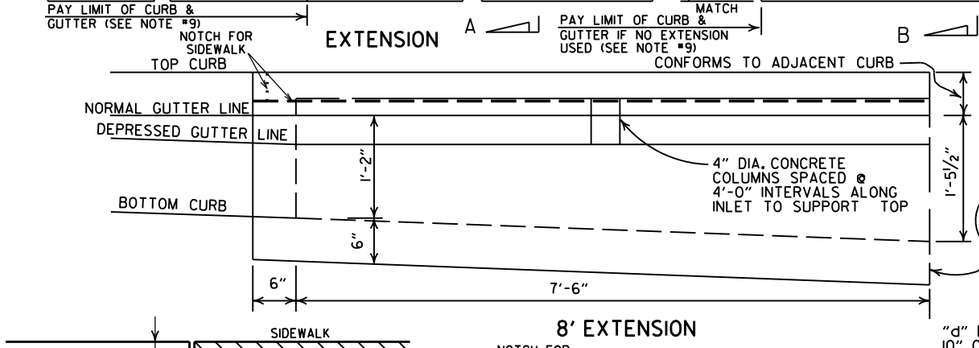
DEDUCT FROM QUANTITY COMPUTED FOR EACH PIPE ENTERING INLET

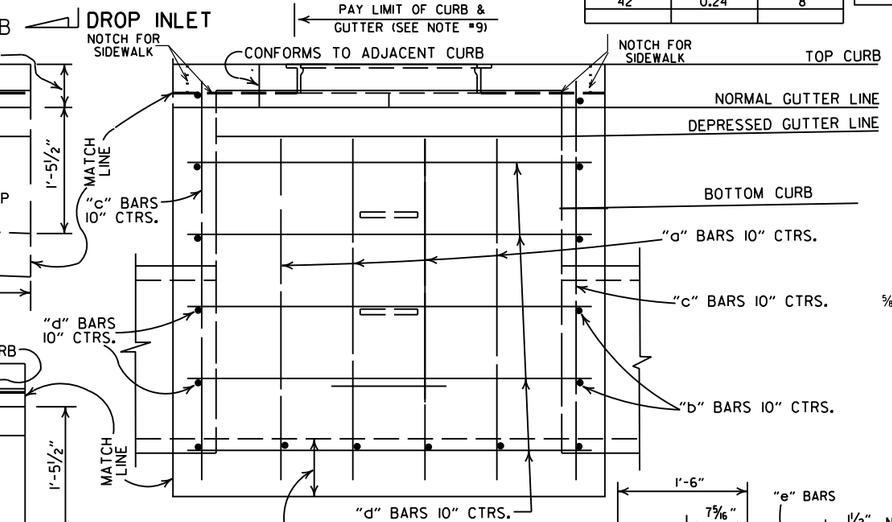
INSIDE DIA. PIPE	CLASS A CONC.	REINF. STEEL
INCHES	CU. YDS.	POUNDS
18	0.05	2
24	0.09	3
30	0.13	4
42	0.24	8

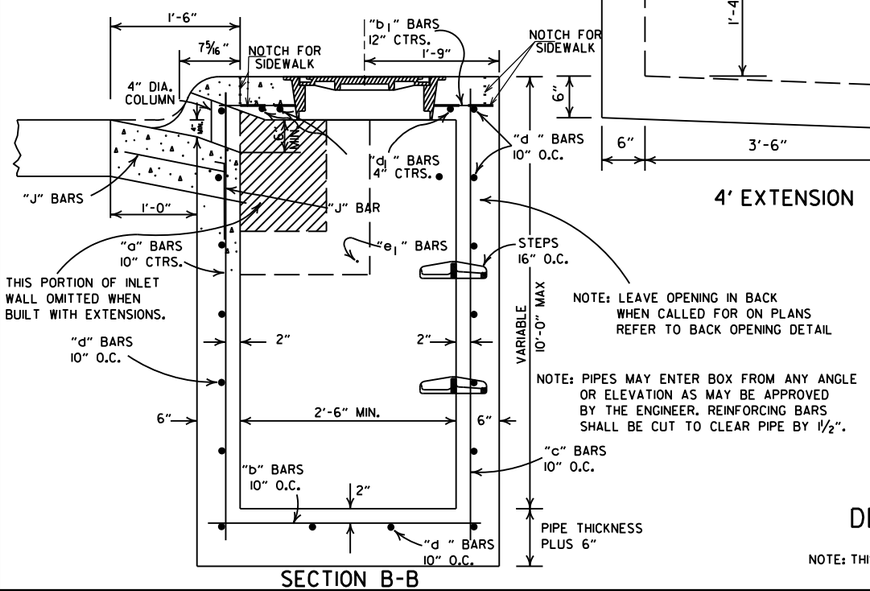
BAR DIAMETER

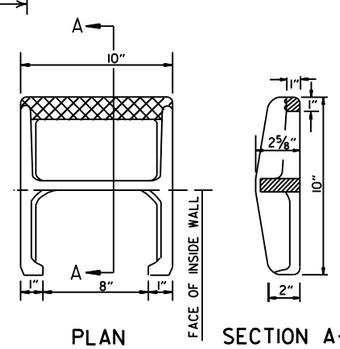


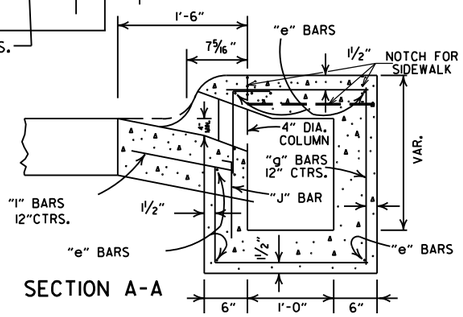


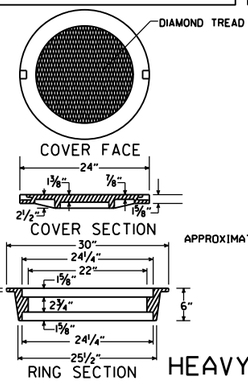






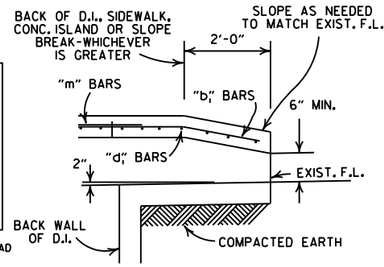






APPROXIMATE TOTAL WEIGHT = 333 LBS.

HEAVY DUTY RING & COVER



BACK OPENING

WHEN OPENING IN BACK IS CALLED FOR ON PLANS EXTEND OPENING AS SHOWN IN DETAIL. PAYMENT TO BE INCLUDED IN PRICE BID FOR DROP INLET (TYPE C).

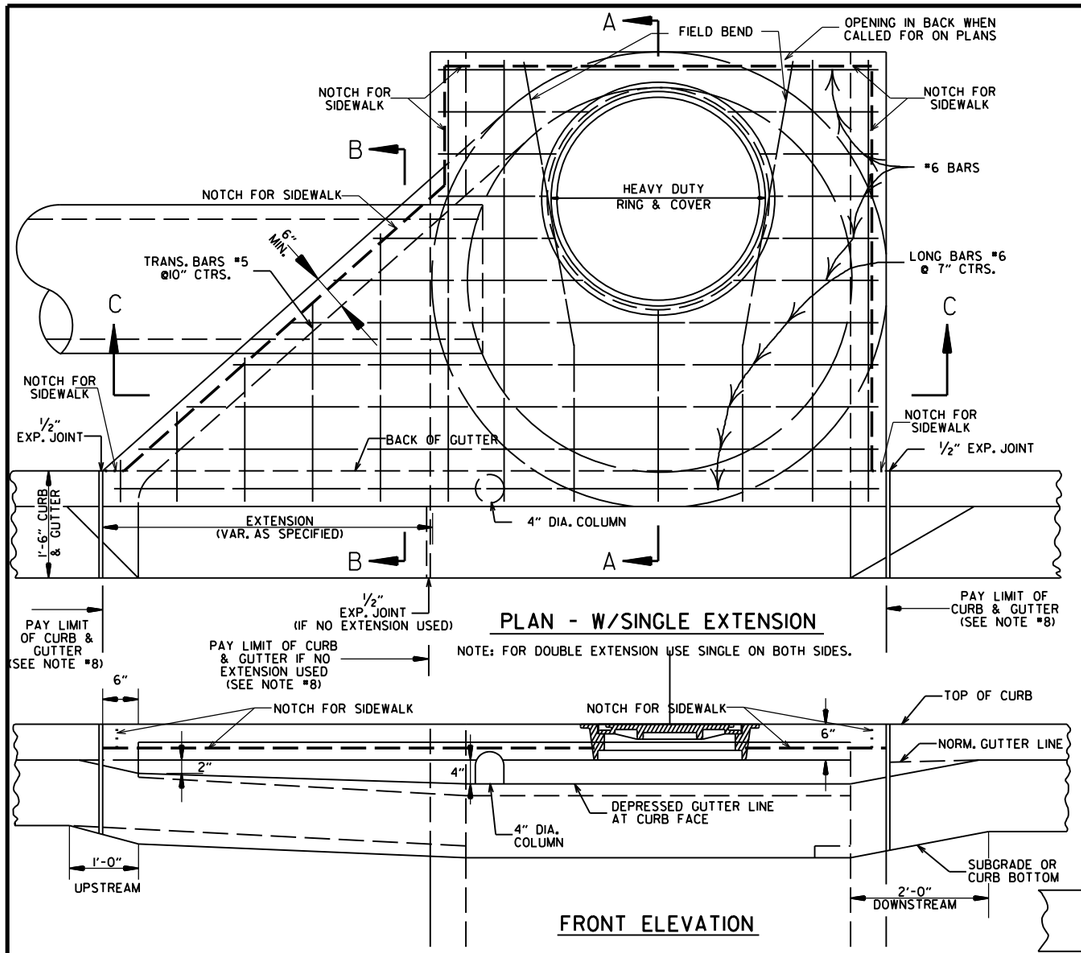
GENERAL NOTES:
1. ALL EXPOSED CORNERS TO HAVE ¾" CHAMFER.
2. STEPS SHALL BE INSTALLED IN ALL INLETS 4'-0" HIGH AND OVER OF AS APPROVED BY THE ENGINEER.
3. ALL REINF. BARS SHALL BE #4 AND HAVE 1½" COVER.
4. DROP INLETS AND EXTENSION ON CURVED SECTIONS SHALL CONFORM TO THE CURVATURE OF THE CURB.
5. THIS DROP INLET MAY BE CONSTRUCTED ON NEW OR EXISTING R.C. BOX CULVERT AS SHOWN ON F.P.C.-9.
6. WHEN PLANS CALL FOR DROP INLET OVER 10'-0" HIGH, FLOOR AND WALLS SHALL BE CONSTRUCTED AS SHOWN FOR TYPE "RM" DROP INLET (FPC-9D).
7. HEAVY DUTY RING SHALL ALWAYS BE INSTALLED WITH FLANGE ON TOP.
8. DURING CONSTRUCTION OF THE ROADWAY THE CONTRACTOR SHALL MAINTAIN DRAINAGE INTO OR AROUND THE DROP INLET AS APPROVED BY THE ENGINEER.
9. PAYMENT FOR CURB AND/OR CURB AND GUTTER WITHIN THE LIMITS OF DROP INLETS AND DROP INLET EXTENSIONS SHALL BE CONSIDERED INCLUDED IN PAYMENT MADE FOR DROP INLETS AND/OR DROP INLET EXTENSIONS.
10. HEAVY DUTY RING AND COVER SHALL BE CONSTRUCTED OF CAST IRON AND SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR GRAY IRON CASTINGS AASHTO M105 CLASS 35B & AASHTO M306.
11. HEAVY DUTY RING AND COVER SHALL NOT BE PAINTED.
12. 4"×2" NOTCH SHALL BE FORMED IN ALL DROP INLETS TO SUPPORT SIDEWALK CONSTRUCTION. REFER TO DETAIL OF NOTCH FOR SIDEWALKS.
13. DIMENSIONS SHOWN FOR RING AND COVER ARE TYPICAL. THE CONTRACTOR MAY SUBSTITUTE SIMILAR CASTINGS WITH THE APPROVAL OF THE ENGINEER. REQUESTING APPROVAL FOR CASTING DESIGNS MAY BE MADE BY REFERRING TO PREVIOUSLY APPROVED DRAWINGS.

DATE REV.	REVISION	DATE FILMED
8-22-02	ADDED PAY LIMIT CURB NOTES TO SECTIONS A-A & B-B	
11-16-01	ADDED NOTE 13; REVISED SECTION B-B	
1-12-00	CORRECTED DIMENSION ON SECTION B-B & REVISED RING & COVER	
5-13-99	ADDED DETAIL OF NOTCH FOR SIDEWALKS	
7-02-98	REPLACED RING & COVER W/HEAVY DUTY RING & COVER ADDED NOTES 9,10,&11	
10-18-96	CORRECTED SPELLING	
4-26-96	ADDED NOTE 8 & REVISED (4')(8') EXTENSION TITLES	10-18-96
4-1-93	REVISED BACK OPENING & NOTE	
8-15-91	DELETE TYPE IV GRATE	
7-15-88	REVISED STEP DETAIL	
5-20-83	REVISED DETAILS OF GRATES (TYPE IV & IV-A)	
2-4-83	ADDED GENERAL NOTE NO. 4	
3-2-81	ADDED TYPE IV-A GRATE	
5-22-74	DELETED INLET (TYPE F) & GRATE (TYPE III)	
10-2-72	REVISED AND REDRAWN	

ARKANSAS STATE HIGHWAY COMMISSION

DETAILS OF DROP INLETS (TYPE C)

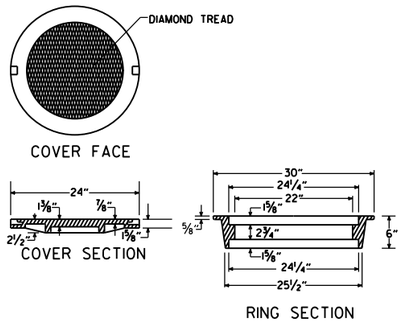
STANDARD DRAWING FPC-9E



PLAN - W/SINGLE EXTENSION

FRONT ELEVATION

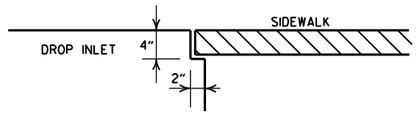
SECTION C-C



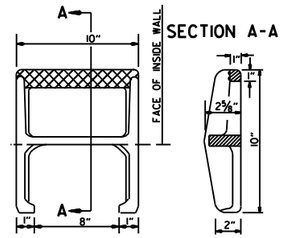
APPROXIMATE TOTAL WEIGHT = 333 LBS.

HEAVY DUTY RING & COVER

1. HEAVY DUTY RING AND COVER SHALL BE CONSTRUCTED OF CAST IRON AND SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR GRAY IRON CASTINGS AASHTO M105 CLASS 35B & AASHTO M306.
2. HEAVY DUTY RING AND COVER SHALL NOT BE PAINTED.
3. HEAVY DUTY RING SHALL ALWAYS BE INSTALLED WITH FLANGE ON TOP.



DETAIL OF NOTCH FOR SIDEWALKS



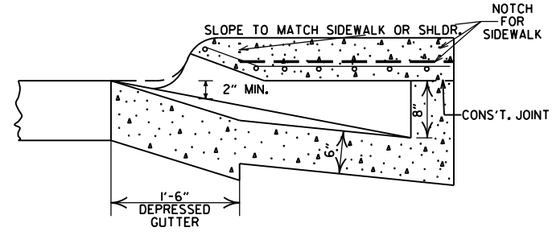
SECTION A-A

APPROX. WEIGHT = 11LBS. (CAST IRON)

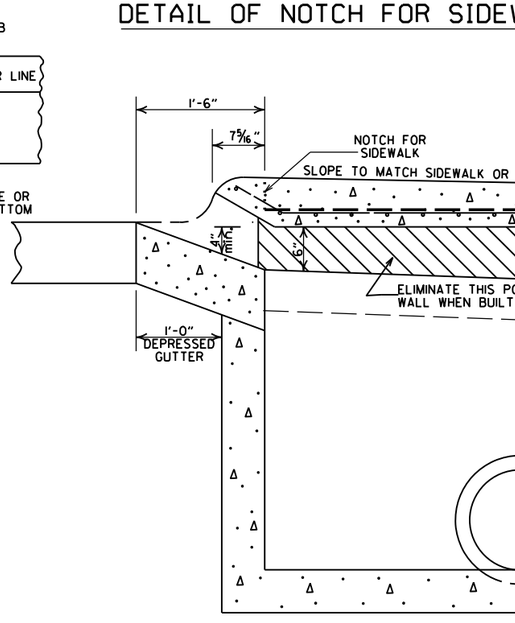
PLAN

NOTE: THIS DETAIL IS TYPICAL. OTHERS MAY BE USED WITH PRIOR APPROVAL OF THE ENGINEER.

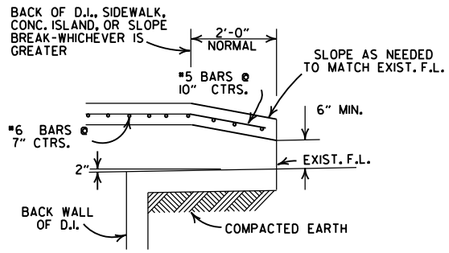
DETAIL OF STEP FOR DROP INLET



SECTION B-B



SECTION A-A



BACK OPENING

WHEN OPENING IN BACK IS CALLED FOR ON PLANS EXTEND OPENING AS SHOWN IN DETAIL. PAYMENT TO BE INCLUDED IN PRICE BID FOR DROP INLET (TYPE MO).

GENERAL NOTES:

1. ALL EXPOSED CORNERS TO HAVE ¾" CHAMFER.
2. STEPS SHALL BE INSTALLED IN ALL INLETS 4'-0" HIGH AND OVER OR AS DIRECTED BY THE ENGINEER.
3. ALL REINFORCING BARS SHALL BE GRADE 60 AND HAVE MIN. 1½" COVER.
4. DROP INLETS AND EXTENSION ON CURVED SECTIONS SHALL CONFORM TO THE CURVATURE OF THE CURB.
5. 4" DIA. COLUMNS SPACED AT MAX. 4'-0" INTERVALS SHALL BE INSTALLED ALONG INLET AND EXTENSION TO SUPPORT TOP.
6. BASE AND INLET WALLS SHALL BE CAST MONOLITHICALLY.
7. THE THROAT SHALL BE CAST INTEGRALLY WITH THE GUTTER.
8. PAYMENT FOR CURB AND/OR CURB AND GUTTER WITHIN THE LIMITS OF DROP INLETS AND DROP INLET EXTENSIONS SHALL BE CONSIDERED INCLUDED IN PAYMENT MADE FOR DROP INLETS AND/OR DROP INLET EXTENSIONS.
9. PIPES MAY ENTER DROP INLET FROM ANY ANGLE OR ELEVATION AS MAY BE APPROVED BY THE ENGINEER.
10. APPROPRIATE SIZE TYPE C DROP INLETS MAY BE SUBSTITUTED FOR TYPE MO DROP INLETS AS APPROVED BY THE ENGINEER. PAYMENT TO BE AS DROP INLET (TYPE MO).
11. DURING CONSTRUCTION OF THE ROADWAY THE CONTRACTOR SHALL MAINTAIN DRAINAGE INTO OR AROUND THE DROP INLET AS APPROVED BY THE ENGINEER.
12. 4"x2" NOTCH SHALL BE FORMED IN ALL DROP INLETS TO SUPPORT SIDEWALK CONSTRUCTION. REFER TO DETAIL OF NOTCH FOR SIDEWALKS.
13. DIMENSIONS SHOWN FOR RING AND COVER ARE TYPICAL. THE CONTRACTOR MAY SUBSTITUTE SIMILAR CASTINGS WITH THE APPROVAL OF THE ENGINEER. REQUESTING APPROVAL FOR CASTING DESIGNS MAY BE MADE BY REFERRING TO PREVIOUSLY APPROVED DRAWINGS.

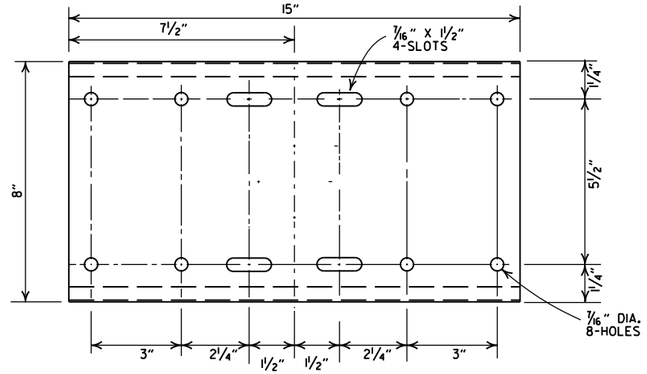
DIA. OF D.I.	DIA. OF OUTLET PIPE	MINIMUM WALL THICKNESS	
		CAST IN PLACE	PRECAST
4' I.D.	12" THRU 27"	6"	5"
5' I.D.	30" THRU 42"	8"	6"
6' I.D.	48" THRU 54"	8"	7"

DATE	REVISIONS	DATE FILMED
8-22-02	ADDED PAY LIMIT CURB NOTES TO SECTIONS A-A & B-B	
11-16-01	ADDED NOTE 13	
1-12-00	REVISED HEAVY DUTY RING & COVER	
5-13-99	ADDED NOTCH DETAIL FOR SIDEWALKS	
7-02-98	REP. NOTE 8, REM. PLAN DET., REV. PICTURE FOR NEW RING & COVER, ADDED HEAVY DUTY RING & COVER AND DETAIL OF STEP FOR DROP INLET	
4-26-96	ADDED NOTE 11, ADJ. OPENING DIMENSION	
10-12-95	CORRECTED #6 BAR SPACING	
7-20-95	CORRECTED DIAMETER OF D.I. IN BOX	
2-2-95	TYPE C TO MO (OPEN, BACK DETAIL)	
11-3-94	REVISED GENERAL NOTES	11-3-94
4-1-93	REV. BACK OPEN. DETAIL & NOTE	4-1-93
8-16-91	REVISED NOTES 11,12 & ADDED BK.OPEN DETAIL	8-15-91
11-30-89	ADDED NOTE NO. 12	11-30-89
5-23-89	ADDED NOTE 8 & MINIMUM WALL THICKNESS	513-5-23-89
7-15-88	ADDED EXTEND NOTE TO SECTION A-A	629-7-15-88
1-14-87	MODIFIED WALL THICKNESS	783-1-14-87
6-12-87	ISSUED	4-6-12-87

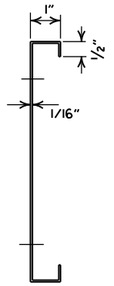
ARKANSAS STATE HIGHWAY COMMISSION

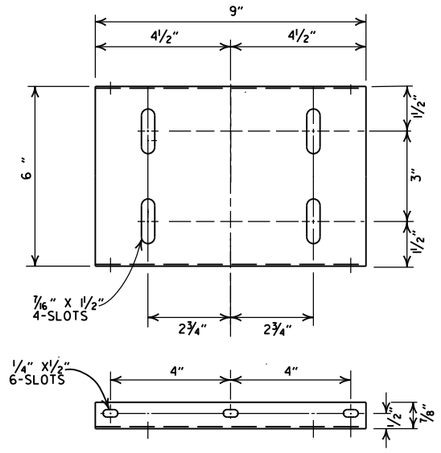
DETAILS OF DROP INLET (TYPE MO)

STANDARD DRAWING FPC-9M

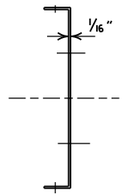


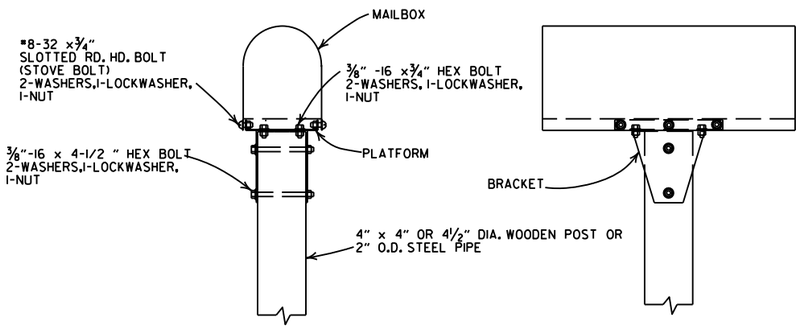
SHELF



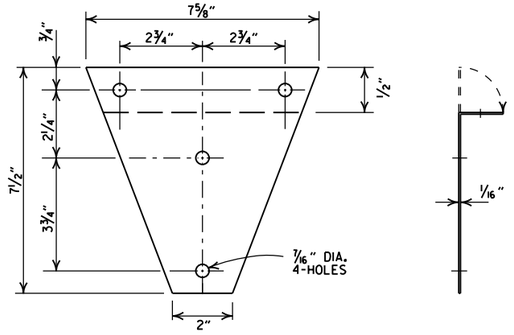


PLATFORM





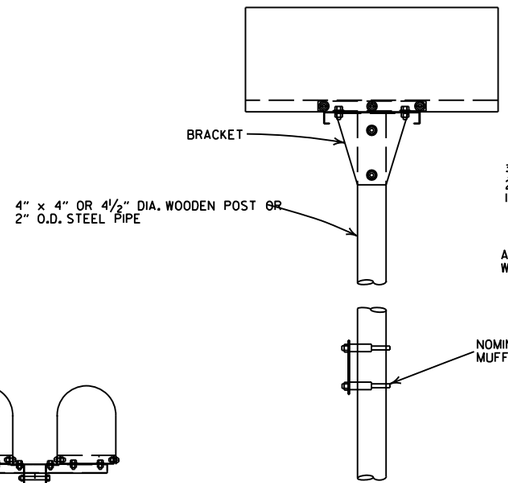
SINGLE INSTALLATION



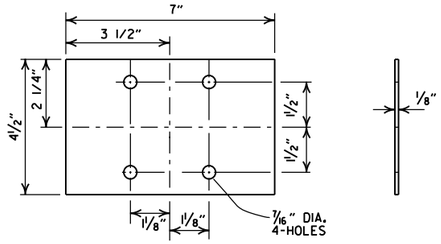
BRACKET

GENERAL NOTES

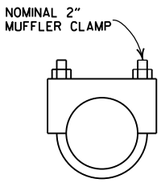
1. MAILBOX POSTS MAY BE WOOD OR METAL. WOOD POSTS SHALL BE PRESSURE TREATED FOR GROUND CONTACT IN ACCORDANCE WITH SECTION 637.02 OF THE STANDARD SPECIFICATIONS.
2. ANTI-TWIST PLATES SHALL BE USED ONLY ON METAL POSTS.
3. MAILBOX SHELF, BRACKET & PLATFORM SHALL BE GALVANIZED OR PAINTED STEEL, HOWEVER TREATED WOOD MAY BE USED WITH WOODEN POSTS. THE WOODEN SHELF, BRACKET & PLATFORM SHALL BE A MINIMUM OF ¾" THICK AND SHALL BE ASSEMBLED WITH BOLTS OF THE APPROPRIATE LENGTH WITH SIX 8 X¾" FLATHEAD WOOD SCREWS USED TO ATTACH THE MAILBOX TO THE PLATFORM.
4. THE MAILBOX SHELF AND PLATFORM THAT IS SHOWN IS FOR STANDARD SIZE MAILBOXES. THE SHELF AND PLATFORM SIZE SHALL BE MODIFIED TO FIT MAILBOXES OF A DIFFERENT SIZE.
5. METAL PIPE FOR MAILBOX SUPPORT SHALL BE 2" OUTSIDE DIAMETER STEEL WITH A WALL THICKNESS OF 0.145" AND A WEIGHT OF 2.72 LBS PER FT. OUTSIDE DIAMETER AND WEIGHT SHALL HAVE A TOLERANCE OF +/- 5% ACCORDING TO AASHTO M 181.
6. MAILBOX SUPPORT SYSTEM DIFFERING FROM THOSE SHOWN MAY BE USED, PROVIDED THEY ARE ON THE ARDOT QUALIFIED PRODUCTS LIST FOR MAILBOX SUPPORTS.



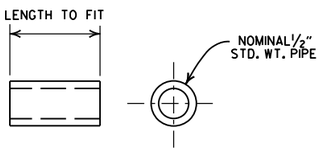
DOUBLE INSTALLATION



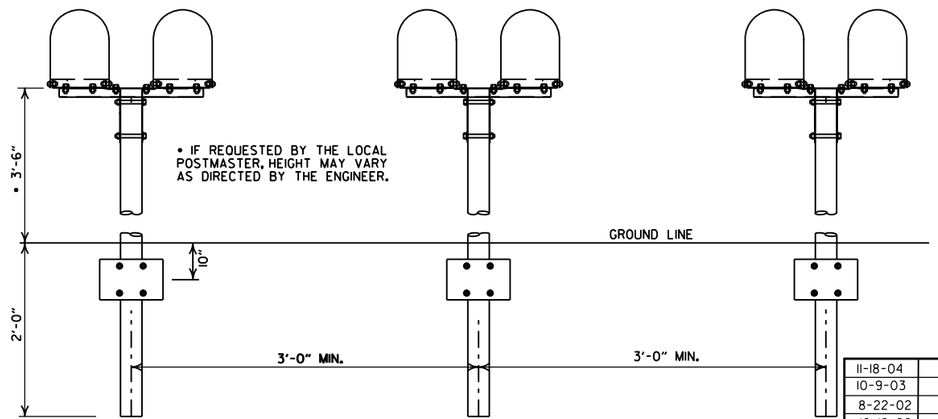
ANTI-TWIST PLATE



CLAMP



SPACER



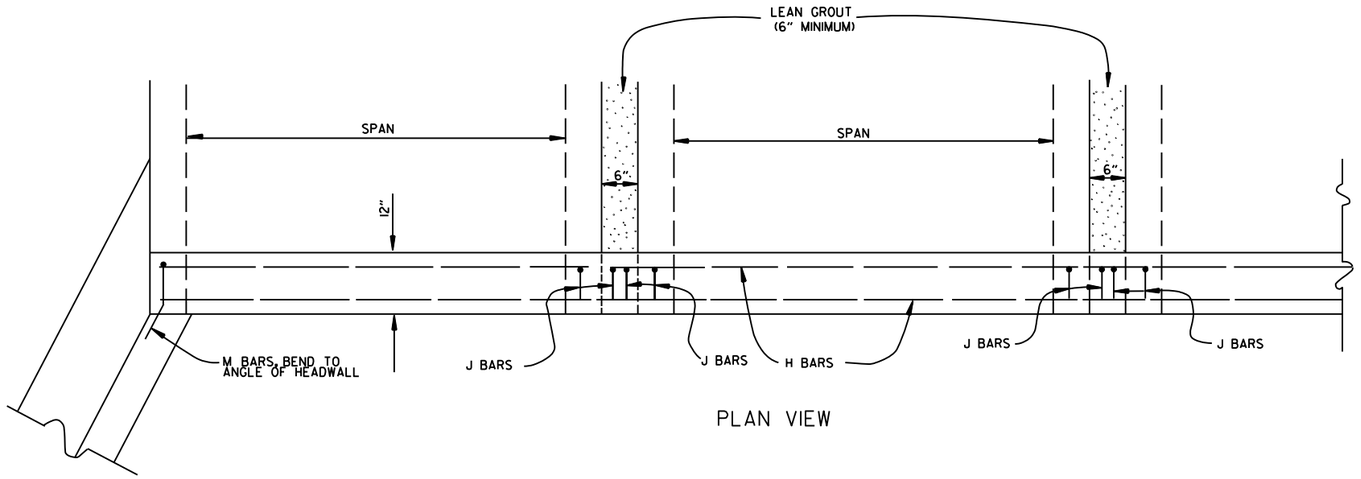
SPACING FOR MULTIPLE POST INSTALLATION

DATE	FILMED	REVISION
11-18-04		REVISED NOTES
10-9-03		REVISED NOTE 6
8-22-02		REVISED NOTE 6
10-18-96		CORRECTED AASHTO
10-1-92		CORRECTED SPELLING
9-26-91		NEW PHONE NUMBER
8-15-91		ADDED NOTE
11-30-89		ADJUSTED HEIGHT & ADDED NOTE
2-16-89		DELETED SLOTS FROM SHELF & PLTF
11-17-88	10-1-92	ADJUSTED DIMENSIONS OF STEEL POSTS
7-15-88	20-7-15-88	ISSUED

ARKANSAS STATE HIGHWAY COMMISSION

MAILBOX DETAILS

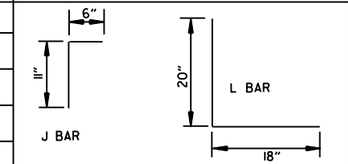
STANDARD DRAWING MB-1



PLAN VIEW

BAR LIST

BAR	NO.	SIZE	LENGTH	BAR BENDING DIAGRAM
H	2	#4	•	
I	•	#4	•	
J	•	#4	1'-5"	
L	•	#4	3'-2"	
M	•	#4	1'-8"	



• NOTE: LENGTH AND NUMBER OF BARS VARIES WITH SIZE OF CULVERT

GENERAL NOTES

WINGS, CURTAIN WALLS AND APRONS SHALL BE TIED TO THE PRECAST CULVERT SECTION BY CASTING BARS IN CULVERT END SECTIONS AS SHOWN OR BY DOWELING AND GROUTING. J BARS AND M BARS SHALL BE EMBEDDED A MINIMUM OF 10" IN PRECAST BOX.

WINGS, FOOTINGS, APRONS AND CURTAIN WALLS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPLICABLE WING DRAWING. STEEL AND CONCRETE QUANTITIES WILL BE ADJUSTED TO FIT THE IN-PLACE WIDTH & HEIGHT OF THE PRECAST CONCRETE BOX CULVERTS.

ALL EXPOSED CORNERS TO HAVE ¾" CHAMFERS.

WINGWALLS AND FOOTINGS MAY BE ADJUSTED IN THE FIELD AS DIRECTED BY THE ENGINEER.

ALL CONCRETE, REINFORCING STEEL, LEAN GROUT, MEMBRANE WATERPROOFING, DRAINAGE FILL MATERIAL, GEOTEXTILE FILTER FABRIC, LABOR, MATERIALS AND EQUIPMENT REQUIRED FOR INSTALLING PRECAST BOX CULVERTS WILL NOT BE PAID FOR DIRECTLY BUT WILL BE CONSIDERED TO BE INCLUDED IN THE PRICE BID FOR THE ITEMS AS SPECIFIED IN SECTION 607 OF THE STANDARD SPECIFICATIONS.

LEAN GROUT SHALL CONSIST OF A SAND CEMENT MIXTURE MEETING THE FOLLOWING REQUIREMENTS:
PORTLAND CEMENT SHALL BE TYPE I AND SHALL MEET THE REQUIREMENTS OF AASHTO M 85.
SAND SHALL MEET THE REQUIREMENTS OF FINE AGGREGATE AS SPECIFIED IN SECTION 802.02 OF THE STANDARD SPECIFICATIONS.
THE SAND CEMENT MIXTURE SHALL CONSIST OF NOT LESS THAN 1.5 SACKS OF PORTLAND CEMENT PER TON OF MATERIAL MIXTURE.
THE MIXTURE SHALL CONTAIN SUFFICIENT WATER TO HYDRATE THE CEMENTS. THE SAND CEMENT MIXTURE SHALL BE PLACED IN MAXIMUM 8 INCH THICK LIFTS, LOOSE MEASURE, AND THOROUGHLY RODDED AND TAMPED AROUND BOX TO THOROUGHLY FILL ALL VOIDS.

MEMBRANE WATERPROOFING CONFORMING TO THE REQUIREMENTS OF SECTION 815 OF THE STANDARD SPECIFICATIONS SHALL BE APPLIED TO ALL BOX CULVERT JOINTS.

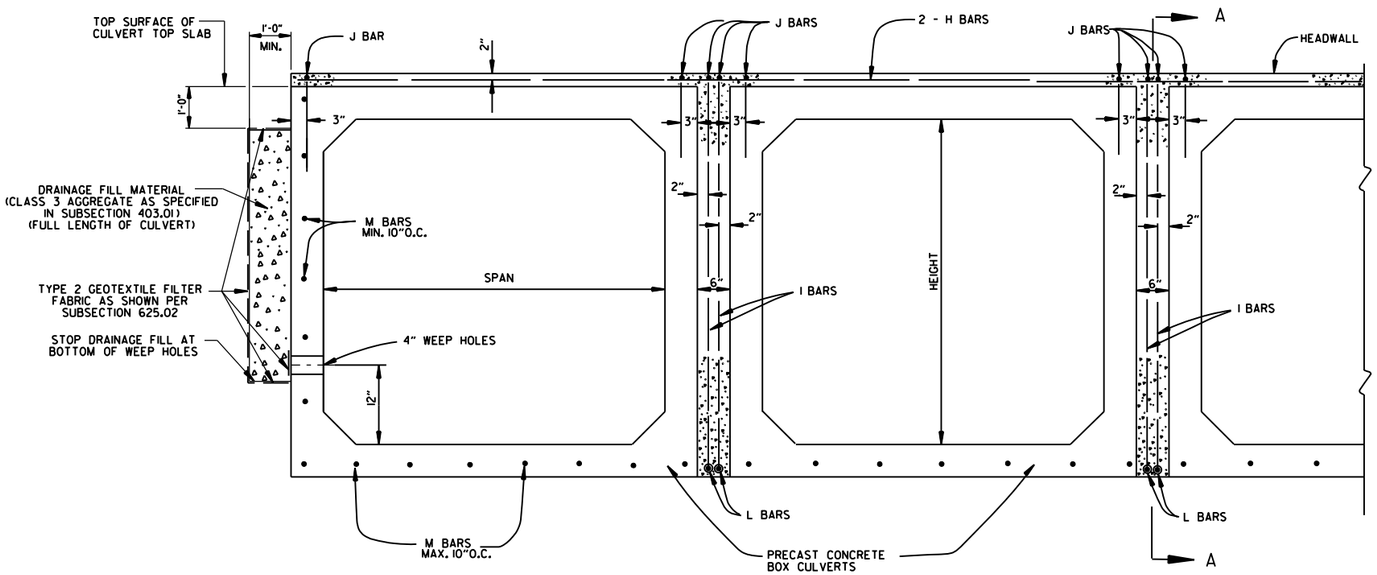
THE MEMBRANE WATERPROOFING WILL BE REQUIRED ON THE TOP EXTERNAL JOINT AND SHALL EXTEND 1 FOOT DOWN THE SIDES OF THE CULVERT.

IN OUTER BARRELS, ONE WEEP HOLE IS REQUIRED IN EXTERIOR WALLS OF EACH PRECAST CULVERT SECTION. WEEP HOLES SHALL HAVE A MAXIMUM HORIZONTAL SPACING OF 10'-0" IN THE ASSEMBLED CULVERT 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.

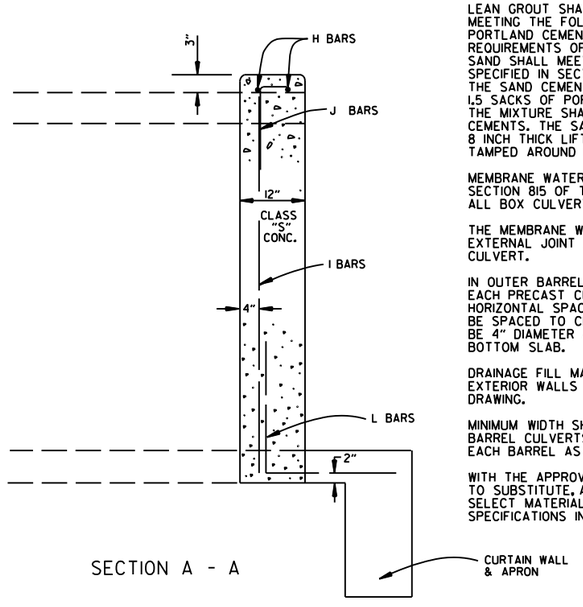
DRAINAGE FILL MATERIAL WITH GEOTEXTILE FABRIC IS REQUIRED AT THE EXTERIOR WALLS OF THE ASSEMBLED CULVERT, SEE DETAILS ON THIS DRAWING.

MINIMUM WIDTH SHALL BE 12" (6" ON EACH SIDE OF JOINT). ON MULTIPLE BARREL CULVERTS, MEMBRANE WATERPROOFING SHALL BE APPLIED TO EACH BARREL AS DESCRIBED ABOVE.

WITH THE APPROVAL OF THE ENGINEER, THE CONTRACTOR WILL BE ALLOWED TO SUBSTITUTE, AT NO ADDITIONAL COST TO THE DEPARTMENT, FLOWABLE SELECT MATERIAL CONFORMING TO SECTION 206 OF THE STANDARD SPECIFICATIONS IN LIEU OF LEAN GROUT.



END VIEW



SECTION A - A

DATE	REVISION	DATE FILMED
1-28-15	REVISED GEOTEXTILE FABRIC PLACEMENT	
12-15-11	ADDED NOTE & DTLS FOR WEEP HOLE AND DRAINAGE FILL	
10-15-09	ADDED GENERAL NOTE	
11-10-05	REVISED SPACING OF "M" BARS	
4-10-03	REVISED GENERAL NOTES	
10-18-96	CORRECTED AASHTO REF.	
10-1-92	ADDED NOTE FOR MEMBRANE WATERPROOFING	
8-15-91	ADDED NOTE FOR LEAN GROUT	
11- 8-90	REVISED FOR 1991 SPECS	
11-30-89	ISSUED; JABE	

ARKANSAS STATE HIGHWAY COMMISSION

PRECAST CONCRETE BOX CULVERTS

STANDARD DRAWING PBC-1

REINFORCED CONCRETE ARCH PIPE DIMENSIONS

EQUIV. DIA.	SPAN		RISE	
	AASHTO M 206	ARDOT NOMINAL	AASHTO M 206	ARDOT NOMINAL
INCHES	INCHES			
15	18	18	11	11
18	22	22	13½	14
21	26	26	15½	16
24	28½	29	18	18
30	36¼	36	22½	23
36	43⅜	44	26⅝	27
42	51⅛	51	31⅜	31
48	58½	59	36	36
54	65	65	40	40
60	73	73	45	45
72	88	88	54	54
84	102	102	62	62
90	115	115	72	72
96	122	122	77½	77
108	138	138	87⅛	87
120	154	154	96⅞	97
132	168¾	169	106½	107

THE MEASURED SPAN AND RISE SHALL NOT VARY MORE THAN ± 2 PERCENT FROM THE VALUES SPECIFIED BY AASHTO M206.

REINFORCED CONCRETE HORIZONTAL ELLIPTICAL PIPE DIMENSIONS

EQUIV. DIA.	AASHTO M 207	
	SPAN	RISE
INCHES	INCHES	
18	23	14
24	30	19
27	34	22
30	38	24
33	42	27
36	45	29
39	49	32
42	53	34
48	60	38
54	68	43
60	76	48
66	83	53
72	91	58
78	98	63
84	106	68

THE MEASURED SPAN AND RISE SHALL NOT VARY MORE THAN ± 2 PERCENT FROM THE VALUES SPECIFIED BY AASHTO M207.

CONSTRUCTION SEQUENCE

1. PLACE STRUCTURAL BEDDING MATERIAL TO GRADE. DO NOT COMPACT.
2. INSTALL PIPE TO GRADE.
3. COMPACT STRUCTURAL BEDDING OUTSIDE THE MIDDLE THIRD OF THE PIPE.
4. PLACE AND COMPACT THE HAUNCH AREA UP TO THE MIDDLE OF THE PIPE.
5. COMPLETE BACKFILL ACCORDING TO SUBSECTION 606.03.(f)(1).

NOTE: HAUNCH AND STRUCTURAL BEDDING MATERIAL WILL NOT BE PAID FOR SEPARATELY, BUT COMPENSATION WILL BE CONSIDERED TO BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF CONCRETE PIPE.

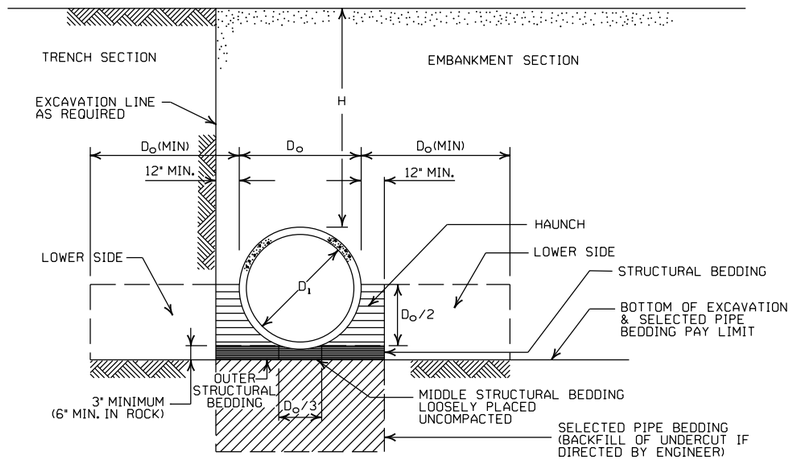
- LEGEND -

D_1 = NORMAL INSIDE DIAMETER OF PIPE
D_O = OUTSIDE DIAMETER OF PIPE
H = FILL COVER HEIGHT OVER PIPE (FEET)
MIN. = MINIMUM
▨ = UNDISTURBED SOIL

INSTALLATION TYPE	MATERIAL REQUIREMENTS FOR HAUNCH AND STRUCTURAL BEDDING
TYPE 1	AGGREGATE BASE COURSE (CLASS 5 OR CLASS 7)
TYPE 2	SELECTED MATERIALS (CLASS SM-1, SM-2, OR SM-4) OR TYPE 1 INSTALLATION MATERIAL*
TYPE 3**	AASHTO CLASSIFICATION A-1 THRU A-6 SOIL OR TYPE 1 OR 2 INSTALLATION MATERIAL

* SM-3 WILL NOT BE ALLOWED.

** MATERIALS SHALL NOT INCLUDE ORGANIC MATERIALS OR STONES LARGER THAN 3 INCHES.



EMBANKMENT AND TRENCH INSTALLATIONS

1. MATERIAL IN THE HAUNCH AND OUTER STRUCTURAL BEDDING SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OR CLASS OF MATERIAL USED.
2. FOR TRENCHES WITH WALLS OF NATURAL SOIL, THE DENSITY OF THE SOIL IN THE LOWER SIDE ZONE SHALL BE AS FIRM AS THE 95% DENSITY REQUIRED FOR THE HAUNCH. IF THE EXISTING SOIL DOES NOT MEET THIS CRITERIA, IT SHALL BE REMOVED AND RECOMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OF MATERIAL USED.
3. FOR EMBANKMENTS, THE MATERIAL IN THE LOWER SIDE ZONE SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OR CLASS OF MATERIAL USED.

