"A FULLY CONTROLLED ACCESS FACILITY"
ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
CONSTRUCTION PLANS FOR STATE HIGHWAY

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	1	191

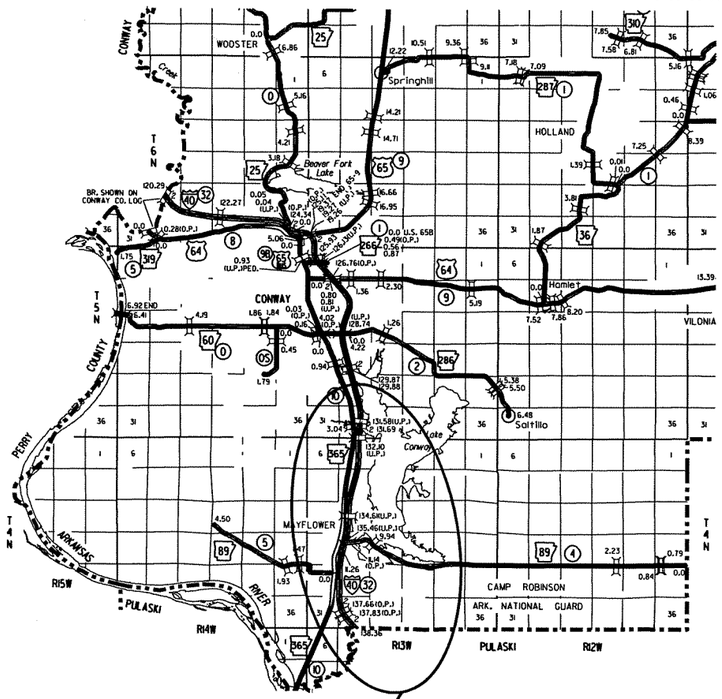
(2) PALARM CREEK-WEST (WIDENING) (F)

PALARM CREEK-WEST (WIDENING) (F)

FAULKNER COUNTY
ROUTE 40 SECTION 32

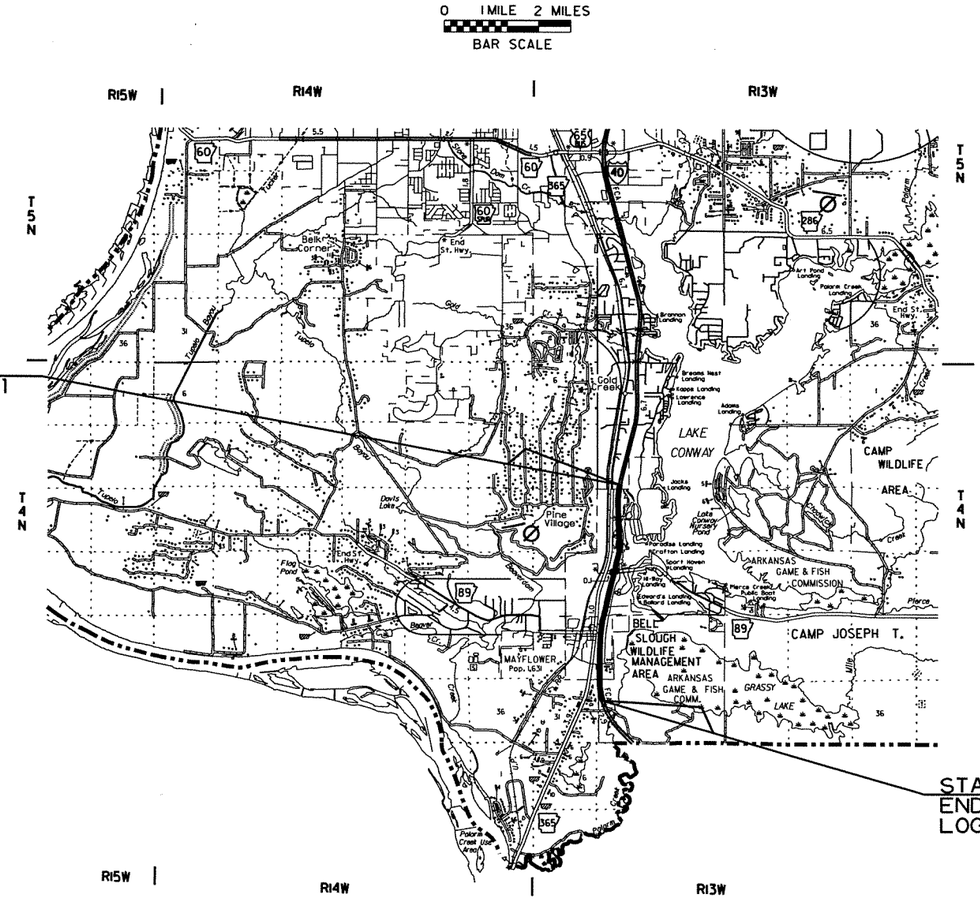
JOB 080411

FED. AID PROJ. EBS-40-3(128)125



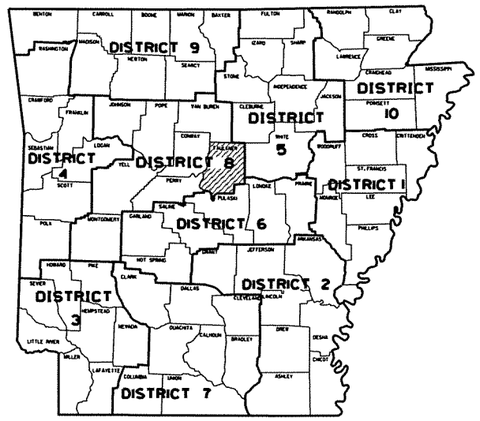
PROJECT LOCATION

VICINITY MAP



STA. 7490+00
BEGIN JOB 080411
LOG MILE 133.39

STA. 7690+83.00
END JOB 080411
LOG MILE 137.19



ARK. HWY. DIST. NO. 8

• DESIGN TRAFFIC DATA •

DESIGN YEAR	2033
2013 ADT	64000
2033 ADT	94000
2033 DHV	10340
TRUCKS	18%
DESIGN SPEED	70 MPH



BEGINNING OF PROJECT	
LATITUDE:	35°0'0.4" N
LONGITUDE:	92°24'45.2" W
MID POINT OF PROJECT	
LATITUDE:	34°58'23" N
LONGITUDE:	92°25'05" W
END OF PROJECT	
LATITUDE:	34°56'45.1" N
LONGITUDE:	92°25'21.6" W

GROSS LENGTH OF PROJECT	20083.00	FEET	OR	3.804	MILES
NET " " ROADWAY	20083.00	"	"	3.804	"
NET " " BRIDGES	0.00	"	"	0.000	"
NET " " PROJECT	20083.00	"	"	3.804	"

P.E. 012119
NON-PART.

APPROVED

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
N. 3917
FRANK VOGEL

1/9/13
DEPUTY DIRECTOR AND CHIEF ENGINEER

R080411.DGN 10/24/11

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	2	191

(2) INDEX OF SHEETS, GOVERNING SPECIFICATIONS AND GENERAL NOTES

INDEX OF SHEETS

SHEET NO.	TITLE	BRIDGE	DRWG.NO.	DATE
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3 - 6	TYPICAL SECTIONS OF IMPROVEMENT			
7 - 14	SPECIAL DETAILS			
15 - 21	TEMPORARY EROSION CONTROL DETAILS			
22 - 28	MAINTENANCE OF TRAFFIC			
29 - 35	QUANTITY SHEETS			
36	SUMMARY OF QUANTITIES AND REVISIONS			
37 - 45	SURVEY CONTROL DETAILS			
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60 - 61	SIGNING QUANTITIES			
62 - 69	SIGN LAYOUT SHEET			
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76	MOUNTING DETAILS FOR DEMOUNTABLE LEGEND ON GUIDE SIGNS			
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78	I-BEAM SIGN SUPPORTS			
79	SPECIAL DETAILS SHOWING BREAKAWAY SIGN SUPPORTS (I-BEAM)			
80	DETAILS I-BEAM SIGN SUPPORTS			
81	DETAIL OF GUIDE SIGN PANELS			
82	DETAIL OF SIGN PLACEMENT			
83	DETAILS FOR 70' TO 85' STEEL OVERHEAD SIGN STRUCTURES (SHEET 1 OF 5)	OH-040-23-18 THRU OH-040-23-22	53059	
84	DETAILS FOR 70' TO 85' STEEL OVERHEAD SIGN STRUCTURES (SHEET 2 OF 5)	OH-040-23-18 THRU OH-040-23-22	53060	
85	DETAILS FOR 70' TO 85' STEEL OVERHEAD SIGN STRUCTURES (SHEET 3 OF 5)	OH-040-23-18 THRU OH-040-23-22	53061	
86	DETAILS FOR 70' TO 85' STEEL OVERHEAD SIGN STRUCTURES (SHEET 4 OF 5)	OH-040-23-18 THRU OH-040-23-22	53062	
87	DETAILS FOR 70' TO 85' STEEL OVERHEAD SIGN STRUCTURES (SHEET 5 OF 5)	OH-040-23-18 THRU OH-040-23-22	53063	
88	FLARED END SECTION		FES-1	10-18-96
89	FLARED END SECTION		FES-2	10-18-96
90	DETAILS OF DROP INLETS & JUNCTION BOXES		FPC-9	11-16-01
91	DETAILS OF DROP INLETS		FPC-9D	8-22-02
92	DETAILS OF DROP INLET & JUNCTION BOX (TYPE ST)		FPC-9S	7-26-12
93	GUARD RAIL DETAILS		GR-8	7-14-10
94	GUARD RAIL DETAILS		GR-9A	4-17-08
95	GUARD RAIL DETAILS		GRT-1	7-14-10
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97	PERMANENT PAVEMENT MARKING ON ACCESS CONTROLLED ROADWAYS		PM-2	7-26-12
98	DETAILS OF PIPE UNDERDRAIN		PU-1	4-10-03
99	TABLES AND METHOD OF SUPERELEVATION FOR ONE-WAY TRAFFIC		SE-1	1-09-87
100	STANDARD HIGHWAY SIGNS & SUPPORTS ASSEMBLIES		SHS-1	4-17-08
101	U-CHANNEL POST ASSEMBLIES		SHS-2	10-09-03
102	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION		TC-1	12-15-11
103	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION		TC-2	3-11-10
104	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION		TC-3	10-15-09
105	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION-TEMPORARY PRECAST BARRIER		TC-4	10-15-09
106	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION-TEMPORARY PRECAST BARRIER		TC-5	10-15-09
107	TEMPORARY EROSION CONTROL DEVICES		TEC-1	12-15-11
108	TEMPORARY EROSION CONTROL DEVICES		TEC-2	6-02-94
109	TEMPORARY EROSION CONTROL DEVICES		TEC-3	11-03-94
110 - 191	CROSS SECTIONS			

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

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
1-8-13

GOVERNING SPECIFICATIONS

ARKANSAS STATE HIGHWAY COMMISSION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EDITION OF 2003, 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 080411
FHWA-1273	SUPPLEMENT - POSTERS AND NOTICES REQUIRED FOR FEDERAL-AID PROJECTS
FHWA-1273	SUPPLEMENT - WAGE RATE DETERMINATION
100-2	MANUAL FOR ASSESSING SAFETY HARDWARE (MASH)
102-1	BIDDING REQUIREMENTS AND CONDITIONS
103-1	DETERMINATION OF DBE PARTICIPATION
105-1	CONSTRUCTION CONTROL MARKINGS
105-2	EQUIPMENT AND MATERIAL STORAGE ON BRIDGE STRUCTURES
105-3	CONTROL OF WORK
107-1	WORKER VISIBILITY
108-1	LIQUIDATED DAMAGES
110-1	PROTECTION OF WATER QUALITY AND WETLANDS
303-1	AGGREGATE BASE COURSE
404-1	PRODUCTION VERIFICATION OF ASPHALT CONCRETE HOT MIX
404-2	DESIGN AND QUALITY CONTROL OF ASPHALT MIXTURES
409-1	MINERAL AGGREGATES
410-3	DENSITY TESTING FOR ACHM LEVELING COURSES AND BOND BREAKERS
411-1	ASPHALT CONCRETE COLD PLANT MIX
600-1	WATER FOR VEGETATION
603-1	MAINTENANCE OF TRAFFIC
604-1	RETROREFLECTIVE SHEETING FOR TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES
604-2	INSPECTION OF TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES
606-2	PIPE CULVERTS
719-2	THERMOPLASTIC PAVEMENT MARKING MATERIAL
723-1	GENERAL REQUIREMENTS FOR SIGNS
JOB 080411	ANIMAL PASSAGE SHELVES FOR WILDLIFE CROSSINGS
JOB 080411	BROADBAND INTERNET SERVICE FOR ASPHALT CONCRETE PLANT
JOB 080411	BROADBAND INTERNET SERVICE FOR FIELD OFFICE
JOB 080411	CONSTRUCTION IN SPECIAL FLOOD HAZARD AREAS
JOB 080411	COORDINATION OF WORK
JOB 080411	EXTENSION FOR PIPE CULVERTS
JOB 080411	GOALS FOR DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION
JOB 080411	HIGH PERFORMANCE PAVEMENT MARKING
JOB 080411	INTERNET BIDDING
JOB 080411	MAINTENANCE OF TRAFFIC
JOB 080411	PARTNERING REQUIREMENTS
JOB 080411	PROSECUTION AND PROGRESS
JOB 080411	SEQUENCE OF CONSTRUCTION
JOB 080411	SIGN PANEL MATERIALS AND FABRICATION
JOB 080411	SITE USE (A + C METHOD)
JOB 080411	SOIL STABILIZATION
JOB 080411	SPECIAL SAFETY REQUIREMENTS FOR OVERHEAD SIGNS
JOB 080411	STEEL SIGN STRUCTURES
JOB 080411	STORM WATER POLLUTION PREVENTION PLAN
JOB 080411	SUBMISSION OF ASPHALT CONCRETE HOT MIX ACCEPTANCE TEST RESULTS
JOB 080411	TEMPORARY IMPACT ATTENUATION BARRIER
JOB 080411	TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES
JOB 080411	UTILITY ADJUSTMENTS
JOB 080411	VALUE ENGINEERING
JOB 080411	WARM MIX ASPHALT

GENERAL NOTES

1. ALL PIPE LINES, POWER, TELEPHONE AND TELEGRAPH LINES TO BE MOVED OR LOWERED BY THE RESPECTIVE OWNERS AS PER AGREEMENT WITH SUCH OWNERS.

2. 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.

3. ALL LAND MONUMENTS LOCATED WITHIN THE CONSTRUCTION AREA SHALL BE PROTECTED IN ACCORDANCE WITH SECTION 107.12 OF THE STANDARD SPECIFICATIONS.

4. ALL FLEXIBLE BASE AND ASPHALTIC PAVEMENTS REMOVED SHALL BE PAID FOR UNDER THE ITEM NO. 210 - UNCLASSIFIED EXCAVATION.

5. 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 INSURE THAT ALL TREES NOT TO BE REMOVED SHALL BE HARMED AS LITTLE AS POSSIBLE DURING THE CONSTRUCTION OPERATIONS.

6. 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.

8/9/2012

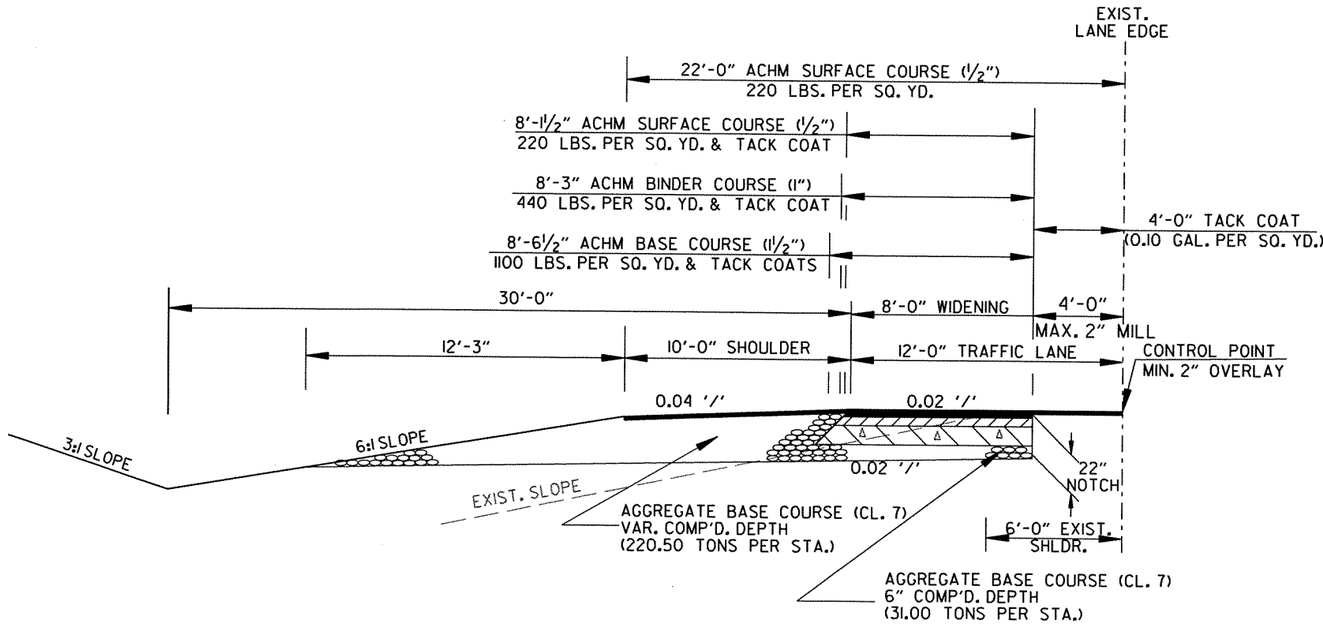
R080411.DGN

INDEX OF SHEETS, GOVERNING SPECIFICATIONS AND GENERAL NOTES

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(2) TYPICAL SECTIONS OF IMPROVEMENT

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
1-8-13



INTERSTATE 40 OPEN SHOULDER
SHOWN IN DIRECTION OF TRAVEL

STA. 7490+00 - STA. 7532+50.00

NOTES:

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

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.

1/4/2013

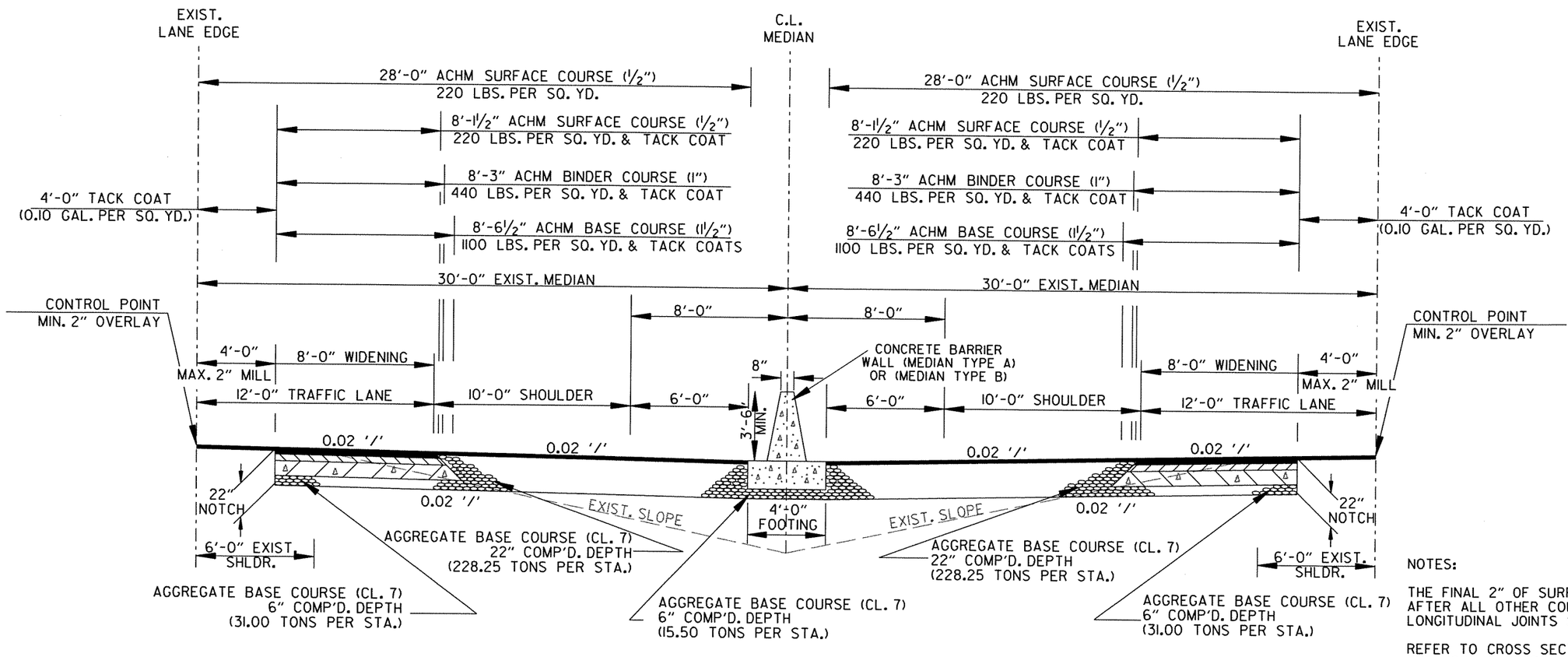
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(2) TYPICAL SECTIONS OF IMPROVEMENT

STATE OF ARKANSAS
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INTERSTATE 40 NOTCH AND WIDEN

STA. STA. 7532+50.00 - STA. 7686+00.00

1/4/2013

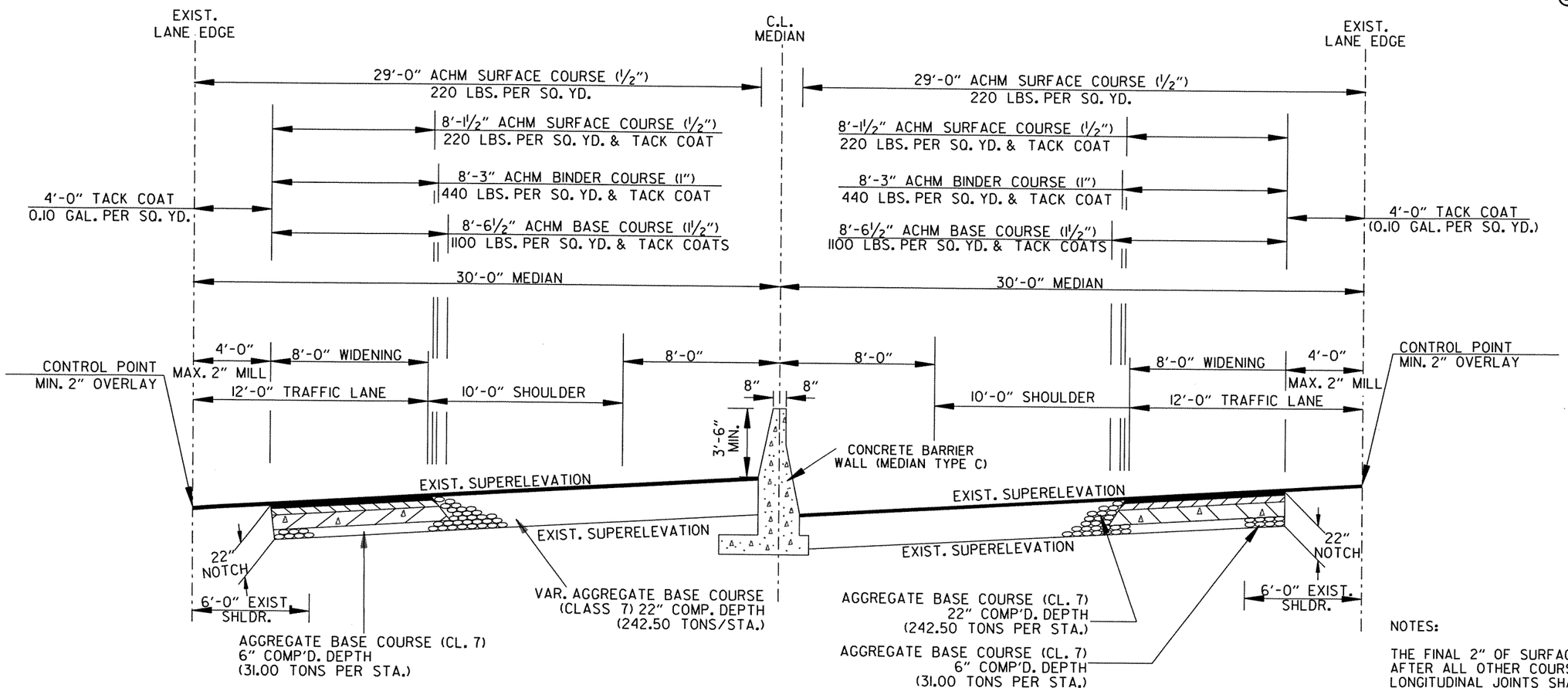
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(2) TYPICAL SECTIONS OF IMPROVEMENT

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
1-8-13



INTERSTATE 40 NOTCH AND WIDEN SUPERELEVATED

STA. 7686+00.00 - STA. 7690+83.00

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1/4/2013

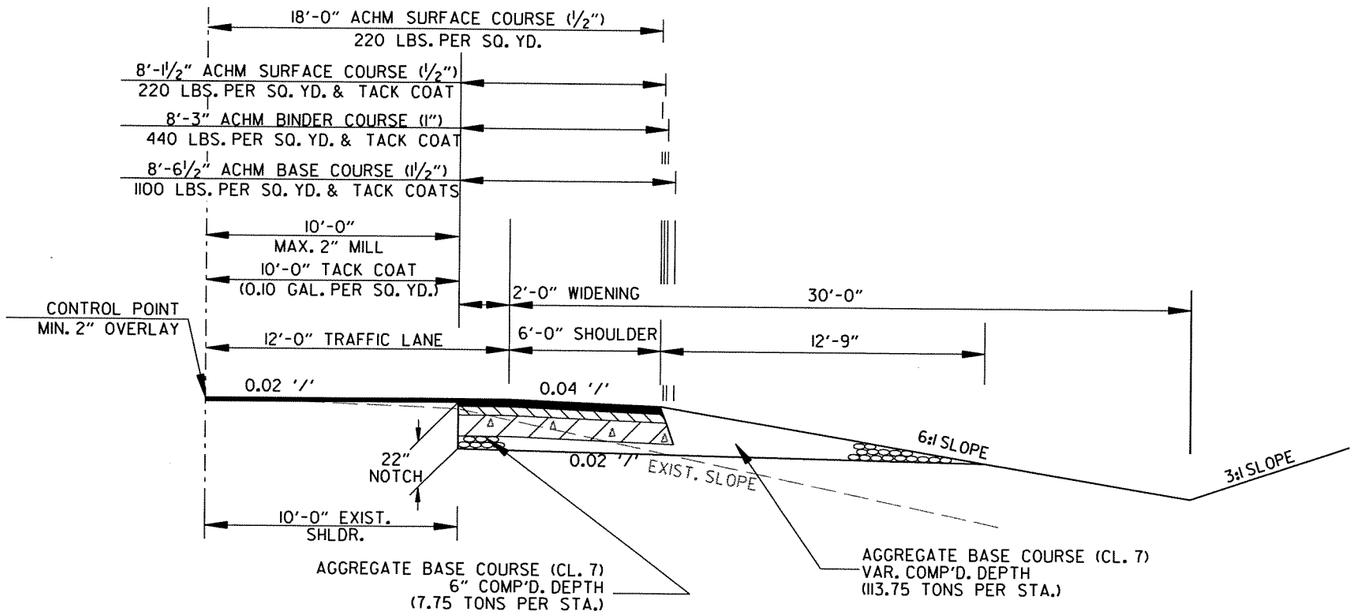
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(2) TYPICAL SECTIONS OF IMPROVEMENT

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
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TRINITY D. SMITH
1-8-13



INTERSTATE 40 ACCEL. LANE EXTENSION
SHOWN IN DIRECTION OF TRAVEL

STA. 7648+26 - STA. 7663+94.00

NOTES:

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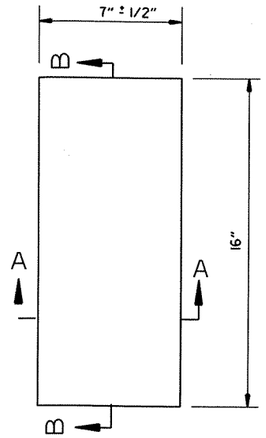
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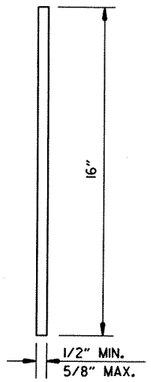
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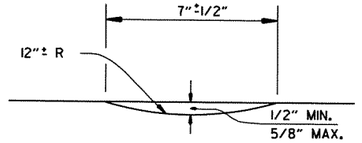
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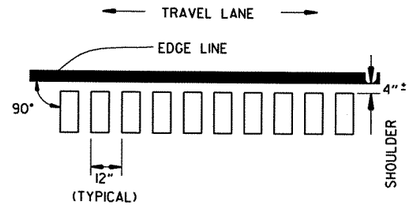
PLAN



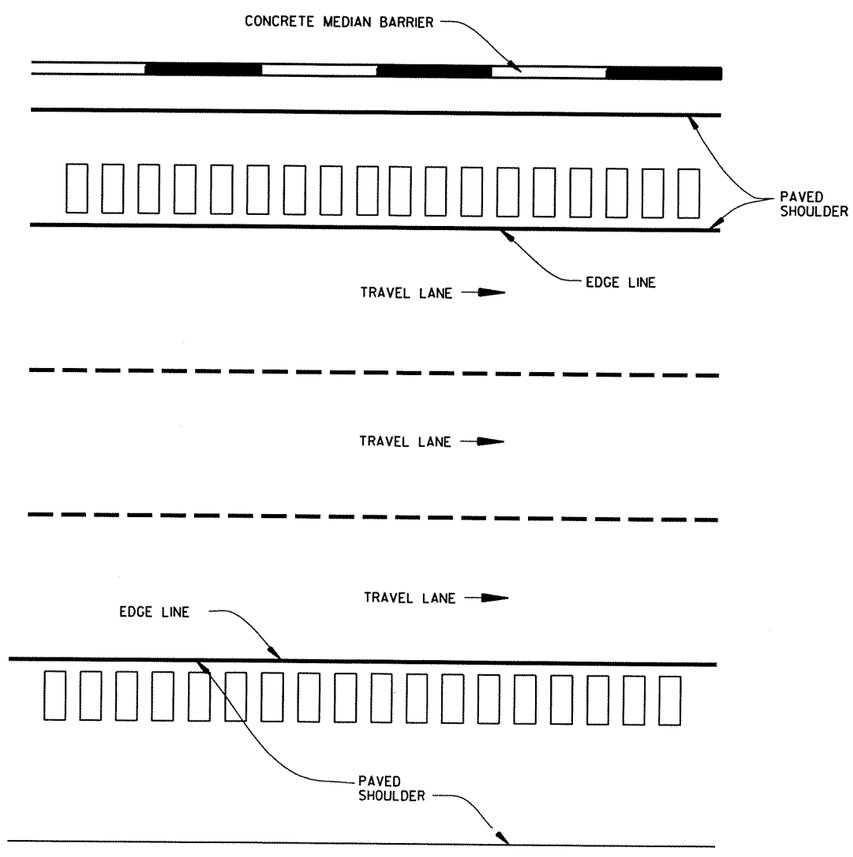
SECTION B-B



SECTION A-A



LOCATION PLAN OF RUMBLE STRIPS
LEFT OR RIGHT SHOULDER



PLAN VIEW

NOTES:

1. ALIGNMENT OF RUMBLE STRIPS SHALL GENERALLY BE STRAIGHT AND OFFSET APPROXIMATELY 4" FROM THE OUTER EDGE OF THE EDGE LINE. THIS OFFSET MAY BE ADJUSTED TO ACCOMMODATE VARIATIONS IN THE EDGE LINE AS WELL AS TO AVOID EXISTING LONGITUDINAL JOINTS.
2. THE 1/2" DEPTH SHALL GENERALLY APPLY FOR THE ENTIRE 16" LENGTH. SOME VARIATION TO SUIT SHOULDER SLOPE BREAKS MAY BE NECESSARY.

DETAILS OF RUMBLE STRIPS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
1-8-13

1/4/2013

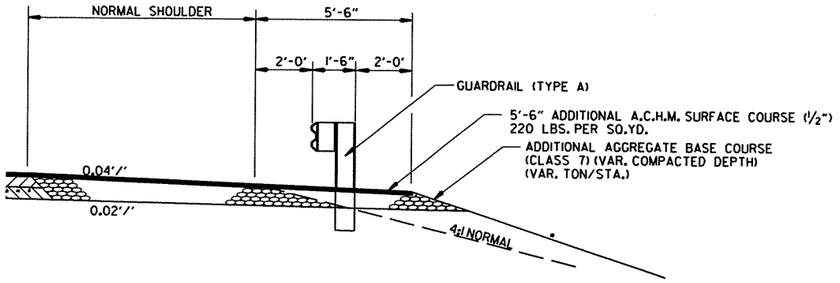
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SPECIAL DETAILS

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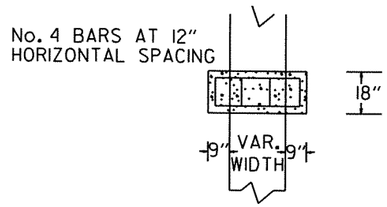
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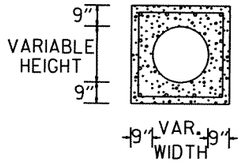
WIDENING FOR GUARDRAIL DETAIL

• NOTE: REFER TO STD. DWG GR-9A AND CROSS SECTIONS FOR SLOPE REQUIREMENTS BEHIND GUARDRAIL.

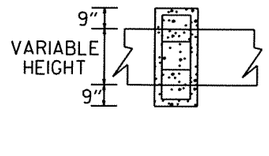


TOP VIEW

MIN. 3" COVER

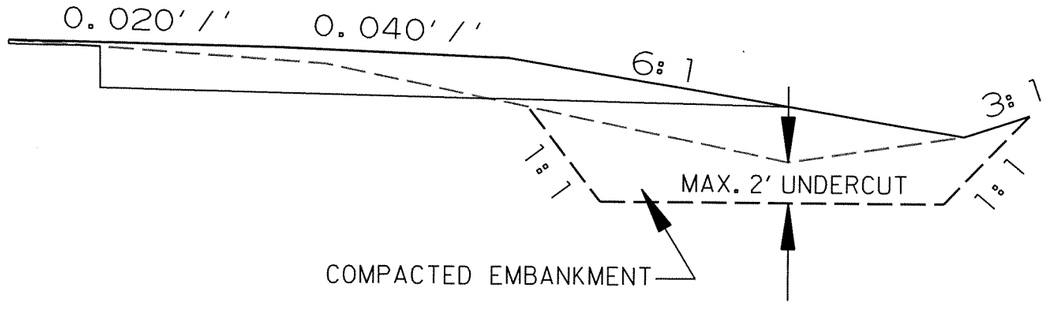


FRONT VIEW

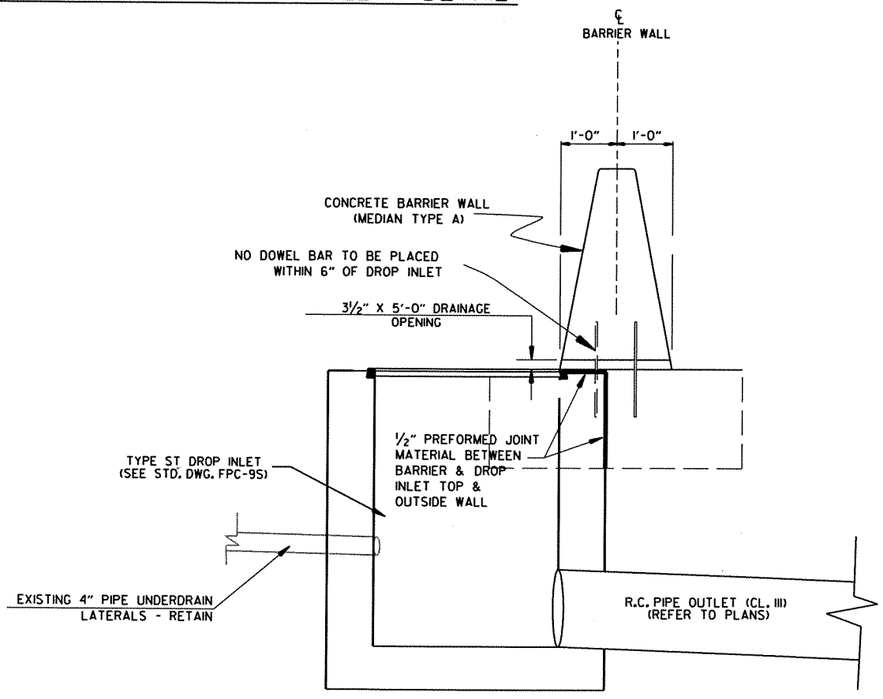


SIDE VIEW

PIPE EXTENSION
REINFORCED CONCRETE COLLAR DETAIL



DETAIL OF UNDERCUT



ADJACENT TO CONCRETE BARRIER WALL (MEDIAN TYPE A)
TRANSVERSE SECTION OF TYPE ST DROP INLET

SPECIAL DETAILS

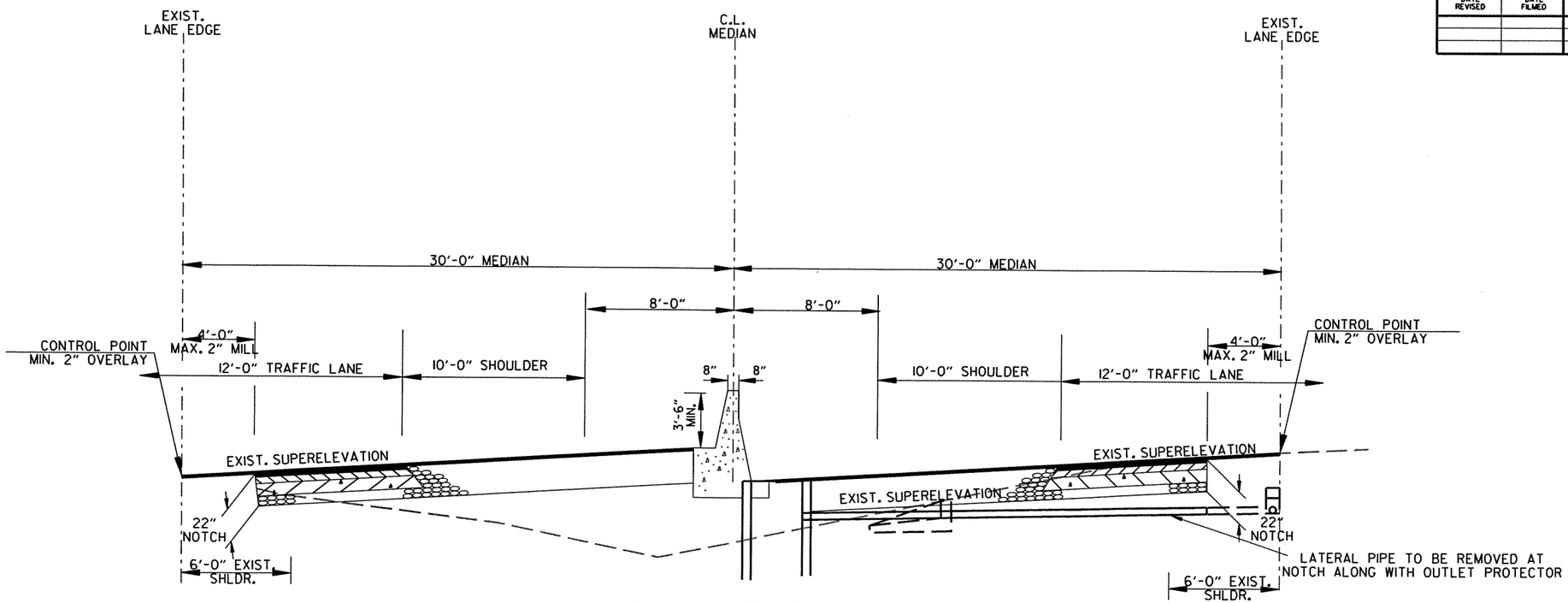
1/4/2013

R080411.DGN

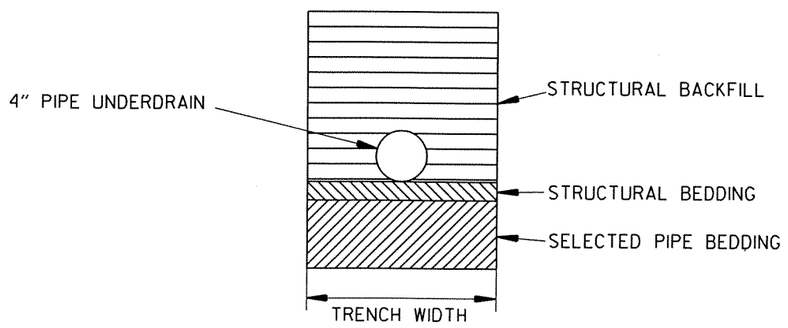
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				6	ARK.			
				JOB NO.		080411	9	191

(2) SPECIAL DETAILS

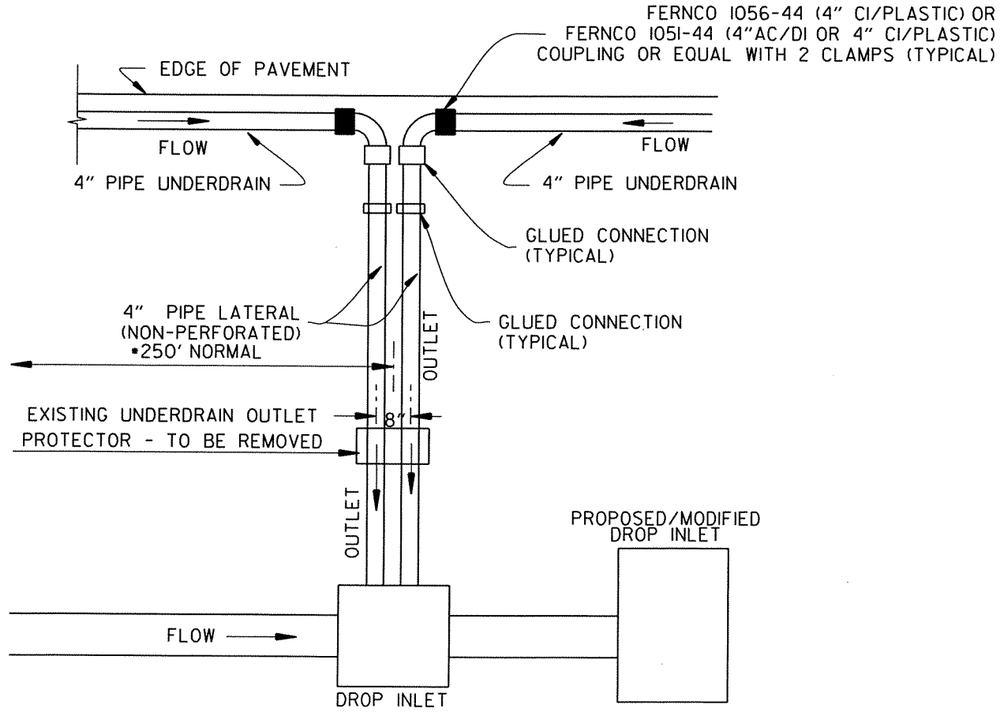
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
1-8-13



INTERSTATE 40 NOTCH AND WIDEN SUPERELEVATED



FOR ADDITIONAL DETAILS
REFER TO STD. DRWG. PCP-2



SPECIAL DETAILS

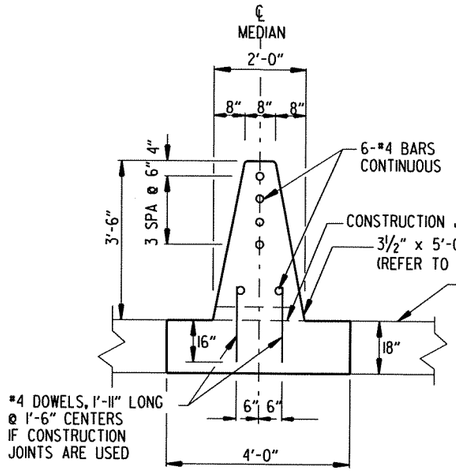
1/4/2013

R080411.DGN

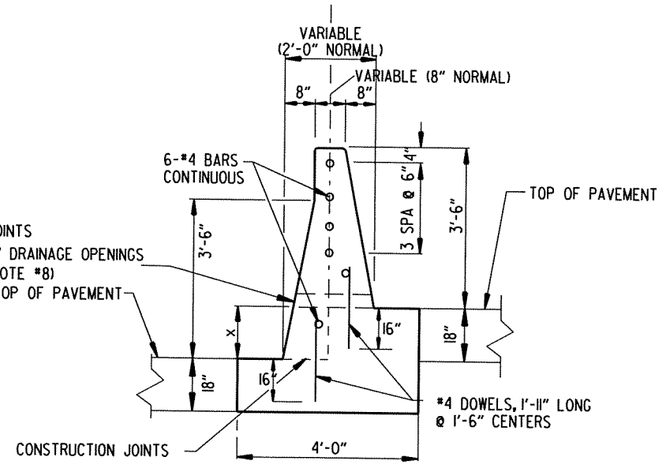
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				JOB NO.		080411	10	191

(2) SPECIAL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
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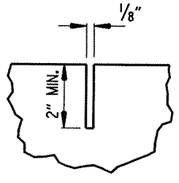
CONCRETE BARRIER WALL
(MEDIAN TYPE A)



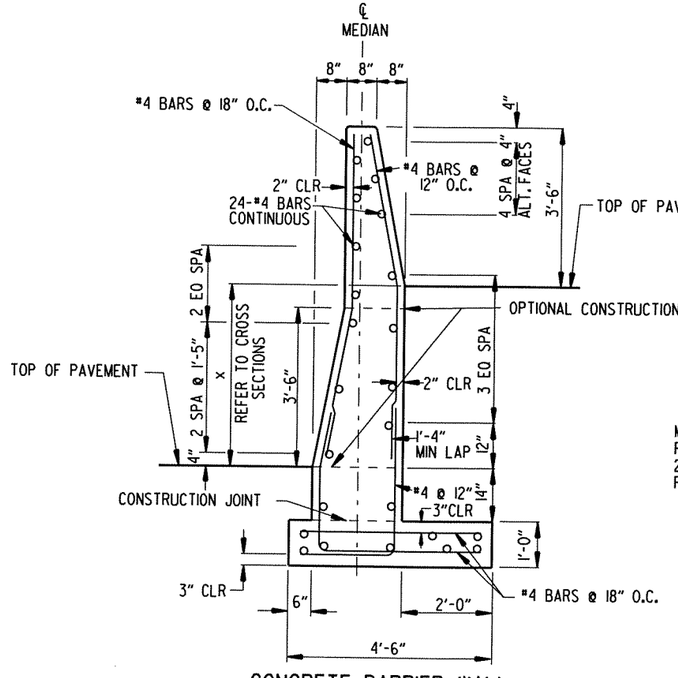
CONCRETE BARRIER WALL
(MEDIAN TYPE B)
X = 0'-0" TO 1'-0" MAX

GENERAL NOTES FOR CONCRETE BARRIER WALLS

1. ALL BARRIER WALLS SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 631OF THE STANDARD SPECIFICATIONS, 2003 EDITION.
2. CONTRACTION JOINTS REQUIRED @ 15'-0" MAXIMUM SPACING FOR BARRIER TYPES MEDIAN A & B. A 30'-0" MAXIMUM SPACING IS REQUIRED FOR TYPE MEDIAN C.
3. ALL CONTRACTION JOINTS TO BE FORMED IN FRESH CONCRETE ON TOP AND IN SIDES OF BARRIER WALL.
4. DOWEL BARS FOR BARRIER TYPES MEDIAN A & B WILL NOT BE REQUIRED IF BARRIER AND MINIMUM 4' WIDE BASE ARE CAST AS A COMPLETE UNIT.
5. ALL EXPOSED EDGES OF CONCRETE BARRIER WALL SHALL HAVE A ¾" CHAMFER.
6. THE DESIGN OF BARRIER WALL TYPES MEDIAN C IS BASED ON A MINIMUM FOUNDATION BEARING CAPACITY OF ONE TON PER SQUARE FOOT. UNSTABLE FOUNDATION MATERIAL SHALL BE REMOVED AND REPLACED TO PROVIDE A FIRM FOUNDATION AS DIRECTED BY THE ENGINEER.
7. SPACING BETWEEN EXPANSION JOINTS SHALL NOT EXCEED 400 FT FOR BARRIER TYPES MEDIAN A & B OR 120 FT FOR BARRIER TYPES MEDIAN C. EXPANSION JOINTS SHALL BE FORMED USING 1" PREFORMED JOINT FILLER. CONTINUOUS REINFORCEMENT SHALL BE CUT 2" CLEAR OF EXPANSION JOINTS.
8. DRAINAGE OPENINGS TO BE CONSTRUCTED EVERY 100' O.C. AND AT SAGS AND ADJACENT TO DROP INLETS. DOWEL BARS SHALL NOT BE PLACED WITHING 3" OF DRAINAGE OPENINGS.



CONTRACTION JOINT DETAIL



CONCRETE BARRIER WALL
(MEDIAN TYPE C)
X = 1'-0" TO 5'-0" MAX

MAINTAIN 3" CLEARANCE ON ALL FOOTING REINFORCEMENT AND 2" CLEARANCE ON ALL OTHER REINFORCEMENT.

SPECIAL DETAILS

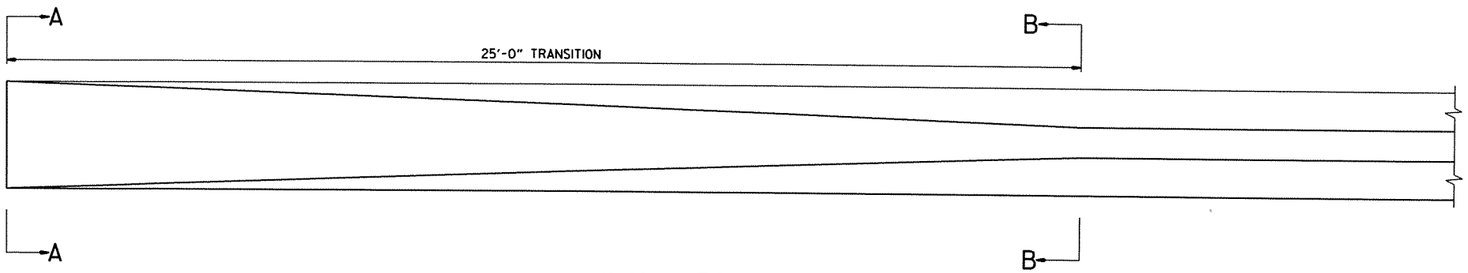
1/8/2013

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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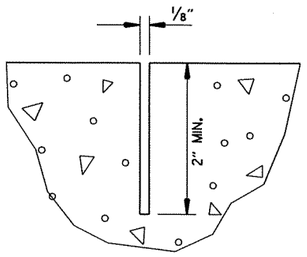
(2) SPECIAL DETAILS

STATE OF ARKANSAS
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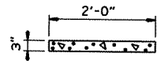
PLAN VIEW
CONCRETE BARRIER WALL (MEDIAN TYPE A) TRANSITION

NOTE: TRANSITION TO BE CONSTRUCTED AT BEGINNING AND END OF BARRIER WALL.

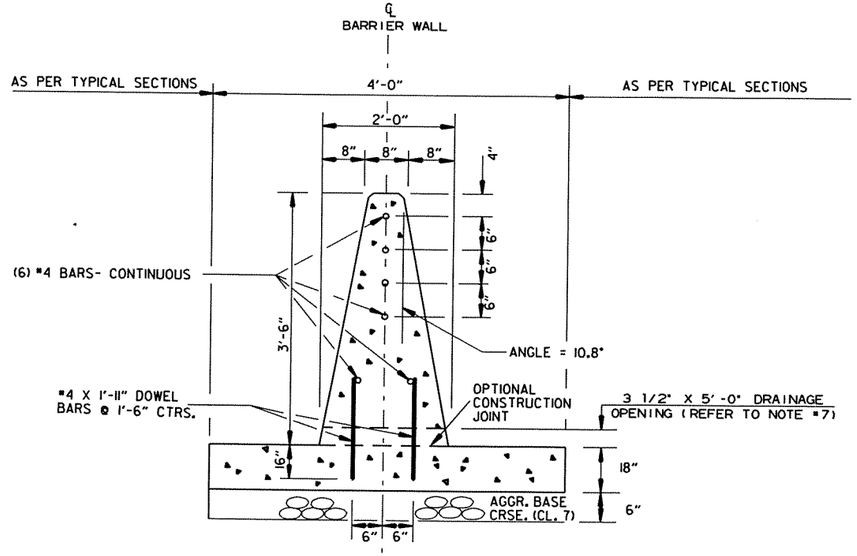


CONTRACTION JOINT DETAIL

NOTES FOR MEDIAN BARRIER:
1. ALL EXPOSED EDGES SHALL HAVE 3/4" CHAMFERS.
2. CONTRACTION JOINTS SHALL BE CONSTRUCTED AT 15'-0" MAXIMUM SPACING IN TOP AND SIDES OF MEDIAN BARRIER AND SHALL BE FORMED IN FRESH CONCRETE.
3. CONTRACTION JOINTS ARE NOT PERMITTED AT THE DOWEL BAR LOCATIONS.
4. ALL REINFORCING BARS SHALL HAVE 2" MINIMUM COVER.
5. DOWEL BARS WILL NOT BE REQUIRED IF BARRIER AND BASE ARE CAST AS A COMPLETE UNIT.
6. BARRIER TRANSITIONS WILL BE MEASURED AND PAID FOR AS "CONCRETE BARRIER WALL (MEDIAN TYPE A)".
7. DRAINAGE OPENINGS TO BE CONSTRUCTED ADJACENT TO DROP INLETS. DOWEL BARS SHALL NOT BE PLACED WITHIN 3" OF DRAINAGE OPENINGS.



CONCRETE BARRIER WALL
(MEDIAN TYPE A)
(SECTION A-A)



CONCRETE BARRIER WALL (MEDIAN TYPE A)
(SECTION B-B)

1/8/2013

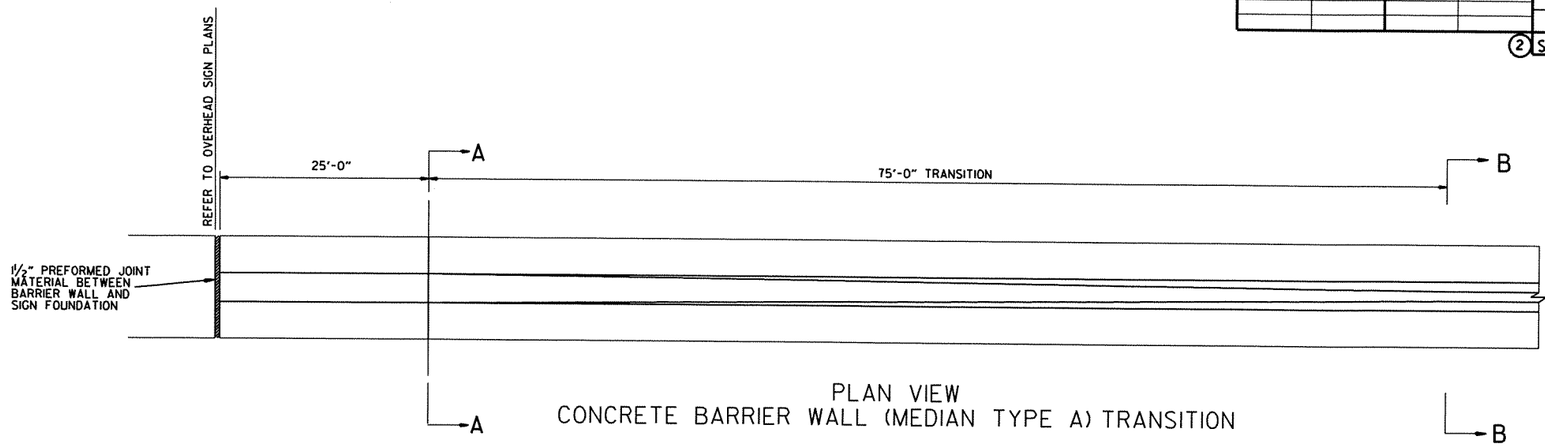
R080411.DGN

SPECIAL DETAILS

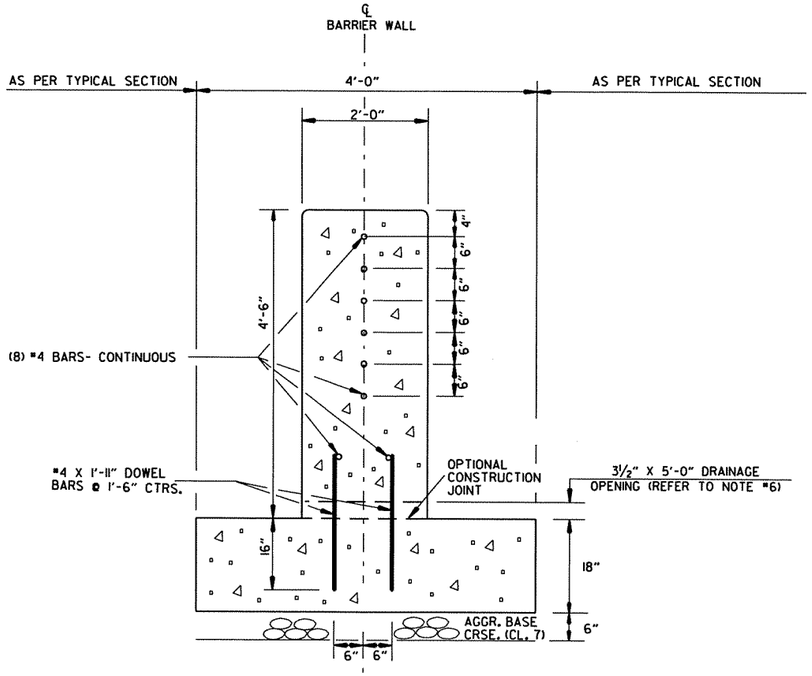
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(2) SPECIAL DETAILS

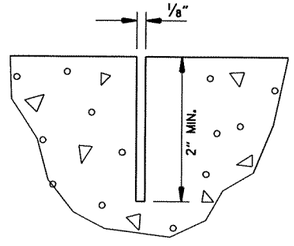
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
1-8-13



PLAN VIEW
CONCRETE BARRIER WALL (MEDIAN TYPE A) TRANSITION

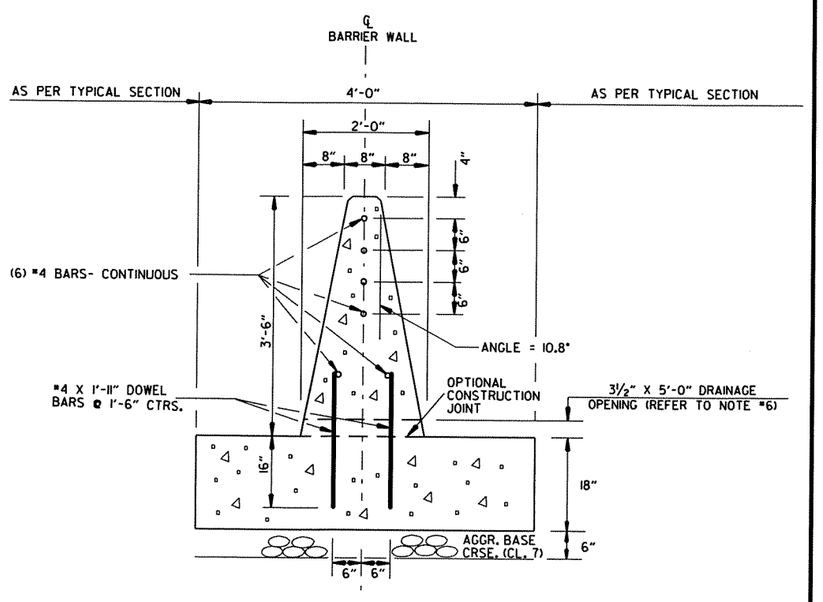


CONCRETE BARRIER WALL (MEDIAN TYPE A)
(SECTION A-A)



CONTRACTION JOINT DETAIL

NOTES FOR MEDIAN BARRIER:
1. ALL EXPOSED EDGES SHALL HAVE 3/4" CHAMFERS.
2. CONTRACTION JOINTS SHALL BE CONSTRUCTED AT 15'-0" MAXIMUM SPACING IN TOP AND SIDES OF MEDIAN BARRIER AND SHALL BE FORMED IN FRESH CONCRETE.
3. CONTRACTION JOINTS ARE NOT PERMITTED AT THE DOWEL BAR LOCATIONS.
4. ALL REINFORCING BARS SHALL HAVE 2" MINIMUM COVER.
5. DOWEL BARS WILL NOT BE REQUIRED IF BARRIER AND BASE ARE CAST AS A COMPLETE UNIT.
6. DRAINAGE OPENINGS TO BE CONSTRUCTED ADJACENT TO DROP INLETS. DOWEL BARS SHALL NOT BE PLACED WITHIN 3" OF DRAINAGE OPENINGS.



CONCRETE BARRIER WALL (MEDIAN TYPE A)
(SECTION B-B)

CONCRETE BARRIER WALL (MEDIAN TYPE A) TRANSITION
FOR OVERHEAD SIGN STRUCTURE

SPECIAL DETAILS

1/8/2013

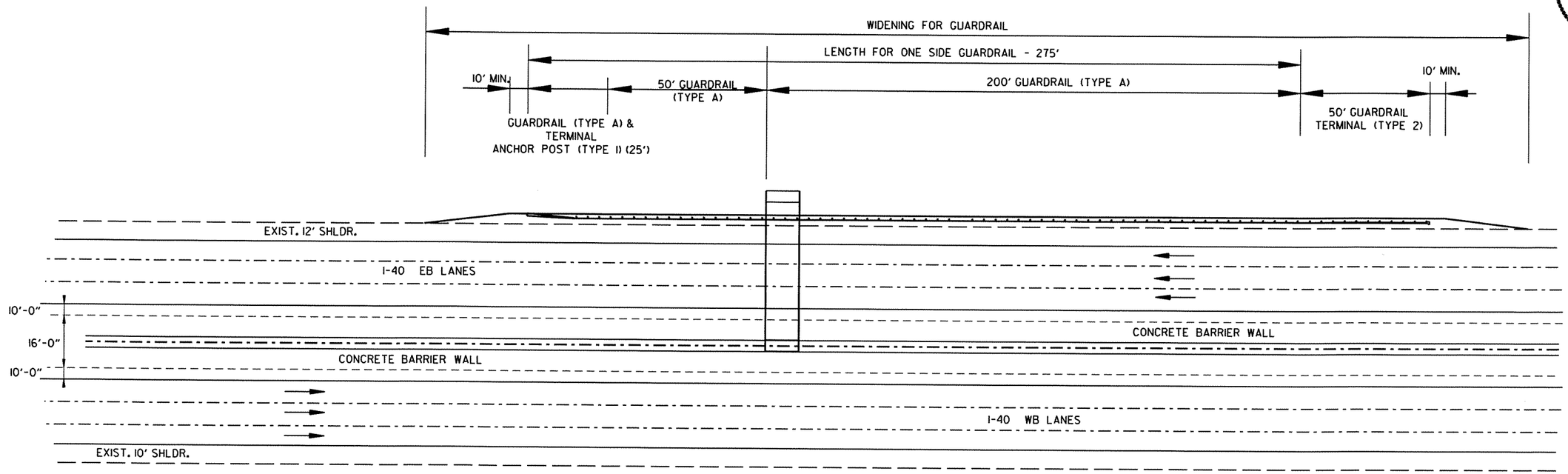
R080411.DGN

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				6	ARK.			
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(2) SPECIAL DETAILS

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REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

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GUARDRAIL INSTALLATION FOR OVERHEAD SIGNS

DIMENSIONS ARE TYPICAL BOTH DIRECTIONS

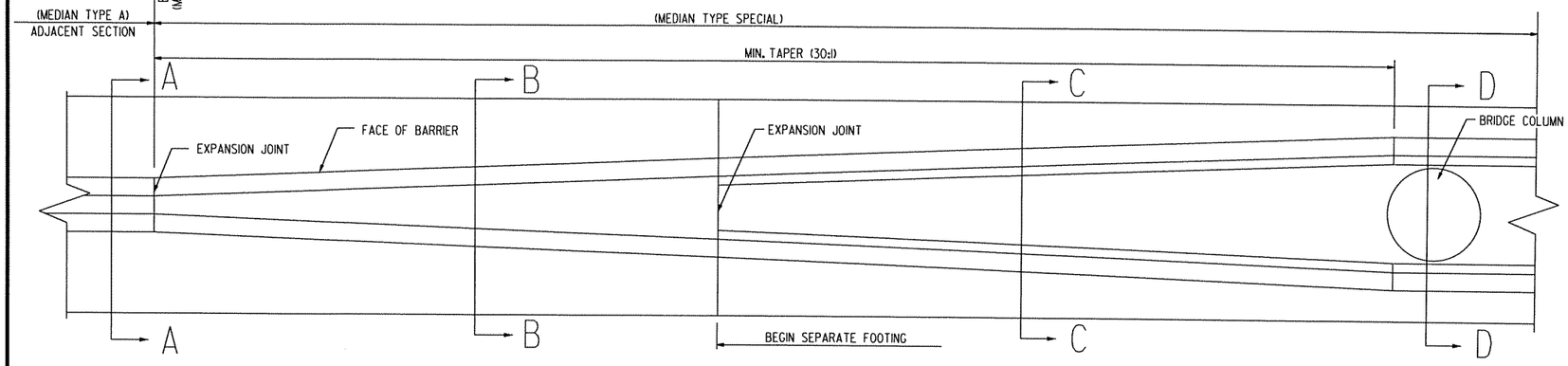
1/4/2013

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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(2) SPECIAL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
1-8-13

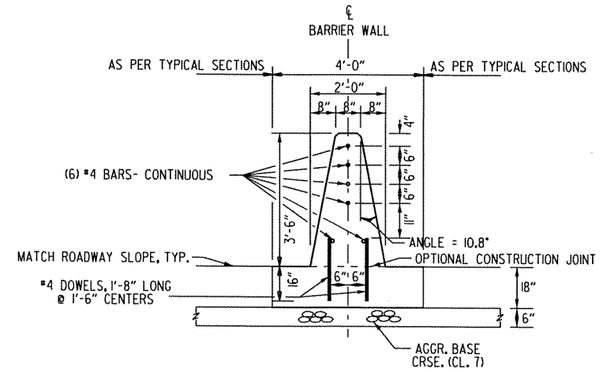


GENERAL NOTES FOR CONCRETE BARRIER WALLS

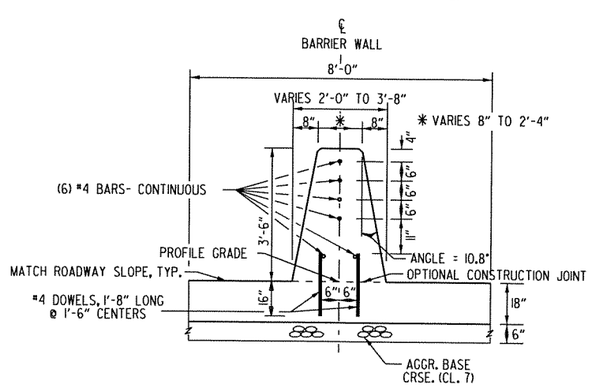
1. ALL BARRIER WALLS SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 631 OF THE STANDARD SPECIFICATIONS, 2003 EDITION.
2. CONTRACTION JOINTS REQUIRED @ 15'-0" MAXIMUM SPACING FOR BARRIER SECTION AA & BB. A 30'-0" MAXIMUM SPACING IS REQUIRED FOR BARRIER SECTION CC. CONTRACTION JOINTS ARE NOT PERMITTED AT THE DOWEL BAR LOCATIONS.
3. ALL CONTRACTION JOINTS TO BE FORMED IN FRESH CONCRETE ON TOP AND IN SIDES OF BARRIER WALL.
4. DOWEL BARS FOR BARRIER SECTION AA & BB WILL NOT BE REQUIRED IF BARRIER AND MINIMUM 8' WIDE BASE ARE CAST AS A COMPLETE UNIT.
5. ALL EXPOSED EDGES OF CONCRETE BARRIER WALL SHALL HAVE A 3/4" CHAMFER.
6. SPACING BETWEEN EXPANSION JOINTS SHALL NOT EXCEED 400 FT. FOR BARRIER. EXPANSION JOINTS SHALL BE FORMED USING 1" PREFORMED JOINT FILLER. CONTINUOUS REINFORCEMENT SHALL BE CUT 2" CLEAR OF EXPANSION JOINTS.
7. MAINTAIN 3" CLEARANCE ON ALL FOOTING REINFORCEMENT AND 2" CLEARANCE ON ALL OTHER REINFORCEMENT.
8. DRAINAGE OPENINGS TO BE CONSTRUCTED AS DIRECTED BY THE ENGINEER.

CONCRETE BARRIER WALL

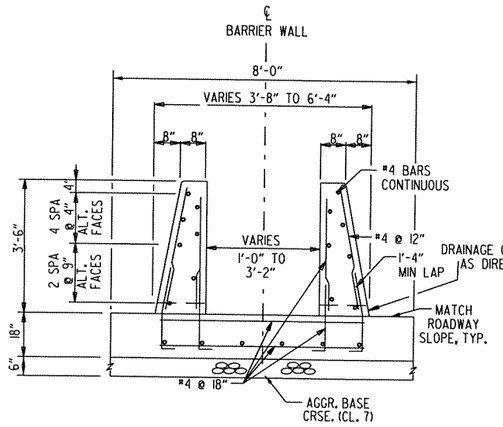
NOTE: TRANSITION FOR SOUTH SIDE SHOWN.
NORTH SIDE TRANSITION IS IDENTICAL.



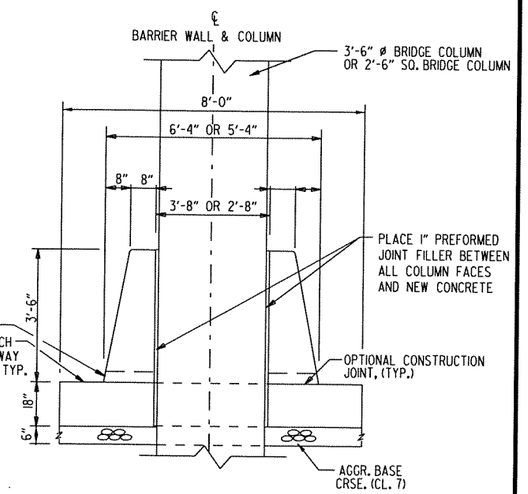
SECTION A-A



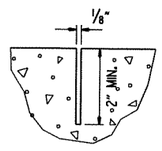
SECTION B-B



SECTION C-C



SECTION D-D
SEE SECTION C-C FOR REINFORCEMENT



CONTRACTION JOINT DETAIL

1/8/2013

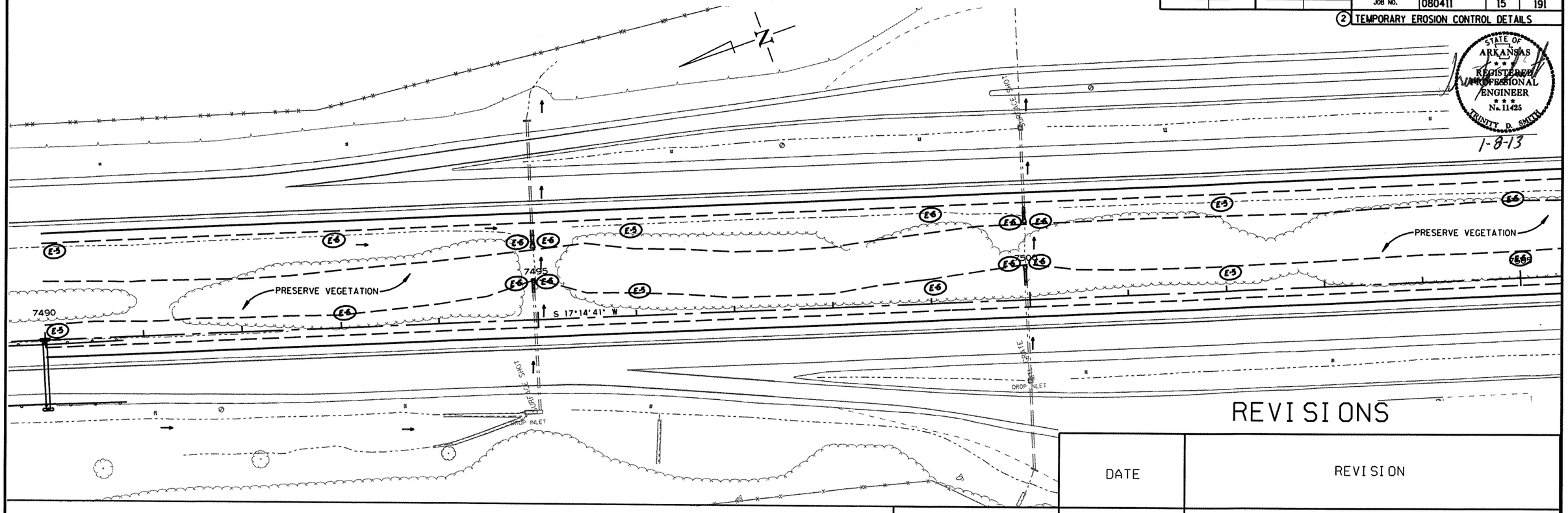
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SPECIAL DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
1-8-13



LEGEND
- (E-5) SAND BAG DITCH CHECKS
- (E-6) ROCK DITCH CHECKS
- (E-7) DROP INLET SILT FENCE

REVISIONS

DATE	REVISION

8/9/2012

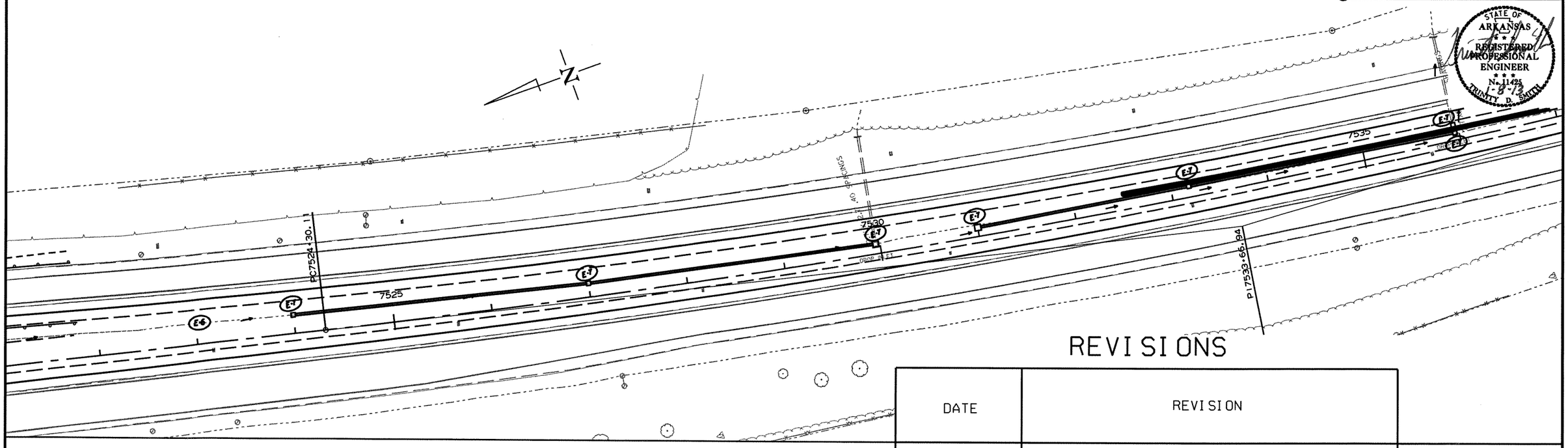
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TEMPORARY EROSION CONTROL DETAILS

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(2) TEMPORARY EROSION CONTROL DETAILS

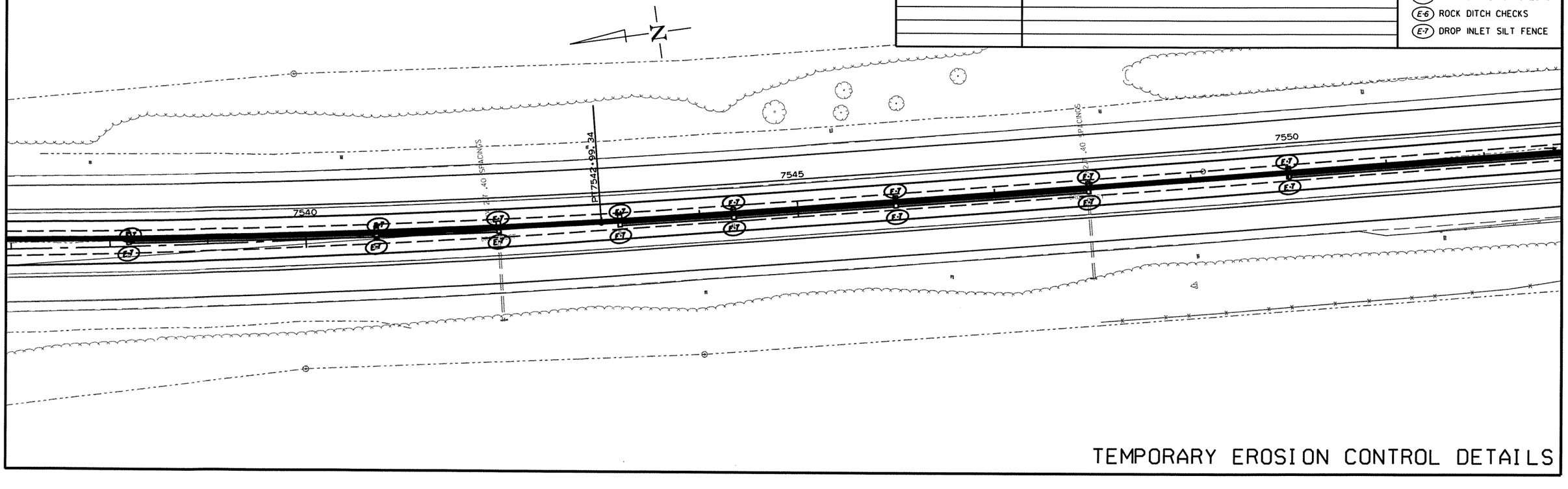
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
1-8-13
TRINITY D. SMITH



REVISIONS

DATE	REVISION

LEGEND
- (E-5) SAND BAG DITCH CHECKS
- (E-6) ROCK DITCH CHECKS
- (E-7) DROP INLET SILT FENCE



8/9/2012

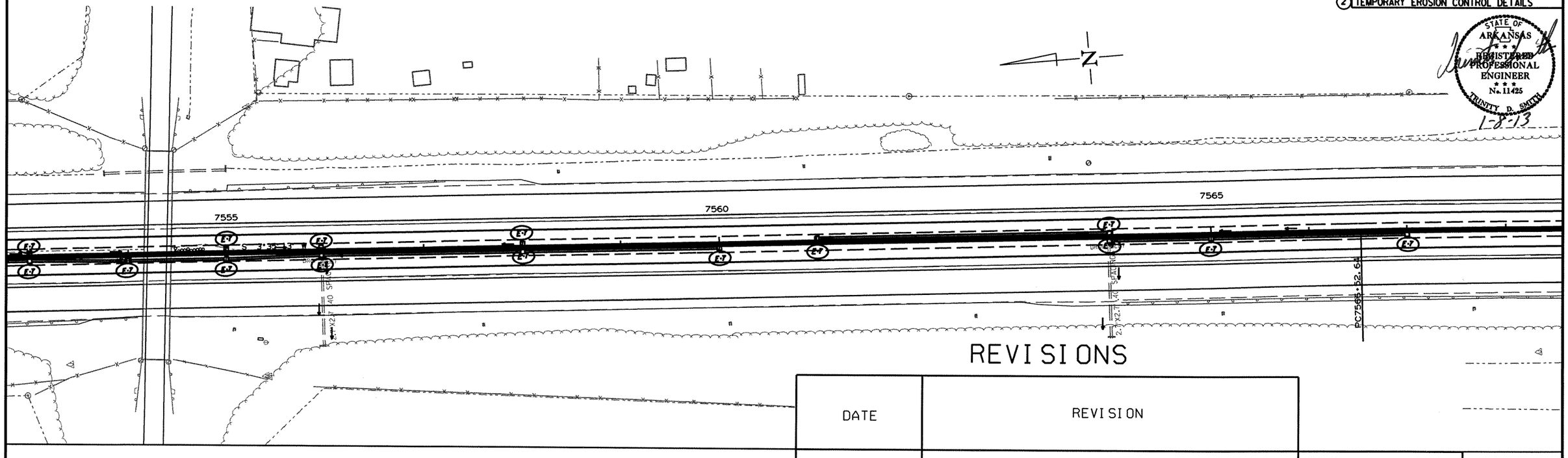
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TEMPORARY EROSION CONTROL DETAILS

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(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
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REVISIONS

DATE	REVISION

LEGEND
- (E-5) SAND BAG DITCH CHECKS
- (E-6) ROCK DITCH CHECKS
- (E-7) DROP INLET SILT FENCE

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TEMPORARY EROSION CONTROL DETAILS

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(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
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No. 11425
TRINITY D. SMITH
1-8-13

LAKE

SPARE SIGNS

7585

7590

7595

7600

SIGNS

DROP INLET

PT 7591+04.97

DROP INLET

DROP INLET

DROP INLET

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
1-8-13

REVISIONS

DATE	REVISION

LEGEND
- (E-5) SAND BAG DITCH CHECKS
- (E-6) ROCK DITCH CHECKS
- (E-7) DROP INLET SILT FENCE

DROP INLET

PC76+41.43

7620

7625

7630

7635

7640

7645

PAVED PARKING

CONCRETE

CENTER POINT ENERGY

8/9/2012

R080411.DGN

TEMPORARY EROSION CONTROL DETAILS

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No. 11425
TRINITY D. SMITH
1-8-13

REVISIONS

DATE	REVISION

LEGEND
- (E-5) SAND BAG DITCH CHECKS
- (E-6) ROCK DITCH CHECKS
- (E-7) DROP INLET SILT FENCE

8/9/2012

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TEMPORARY EROSION CONTROL DETAILS

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(2) TEMPORARY EROSION CONTROL DETAILS

REVISIONS

DATE	REVISION

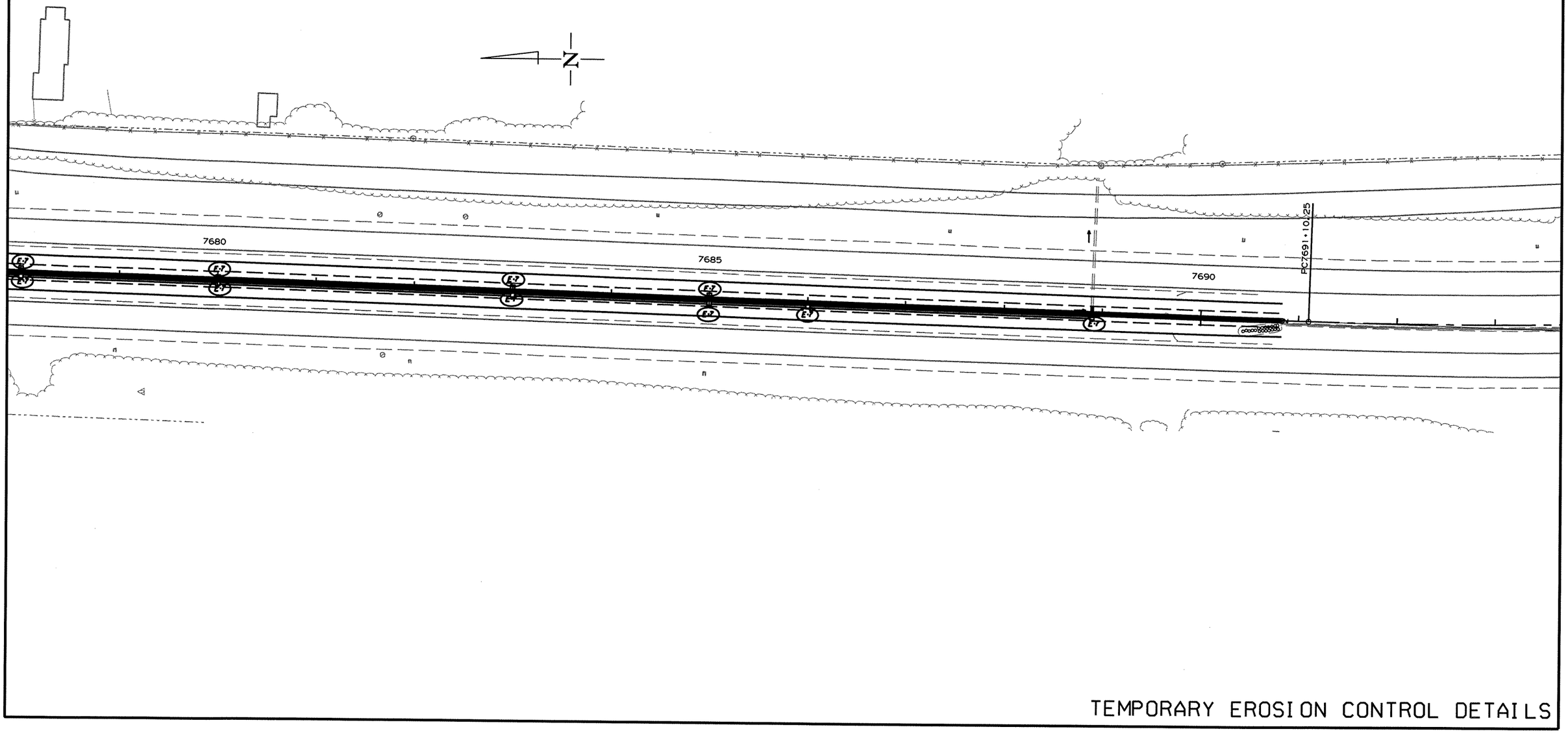
LEGEND

(E-5) SAND BAG DITCH CHECKS

(E-6) ROCK DITCH CHECKS

(E-7) DROP INLET SILT FENCE

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
1-9-13



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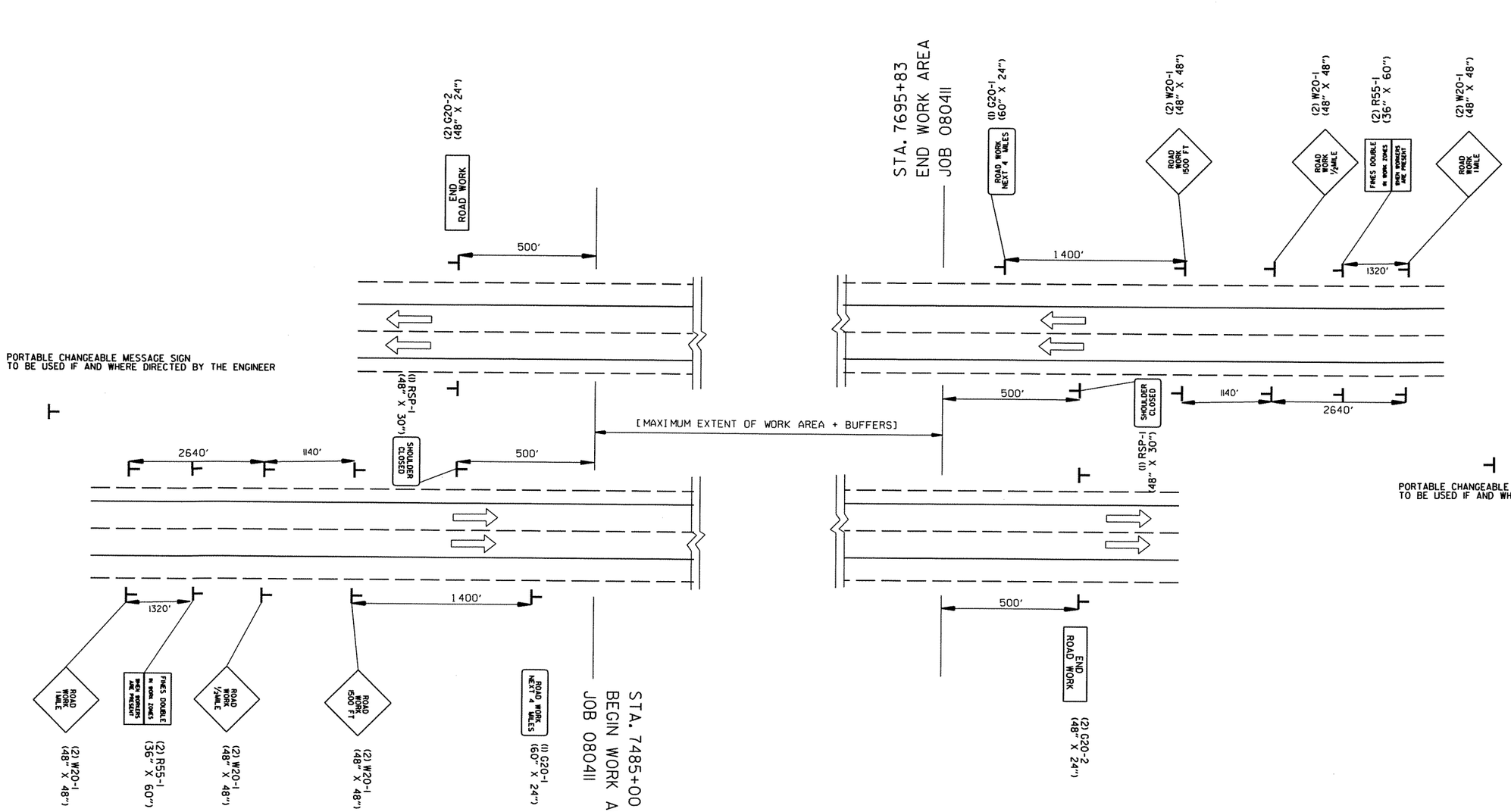
R080411.DGN

TEMPORARY EROSION CONTROL DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	22	191

(2) MAINTENANCE OF TRAFFIC

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
1-8-13



ADVANCE SIGNS AT BEGINNING AND END OF JOB
ALL STAGES

MAINTENANCE OF TRAFFIC
ADVANCE SIGNS AT JOB ENDS

8/9/2012

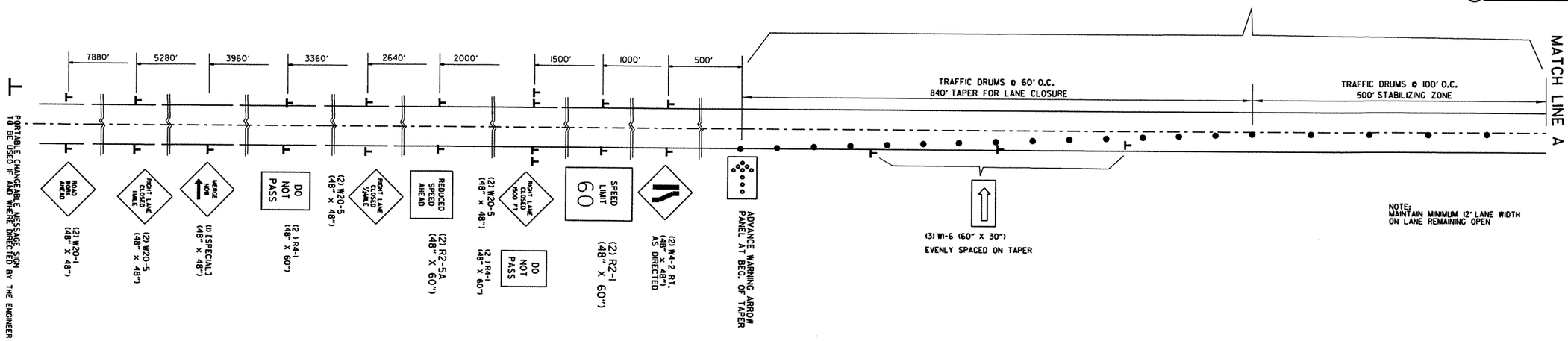
R080411.DGN

NOTE: ANY WORK ZONE OUTSIDE THE LIMITS OF THE LANE CLOSURE AREA MUST HAVE PRIOR WRITTEN APPROVAL OF THE ENGINEER AND ANY ADDITIONAL TRAFFIC CONTROL DEVICES REQUIRED SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE DEPARTMENT.