GENERAL NOTES

1. CONCRETE PIPE CULVERT CONSTRUCTION SHALL CONFORM TO ARKANSAS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION), WITH APPLICABLE SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS. UNLESS OTHERWISE NOTED IN THE PLANS, SECTION AND SUBSECTION REFER TO THE STANDARD CONSTRUCTION SPECIFICATIONS.
2. CONCRETE PIPE CULVERT DESIGN SHALL CONFORM TO AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, FIFTH EDITION (2010) WITH 2010 INTERIMS.
3. ALL PIPE SHALL CONFORM TO SECTION 606. CIRCULAR R.C. PIPE CULVERTS SHALL CONFORM TO AASHTO M170, R.C. ARCH PIPE CULVERTS SHALL CONFORM TO AASHTO M206 AND HORIZONTAL ELLIPTICAL PIPE CULVERTS SHALL CONFORM TO AASHTO M207.
4. ALL PIPE SHALL BE PROTECTED DURING CONSTRUCTION BY A COVER SUFFICIENT TO PREVENT DAMAGE FROM PASSAGE OF EQUIPMENT.
5. THE MINIMUM TRENCH WIDTH SHALL BE THE OUTSIDE DIAMETER OF THE PIPE PLUS 24 INCHES. THE MAXIMUM ALLOWABLE TRENCH WIDTH SHALL BE THE MINIMUM WIDTH PRACTICABLE FOR WORKING CONDITIONS.
6. MULTIPLE PIPE CULVERTS SHALL BE INSTALLED WITH A MINIMUM CLEARANCE OF 24 INCHES BETWEEN STRINGS OF PIPE. REFER TO STD. DWG. FES-2 FOR MINIMUM CLEARANCE WHERE FLARED END SECTIONS ARE USED.
7. IMPERVIOUS MATERIAL SHOULD BE PLACED AS DIRECTED BY THE ENGINEER AT THE ENDS OF THE CULVERT TO PREVENT LOSS OF STRUCTURAL BEDDING WHEN PERVIOUS MATERIAL IS USED FOR STRUCTURAL BEDDING AND/OR BACKFILL.
8. NOT MORE THAN ONE LIFTING HOLE MAY BE PROVIDED IN CONCRETE PIPE TO FACILITATE HANDLING. HOLE MAY BE CAST IN PLACE, CUT INTO THE FRESH CONCRETE AFTER FORMS ARE REMOVED, OR DRILLED. THE HOLE SHALL NOT BE MORE THAN TWO INCHES IN DIAMETER OR TWO INCHES SQUARE. CUTTING OR DISPLACEMENT OF REINFORCEMENT WILL NOT BE PERMITTED. SPALLED AREAS AROUND THE HOLE SHALL BE REPAIRED IN A WORKMANLIKE MANNER. LIFTING HOLE SHALL BE FILLED WITH MORTAR, CONCRETE, OR OTHER METHOD AS APPROVED BY THE ENGINEER.
9. WHEN DIRECTED BY THE ENGINEER, UNSUITABLE MATERIAL THAT IS ENCOUNTERED AT THE BOTTOM OF THE EXCAVATED TRENCH (BELOW THE AREA IDENTIFIED AS "STRUCTURAL BEDDING" ABOVE) WILL BE EXCAVATED AND REPLACED WITH SELECTED PIPE BEDDING. THE QUANTITY OF MATERIAL REQUIRED TO BACKFILL THE UNDERCUT AREA UP TO THE SELECTED PIPE BEDDING PAY LIMIT DESIGNATED ABOVE WILL BE MEASURED AND PAID FOR AS "SELECTED PIPE BEDDING."
10. WHEN THE EXISTING MATERIAL EXCAVATED FOR THE PIPE TRENCH IS DETERMINED BY THE ENGINEER TO BE UNSUITABLE FOR BACKFILLING THE PIPE (ABOVE THE AREA IDENTIFIED ABOVE AS THE HAUNCH), BORROW MATERIAL OR MATERIAL FROM THE ROADWAY EXCAVATION WILL BE USED TO BACKFILL THE PIPE. IF SUITABLE MATERIAL IS NOT AVAILABLE, THE ENGINEER MAY AUTHORIZE THE USE OF "SELECTED PIPE BACKFILL."

MINIMUM HEIGHT OF FILL "H" OVER CIRCULAR R.C. PIPE CULVERTS

	CLASS OF PIPE			
	CLASS III		CLASS IV	CLASS V
INSTALLATION TYPE	TYPE 1 OR 2	TYPE 3	ALL	ALL
PIPE ID (IN.)	FEET			
12-15	2	2.5	2	1
18-24	2.5	3	2	1
27-33	3	4	2	1
36-42	3.5	5	2	1
48	4.5	5.5	2	1
54-60	5	7	2	1
66-78	6	8	2	1
84-108	7.5	8	2	1

NOTE: FOR MINIMUM COVER VALUES, "H" SHALL INCLUDE A MINIMUM OF 12" OF PAVEMENT AND/OR BASE.

MAXIMUM HEIGHT OF FILL "H" OVER CIRCULAR R.C. PIPE CULVERTS

INSTALLATION TYPE	CLASS OF PIPE		
	CLASS III	CLASS IV	CLASS V
	FEET		
TYPE 1	21	32	50
TYPE 2	16	25	39
TYPE 3	12	20	30

NOTE: IF FILL HEIGHT EXCEEDS 50 FEET, A SPECIAL DESIGN CONCRETE PIPE WILL BE REQUIRED USING TYPE 1 INSTALLATION.

MINIMUM HEIGHT OF FILL "H" OVER R.C. ARCH & HORIZONTAL ELLIPTICAL PIPE CULVERTS

INSTALLATION TYPE	CLASS OF PIPE	
	CLASS III	CLASS IV
	FEET	
TYPE 2 OR TYPE 3	2.5	1.5

NOTE: TYPE 1 INSTALLATION WILL NOT BE ALLOWED FOR ARCH & HORIZONTAL ELLIPTICAL PIPE CULVERTS.

NOTE: FOR MINIMUM COVER VALUES, "H" SHALL INCLUDE A MINIMUM OF 12" OF PAVEMENT AND/OR BASE.

MAXIMUM HEIGHT OF FILL "H" OVER R.C. ARCH & HORIZONTAL ELLIPTICAL PIPE CULVERTS

INSTALLATION TYPE	CLASS OF PIPE	
	CLASS III	CLASS IV
	FEET	
TYPE 2	13	21
TYPE 3	10	16

NOTE: TYPE 1 INSTALLATION WILL NOT BE ALLOWED FOR ARCH & HORIZONTAL ELLIPTICAL PIPE CULVERTS.

DATE	REVISION	DATE FILMED
2-27-14	REVISED GENERAL NOTE 1.	
12-15-11	REVISED FOR LRFD DESIGN SPECIFICATIONS	
5-18-00	REVISED TYPE 3 BEDDING & ADDED NOTE	
3-30-00	REVISED INSTALLATIONS	
11-06-97	ISSUED	

ARKANSAS STATE HIGHWAY COMMISSION

CONCRETE PIPE CULVERT FILL HEIGHTS & BEDDING

STANDARD DRAWING PCC-1

CORRUGATED STEEL PIPE (ROUND)

PIPE DIAMETER (INCHES)	① MINUMUM COVER TOP OF PIPE TO TOP OF GROUND "H" (FEET)	MAX. FILL HEIGHT "H" ABOVE TOP OF PIPE (FEET)				
		METAL THICKNESS (INCHES)				
		0.064	0.079	0.109	0.138	0.168
2⅔ INCH BY ½ INCH CORRUGATION RIVETED, WELDED, OR HELICAL LOCK-SEAM						
12	1	84	91			
15	1	67	73			
18	1	56	61			
24	1	42	46	59		
30	2	34	36	47		
36	2		30	39	41	
42	2		43	67	70	73
48	2		37	58	61	64
② 3 INCH BY 1 INCH OR 5 INCH BY 1 INCH CORRUGATION RIVETED, WELDED, BOLTED, OR HELICAL LOCK-SEAM						
36	1	48	60	88	111	118
42	1	41	51	72	90	102
48	1	36	45	64	77	85
54	2	32	40	59	71	79
60	2	29	36	53	64	71
66	2	26	33	47	58	64
72	2	24	30	44	53	59
78	2		28	41	49	54
84	2		26	38	45	51
90	2		24	35	43	45
96	2		22	33	40	44
102	2			31	38	42
108	2			30	35	39
114	2			28	34	37
120	2			27	32	35

CORRUGATED ALUMINUM PIPE (ROUND)

PIPE DIAMETER (INCHES)	① MINUMUM COVER TOP OF PIPE TO TOP OF GROUND "H" (FEET)	MAX. FILL HEIGHT "H" ABOVE TOP OF PIPE (FEET)				
		METAL THICKNESS IN INCHES				
		0.060	0.075	0.105	0.135	0.164
		2 ⅔ INCH BY ½ INCH CORRUGATION RIVETED OR HELICAL LOCK-SEAM				
12	1	45	45			
18	2	30	30	52		
24	2	22	22	39	41	
30	2		18	31	32	34
36	2.5		15	26	27	28
42	2			43	43	44
48	2			40	41	43
54	2			35	37	38
60	2				33	34
66	2					31
72	2					29

CONSTRUCTION SEQUENCE

1. PLACE STRUCTURAL BEDDING MATERIAL TO GRADE. DO NOT COMPACT.
2. INSTALL PIPE TO GRADE.
3. COMPACT STRUCTURAL BEDDING OUTSIDE THE MIDDLE THIRD OF THE PIPE.
4. COMPLETE STRUCTURAL BACKFILL OPERATION BY WORKING FROM SIDE TO SIDE OF THE PIPE. THE SIDE TO SIDE STRUCTURAL BACKFILL DIFFERENTIAL SHALL NOT EXCEED 24 INCHES OR 1/3 THE SIZE OF THE PIPE, WHICHEVER IS LESS.

NOTE: STRUCTURAL BACKFILL AND STRUCTURAL BEDDING MATERIAL WILL NOT BE PAID FOR SEPARATELY, BUT COMPENSATION WILL BE CONSIDERED TO BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF METAL PIPE.

INSTALLATION TYPE	MATERIAL REQUIREMENTS FOR STRUCTURAL BACKFILL AND STRUCTURAL BEDDING
TYPE 1	AGGREGATE BASE COURSE (CLASS 4, 5, 6, OR 7)
TYPE 2	SELECTED MATERIALS (CLASS SM-1, SM-2, OR SM-4) OR TYPE 1 INSTALLATION MATERIAL ③

③ SM-3 WILL NOT BE ALLOWED.

EQUIVALENT METAL THICKNESSES AND GAUGES

METAL THICKNESS IN INCHES			GAUGE NUMBER
STEEL			
ZINC COATED	UNCOATED	ALUMINUM	
0.064	0.0598	0.060	16
0.079	0.0747	0.075	14
0.109	0.1046	0.105	12
0.138	0.1345	0.135	10
0.168	0.1644	0.164	8

CORRUGATED METAL PIPE ARCHES

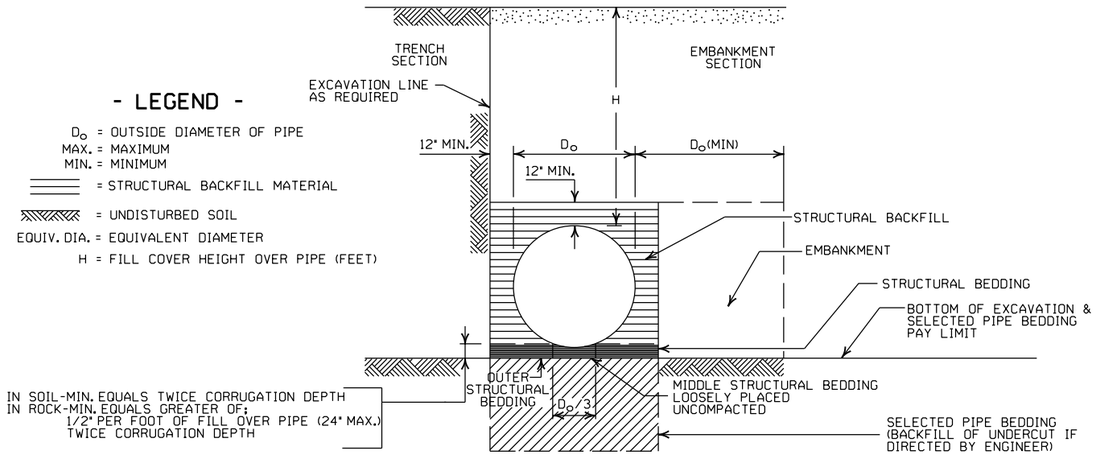
EQUIV. DIA. (INCHES)	PIPE DIMENSION SPAN X RISE (INCHES)	MINUMUM CORNER RADIUS (INCHES)	STEEL			ALUMINUM		
			MIN. THICKNESS REQUIRED INCHES	① MIN. HEIGHT OF FILL, "H" (FT.)	MAX. HEIGHT OF FILL, "H" (FT.)	MIN. THICKNESS REQUIRED INCHES	① MIN. HEIGHT OF FILL, "H" (FT.)	MAX. HEIGHT OF FILL, "H" (FT.)
				INSTALLATION TYPE 1	INSTALLATION TYPE 1		INSTALLATION TYPE 1	INSTALLATION TYPE 1
			2 ⅔ INCH BY ½ INCH CORRUGATION RIVETED, WELDED, OR HELICAL LOCK-SEAM			2 ⅔ INCH BY ½ INCH CORRUGATION RIVETED OR HELICAL LOCK-SEAM		
15	17x13	3	0.064	2	15	0.060	2	15
18	21x15	3	0.064	2	15	0.060	2	15
21	24x18	3	0.064	2.25	15	0.060	2.25	15
24	28x20	3	0.064	2.5	15	0.075	2.5	15
30	35x24	3	0.079	3	12	0.075	3	12
36	42x29	3½	0.079	3	12	0.105	3	12
42	49x33	4	0.079	3	12	0.105	3	12
48	57x38	5	0.109	3	13	0.135	3	13
54	64x43	6	0.109	3	14	0.135	3	14
60	71x47	7	0.138	3	15	0.164	3	15
66	77x52	8	0.168	3	15			
72	83x57	9	0.168	3	15			
			② 3 INCH BY 1 INCH OR 5 INCH BY 1 INCH CORRUGATION RIVETED, WELDED, OR HELICAL LOCK-SEAM					
				INSTALLATION TYPE 2	INSTALLATION TYPE 1		INSTALLATION TYPE 2	INSTALLATION TYPE 1
36	40x31	5	0.079	3	2		12	15
42	46x36	6	0.079	3	2		13	15
48	53x41	7	0.079	3	2		13	15
54	60x46	8	0.079	3	2		13	15
60	66x51	9	0.079	3	2		13	15
66	73x55	12	0.079	3	2		15	15
72	81x59	14	0.079	3	2		15	15
78	87x63	14	0.079	3	2		15	15
84	95x67	16	0.109	3	2		15	15
90	103x71	16	0.109	3	2		15	15
96	112x75	18	0.109	3	2		15	15
102	117x79	18	0.109	3	2		15	15
108	128x83	18	0.138	3	2		15	15

① FOR MINIMUM COVER VALUES, "H" SHALL INCLUDE A MINIMUM 12" OF PAVEMENT AND/OR BASE.

② WHERE THE STANDARD 2 2/3"x ½" CORRUGATION AND GAUGE IS SPECIFIED FOR A GIVEN DIAMETER, A PIPE OF THE SAME DIAMETER WITH A 3" x 1" OR 5" x 1" CORRUGATION MAY BE SUBSTITUTED, PROVIDING IT IS GAUGED FOR A FILL HEIGHT CONDITION EQUAL TO OR GREATER THAN THE MAXIMUM FILL HEIGHT CONDITION FOR THE SPECIFIED GAUGE AND CORRUGATION.

- LEGEND -

D_o = OUTSIDE DIAMETER OF PIPE
MAX. = MAXIMUM
MIN. = MINIMUM
= STRUCTURAL BACKFILL MATERIAL
= UNDISTURBED SOIL
EQUIV. DIA. = EQUIVALENT DIAMETER
H = FILL COVER HEIGHT OVER PIPE (FEET)



EMBANKMENT AND TRENCH INSTALLATIONS

1. STRUCTURAL BACKFILL, EMBANKMENT, AND OUTER STRUCTURAL BEDDING MATERIAL SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OR CLASS OF MATERIAL USED.
2. INSTALLATION TYPE 1 OR 2 MAY BE USED FOR CORRUGATED STEEL OR ALUMINUM PIPE (ROUND).
3. INSTALALTION TYPE 1 SHALL BE USED FOR CORRUGATED STEEL OR ALUMINUM PIPE ARCHES WITH 2⅔" X ½" CORRUGATION.
4. INSTALLATION TYPE 1 OR 2 MAY BE USED FOR CORRUGATED STEEL OR ALUMINUM PIPE ARCHES WITH 3" X 1" OR 5" X 1" CORRUGATION.

GENERAL NOTES

1. METAL PIPE CULVERT CONSTRUCTION SHALL CONFORM TO ARKANSAS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION), WITH APPLICABLE SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS. UNLESS OTHERWISE NOTED IN THE PLANS, SECTION AND SUBSECTION REFER TO THE STANDARD CONSTRUCTION SPECIFICATIONS.
2. METAL PIPE CULVERT DESIGN SHALL CONFORM TO AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, FIFTH EDITION (2010) WITH 2010 INTERIMS.
3. METAL PIPE CULVERT MATERIALS AND INSTALLATIONS SHALL CONFORM TO SECTION 606 AND JOB SPECIAL PROVISION "METAL PIPE".
4. ALL PIPE SHALL BE PROTECTED DURING CONSTRUCTION BY A COVER SUFFICIENT TO PREVENT DAMAGE FROM PASSAGE OF EQUIPMENT.
5. THE MINIMUM TRENCH WIDTH SHALL BE THE OUTSIDE DIAMETER OF THE PIPE PLUS 24 INCHES. THE MAXIMUM ALLOWABLE TRENCH WIDTH SHALL BE THE MINIMUM WIDTH PRACTICABLE FOR WORKING CONDITIONS.
6. MULTIPLE PIPE CULVERTS SHALL BE INSTALLED WITH A MINIMUM CLEARANCE OF 24 INCHES BETWEEN STRINGS OF PIPE. REFER TO STD. DWG. FES-2 FOR MINIMUM CLEARANCE WHERE FLARED END SECTIONS ARE USED.
7. IMPERVIOUS MATERIAL SHOULD BE PLACED AS DIRECTED BY THE ENGINEER AT THE ENDS OF THE CULVERT TO PREVENT LOSS OF STRUCTURAL BEDDING WHEN PERVIOUS MATERIAL IS USED FOR STRUCTURAL BEDDING AND/OR BACKFILL.
8. WHEN DIRECTED BY THE ENGINEER, UNSUITABLE MATERIAL THAT IS ENCOUNTERED AT THE BOTTOM OF THE EXCAVATED TRENCH (BELOW THE AREA IDENTIFIED AS "STRUCTURAL BEDDING" ABOVE) WILL BE EXCAVATED AND REPLACED WITH SELECTED PIPE BEDDING. THE QUANTITY OF MATERIAL REQUIRED TO BACKFILL THE UNDERCUT AREA UP TO THE SELECTED PIPE BEDDING PAY LIMIT DESIGNATED ABOVE WILL BE MEASURED AND PAID FOR AS "SELECTED PIPE BEDDING."
9. WHEN THE EXISTING MATERIAL EXCAVATED FOR THE PIPE TRENCH IS DETERMINED BY THE ENGINEER TO BE UNSUITABLE FOR BACKFILLING THE PIPE (ABOVE THE AREA IDENTIFIED AS STRUCTURAL BACKFILL), BORROW MATERIAL OR MATERIAL FROM THE ROADWAY EXCAVATION WILL BE USED TO BACKFILL THE PIPE. IF SUITABLE MATERIAL IS NOT AVAILABLE, THE ENGINEER MAY AUTHORIZE THE USE OF "SELECTED PIPE BACKFILL."

DATE	REVISION	DATE FILMED
2-27-14	REVISED GENERAL NOTE 1.	
12-15-11	REVISED FOR LRFD DESIGN SPECS	
3-30-00	REVISED INSTALLATIONS	
11-06-97	ISSUED	

ARKANSAS STATE HIGHWAY COMMISSION

METAL PIPE CULVERT FILL HEIGHTS & BEDDING

STANDARD DRAWING PCM-1

INSTALLATION TYPE	•• MATERIAL REQUIREMENTS FOR STRUCTURAL BACKFILL AND STRUCTURAL BEDDING
TYPE 2	•SELECTED MATERIALS (CLASS SM-1, SM-2 OR SM-4)

• AGGREGATE BASE COURSE (CLASS 4, 5, 6, OR 7) MAY BE USED IN LIEU OF SELECTED MATERIAL.

SM3 WILL NOT BE ALLOWED.

•• STRUCTURAL BEDDING MATERIAL SHALL HAVE A MAXIMUM PARTICLE SIZE OF 1INCH. STRUCTURAL BACKFILL MATERIAL SHALL BE FREE OF ORGANIC MATERIAL, STONES LARGER THAN 1.50 INCH IN GREATEST DIMENSION, OR FROZEN LUMPS.

STRUCTURAL BACKFILL AND STRUCTURAL BEDDING MATERIAL WILL NOT BE PAID FOR SEPARATELY, BUT COMPENSATION WILL BE CONSIDERED TO BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF HDPE PIPE.

MULTIPLE INSTALLATION OF HIGH DENSITY POLYETHYLENE PIPES

PIPE DIAMETER	CLEAR DISTANCE BETWEEN PIPES
18"	1'-6"
24"	2'-0"
30"	2'-6"
36"	3'-0"
42"	3'-6"
48"	4'-0"

MINIMUM TRENCH WIDTH BASED ON FILL HEIGHT "H"

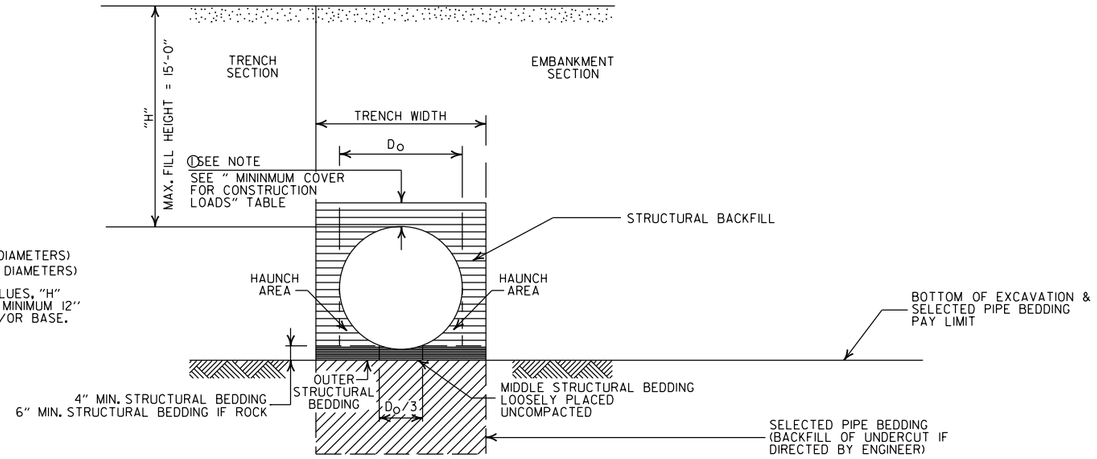
PIPE DIAMETER	TRENCH WIDTH (FEET)	
	"H" < 10'-0"	"H" >OR= 10'-0"
18"	4'-6"	4'-6"
24"	5'-0"	6'-0"
30"	5'-6"	7'-6"
36"	6'-0"	9'-0"
42"	7'-0"	10'-6"
48"	8'-0"	12'-0"

①NOTE:
18" MIN. (18" - 30" DIAMETERS)
24" MIN. (36" - 48" DIAMETERS)
MINIMUM COVER VALUES, "H" SHALL INCLUDE A MINIMUM 12" OF PAVEMENT AND/OR BASE.

MINIMUM COVER FOR CONSTRUCTION LOADS

PIPE DIAMETER	② MIN. COVER (FEET) FOR INDICATED CONSTRUCTION LOADS			
	18.0-50.0 (KIPS)	50.0-75.0 (KIPS)	75.0-110.0 (KIPS)	110.0-175.0 (KIPS)
36" OR LESS	2'-0"	2'-6"	3'-0"	3'-0"
42" OR GREATER	3'-0"	3'-0"	3'-6"	4'-0"

②MINIMUM COVER SHALL BE MEASURED FROM TOP OF PIPE TO TOP OF THE MAINTAINED CONSTRUCTION ROADWAY SURFACE. THE SURFACE SHALL BE MAINTAINED.



TYPE 2 EMBANKMENT AND TRENCH INSTALLATIONS

1. STRUCTURAL BACKFILL, EMBANKMENT, AND OUTER STRUCTURAL BEDDING MATERIAL SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OR CLASS OF MATERIAL USED.

CONSTRUCTION SEQUENCE

1. PLACE STRUCTURAL BEDDING MATERIAL TO GRADE. DO NOT COMPACT.
2. INSTALL PIPE TO GRADE.
3. COMPACT STRUCTURAL BEDDING OUTSIDE THE MIDDLE THIRD OF THE PIPE.
4. THE STRUCTURAL BACKFILL SHALL BE PLACED AND COMPACTED IN LAYERS NOT EXCEEDING 8". THE LAYERS SHALL BE BROUGHT UP EVENLY AND SIMULTANEOUSLY TO THE ELEVATION OF THE MINIMUM COVER.
5. PIPE INSTALLATION MAY REQUIRE THE USE OF RESTRAINTS, WEIGHTING OR OTHER APPROVED METHODS IN ORDER TO HELP MAINTAIN GRADE AND ALIGNMENT.

GENERAL NOTES

1. PIPE SHALL CONFORM TO AASHTO M294, TYPE S. INSTALLATION SHALL CONFORM TO JOB SPECIAL PROVISION "PLASTIC PIPE" AND SECTION 606 OF THE STANDARD SPECIFICIATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION).
2. PLASTIC PIPE CULVERT DESIGN SHALL CONFORM TO AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, FIFTH EDITION (2010) WITH 2010 INTERIMS.
3. THE MAXIMUM ALLOWABLE TRENCH WIDTH SHALL BE THE MINIMUM WIDTH PLUS A SUFFICIENT WIDTH TO ENSURE WORKING ROOM TO PROPERLY AND SAFELY PLACE AND COMPACT HAUNCHING AND OTHER BACKFILL MATERIAL.
4. IMPERVIOUS MATERIAL SHOULD BE PLACED AS DIRECTED BY THE ENGINEER AT THE ENDS OF THE CULVERT TO PREVENT LOSS OF STRUCTURAL BEDDING WHEN PERVIOUS MATERIAL IS USED FOR STRUCTURAL BEDDING AND/OR BACKFILL.
5. WHEN DIRECTED BY THE ENGINEER, UNSUITABLE MATERIAL THAT IS ENCOUNTERED AT THE BOTTOM OF THE EXCAVATED TRENCH (BELOW THE AREA IDENTIFIED AS "STRUCTURAL BEDDING" ABOVE) WILL BE EXCAVATED AND REPLACED WITH SELECTED PIPE BEDDING. THE QUANTITY OF MATERIAL REQUIRED TO BACKFILL THE UNDERCUT AREA UP TO THE SELECTED PIPE BEDDING PAY LIMIT DESIGNATED ABOVE WILL BE MEASURED AND PAID FOR AS "SELECTED PIPE BEDDING."
6. WHEN THE EXISTING MATERIAL EXCAVATED FOR THE PIPE TRENCH IS DETERMINED BY THE ENGINEER TO BE UNSUITABLE FOR BACKFILLING THE PIPE (ABOVE THE AREA IDENTIFIED ABOVE AS STRUCTURAL BACKFILL), BORROW MATERIAL OR MATERIAL FROM THE ROADWAY EXCAVATION WILL BE USED TO BACKFILL THE PIPE. IF SUITABLE MATERIAL IS NOT AVAILABLE, THE ENGINEER MAY AUTHORIZE THE USE OF "SELECTED PIPE BACKFILL."
7. FOR PIPE TYPES THAT ARE NOT SMOOTH ON THE OUTSIDE (CORRUGATED OR PROFILE WALLS), BACKFILL GRADATIONS SHOULD BE SELECTED THAT WILL PERMIT THE FILLING OF THE CORRUGATION OR PROFILE VALLEY.
8. HIGH DENSITY POLYETHYLENE PIPES OF DIAMETERS OTHER THAN SHOWN WILL NOT BE ALLOWED.
9. JOINTS FOR HDPE PIPE SHALL MEET THE REQUIREMENTS FOR SOIL TIGHTNESS AS SPECIFIED IN AASHTO SECTION 26.4.2.4 AND 30.4.2 "AASHTO LRFD BRIDGE CONSTRUCTION SPECIFICATIONS." JOINTS SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.

- LEGEND -

H = FILL HEIGHT (FT.)
D_O = OUTSIDE DIAMETER OF PIPE
MAX. = MAXIMUM
MIN. = MINIMUM

= STRUCTURAL BACKFILL MATERIAL

= UNDISTURBED SOIL

DATE	REVISION	DATE FILMED
2-27-14	REVISED GENERAL NOTE 1.	
12-15-11	REVISED GENERAL NOTES & MINIMUM COVER NOTE	
11-17-10	ISSUED	

ARKANSAS STATE HIGHWAY COMMISSION

PLASTIC PIPE CULVERT (HIGH DENSITY POLYETHYLENE)

STANDARD DRAWING PCP-1

INSTALLATION TYPE	•• MATERIAL REQUIREMENTS FOR STRUCTURAL BACKFILL AND STRUCTURAL BEDDING
TYPE 2	•SELECTED MATERIALS (CLASS SM-1, SM-2, OR SM-4)

• AGGREGATE BASE COURSE (CLASS 4, 5, 6, OR 7) MAY BE USED IN LIEU OF SELECTED MATERIAL.

SM3 WILL NOT BE ALLOWED.

•• STRUCTURAL BEDDING MATERIAL SHALL HAVE A MAXIMUM PARTICLE SIZE OF 1INCH. STRUCTURAL BACKFILL MATERIAL SHALL BE FREE OF ORGANIC MATERIAL, STONES LARGER THAN 1.50 INCH IN GREATEST DIMENSION, OR FROZEN LUMPS.

STRUCTURAL BACKFILL AND STRUCTURAL BEDDING MATERIAL WILL NOT BE PAID FOR SEPARATELY, BUT COMPENSATION WILL BE CONSIDERED TO BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF PVC PIPE.

MINIMUM TRENCH WIDTH BASED ON FILL HEIGHT "H"

PIPE DIAMETER	TRENCH WIDTH (FEET)	
	"H" < 10'-0"	"H" >OR= 10'-0"
18"	4'-6"	4'-6"
24"	5'-0"	6'-0"
30"	5'-6"	7'-6"
36"	6'-0"	9'-0"

MULTIPLE INSTALLATION OF PVC PIPES

PIPE DIAMETER	CLEAR DISTANCE BETWEEN PIPES
18"	1'-6"
24"	2'-0"
30"	2'-6"
36"	3'-0"

MAXIMUM FILL HEIGHT BASED ON STRUCTURAL BACKFILL

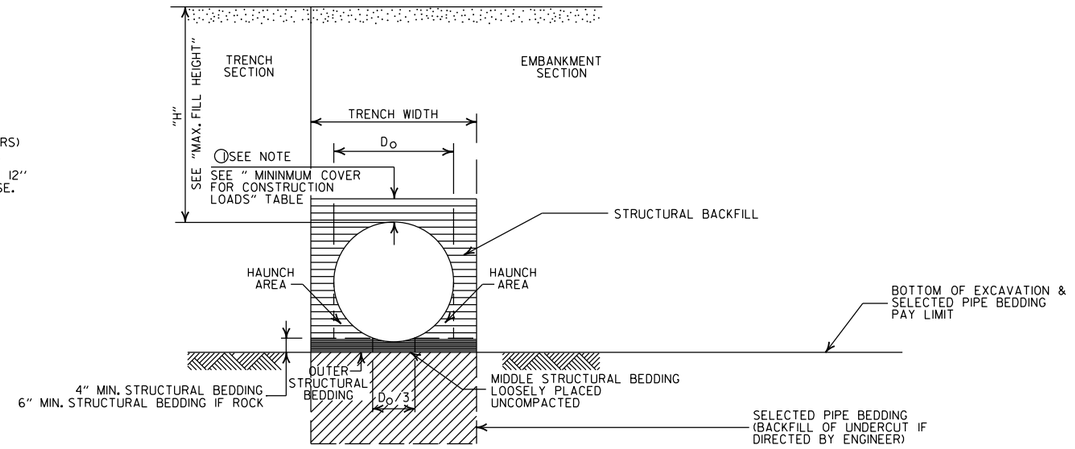
PIPE DIAMETER	"H"
18"	45'-0"
24"	45'-0"
30"	40'-0"
36"	40'-0"

① NOTE:
12" MIN. (18" - 36" DIAMETERS)
MINIMUM COVER VALUE, "H" SHALL INCLUDE A MINIMUM 12" OF PAVEMENT AND/OR BASE.

MINIMUM COVER FOR CONSTRUCTION LOADS

PIPE DIAMETER	② MIN. COVER (FEET) FOR INDICATED CONSTRUCTION LOADS			
	18.0-50.0 (KIPS)	50.0-75.0 (KIPS)	75.0-110.0 (KIPS)	110.0-175.0 (KIPS)
18" THRU 36"	2'-0"	2'-6"	3'-0"	3'-0"

②MINIMUM COVER SHALL BE MEASURED FROM TOP OF PIPE TO TOP OF THE MAINTAINED CONSTRUCTION ROADWAY SURFACE. THE SURFACE SHALL BE MAINTAINED.



TYPE 2 EMBANKMENT AND TRENCH INSTALLATIONS

1. STRUCTURAL BACKFILL, EMBANKMENT, AND OUTER STRUCTURAL BEDDING MATERIAL SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OR CLASS OF MATERIAL USED.

CONSTRUCTION SEQUENCE

1. PLACE STRUCTURAL BEDDING MATERIAL TO GRADE. DO NOT COMPACT.
2. INSTALL PIPE TO GRADE.
3. COMPACT STRUCTURAL BEDDING OUTSIDE THE MIDDLE THIRD OF THE PIPE.
4. THE STRUCTURAL BACKFILL SHALL BE PLACED AND COMPACTED IN LAYERS NOT EXCEEDING 8". THE LAYERS SHALL BE BROUGHT UP EVENLY AND SIMULTANEOUSLY TO THE ELEVATION OF THE MINIMUM COVER.
5. PIPE INSTALLATION MAY REQUIRE THE USE OF RESTRAINTS, WEIGHTING OR OTHER APPROVED METHODS IN ORDER TO HELP MAINTAIN GRADE AND ALIGNMENT.

GENERAL NOTES

1. PIPE SHALL CONFORM TO ASTM F949, CELL CLASS 12454. INSTALLATION SHALL CONFORM TO JOB SPECIAL PROVISION "PLASTIC PIPE" AND SECTION 606 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION).
2. PLASTIC PIPE CULVERT DESIGN SHALL CONFORM TO AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, FIFTH EDITION (2010) WITH 2010 INTERIMS.
3. THE MAXIMUM ALLOWABLE TRENCH WIDTH SHALL BE THE MINIMUM WIDTH PLUS A SUFFICIENT WIDTH TO ENSURE WORKING ROOM TO PROPERLY AND SAFELY PLACE AND COMPACT HAUNCHING AND OTHER BACKFILL MATERIAL.
4. IMPERVIOUS MATERIAL SHOULD BE PLACED AS DIRECTED BY THE ENGINEER AT THE ENDS OF THE CULVERT TO PREVENT LOSS OF STRUCTURAL BEDDING WHEN PERVIOUS MATERIAL IS USED FOR STRUCTURAL BEDDING AND/OR BACKFILL.
5. WHEN DIRECTED BY THE ENGINEER, UNSUITABLE MATERIAL THAT IS ENCOUNTERED AT THE BOTTOM OF THE EXCAVATED TRENCH (BELOW THE AREA IDENTIFIED AS "STRUCTURAL BEDDING" ABOVE) WILL BE EXCAVATED AND REPLACED WITH SELECTED PIPE BEDDING. THE QUANTITY OF MATERIAL REQUIRED TO BACKFILL THE UNDERCUT AREA UP TO THE SELECTED PIPE BEDDING PAY LIMIT DESIGNATED ABOVE WILL BE MEASURED AND PAID FOR AS "SELECTED PIPE BEDDING."
6. WHEN THE EXISTING MATERIAL EXCAVATED FOR THE PIPE TRENCH IS DETERMINED BY THE ENGINEER TO BE UNSUITABLE FOR BACKFILLING THE PIPE (ABOVE THE AREA IDENTIFIED ABOVE AS STRUCTURAL BACKFILL), BORROW MATERIAL OR MATERIAL FROM THE ROADWAY EXCAVATION WILL BE USED TO BACKFILL THE PIPE. IF SUITABLE MATERIAL IS NOT AVAILABLE, THE ENGINEER MAY AUTHORIZE THE USE OF "SELECTED PIPE BACKFILL."
7. FOR PIPE TYPES THAT ARE NOT SMOOTH ON THE OUTSIDE (CORRUGATED OR PROFILE WALLS), BACKFILL GRADATIONS SHOULD BE SELECTED THAT WILL PERMIT THE FILLING OF THE CORRUGATION OR PROFILE VALLEY.
8. PVC PIPES OF DIAMETERS OTHER THAN SHOWN WILL NOT BE ALLOWED.
9. JOINTS FOR PVC PIPE SHALL MEET THE REQUIREMENTS FOR SOIL TIGHTNESS AS SPECIFIED IN AASHTO SECTION 26.4.2.4 AND 30.4.2 "AASHTO LRFD BRIDGE CONSTRUCTION SPECIFICATIONS." JOINTS SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.

- LEGEND -

H = FILL HEIGHT (FT.)
D_O = OUTSIDE DIAMETER OF PIPE
MAX. = MAXIMUM
MIN. = MINIMUM

= STRUCTURAL BACKFILL MATERIAL

= UNDISTURBED SOIL

DATE	REVISION	DATE FILMED
2-27-14	REVISED GENERAL NOTE 1.	
12-15-11	REV GENERAL NOTES & MINIMUM COVER NOTE; DELETED SM3 MATERIAL	
11-17-10	ISSUED	

ARKANSAS STATE HIGHWAY COMMISSION

PLASTIC PIPE CULVERT (PVC F949)

STANDARD DRAWING PCP-2

INSTALLATION TYPE	**MATERIAL REQUIREMENTS FOR STRUCTURAL BACKFILL AND STRUCTURAL BEDDING
TYPE 1	AGGREGATE BASE COURSE (CLASS 4, 5, 6, OR 7)
TYPE 2	*SELECTED MATERIALS (CLASS SM-1, SM-2 OR SM-4) OR TYPE 1 INSTALLATION MATERIAL

*SM3 WILL NOT BE ALLOWED.

** STRUCTURAL BEDDING MATERIAL SHALL HAVE A MAXIMUM PARTICLE SIZE OF 1INCH. STRUCTURAL BACKFILL MATERIAL SHALL BE FREE OF ORGANIC MATERIAL, STONES LARGER THAN 1.50 INCH IN GREATEST DIMENSION, OR FROZEN LUMPS.

STRUCTURAL BACKFILL AND STRUCTURAL BEDDING MATERIAL WILL NOT BE PAID FOR SEPARATELY, BUT COMPENSATION WILL BE CONSIDERED TO BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF POLYPROPYLENE PIPE.

MULTIPLE INSTALLATION OF POLYPROPYLENE PIPES

PIPE DIAMETER	CLEAR DISTANCE BETWEEN PIPES
18"	1'-6"
24"	2'-0"
30"	2'-6"
36"	3'-0"
42"	3'-6"
48"	4'-0"
60"	5'-0"

MINIMUM TRENCH WIDTH BASED ON FILL HEIGHT "H"

PIPE DIAMETER	TRENCH WIDTH (FEET)	
	"H" < 10'-0"	"H" >OR= 10'-0"
18"	4'-6"	4'-6"
24"	5'-0"	6'-0"
30"	5'-6"	7'-6"
36"	6'-0"	9'-0"
42"	7'-0"	10'-6"
48"	8'-0"	12'-0"
60"	10'-0"	15'-0"

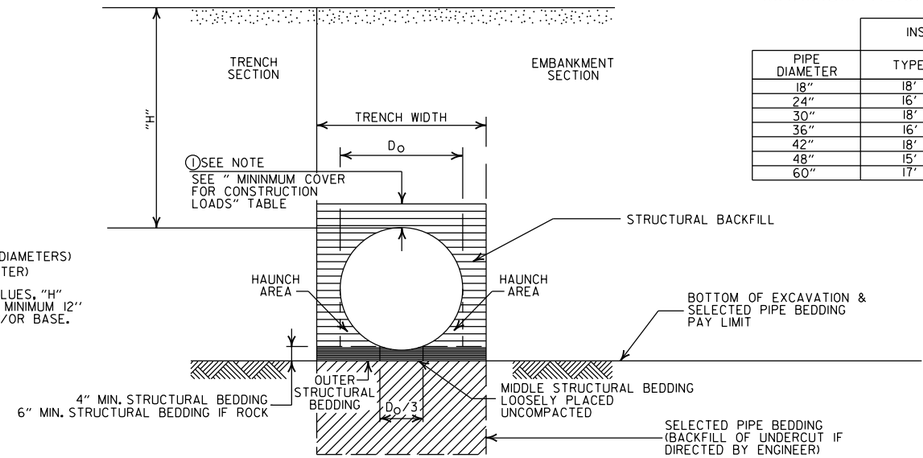
MINIMUM COVER FOR CONSTRUCTION LOADS

PIPE DIAMETER	② MIN. COVER (FEET) FOR INDICATED CONSTRUCTION LOADS			
	18.0-50.0 (KIPS)	50.0-75.0 (KIPS)	75.0-110.0 (KIPS)	110.0-150.0 (KIPS)
36" OR LESS	2'-0"	2'-6"	3'-0"	3'-0"
42" OR GREATER	3'-0"	3'-0"	3'-6"	4'-0"

②MINIMUM COVER SHALL BE MEASURED FROM TOP OF PIPE TO TOP OF THE MAINTAINED CONSTRUCTION ROADWAY SURFACE. THE SURFACE SHALL BE MAINTAINED.

①NOTE:
12" MIN. (18" - 42" DIAMETERS)
24" MIN. (60" DIAMETER)

MINIMUM COVER VALUES, "H" SHALL INCLUDE A MINIMUM 12" OF PAVEMENT AND/OR BASE.



MAXIMUM HEIGHT OF FILL "H"

PIPE DIAMETER	INSTALLATION TYPE	
	TYPE 1	TYPE 2
18"	18'	14'
24"	16'	12'
30"	18'	14'
36"	16'	12'
42"	18'	13'
48"	15'	11'
60"	17'	12'

EMBANKMENT AND TRENCH INSTALLATIONS

1. STRUCTURAL BACKFILL, EMBANKMENT, AND OUTER STRUCTURAL BEDDING MATERIAL SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OR CLASS OF MATERIAL USED.

CONSTRUCTION SEQUENCE

1. PLACE STRUCTURAL BEDDING MATERIAL TO GRADE. DO NOT COMPACT.
2. INSTALL PIPE TO GRADE.
3. COMPACT STRUCTURAL BEDDING OUTSIDE THE MIDDLE THIRD OF THE PIPE.
4. THE STRUCTURAL BACKFILL SHALL BE PLACED AND COMPACTED IN LAYERS NOT EXCEEDING 8". THE LAYERS SHALL BE BROUGHT UP EVENLY AND SIMULTANEOUSLY TO THE ELEVATION OF THE MINIMUM COVER.
5. PIPE INSTALLATION MAY REQUIRE THE USE OF RESTRAINTS, WEIGHTING OR OTHER APPROVED METHODS IN ORDER TO HELP MAINTAIN GRADE AND ALIGNMENT.

GENERAL NOTES

1. PIPE SHALL CONFORM TO AASHTO M330, TYPE S, INSTALLATION SHALL CONFORM TO JOB SPECIAL PROVISION "PLASTIC PIPE" AND SECTION 606 OF THE STANDARD SPECIFICIATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION).
2. PLASTIC PIPE CULVERT DESIGN SHALL CONFORM TO AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SIXTH EDITION (2012) WITH 2013 INTERIMS.
3. THE MAXIMUM ALLOWABLE TRENCH WIDTH SHALL BE THE MINIMUM WIDTH PLUS A SUFFICIENT WIDTH TO ENSURE WORKING ROOM TO PROPERLY AND SAFELY PLACE AND COMPACT HAUNCHING AND OTHER BACKFILL MATERIAL.
4. IMPERVIOUS MATERIAL SHOULD BE PLACED AS DIRECTED BY THE ENGINEER AT THE ENDS OF THE CULVERT TO PREVENT LOSS OF STRUCTURAL BEDDING WHEN PERVIOUS MATERIAL IS USED FOR STRUCTURAL BEDDING AND/OR BACKFILL.
5. WHEN DIRECTED BY THE ENGINEER, UNSUITABLE MATERIAL THAT IS ENCOUNTERED AT THE BOTTOM OF THE EXCAVATED TRENCH (BELOW THE AREA IDENTIFIED AS "STRUCTURAL BEDDING" ABOVE) WILL BE EXCAVATED AND REPLACED WITH SELECTED PIPE BEDDING. THE QUANTITY OF MATERIAL REQUIRED TO BACKFILL THE UNDERCUT AREA UP TO THE SELECTED PIPE BEDDING PAY LIMIT DESIGNATED ABOVE WILL BE MEASURED AND PAID FOR AS "SELECTED PIPE BEDDING."
6. WHEN THE EXISTING MATERIAL EXCAVATED FOR THE PIPE TRENCH IS DETERMINED BY THE ENGINEER TO BE UNSUITABLE FOR BACKFILLING THE PIPE (ABOVE THE AREA IDENTIFIED ABOVE AS STRUCTURAL BACKFILL), BORROW MATERIAL OR MATERIAL FROM THE ROADWAY EXCAVATION WILL BE USED TO BACKFILL THE PIPE. IF SUITABLE MATERIAL IS NOT AVAILABLE, THE ENGINEER MAY AUTHORIZE THE USE OF "SELECTED PIPE BACKFILL."
7. FOR PIPE TYPES THAT ARE NOT SMOOTH ON THE OUTSIDE (CORRUGATED OR PROFILE WALLS), BACKFILL GRADATIONS SHOULD BE SELECTED THAT WILL PERMIT THE FILLING OF THE CORRUGATION OR PROFILE VALLEY.
8. POLYPROPYLENE PIPES OF DIAMETERS OTHER THAN SHOWN WILL NOT BE ALLOWED.
9. JOINTS FOR POLYPROPYLENE PIPE SHALL MEET THE REQUIREMENTS FOR SOIL TIGHTNESS AS SPECIFIED IN SECTION 26.4.2.4 AND 30.4.2 OF THE AASHTO LRFD BRIDGE CONSTRUCTION SPECIFICATIONS 3RD EDITION (2010) WITH 2012 INTERIMS. JOINTS SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.