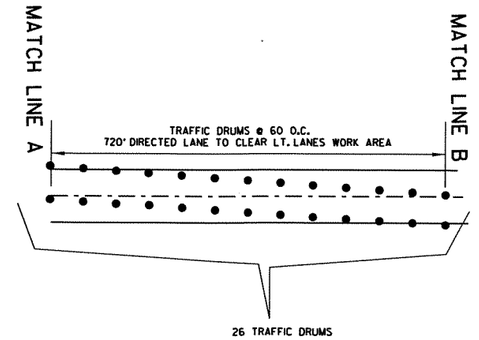
NOTE: REFER TO SP-MAINTENANCE OF TRAFFIC FOR LANE CLOSURE LIMITATIONS AND RESTRICTIONS. QUANTITY OF TRAFFIC DRUMS PROVIDED IN THE CONTRACT IS THE MAXIMUM NUMBER REQUIRED FOR ONE LANE CLOSURE.

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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				JOB NO.		080411	23	191

(2) MAINTENANCE OF TRAFFIC



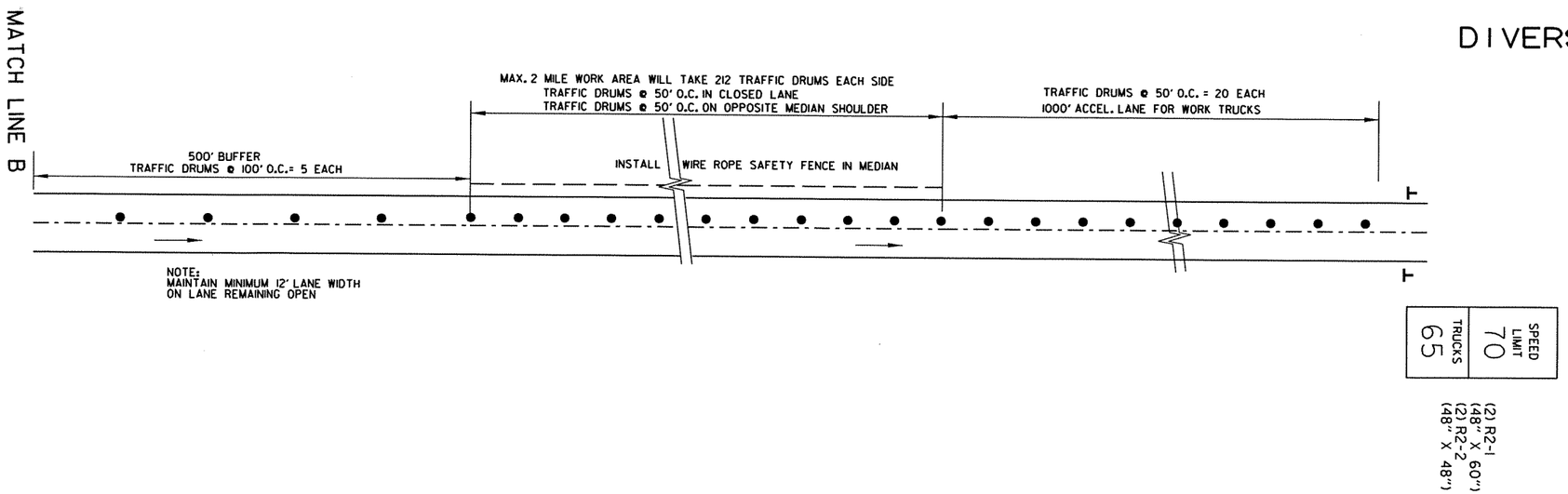
RT. LANE CLOSURE



DIVERSION FOR LT. LANE WORK ZONE

NOTE:

REFER TO SP 'MAINTENANCE OF TRAFFIC' FOR RESTRICTIONS ON TIME-OF-DAY WHEN WORK MAY BE DONE.



MAINTENANCE OF TRAFFIC
MOVABLE LANE CLOSURE
WORK AREAS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
1-8-13

r080411.dgn maint of traffic 9/27/12

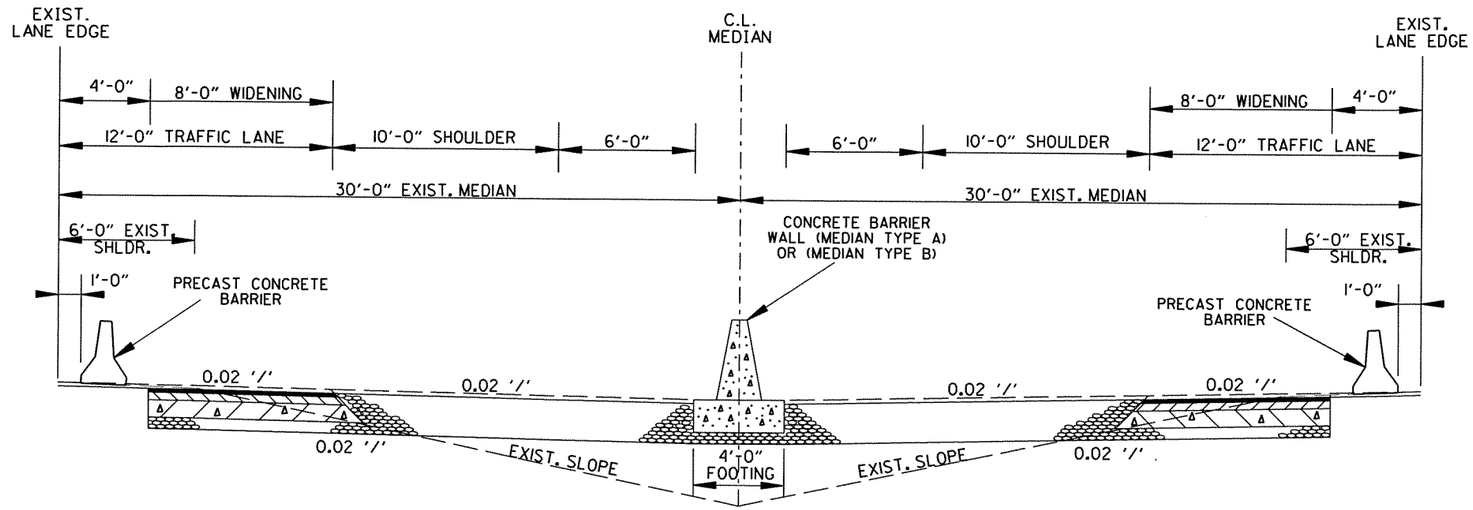
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	24	191

(2) MAINTENANCE OF TRAFFIC

STATE OF ARKANSAS
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No. 11425
TRINITY D. SMITH
1-8-13

FURNISHING AND INSTALLING PRECAST CONCRETE BARRIER
STA. 7490+00 - STA. 7691+00 SOUTHBOUND SHOULDER = 20566 LIN.FT.
STA. 7488+27 - STA. 7693+93 NORTHBOUND SHOULDER = 20566 LIN.FT.

TRAFFIC DRUMS
140' O.C. ON SHOULDERS
SOUTHBOUND LANES STA. 7490+00 - STA. 7691+00 = 147 EACH
NORTHBOUND LANES STA. 7488+27 - STA. 7693+93 = 147 EACH



PLACEMENT OF PRECAST CONC. BARRIER FOR WORK IN MEDIAN

STAGE 1 OPERATIONS
INSTALL PRECAST CONC. BARRIER ON INSIDE SHOULDERS.
CONSTRUCT NOTCH & WIDENING IN MEDIAN.
CONSTRUCT FOUNDATIONS IN MEDIAN FOR NEW OVERHEAD SIGNS.
CONSTRUCT CONCRETE BARRIER MEDIAN BARRIER.
INSTALL GUARDRAIL ON OPEN SHOULDER SECTIONS AT OVERHEAD SIGNS.
REMOVE PRECAST CONCRETE BARRIER AND REPLACE WITH TRAFFIC DRUMS @ 140' O.C.
COLD MILL 4' OF EXISTING PAVED SHOULDERS AND INSTALL FINAL SURFACE COURSE.
REMOVE INSIDE EDGE LINE TAPERS LEFT FROM JOB 080388.
INSTALL STRIPING FOR NEW INSIDE LANES.

8/9/2012

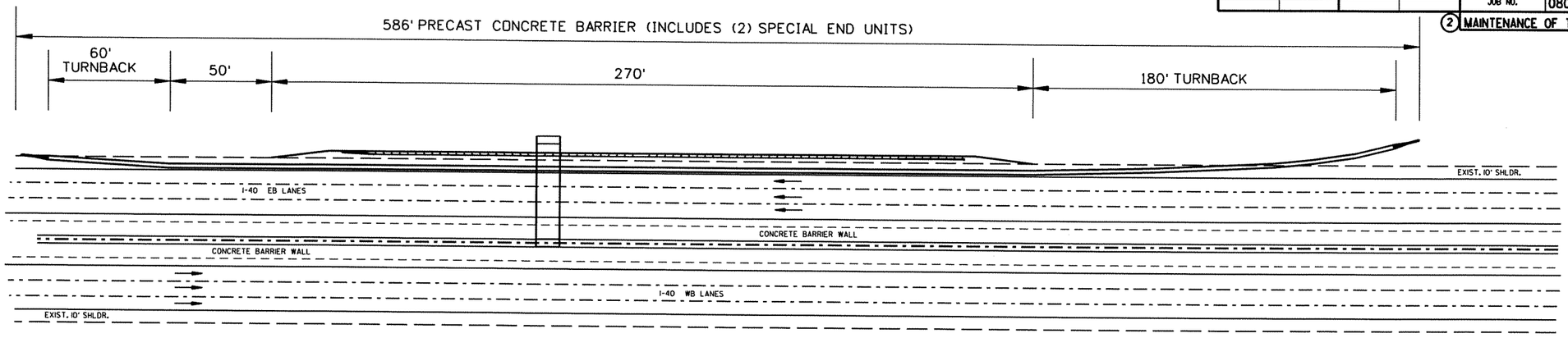
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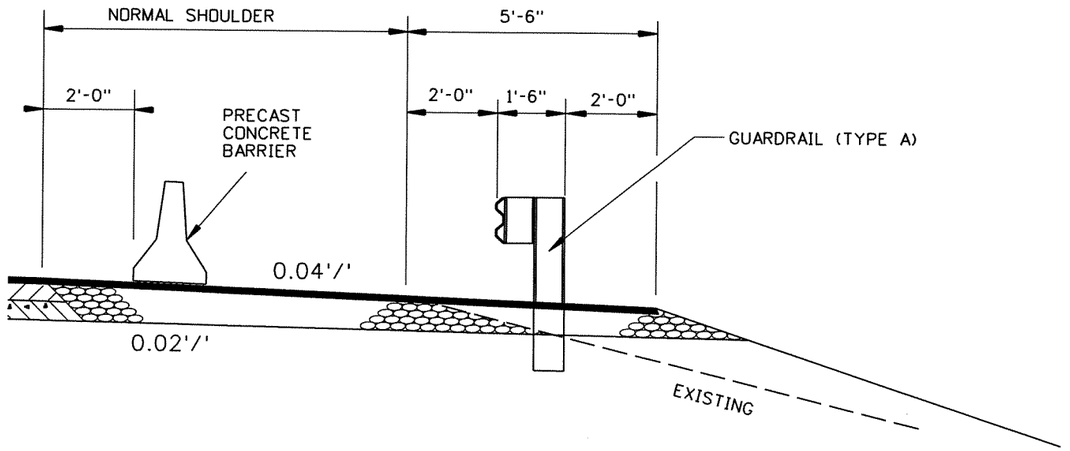
MAINTENANCE OF TRAFFIC STAGE 1

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	25	191

(2) MAINTENANCE OF TRAFFIC

STATE OF ARKANSAS
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No. 11425
TRINITY D. SMITH
1-8-13





PRECAST CONCRETE BARRIER PLACEMENT AT WIDENING FOR GUARDRAIL

NEEDED AT FIVE OVERHEAD SIGN LOCATIONS

RELOCATING PRECAST CONCRETE BARRIER - 2852 LIN.FT.
THIS INCLUDES (4) SPECIAL END UNITS

FURNISHING AND INSTALLING PRECAST CONCRETE BARRIER - 78 LIN.FT.
THIS CONSISTS OF (6) SPECIAL END UNITS

STAGE 2 OPERATIONS
RELOCATE PRECAST CONC. BARRIER TO OUTSIDE SHOULDERS AT OVERHEAD SIGN LOCATIONS.
CONSTRUCT FOUNDATIONS ON OUTSIDE SHOULDERS FOR NEW OVERHEAD SIGNS.
INSTALL GUARDRAIL ON OPEN SHOULDER SECTIONS AT OVERHEAD SIGNS.
TEMPORARY CLOSE ACCELERATION LANE
CONSTRUCT WIDENING & EXTENSION OF ACCELERATION LANE AS SHOWN ON PLANS.
COLD MILL ACCELERATION LANE & EXISTING SHOULDER.
PLACE FINAL STRIPING ON EXTENDED ACCELERATION LANE.

MAINTENANCE OF TRAFFIC STAGE 2

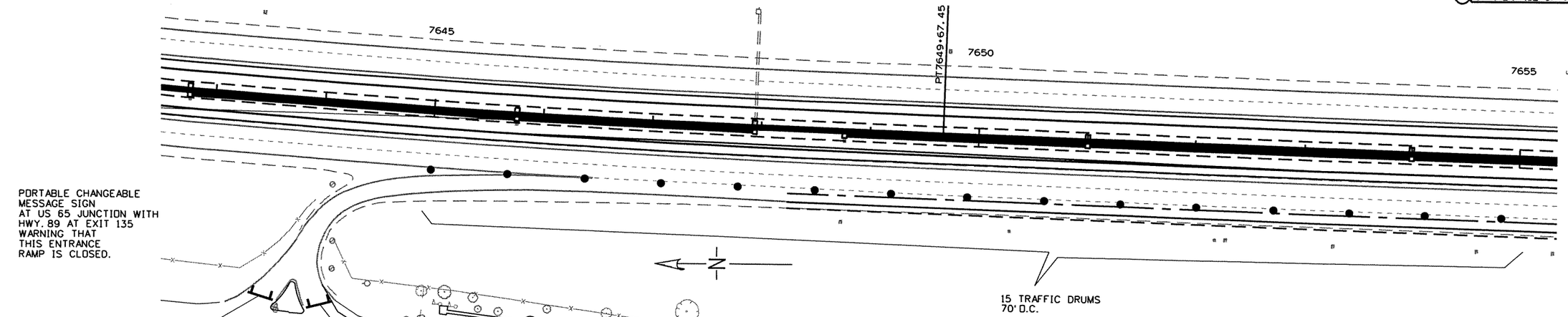
8/9/2012

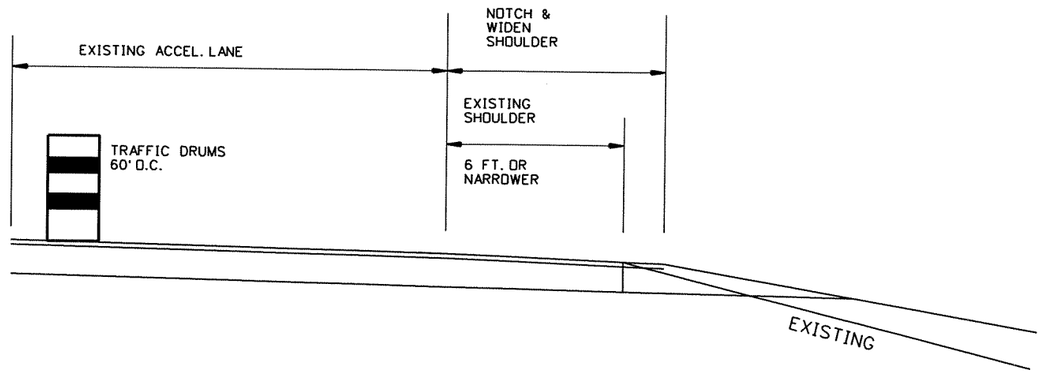
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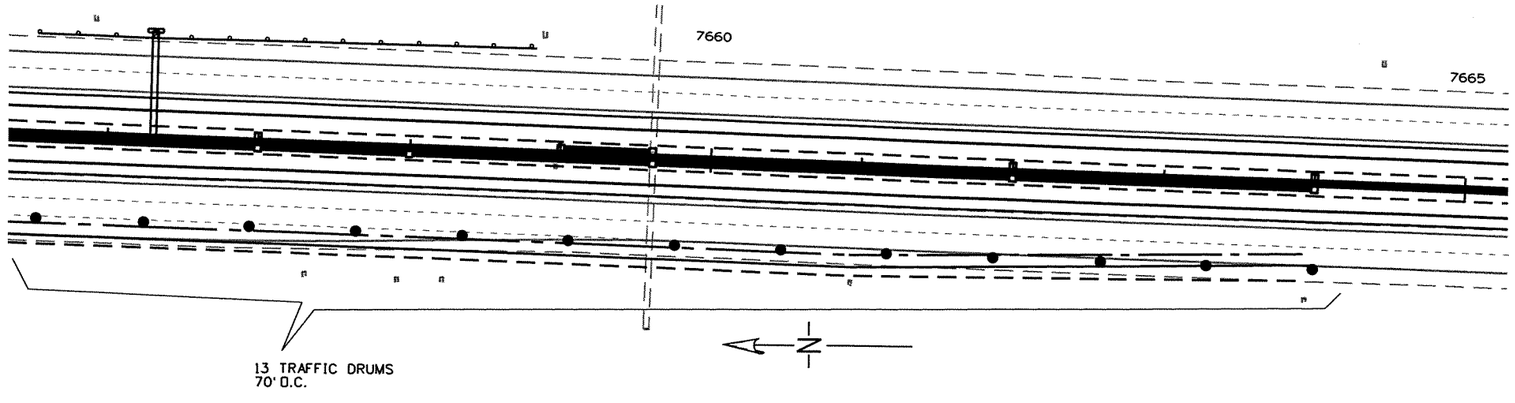
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	26	191

(2) MAINTENANCE OF TRAFFIC

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
1-8-13







STAGE 2 OPERATIONS
- RELOCATE PRECAST CONC. BARRIER TO OUTSIDE SHOULDERS AT OVERHEAD SIGN LOCATIONS.
- CONSTRUCT FOUNDATIONS ON OUTSIDE SHOULDERS FOR NEW OVERHEAD SIGNS.
- INSTALL GUARDRAIL ON OPEN SHOULDER SECTIONS AT OVERHEAD SIGNS.
- TEMPORARY CLOSE RAMP AND ACCELERATION LANE AT STA. 7647+00
- CONSTRUCT WIDENING & EXTENSION OF ACCELERATION LANE AS SHOWN ON PLANS.
- COLD MILL ACCELERATION LANE & EXISTING SHOULDER.
- PLACE FINAL STRIPING ON EXTENDED ACCELERATION LANE.

MAINTENANCE OF TRAFFIC STAGE 2

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				6	ARK.			
				JOB NO.		080411	27	191

(2) MAINTENANCE OF TRAFFIC

REMOVAL OF PERMANENT PAVEMENT MARKINGS
SKIP LANE DIVIDER ON ACCEL LANE
STA. 7646+47 - STA. 7648+25 = 50 LIN.FT.

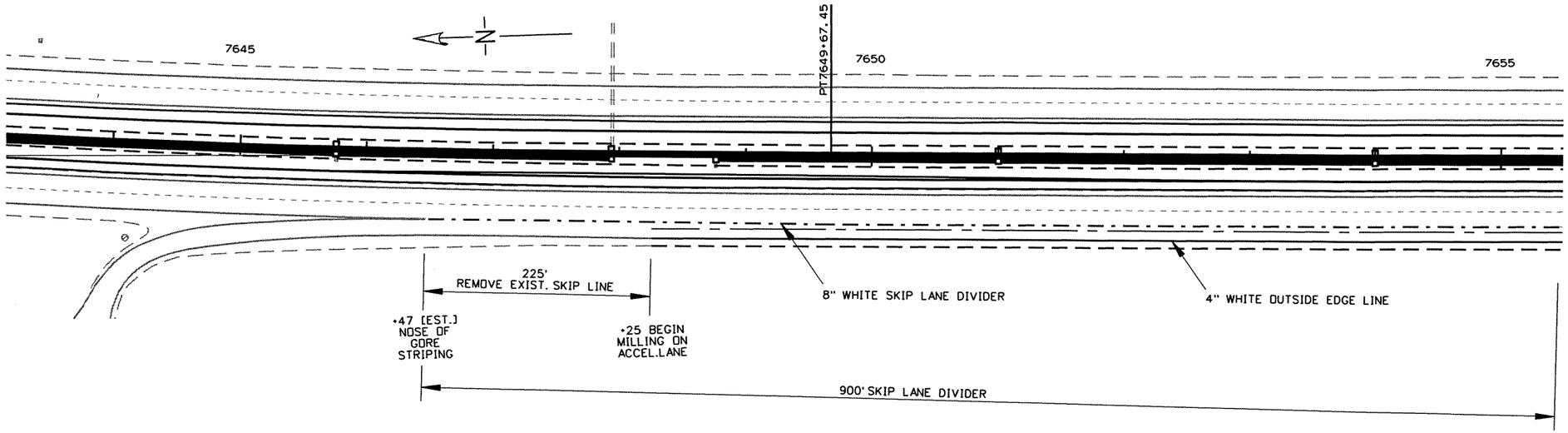
THERMOPLASTIC PAVEMENT MARKINGS
SKIP LINE ON ACCEL. LANE = 228 LIN.FT. 8" WHITE

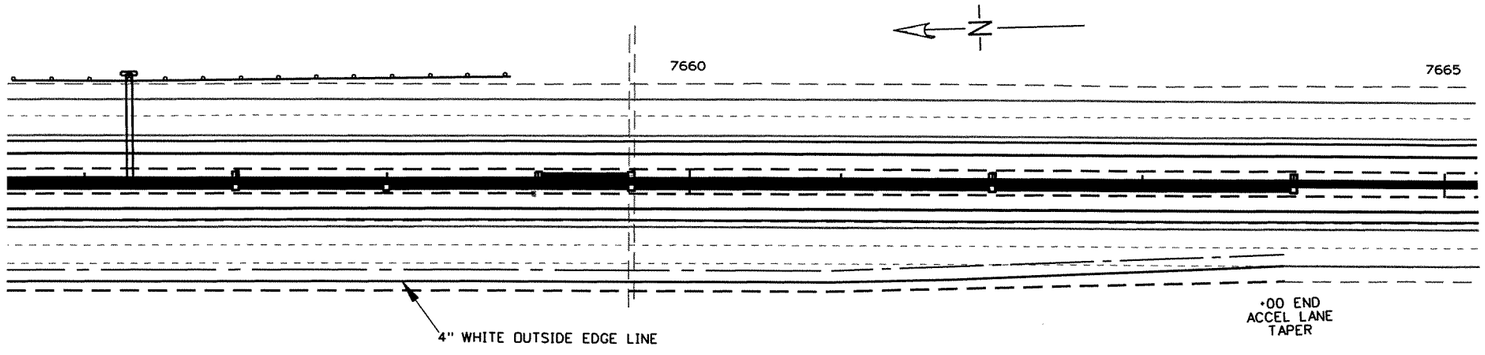
RAISED PAVEMENT MARKERS TYPE II (WHT/RED)
IN PAIRS 36' O.C. ON SKIP LINE = 50 EACH

REFER ALSO TO STANDARD DRAWING PM-2

HIGH PERFORMANCE PAVEMENT MARKINGS
OUTSIDE EDGE LINE ACCEL LANE
STA. 7648+25 - STA. 7664+00 = 1575 LIN.FT. 4" WHITE

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STAGE 2 OPERATIONS
RELOCATE PRECAST CONC. BARRIER TO OUTSIDE SHOULDERS AT OVERHEAD SIGN LOCATIONS.
CONSTRUCT FOUNDATIONS ON OUTSIDE SHOULDERS FOR NEW OVERHEAD SIGNS.
INSTALL GUARDRAIL ON OPEN SHOULDER SECTIONS AT OVERHEAD SIGNS.
TEMPORARY CLOSE RAMP AND ACCELERATION LANE AT STA. 7647+00
CONSTRUCT WIDENING & EXTENSION OF ACCELERATION LANE AS SHOWN ON PLANS.
COLD MILL ACCELERATION LANE & EXISTING SHOULDER.
PLACE FINAL STRIPING ON EXTENDED ACCELERATION LANE.

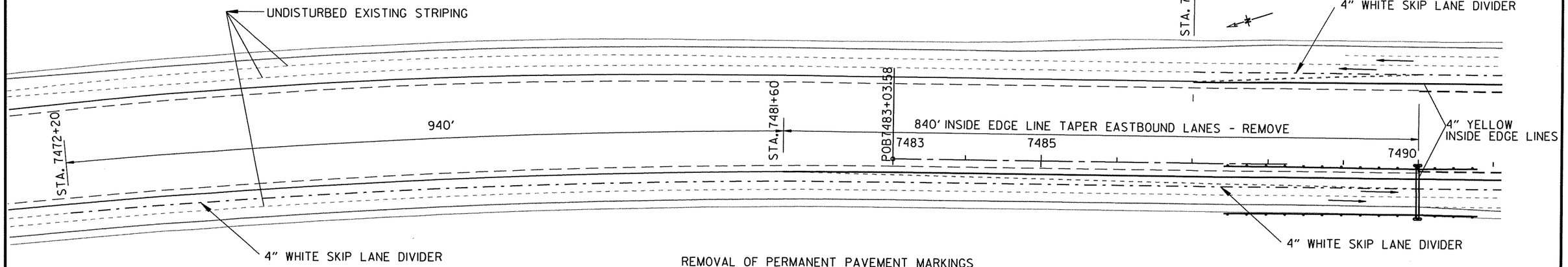
MAINTENANCE OF TRAFFIC
STAGE 2 STRIPING

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	28	191

(2) MAINTENANCE OF TRAFFIC

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
1-8-13

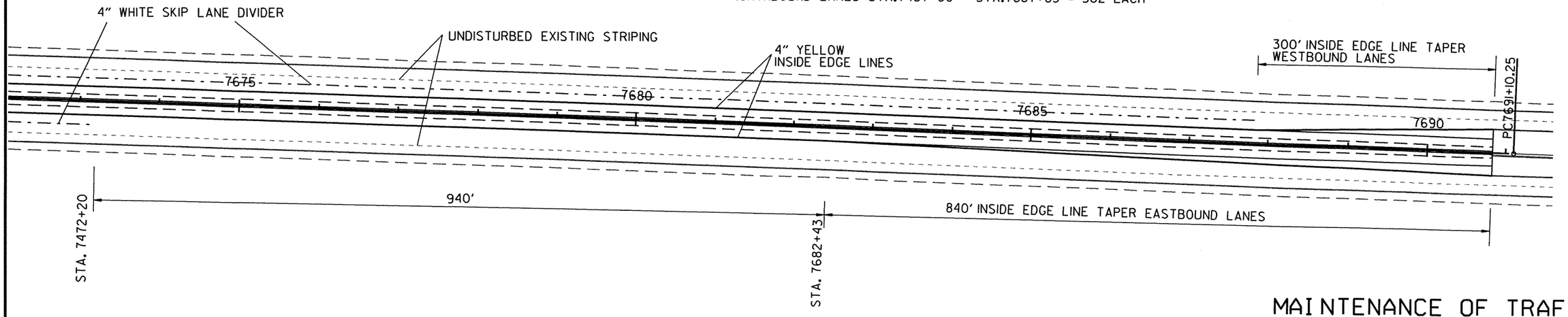


REMOVAL OF PERMANENT PAVEMENT MARKINGS
INSIDE EDGE LINES
SOUTHBOUND LANES STA.7481+60 - STA.7490+00 = 840 LIN.FT.
NORTHBOUND LANES STA.7487+00 - STA.7490+00 = 300 LIN.FT.

HIGH PERFORMANCE PAVEMENT MARKINGS
INSIDE EDGE LINES
SOUTHBOUND LANES STA.7481+60 - STA.7690+83 = 20923 LIN.FT. 4" YELLOW
NORTHBOUND LANES STA.7487+00 - STA.7690+83 = 20383 LIN.FT. 4" YELLOW

HIGH PERFORMANCE PAVEMENT MARKINGS
SKIP LANE DIVIDER NEW INSIDE LANES
SOUTHBOUND LANES STA.7472+20 - STA.7673+03 = 5020 LIN.FT. 4" WHITE
NORTHBOUND LANES STA.7487+00 - STA.7687+83 = 5020 LIN.FT. 4" WHITE

RAISED PAVEMENT MARKERS TYPE II (WHITE/RED)
40' O.C. ON SKIP LANE DIVIDER NEW INSIDE LANES
SOUTHBOUND LANES STA.7472+20 - STA.7673+03 = 502 EACH
NORTHBOUND LANES STA.7487+00 - STA.7687+83 = 502 EACH



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MAINTENANCE OF TRAFFIC
FINAL STRIPING

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	29	191

(2) QUANTITY SHEETS

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

1-8-13

PERMANENT PAVEMENT MARKINGS

DESCRIPTION	STAGE 1	STAGE 2	REMOVAL OF PERMANENT PAVEMENT MARKINGS	RAISED PAVEMENT MARKERS TYPE II (WHT/RED)	THERMOPLASTIC PAVEMENT MARKINGS	HIGH PERFORMANCE PAVEMENT MARKING	
					8" WHITE	4" WHITE	4" YELLOW
	LIN. FT. - EACH		LIN. FT.	EACH	LIN. FT.		
REMOVAL OF PERMANENT PAVEMENT MARKINGS	1140	50	1190				
RAISED PAVEMENT MARKERS TYPE II (WHT/RED)	1004	50		1054			
THERMOPLASTIC PAVEMENT MARKINGS WHITE (8")		228			228		
HIGH PERFORMANCE PAVEMENT MARKING WHITE (4")	10040	1575				11615	
HIGH PERFORMANCE PAVEMENT MARKING YELLOW (4")	41306						41306
TOTALS:			**1190**	**1054**	**228**	**11615**	**41306**

NOTE: THIS IS A HIGH TRAFFIC VOLUME ROAD AS DEFINED IN SECTION 604.03, STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, 2003 EDITION.

ADVANCE WARNING SIGNS AND DEVICES

SIGN NUMBER	DESCRIPTION	SIGN SIZE	STAGE 1	STAGE 2	MAXIMUM NUMBER REQUIRED	TOTAL SIGNS REQUIRED		TRAFFIC DRUMS	BARRICADES (TYPE III)	FURNISHING & INSTALLING PRECAST CONC. BARRIER	RELOCATING PRECAST CONCRETE BARRIER	PORTABLE CHANGEABLE MESSAGE SIGN	TEMPORARY IMPACT ATTENUATION BARRIER	TEMP. IMPACT ATTEN.BARR. (REPAIR)	ADVANCE WARNING ARROW PANEL
									RIGHT						
			LIN. FT. - EACH			NO.	SQ. FT.	EACH	LIN. FT.			WEEK	EACH		DAY
W1-6	LARGE ARROW	48"x48"	3	3	3	3	37.5								
W20-1	ROAD WORK AHEAD	48"x48"	2	2	2	2	32.0								
W20-1	ROAD WORK 1 MILE	48"x48"	4	4	4	4	64.0								
W20-1	ROAD WORK 1/2 MILE	48"x48"	4	4	4	4	64.0								
W20-1	ROAD WORK 1500 FT.	48"x48"	4	4	4	4	64.0								
W20-5	RIGHT LANE CLOSED 1 MILE	48"x48"	2	2	2	2	32.0								
W20-5	RIGHT LANE CLOSED 1/2 MILE	48"x48"	2	2	2	2	32.0								
W20-5	RIGHT LANE CLOSED 1500 FEET	48"x48"	2	2	2	2	32.0								
W4-2 RT.	RIGHT LANE CLOSING GRAPHIC	48"x48"	2	2	2	2	32.0								
G20-2	END ROAD WORK	48"x24"	4	4	4	4	32.0								
G20-1	ROAD WORK NEXT xx MILES	60"x24"	2	2	2	2	20.0								
R2-1	SPEED LIMIT 60	48"x60"	2	2	2	2	40.0								
R2-1	TRUCKS SPEED LIMIT 65	48"x48"	2	2	2	2	32.0								
R2-1	SPEED LIMIT 70	48"x60"	2	2	2	2	40.0								
R2-5A	REDUCED SPEED AHEAD	48"x60"	2	2	2	2	40.0								
R4-1	DO NOT PASS	48"x60"	4	4	4	4	80.0								
R55-1	FINES DOUBLE IN WORK ZONES	35"x60"	4	4	4	4	58.4								
RSP-1	SHOULDER CLOSED	48"x30"	2	2	2	2	20.0								
R11-2	ROAD CLOSED	48"x30"		2	2	2	20.0								
SPECIAL 1	MERGE NOW + ARROW	48"x48"	2	2	2	2	32.0								
	TRAFFIC DRUMS		576	310	576			576							
	TYPE III BARRICADE-RT. (16')			2	2				32						
	FURNISHING AND INSTALLING PRECAST CONCRETE BARRIER		41132	78	41210					41210					
	RELOCATING PRECAST CONCRETE BARRIER			2852	2852						2852				
	PORTABLE CHANGEABLE MESSAGE SIGN		2	1	3							6			
	TEMPORARY IMPACT ATTENUATION BARRIER				4								4		
	TEMPORARY IMPACT ATTENUATION BARRIER (REPAIR)				4									4	
	ADVANCE WARNING ARROW PANEL		1	1	1										10
TOTALS:							**803.9**	**576**	**32**	**41210**	**2852**	**6**	**4**	**4**	**10**

8/9/2012

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QUANTITY SHEETS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2-18-13				6	ARK.			
				JOB NO.		080411	30	191

(2) QUANTITY SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
2-18-13

EARTHWORK

	STATION	STATION	LOCATION / DESCRIPTION	UNCLASSIFIED EXCAVATION	COMPACTED EMBANKMENT	* SOIL STABILIZATION
				CU. YD.		TON
**	ENTIRE	PROJECT	MAIN LANES	25594	24478	
	ENTIRE	PROJECT	MAIN LANES- UNDERCUT	5019	5019	
*	ENTIRE	PROJECT	TO BE USED IF AND WHERE			1000
			DIRECTED BY THE ENGINEER			
TOTALS:				**30613**	**29497**	**1000**

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

** MAIN LANES EARTHWORK QUANTITIES SHALL BE PAID AS PLAN QUANTITY.
NOTE: UNDERCUT SHALL BE FIELD MEASURED.

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")			
				TON / STATION	TON	TOTAL WID.	SQ.YD.	GALLONS / SQ.YD.	GALLON	AVG. WID.	SQ.YD.	POUND / SQ.YD.	PG 76-22	AVG. WID.	SQ.YD.	POUND / SQ.YD.	PG 76-22	AVG. WID.	SQ.YD.	POUND / SQ.YD.	PG 76-22
			FEET			FEET				FEET			TON	FEET			TON	FEET			TON
MAIN LANES																					
7490+00	7532+50	LEFT MAIN LANES WIDENING	4250.0	251.50	10688.8	33.5	15819.4	0.03	474.6	8.5	4013.9	1110.0	2227.7	8.3	3919.4	440.0	862.3	30.1	14213.9	220.0	1563.5
7490+00	7532+50	RIGHT MAIN LANES WIDENING	4250.0	251.50	10688.8	33.5	15819.4	0.03	474.6	8.5	4013.9	1110.0	2227.7	8.3	3919.4	440.0	862.3	30.1	14213.9	220.0	1563.5
7490+00	7532+50	MILL INSIDE SHLDR. LT & RT. LANES	4250.0			8.0	3777.8	0.10	377.8												
7532+50	7686+00	MEDIAN	15350.0	534.00	81969.0	66.9	114101.7	0.03	3423.1	17.1	29165.0	1110.0	16186.6	16.5	28141.7	440.0	6191.2	72.3	123311.7	220.0	13564.3
7532+50	7686+00	MILL INSIDE SHLDR. LT & RT. LANES	15350.0			8.0	13644.4	0.10	1364.4												
7648+26	7663+94	MILL OUTSIDE SHLDR. RT. LANE	1568.0			10.0	1742.2	0.10	174.2												
7648+26	7663+94	FULL DEPTH LANE AND SHLDR.	1568.0	121.50	1905.1	33.5	5836.4	0.03	175.1	8.5	1480.9	1110.0	821.9	8.3	1446.0	440.0	318.1	26.1	4547.2	220.0	500.2
7686+00	7690+83	MEDIAN	483.0	547.00	2642.0	66.9	3590.3	0.03	107.7	17.1	917.7	1110.0	509.3	16.5	885.5	440.0	194.8	72.3	3880.1	220.0	426.8
7686+00	7690+83	MILL INSIDE SHLDR. LT & RT. LANES	483.0			8.0	429.3	0.10	42.9												
ADDITIONAL FOR GUARDRAIL																					
7487+12	7487+45	RT. SIDE RT. MAIN LANES	33.0	39.25	13.0													2.8	10.3	220.0	1.1
7487+45	7490+90	RT. SIDE RT. MAIN LANES	345.0	78.50	270.8													5.5	210.8	220.0	23.2
7490+90	7491+23	RT. SIDE RT. MAIN LANES	33.0	39.25	13.0													2.8	10.3	220.0	1.1
7487+12	7487+45	LT. SIDE RT. MAIN LANES	33.0	39.25	13.0													2.8	10.3	220.0	1.1
7487+45	7490+90	LT. SIDE RT. MAIN LANES	345.0	78.50	270.8													5.5	210.8	220.0	23.2
7490+90	7491+23	LT. SIDE RT. MAIN LANES	33.0	39.25	13.0													2.8	10.3	220.0	1.1
7518+07	7518+40	RT. SIDE LT. MAIN LANES	33.0	39.25	13.0													2.8	10.3	220.0	1.1
7518+40	7521+85	RT. SIDE LT. MAIN LANES	345.0	78.50	270.8													5.5	210.8	220.0	23.2
7521+95	7522+28	RT. SIDE LT. MAIN LANES	33.0	39.25	13.0													2.8	10.3	220.0	1.1
7518+07	7518+40	LT. SIDE LT. MAIN LANES	33.0	39.25	13.0													2.8	10.3	220.0	1.1
7518+40	7521+85	LT. SIDE LT. MAIN LANES	345.0	78.50	270.8													5.5	210.8	220.0	23.2
7521+95	7522+28	LT. SIDE LT. MAIN LANES	33.0	39.25	13.0													2.8	10.3	220.0	1.1
7612+27	7612+60	LT. SIDE LT. MAIN LANES	33.0	39.25	13.0													2.8	10.3	220.0	1.1
7612+60	7616+05	LT. SIDE LT. MAIN LANES	345.0	78.50	270.8													5.5	210.8	220.0	23.2
7616+05	7616+38	LT. SIDE LT. MAIN LANES	33.0	39.25	13.0													2.8	10.3	220.0	1.1
7665+07	7665+40	LT. SIDE LT. MAIN LANES	33.0	39.25	13.0													2.8	10.3	220.0	1.1
7665+40	7668+85	LT. SIDE LT. MAIN LANES	345.0	78.50	270.8													5.5	210.8	220.0	23.2
7668+85	7669+18	LT. SIDE LT. MAIN LANES	33.0	39.25	13.0													2.8	10.3	220.0	1.1
TOTALS:					**109674.5**		**174760.9**		**6614.4**		**39591.4**		**21973.2**		**38312.0**		**8428.7**		**161555.2**		**17770.7**

BASIS OF ESTIMATE:
ACHM SURFACE COURSE (1/2").....94.8% MIN. AGGR.....5.2% ASPHALT BINDER
ACHM BINDER COURSE (1").....95.6% MIN. AGGR.....4.4% ASPHALT BINDER
ACHM BASE COURSE (1 1/2").....96.2% MIN. AGGR.....3.8% ASPHALT BINDER
MAXIMUM NUMBER OF GYRATIONS = 205 FOR PG 76-22

ACHM PATCHING OF EXISTING ROADWAY

DESCRIPTION	TON
ENTIRE PROJECT - TO BE USED IF AND WHERE	50
DIRECTED BY THE ENGINEER	
TOTAL:	**50**

NOTE: QUANTITY IS 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.
7490+00	7690+83	INSIDE RIGHT MAIN LANES	4	8925.78
7490+00	7690+83	INSIDE LEFT MAIN LANES	4	8925.78
7648+26	7660+91.62	OUTSIDE RIGHT MAIN LANES	6	843.75
7660+91.62	7663+94	OUTSIDE RIGHT MAIN LANES	VAR.	268.78
TOTAL:				**18964.09**

NOTE: AVERAGE MILLING DEPTH 2".

ASPHALT CONCRETE PATCHING FOR MAINTENANCE OF TRAFFIC

LOCATION	TON	TACK COAT
		GALLON
ENTIRE PROJECT - TO BE USED IF AND WHERE	95	190
DIRECTED BY THE ENGINEER		
TOTALS:	**95**	**190**

NOTE: QUANTITIES ARE ESTIMATED.
SEE SECTION 104.03 OF THE STD. SPECS.

8/9/2012

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QUANTITY SHEETS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	31	191

(2) QUANTITY SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
1-8-13

RUMBLE STRIPS IN ASPHALT SHOULDERS

STATION	STATION	LOCATION	RUMBLE STRIPS
			LIN. FT.
7490+00	7690+83	RT. SIDE LEFT MAIN LANES	20083
7648+26	7663+94	RT. SIDE RIGHT MAIN LANES	1568
7490+00	7690+83	LT. SIDE RIGHT MAIN LANES	20083
TOTAL:			41734

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)	DROP INLET SILT FENCE (E-7)	SILT FENCE (E-11)	SEDIMENT BASIN (E-9)	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	MAIN LANES	6.74	13.48	6.74	687.5	6.74				396	93	1625	3325			232
*ENTIRE PROJECT TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER.								34.00	34.00	693.6	80	16	75	1000	222	222	262
TOTALS:			6.74	13.48	6.74	687.5	6.74	34.00	34.00	693.6	476	109	1700	4325	222	222	494

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

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

REMOVAL AND DISPOSAL OF DROP INLETS

STATION	DESCRIPTION	DROP INLETS
		EACH
7529+95	TYPE H DROP INLET IN MEDIAN	1
7535+95	TYPE H DROP INLET IN MEDIAN	1
7541+95	TYPE H DROP INLET IN MEDIAN	1
7547+95	TYPE H DROP INLET IN MEDIAN	1
7555+95	TYPE H DROP INLET IN MEDIAN	1
7563+95	TYPE H DROP INLET IN MEDIAN	1
7570+95	TYPE H DROP INLET IN MEDIAN	1
7577+48	TYPE K DROP INLET IN MEDIAN	1
7584+95	TYPE H DROP INLET IN MEDIAN	1
7591+95	TYPE H DROP INLET IN MEDIAN	1
7601+33	TYPE H DROP INLET IN MEDIAN	1
7609+97	TYPE H DROP INLET IN MEDIAN	1
7615+96	TYPE H DROP INLET IN MEDIAN	1
7621+00	TYPE H DROP INLET IN MEDIAN	1
7627+96	TYPE H DROP INLET IN MEDIAN	1
7633+96	TYPE H DROP INLET IN MEDIAN	1
7647+95	TYPE H DROP INLET IN MEDIAN	1
7659+64	TYPE H DROP INLET IN MEDIAN	1
7666+97	TYPE H DROP INLET IN MEDIAN	1
7675+97	TYPE H DROP INLET IN MEDIAN	1
7688+91	TYPE H DROP INLET IN MEDIAN	1
TOTAL:		21

REMOVAL AND DISPOSAL OF ITEMS

STATION	STATION	LOCATION	PIER PROTECTION	IMPACT ATTENUATION BARRIER
			LIN. FT.	EACH
7554+95	7554+68	MEDIAN	80	2
7599+25	7600+00	MEDIAN	80	2
7690+83		MEDIAN		1
TOTALS:			160	5

CONCRETE BARRIER WALL

STATION	STATION	LOCATION	CONCRETE BARRIER WALL	
			MEDIAN TYPE B	MEDIAN TYPE C
			LIN. FT.	
7532+50	7686+00	MEDIAN	15350	
7686+00	7690+83	MEDIAN		483
TOTALS:			15350	483

SELECTED PIPE BEDDING

LOCATION	SELECTED PIPE BEDDING
	CU.YD.
ENTIRE PROJECT TO BE USED IF	
AND WHERE DIRECTED BY THE	200
ENGINEER	
TOTAL:	200

NOTE: QUANTITIES ARE ESTIMATED.
SEE SECTION 104.03 OF THE STD. SPECS.

CLEARING AND GRUBBING

STATION	STATION	LOCATION	CLEARING	GRUBBING
			STATION	
7490+00	7515+25	MAIN LANES	26	26
TOTALS:			26	26

QUANTITY SHEETS

8/9/2012

R080411.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	32	191

(2) QUANTITY SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
1-8-13

SOIL LOG BOX (1 OF 2)

STATION	LATITUDE			LONGITUDE			LOCATION	DEPTH	LIQUID LIMIT	PLASTICITY INDEX	AASHTO CLASSIFICATION	COLOR
	DEG	MIN	SEC	DEG	MIN	SEC		FEET				
7491+00	34	59	59.60	92	24	45.90	26' RT.	0-5	26	12	A-6 (3)	RD/BR
7491+00	34	59	59.50	92	24	45.60	CL	0-5	33	16	A-6 (7)	RD/BR
7495+00	34	59	55.70	92	24	47.00	CL	0-5	40	18	A-6 (14)	RD/BR
7499+00	34	59	51.60	92	24	47.30	100' LT.	0-5	40	19	A-6 (17)	RD/BR
7499+00	34	59	51.60	92	24	47.30	120' LT.	0-5	19	4	A-4 (0)	RD/BR
7503+00	34	59	48.10	92	24	49.90	CL	0-5	40	17	A-6 (12)	RD/BR
7507+00	34	59	44.40	92	24	51.40	12' RT.	0-5	29	10	A-4 (4)	RD/BR
7507+00	34	59	44.40	92	24	51.50	25' RT.	0-5	27	12	A-6 (3)	RD/BR
7511+00	34	59	40.60	92	24	52.60	CL	0-5	38	17	A-6 (11)	RD/BR
7515+00	34	59	36.40	92	24	52.80	85' LT.	0-5	29	13	A-6 (5)	RD/BR
7515+00	34	59	36.40	92	24	52.80	100' LT.	0-5	ND	NP	A-2-4 (0)	RD/BR
7519+00	34	59	32.70	92	24	54.70	25' LT.	0-5	39	16	A-6 (8)	BROWN
7519+00	34	59	32.70	92	24	54.70	25' LT.		44	20	A-6 (9)	BROWN
7523+00	34	59	28.90	92	24	56.20	15' RT.	0-5	21	6	A-4 (0)	RD/BR
7523+00	34	59	28.90	92	24	56.20	24' RT	0-5	26	12	A-6 (3)	RD/BR
7527+00	34	59	25.00	92	24	57.00	CL	2-4Z	33	12	A-6 (5)	RD/BR
7531+00	34	59	21.10	92	24	57.50	32' LT.	0-5	ND	NP	A-4 (0)	RD/BR
7531+00	34	59	21.30	92	24	57.90	49' LT.	0-5	ND	NP	A-4 (0)	RD/BR
7535+00	34	59	17.10	92	24	58.70	CL	0-5	36	15	A-6 (10)	RD/BR
7539+00	34	59	13.20	92	24	59.40	12' RT.	0-3.5Z	30	15	A-6 (8)	BROWN
7539+00	34	59	13.40	92	24	59.30	25' RT.	0-4Z	26	11	A-6 (4)	RD/BR
7543+00	34	59	10.00	92	24	59.50	CL	0-2.4Z	26	10	A-4 (5)	RD/BR
7547+00	34	59	5.20	92	24	59.60	13' LT.	0-4.5Z	21	5	A-4 (0)	RED
7547+00	34	59	5.20	92	24	59.60	28' LT.	0-5	ND	NP	A-2-4 (0)	BROWN
7510+00	34	59	2.00	92	24	60.00	CL	0-3.5Z	34	14	A-6 (10)	BROWN
7555+00	34	58	58.00	92	25	0.39	15' RT.	0-2.5Z	23	7	A-4 (1)	BROWN
7555+00	34	58	58.00	92	25	0.58	29' RT.	0-4.0Z	ND	NP	A-4 (0)	BROWN
7559+00	34	58	53.30	92	25	0.70	CL	0-5	29	11	A-6 (4)	BROWN
7563+00	34	58	49.30	92	25	0.70	15' LT.	0-5	27	8	A-4 (3)	BROWN
7563+00	34	58	49.30	92	25	0.70	30' LT.	0-5	ND	NP	A-4 (0)	BROWN
7567+00	34	58	45.40	92	25	1.20	CL	0-5	29	13	A-6 (6)	RD/BR
7571+00	34	58	41.60	92	25	1.80	17' RT.	0-2.5Z	20	5	A-4 (0)	RD/BR
7571+00	34	58	41.70	92	25	1.80	29' RT.	0-4.0Z	ND	NP	A-4 (0)	RD/BR
7575+00	34	58	37.70	92	25	2.30	CL	0-4.3Z	32	13	A-6 (8)	RD/BR
7579+00	34	58	33.70	92	25	2.70	18' LT.	0-5	24	9	A-4 (3)	RD/BR
7579+00	34	58	33.90	92	25	3.10	30' LT.	0-5	17	3	A-4 (0)	BROWN
7583+00	34	58	31.00	92	25	3.50	CL	0-5	24	10	A-4 (4)	BROWN
7583+00	34	58	31.00	92	25	3.50	CL		25	7	A-4 (4)	BROWN
7587+00	34	58	25.80	92	25	5.10	18' RT.	0-5	ND	NP	A-4 (0)	BROWN

SOIL LOG (BOX 2 OF 2)

STATION	LATITUDE			LONGITUDE			LOCATION	DEPTH	LIQUID LIMIT	PLASTICITY INDEX	AASHTO CLASSIFICATION	COLOR
	DEG	MIN	SEC	DEG	MIN	SEC		FEET				
7587+00	34	58	25.90	92	25	5.10	30' RT.	0-5	ND	NP	A-4 (0)	BROWN
7591+00	34	58	22.30	92	25	6.10	CL	0-5	30	13	A-6 (10)	BROWN
7595+00	34	58	18.00	92	25	7.30	16' LT.	0-5	20	7	A-4 (1)	BROWN
7595+00	34	58	18.00	92	25	7.30	28' LT.	0-5	19	5	A-4 (0)	RD/BR
7599+00	34	58	14.80	92	25	8.60	CL	0-5	33	19	A-6 (13)	BROWN
7603+00	34	58	11.00	92	25	10.10	18' RT.	0-5	30	16	A-6 (10)	RD/BR
7603+00	34	58	11.60	92	25	9.90	28' RT.	0-5	22	7	A-4 (2)	RD/BR
7607+00	34	58	8.20	92	25	11.10	CL	0-5	28	9	A-4 (7)	RD/BR
7611+00	34	58	3.20	92	25	12.30	18' LT.	0-5	24	8	A-4 (3)	BROWN
7611+00	34	58	3.20	92	25	12.20	30' LT.	0-5	18	4	A-4 (0)	BROWN
7615+00	34	58	1.10	92	25	13.20	CL	0-5	27	9	A-4 (6)	BROWN
7619+00	34	57	56.00	92	25	15.20	16' RT.	0-5	23	11	A-6 (5)	RD/BR
7619+00	34	57	56.00	92	25	15.20	25' RT.	0-5	21	8	A-4 (1)	RD/BR
7623+00	34	57	53.80	92	25	15.90	CL	0-5	31	16	A-6 (12)	RD/BR
7627+00	34	57	47.80	92	25	17.10	28' LT.	0-5	23	8	A-4 (3)	BROWN
7627+00	34	57	50.80	92	25	16.70	39' LT.	0-5	18	4	A-4 (0)	BROWN
7631+00	34	57	46.30	92	25	17.90	CL	0-5	28	9	A-4 (6)	RD/BR
7635+00	34	57	39.80	92	25	19.20	9' RT.	0-5	22	6	A-4 (1)	BROWN
7635+00	34	57	41.80	92	25	18.90	16' RT.	0-5	19	5	A-4 (0)	BROWN
7638+88	34	57	38.50	92	25	19.50	3' LT.	0-5	31	12	A-6 (10)	BROWN
7638+88	34	57	38.50	92	25	19.50	3' LT.		38	19	A-6 (17)	BROWN
7651+00	34	57	23.80	92	25	20.70	19' RT.	0-5	21	4	A-4 (0)	RD/BR
7651+00	34	57	25.40	92	25	20.60	29' RT.	0-5	21	6	A-4 (1)	RD/BR
7655+00	34	57	23.80	92	25	20.70	CL	0-5	34	21	A-6 (17)	RD/BR
7660+00	34	57	14.90	92	25	20.50	18' LT.	0-5	24	8	A-4 (3)	RD/BR
7660+00	34	57	16.20	92	25	20.70	30' LT.	0-5	20	6	A-4 (1)	RD/BR
7663+00	34	57	14.90	92	25	2.10	CL	0-5	29	10	A-4 (9)	RD/BR
7667+00	34	57	8.30	92	25	21.10	19' RT.	0-5	25	9	A-4 (3)	RD/BR
7667+00	34	57	10.90	92	25	21.10	28' RT.	0-5	19	3	A-4 (0)	RD/BR
7671+00	34	57	8.10	92	25	21.20	CL	0-5	49	32	A-7-6 (31)	RD/BR
7675+00	34	57	0.60	92	25	20.90	18' LT.	0-5	23	7	A-4 (3)	BROWN
7675+00	34	57	3.70	92	25	21.20	30' LT.	0-5	21	7	A-4 (0)	BROWN
7679+00	34	56	56.40	92	25	21.30	CL	0-5	23	3	A-4 (0)	RD/BR
7683+00	34	56	52.70	92	25	21.60	18' RT.	0-5	21	5	A-4 (0)	RD/BR
7683+00	34	56	53.70	92	25	21.60	27' RT.	0-5	18	3	A-4 (0)	RD/BR
7687+00	34	56	49.00	92	25	21.60	CL	0-5	29	13	A-6 (10)	RD/BR
7687+00	34	56	49.00	92	25	21.60	CL	0-5	24	8	A-4 (4)	BROWN
7690+00	34	56	45.60	92	25	21.70	18' LT.	0-5	24	21	A-4 (0)	RD/BR
7690+00	34	56	45.80	92	25	21.50	28' LT.	0-5	7	8	A-4 (1)	RD/BR

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.
Z- AUGER REFUSAL
NP - NON-PLASTIC
ND - NOT DETERMINABLE

8/9/2012

R080411.DGN

QUANTITY SHEETS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	33	191

(2) QUANTITY SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
1-8-13

STRUCTURES BOX (1 OF 3)

STATION	DESCRIPTION	REINF. CONC. PIPE CULVERT (CLASS III)		F.E.S. FOR R.C. PIPE CULVERTS		DROP INLETS TYPE		JUNCT. BOX	SOLID SODDING	WATER	STD. DWG. NOS.
		24"	30"	24"	30"	RM	ST	(TYPE ST)			
		LIN. FT.		EACH		EACH			SQ.YD.	M.GAL	
7494+97	EXTEND R.C. PIPE RIGHT		12		1				13	0.16	PCC-1, FES-1, FES-2
7494+97	EXTEND R.C. PIPE LEFT		8		1				13	0.16	PCC-1, FES-1, FES-2
7499+97	EXTEND R.C. PIPE RIGHT	14		1					8	0.10	PCC-1, FES-1, FES-2
7499+97	EXTEND R.C. PIPE LEFT	14		1					8	0.10	PCC-1, FES-1, FES-2
7505+97	EXTEND R.C. PIPE RIGHT	12		1					8	0.10	PCC-1, FES-1, FES-2
7505+97	EXTEND R.C. PIPE LEFT	18		1					8	0.10	PCC-1, FES-1, FES-2
7513+95	EXTEND R.C. PIPE RIGHT		16		1				13	0.16	PCC-1, FES-1, FES-2
7513+95	EXTEND R.C. PIPE LEFT		12		1				13	0.16	PCC-1, FES-1, FES-2
7524+00	CONST. DI IN MEDIAN W/ RCP OUTLET	300				1					FPC-9D, PCC-1
7527+00	CONST. DI IN MEDIAN W/ RCP OUTLET	296				1					FPC-9D, PCC-1
7529+95	CONST. DI IN MEDIAN W/ RCP OUTLET	6				1					FPC-9D, PCC-1
7531+00	CONST. DI IN MEDIAN W/ RCP OUTLET	220				1					FPC-9D, PCC-1
7533+19	CONST. DI IN MEDIAN W/ RCP OUTLET	278					1				FPC-9S, PCC-1
7535+95	CONST. DI IN MEDIAN						1				FPC-9S
7535+95	CONST. DI IN MEDIAN W/ RCP OUTLET	2					1				FPC-9S, PCC-1
7538+19	CONST. DI IN MEDIAN W/ RCP OUTLET	2					1				FPC-9S, PCC-1
7538+19	CONST. DI IN MEDIAN W/ RCP OUTLET	252					1				FPC-9S, PCC-1
7540+70	CONST. DI IN MEDIAN W/ RCP OUTLET	2					1				FPC-9S, PCC-1
7540+70	CONST. DI IN MEDIAN W/ RCP OUTLET	126					1				FPC-9S, PCC-1
7541+95	CONST. DI IN MEDIAN W/ RCP OUTLET	2					1				FPC-9S, PCC-1
7541+95	CONST. DI IN MEDIAN W/ RCP OUTLET	6					1				FPC-9S, PCC-1
7543+19	CONST. DI IN MEDIAN W/ RCP OUTLET	2					1				FPC-9S, PCC-1
7543+19	CONST. DI IN MEDIAN W/ RCP OUTLET	116					1				FPC-9S, PCC-1
7544+34	CONST. DI IN MEDIAN W/ RCP OUTLET	2					1				FPC-9S, PCC-1
7544+34	CONST. DI IN MEDIAN W/ RCP OUTLET	158					1				FPC-9S, PCC-1
7546+00	CONST. DI IN MEDIAN W/ RCP OUTLET	196					1				FPC-9S, PCC-1
7546+00	CONST. DI IN MEDIAN W/ RCP OUTLET	2					1				FPC-9S, PCC-1
7547+95	CONST. DI IN MEDIAN						1				FPC-9S
7547+95	CONST. DI IN MEDIAN W/ RCP OUTLET	2					1				FPC-9S, PCC-1
7550+00	CONST. DI IN MEDIAN W/ RCP OUTLET	300					1				FPC-9S, PCC-1
7550+00	CONST. DI IN MEDIAN W/ RCP OUTLET	2					1				FPC-9S, PCC-1
7553+00	CONST. DI IN MEDIAN W/ RCP OUTLET	100					1				FPC-9S, PCC-1
7553+00	CONST. DI IN MEDIAN W/ RCP OUTLET	2					1				FPC-9S, PCC-1
7554+00	CONST. JB IN MEDIAN W/ RCP OUTLET	100					1	1			FPC-9S, PCC-1
7555+00	CONST. JB IN MEDIAN W/ RCP OUTLET	96					1	1			FPC-9S, PCC-1
7555+00	CONST. DI IN MEDIAN W/ RCP OUTLET	6					1				FPC-9S, PCC-1
7555+95	CONST. DI IN MEDIAN						1				FPC-9S
7555+95	CONST. DI IN MEDIAN W/ RCP OUTLET	2					1				FPC-9S, PCC-1
7558+00	CONST. DI IN MEDIAN W/ RCP OUTLET	206					1				FPC-9S, PCC-1
7558+00	CONST. DI IN MEDIAN W/ RCP OUTLET	2					1				FPC-9S, PCC-1
7560+00	CONST. DI IN MEDIAN W/ RCP OUTLET	200					1				FPC-9S, PCC-1
7561+00	CONST. DI IN MEDIAN W/ RCP OUTLET	296					1				FPC-9S, PCC-1
7563+95	CONST. DI IN MEDIAN						1				FPC-9S
7563+95	CONST. DI IN MEDIAN W/ RCP OUTLET	2					1				FPC-9S, PCC-1
7565+00	CONST. DI IN MEDIAN W/ RCP OUTLET	106					1				FPC-9S, PCC-1
7567+00	CONST. DI IN MEDIAN W/ RCP OUTLET	200					1				FPC-9S, PCC-1
7568+78	CONST. DI IN MEDIAN W/ RCP OUTLET	218					1				FPC-9S, PCC-1
7568+78	CONST. DI IN MEDIAN W/ RCP OUTLET	2					1				FPC-9S, PCC-1
7570+95	CONST. DI IN MEDIAN						1				FPC-9S
7570+95	CONST. DI IN MEDIAN W/ RCP OUTLET	2					1				FPC-9S, PCC-1
7571+55	CONST. DI IN MEDIAN W/ RCP OUTLET	60					1				FPC-9S, PCC-1
7571+55	CONST. DI IN MEDIAN W/ RCP OUTLET	2					1				FPC-9S, PCC-1
7574+29	CONST. DI IN MEDIAN W/ RCP OUTLET	274					1				FPC-9S, PCC-1
7574+29	CONST. DI IN MEDIAN W/ RCP OUTLET	2					1				FPC-9S, PCC-1
7576+89	CONST. DI IN MEDIAN W/ RCP OUTLET	60					1				FPC-9S, PCC-1
7576+89	CONST. DI IN MEDIAN W/ RCP OUTLET	2					1				FPC-9S, PCC-1
7577+48	CONST. DI IN MEDIAN						1				FPC-9S
7579+40	CONST. DI IN MEDIAN W/ RCP OUTLET	192					1				FPC-9S, PCC-1
7579+40	CONST. DI IN MEDIAN W/ RCP OUTLET	2					1				FPC-9S, PCC-1
7581+92	CONST. DI IN MEDIAN W/ RCP OUTLET	252					1				FPC-9S, PCC-1
7581+92	CONST. DI IN MEDIAN W/ RCP OUTLET	2					1				FPC-9S, PCC-1
7584+43	CONST. DI IN MEDIAN W/ RCP OUTLET	52					1				FPC-9S, PCC-1
7584+43	CONST. DI IN MEDIAN W/ RCP OUTLET	2					1				FPC-9S, PCC-1
7584+95	CONST. DI IN MEDIAN W/ RCP OUTLET	8					1				FPC-9S, PCC-1
7584+95	CONST. DI IN MEDIAN W/ RCP OUTLET	2					1				FPC-9S, PCC-1
7586+93	CONST. DI IN MEDIAN W/ RCP OUTLET	198					1				FPC-9S, PCC-1
7586+93	CONST. DI IN MEDIAN W/ RCP OUTLET	2					1				FPC-9S, PCC-1
7589+44	CONST. DI IN MEDIAN W/ RCP OUTLET	252					1				FPC-9S, PCC-1
SUBTOTALS BOX 1:		5234	48	4	4	4	56	2	84	1.04	

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QUANTITY SHEETS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	34	191

(2) QUANTITY SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
1-8-13

STRUCTURES BOX (2 OF 3)

STATION	DESCRIPTION	REINF. CONC. PIPE CULVERT (CLASS III)		F.E.S. FOR R.C. PIPE CULVERTS		DROP INLETS TYPE		JUNCT. BOX	SOLID SODDING	WATER	STD. DWG. NOS.
		24"	30"	24"	30"	RM	ST	(TYPE ST)			
		LIN. FT.		EACH		EACH			SQ.YD.	M.GAL	
7589+44	CONST. DI IN MEDIAN W/ RCP OUTLET	2					1				FPC-9S, PCC-1
7591+95	CONST. DI IN MEDIAN W/ RCP OUTLET	8					1				FPC-9S, PCC-1
7591+95	CONST. DI IN MEDIAN W/ RCP OUTLET	2					1				FPC-9S, PCC-1
7595+00	CONST. DI IN MEDIAN W/ RCP OUTLET	306					1				FPC-9S, PCC-1
7595+00	CONST. DI IN MEDIAN W/ RCP OUTLET	2					1				FPC-9S, PCC-1
7598+00	CONST. DI IN MEDIAN W/ RCP OUTLET	300					1				FPC-9S, PCC-1
7598+00	CONST. DI IN MEDIAN W/ RCP OUTLET	2					1				FPC-9S, PCC-1
7601+33	CONST. DI IN MEDIAN						1				FPC-9S
7601+33	CONST. DI IN MEDIAN W/ RCP OUTLET	8					1				FPC-9S, PCC-1
7604+00	CONST. DI IN MEDIAN W/ RCP OUTLET	268					1				FPC-9S, PCC-1
7604+00	CONST. DI IN MEDIAN W/ RCP OUTLET	2					1				FPC-9S, PCC-1
7607+00	CONST. DI IN MEDIAN W/ RCP OUTLET	298					1				FPC-9S, PCC-1
7607+00	CONST. DI IN MEDIAN W/ RCP OUTLET	2					1				FPC-9S, PCC-1
7609+97	CONST. DI IN MEDIAN						1				FPC-9S
7609+97	CONST. DI IN MEDIAN W/ RCP OUTLET	2					1				FPC-9S, PCC-1
7613+00	CONST. DI IN MEDIAN W/ RCP OUTLET	296					1				FPC-9S, PCC-1
7613+00	CONST. DI IN MEDIAN W/ RCP OUTLET	2					1				FPC-9S, PCC-1
7615+96	CONST. DI IN MEDIAN W/ RCP OUTLET	8					1				FPC-9S, PCC-1
7615+96	CONST. DI IN MEDIAN W/ RCP OUTLET	2					1				FPC-9S, PCC-1
7618+41	CONST. DI IN MEDIAN W/ RCP OUTLET	286					1				FPC-9S, PCC-1
7618+41	CONST. DI IN MEDIAN W/ RCP OUTLET	2					1				FPC-9S, PCC-1
7621+00	CONST. DI IN MEDIAN						1				FPC-9S
7621+56	CONST. DI IN MEDIAN W/ RCP OUTLET	56					1				FPC-9S, PCC-1
7623+00	CONST. DI IN MEDIAN W/ RCP OUTLET	144					1				
7624+81	CONST. DI IN MEDIAN W/ RCP OUTLET	182					1				FPC-9S, PCC-1
7624+81	CONST. DI IN MEDIAN W/ RCP OUTLET	2					1				FPC-9S, PCC-1
7627+00	CONST. DI IN MEDIAN W/ RCP OUTLET	96					1				FPC-9S, PCC-1
7627+96	CONST. DI IN MEDIAN W/ RCP OUTLET	2					1				FPC-9S, PCC-1
7627+96	CONST. DI IN MEDIAN						1				FPC-9S, PCC-1
7630+81	CONST. DI IN MEDIAN W/ RCP OUTLET	286					1				FPC-9S, PCC-1
7630+81	CONST. DI IN MEDIAN W/ RCP OUTLET	2					1				FPC-9S, PCC-1
7633+96	CONST. DI IN MEDIAN W/ RCP OUTLET	2					1				FPC-9S, PCC-1
7633+96	CONST. DI IN MEDIAN						1				FPC-9S
7636+80	CONST. DI IN MEDIAN W/ RCP OUTLET	184					1				FPC-9S, PCC-1
7636+80	CONST. DI IN MEDIAN W/ RCP OUTLET	2					1				FPC-9S, PCC-1
7639+00	CONST. DI IN MEDIAN W/ RCP OUTLET	220					1				FPC-9S, PCC-1
7640+19	CONST. DI IN MEDIAN W/ RCP OUTLET	120					1				FPC-9S, PCC-1
7640+19	CONST. DI IN MEDIAN W/ RCP OUTLET	2					1				FPC-9S, PCC-1
7642+76	CONST. DI IN MEDIAN W/ RCP OUTLET	300					1				FPC-9S, PCC-1
7642+76	CONST. DI IN MEDIAN W/ RCP OUTLET	2					1				FPC-9S, PCC-1
7645+76	CONST. DI IN MEDIAN W/ RCP OUTLET	220					1				FPC-9S, PCC-1
7645+76	CONST. DI IN MEDIAN W/ RCP OUTLET	2					1				FPC-9S, PCC-1
7647+95	CONST. DI IN MEDIAN W/ RCP OUTLET	8					1				FPC-9S, PCC-1
7647+95	CONST. DI IN MEDIAN W/ RCP OUTLET	2					1				FPC-9S, PCC-1
7648+76	CONST. DI IN MEDIAN W/ RCP OUTLET	224					1				FPC-9S, PCC-1
7651+00	CONST. DI IN MEDIAN W/ RCP OUTLET	300					1				FPC-9S, PCC-1
7651+00	CONST. DI IN MEDIAN W/ RCP OUTLET	2					1				FPC-9S, PCC-1
7654+00	CONST. DI IN MEDIAN W/ RCP OUTLET	300					1				FPC-9S, PCC-1
7654+00	CONST. DI IN MEDIAN W/ RCP OUTLET	2					1				FPC-9S, PCC-1
7657+00	CONST. DI IN MEDIAN W/ RCP OUTLET	100					1				FPC-9S, PCC-1
7657+00	CONST. DI IN MEDIAN W/ RCP OUTLET	2					1				FPC-9S, PCC-1
7658+00	CONST. DI IN MEDIAN W/ RCP OUTLET	100					1				FPC-9S, PCC-1
7659+00	CONST. DI IN MEDIAN W/ RCP OUTLET	64					1				FPC-9S, PCC-1
7659+64	CONST. DI IN MEDIAN						1				FPC-9S
7659+64	CONST. DI IN MEDIAN W/ RCP OUTLET	2					1				FPC-9S, PCC-1
7662+00	CONST. DI IN MEDIAN W/ RCP OUTLET	236					1				FPC-9S, PCC-1
7662+00	CONST. DI IN MEDIAN W/ RCP OUTLET	2					1				FPC-9S, PCC-1
7664+00	CONST. DI IN MEDIAN W/ RCP OUTLET	200					1				FPC-9S, PCC-1
7664+00	CONST. DI IN MEDIAN W/ RCP OUTLET	2					1				FPC-9S, PCC-1
7666+97	CONST. DI IN MEDIAN W/ RCP OUTLET	8					1				FPC-9S, PCC-1
7666+97	CONST. DI IN MEDIAN W/ RCP OUTLET	2					1				FPC-9S, PCC-1
7670+00	CONST. DI IN MEDIAN W/ RCP OUTLET	304					1				FPC-9S, PCC-1
7670+00	CONST. DI IN MEDIAN W/ RCP OUTLET	2					1				FPC-9S, PCC-1
7673+00	CONST. DI IN MEDIAN W/ RCP OUTLET	300					1				FPC-9S, PCC-1
7673+00	CONST. DI IN MEDIAN W/ RCP OUTLET	2					1				FPC-9S, PCC-1
7675+97	CONST. DI IN MEDIAN W/ RCP OUTLET	8					1				FPC-9S, PCC-1
7675+97	CONST. DI IN MEDIAN W/ RCP OUTLET	2					1				FPC-9S, PCC-1
SUBTOTALS BOX 2:		5796					67				

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QUANTITY SHEETS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	35	191

(2) QUANTITY SHEETS

STRUCTURES BOX (3 OF 3)

STATION	DESCRIPTION	REINF. CONC. PIPE CULVERT (CLASS III)		F.E.S. FOR R.C. PIPE CULVERTS		DROP INLETS TYPE		JUNCT. BOX	SOLID SODDING	WATER	STD. DWG. NOS.
		24"	30"	24"	30"	RM	ST	(TYPE ST)			
		LIN. FT.		EACH		EACH			SQ.YD.	M.GAL	
7678+00	CONST. DI IN MEDIAN W/ RCP OUTLET	200					1				FPC-9S, PCC-1
7678+00	CONST. DI IN MEDIAN W/ RCP OUTLET	2					1				FPC-9S, PCC-1
7680+00	CONST. DI IN MEDIAN W/ RCP OUTLET	300					1				FPC-9S, PCC-1
7680+00	CONST. DI IN MEDIAN W/ RCP OUTLET	2					1				FPC-9S, PCC-1
7683+00	CONST. DI IN MEDIAN W/ RCP OUTLET	200					1				FPC-9S, PCC-1
7683+00	CONST. DI IN MEDIAN W/ RCP OUTLET	2					1				FPC-9S, PCC-1
7685+00	CONST. DI IN MEDIAN W/ RCP OUTLET	100					1				FPC-9S, PCC-1
7685+00	CONST. DI IN MEDIAN W/ RCP OUTLET	2					1				FPC-9S, PCC-1
7686+00	CONST. DI IN MEDIAN W/ RCP OUTLET	292					1				FPC-9S, PCC-1
7688+91	CONST. DI IN MEDIAN W/ RCP OUTLET	8					1				FPC-9S, PCC-1
SUBTOTALS BOX 3:		**1108**					**10**				
SUBTOTALS BOX 2:		**5796**					**67**				
SUBTOTALS BOX 1:		**5234**	**48**	**4**	**4**	**4**	**56**	**2**	**84**	**1.04**	
TOTALS:		**12138**	**48**	**4**	**4**	**4**	**133**	**2**	**84**	**1.04**	

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.

GUARDRAIL

STATION	STATION	LOCATION	GUARDRAIL (TYPE A)	GUARDRAIL TERMINAL (TYPE 2)	TERMINAL ANCHOR POST (TYPE 1)
			LIN. FT.	EACH	
7487+55.00	7490+80.00	RT. SIDE OF RT. MAIN LANES	275	1	1
7487+55.00	7490+80.00	LT. SIDE OF RT. MAIN LANES	275	1	1
7518+50.00	7521+75.00	RT. SIDE OF LT. MAIN LANES	275	1	1
7518+50.00	7521+75.00	LT. SIDE OF LT. MAIN LANES	275	1	1
7612+70.00	7615+95.00	LT. SIDE OF LT. MAIN LANES	275	1	1
7665+50.00	7668+75.00	LT. SIDE OF LT. MAIN LANES	275	1	1
TOTALS:			**1650**	**6**	**6**

ANIMAL PASSAGE SHELVES FOR WILDLIFE CROSSINGS

STATION	DESCRIPTION	ANIMAL PASSAGE SHELVES	ANIMAL PASSAGE RAMPS
		LIN. FT.	
7577+46	8' x 8' x 218' R.C. BOX W/ 1 SHELF & 4 RAMPS	218	240
7621+07	8' x 8' x 218' R.C. BOX W/ 1 SHELF & 4 RAMPS	528	240
7659+64	4' x 6' x 278' R.C. BOX W/ 1 SHELF & 4 RAMPS	278	240
TOTALS:		**1024**	**720**

4" PIPE UNDERDRAIN

STATION	LOCATIONS	4" PIPE UNDERDRAINS	UNDERDRAIN OUTLET PROTECTORS
		LIN. FT.	EACH
7511+73	RT. OF CENTERLINE	30	1
7514+29	RT. OF CENTERLINE	30	1
7515+73	RT. OF CENTERLINE	30	1
7523+16	RT. OF CENTERLINE	30	1
7525+65	RT. OF CENTERLINE	30	1
7528+15	RT. OF CENTERLINE	30	1
7530+69	RT. OF CENTERLINE	32	
7533+19	RT. OF CENTERLINE	30	
7535+69	RT. OF CENTERLINE	56	
7538+19	RT. OF CENTERLINE	28	
7540+70	RT. OF CENTERLINE	26	
7543+19	RT. OF CENTERLINE	24	
7544+34	RT. OF CENTERLINE	24	
7568+78	LT. OF CENTERLINE	24	
7571+55	LT. OF CENTERLINE	24	
7574+29	LT. OF CENTERLINE	24	
7576+89	LT. OF CENTERLINE	24	
7579+40	LT. OF CENTERLINE	24	
7581+92	LT. OF CENTERLINE	24	
7584+43	RT. OF CENTERLINE	24	
7586+92	RT. OF CENTERLINE	24	
7589+44	RT. OF CENTERLINE	24	
7591+93	RT. OF CENTERLINE	28	
7618+41	RT. OF CENTERLINE	24	
7621+56	RT. OF CENTERLINE	24	
7624+81	RT. OF CENTERLINE	24	
7627+83	RT. OF CENTERLINE	50	
7630+81	RT. OF CENTERLINE	24	
7634+00	RT. OF CENTERLINE	28	
7636+80	RT. OF CENTERLINE	24	
7640+19	RT. OF CENTERLINE	24	
7642+76	RT. OF CENTERLINE	26	
7645+76	RT. OF CENTERLINE	26	
7648+76	RT. OF CENTERLINE	24	
7658+97	RT. OF CENTERLINE	24	
7650+31	RT. OF RAMP	12	1
7652+20	RT. OF RAMP	12	1
7652+31	RT. OF RAMP	12	1
7653+30	RT. OF RAMP	12	1
7654+63	RT. OF RAMP	12	1
7655+34	RT. OF RAMP	12	1
7657+33	RT. OF RAMP	12	1
7657+94	RT. OF RAMP	12	1
7658+25	RT. OF RAMP	12	1
7660+95	RT. OF RAMP	12	1
* ENTIRE PROJECT TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER		100	2
TOTALS:		**1186**	**18**

* NOTE: QUANTITIES ARE 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.

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
1-8-13

8/9/2012

R080411.DGN

QUANTITY SHEETS

SUMMARY OF QUANTITIES

ITEM NUMBER	ITEM		QUANTITY	UNIT
201	CLEARING		26	STATION
201	GRUBBING		26	STATION
202	REMOVAL AND DISPOSAL OF PIER PROTECTION		160	LIN. FT.
202	REMOVAL AND DISPOSAL OF DROP INLETS		21	EACH
202	REMOVAL AND DISPOSAL OF IMPACT ATTENUATION BARRIER		5	EACH
210	UNCLASSIFIED EXCAVATION		30613	CU. YD.
210	COMPACTED EMBANKMENT		29497	CU. YD.
SP & 210	SOIL STABILIZATION		1000	TON
SS & 303	AGGREGATE BASE COURSE (CLASS 7)		109675	TON
401	TACK COAT		6804	GAL.
SP, SS, & 405	MINERAL AGGREGATE IN ACHM BASE COURSE (1 1/2")		21138	TON
SP, SS, & 405	ASPHALT BINDER (PG 76-22) IN ACHM BASE COURSE (1 1/2")		835	TON
SP, SS, & 406	MINERAL AGGREGATE IN ACHM BINDER COURSE (1")		8058	TON
SP, SS, & 406	ASPHALT BINDER (PG 76-22) IN ACHM BINDER COURSE (1")		371	TON
SP, SS, & 407	MINERAL AGGREGATE IN ACHM SURFACE COURSE (1/2")		16847	TON
SP, SS, & 407	ASPHALT BINDER (PG 76-22) IN ACHM SURFACE COURSE (1/2")		924	TON
412	COLD MILLING ASPHALT PAVEMENT		18964	SQ. YD.
SP, SS, & 414	ASPHALT CONCRETE PATCHING FOR MAINTENANCE OF TRAFFIC		95	TON
SP, SS, & 415	ACHM PATCHING OF EXISTING ROADWAY		50	TON
601	MOBILIZATION		1.00	LUMP SUM
SP & 602	FURNISHING FIELD OFFICE		1	EACH
SP, SS, & 603	MAINTENANCE OF TRAFFIC		1.00	LUMP SUM
603	TRAFFIC CONTROL SUPERVISOR		1.00	LUMP SUM
SS & 604	SIGNS		804	SQ. FT.
SS & 604	BARRICADES		32	LIN. FT.
SS & 604	TRAFFIC DRUMS		576	EACH
SS & 604	FURNISHING AND INSTALLING PRECAST CONCRETE BARRIER		41210	LIN. FT.
SS & 604	RELOCATING PRECAST CONCRETE BARRIER		2852	LIN. FT.
604	REMOVAL OF PERMANENT PAVEMENT MARKINGS		1190	LIN. FT.
SS & 604	ADVANCE WARNING ARROW PANEL		10	DAY
SP, SS, & 604	PORTABLE CHANGEABLE MESSAGE SIGN		6	WEEK
SP, SS, & 606	24" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)		12138	LIN. FT.
SP, SS, & 606	30" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)		48	LIN. FT.
606	24" FLARED END SECTIONS FOR REINFORCED CONCRETE PIPE CULVERTS		4	EACH
606	30" FLARED END SECTIONS FOR REINFORCED CONCRETE PIPE CULVERTS		4	EACH
606	SELECTED PIPE BEDDING		200	CU. YD.
609	DROP INLETS (TYPE RM)		4	EACH
609	DROP INLETS (TYPE ST)		133	EACH
609	JUNCTION BOXES (TYPE ST)		2	EACH
611	UNDERDRAIN OUTLET PROTECTORS		18	EACH
611	4" PIPE UNDERDRAINS		1186	LIN. FT.
SS & 617	GUARDRAIL (TYPE A)		1650	LIN. FT.
SS & 617	TERMINAL ANCHOR POSTS (TYPE 1)		6	EACH
SS & 617	GUARDRAIL TERMINAL (TYPE 2)		6	EACH
620	LIME		13	TON
620	SEEDING		6.74	ACRE
620	MULCH COVER		40.74	ACRE
SS & 620	WATER		1382.1	M.GAL.
621	TEMPORARY SEEDING		34.00	ACRE
621	SILT FENCE		4325	LIN. FT.
621	SAND BAG DITCH CHECKS		476	BAG
621	DROP INLET SILT FENCE		1700	LIN. FT.
621	SEDIMENT BASIN		222	CU. YD.
621	OBLITERATION OF SEDIMENT BASIN		222	CU. YD.
621	SEDIMENT REMOVAL AND DISPOSAL		494	CU. YD.
621	ROCK DITCH CHECKS		109	CU. YD.
623	SECOND SEEDING APPLICATION		6.74	ACRE
624	SOLID SODDING		84	SQ. YD.
631	CONCRETE BARRIER WALL (MEDIAN TYPE B)		15350	LIN. FT.
631	CONCRETE BARRIER WALL (MEDIAN TYPE C)		483	LIN. FT.
635	ROADWAY CONSTRUCTION CONTROL		1.00	LUMP SUM
642	RUMBLE STRIPS IN ASPHALT SHOULDERS		41734	LIN. FT.
SS & 719	THERMOPLASTIC PAVEMENT MARKING WHITE (8")		228	LIN. FT.
* SP & 719	INVERTED PROFILE THERMOPLASTIC PAVEMENT MARKING WHITE (4")	(ALTERNATE NO. 1)	11615	LIN. FT.
** SP	HIGH PERFORMANCE MARKING TAPE WHITE (4")	(ALTERNATE NO. 2)	11615	LIN. FT.
* SP & 719	INVERTED PROFILE THERMOPLASTIC PAVEMENT MARKING YELLOW (4")	(ALTERNATE NO. 1)	41306	LIN. FT.
* SP	HIGH PERFORMANCE MARKING TAPE YELLOW (4")	(ALTERNATE NO. 2)	41306	LIN. FT.
721	RAISED PAVEMENT MARKERS (TYPE II)		1054	EACH
SP, SS, & 725	GUIDE SIGN-ROADSIDE MOUNTED (DEMOUNTABLE LEGEND)		121	SQ. FT.
SP, SS, & 725	GUIDE SIGN-OVERHEAD MOUNTED (DEMOUNTABLE LEGEND)		1360	SQ. FT.
SP, SS, & 726	STANDARD SIGN		378	SQ. FT.
SP, SS, & 727	EXIT NUMBER PANEL (TYPE A)		119	SQ. FT.
730	BREAKAWAY SIGN SUPPORT (TYPE G-2)		4398	POUND
SP	TEMPORARY IMPACT ATTENUATION BARRIER		4	EACH
SP	TEMPORARY IMPACT ATTENUATION BARRIER (REPAIR)		4	EACH
SP	STEEL OVERHEAD SIGN STRUCTURE (OH-040-23-18)		1	EACH
SP	STEEL OVERHEAD SIGN STRUCTURE (OH-040-23-19)		1	EACH
SP	STEEL OVERHEAD SIGN STRUCTURE (OH-040-23-20)		1	EACH
SP	STEEL OVERHEAD SIGN STRUCTURE (OH-040-23-21)		1	EACH
SP	STEEL OVERHEAD SIGN STRUCTURE (OH-040-23-22)		1	EACH
SP	ANIMAL PASSAGE SHELVES		1024	LIN. FT.
SP	ANIMAL PASSAGE RAMPS		720	LIN. FT.

*ALTERNATE BID ITEMS

REVISIONS

DATE	REVISION	SHEET NUMBER
2/18/2013	REVISED PLAN QUANTITY EARTHWORK NOTE UNDER EARTHWORK QUANTITY BOX	30, 36
2/18/2013	ADDED NOTE TO EARTHWORK QUANITITY BOX FOR FIELD MEASUREMENT OF UNDERCUT	30, 36

SUMMARY OF QUANTITIES AND REVISIONS

STATE OF ARKANSAS TIMOTHY D. SMITH REGISTERED PROFESSIONAL ENGINEER No. 11425

2-18-13

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.AID SYS.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
2-18-13				6	ARK.		36	191

(2) SUMMARY OF QUANTITIES AND REVISIONS

JOB NO. 080411

SURVEY CONTROL COORDINATES

Project Name: s080411
Date: 9/8/2011
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
100	241888.0931	1188351.0057	309.79	GPS	AHTD GPS 230027
101	228312.2246	1186003.7397	287.36	GPS	AHTD GPS 230019
800	240135.8248	1187968.8683	305.63	CTL	5/8" REBAR W/2" CAP
801	239327.9955	1187786.5293	302.96	CTL	5/8" REBAR W/2" CAP
802	238590.7426	1187664.1729	294.94	CTL	5/8" REBAR W/2" CAP
803	237700.4201	1187578.6935	285.58	CTL	5/8" REBAR W/2" CAP
804	236778.3515	1187519.4111	277.95	CTL	5/8" REBAR W/2" CAP
805	236759.9006	1186850.9942	273.67	CTL	5/8" REBAR W/2" CAP
806	236742.5538	1187168.9129	281.26	CTL	5/8" REBAR W/2" CAP
807	236689.5518	1187679.3344	294.53	CTL	5/8" REBAR W/2" CAP
808	236602.3676	1188167.8711	270.11	CTL	5/8" REBAR W/2" CAP
809	235913.6846	1187466.1687	277.59	CTL	5/8" REBAR W/2" CAP
810	235006.7392	1187398.4772	277.76	CTL	5/8" REBAR W/2" CAP
811	234339.1174	1187310.0458	277.65	CTL	5/8" REBAR W/2" CAP
812	233532.6087	1187147.6012	278.57	CTL	5/8" REBAR W/2" CAP
813	232783.4922	1187207.9998	275.56	CTL	5/8" REBAR W/2" CAP
814	232844.1314	1186741.6124	285.70	CTL	5/8" REBAR W/2" CAP
815	232782.2285	1186945.1680	280.06	CTL	5/8" REBAR W/2" CAP
816	232601.8180	1186372.6756	288.74	CTL	5/8" REBAR W/2" CAP
817	232177.4033	1186493.4023	293.16	CTL	5/8" REBAR W/2" CAP
818	232229.8386	1187022.0529	298.23	CTL	5/8" REBAR W/2" CAP
819	232254.7600	1187588.6129	268.56	CTL	5/8" REBAR W/2" CAP
820	231920.9949	1186158.5016	286.24	CTL	5/8" REBAR W/2" CAP
821	232339.0046	1188302.5371	268.28	CTL	5/8" REBAR W/2" CAP
822	231911.0145	1186708.3485	281.15	CTL	5/8" REBAR W/2" CAP
823	231821.9372	1187167.0444	274.53	CTL	5/8" REBAR W/2" CAP
824	231253.4819	1186511.5650	279.20	CTL	5/8" REBAR W/2" CAP
825	230375.3600	1186264.0409	277.39	CTL	5/8" REBAR W/2" CAP
826	229662.6321	1186086.3966	277.51	CTL	5/8" REBAR W/2" CAP
827	228871.6169	1185939.9245	283.80	CTL	5/8" REBAR W/2" CAP
828	227588.7269	1185810.3956	285.99	CTL	5/8" REBAR W/2" CAP
829	226743.5233	1185783.2658	279.61	CTL	5/8" REBAR W/2" CAP
830	225100.3601	1185734.0701	286.49	CTL	5/8" REBAR W/2" CAP
831	224340.5298	1185711.2387	284.65	CTL	5/8" REBAR W/2" CAP
832	223371.6585	1185687.5978	276.44	CTL	5/8" REBAR W/2" CAP
833	222694.5653	1185775.5148	275.68	CTL	5/8" REBAR W/2" CAP
834	222678.1866	1185636.4062	276.64	CTL	5/8" REBAR W/2" CAP
835	221837.8617	1185894.0333	275.69	CTL	5/8" REBAR W/2" CAP
836	221807.5846	1185755.3018	277.06	CTL	5/8" REBAR W/2" CAP
837	221050.9694	1186129.1166	276.47	CTL	5/8" REBAR W/2" CAP
838	221101.7913	1185953.0564	278.95	CTL	5/8" REBAR W/2" CAP
839	220566.5709	1186336.0435	276.96	CTL	5/8" REBAR W/2" CAP
840	220568.7054	1186175.9477	279.43	CTL	5/8" REBAR W/2" CAP
841	220104.6108	1186575.4258	277.48	CTL	5/8" REBAR W/2" CAP
842	220038.2284	1186462.5286	279.70	CTL	5/8" REBAR W/2" CAP
878	231221.8451	1185986.0432	284.36	CTL	5/8" REBAR W/2" CAP
879	230393.4136	1185772.0784	272.22	CTL	5/8" REBAR W/2" CAP
880	229365.7583	1185664.3464	283.93	CTL	5/8" REBAR W/2" CAP
881	228578.0511	1185645.3336	286.26	CTL	5/8" REBAR W/2" CAP
882	227879.4522	1185658.6381	289.28	CTL	5/8" REBAR W/2" CAP
883	227205.9262	1185469.4011	280.99	CTL	5/8" REBAR W/2" CAP
884	226251.7162	1185374.6866	269.94	CTL	5/8" REBAR W/2" CAP
885	227290.5333	1185042.4110	288.92	CTL	5/8" REBAR W/2" CAP
886	227239.5396	1184345.7899	290.32	CTL	5/8" REBAR W/2" CAP
966	239108.4422	1187773.5881	296.47	TBM	CH SQ SQ CUT IN DI IN MEDIAN
967	237919.8759	1187614.8830	284.52	TBM	CH SQ SQ CUT IN DI IN MEDIAN
968	236661.8079	1187639.6556	296.84	TBM	CH SQ SQ CUT IN S-E OF BR 3762 PARADI
969	236539.6733	1188681.3317	268.52	TBM	CPS IN PP
970	236522.3275	1187525.0832	273.98	TBM	CH SQ SQ CUT IN DI IN MEDIAN
971	235725.6958	1187475.3384	273.95	TBM	CH SQ SQ CUT IN DI IN MEDIAN
972	234379.2967	1187338.0672	273.69	TBM	CH SQ SQ CUT IN DI IN MEDIAN
973	232969.3806	1187020.8908	276.45	TBM	CH SQ SQ CUT IN DI IN MEDIAN RTK ELEV
974	232194.9908	1186251.8867	289.27	TBM	CH SQ SQ CUT IN LA 3' W OF EP HWY 365
975	232222.1220	1186922.5128	302.05	TBM	CH SQ SQ CUT IN S-E CORN OF BR 3852
976	232355.6231	1188412.8039	265.94	TBM	CPS IN PP
977	232066.1816	1186764.6442	277.79	TBM	CH SQ SQ CUT IN DI IN MEDIAN
978	231235.8471	1186528.8753	275.58	TBM	CH SQ SQ CUT IN DI IN MEDIAN
979	230177.1161	1186231.3951	273.92	TBM	CH SQ SQ CUT IN DI IN MEDIAN
980	228908.2155	1185966.1494	280.12	TBM	CH SQ SQ CUT IN DI IN MEDIAN
981	227518.1145	1185828.4222	281.88	TBM	CH SQ SQ CUT IN DI IN MEDIAN
982	226347.6860	1185794.0431	275.17	TBM	CH SQ SQ CUT IN DI IN MEDIAN
983	224714.4342	1185744.5353	282.48	TBM	CH SQ SQ CUT IN DI IN MEDIAN
984	223420.7393	1185706.2057	272.85	TBM	CH SQ SQ IN DI IN MEDIAN
985	221946.4279	1185947.8859	262.26	TBM	CH SQ SQ CUT IN TOP OF CONC FES UNDER
986	221939.0394	1185792.2003	275.91	TBM	CH SQ SQCUT IN DI .5' W OF DIVIDING W
987	220811.2629	1186212.8450	277.88	TBM	
988	220844.0728	1186058.6515	279.67	TBM	AHTD CAP
989	219817.9375	1186753.5178	280.65	TBM	AHTD CAP
994	236660.0567	1186943.2503	272.96	BM	SS ROD
995	231448.8621	1185700.0477	282.84	BM	BRASS CAP
996	227442.8338	1184428.1873	287.93	BM	BRASS CAP

*NOTE - REBAR AND CAP - STANDARD - 5/8" REBAR WITH 2" ALUMINUM CAP STAMPED
*(STANDARD MARKINGS COMMON TO ALL CAPS), OR AS INDICATED
(OTHER MARKINGS INDICATED IN THE POINT DESCRIPTION OF THE INDIVIDUAL POINT).
ALL DISTANCES ARE GROUND.
USE CAF = 1.0 FOR STAKEOUT FOR THIS PROJECT.
A PROJECT CAF OF0.9999676209 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. XXXCTL
HORIZONTAL DATUM: NAD 83 (1997)
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: 880088-880088A
CONVERGENCE ANGLE: 00 14 42 LEFT AT LT: 34-57-55.8 LG: 092-25-15.1
GRID AZIMUTH = ASTRONOMICAL AZIMUTH - CONVERGENCE ANGLE.

SURVEY CONTROL DETAILS

STATE OF ARKANSAS TIMOTHY D. SMITH REGISTERED PROFESSIONAL ENGINEER No. 11425
1-9-13

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		37	191

JOB NO. 080411

2 SURVEY CONTROL DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	38	191

(2) SURVEY CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
1-8-13

CONST.

POINT NO.	TYPE	STATION	NORTHING	EASTING
8000	POB	7483+03.58	243629.3384	1189017.8254
8001	PC	7507+67.02	241276.6391	1188287.5289
8003	PT	7515+67.01	240504.9507	1188077.2183
8004	PC	7524+30.11	239664.8175	1187879.4740
8006	PT	7542+99.34	237817.8967	1187606.2202
8007	PC	7566+52.64	235469.2091	1187458.9861
8009	PT	7591+04.97	233056.6797	1187045.8304
8010	PC	7618+41.43	230424.2391	1186298.5081
8012	PT	7649+67.45	227342.7055	1185822.3489
8013	PC	7691+10.25	223201.7742	1185698.0688
8015	PT	7735+46.32	219148.6110	1187210.3644
8016	POE	7754+86.87	217721.1357	1188524.9123

RAMP

POINT NO.	TYPE	STATION	NORTHING	EASTING
8017	POB	100+00.00	227486.5354	1185768.6661
8018	PI	112+68.36	226218.7595	1185730.3220
8019	POE	115+68.59	225918.5390	1185733.5624

R080411.DGN 8/9/2012

SURVEY CONTROL DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	39	191

(2) SURVEY CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
1-8-13

STA. 7490+00.00
BEGIN JOB 080411
LOG MILE 133.39

PI = 7511+67.18
Δ = 4°00'00" LT.
D = 0°30'00"
T = 400.16'
L = 800.00'
PC = 7507+67.02
PT = 7515+67.01
e = MATCH EXIST.
Ls = MATCH EXIST.

8/9/2012

R080411.DGN

SURVEY CONTROL DETAILS

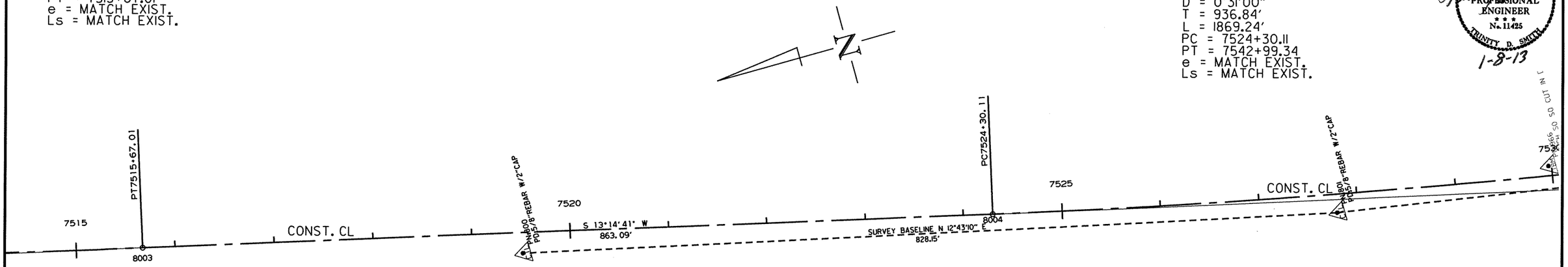
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	40	191

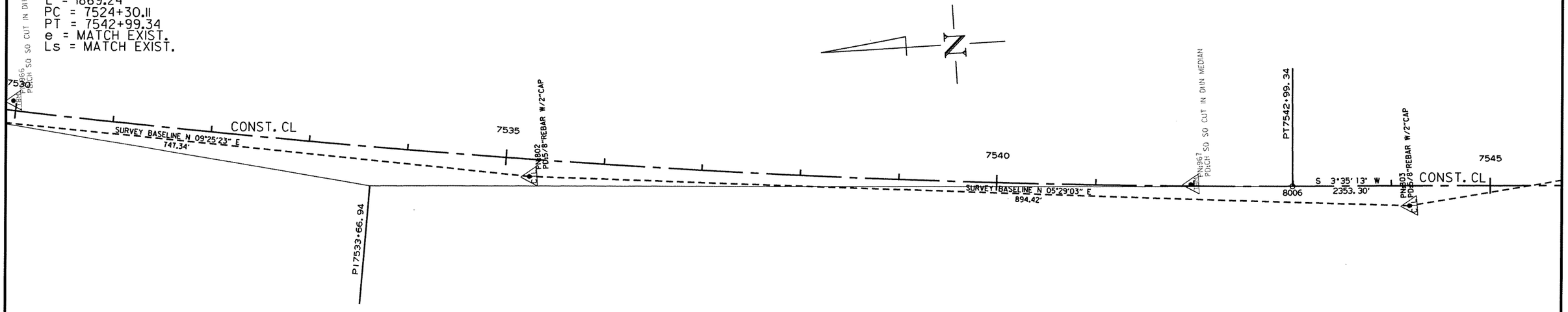
(2) SURVEY CONTROL DETAILS

PI = 7511+67.18
Δ = 4°00'00" LT.
D = 0°30'00"
T = 400.16'
L = 800.00'
PC = 7507+67.02
PT = 7515+67.01
e = MATCH EXIST.
Ls = MATCH EXIST.

PI = 7533+66.94
Δ = 9°39'28" LT.
D = 0°31'00"
T = 936.84'
L = 1869.24'
PC = 7524+30.11
PT = 7542+99.34
e = MATCH EXIST.
Ls = MATCH EXIST.

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
1-8-13





SURVEY CONTROL DETAILS

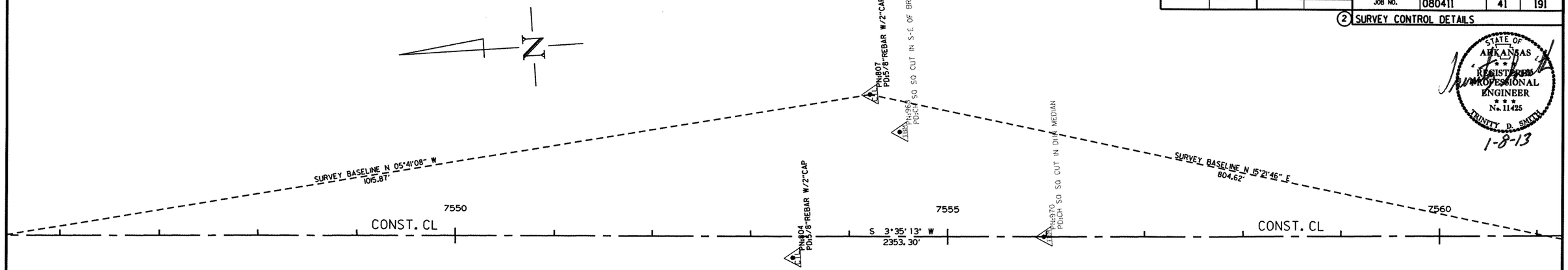
8/9/2012

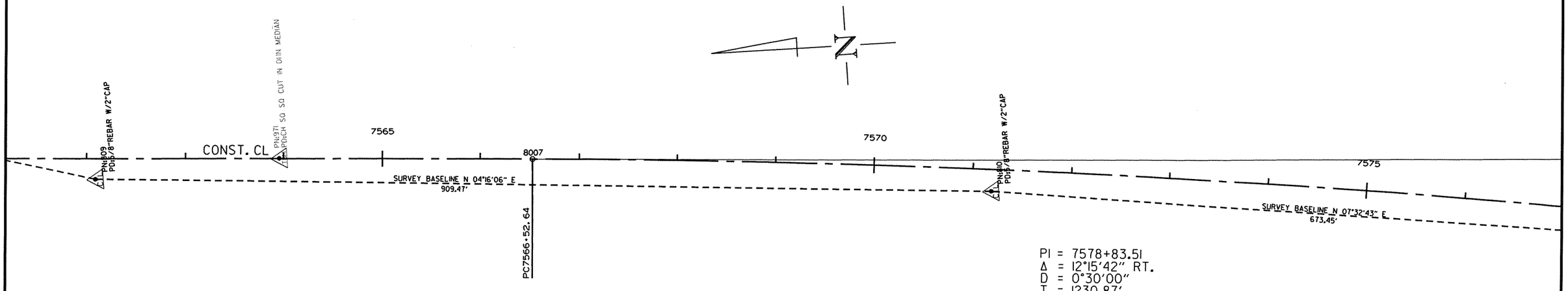
R080411.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	41	191

(2) SURVEY CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
1-8-13





PI = 7578+83.51
Δ = 12°15'42" RT.
D = 0°30'00"
T = 1230.87'
L = 2452.33'
PC = 7566+52.64
PT = 7591+04.97
e = MATCH EXIST.
Ls = MATCH EXIST.

SURVEY CONTROL DETAILS

8/9/2012

R080411.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	42	191

(2) SURVEY CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
1-8-13

PI 7578+83.51

PN:972 PD:CH SQ CUT IN DIN MEDIAN

PN:808 PD:5/8"REBAR W/2"CAP

7580

CONST. CL

7585

PN:807 PD:5/8"REBAR W/2"CAP

SURVEY BASELINE N 11°23'17" E
822.71'

7590

CONST. CL

8009

S 15°50' 55" W

PN:973 PD:CH SQ CUT IN DIN MEDIAN RTK ELEV

SURVEY BASELINE N 15°05'51" E
777.21'

PT7591+04.97

PI = 7578+83.51
Δ = 12°15'42" RT.
D = 0°30'00"
T = 1230.87'
L = 2452.33'
PC = 7566+52.64
PT = 7591+04.97
e = MATCH EXIST.
Ls = MATCH EXIST.

PN:804 PD:5/8"REBAR W/2"CAP

SURVEY BASELINE N 07°55'26" W
557.71'

7595

CONST. CL

PN:805 PD:5/8"REBAR W/2"CAP

PN:806 PD:CH SQ CUT IN DIN MEDIAN

7600

PN:809 PD:CH SQ CUT IN DIN MEDIAN

SURVEY BASELINE N 48°22'08" E
418.71'

PN:822 PD:5/8"REBAR W/2"CAP

7605

CONST. CL

S 15°50' 55" W
2736.46'

SURVEY BASELINE N 15°45'16" E
724.76'

REBAR W/2"CAP

8/9/2012

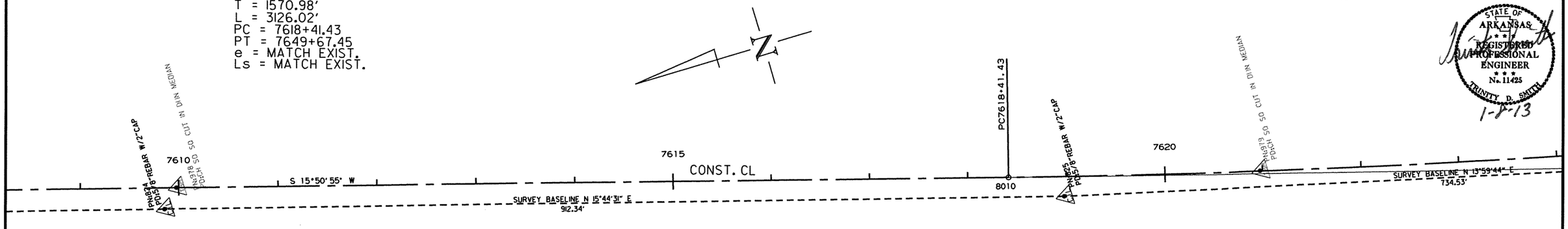
ROB0411.DGN

SURVEY CONTROL DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	43	191

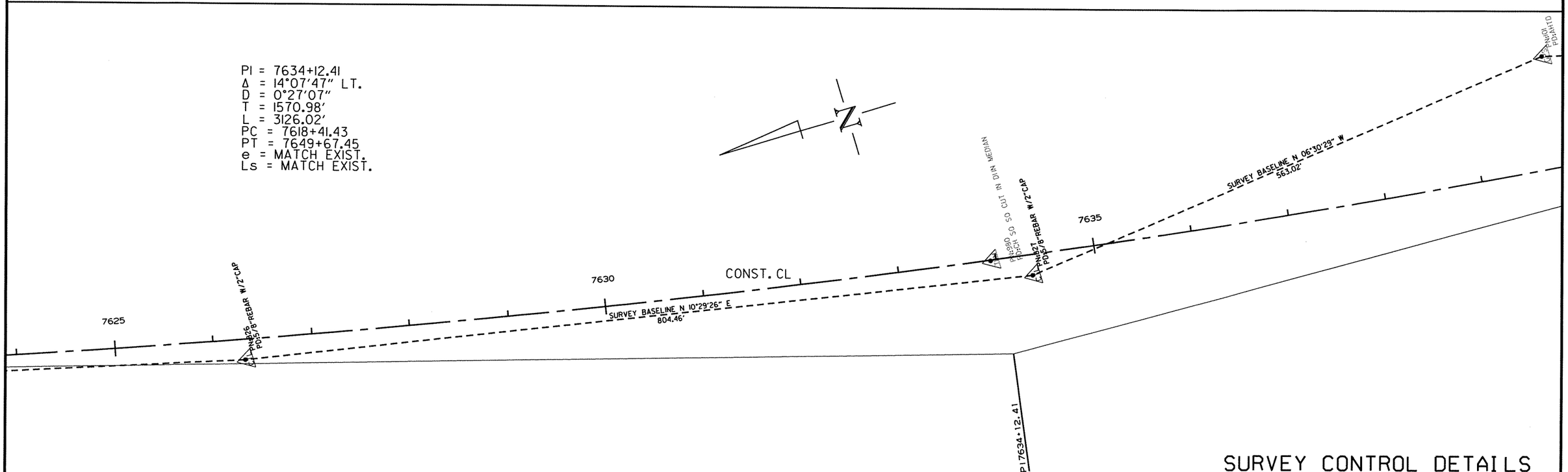
(2) SURVEY CONTROL DETAILS

PI = 7634+12.41
Δ = 14°07'47" LT.
D = 0°27'07"
T = 1570.98'
L = 3126.02'
PC = 7618+41.43
PT = 7649+67.45
e = MATCH EXIST.
Ls = MATCH EXIST.



STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
1-2-13

PI = 7634+12.41
Δ = 14°07'47" LT.
D = 0°27'07"
T = 1570.98'
L = 3126.02'
PC = 7618+41.43
PT = 7649+67.45
e = MATCH EXIST.
Ls = MATCH EXIST.



8/9/2012

R080411.DGN

SURVEY CONTROL DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	44	191

(2) SURVEY CONTROL DETAILS

PI = 7634+12.41
Δ = 14°07'47" LT.
D = 0°27'07"
T = 1570.98'
L = 3126.02'
PC = 7618+41.43
PT = 7649+67.45
e = MATCH EXIST.
Ls = MATCH EXIST.

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
1-8-13

PN101
PD=4HTD GPS 230019

SURVEY BASELINE N 14°57'43" E
748.89'

7640

7645

PN428
PD3/8"REBAR W/2"CAP

PN498
PDCH SQ SQ CUT IN DIN MEDIAN

PT7649+67.45

7650

8012

7655

CONST. CL

S 1°43'09" W
4142.80'

SURVEY BASELINE N 01°50'19" E
845.64'

100

8017

105

RAMP

S 1°43'57" W
1268.36'

PI1100+00.00

PN982
PD3/8"REBAR W/2"CAP

PN429
PD3/8"REBAR W/2"CAP

CONST. CL

7660

PN982
PDCH SQ SQ CUT IN DIN MEDIAN

7665

7670

CONST. CL

S 1°43'09" W
4142.80'

110

SURVEY BASELINE N 01°42'54" E
1643.90'

115

RAMP

S 1°43'57" W
1268.36'

8018

S 0°37'06" E
300.24'

8019

PI112+68.36

PI115+68.59

8/9/2012

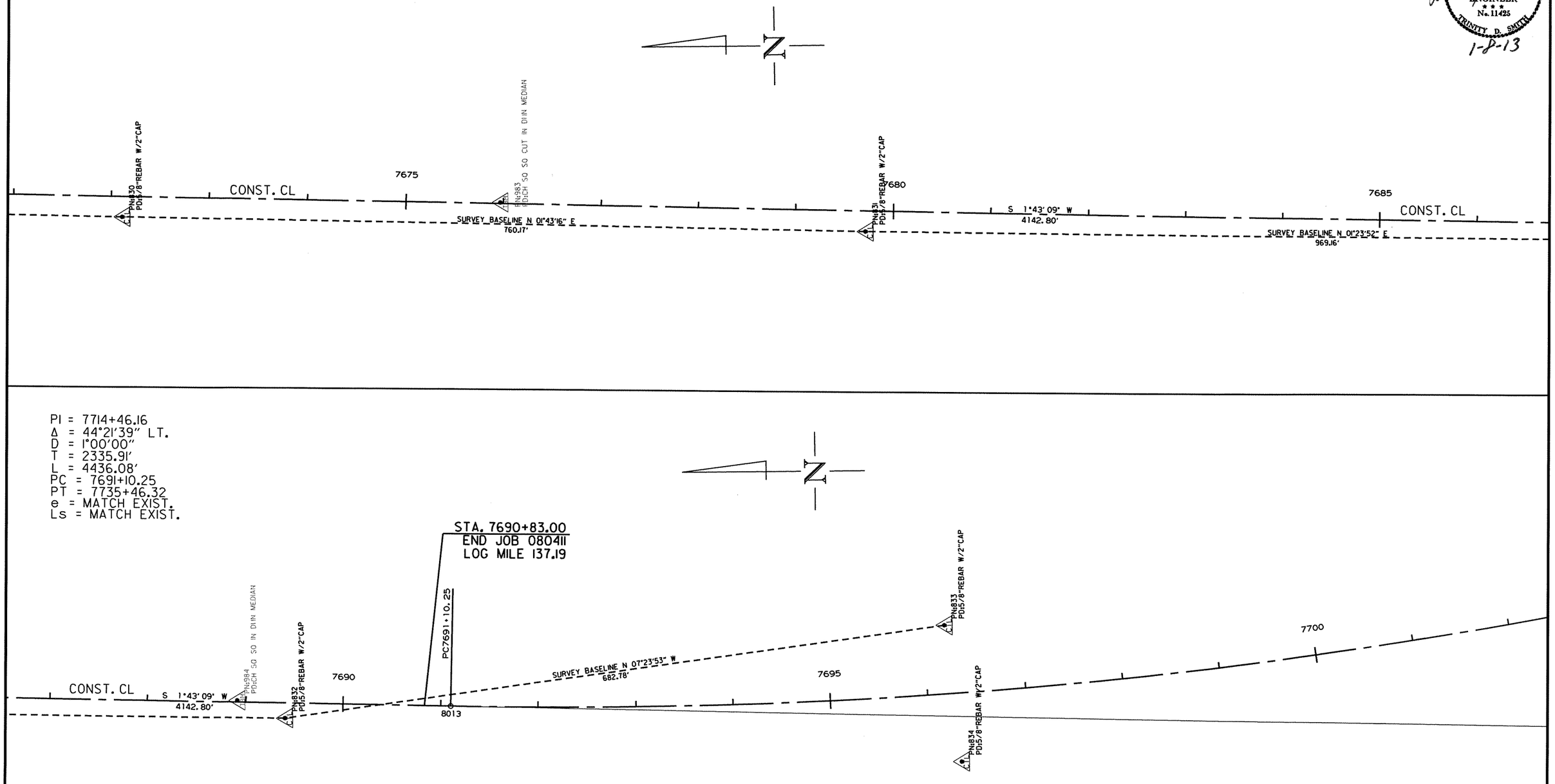
R080411.DGN

SURVEY CONTROL DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	45	191

(2) SURVEY CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
1-8-13



SURVEY CONTROL DETAILS

8/9/2012

R080411.DGN

STA.	STA.	LOCATION	GUARDRAIL (TYPE A)	GUARDRAIL TERMINAL (TYPE 2)	GUARDRAIL ANCHOR POST (TYPE I)
7487+55.00	7490+80.00	RT. SIDE OF RT. MAIN LANES	275 LIN. FT.	1	1
7487+55.00	7490+80.00	LT. SIDE OF RT. MAIN LANES	275 LIN. FT.	1	1

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	46	191

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
1-8-13

STA. 7494+97 IN PLACE
30" x 112' R.C. PIPE CULVERT
UNDER LT. LANES W. HDWLS. LT & RT.
REMOVE HDWLS. RT. & EXTEND R.C. PIPE
8' RT.
CLASS III TYPE 3 BEDDING W. FES RT.
30" R.C. PIPE- 12 LIN.FT.
30" FES- 1 EA.

STA. 7499+97 IN PLACE
TYPE H DROP INLET
RETAIN

STA. 7499+97 IN PLACE
24" x 138' R.C. PIPE CULVERT TO LT.
RETAIN
24" x 82' R.C. PIPE CULVERT
UNDER LT. LANES W. HDWLS. LT & RT.
REMOVE HDWLS. RT. & EXTEND R.C. PIPE
10' RT.
CLASS III TYPE 3 BEDDING W. FES RT.
24" R.C. PIPE- 14 LIN.FT.
24" FES- 1 EA.

STA. 7490+00.00
BEGIN JOB 080411
LOG MILE 133.39

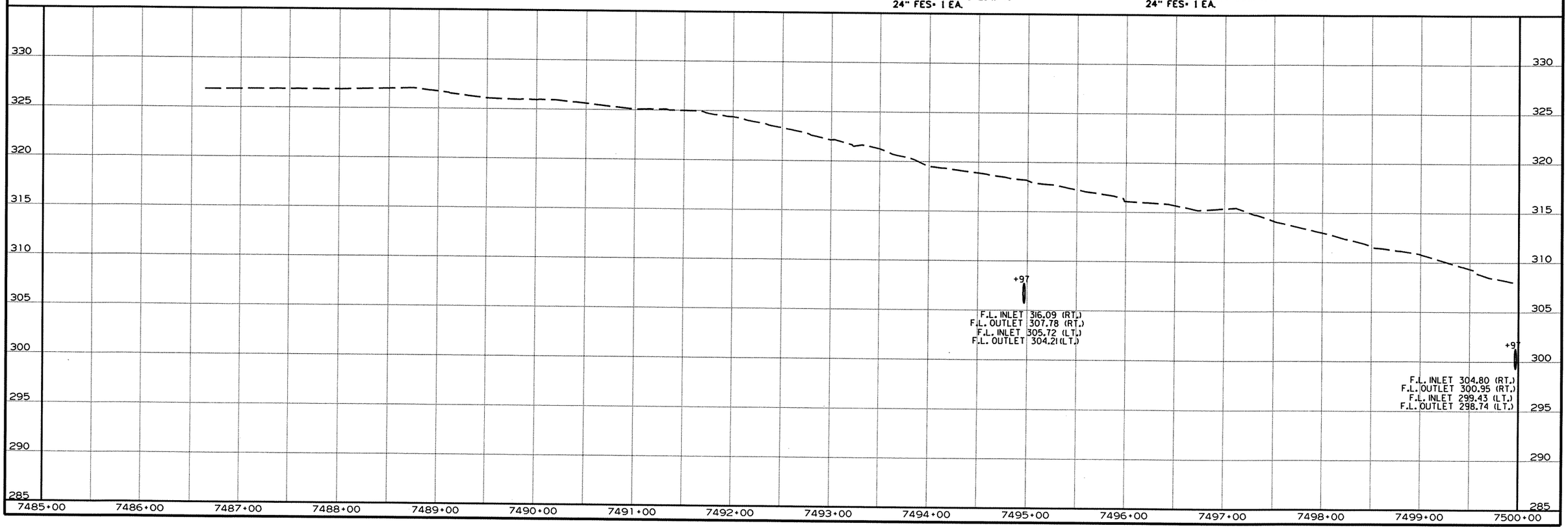
CONST. LIMITS
PRESERVE VEGETATION
CONST. LIMITS
7490
7495
7500
S 17°14'41" W
CONST. LIMITS
PRESERVE VEGETATION
CONST. LIMITS

STA. 7490+00 INSTALL
OVERHEAD HIGHWAY SIGN
EASTBOUND LANES
SEE SIGNING PLANS

STA. 7494+97 IN PLACE
24" x 122' R.C. PIPE CULVERT
UNDER RT. LANES W. HDWLS. LT & RT.
REMOVE HDWLS. LT. & EXTEND R.C. PIPE
4' LT.
CLASS III TYPE 3 BEDDING W. FES LT.
24" R.C. PIPE- 8 LIN.FT.
24" FES- 1 EA.

STA. 7499+97 IN PLACE
TYPE H DROP INLET
RETAIN

STA. 7499+97 IN PLACE
24" x 64' R.C. PIPE CULVERT TO RT.
RETAIN
24" x 96' R.C. PIPE CULVERT
UNDER RT. LANES W. HDWLS. LT & RT.
REMOVE HDWLS. LT. & EXTEND R.C. PIPE
10' LT.
CLASS III TYPE 3 BEDDING W. FES LT.
24" R.C. PIPE- 14 LIN.FT.
24" FES- 1 EA.



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STA. 7505+97 IN PLACE
TYPE H DROP INLET
RETAIN

STA. 7505+97 IN PLACE
24" x 134' R.C. PIPE CULVERT TO LT.
RETAIN
24" x 76' R.C. PIPE CULVERT
UNDER LT. LANES W. HDWLS. LT & RT.
REMOVE HDWLS. RT. & EXTEND R.C. PIPE
8' RT.
CLASS III TYPE 3 BEDDING W. FES RT.
24" R.C. PIPE= 12 LIN.FT.
24" FES= 1 EA.

PI = 7511+67.18
Δ = 4°00'00" LT.
D = 0°30'00"
T = 400.16'
L = 800.00'
PC = 7507+67.02
PT = 7515+67.01
e = MATCH EXIST.
Ls = MATCH EXIST.

STA. 7513+95 IN PLACE
TYPE H DROP INLET
RETAIN

STA. 7513+95 IN PLACE
30" x 110' R.C. PIPE CULVERT
UNDER LT. LANES W. HDWLS. LT & RT.
REMOVE HDWLS. RT. & EXTEND R.C. PIPE
12' RT.
CLASS III TYPE 3 BEDDING W. FES RT.
30" R.C. PIPE= 16 LIN.FT.
30" FES= 1 EA.

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				6	ARK.			
				JOB NO.		080411	47	191

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
1-8-13

CONST. LIMITS
PRESERVE VEGETATION
500
S 17°14'41.1" W
7505
PC 7507+67.02
7510
7515
P.I. 7511+67.18

STA. 7505+97 IN PLACE
TYPE H DROP INLET
RETAIN

STA. 7505+97 IN PLACE
24" x 134' R.C. PIPE CULVERT TO RT.
RETAIN
24" x 86' R.C. PIPE CULVERT
UNDER RT. LANES W. HDWLS. LT & RT.
REMOVE HDWLS. LT. & EXTEND R.C. PIPE
14' LT.
CLASS III TYPE 3 BEDDING W. FES LT.
24" R.C. PIPE= 18 LIN.FT.
24" FES= 1 EA.

STA. 7513+95 IN PLACE
TYPE H DROP
RETAIN

STA. 7513+95 IN PLACE
30" x 60' R.C. PIPE CULVERT TO RT.
RETAIN
30" x 100' R.C. PIPE CULVERT
UNDER RT. LANES W. HDWLS. LT & RT.
REMOVE HDWLS. LT. & EXTEND R.C. PIPE
8' LT.
CLASS III TYPE 3 BEDDING W. FES LT.
30" R.C. PIPE= 12 LIN.FT.
30" FES= 1 EA.

330
325
320
315
310
305
300
295
290
285

7507+00.00
295.43
LT. DITCH GRADE -0.71%
7510+00.00
293.31

+97
F.L. INLET 303.59 (RT.)
F.L. OUTLET 296.55 (RT.)
F.L. INLET 295.43 (LT.)
F.L. OUTLET 290.21 (LT.)

+95
F.L. INLET 294.57 (RT.)
F.L. OUTLET 291.68 (RT.)
F.L. INLET 290.90 (LT.)
F.L. OUTLET 287.79 (LT.)

BM: 100 AHTD GPS 230027
120.64 RT. OF STA. 7501+64.23
ELEVATION = 309.79

7500+00 7501+00 7502+00 7503+00 7504+00 7505+00 7506+00 7507+00 7508+00 7509+00 7510+00 7511+00 7512+00 7513+00 7514+00 7515+00

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PI = 7511+67.18
Δ = 4°00'00" LT.
D = 0°30'00"
T = 400.16'
L = 800.00'
PC = 7507+67.02
PT = 7515+67.01
e = MATCH EXIST.
Ls = MATCH EXIST.

STA.	STA.	LOCATION	GUARDRAIL (TYPE A)	GUARDRAIL TERMINAL (TYPE 2)	GUARDRAIL ANCHOR POST (TYPE I)
7518+50.00	7521+75.00	RT. SIDE OF LT. MAIN LANES	275 LIN. FT.	1	1
7518+50.00	7521+75.00	LT. SIDE OF LT. MAIN LANES	275 LIN. FT.	1	1

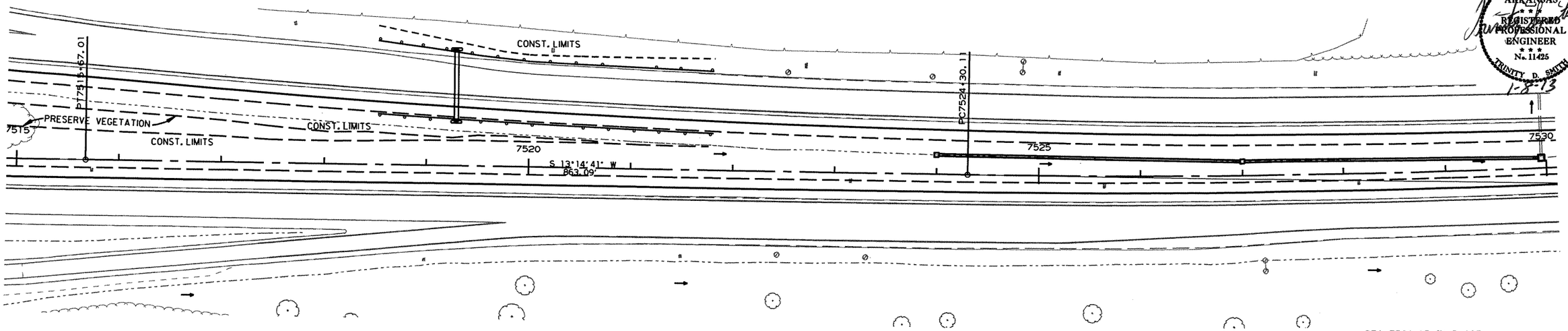
STA. 7519+30 INSTALL
OVERHEAD HIGHWAY SIGN
WESTBOUND LANES
SEE SIGNING PLANS

PI = 7533+66.94
Δ = 9°39'28" LT.
D = 0°31'00"
T = 936.84'
L = 1869.24'
PC = 7524+30.11
PT = 7542+99.34
e = MATCH EXIST.
Ls = MATCH EXIST.

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	48	191

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
1-8-13

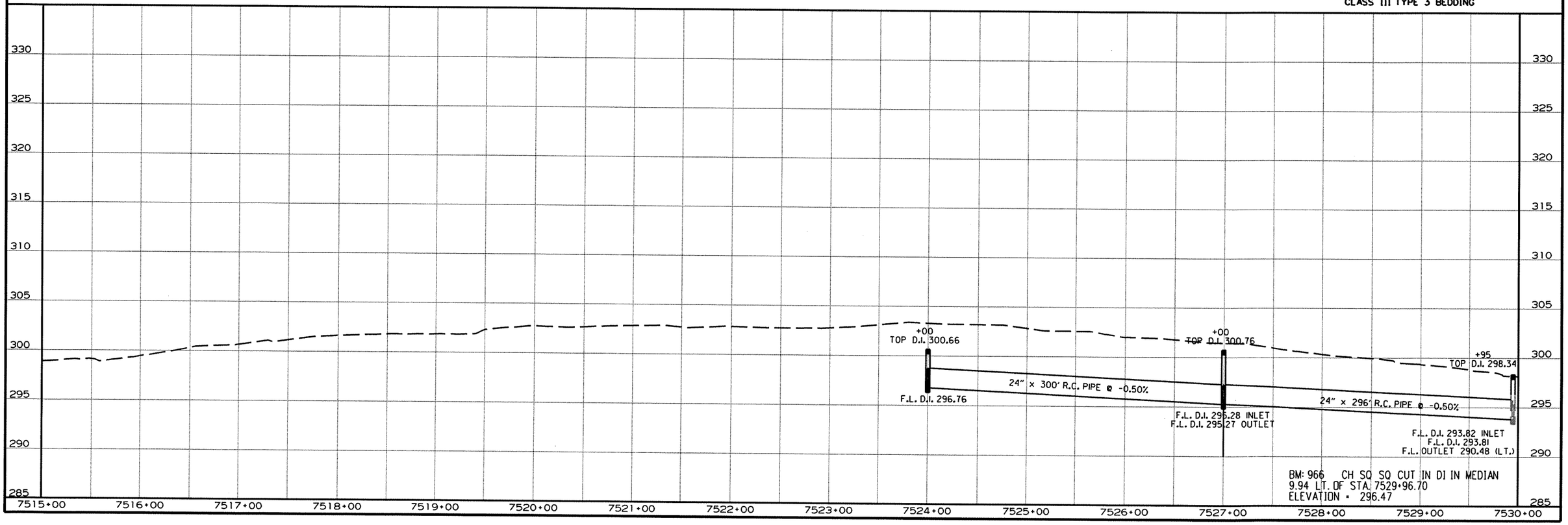


STA. 7524+00 CONSTRUCT
TYPE RM DROP INLET IN MEDIAN
4' x 5' x H= 3'-11"
WITH 24" x 300' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7527+00

STA. 7527+00 CONSTRUCT
TYPE RM DROP INLET IN MEDIAN
4' x 5' x H= 5'-6"
WITH 24" x 296' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7529+95

STA. 7529+95 IN PLACE
TYPE H DROP INLET IN MEDIAN
REMOVE AND CONSTRUCT
TYPE RM DROP INLET IN MEDIAN
4' x 5' x H= 4'-9"

STA. 7529+95 IN PLACE
24" x 108' R.C. PIPE CULVERT TO LT.
RETAIN AND EXTEND 2' RT
24" R.C. PIPE CULVERT= 6'
CLASS III TYPE 3 BEDDING



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PI = 7533+66.94
Δ = 9°39'28" LT.
D = 0°31'00"
T = 936.84'
L = 1869.24'
PC = 7524+30.11
PT = 7542+99.34
e = MATCH EXIST.
Ls = MATCH EXIST.

STA. 7535+95 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 4'-0" DROP INLET
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7535+95 ON RT.

STA. 7535+95 IN PLACE
24" x 98' R.C. PIPE CULVERT TO LT.
RETAIN

STA. 7538+19 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 4'-0"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7538+19 ON RT.

STA. 7540+70 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 4'-0"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7540+70 ON RT.

STA. 7541+95 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 4'-0"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7541+95 ON RT.

STA. 7543+19 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 4'-0"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7543+19 ON RT.

STA. 7544+34 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 4'-0"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7544+34 ON RT.

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				6	ARK.			
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(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
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530
7535
7540
7545
PI 7533+66.94
PT 7542+99.34
S 1°32'13" W

STA. 7531+00 CONSTRUCT
TYPE RM DROP INLET IN MEDIAN
4' x 5' x H= 3'-9"
WITH 24" x 220 'R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7533+19

STA. 7533+19 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER W/ DRAINAGE SLOTS
4' x 3' x H= 7'-0"
WITH 24" x 278 'R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7535+96

STA. 7535+95 IN PLACE
TYPE H DROP INLET IN MEDIAN
REMOVE AND CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 6'-8" DROP INLET

STA. 7538+19 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 6'-4"
WITH 24" x 252 'R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7540+70

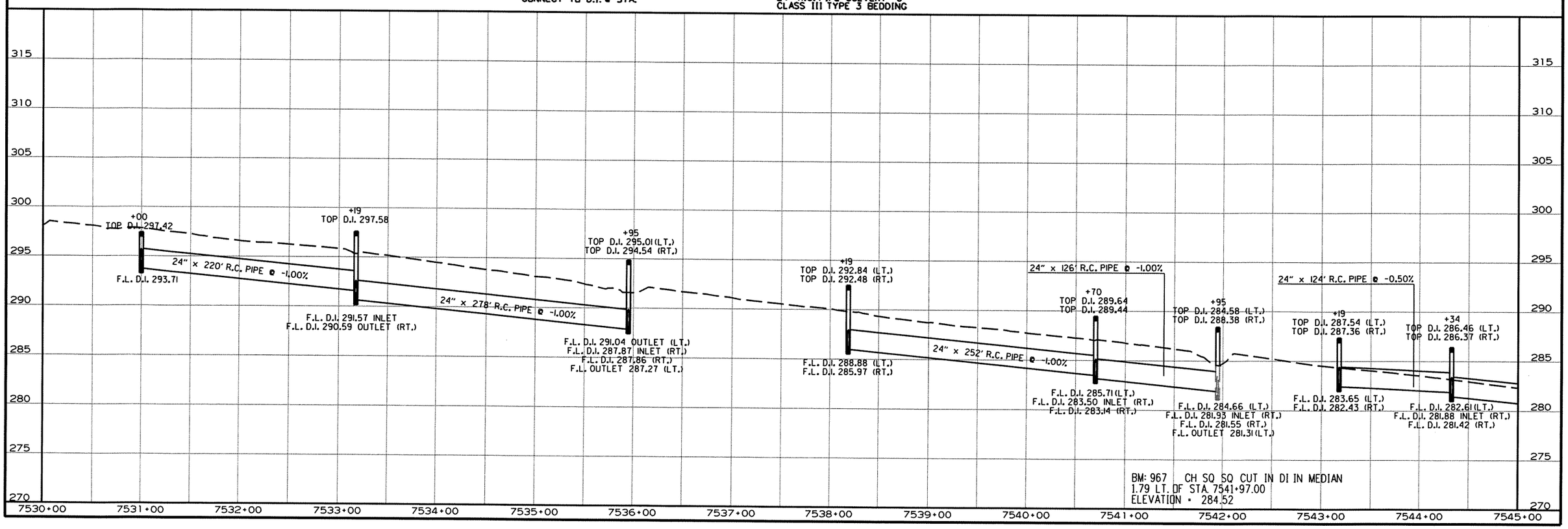
STA. 7540+70 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 6'-4"
WITH 24" x 126 'R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA.

STA. 7541+95 IN PLACE
TYPE H DROP INLET IN MEDIAN
REMOVE AND CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 6'-10"

STA. 7541+95 IN PLACE
24" x 92' R.C. PIPE CULVERT TO RT.
RETAIN AND EXTEND 2' RT
24" R.C. PIPE CULVERT= 6'
CLASS III TYPE 3 BEDDING

STA. 7543+19 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 4'-9"
WITH 24" x 116 'R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7544+34

STA. 7544+34 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 4'-9"
WITH 24" x 158' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7546+00



BM: 967 CH SQ SQ CUT IN DI IN MEDIAN
1.79 LT. OF STA. 7541+97.00
ELEVATION = 284.52

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				6	ARK.			
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(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
1-8-13

STA. 7546+00 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 3'-0"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7546+00 ON RT.

STA. 7547+95 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 4'-0"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7547+95 ON RT.

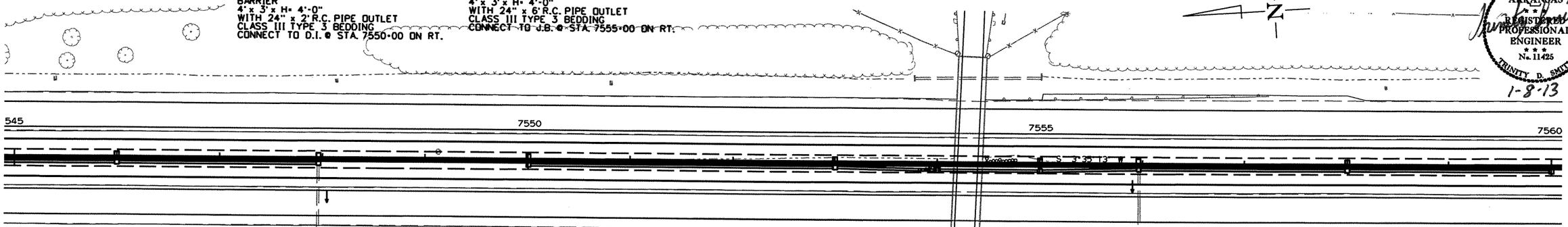
STA. 7550+00 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 4'-0"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7550+00 ON RT.

STA. 7553+00 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 4'-0"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7553+00 ON RT.

STA. 7555+00 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 4'-0"
WITH 24" x 6' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO J.B. @ STA. 7555+00 ON RT.

STA. 7555+95 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 4'-0"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7555+95 ON RT.

STA. 7558+00 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 4'-0"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7558+00 ON RT.



STA. 7546+00 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 5'-0"
WITH 24" x 191' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7547+95

STA. 7547+95 IN PLACE
TYPE H DROP INLET IN MEDIAN
REMOVE AND CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 6'-6"

STA. 7547+95 IN PLACE
24" x 90' R.C. PIPE CULVERT TO RT.
RETAIN

STA. 7550+00 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 5'-0"
WITH 24" x 300' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7553+00

STA. 7553+00 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 5'-0"
WITH 24" x 100' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO J.B. @ STA. 7554+00

STA. 7554+00- CONSTRUCT
TYPE ST JUNCTION BOX
WITH 24" x 100' R.C. PIPE CULV'T
CLASS III TYPE 3 BEDDING
CONNECT TO J.B. @ STA. 7555+00
TY ST = 3'-0" I.D.
H = 5'-6"

STA. 7554+68 IN PLACE
IMPACT ATTENUATION BARRIER
IN MEDIAN
REMOVE

STA. 7554+95 IN PLACE
IMPACT ATTENUATION BARRIER
IN MEDIAN
REMOVE

STA. 7554+95 TO STA. 7554+68
CONCRETE PIER PROTECTION
IN MEDIAN
REMOVE

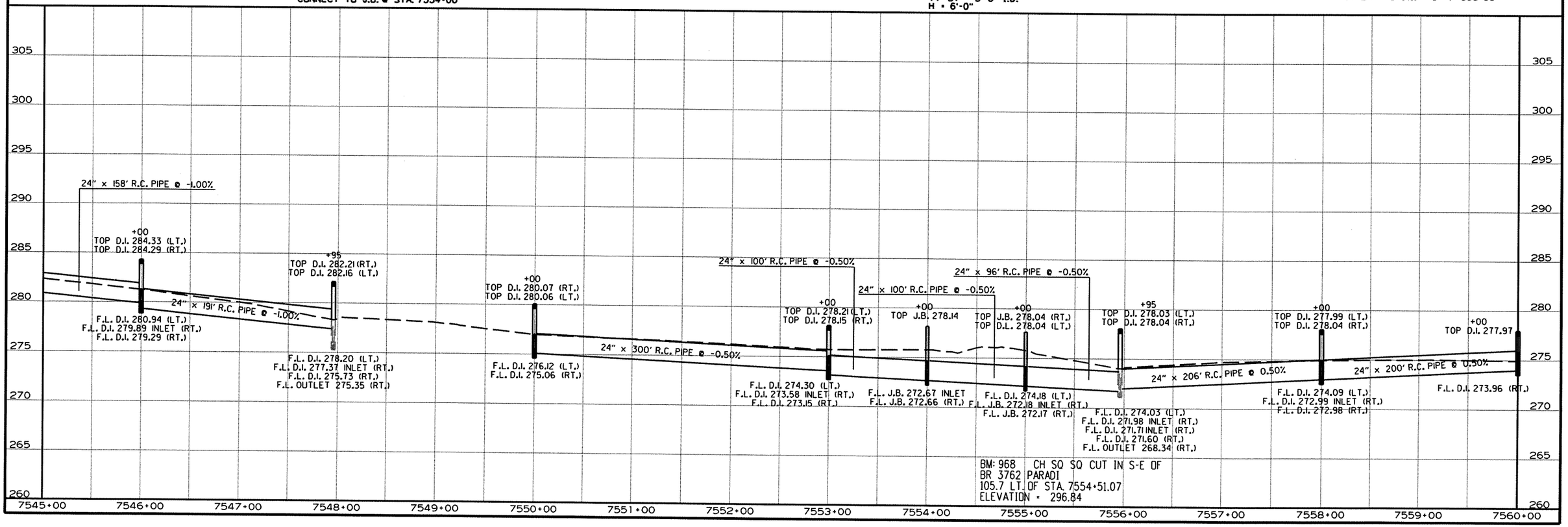
STA. 7555+00- CONSTRUCT
TYPE ST JUNCTION BOX
WITH 24" x 96' R.C. PIPE CULV'T
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7555+95
TY ST = 3'-0" I.D.
H = 6'-0"

STA. 7555+95 IN PLACE
TYPE H DROP INLET IN MEDIAN
REMOVE AND CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 6'-5"

STA. 7555+95 IN PLACE
24" x 94' R.C. PIPE CULVERT TO RT.
RETAIN

STA. 7558+00 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 5'-0"
WITH 24" x 206' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7555+95

STA. 7560+00 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER W/ DRAINAGE SLOTS
4' x 3' x H= 4'-0"
WITH 24" x 200' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7558+00



BM: 968 CH SQ SQ CUT IN S-E OF BR 3762 PARADI
105.7 LT. OF STA. 7554+51.07
ELEVATION = 296.84

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PI = 7578+83.51
Δ = 12°15'42" RT.
D = 0°30'00"
T = 1230.87'
L = 2452.33'
PC = 7566+52.64
PT = 7591+04.97
e = MATCH EXIST.
Ls = MATCH EXIST.

STA. 7561+00 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 4'-0"
WITH 24" x 296 'R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7563+95

STA. 7563+95 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 5'-5"
WITH 24" x 2 'R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7563+95

STA. 7568+78 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 3'-5"
WITH 24" x 2'R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7568+78

STA. 7570+95 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 4'-0"
WITH 24" x 2'R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7570+95 ON RT.

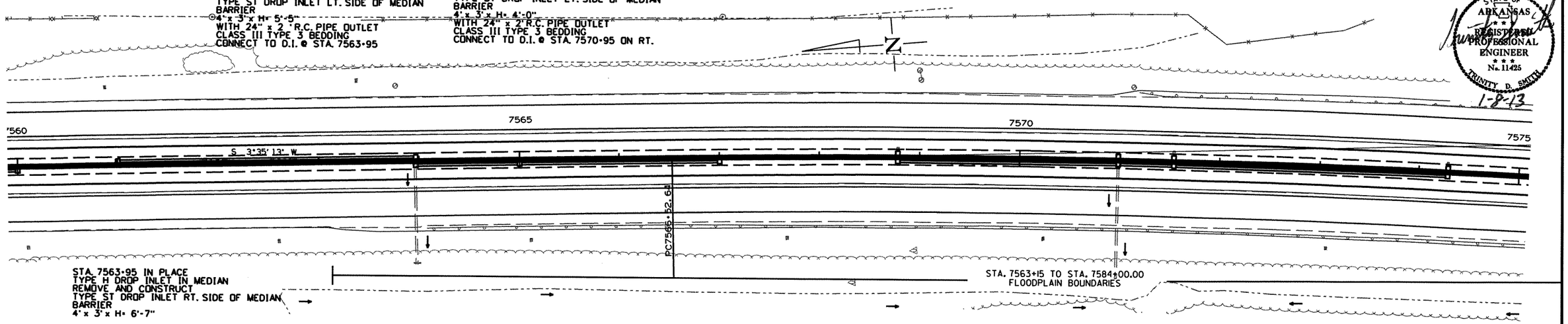
STA. 7571+55 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 4'-0"
WITH 24" x 2'R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7571+55 ON RT.

STA. 7574+29 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 3'-5"
WITH 24" x 2'R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7574+29 ON RT.

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	51	191

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
1-8-13



STA. 7563+95 IN PLACE
TYPE H DROP INLET IN MEDIAN
REMOVE AND CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 6'-7"

STA. 7563+95 IN PLACE
24" x 110' R.C. PIPE CULVERT TO RT.
RETAIN

STA. 7565+00 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER W/ DRAINAGE SLOTS
4' x 3' x H= 5'-10"
WITH 24" x 106 'R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7563+95

STA. 7567+00 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN BARRIER W/ DRAINAGE SLOTS
4' x 3' x H= 5'-0"
WITH 24" x 200'R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7565+00

STA. 7568+78 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 4'-0"
WITH 24" x 218'R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7570+95

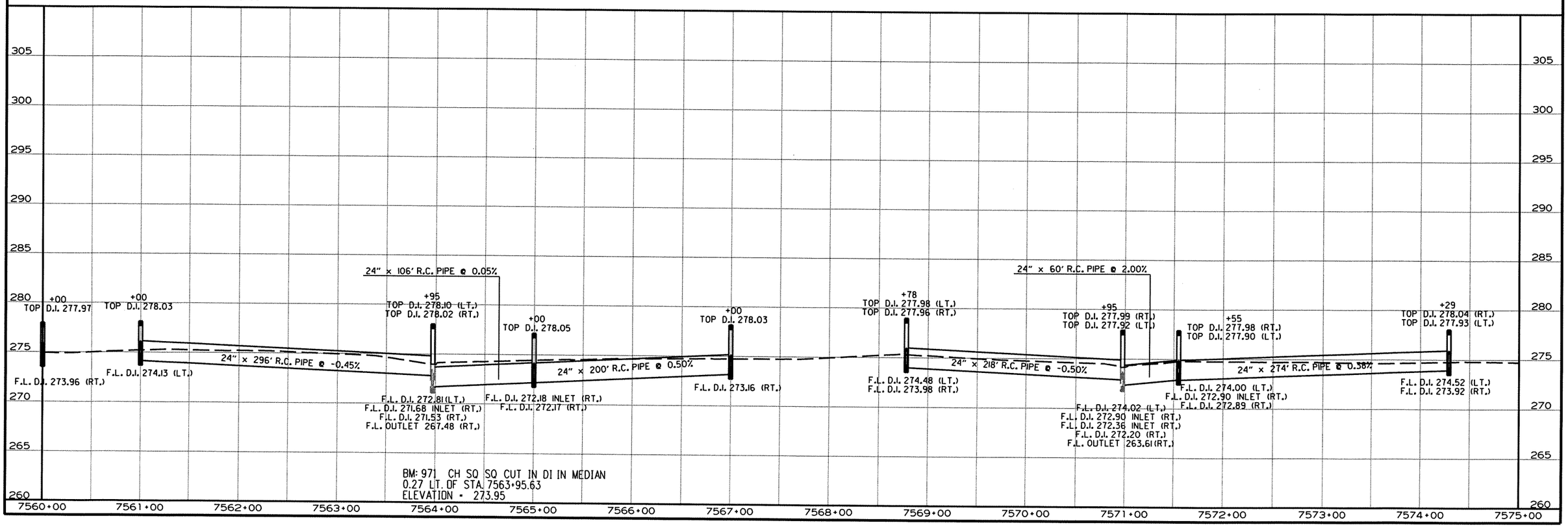
STA. 7570+95 IN PLACE
TYPE H DROP INLET IN MEDIAN
REMOVE AND CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 5'-10"

STA. 7570+95 IN PLACE
24" x 116'R.C. PIPE CULVERT TO RT.

STA. 7571+55 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 5'-0"
WITH 24" x 60'R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7570+95

STA. 7574+29 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 4'-0"
WITH 24" x 274'R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7571+55

STA. 7563+15 TO STA. 7584+00.00
FLOODPLAIN BOUNDARIES



BM: 971 CH SQ SQ CUT IN DI IN MEDIAN
0.27 LT. OF STA. 7563+95.63
ELEVATION = 273.95

8/9/2012
R080411.DGN

PI = 7578+83.51
Δ = 12°15'42" RT.
D = 0°30'00"
T = 1230.87'
L = 2452.33'
PC = 7566+52.64
PT = 7591+04.97
e = MATCH EXIST.
Ls = MATCH EXIST.

STA. 7576+89 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN
BARRIER
4' x 3' x H= 3'-5"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7576+89 ON RT.

STA. 7579+40 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN
BARRIER
4' x 3' x H= 3'-5"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7579+40 ON RT.

STA. 7581+92 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN
BARRIER
4' x 3' x H= 4'-1"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7581+92 ON RT.

STA. 7584+43 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN
BARRIER
4' x 3' x H= 5'-0"
WITH 24" x 52' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7584+95

STA. 7584+95 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN
BARRIER
4' x 3' x H= 5'-2"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7584+95 ON RT.

STA. 7586+93 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN
BARRIER
4' x 3' x H= 3'-9"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7586+93 ON RT.

STA. 7589+44 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN
BARRIER
4' x 3' x H= 5'-0"
WITH 24" x 252' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7586+93

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	52	191

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
1-8-13

7575 7580 7585 7590

P.I. 7578+83.51

STA. 7616+60 TO STA. 7628+96.00
FLOODPLAIN BOUNDARIES

STA. 7576+89 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN
BARRIER
4' x 3' x H= 5'-0"
WITH 24" x 60' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7577+48

STA. 7577+48 IN PLACE
TYPE K DROP INLET IN MEDIAN
REMOVE AND CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN
BARRIER
4' x 3' x H= 10'-8"

STA. 7577+46 IN PLACE
8' x 8' x 218' R.C. BOX CULVERT
RETAIN AND INSTALL
ANIMAL PASSAGE SHELF & 4 RAMPS

STA. 7582+10 INSTALL
OVERHEAD HIGHWAY SIGN
EASTBOUND LANES
SEE SIGNING PLANS

STA. 7579+40 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN
BARRIER
4' x 3' x H= 6'-4"
WITH 24" x 192' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7577+48

STA. 7581+92 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN
BARRIER
4' x 3' x H= 5'-2"
WITH 24" x 252' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7579+40

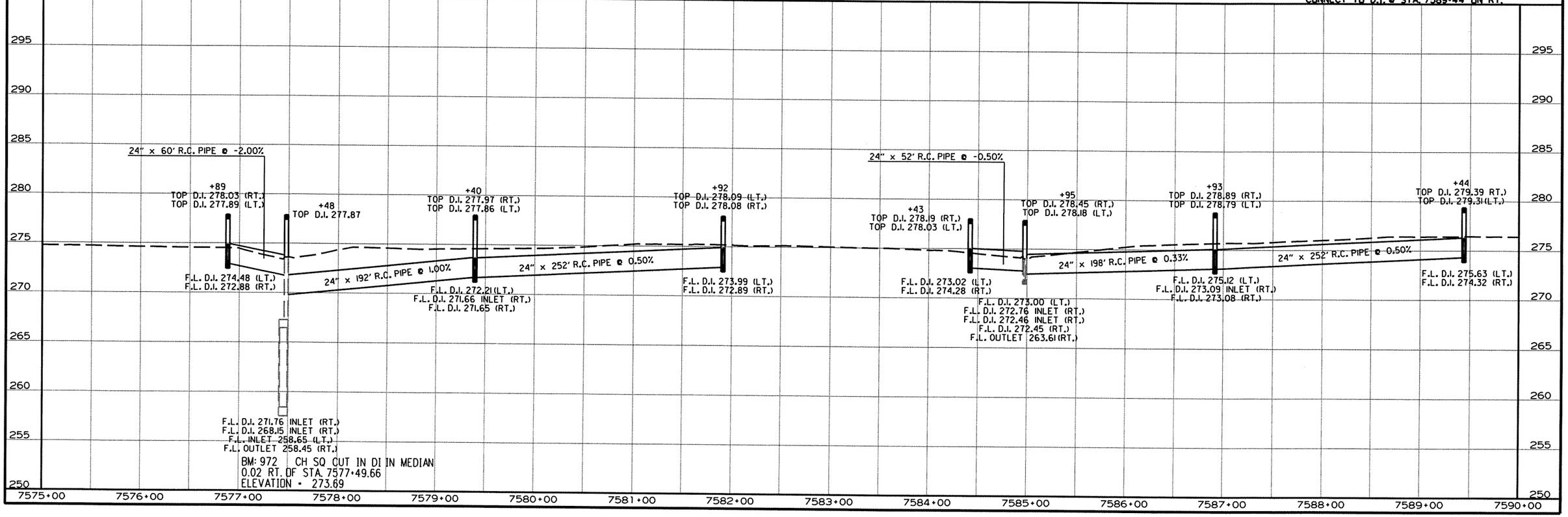
STA. 7584+43 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN
BARRIER
4' x 3' x H= 4'-0"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7584+43 ON RT.

STA. 7584+95 IN PLACE
TYPE H DROP INLET IN MEDIAN
REMOVE AND CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN
BARRIER
4' x 3' x H= 6'-0"

STA. 7584+95 IN PLACE
24" x 100' R.C. PIPE CULVERT TO RT.
RETAIN AND EXTEND 4' LT.
24" R.C. PIPE= 8 LIN.FT.
CLASS III TYPE 3 BEDDING

STA. 7586+93 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN
BARRIER
4' x 3' x H= 5'-10"
WITH 24" x 198' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7584+95

STA. 7589+44 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN
BARRIER
4' x 3' x H= 3'-9"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7589+44 ON RT.



R080411.DGN 8/9/2012

PI = 7578+83.51
Δ = 12°15'42" RT.
D = 0°30'00"
T = 1230.87'
L = 2452.33'
PC = 7566+52.64
PT = 7591+04.97
e = MATCH EXIST.
Ls = MATCH EXIST.

STA. 7591+95 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN BARRIER
4'x 3'x H= 3'-9"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7591+95 ON RT.

STA. 7595+00 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN BARRIER
4'x 3'x H= 3'-9"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7595+00 ON RT.

STA. 7598+00 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN BARRIER
4'x 3'x H= 3'-9"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7598+00 ON RT.

STA. 7601+33 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN BARRIER
4'x 3'x H= 3'-9"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7598+00 ON RT.

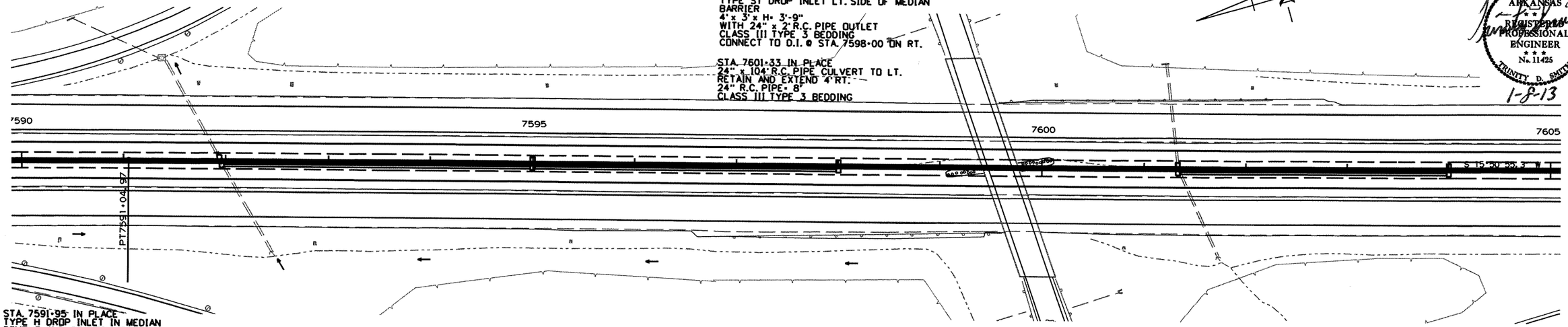
STA. 7601+33 IN PLACE
24" x 104' R.C. PIPE CULVERT TO LT.
RETAIN AND EXTEND 4' RT.
24" R.C. PIPE= 8'
CLASS III TYPE 3 BEDDING

STA. 7604+00 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN BARRIER
4'x 3'x H= 3'-9"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7604+00 ON RT.

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				6	ARK.			
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(2) PLAN AND PROFILE SHEETS

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REGISTERED PROFESSIONAL ENGINEER
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STA. 7591+95 IN PLACE
TYPE H DROP INLET IN MEDIAN
REMOVE AND CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER
4'x 3'x H= 6'-7"

STA. 7591+95 IN PLACE
24" x 216' R.C. PIPE CULVERT
30° RT. FWD. SKEW
RETAIN AND ETEND 4' LT.
24" R.C. PIPE= 8'
CLASS III TYPE 3 BEDDING

STA. 7595+00 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER
4'x 3'x H= 5'-10"
WITH 24" x 306' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7591+95

STA. 7598+00 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER
4'x 3'x H= 4'-6"
WITH 24" x 300' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7595+00

STA. 7599+25 IN PLACE
IMPACT ATTENUATION BARRIER IN MEDIAN
REMOVE

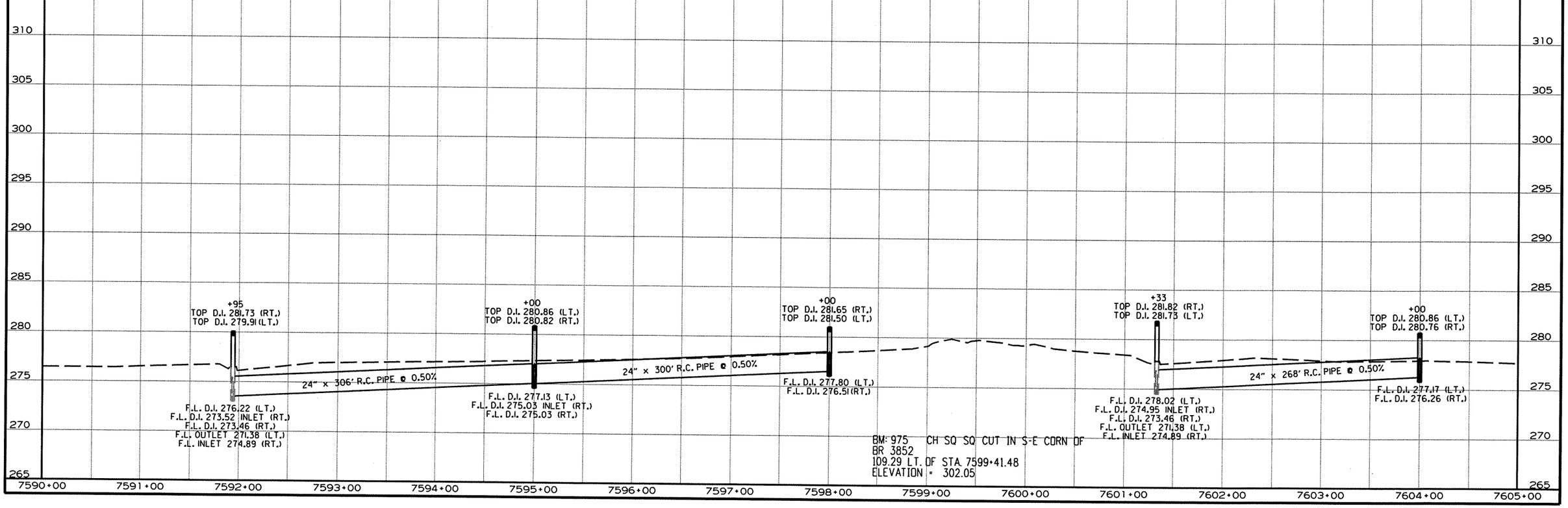
STA. 7600+00 IN PLACE
IMPACT ATTENUATION BARRIER IN MEDIAN
REMOVE

STA. 7599+25 TO STA. 7600+00
CONCRETE PIER PROTECTION IN MEDIAN
REMOVE

STA. 7601+33 IN PLACE
TYPE H DROP INLET IN MEDIAN
REMOVE AND CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER

STA. 7601+33 IN PLACE
24" x 92' R.C. PIPE CULVERT
30° RT. FWD. SKEW
RETAIN

STA. 7604+00 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER
4'x 3'x H= 4'-6"
WITH 24" x 268' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7601+33



BM: 975 CH SQ SQ CUT IN S-E CORN OF BR 3852
109.29 LT. OF STA. 7599+41.48
ELEVATION = 302.05

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R080411.DGN

STA. 7607+00 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 3'-9"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7607+00 ON RT.

STA. 7609+97 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 3'-9"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7609+97 ON RT.

STA. 7613+00 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 3'-9"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7613+00 ON RT.

STA. 7613+50 INSTALL
OVERHEAD HIGHWAY SIGN
WESTBOUND LANES
SEE SIGNING PLANS

STA. 7615+96 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 3'-9"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7615+96 ON RT.

PI = 7634+12.41
Δ = 14°07'47" LT.
D = 0°27'07"
T = 1570.98'
L = 3126.02'
PC = 7618+41.43
PT = 7649+67.45
e = MATCH EXIST.
Ls = MATCH EXIST.

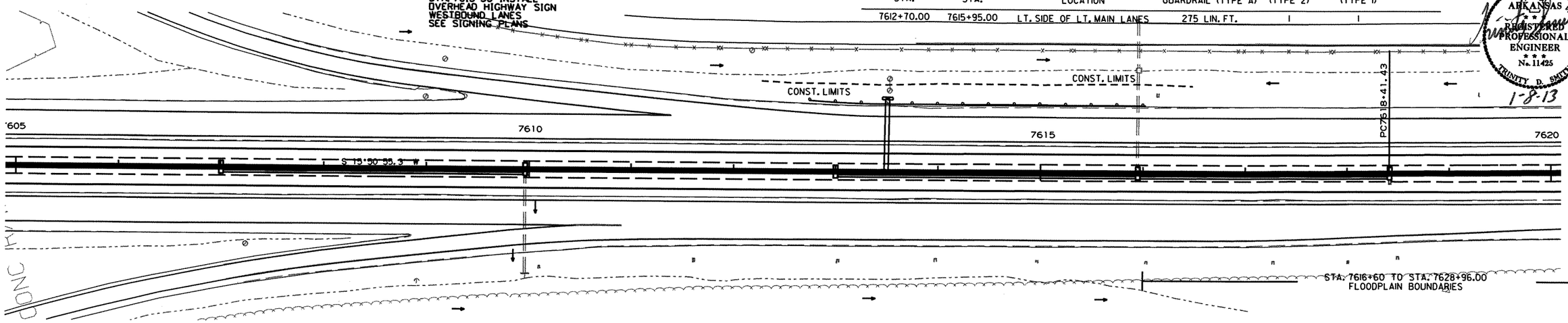
STA. 7618+41 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 3'-9"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7618+41 ON RT.