- LEGEND -

H = FILL HEIGHT (FT.)
D_O = OUTSIDE DIAMETER OF PIPE
MAX. = MAXIMUM
MIN. = MINIMUM

= STRUCTURAL BACKFILL MATERIAL

= UNDISTURBED SOIL

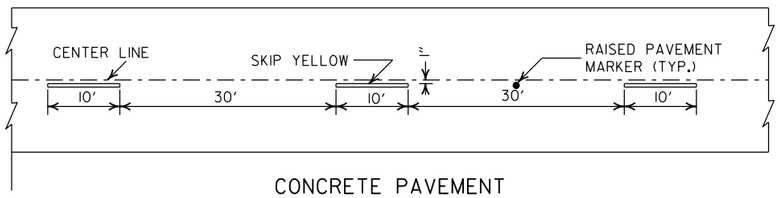
DATE	REVISION	DATE FILMED
02-27-20	REVISED	
11-07-19	ISSUED	

ARKANSAS STATE HIGHWAY COMMISSION

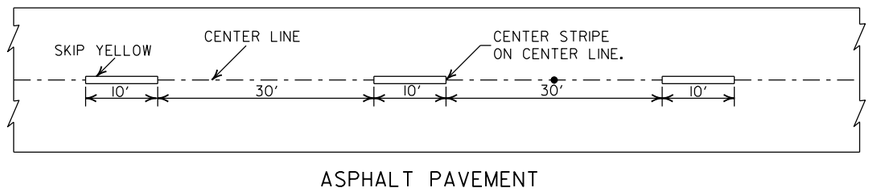
PLASTIC PIPE CULVERT (POLYPROPYLENE)

STANDARD DRAWING PCP-3

NOTES:
1. REFER TO THE STRIPING DETAILS FOR PAVEMENT MARKING LINE WIDTHS.
2. THIS DRAWING SHALL BE USED IN CONJUNCTION WITH THE LATEST REVISED ADDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES."
3. RAISED PAVEMENT MARKERS SHALL BE PLACED ON AN 80 FEET SPACING UNLESS OTHERWISE SHOWN IN THE PLANS.

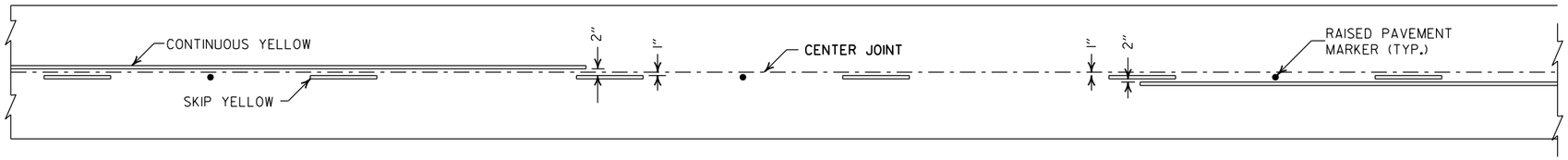


CONCRETE PAVEMENT

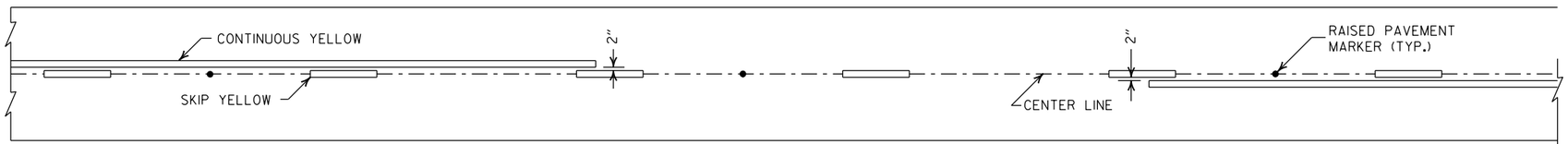


ASPHALT PAVEMENT

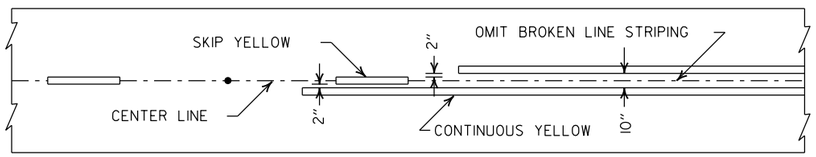
BROKEN LINE STRIPING



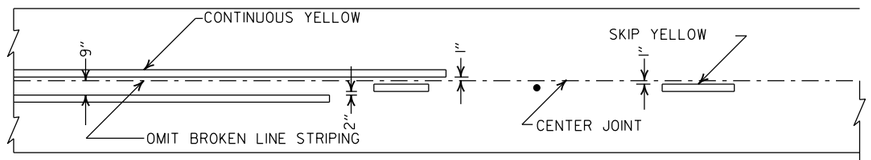
SOLID LINE STRIPING ON CONCRETE PAVEMENT



SOLID LINE STRIPING ON ASPHALT PAVEMENT

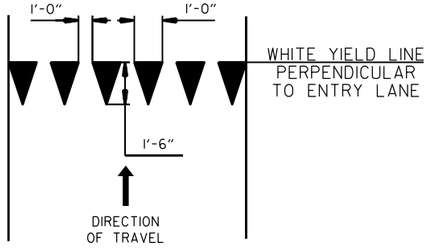


ASPHALT PAVEMENT

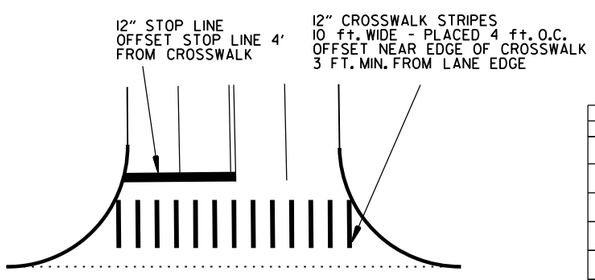


CONCRETE PAVEMENT

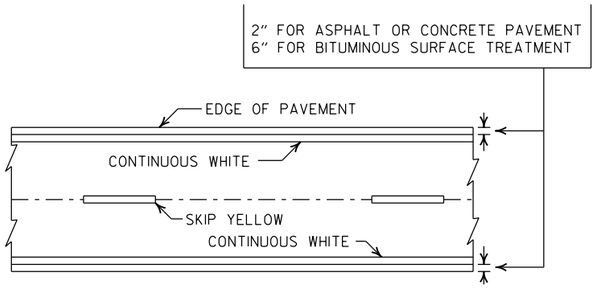
STRIPING AT ADJACENT NO PASSING LANES



YIELD LINE DETAIL



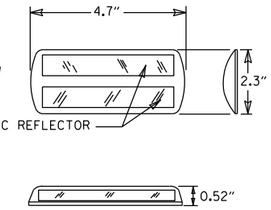
CROSSWALK AND STOP LINE DETAILS



PAVEMENT EDGE LINE MARKING

NOTE:
THE RED LENS OF THE TYPE II R.P.M. SHALL FACE THE INCORRECT TRAFFIC MOVEMENT.

TYPE II
RED/CLEAR OR YELLOW/YELLOW



NOTE:
DIMENSIONS SHOWN FOR RAISED PAVEMENT MARKERS ARE TYPICAL. THE CONTRACTOR MAY SUBSTITUTE SIMILAR MARKERS WITH THE APPROVAL OF THE ENGINEER. REQUESTING APPROVAL FOR SIMILAR MARKERS MAY BE MADE BY REFERRING TO THE ARDOT QUALIFIED PRODUCTS LIST.

DETAIL OF STANDARD RAISED PAVEMENT MARKERS

DATE	REVISION	FILMED
2-27-20	REVISED STOP LINE DETAILS	
6-1-17	ADDED YIELD LINE DETAIL	
5-12-16	REVISED LINE WIDTHS, SPACING, & NOTES	
9-12-13	REVISED DETAIL OF STANDARD RAISED PAVEMENT MARKERS	
11-17-10	REVISED GENERAL NOTES & REMOVED PLOWABLE PVMT MRKRS	
11-18-04	REVISED NOTE 2 & GENERAL NOTES	
8-22-02	ADDED CROSSWALK & STOPBAR DTLS.	
7-02-98	ADDED DETAILS OF STD. RAISED PAV'T. MARKERS	
4-26-96	REV. NOTES 3&4; ADDED R.P.M.	
9-30-80	DRAWN	1-9-30-80

ARKANSAS STATE HIGHWAY COMMISSION

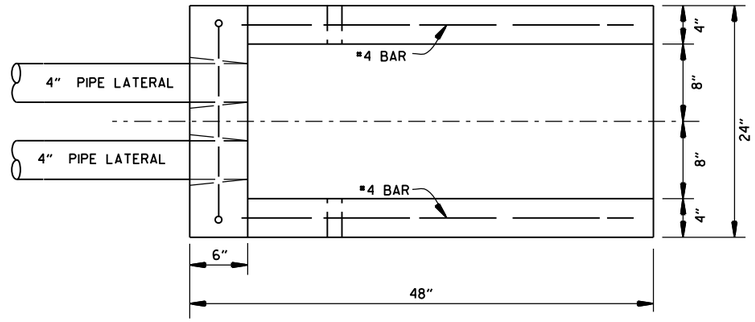
PAVEMENT MARKING DETAILS

STANDARD DRAWING PM-1

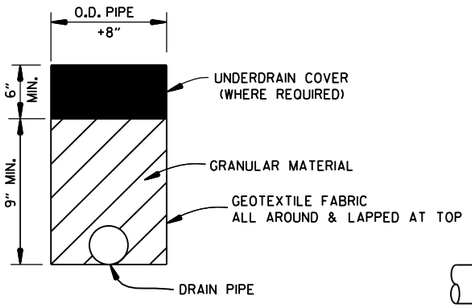
NOTE:

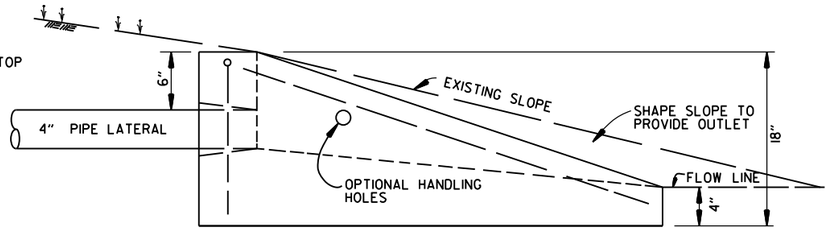
1. UNLESS OTHERWISE SPECIFIED ON THE PLANS, THE UNDERDRAIN COVER SHALL BE THOROUGHLY COMPACTED EARTH AND SHALL BE SUBSIDIARY TO PIPE UNDERDRAIN.

2. GRANULAR MATERIAL SHALL BE WRAPPED WITH GEOTEXTILE FABRIC. LAP FABRIC 12" OR THE WIDTH OF THE TRENCH AT THE TOP.

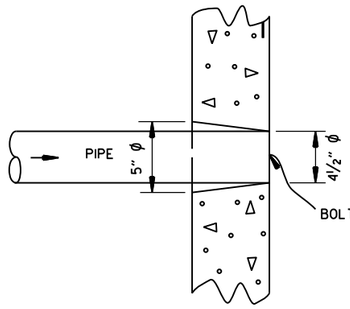


PLAN VIEW

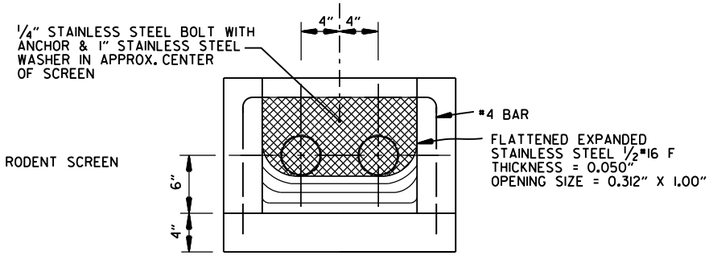




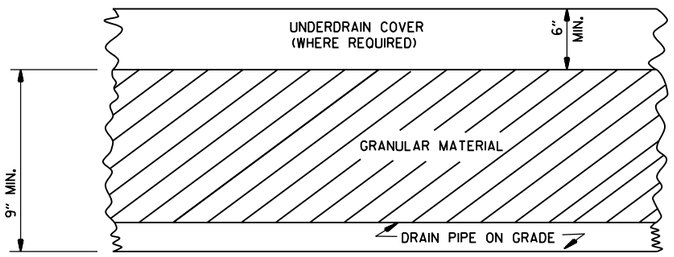
SIDE VIEW



DETAIL OF HOLE FOR 4" PIPE

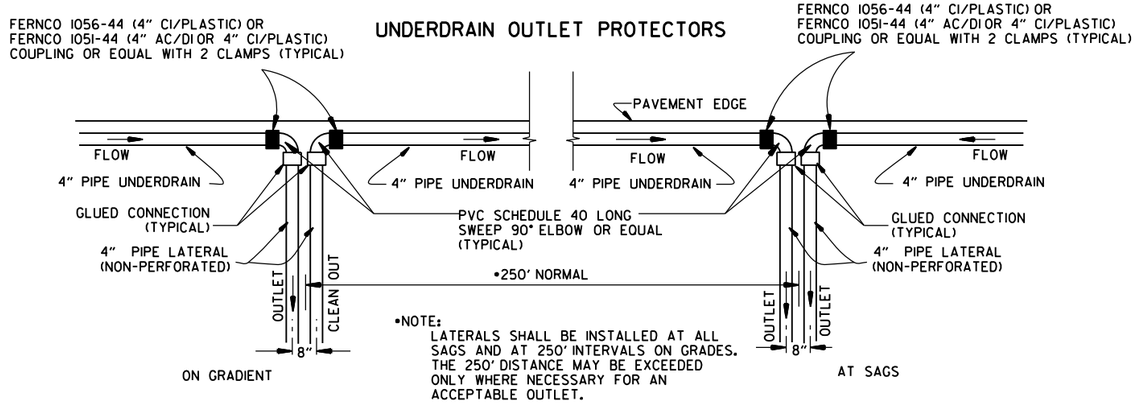


FRONT VIEW
(DETAIL OF RODENT SCREEN)



DETAILS OF PIPE UNDERDRAIN

UNDERDRAIN OUTLET PROTECTORS



DETAIL OF PIPE UNDERDRAIN LATERALS WHEN PLACED ALONG PAVEMENT EDGE

NOTE: PVC PIPE FOR LATERALS SHALL MEET THE REQUIREMENTS OF ASTM D 1785 (LATEST REVISION) FOR SCHEDULE 40 PIPE.

NOTES FOR PIPE UNDERDRAINS

1. GEOTEXTILE FABRIC SHALL MEET THE REQUIREMENTS OF SECTION 625 FOR TYPE I. PAYMENT FOR GEOTEXTILE FABRIC AND GRANULAR FILTER MATERIAL SHALL BE INCLUDED IN THE PRICE BID PER LIN. FT. FOR "4" PIPE UNDERDRAINS" IN ACCORDANCE WITH SECTION 611 OF THE STANDARD SPECIFICATIONS.

2. 4" NON-PERFORATED SCHEDULE 40 PVC PIPE LATERALS WITH OUTLET PROTECTORS SHALL BE INSTALLED AS SHOWN HEREON. LATERALS WILL BE MEASURED AND PAID FOR AS "4" PIPE UNDERDRAINS." UNDERDRAIN OUTLET PROTECTORS WILL BE MEASURED AND PAID FOR BY THE UNIT IN ACCORDANCE WITH SECTION 611 OF THE STANDARD SPECIFICATIONS.

3. EXISTING 4" PIPE UNDERDRAINS MAY BE CONNECTED TO PROPOSED DROP INLETS OR EXTENDED WHERE DIRECTED BY THE ENGINEER. PAYMENT FOR CONNECTING TO DROP INLETS SHALL BE CONSIDERED INCLUDED IN THE PRICE BID FOR "4" PIPE UNDERDRAINS."

4. THE LOCATION OF ALL LATERALS SHALL BE MARKED WITH 4" X 12" PERMANENT PAVEMENT MARKING TAPE (TYPE III WHITE) AT THE OUTSIDE EDGE OF THE SHOULDER, PLACED TRANSVERSE TO TRAFFIC. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR THE VARIOUS CONTRACT ITEMS.

5. PAYMENT FOR THE RODENT SCREEN SHALL BE INCLUDED IN THE PRICE BID PER EACH FOR "UNDERDRAIN OUTLET PROTECTORS."

6. ANY EXISTING UNDERDRAINS THAT INTERFERE WITH INSTALLATION OF THE NEW UNDERDRAIN SYSTEM SHALL BE REMOVED AND DISPOSED OF AS DIRECTED BY THE ENGINEER. PAYMENT WILL BE CONSIDERED INCLUDED IN THE PRICE BID FOR THE VARIOUS CONTRACT ITEMS. EXISTING UNDERDRAIN OUTLET PROTECTORS SHALL BE REMOVED UNDER THE ITEM "REMOVAL AND DISPOSAL OF UNDERDRAIN OUTLET PROTECTORS."

7. AT LOCATIONS WHERE A SINGLE LATERAL IS USED THE CONTRACTOR SHALL HAVE THE FOLLOWING OPTIONS: 1. INSTALL OUTLET PROTECTOR AS SHOWN ON STANDARD DRAWING PU-1 AND GROUT THE UNUSED HOLE OR 2. INSTALL AN OUTLET PROTECTOR WITH A SINGLE HOLE.

DATE	REVISION	DATE FILMED
12-8-16	ADDED NOTES FOR PIPE UNDERDRAINS, REVISED RODENT SCREEN DETAIL AND NOTES, REMOVED NOTE 1 FOR GRANULAR MATERIAL, ADDED NOTE FOR GEOTEXTILE FABRIC	
4-10-03	REVISED NOTE 3	
1-12-00	REVISED DETAIL OF UNDERDRAIN LATERALS	
11-18-98	REVISED NOTE	
10-18-96	REVISED MIN. DEPTH & GEOTEXTILE FABRIC	
4-26-96	ADDED LATERAL NOTE; 5½" TO 5"	
11-22-95	REVISED LATERALS	
7-20-95	REVISED LATERALS & ADDED NOTE	
11- 3-94	REVISED FOR DUAL LATERALS	11- 3-94
10- 1-92	SUBSTITUTED GEOTEXTILE	10- 1-92
8-15-91	ADDED POLYEDTHYLENE PIPE	8-15-91
11- 8-90	DELETED ALTERNATE NOTE	11- 8-90
1-25-90	ADDED 4" SNAP ADAPTER	1-25-90
11-30-89	DEL. (SUBGRADE); ADDED (WHERE REQUIRED)	11-30-89
7-15-88	ISSUED P.L.M.	647-7-15-88

ARKANSAS STATE HIGHWAY COMMISSION

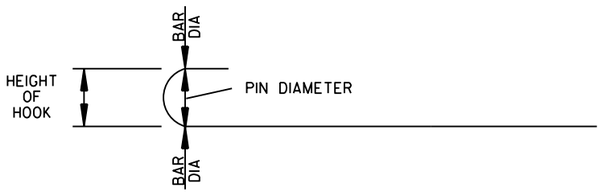
DETAILS OF PIPE UNDERDRAIN

STANDARD DRAWING PU-1

STEEL FABRICATION: REINFORCING STEEL FABRICATION SHALL CONFORM TO THE DIMENSIONS LISTED IN THE TABLE BELOW:

BAR SIZE	PIN DIAMETER	HOOK EXTENSION "K"
3	2¼"	4"
4	3 "	4½"
5	3¾"	5"
6	4½"	6"
7	5¼"	7"
8	6"	8"

IF THE OVERALL HEIGHT OF THE HOOK (SEE DIAGRAM BELOW) FOR A "b", "b1", "b2" or "b3" BENT BAR IS GREATER THAN THE CORRESPONDING TOP OR BOTTOM SLAB THICKNESS, LESS 2¾ INCHES, EACH BENT BAR SHALL BE REPLACED WITH ONE HOOKED BAR AND ONE STRAIGHT BAR, USING LENGTHS AS SHOWN IN THE TABLE BELOW. THE TWO BARS SHALL BE THE SAME DIAMETER AS, AND PLACED AT THE SAME SPACING AS, THE "b", "b1", "b2" OR "b3" BENT BARS THEY REPLACE.



NOTE: DIMENSIONS OF BARS ARE MEASURED OUT TO OUT OF BARS.

OVERALL HEIGHT OF HOOKED BAR DIAGRAM

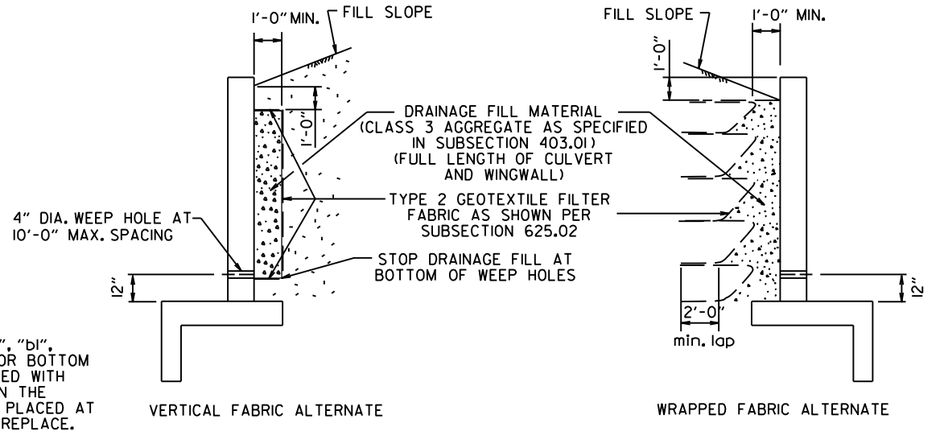
THE HOOKED BARS SHALL BE PLACED IN THE BOTTOM OF THE TOP SLAB AND THE TOP OF THE BOTTOM SLAB. THE STRAIGHT BARS SHALL BE PLACED IN THE TOP OF THE TOP SLAB AND THE BOTTOM OF THE BOTTOM SLAB. SEE TABLE BELOW FOR LENGTHS OF REPLACEMENT HOOKED AND STRAIGHT BARS.

FOR SKEWED CULVERTS, THE REPLACEMENT STRAIGHT BAR MAY HAVE TO BE CUT IN FIELD TO FIT.

REPLACEMENT BAR LENGTHS TABLE

BAR SIZE: "b", "b1", "b2" OR "b3"	LENGTH OF HOOKED BAR	LENGTH OF STRAIGHT BAR
#4	L + 1' - 0"	SEE "c" BAR LENGTH
#5	L + 1' - 2"	SEE "c" BAR LENGTH
#6	L + 1' - 4"	SEE "c" BAR LENGTH
#7	L + 1' - 8"	SEE "c" BAR LENGTH
#8	L + 1' - 10"	SEE "c" BAR LENGTH
#9	L + 2' - 6"	SEE "c" BAR LENGTH

L = "OW" - 3 INCHES



WINGWALL & CULVERT DRAINAGE DETAIL

REINFORCED CONCRETE BOX CULVERT GENERAL NOTES

CONCRETE SHALL BE CLASS S WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3500 PSI.

REINFORCING STEEL SHALL BE AASHTO M 31 OR M 53, GRADE 60.

CONSTRUCTION AND MATERIALS FOR WINGWALL & CULVERT DRAINAGE, INCLUDING WEEP HOLES AND GRANULAR MATERIAL, SHALL BE SUBSIDIARY TO THE BID ITEM, "CLASS S CONCRETE".

MEMBRANE WATERPROOFING SHALL CONFORM TO THE REQUIREMENTS OF SECTION 815 OF THE STANDARD SPECIFICATIONS.

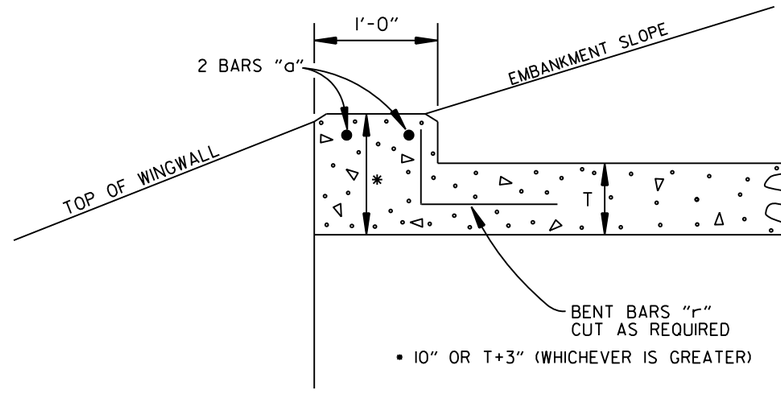
MEMBRANE WATERPROOFING SHALL BE APPLIED TO ALL CONSTRUCTION JOINTS IN THE TOP SLAB AND THE SIDEWALLS OF R.C. BOX CULVERTS AS DIRECTED BY THE ENGINEER. NO PAYMENT SHALL BE MADE FOR THIS ITEM, BUT PAYMENT WILL BE CONSIDERED TO BE INCLUDED IN THE VARIOUS ITEMS BID FOR THE R.C. BOX CULVERT.

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 ½ INCH.

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 REQUIREMENTS SHOWN ON THIS DRAWING SHALL SUPERCEDE THE CORRESPONDING REQUIREMENTS ON ALL REINFORCED CONCRETE BOX CULVERT STANDARD DRAWINGS.



NOTE: FOR ALL SKEWED R.C. BOX CULVERTS THE LENGTH "K" OF THE MODIFIED HEADWALL SHALL BE EQUAL TO THE ROADWAY LENGTH "RL". THE ENDS OF THE HEADWALL SHALL BE CONSTRUCTED PARALLEL TO THE SKEW ANGLE OF THE BOX CULVERT.

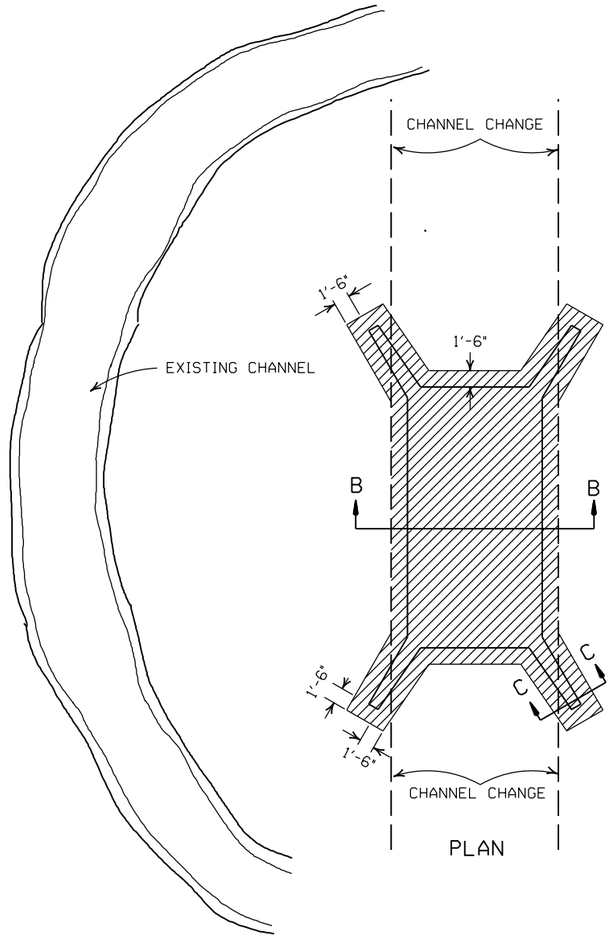
R.C. BOX CULVERT HEADWALL MODIFICATIONS

DATE	REVISION	DATE FILMED
7/26/12	REV. DRAINAGE FILL MATERIAL & DETAIL	
12/15/11	REQUIRE WEEP HOLES IN BOX CULVERT WALLS	
5-25-06	REV. GEN. NOTES AND DETAILS FOR WEEP HOLES; BAR DIAGRAM	
11-16-01	ADDED WINGWALL DRAINAGE DETAIL/EDITED GEN. NOTES	
10-18-96	REV. ASTM REF. TO AASHTO & ADDED BAR DIAGRAM	
10-12-95	MOVED SOLID SODDING DETAIL TO RCB-2	
6-2-94	ADDED SOLID SODDING PLAN DETAIL	
8-5-93	REVISED PIN DIAMETER TO SPECS.	
8-15-91	DRAWN AND ISSUED	

ARKANSAS STATE HIGHWAY COMMISSION

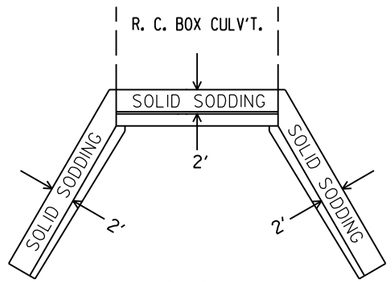
REINFORCED CONCRETE BOX CULVERT DETAILS

STANDARD DRAWING RCB-1



PLAN

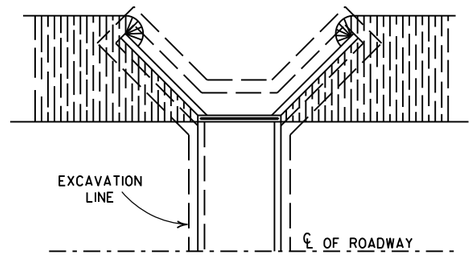
SOLID SODDING



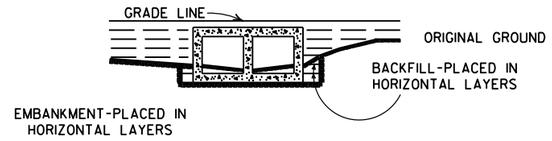
PLAN

PARTIAL SECTION SHOWING SOLID SODDING AT HEADWALLS AND WING WALLS

NOTE: LENGTH MEASURED ALONG THE CENTER OF 2' STRIP OF SOLID SODDING.

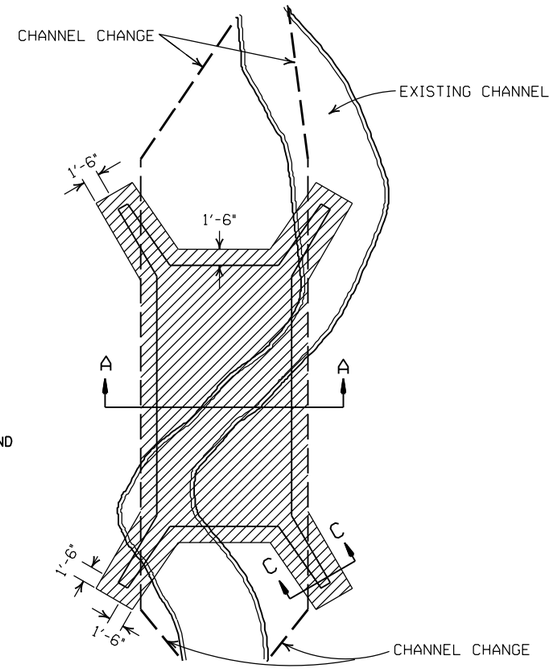


PLAN

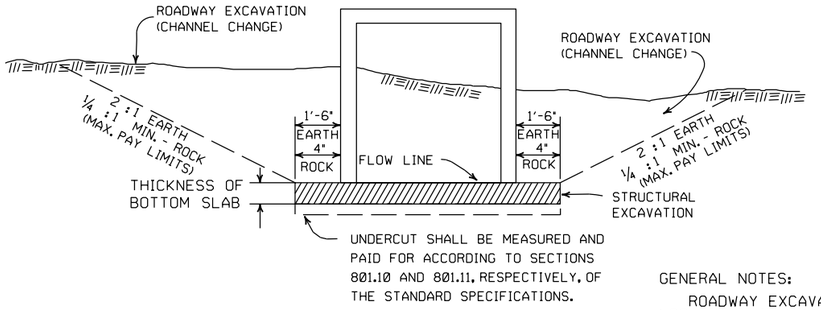


LONGITUDINAL SECTION

BACKFILL DETAILS FOR BOX CULVERT

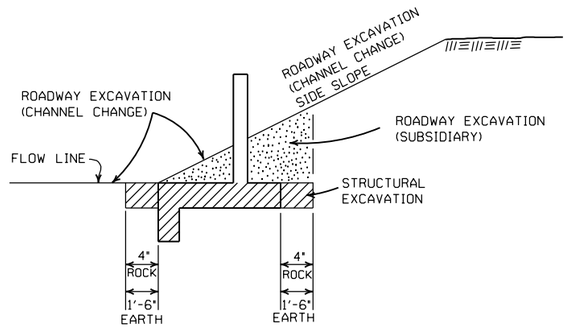


PLAN

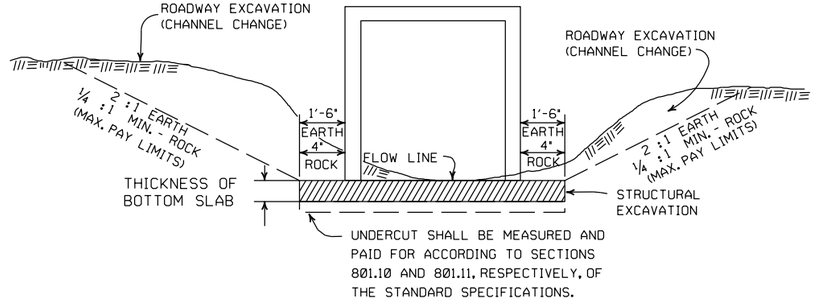


SECTION B-B

DETAILS FOR NEW CHANNELS



SECTION C-C



SECTION A-A

DETAILS THROUGH EXISTING CHANNELS

GENERAL NOTES:

ROADWAY EXCAVATION (CHANNEL CHANGE) WILL BE PAID FOR AT R.C. BOX CULVERT LOCATIONS. IT WILL BE PAID TO THE LIMITS ACTUALLY CUT AND WILL BE CONFINED TO THAT PORTION OF THE INDICATED AREA THAT IS ABOVE THE FLOW LINE. ROADWAY EXCAVATION (CHANNEL CHANGE) SHALL BE MEASURED BY CROSS SECTIONS AND VOLUMES COMPUTED BY AVERAGE END AREA METHOD. ALL CHANNEL CHANGES SHALL BE BROUGHT TO GRADE PRIOR TO MAKING ANY EXCAVATION FOR STRUCTURES.

EXCAVATION FOR STRUCTURES WILL BE PAID FOR AT ALL R.C. BOX CULVERT LOCATIONS. IT WILL BE PAID TO THE LIMITS SHOWN AND SHALL BE CONFINED TO THAT PORTION OF THE INDICATED AREA THAT IS BELOW THE CHANNEL FLOW LINE.

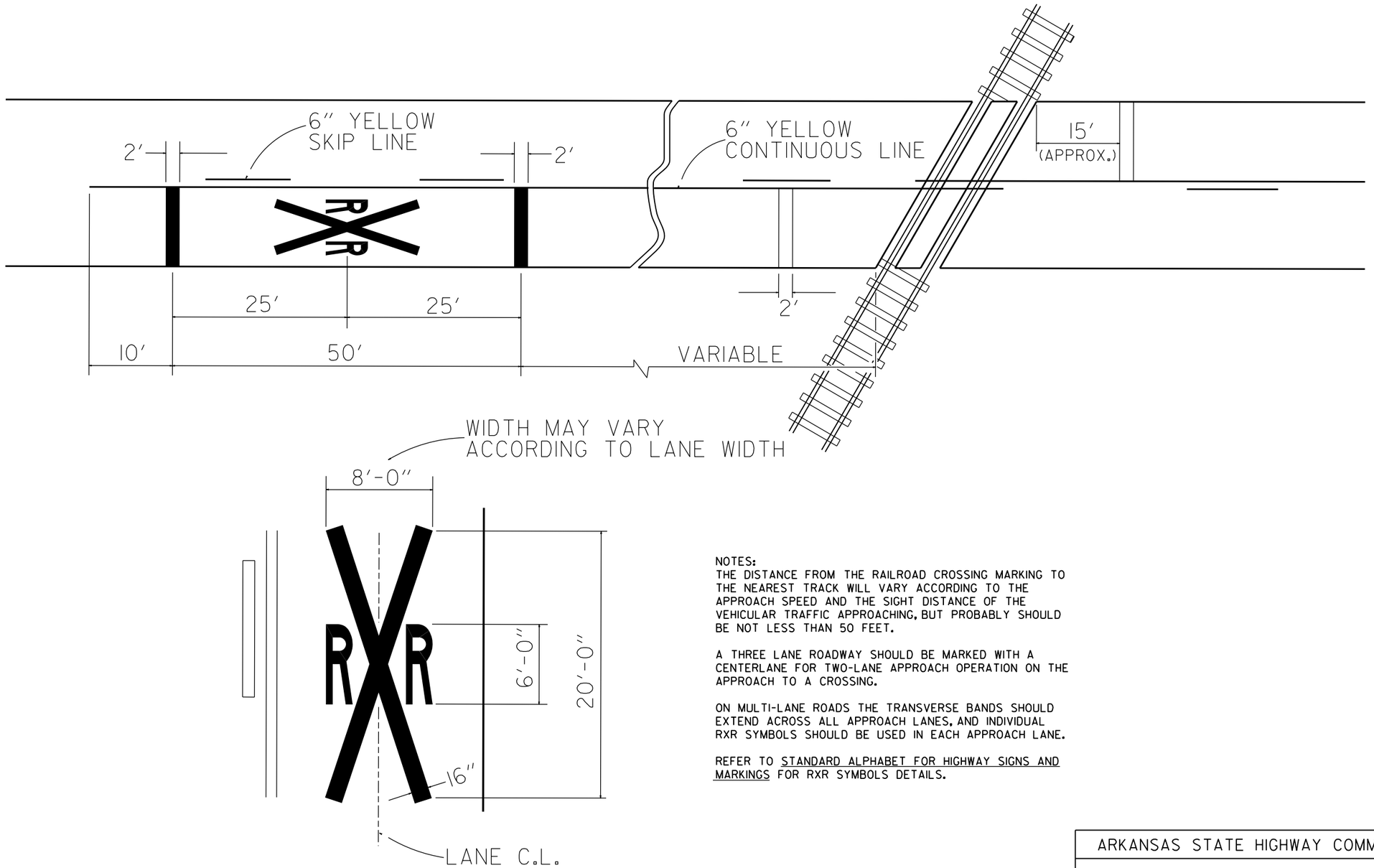
ROADWAY EXCAVATION SHOWN IN SECTION C-C ABOVE AS SUBSIDIARY WILL NOT BE MEASURED OR PAID FOR DIRECTLY, BUT PAYMENT WILL BE CONSIDERED TO BE INCLUDED IN THE VARIOUS ITEMS OF EXCAVATION.

DATE	REVISION	FILMED
11-20-03	REVISED SECTION A-A NOTE	
8-22-02	REVISED SECTION B-B NOTE	
10-12-95	COMBINED 1891B AND 1888A	
1-4-83	REVISED GENERAL NOTES	674-1-4-83
	AND ADDED MAXIMUM PAY	
	LIMIT NOTES.	
2-2-76	EXCAV. PAY LIMITS	917-2-2-76
10-2-72	REVISED AND REDRAWN	564-10-16-72

ARKANSAS STATE HIGHWAY COMMISSION

EXCAVATION PAY LIMITS, BACKFILL, & SOLID SODDING FOR BOX CULVERTS

STANDARD DRAWING RCB-2



DETAIL OF PAVEMENT MARKINGS FOR RAILROAD CROSSING

PAVEMENT MARKING TO BE
SYMMETRICAL ABOUT RAILROAD

NOTES:
THE DISTANCE FROM THE RAILROAD CROSSING MARKING TO THE NEAREST TRACK WILL VARY ACCORDING TO THE APPROACH SPEED AND THE SIGHT DISTANCE OF THE VEHICULAR TRAFFIC APPROACHING, BUT PROBABLY SHOULD BE NOT LESS THAN 50 FEET.

A THREE LANE ROADWAY SHOULD BE MARKED WITH A CENTERLANE FOR TWO-LANE APPROACH OPERATION ON THE APPROACH TO A CROSSING.

ON MULTI-LANE ROADS THE TRANSVERSE BANDS SHOULD EXTEND ACROSS ALL APPROACH LANES, AND INDIVIDUAL RXR SYMBOLS SHOULD BE USED IN EACH APPROACH LANE.

REFER TO STANDARD ALPHABET FOR HIGHWAY SIGNS AND MARKINGS FOR RXR SYMBOLS DETAILS.

DATE	REVISION	DATE FILMED
12-8-16	REVISED CENTERLINE LABELS	
11-20-08	CORRECTED SPELLING	
4-10-03	REVISED NOTES	
3-2-81	DELETED LETTER & ADDED NOTE	684-3-2-81
7-20-79	STOP LINE CHGD. TO PERP.	636-8-30-79
4-23-75	SHEET RENUMBER	697-4-20-79
4-23-75	REDRAWN	860-4-23-75

ARKANSAS STATE HIGHWAY COMMISSION

PAVEMENT MARKING
FOR RAILROAD CROSSING

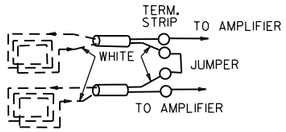
STANDARD DRAWING RRS-1

LOOP DETECTOR INSTALLATION AND TESTING

NOTES:

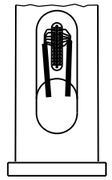
1. LOOPS WITH A PERIMETER GREATER THAN 40' SHALL HAVE TWO TURNS. LOOPS WITH A PERIMETER LESS THAN OR EQUAL TO 40' SHALL HAVE THREE TURNS, UNLESS OTHERWISE NOTED ON THE PLANS. QUADRUPOLE LOOPS SHALL BE TWO TURNS IN A (2-4-2 CONFIGURATION), UNLESS OTHERWISE NOTED ON THE PLANS.
2. LOOP AND FEEDER WIRE SHALL BE CONTINUOUS WITHOUT SPLICES EXCEPT AT THE LOOP/FEEDER WIRE SPLICE AS SHOWN. SPLICES SHALL BE ROSIN SOLDERED AND WATERPROOFED WITH AN ACCEPTED SPLICE KIT. A DRIAN WIRE SHALL BE GROUNDED IN THE CABINET AND INSULATED AT THE LOOP TO FEEDER WIRE SPLICE.
3. THE LOOP TO FEEDER WIRE SPLICE, THE FEEDER WIRE JACKET AND LOOP WIRE JACKET IN DUCT SHALL BE COMPLETELY SEALED AND WATERPROOFED.
4. THE CONTRACTOR MAY MAKE CONNECTIONS TO THE SIGNAL CABLE AND LOOP TO FEEDER WIRE CONNECTION AT THE TERMINAL STRIPS MOUNTED TO POLE INSIDE THE HAND HOLD COVER AS SHOWN IN DETAIL. HANDHOLE TERMINALS MUST BE EASILY ACCESSIBLE, BUT PROTECTED AGAINST ACCIDENTAL CONTACT. THE CONNECTION OF POWER CARRYING CIRCUITS MUST BE SEPERATED FROM LOOP OR LOGIC CIRCUITS. ALL CONNECTIONS TO TERMINAL STRIPS SHALL UTILIZE SPADE LUGS OR AS APPROVED BY THE ENGINEER.
5. EACH LOOP SHALL HAVE A SEPERATE "FEEDER WIRE" UNLESS OTHERWISE NOTED ON THE PLANS. ALL FEEDER WIRES SHALL BE LABELED AS TO LOOP NUMBER AS DESIGNATED ON THE PLANS.
6. ALL LOOP WIRE ENTERING CONCRETE PULL BOXES SHALL BE ENCLOSED IN CONDUIT. EACH LOOP WIRE SHALL ENTER CONCRETE PULL BOX OR POLE BASE THROUGH A SEPARATE PIECE OF ONE (1.25") INCH CONDUIT.
7. LOOP WIRE FROM LOOP TO CONDUIT IS NOT TWISTED. LOOP WIRE IN THE CONDUIT MUST BE TWISTED TWO TO FIVE TURNS PER FOOT.
8. "30-DAY PERFORMANCE TEST SHALL NOT COMMENCE UNTIL ALL LOOPS ARE TESTED BY THE CONTRACTOR, THEN APPROVED AND ACCEPTED BY THE ENGINEER, AND THE TESTING RECORDS HAVE BEEN SUBMITTED TO THE ENGINEER. THE WARRENTY PERIOD FOR LOOPS SHALL NOT COMMENCE UNTIL TESTED BY THE CONTRACTOR AND ACCEPTED BY THE ENGINEER. THE CONTRACTOR SHALL PERFORM TEST AND PROVIDE A RECORD TO THE ENGINEER AS LISTED IN THE LOOP DETECTOR TESTING PROCEDURE.
9. UNLESS OTHERWISE APPROVED BY THE ENGINEER, BACKER ROD SHALL BE INSTALLED IN SHORT SECTIONS SPACED NO MORE THAN 18" APART AND WEDGED INTO THE SLOT TO THE CABLE IN PLACE. CABLE SHALL BE TOTALLY ENCAPSULATED IN SEALER.
10. "HOT POUR" SEALER SHALL NOT ALLOW WITH 705-LOOP WIRING IN DUCT.
11. WHERE UNDERGROUND SPLICES OF SIGNAL CABLE ARE REQUIRED. CONNECTIONS SHALL BE SOLDERED AND COMPLETELY WATERPROOFED TO THE SATISIFACTION OF THE ENGINEER. WATERPROOFING SHALL EXTEND A MININUM OF TWO (2") INCHES PAST THE SIGNAL CABLE JACKET AND SHALL COMPLETELY COVER ALL INDIVIDUAL CONDUCTORS OF THE SIGNAL CABLE. WATERPROOFING DOES NOT APPLY TO CONNECTIONS MADE IN POLE BASES.
12. THE CONTRACTOR SHALL CONNECT A SEPARATE NEUTRAL FOR EACH LOAD SWITCH REPRESENTED ON EACH SIGNAL POLE. ONLY ONE NEUTRAL IS REQUIRED FOR PEDESTRIAN SIGNALS. A SEPERATE 5C (TYPICAL) IS PROVIDED FOR PEDESTRIAN PUSH BUTTONS.
13. TRAFFIC CONTROLLER CABINET LAYOUT SHALL BE SUCH THAT IT IS NOT NECESSARY TO SHUT DOWN POWER TO REMOVE LOAD SWITCHES IN ORDER TO EASILY TEST OR MODIFY DETECTOR INPUTS TO THE CONTROLLER. THE CONTROLLER CABINET SHALL BE WIRED SUCH THAT THE POWER TO LOAD SWITCHES CANNOT BACKFEED TO THE LOAD SWITCH POWER BUSS DURING FLASH OPERATION.

SERIES CONNECTED LOOPS

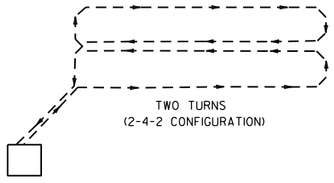


WIND LOOPS COUNTERCLOCKWISE; TAG WIRE EXITING SLOT AND TIE TO WHITE LEAD OF FEEDER WIRE; WHEN LOOPS ARE TIED TO SAME VEHICLE DETECTOR, SERIES CONNECT IN CABINET AS SHOWN.