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				6	ARK.			
				JOB NO.	080411		54	191

(2) PLAN AND PROFILE SHEETS

STA.	STA.	LOCATION	GUARDRAIL (TYPE A)	GUARDRAIL TERMINAL (TYPE 2)	GUARDRAIL ANCHOR POST (TYPE I)
7612+70.00	7615+95.00	LT. SIDE OF LT. MAIN LANES	275 LIN. FT.	1	1

STATE OF ARKANSAS
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STA. 7607+00 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 5'-0"
WITH 24" x 298' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7609+97

STA. 7609+97 IN PLACE
TYPE H DROP INLET IN MEDIAN
REMOVE AND CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 6'-9"

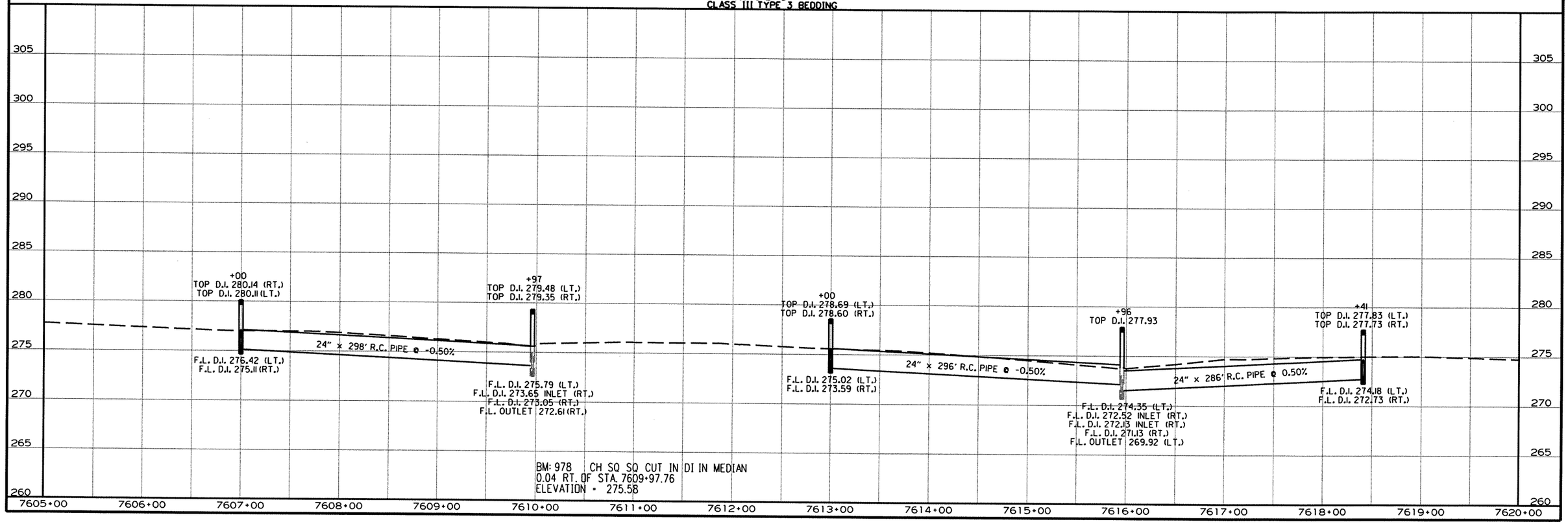
STA. 7609+97 IN PLACE
24" x 100' R.C. PIPE CULVERT TO RT.
RETAIN

STA. 7613+00 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 5'-0"
WITH 24" x 296' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7615+96

STA. 7615+96 IN PLACE
TYPE H DROP INLET IN MEDIAN
REMOVE AND CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 3'-9"

STA. 7615+96 IN PLACE
24" x 96' R.C. PIPE CULVERT TO LT.
RETAIN AND EXTEND 4' RT.
24" R.C. PIPE= 8'
CLASS III TYPE 3 BEDDING

STA. 7618+41 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 5'-0"
WITH 24" x 286' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7615+96



BM: 978 CH SQ SQ CUT IN DI IN MEDIAN
0.04 RT. OF STA. 7609+97.76
ELEVATION = 275.58

8/9/2012
R080411.DGN

PI = 7634+12.41
Δ = 14°07'47" LT.
D = 0°27'07"
T = 1570.98'
L = 3126.02'
PC = 7618+41.43
PT = 7649+67.45
e = MATCH EXIST.
Ls = MATCH EXIST.

STA. 7624+81 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 3'-9"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7624+81 ON RT.

STA. 7627+00 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN BARRIER W/ DRAINAGE SLOT
4' x 3' x H= 4'-0"
WITH 24" x 96' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7627+96 ON LT.

STA. 7627+96 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 4'-6"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7627+96 ON RT.

STA. 7630+81 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 4'-0"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7630+81 ON RT.

STA. 7633+96 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 3'-5"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7633+96 ON RT.

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				6	ARK.			
				JOB NO.		080411	55	191

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
1-8-13

620 7625 7630 7635

STA. 7616+60 TO STA. 7628+96.00
FLOODPLAIN BOUNDARIES

STA. 7621+00 IN PLACE
TYPE K DROP INLET IN MEDIAN
REMOVE AND CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER W/ DRAINAGE SLOT
4' x 3' x H= 6'-0"

STA. 7621+07 IN PLACE
DBL. 8' x 6' x 264' R.C. BOX CULVERT
RETAIN AND INSTALL
2 ANIMAL PASSAGE SHELVES & 4 RAMPS

STA. 7621+56 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER W/ DRAINAGE SLOT
4' x 3' x H= 6'-6"
WITH 24" x 56' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7621+00

STA. 7623+00 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER W/ DRAINAGE SLOT
4' x 3' x H= 5'-9
WITH 24" x 144' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7621+56

STA. 7624+81 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 5'-0"
WITH 24" x 182' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7623+00

STA. 7627+96 IN PLACE
TYPE H DROP INLET IN MEDIAN
REMOVE AND CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 5'-8"

STA. 7627+96 IN PLACE
24" x 88' R.C. PIPE CULVERT TO RT.

STA. 7630+81 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 5'-1"
WITH 24" x 286' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7627+96

STA. 7633+96 IN PLACE
TYPE H DROP INLET IN MEDIAN
REMOVE AND CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 4'-8"

STA. 7633+96 IN PLACE
24" x 86' R.C. PIPE CULVERT TO RT.
RETAIN

P.I. 7634+12.41

305 300 295 290 285 280 275 270 265 260

24" x 56' R.C. PIPE @ 0.50%
+00 TOP D.I. 277.79
+56 TOP D.I. 277.75
24" x 144' R.C. PIPE @ 0.50%
F.L. D.I. 271.30 INLET (RT.)
F.L. D.I. 271.29 (RT.)
+07 TOP BOX 268.55
F.L. D.I. 271.03 INLET (RT.)
F.L. INLET 263.38 (RT.)
F.L. OUTLET 262.88 (LT.)

+00 TOP D.I. 277.75 (RT.)
24" x 182' R.C. PIPE @ 0.50%
F.L. D.I. 272.01 INLET (RT.)
F.L. D.I. 272.00 (RT.)

+81 TOP D.I. 277.87 (RT.)
TOP D.I. 277.84 (LT.)
F.L. D.I. 274.19 (LT.)
F.L. D.I. 272.84 (RT.)

24" x 96' R.C. PIPE @ -0.38%
+00 TOP D.I. 277.93 (LT.)
TOP D.I. 277.78 (RT.)
F.L. D.I. 273.88 (LT.)

+96 TOP D.I. 277.91 (LT.)
TOP D.I. 277.94 (RT.)
F.L. D.I. 273.53 INLET (LT.)
F.L. D.I. 273.52 (LT.)
F.L. D.I. 273.08 INLET (RT.)
F.L. D.I. 272.32 (RT.)
F.L. OUTLET 271.69 (RT.)

24" x 286' R.C. PIPE @ 0.50%

+81 TOP D.I. 279.56 (RT.)
TOP D.I. 279.49 (LT.)
F.L. D.I. 275.56 (LT.)
F.L. D.I. 274.49 (RT.)

+96 TOP D.I. 283.51 (RT.)
TOP D.I. 283.53 (LT.)
F.L. D.I. 280.03 (LT.)
F.L. D.I. 279.90 INLET (RT.)
F.L. D.I. 278.94 (RT.)
F.L. OUTLET 277.22 (RT.)

BM: 980 CH SQ SQ CUT IN DI IN MEDIAN
0.72 RT. OF STA. 7633+94.39
ELEVATION = 280.12

7620+00 7621+00 7622+00 7623+00 7624+00 7625+00 7626+00 7627+00 7628+00 7629+00 7630+00 7631+00 7632+00 7633+00 7634+00 7635+00

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PI = 7634+12.41
Δ = 14°07'47" LT.
D = 0°27'07"
T = 1570.98'
L = 3126.02'
PC = 7618+41.43
PT = 7649+67.45
e = MATCH EXIST.
Ls = MATCH EXIST.

STA. 7636+80 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN BARRIER
4'x 3'x H= 4'-0"
WITH 24" x 2'R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7636+80 ON RT.

STA. 7640+19 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN BARRIER
4'x 3'x H= 4'-0"
WITH 24" x 2'R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7640+19

STA. 7642+76 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN BARRIER
4'x 3'x H= 4'-0"
WITH 24" x 2'R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7642+76

STA. 7645+76 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN BARRIER
4'x 3'x H= 4'-0"
WITH 24" x 2'R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7645+76

STA. 7647+95 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN BARRIER
4'x 3'x H= 3'-5"
WITH 24" x 2'R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7647+95

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				6	ARK.			
				JOB NO.		080411	56	191

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
1-8-13

635 7640 7645 7650

P.I. 7649+67.45

P.I. 1100+00.00

100

CONST. LIMITS

45 RT.

STA. 7636+80 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER
4'x 3'x H= 6'-4"
WITH 24" x 184' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7633+96 ON RT.

STA. 7639+00 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER
4'x 3'x H= 5'-10"
WITH 24" x 220' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7636+80

STA. 7640+19 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER
4'x 3'x H= 5'-2"
WITH 24" x 120' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7639+00

STA. 7642+76 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER
4'x 3'x H= 5'-0"
WITH 24" x 300' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7645+76

STA. 7645+76 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER
4'x 3'x H= 5'-0"
WITH 24" x 220' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7647+95

STA. 7647+95 IN PLACE
TYPE H DROP INLET IN MEDIAN
REMOVE AND CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER
4'x 3'x H= 6'-0"

STA. 7647+95 IN PLACE
24" x 102' R.C. PIPE CULVERT TO LT.
RETAIN AND EXTEND 4' RT.
24" R.C. PIPE= 8'
CLASS III TYPE 3 BEDDING

STA. 7648+76 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER W/ DRAINAGE SLOT
4'x 3'x H= 5'-0"
WITH 24" x 224' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7651+00

315 310 305 300 295 290 285 280 275 270

24" x 184' R.C. PIPE @ 0.50%
+80
TOP D.I. 287.67
TOP D.I. 287.58
F.L. D.I. 282.43 (LT.)
F.L. D.I. 281.39 INLET (RT.)
F.L. D.I. 281.30 (RT.)

24" x 220' R.C. PIPE @ 1.00%
24" x 120' R.C. PIPE @ 1.00%
+00
TOP D.I. 289.41
F.L. D.I. 283.55 INLET (RT.)
F.L. D.I. 283.54 (RT.)
+19
TOP D.I. 289.85 (RT.)
TOP D.I. 289.68 (LT.)
F.L. D.I. 285.87 (LT.)
F.L. D.I. 284.71 (RT.)

+76
TOP D.I. 289.46 (RT.)
TOP D.I. 289.44 (LT.)
F.L. D.I. 285.47 (LT.)
F.L. D.I. 284.43 (RT.)

24" x 300' R.C. PIPE @ -0.50%

+76
TOP D.I. 287.31 (LT.)
TOP D.I. 287.32 (RT.)
F.L. D.I. 283.35 (LT.)
F.L. D.I. 282.95 INLET (RT.)
F.L. D.I. 282.31 (RT.)

24" x 220' R.C. PIPE @ -1.00%

+95
TOP D.I. 285.78 (LT.)
TOP D.I. 285.80 (RT.)
F.L. D.I. 282.31 (LT.)
F.L. D.I. 280.17 INLET (RT.)
F.L. D.I. 279.85 (RT.)
F.L. OUTLET 274.72 (LT.)

24" x 224' R.C. PIPE @ -0.50%
+76
TOP D.I. 284.99
F.L. D.I. 279.99 (RT.)

BM: 101 AHTD GPS 230019
114.37 LT. OF STA. 7639+83.07
ELEVATION = 287.36

BM: 981 CH SQ SQ CUT IN DI IN MEDIAN
0.41 RT. OF STA. 7647+91.94
ELEVATION = 281.88

7635+00 7636+00 7637+00 7638+00 7639+00 7640+00 7641+00 7642+00 7643+00 7644+00 7645+00 7646+00 7647+00 7648+00 7649+00 7650+00

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STA. 7651+00 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 4'-0"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7651+00 ON RT.

STA. 7654+00 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 4'-0"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7654+00 ON RT.

STA. 7657+00 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 4'-0"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7657+00 ON RT.

STA. 7659+64 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 4'-0"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7659+64 ON RT.

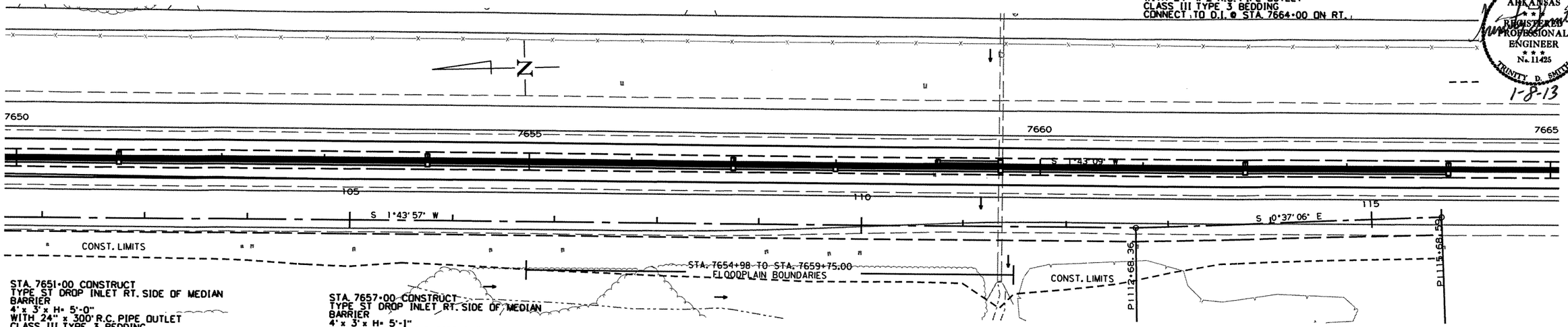
STA. 7662+00 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 4'-0"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7662+00 ON RT.

STA. 7664+00 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 4'-0"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7664+00 ON RT.

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				6	ARK.			
				JOB NO.	080411		57	191

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
1-8-13



STA. 7651+00 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 5'-0"
WITH 24" x 300' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7654+00

STA. 7654+00 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 5'-0"
WITH 24" x 300' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7657+00

STA. 7657+00 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 5'-1"
WITH 24" x 100' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7658+00

STA. 7658+00 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER W/ DRAINAGE SLOT
4' x 3' x H= 5'-4"
WITH 24" x 100' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7659+00

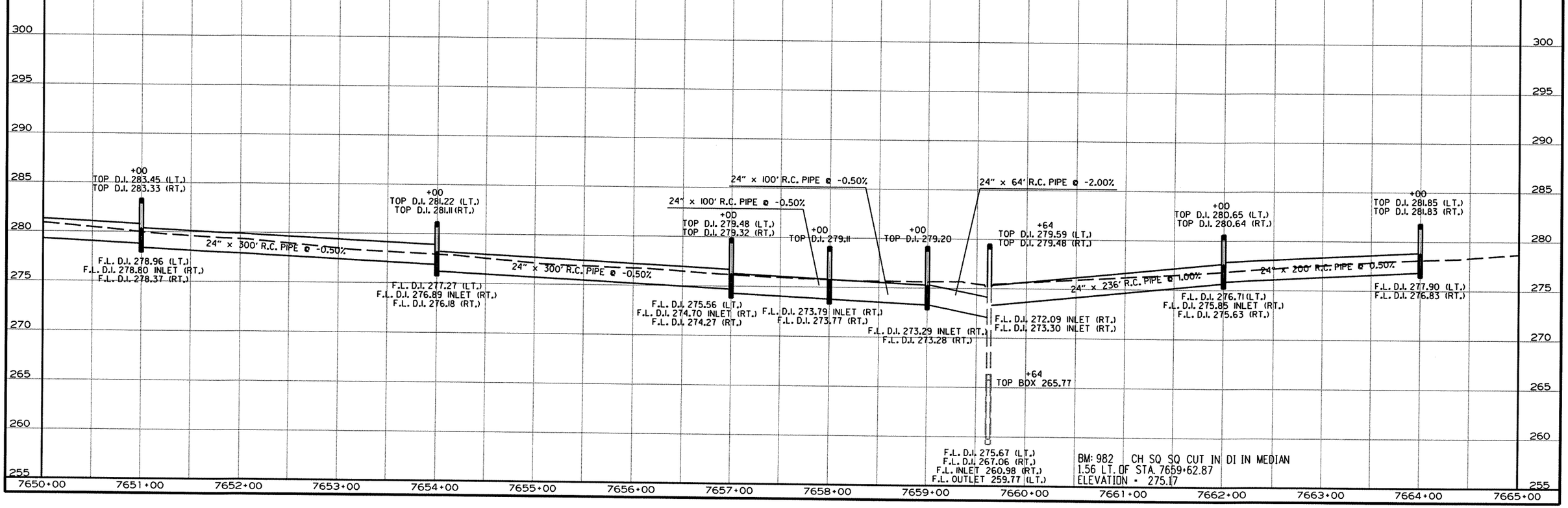
STA. 7659+00 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER W/ DRAINAGE SLOT
4' x 3' x H= 5'-11"
WITH 24" x 64' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7659+64

STA. 7659+64 IN PLACE
TYPE K DROP INLET IN MEDIAN
REMOVE AND CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 12'-6"

STA. 7659+64 IN PLACE
4' x 6' x 278' R.C. BOX CULVERT
RETAIN AND INSTALL
ANIMAL PASSAGE SHELF & 4 RAMPS

STA. 7662+00 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 5'-0"
WITH 24" x 236' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7659+64

STA. 7664+00 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER
4' x 5' x H= 5'-0"
WITH 24" x 200' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7662+00



BM: 982 CH SQ SQ CUT IN DI IN MEDIAN
1.56 LT. OF STA. 7659+62.87
ELEVATION = 275.17

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STA. 7666+30 INSTALL
OVERHEAD HIGHWAY SIGN
WESTBOUND LANES
SEE SIGNING PLANS

STA. 7666+97 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN
BARRIER
4' x 3' x H= 4'-0"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7666+97 ON RT.

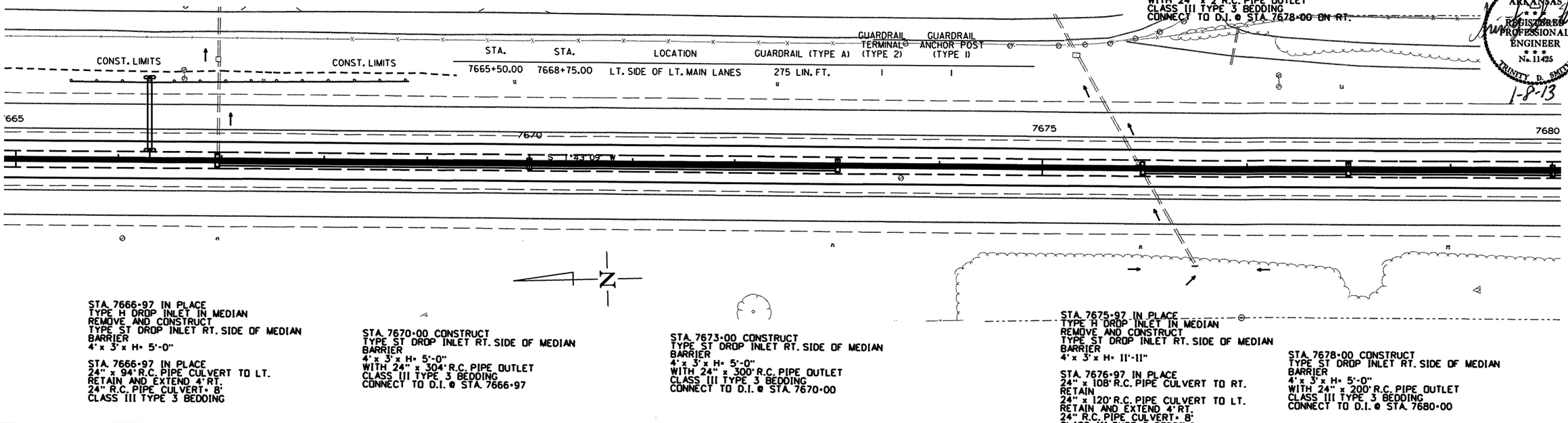
STA. 7670+00 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN
BARRIER
4' x 3' x H= 4'-0"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7670+00 ON RT.

STA. 7673+00 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN
BARRIER
4' x 3' x H= 4'-0"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7673+00 ON RT.

STA. 7675+97 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN
BARRIER
4' x 3' x H= 4'-0"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7675+97 ON RT.

STA. 7678+00 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN
BARRIER
4' x 3' x H= 4'-0"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7678+00 ON RT.

	STA.	STA.	LOCATION	GUARDRAIL (TYPE A)	GUARDRAIL TERMINAL (TYPE 2)	GUARDRAIL ANCHOR POST (TYPE I)
	7665+50.00	7668+75.00	LT. SIDE OF LT. MAIN LANES	275 LIN. FT.	1	1



STA. 7666+97 IN PLACE
TYPE H DROP INLET IN MEDIAN
REMOVE AND CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN
BARRIER
4' x 3' x H= 5'-0"

STA. 7666+97 IN PLACE
24" x 94' R.C. PIPE CULVERT TO LT.
RETAIN AND EXTEND 4' RT.
24" R.C. PIPE CULVERT= 8'
CLASS III TYPE 3 BEDDING

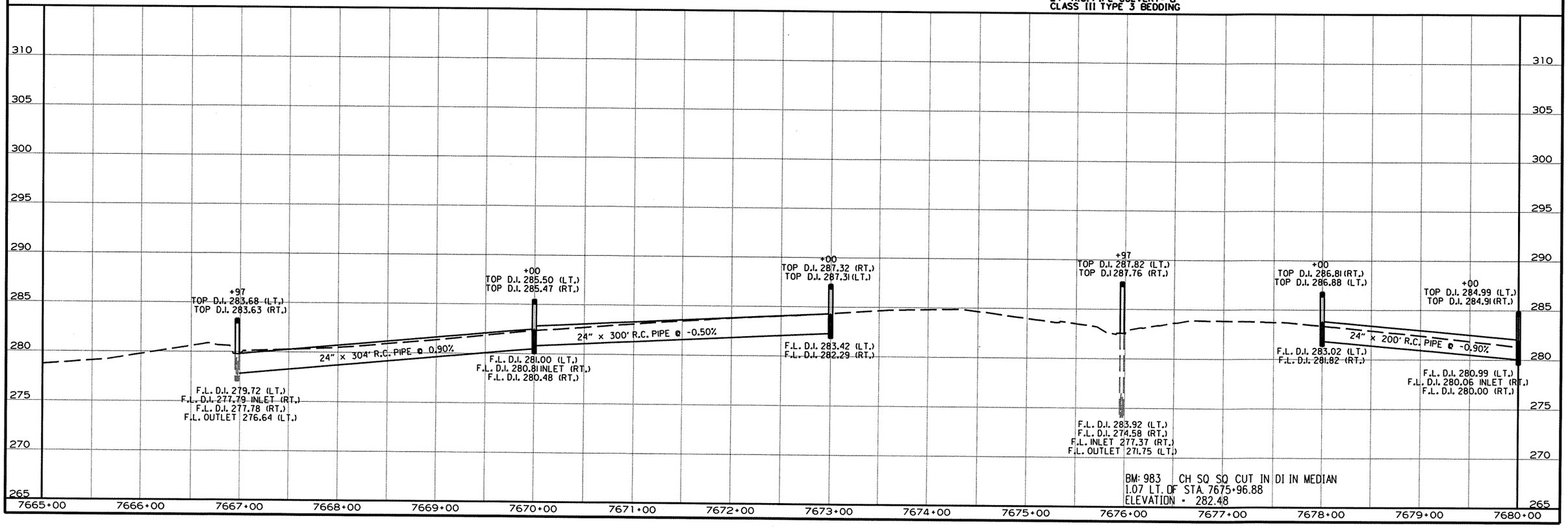
STA. 7670+00 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN
BARRIER
4' x 3' x H= 5'-0"
WITH 24" x 304' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7666+97

STA. 7673+00 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN
BARRIER
4' x 3' x H= 5'-0"
WITH 24" x 300' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7670+00

STA. 7675+97 IN PLACE
TYPE H DROP INLET IN MEDIAN
REMOVE AND CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN
BARRIER
4' x 3' x H= 11'-11"

STA. 7676+97 IN PLACE
24" x 108' R.C. PIPE CULVERT TO RT.
RETAIN
24" x 120' R.C. PIPE CULVERT TO LT.
RETAIN AND EXTEND 4' RT.
24" R.C. PIPE CULVERT= 8'
CLASS III TYPE 3 BEDDING

STA. 7678+00 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN
BARRIER
4' x 3' x H= 5'-0"
WITH 24" x 200' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7680+00



BM: 983 CH SQ SQ CUT IN DI IN MEDIAN
1.07 LT. OF STA. 7675+96.88
ELEVATION = 282.48

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				6	ARK.			
				JOB NO.		080411	59	191

(2) PLAN AND PROFILE SHEETS

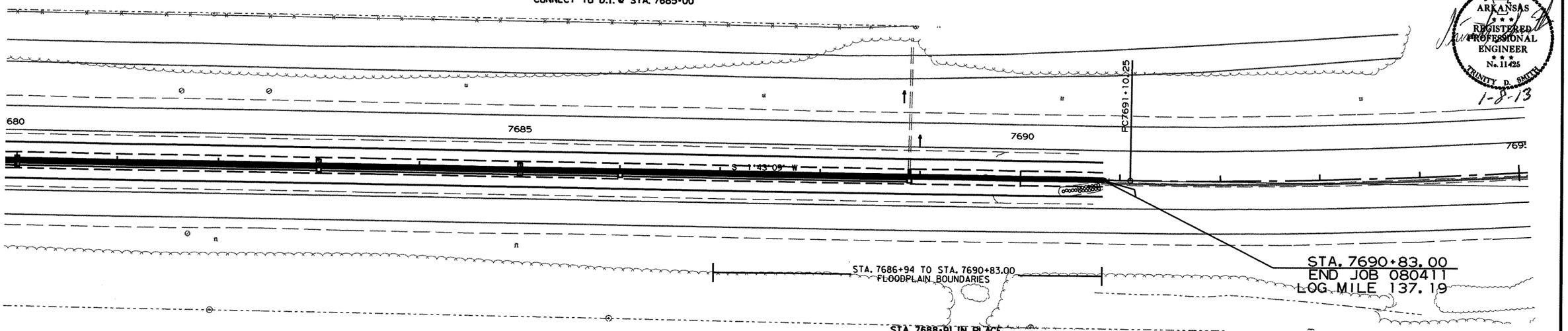
PI = 7714+46.16
Δ = 44°21'39" LT.
D = 1°00'00"
T = 2335.91'
L = 4436.08'
PC = 7691+10.25
PT = 7735+46.32
e = MATCH EXIST.
Ls = MATCH EXIST.

STATE OF ARKANSAS
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STA. 7680+00 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 4'-0"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7680+00 ON RT.

STA. 7683+00 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 4'-0"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7683+00 ON RT.

STA. 7685+00 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 3'-4"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7685+00



STA. 7680+00 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 4'-11"
WITH 24" x 300' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7683+00

STA. 7683+00 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 5'-5"
WITH 24" x 200' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7685+00

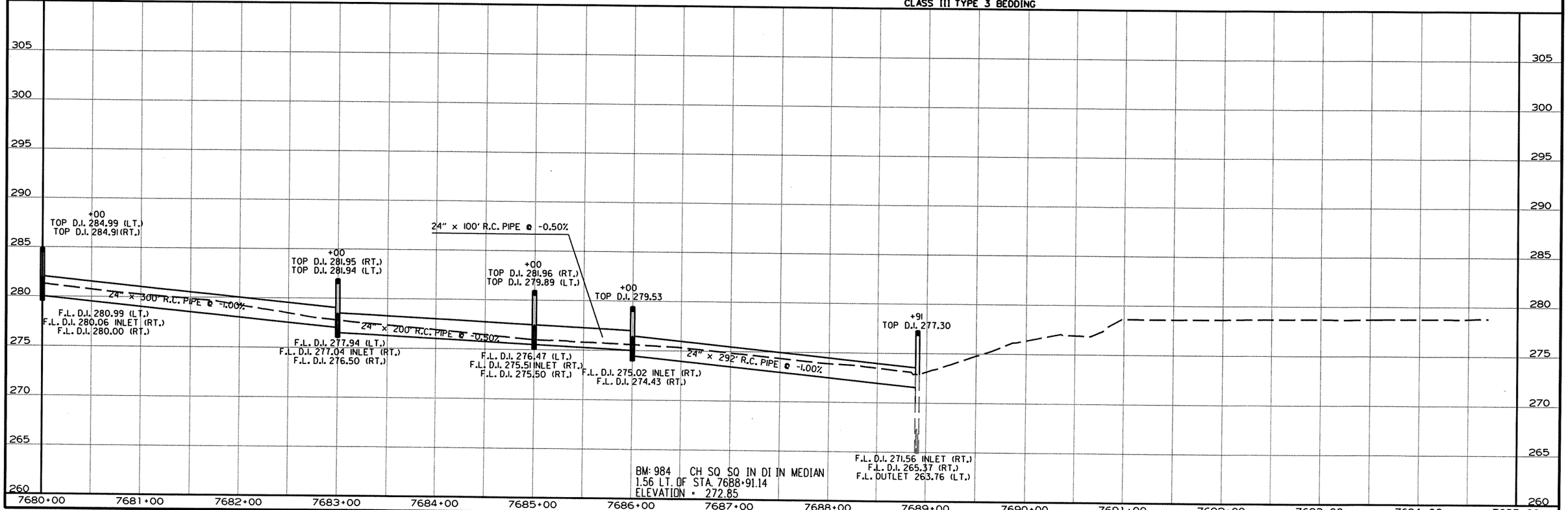
STA. 7685+00 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 4'-6"
WITH 24" x 100' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7686+00

STA. 7686+00 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 5'-0"
WITH 24" x 292' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7688+91

STA. 7688+91 IN PLACE
TYPE H DROP INLET IN MEDIAN
REMOVE AND CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 11'-11"

STA. 7688+91 IN PLACE
24" x 136' R.C. PIPE CULVERT TO LT.
RETAIN AND EXTEND 4' RT.
24" R.C. PIPE CULVERT= 8'
CLASS III TYPE 3 BEDDING

STA. 7690+83.00 IN PLACE
IMPACT ATTENUATION BARRIER
IN MEDIAN
REMOVE



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				6	ARK.			
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(2) SIGNING QUANTITIES

SIGNING SUMMARY OF QUANTITIES

ITEM NUMBER	ITEM	TOTAL	UNIT
SP	STEEL OVERHEAD SIGN STRUCTURE (OH-040-23-18)	1	EACH
SP	STEEL OVERHEAD SIGN STRUCTURE (OH-040-23-19)	1	EACH
SP	STEEL OVERHEAD SIGN STRUCTURE (OH-040-23-20)	1	EACH
SP	STEEL OVERHEAD SIGN STRUCTURE (OH-040-23-21)	1	EACH
SP	STEEL OVERHEAD SIGN STRUCTURE (OH-040-23-22)	1	EACH
SP, SS & 725	GUIDE SIGN - ROADSIDE MOUNTED (DEMOUNTABLE LEGEND)	121	SQ. FT.
SP, SS & 725	GUIDE SIGN - OVERHEAD MOUNTED (DEMOUNTABLE LEGEND)	1,360	SQ. FT.
SP, SS & 726	STANDARD SIGN	378	SQ. FT.
SP, SS & 727	EXIT NUMBER PANEL (TYPE A)	119	SQ. FT.
730	BREAKAWAY SIGN SUPPORT (TYPE G-2)	4,398	POUND

MAIN LANES SIGNING QUANTITIES
ROADSIDE MOUNTED I-BEAM SIGN SUPPORTS

SIGN NO./ LOCATION	I-BEAM SIGN SUPPORTS TYPE		GUIDE SIGN ROADSIDE MOUNTED LENGTH	GUIDE SIGN ROADSIDE MOUNTED HEIGHT		BREAKAWAY SIGN SUPPORT STEEL SECT. A-572		SIGN POST LENGTH H - 1	SIGN POST LENGTH H - 2	STUB POST H - 1	STUB POST H - 2	FOOTINGS DIA.	FOOTINGS DEPTH	FOOTINGS EMBED.	SIGN POST AND STUB
	G-1	G-2	LIN. FT.		SQ. Ft.	BEAM	LBS	LIN FT		LIN FT		LIN FT			POUND
EX-040-23-STA7512+00WB		1	7.00	6.50	45.50	W6	9	14.00	15.00	1.99	1.99	1.50	2.50	1.66	296.82
EX-040-23-STA7587+60EB		1	7.50	5.00	37.50	W6	9	12.50	13.50	1.99	1.99	1.50	2.50	1.66	269.82
EX-040-23-STA7609+00WB		1	7.50	5.00	37.50	W6	9	12.50	13.50	1.99	1.99	1.50	2.50	1.66	269.82
TOTALS:		**1**			**120.50**										**836.46**

STANDARD SIGNS (FLAT SHEET)
I-BEAM SIGN SUPPORTS

SIGN NO./ LOCATION	STANDARD SIGNS FLAT SHEET I-BEAM SIGN SUPPORTS TYPE		STANDARD SIGN SQ. FT.	BREAKAWAY SIGN SUPPORT STEEL SECT. A-572		SIGN POST LENGTH H - 1	SIGN POST LENGTH H - 2	STUB POST H - 1	STUB POST H - 2	FOOTINGS DIA.	FOOTINGS DEPTH	FOOTINGS EMBED.	SIGN POST AND STUB
	G-1	G-2		BEAM	LBS	LIN FT		LIN FT		LIN FT			POUND
SS-040-23STA7609+00WB		1	20.00	W6	9	11.00	12.00	1.99	1.99	1.50	3.00	2.00	242.82
SS-040-23-STA7563+90WB		1	36.00	W6	9	16.00	17.00	1.99	1.99	2.00	3.00	2.00	332.82
SS-040-23-STA7635+00EB		1	36.00	W6	9	16.00	17.00	1.99	1.99	2.00	3.00	2.00	332.82
SS-040-23-STA7676+50EB		1	36.00	W6	9	16.00	17.00	1.99	1.99	2.00	3.00	2.00	332.82
SS-040-23-STA76320+30EB		1	24.50	W6	9	13.50	14.50	1.99	1.99	1.50	3.00	2.00	287.82
SS-040-23-STA7666+00EB		1	24.50	W6	9	13.50	14.50	1.99	1.99	1.50	3.00	2.00	287.82
SS-040-23-STA7582+10EB		1	20.00	OH-040-23-18									
SS-040-23-STA7519+30WB		1	20.00	OH-040-23-19									
SS-040-23-STA7490+00EB		1	20.00	OH-040-23-20									
SS-040-23-STA7613+50WB		1	20.00	OH-040-23-21									
SS-040-23-STA7574+10WB		1	24.50	W6	9	13.50	14.50	1.99	1.99	1.50	3.00	2.00	287.82
SS-040-23-STA7670+00EB-A		1	16.00	W6	9	11.00	12.00	1.99	1.99	1.50	3.00	2.00	242.82
SS-040-23-STA7670+00EB-B		1	16.00	W6	9	11.00	12.00	1.99	1.99	1.50	3.00	2.00	242.82
SS-040-23-STA7643+50EB-A		1	16.00	W6	9	11.00	12.00	1.99	1.99	1.50	3.00	2.00	242.82
SS-040-23-STA7643+50EB-B		1	16.00	W6	9	11.00	12.00	1.99	1.99	1.50	3.00	2.00	242.82
SS-040-23-STA7657+50EB-A		1	16.00	W6	9	11.00	12.00	1.99	1.99	1.50	3.00	2.00	242.82
SS-040-23-STA7657+50EB-B		1	16.00	W6	9	11.00	12.00	1.99	1.99	1.50	3.00	2.00	242.82
TOTALS:		**17**	**377.50**										**3561.66**

THE CONTRACTOR WILL BE REQUIRED TO INSTALL OVERHEAD SIGNS AND SIGN STRUCTURES OVER ROADWAYS OPEN TO TRAFFIC. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE TRAFFIC CONTROL. PAYMENT WILL BE CONSIDERED TO BE INCLUDED IN ITEM 603 OF THE STANDARD SPECIFICATIONS.

THE CONTRACTOR WILL VERIFY SIGN PLACEMENT AND MAKE ANY ADJUSTMENTS NECESSARY TO ALIGN SIGNS OVER INTENDED LANES.

ALL SIGNS SHALL BE CONSTRUCTED WITH TYPE III SHEETING BACKGROUND AND SHALL HAVE DEMOUNTABLE LEGEND CONSTRUCTED OF PRISMATIC SHEETING (TYPE VIII OR IX), UNLESS OTHERWISE NOTED IN THE PLANS. THE LEGEND SHALL BE PLACED USING CLEARVIEW SPACING AND SERIES 5W AND 5WR CHARACTERS, UNLESS OTHERWISE NOTED IN THE PLANS.

THE CLEARVIEW FONT SHALL FOLLOW THE SPACE TABLES FOR CLEARVIEW AND NOT SHS E-MODIFIED. THIS INCLUDES THE USE OF CLEARVIEW 5WR. FOR GENERAL GUIDANCE ON LETTER AND WORD SPACING REFER TO THE FHWA CLEARVIEW TYPEFACE SUPPLEMENT. (HTTP://MUTCD. FHWA.DOT.GOV)

EXISTING LOGOS WILL BE RELOCATED TO THE NEW LOGO SIGN IN THE ORDER SHOWN ON THE PLANS BY THE CONTRACTOR. THE LOGO INSTALLATION SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED SUBSIDIARY TO OTHER ITEMS IN THE CONTRACT.

ALL EXISTING GUIDE SIGNS SHALL BE MAINTAINED IN SUCH A MANNER THAT THE SIGNS ARE FULLY VISIBLE, INTACT, AND ERECT FOR THE DURATION OF THE PROJECT, AND SHALL BE REMOVED WHEN THEIR USE IS NO LONGER REQUIRED.

THE EXISTING SIGNS AND SIGN STRUCTURE SHALL BECOME THE PROPERTY OF THE CONTRACTOR. THE EXISTING FOOTINGS SHALL BE REMOVED TO A MINIMUM OF 12" BELOW NORMAL GRADE AND THE HOLES FILLED WITH A SUITABLE MATERIAL AND COMPACTED. THE REMOVAL AND DISPOSAL OF THE SIGNS, SIGN SUPPORTS AND FOUNDATIONS SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED SUBSIDIARY TO OTHER ITEMS IN THE CONTRACT.

NOTE:
BREAKAWAY SIGN SUPPORT TOTAL IS CALCULATED BY TAKING THE LENGTH OF H-1, H-2, H-3 AND EACH STUB POST AND MULTIPLYING BY THE BEAM WEIGHT (LBS).

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 5851
11/2/13
TONY SULLIVAN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	61	191
				(2)	SIGNING QUANTITIES			

MAIN LANES SIGNING QUANTITIES
OVERHEAD MOUNTED

SIGN NO./ LOCATION	STRUCTURE TYPE			GUIDE SIGN			EXIT NUMBER PANEL				GUARDRAIL				
				LENGTH	HEIGTH		LEGEND	TYPE			TYPE A	TERM. ANCHOR TYPE 1	GUARDRAIL TERM. TYPE 2	AGG. BASE CR (CL. 7)	ACHM SURF.CR. 220 LBS/SY PG 70-22
								A	B	C					
	OH	BM	CL	LIN. FT.		SQ. FT.		SQ. FT.			LIN. FT.	EACH	EACH	TON	TON
OH-040-23-16	EXISTING														
OH-040-23-STA7414+00EB-B				16.50	8.00	132.00									
0H-040-23-18	1										SEE ROADWAY PLANS FOR GUARDRAIL DETAILS				
OH-040-23-STA7490+00EB-A				14.00	8.00	112.00									
OH-040-23-STA7490+00EB-B				13.50	10.00	135.00	135	23.75							
0H-040-23-19	1										SEE ROADWAY PLANS FOR GUARDRAIL DETAILS				
OH-040-23-STA7519+30WB-A				14.00	8.00	112.00									
0H-040-23-20	1										SEE ROADWAY PLANS FOR GUARDRAIL DETAILS				
OH-040-23-STA7582+10EB-A				13.50	10.00	135.00	135	23.75							
OH-040-23-STA7582+10EB-B				13.50	10.00	135.00									
OH-040-23-21	1										SEE ROADWAY PLANS FOR GUARDRAIL DETAILS				
OH-040-23-STA7613+50WB-A				13.50	10.00	135.00	135	23.75							
OH-040-23-STA7613+50WB-B				16.50	8.00	132.00									
OH-040-23-22	1										SEE ROADWAY PLANS FOR GUARDRAIL DETAILS				
OH-040-23-STA7666+30WB-A				13.50	9.50	128.25	127	23.75							
OH-040-23-STA7666+30WB-B				18.50	11.00	203.50	125	23.75							
TOTALS:	**5**					**1359.75**		**118.75**							

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 5851
11/2/13
LYDNY SULLIVAN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	62	191

(2) SIGN LAYOUT SHEET

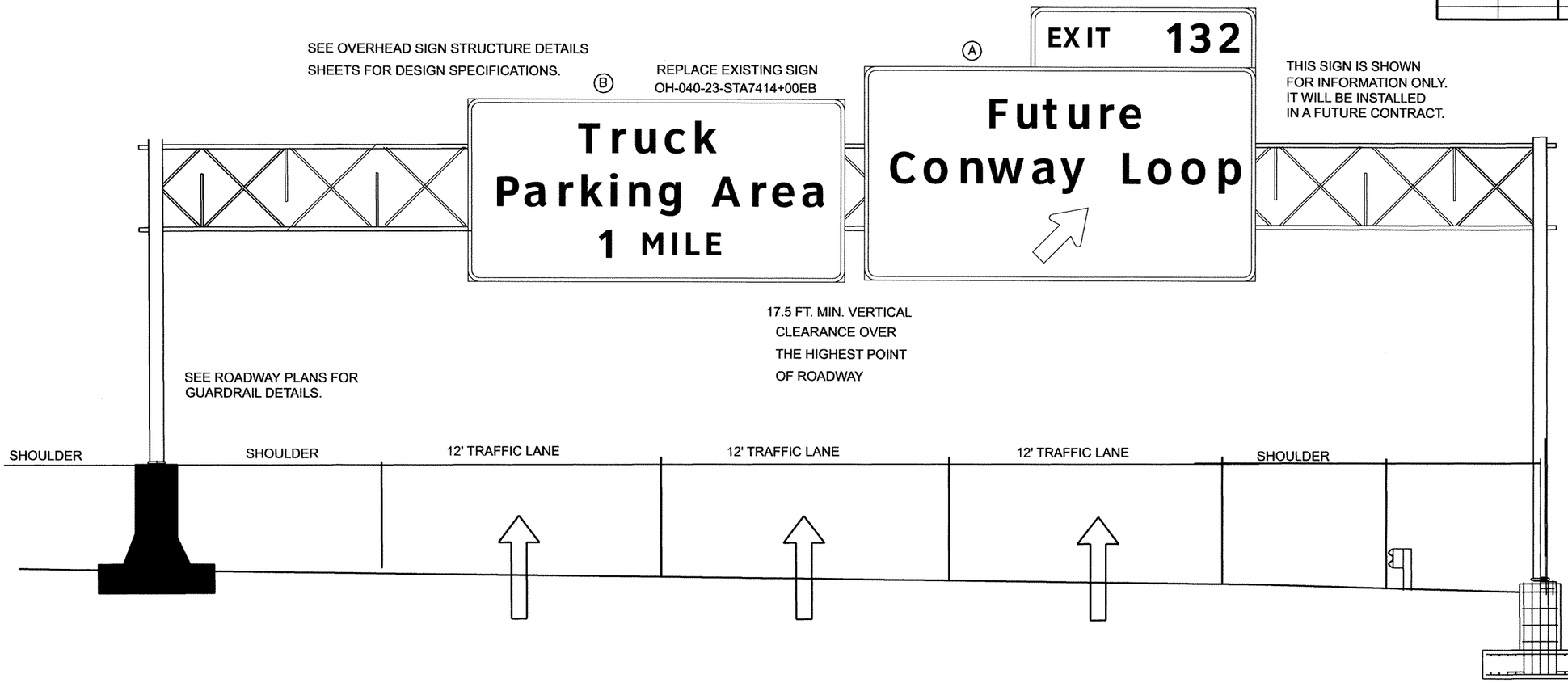
OH-040-23-16

SEE OVERHEAD SIGN STRUCTURE DETAILS SHEETS FOR DESIGN SPECIFICATIONS.

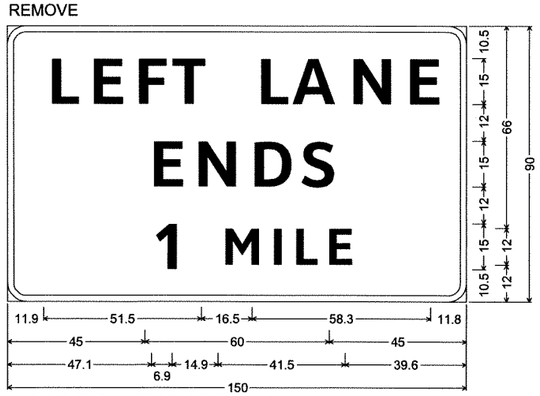
(B) REPLACE EXISTING SIGN OH-040-23-STA7414+00EB

(A)

THIS SIGN IS SHOWN FOR INFORMATION ONLY. IT WILL BE INSTALLED IN A FUTURE CONTRACT.

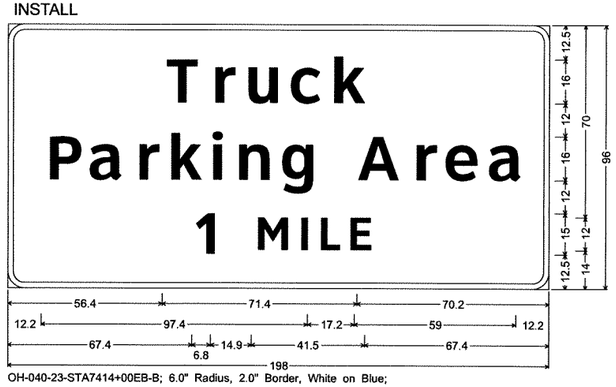


REMOVE



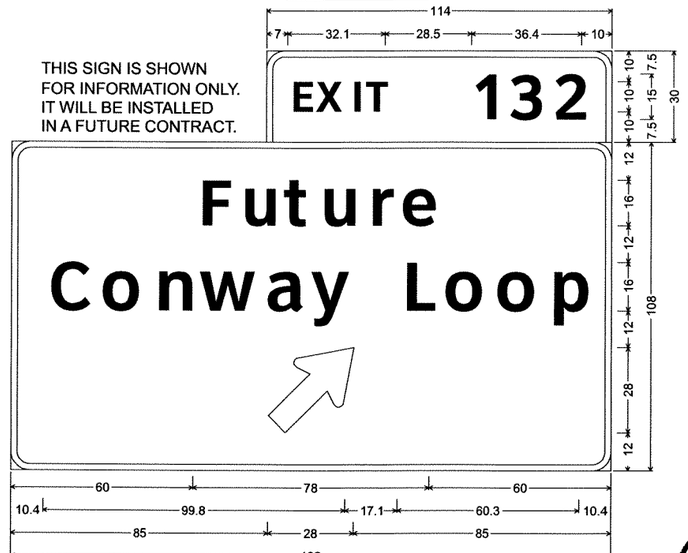
OH-040-23-STA7414+00EB-B; 6.0" Radius, 2.0" Border, Black on Yellow;
[LEFT LANE] ClearviewHwy-5-W; [ENDS] ClearviewHwy-5-W;
[ ] ClearviewHwy-5-W; [1 MILE] ClearviewHwy-5-W;

INSTALL



OH-040-23-STA7414+00EB-B; 6.0" Radius, 2.0" Border, White on Blue;
[Truck] ClearviewHwy-5-W; [Parking Area] ClearviewHwy-5-W; [1 MILE] ClearviewHwy-5-W;

THIS SIGN IS SHOWN FOR INFORMATION ONLY. IT WILL BE INSTALLED IN A FUTURE CONTRACT.



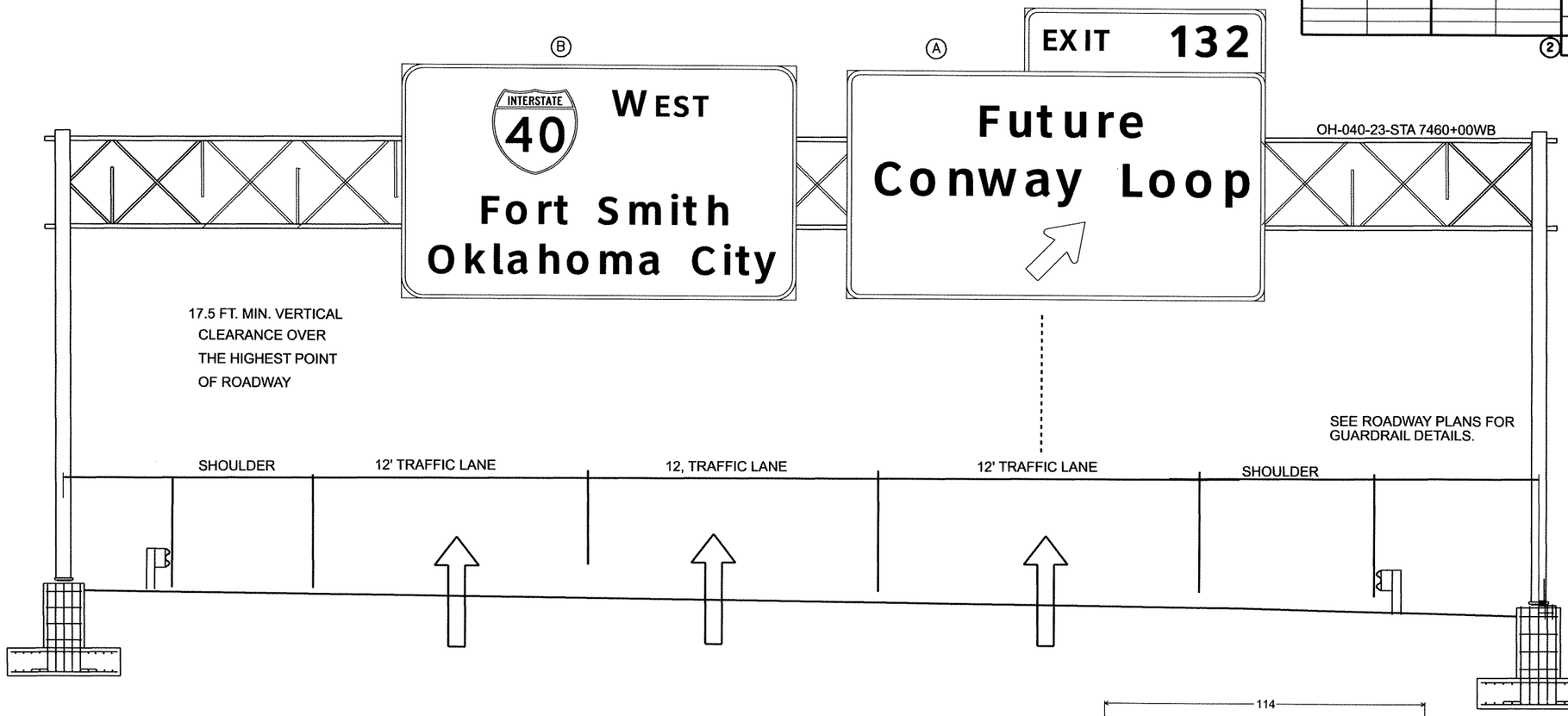
OH-040-23-STA7414+00EB-A;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] ClearviewHwy-5-W; [132] ClearviewHwy-5-W;
6.0" Radius, 2.0" Border, White on Green;
[Future] ClearviewHwy-5-W; [Conway Loop] ClearviewHwy-5-W;
Standard Arrow Custom 35.8" X 21.6" 45°;

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 5851
12/13
TONY SULLIVAN

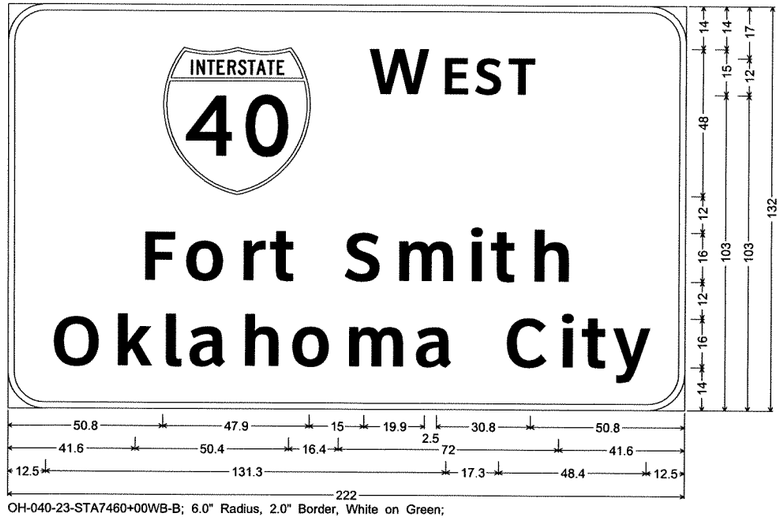
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	63	191

(2) SIGN LAYOUT SHEET

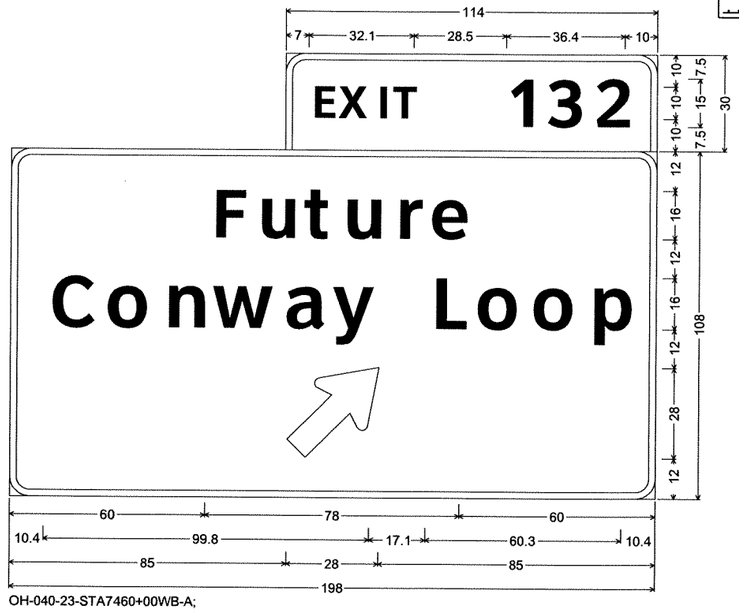
OH-040-23-17



THIS SIGN STRUCTURE AND SIGNS ARE SHOWN FOR INFORMATION ONLY. IT WILL BE INSTALLED IN A FUTURE CONTRACT.



OH-040-23-STA7460+00WB-B; 6.0" Radius, 2.0" Border, White on Green;
[W] ClearviewHwy-5-W; [EST] ClearviewHwy-5-W; [Fort Smith] ClearviewHwy-5-W;
[Oklahoma City] ClearviewHwy-5-W;



OH-040-23-STA7460+00WB-A;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] ClearviewHwy-5-W; [132] ClearviewHwy-5-W;
6.0" Radius, 2.0" Border, White on Green;
[Future] ClearviewHwy-5-W; [Conway Loop] ClearviewHwy-5-W;
Standard Arrow Custom 35.8" X 21.6" 45°;

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 5851
1/24/13

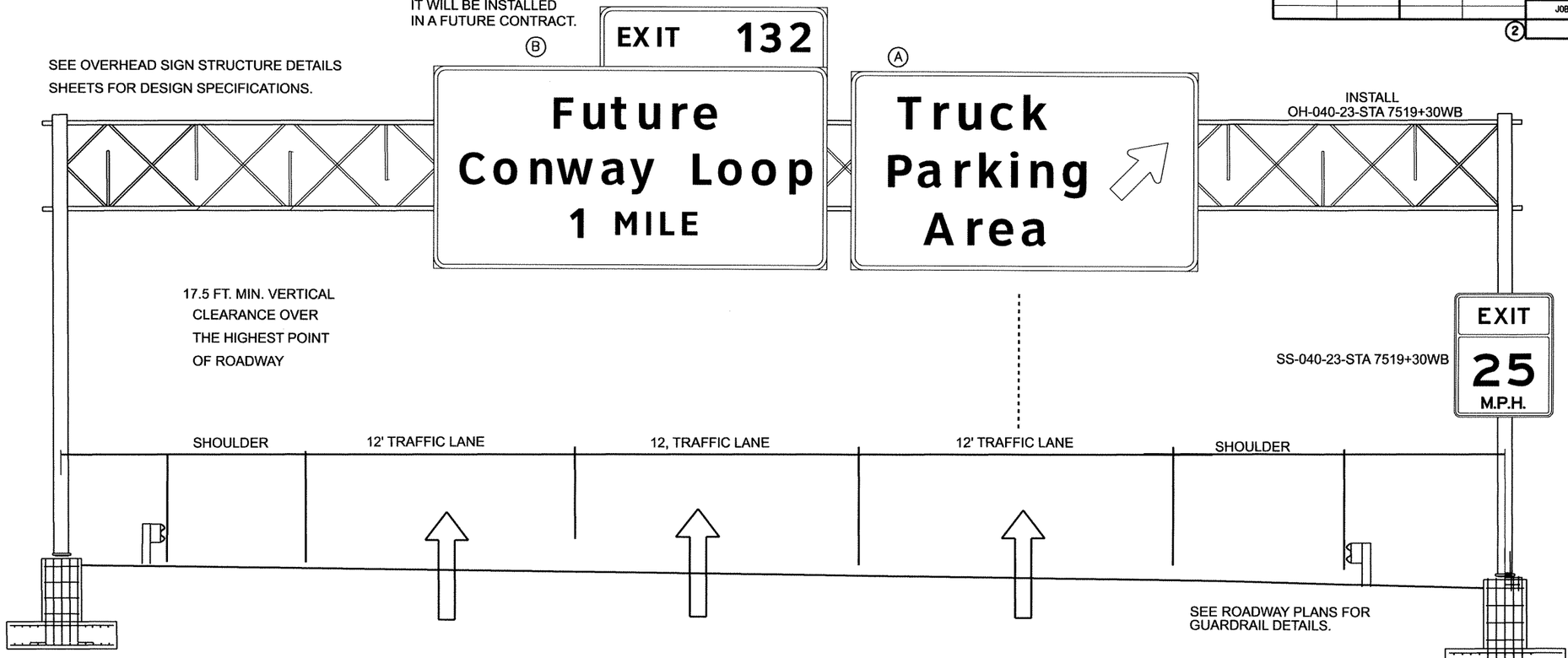
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	64	191

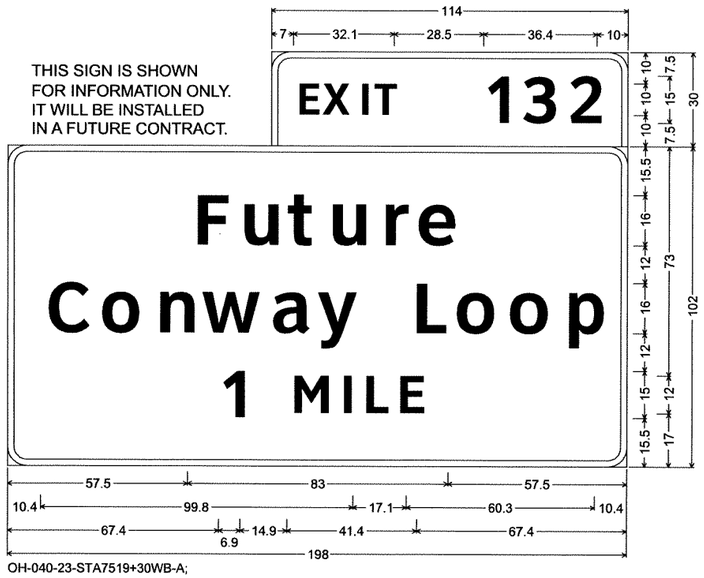
(2) SIGN LAYOUT SHEET

OH-040-23-19

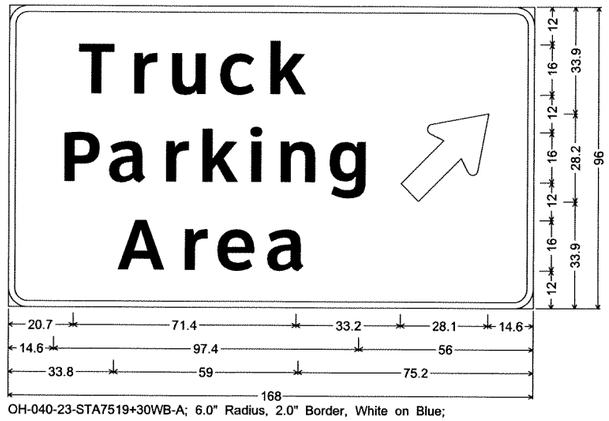
THIS SIGN IS SHOWN
FOR INFORMATION ONLY.
IT WILL BE INSTALLED
IN A FUTURE CONTRACT.

SEE OVERHEAD SIGN STRUCTURE DETAILS
SHEETS FOR DESIGN SPECIFICATIONS.





OH-040-23-STA7519+30WB-A;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] ClearviewHwy-5-W; [132] ClearviewHwy-5-W;
6.0" Radius, 2.0" Border, White on Green;
[Future] ClearviewHwy-5-W; [Conway Loop] ClearviewHwy-5-W; [1 MILE] ClearviewHwy-5-W;



OH-040-23-STA7519+30WB-A; 6.0" Radius, 2.0" Border, White on Blue;
[Truck] ClearviewHwy-5-W; [Parking] ClearviewHwy-5-W;
[Area] ClearviewHwy-5-W; Standard Arrow Custom 35.8" X 21.6" 45°;

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 5851
11/2/13
TONY SULLIVAN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	65	191

(2) SIGN LAYOUT SHEET

OH-040-23-18

SEE OVERHEAD SIGN STRUCTURE DETAILS SHEETS FOR DESIGN SPECIFICATIONS.

INSTALL OH-040-23-STA 7490+00EB

(B) EXIT 135

89 365

Mayflower

1½ MILE

(A) Truck Parking Area

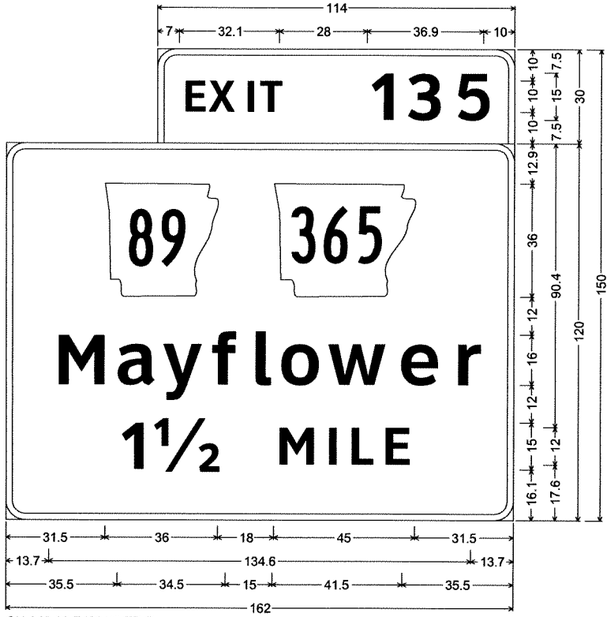
17.5 FT. MIN. VERTICAL CLEARANCE OVER THE HIGHEST POINT OF ROADWAY

EXIT 25 M.P.H.

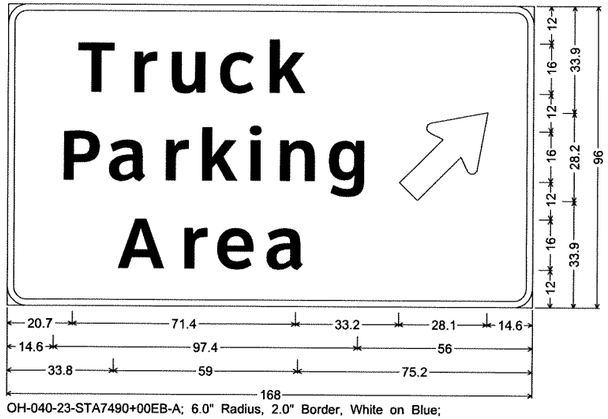
SS-040-23-STA 7490+00EB

SHOULDER | 12' TRAFFIC LANE | 12, TRAFFIC LANE | 12' TRAFFIC LANE | SHOULDER

SEE ROADWAY PLANS FOR GUARDRAIL DETAILS.



OH-040-23-7490+00EB-B;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] ClearviewHwy-5-W; [135] ClearviewHwy-5-W;
6.0" Radius, 2.0" Border, White on Green;
M1-6; M1-6; [Mayflower] ClearviewHwy-5-W; [1½] ClearviewHwy-5-W;
[MILE] ClearviewHwy-5-W;



OH-040-23-STA7490+00EB-A; 6.0" Radius, 2.0" Border, White on Blue;
[Truck] ClearviewHwy-5-W; [Parking] ClearviewHwy-5-W;
[Area] ClearviewHwy-5-W; Standard Arrow Custom 35.8" X 21.6" 45°;

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 5851
11/2/13
LEONA SULLIVAN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	66	191

(2) SIGN LAYOUT SHEET

OH-040-23-20

SEE OVERHEAD SIGN STRUCTURE DETAILS SHEETS FOR DESIGN SPECIFICATIONS.

TEMP. SIGN (B)

LEFT LANE ENDS 1¾ MILE

(A)

EXIT 135

89 365

Mayflower

INSTALL OH-040-23-STA 7582+10EB

17.5 FT. MIN. VERTICAL CLEARANCE OVER THE HIGHEST POINT OF ROADWAY

SS-040-23-STA 7582+10EB

EXIT 45 M.P.H.

SHOULDER | SHOULDER | 12' TRAFFIC LANE | 12, TRAFFIC LANE | 12' TRAFFIC LANE | SHOULDER

SEE ROADWAY PLANS FOR GUARDRAIL DETAILS.

PERM. SIGN

Shown For Info. Only (Install as part of Job 012145)

INTERSTATE 40 EAST

Little Rock
Memphis

14 | 14 | 17
48 | 15 | 14 | 12
12 | 16 | 12 | 16
16 | 12 | 16 | 12
14 | 16 | 14 | 16
103 | 103 | 132

36.3 | 48 | 18 | 9.6 | 4 | 33.8 | 36.3
20.3 | 66.4 | 18.3 | 60.8 | 20.3
36 | 114 | 36
186

OH-040-23-STA7582+10EB-B; 12.0" Radius, 2.0" Border, White on Green;
[E] ClearviewHwy-5-W; [AST] ClearviewHwy-5-W; [Little Rock] ClearviewHwy-5-W;
[Memphis] ClearviewHwy-5-W;

TEMP. SIGN

LEFT LANE ENDS 1¾ MILE

12.5 | 16 | 12 | 16 | 12 | 15 | 12.5
70 | 14 | 12 | 96

10.6 | 55 | 17.8 | 62 | 10.6
46 | 64 | 46
37.8 | 34.5 | 12 | 41.4 | 30.3
156

OH-040-23-STA7582+10EB-B; 6.0" Radius, 2.0" Border, Black on Yellow;
[LEFT LANE] ClearviewHwy-5-W; [ENDS] ClearviewHwy-5-W;
[ ] ClearviewHwy-5-W; [1¾ MILE] ClearviewHwy-5-W;

114
7 | 32.1 | 28 | 36.9 | 10

EXIT 135

89 365

Mayflower

10 | 10 | 7.5 | 15 | 7.5 | 30
10 | 11.4 | 36 | 12 | 16 | 10 | 28.2 | 6.4 | 120 | 150

31.5 | 36 | 18 | 45 | 31.5
13.7 | 134.6 | 13.7
66.9 | 28.2 | 66.9
162

OH-040-23-STA7582+10EB-A;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] ClearviewHwy-5-W; [135] ClearviewHwy-5-W;
6.0" Radius, 2.0" Border, White on Green;
M1-6; M1-6; [Mayflower] ClearviewHwy-5-W;
Standard Arrow Custom 35.8" X 21.6" 45°;

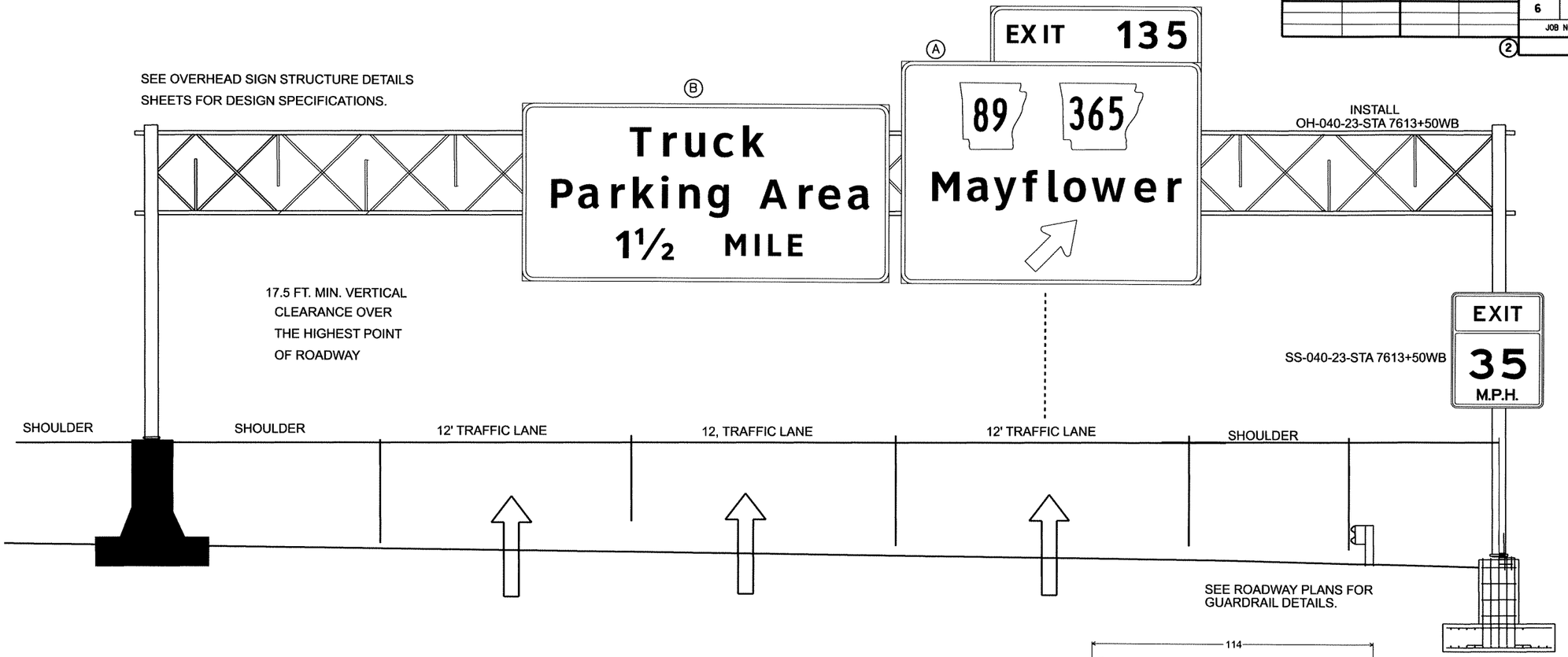
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 5851
1/2/13
ANTONY SELVARAJ

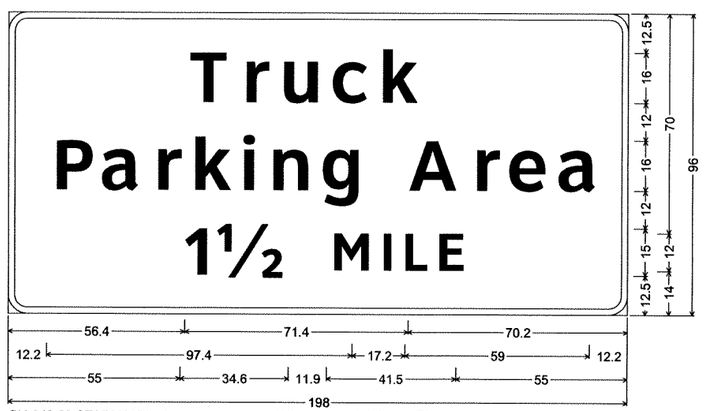
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	67	191

(2) SIGN LAYOUT SHEET

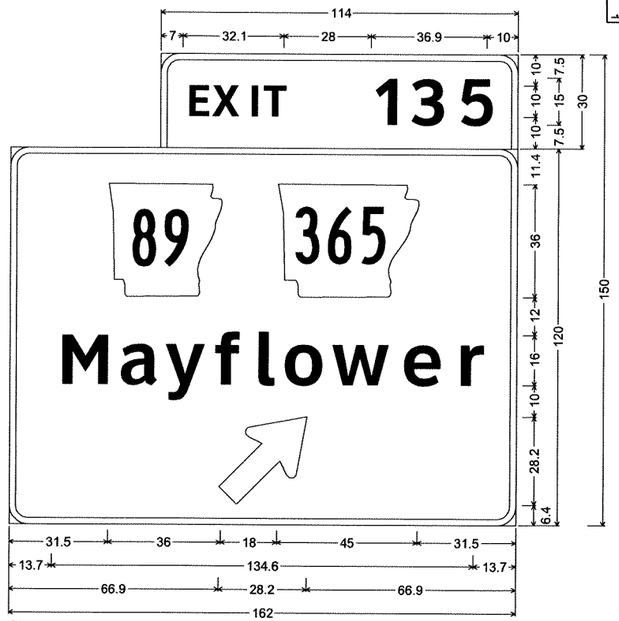
OH-040-23-21

SEE OVERHEAD SIGN STRUCTURE DETAILS SHEETS FOR DESIGN SPECIFICATIONS.





OH-040-23-STA7613+50WB-B; 6.0" Radius, 2.0" Border, White on Blue;
[Truck] ClearviewHwy-5-W; [Parking Area] ClearviewHwy-5-W; [1½ MILE] ClearviewHwy-5-W;



OH-040-23-STA7613+50WB-A;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] ClearviewHwy-5-W; [135] ClearviewHwy-5-W;
6.0" Radius, 2.0" Border, White on Green;
M1-6; M1-6; [Mayflower] ClearviewHwy-5-W;
Standard Arrow Custom 35.8" X 21.6" 45°;

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 5851
11/2/13

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	68	191

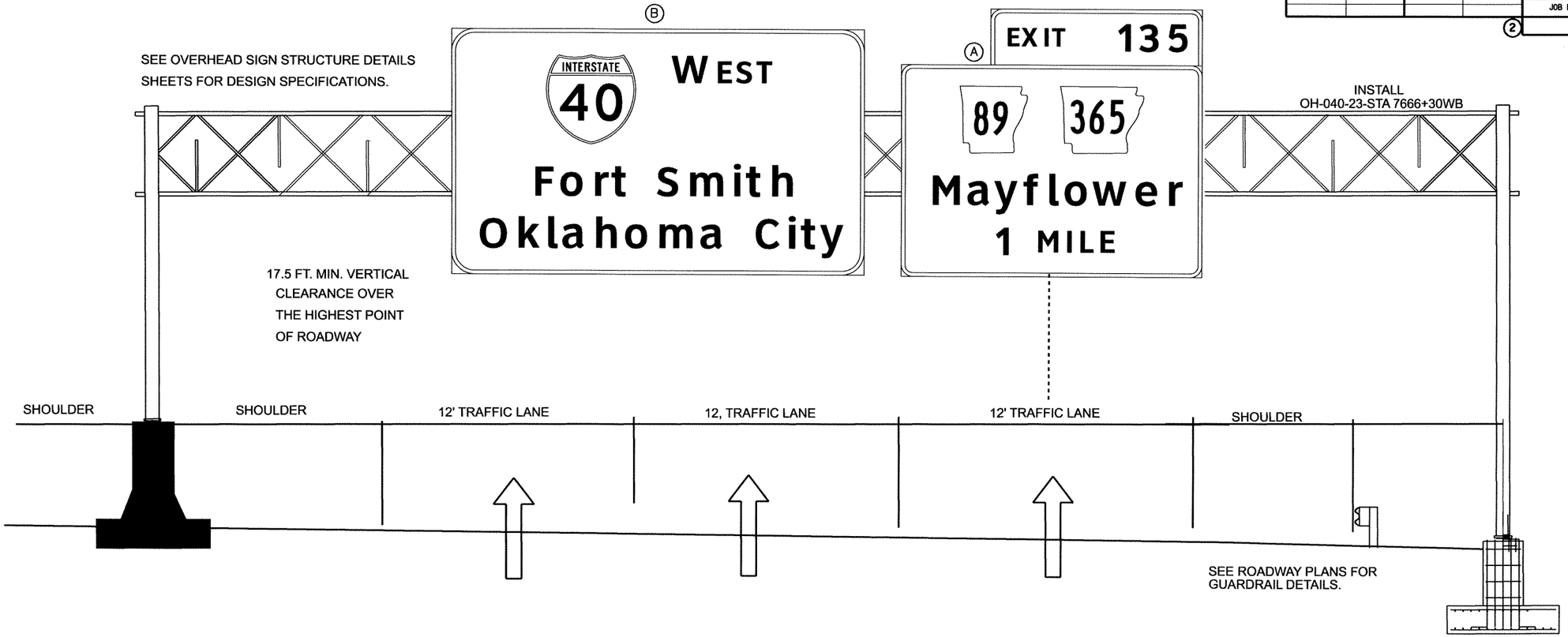
(2) SIGN LAYOUT SHEET

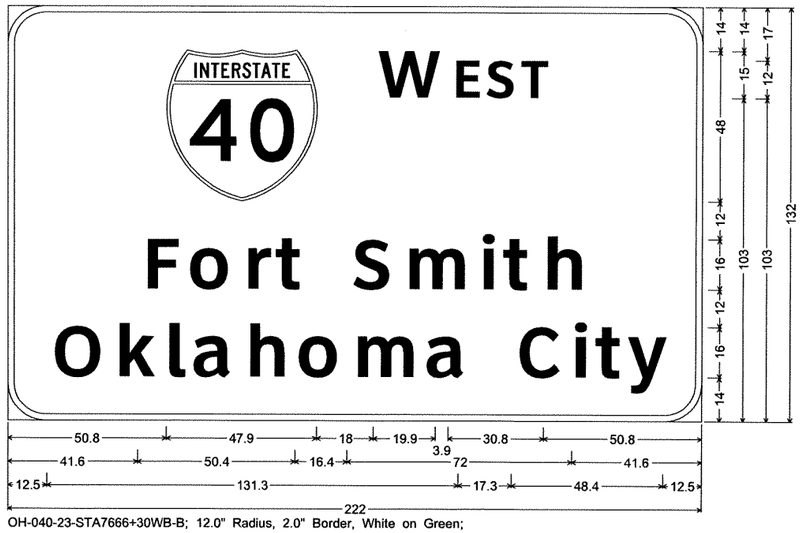
OH-040-23-22

SEE OVERHEAD SIGN STRUCTURE DETAILS SHEETS FOR DESIGN SPECIFICATIONS.

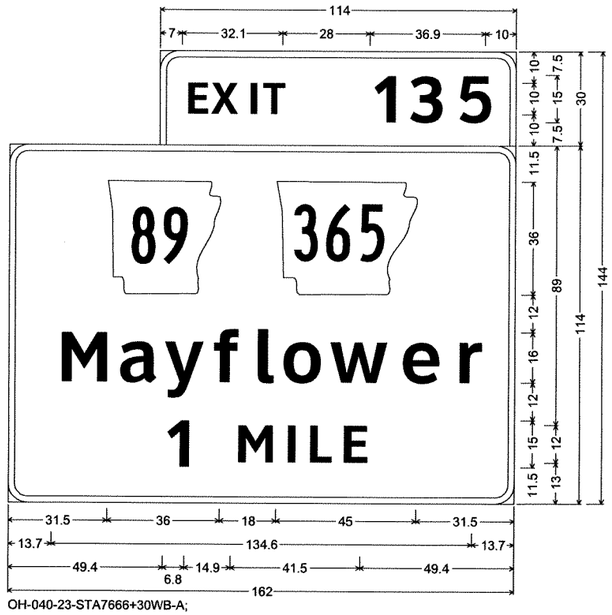
INSTALL OH-040-23-STA 7666+30WB

17.5 FT. MIN. VERTICAL CLEARANCE OVER THE HIGHEST POINT OF ROADWAY





OH-040-23-STA7666+30WB-B; 12.0" Radius, 2.0" Border, White on Green;
[W] ClearviewHwy-5-W; [EST] ClearviewHwy-5-W; [Fort Smith] ClearviewHwy-5-W;
[Oklahoma City] ClearviewHwy-5-W;



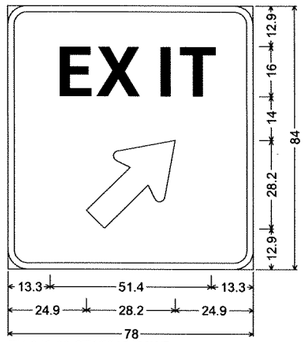
OH-040-23-STA7666+30WB-A;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] ClearviewHwy-5-W; [135] ClearviewHwy-5-W;
6.0" Radius, 2.0" Border, White on Green;
M1-6; M1-6; [Mayflower] ClearviewHwy-5-W; [1 MILE] ClearviewHwy-5-W;

STATE OF ARKANSAS
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No. 5851
11/2/12
LATONE SULAIMAN

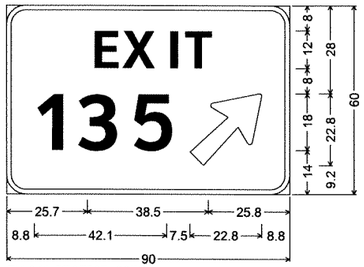
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	69	191

(2) SIGN LAYOUT SHEET

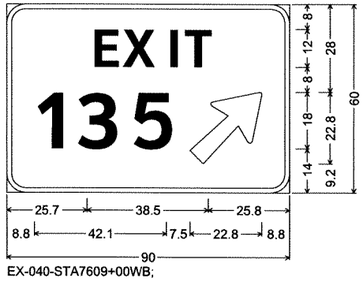
ROADSIDE MOUNTED SIGNS



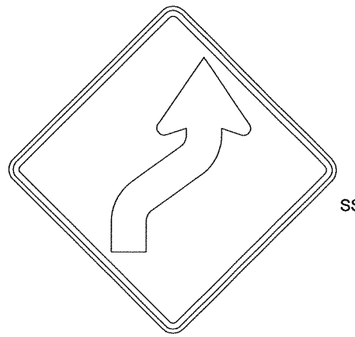
EX-040-23-STA7512+00WB;
6.0" Radius, 2.0" Border, White on Blue;
[EXIT] ClearviewHwy-5-W;
Standard Arrow Custom 35.8" X 21.6" 45°;



EX-040-STA7587+60EB;
6.0" Radius, 1.5" Border, White on Green;
[EXIT] ClearviewHwy-5-W;
[135] ClearviewHwy-5-W-R;
Arrow Custom - 29.0" 45°;

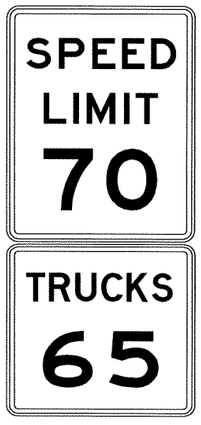


EX-040-STA7609+00WB;
6.0" Radius, 1.5" Border, White on Green;
[EXIT] ClearviewHwy-5-W;
[135] ClearviewHwy-5-W-R;
Arrow Custom - 29.0" 45°;



W1-4RT 48"X84"
W13-1(35) 24"X24"
SS-040-23-STA7609+00WB

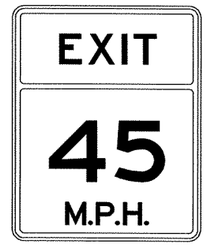




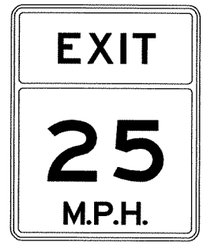
R2-1(70) 48"X60"
R2-2(65) 48"X48"
SS-040-23-STA7563+90WB
SS-040-23-STA7635+00EB
SS-040-23-STA7676+50EB



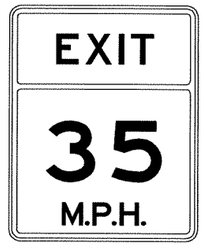
M3-2(Blue) 36"X18"
M1-1(40) 60"X48"
SS-040-23-STA7620+30EB
SS-040-23-STA7666+00EB



W13-2(45) 48"X60"
SS-040-23-STA7582+10EB



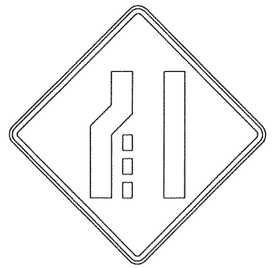
W13-2(25) 48"X60"
SS-040-23-STA7519+30WB
SS-040-23-STA7490+00EB



W13-2(35) 48"X60"
SS-040-23-STA7613+50WB



M3-4(Blue) 36"X18"
M1-1(40) 60"X48"
SS-040-23-STA7574+10WB



W4-2(LT) (48"X48")
SS-040-23-STA7670+00EB-A
SS-040-23-STA7670+00EB-B



W9-1(LT) (48"X48")
SS-040-23-STA7643+50EB-A
SS-040-23-STA7643+50EB-B



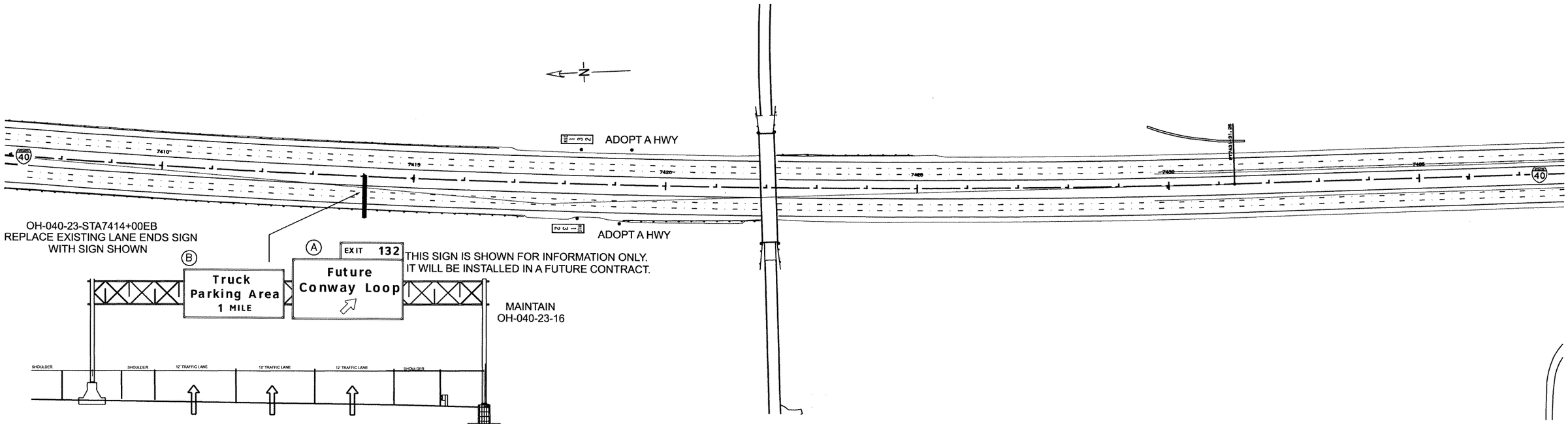
W9-2(RT) (48"X48")
SS-040-23-STA7657+50EB-A
SS-040-23-STA7657+50EB-B

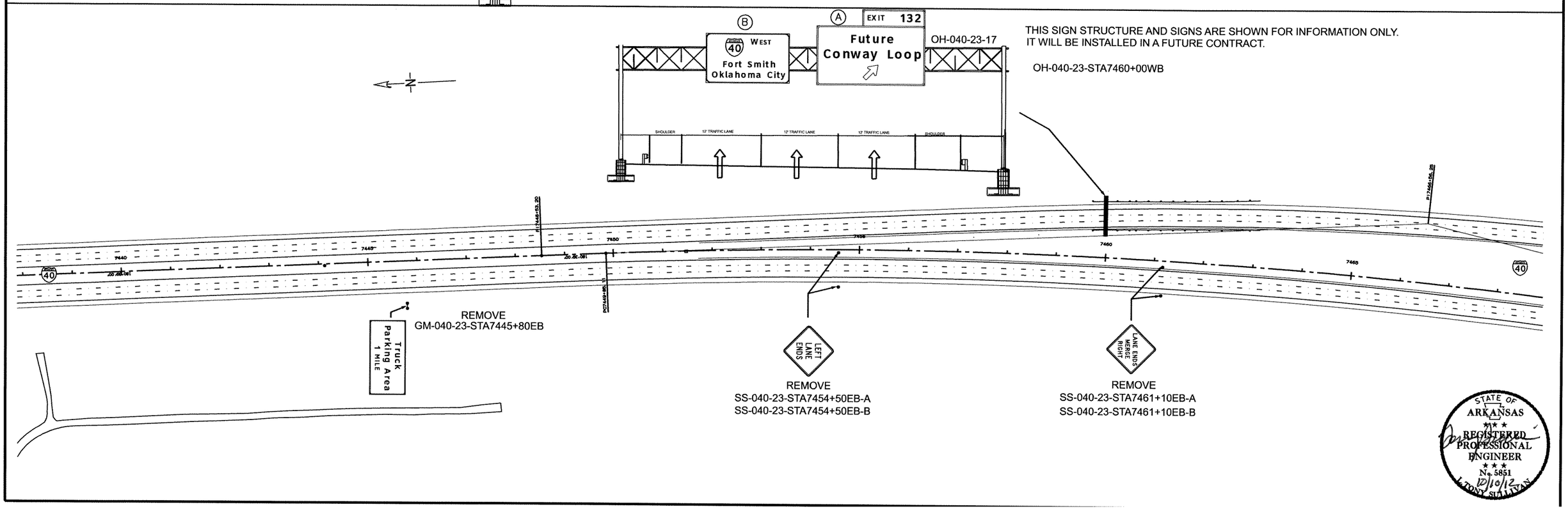


DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	70	191

(2) SIGN PLACEMENT SHEET

STA 7407+00 TO STA 7468+00





STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 5851
10/10/12
J. TONY SULLIVAN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080411	71	191

(2) **SIGN PLACEMENT SHEET**

STA 7468+00 TO STA 7530+00

MAINTAIN
SS-040-23-STA7497+50WB

ADOPT A HWY

ADOPT A HWY

REMOVE
SS-040-23-STA7469+10EB-A
SS-040-23-STA7469+10EB-B

REMOVE
GM-040-23-STA7487+40EB

REMOVE EXIT MPH

INSTALL
OH-040-23-STA7490+00EB

OH-040-23-18

SS-040-23-STA7490+00EB

MAINTAIN
EX-040-23-STA7498+00EB

THIS SIGN IS SHOWN FOR INFORMATION ONLY.
IT WILL BE INSTALLED IN A FUTURE CONTRACT.

INSTALL
OH-040-23-STA7519+30WB

OH-040-23-19

INSTALL
SS-040-23-STA7519+30WB

REMOVE
GM-040-23-STA7525+00WB

REPLACE
EX-040-23-STA7512+00WB

ADOPT A HWY

ADOPT A HWY

MAINTAIN
SS-040-23-STA7515+00WB

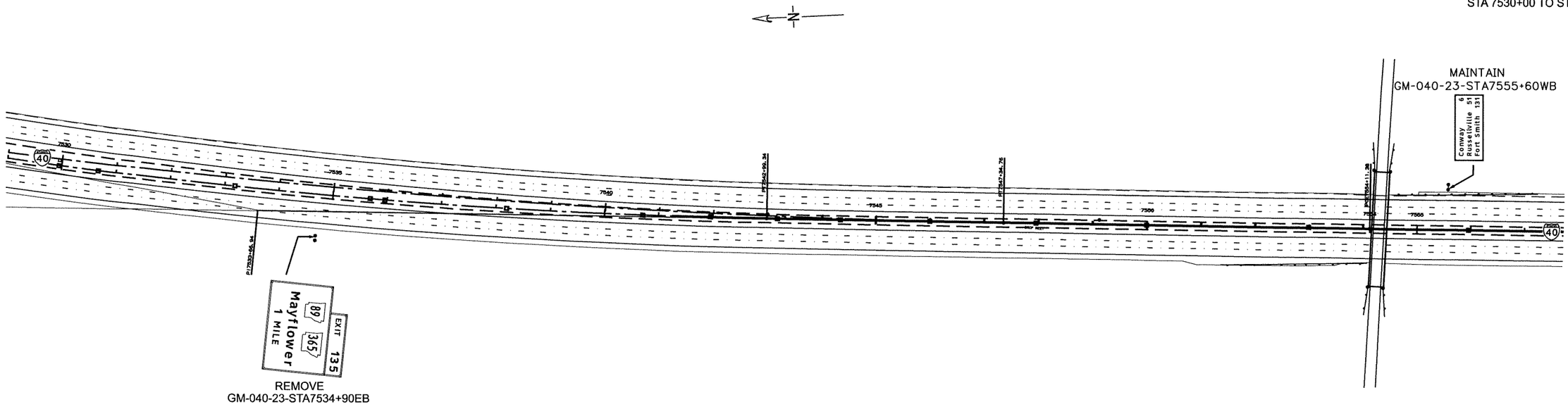
MAINTAIN
LGF-040-23-STA7527+00EB

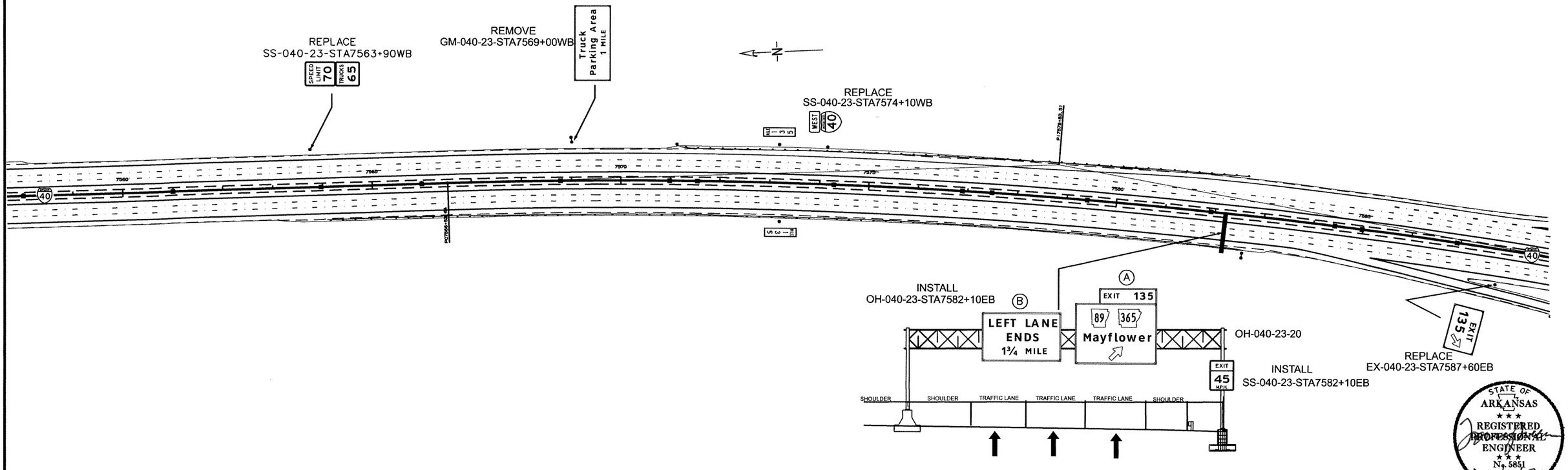
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 5851
10/10/12
ANTONY SULLIVAN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	72	191

(2) **SIGN PLACEMENT SHEET**

STA 7530+00 TO STA 7588+00



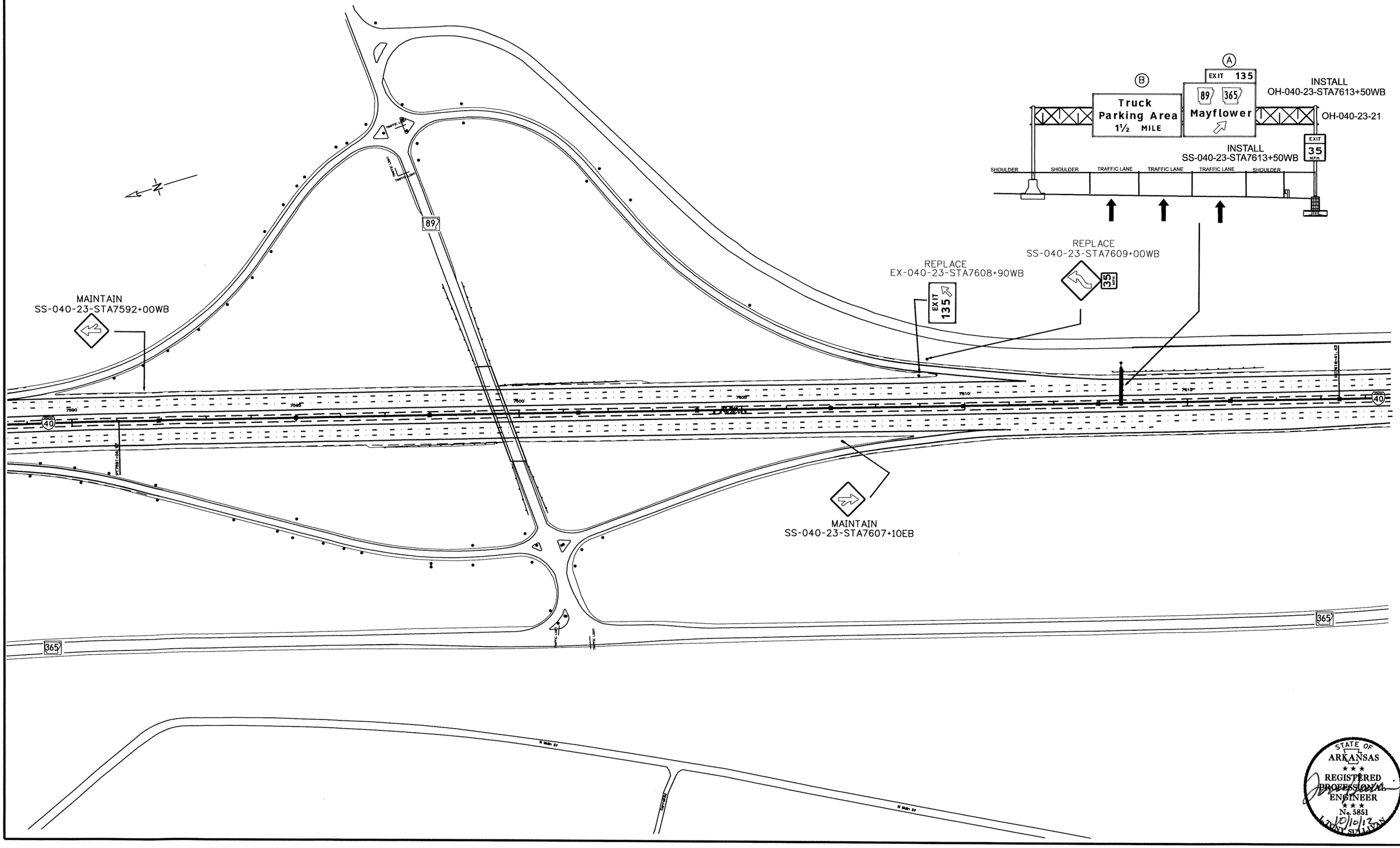


STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 5851
ANTONY SULLIVAN
10/10/13

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	73	191

(2) **SIGN PLACEMENT SHEET**

STA 7588+00 TO STA 7619+00



STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 5851
10/10/12
ANTONY SULLIVAN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080411	74	191

(2) **SIGN PLACEMENT SHEET**

STA 7619+00 TO STA 7681+00

N

ADOPT A HWY

ADOPT A HWY

REPLACE
SS-040-23-STA7620+30EB

REPLACE
SS-040-23-STA7635+00EB

MAINTAIN
SS-040-23-STA7641+10EB

INSTALL
SS-040-23-STA7643+50EB-A
SS-040-23-STA7643+50EB-B

INSTALL
OH-040-23-STA7666+30WB

OH-040-23-22

MAINTAIN
LGF-040-23-STA7677+20WB

INSTALL
SS-040-23-STA7657+50EB-A
SS-040-23-STA7657+50EB-B

REPLACE
SS-040-23-STA7666+00EB

INSTALL
SS-040-23-STA7670+00EB-A
SS-040-23-STA7670+00EB-B

REMOVE
SS-040-23-STA7673+60EB

REPLACE
SS-040-23-STA7676+50EB

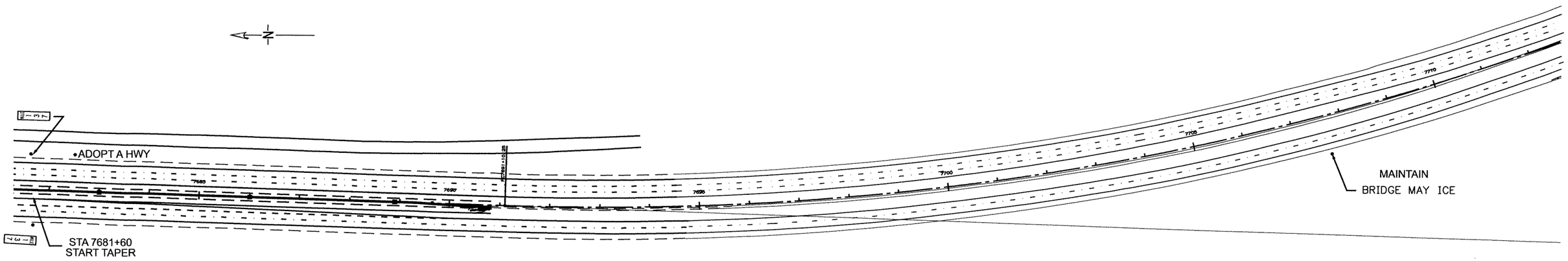
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 5851
TONY SULLIVAN
10/10/23

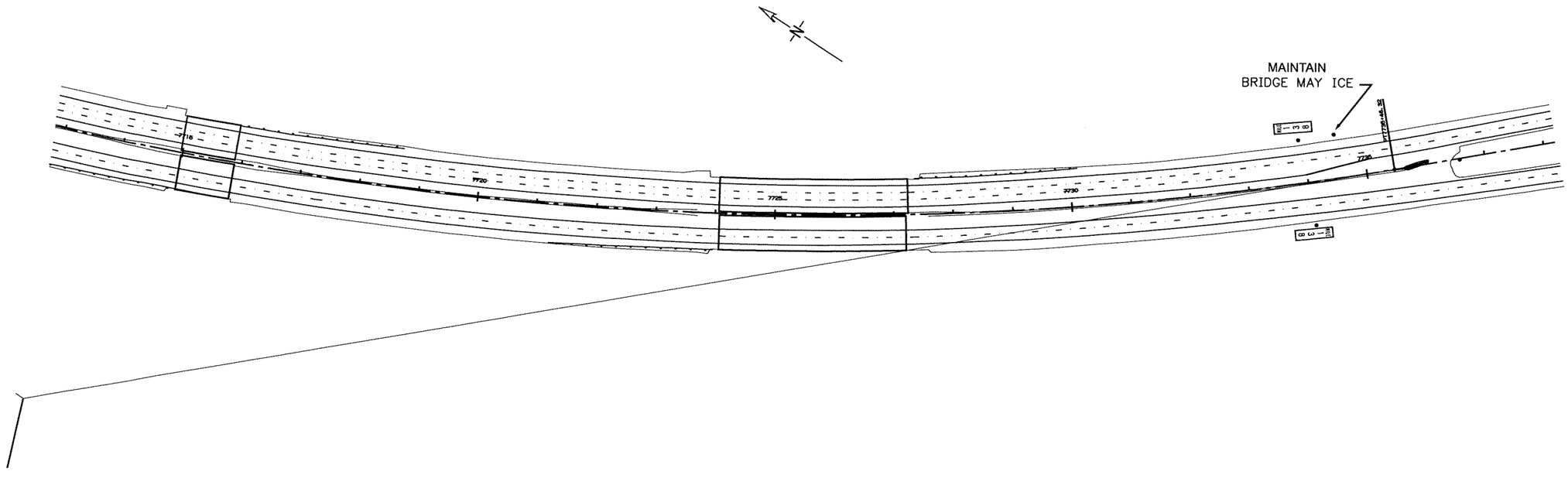
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080411	75	191

(2) SIGN PLACEMENT SHEET

STA 7681+00 TO STA 7738+00





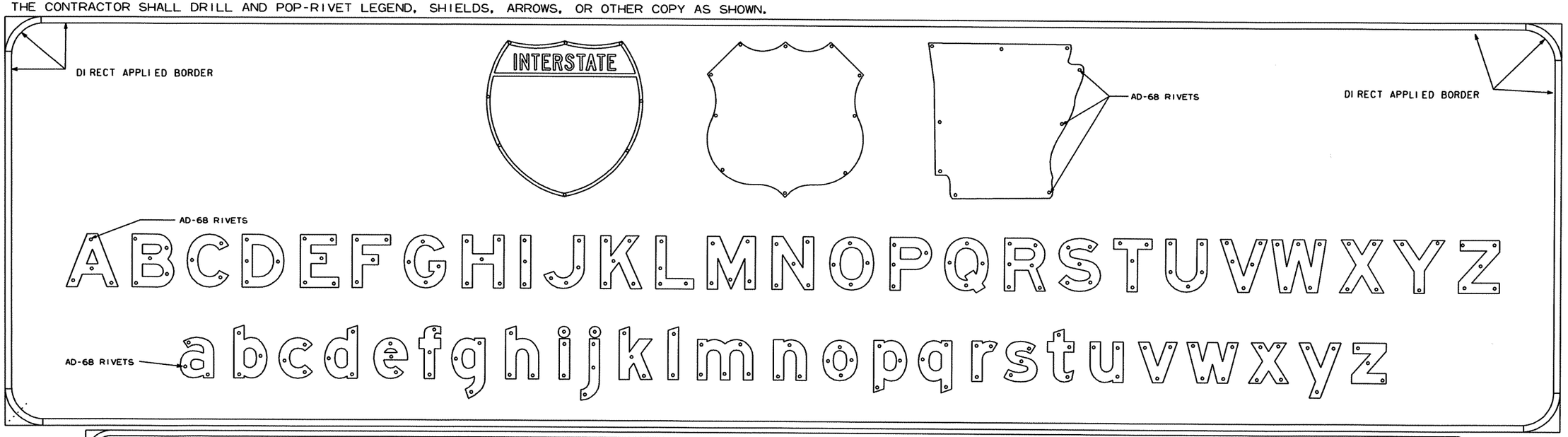
STATE OF ARKANSAS
★★★
REGISTERED PROFESSIONAL ENGINEER
★★★
No. 5851
10/14/12
L. TONY SULLIVAN

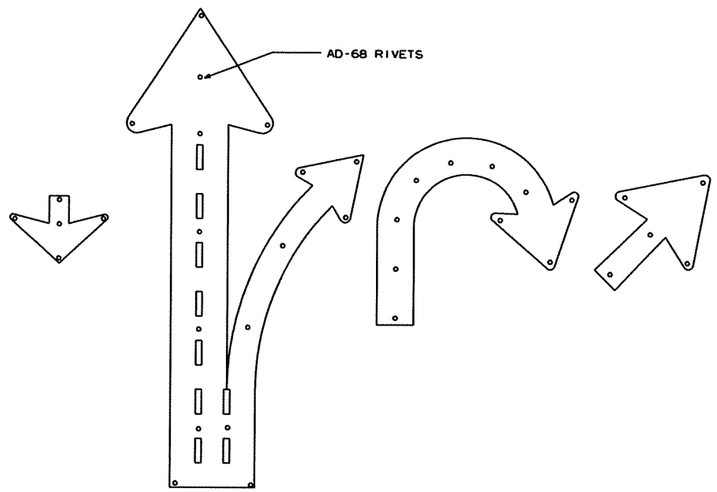
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		080411	76	191

(2) MOUNTING DETAILS FOR DEMOUNTABLE LEGEND ON GUIDE SIGNS

THE CONTRACTOR SHALL DRILL AND POP-RIVET LEGEND, SHIELDS, ARROWS, OR OTHER COPY AS SHOWN.





NOTE:

LEGEND ON GUIDE SIGNS ON THE MAIN LANES SHALL BE DEMOUNTABLE LEGEND.
LEGEND ON GUIDE SIGNS ON CROSS ROADS AND RAMPS SHALL BE DIRECT APPLIED.
THE DEMOUNTABLE AND DIRECT APPLIED LEGENDS SHALL BE TYPE VIII OR IX SHEETING.

THE BACKGROUND ON ALL GUIDE SIGNS AND STANDARD SIGNS SHALL BE CONSTRUCTED USING TYPE III SHEETING.
TYPE IX SHEETING FOR BORDER, LEGEND, SHIELDS, ARROWS, OR OTHER COPY SHALL BE ORIENTED VERTICALLY AS PER MANUFACTURERS' DATUM MARKS, ORIENTATION MARKS, OR OTHER RECOMMENDATIONS.

SIGN LEGEND, SHIELDS, ARROWS OR OTHER COPY SHALL BE APPLIED WITH RIVETS ONLY.
NO OTHER METHOD OF APPLYING CHARACTERS IS ALLOWED.

STATE OF ARKANSAS
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No. 5851
10/10/12

MOUNTING DETAILS FOR DEMOUNTABLE LEGEND ON GUIDE SIGNS

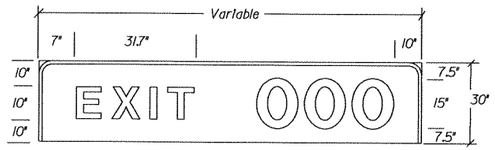
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	20	19

(2) EXIT PANEL DETAILS



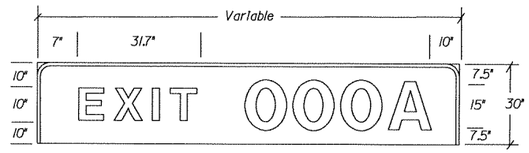
TYPICAL DETAIL

TYPE A



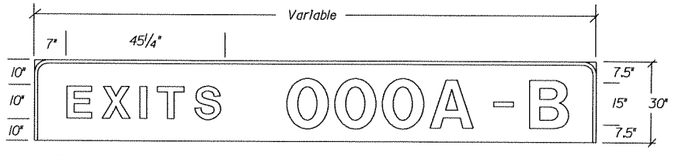
EXIT WITH 1 DIGIT 84"X30"=17.50 SF
EXIT WITH 2 DIGITS 96"X30"=20.0 SF
EXIT WITH 3 DIGITS 114"X30"=23.57 SF

TYPE B



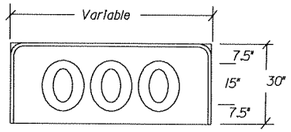
EXIT WITH 1 DIGIT PLUS "A"OR"B" 96"X30"=20.0 SF
EXIT WITH 2 DIGITS PLUS "A"OR"B" 114"X30"=23.57 SF
EXIT WITH 3 DIGITS PLUS "A"OR"B" 126"X30"=26.25 SF

TYPE C



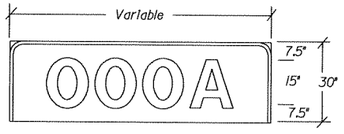
EXITS WITH 1 DIGIT PLUS "A"&"B" 132"X30"=27.50 SF
EXITS WITH 2 DIGITS PLUS "A"&"B" 150"X30"=31.25 SF
EXITS WITH 3 DIGITS PLUS "A"&"B" 168"X30"=35.00 SF

TYPE D



1 DIGIT 24"X30" =5.0 SF
2 DIGITS 42"X30" =8.75 SF
3 DIGITS 60"X30" =12.50 SF

TYPE E



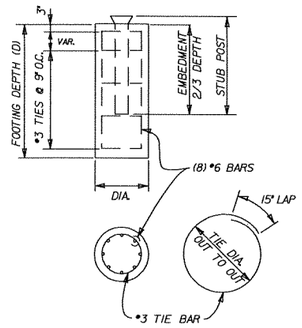
1 DIGIT PLUS "A"OR"B" 42"X30"=8.75 SF
2 DIGITS PLUS "A"OR"B" 60"X30"=12.50 SF
3 DIGIT PLUS "A"OR"B" 78"X30"=16.25 SF

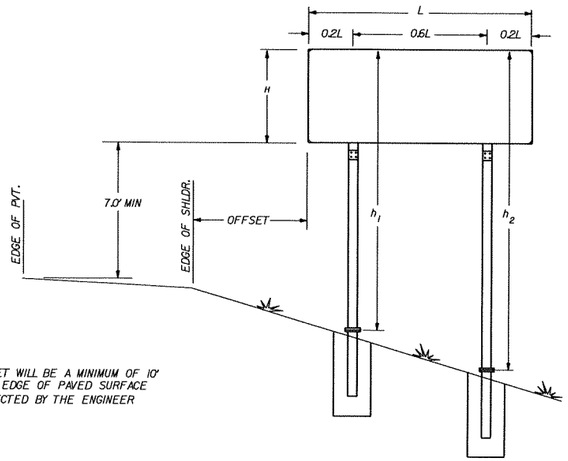
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 5851
10/10/13
TONY SULLIVAN

EXIT PANEL DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	70	191

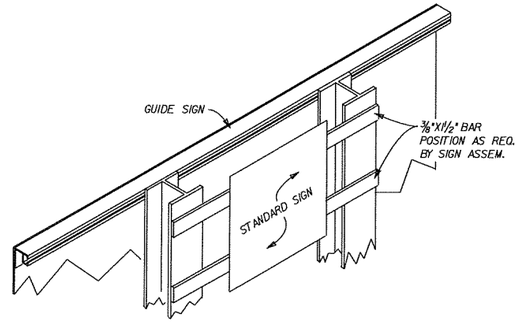
(2) I-BEAM SIGN SUPPORTS



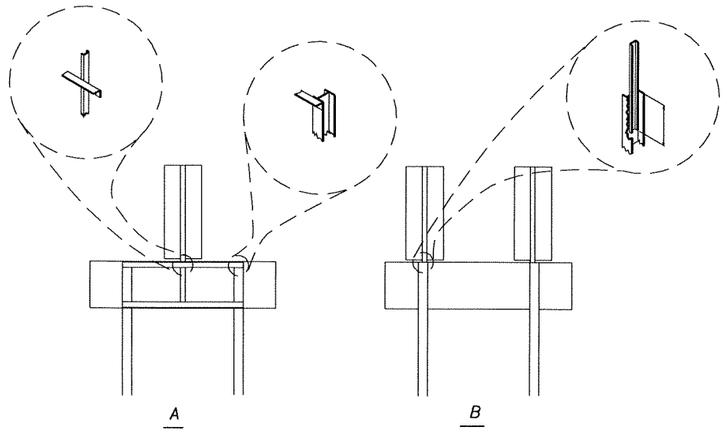


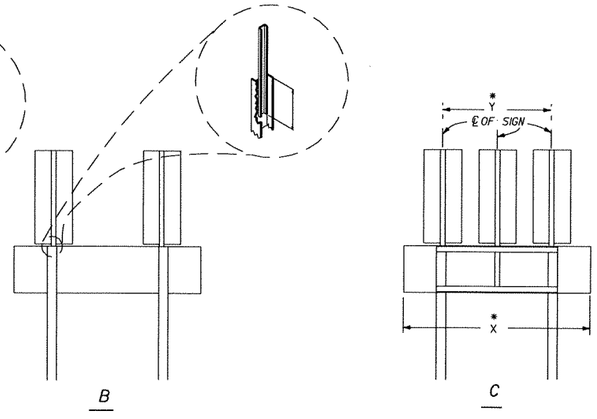
NOTE:
THE OFFSET WILL BE A MINIMUM OF 10' FROM THE EDGE OF PAVED SURFACE OR AS DIRECTED BY THE ENGINEER

G-I



SECONDARY SIGN INSTALLATION ON BACKSIDE OF GUIDE SIGN

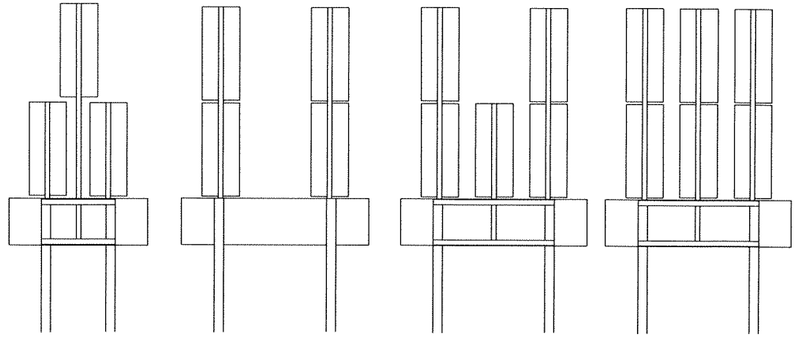




TRIPLE ASSEM.(C or D)

* Y	* X	TYPE ASSEM.
4'-4"	≥ 7'-6"	G-IC
4'-4"	< 7'-6"	G-ID
4'-10"	≥ 8'-0"	G-IC
4'-10"	< 8'-0"	G-ID
5'-1"	≥ 8'-6"	G-IC
5'-1"	< 8'-6"	G-ID
5'-4"	≥ 9'-0"	G-IC
5'-4"	< 9'-0"	G-ID

LEGEND
≥ GREATER THAN OR EQUAL TO
< LESS THAN



FOOTING QUANTITIES

FTG. DEPTH	NO. OF TIES	STUB PROJ.	18" DIA. CU.YD.	18" DIA. * STEEL	24" DIA. CU.YD.	24" DIA. * STEEL	30" DIA. CU.YD.	30" DIA. * STEEL	36" DIA. CU.YD.	36" DIA. * STEEL	"A" EMBED.
2'-6"	4	4"	0.16	30.5							1'-8"
3'-0"	4	4"	0.20	36.6							2'-0"
3'-6"	5	4"	0.23	44.2							2'-4"
4'-0"	6	4"	0.26	51.8	0.46	55.4					2'-8"
4'-6"	7	4"	0.29	59.5	0.52	63.6					3'-0"
5'-0"	7	4"	0.33	65.5	0.58	69.6	0.91	73.8			3'-4"
5'-6"	8	4"			0.64	77.9	1.00	82.6			3'-8"
6'-0"	9	4"			0.70	86.7	1.09	91.5	1.57	96.5	4'-0"
6'-6"	9	4"					1.18	97.5	1.70	102.6	4'-4"
7'-0"	10	4"					1.27	106.3	1.83	111.9	4'-8"
7'-6"	11	4"							1.96	121.3	5'-0"
8'-0"	11	4"							2.09	127.3	5'-4"

REINFORCING STEEL SCHEDULE

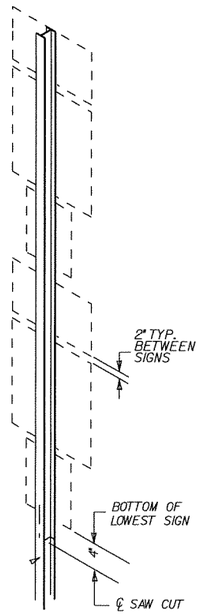
FTG. DIA. IN.	#3 TIE BARS DIA. IN.	#3 TIE BARS LGTH.-EA. FT./IN.	#3 TIE BARS WEIGHT LBS.	FTG. DEPTH FT./IN.	(8) #6 BARS LGTH.-EA. FT./IN.	(8) #6 BARS WEIGHT LBS.	NO. TIES EA.
18"	12"	4'-4"	1629	2'-6"	2'-0"	240.3	4
				3'-0"	2'-6"	300.4	4
24"	18"	5'-11"	2225	3'-6"	3'-0"	360.5	5
				4'-0"	3'-6"	420.6	6
30"	24"	7'-6"	2820	4'-6"	4'-0"	480.6	7
				5'-0"	4'-6"	540.7	7
36"	30"	9'-0"	3384	5'-6"	5'-0"	600.8	8
				6'-0"	5'-6"	660.9	9
				6'-6"	6'-0"	721.0	9
				7'-0"	6'-6"	781.0	10
				7'-6"	7'-0"	841.1	11
				8'-0"	7'-6"	901.2	11

STATE OF ARKANSAS ★★★ REGISTERED PROFESSIONAL ENGINEER ★★★ No. 5851 10/1/12 ANTONY SULLIVAN

I-BEAM SIGN SUPPORTS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	79	191

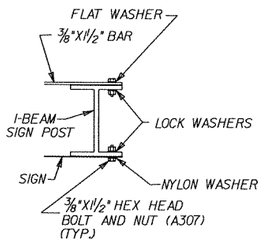
(2) SPECIAL DETAILS SHOWING BREAKAWAY SIGN SUPPORTS (I-BEAM)

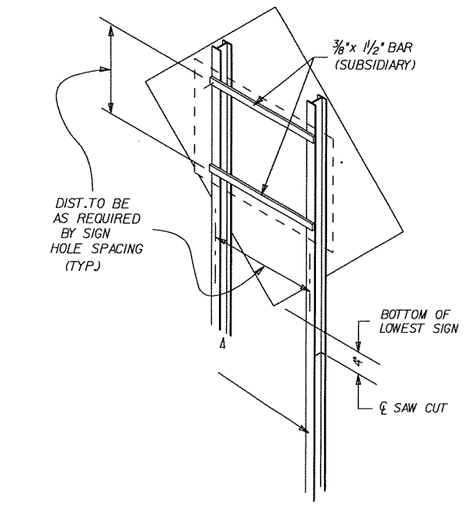


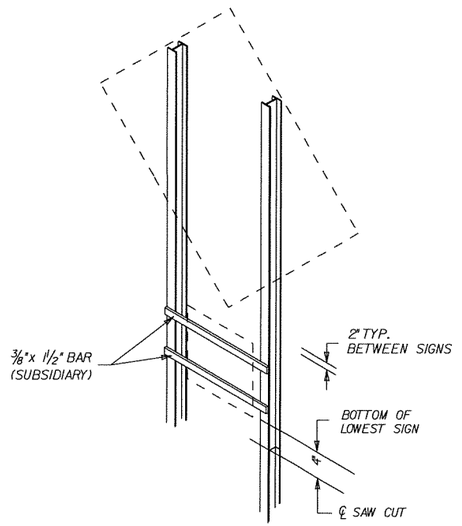
TYPE-1

I-BEAM (TYPICAL)
BASIS OF ESTIMATE
APPROX. 325 lbs STEEL

FOOTING
DIA. 1'-6"
DEPTH 4'-6"
EMBED. 4'-0" MIN.







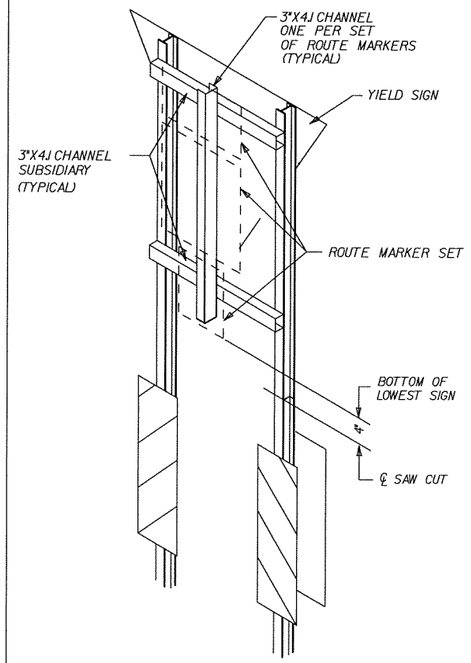
TYPE-2

I-BEAM (TYPICAL)
BASIS OF ESTIMATE
APPROX. 160 lbs STEEL

FOOTING
DIA. 1'-0"
DEPTH 3'-6"
EMBED. 3'-0" MIN.

NOTE

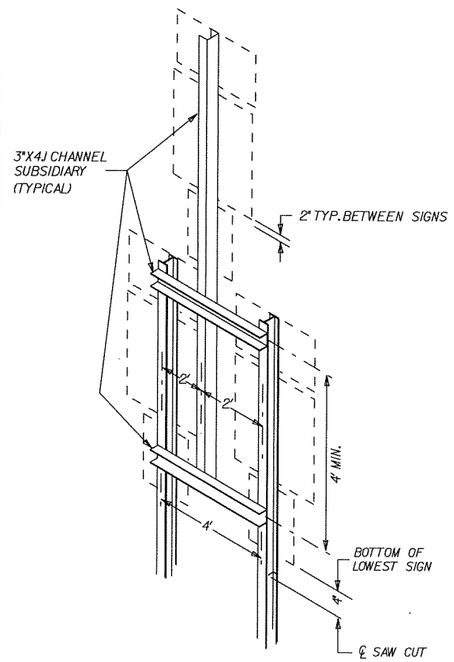
ALL ADDITIONAL MOUNTING HARDWARE, BOLTS, NUTS, CHANNELS AND BAR STRAPS REQUIRED TO MOUNT SECONDARY SIGNS WILL BE CONSIDERED TO BE SUPPLEMENTAL TO THE MAIN SIGN SUPPORT SPECIFIED. PAYMENT WILL BE CONSIDERED SUBSIDIARY TO THE MAIN SUPPORT .



TYPE-3

I-BEAM (TYPICAL)
BASIS OF ESTIMATE
APPROX. 160 lbs STEEL

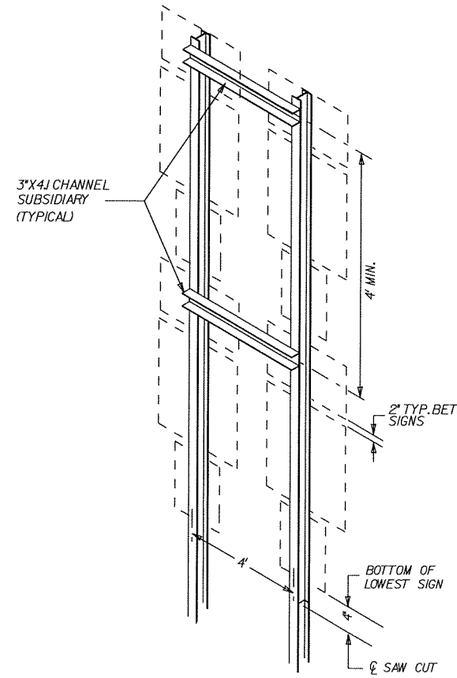
FOOTING
DIA. 1'-0"
DEPTH 3'-6"
EMBED. 3'-0" MIN.



TYPE-4

I-BEAM (TYPICAL)
BASIS OF ESTIMATE
APPROX. 325 lbs STEEL

FOOTING
DIA. 1'-0"
DEPTH 3'-6"
EMBED. 3'-0" MIN.



TYPE-5

I-BEAM (TYPICAL)
BASIS OF ESTIMATE
APPROX. 325 lbs STEEL

FOOTING
DIA. 1'-0"
DEPTH 3'-6"
EMBED. 3'-0" MIN.

NOTE:

THE GALVANIZED STEEL CHANNEL AND BAR SUPPORTS MAY BE ASTM A-36.

FOOTING DESIGN IS BASED ON THE FOLLOWING:
AVG. SOIL PRESSURE S =1200LBS PER SQ.FT.
MAX. FOUNDATION PRESSURE = 3000LBS. PER SQ.FT.
ALL CONCRETE TO BE CLASS "S".

REFER TO THE P.C. RUTLEDGE FORMULA ON PAGE 58 OF THE AASHTO PUBLICATION "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS".

ALL BOLT HOLES SHALL BE 1/8" DIA. UNLESS OTHERWISE SHOWN.

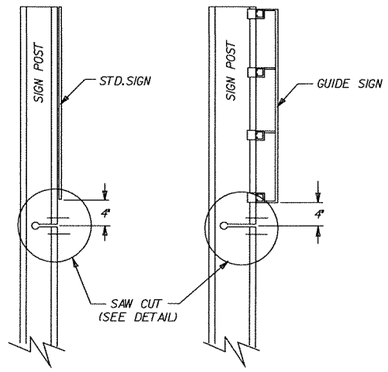
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 5851
10/10/12
TONY SULLIVAN

SPECIAL DETAILS SHOWING BREAKAWAY SIGN SUPPORTS (I-BEAM) - FOR STANDARD SIGNS -

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	90	191

(2) DETAILS OF I-BEAM SIGN SUPPORTS

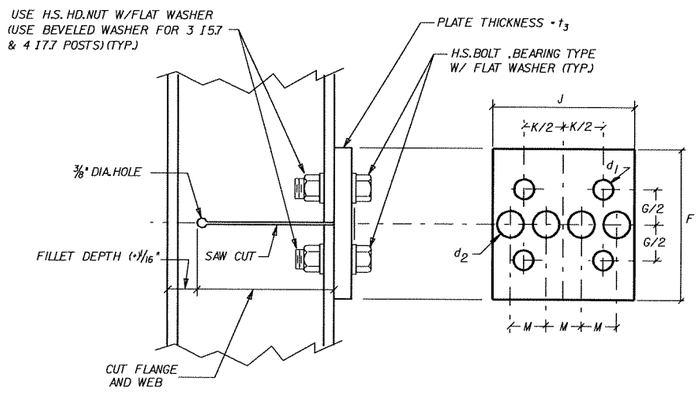
NOTE: BOLT HOLES, USED IN THE MOUNTING OF STANDARD SIGNS SHALL BE LOCATED IN THE FLANGE ADJACENT TO THE NEAR EDGE OF PAVEMENT FOR SINGLE POST ASSEMBLIES AND IN THE OUTSIDE FLANGES FOR MULTIPLE POST ASSEMBLIES.



NOTE: POST SHALL BE SAW CUT AFTER GALVANIZING AND THE CUT SURFACE TREATED, AFTER PLATE IS INSTALLED AND ALL BOLTS FULLY TIGHTENED, WITH AN APPROVED ZINC SOLDER MEETING THE FEDERAL SPEC. O-G-93 (STICK ONLY).

Standard Signs

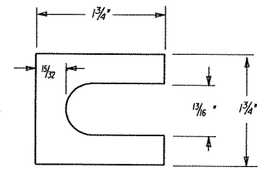
Guide Signs



NOTE: USE H.S. HEX HEAD BOLTS, HEX HEAD NUTS AND BEVEL OR FLAT WASHERS (WHERE REQ) UNDER NUTS. ALL HOLES SHALL BE DRILLED. ALL PLATE CUTS SHALL PREFERABLY BE SAW CUTS, HOWEVER FLAME CUTTING WILL BE PERMITTED PROVIDED ALL EDGES ARE GROUND. METAL PROJECTING BEYOND THE PLANE OF THE PLATE FACE WILL NOT BE PERMITTED. STEEL FUSE PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM-A36, ASTM-A441, ASTM-572 GRADE 50, OR ASTM-A588 MAY BE SUBSTITUTED FOR A36 AT THE OPTION OF THE FABRICATOR. STEEL USED SHALL HAVE AN ULTIMATE TENSILE STRENGTH NOT TO EXCEED 80 KSI.

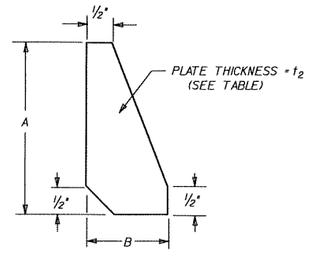
POST SIZE	BASE CONNECTION DATA										FUSE PLATE DATA									
	BOLT SIZE	BOLT TORQUE (INCH/LBS)	A	B	C	D	E	t_1	t_2	W	R	F	G	J	K	M	d_1	d_2	t_3	BOLT SIZE	WT. OF EACH FUSE PLATE LBS.
W 6X9	⅝" x 2¾"	450"-680"	5"	2"	1¼"	2¾"	1⅛"	¾"	½"	¼"	1/32"	4¼"	2"	4"	2¼"	1"	3/16"	¾"	¼"	½" x 1½"	1.01
W 6X12												5"	2½"	6"	3½"	1½"	11/16"	1¼"	⅜"	⅝" x 2¼"	2.51
W 6X15												5"	2½"	5¼"	2⅜"	1¼"	11/16"	⅞"	⅜"	¾" x 2¼"	2.26
W 8X18												5½"	2½"	5¼"	2¾"	1¼"	13/16"	1"	½"	¾" x 2¼"	3.35
W 8X21	¾" x 3½"	750"-1050"	6"	2¼"	1⅜"	3½"	1¼"	1"	¾"	5/16"	1/32"	6"	3"	5¾"	2¾"	1⅜"	13/16"	1⅛"	½"	¾" x 2¼"	4.03
W 10X22												6"	3"	6½"	3½"	1⅝"	15/16"	1⅜"	½"	¾" x 2¼"	4.47
W 10X26																					
W 12X26																					

FUSE PLATE DETAILS

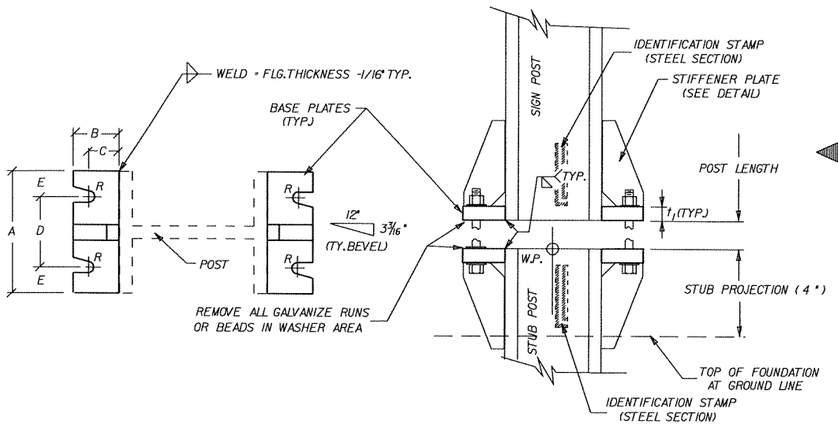


FURNISH 2 ~ .012"+/- THICK AND 2 ~ .032"+/- THICK SHIMS PER POST

SHIM DETAIL



STIFFENER PLATE DETAIL



TRAFFIC FLOW DIRECTION

SIGN POST AND STUB POST

NOTE: SECTIONS SHOWN ARE FOR INSTALLATION ON THE RIGHT SHOULDER AND IN THE GORE. BOLT HOLES IN BASE PLATE ARE SLOTTED AND BEVELED AS SHOWN. USE H.S. BOLTS WITH HEX HD., HEX NUT AND THREE FLAT WASHERS FOR EACH BOLT. SEE TABLE FOR BOLT DIA. AND TORQUE.
NOTE: ASSEMBLE SIGN POST TO STUB POST USING THE BOLTS SPEC. IN THE TABLE AND AS SHOWN IN THE ELEVATION DETAILS. THERE SHALL BE THREE FLAT WASHERS ON EACH BOLT LOCATED AS SHOWN IN THE ELEVATIONS. USE A SHIM TO PLUMB THE SIGN POST, THEN TIGHTEN THE BOLTS USING A 12" TO 15" WRENCH UNTIL THE WASHERS AND SHIMS ARE SEATED AND THE BOLT THREADS ARE CLEAR, THEN LOOSEN EACH BOLT IN TURN AND RETIGHTEN IN A SYSTEMATIC ORDER TO THE PRESCRIBED TORQUE (SEE TABLE). THE BURR THREADS ADJACENT TO THE BACK SIDE OF THE NUT TO PREVENT LOOSENING.

GENERAL NOTES

TIGHTEN THE HIGH STRENGTH BOLTS IN THE BASE CONNECTION ONLY TO THE TORQUE SHOWN. DO NOT OVERTIGHTEN.

BASE PLATES AND STIFFENER PLATES SHALL BE OF THE SAME MATERIAL AS THE PRIMARY SUPPORT POSTS WHICH THEY ARE WELDED.

FOR FOOTING DETAILS REFER TO PLANS.

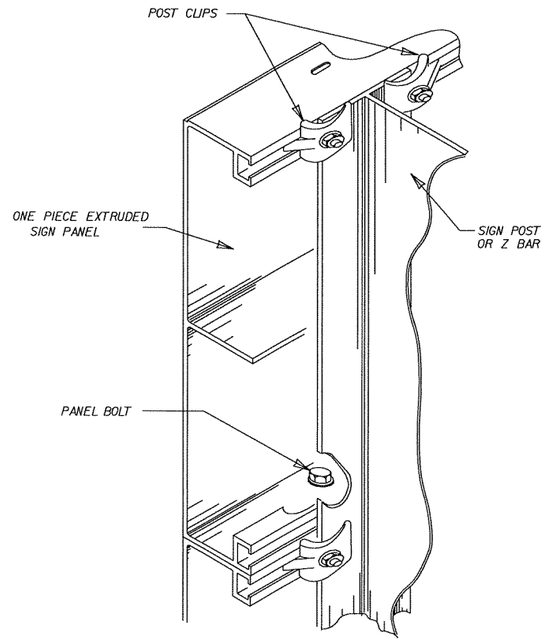
EACH STUB POST AND SIGN POST SHALL HAVE A PERMANENT IDENTIFYING STAMP WHICH SPECIFIES THE STEEL SECTION USED. IF THE CONTRACTOR ELECTS TO SHIP THE STUB POST SEPARATE FROM THE SIGN POST A MATCH MARK SYSTEM WILL BE REQUIRED.

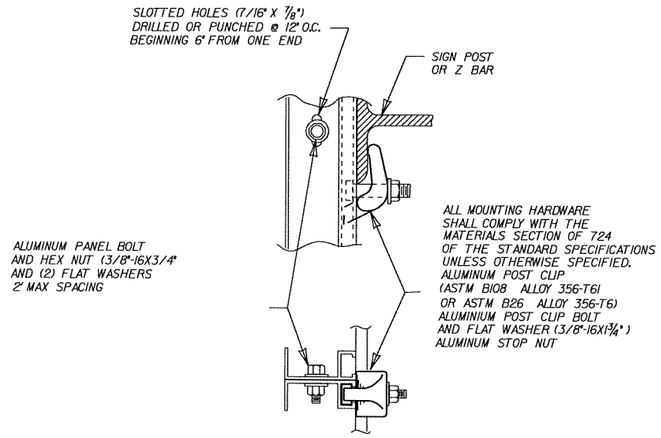


DETAILS OF I-BEAM SIGN SUPPORTS

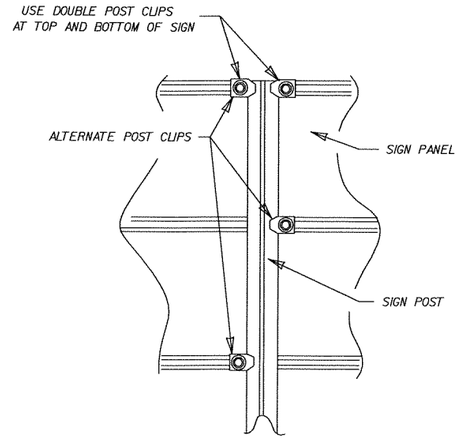
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	61	191

(2) DETAILS OF GUIDE SIGN PANELS

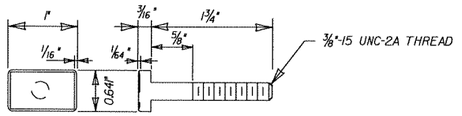




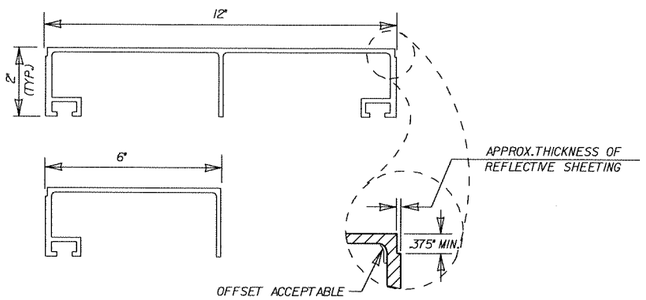
MOUNTING HARDWARE



POST CLIP PLACEMENT

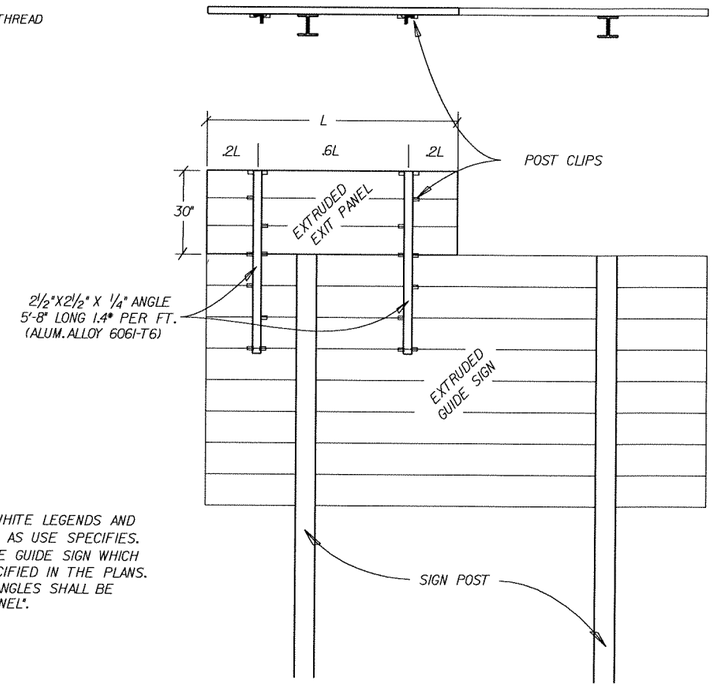


POST CLIP BOLT



ONE PIECE EXTRUDED SIGN PANELS

NOTE: EXIT NUMBER PANELS SHALL HAVE WHITE LEGENDS AND BORDERS. THE BACKGROUND COLOR WILL BE AS USE SPECIFIES. SHEETING TYPE WILL BE THE SAME AS THE GUIDE SIGN WHICH THE EXIT PANEL IS ATTACHED OR AS SPECIFIED IN THE PLANS. PAYMENT FOR ALL POST CLIPS, BOLTS, AND ANGLES SHALL BE SUBSIDIARY TO THE ITEM "EXIT NUMBER PANEL".

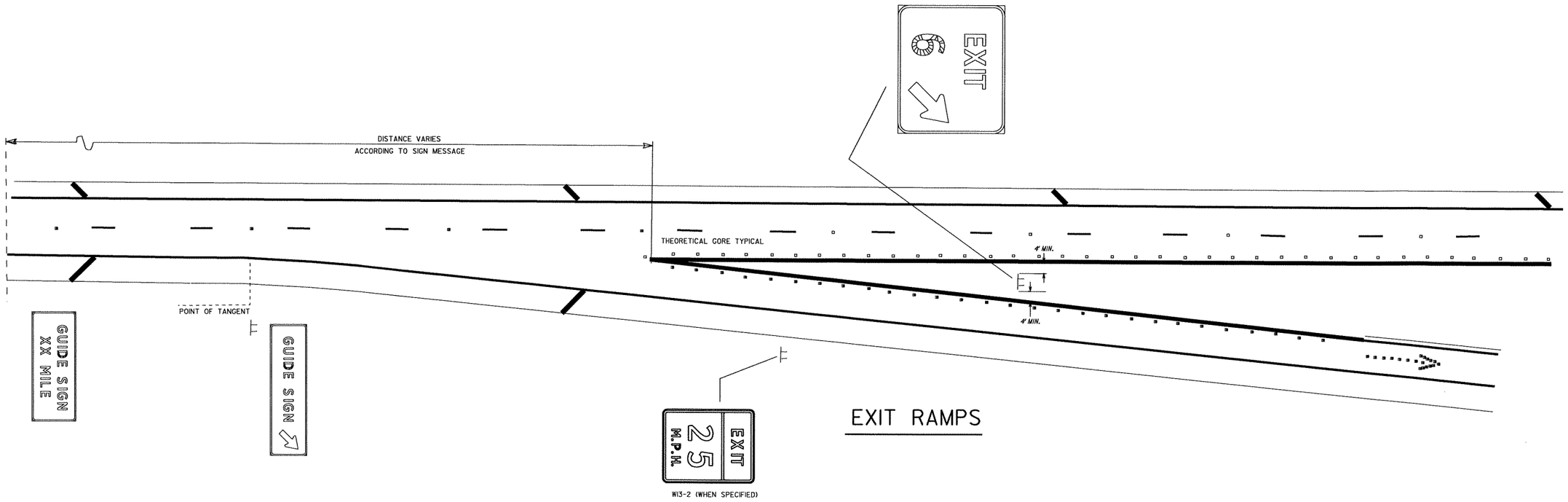


STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 5851
TONY SULLARD
1/9/13

DETAILS OF GUIDE SIGN PANELS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	82	191

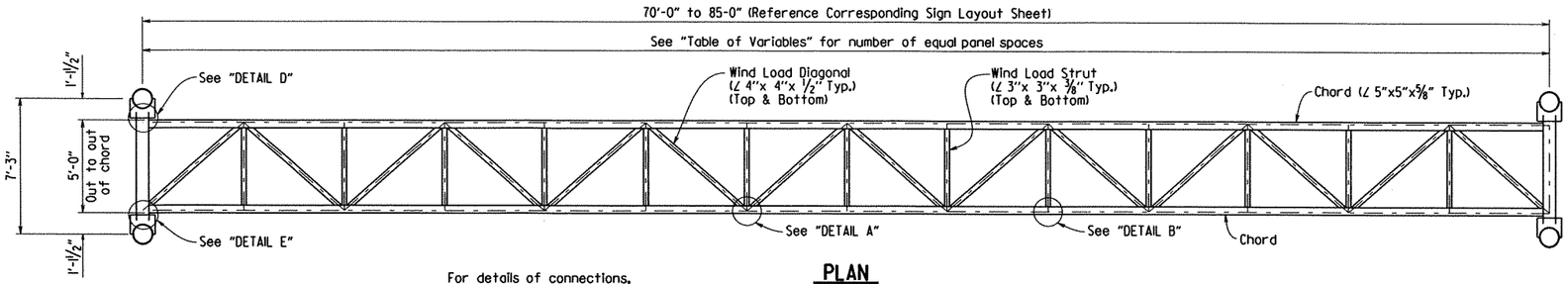
(2) DETAIL OF SIGN PLACEMENT



STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 5851
10/10/13
ANTONY SULLIVAN

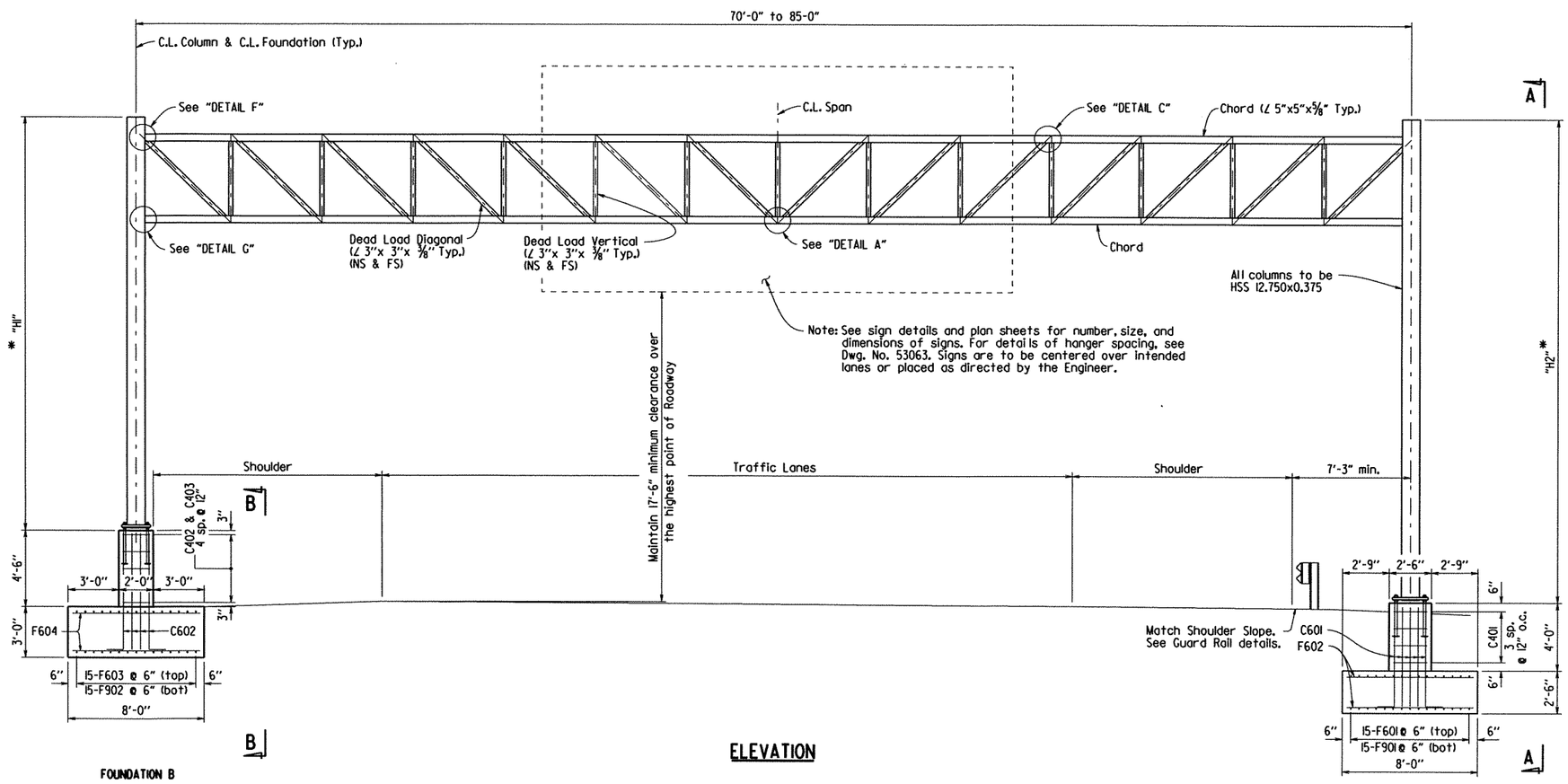
DETAIL OF SIGN PLACEMENT

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.		080411	83	191
				(1) OH-040-23-18 THRU OH-040-23-22		SIGN STRUCTURE		53059



For details of connections, see Dwg. No. 53061.

PLAN

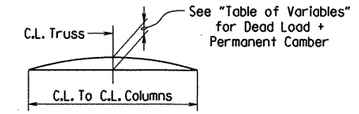


FOUNDATION B

ELEVATION

FOUNDATION A

* Note: The Contractor shall make field measurements to determine the Column heights "H1" and "H2" that are required to maintain the minimum vertical clearance with the centerline of the sign located at the centerline of the truss. These column heights shall be shown on the shop drawings with a note stating that the Contractor has made the required field measurements. If the structure height ("H1" or "H2") exceeds 30'-0" contact the Engineer. The Contractor shall also verify that the variable span length (70'-0" to 85'-0") is sufficient to meet the minimum clearances and to fit the new structure to the existing and/or proposed conditions.



TRUSS CAMBER DIAGRAM

TABLE OF VARIABLES

Span (ft)	No. of Equal Panel Spaces	Dead Load + Permanent Camber
70' thru 75'	14	1"
76' thru 85'	16	1¼"

APPROXIMATE QUANTITIES FOR FOUNDATION (FOR INFORMATION ONLY)

FOUNDATION	CLASS S CONCRETE (Cu. Yds.)	REINFORCING STEEL (Lbs.)	EXCAVATION (Cu. Yds.)
A	17.2	2659	51
B	22.0	3137	26

TABLE OF FOUNDATIONS

FOUNDATION		SIGN STRUCTURE
MEDIAN	OUTSIDE SHOULDER	
A	A	OH-40-23-18, OH-40-23-19
B	A	OH-40-23-20, OH-40-23-21, OH-40-23-22

BAR LIST-FOUNDATION 'A'

MARK	NO. REQ'D	LENGTH	P.D.	BENDING DIAGRAMS
				Dimensions are out to out of bars.
C401	8	18'-2"	3"	6'-9", 2'-1", 5" (Typ.), 45°, 5'-11", 12", C401, C601
C601	48	6'-9"	4½"	
F601	15	17'-6"	Str.	
F602	70	7'-6"	Str.	
F901	15	17'-6"	Str.	

BAR LIST-FOUNDATION 'B'

MARK	NO. REQ'D	LENGTH	P.D.	BENDING DIAGRAMS
				Dimensions are out to out of bars.
C402	10	17'-8"	3"	7'-0", 10'-6", 1'-7", 5" (Typ.), 45°, 6'-11", 12", C402, C403, C602
C403	5	24'-8"	3"	
C602	74	7'-9"	4½"	
F603	15	17'-6"	Str.	
F604	70	7'-6"	Str.	
F902	15	17'-6"	Str.	

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7510
CARL J. FUSELIER
9/13/12

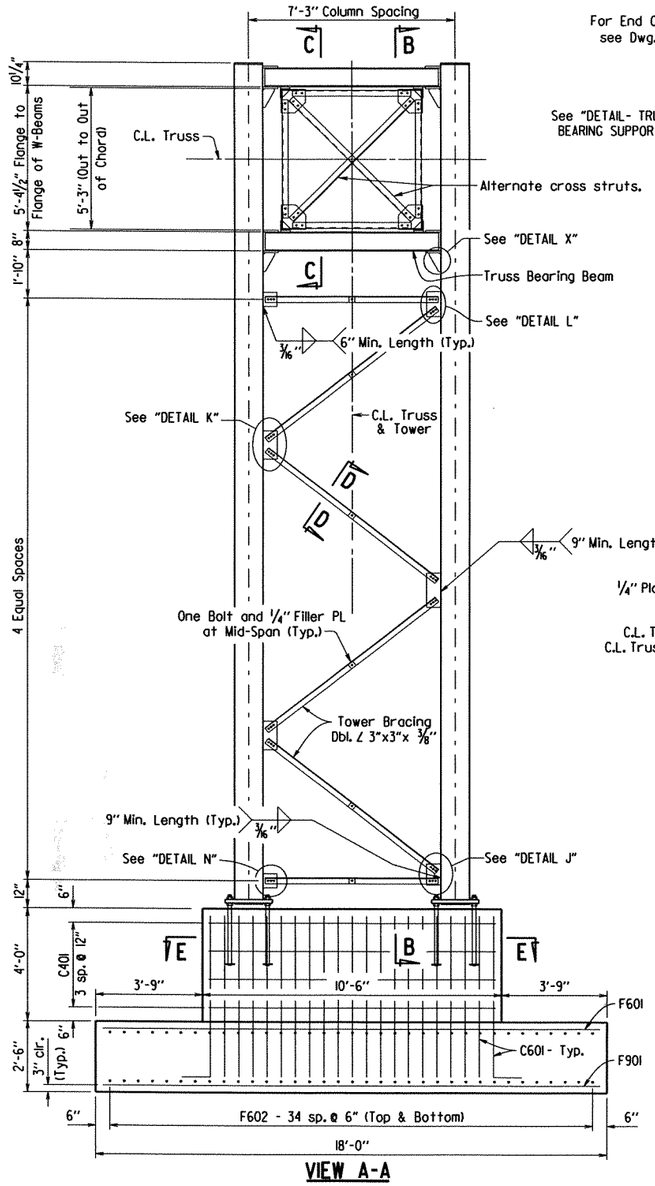
BRIDGE ENGINEER

SHEET 1 OF 5
DETAILS FOR 70' TO 85'
STEEL OVERHEAD SIGN STRUCTURES
PALARM CREEK-WEST (WIDENING) (F)
FAULKNER COUNTY

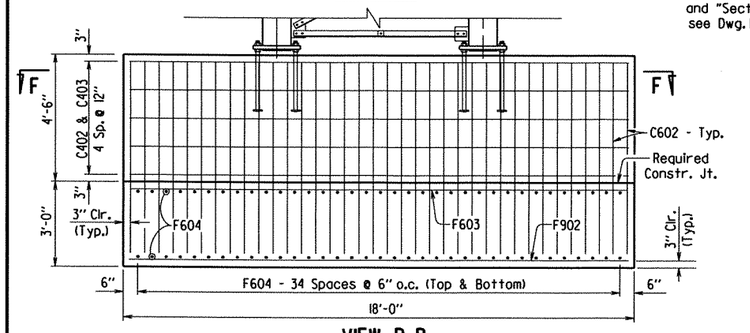
ROUTE 40 SEC. 32
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: CSG DATE: 07/30/12 FILENAME: b080411_f1.dgn
CHECKED BY: CMW DATE: 8/9/12 SCALE: NOT TO SCALE
DESIGNED BY: BGK DATE: 9/12/12
STR. NO. OH-040-23-18 THRU OH-040-23-22 DRAWING NO. 53059

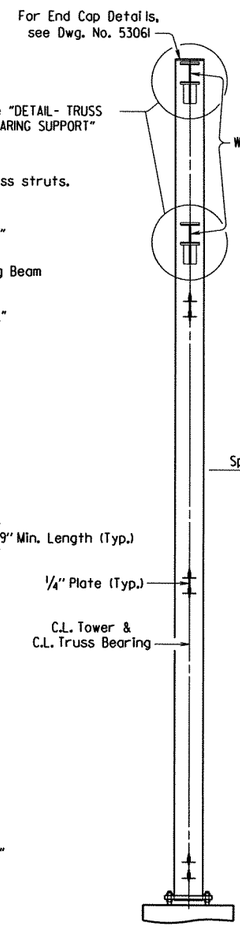
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	84	191
				① OH-040-23-18 THRU OH-040-23-22		SIGN STRUCTURE		53060



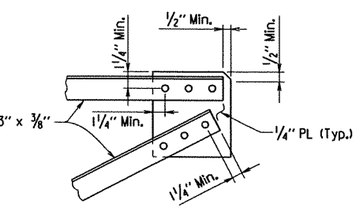
VIEW A-A



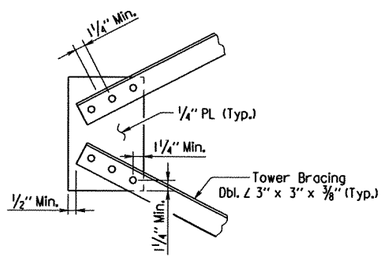
VIEW B-B



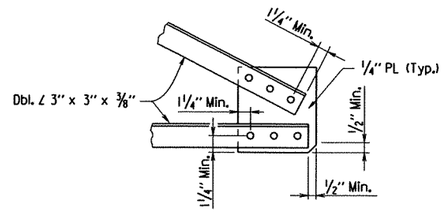
SECTION B-B



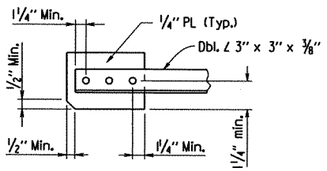
DETAIL L



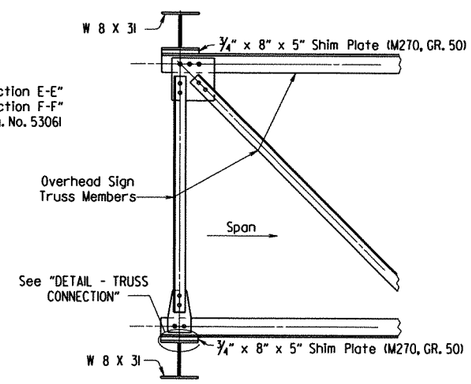
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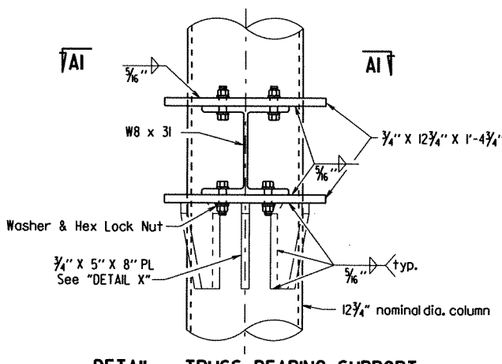
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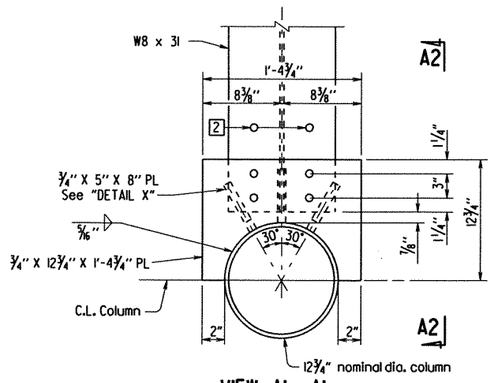
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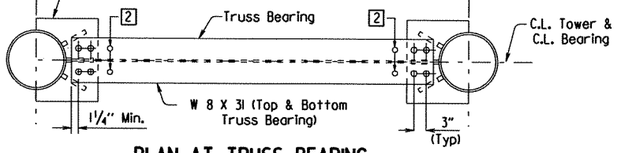
SECTION C-C



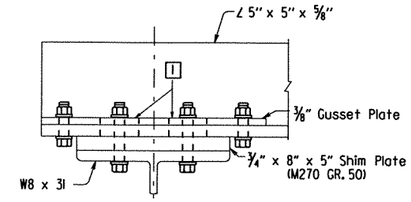
DETAIL - TRUSS BEARING SUPPORT



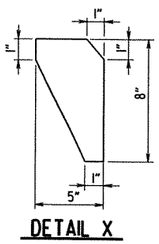
VIEW A1 - A1



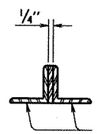
PLAN AT TRUSS BEARING



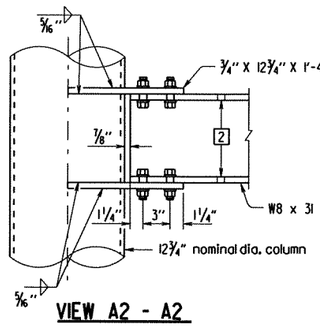
DETAIL - TRUSS CONNECTION



DETAIL X



SECTION D-D



VIEW A2 - A2

3/4" X 5" X 8" Plate not shown for clarity

[1] Slotted Hole in Gusset Plate and Chord Angle 11/16" X 2". Use plate washer on Gusset plate side. 11/16" ø holes in 3/4" shim plate and beam flange.

[2] 11/16" Dia. holes at top or bottom flanges as required.

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7510
CARL J. FUSELIER
9/13/12

BRIDGE ENGINEER

SHEET 2 OF 5
DETAILS FOR 70' TO 85'
STEEL OVERHEAD SIGN STRUCTURES
PALARM CREEK-WEST (WIDENING) (F)
FAULKNER COUNTY

ROUTE 40 SEC. 32
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

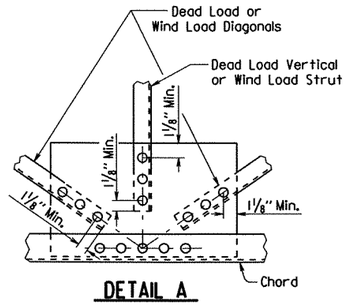
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DESIGNED BY: RBR	DATE: 8/8/12		

STR. NO. OH-040-23-18 THRU OH-040-23-22 DRAWING NO. 53060

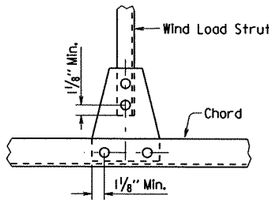
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	85	191
				(1) OH-040-23-18 THRU OH-040-23-22		SIGN STRUCTURE		53061

Note: All Gusset Plate thicknesses shall be ⅜".

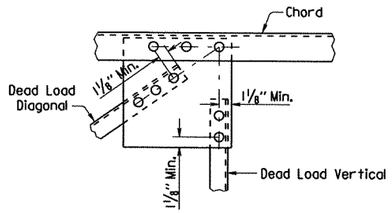
[1] Slotted Hole in Gusset Plate and Chord Angle 11/16" X 2". Use plate washer on Gusset plate side. 11/16" ø holes in ¾" shim plate and beam flange.



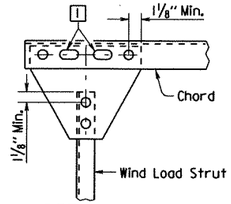
DETAIL A



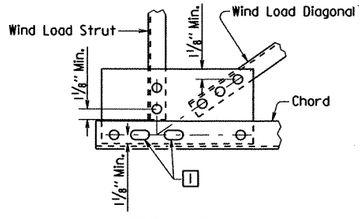
DETAIL B



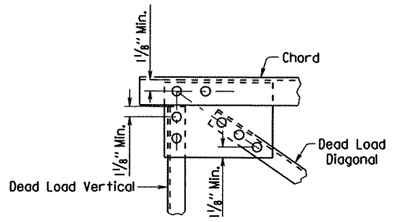
DETAIL C



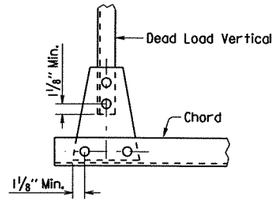
DETAIL D



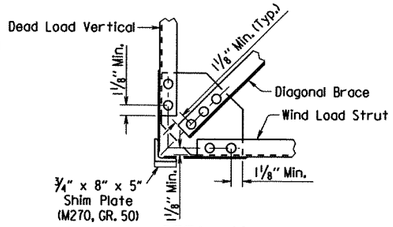
DETAIL E



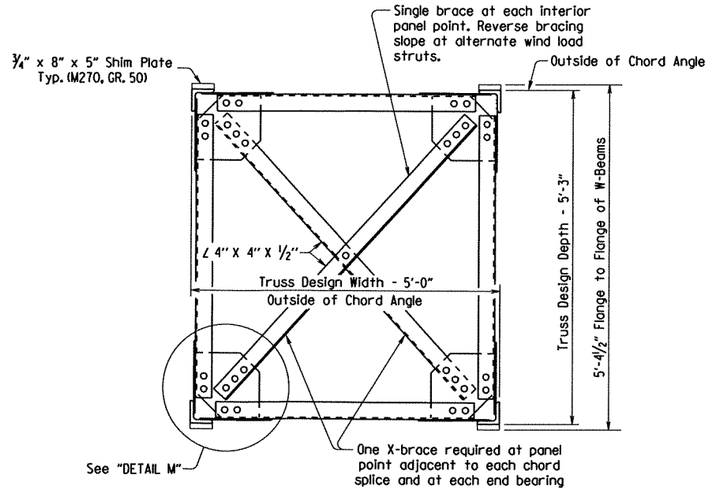
DETAIL F



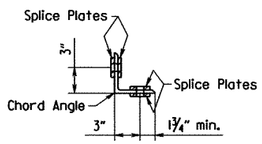
DETAIL G



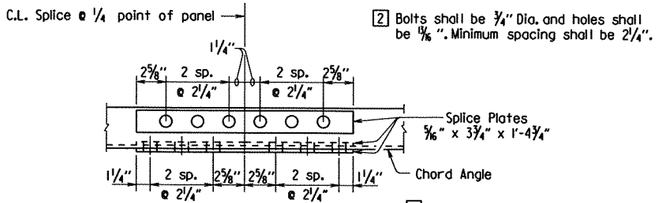
DETAIL M



TRUSS SECTION

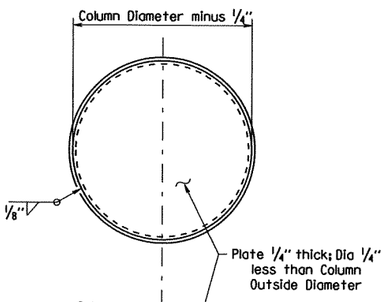


SECTION ON C.L. SPLICE

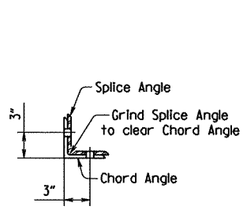


[2] Bolts shall be ¾" Dia. and holes shall be 15/16". Minimum spacing shall be 2¼".