HANDHOLE TERMINAL

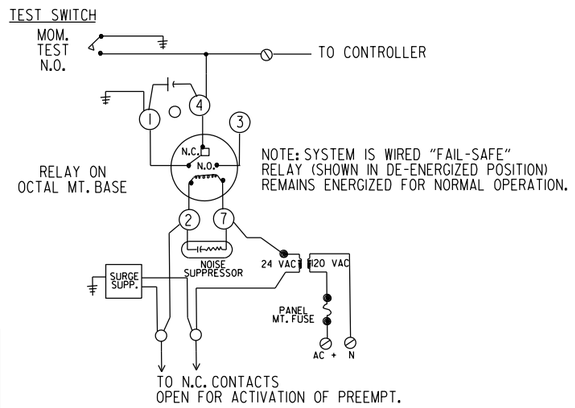


QUADRUPOLE LOOP

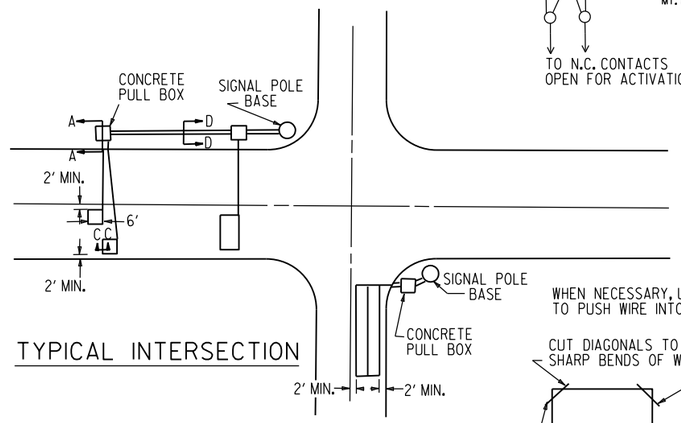


TWO TURNS
(2-4-2 CONFIGURATION)

TRAFFIC SIGNAL PRE-EMPTION INTERFACE WIRING DIAGRAM



NOTE: SYSTEM IS WIRED "FAIL-SAFE" RELAY (SHOWN IN DE-ENERGIZED POSITION) REMAINS ENERGIZED FOR NORMAL OPERATION.



TYPICAL INTERSECTION

WHEN NECESSARY, USE A WOODEN STICK TO PUSH WIRE INTO SAWED SLOT.

CUT DIAGONALS TO PREVENT SHARP BENDS OF WIRE.

SLOT CUT BY SAW SHOWING OVERLAP TO PROVIDE FULL DEPTH AT CORNERS.

TYPICAL PROCEDURE FOR DETECTOR LOOP TESTING

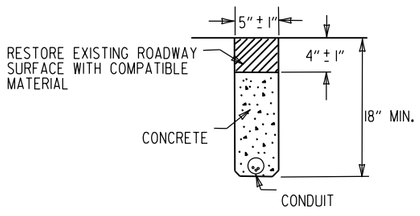
1. DISCONNECT AND TEST CONTINUITY (< 10 OHMS) IF CONTINUITY IS BAD, GO TO TEST 3.
2. TEST INSULATION (@ 500 VOLT TEST > 10 MEG-OHM)

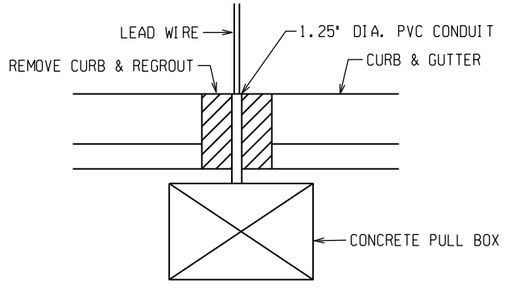
   IF TESTS 1& 2 ARE GOOD, NO FURTHER TESTING IS NECESSARY. RECORDED RESULTS CONSIST OF TESTS 1& 2 FROM CONTROL CABINET WITH FEEDER WIRE CONNECTED TO LOOP.
3. OPEN SPACE (DO NOT BREAK CONNECTION) REPEAT TEST 1& 2 IF TEST 3 IS BAD, GO TO TEST 4.
4. BREAK SPLICE, INSTALL JUMPER IN CABINET, REPEAT TESTS 1& 2 SEPARATELY FOR FEEDER AND FOR LOOP.

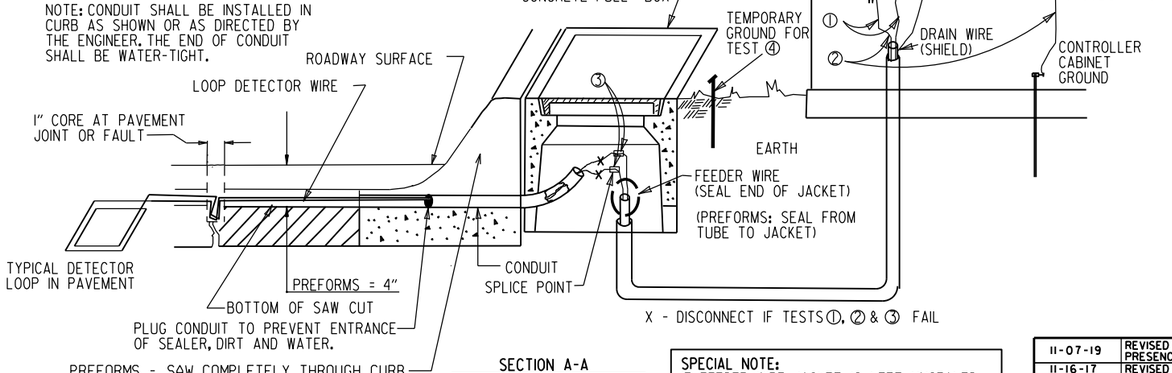
FAILURES TYPICALLY RESULT FROM BROKEN WIRE IN PAVEMENT, FAULTY INSULATION OF LOOP OR FEEDER WIRE, OR POORLY INSULATED SPLICE CONNECTION.

TRENCHING DETAIL

(FOR SAW CUT TRENCH IN ROADWAY)

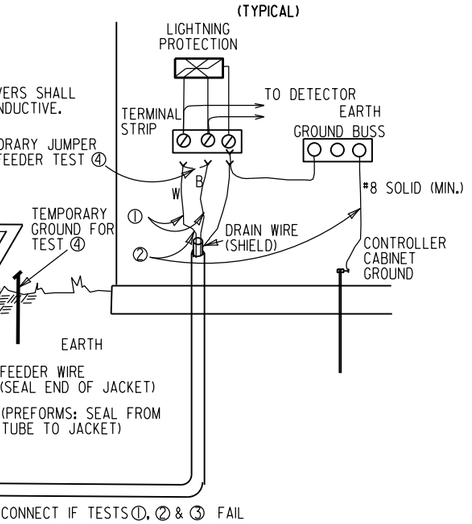






SECTION A-A

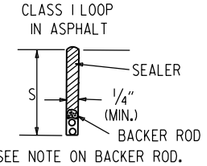
1'-6" CONCRETE COMBINATION CURB AND GUTTER



NOTE: CONCRETE PULL BOX COVERS SHALL BE NON-METALLIC AND NON-CONDUCTIVE.

SPECIAL NOTE:
IF FEEDER WIRE JACKET IS LEFT UNSEALED AND WATER IS ALLOWED TO ENTER JACKET, CONTRACTOR WILL BE REQUIRED TO REPLACE FEEDER WIRE AT NO COST TO DEPARTMENT.

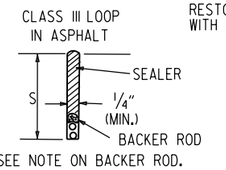
TYPICAL SECTIONS FOR PULSE AND PRESENCE LOOP DETECTORS



SEE NOTE ON BACKER ROD.

SECTION C-C

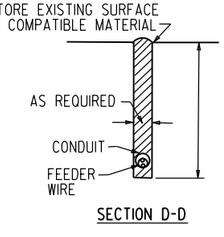
S = 2 1/2" IN ASPHALT
S = 2" IN CONCRETE



SEE NOTE ON BACKER ROD.

SECTION C-C

S = 4" IN ASPHALT
S = 4" IN CONCRETE



SECTION D-D

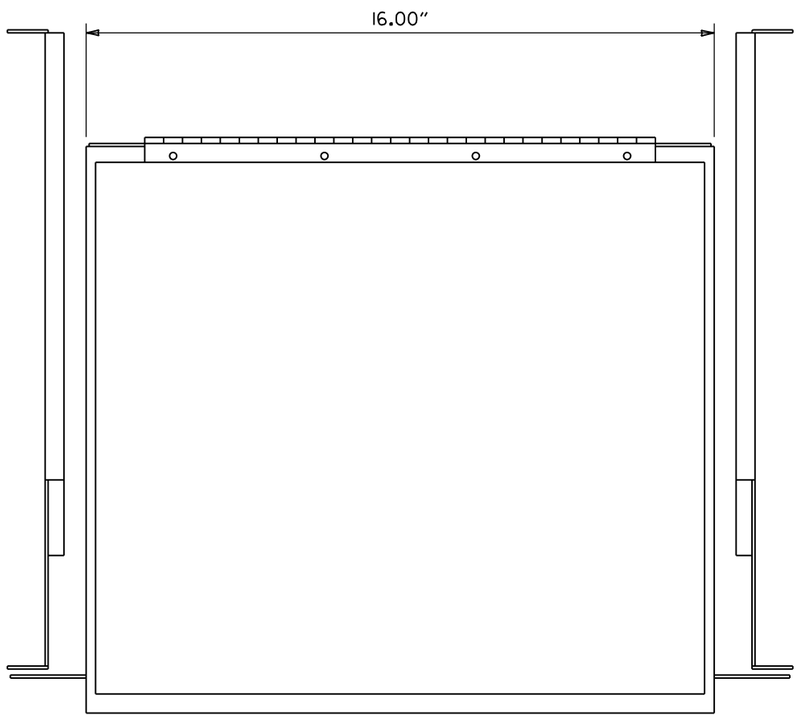
DATE	REVISION	FILMED
11-07-19	REVISED NOTE 6 & TYPICAL FOR PRESENCE LOOP DETECTORS	
11-16-17	REVISED NOTES	
09-12-13	ISSUED AS STANDARD DRAWING	
05-17-01	REVISED	
04-11-01	REVISED	
02-04-00	REVISED PRE-EMPTION TEST SWITCH	
11-18-98	REVISED NOTES	
11-21-95	ISSUED	

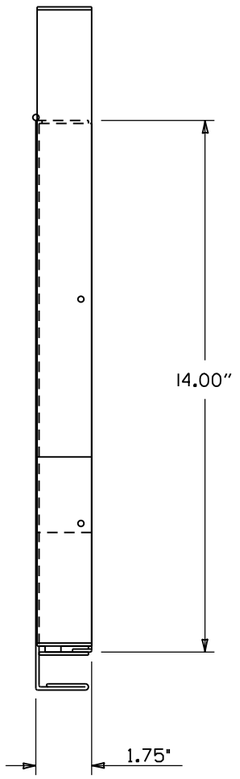
ARKANSAS STATE HIGHWAY COMMISSION

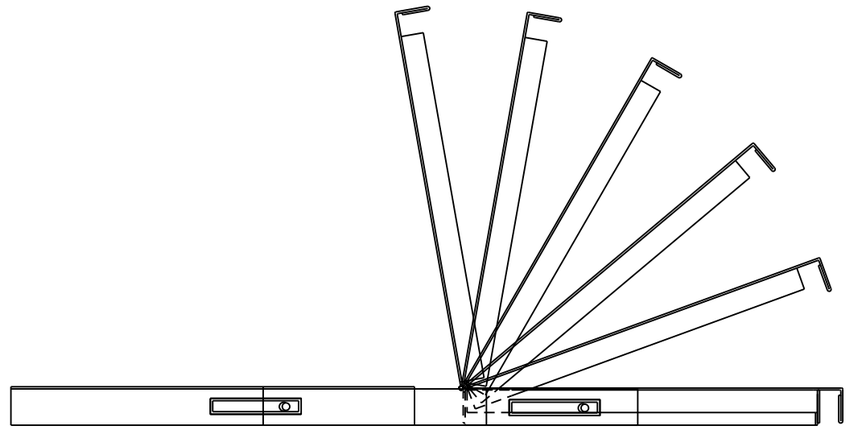
LOOP DETECTOR INSTALLATION

STANDARD DRAWING SD-4

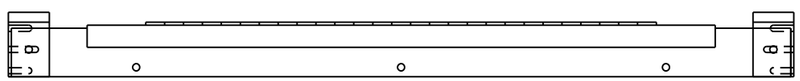
DRAWER PLAN VIEW



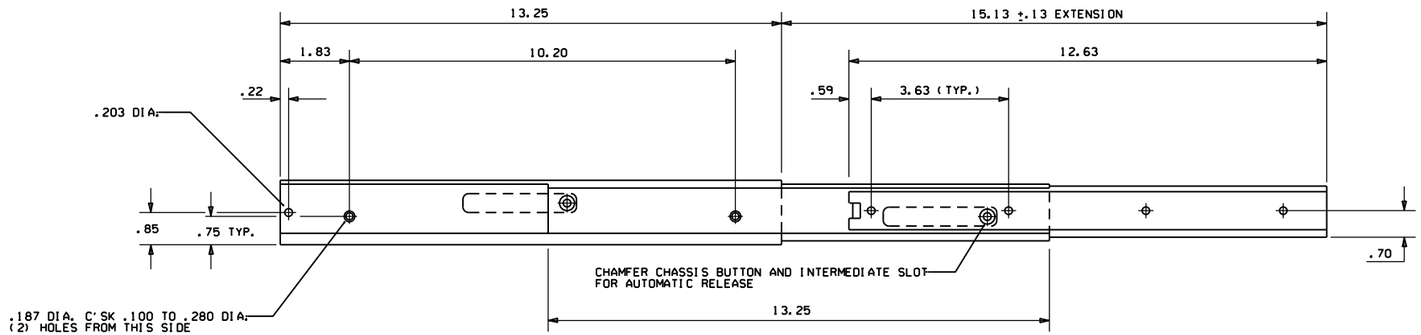




NOTES:
1. RIGHT HAND SLIDE SHOWN, LEFT SLIDE OPPOSITE.
2. GENERAL DEVICES (CC3002-99-0102) OR EQUAL AND CONTAINS (1) RIGHT HAND SLIDE ASSEMBLY, (1) LEFT HAND SLIDE ASSEMBLY.
3. ALL HARDWARE NECESSARY TO FASTEN SLIDE ASSEMBLY TO UNDERSIDE OF CONTROLLER SHELF SHALL BE INCLUDED.



FRONT VIEW



RIGHT SIDE ASSEMBLY

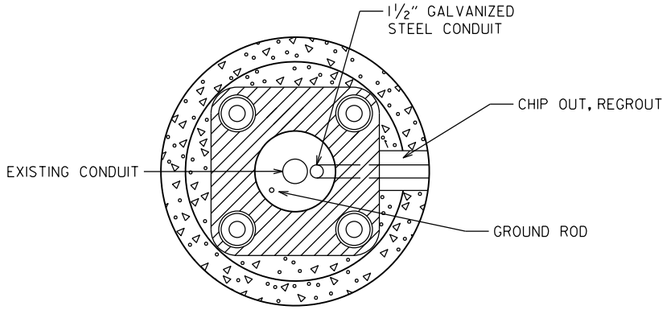
DATE	REVISION	DATE FILM
9-12-13	ISSUED AS STANDARD DRAWING	
6-15-05	ISSUED	

ARKANSAS STATE HIGHWAY COMMISSION

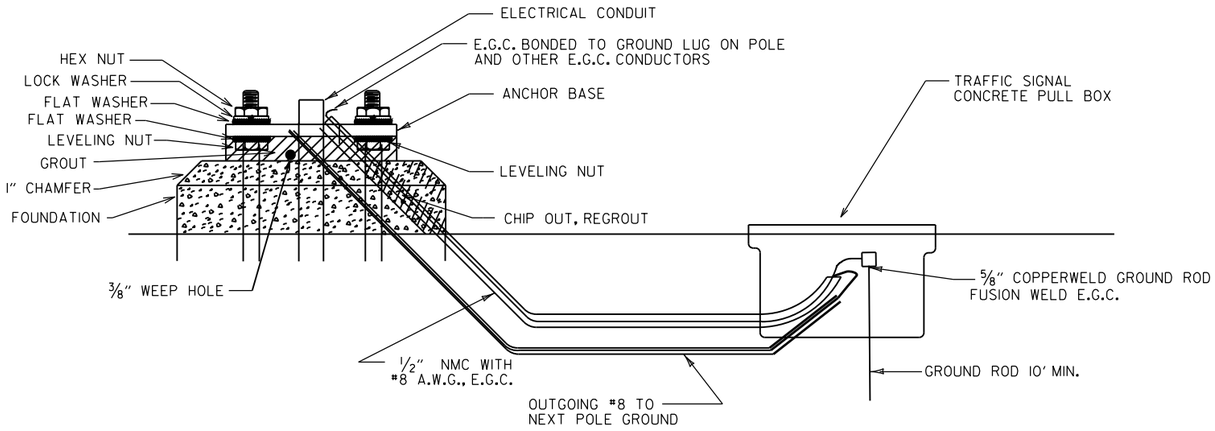
CONTROLLER CABINET UTILITY DRAWER

STANDARD DRAWING SD-5

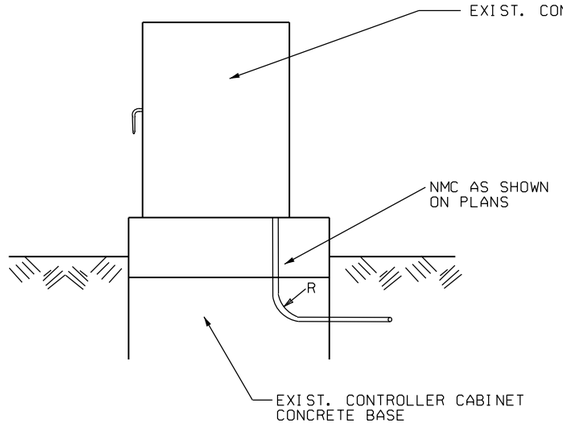
CONDUIT ENTRY TO EXISTING POLE BASE



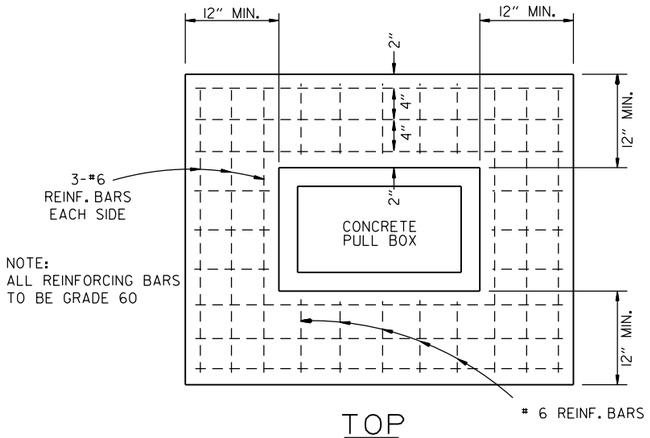
ANCHOR BASE



CONDUIT ENTRY TO EXISTING CONTROLLER CABINET

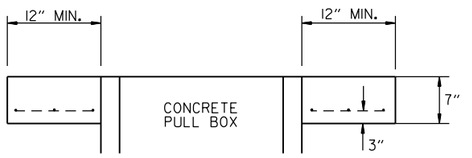


NOTE: ENTRY TO CABINET SHALL BE THROUGH A CUT IN THE BASE SUFFICIENT TO PROVIDE ADEQUATE CONDUIT RADIUS FOR ITEM.



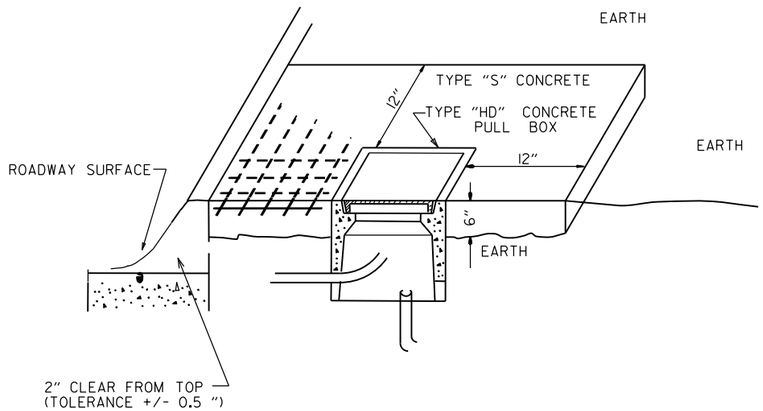
NOTE:
ALL REINFORCING BARS TO BE GRADE 60

TOP



ELEVATION

TYPE "HD" CONCRETE PULL BOX DETAIL



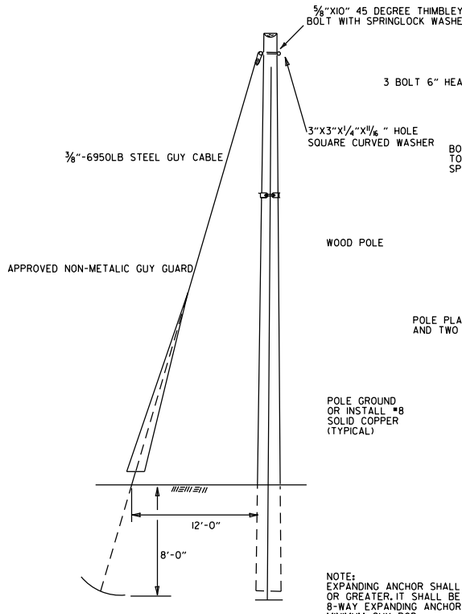
NOTE:
ALL TYPE 1AND TYPE 2 HD CONCRETE PULL BOXES ARE INSTALLED WITH AN APRON OF CONCRETE 12" WIDE AND 7" IN DEPTH. ALL PAYMENT SHALL BE INCLUDED IN THE PRICE OF THE TYPE HD CONCRETE PULL BOX. THE CONCRETE PULL BOX SHALL BE INSTALLED FLUSH TO SURROUNDING GRADE UNLESS OTHERWISE INSTRUCTED BY THE ENGINEER. THE CONCRETE SHALL BE CLASS "S". THREE #6 REINFORCING BARS IN THE APRON ON ALL SIDES OF THE CONCRETE PULL BOX IS REQUIRED IN CONCRETE.

DATE	REVISION	FILMED
11-16-17	REVISED NOTES	
09-02-15	REVISED PULL BOX DEPTH	
09-12-13	ISSUED AS STANDARD DRAWING	
05-21-09	REVISED GROUNDING	
07-31-08	ADDED & REVISED CONDUIT ENTRY	
06-23-04	REVISED CLEARANCE AT CURB ENTRY	
01-04-02	ADDED REINFORCING TO BOX APRON	
07-02-01	REVISED	
12-27-99	REVISED NOTES	
11-18-98	ISSUED	

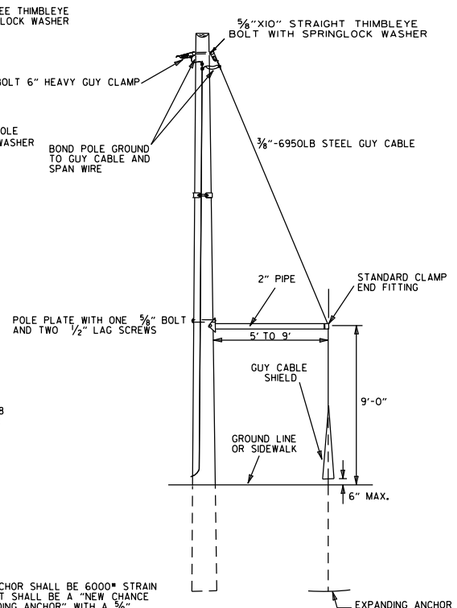
ARKANSAS STATE HIGHWAY COMMISSION

HEAVY DUTY PULL BOX

STANDARD DRAWING SD-6



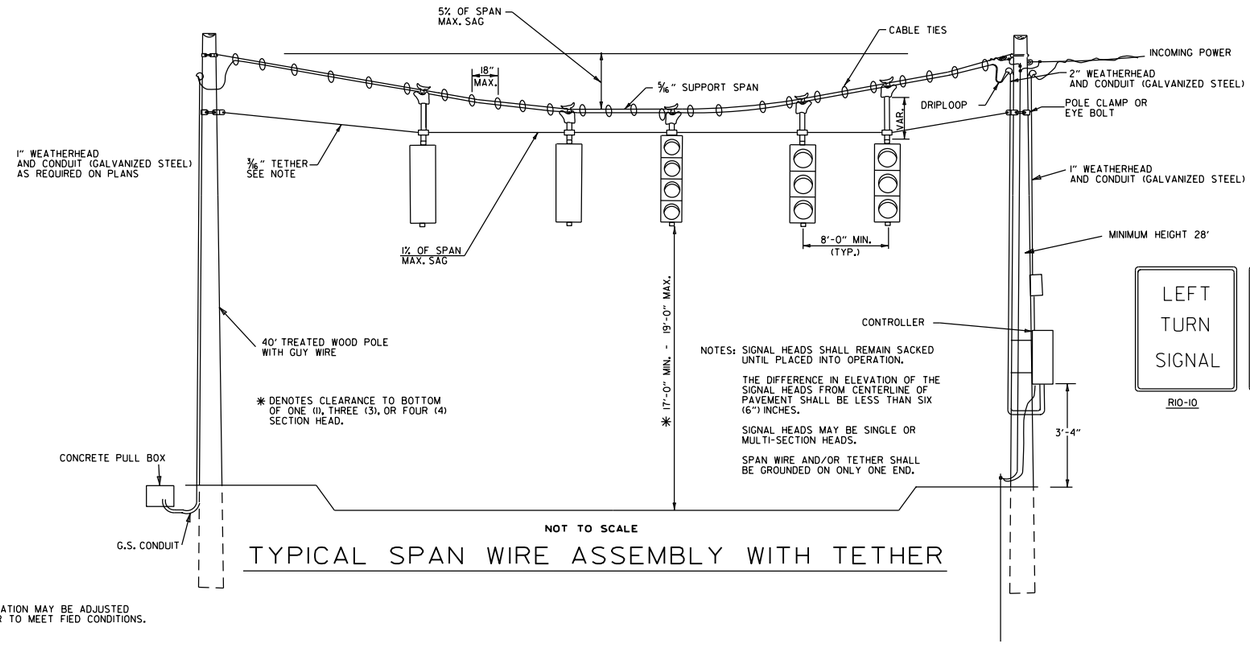
STANDARD GUY INSTALLATION



SIDEWALK GUY INSTALLATION

NOTE:
EXPANDING ANCHOR SHALL BE 6000# STRAIN OR GREATER. IT SHALL BE A "NEW CHANCE 8-WAY EXPANDING ANCHOR", WITH A ⅝" MINIMUM GUY ROD.

NOTE:
CONDUIT INSTALLATION MAY BE ADJUSTED BY THE ENGINEER TO MEET FIED CONDITIONS.



* DENOTES CLEARANCE TO BOTTOM OF ONE (1), THREE (3), OR FOUR (4) SECTION HEAD.

NOTES: SIGNAL HEADS SHALL REMAIN SACKED UNTIL PLACED INTO OPERATION.

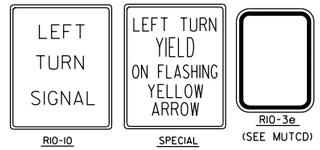
THE DIFFERENCE IN ELEVATION OF THE SIGNAL HEADS FROM CENTERLINE OF PAVEMENT SHALL BE LESS THAN SIX (6") INCHES.

SIGNAL HEADS MAY BE SINGLE OR MULTI-SECTION HEADS.

SPAN WIRE AND/OR TETHER SHALL BE GROUNDED ON ONLY ONE END.

NOT TO SCALE

TYPICAL SPAN WIRE ASSEMBLY WITH TETHER

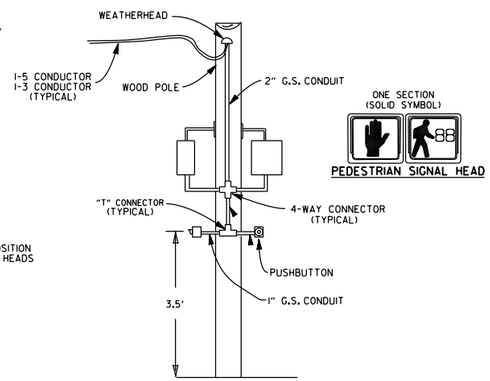


NOTES:
SPAN WIRE POLES SHALL BE MOUNTED A MINIMUM OF FOUR (4') FEET BEHIND CURB OR SHOULDER.

SPAN WIRE ASSEMBLIES WILL REQUIRE TETHER UNLESS OTHERWISE NOTED ON PLAN SHEETS.

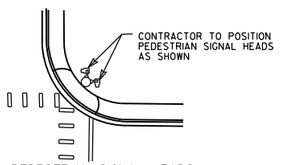
CABLE TIES SHALL BE SUITABLE FOR OUTSIDE USE (BLACK).

THE CONTROLLER POWER SUPPLY GROUND BUSS SHALL BE BONDED TO THE FOUNDATION GROUND ROD WITH A #8 A.W.G. SOLID COPPER WIRE. ON EXISTING FOUNDATIONS WITH NO GROUND ROD, CONTRACTOR SHALL INSTALL A 10' X ⅝" COPPERWELD GROUND ROD.

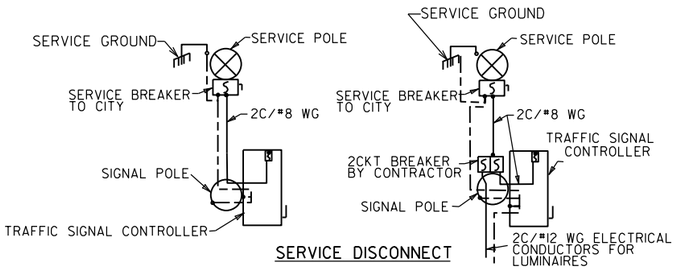


WOODEN POLE INSTALLATION OF PED HEADS

PEDESTRIAN SIGNAL HEAD



PEDESTRIAN SIGNAL HEADS



SERVICE DISCONNECT

NO LUMINAIRE WITH LUMINAIRE

NOTE: ELECTRICAL GROUND CONDUCTOR IS BONDED TO ALL METAL ENCLOSURES

NOTES:

EACH ITEM "TRAFFIC SIGNAL HEAD (4 SEC., 1-WAY)" SHALL INCLUDE A SPECIAL SIGN AS SHOWN, ATTACHED TO THE MAST ARM OR SPAN ASSEMBLY 12" TO THE RIGHT OF THE SIGNAL HEAD UNLESS REMOVED WITHIN SIGNAL PLAN NOTES.

EACH ITEM "TRAFFIC SIGNAL HEAD (3 SEC., 1-WAY)", TO BE USED AS A LEFT TURN INDICATION ONLY, SHALL INCLUDE A SIGN (R10-10) AS SHOWN, ATTACHED TO THE MAST ARM OR SPAN ASSEMBLY 12" TO THE RIGHT OF THE SIGNAL HEAD.

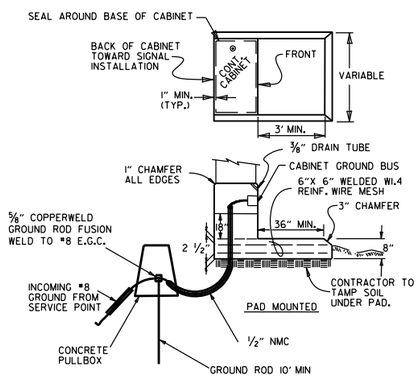
ALL SIGN BLANK SHALL BE CONSTRUCTED OF ALUMINUM ALLOY (ASTM DESIGNATION B-209, ALLOY 5052-H38) WITH A THICKNESS OF 0.100 INCH.

ALL SIGN FACE SHALL BE CONSTRUCTED OF HIGH INTENSITY SHEETING (TYPE III) WITH SILKSCREEN LEGEND AND BORDER.

SIGNAL OPERATION NOTES:

FLASHING OPERATION - PRIOR TO NORMAL OPERATION, SIGNAL SHALL BE FLASHED FOR A PERIOD OF 3 TO 5 WORK DAYS. SIGNAL SHALL BE PLACED IN OPERATION ONLY ON A REGULAR WORK DAY, EXCEPT FRIDAY.

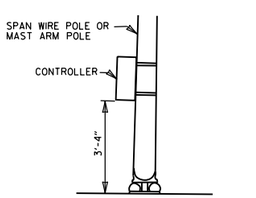
THE CONTRACTOR MAY BE REQUIRED TO ALTER THE FLASHING DISPLAY DURING THE TEMPORARY FLASH PERIOD. AT THE TIME THE INTERSECTION IS PLACED IN PERMANENT OPERATION, THE FLASH SEQUENCE SHALL THEN BE RETURNED TO THAT INDICATED ON THE PLAN SHEETS. NO ADDITIONAL COMPENSATION SHALL BE ALLOWED FOR THESE ALTERATIONS IN FLASH SEQUENCE.



CONCRETE BASE MOUNTED CABINET DETAILS

CABINET NOTE:

UNLESS OTHERWISE DIRECTED BY THE ENGINEER, CABINET ORIENTATION SHALL BE SUCH THAT THE BACK OF THE CABINET IS PARALLEL TO THE STREET AND POSITIONED TO ALLOW VISIBILITY OF THE SIGNAL DISPLAY WHILE OBSERVING THE CONTROLLER FRONT PANEL.



SPAN WIRE SUPPORT POLE AND MAST ARM POLE MOUNTED

MINIMUM STRUCTURAL REQUIREMENTS:

DESIGN SPECIFICATIONS: AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, 4TH EDITION (2001) WITH 2003 AND 2006 INTERIMS.

CONSTRUCTION SPECIFICATIONS: STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION) WITH APPLICABLE SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS.

BASE WIND SPEED: 90 MPH

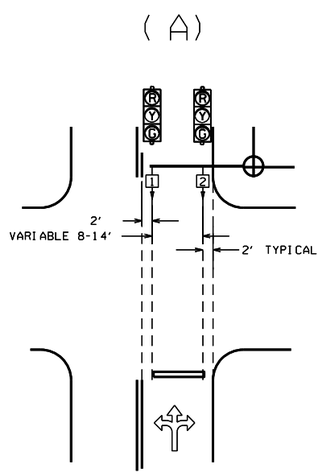
STEEL MEMBERS CONSIDERED MAIN LOAD CARRYING MEMBERS WITH THICKNESS GREATER THAN ½" SHALL MEET THE LONGITUDINAL CHARPY V-NOTCH TEST SPECIFIED IN SUBSECTION 807.05 OF THE STANDARD SPECIFICATIONS.

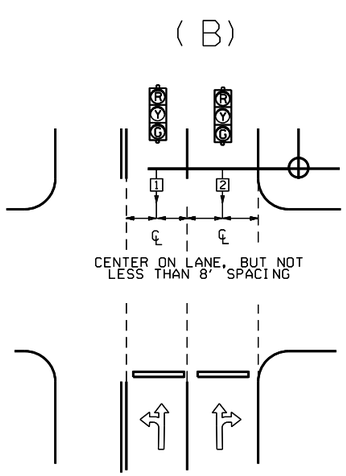
DATE	REVISION	FILMED
11-16-17	REVISED NOTES, ADDED SPAN WIRE SUPPORT POLE DETAIL, ADDED PEDESTRIAN SIGNAL HEAD DETAIL	
02-27-14	REVISED NOTES.	
09-12-13	ISSUED AS STANDARD DRAWING	
07-21-11	REVISED PEDESTRIAN SIGN & GROUNDING	
04-17-08	REVISED TO 2001 AASHTO STANDARDS	
10-12-04	REV. CABINET ORIENTATION & SIGNAL OPERATION	
05-22-02	REV. TYP. SPAN WIRE ASSEMBLY	
12-27-99	REVISED	
11-18-98	REVISION TO NOTES	
11-21-95	ISSUED	

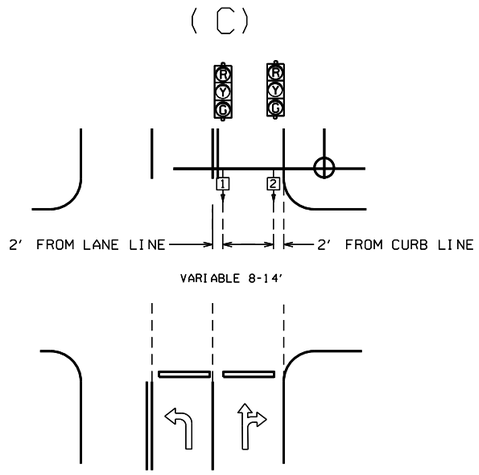
ARKANSAS STATE HIGHWAY COMMISSION

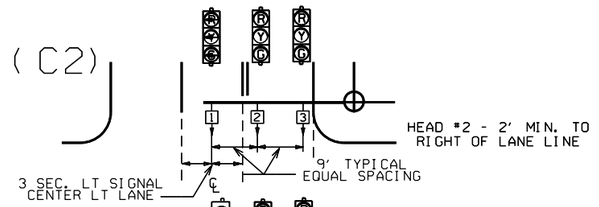
SPAN WIRE ASSEMBLY WOOD POLE

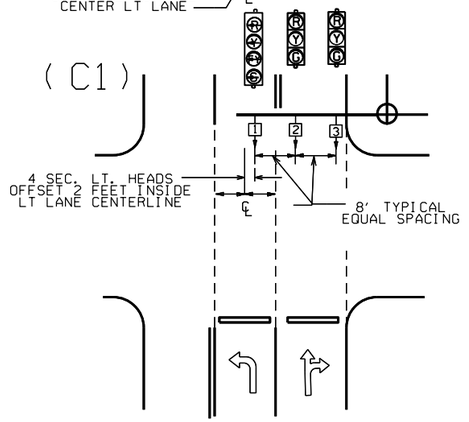
STANDARD DRAWING SD-7

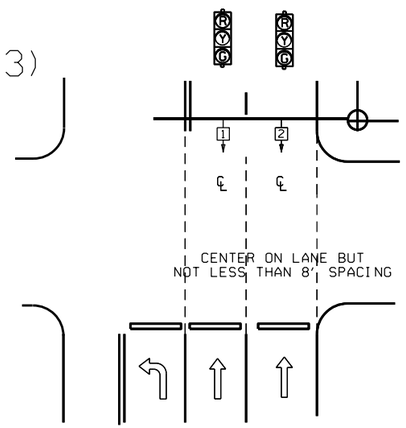


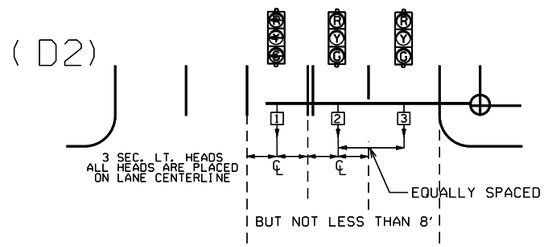


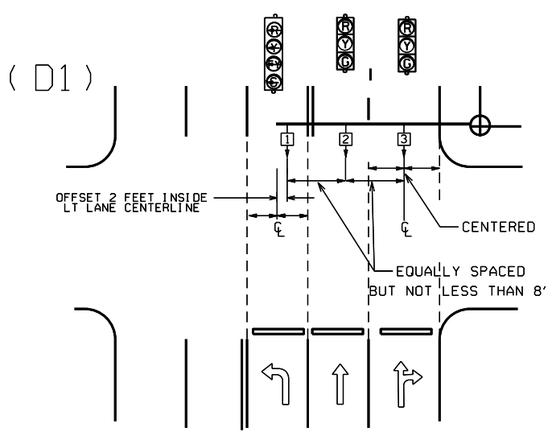




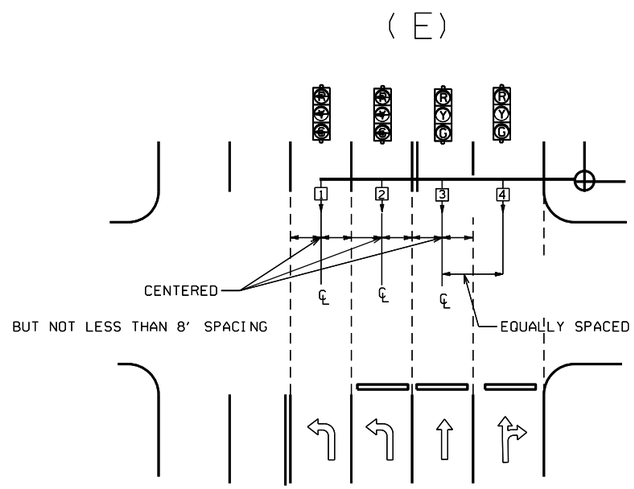








NOTE: WHERE LEFT TURN HEAD (HEAD 1 ON D1 AND D2) IS NOT CALLED FOR ON PLANS, MAST ARM LENGTH MAY STILL BE ALLOWED FOR FUTURE INSTALLATION. HEADS FOR THROUGH MOVEMENTS SHALL STILL BE ALIGNED WITH THROUGH LANES AS SHOWN ON DETAILS.



℄ = CENTER OF LANE FROM APPROACH SIDE

GENERAL NOTES:

1. FOUR SECTION "PROTECTED/PERMISSIVE" LEFT TURN HEADS SHOULD BE PLACED A MINIMUM OF TWO (2') FEET TO THE RIGHT OF THE CENTERLINE OF THE APPROACHING LEFT TURN LANE.

2. THREE SECTION "PROTECTED" LEFT TURN HEADS SHOULD BE PLACED ON THE CENTERLINE OF THE APPROACHING LEFT TURN LANE.

3. WHEN IT IS NECESSARY TO PLACE POLES OTHER THAN AS SHOWN ON PLAN SHEET(S) RESULTING IN MAST ARM EXTENDING MORE THAN TWO FEET PAST (TO THE LEFT OF) THE CENTERLINE OF THE APPROACHING LEFT TURN LANE, MAST ARM SHALL BE CUT TO APPROPRIATE LENGTH AS DETERMINED BY THE ENGINEER, AND A NEW END CAP PROVIDED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THIS PRIOR TO INSTALLING THE MAST ARM IF ADDITIONAL COMPENSATION IS REQUIRED.

4. SIGNAL HEAD SPACING SHALL, IN NO CASE, BE LESS THAN EIGHT (8') FEET BETWEEN HEADS ON CENTER, MEASURED HORIZONTALLY PERPENDICULAR TO THE APPROACH.

5. ALL SIGNAL HEADS SHOWN ON THIS DETAIL SHEET SHALL BE LOCATED ACCORDING TO THE DIMENSIONS SHOWN IN RELATION TO THE APPROACH SIDE OF THE INTERSECTION.

6. MAXIMUM MOUNTING HEIGHT OF SIGNAL FACES LOCATED BETWEEN 40 FEET AND 53 FEET FROM STOP BAR SHALL BE IN ACCORDANCE WITH FIGURE 4D-5 OF 2009 MUTCD.

12-8-16	REVISED NOTE 6	
9-12-13	ISSUED AS STANDARD DRAWING	
3-11-10	2009 MUTCD	
12-9-99	ISSUED	
DATE	REVISION	DATE FILM

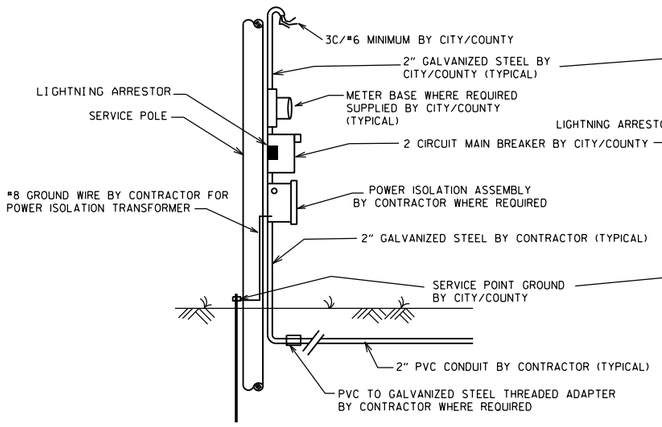
ARKANSAS STATE HIGHWAY COMMISSION

SIGNAL HEAD PLACEMENT

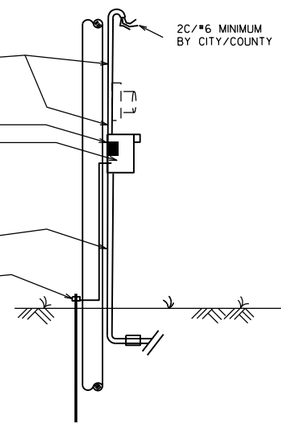
STANDARD DRAWING SD-8

MAIN BREAKER NOT NEAR CONTROLLER CABINET SECONDARY REQUIRED

WITH POWER ISOLATION ASSEMBLY



WITHOUT POWER ISOLATION ASSEMBLY



NOTES TO CONTRACTOR AND AGENCY RESPONSIBLE FOR MAINTENANCE OF THE INTERSECTION (CITY/COUNTY):

ELECTRICAL SERVICE TYPICALLY FALLS INTO TWO CATEGORIES:
MAIN BREAKER NEAR CONTROLLER CABINET; AND MAIN BREAKER NOT NEAR CONTROLLER CABINET. THE CONTRACTOR'S AND THE CITY'S/COUNTY'S RESPONSIBILITY VARIES ACCORDINGLY AS INDICATED ON THESE DETAILS.

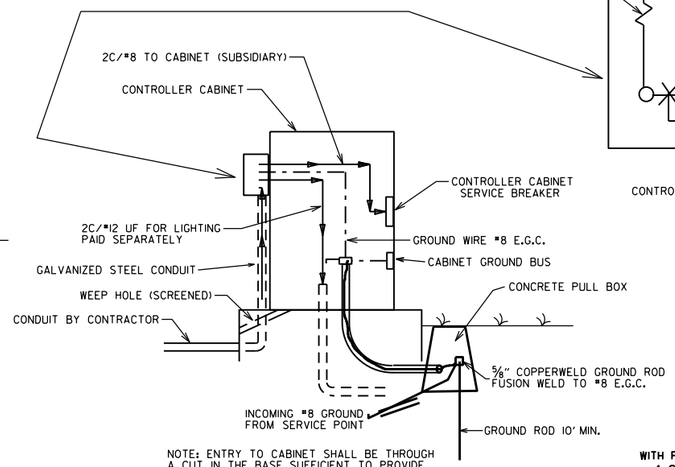
ALL SITUATIONS:
ELECTRICAL SERVICE SHALL BE PROVIDED BY THE CITY/COUNTY TO A SERVICE POLE WITH EXTERNAL RAINTIGHT BREAKER (MAIN BREAKER) AT A MUTUALLY ACCEPTABLE POINT WITHIN THE RIGHT-OF-WAY. SERVICE POINT INCLUDES GALVANIZED STEEL CONDUIT TO A POINT 18" BELOW GROUND LINE, TWO CIRCUIT MAIN BREAKER, LIGHTNING ARRESTOR, POWER ISOLATION ASSEMBLY WHERE REQUIRED, METER LOOP IF REQUIRED BY LOCAL UTILITY COMPANY, ELECTRICAL CONDUCTORS AND WEATHERHEAD. WHERE STREET LIGHTING IS INCLUDED AS PART OF SIGNAL INSTALLATION STREET LIGHTING CIRCUIT (2C/#12 A.W.G. UF RATED, TYPICAL) SHALL BE KEPT SEPARATE FROM THE CIRCUIT SERVING TRAFFIC SIGNAL. SERVICE WIRE AND WIRING FROM THE CONTROLLER TO MAIN BREAKER IS PROVIDED BY THE CONTRACTOR AS A PART OF THIS CONTRACT. WIRE AND WIRING FROM MAIN BREAKER, AND CONNECTION TO THE UTILITY IS THE RESPONSIBILITY OF THE CITY/COUNTY.