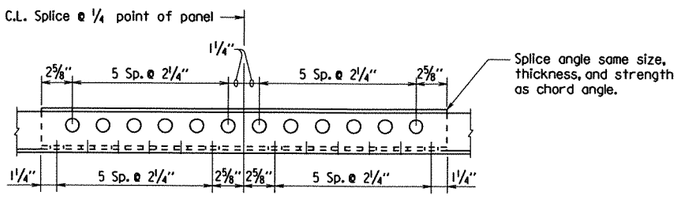
CHORD SPLICE USING PLATES [2]



END CAP DETAILS

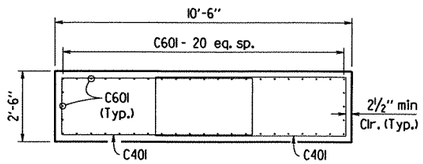


SECTION ON C.L. SPLICE

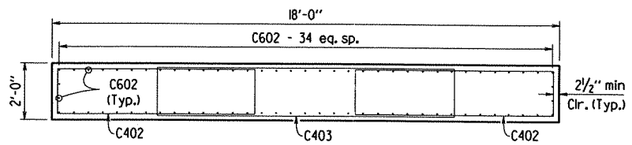


OPTIONAL CHORD SPLICE USING ANGLES [2]
Place Splice Angle on inside of Truss

Note: Chord angles may be spliced in convenient lengths for galvanizing and sign placement.



SECTION E-E
Foundation A



SECTION F-F
Foundation B

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7510
CARL J. FUSELIER
9/13/12

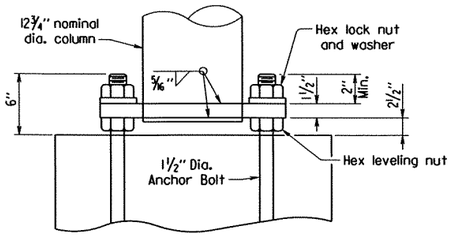
BRIDGE ENGINEER

SHEET 3 OF 5
DETAILS FOR 70' TO 85'
STEEL OVERHEAD SIGN STRUCTURES
PALARM CREEK-WEST (WIDENING) (F)
FAULKNER COUNTY

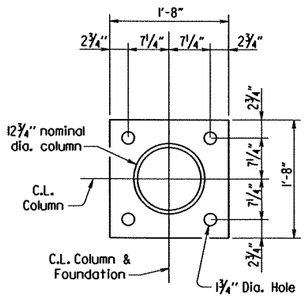
ROUTE 40 SEC. 32
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: CSG DATE: 07/30/12 FILENAME: b080411_tl.dgn
CHECKED BY: CMW DATE: 8/17/12 SCALE: NOT TO SCALE
DESIGNED BY: RBR DATE: 2/8/12
STR. NO. OH-040-23-18 THRU OH-040-23-22 DRAWING NO. 53061

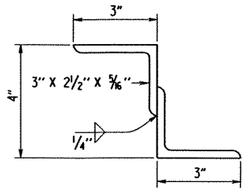
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				6	ARK.			
				JOB NO.		080411	16	19
				① OH-040-23-18 THRU OH-040-23-22		SIGN STRUCTURE		53062



ELEVATION - COLUMN BASE

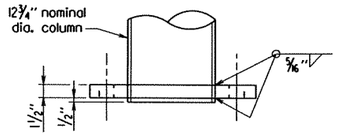


PLAN - COLUMN BASE



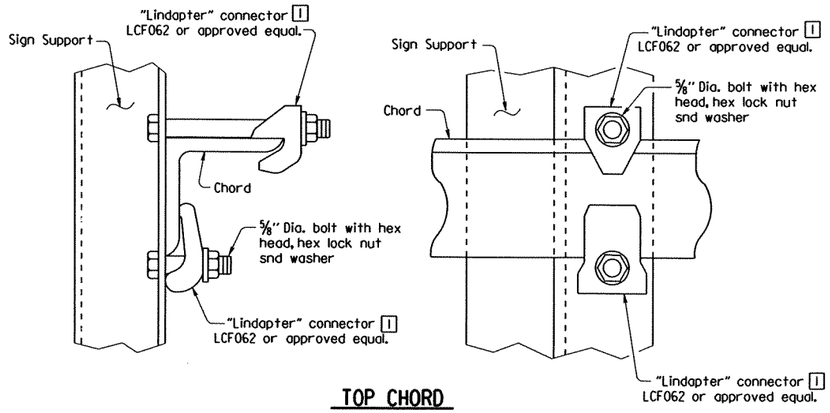
NOTE: Structural Z support may be fabricated from angles as shown.

DETAILS OF ALTERNATE Z SUPPORT

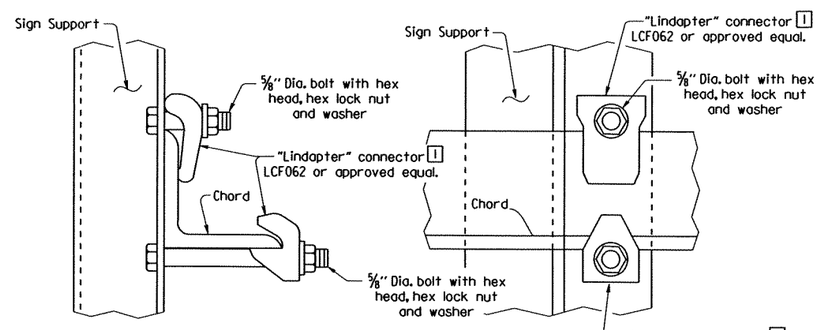


Note: Diameter of hole in base plate to be ⅛" larger than column diameter.

DETAIL OF COLUMN CONNECTION TO BASE PLATE



TOP CHORD

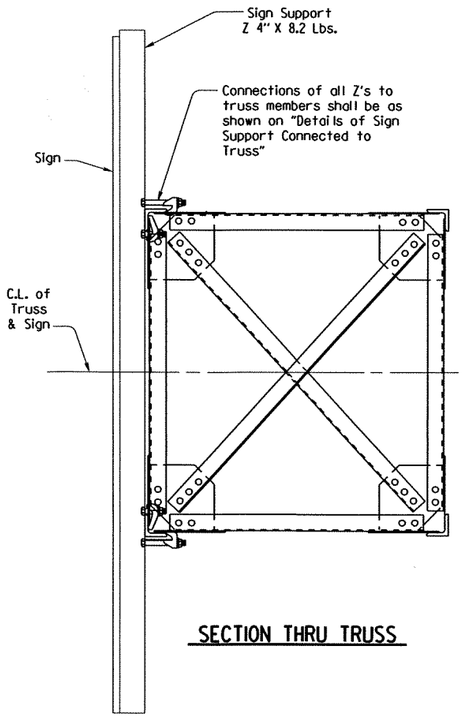


BOTTOM CHORD

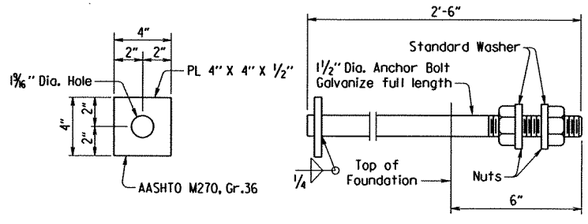
[1] Note: All "Lindapter" connectors or approved equal shall be installed according to manufacturer's recommendations. All connectors, bolts, nuts and washers shall be galvanized.

Note: Install all support connectors clear of the gusset plates and splice locations.

DETAIL OF SIGN SUPPORT CONNECTED TO TRUSS



SECTION THRU TRUSS



Anchor bolts shall comply with AASHTO M314, Grade 55, with Supplementary Requirement S1, and galvanized according to Section 807.07. Nuts for bolts shall be as specified in Section 807.07.

ANCHOR BOLT DETAIL

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7510
CARL S. FUSELIER
9/13/12

BRIDGE ENGINEER

SHEET 4 OF 5
DETAILS FOR 70' TO 85'
STEEL OVERHEAD SIGN STRUCTURES
PALARM CREEK-WEST (WIDENING) (F)
FAULKNER COUNTY

ROUTE 40 SEC. 32
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: CSG DATE: 07/30/12 FILENAME: b080411_t1.dgn
CHECKED BY: CMW DATE: 8/8/12 SCALE: NOT TO SCALE
DESIGNED BY: RBR DATE: 8/8/12
STR. NO. OH-040-23-18 THRU OH-040-23-22 DRAWING NO. 53062

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.		080411	87	191
				(1) OH-040-23-18 THRU OH-040-23-22		SIGN STRUCTURE		53063

GENERAL NOTES:
Construction Specifications: Arkansas State Highway Commission Standard Specifications for Highway Construction, Edition of 2003, with applicable special provisions and Supplemental Specifications.

Design Specifications: Standard Specifications for Structural supports for Highway Signs, Luminaries and Traffic Signals, AASHTO Fifth Edition 2009.

Basic Wind Speed = 90 m.p.h.

Fatigue Category I

This structure is approved for a sign area equivalent to 75% of the span at 15' tall. Use of additional sign area must be approved by the Engineer. If the structure height ('H1' or 'H2') exceeds 30'-0" contact the engineer.

FOUNDATION MATERIALS AND STRENGTHS:
Class S Concrete f 'c = 3,500 psi
Reinforcing Steel (AASHTO M31 or M53, Grade 60) fy = 60,000 psi

Structural steel sign support members shall comply with the following specifications:

Angles:	AASHTO M270, Grade 36 (Fy = 36,000 psi).
Plate, W-Section, WT-Section:	AASHTO M270, Grade 50 (Fy = 50,000 psi).
[1] Pipe:	ASTM A139 Grade C, straight-seam welded (Fy = 42,000 psi).
	ASTM A500 Grade B (Fy = 42,000 psi).
	ASTM A501 Grade B (Fy = 50,000 psi).
	ASTM A714 Class 2, Grade II, Type E or S (Fy = 50,000 psi).
All grades of pipe require Heat traceability back to the original melting mill	
Z-Shapes:	AASHTO M270, Grade 36 (Fy = 36,000 psi).
Shim Plates:	ASTM A1011, SS, Grade 36, Type 2, or Grade 40.
Bolts:	AASHTO M164, Type I.
Locknuts - Approved Type:	Meeting or exceeding AASHTO M292
Washers:	AASHTO M293
Nuts:	AASHTO M291 or M292, Grade 2H or Grade DH (Grade IOS)

All steel shall be Galvanized according to section 807.19. Steel completely encased in concrete may not be Galvanized.

Drawings show general features of design only. Shop drawings shall be made in accordance with section 807.04, submitted, and approval secured before fabrication is begun.

No circumferential butt welds will be allowed in any pipe sections.

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. Shapes and materials shown in the plans will be the basis of payment and no additional compensation will be made for any adjustments due to substitutions.

Connections shall be bolted with high-strength bolts. Unless noted otherwise, bolts shall be 5/8" diameter and open holes shall be 11/16". Bolt spacing shall be 2 1/4" for 5/8" diameter bolts unless otherwise noted. Bolts shall be placed with heads on the outside face of all members.

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 temporary or permanent, a formal request with detailed drawings shall be submitted to the Engineer for approval. All welding shall conform to subsection 807.26.

Anchor bolts shall comply with AASHTO M314, Grade 55, with Supplementary Requirement SI, and galvanized according to Section 807.07. Nuts and washers for anchor bolts shall be furnished and galvanized in accordance with subsection 807.07. Anchor bolts shall be pretensioned in accordance with Special Provision Job 080411 "STEEL SIGN STRUCTURES".

All truss frame bolts shall comply with AASHTO M164 Type I, galvanized according to Subsection 807.06, Nuts and washers for AASHTO MI64 Type I bolts shall be furnished and galvanized in accordance with subsection 807.06.

Field splices shall be located In order to avoid sign panel connections, There shall be a maximum of two field splices and they shall be spaced a minimum of 15 ft. apart.

All main load carrying tension members greater than ½" in thickness shall conform to the requirements of the Longitudinal Charpy V-notch test specified for Zone I minimum service temperature. This work and materials shall be paid for in accordance with Special Provision Job 080411 "STEEL SIGN STRUCTURES".

All fillet welds of critical members shall be tested according to AWS D1.1 Structural Welding Code - Steel, using the magnetic particle method, Critical welds shall include: column to base plate and truss bottom support to column.

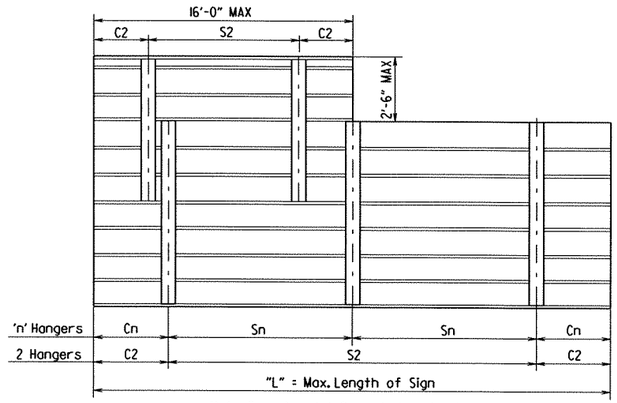
Truss field sections shall be shop assembled. Entire truss shall be fully assembled and lifted into place as one unit on to tower supports. All truss member connections shall be bolted connections.

Lock nuts to be equipped with nylon locking inserts or other approved type locking system. Lock nuts to be installed according to manufacturer's recommendations.

The excavations for the footings shall be back-filled before the structure is attached to the foundations.

Galvanized Coating damaged during transport, handling, or erection shall be field repaired in accordance with section 807.88.

The Contractor shall make check measurements in the field and make any adjustments necessary to meet the required clearances and to fit the new structures to the existing conditions.



Note: See sign details and plan sheets for number, size and dimensions of signs.

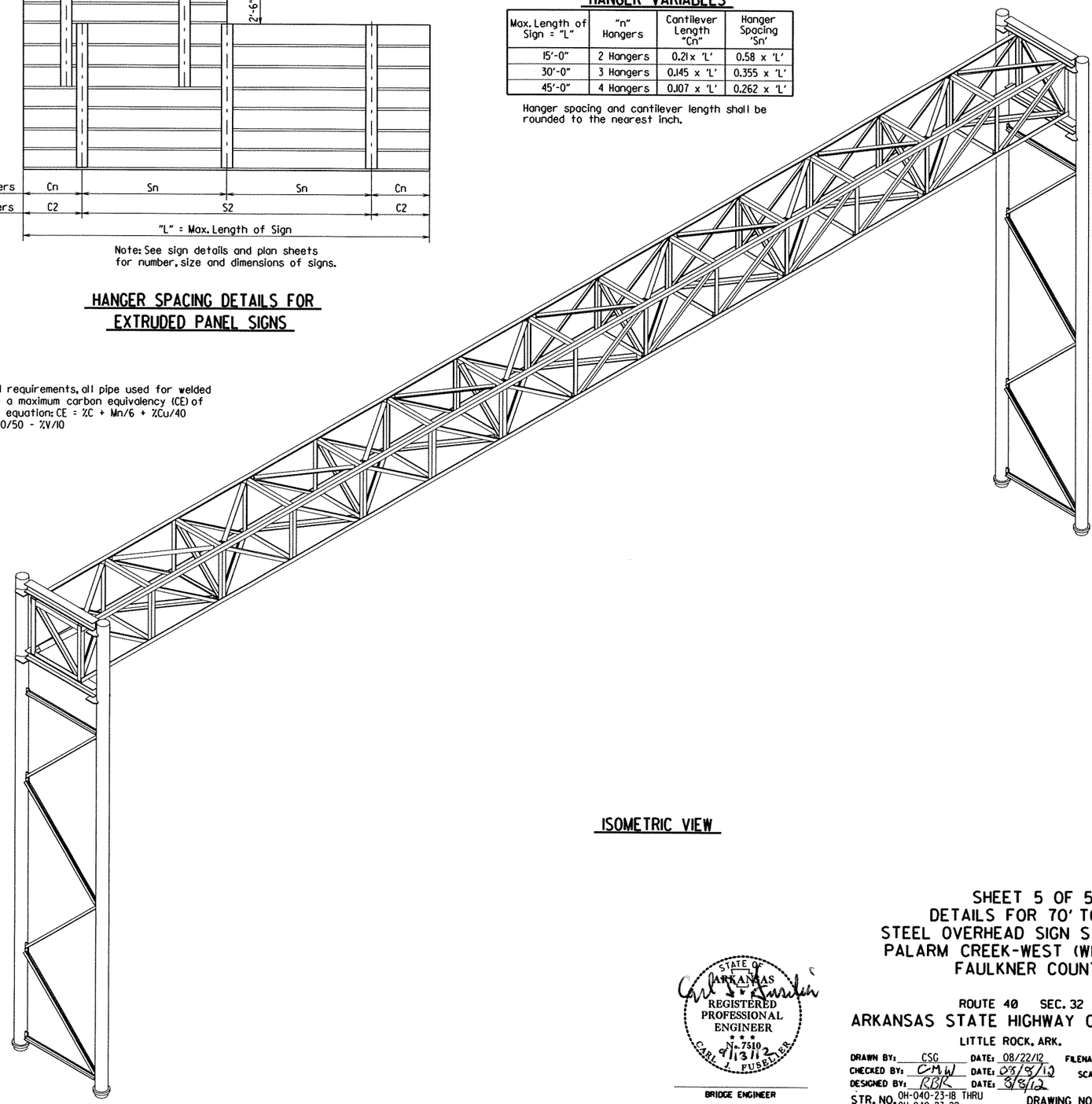
HANGER SPACING DETAILS FOR EXTRUDED PANEL SIGNS

[1] In addition to material requirements, all pipe used for welded applications shall have a maximum carbon equivalency (CE) of 0.4 using the following equation: CE = %C + Mn/6 + %Cu/40 + %Ni/20 + %Cr/10 - %Mo/50 - %V/10

HANGER VARIABLES

Max. Length of Sign = "L"	"n" Hangers	Cantilever Length "Cn"	Hanger Spacing 'Sn'
15'-0"	2 Hangers	0.21 x 'L'	0.58 x 'L'
30'-0"	3 Hangers	0.145 x 'L'	0.355 x 'L'
45'-0"	4 Hangers	0.107 x 'L'	0.262 x 'L'

Hanger spacing and cantilever length shall be rounded to the nearest inch.



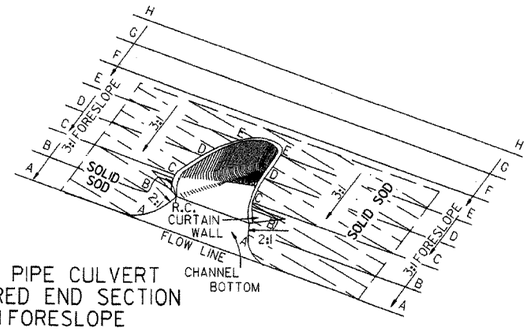
ISOMETRIC VIEW

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7510
9/13/12
CARL J. FUSELIER
BRIDGE ENGINEER

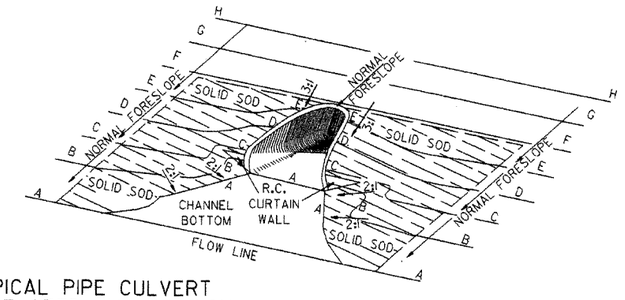
SHEET 5 OF 5
DETAILS FOR 70' TO 85'
STEEL OVERHEAD SIGN STRUCTURES
PALARM CREEK-WEST (WIDENING) (F)
FAULKNER COUNTY

ROUTE 40 SEC. 32
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

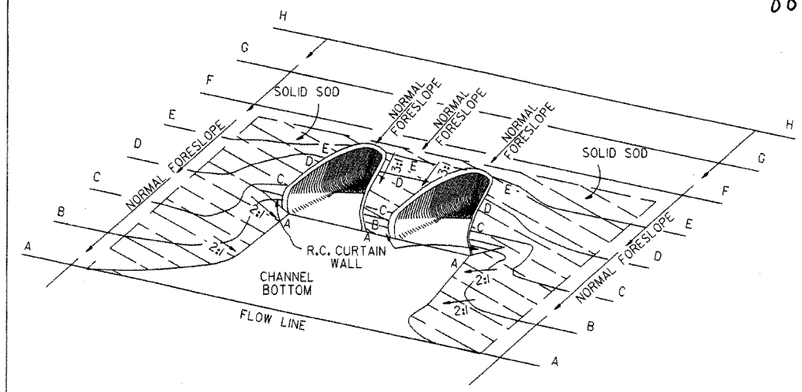
DRAWN BY: CSG DATE: 08/22/12 FILENAME: b080411_t1.dgn
CHECKED BY: CMW DATE: 09/9/12 SCALE: NOT TO SCALE
DESIGNED BY: RBK DATE: 3/3/12
STR. NO. OH-040-23-18 THRU OH-040-23-22 DRAWING NO. 53063



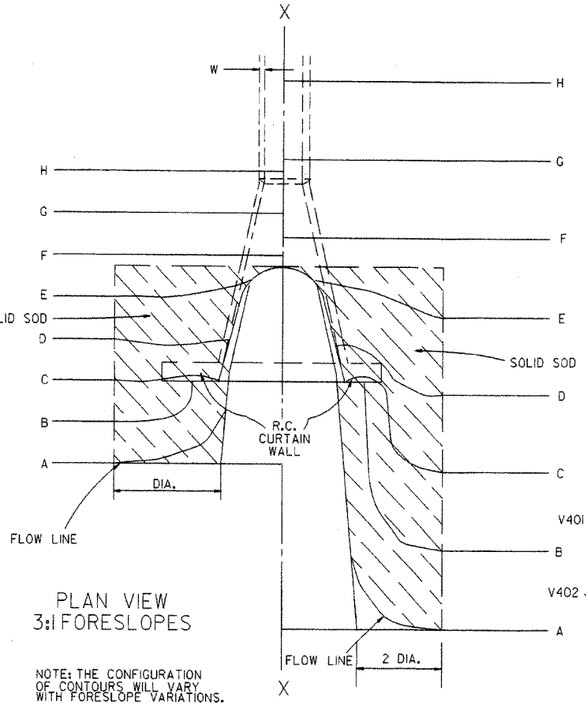
TYPICAL PIPE CULVERT
WITH FLARED END SECTION
& 3:1 FORESLOPE



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

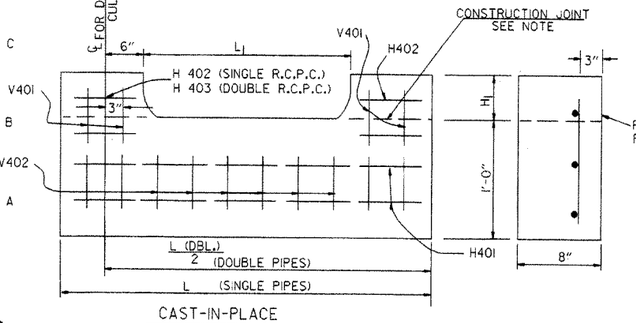
NOTE: THE CONFIGURATION OF CONTOURS WILL VARY WITH FORESLOPE VARIATIONS.

PLAN VIEW
FLATTENED FORESLOPES

R.C. CURTAIN WALL DIMENSIONS & QUANTITIES

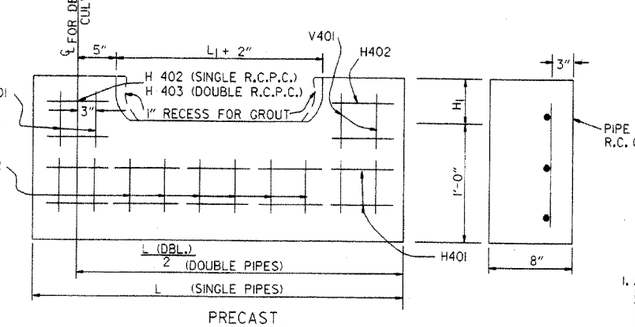
PIPE DIA.	H_1	L_1	L	L (DBL.)/2	SINGLE R.C.P.C. CONC.	SINGLE R.C.P.C. REINF. STEEL	DOUBLE R.C.P.C. CONC.	DOUBLE R.C.P.C. REINF. STEEL
					CU. YDS.	LBS.	CU. YDS.	LBS.
18"	11½"	3'-5"	8'-0"	6'-3"	0.31	27.7	0.45	39.5
24"	1'-0½"	4'-6"	9'-6"	7'-6"	0.37	33.4	0.53	48.0
30"	1'-3½"	5'-7"	11'-0"	9'-0"	0.45	39.0	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

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.

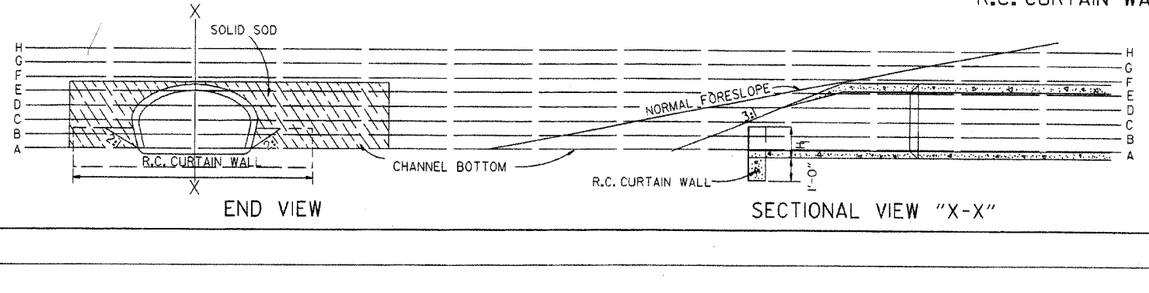
SOLID SODDING

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 W.10 x W10 MAY BE USED IN LIEU OF REINFORCING BARS.



END VIEW

SECTIONAL VIEW "X-X"

DATE	REVISION	FILMED
10-18-96	ADDED NOTE TO SOLID SODDING	10-18-96
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

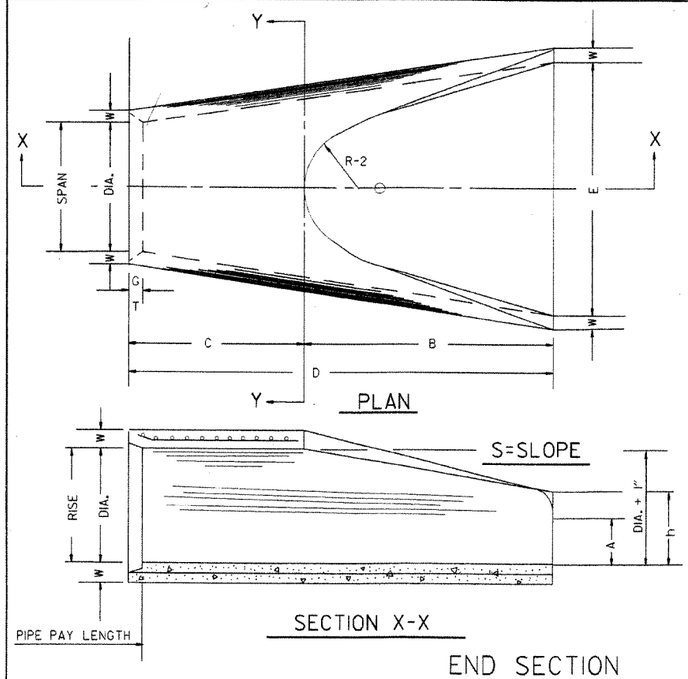
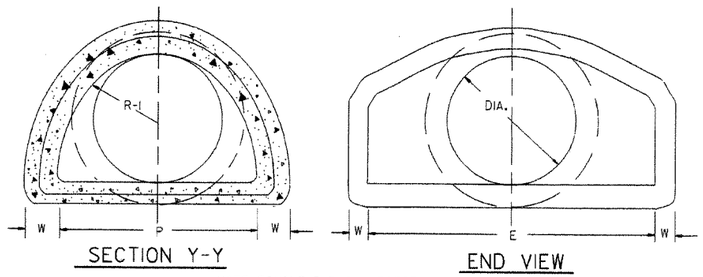


TABLE OF DIMENSIONS

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'-11½"	4'-0"	3:1	25"	33 3/16"	16 13/16"	14"	2½"	1600	1'-11½"
30"	3½"	1'-0"	4'-6"	1'-7¾"	6'-1¾"	5'-0"	3:1	31"	37"	18½"	15"	3¼"	1940	1'-4¾"
36"	4"	1'-3"	5'-3"	2'-10¾"	8'-1¾"	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"	53 7/16"	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'-0"	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 5/16"	24"	5"	13250	4'-6"

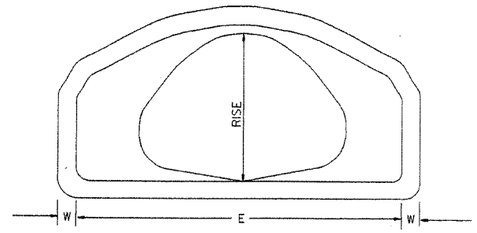


NOTE: TONGUE END ON UPSTREAM SECTION
GROOVE END ON DOWNSTREAM SECTION

ARCH PIPE

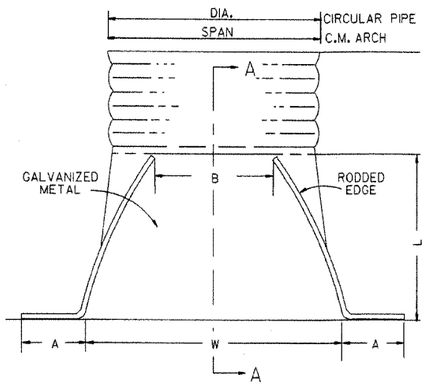
EQUIV. DIA.	• SPAN AASHTO M 206	• SPAN AHD NOMINAL	• RISE AASHTO M 206	• RISE AHD NOMINAL	W	A	B	C	D	E	P	R2	G-T	S
	INCHES													
15	18	18	11	11	2"	4"	2'-0"	4'-0"	6'-0"	3'-0"	29"	12"	1½"	2½:1
18	22	22	13½	14	2½"	5"	2'-0"	4'-1"	6'-1"	3'-6"	32⅛"	13"	2¼"	2½:1
21	26	26	15½	16	2¾"	7"	2'-3"	3'-10"	6'-1"	4'-0"	34⅛"	14"	2½"	2½:1
24	28½	29	18	18	3"	9"	2'-3"	3'-10"	6'-1"	5'-0"	36 13/16"	15"	2½"	2½:1
30	36¼	36	22½	23	3½"	10"	3'-1"	3'-01/2"	6'-1½"	6'-0"	47 13/16"	20"	3"	2½:1
36	43¾	44	26⅝	27	4"	10½"	4'-0"	2'-1½"	6'-1½"	6'-6"	54 7/16"	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"	2½:1
60	73	73	45	45	6"	1'-10"	5'-6"	2'-8"	8'-2"	9'-0"	77 13/16"	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.

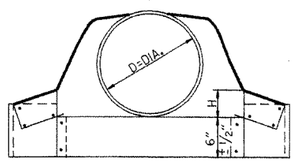


END VIEW
CONCRETE ARCH PIPE

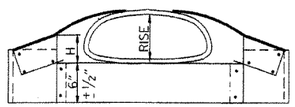
END SECTION FOR REINFORCED CONCRETE PIPE CULVERTS



NOTE: ALTERNATE CONNECTIONS TO THE PIPE CULVERTS, IN ACCORDANCE WITH MANUFACTURER'S STANDARD PRACTICES, MAY BE MADE SUBJECT TO THE APPROVAL OF THE ENGINEER.



CIRCULAR PIPE



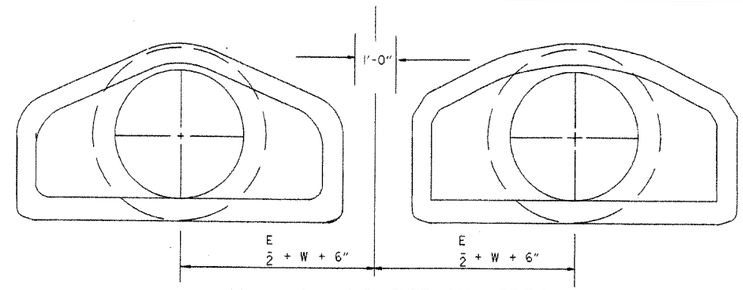
C.M. ARCH PIPE

CIRCULAR PIPE

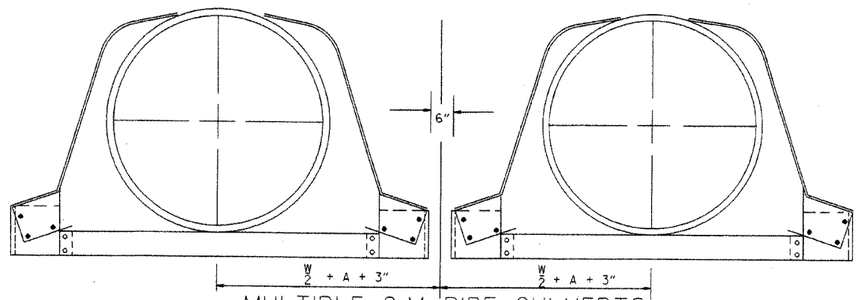
D. DIA.	GAUGE	A 1" ±	B. MAX.	H 1" ±	L 1½" ±	W 2" ±	S
		INCHES					
12	16	6	6	6	21	24	2½:1
15	16	7	8	6	26	30	2½:1
18	16	8	10	6	31	36	2½:1
21	16	9	12	6	36	42	2½:1
24	16	10	13	6	41	48	2½:1
30	14	12	16	8	51	60	2½:1
36	14	14	19	9	60	72	2½:1
42	12	16	22	11	69	84	2½:1
48	12	18	27	12	78	90	2½:1
54	12	18	30	12	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



MULTIPLE R.C. PIPE CULVERTS



MULTIPLE C.M. PIPE CULVERTS

END SECTIONS FOR CORRUGATED METAL PIPE CULVERTS

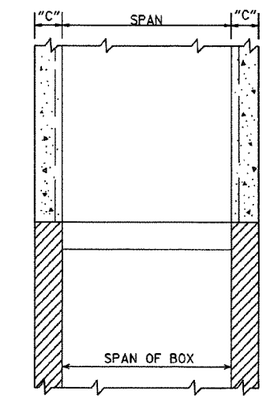
DATE	REVISION	FILMED
10-18-96	REVISED ASTM REF. TO AASHTO	10-18-96
5-15-80	REVISED DISTANCE BETWEEN MULTIPLE R.C.P. F.E.S.	664-5-15-80
7-14-78	C.M. ARCH SIZES TO CONFORM WITH AASHTO SIZES	752-7-14-78
8-22-75	ADDED MULTIPLE PIPE CULVERTS	517-8-22-75
12-5-74	REMOVED NOTE RE REINF. FOR R.C. F.E.S.	500-12-5-74
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 COMMISION

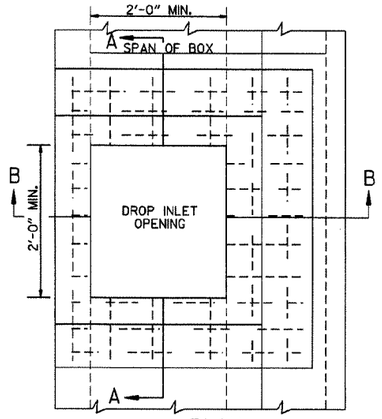
FLARED END SECTION

STANDARD DRAWING FES-2

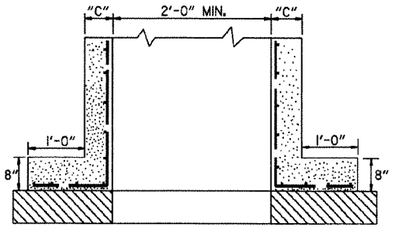
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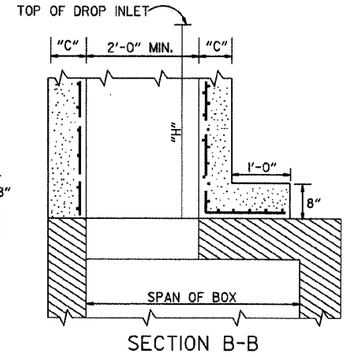
SECTION B-B



PLAN

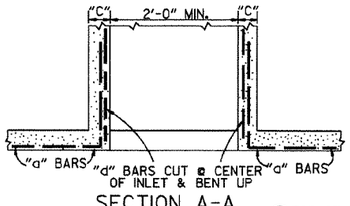


SECTION A-A

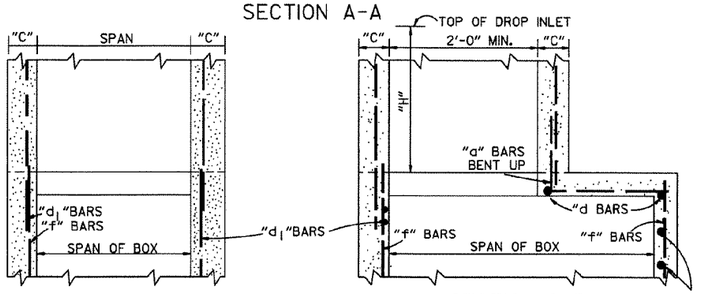


SECTION B-B

METHOD OF CONSTRUCTING DROP INLET ON EXISTING R.C. BOX CULVERT



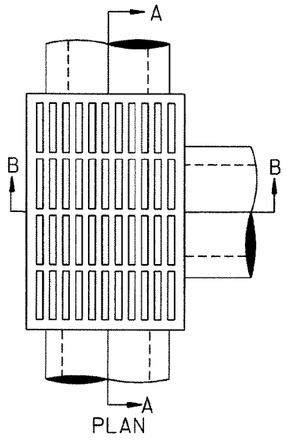
SECTION A-A



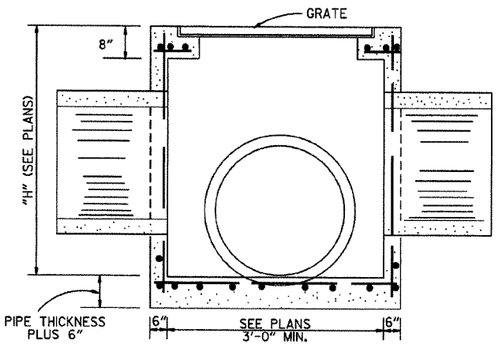
SECTION B-B SECTION B-B

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.

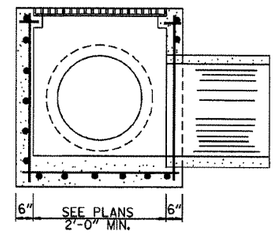


PLAN



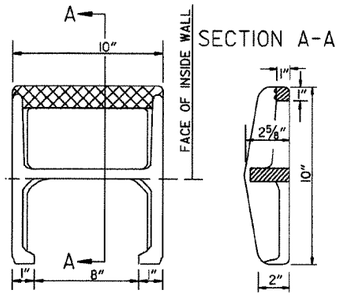
SECTION A-A

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)



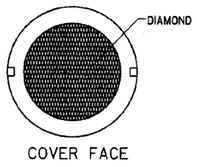
SECTION A-A

APPROX. WEIGHT = 11 LBS. (CAST IRON)

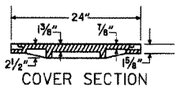
PLAN

NOTE: THIS DETAIL IS TYPICAL. OTHERS MAY BE USED WITH PRIOR APPROVAL OF THE ENGINEER.

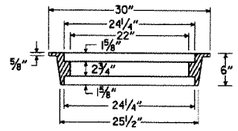
DETAIL OF STEP FOR DROP INLET



COVER FACE



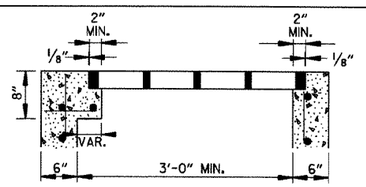
COVER SECTION



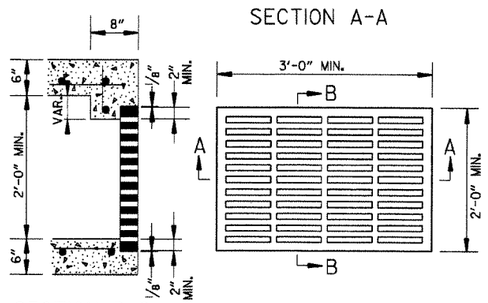
RING SECTION

APPROXIMATE TOTAL WEIGHT = 333 LBS.

HEAVY DUTY RING & COVER



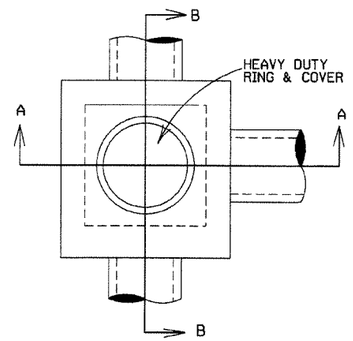
SECTION A-A



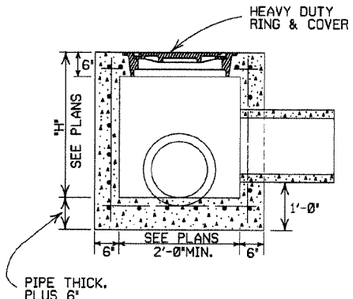
SECTION B-B

APPROXIMATE MINIMUM WATERWAY OPENING = 260 SQ. IN.

GRATE FOR TYPE E DROP INLET

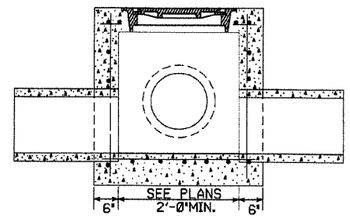


PLAN



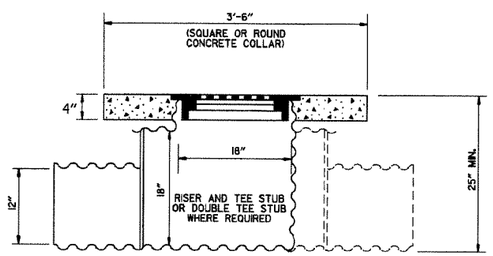
SECTION A-A

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.

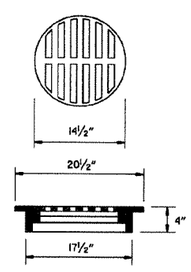


SECTION B-B

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:

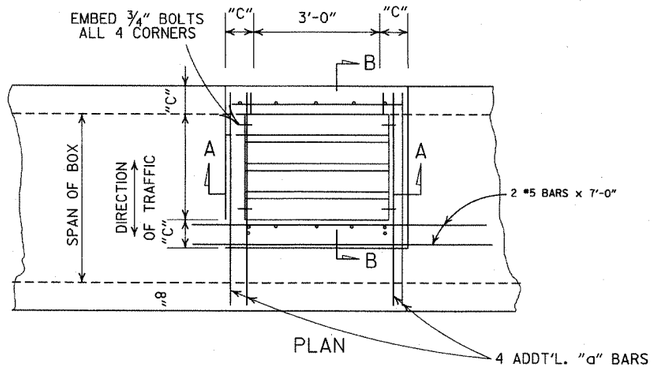
1. ALL EXPOSED CORNERS SHALL BE ¾" CHAMFERED.
2. STEPS SHALL BE INSTALLED ON 16" CENTERS ON ALL INLETS 4'-0" HIGH OR OVER, OR AS APPROVED BY THE ENGINEER.
3. EXPANSION JOINT MATERIAL SHALL BE ¾" PREFORMED FIBER.
4. GRATE OR GRATE AND FRAME SHALL BE CONSTRUCTED OF CAST IRON AND SHALL CONFORM TO THE REQUIREMENTS 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	

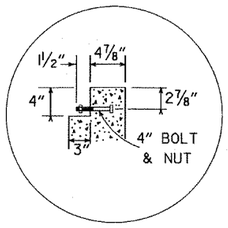
ARKANSAS STATE HIGHWAY COMMISSION

DETAILS OF DROP INLETS & JUNCTION BOXES

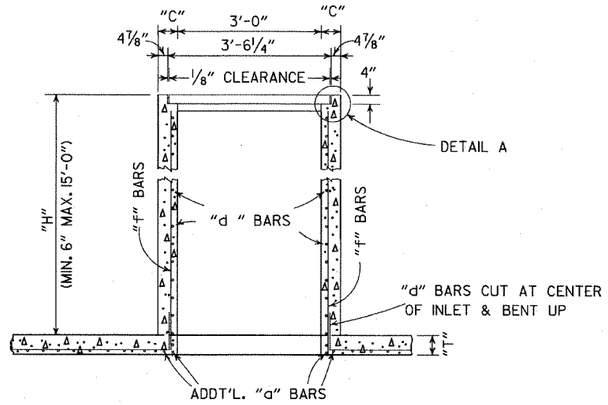
STANDARD DRAWING FPC-9



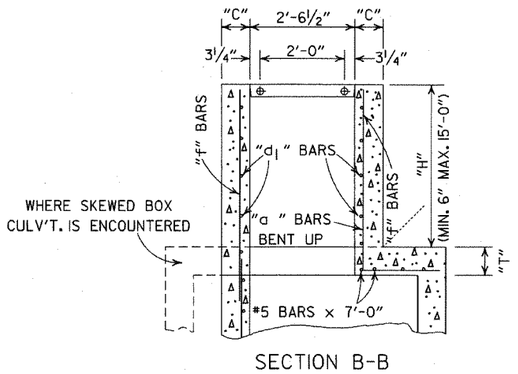
PLAN



DETAIL A



SECTION A-A

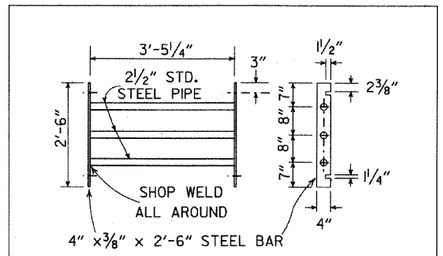


SECTION B-B

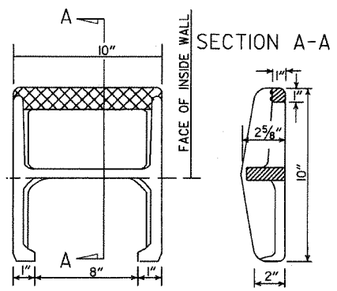
NOTE: ADDT'L.REINF. STEEL TO BE INCLUDED IN UNIT PRICE BID PER TYPE "TM" D.I.

DIMENSIONS & REINF. BARS FOR D.I. TO BE THE SAME AS THOSE SHOWN ON APPLICABLE STD. BARREL DRAWING FOR R.C. BOX CULVERTS.

DROP INLET TYPE "TM" FOR REINFORCED CONC. BOX CULVERTS



GRATE DETAIL



APPROX. WEIGHT = 11 LBS. (CAST IRON)

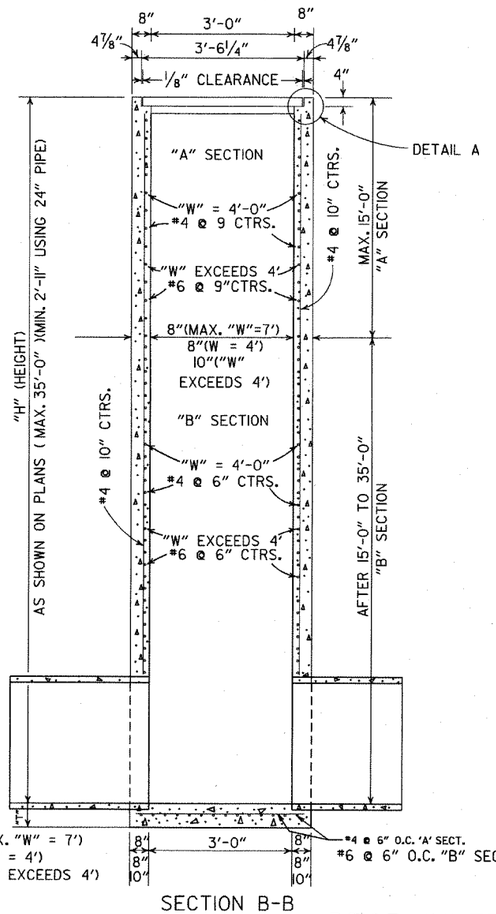
PLAN

NOTE: THIS DETAIL IS TYPICAL. OTHERS MAY BE USED WITH PRIOR APPROVAL OF THE ENGINEER.

DETAIL OF STEP FOR DROP INLET

GENERAL NOTES:

1. STEEL PIPE FOR GRATES AND BOLTS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 807. BOLTS SHALL CONFORM TO ONE OF THE FOLLOWING: ASTM A193, GRADE B8 CLASS 1 OR 2, ASTM A307 OR AASHTO M 164.
2. STEEL PIPE FOR GRATES SHALL BE "STANDARD WEIGHT" PIPE CONFORMING TO ASTM A53 NATIONAL STANDARD PIPE.
3. BOLTS, NUTS, WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO M 232 OR AASHTO M 298, CLASS 40 OR 50.
4. ALL EXPOSED CORNERS TO HAVE ¾" CHAMFER.
5. ALL #4 AND #5 REINFORCING BARS TO HAVE 1½" COVER. LARGER SIZES TO HAVE 2" COVER.
6. THE COMPLETE PIPE GRATE SHALL BE PAINTED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

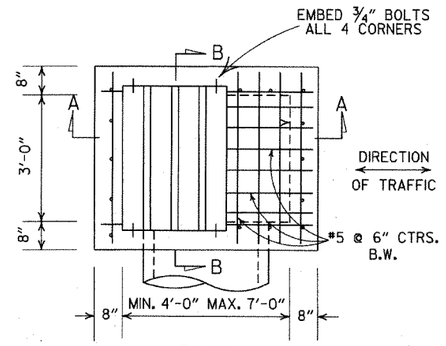


SECTION B-B

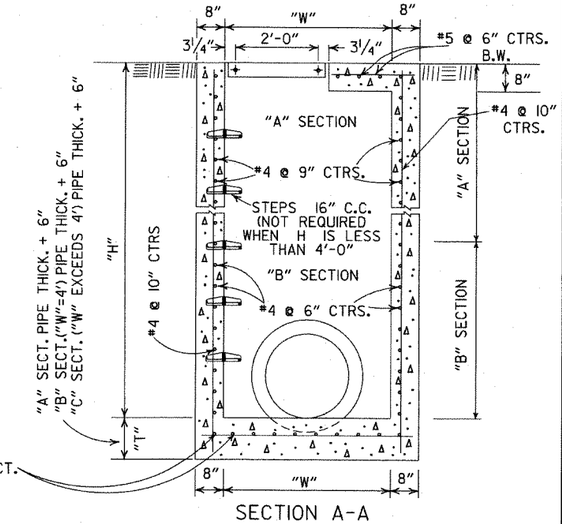
TABLE OF "W" DIMENSIONS

I.D. PIPE	SKEW OF CROSS DRAIN		
	STRAIGHT	30°	45°
	"W"	"W"	"W"
24"	4'-0"	4'-0"	4'-0"
30"	4'-0"	4'-0"	4'-5"
36"	4'-0"	4'-3"	5'-3"
42"	4'-3"	4'-11"	6'-1"
48"	4'-10"	5'-7"	6'-11"

NOTE: DIMENSIONS SHOWN ABOVE ARE FOR PIPES INTERSECTING DROP INLET ON ONE SIDE ONLY. FOR SKEWED PIPES INTERSECTING BOTH SIDES OF DROP INLET, "W" WILL NEED TO BE INCREASED OR AXIS OF INTERSECTING PIPES WILL NEED TO BE SHIFTED.



PLAN



SECTION A-A

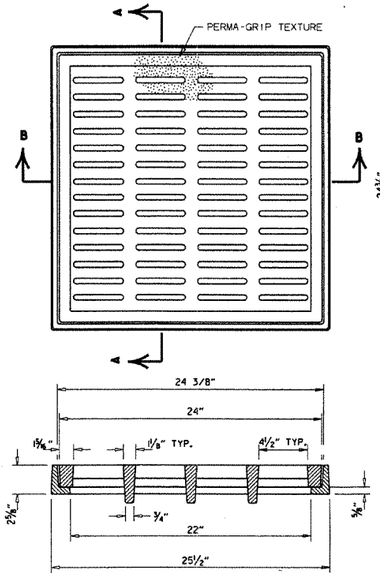
DROP INLET(TYPE RM)

REVISED		DATE FILMED
8-22-02	ADDED & REVISED DIMENSION TO SECTION A-A	
1-12-00	CORRECTED DIMENSION ON SECTION B-B	
11-06-97	ADDED DIMENSION TO SECTION A-A	
10-18-96	REVISED ASTM REF. TO AASHTO AND ADDED NOTE TO TABLE OF "W" DIMENSIONS	
10-1-92	ADDED DIRECTION OF TRAFFIC	10-1-92
8-15-91	ADDED NOTE ABOUT PAINTING OF GRATE	8-15-91
11-30-89	ALTERED DETAIL A	11-30-89
7-15-88	REVISED STEP DETAIL,TM & RM D.I. & GRATE DETAIL	719-7-15-88
10-2-72	REVISED AND REDRAWN	542-10-2-72

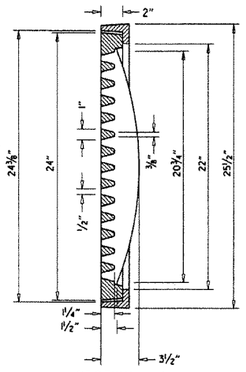
ARKANSAS STATE HIGHWAY COMMISSION

DETAILS OF DROP INLETS

STANDARD DRAWING FPC-9D



SECTION B-B

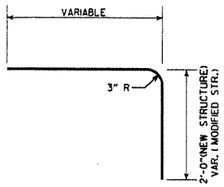


SECTION A-A

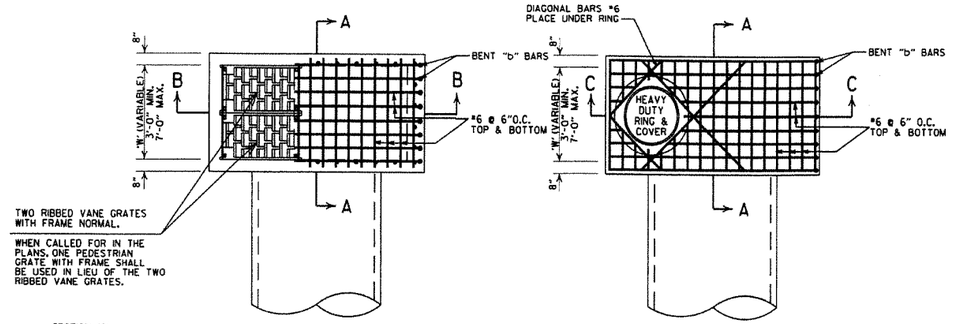
GENERAL NOTES (PEDESTRIAN GRATE & FRAME)

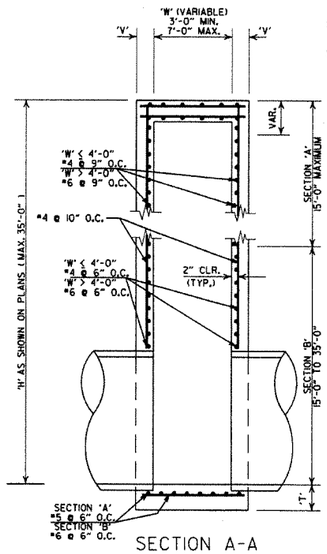
1. THE PEDESTRIAN GRATE SHALL BE ORIENTED IN THE TOP OF THE DROP INLET SO THAT THE ½" OPENINGS ARE PERPENDICULAR TO THE PATH OF PEDESTRIAN TRAVEL.
2. THE PEDESTRIAN GRATE AND FRAME SHALL BE CONSTRUCTED OF CAST IRON AND SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR GRAY IRON CASTINGS AASHTO M 105, CLASS 35B, & AASHTO M 306.
3. THE GRATE AND FRAME SHALL NOT BE PAINTED.
4. THE GRATE AND FRAME SHALL BE INSTALLED IN THE DROP INLET IN THE ASSEMBLED POSITION.
5. THE APPROXIMATE WEIGHT OF THE GRATE AND FRAME SHALL BE 211LBS.
6. THE MINIMUM WATERWAY OPENING SHALL BE 122 SQ. IN.

DETAILS OF PEDESTRIAN GRATE AND FRAME



DETAIL OF BENT "b" BAR





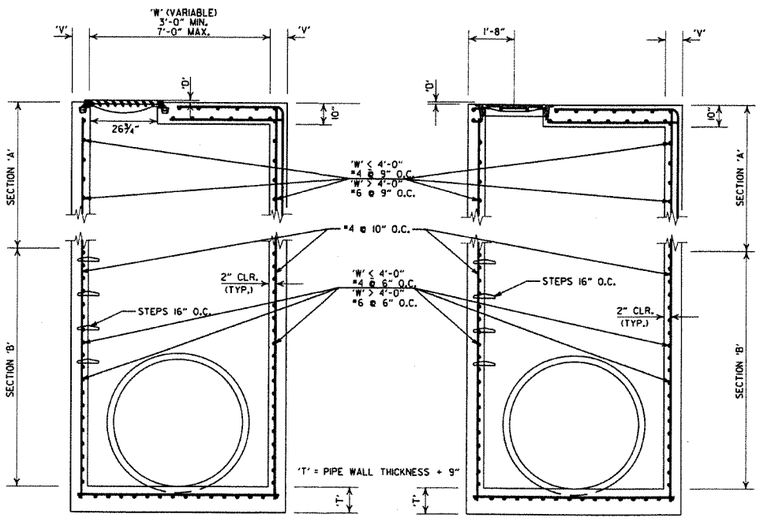
SECTION A-A

DETAILS OF DROP INLET
(TYPE ST)

SECTION 'A'
'V' = 8"

SECTION 'B' (W≤4'-0")
'V' = 8"

SECTION 'B' (W>4'-0")
'V' = 10"



SECTION B-B

SECTION C-C

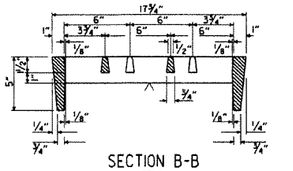
DETAILS OF JUNCTION BOX
(TYPE ST)

GENERAL NOTES (TYPE ST DROP INLET & JUNCTION BOX)

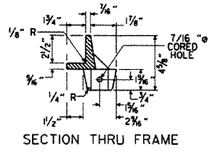
1. THE 'D' DIMENSION SHALL MATCH THE FINAL LIFT OF ACHM SURFACE COURSE SHOWN IN THE PLANS WHEN ASPHALT PAVING SURROUNDS THE GRATE OR RING COVER, AND SHALL BE 0" AT OTHER INSTALLATIONS.
2. THE STEPS SHALL BE OMITTED WHERE 'H' IS LESS THAN 4'-0".
3. ALL EXPOSED CORNERS ARE TO HAVE A ¾" CHAMFER.

GENERAL NOTES (HEAVY DUTY RING & COVER):

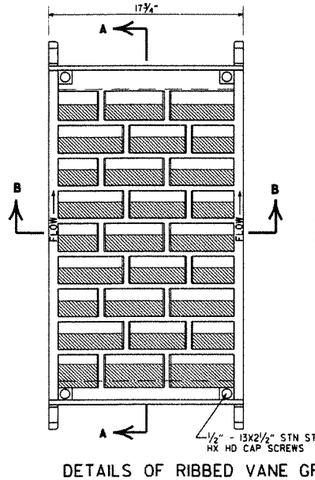
1. HEAVY DUTY RING AND COVER SHALL BE CONSTRUCTED OF CAST IRON AND SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR GRAY IRON CASTINGS AASHTO M 105, CLASS 35B, & AASHTO M 306.
2. HEAVY DUTY RING AND COVER SHALL NOT BE PAINTED.
3. HEAVY DUTY RING SHALL ALWAYS BE INSTALLED WITH FLANGE ON TOP.
4. 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.



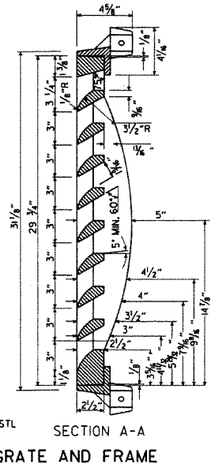
SECTION B-B



SECTION THRU FRAME



DETAILS OF RIBBED VANE GRATE AND FRAME



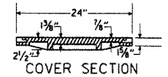
SECTION A-A

GENERAL NOTES (RIBBED VANE GRATE & FRAME)

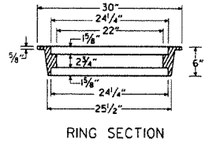
1. RIBBED VANE GRATE AND FRAME SHALL BE CONSTRUCTED OF CAST IRON AND SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR GRAY IRON CASTINGS AASHTO M 105, CLASS 35B, & AASHTO M 306.
2. GRATE AND FRAME SHALL NOT BE PAINTED.
3. GRATE AND FRAME SHALL BE INSTALLED IN DROP INLET IN ASSEMBLED POSITION.
4. APPROXIMATE WEIGHT OF GRATE SHALL BE 170 LBS.



COVER FACE



COVER SECTION



RING SECTION

HEAVY DUTY
RING & COVER

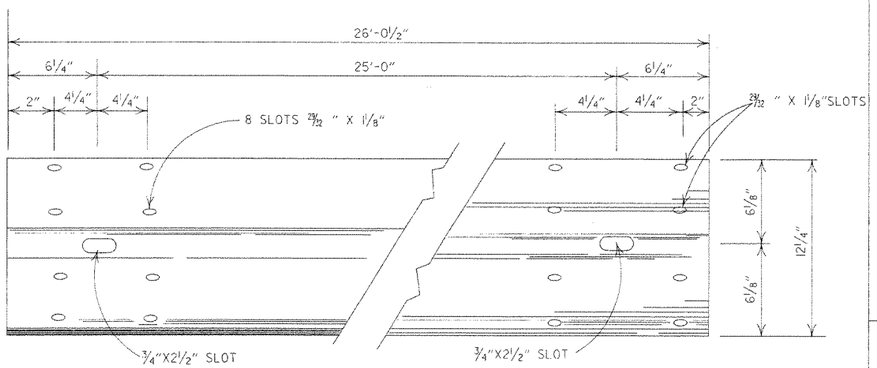
APPROXIMATE TOTAL WEIGHT = 333 LBS.

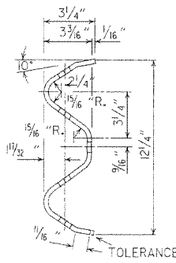
DATE REVISED	DATE FILMED	DESCRIPTION
7-26-12		REMOVED NOTE 4, REVISED 'T', REVISED BOTTOM SLAB REBAR FOR SECTION 'A', SHOWED REBAR CLEARANCE IN SECTIONS
11-16-01		ADDED NOTE 4
1-12-00		REVISED HEAVY DUTY RING & COVER
5-13-99		ADDED PEDESTRIAN FRAME & GRATE
7-02-98		REMOVED NOTE 5, REV. DIMENSIONS, ADDED HEAVY DUTY RING & COVER ADDED AASHTO REF. REVISED GRATE
10-18-96		REVISED ASTM REF. TO AASHTO
10-1-92		REVISED & REISSUED
8-15-91	8-15-91	REVISED & REISSUED

ARKANSAS STATE HIGHWAY COMMISSION

DETAILS OF DROP INLET & JUNCTION BOX (TYPE ST)

STANDARD DRAWING FPC-9S

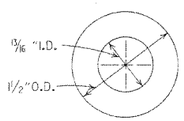




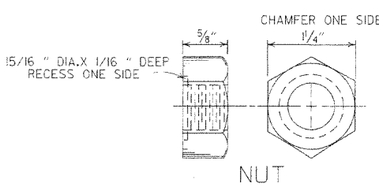
DETAILS OF W-BEAM GUARD RAIL

RAIL SECTION OF CLOSELY SIMILAR DIMENSIONS AND COMPARABLE STRENGTH MAY BE SUBSTITUTED IF APPROVED BY THE ENGINEER.

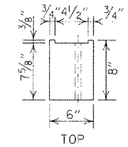
SPLICE BOLT
POST BOLT - SAME EXCEPT LENGTH



CUT STEEL WASHER

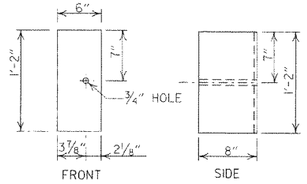


NUT

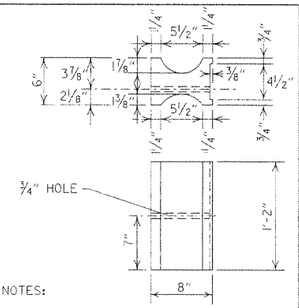


WOOD BLOCKOUT USED WITH WOOD POSTS SHALL BE 6"X8"X1'-2" WITH NO NOTCH REQUIRED.

TOP



WOOD BLOCKOUT (W-BEAM)

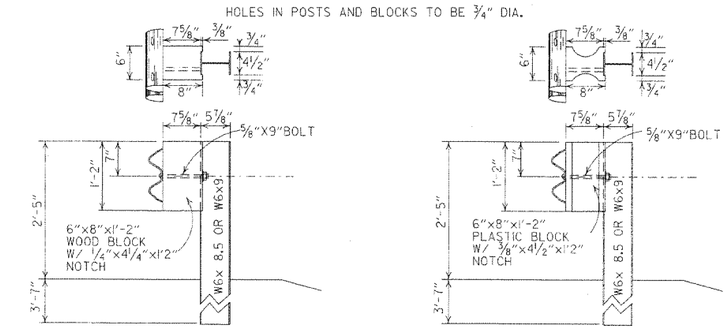


NOTES:

1. SIMILAR SHAPED PLASTIC BLOCKOUTS MAY BE USED AS LONG AS THEY MEET NCHRP-350 TEST LEVEL 3 SPECIFICATIONS OR REQUIREMENTS FOR MANUAL FOR ASSESSING SAFETY HARDWARE (MASH).
2. DIMENSIONS ARE SUBJECT TO MANUFACTURERS TOLERANCES.

PLASTIC BLOCKOUT (W-BEAM)

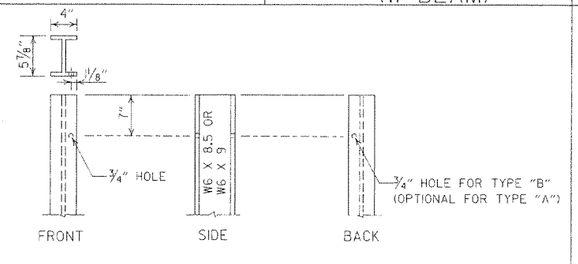
HOLES IN POSTS AND BLOCKS TO BE 3/4" DIA.



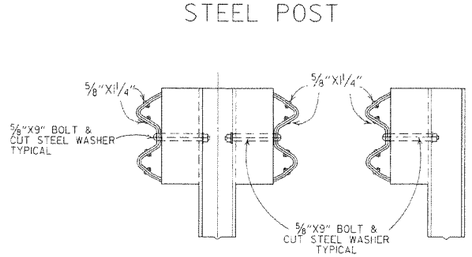
WOOD BLOCKOUT CONNECTIONS

PLASTIC BLOCKOUT CONNECTIONS

DETAILS OF STEEL LINE POST CONNECTIONS (W-BEAM)



STEEL POST



TYPE "B" TYPE "A"

DETAILS OF STEEL LINE POST CONNECTIONS (W-BEAM)

HOLES IN POSTS AND BLOCKS TO BE 3/4" DIA.



POSTS AND BLOCKS TO BE ROUGH SAWN 6"X8" WITH A TOLERANCE OF + OR - 1/4".

WOOD BLOCKOUT CONNECTIONS

PLASTIC BLOCKOUT CONNECTIONS

DETAILS OF WOOD LINE POST CONNECTIONS (W-BEAM)

-GENERAL NOTES-

ALL BOLTS SHALL BE SUFFICIENT LENGTH TO EXTEND THROUGH THE FULL THICKNESS OF THE NUT AND NO MORE THAN 3/4" BEYOND IT.

WHERE W-BEAM GUARD RAIL CONTINUES, THE INTERMEDIATE SECTIONS SHALL HAVE A POST SPACING OF 6'-3" UNLESS OTHERWISE NOTED.

W-BEAM GUARD RAIL REPRESENTING INTERMEDIATE SECTIONS WILL BE MEASURED ALONG THE ROADWAY FACE FROM CENTERLINE OF POST TO CENTERLINE OF POST.

USE W-BEAM GUARD RAIL COMPONENTS OF SAME MATERIAL FOR ENTIRE JOB. FOR EXTENSIONS OR MODIFICATION OF EXISTING GUARD RAIL, W-BEAM GUARD RAIL COMPONENTS OF THE SAME TYPE AS THOSE EXISTING SHALL BE USED.

ANY BACKFILLING UNDER OR AROUND POST SHALL BE DAMP SAND THOROUGHLY TAMPED IN PLACE.

WOOD POSTS & WOOD BLOCKS SHALL BE EITHER DENSE NO. 1 STRUCTURAL OR BETTER 9.7# (1400 #) OR NO. 1 1350 # SOUTHERN PINE.

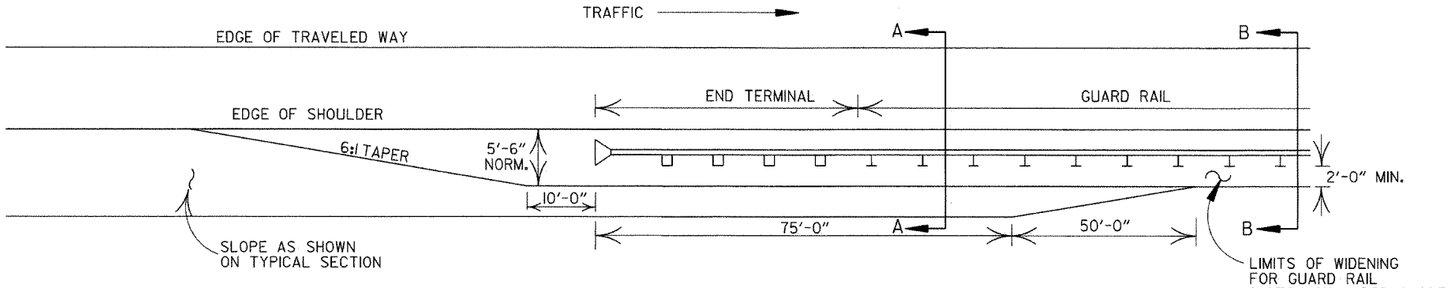
CONTRACTOR SHALL HAVE THE OPTION OF USING WOOD BLOCKOUTS FOR W-BEAM GUARD RAIL OR PLASTIC BLOCKOUTS, AS LONG AS BLOCKOUT USED MEETS NCHRP-350 TEST LEVEL 3 SPECIFICATIONS OR REQUIREMENTS FOR MANUAL FOR ASSESSING SAFETY HARDWARE (MASH) FOR W-BEAM GUARD RAIL.

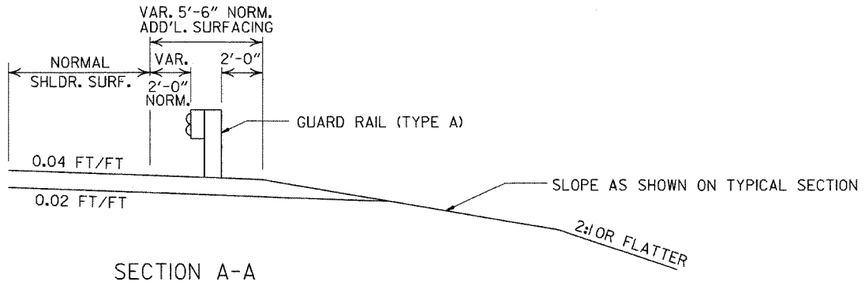
DATE	REVISION	DATE FILM
7-14-10	RAISED HEIGHT OF GUARD RAIL 1"	
10-15-09	ADDED REFERENCE TO MASH	
4-10-03	REVISED GENERAL NOTES	
8-22-02	REVISED DIMENSION ON WOOD & PLASTIC BLOCKOUT CONNECTIONS & ON STEEL POST	
11-16-01	REVISED WOOD BLOCKOUT & DETAILS OF WOOD LINE POST CONNECTIONS	
3-30-00	REMOVED GUARD RAIL AT BRIDGE ENDS	
1-12-00	ADDED PLASTIC BLOCKOUT	
8-12-98	REV. BLOCKOUTS TO WOOD, DELETED CONC. POST & REV. GENERAL NOTE, DELETED DET. OF GUARD RAIL REPLACE. BEHIND CURB & DET. OF POST PLACE. IN SOLID ROCK, & ADDED DETAILS OF STEEL LINE POST CONN. REMOVED BACK-UP PLATE, REVISED HOLES IN STEEL POLES	
4-3-97	REMOVED "LAP IN DIRECTION OF TRAFFIC" NOTE & PLACED ARROWS ON WASHERS	
10-18-96	REVISED WOOD POST NOTE	
6-2-94	ADDED ALT. STEEL POST SIZE	
8-5-93	REVISED STEEL POST SIZE	8-5-93
10-1-92	REDRAWN & REVISED	10-1-92
8-15-91	REVISED WASHER NOTE	8-6-91
8-2-90	REV. GEN. NOTE & DEPHT OF ANC. POST IN ROCK	8-2-90
7-15-88	REVISED SECTION 3 & GENERAL NOTES	
3-4-88	REV. ANCHOR POST, ELEV. NOTES & POST IN ROCK	780-3-4-88
10-30-87	REVISED WOOD LINE POST DETAIL	546-10-30-87
10-9-87	REDRAWN & REVISED	802-10-9-87

ARKANSAS STATE HIGHWAY COMMISSION

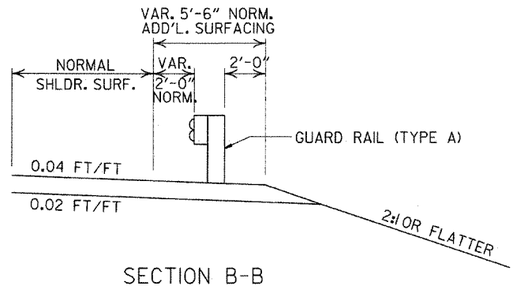
GUARD RAIL DETAILS

STANDARD DRAWING GR-8





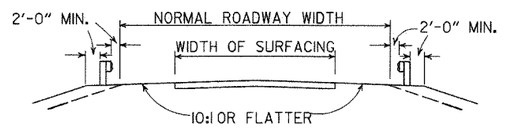
SECTION A-A



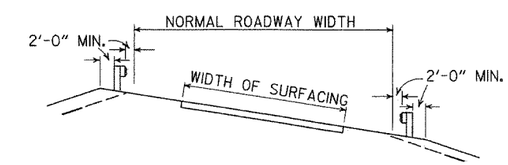
SECTION B-B

DETAILS OF WIDENING FOR GUARD RAIL

NOTE: NORMAL SECTION TO BE WIDENED APPROX. 5'-6" EACH SIDE TO SUPPORT GUARD RAIL.

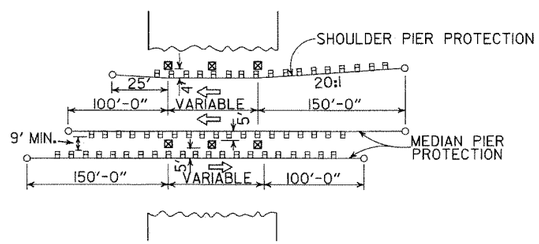


SECTION ON TANGENT



SECTION ON CURVE

DETAILS SHOWING POSITION OF GUARD RAIL ON HIGHWAY



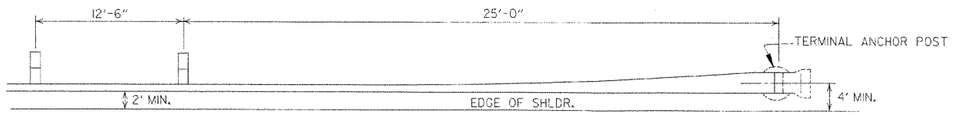
METHOD OF INSTALLATION OF GUARD RAIL AT FIXED OBSTACLE

DATE	REVISION	DATE FILM
4-17-08	MINOR REVISION	
11-10-05	DRAWN	

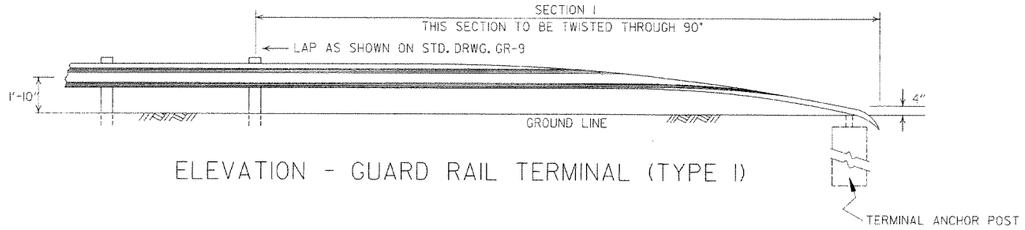
ARKANSAS STATE HIGHWAY COMMISSION

GUARD RAIL DETAILS

STANDARD DRAWING GR-9A

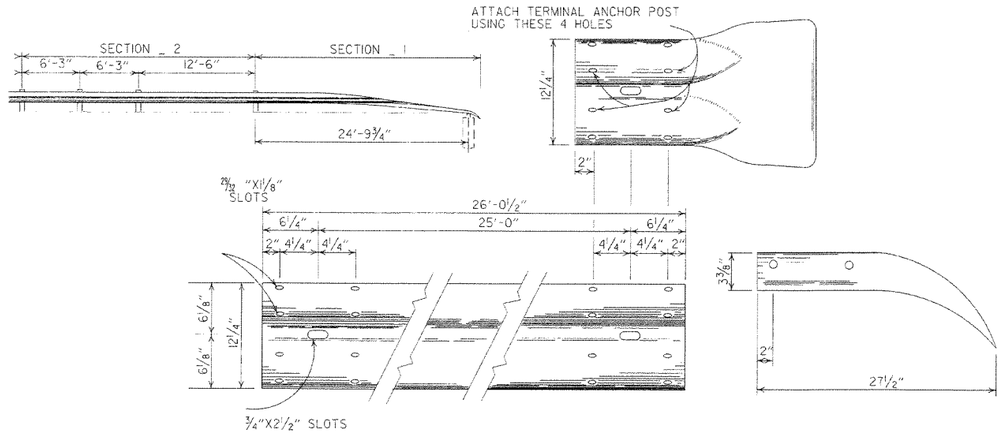


PLAN - GUARD RAIL TERMINAL (TYPE I)



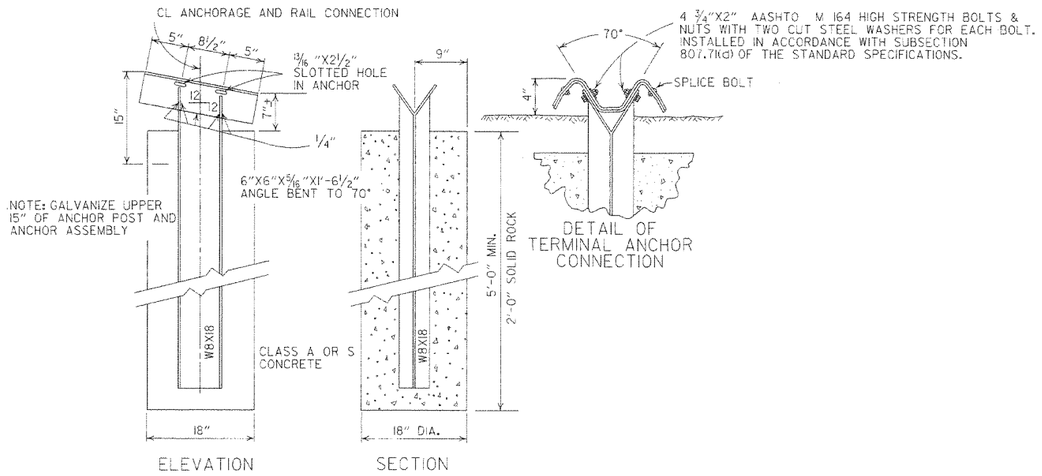
ELEVATION - GUARD RAIL TERMINAL (TYPE I)

NOTE:
SECTIONS 1 AND 2 OF GUARD RAIL TERMINAL SHALL BE PAID FOR AT THE PRICE BID PER LINEAR FOOT OF THE TYPE OF GUARD RAIL SPECIFIED.



SECTION 1

TERMINAL SECTION



NOTE: RAIL MEMBERS MAY BE BOLTED TO ANGLE AT TERMINAL ANCHOR AND THE TWO ASSEMBLIES POSITIONED TO PROPER ALIGNMENT PRIOR TO PLACING CONCRETE AROUND 8 WF 17 POST IF CONTRACTOR SO DESIRES.

DETAIL OF TERMINAL ANCHOR POST (TYPE I)

DATE	REVISION	DATE FILM
7-14-10	RAISED HEIGHT OF GUARD RAIL 1"	
6-26-97	REVISED LAP NOTE	
10-18-96	REVISED ASTM REF. TO AASHTO	
11-3-94	DIMENSION TERMINAL DETAIL	
11-11-92	ADDED NOTE FOR PAYMENT	11-11-92
10-1-92	DRAWN & ISSUED	10-1-92

ARKANSAS STATE HIGHWAY COMMISSION

GUARD RAIL DETAILS

STANDARD DRAWING GRT-1

REINFORCED CONCRETE ARCH PIPE DIMENSIONS

EQUIV. DIA.	SPAN		RISE	
	AASHTO M 206	AHTD NOMINAL	AASHTO M 206	AHTD 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	31⅝	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.

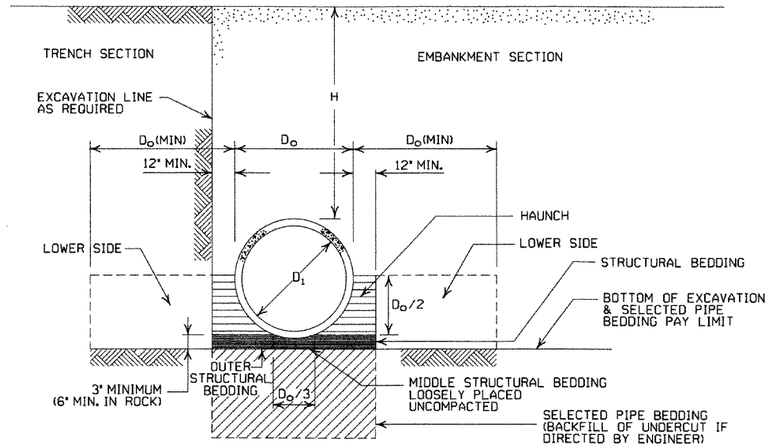
- LEGEND -

D_i = 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 STATE HIGHWAY AND TRANSPORTATION DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (2003 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
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

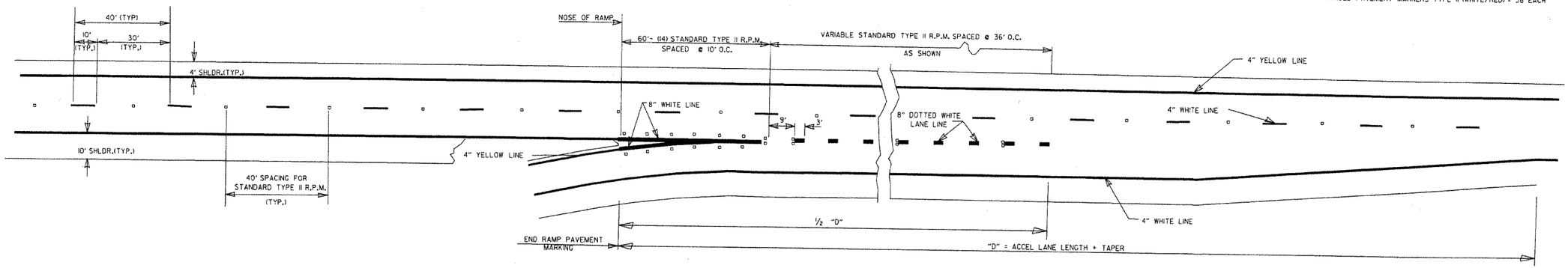
PAVEMENT MARKING QUANTITIES
(BASED ON 700' ACCEL. LANE + 300' TAPER)

ENTRANCE RAMP

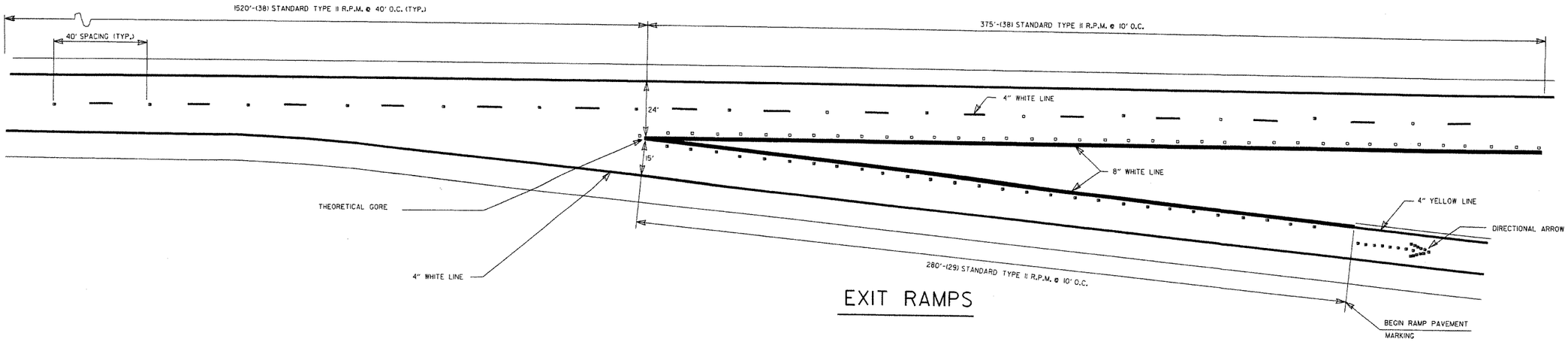
8" WHITE = 228 LIN. FT.
RAISED PAVEMENT MARKERS TYPE II (WHITE/RED) = 38 EACH

EXIT RAMP

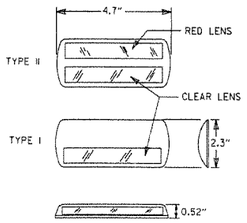
4" WHITE = 280 LIN. FT.
8" WHITE = 655 LIN. FT.
RAISED PAVEMENT MARKERS TYPE II (WHITE/RED) = 38 EACH
RAISED PAVEMENT MARKERS TYPE II (WHITE/RED) = 48 EACH
RAISED PAVEMENT MARKERS TYPE II (WHITE/RED) = 38 EACH



ENTRANCE RAMPS

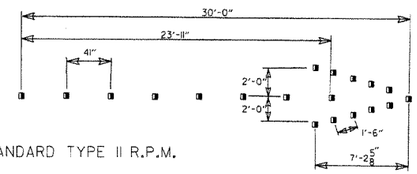


EXIT RAMPS



DETAIL OF
STANDARD
RAISED PAVEMENT MARKERS

NOTE:
THE RED LENS OF THE TYPE II R.P.M. SHALL FACE THE INCORRECT TRAFFIC MOVEMENT.



(19) STANDARD TYPE II R.P.M.

DIRECTIONAL ARROWS

GENERAL NOTES:

THIS DRAWING SHOULD BE CONSIDERED AS TYPICAL ONLY AND THE FINAL LOCATION OF THE STRIPING AND PAVEMENT MARKERS SHALL BE DETERMINED BY THE ENGINEER.

THIS DRAWING SHOULD BE USED IN CONJUNCTION WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", LATEST REVISION.

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 AHTD QUALIFIED PRODUCTS LIST.

DATE	REVISION	FILMED
7/26/12	REVISED RPM NOTATION	
12-15-11	REVISED RPMs ACCORDING TO LATEST POLICY	
11-17-10	REMOVED PLOWABLE PAVEMENT MARKERS	
6-3-10	REVISED PER 2009 MUTCD	
11-18-04	REVISED NOTES	
8-22-02	ADDED & REVISED NOTES; REV. ENTRANCE & EXIT RAMPS	
5-18-00	REMOVED HASHMARKS	
7-02-98	CHANGED TYPES TO ROMAN NUMERALS	
4-26-96	ADDED DIMENSIONS & QUANTITIES; REVISED LANE WIDTH ON EXIT RAMP	
2-2-95	PLACED IN USE	2-2-95

ARKANSAS STATE HIGHWAY COMMISSION

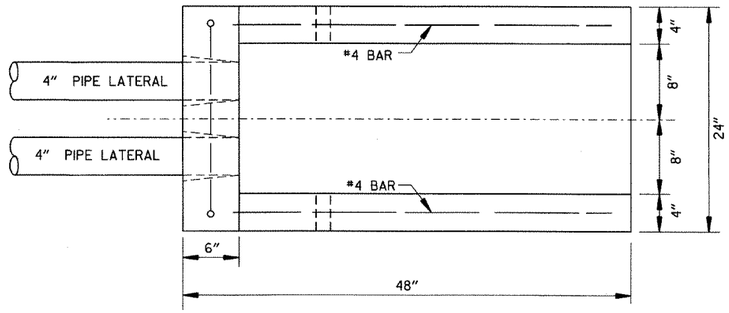
PERMANENT PAVEMENT MARKING ON ACCESS CONTROLLED ROADWAYS

STANDARD DRAWING PM-2

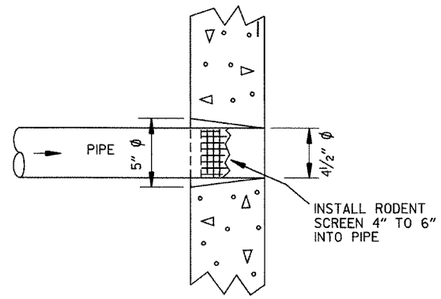
NOTE:
1. GRANULAR BACKFILL TO BE SUBSIDIARY TO PIPE UNDERDRAIN.

2. UNLESS OTHERWISE SPECIFIED ON THE PLANS, THE UNDERDRAIN COVER SHALL BE THOROUGHLY COMPACTED EARTH AND SHALL BE SUBSIDIARY TO PIPE UNDERDRAIN.

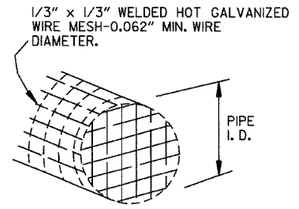
3. GRANULAR MATERIAL SHALL BE WRAPPED WITH GEOTEXTILE FABRIC. LAP FABRIC 12" OR THE WIDTH OF THE TRENCH AT THE TOP.



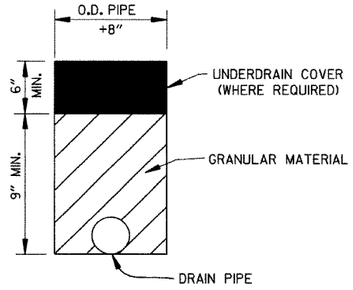
PLAN VIEW

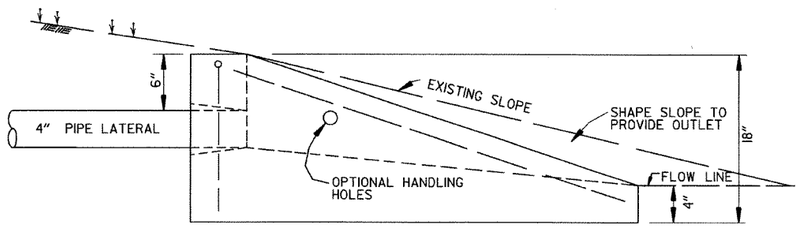


DETAIL OF HOLE FOR 4" PIPE

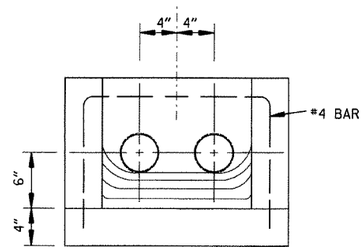


DETAIL OF RODENT SCREEN

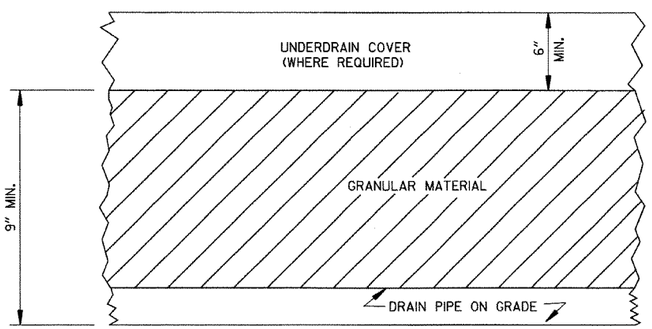




SIDE VIEW

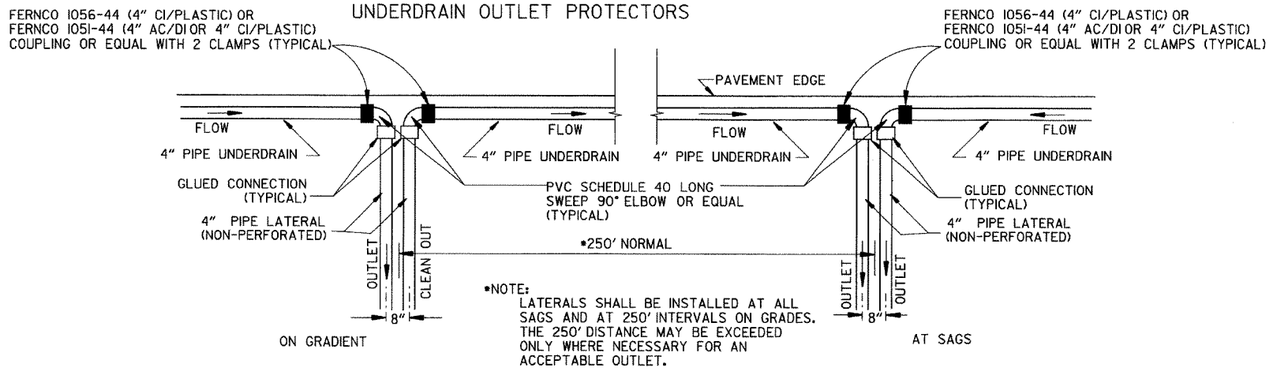


FRONT VIEW



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.

DATE	REVISION	DATE FILMED
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

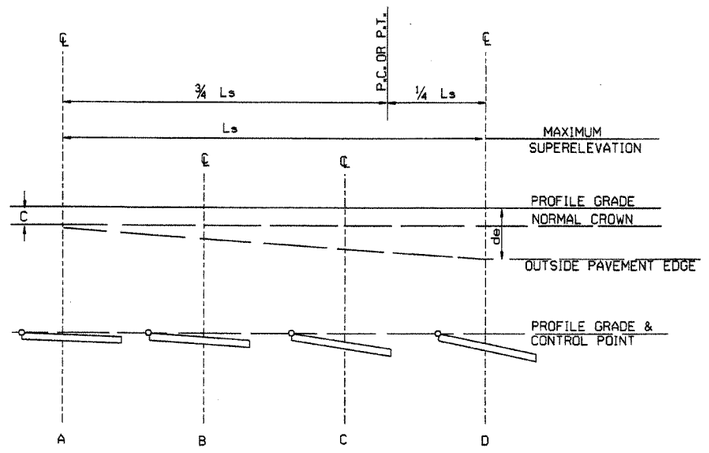
DETAILS OF PIPE UNDERDRAIN

STANDARD DRAWING PU-1

7-20-95 INSTD.PUI

SUPERELEVATION TABLE FOR ONE - WAY TRAFFIC

DEGREE OF CURVE	30 MPH			40 MPH			50 MPH			55 MPH			60 MPH			65 MPH			70 MPH		
	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
0° 15′	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
0° 30′	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
0° 45′	N.C.			N.C.			R.C.			0.022			0.023			0.025			0.028		
1° 00′	N.C.			R.C.			0.021			0.026			0.030			0.033	250		0.037	275	
1° 15′	N.C.			0.021			0.026			0.032			0.037			0.041			0.046		350
1° 30′	N.C.			0.025	175		0.031	200		0.037	225		0.043	250		0.048			0.054		
1° 45′	R.C.			0.028			0.036			0.043			0.049			0.055			0.062		
2° 00′	R.C.			0.031			0.040			0.048			0.055			0.062			0.070		
2° 15′	R.C.			0.034			0.045			0.053			0.061			0.069	265		0.078	300	
2° 30′	0.021			0.037			0.049			0.058			0.067			0.075	280		0.085	315	400
2° 45′	0.023			0.040		250	0.053			0.063			0.072			0.081	300		0.091	335	
3° 00′	0.025			0.043			0.057			0.067	230		0.077	260		0.087	315		0.095	350	
3° 15′	0.027	150		0.046			0.061			0.072	245		0.082	275		0.090	325	400	0.098	360	450
3° 30′	0.029			0.049			0.065	205		0.076	255		0.086	285		0.095	340		0.100	360	
3° 45′	0.031		250	0.051			0.069	215		0.080	265		0.090	295		0.097	345				
4° 00′	0.033			0.056			0.072	225		0.083	270		0.093	305	400	0.099	350				
4° 30′	0.037			0.061			0.078	240		0.087	280		0.096	315							
5° 00′	0.040			0.066	185		0.083	250		0.091	295	400	0.098	320							
5° 30′	0.043			0.070	190		0.088	260		0.094	300										
6° 00′	0.046			0.074	200		0.092	270		0.096	305										
6° 30′	0.050			0.078	210		0.095	280	350	0.100	315										
7° 00′	0.053			0.081	215		0.098	285													
7° 30′	0.056			0.084	220		0.099	290													
8° 00′	0.058			0.087	225	300	0.100	290													
8° 30′	0.061			0.089	230																
9° 00′	0.063			0.094	235																
10° 00′	0.068	160		0.097	250																
11° 00′	0.072	170		0.099	250																
12° 00′	0.076	175		0.100	250																
13° 00′	0.080	180																			
14° 00′	0.083	190																			
15° 00′	0.086	195																			
16° 00′	0.089	200																			
17° 00′	0.091	200																			
18° 00′	0.093	205																			
19° 00′	0.095	210																			
20° 00′	0.097	215	300																		
21° 00′	0.098	215																			
22° 00′	0.099	215																			
23° 00′	0.099	215																			
24° 00′	0.100	220																			
	D MAX = 24° 45′			D MAX = 13° 15′			D MAX = 8° 15′			D MAX = 6° 30′			D MAX = 5° 15′			D MAX = 4° 15′			D MAX = 3° 30′		



ONE-WAY TRAFFIC
INSIDE LANE

SUPERELEVATION FORMULA = $S = -\frac{L(de-C)}{Ls} - C$

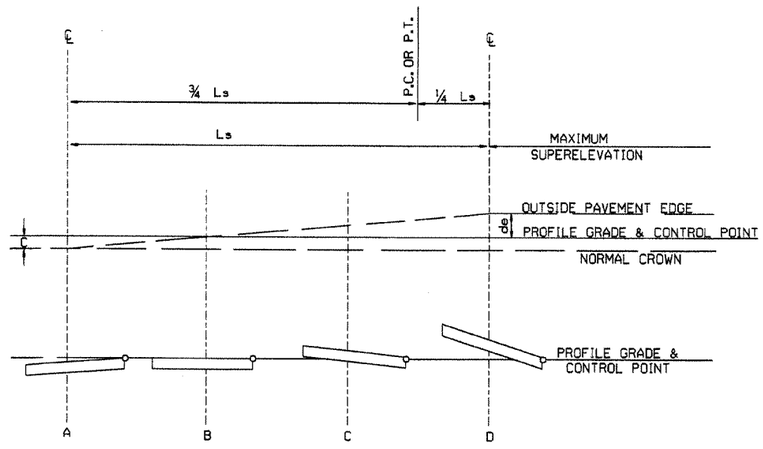
ABBREVIATIONS

NC - NORMAL CROWN
RC - REVERSE CROWN, SUPERELEVATION AT NORMAL CROWN SLOPE
S - SUPERELEVATION
L - DISTANCE FROM BEGINNING OF SUPERELEVATION TRANSITION TO ANY POINT (FT.)
d - WIDTH OF PAVEMENT
e - MAXIMUM RATE OF SUPERELEVATION (FT. PER FT.)
Ls - LENGTH OF SUPERELEVATION TRANSITION (FT.)
C - NORMAL CROWN (FT.)

GENERAL NOTES

1. ON PAVEMENT WITH ONE-WAY TRAFFIC, THE SUPERELEVATION SHALL BE REVOLVED ON THE PROFILE GRADE POINT.
2. SUPERELEVATION VALUES SHOWN ON THE CROSS SECTIONS ARE VALUES (+) OR (-) TO BE ADDED OR SUBTRACTED FROM THE POINT OF CONTROL.
3. LENGTHS FOR Ls MAY BE ROUNDED IN MULTIPLES OF 25 FT. OR 50 FT. TO PERMIT SIMPLER CALCULATIONS.
4. MINIMUM Ls VALUES MAY BE USED FOR RAMPS; DESIRABLE VALUES SHALL APPLY TO MAIN LANES.
5. DIVIDED PAVEMENTS WIDER THAN 4 LANES SHALL HAVE ADDITIONAL TRANSITION LENGTHS AS FOLOWS:

6 LANE DIVIDED---------+20%
8 LANE DIVIDED---------+50%



ONE-WAY TRAFFIC
OUTSIDE LANE

SUPERELEVATION FORMULA = $S = +\frac{L(de+C)}{Ls} - C$

DATE	REVISION	DATE FILMED
01-09-87	ISSUED	578-1-15-87

ARKANSAS STATE HIGHWAY COMMISSION

TABLES AND METHOD OF SUPERELEVATION FOR ONE-WAY TRAFFIC

STANDARD DRAWING SE-1

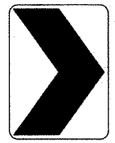
FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.		100	
JOB NO.				
(4) STD. HWY. SIGNS & SUP ASSEMB				



R1-1
30"X30"



W1-3
30"X30"
(LT. OR RT.)



W1-8
18"X24"



W2-5
30"X30"



W3-1
36"X36"



W5-1
36"X36"



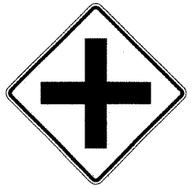
M6-3
21"X15"



R1-2
36"X36"X36"



W1-4
30"X30"
(LT. or RT.)



W2-1
30"X30"



S1-1
36"X36"

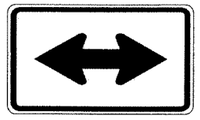


W3-2
36"X36"

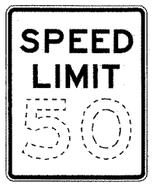


County
Route Marker
M1-5
24"X24"

NOTE: REFLECTORIZED YELLOW LEGEND (COUNTY NAME, ROUTE LETTER & NUMBER) & BORDER ON A BLUE BACKGROUND.



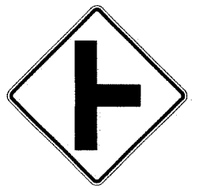
M6-4
21"X15"



R2-1
24"X30"



W1-5
30"X30"
(LT. or RT.)



W2-2
30"X30"



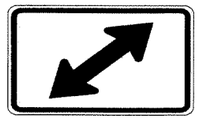
W5-2
36"X36"



W8-3
36"X36"



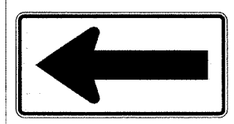
R1-3
12"X6"



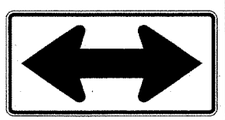
M6-5
21"X15"



W1-1
30"X30"
(LT. or RT.)



W1-6
48"X24"



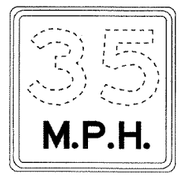
W1-7
48"X24"



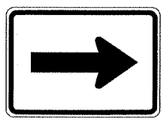
W2-3
30"X30"
(LT. or RT.)



W5-3
36"X36"

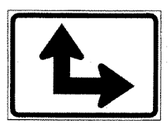


W13-1
18"X18"

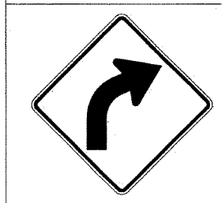


M6-1
21"X15"

NOTE: ALL M6 SIGNS TO BE MADE WITH REFLECTORIZED YELLOW ARROW & BORDER WITH BLUE BACKGROUND.



M6-6
21"X15"



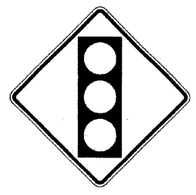
W1-2
30"X30"
(LT. or RT.)



W2-4
30"X30"



W10-1
36" DIAMETER



W3-3
36"X36"



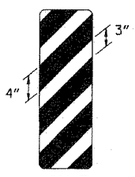
M6-2
21"X15"



S4-3
24"X8"



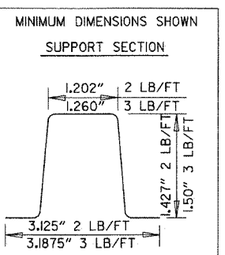
S4-2
24"X10"



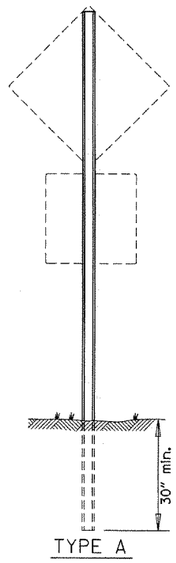
OM-3
12"X36"
(LT. or RT.)

MINIMUM DIMENSIONS SHOWN

SUPPORT SECTION

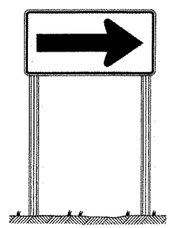


(U-CHANNEL)
STANDARD SUPPORT
ASSEMBLIES

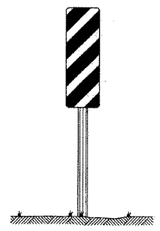


TYPE A

NOTE: LENGTH OF SIGN POSTS SHALL BE DETERMINED SO AS TO PROVIDE FOR MINIMUM VERTICAL CLEARANCES AS CALLED FOR IN THE SPECIFICATIONS PLUS A MINIMUM VERTICAL PENETRATION OF 30" IN THE SOIL.



TYPE B



TYPE C

MINIMUM WEIGHT

TYPE A & B = 3 LBS./FT.
TYPE C = 2 LBS./FT.

STANDARD HIGHWAY SIGNS

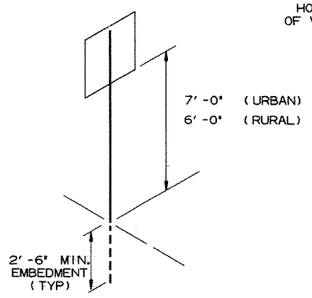
DATE	REVISION	DATE FILMED
4-17-08	REVISED SIGN DESIGNATION - W3-1 & W3-2	
4-10-03	REVISED W5-2, W8-3, OM-3; ADDED W1-8	
1-5-81	REDRAWN	960-1-15-81
9-15-78	ADDED W14-3	877-9-15-78
9-2-76	POST WT. STEEL POST WT. FROM 2# - 3#	623-9-3-76
5-3-76	ADDED S4-2 & S4-3	504-5-3-76
8-12-74	REV. HT. TYPE "C" ASSEMBLY	500-8-21-74
12-21-72	ADDED M6-2,3,4,5,6	500-12-21-72
12-1-72	ISSUED	562-12-1-72

SUPPORT ASSEMBLIES

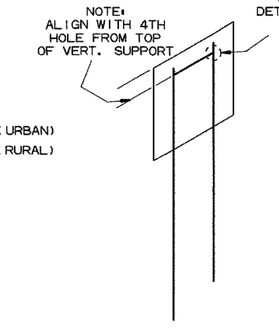
ARKANSAS STATE HIGHWAY COMMISSION

STANDARD HIGHWAY SIGNS
AND SUPPORT ASSEMBLIES

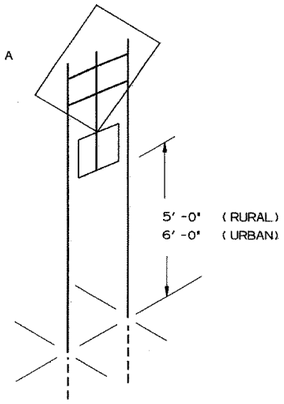
STANDARD DRAWING SHS-1



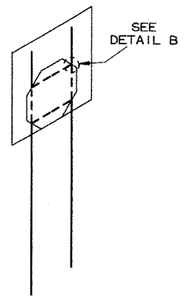
U-1



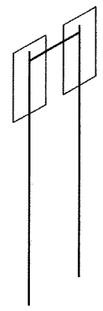
U-2



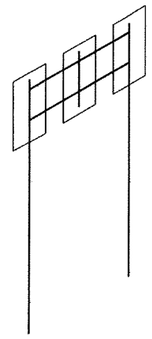
U-2 (A)



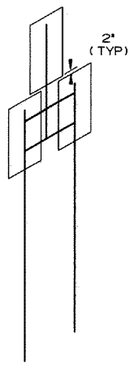
U-2 (B)



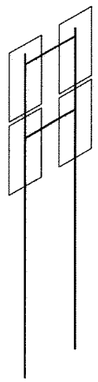
U-2 (1)



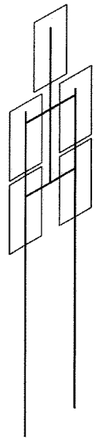
U-2 (2)



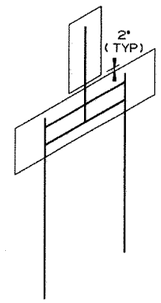
U-2 (3)



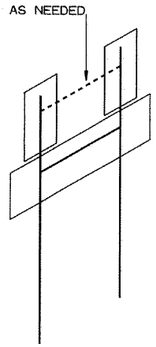
U-2 (4)



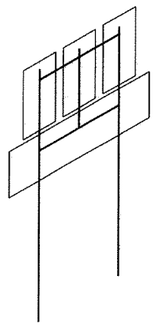
U-2 (5)



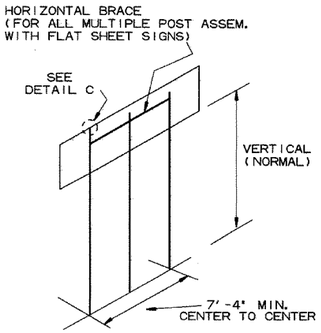
U-2 (6)



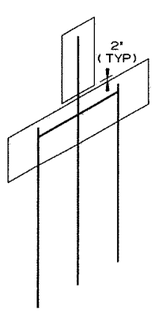
U-2 (7)



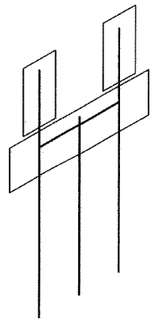
U-2 (8)



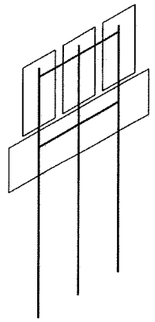
U-3



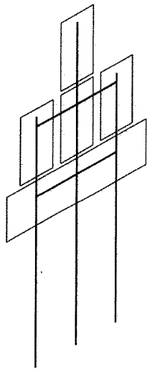
U-3 (1)



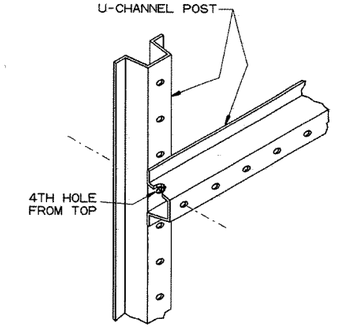
U-3 (2)



U-3 (3)

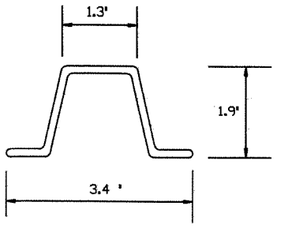


U-3 (4)



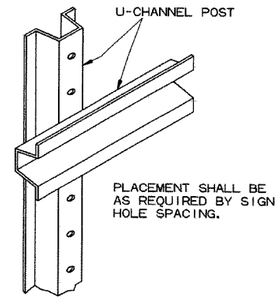
DETAIL A

SHOWING HORIZONTAL BRACE



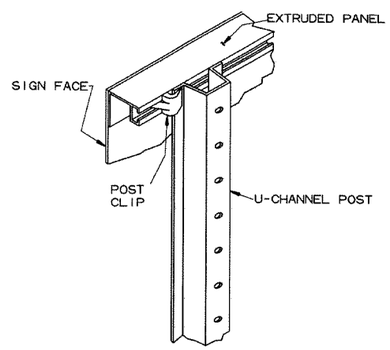
DETAIL D

(3 LB. U-CHANNEL POST)



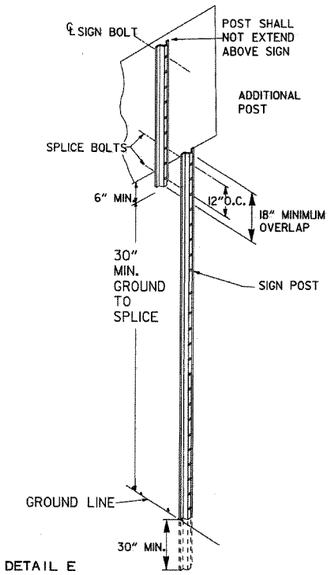
DETAIL B

SHOWING BACK-TO-BACK INSTALLATION



DETAIL C

SHOWING GUIDE SIGN MOUNTING WITH EXTRUDED PANELS



DETAIL E

NOTES:

SIGNS AT LEAST 8' IN LENGTH MAY BE INSTALLED ON THREE 3 LB. POST. IN NO CASE SHALL THERE BE MORE THAN TWO 3 LB. POSTS WITHIN A 7' PATH.

SPLICES NECESSARY TO ATTAIN PROPER MOUNTING HEIGHT SHALL BE AS SHOWN IN DETAIL (E).

NORMAL INSTALLATIONS WILL REQUIRE 1/4" DIA. CARRIAGE BOLTS TO MOUNT SIGNS TO POST AND 5/16" DIA. CARRIAGE BOLTS TO ASSEMBLE THE VARIOUS POST SUPPORTS.

ALL SIGN POSTS SHALL BE PLUMB.

DATE	REVISION	FILMED
10-9-03	REMOVED ROUND POST & REVISED SPACING	10-9-03
10-12-95	MOVED UPPER SPLICE	
6-8-95	REVISED SPLICE DETAIL	6-8-95
2-2-95	REDRAWN	2-2-95

ARKANSAS STATE HIGHWAY COMMISSION

U-CHANNEL POST ASSEMBLIES

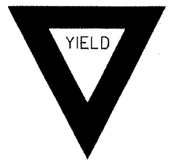
STANDARD DRAWING SHS-2

R1-1



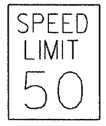
STANDARD 30"X30"
EXPRESSWAY 36"X36"
SPECIAL 48"X48"

R1-2



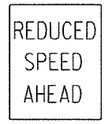
STD. 36"X36"X36"
EXPWY. 48"X48"X48"
FWY. 60"X60"X60"

R2-1



STD. 24"X30"
EXPWY. 36"X48"
FWY. 48"X60"

R2-5A



STD. 24"X30"
EXPWY. 36"X48"
FWY. 48"X60"

R2-5C



STD. 24"X30"
EXPWY. 36"X48"
FWY. 48"X60"

R4-1



STD. 24"X30"
EXPWY. 36"X48"
FWY. 48"X60"

R4-2



STD. 24"X30"
EXPWY. 36"X48"
FWY. 48"X60"

R5-1



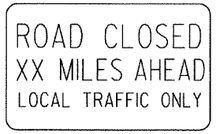
STD. 30"X30"
EXPWY. 36"X36"
SPECIAL 48"X48"

R11-2



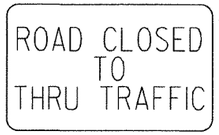
48"X30"

R11-3A



60"X30"

R11-4



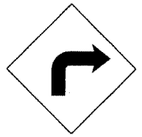
60"X30"

RSP-1



48"X30"

W1-1



STD. 36"X36"
FWY. 48"X48"

W1-2



STD. 36"X36"
FWY. 48"X48"

W1-3



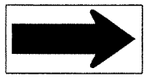
STD. 48"X48"

W1-4



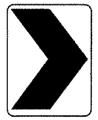
STD. 48"X48"

W1-6



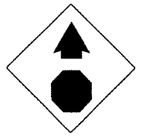
STD. 48"X24"
SPECIAL 60"X30"

W1-8



STD. 18"X24"
SPECIAL 24"X30"
EXPWY. 30"X36"
FWY. 36"X48"

W3-1



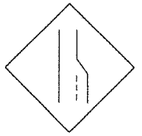
STD. 36"X36"
SPECIAL 48"X48"

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"

W13-1



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"

W1-4b



STD. 48"X48"

R56-1



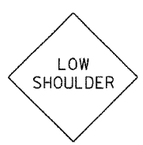
STD. 18"X18"

W8-11



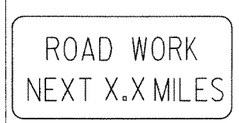
STD. 36"X36"
FWY. 48"X48"

W8-9



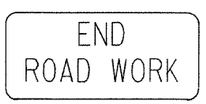
STD. 36"X36"
FWY. 48"X48"

G20-1



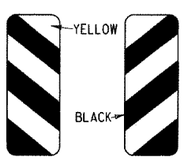
60"X24"

G20-2



48"X24"

OM-3L OM-3R



12"X36"

M4-9



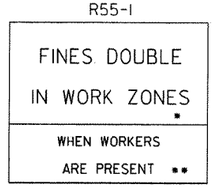
STD. 30"X24"
SPECIAL 48"X36"
SPECIAL 60"X48"

M4-10



48"X18"

R55-1



36"X60"

* USE 6" C LETTERS
** USE 4" D LETTERS

ADVANCE DISTANCES
(XXXX)

500 FT	1/2 MILE
1000 FT	3/4 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.

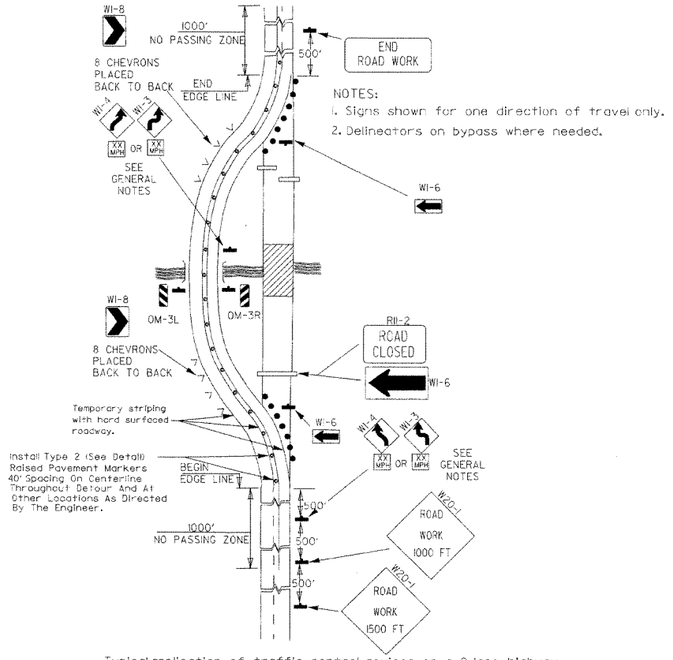
- NOTE: SUPPORTS FOR SIGNS, BARRICADES, AND VERTICAL PANELS THAT ARE DIFFERENT FROM THE REQUIREMENTS SHOWN IN NOTES 4 & 5, BUT MEET THE REQUIREMENTS OF NCHRP-350 OR MANUAL FOR ASSESSING SAFETY HARDWARE (MASH), WILL BE ACCEPTED. COMPLIANCE WITH THE REQUIREMENTS OF NCHRP-350 OR MANUAL FOR ASSESSING SAFETY HARDWARE (MASH) IS REQUIRED FOR ALL PROJECTS.

DATE	REVISION	FILMED
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

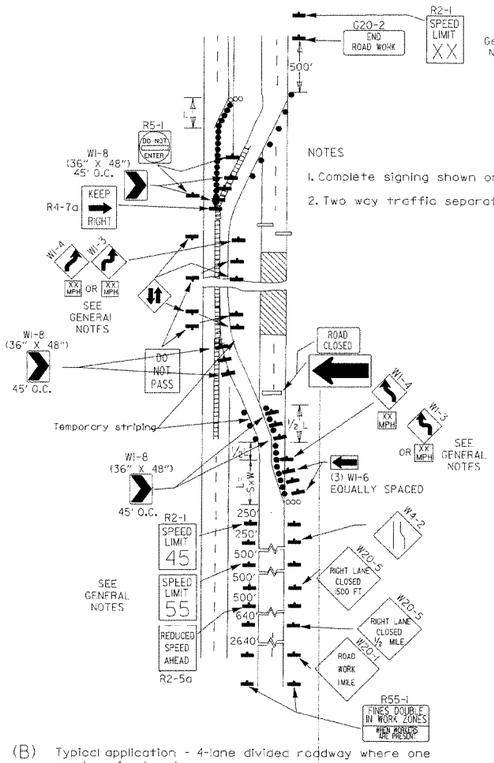
STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION

STANDARD DRAWING TC-1



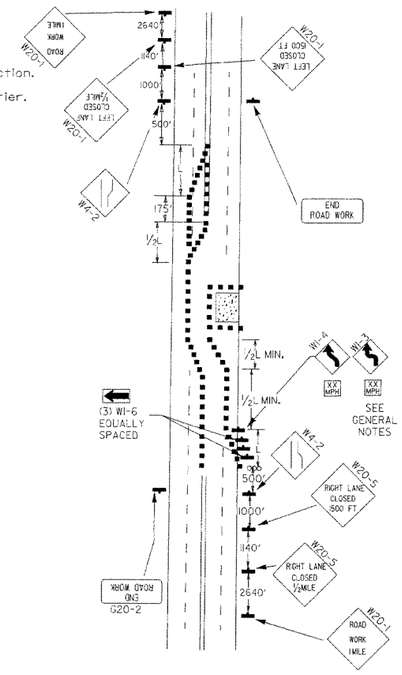
NOTES:
1. Signs shown for one direction of travel only.
2. Delineators on bypass where needed.

(A) Typical application of traffic control devices on a 2-lane highway where the entire roadway is closed and a bypass detour is provided.

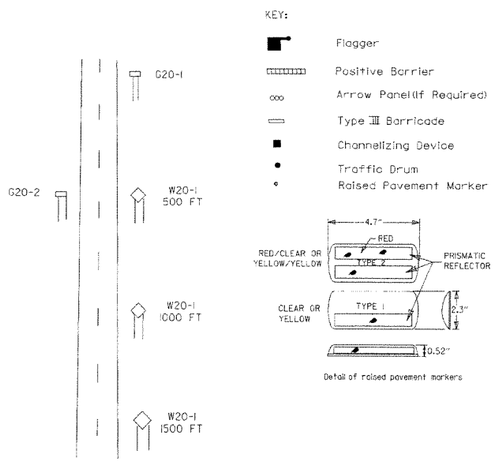


NOTES
1. Complete signing shown only in crossover direction.
2. Two way traffic separated with positive barrier.

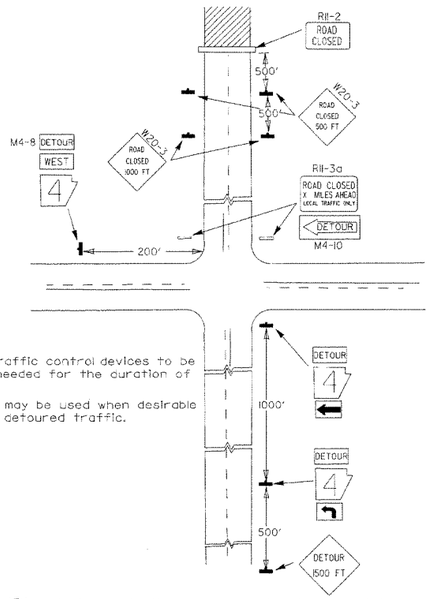
(B) Typical application - 4-lane divided roadway where one roadway is closed.



(C) Typical application - 4-lane undivided roadway where half of the roadway is closed.

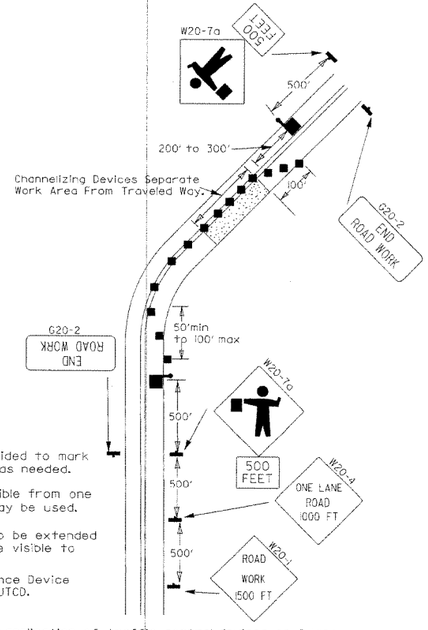


Typical advance warning sign placement



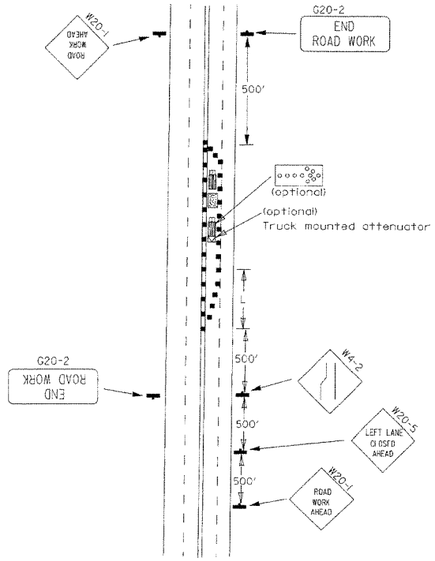
NOTES:
1. Regulatory traffic control devices to be modified as needed for the duration of the detour.
2. Street names may be used when desirable for directing detoured traffic.

(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.

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:

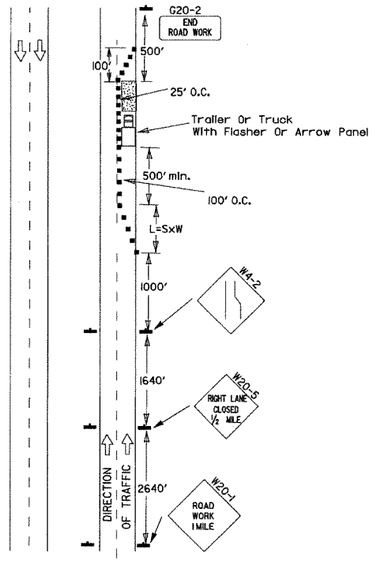
1. Advisory speed posted on WI-3 or WI-4 curve warning signs to be determined at site. Use WI-4 when speed is greater than 30mph and WI-3 when 30mph or less.
2. When the existing speed limit is 55mph and the plans require a speed limit of 45mph, the R2-1(55) shall be omitted and the R2-5A shall be installed 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(65) 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.

DATE	REVISION	FILMED
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 WI-4A	6-8-95
2-2-95	REVISED PER PART VI, MUTCD, SEPT. 3, 1993	
6-15-91	DRAWN AND PLACED IN USE	

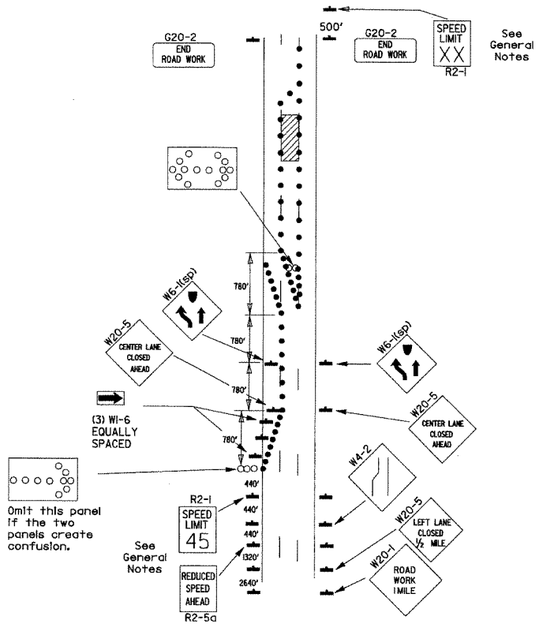
ARKANSAS STATE HIGHWAY COMMISSION

STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION

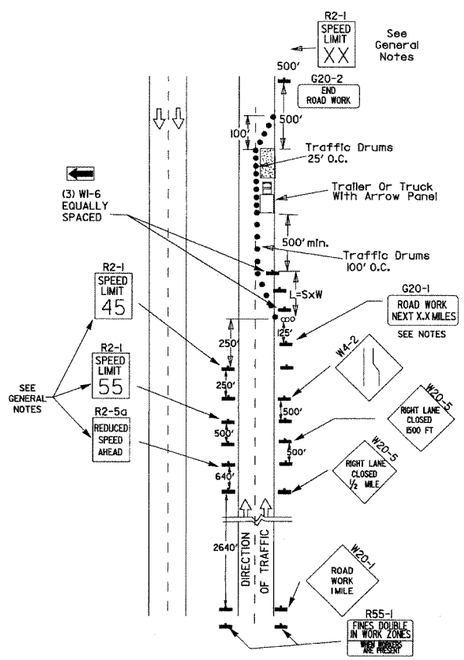
STANDARD DRAWING TC 2



(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.



(C) Typical application - construction operations of intermediate to long term duration on a 4-lane divided roadway where half of the roadway is closed.

KEY:

○○○ Arrow Panel (If Required)

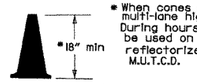
■ Channelizing Device

● Traffic drum

GENERAL NOTES:

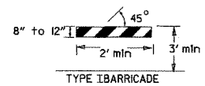
1. A speed limit reduction may be implemented ONLY when designated in the plan or when recommended by the Roadway Design Division.
2. When the existing speed limit is 55mph and the plans require a speed limit of 45mph, the R2-1(55) shall be omitted and the R2-5A shall be installed at that location. Additional R2-1 45mph speed limit signs shall be installed at a maximum of 1 mile 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 1 mile 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 NCHRP-350 or 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.

Channelizing devices



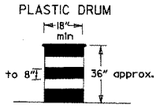
* When cones are used on freeways and multi-lane highways, they shall be 28" min. During hours of darkness, 28" cones shall be used on all roadways, and shall be reflectorized in accordance with the M.U.T.C.D.

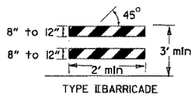
CONES



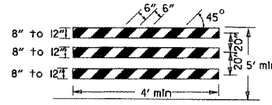
TYPE I BARRICADE

PLASTIC DRUM



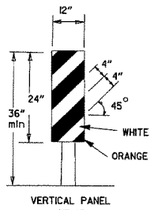


TYPE II BARRICADE



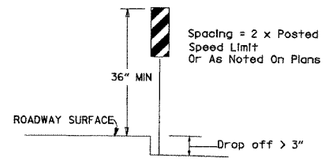
TYPE III BARRICADE

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



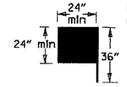
TRAFFIC CONTROL DEVICES
FOR
VERTICAL PAVEMENT DIFFERENTIALS

VERTICAL DIFFERENTIAL	LOCATIONS	TRAFFIC CONTROL
1" to 3"	Centerline, lane lines	W8-11
1" to 3"	Edge of shoulder	W8-9
Greater than 3"	Lane lines	Standard lane closure required
Greater than 3"	Edge of traveled lane	*RSP-1 and vertical panels, drums or concrete barrier
Greater than 3"	Edge of shoulder	*Vertical panels, drums or concrete barrier

* When shown on the plans concrete barrier will be used.

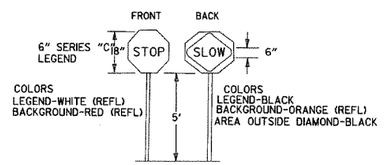
When the shoulder area is used as part of the traveled lane and there is insufficient width to place drums on the remaining shoulder width, then vertical panels shall be used.

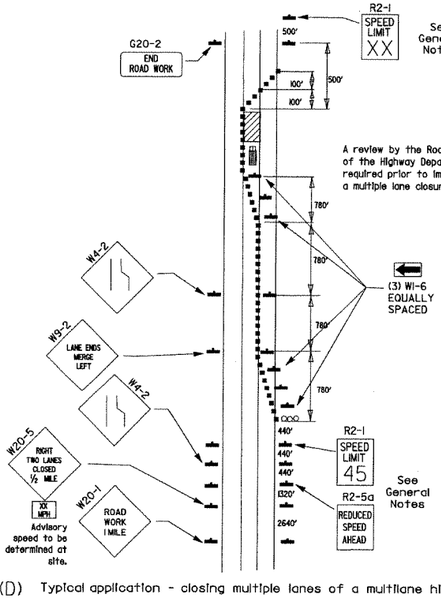
FLAG



Flag shall be of good grade red material

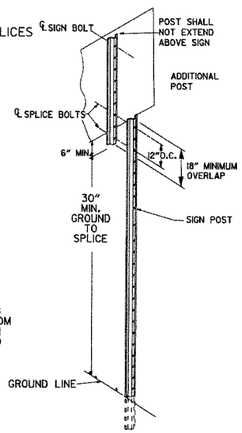
STOP SLOW PADDLE





(D) Typical application - closing multiple lanes of a multilane highway.

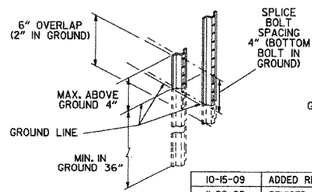
DETAIL OF SPLICES



NOTES: USE SPLICES ONLY WHEN NECESSARY FOR INSTALLATION. TYPICAL INSTALLATION SHOULD HAVE NO SPLICES (SEE STD. DRAWING NO. SHS-2)

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.



DATE	REVISION	FILMED
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	

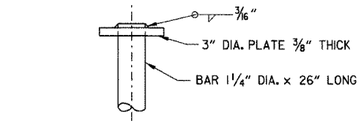
ARKANSAS STATE HIGHWAY COMMISSION

STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION

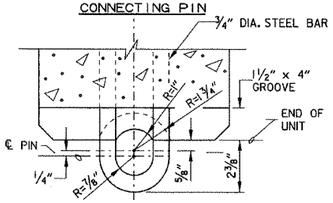
STANDARD DRAWING TC-3

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°, 9 1/2", 2'-1 3/8", 4 3/8"

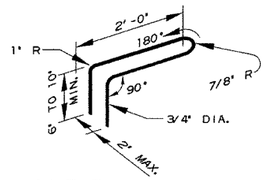


CONNECTING PIN

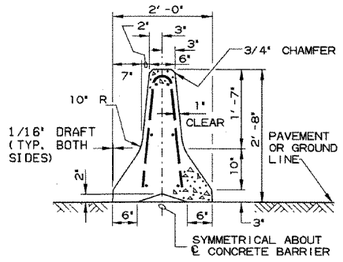


SECTION E-E

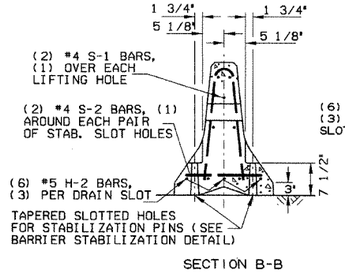
CONNECTION DETAILS



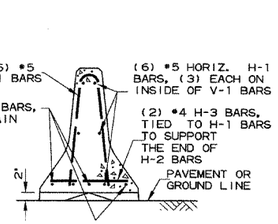
CONNECTION LOOP



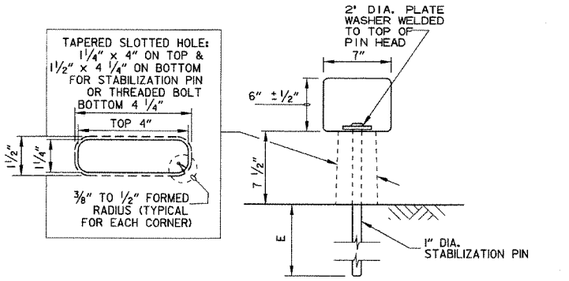
SECTION A-A



SECTION B-B



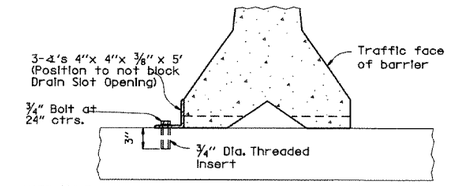
SECTION C-C



BARRIER STABILIZATION DETAIL

ROADWAY SECTION

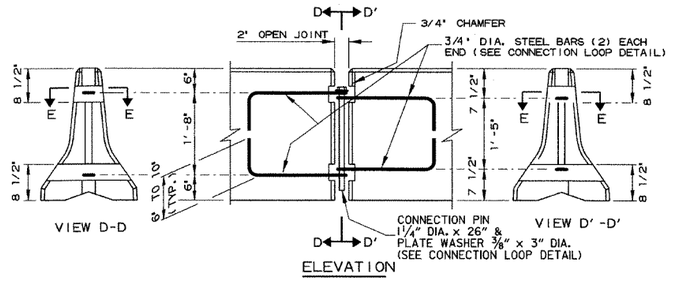
(E) 4" - Concrete Pavement
8" - Asphalt Pavement
12" - Shoulder Areas



NOTE: 3/4" Threaded Inserts shall be cast in place for all new bridge decks and drilled and grouted for existing bridge decks to be retained. 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

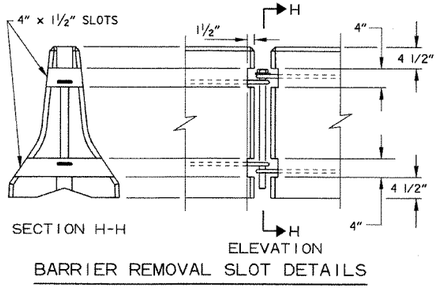
BRIDGE DECKS



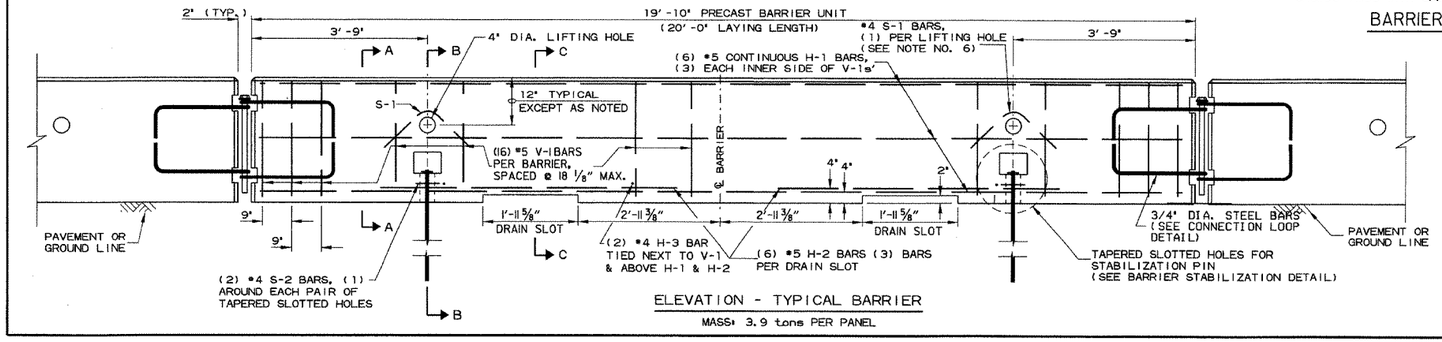
VIEW D-D

VIEW D'-D'

ELEVATION



BARRIER REMOVAL SLOT DETAILS



ELEVATION - TYPICAL BARRIER

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 AHTD 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 NCHRP-350 test level 3 or 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 NCHRP Report 350 or 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 NCHRP Report 350 or Manual For Assessing Safety Hardware (MASH) and include a copy of the Federal Highway Administration's (FHWA) approval letter with all attachments. Precast concrete barrier units shall be fabricated and installed in accordance with crash testing and documentation provided in the FHWA approval letter. 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.

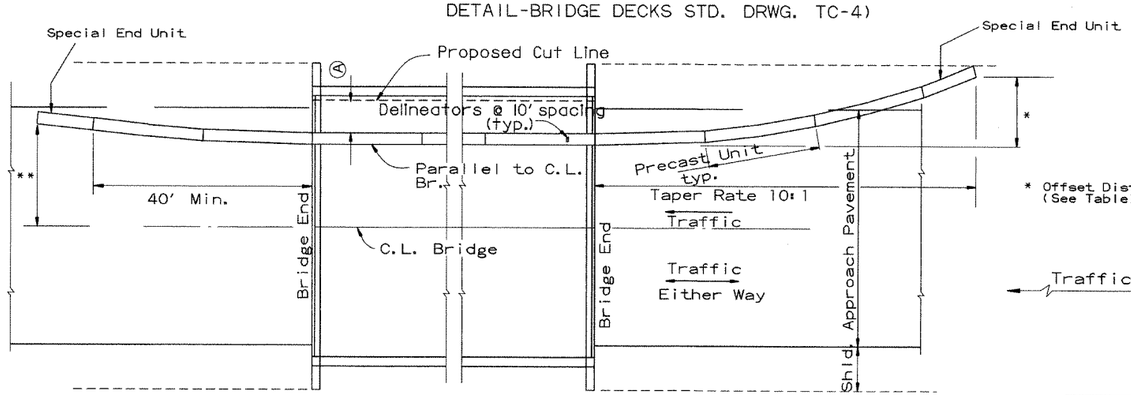
DATE	REVISION	FILMED
10-15-09	ADDED REFERENCE TO MASH	
8-5-09	REV. NOTE 3 CONCERNING DRAIN SLOTS	
11-29-07	REVISED NOTE 3	
5-25-06	DELETED GENERAL NOTE 7	
11-18-04	REVISED BARRIER STABILIZATION DETAIL BRIDGE DECKS	
4-10-03	REVISED GENERAL NOTE 2	
8-22-02	ISSUED NEW DRAWING	

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)

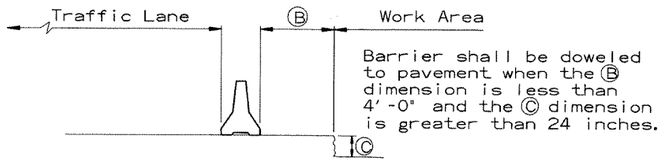


BARRIER PLACEMENT ALONG BRIDGE WITH OFFSET

No Scale

* Offset Distance (See Table)

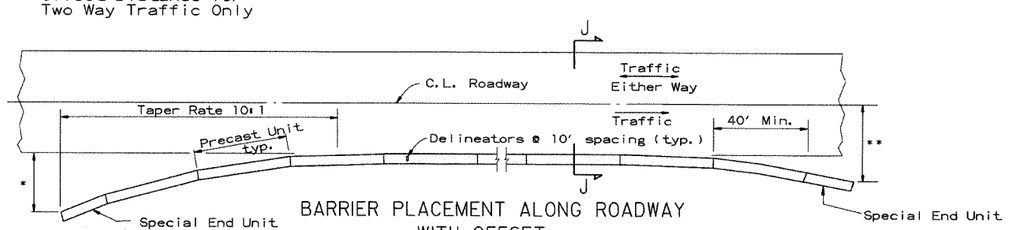
** Offset Distance for Two Way Traffic Only



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

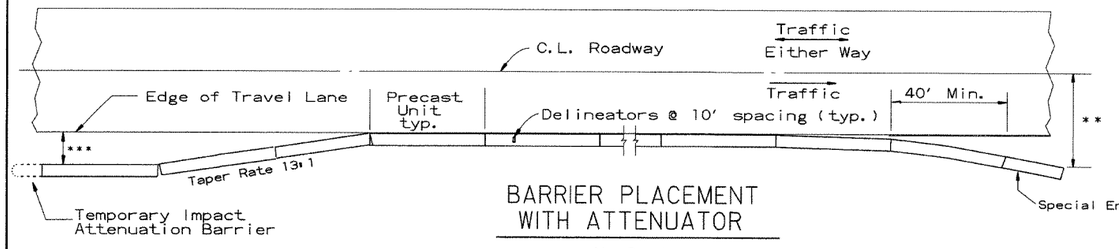
* Offset Distance (See Table)

** Offset Distance For Two Way Traffic Only

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.

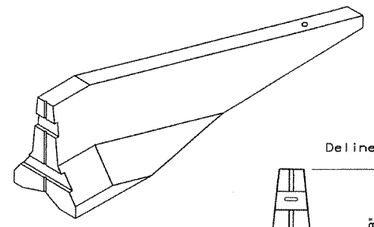


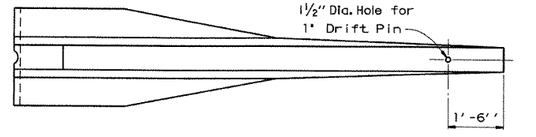
BARRIER PLACEMENT WITH ATTENUATOR

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 an NCHRP-350 or 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
10-15-09	ADDED REFERENCE TO MASH	
5-25-06	REVISED BARRIER PLACEMENT	
8-22-02	ISSUED NEW DRAWING	

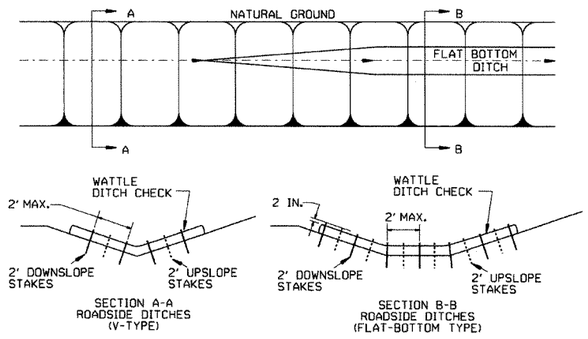
ARKANSAS STATE HIGHWAY COMMISSION

STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION - TEMPORARY PRECAST BARRIER

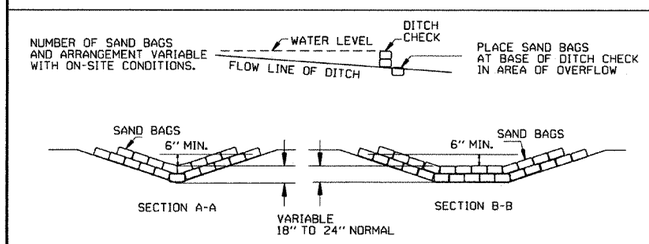
STANDARD DRAWING TC-5

GENERAL NOTES

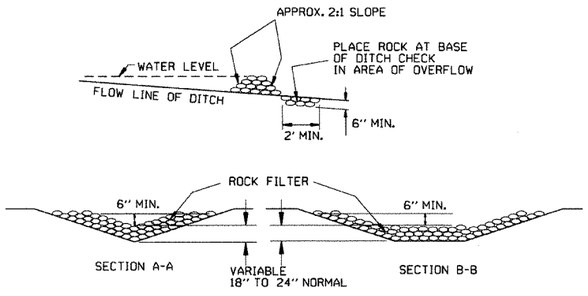
INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.



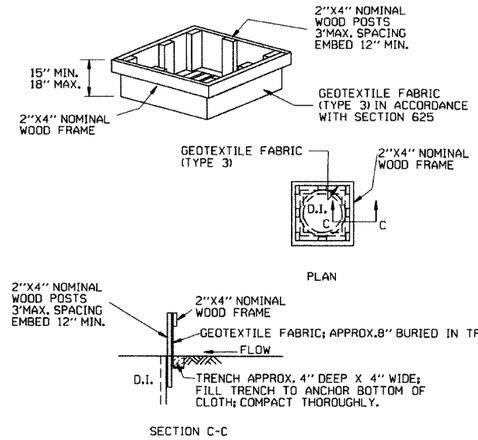
WATTLE DITCH CHECK (E-1)



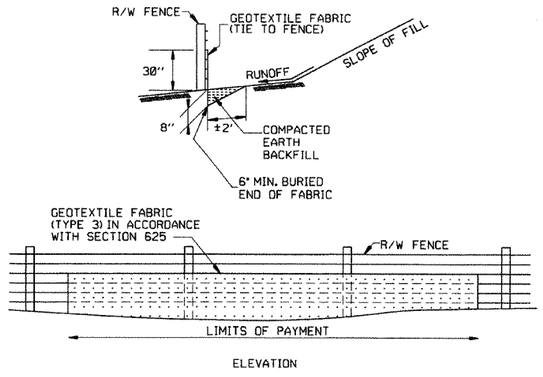
SAND BAG DITCH CHECK (E-5)



ROCK DITCH CHECK (E-6)



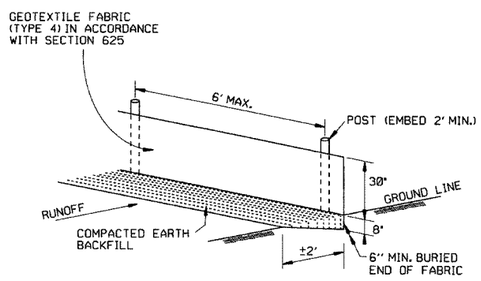
DROP INLET SILT FENCE (E-7)



SILT FENCE ON R/W FENCE (E-4)

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 (E-11)

GENERAL NOTES

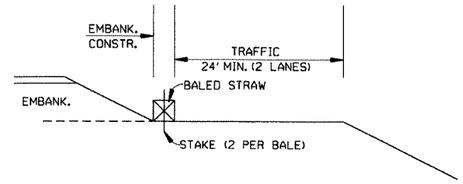
GEOTEXTILE FABRIC SHALL BE SPLICED TOGETHER WITH A SEWN SEAM ONLY AT A SUPPORT POST OR TWO SECTIONS OF FENCE MAY BE OVERLAPPED INSTEAD. PAYMENT OF ADDITIONAL MATERIAL FOR OVERLAP WILL NOT BE MADE.

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.



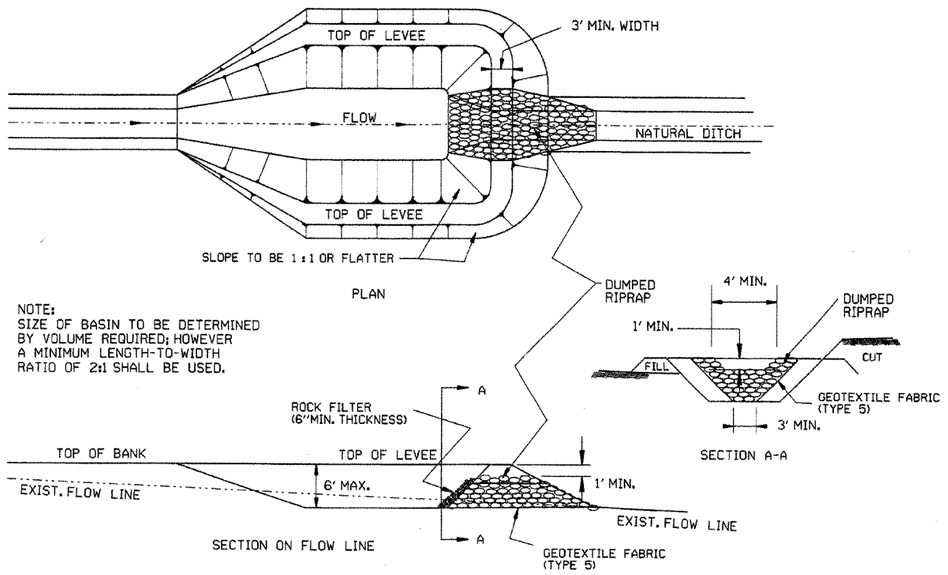
BALED STRAW FILTER BARRIER (E-2)

DATE	REVISION	FILMED
12-15-11	DELETED BALED STRAW DITCH CHECK & ADDED WATTLE DITCH CHECK	
11-18-98	ADDED NOTES	
7-02-98	ADDED BALED STRAW FILTER BARRIER (E-2)	
7-20-95	REVISED SILT FENCE E-4 AND E-11	7-20-95
7-15-94	REV. E-4 & E-11 MIN. 13" BURIED END OF FABRIC	
6-2-94	REVISED E-1,4,7 & 11; DELETED E-2 & 3	6-2-94
4-1-93	REDRAWN	
10-1-92	REDRAWN	
8-2-76	ISSUED R.D.M.	298-7-28-76

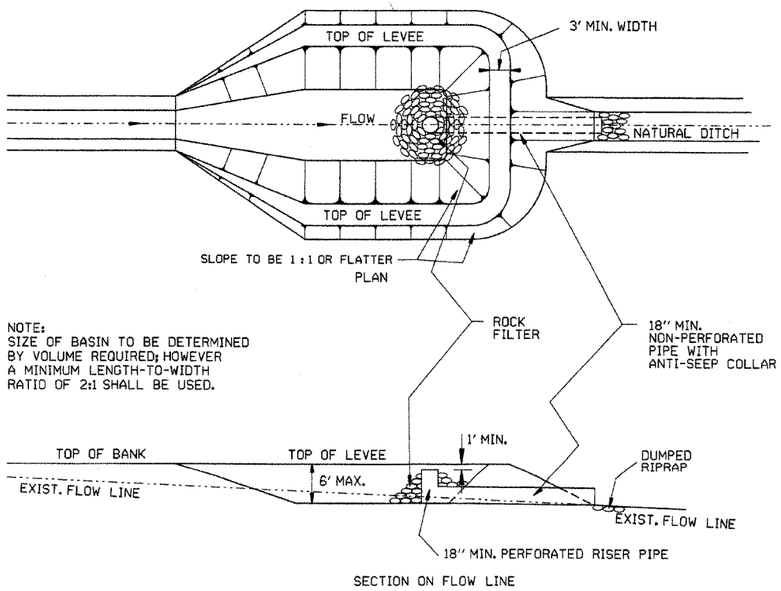
ARKANSAS STATE HIGHWAY COMMISSION

TEMPORARY EROSION CONTROL DEVICES

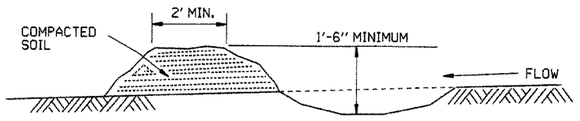
STANDARD DRAWING TEC-1



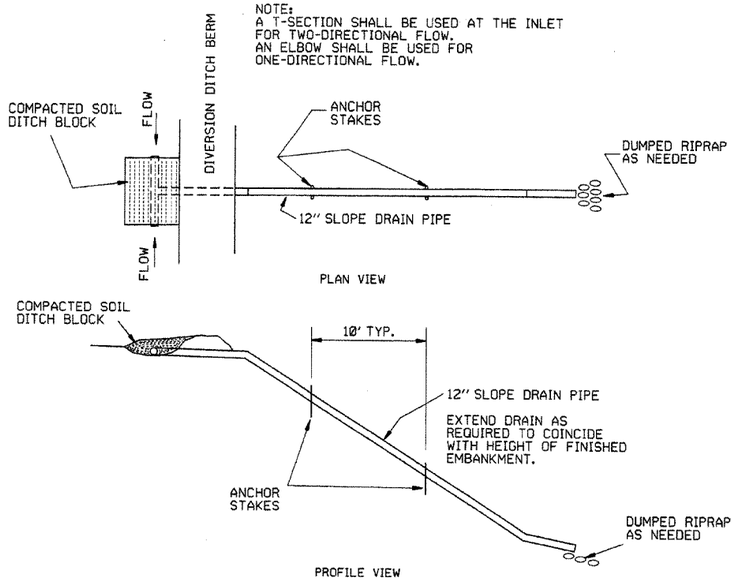
SEDIMENT BASIN WITH RIPRAP OUTLET (E-9)



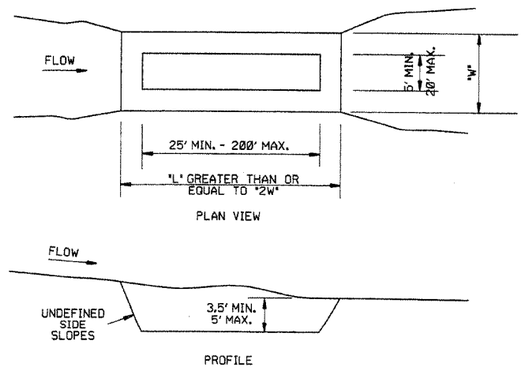
SEDIMENT BASIN WITH PIPE OUTLET (E-10)



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

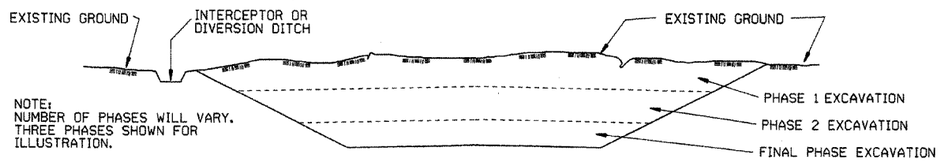
STANDARD DRAWING TEC-2

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



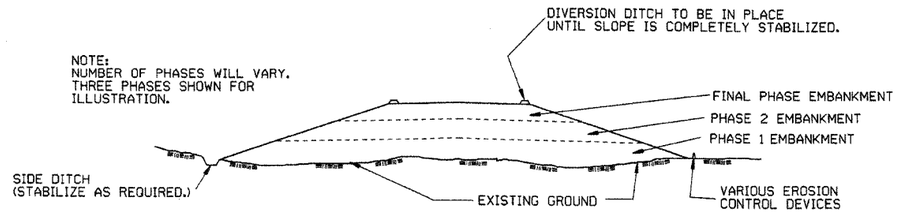
GENERAL NOTE

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.

DATE	REVISION	FILMED
11-03-94	CORRECTED SPELLING	
6-2-94	Drawn & Issued	6-2-94

ARKANSAS STATE HIGHWAY COMMISSION

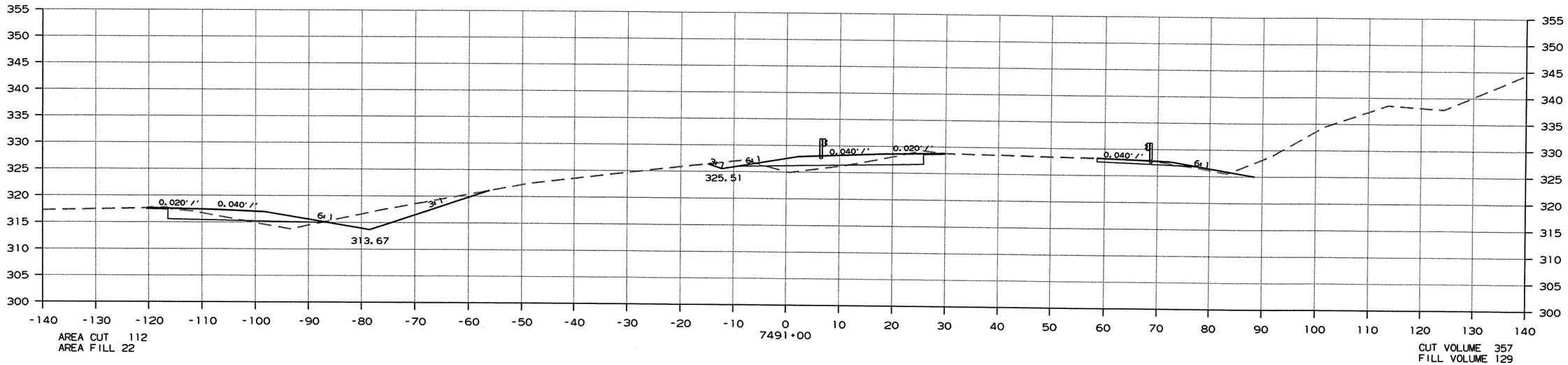
TEMPORARY EROSION CONTROL DEVICES

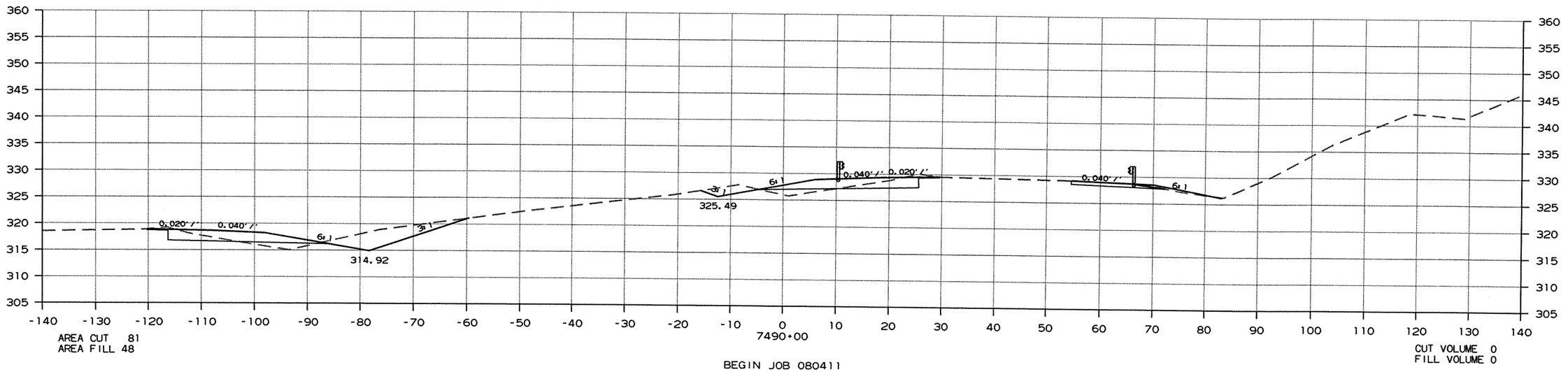
STANDARD DRAWING TEC-3

stdtec3.dgn

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	110	191

(2) CROSS SECTIONS





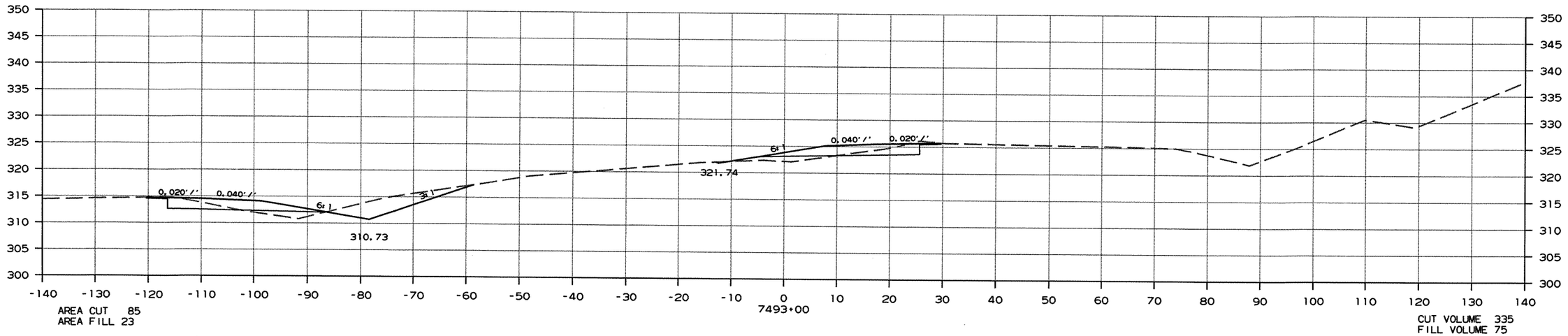
BEGIN JOB 080411

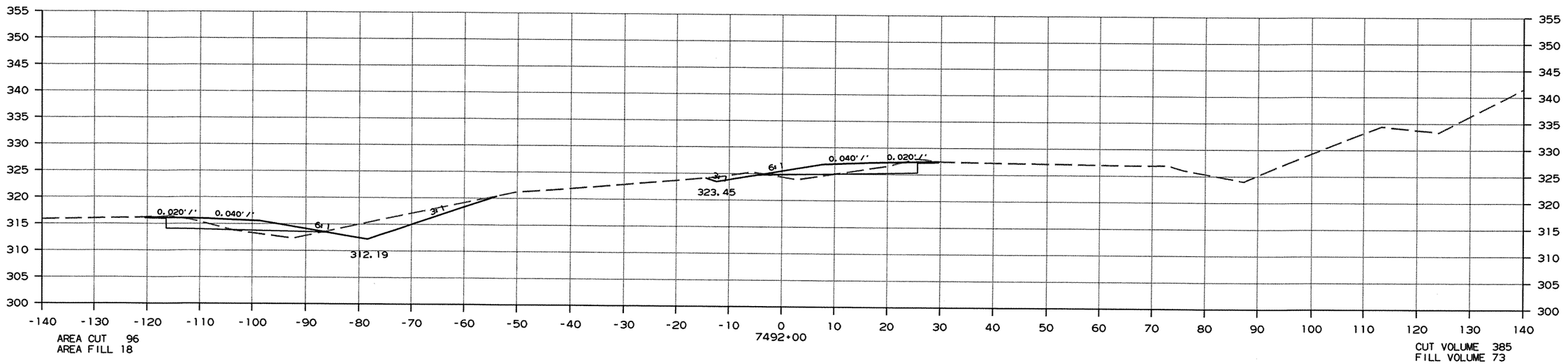
CROSS SECTION STA. 7490+00 TO STA. 7491+00

R080411.DGN 4/18/2012

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	111	191

(2) CROSS SECTIONS





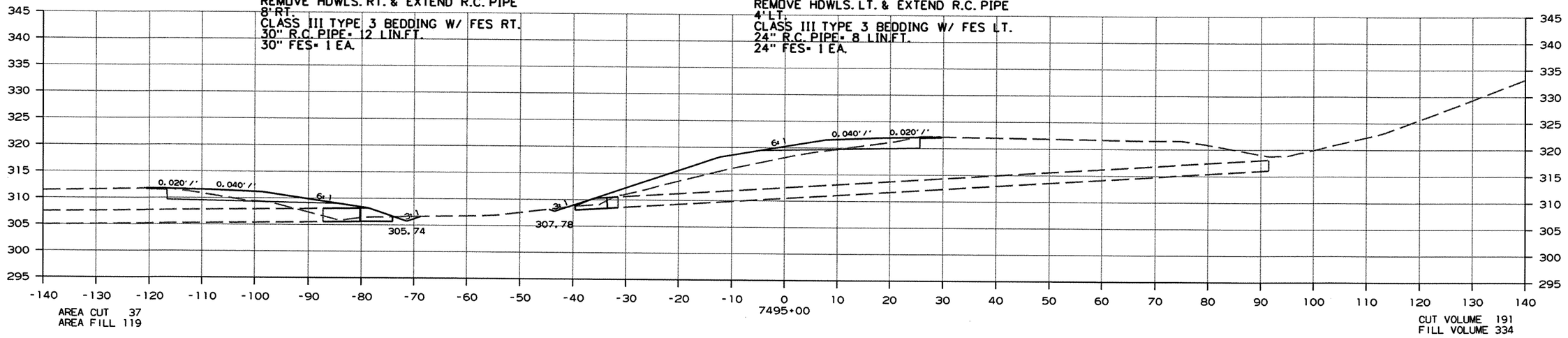
CROSS SECTION STA. 7492+00 TO STA. 7493+00

R080411.DGN 4/18/2012

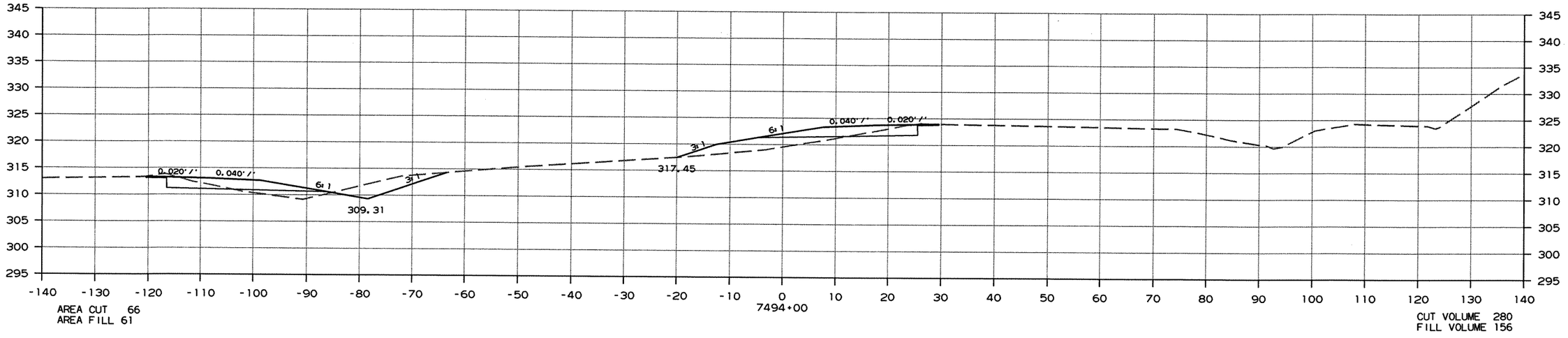
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	112	191

(2) CROSS SECTIONS

STA. 7494+97 IN PLACE
30" x 112' R.C. PIPE CULVERT
UNDER LT. LANES W. HDWLS. LT & RT.
REMOVE HDWLS. RT. & EXTEND R.C. PIPE
8' RT.
CLASS III TYPE 3 BEDDING W/ FES RT.
30" R.C. PIPE- 12 LIN.FT.
30" FES- 1 EA.