MAIN BREAKER NOT NEAR CONTROLLER CABINET:
THE MAIN BREAKER ASSEMBLY, GALVANIZED STEEL CONDUIT. WEATHERHEAD AND WIRE ABOVE MAIN BREAKER AND CONNECTION TO THE UTILITY SHALL BE PROVIDED BY CITY/COUNTY. CONTRACTOR SHALL PROVIDE AS PART OF CONTRACT SECONDARY BREAKER, CONDUIT, WIRE AND WIRING TO THE MAIN BREAKER.

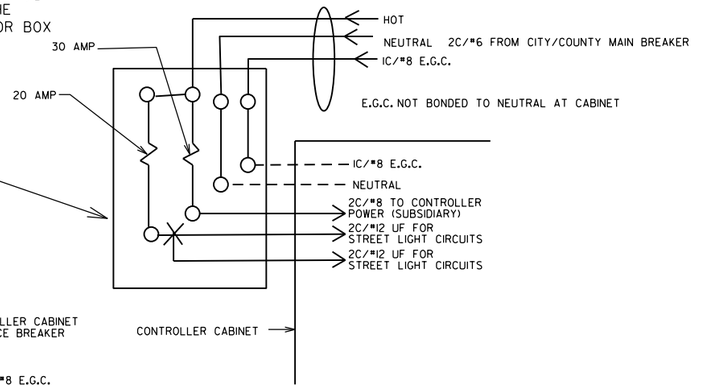
MAIN BREAKER NEAR CONTROLLER CABINET:
ALL COMPONENTS OF THE SERVICE POINT WITH THE EXCEPTION OF THE WIRE AND WIRING ABOVE THE MAIN BREAKER IS FURNISHED AND INSTALLED BY THE CONTRACTOR. WIRING FROM MAIN BREAKER INCLUDING CONNECTION TO THE UTILITY, IS THE RESPONSIBILITY OF THE CITY/COUNTY. IF METER LOOP IS REQUIRED, METER BASE AND HARDWARE IS PROVIDED BY THE CITY/COUNTY AND INSTALLED BY THE CONTRACTOR.

GROUND ROD - A 10' X 5/8" GROUND ROD SHALL BE INSTALLED IN THE CONCRETE PULL BOX FOR EACH POLE AND THE CONTROLLER. PAYMENT FOR THE GROUND ROD AND 1/2" NMC SHALL BE INCLUDED IN ITEM 701. THE CONCRETE PULL BOX AND CONDUCTOR BOX SHALL BE PAID FOR SEPARATELY.

SECONDARY BREAKER BY CONTRACTOR (SUBSIDIARY)



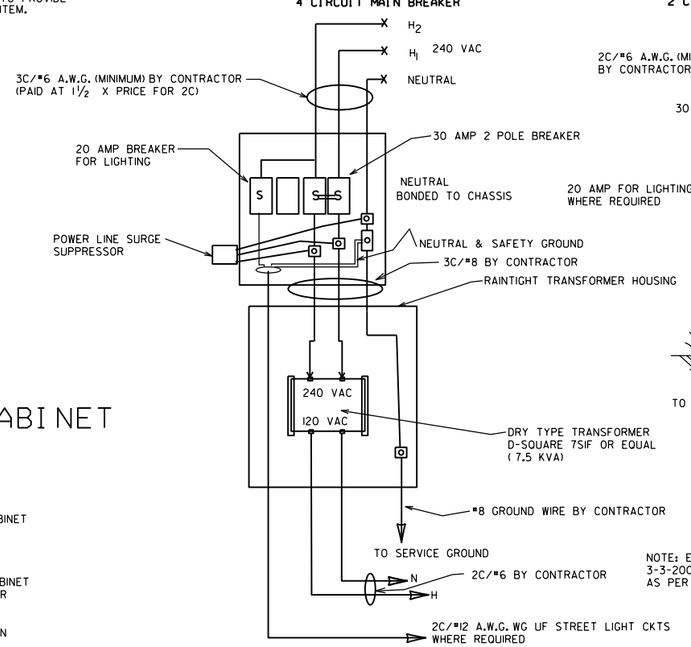
NOTE: ENTRY TO CABINET SHALL BE THROUGH A CUT IN THE BASE SUFFICIENT TO PROVIDE ADEQUATE CONDUIT RADIUS FOR ITEM.



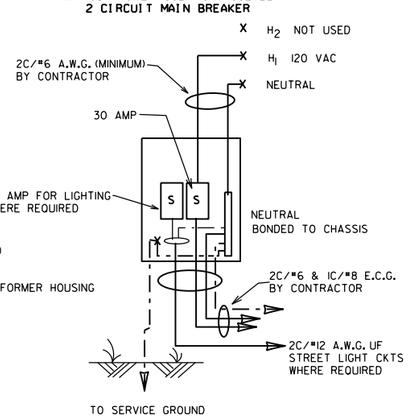
MAIN BREAKER WIRING (TYPICAL)

SERVICE GROUND IS TYPICALLY TIED TO NEUTRAL AT THE MAIN BREAKER. AS SUCH, CONTROLLER GROUND IS NOT TIED TO NEUTRAL AT SECONDARY BREAKER OR IN CONTROLLER CABINET.

WITH POWER ISOLATION ASSEMBLY
4 CIRCUIT MAIN BREAKER

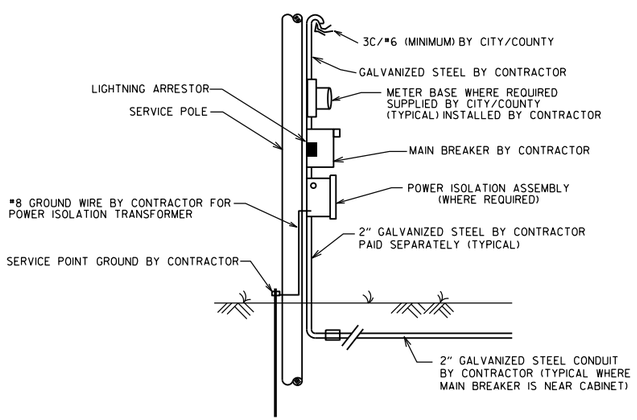


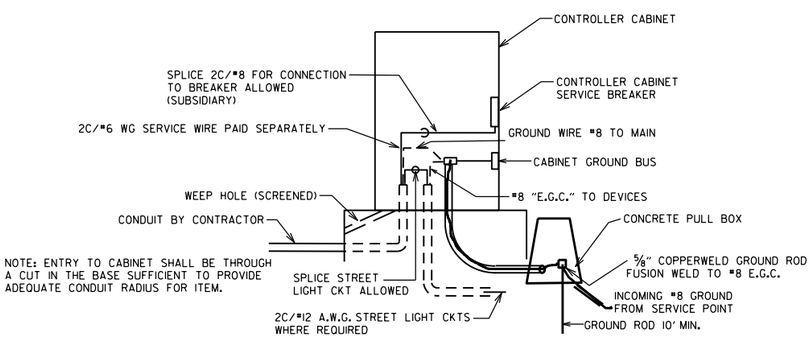
WITHOUT POWER ISOLATION ASSEMBLY
2 CIRCUIT MAIN BREAKER



NOTE: ELECTRICAL GROUND CONDUCTOR (E.C.G.) ADDED 3-3-2003, CONSISTING OF A IC/#8 A.W.G. CU GREEN WIRE AS PER NATIONAL ELECT. CODES.

MAIN BREAKER NEAR CONTROLLER CABINET SECONDARY NOT REQUIRED





NOTE: ENTRY TO CABINET SHALL BE THROUGH A CUT IN THE BASE SUFFICIENT TO PROVIDE ADEQUATE CONDUIT RADIUS FOR ITEM.

DATE	REVISION	FILMED
11-07-19	REVISED	
11-16-17	REVISED NOTES	
09-12-13	ISSUED AS STANDARD DRAWING	
04-18-13	ADDED LIGHTNING ARRESTOR	
05-21-09	REVISED GROUNDING	
07-31-08	REVISED GROUNDING	
03-03-03	ADDED EGC NOTE	
09-26-01	REVISED	
12-27-99	REVISED	
07-28-99	REVISED	
02-05-99	ISSUED	

ARKANSAS STATE HIGHWAY COMMISSION

SERVICE POINT

STANDARD DRAWING SD-9

NOTES:
PEDESTRIAN AND TRAFFIC SIGNAL HEAD SIGNS:
EACH ITEM "TRAFFIC SIGNAL HEAD (4 SEC., 1-WAY)" SHALL INCLUDE A SPECIAL SIGN AS SHOWN, ATTACHED TO THE MAST ARM OR SPAN ASSEMBLY 12" TO THE RIGHT OF THE SIGNAL HEAD UNLESS REMOVED WITHIN THE SIGNAL PLAN NOTES.

EACH ITEM "TRAFFIC SIGNAL HEAD (3 SEC., 1-WAY)" TO BE USED AS A LEFT TURN INDICATION ONLY SHALL INCLUDE A SIGN (R10-10) AS SHOWN, ATTACHED TO THE MAST ARM OR SPAN ASSEMBLY 12" TO THE RIGHT OF THE SIGNAL HEAD.

EACH PEDESTRIAN PUSHBUTTON SHALL HAVE ONE R10-3E SIGN ATTACHED TO THE POLE ABOVE THE BUTTON. ALL SIGNS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 723 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

ALL SIGN BLANKS SHALL BE CONSTRUCTED OF ALUMINUM ALLOY (ASTM DESIGNATION B-209. ALLOY 5052-H38) WITH THICKNESS OF 0.100 INCH.

GENERAL NOTES:
1. MAST ARM POLES SHALL BE MOUNTED A MINIMUM OF FOUR (4') FEET BEHIND CURB OR SHOULDER.

2. OCTAGONAL POLES AND ARMS MEETING THE REQUIREMENTS OF THE PLANS SPECIFICATIONS CAN BE INSTALLED IN LIEU OF ROUND. ALL POLES AND ARMS IN A JOB MUST BE THE SAME SHAPE.

3. MINIMUM STRUCTURAL REQUIREMENTS:
DESIGN SPECIFICATIONS: AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, 4TH EDITION (2001) WITH 2003 AND 2006 INTERIMS.

USE FATIGUE CATEGORY I FOR ALL STRUCTURES ON ROUTES WHERE THE SPEED LIMIT IS 65 MPH AND GREATER AT THE STRUCTURE LOCATION AND ON ROUTES WHERE THE SPEED LIMIT IS GREATER THAN 45 MPH WITH AN MAST ARM OF 60' OR LONGER.

USE FATIGUE CATEGORY II FOR ALL STRUCTURES ON ROUTES WHERE THE SPEED LIMIT IS LESS THAN 65 MPH AND GREATER THAN 45 MPH WITH MAST ARMS LESS THAN 60' AND ON ROUTES WHERE THE SPEED LIMITS OF 45 MPH AND LESS WITH AN MAST ARM OF 60' OR LONGER.

USE FATIGUE CATEGORY III FOR ALL STRUCTURES WHERE THE SPEED LIMIT IS 45 MPH AND LESS AND MAST ARMS LESS THAN 60'.

CONSTRUCTION SPECIFICATIONS:
STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION) WITH APPLICABLE SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS.

BASE WIND SPEED: 90 MPH.

STEEL MEMBERS CONSIDERED MAIN LOAD CARRYING MEMBERS WITH A THICKNESS GREATER THAN ½" SHALL MEET THE LONGITUDINAL CHARPY V-NOTCH TEST SPECIFIED IN SUBSECTION 807.05 OF THE STANDARD SPECIFICATIONS.

DEAD LOAD: AS A MINIMUM, DESIGN SHALL BE BASED ON THE FIXED ATTACHMENTS SHOWN BELOW OR AS MODIFIED IN THE PLANS.

ALL SIGNAL HEADS TO BE ONE WAY, TWELVE (12") INCH AND HAVE FIVE (5") INCH BACK PLATES:

SIGNAL HEADS AT THE END OF MAST ARM - ONE 4 SEC., 85 LB., 14.5 SQ. FT., ONE SIGN MOUNTED 3 FEET FROM SIGNAL HEAD (2'-0" X 2'-6"; 20 LB.) REMAINING SIGNAL HEADS SPACED AT 8 FT. (3 SEC., 56 LB., 8.3 SQ. FT.):
DESIGN TO ACCOMMODATE:
2 SIGNAL HEADS FOR MAST ARMS 10 FT. TO 16 FT.
3 SIGNAL HEADS FOR MAST ARMS 18 FT. TO 24 FT.
4 SIGNAL HEADS FOR MAST ARMS OVER 26 FT.

STREET NAME SIGN - 72" X 18", 36 LB., MOUNTED SUCH THAT OUTSIDE EDGE IS NOT GREATER THAT 12 FT. FROM POLE. DEPENDING UPON POSITION OF SIGNAL HEAD ADJACENT TO POLE, SIGN MAY OVERLAP POLE SHAFT.
ROADWAY LUMINAIRES (WHERE REQUIRED ON PLAN SHEET) - VARIABLE ARM LENGTH (MAX. WT. 75 LB., 3.3 SQ. FT.)
PEDESTRIAN SIGNALS - TWO 1 SEC., 12 INCH MOUNTED 8 FT. FROM BASE OF POLE. POST MOUNTED 3 SEC. SIGNAL HEAD AT 10 FT. ON SIDE OF POLE.

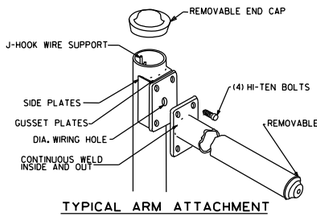
4. POLE/MAST ARM CAP - POLE AND MAST ARM CAPS SHALL BE PROVIDED, FABRICATED OF EITHER STEEL OR CAST ALUMINUM.

5. HAND HOLE - HAND HOLES SHALL BE 4 IN. X 6 IN. FOR STANDARD, AND 3 IN. X 5 IN. FOR PED POLES. MINIMUM PLACED APPROXIMATELY 12 INCHES FROM BASE, AND SHALL BE FIXED WITH A BOLT DOWN COVER. A VACCUM FORMED ABS COVER IS AN ACCEPTABLE ALTERNATE TO STEEL. POLES GREATER THAN 21 FT. IN HEIGHT (FOR ROADWAY LUMINAIRE ATTACHMENT) SHALL INCLUDED A HAND HOLE WITHIN 12 INCHES OF MAST ARM(S) ATTACHMENT(S).

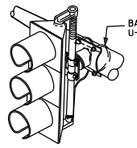
6. POLE/MAST ARM TAPER SLOPE - AVERAGE TAPER OF SIGNAL MAST ARMS AND POLE SHAFT SHALL BE 0.125 TO 0.15 INCHES PER FOOT.

MAST ARM CENTERLINE ANGLE AT ATTACHMENT POINT WITH POLE SHALL MAINTAIN NOT LESS THAN 0.5 DEGREES OR MORE THAN 4 DEGREES POSITIVE SLOPE WITH A LINE PERPENDICULAR TO THE POLE CENTERLINE. THE MAST ARM SHALL MAINTAIN A POSITIVE SLOPE AFTER IT IS PLACED UNDER LOAD.

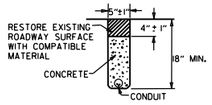
7. NUT COVERS - EACH POLE SHALL INCLUDE A BOLT DOWN NUT COVER FOR EACH ANCHOR BOLT.



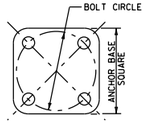
TYPICAL ARM ATTACHMENT



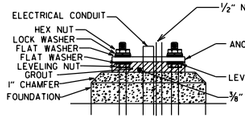
NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

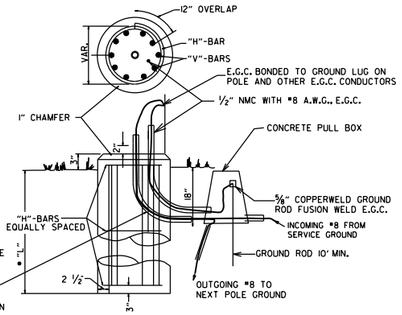


TRENCHING DETAIL
(FOR SAW CUT TRENCH IN ROADWAY)



ANCHOR BASE





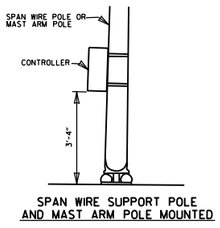
THE SWEEPING "L" IN THE FOUNDATION SHALL BE THE SAME SIZE AS THE CONDUIT FROM THE FOUNDATION TO THE PULL BOX AS SHOWN ON THE PLANS.

THE GROUND ROD SHALL BE FUSION WELDED TO A IC/#8 A.W.G. SOLID COPPER GROUND WIRE. ATTACHMENT TO THE PRIMARY GROUND MAY BE BY AN APPROVED CLAMP. THE GROUND ROD IS TO BE LOCATED IN THE CONCRETE PULL BOX.

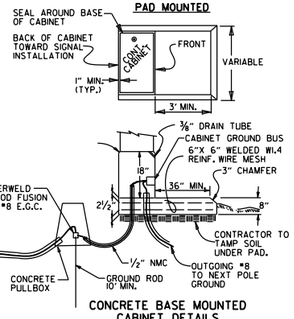
TYPICAL FOUNDATION DETAILS

POLE FOUNDATION MINIMUM DIMENSIONS AND STEEL REINFORCING. ALL REINFORCING STEEL SHALL BE GRADE 40 MIN.

ARM LENGTH	FOUNDATION DIAMETER	DEPTH "L"*	STEEL		
			VERTICAL	HORIZONTAL	O.C.
PED	30"	7'-0"	12-#7 (6'-6")	10-#4	8.44"
2' TO 12'	30"	10'-6"	12-#7 (10'-0")	15-#4	8.42"
OVER 12' TO 20'	30"	11'-6"	12-#7 (11'-0")	16-#4	8.66"
OVER 20' TO 35'	36"	12'-6"	13-#8 (12'-0")	17-#4	8.88"
OVER 35' TO 50'	36"	13'-6"	13-#8 (13'-0")	19-#4	8.56"
OVER 50' TO 72'	42"	14'-6"	18-#8 (14'-0")	20-#4	8.74"
TWINS TO 20'	30"	16'-0"	12-#6 (15'-6")	22-#4	8.76"
TWINS OVER 20' TO 44'	36"	16'-0"	13-#8 (15'-6")	22-#4	8.76"
TWINS OVER 44' TO 50'	42"	16'-0"	18-#8 (15'-6")	22-#4	8.76"
TWINS OVER 50' TO 72'	42"	16'-6"	18-#8 (16'-0")	23-#4	8.64"



SPAN WIRE SUPPORT POLE AND MAST ARM POLE MOUNTED



CONCRETE BASE MOUNTED CABINET DETAILS

CONTROLLER CABINET MOUNTING DETAILS

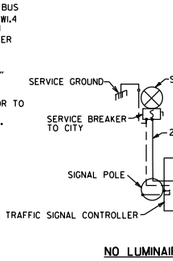
NOTE:
UNLESS OTHERWISE DIRECTED BY THE ENGINEER, CABINET ORIENTATION SHALL BE SUCH THAT THE BACK OF THE CABINET IS PARALLEL TO THE STREET AND POSITIONED TO ALLOW VISIBILITY OF THE SIGNAL DISPLAY WHILE OBSERVING THE CONTROLLER FRONT PANEL.

8. GROUND ROD - A 10' X ⅝" GROUND ROD SHALL BE INSTALLED IN THE CONCRETE PULL BOX FOR EACH POLE AND THE CONTROLLER. PAYMENT FOR THE GROUND ROD AND ½" NMC SHALL BE INCLUDED IN ITEM 714 FOR SIGNAL POLES AND ITEM 701 FOR THE CONTROLLER. THE CONCRETE PULL BOX AND CONDUCTOR BOX SHALL BE PAID SEPERATELY.

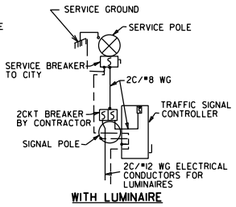
9. POLE BASE/FOUNDATION - ANCHOR BOLTS SHALL INCLUDE AS A MINIMUM, ONE LEVELING NUT, TWO FLAT WASHERS, ONE LOCK WASHER, AND ONE HEX NUT. PERIMETER OF ANCHOR BASE SHALL BE GROUTED WITH A ¼" WEEP HOLE. ALL CONCRETE SHALL BE CLASS "S" OR GREATER.

10. CONCRETE - ALL CONCRETE FOR CONTROLLER CABINET AND POLE FOUNDATIONS SHALL BE CLASS "S" OR GREATER.

11. PEDESTRIAN PHASES - PEDESTRIAN MOVEMENTS SHALL BE PUSH BUTTON ACTUATED AND CONCURRENTLY TIMED, UNLESS OTHERWISE INDICATED ON THE PLAN SHEET(S). FURNISHING AND INSTALLING PEDESTRIAN PUSH SWITCH SHALL BE CONSIDERED SUBSIDIARY TO THE ITEM 707 PEDESTRIAN SIGNAL HEAD.



NO LUMINAIRE



WITH LUMINAIRE

SERVICE DISCONNECT
NOTE: ELECTRICAL GROUND CONDUCTOR IS BONDED TO ALL METAL ENCLOSURES

* WHEN THE GROUND ELEVATION AT THE POLE IS LOWER THAN THE ROADWAY ELEVATION, THE LENGTH OF FOUNDATION ABOVE THE GROUND MAY BE INCREASED TO PROVIDE THE REQUIRED SIGNAL HEAD CLEARANCE ABOVE THE ROADWAY. WHEN THE REQUIRED LENGTH OF FOUNDATION ABOVE THE GROUND IS 18" OR LESS, NO INCREASE IN DEPTH "L" WILL BE REQUIRED. WHEN THE REQUIRED LENGTH OF FOUNDATION ABOVE THE GROUND IS 5'-6" OR LESS, INCREASE DEPTH "L" BY 1'-0". FOR LENGTHS GREATER THAN 5'-6", DEPTH "L" SHALL BE ADJUSTED AS DIRECTED BY THE ENGINEER. LONGITUDINAL REINFORCING, AS SHOWN IN THE TABLE, SHALL BE PROVIDED FOR THE LENGTH OF THE EXTENDED SHAFT AND #4 TIES SHALL BE PROVIDED AT A SPACING NOT TO EXCEED 9" ON CENTERS. PAYMENT WILL BE IN ACCORDANCE WITH SECTION 714 TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION OF THE STANDARD SPECIFICATIONS.

** IN LIEU OF DESIGNING THE STRUCTURE TO RESIST PERIODIC GALLOPING, A VIBRATORY MITIGATION DEVICE MAY BE PROVIDED BY THE POLE MANUFACTURER. THE VIBRATORY MITIGATION DEVICE SHALL BE AN ANTI-GALLOPING PANEL CONSISTING OF A 60" X 16" X 0.125" SIGN BLANK MOUNTED NEAR THE END OF THE MAST ARM NOT TO EXCEED ONE QUARTER OF THE LENGTH OF THE MAST ARM FROM THE END OF THE MAST ARM WITH THE LONG AXIS OF THE PANEL COLLINEAR WITH THE LONG AXIS OF THE MAST ARM. THE PANEL SHOULD BE MOUNTED AT SUCH THE HEIGHT AS TO PROVIDE AT LEAST 6" CLEAR FROM THE TOP OF ANY SIGNAL ASSEMBLY OF SIGN PANEL LOCATED ON THE MAST ARM WITHIN THE LENGTH OF THE ANTI-GALLOPING PANEL.

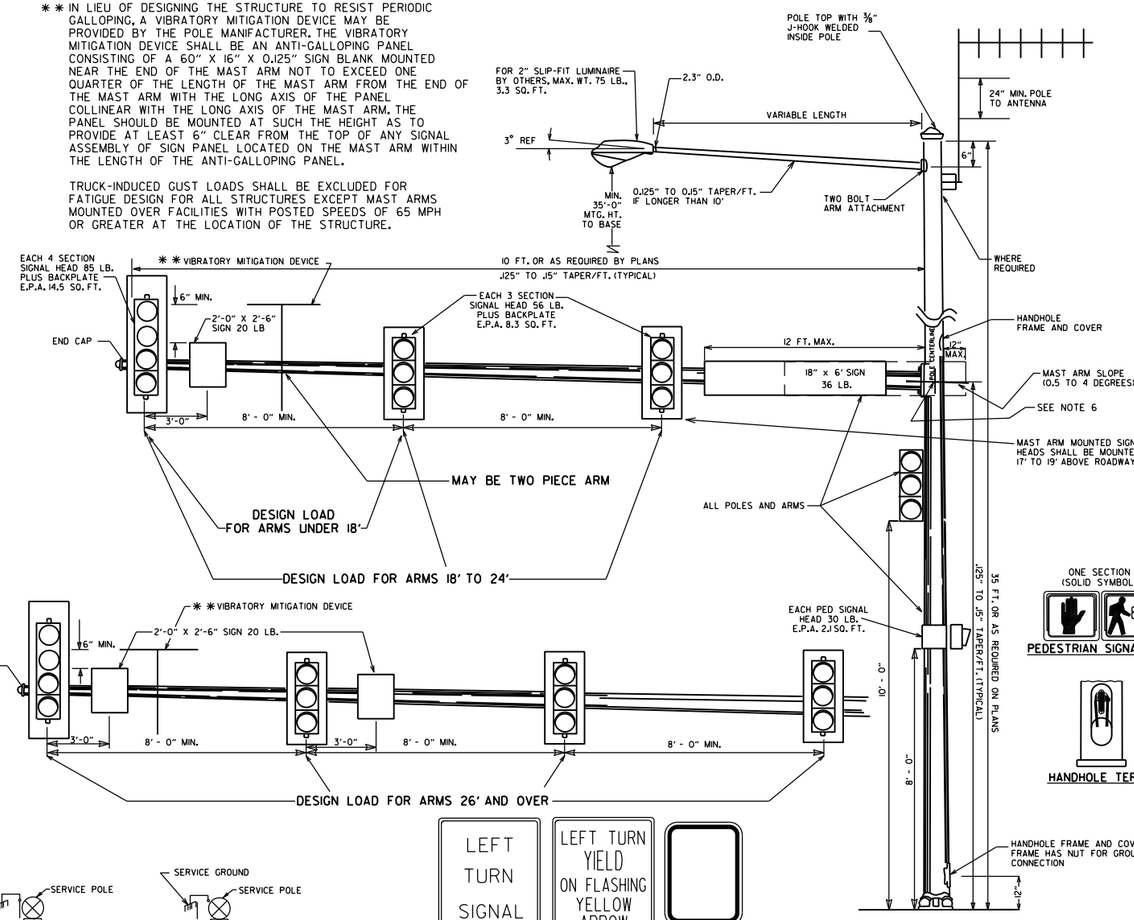
TRUCK-INDUCED GUST LOADS SHALL BE EXCLUDED FOR FATIGUE DESIGN FOR ALL STRUCTURES EXCEPT MAST ARMS MOUNTED OVER FACILITIES WITH POSTED SPEEDS OF 65 MPH OR GREATER AT THE LOCATION OF THE STRUCTURE.

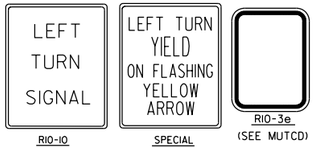
SIGNAL OPERATION NOTES:

FLASHING OPERATION - PRIOR TO NORMAL OPERATION, SIGNAL SHALL BE FLASHED FOR A PERIOD OF 3 TO 5 WORK DAYS OR AS DIRECTED BY THE ENGINEER. SIGNAL SHALL BE PLACED IN OPERATION ONLY ON A REGULAR WORK DAY, EXCEPT FRIDAY.

THE CONTRACTOR MAY BE REQUIRED TO ALTER THE FLASHING DISPLAY DURING THE TEMPORARY FLASH PERIOD. AT THE TIME THE INTERSECTION IS PLACED IN PERMANENT OPERATION, THE FLASH SEQUENCE SHALL THEN BE RETURNED TO THAT INDICATED ON THE PLAN SHEETS. NO ADDITIONAL COMPENSATION SHALL BE ALLOWED FOR THESE ALTERATION IN FLASH SEQUENCE.

SPECIAL NOTE: 90 MPH WIND ZONE DESIGN, SEE NOTE 3. MINIMUM STRUCTURAL REQUIREMENTS.





R10-10 SPECIAL R10-3e (SEE MUTCD)

DATE	REVISION	FILMED
11-16-17	REVISED NOTES, ADDED PEDESTRIAN SIGNAL HEAD DETAIL, ADDED HANDHOLE TERMINAL DETAIL, ADDED TRENCHING DETAIL	
02-27-14	REVISED NOTES.	
09-12-13	ISSUED AS STANDARD DRAWING	
12-08-16	REVISED NOTES	
02-27-14	REVISED NOTES	
09-12-13	ISSUED AS STANDARD DRAWING	
07-21-11	REVISED VMD, SIGNAL HEADS	
05-21-09	REVISED GROUNDING	
07-31-08	REVISED GROUNDING	
04-25-08	ADDED VIBRATORY MITIGATION DEVICE & NOTES	
04-18-08	REVISED AASHTO NOTES	
04-17-08	REVISED TO 2001 AASHTO STANDARDS	
10-12-04	REVISED CABINET ORIENTATION	
06-23-04	REVISED	
05-11-04	REV. NOTE 3/AASHTO REQUIREMENTS	
06-11-01	REV. NOTES & POLE MAST ARM SLOPE	
04-11-01	REVISED POLE TAPERS	
04-25-00	REV. NOTES & SIGNAL HEAD PLACEMENT	
11-22-99	REVISED FOUNDATION DETAILS	
11-17-98	REVISED DETAILS AND NOTES	
11-21-95	ISSUED	

ARKANSAS STATE HIGHWAY COMMISSION

STEEL POLE WITH MAST ARM

STANDARD DRAWING SD-11

SUPERELEVATION TABLE FOR TWO - WAY TRAFFIC

DEGREE OF CURVE	30 MPH			35 MPH			40 MPH			45 MPH			50 MPH			55 MPH			60 MPH			65 MPH			70 MPH			75 MPH		
	e	Ls (FT)		e	Ls (FT)		e	Ls (FT)		e	Ls (FT)		e	Ls (FT)		e	Ls (FT)		e	Ls (FT)		e	Ls (FT)		e	Ls (FT)		e	Ls (FT)	
		MINIMUM	DESIRABLE		MINIMUM	DESIRABLE		MINIMUM	DESIRABLE		MINIMUM	DESIRABLE		MINIMUM	DESIRABLE		MINIMUM	DESIRABLE		MINIMUM	DESIRABLE		MINIMUM	DESIRABLE		MINIMUM	DESIRABLE		MINIMUM	DESIRABLE
0° 15'	NC			NC			NC			NC			NC			NC			NC			NC			NC			NC		
0° 30'	NC			NC			NC			NC			NC			NC			RC	96		RC	96		RC	96		0.022	101	
0° 45'	NC			NC			NC			NC			RC	96		RC	96		0.024	106		0.026	110		0.030	120		0.032	125	
1° 00'	NC			NC			NC			RC	90		0.022	101		0.026	110		0.030	120		0.034	130		0.038	139	300	0.042	149	300
1° 15'	NC			NC			RC	84		0.022	95		0.028	115		0.032	125		0.038	139		0.042	149		0.046	158		0.052	173	
1° 30'	NC			RC	78		0.022	88		0.028	108		0.032	125		0.038	139		0.044	154		0.050	168	300	0.056	182		0.062	197	
1° 45'	RC	72		RC	78		0.026	97		0.030	113		0.036	134		0.044	154		0.050	168	300	0.056	182		0.064	202		0.070	216	
2° 00'	RC	72		0.024	86		0.028	101		0.034	122		0.042	149		0.048	163		0.056	182		0.064	202		0.070	216		0.080	240	
2° 15'	RC	72		0.026	90		0.032	109		0.038	131		0.046	158		0.054	178	300	0.062	197		0.070	216		0.078	235	350	0.088	259	350
2° 30'	0.022	75		0.028	94		0.034	113		0.042	140		0.050	168		0.058	187		0.068	211		0.076	230		0.086	254		0.096	278	
2° 45'	0.024	79		0.030	98		0.038	122		0.046	149	200	0.054	178		0.064	202		0.072	221		0.082	245		0.092	269		0.100	288	400
3° 00'	0.026	83		0.034	105		0.040	126		0.050	158		0.058	187	250	0.068	211		0.078	235		0.088	259		0.098	283	400	D MAX = 2° 45'		
3° 15'	0.028	86		0.036	109		0.044	134		0.052	162		0.062	197		0.072	221		0.082	245		0.092	269		0.100	288				
3° 30'	0.030	90		0.038	113		0.046	139	200	0.056	171		0.066	206		0.076	230		0.086	254		0.096	278	350	D MAX = 3° 30'					
3° 45'	0.032	93		0.040	117		0.050	147		0.058	176		0.070	216		0.080	240		0.090	264		0.098	283							
4° 00'	0.034	97		0.042	121	200	0.052	151		0.062	185		0.072	221		0.084	250		0.094	274	350	0.100	288							
4° 15'	0.036	100		0.044	125		0.054	155		0.064	189		0.076	230		0.086	254	350	0.096	278		D MAX = 4° 15'								
4° 30'	0.036	100	200	0.046	129		0.056	160		0.068	198		0.078	235		0.090	264		0.098	283										
4° 45'	0.038	104		0.048	133		0.060	168		0.070	203		0.082	245		0.092	269		0.100	288										
5° 00'	0.040	108		0.050	137		0.062	172		0.072	207		0.084	250		0.094	274		D MAX = 5° 15'										
5° 30'	0.044	115		0.054	144		0.066	181		0.078	221	250	0.088	259	300	0.098	283												
6° 00'	0.046	119		0.058	152		0.070	189		0.082	230		0.092	269		0.100	288												
6° 30'	0.050	126		0.062	160		0.074	198	250	0.086	239		0.096	278		D MAX = 6° 30'														
7° 00'	0.052	130		0.064	164		0.078	206		0.090	248		0.098	283																
7° 30'	0.054	133		0.068	172		0.080	210		0.092	252	300	0.100	288																
8° 00'	0.058	140		0.070	176		0.084	219		0.094	257		D MAX = 8° 25'																	
8° 30'	0.060	144		0.072	179		0.086	223	250	0.096	261																			
9° 00'	0.062	148		0.076	187		0.088	227		0.098	266																			
9° 30'	0.064	151		0.078	191		0.092	235		0.100	270																			
10° 00'	0.066	155		0.080	195		0.094	240		D MAX = 10° 30'																				
11° 00'	0.070	162		0.084	203		0.096	244																						
12° 00'	0.074	169		0.088	211	250	0.098	248																						
13° 00'	0.076	173		0.090	215		0.100	252	300																					
14° 00'	0.080	180		0.094	222		D MAX = 13° 45'																							
15° 00'	0.082	184		0.096	226																									
16° 00'	0.086	191		0.098	230																									
17° 00'	0.088	194		0.100	234																									
18° 00'	0.090	198	250	D MAX = 19° 30'																										
19° 00'	0.092	202																												
20° 00'	0.094	205																												
21° 00'	0.096	209																												
22° 00'	0.096	209																												
23° 00'	0.098	212																												
24° 00'	0.098	212																												
25° 00'	0.100	216																												

D MAX = 28° 30'

GENERAL NOTES

1. ON PAVEMENT WITH TWO-WAY TRAFFIC, THE SUPERELEVATION SHALL BE REVOLVED ON THE INSIDE PAVEMENT EDGE UNLESS OTHERWISE NOTED ON THE PLANS
2. SUPERELEVATION VALUES SHOWN ON THE CROSS SECTIONS ARE VALUES (+) OR (-) TO BE ADDED TO OR SUBTRACTED FROM THE POINT OF CONTROL.
3. LENGTHS FOR L MAY BE ROUNDED IN MULTIPLES OF 25 FT. OR 50 FT. TO PERMIT SIMPLER CALCULATIONS.
4. PAVEMENTS WIDER THAN 2 LANES SHALL HAVE ADDITIONAL TRANSITION LENGTHS AS FOLLOWS:

3 LANE UNDIVIDED - - - - - +20%
4 LANE UNDIVIDED - - - - - +50%
5 LANE UNDIVIDED - - - - - +80%
6 LANE UNDIVIDED - - - - - +100%

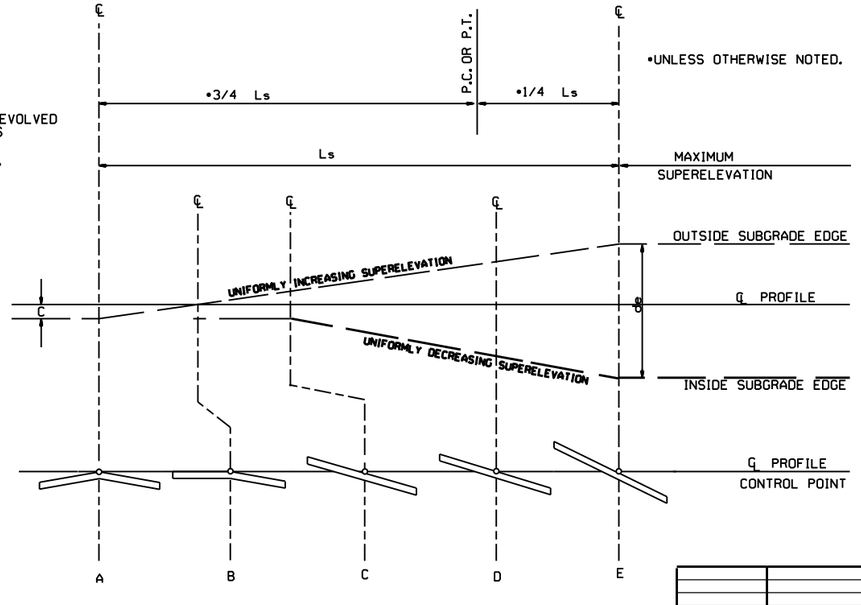
NOTE: MAINTAIN NORMAL CROWN ON INSIDE UNTIL SUPERELEVATION EXCEEDS 2C.

RATE OF SUPERELEVATION SHALL BE COMPUTED ON STRAIGHT LINE METHOD USING APPLICABLE Ls.

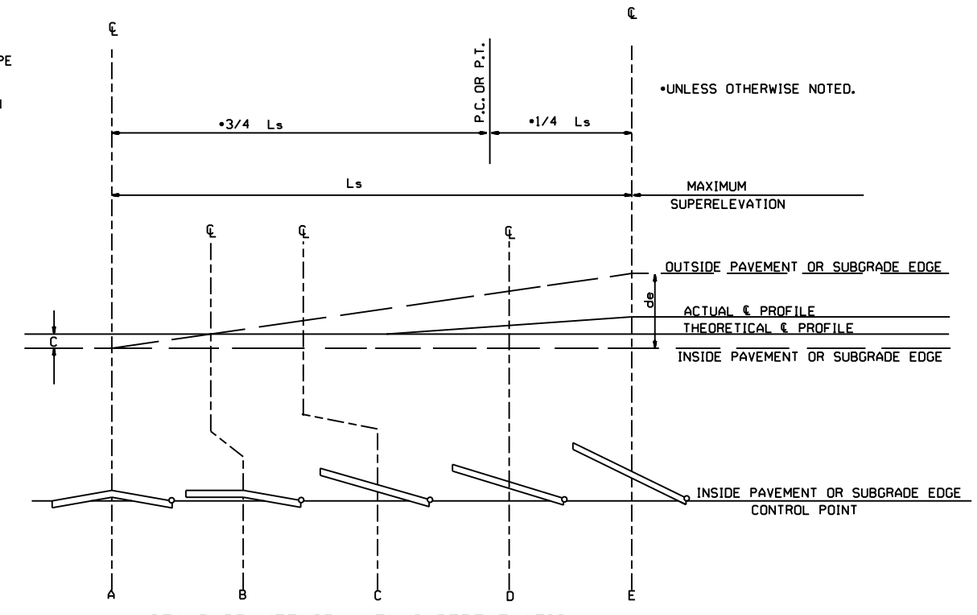
SUPERELEVATION FORMULA = $\frac{Lde}{Ls}$

ABBREVIATIONS

NC - NORMAL CROWN
RC - REVERSE CROWN, SUPERELEVATION AT NORMAL CROWN SLOPE
e - RATE OF SUPERELEVATION (FT. PER FT.)
Ls - LENGTH OF SUPERELEVATION TRANSITION (FT.)
L - DISTANCE FROM BEGINNING OF SUPERELEVATION TRANSITION TO ANY POINT (FT.)
d - WIDTH OF PAVEMENT (FT.) OR WIDTH OF SUBGRADE (FT.)
C - NORMAL CROWN (FT.)



STANDARD METHOD WHEN SUPERELEVATION REVOLVES AROUND CENTER LINE



STANDARD METHOD WHEN SUPERELEVATION REVOLVES AROUND INNER SUBGRADE POINT OR INNER PAVEMENT EDGE

NOTE: MAINTAIN NORMAL CROWN ON INSIDE UNTIL SUPERELEVATION EXCEEDS 2C.

DATE	REVISION	DATE FILMED
11-07-19	REVISED SUPERELEVATION TABLE	
10-18-96	ADDED FORMULA	
01-09-87	ISSUED	534-1-9-87

ARKANSAS STATE HIGHWAY COMMISSION

TABLES AND METHOD OF SUPERELEVATION FOR TWO-WAY TRAFFIC

STANDARD DRAWING SE-2

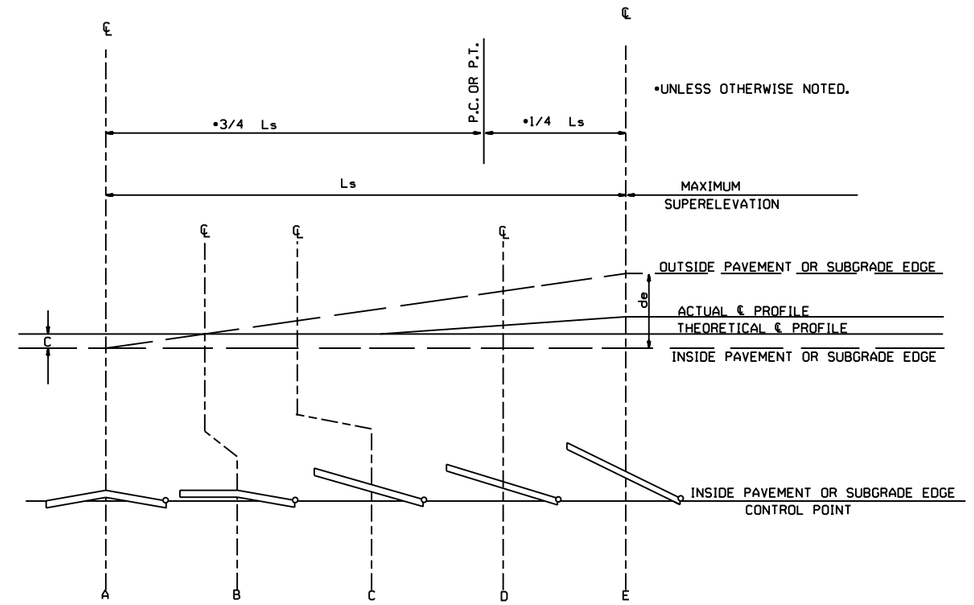
SUPERELEVATION TABLE FOR TWO - WAY TRAFFIC (4% MAXIMUM)

DEGREE OF CURVE	30 MPH e	30 MPH Ls (FT) MINIMUM	30 MPH Ls (FT) DESIRABLE	DEGREE OF CURVE	35 MPH e	35 MPH Ls (FT) MINIMUM	35 MPH Ls (FT) DESIRABLE	DEGREE OF CURVE	40 MPH e	40 MPH Ls (FT) MINIMUM	40 MPH Ls (FT) DESIRABLE	DEGREE OF CURVE	45 MPH e	45 MPH Ls (FT) MINIMUM	45 MPH Ls (FT) DESIRABLE
0° 15'	NC			0° 15'	NC			0° 15'	NC			0° 15'	NC		
0° 30'				0° 30'				0° 30'				0° 30'			
0° 45'				0° 45'				0° 45'				0° 45'			
1° 00'				1° 00'				1° 00'				1° 00'	RC	90	125
1° 15'				1° 15'				1° 15'				1° 15'			
1° 30'				1° 30'				1° 30'	RC	84	100	1° 30'	0.022	95	
1° 45'				1° 45'				1° 45'				1° 45'	0.024	99	
2° 00'				2° 00'	RC	78	100	2° 00'	0.022	88		2° 00'	0.026	104	
2° 15'				2° 15'				2° 15'	0.024	92		2° 15'			
2° 30'	RC	72		2° 30'	0.022	82		2° 30'	0.026	97		2° 30'	0.028	108	
2° 45'				2° 45'				2° 45'				2° 45'	0.030	113	
3° 00'				3° 00'	0.024	86		3° 00'				3° 00'			
3° 15'	0.022	75		3° 15'				3° 15'	0.028	101	125	3° 15'	0.032	117	
3° 30'				3° 30'				3° 30'				3° 30'			
3° 45'				3° 45'	0.026	90		3° 45'				3° 45'			
4° 00'	0.024	79	100	4° 00'				4° 00'	0.030	105		4° 00'	0.034	122	150
4° 15'				4° 15'				4° 15'				4° 15'			
4° 30'				4° 30'	0.028	94	125	4° 30'	0.032	109		4° 30'	0.036	126	
4° 45'				4° 45'				4° 45'				4° 45'			
5° 00'	0.026	83		5° 00'	0.030	98		5° 00'	0.034	113		5° 00'	0.038	131	
5° 30'				5° 30'				5° 30'				5° 30'			
6° 00'				6° 00'	0.032	101		6° 00'	0.036	118		6° 00'	0.040	135	
6° 30'	0.028	86		6° 30'				6° 30'			150				
7° 00'				7° 00'				7° 00'	0.038	122					
7° 30'	0.030	90		7° 30'	0.034	105		7° 30'							
8° 00'				8° 00'				8° 00'	0.040	126					
8° 30'	0.032	93		8° 30'	0.036	109									
9° 00'				9° 00'			150								
9° 30'				9° 30'											
10° 00'	0.034	97		10° 00'	0.038	113									
10° 30'				10° 30'											
11° 00'			125	11° 00'											
11° 30'				11° 30'	0.040	117									
12° 00'															
12° 30'	0.036	100													
13° 00'															
13° 30'															
14° 00'															
14° 30'	0.038	104													
15° 00'															
15° 30'															
16° 00'															
16° 30'	0.040	108	150												

D MAX = 22° 45' | D MAX = 15° 15' | D MAX = 10° 30' | D MAX = 8° 00'

ABBREVIATIONS

NC - NORMAL CROWN
RC - REVERSE CROWN, SUPERELEVATION AT NORMAL CROWN SLOPE
e - RATE OF SUPERELEVATION (FT. PER FT.)
Ls - LENGTH OF SUPERELEVATION TRANSITION (FT.)
L - DISTANCE FROM BEGINNING OF SUPERELEVATION TRANSITION TO ANY POINT (FT.)
d - WIDTH OF PAVEMENT (FT.) OR WIDTH OF SUBGRADE (FT.)
C - NORMAL CROWN (FT.)



STANDARD METHOD WHEN SUPERELEVATION REVOLVES AROUND INNER SUBGRADE POINT OR INNER PAVEMENT EDGE

NOTE: MAINTAIN NORMAL CROWN ON INSIDE UNTIL SUPERELEVATION EXCEEDS 2C.

SUPERELEVATION FORMULA = $\frac{Lde}{Ls}$

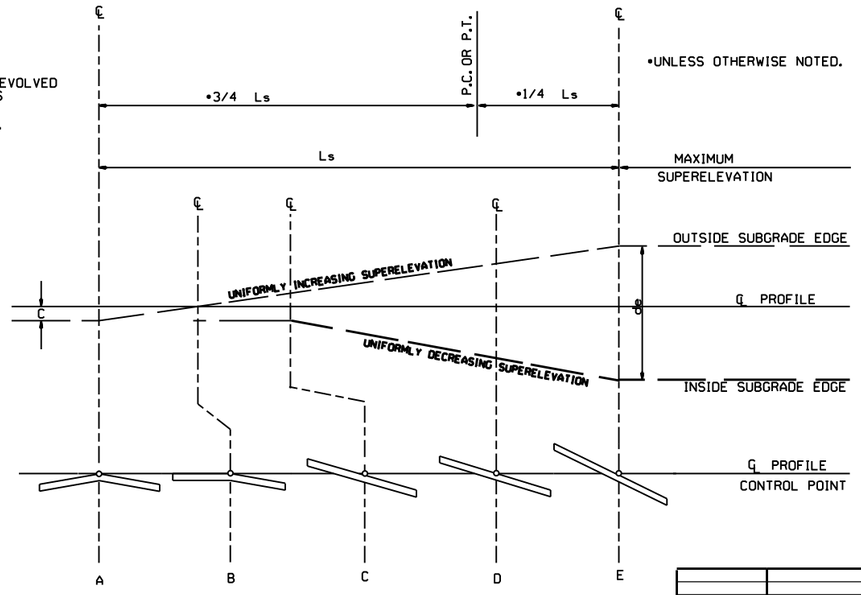
GENERAL NOTES

1. ON PAVEMENT WITH TWO-WAY TRAFFIC, THE SUPERELEVATION SHALL BE REVOLVED ON THE INSIDE PAVEMENT EDGE UNLESS OTHERWISE NOTED ON THE PLANS
2. SUPERELEVATION VALUES SHOWN ON THE CROSS SECTIONS ARE VALUES (+) OR (-) TO BE ADDED TO OR SUBTRACTED FROM THE POINT OF CONTROL.
3. LENGTHS FOR L MAY BE ROUNDED IN MULTIPLES OF 25 FT. OR 50 FT. TO PERMIT SIMPLER CALCULATIONS.
4. PAVEMENTS WIDER THAN 2 LANES SHALL HAVE ADDITIONAL TRANSITION LENGTHS AS FOLLOWS:

3 LANE UNDIVIDED - - - - - +20%
4 LANE UNDIVIDED - - - - - +50%
5 LANE UNDIVIDED - - - - - +80%
6 LANE UNDIVIDED - - - - - +100%

NOTE: MAINTAIN NORMAL CROWN ON INSIDE UNTIL SUPERELEVATION EXCEEDS 2C.

RATE OF SUPERELEVATION SHALL BE COMPUTED ON STRAIGHT LINE METHOD USING APPLICABLE Ls.



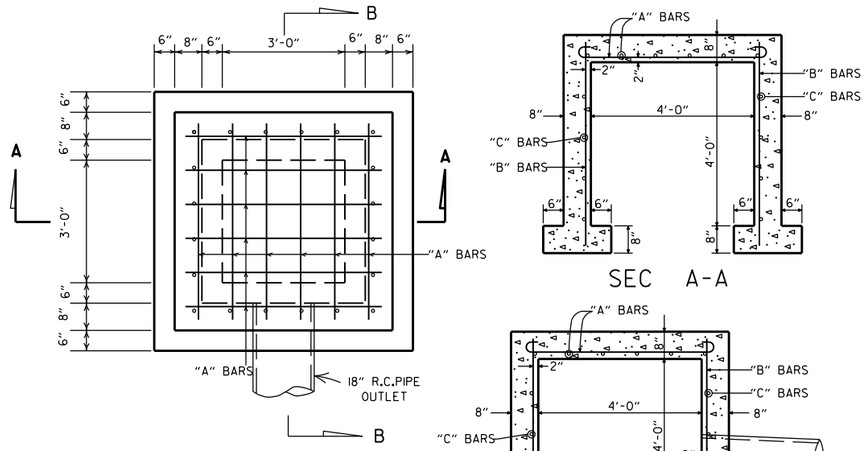
STANDARD METHOD WHEN SUPERELEVATION REVOLVES AROUND CENTER LINE

11-07-19	ISSUED	
DATE	REVISION	DATE FILMED

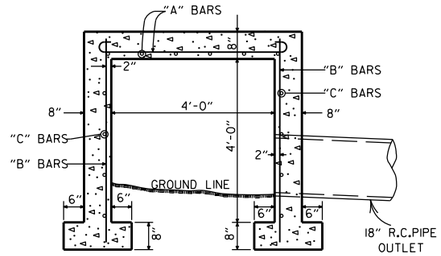
ARKANSAS STATE HIGHWAY COMMISSION

TABLES AND METHOD OF SUPERELEVATION FOR TWO-WAY TRAFFIC (4% MAXIMUM)

STANDARD DRAWING SE-3



SEC A-A



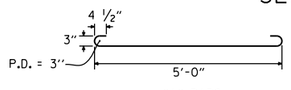
SEC B-B

NOTE: MAX FILL HEIGHT ABOVE TOP OF BOX = 13'-0".

STEEL SCHEDULE

BARS	NUMBER	LENGTH	SPACING
"A"	12	6'-0"	10"
"B"	20	5'-0"	10 ½"
"C"	16	5'-0"	12"

ALL STEEL TO BE #4 BARS



"A" BARS

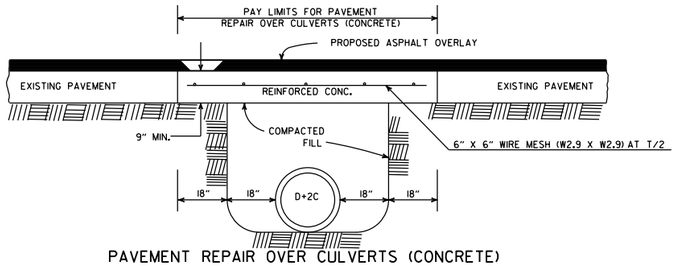
QUANTITIES

CONCRETE 3.31 CU. YDS.
REINFORCING STEEL 168 LB.

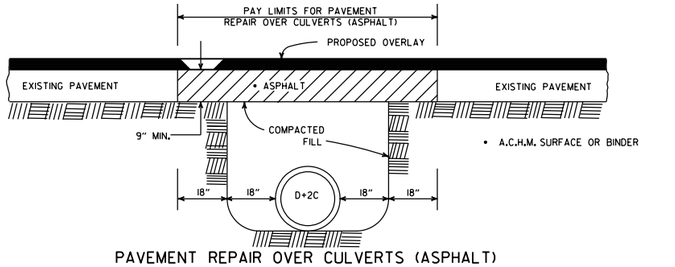
GENERAL NOTE:

THE PAY ITEMS FOR REINFORCED CONCRETE SPRING BOXES SHALL BE FOR THE QUANTITIES OF CONCRETE OF THE CLASS SPECIFIED, REINFORCING STEEL, EXCAVATION FOR STRUCTURES AND 18" R.C. PIPE CULVERT.

REINFORCED CONCRETE SPRING BOX



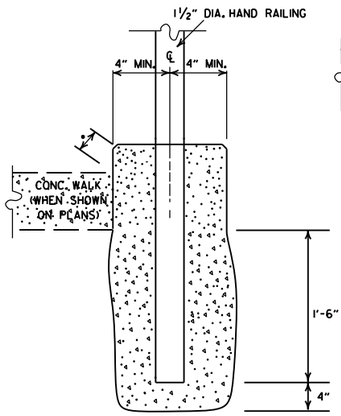
PAVEMENT REPAIR OVER CULVERTS (CONCRETE)



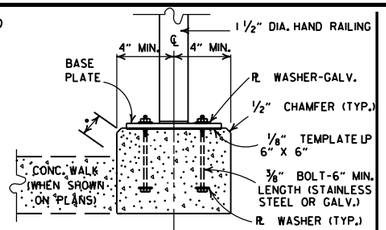
PAVEMENT REPAIR OVER CULVERTS (ASPHALT)

DETAIL SHOWING REPAIR OF EXISTING PAVEMENT AT CULVERT INSTALLATIONS

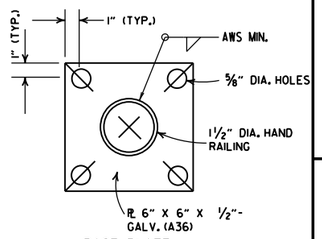
• A 2" MIN. HIGH CURB IS REQUIRED WHEN CONCRETE WALK IS ADJACENT TO THE HAND RAILING. PAYMENT FOR CURB SHALL BE CONSIDERED INCLUDED IN THE PRICE BID FOR CONCRETE WALKS.



DETAIL OF HAND RAILING SET IN CONCRETE

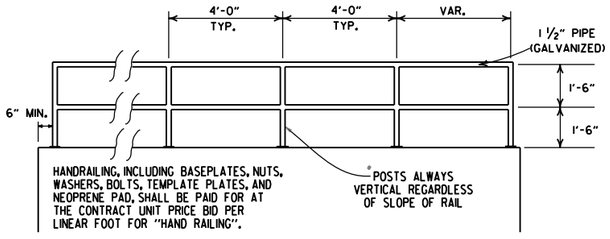


POST CONNECTION TO WALL

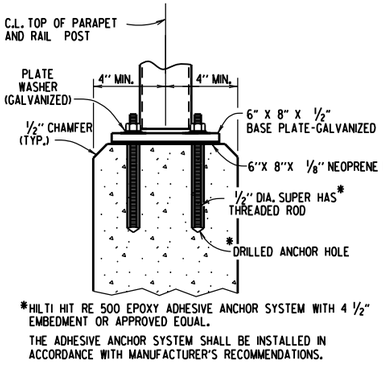


BASE PLATE

POST CONNECTION DETAILS



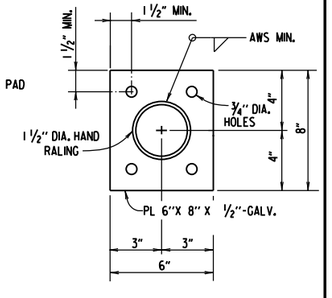
HAND RAILING SHALL CONFORM TO SECTION 633.



*HILTI HIT RE 500 EPOXY ADHESIVE ANCHOR SYSTEM WITH 4 ½" EMBEDMENT OR APPROVED EQUAL.

THE ADHESIVE ANCHOR SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

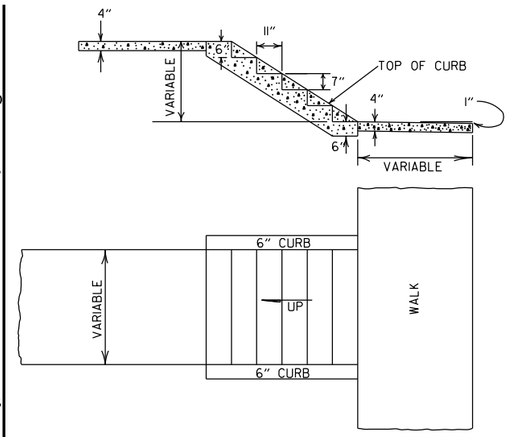
POST CONNECTION TO WALL



BASE PLATE

DETAILS OF ALTERNATE POST ANCHOR SYSTEM (EPOXY ADHESIVE ANCHORS)

HAND RAILING DETAILS



GENERAL NOTES

1. RISE AND TREAD DIMENSIONS OF STEPS MAY BE VARIED AS DIRECTED BY THE ENGINEER, HOWEVER, TREAD WIDTHS SHALL BE 11" MIN. ALL STEPS IN A FLIGHT SHALL HAVE CONSISTENT TREAD & RISER DIMENSIONS.
2. 1" TRANSVERSE EXPANSION JOINTS SHALL BE PLACED IN CONCRETE WALKS AT 45' INTERVALS.

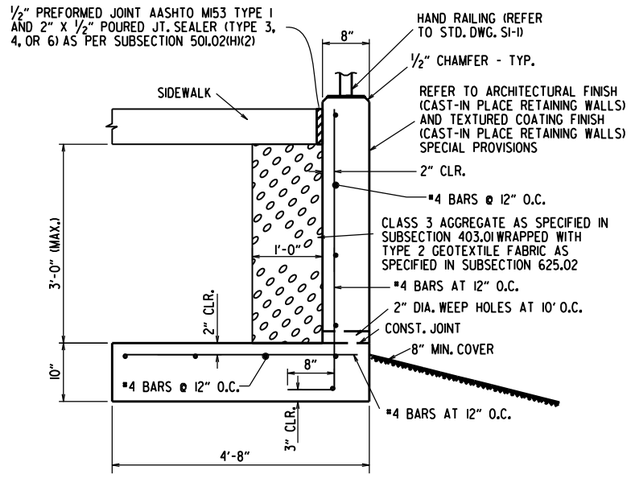
DETAILS OF CONCRETE STEPS & WALKS

DATE	REVISION	DATE FILMED
10-25-18	REVISED DETAIL SHOWING REPAIR OF EXISTING PAVEMENT AT CULVERT INSTALLATIONS	
9-12-13	REVISED REINFORCED CONCRETE SPRING BOX	
7-26-12	REMOVED RETAINING WALL DETAILS & REVISED HAND RAILING DETAILS	
4-17-08	REV. JOINT & FOOTING STEP DETAILS	
11-29-07	REVISED RETAINING WALL DRAINAGE	
5-25-06	REVISED PVMT REPAIR OVER CULVERTS (CONC); REVISED REINFORCED CONC SPRING BOX	
10-9-03	REVISED PIPE RAILING DETAILS TO HAND RAILING DETAILS	
4-10-03	REVISED RETAINING WALL DRAWING	
8-22-02	ADDED HAND RAILING DETAIL	
11-16-01	REVISED PVMT REPAIR OVER CULVERTS (CONC); CORRECTED SPELLING IN GENERAL NOTES	
11-18-98	ADDED GENERAL NOTES TO CONCRETE STEPS & WALKS	
7-02-98	ENLARGED PIPE	
4-03-97	ADDED NOTE TO STEEL BAR SCHED.	
10-18-96	CORRECTED SPELLING	
4-26-94	ADD WEEP HOLE;REV. JOINT SPACING IN RET. WALL	
6-2-94	CHANGED CONST. TO CONTRACTION JOINT	
10-1-92	CHANGED MESH FABRIC TO WIRE MESH	10-1-92
8-15-91	DELETED HDWL MODIFICATION DETAIL	8-15-91
11-8-90	DELETED COLD MIX FROM CULV'T. REPAIR	11-8-90
11-30-89	REV. RETAINING WALL STEEL SCHEDULE	11-30-89
11-17-88	V. BARS BEHIND ARROW	665-11-17-88
7-15-88	REV. PAVEMENT REPAIR ADDED HDWL. MODS, DEL. PIPE UNDERDRAINS	649-7-15-88
11-1-84	REV. TRENCH FOR PIPE UNDERDRAIN	510-11-1-84
1-4-83	ELIMINATED CONC. CLASS & ADDED CHAMFER NOTE	682-1-4-83
3-2-81	SPELLING OF "UNDERDRAIN"	721-3-2-81
4-20-79	REV. UNDERDRAIN DET& PAVEMENT REPAIR	674-4-20-79
2-2-76	12"MIN. GRAN. MAT'L. OVER PIPE	919-2-2-76
4-10-75	REM. SPECS. FOR GRAN. MAT'L.	568-4-10-75-853
5-22-74	GRANULAR MAT'L. TO BE SB-3	567-5-22-74-740
10-2-72	REVISED AND REDRAWN	564-10-16-72

ARKANSAS STATE HIGHWAY COMMISSION

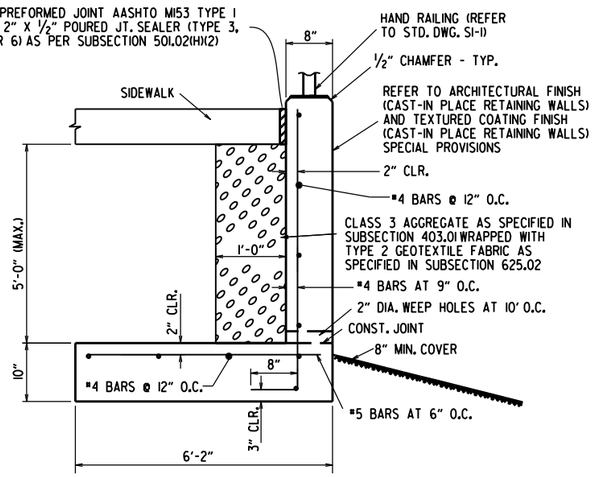
DETAILS OF SPECIAL ITEMS

STANDARD DRAWING SI - 1



CONCRETE WALK (TYPE SPECIAL) DETAIL MAX HEIGHT 3'-0"

N.T.S.



CONCRETE WALK (TYPE SPECIAL) DETAIL MAX HEIGHT 5'-0"

N.T.S.

GENERAL NOTES

CONSTRUCTION SPECIFICATIONS: ARKANSAS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION) WITH APPLICABLE SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS. UNLESS OTHERWISE NOTED IN THE PLANS, SECTION AND SUBSECTION REFER TO THE STANDARD CONSTRUCTION SPECIFICATIONS.

DESIGN SPECIFICATIONS: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SIXTH EDITION (2012).

LIVE LOAD: LIVE LOAD SURCHARGE IS NOT INCLUDED IN THE DESIGN OF THESE WALLS. VEHICULAR LIVE LOAD SHALL NOT BE ALLOWED WITHIN A DISTANCE EQUAL TO ONE-HALF THE HEIGHT OF THE WALL.

CONCRETE: CONCRETE SHALL BE POURED IN THE DRY AND ALL EXPOSED CORNERS TO BE CHAMFERED ½". ALL CONCRETE SHALL BE CLASS S WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH F'C = 3,500 PSI. A CLASS 2 SURFACE FINISH SHALL BE USED ON ALL SURFACES OF THE CONCRETE UNLESS OTHERWISE NOTED. REFER TO ARCHITECTURAL FINISH (CAST-IN PLACE RETAINING WALLS) AND TEXTURED COATING FINISH (CAST-IN PLACE RETAINING WALLS) SPECIAL PROVISIONS.

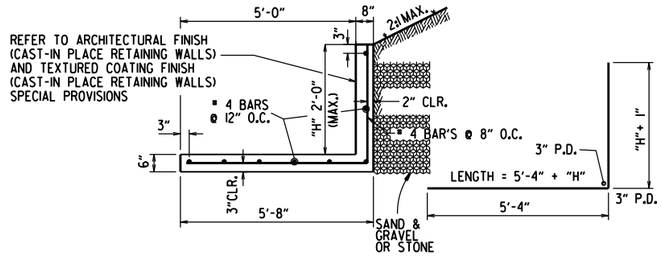
REINFORCING STEEL: ALL REINFORCING STEEL SHALL CONFORM TO AASHTO M31 OR M53, GRADE 60.

FOUNDATIONS FOR FOOTINGS SHALL BE PREPARED IN ACCORDANCE WITH SUBSECTION 801.04. BACKFILL FOR RETAINING WALLS SHALL BE IN ACCORDANCE WITH SUBSECTION 801.08.

WATERPROOF MEMBRANE (TYPE C), WATERSTOPS, PREFORMED JOINTS, PREFORMED JOINT FILLER, WEEP HOLES, CLASS 3 AGGREGATE, REINF. STEEL, CONCRETE, & GEOTEXTILE FABRIC SHALL NOT BE PAID FOR DIRECTLY, BUT SHALL BE CONSIDERED SUBSIDIARY TO CONCRETE WALKS (TYPE SPECIAL).

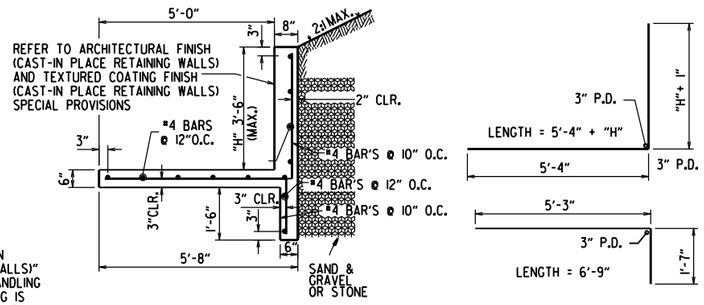
JOINTS IN THE WALL SHALL MATCH TYPE AND SPACING OF THE JOINTS IN THE WALK.

THESE DETAILS ARE NOT INTENDED FOR USE ALONG STREAMS OR DITCHES WITHOUT CONSIDERATION FOR SCOUR.



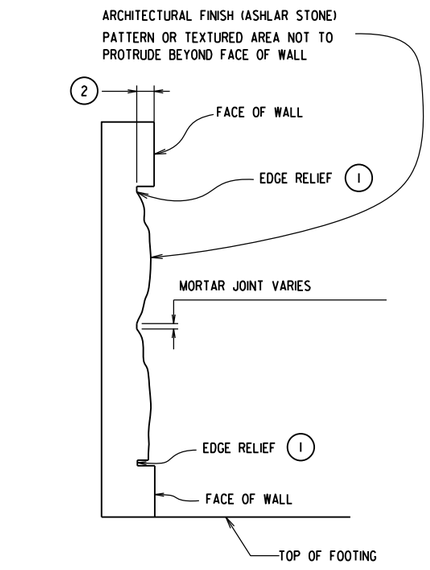
CONCRETE WALK (TYPE SPECIAL) DETAILS MAX HEIGHT 2'-0"

N.T.S.



CONCRETE WALK (TYPE SPECIAL) DETAILS MAX HEIGHT 3'-6"

N.T.S.

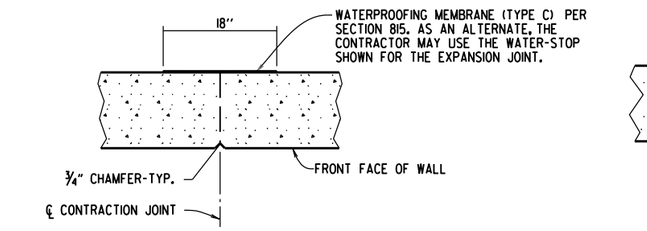


ARCHITECTURAL FINISH DETAILS

N.T.S.

(1) PROVIDE EDGE RELIEF AROUND PERIMETER OF TEXTURE. EDGE RELIEF DIMENSIONS SHALL MATCH MANUFACTURERS EDGE DISTANCE.

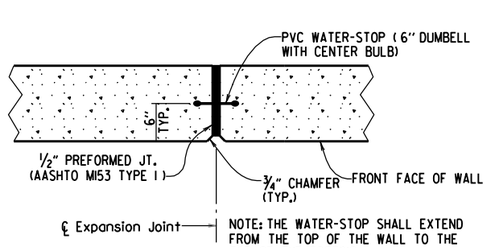
(2) DEPTH OF ASHLAR STONE PATTERN APPROX. 1⅝". SEE SP "ARCHITECTURAL FINISH (CAST-IN PLACE RETAINING WALLS)".



TYPICAL CONTRACTION JOINT DETAIL

N.T.S.

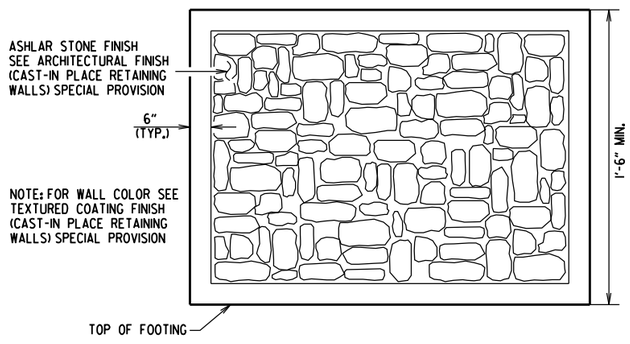
NOTE: 20'-0" MAX. SPACING BETWEEN CONTRACTION JOINTS. HORIZONTAL REINFORCEMENT SHALL BE CONTINUOUS THROUGH CONTRACTION JOINTS.



TYPICAL EXPANSION JOINT DETAIL

N.T.S.

NOTE: 60'-0" MAX. SPACING BETWEEN EXPANSION JOINTS. HORIZONTAL REINFORCING SHALL STOP 2" FROM ℄ EXPANSION JOINT.



ASHLAR STONE FINISH DETAIL

NOTES:

WALL PATTERN SHALL BE APPLIED TO THE EXPOSED SURFACES OF WALL IN ACCORDANCE WITH SP "ARCHITECTURAL FINISH (CAST-IN PLACE RETAINING WALLS)" AND AS SHOWN IN THE PLANS. CARE SHALL BE TAKEN WITH FORM LINER HANDLING AND INSTALLATION TO ENSURE AESTHETIC QUALITY OF THE WALL TEXTURING IS MAINTAINED. WHERE FORM LINER PANELS REQUIRE MODIFICATION TO CONFORM TO THE LOCATION, DIMENSIONS AND LINES SHOWN IN THE PLANS, THE CONTRACTOR SHALL PROVIDE EDGE RELIEF MATCHING THAT OF THE UNALTERED FORM LINER. PAYMENT FOR WALL TEXTURING SHALL BE IN ACCORDANCE WITH SP "ARCHITECTURAL FINISH (CAST-IN PLACE RETAINING WALLS)".

NO ADJUSTMENTS WILL BE MADE IN CONCRETE VOLUME DUE TO THE USE OF "ARCHITECTURAL FINISH". CLASS "S" CONCRETE SHALL BE MEASURED IN ACCORDANCE WITH SUBSECTION 802.24(A). CARE SHALL BE TAKEN IN PLACING CONCRETE TO AVOID SEGREGATION AND TO ELIMINATE FLOW LINES.

CLASS 3 TEXTURED COATING FINISH SHALL BE APPLIED TO WALL SURFACES AS SPECIFIED IN SP "TEXTURED COATING FINISH (CAST-IN PLACE RETAINING WALLS)" AND IN ACCORDANCE WITH SUBSECTION 802.19(B)(3).

DATE	REVISION	DATE FILMED
11-05-20	REVISED GENERAL NOTES	
5-14-20	DRAWING ISSUED	

ARKANSAS STATE HIGHWAY COMMISSION

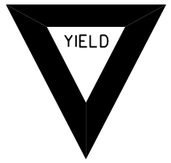
CONCRETE WALK (TYPE SPECIAL)

STANDARD DRAWING SI - 3

R1-1

STANDARD 30"X30"
EXPRESSWAY 36"X36"
SPECIAL 48"X48"

R1-2



STD. 36"X36"X36"
EXPWY. 48"X48"X48"
FWY. 60"X60"X60"

R2-1

STD. 24"X30"
EXPWY. 36"X48"
FWY. 48"X60"

W3-5

STD. 36"X36"
EXPWY. 48"X48"
FWY. 48"X48"

W3-5a

STD. 36"X36"
EXPWY. 48"X48"
FWY. 48"X48"

R4-1

STD. 24"X30"
EXPWY. 36"X48"
FWY. 48"X60"

R4-2

STD. 24"X30"
EXPWY. 36"X48"
FWY. 48"X60"

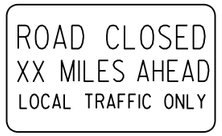
R5-1

STD. 30"X30"
EXPWY. 36"X36"
SPECIAL 48"X48"

RII-2

48"X30"

RII-3A



60"X30"

RII-4

60"X30"

W21-5a

STD. 36"X36"
FWY. 48"X48"

WI-1

STD. 36"X36"
FWY. 48"X48"

WI-2

STD. 36"X36"
FWY. 48"X48"

WI-3

STD. 48"X48"

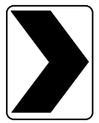
WI-4

STD. 48"X48"

WI-6

STD. 48"X24"
SPECIAL 60"X30"

WI-8



STD. 18"X24"
SPECIAL 24"X30"
EXPWY. 30"X36"
FWY. 36"X48"

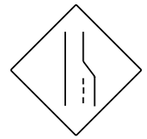
W3-1

STD. 36"X36"
SPECIAL 48"X48"

W3-2

STD. 36"X36"
SPECIAL 48"X48"

W4-2



STD. 36"X36"
FWY. 48"X48"

W5-1

STD. 36"X36"
SPECIAL 48"X48"

W6-3

EXPWY. 36"X36"
SPECIAL 48"X48"

W8-7

EXPWY. 36"X36"
FWY. 48"X48"

W9-2

STD. 36"X36"
FWY. 48"X48"

WI3-1

STD. 24"X24"

W20-1

STD. 48"X48"

W20-2

STD. 48"X48"

W20-3

STD. 48"X48"

W20-4

STD. 48"X48"

W20-5

STD. 48"X48"

W20-7a

STD. 36"X36"
FWY. 48"X48"

W21-2

STD. 30"X30"
SPECIAL 36"X36"

W21-5

STD. 30"X30"
SPECIAL 36"X36"

W24-1

STD. 36"X36"

WI-4b

STD. 48"X48"

R56-1

STD. 18"X18"

W8-11

STD. 36"X36"
FWY. 48"X48"

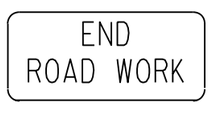
W8-9

STD. 36"X36"
FWY. 48"X48"

G20-1

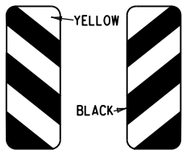
60"X24"

G20-2



48"X24"

OM-3L OM-3R



12"X36"

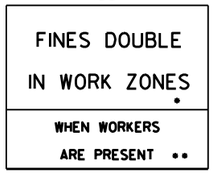
M4-9

STD. 30"X24"
SPECIAL 48"X36"
SPECIAL 60"X48"

M4-10

48"X18"

R55-1



36"X60"

• USE 6" C LETTERS
•• USE 4" D LETTERS

ADVANCE DISTANCES
(XXXX)

500 FT	½ MILE
1000 FT	¾ MILE
1500 FT	1 MILE AHEAD

GENERAL NOTES:

1. ALL TRAFFIC CONTROL DEVICES USED ON ROAD CONSTRUCTION SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION, AND TO THE STANDARD HIGHWAY SIGNS, LATEST EDITION, OR AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION.
2. TRAFFIC CONTROL DEVICES SHALL BE SET UP JUST BEFORE THE START OF CONSTRUCTION OPERATIONS AND SHALL BE PROPERLY MAINTAINED DURING THE TIME SUCH CONDITIONS EXIST. THEY SHALL REMAIN IN PLACE ONLY AS LONG AS NEEDED AND REMOVED THEREAFTER.
3. EXISTING SIGNS AND CONSTRUCTION SIGNS SHALL BE KEPT IN PROPER POSITION, AND BE CLEAN AND LEGIBLE AT ALL TIMES. SIGNS THAT DO NOT APPLY TO EXISTING CONDITIONS SHALL BE REMOVED. SIGNS THAT ARE DAMAGED, DEFACED, OR THAT ACCUMULATE DIRT DURING CONSTRUCTION SHALL BE CLEANED, REPAIRED, OR REPLACED.
- 4. SIGNS ARE USUALLY MOUNTED ON A SINGLE POST, ALTHOUGH THOSE WIDER THAN 36" OR LARGER THAN 10 SQ. FT. SHALL BE MOUNTED ON TWO POSTS OR ABOVE A TYPE III BARRICADE.
- 5. SIGN POSTS DIRECT BURIED IN SOIL SHALL BE 2 LB. MINIMUM CHANNEL POST OR 4"x4" WOOD POSTS. CHANNEL POSTS SHALL BE PAINTED GREEN. WOOD POSTS SHALL BE PAINTED WHITE. ALL POSTS SHALL BE NEATLY CONSTRUCTED, AND SHALL BE REPLUMBED, CLEANED, OR REPAIRED AS NEEDED FOR THE DURATION OF THE JOB. THERE SHALL NOT BE MORE THAN 2 POSTS IN A 7' PATH FOR WOOD OR CHANNEL POSTS. ANY CHANNEL POST SPLICE SHALL BE IN ACCORDANCE WITH STANDARD DRAWING TC-3.
6. POST MOUNTED SIGNS IN RURAL AREAS SHALL BE CONSTRUCTED WITH THE NEAR EDGE OF THE SIGN FROM 6 TO 12 FEET FROM THE PAVEMENT EDGE. SIGNS IN URBAN AREAS AND BARRICADE MOUNTED SIGNS SHALL BE MOUNTED A MINIMUM OF 2 FEET FROM THE PAVEMENT EDGE.
7. ALL POST AND BARRICADE MOUNTED SIGNS MOUNTED IN URBAN AREAS SHALL BE MOUNTED A MINIMUM DISTANCE OF 7' FROM THE BOTTOM OF THE SIGN TO THE ROADWAY SURFACE. ALL POST AND BARRICADE MOUNTED SIGNS MOUNTED IN RURAL AREAS SHALL BE MOUNTED A MINIMUM DISTANCE OF 7' FROM THE BOTTOM OF THE SIGN TO THE ROADWAY SURFACE, EXCEPT A MINIMUM OF 6' SHALL BE USED WHEN MOUNTING AN ADVISORY SIGN BELOW A WARNING SIGN. TEMPORARY SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS FOR INTERMEDIATE TERM STATIONARY WORK CONDITIONS. THE SIGNS MINIMUM MOUNTING HEIGHT SHALL BE 5'. RETROREFLECTIVE DEVICES SHALL BE USED. TEMPORARY SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS FOR SHORT-TERM, SHORT DURATION, AND MOBILE CONDITIONS. THEY SHALL BE NO LESS THAN ONE (1) FOOT ABOVE THE TRAVELED WAY. LONG-TERM STATIONARY SIGNS SHALL BE DIRECT BURIED IN SOIL, UNLESS CONDITIONS NECESSITATE THE USE OF PORTABLE SIGNS, OR AS APPROVED BY THE ENGINEER. CONCRETE PADS, CONCRETE OR ROCK BALLAST, OR OTHER SOLID MATERIALS SHALL NOT BE UTILIZED WITH PORTABLE SIGN SUPPORTS.
8. FLAGGERS SHALL USE REFLECTORIZED STOP-SLOW PADDLES. FLAGS MAY BE USED ONLY FOR EMERGENCY SITUATIONS.
9. MOST OF THE SIGNS SHOWN ARE ORIENTED TO THE RIGHT. HOWEVER, THIS DOES NOT PRECLUDE THE USE OF MIRROR IMAGES OF THESE SIGNS WHERE THE REVERSE ORIENTATION MIGHT BETTER CONVEY TO MOTORISTS THE PROPER DIRECTION OF MOVEMENT.
10. R55-1 SIGNS SHALL BE PLACED AT LEAST 1500' BUT NOT MORE THAN 1 MILE IN ADVANCE OF THE WORK ZONE. IF A SPEED LIMIT REDUCTION IS IN EFFECT, THE SIGN SHALL BE PLACED A MINIMUM OF 500' IN ADVANCE OF THE "REDUCED SPEED AHEAD" SIGN.

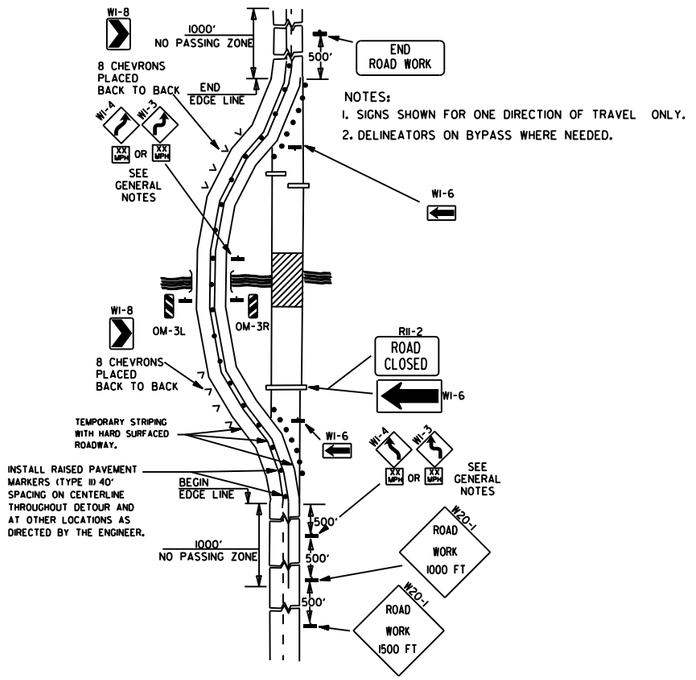
• NOTE: SUPPORTS FOR SIGNS, BARRICADES, AND VERTICAL PANELS THAT ARE DIFFERENT FROM THE REQUIREMENTS SHOWN IN NOTES 4 & 5, BUT MEET THE REQUIREMENTS OF MANUAL FOR ASSESSING SAFETY HARDWARE (MASH), WILL BE ACCEPTED. COMPLIANCE WITH THE REQUIREMENTS OF MANUAL FOR ASSESSING SAFETY HARDWARE (MASH) IS REQUIRED FOR ALL PROJECTS.

DATE	REVISION	FILMED
11-07-19	REVISED FOR MASH	
4-13-17	DELETED RSP-1 & ADDED W21-5a	
9-2-15	REVISED REDUCED SPEED LIMIT AHEAD SIGNS REVISED ROAD WORK NEXT XX MILES	
12-15-11	REVISED W24-1	
11-17-10	DELETED W8-9a & ADDED W8-9	
10-15-09	ADDED REFERENCE TO MASH & ADDED SIGN W24-1	
4-17-08	REVISED SIGN DESIGNATIONS	
11-18-04	REVISED NOTES	
10-9-03	REVISED NOTE 1	
11-16-01	REVISED NOTE 7	
9-28-00	REVISED NOTE	
11-18-98	ADDED NOTE	
6-26-97	REVISED NOTE 5	
4-03-97	REVISED NOTE 5	
10-18-96	ADDED CONTROLLED ACCESS HWY. SIGN & TO NOTE 7	
10-12-95	ADDED R55-1	
6-8-95	REVISED TO CORRECT SIGN ILLUSTRATIONS	6-8-95
2-2-95	REVISED PER PART VI, MUTCD SEPT. 3, 1993	
8-15-91	DRAWN AND PLACED IN USE	

ARKANSAS STATE HIGHWAY COMMISSION

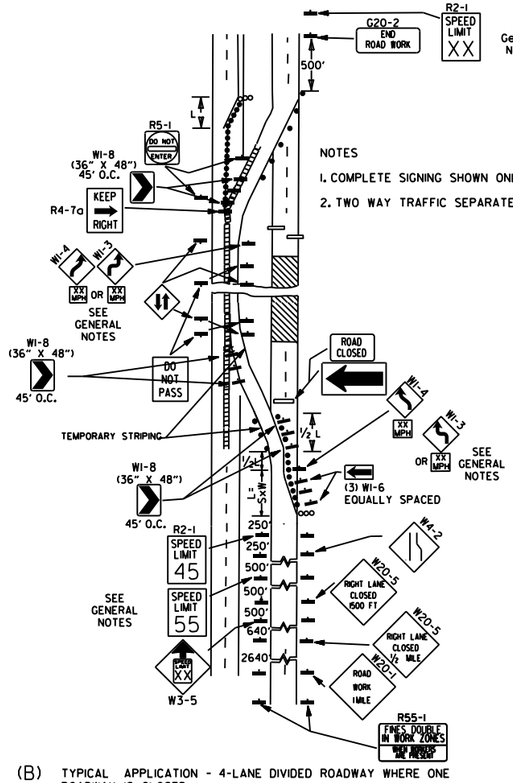
STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION

STANDARD DRAWING TC-1



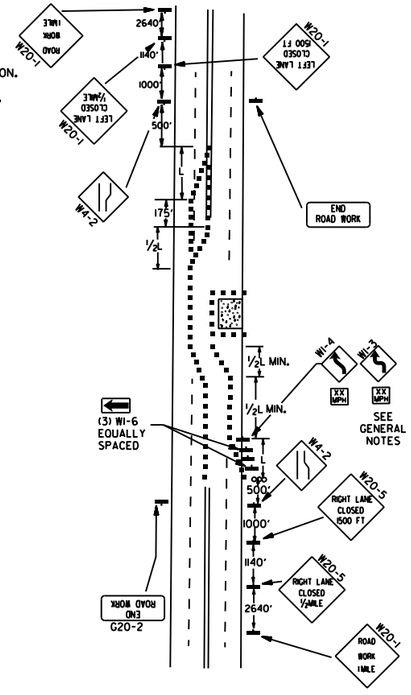
NOTES:
1. SIGNS SHOWN FOR ONE DIRECTION OF TRAVEL ONLY.
2. DELINEATORS ON BYPASS WHERE NEEDED.

(A) TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES ON A 2-LANE HIGHWAY WHERE THE ENTIRE ROADWAY IS CLOSED AND A BYPASS DETOUR IS PROVIDED.

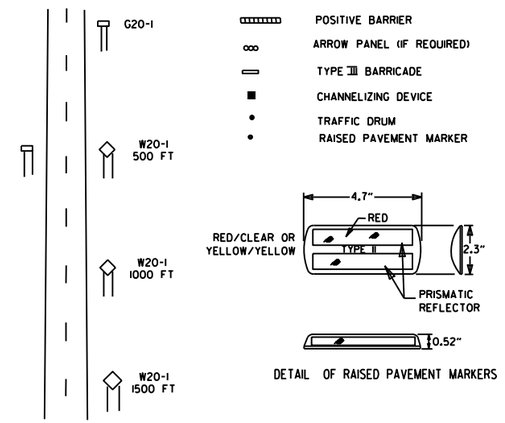


NOTES
1. COMPLETE SIGNING SHOWN ONLY IN CROSSOVER DIRECTION.
2. TWO WAY TRAFFIC SEPARATED WITH POSITIVE BARRIER.

(B) TYPICAL APPLICATION - 4-LANE DIVIDED ROADWAY WHERE ONE ROADWAY IS CLOSED.



(C) TYPICAL APPLICATION - 4-LANE UNDIVIDED ROADWAY WHERE HALF OF THE ROADWAY IS CLOSED.



DETAIL OF RAISED PAVEMENT MARKERS

TYPICAL ADVANCE WARNING SIGN PLACEMENT

TAPER FORMULAE:

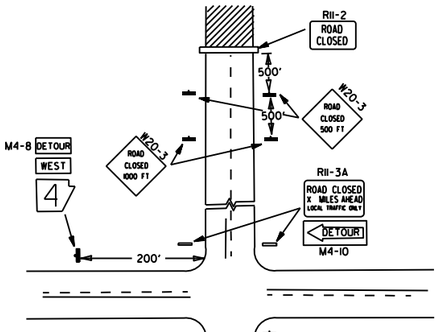
L=SXW FOR SPEEDS OF 45MPH OR MORE.

$L = \frac{WS^2}{60}$ FOR SPEEDS OF 40MPH OR LESS.

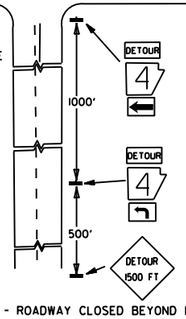
WHERE:
L= MINIMUM LENGTH OF TAPER.
S= NUMERICAL VALUE OF POSTED SPEED LIMIT PRIOR TO WORK OR 85TH PERCENTILE SPEED.
W= WIDTH OF OFFSET.

GENERAL NOTES:

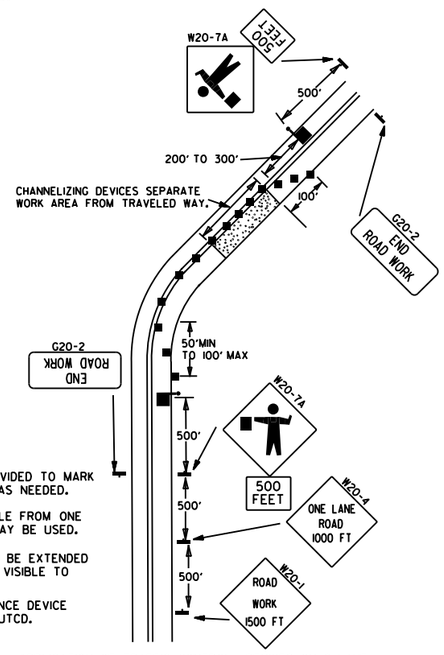
1. THE MAINTENANCE DIVISION SHALL CONDUCT A BALL BANK STUDY TO DETERMINE THE ADVISORY SPEED LIMIT PRIOR TO OPENING TO TRAFFIC. THE ADVISORY SPEED WILL BE POSTED ON W1-3 OR W1-4 CURVE WARNING SIGNS. USE W1-4 WHEN SPEED IS GREATER THAN 30MPH AND W1-3 WHEN 30MPH OR LESS
2. WHEN THE EXISTING SPEED LIMIT IS 55MPH AND THE PLANS REQUIRE A SPEED LIMIT OF 45MPH, THE R2-1(55) SHALL BE OMITTED AND THE W3-5 SHALL BE INSTALLED AT THAT LOCATION. ADDITIONAL R2-1 45MPH SPEED LIMIT SIGNS SHALL BE INSTALLED AT A MAXIMUM OF 1MILE INTERVALS. AT THE END OF THE WORK AREA A R2-1(XX) SHALL BE INSTALLED TO MATCH ORIGINAL SPEED LIMIT.
3. WHEN THE EXISTING SPEED LIMIT IS 65MPH AND THE PLANS REQUIRE A SPEED LIMIT OF 55MPH, THE R2-1(45) SHALL BE OMITTED. ADDITIONAL R2-1 55MPH SPEED LIMIT SIGNS SHALL BE INSTALLED AT A MAXIMUM OF 1MILE INTERVALS. AT THE END OF THE WORK AREA A R2-1(XX) SHALL BE INSTALLED TO MATCH ORIGINAL SPEED LIMIT.
4. THE MAXIMUM SPACING BETWEEN CHANNELIZING DEVICES IN A TAPER SHOULD BE APPROXIMATELY EQUAL IN FEET TO THE SPEED LIMIT. BEYOND THE TAPER, MAXIMUM SPACING SHALL BE TWO TIMES THE SPEED LIMIT, OR AS DIRECTED BY THE ENGINEER.
5. WARNING LIGHTS AND/OR FLAGS MAY BE MOUNTED TO SIGNS OR CHANNELIZING DEVICES AT NIGHT AS NEEDED.
6. PAVEMENT MARKINGS NO LONGER APPLICABLE WHICH MIGHT CREATE CONFUSION IN THE MINDS OF VEHICLE OPERATORS SHALL BE REMOVED OR OBLITERATED AS SOON AS PRACTICABLE.
7. TRAILER MOUNTED DEVICES SUCH AS ARROW PANELS AND PORTABLE CHANGEABLE MESSAGE SIGNS SHALL BE DELINEATED BY AFFIXING CONSPICUITY MATERIAL IN A CONTINUOUS LINE ON THE FACE OF THE TRAILER. WHEN PLACED ON OR ADJACENT TO THE SHOULDER AND NOT BEHIND A POSITIVE BARRIER, THESE DEVICES SHALL BE DELINEATED BY PLACING FIVE (5) TRAFFIC DRUMS, EQUALLY SPACED ALONG THE TRAFFIC SIDE OF THE DEVICE. PAYMENT FOR TRAFFIC DRUMS SHALL BE CONSIDERED INCLUDED IN THE PRICE BID FOR VARIOUS TRAILER MOUNTED DEVICES.
8. DIMENSIONS SHOWN FOR RAISED PAVEMENT MARKERS ARE TYPICAL. THE CONTRACTOR MAY SUBSTITUTE SIMILAR MARKERS WITH THE APPROVAL OF THE ENGINEER. REQUESTING APPROVAL FOR SIMILAR MARKERS MAY BE MADE BY REFERRING TO THE ARDOT QUALIFIED PRODUCTS LIST.
9. ALL TRAILER MOUNTED DEVICES SUCH AS ARROW PANELS AND PORTABLE CHANGEABLE MESSAGE SIGNS SHALL MEET THE REQUIREMENTS OF THE MANUAL FOR ASSESSING SAFETY HARDWARE (MASH).



NOTES:
1. REGULATORY TRAFFIC CONTROL DEVICES TO BE MODIFIED AS NEEDED FOR THE DURATION OF THE DETOUR.
2. STREET NAMES MAY BE USED WHEN DESIRABLE FOR DIRECTING DETOURED TRAFFIC.

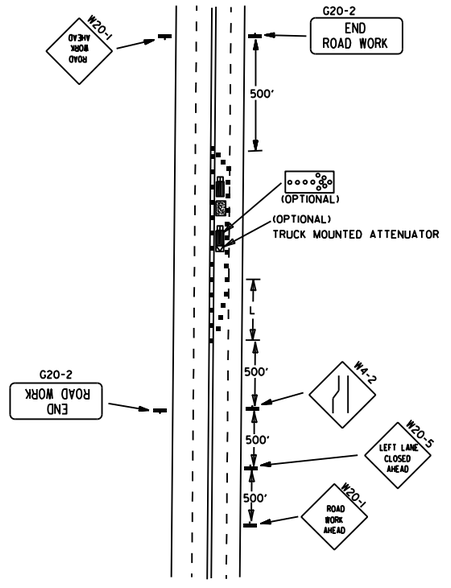


(D) TYPICAL APPLICATION - ROADWAY CLOSED BEYOND DETOUR POINT.



NOTES:
1. FLOOD LIGHTS SHOULD BE PROVIDED TO MARK FLAGGER STATIONS AT NIGHT AS NEEDED.
2. IF ENTIRE WORK AREA IS VISIBLE FROM ONE STATION, A SINGLE FLAGGER MAY BE USED.
3. CHANNELIZING DEVICES ARE TO BE EXTENDED TO A POINT WHERE THEY ARE VISIBLE TO APPROACHING TRAFFIC.
4. AUTOMATED FLAGGER ASSISTANCE DEVICE (AFAD) OPTIONAL. REFER TO MUTCD.

(E) TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES ON 2-LANE HIGHWAY WHERE ONE LANE IS CLOSED AND FLAGGING IS PROVIDED.



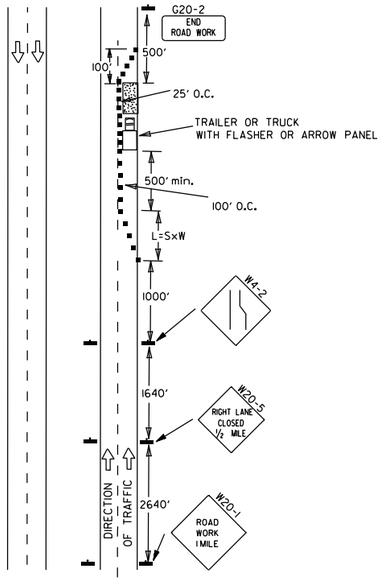
(F) TYPICAL APPLICATION - 4-LANE UNDIVIDED ROADWAY WITH INSIDE LANE CLOSED.

DATE	REVISION	FILMED
05-20-21	REVISED NOTE 7	
11-07-19	REVISED NOTE 1, ADDED NOTE 9	
9-2-15	REVISED NOTE 2, ADDED NOTE 8, REVISED DRAWING (A) & REPLACED R2-5A WITH W3-5	
9-12-13	REVISED DETAIL OF RAISED PAVEMENT MARKERS	
3-11-10	ADDED (AFAD)	
11-20-08	REVISED SIGN DESIGNATIONS	
11-18-04	ADDED GENERAL NOTE	
10-18-96	ADDED R55-1	
4-26-96	CORRECTED (a) BEHIND G20-2	
6-8-95	CORRECTED SIGN IDENT. ON W1-4A	6-8-95
2-2-95	REVISED PER PART VI, MUTCD, SEPT. 3, 1993	
8-15-91	DRAWN AND PLACED IN USE	

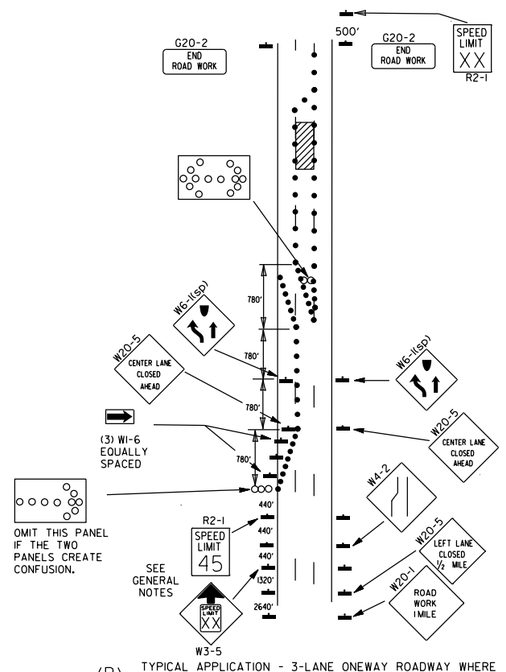
ARKANSAS STATE HIGHWAY COMMISSION

STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION

STANDARD DRAWING TC-2



(A) TYPICAL APPLICATION - DAYTIME MAINTENANCE OPERATIONS OF SHORT DURATION ON A 4-LANE DIVIDED ROADWAY WHERE HALF OF THE ROADWAY IS CLOSED.



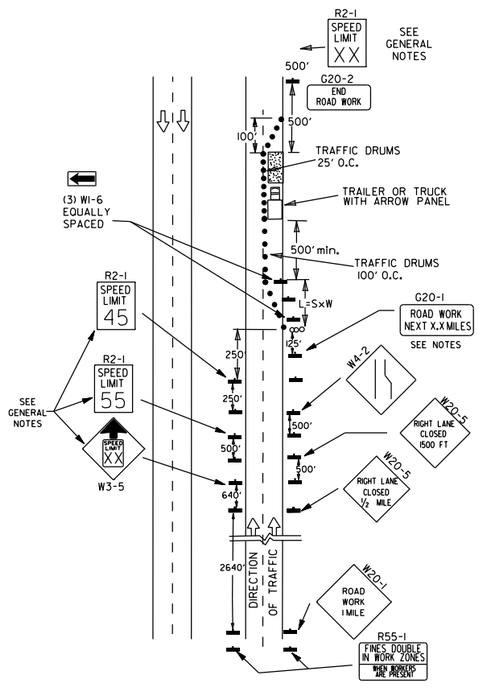
(B) TYPICAL APPLICATION - 3-LANE ONEWAY ROADWAY WHERE CENTER LANE IS CLOSED.

KEY:

- ARROW PANEL (IF REQUIRED)
- ■ CHANNELIZING DEVICE
- ● TRAFFIC DRUM

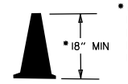
GENERAL NOTES:

1. A SPEED LIMIT REDUCTION MAY BE IMPLEMENTED ONLY WHEN DESIGNATED IN THE PLAN OR WHEN RECOMMENDED BY THE ROADWAY DESIGN DIVISION.
2. WHEN THE EXISTING SPEED LIMIT IS 55MPH AND THE PLANS REQUIRE A SPEED LIMIT OF 45MPH, THE R2-1(55) SHALL BE OMITTED AND THE W3-5 SHALL BE INSTALLED AT THAT LOCATION. ADDITIONAL R2-1 45MPH SPEED LIMIT SIGNS SHALL BE INSTALLED AT A MAXIMUM OF 1MILE INTERVALS. AT THE END OF THE WORK AREA A R2-1(XX) SHALL BE INSTALLED TO MATCH ORIGINAL SPEED LIMIT.
3. WHEN THE EXISTING SPEED LIMIT IS 65MPH AND THE PLANS REQUIRE A SPEED LIMIT OF 55MPH, THE R2-1(45) SHALL BE OMITTED. ADDITIONAL R2-1 55MPH SPEED LIMIT SIGNS SHALL BE INSTALLED AT A MAXIMUM OF 1MILE INTERVALS, AT THE END OF THE WORK AREA A R2-1(XX) SHALL BE INSTALLED TO MATCH ORIGINAL SPEED LIMIT.
4. THE MAXIMUM SPACING BETWEEN CHANNELIZING DEVICES IN A TAPER SHOULD BE APPROXIMATELY EQUAL IN FEET TO THE SPEED LIMIT. BEYOND THE TAPER, MAXIMUM SPACING SHALL BE TWO TIMES THE SPEED LIMIT OR AS DIRECTED BY THE ENGINEER.
5. WARNING LIGHTS AND/OR FLAGS MAY BE MOUNTED TO SIGNS OR CHANNELIZING DEVICES AT NIGHT AS NEEDED.
6. PAVEMENT MARKINGS NO LONGER APPLICABLE WHICH MIGHT CREATE CONFUSION IN THE MINDS OF VEHICLE OPERATORS SHALL BE REMOVED OR OBLITERATED AS SOON AS PRACTICABLE.
7. THE G20-1 SIGN WILL BE REQUIRED ON JOBS OF OVER TWO MILES IN LENGTH. WHEN THE LANE CLOSURE IS NOT AT THE BEGINNING OF THE PROJECT, THE G20-1 SIGN SHALL BE ERECTED 125' IN ADVANCE OF THE JOB LIMIT. ADDITIONAL W20-1 (1 MILE) SIGNS ARE NOT REQUIRED IN ADVANCE OF LANE CLOSURES THAT BEGIN INSIDE THE PROJECT LIMITS.
8. FLAGGERS SHALL USE STOP/SLOW PADDLES FOR CONTROLLING TRAFFIC THROUGH WORK ZONES. FLAGS MAY BE USED ONLY FOR EMERGENCY SITUATIONS.
9. ALL PLASTIC DRUMS AND CONES SHALL MEET THE REQUIREMENTS OF MANUAL FOR ASSESSING SAFETY HARDWARE (MASH).
10. TRAILER MOUNTED DEVICES SUCH AS ARROW PANELS AND PORTABLE CHANGEABLE MESSAGE SIGNS SHALL BE DELINEATED BY AFFIXING CONSPICUITY MATERIAL IN A CONTINUOUS LINE ON THE FACE OF THE TRAILER. WHEN PLACED ON OR ADJACENT TO THE SHOULDER AND NOT BEHIND A POSITIVE BARRIER, THESE DEVICES SHALL BE DELINEATED BY PLACING FIVE (5) TRAFFIC DRUMS, EQUALLY SPACED ALONG THE TRAFFIC SIDE OF THE DEVICE. PAYMENT FOR TRAFFIC DRUMS SHALL BE CONSIDERED INCLUDED IN THE PRICE BID FOR VARIOUS TRAILER MOUNTED DEVICES.
11. ALL TRAILER MOUNTED DEVICES SUCH AS ARROW PANELS AND PORTABLE CHANGEABLE MESSAGE SIGNS SHALL MEET THE REQUIREMENTS OF THE MANUAL FOR ASSESSING SAFETY HARDWARE (MASH).



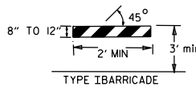
(C) TYPICAL APPLICATION - CONSTRUCTION OPERATIONS OF INTERMEDIATE TO LONG TERM DURATION ON A 4-LANE DIVIDED ROADWAY WHERE HALF OF THE ROADWAY IS CLOSED.

CHANNELIZING DEVICES



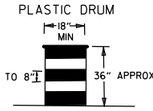
* WHEN CONES ARE USED ON FREEWAYS AND MULTI-LANE HIGHWAYS, THEY SHALL BE 28" MIN. DURING HOURS OF DARKNESS, 28" CONES SHALL BE USED ON ALL ROADWAYS, AND SHALL BE REFLECTORIZED IN ACCORDANCE WITH THE M.U.T.C.D.

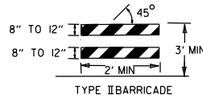
CONES



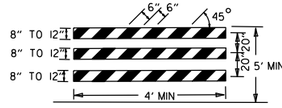
TYPE I BARRICADE

PLASTIC DRUM



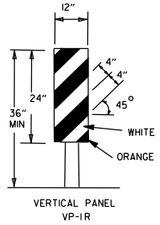


TYPE II BARRICADE



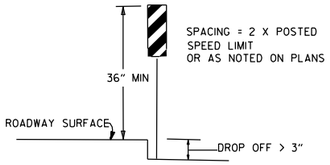
TYPE III BARRICADE

NOTE:
FOR ALL ROAD CLOSURES, THE TYPE III BARRICADES SHALL BE OF SUFFICIENT LENGTH TO EXTEND ACROSS ENTIRE ROADWAY.

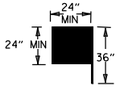


VERTICAL PANEL VP-1R

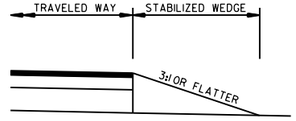
VERTICAL PANEL PLACEMENT



FLAG



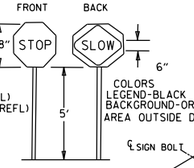
FLAG SHALL BE OF GOOD GRADE RED MATERIAL

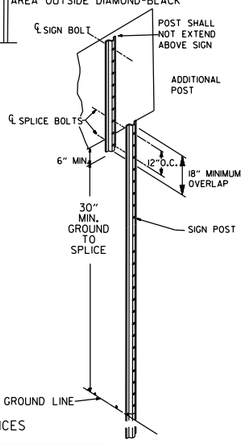


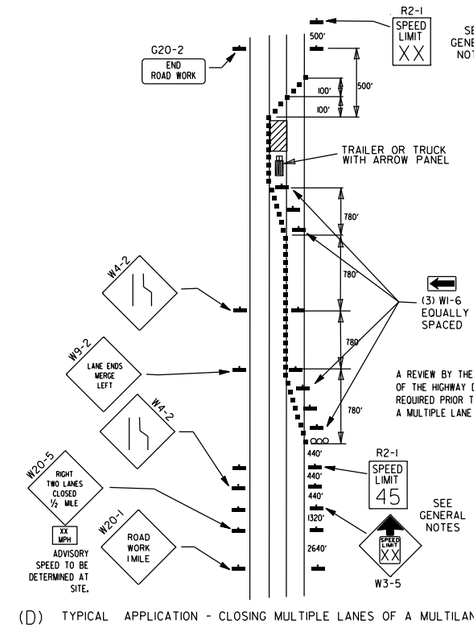
STABILIZED WEDGE

NOTE:
MATERIALS FOR THE STABILIZED WEDGE SHALL MEET THE REQUIREMENTS PROVIDED IN SECTION 603.02 OF THE STANDARD SPECIFICATIONS.

STOP SLOW PADDLE







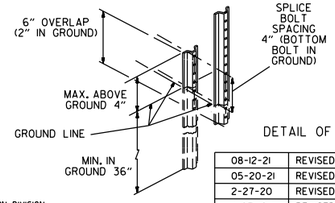
A REVIEW BY THE ROADWAY DESIGN DIVISION OF THE HIGHWAY DEPARTMENT WILL BE REQUIRED PRIOR TO IMPLEMENTING A MULTIPLE LANE CLOSURE.

(D) TYPICAL APPLICATION - CLOSING MULTIPLE LANES OF A MULTILANE HIGHWAY.

NOTES: USE SPLICES ONLY WHEN NECESSARY FOR INSTALLATION. TYPICAL INSTALLATION SHOULD HAVE NO SPLICES (SEE STD. DRAWING NO. SHS-21)

NORMAL INSTALLATIONS WILL REQUIRE 1/4" DIA. BOLTS TO MOUNT SIGNS TO POST AND 5/16" DIA. BOLTS TO ASSEMBLE THE VARIOUS POST SUPPORTS. EACH OF THESE BOLTS SHALL BE CARRIAGE BOLTS.

SIGN POSTS SHALL BE PAINTED GREEN; SIGNS SHALL NOT BE PAINTED, AND ALL SIGN POSTS SHALL BE PLUMB.



DETAIL OF SPLICES

TRAFFIC CONTROL DEVICES

NON-INTERSTATE

VERTICAL DIFFERENTIAL	LOCATION	TRAFFIC CONTROL	
		≤ 45 MPH	> 45 MPH
≤ 1"	CENTERLINE	W8-11	W8-11
> 1" ≤ 3"	CENTERLINE	W8-11 AND CENTERLINE LANE STRIPING	W8-11 AND CENTERLINE LANE STRIPING
> 3"	CENTERLINE	STANDARD LANE CLOSURE[6]	STANDARD LANE CLOSURE[6]
≤ 3"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	W8-9 AND TRAFFIC DRUMS[1]	W8-9 AND TRAFFIC DRUMS[1]
> 3" ≤ 6"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	W8-17, EDGE LINE STRIPING, AND TRAFFIC DRUMS[1]	W8-17, EDGE LINE STRIPING, AND TRAFFIC DRUMS[1]
> 6" ≤ 18"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	W8-17, EDGE LINE STRIPING, AND TRAFFIC DRUMS[1]	W8-17, EDGE LINE STRIPING, AND TRAFFIC DRUMS[2]
> 18" ≤ 24"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	W8-17, EDGE LINE STRIPING, AND TRAFFIC DRUMS[1]	A STABILIZED WEDGE, W8-17, EDGE LINE STRIPING AND TRAFFIC DRUMS[3]
> 24"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	PRECAST CONCRETE BARRIER[4] & EDGE LINES	PRECAST CONCRETE BARRIER[4] & EDGE LINES

INTERSTATE

VERTICAL DIFFERENTIAL	LOCATION	TRAFFIC CONTROL
≤ 3"	CENTERLINE	W8-11 AND LANE STRIPING
≤ 3"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	W8-9, EDGE LINE STRIPING, AND TRAFFIC DRUMS[2]
> 3" ≤ 6"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	W8-17, EDGE LINE STRIPING, AND TRAFFIC DRUMS[2]
> 6"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	PRECAST CONCRETE BARRIER & EDGE LINES

INTERSTATE AND NON-INTERSTATE

FORESLOPE	HEIGHT	TRAFFIC CONTROL
1:1	> 2 FT	PRECAST CONCRETE BARRIER
2:1	≤ 5 FT	TRAFFIC DRUMS
2:1	> 5 FT	PRECAST CONCRETE BARRIER
Flatter than 2:1	N/A	TRAFFIC DRUMS

GENERAL NOTES:

1. WHEN THE SHOULDER AREA IS USED AS PART OF THE TRAVELED LANE AND THERE IS INSUFFICIENT WIDTH TO PLACE TRAFFIC DRUMS ON THE REMAINING SHOULDER WIDTH, THEN VERTICAL PANELS SHALL BE USED.
2. WHEN THERE IS INSUFFICIENT WIDTH TO PLACE TRAFFIC DRUMS ON THE REMAINING SHOULDER WIDTH, A STABILIZED WEDGE SHALL BE USED.
3. PRECAST CONCRETE BARRIER WALL CAN BE USED IN LIEU OF A STABILIZED WEDGE, W8-17 SIGN, EDGE LINE STRIPING, AND TRAFFIC DRUMS, IF AND WHERE DIRECTED BY THE ENGINEER.
4. A STABILIZED WEDGE, W8-17 SIGN, EDGE LINE STRIPING, AND TRAFFIC DRUMS CAN BE USED IN LIEU OF PRECAST CONCRETE BARRIER WALL, IF AND WHERE DIRECTED BY THE ENGINEER.
5. W21-5, W21-5a, AND/OR W21-5b SIGNS SHALL BE USED WHERE THE ROADWAY IS UNOBSTRUCTED IF AND WHERE DIRECTED BY THE ENGINEER.
6. TIME LIMITATIONS MUST CONFORM TO SECTION 603 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION).

DATE	REVISION	FILMED
08-12-21	REVISED TRAFFIC CONTROL DEVICES AND NOTES	
05-20-21	REVISED NOTE 10	
2-27-20	REVISED TRAFFIC CONTROL DEVICES DETAILS	
11-07-19	REVISED NOTE 9, ADDED NOTE 11	
7-25-19	REVISED TRAFFIC CONTROL DEVICES DETAILS	
9-2-15	REVISED NOTE 2 & REPLACED R2-5A WITH W3-5	
10-15-09	ADDED REFERENCE TO MASH	
11-20-08	REVISED SIGN DESIGNATIONS	
11-18-04	ADDED NOTE	
10-1-98	ADDED NOTE	
4-03-97	ADDED (SP) TO W6-1& REVISED TRAFFIC CONTROL DEVICES NOTE	
10-18-96	ADDED R55-1	
10-12-95	MOVED UPPER SPLICE	
6-8-95	REVISED SPLICE DETAIL, TEXT	6-8-95
2-2-95	REVISED PER PART VI, MUTCD, SEPT. 3, 1993	
8-15-91	DRAWN AND PLACED IN USE	

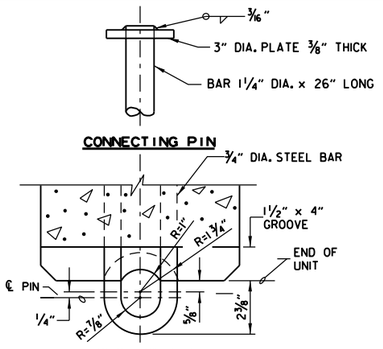
ARKANSAS STATE HIGHWAY COMMISSION

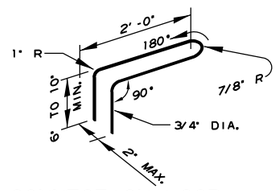
STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION

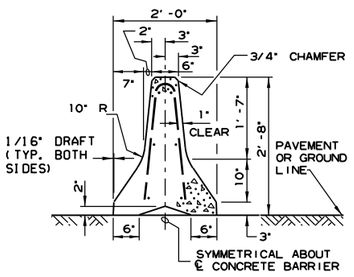
STANDARD DRAWING TC-3

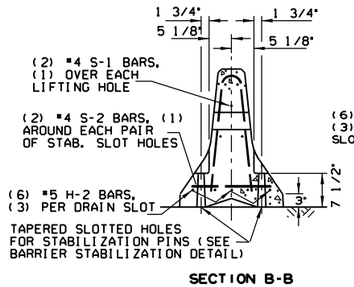
REINFORCING BAR TABLE PER BARRIER UNIT

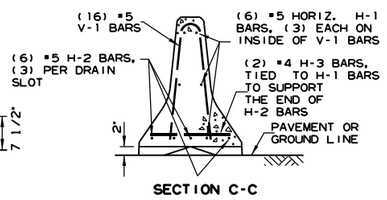
MARK	LOCATION	BAR SIZE	(NO. BARS)	SKETCH
H-1	HORIZONTAL IN BARRIER TIED INSIDE V-1 BARS	#5	(6)	19'-3"
H-2	CENTERED ABOVE DRAIN SLOTS LONG. & TRANSVERSELY	#5	(6)	6'-6"
H-3	TIED ABOVE H-1 BARS TO SUPPORT H-2, TIED TO V-1	#4	(2)	1'-6"
S-1	OVER LIFT HOLES	#4	(2)	2'-5", LIFTING HOLE, 90°, 3 3/8" R
S-2	HORIZ. AROUND SLOTS BETWEEN V-1'S @ DRAIN SLOTS	#4	(2)	1 1/2" R, SLOTS, 7", 1'-6", 1" MIN. CLEAR TO BAR; 5'-1" BAR W/(4) 1 1/2" R BENDS & MIN. 1'-0" OVERLAP
V-1	VERTICAL IN BARRIER(3) EACH END & (2) AT EACH DRAIN SLOTS	#5	(16)	TOTAL LENGTH 4'-9"; 2 3/16" R; 12°; 1 1/2"; 9"; 2'-1 3/8"; 4 3/8"

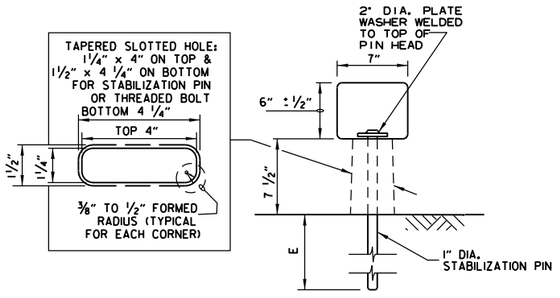




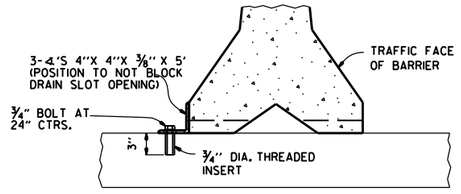






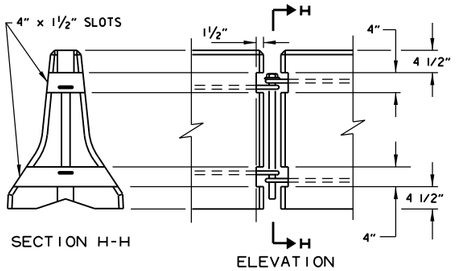


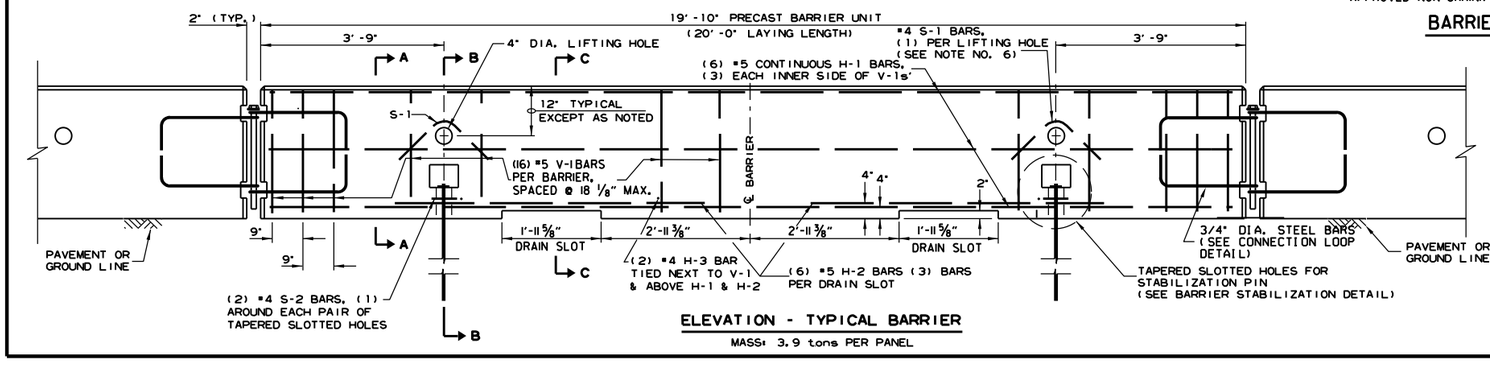
Ⓔ 4" - CONCRETE PAVEMENT
8" - ASPHALT PAVEMENT
12" - SHOULDER AREAS



NOTE: " THREADED INSERTS SHALL BE CAST IN PLACE FOR ALL NEW BRIDGE DECKS AND DRILLED AND GROUTED FOR EXISTING BRIDGE DECKS. INSERTS SHALL HAVE A MINIMUM ULTIMATE LOAD CAPACITY OF 8000 LBS. IN TENSION. AFTER REMOVAL OF BARRIER, BOLTS, AND ANGLES, THE INSERTS SHALL BE FILLED WITH APPROVED NON-SHRINK EPOXY.

BARRIER STABILIZATION DETAIL
BRIDGE DECKS





MASS: 3.9 tons PER PANEL

GENERAL NOTES

1. THE CONTRACTOR SHALL FURNISH THE PRECAST CONCRETE BARRIER UNITS AND SHALL BE RESPONSIBLE FOR THE MANUFACTURE, SHIPMENT, STORAGE, PLACEMENT AND REMOVAL. AT THE COMPLETION OF THE PROJECT, THE PRECAST UNITS WILL REMAIN THE PROPERTY OF THE CONTRACTOR.

2. MATERIALS SHALL MEET THE FOLLOWING MINIMUM REQUIREMENTS:
   CONCRETE: 2500 PSI COMPRESSIVE STRENGTH AT 28 DAYS.
   REINFORCING STEEL: AASHTO M 31 OR M 53, GRADE 60
   STRUCTURAL STEEL: AASHTO-M270 GRADE 36 SHALL BE USED FOR THE CONNECTION PIN, CONNECTION LOOPS, AND STABILIZATION PINS. A ONE PIECE PIN WITH A 3" ROUNDED TOP MAY BE USED IN PLACE OF THE DETAILED CONNECTION PIN.
   DELINEATORS: DELINEATORS SHALL BE MOUNTED AT 10' SPACING ON TOP OF PRECAST BARRIER.

   IN APPLICATIONS WHERE BARRIER WALL IS WITHIN 6 FEET OF A TRAFFIC LANE, ADDITIONAL DELINEATORS SHALL BE PLACED ON THE BARRIER AT 10' SPACING APPROXIMATELY ONE (1) FOOT FROM THE TOP OF THE BARRIER. DELINEATORS SHALL BE ON THE ARDOT QUALIFIED PRODUCTS LIST FOR CONSTRUCTION CONCRETE BARRIER MARKERS.
   DELINEATOR COLOR SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
   PAYMENT FOR DELINEATORS SHALL BE CONSIDERED INCLUDED IN THE PRICE BID PER LIN. FT. FOR "FURNISHING AND INSTALLING PRECAST CONCRETE BARRIER". THE CONTRACTOR SHALL CERTIFY TO THE ENGINEER THAT THE MATERIAL AND THE DESIGN USED IN THE PRECAST BARRIER UNITS MEETS THE REQUIREMENTS AS SHOWN ON THIS STANDARD DRAWING.

3. OTHER PRECAST CONCRETE BARRIERS THAT HAVE BEEN CRASH TESTED AND APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION TO MEET THE REQUIREMENTS OF MANUAL FOR ASSESSING SAFETY HARDWARE (MASH) WILL BE ACCEPTED IN LIEU OF THE BARRIER SHOWN. DRAIN SLOTS SHALL BE PROVIDED AS NEEDED OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH A CERTIFICATION OF MANUAL FOR ASSESSING SAFETY HARDWARE (MASH) COMPLIANCE FOR ANY OTHER TYPES OF PRECAST BARRIER TO BE USED. THE CERTIFICATION SHALL STATE THAT THE PRECAST CONCRETE BARRIER MEETS THE REQUIREMENTS OF MANUAL FOR ASSESSING SAFETY HARDWARE (MASH). MIXING OF SHAPES WILL NOT BE ALLOWED IN A CONTINUOUS LINE OF UNITS.

4. DOWEL HOLES IN PAVEMENT OR BRIDGE SLABS THAT ARE TO REMAIN IN PLACE SHALL BE FILLED. HOLES IN CONCRETE PAVEMENT AND BRIDGE SLABS SHALL BE FILLED WITH AN APPROVED NON-SHRINK EPOXY GROUT. HOLES IN ASPHALT PAVEMENT SHALL BE FILLED WITH AN APPROVED ASPHALT JOINT FILLER. PAYMENT FOR DRILLING AND FILLING HOLES TO BE INCLUDED IN THE PRICE FOR VARIOUS BARRIER ITEMS.

5. ATTACH UNITS TO ROADWAY SURFACE WITH STABILIZATION PINS AND TO DECK SLABS USING BOLTS WHEN REQUIRED.

6. A 4" WHITE PVC SLEEVE MAY BE USED TO FORM THE LIFTING HOLE AND IF USED THE SLEEVE IS TO BE LEFT IN PLACE.

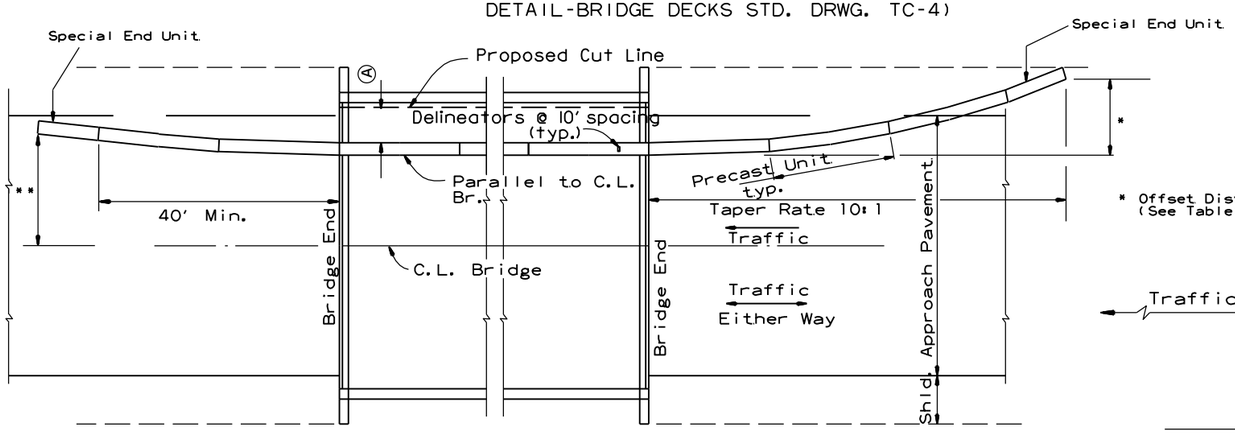
DATE	REVISION	FILMED
11-07-19	REVISED NOTE 3	
2-27-14	REVISED BARRIER STABILIZATION DETAIL	
10-15-09	ADDED REFERENCE TO WASH	
8-5-09	REV. NOTE 3 CONCERNING DRAIN SLOTS	
11-29-07	REVISED NOTE 3	
5-25-06	DELETED GENERAL NOTE 7	
11-18-04	REVISED BARRIER STABILIZATION DETAIL BRIDGE DECKS	
4-10-03	REVISED GENERAL NOTE 2	
8-22-02	ISSUED NEW DRAWING	

ARKANSAS STATE HIGHWAY COMMISSION

STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION - TEMPORARY PRECAST BARRIER

STANDARD DRAWING TC-4

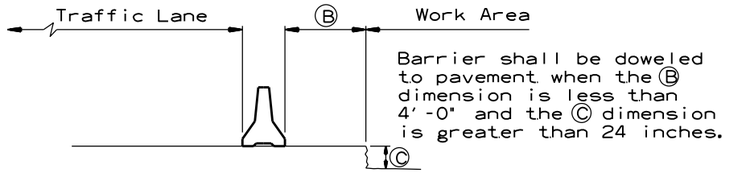
Ⓐ 4 feet or greater preferred. If less than 4 feet, Precast Units shall be connected to slab (SEE BARRIER STABILIZATION DETAIL-BRIDGE DECKS STD. DRWG. TC-4)



BARRIER PLACEMENT ALONG BRIDGE WITH OFFSET

No Scale

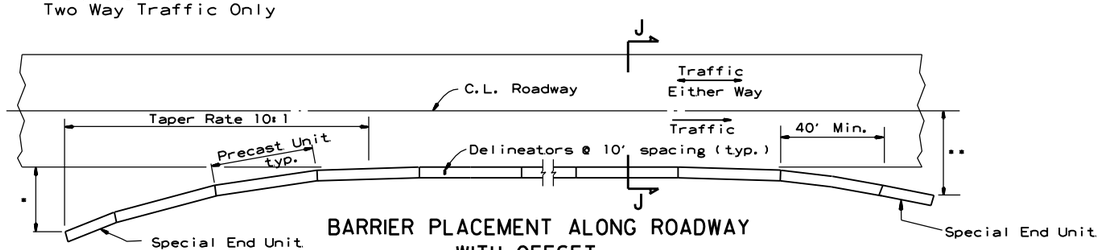
** Offset Distance for Two Way Traffic Only



Barrier shall be doweled to pavement when the Ⓑ dimension is less than 4'-0" and the Ⓒ dimension is greater than 24 inches.

SECTION J-J

No Scale



BARRIER PLACEMENT ALONG ROADWAY WITH OFFSET

No Scale

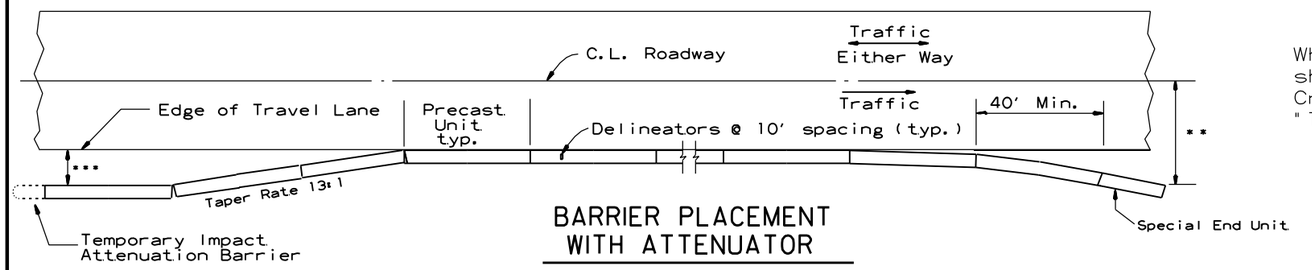
** Offset Distance For Two Way Traffic Only

* Offset Distance (See Table)

Offset Distance Table

Speed (MPH)	Offset Distance (FT.)
≤ 45	12
> 45	18

If offset distance is not attainable, then see "Barrier Placement With Attenuator" Detail shown below.

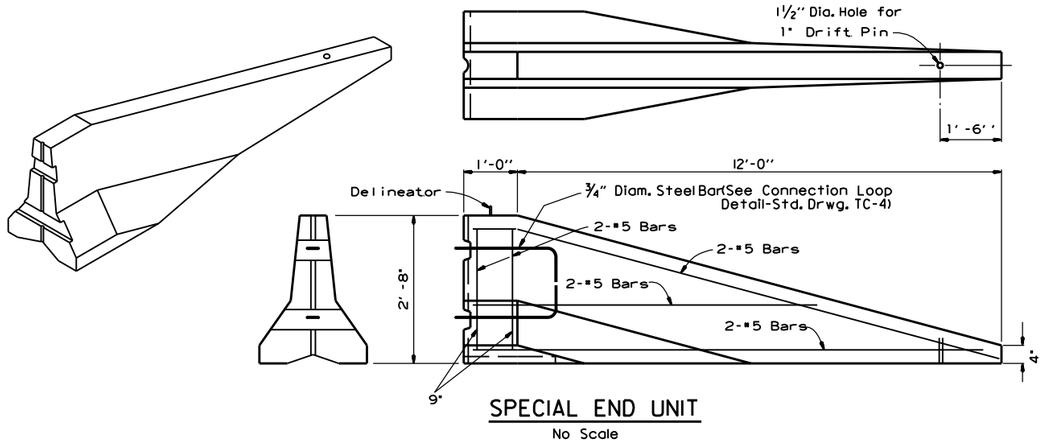


BARRIER PLACEMENT WITH ATTENUATOR

No Scale

*** Min. 3'-0" From Edge of Travel Lane to Nearest Edge of Attenuator

** Offset Distance For Two Way Traffic Only



SPECIAL END UNIT

No Scale

General Notes

When shown on the Plans, the ends of the Temporary Precast Concrete Barrier shall be protected with a Manual For Assessing Safety Hardware (MASH) approved Crash Cushion. Payment for Crash Cushions shall be made under the item of "Temporary Impact Attenuation Barrier."

DATE	REVISION	FILMED
11-07-19	REVISED NOTE	
10-15-09	ADDED REFERENCE TO MASH	
5-25-06	REVISED BARRIER PLACEMENT	
8-22-02	ISSUED NEW DRAWING	

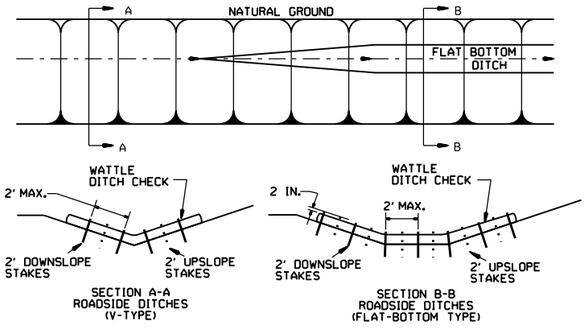
ARKANSAS STATE HIGHWAY COMMISSION

STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION - TEMPORARY PRECAST BARRIER

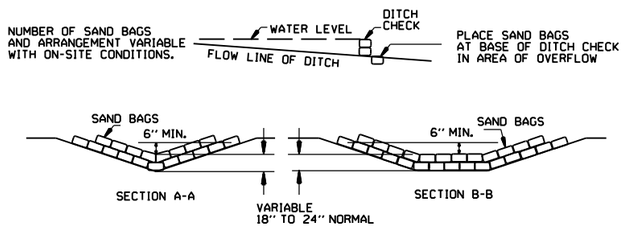
STANDARD DRAWING TC-5

GENERAL NOTES

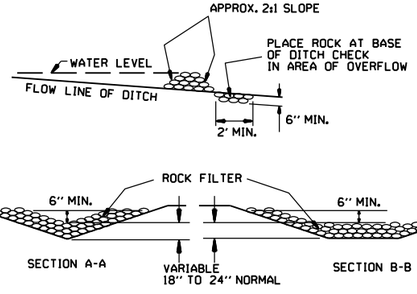
INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.



WATTLE DITCH CHECK (E-1)



SAND BAG DITCH CHECK (E-5)

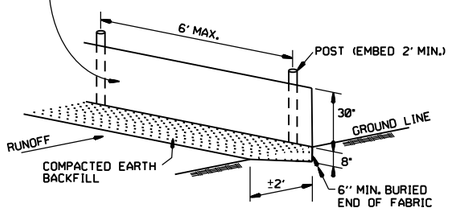


ROCK DITCH CHECK (E-6)

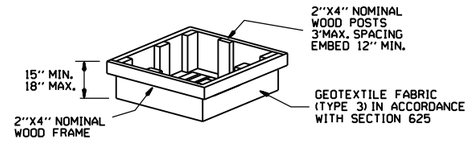
GENERAL NOTES

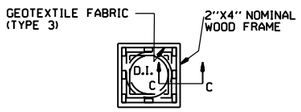
GEOTEXTILE FABRIC (TYPE 4) IN ACCORDANCE WITH SECTION 625

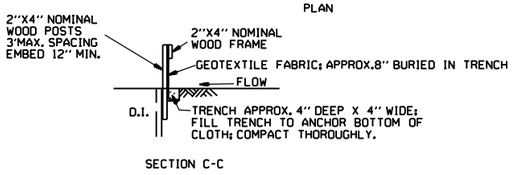
GEOTEXTILE FABRIC SHALL BE SPLICED TOGETHER WITH A SEWN SEAM ONLY AT A SUPPORT POST OR TWO SECTIONS OF FENCE MAY BE OVERLAPPED INSTEAD. PAYMENT OF ADDITIONAL MATERIAL FOR OVERLAP WILL NOT BE MADE.



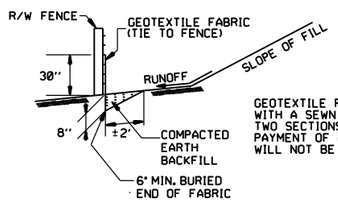
SILT FENCE (E-11)





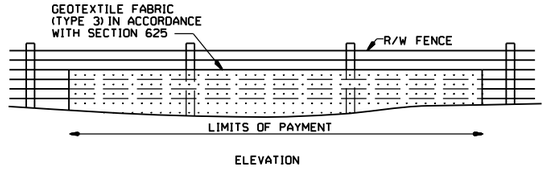


DROP INLET SILT FENCE (E-7)



GENERAL NOTES

GEOTEXTILE FABRIC SHALL BE SPLICED TOGETHER WITH A SEWN SEAM ONLY AT A SUPPORT POST, OR TWO SECTIONS OF FENCE MAY BE OVERLAPPED INSTEAD. PAYMENT OF ADDITIONAL MATERIAL FOR OVERLAP WILL NOT BE MADE.



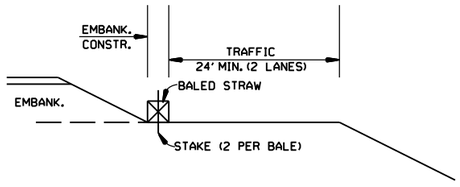
SILT FENCE ON R/W FENCE (E-4)

GENERAL NOTES

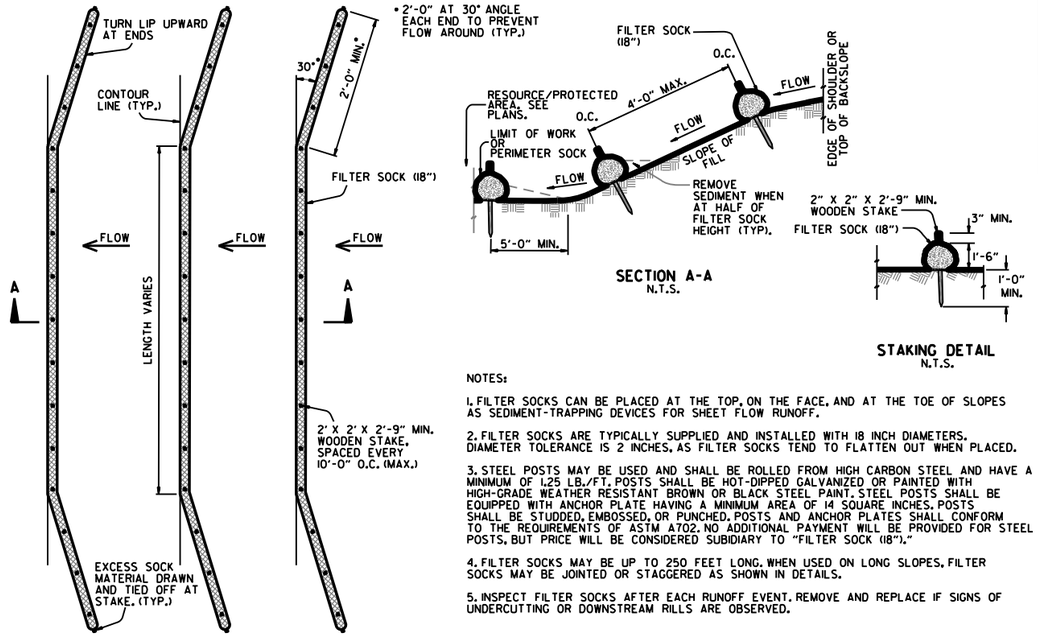
1. STRAW BALES SHALL BE INSTALLED SO THAT THE BINDINGS ARE ORIENTED AROUND THE SIDES RATHER THAN ALONG THE TOPS AND BOTTOMS OF THE BALES. THE BALES SHALL BE A MINIMUM OF 30 INCHES IN LENGTH.

2. NO GAPS SHALL BE LEFT BETWEEN BALES.

3. BALED STRAW FILTER BARRIERS COMPLETED AND ACCEPTED WILL BE MEASURED BY THE BALE IN PLACE AS AUTHORIZED BY THE ENGINEER AND WILL BE PAID FOR AT THE CONTRACT UNIT PRICE BID PER BALE FOR BALED STRAW DITCH CHECKS.



BALED STRAW FILTER BARRIER (E-2)



NOTES:

1. FILTER SOCKS CAN BE PLACED AT THE TOP, ON THE FACE, AND AT THE TOE OF SLOPES AS SEDIMENT-TRAPPING DEVICES FOR SHEET FLOW RUNOFF.

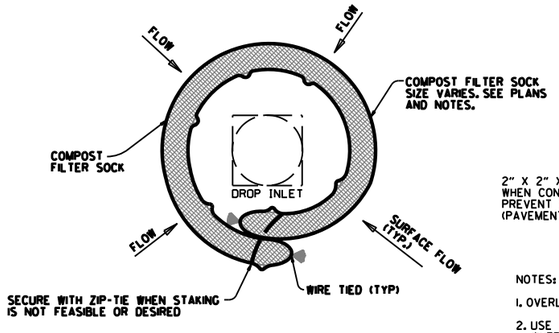
2. FILTER SOCKS ARE TYPICALLY SUPPLIED AND INSTALLED WITH 18 INCH DIAMETERS. DIAMETER TOLERANCE IS 2 INCHES, AS FILTER SOCKS TEND TO FLATTEN OUT WHEN PLACED.

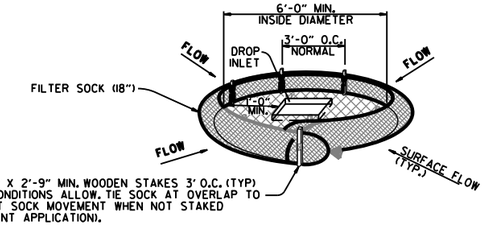
3. STEEL POSTS MAY BE USED AND SHALL BE ROLLED FROM HIGH CARBON STEEL AND HAVE A MINIMUM OF 1.25 LB./FT. POSTS SHALL BE HOT-DIPPED GALVANIZED OR PAINTED WITH HIGH-GRADE WEATHER RESISTANT BROWN OR BLACK STEEL PAINT. STEEL POSTS SHALL BE EQUIPPED WITH ANCHOR PLATE HAVING A MINIMUM AREA OF 14 SQUARE INCHES. POSTS SHALL BE STUDDED, EMBOSSED, OR PUNCHED. POSTS AND ANCHOR PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A702. NO ADDITIONAL PAYMENT WILL BE PROVIDED FOR STEEL POSTS, BUT PRICE WILL BE CONSIDERED SUBIDIARY TO "FILTER SOCK (18")."

4. FILTER SOCKS MAY BE UP TO 250 FEET LONG. WHEN USED ON LONG SLOPES, FILTER SOCKS MAY BE JOINTED OR STAGGERED AS SHOWN IN DETAILS.

5. INSPECT FILTER SOCKS AFTER EACH RUNOFF EVENT. REMOVE AND REPLACE IF SIGNS OF UNDERCUTTING OR DOWNSTREAM RILLS ARE OBSERVED.

FILTER SOCK ALONG SLOPE (E-3)





NOTES:

1. OVERLAP ENDS OF SOCK (1' MIN. 3' MAX.).

2. USE 18" DIA. SOCK IN NON-TRAFFIC AREAS OR AREAS WHERE SAFETY IS NOT A CONCERN.

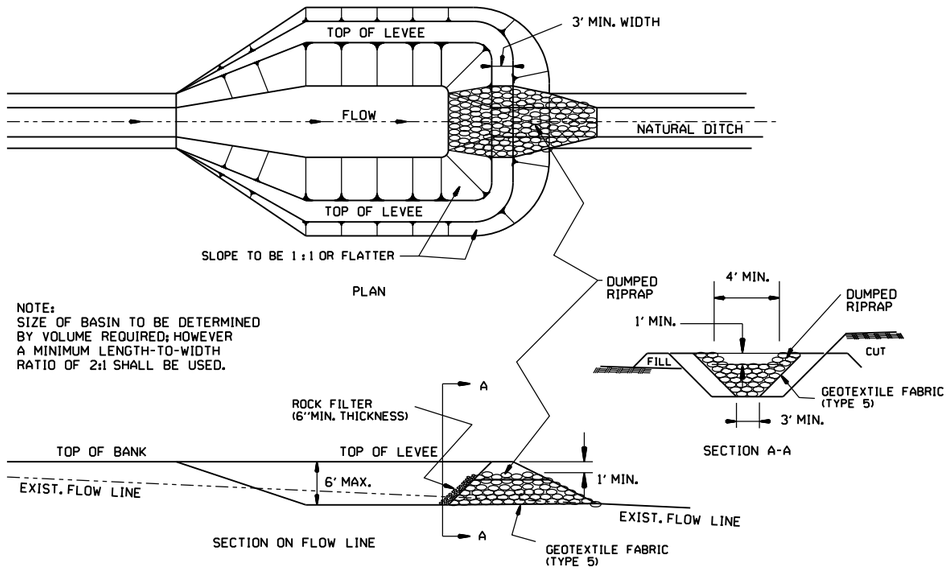
COMPOST FILTER SOCK DROP INLET PROTECTION (E-13)

DATE	REVISION	FILMED
11-16-17	ADDED FILTER SOCK E-3 AND E-13	
12-15-11	DELETED BALED STRAW DITCH CHECK & ADDED WATTLE DITCH CHECK	
11-18-98	ADDED NOTES	
07-02-98	ADDED BALED STRAW FILTER BARRIER (E-2)	
07-20-95	REVISED SILT FENCE E-4 AND E-11	7-20-95
07-15-94	REV. E-4 & E-11 MIN. 13" BURIED END OF FABRIC	
06-02-94	REVISED E-1,4,7 & 11; DELETED E-2 & 3	6-2-94
04-01-93	REDRAWN	
10-01-92	REDRAWN	
08-02-76	ISSUED R.D.M.	298-7-28-76

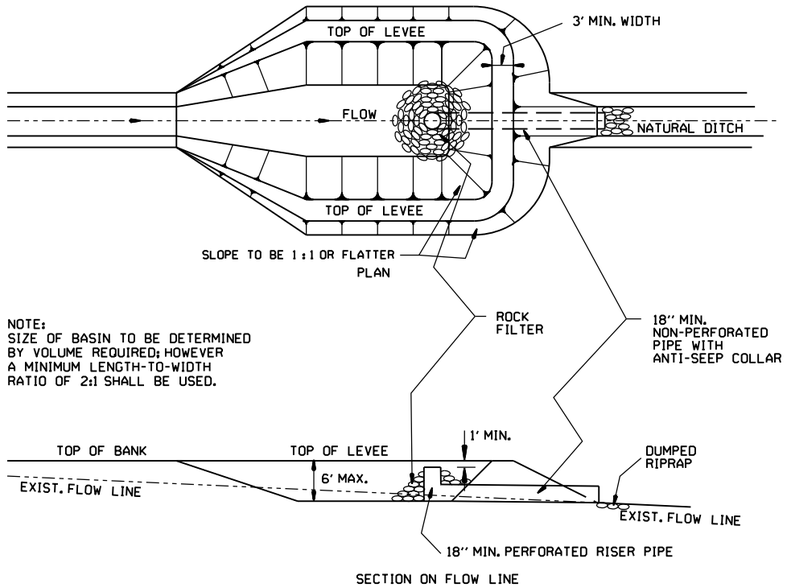
ARKANSAS STATE HIGHWAY COMMISSION

TEMPORARY EROSION CONTROL DEVICES

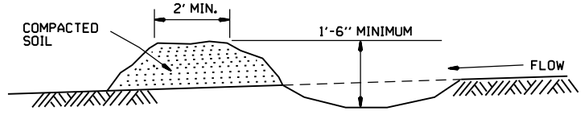
STANDARD DRAWING TEC-1



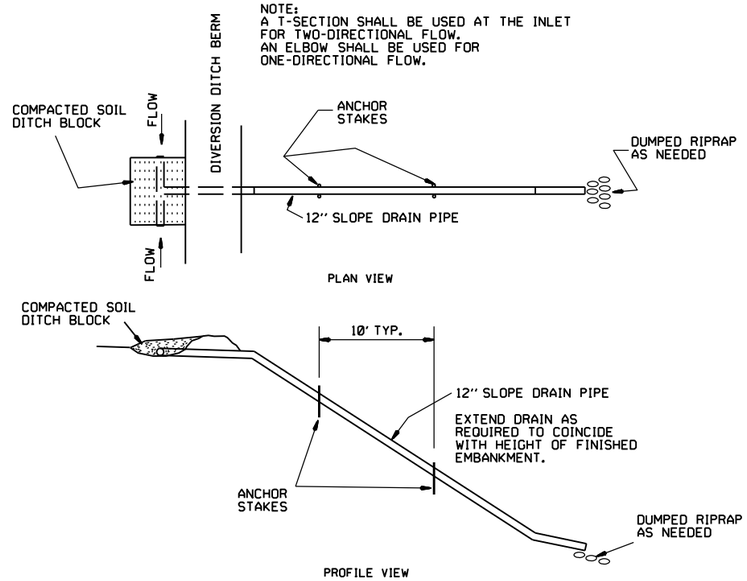
SEDIMENT BASIN WITH RIPRAP OUTLET (E-9)



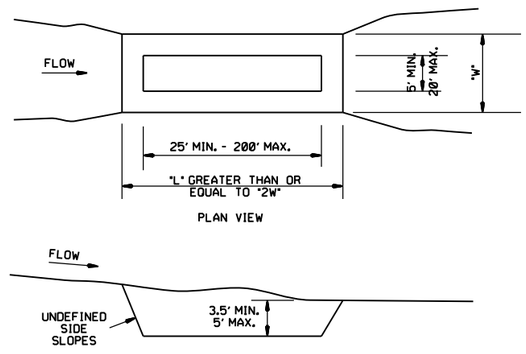
SEDIMENT BASIN WITH PIPE OUTLET (E-10)



DIVERSION DITCH (E-8)



SLOPE DRAIN (E-12)



SEDIMENT BASIN (E-14)

DATE	REVISION	FILMED
6-2-94	Revised E-8 & E-12; Added E-14 & Deleted E-13	
4-1-93	ISSUED	

ARKANSAS STATE HIGHWAY COMMISSION

TEMPORARY EROSION CONTROL DEVICES

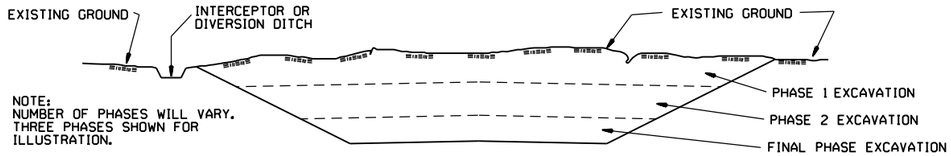
STANDARD DRAWING TEC-2

CLEARING AND GRUBBING

CONSTRUCTION SEQUENCE

1. PLACE PERIMETER CONTROLS (I.E. SILT FENCES , DIVERSION DITCHES, SEDIMENT BASINS, ETC.)
2. PERFORM CLEARING AND GRUBBING OPERATION.

EXCAVATION



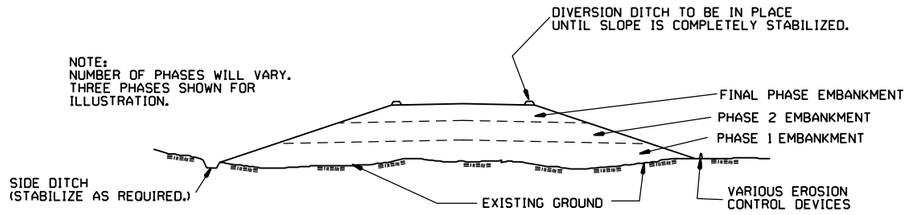
GENERAL NOTE

ALL CUT SLOPES SHALL BE DRESSED, PREPARED, SEEDED, AND MULCHED AS THE WORK PROGRESSES. SLOPES SHALL BE EXCAVATED AND STABILIZED IN EQUAL INCREMENTS NOT TO EXCEED 25 FEET, MEASURED VERTICALLY.

CONSTRUCTION SEQUENCE

1. EXCAVATE AND STABILIZE INTERCEPTOR AND/OR DIVERSION DITCHES.
2. PERFORM PHASE 1 EXCAVATION. PLACE PERMANENT OR TEMPORARY SEEDING.
3. PERFORM PHASE 2 EXCAVATION. PLACE PERMANENT OR TEMPORARY SEEDING.
4. PERFORM FINAL PHASE OF EXCAVATION. PLACE PERMANENT OR TEMPORARY SEEDING. STABILIZE DITCHES. CONSTRUCT DITCH CHECKS, DIVERSION DITCHES, SEDIMENT BASINS, OR OTHER EROSION CONTROL DEVICES AS REQUIRED.

EMBANKMENT



GENERAL NOTE

ALL EMBANKMENT SLOPES SHALL BE DRESSED, PREPARED, SEEDED, AND MULCHED AS THE WORK PROGRESSES. SLOPES SHALL BE CONSTRUCTED AND STABILIZED IN EQUAL INCREMENTS NOT TO EXCEED 25 FEET, MEASURED VERTICALLY.

CONSTRUCTION SEQUENCE

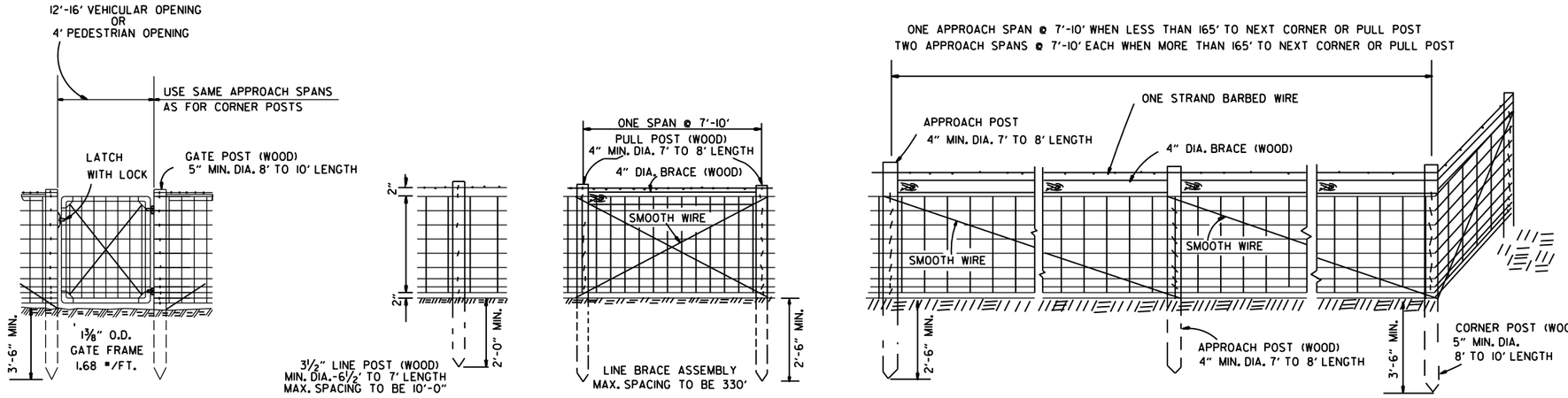
1. CONSTRUCT DIVERSION DITCHES, DITCH CHECKS, SEDIMENT BASINS, SILT FENCES, OR OTHER EROSION CONTROL DEVICES AS SPECIFIED.
2. PLACE PHASE 1 EMBANKMENT WITH PERMANENT OR TEMPORARY SEEDING. PROVIDE DIVERSION DITCHES AND SLOPE DRAINS IF EMBANKMENT CONSTRUCTION IS TO BE TEMPORARILY ABANDONED FOR A PERIOD OF GREATER THAN 21 DAYS.
3. PLACE PHASE 2 EMBANKMENT WITH PERMANENT OR TEMPORARY SEEDING. PROVIDE DIVERSION DITCHES AND SLOPE DRAINS IF EMBANKMENT CONSTRUCTION IS TO BE TEMPORARILY ABANDONED FOR A PERIOD OF GREATER THAN 21 DAYS.
4. PLACE FINAL PHASE OF EMBANKMENT WITH PERMANENT OR TEMPORARY SEEDING. PLACE DIVERSION DITCHES AND SLOPE DRAINS AND MAINTAIN UNTIL ENTIRE SLOPE IS STABILIZED.

11-03-94	CORRECTED SPELLING	
6-2-94	Drawn & Issued	6-2-94
DATE	REVISION	FILMED

ARKANSAS STATE HIGHWAY COMMISSION

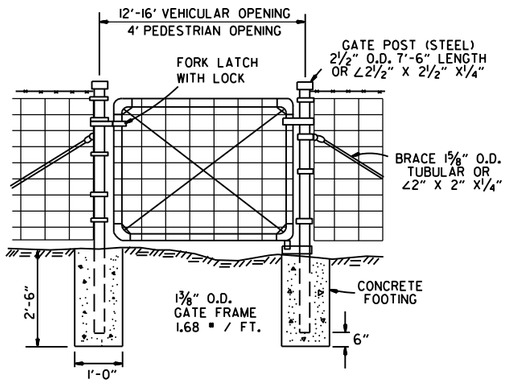
TEMPORARY EROSION CONTROL DEVICES

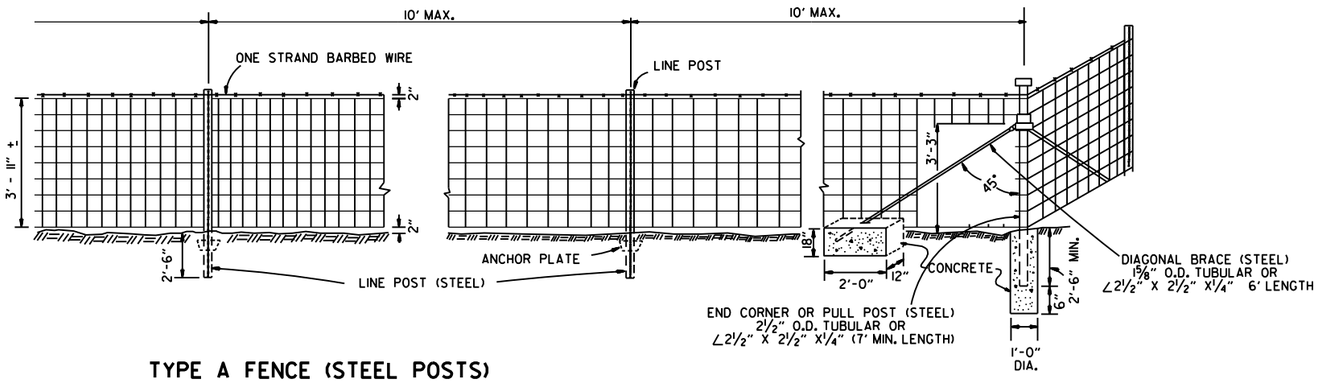
STANDARD DRAWING TEC-3



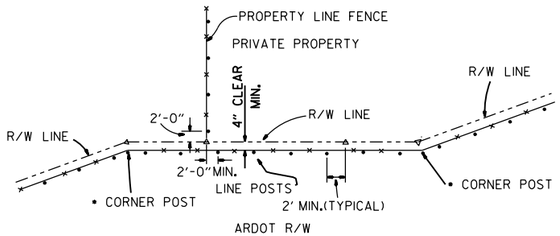
NOTE: STAPLE AT LEAST TOP, BOTTOM AND ALTERNATE WIRES OF WOVEN FABRIC FOR WOOD LINE POSTS.

TYPE A FENCE (WOOD POSTS)





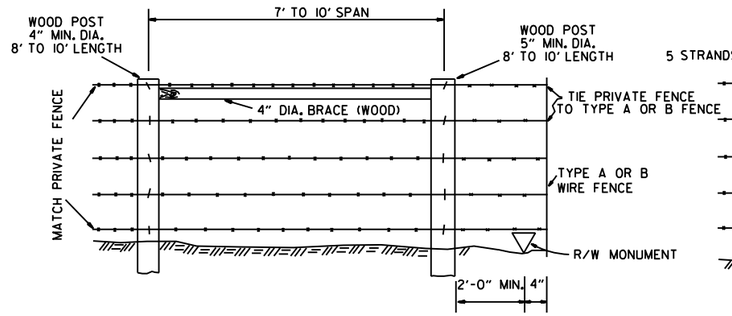
TYPE A FENCE (STEEL POSTS)



•NOTE: RIGHT-OF-WAY MONUMENTS SHALL NOT BE DISTURBED BY FENCE CONSTRUCTION. CORNER POSTS SHALL BE CONSTRUCTED 2' FROM THE RIGHT-OF-WAY MONUMENT OR AS DIRECTED BY THE ENGINEER.

△ - R/W MONUMENTS
• - FENCE POSTS

RIGHT-OF-WAY FENCE LOCATION

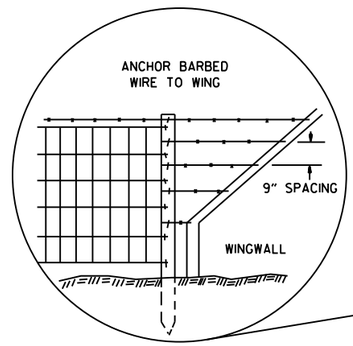


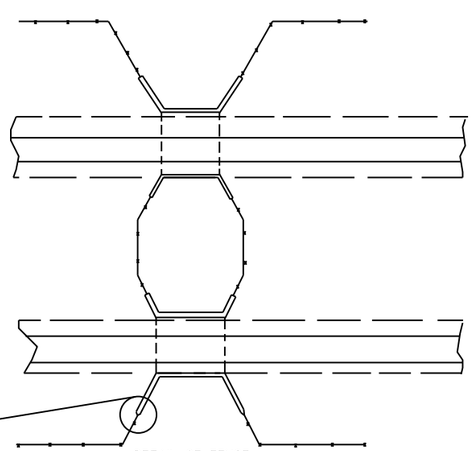
WHERE EXISTING PRIVATE FENCE CONSISTS OF STEEL POSTS, USE END POST ASSEMBLY AS SHOWN WITH TYPE A FENCE OR OTHER END POST ASSEMBLY AS APPROVED BY THE ENGINEER.

PRIVATE FENCE TERMINAL INSTALLATION

SPACING AND SIZE OF POSTS FOR TYPE B FENCE SHALL BE THE SAME AS TYPE A FENCE.

TYPE B FENCE





DETAIL OF FENCE CONSTRUCTION AT LARGE CULVERTS (5' IN HEIGHT AND OVER)

GENERAL NOTES:

STEEL LINE POSTS SHALL BE GALVANIZED, 7 FT. IN LENGTH.

TUBULAR END, CORNER, PULL, OR DIAGONAL BRACES MUST CONFORM TO THE DIMENSIONS AND WEIGHTS SPECIFIED ON STANDARD DRAWING WF-3 (CHAIN LINK).

THE CONTRACTOR SHALL FURNISH AT LEAST 25% OF WOOD LINE POSTS OF 7' LENGTHS IN ORDER TO PROVIDE SUFFICIENT SET IN SOFT GROUND OR SMALL DEPRESSIONS.

GATE HINGES AND LATCHES WITH LOCKS TO BE OF A TYPE APPROVED BY THE ENGINEER. DRIVEWAY GATES, EITHER SINGLE 12' OR 16' OR DOUBLE 6' TO 8' OPENINGS OF THE SAME TYPE AS THE PEDESTRIAN GATE, SHALL BE INSTALLED ON THE RIGHT SIDE OF EACH THROUGH LANE ROAD AT LARGE CULVERTS OR BRIDGE CROSS FENCE FOR USE BY MAINTENANCE EQUIPMENT. LOCATION OF GATES TO BE SHOWN ON THE PLANS OR AS DESIGNATED BY THE ENGINEER.

AT STREAM CROSSINGS THE FENCE SHALL NOT BE CONSTRUCTED ACROSS LARGE STREAMS. WHERE CLEARANCE IS SUFFICIENT FROM THE TOP OF BANK TO THE BRIDGE STRUCTURE, A CROSS CONNECTION SHALL BE CONSTRUCTED BETWEEN THE FENCE ON EACH SIDE OF THE ROAD. WHERE THE CLEARANCE IS NOT SUFFIEICNT, THE FENCE SHALL BE TERMINATED WITH CROSS CONNECTIONS AND END POSTS ADJACENT TO THE BRIDGE ABUTMENTS OR CULVERT WINGWALLS.

SPLICE FOR WOVEN WIRE BETWEEN PULL POST SHALL BE BY THE "WESTERN UNION METHOD" AS DESCRIBED AS FOLLOWS: THE VERTICAL WIRES FOR EACH END OF THE FENCE FABRIC SHALL BE PLACED SIDE BY SIDE AND THE PROJECTING HORIZONTAL WIRES SHALL BE WRAPPED A MINIMUM OF 4 TIMES AROUND THE HORIZONTAL WIRES OF THE FIRST WEB.

SPLICE FOR BARBED WIRE BETWEEN PULL POST ASSEMBLY SHALL BE BY THE "EYE METHOD": AS DESCRIBED AS FOLLOWS: THE ENDS OF THE BARBED WIRE SHALL BE BENT TO FORM A LOOP. THE LOOPS SHALL BE CONNECTED. AFTER THE LOOPS ARE CONNECTED THE ENDS OF THE WIRE SHALL BE WRAPPED AROUND THE PROJECTING WIRE A MINIMUM OF 4 TIMES FOR EACH WIRE LOOP.

DATE	REVISION	DATE FILMED
8-22-02	REVISED GENERAL NOTES	
10-18-96	REVISED ASTM REF. TO AASHTO	
11-22-95	REVISED R-O-W LOCATION DETAIL	
6-2-94	ADDED CORNER POST NOTE	6-2-94
8-5-93	REVISED R-O-W LOCATION DETAIL	8-5-93
10-1-92	ADDED STAPLE NOTE	
8-2-90	REV'D PULL POST LENGTH	
11-30-89	DELETED CLASS CONC.	
7-15-88	ADDED SPLICE NOTES	
7-15-88	ADDED HEIGHT DIMENSION	
4-3-87	REVISED VARIOUS NOTES	
	AND GENERAL NOTES	
11-1-84	MAX. POST SPACING	
1-4-83	MIN. DIA. LINE POST	
10-2-72	REVISED & REDRAWN	

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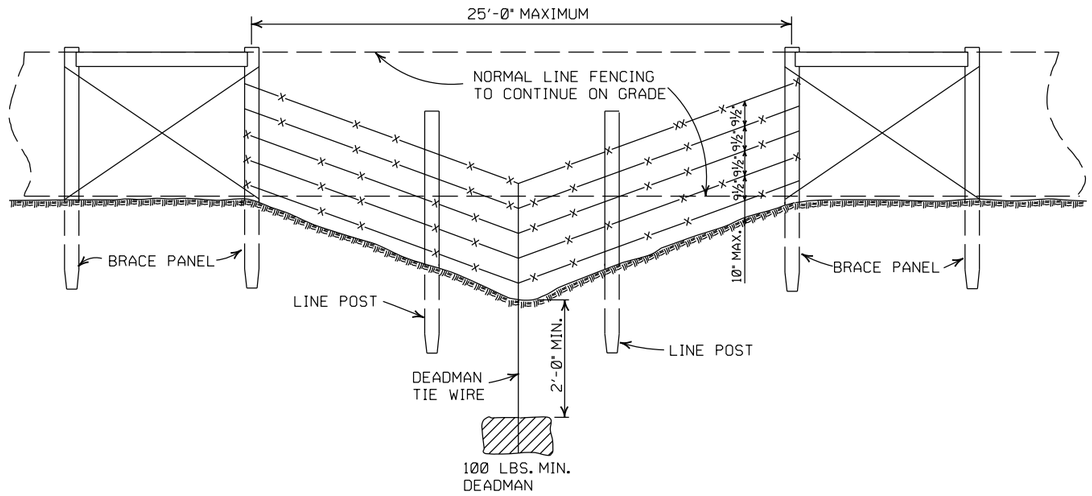
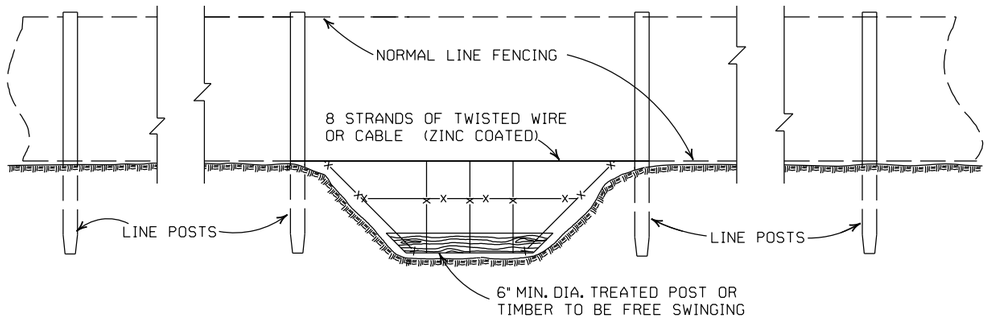
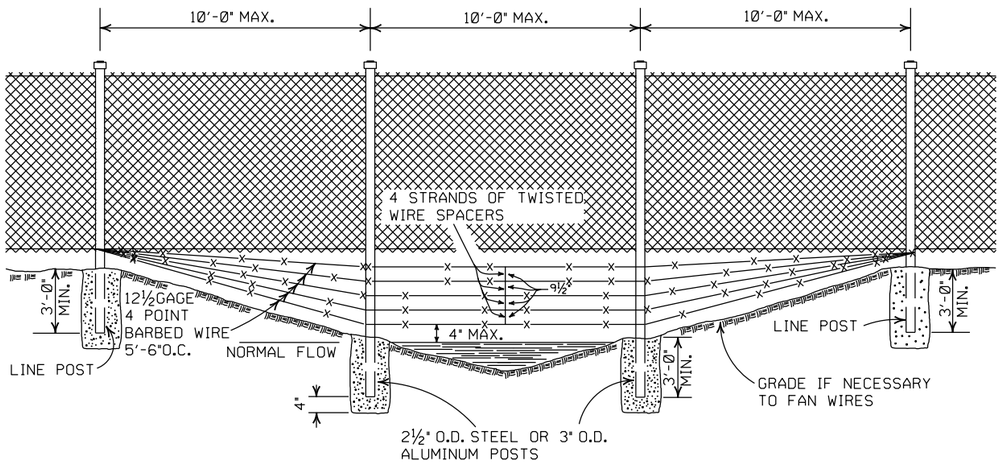
WIRE FENCE
TYPE A AND B

STANDARD DRAWING WF-1







GENERAL NOTES:

THESE INSTALLATIONS TO BE USED WHERE NORMAL FENCING INSTALLATION WOULD CAUSE THE COLLECTING OF DRIFT IN THE CHANNEL OR THE DEPRESSION WILL NOT PERMIT NORMAL INSTALLATION. INSTALLATIONS WILL BE MADE ONLY WHERE DIRECTED BY THE ENGINEER.

WHEN A FENCE LINE APPROACHES A DITCH, GULLY OR DEPRESSION, THE LAST POST ON LEVEL GROUND SHALL BE PLACED CLOSE ENOUGH TO THE EDGE OF THE DROP OFF THAT THE FENCE MAY BE STRUNG TO THE POST IN THE DEPRESSION WITHOUT TOUCHING THE GROUND.

IN TERRAIN OF SUCH EXTREME IRREGULARITY THAT MINOR GRADING WILL NOT BE FEASIBLE, THE NORMAL FENCE SHALL CONTINUE ON GRADE AND THE GULLIES OR DEPRESSIONS TREATED BY AUXILIARY FENCES AS SHOWN.

PAYMENT FOR THE TYPE INSTALLATION USED WILL NOT BE MADE DIRECTLY BUT WILL BE INCLUDED IN THE CONTRACT UNIT PRICE BID FOR WIRE FENCE OR CHAIN LINK FENCE.

DATE	REVISION	FILMED
4-20-79	REVISED TOP RAIL & TENSION WIRE	696-4-20-79
10-2-72	REVISED AND REDRAWN	529-10-2-72

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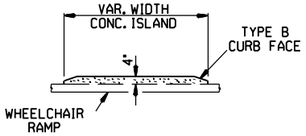
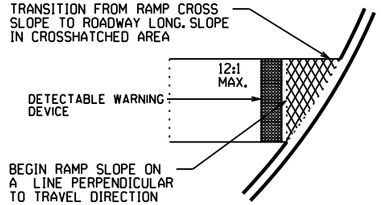
WIRE FENCE WATER GAPS

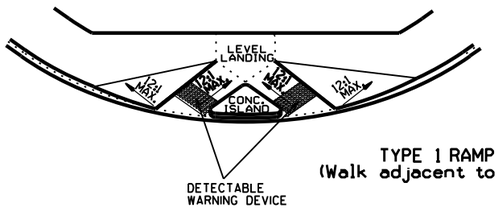
STANDARD DRAWING WF-2



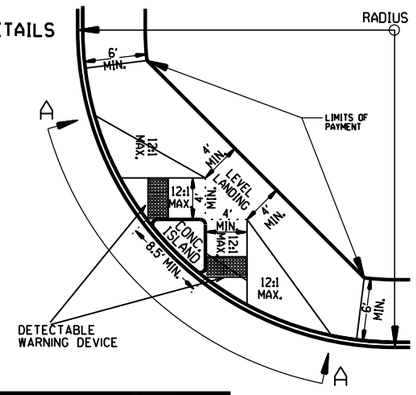
CONCRETE ISLAND DETAIL

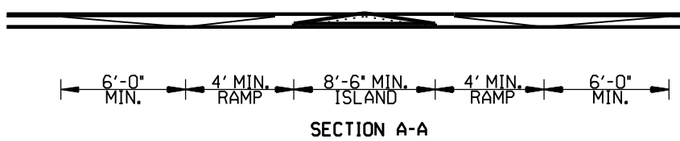


SLOPE TRANSITION DETAILS



TYPE 1 RAMP
(Walk adjacent to curb)

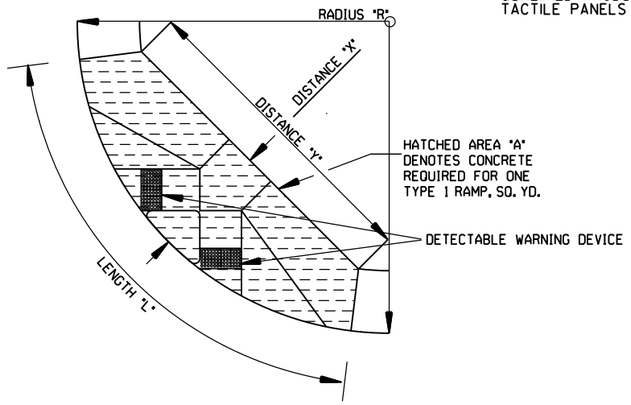




SECTION A-A

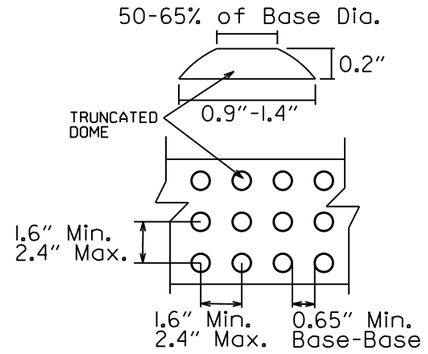
TYPE 1 RAMP DIMENSIONS AND QUANTITIES

RADIUS "R" FEET	DISTANCE "X" FEET	DISTANCE "Y" FEET	LENGTH "L" FEET	RAMP AREA "A" SQ. YD.
15	11.67	18.82	32.18	26.21
20	11.52	22.28	35.46	30.07
25	11.43	26.60	38.77	33.80
30	11.37	30.26	40.93	36.90
35	11.33	33.51	43.11	39.77
40	11.30	36.45	45.26	42.45
45	11.27	39.16	47.34	44.97
50	11.25	41.69	49.36	47.35
55	11.24	44.07	51.31	49.63
60	11.22	46.33	53.21	51.80



GENERAL NOTES FOR DETECTABLE WARNING DEVICES

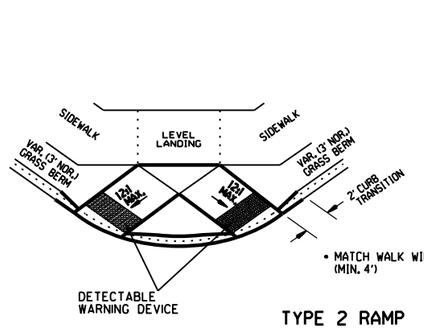
THE DETECTABLE WARNING DEVICE SHALL BE LOCATED SO THAT THE NEAREST EDGE OF THE DEVICE IS 6 TO 8 INCHES FROM THE FACE OF THE CURB.
TRUNCATED DOMES IN THE DETECTABLE WARNING SURFACE SHALL MEET THE REQUIREMENTS OF THE GEOMETRIC CONFIGURATION SHOWN.
DOMES SHALL BE ALIGNED ON A SQUARE GRID IN THE PREDOMINANT DIRECTION OF TRAVEL TO PERMIT WHEELS TO ROLL BETWEEN DOMES.
DETECTABLE WARNING DEVICE SHALL BE 24 INCHES IN THE DIRECTION OF TRAVEL AND EXTEND THE FULL WIDTH OF THE CURB RAMP OR FLUSH SURFACE.
DETECTABLE WARNING DEVICE SHALL BE ON THE ARDOT QUALIFIED PRODUCTS LIST FOR CAST-IN-PLACE TACTILE PANELS (ADA DETECTABLE WARNING).



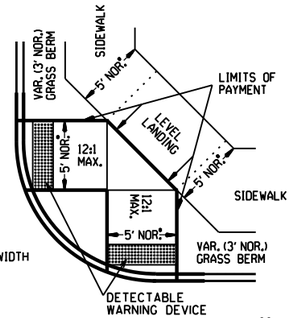
DETECTABLE WARNING DEVICE DETAIL

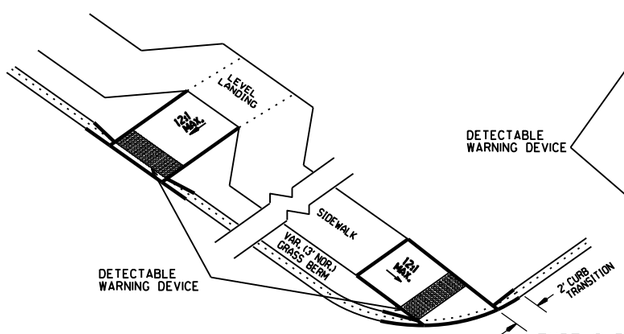
GENERAL NOTES:

IN NEW CONSTRUCTION, UNLESS OTHERWISE INDICATED ON THE PLANS, WHEELCHAIR RAMPS ARE TO BE PROVIDED AT ALL CORNERS OF CURBED STREET INTERSECTIONS AND MID-BLOCK CROSSWALK LOCATIONS.
IN ALTERATIONS WHEELCHAIR RAMPS ARE TO BE PROVIDED AT CURBED STREET INTERSECTIONS WITH PEDESTRIAN TRAFFIC AND MID-BLOCK CROSSWALK LOCATIONS.
THE LENGTH OF THE RAMP SHALL BE SUCH THAT THE SLOPE DOES NOT EXCEED 12:1. THE SURFACE TEXTURE OF THE RAMP SHALL CONFORM TO A CLASS 6 FINISH ACCORDING TO SECTION 802.19.
THE NORMAL GUTTER GRADE SHALL BE MAINTAINED THROUGH THE AREA OF THE RAMP.
ALL PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION.
THE MINIMUM THICKNESS OF THE RAMP, WALK, & LANDING SHALL BE 4".
THE MINIMUM WIDTH OF THE RAMPS SHALL BE THE WALK WIDTH OR 36", WHICHEVER IS GREATER.
RAMPS SHALL BE MODIFIED AS NECESSARY TO INSURE THAT THEY ARE PARALLEL TO A LINE DRAWN FROM THE CENTER OF ONE RAMP TO THE CENTER OF THE RAMP ON THE OPPOSITE SIDE OF THE INTERSECTION.
THE DIMENSIONS AND QUANTITIES SHOWN ON THIS DRAWING ARE FOR A 90° INTERSECTION ONLY. DIMENSIONS AND QUANTITIES FOR SKEWED INTERSECTIONS WILL VARY, AND ARE TO BE DETERMINED BY THE ENGINEER.

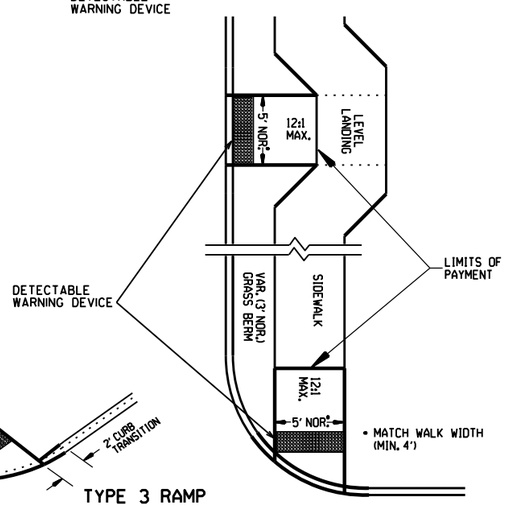


TYPE 2 RAMP

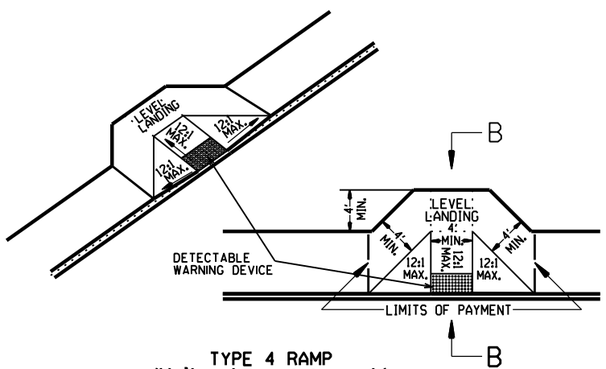




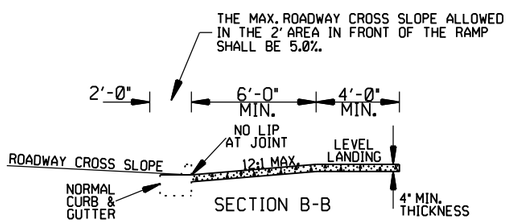
TYPE 3 RAMP



NOTE:
THE CROSS SLOPE OF THE RAMPS, LEVEL LANDINGS, AND SIDEWALKS SHALL NOT EXCEED 2.0% UNLESS REQUIRED TO MATCH STREET LONGTITUDINAL GRADE.



TYPE 4 RAMP
(Walk adjacent to curb)



SECTION B-B

RAMP SELECTION CRITERIA

FIRST CHOICE	TYPE 1	CORNER LOCATIONS WITH THE WALK ADJACENT TO THE CURB (BOTH NEW CONSTRUCTION AND ALTERATIONS).
	TYPE 2	CORNER LOCATIONS WITH THE WALK OFFSET FROM THE CURB A DISTANCE INSUFFICIENT TO ALLOW THE REQUIRED RAMP SLOPE (BOTH NEW CONSTRUCTION AND ALTERATIONS).
	TYPE 3	CORNER LOCATIONS WITH THE WALK OFFSET FROM THE CURB A DISTANCE SUFFICIENT TO ALLOW THE REQUIRED RAMP SLOPE (BOTH NEW CONSTRUCTION AND ALTERATIONS).
	TYPE 4	TANGENT LOCATIONS (BOTH NEW CONSTRUCTION AND ALTERATIONS).
SECOND CHOICE	TYPE 5	TANGENT LOCATIONS (ALTERATIONS ONLY).
THIRD CHOICE	TYPE 6	CORNER LOCATIONS (ALTERATIONS ONLY). THIS RAMP MAY BE USED ONLY IF THE TYPE 5 RAMPS CANNOT BE PLACED AT THE ENDS OF THE RADIUS.
FOURTH CHOICE		IF SITE CONSTRAINTS PREVENT THE CONSTRUCTION OF ANY OF THE TYPES LISTED, THEN AND ONLY THEN CAN THE 12:1 MAX. SLOPE ON THE RAMP BE EXCEEDED TO PROVIDE ACCESS TO THE STREET LEVEL (ALTERATIONS ONLY). THE SLOPE CAN BE STEEPENED TO A 10:1 MAX. FOR A MAX. LENGTH OF 5' OR A 8:1 MAX. FOR A MAX. LENGTH OF 2'. SLOPES STEEPER THAN 8:1 ARE NOT ALLOWED UNDER ANY CIRCUMSTANCES.

NOTE: IN ALTERATIONS, THE SELECTION OF THE TYPE OF WHEELCHAIR RAMP TO BE CONSTRUCTED SHALL BE BASED ON THE AMOUNT OF RIGHT-OF-WAY AVAILABLE, AND ON THE PRESENCE OF OTHER SITE CONSTRAINTS (UTILITIES, BUILDINGS, ETC.). THE TABLE ABOVE LISTS THE ORDER IN WHICH THE RAMPS ARE TO BE CONSIDERED.

AN ALTERATION IS DEFINED AS A PROJECT THAT CHANGES OR AFFECTS THE USE OF A PEDESTRIAN PATHWAY (OVERLAYS, SIGNALIZATION PROJECTS, ETC.) BUT DOES NOT REQUIRE THE PURCHASE OF ADDITIONAL RIGHT-OF-WAY. ALL PROJECTS THAT REQUIRE THE PURCHASE OF ADDITIONAL RIGHT-OF-WAY WILL USUALLY BE CONSIDERED NEW CONSTRUCTION FOR THE PURPOSES OF THE CHART ABOVE.

DATE	REVISION	DATE FILM
11-10-05	REVISED TO NEW SIDEWALK POLICY	
10-9-03	REVISED GEN. NOTES & ADDED NOTE	
4-10-03	REV. DETECTABLE WARNING DEVICES	
8-22-02	ADD DETECTABLE WARNING DEVICES	
3-30-00	ADD.SLOPE TRANS. & REV. ISL. DIMS.	
11-18-98	REVISED NOTES	
8-12-98	REVISED TEXTURE	
7-02-98	REDRAWN & REISSUED	
10-18-96	CORRECTED DIMENSIONS	10-18-96
5-24-90	FROM8#TO12#MAX.SLOPES	5-24-90
7-15-88	ADJUSTED MAX. SLOPE	652-7-15-88
7-14-88	INCLUD."CONC. ISLD."IN PAY ITEM	------
6-02-76	ISSUED-P.M.D.	299-7-28-76

ARKANSAS STATE HIGHWAY COMMISSION

WHEELCHAIR RAMPS NEW CONSTRUCTION AND ALTERATIONS

STANDARD DRAWING WR-1