STA. 7494+97 IN PLACE
24" x 122' R.C. PIPE CULVERT
UNDER RT. LANES W. HDWLS. LT & RT.
REMOVE HDWLS. LT. & EXTEND R.C. PIPE
4' LT.
CLASS III TYPE 3 BEDDING W/ FES LT.
24" R.C. PIPE- 8 LIN.FT.
24" FES- 1 EA.

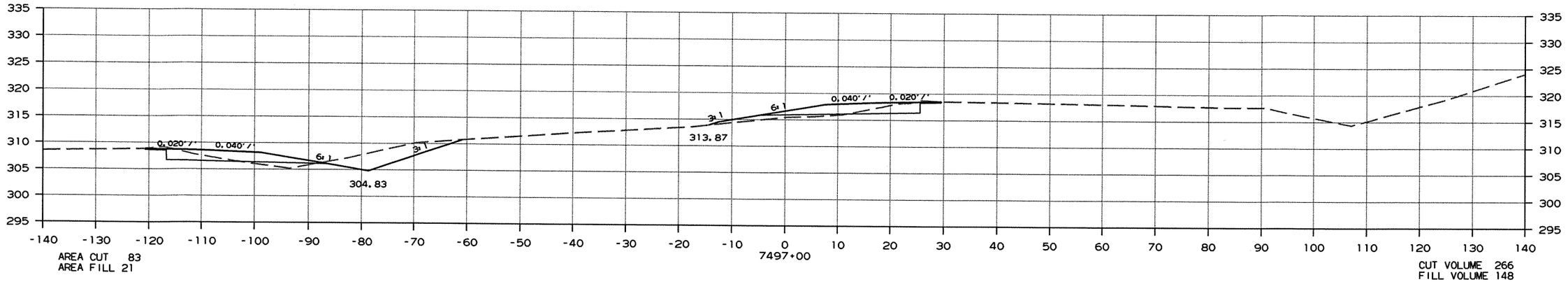


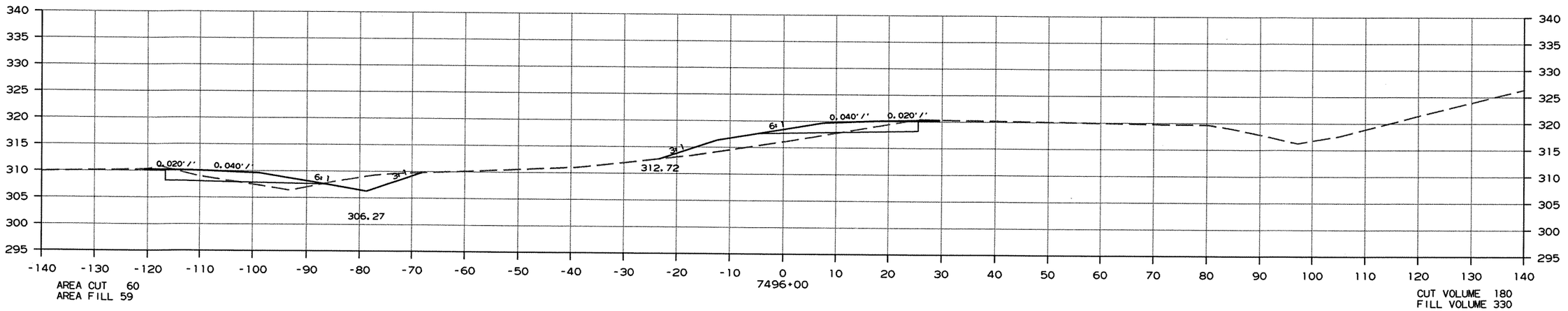
CROSS SECTION STA. 7494+00 TO STA. 7495+00

R080411.DGN 4/18/2012

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	113	191

(2) CROSS SECTIONS





CROSS SECTION STA. 7496+00 TO STA. 7497+00

R080411.DGN 4/18/2012

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	114	191

(2) CROSS SECTIONS

STA. 7499+97 IN PLACE
TYPE H DROP INLET
RETAIN

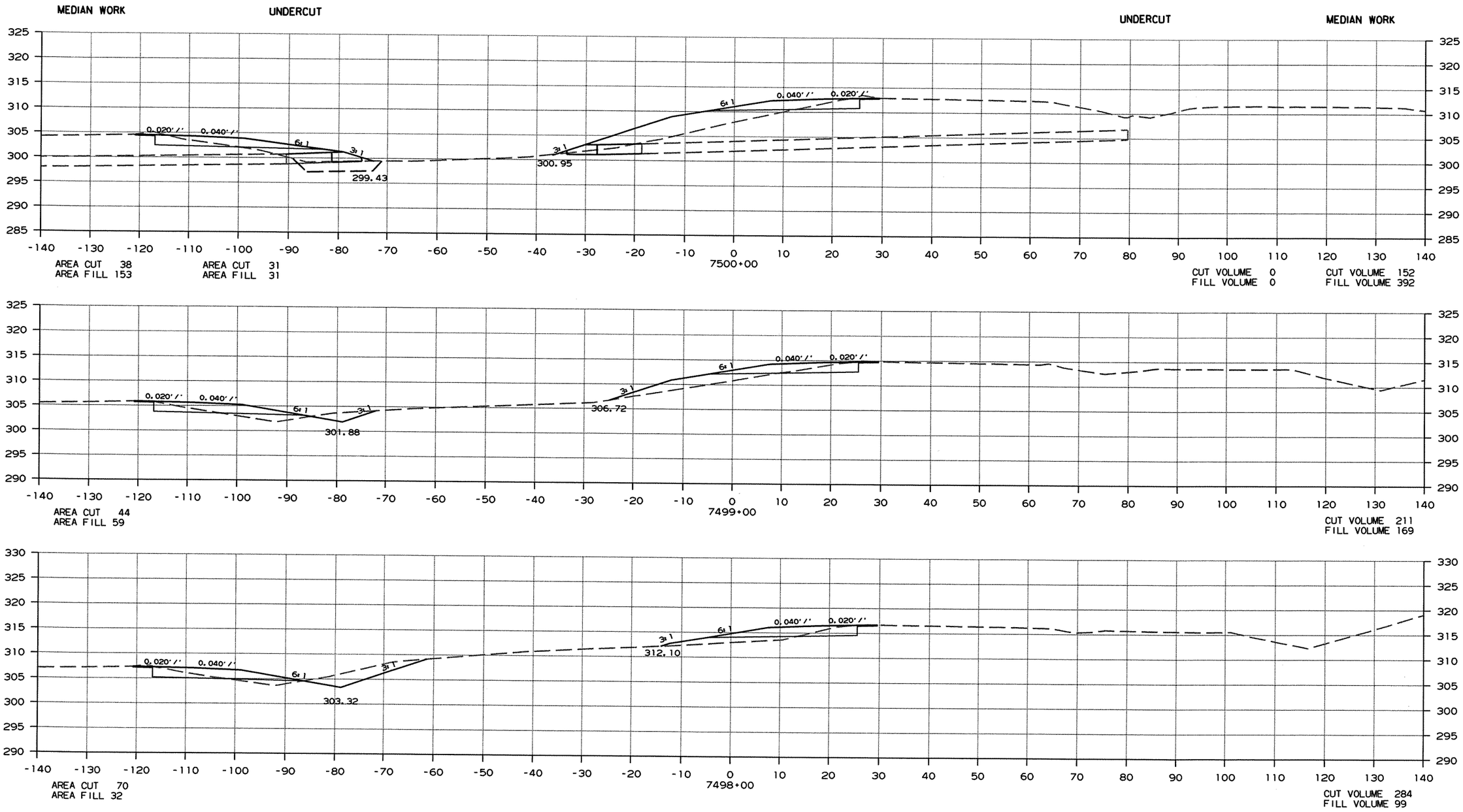
STA. 7499+97 IN PLACE
24" x 138' R.C. PIPE CULVERT TO LT.
RETAIN
24" x 82' R.C. PIPE CULVERT
UNDER LT. LANES W. HDWLS. LT & RT.
REMOVE HDWLS. RT. & EXTEND R.C. PIPE
10' RT.
CLASS III TYPE 3 BEDDING W/ FES RT.
24" R.C. PIPE- 14 LIN.FT.
24" FES- 1 EA.

STA. 7499+97 IN PLACE
TYPE H DROP INLET
RETAIN

STA. 7499+97 IN PLACE
24" x 64' R.C. PIPE CULVERT TO RT.
RETAIN
24" x 96' R.C. PIPE CULVERT
UNDER RT. LANES W. HDWLS. LT & RT.
REMOVE HDWLS. LT. & EXTEND R.C. PIPE
10' LT.
CLASS III TYPE 3 BEDDING W/ FES LT.
24" R.C. PIPE- 14 LIN.FT.
24" FES- 1 EA.

AREA

VOLUME

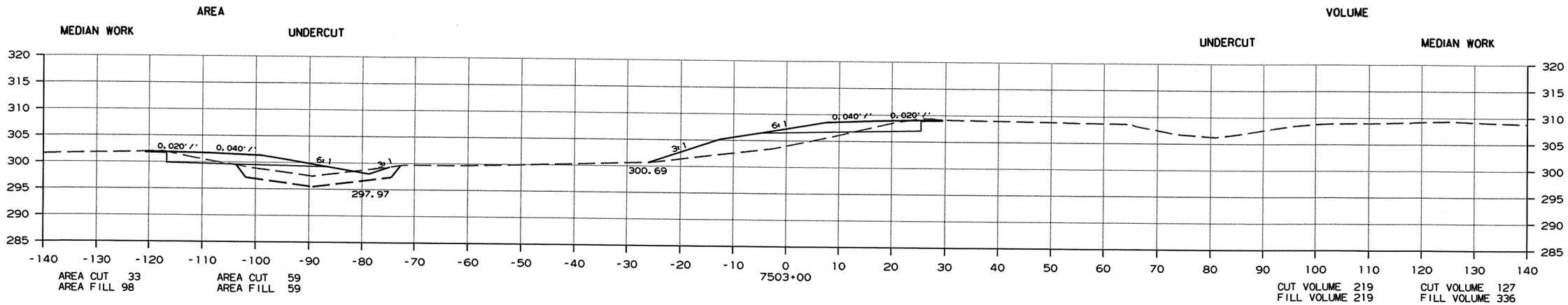


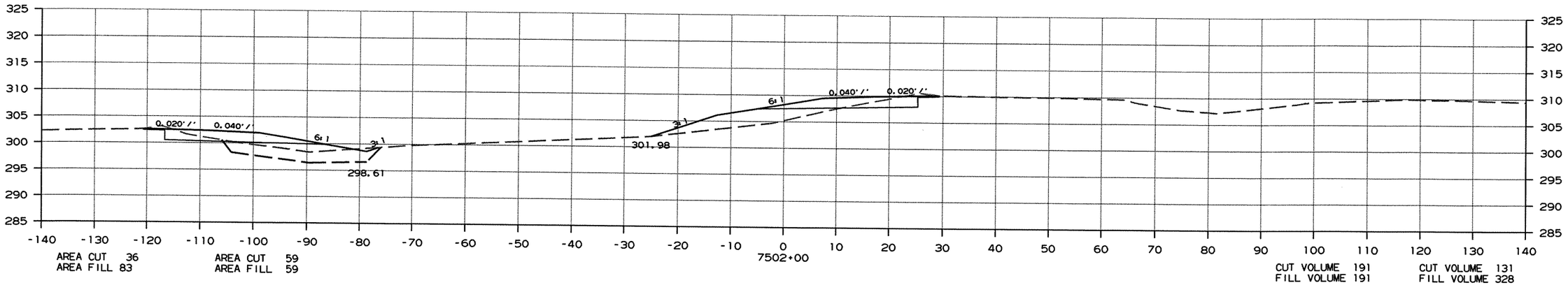
CROSS SECTION STA. 7498+00 TO STA. 7500+00

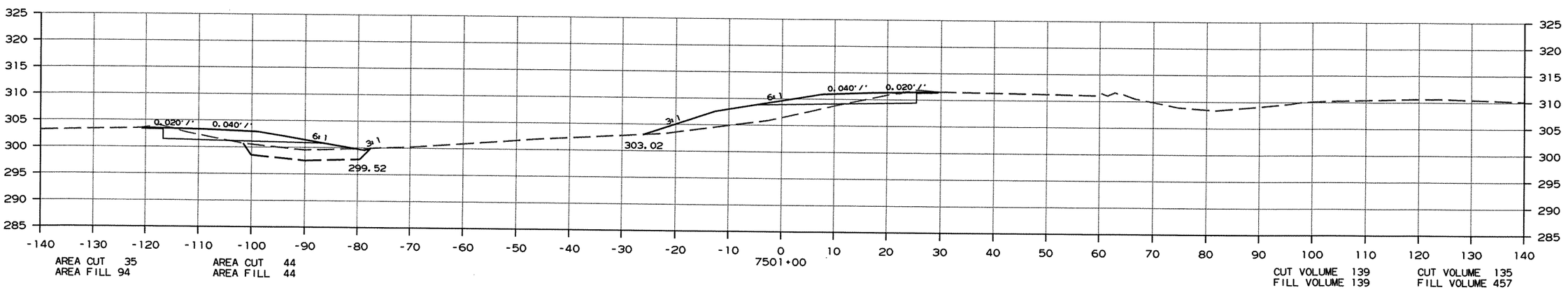
R080411.DGN 4/18/2012

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	115	191

(2) CROSS SECTIONS







CROSS SECTION STA. 7501+00 TO STA. 7503+00

R080411.DGN 4/18/2012

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	116	191

(2) CROSS SECTIONS

STA. 7505+97 IN PLACE
TYPE H DROP INLET
RETAIN

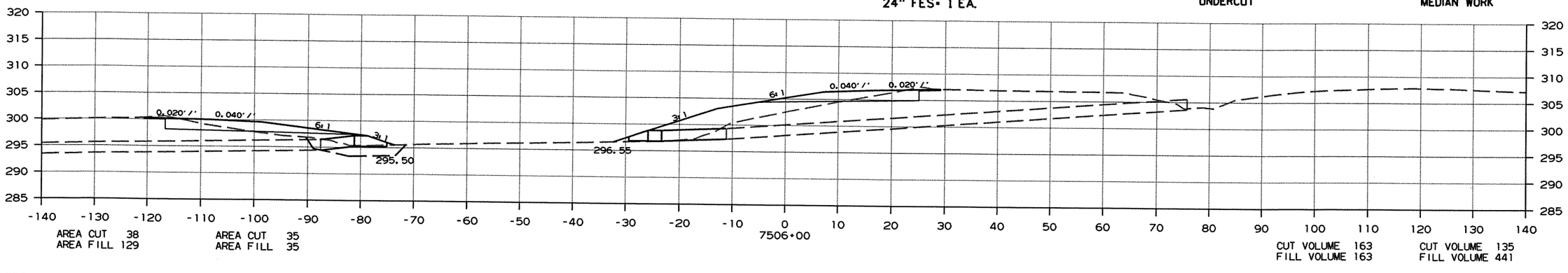
STA. 7505+97 IN PLACE
24" x 134' R.C. PIPE CULVERT TO LT.
RETAIN
24" x 76' R.C. PIPE CULVERT
UNDER LT. LANES W. HDWLS. LT & RT.
REMOVE HDWLS. RT. & EXTEND R.C. PIPE
8' RT.
CLASS III TYPE 3 BEDDING W. FES RT.
24" R.C. PIPE- 12 LIN.FT.
24" FES- 1 EA.

STA. 7505+97 IN PLACE
TYPE H DROP INLET
RETAIN

STA. 7505+97 IN PLACE
24" x 134' R.C. PIPE CULVERT TO RT.
RETAIN
24" x 86' R.C. PIPE CULVERT
UNDER RT. LANES W. HDWLS. LT & RT.
REMOVE HDWLS. LT. & EXTEND R.C. PIPE
14' LT.
CLASS III TYPE 3 BEDDING W. FES LT.
24" R.C. PIPE- 18 LIN.FT.
24" FES- 1 EA.

AREA — VOLUME

MEDIAN WORK — UNDERCUT — UNDERCUT — MEDIAN WORK

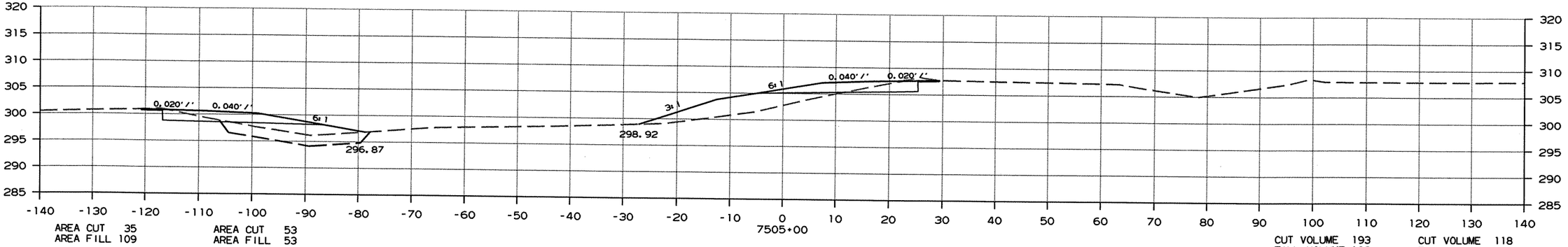


AREA CUT 38
AREA FILL 129

AREA CUT 35
AREA FILL 35

CUT VOLUME 163
FILL VOLUME 163

CUT VOLUME 135
FILL VOLUME 441

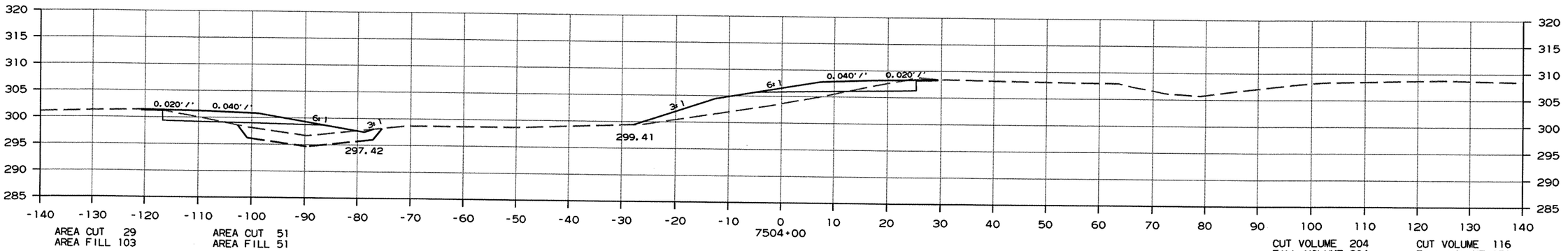


AREA CUT 35
AREA FILL 109

AREA CUT 53
AREA FILL 53

CUT VOLUME 193
FILL VOLUME 193

CUT VOLUME 118
FILL VOLUME 392



AREA CUT 29
AREA FILL 103

AREA CUT 51
AREA FILL 51

CUT VOLUME 204
FILL VOLUME 204

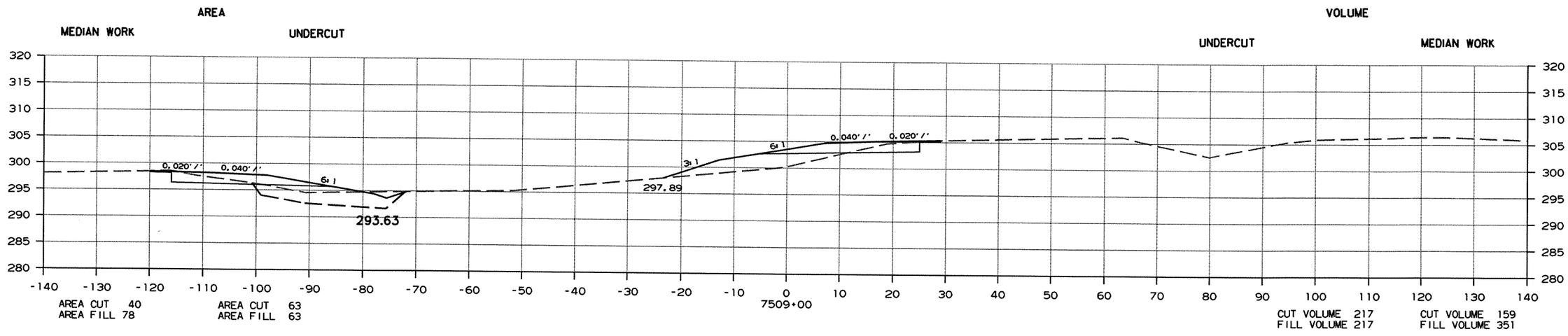
CUT VOLUME 116
FILL VOLUME 372

CROSS SECTION STA. 7504+00 TO STA. 7506+00

R080411.DGN 4/18/2012

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	117	191

(2) CROSS SECTIONS

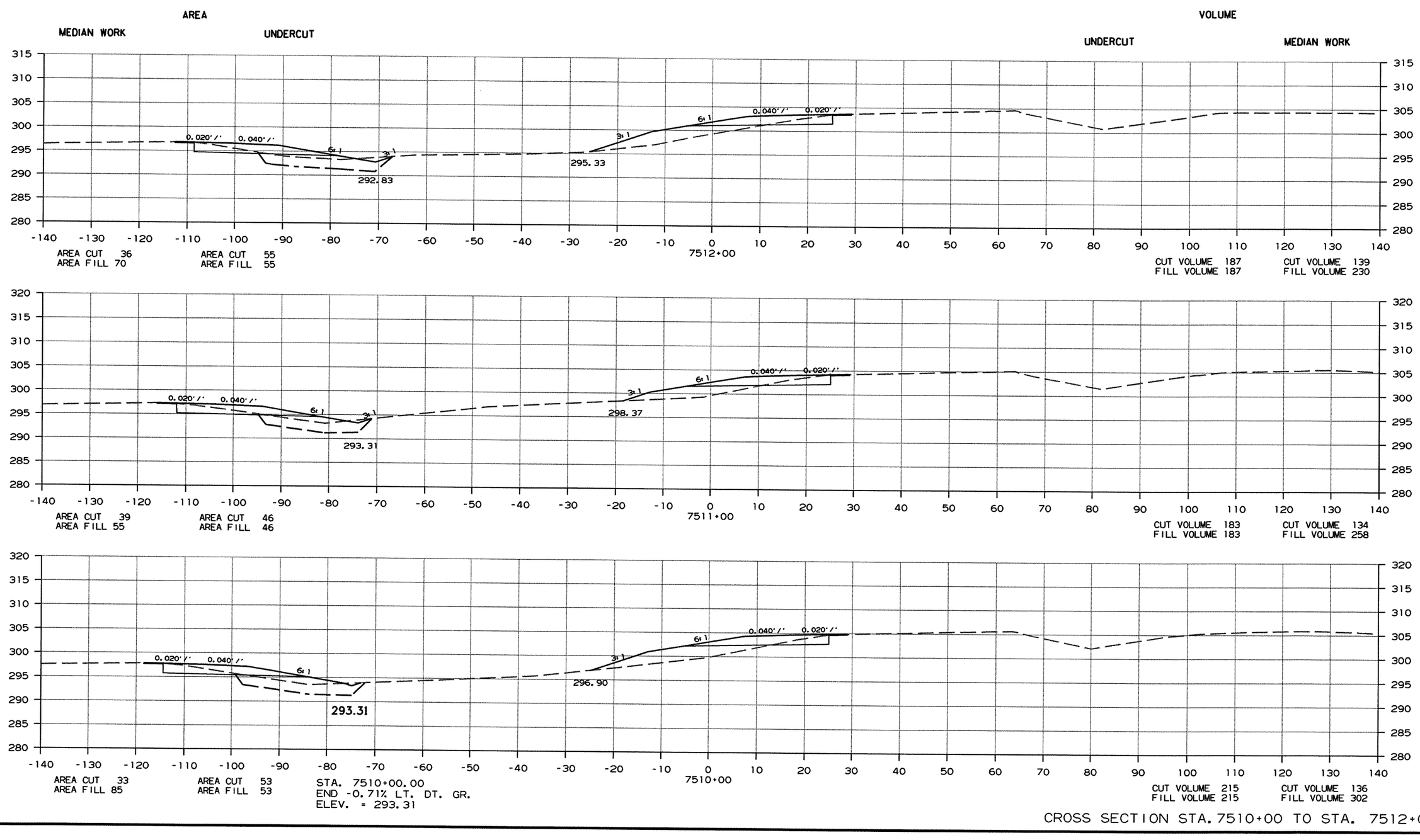


CROSS SECTION STA. 7507+00 TO STA. 7509+00

R080411.DGN 4/18/2012

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	118	191

(2) CROSS SECTIONS

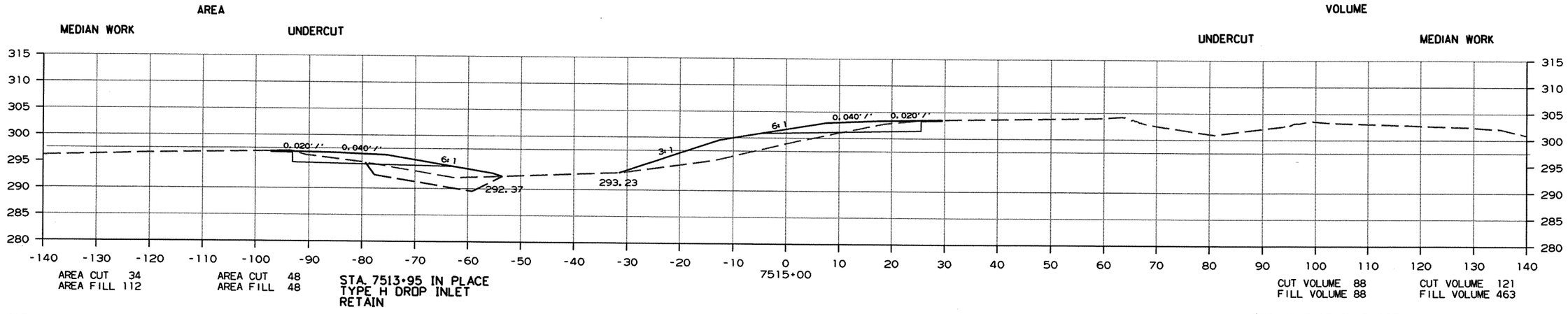


CROSS SECTION STA. 7510+00 TO STA. 7512+00

R080411.DGN 4/18/2012

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	119	191

(2) CROSS SECTIONS

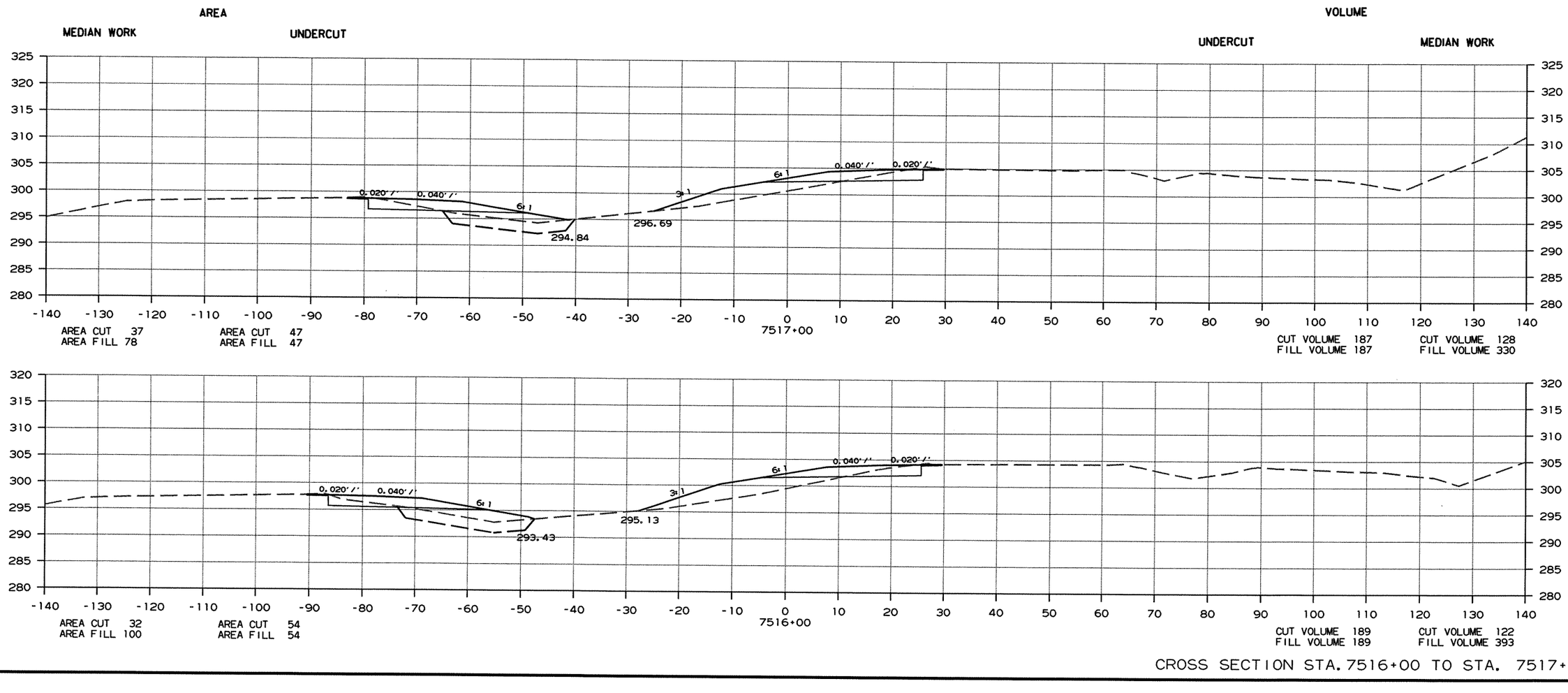


CROSS SECTION STA. 7513+00 TO STA. 7515+00

R080411.DGN 4/18/2012

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	120	191

(2) CROSS SECTIONS

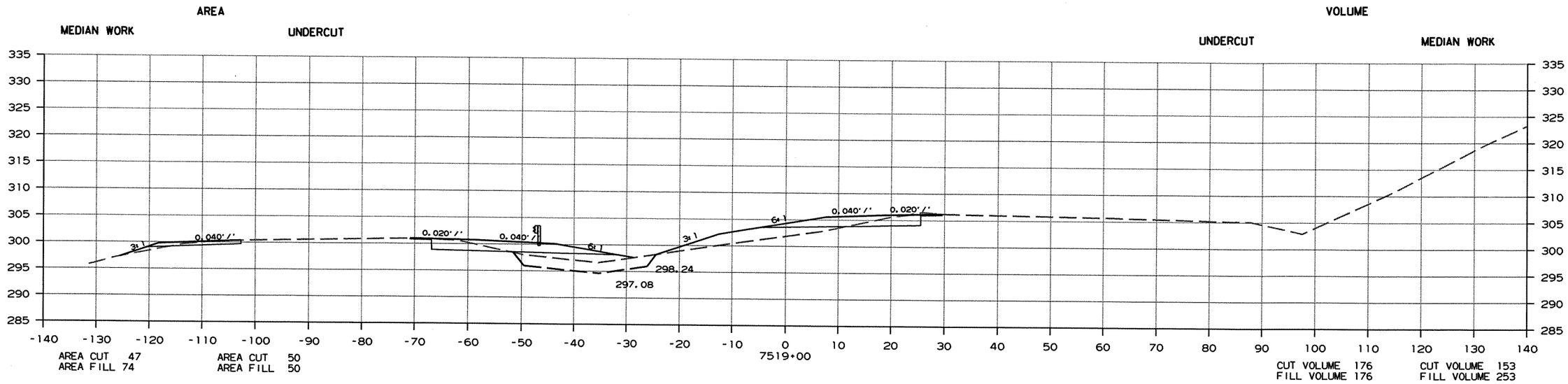


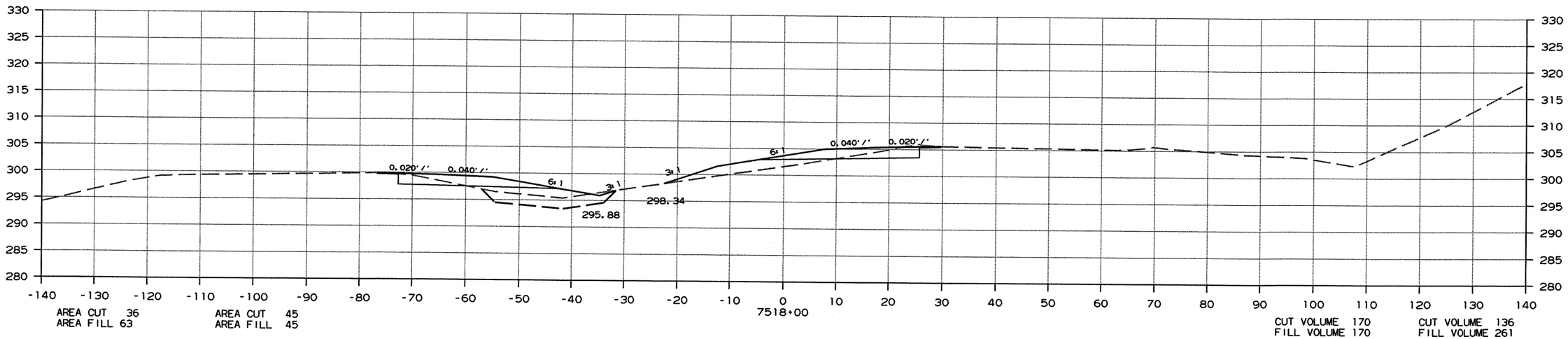
CROSS SECTION STA. 7516+00 TO STA. 7517+00

R080411.DGN 4/18/2012

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	121	191

(2) CROSS SECTIONS



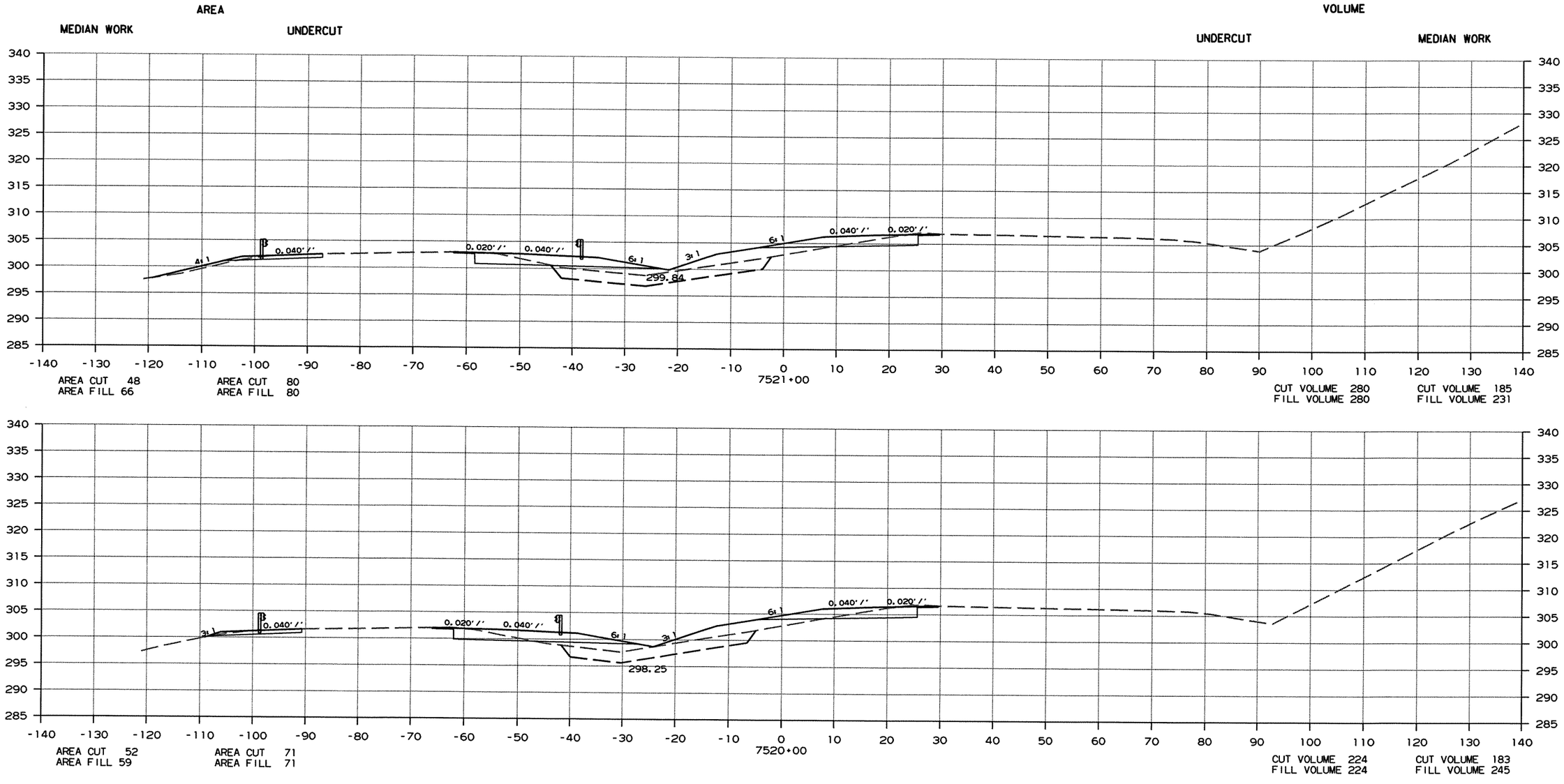


CROSS SECTION STA. 7518+00 TO STA. 7519+00

R080411.DGN 4/18/2012

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	122	191

(2) CROSS SECTIONS

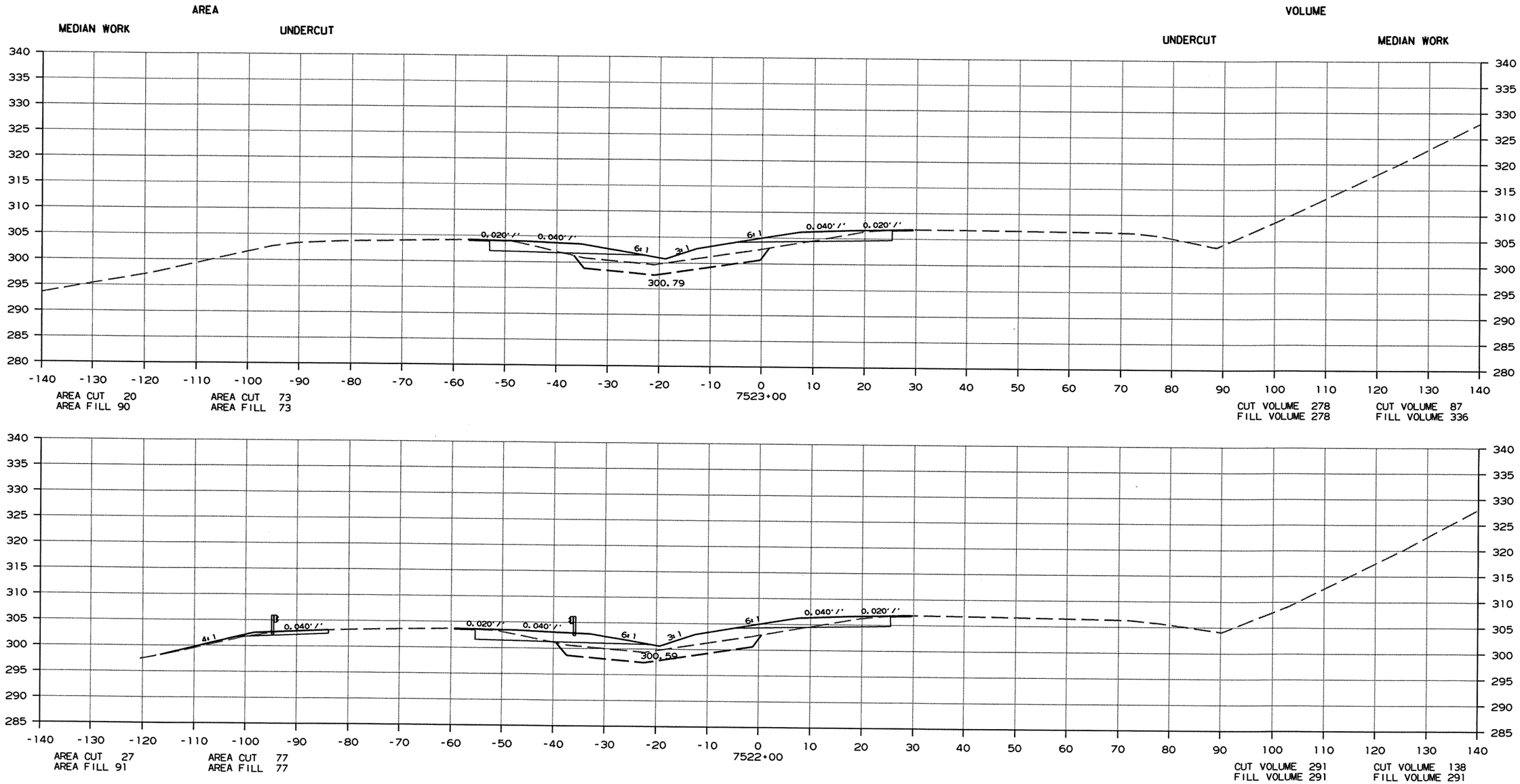


CROSS SECTION STA. 7520+00 TO STA. 7521+00

R080411.DGN 4/18/2012

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	123	191

(2) CROSS SECTIONS

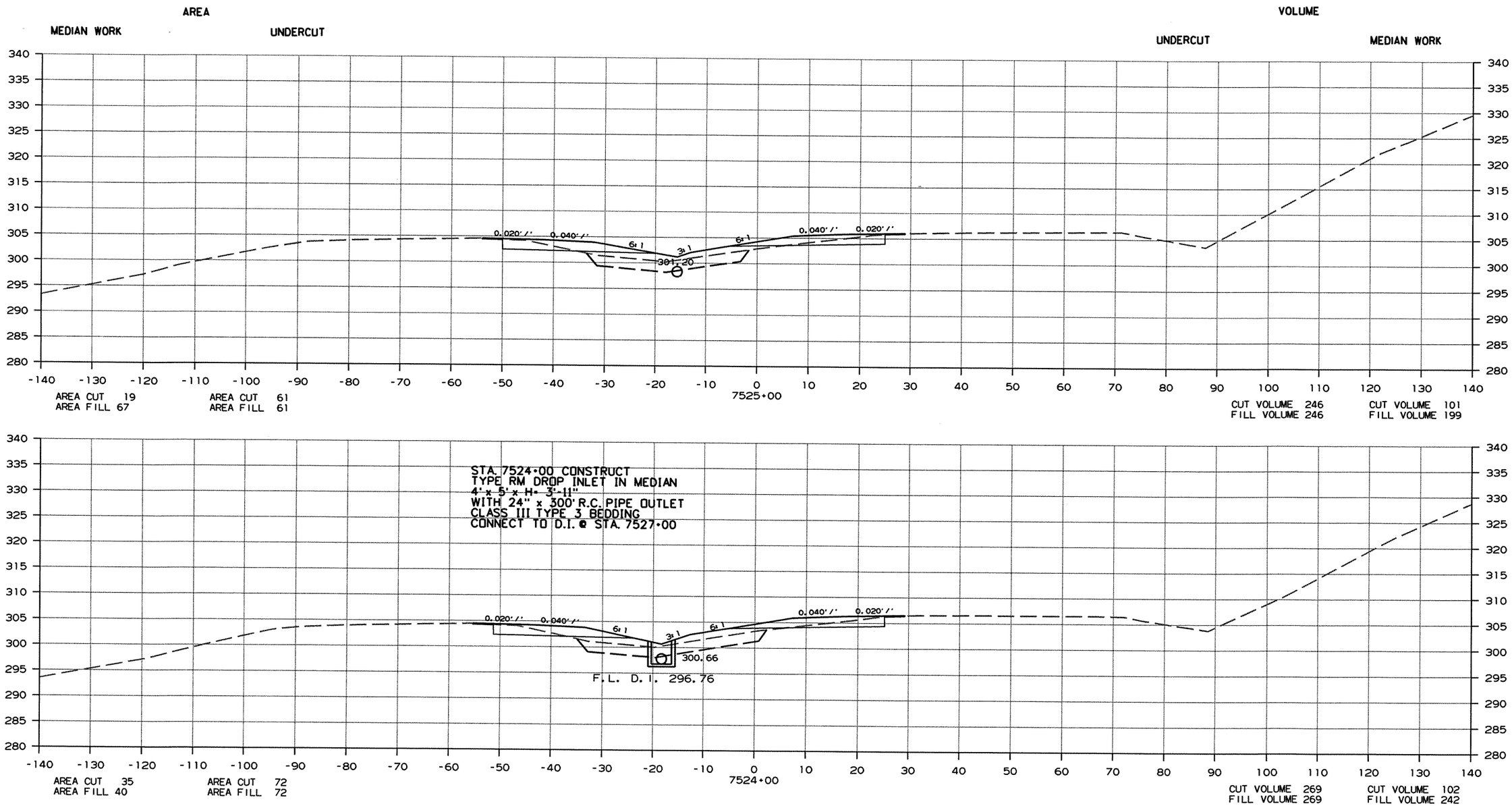


CROSS SECTION STA. 7522+00 TO STA. 7523+00

R080411.DGN 4/18/2012

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	124	191

(2) CROSS SECTIONS

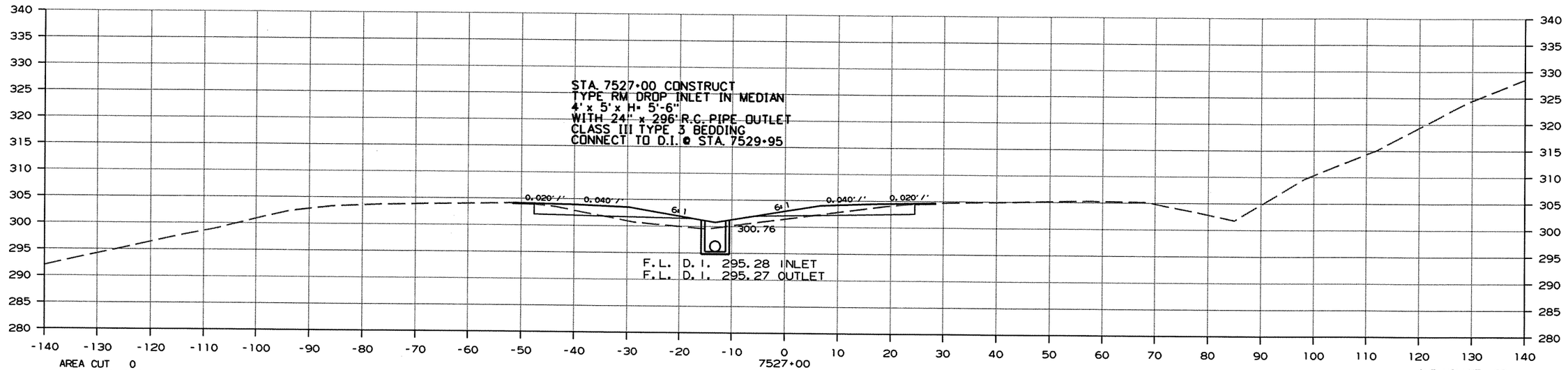


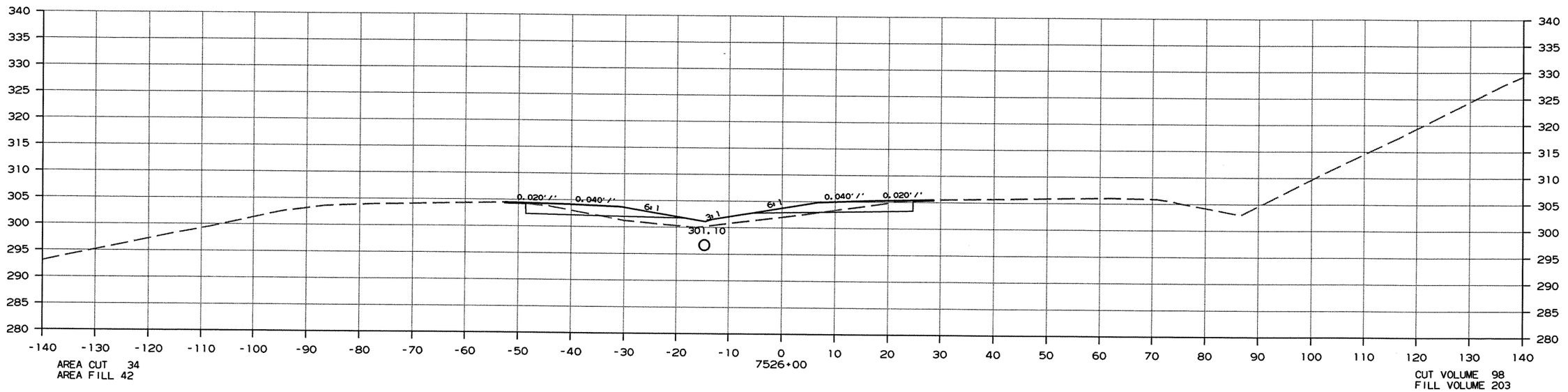
CROSS SECTION STA. 7524+00 TO STA. 7525+00

R080411.DGN 4/18/2012

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	125	191

(2) CROSS SECTIONS



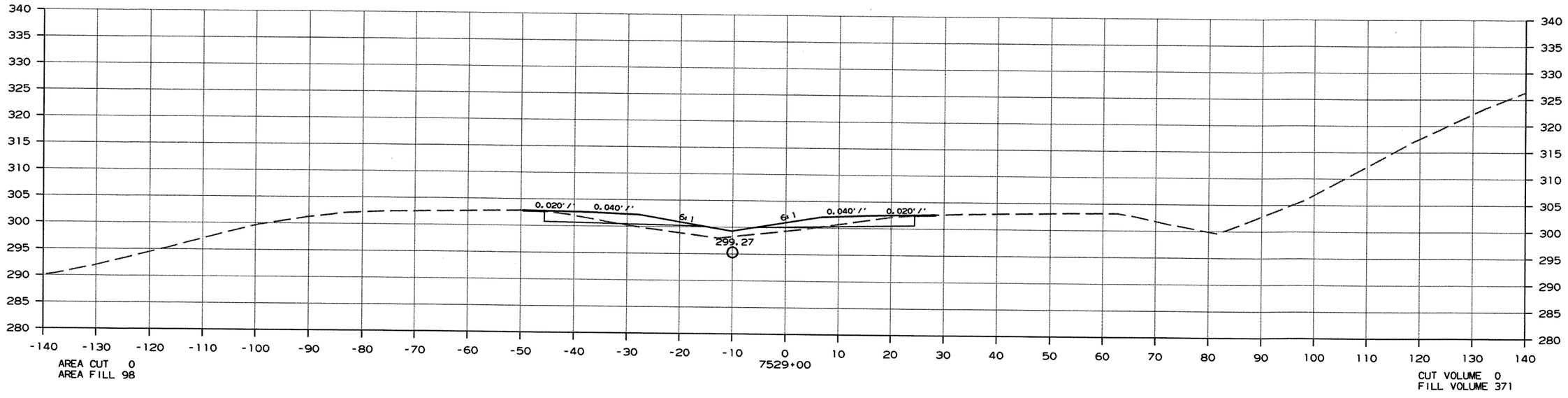


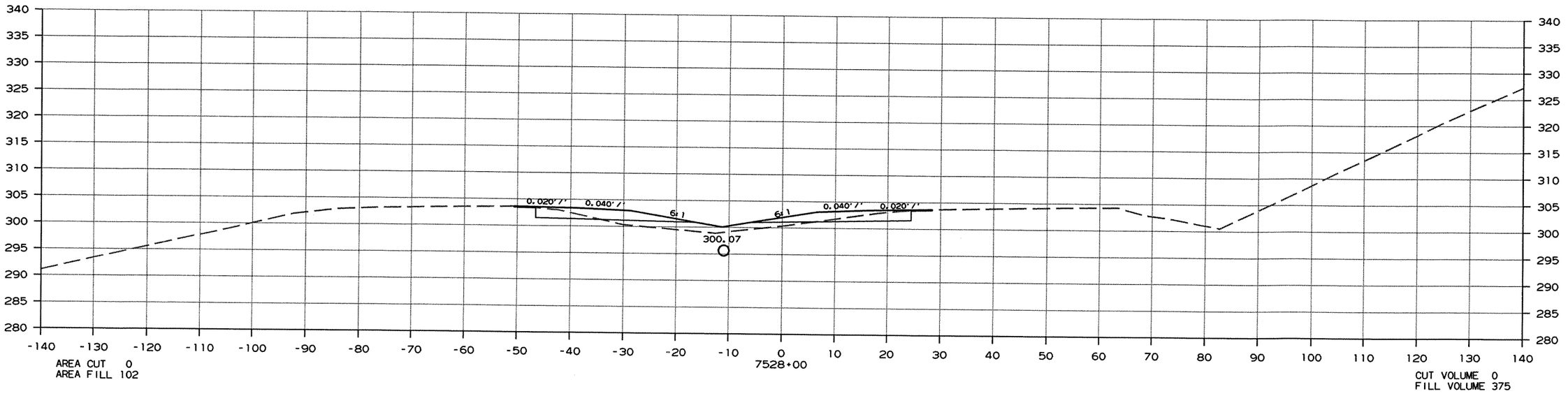
CROSS SECTION STA. 7526+00 TO STA. 7527+00

R080411.DGN 4/18/2012

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	126	191

(2) CROSS SECTIONS



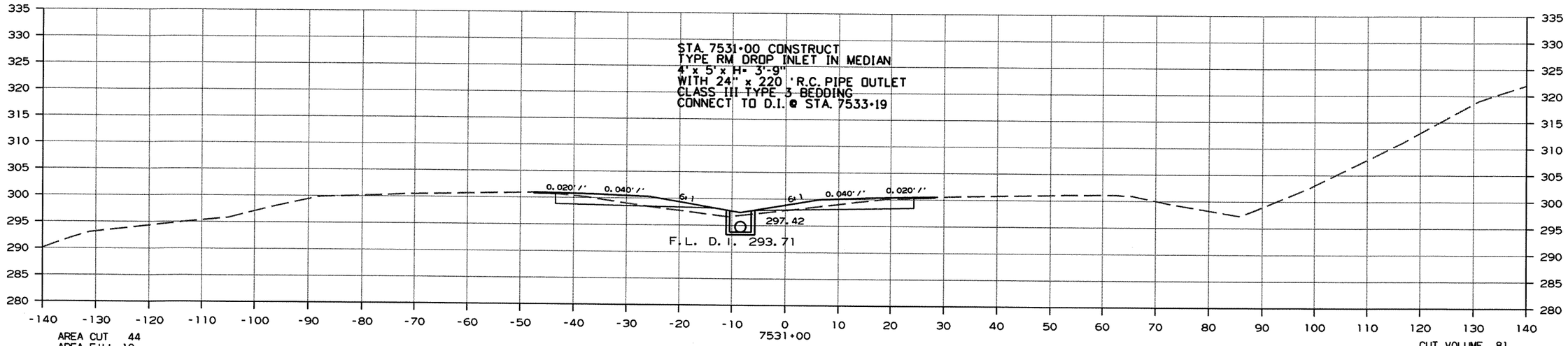


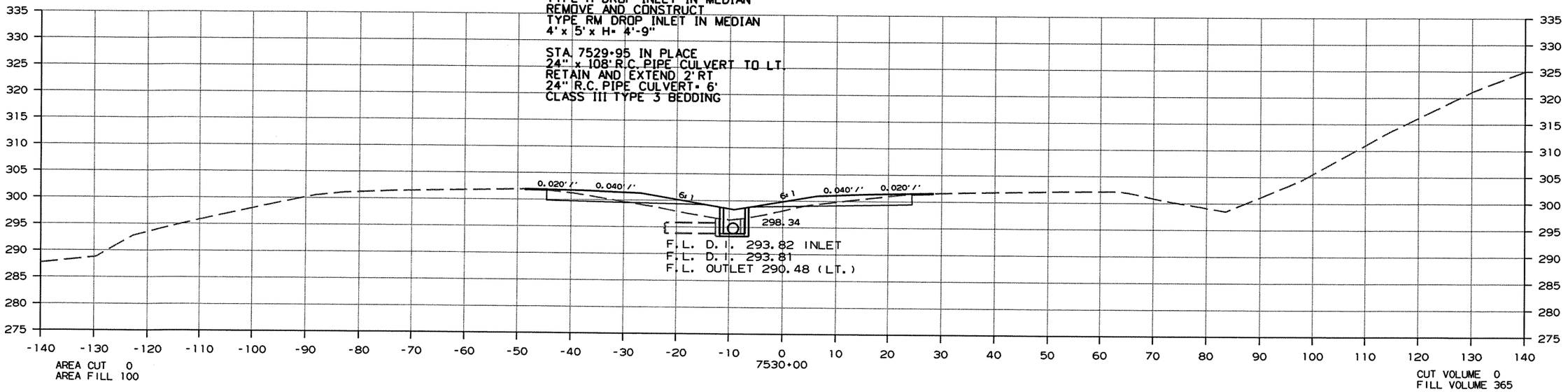
CROSS SECTION STA. 7528+00 TO STA. 7529+00

R080411.DGN 4/18/2012

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	127	191

(2) CROSS SECTIONS



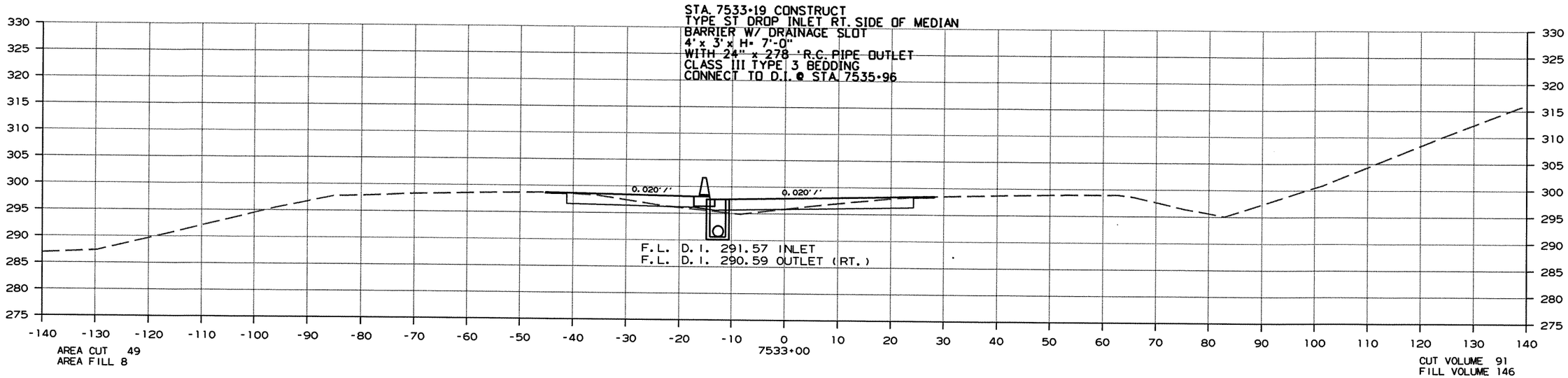


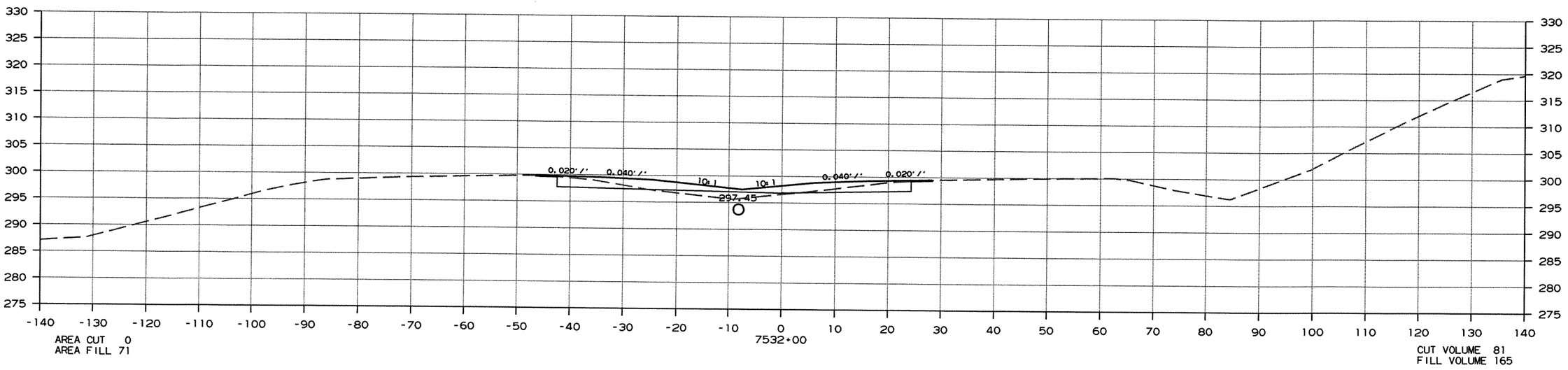
CROSS SECTION STA. 7530+00 TO STA. 7531+00

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	128	191

(2) CROSS SECTIONS



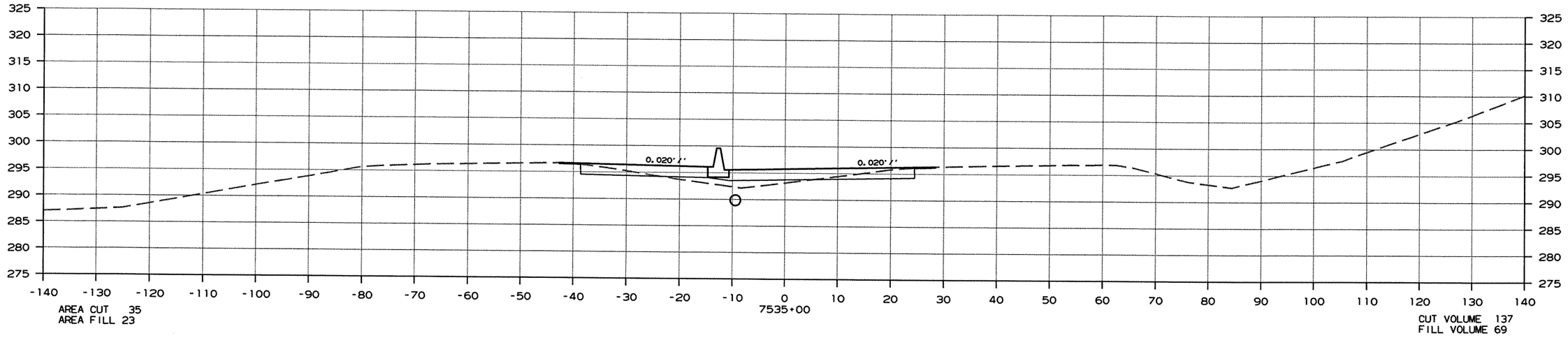


CROSS SECTION STA. 7532+00 TO STA. 7533+00

R080411.DGN 4/18/2012

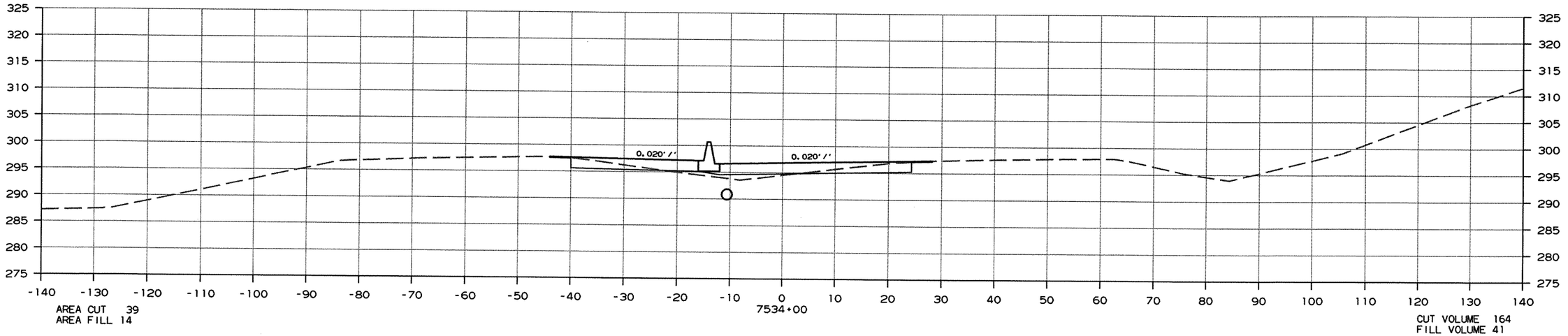
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	129	191

(2) CROSS SECTIONS



AREA CUT 35
AREA FILL 23

CUT VOLUME 137
FILL VOLUME 69



AREA CUT 39
AREA FILL 14

CUT VOLUME 164
FILL VOLUME 41

CROSS SECTION STA. 7534+00 TO STA. 7535+00

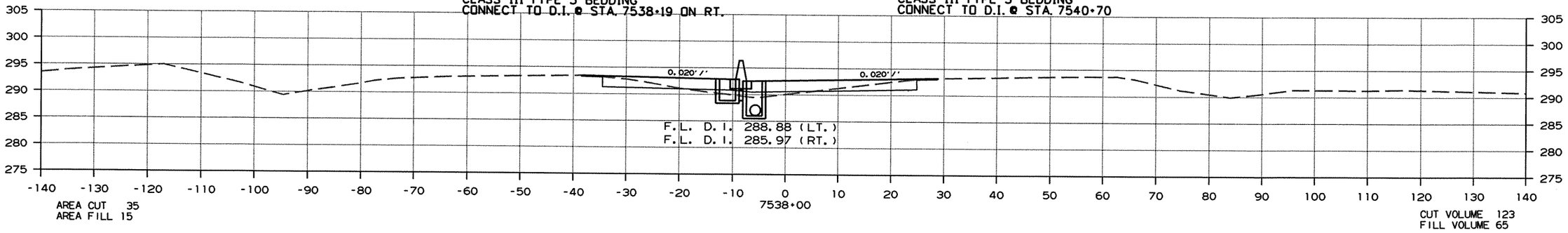
R080411.DGN 4/18/2012

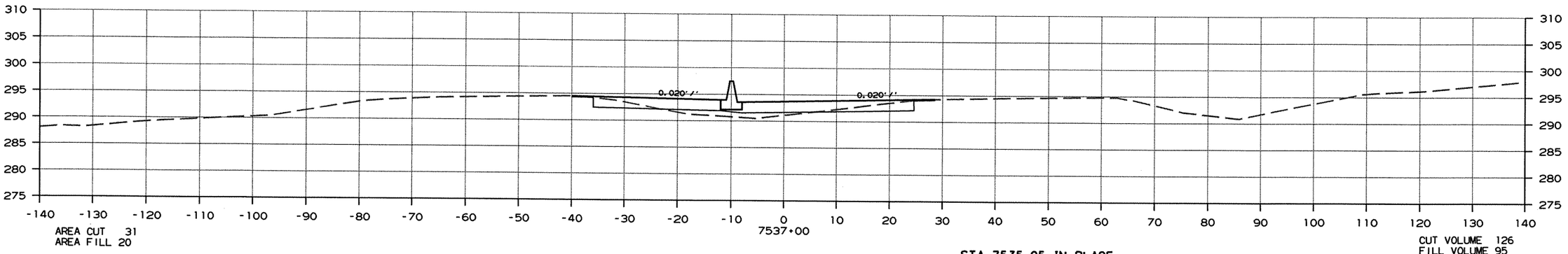
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	130	191

(2) CROSS SECTIONS

STA. 7538+19 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 4'-0"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7538+19 ON RT.

STA. 7538+19 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 6'-4"
WITH 24" x 252 ' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7540+70

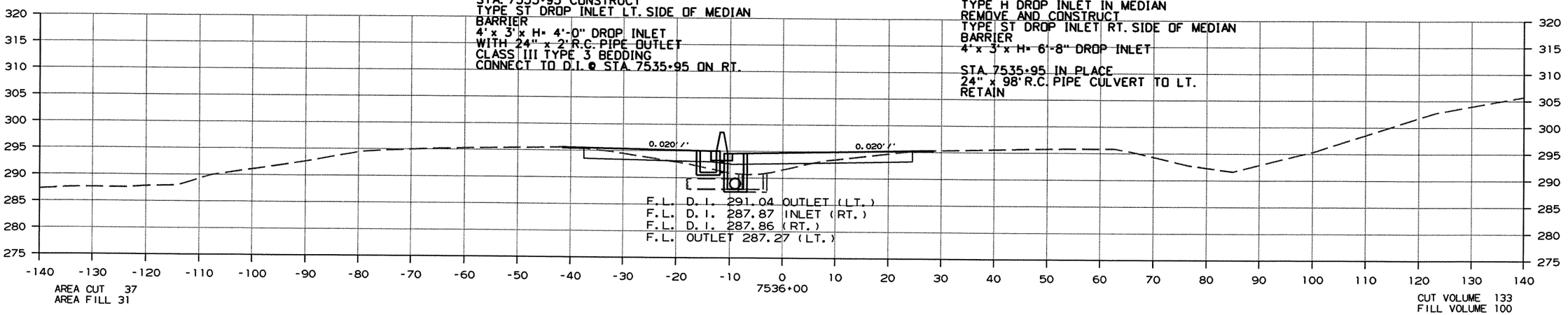




STA. 7535+95 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 4'-0" DROP INLET
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7535+95 ON RT.

STA. 7535+95 IN PLACE
TYPE H DROP INLET IN MEDIAN
REMOVE AND CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 6'-8" DROP INLET

STA. 7535+95 IN PLACE
24" x 98' R.C. PIPE CULVERT TO LT.
RETAIN

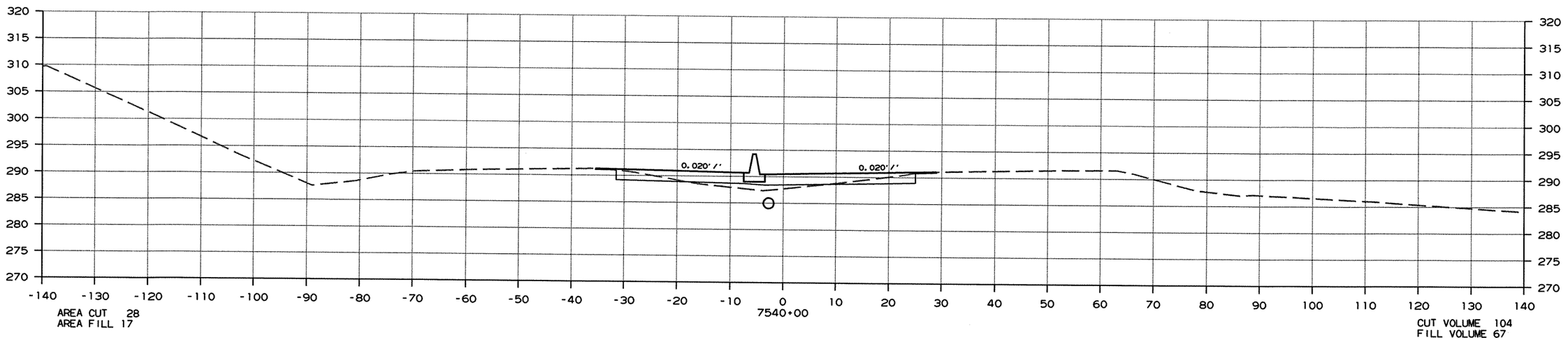


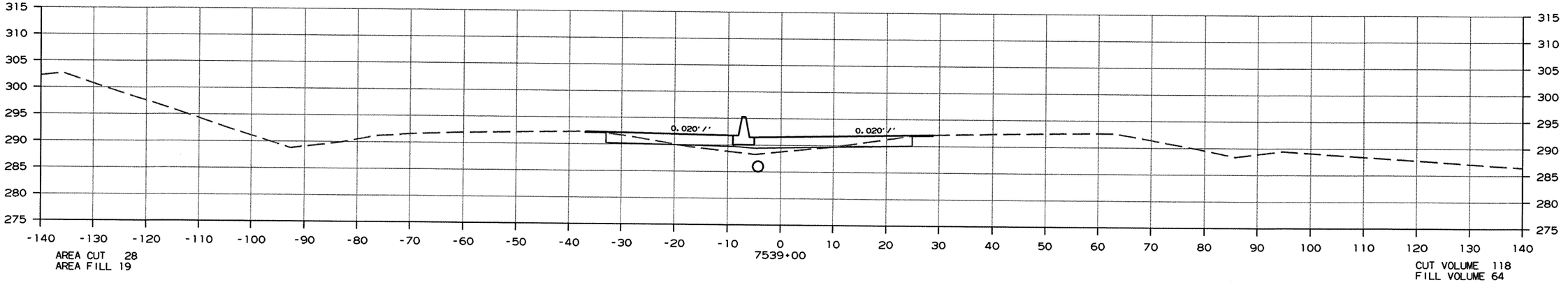
CROSS SECTION STA. 7536+00 TO STA. 7538+00

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	131	191

(2) CROSS SECTIONS



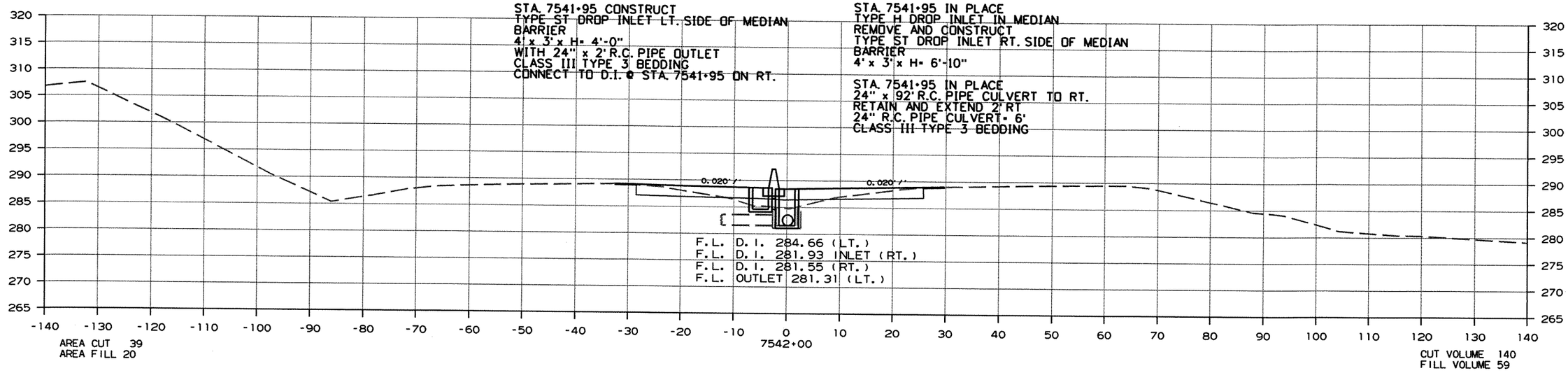


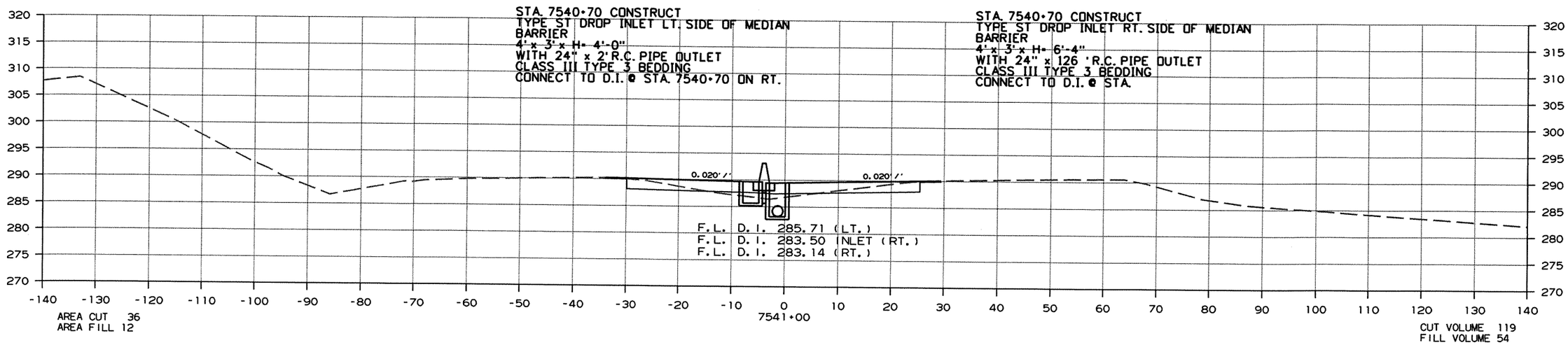
CROSS SECTION STA. 7539+00 TO STA. 7540+00

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	132	191

(2) CROSS SECTIONS



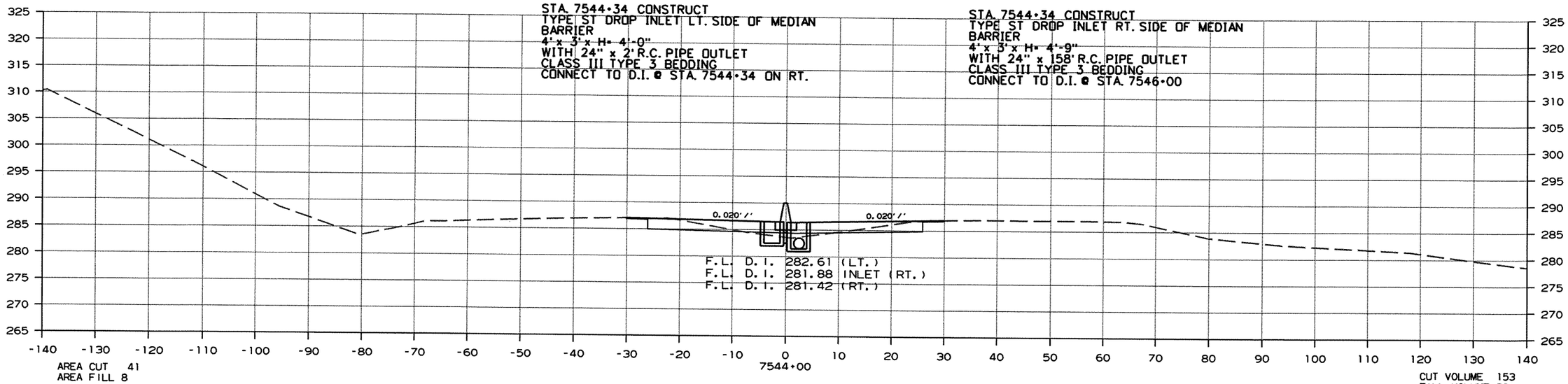


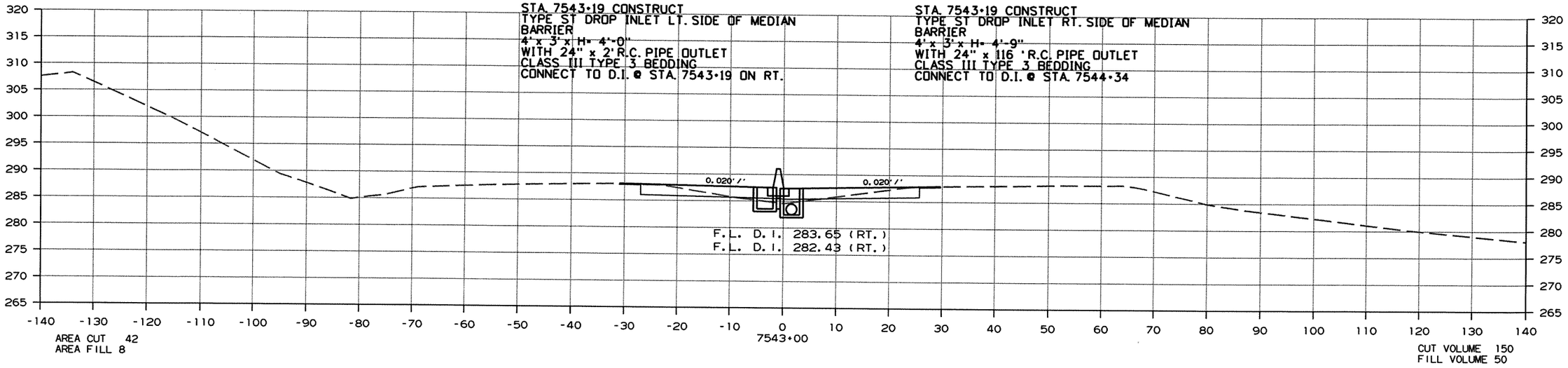
CROSS SECTION STA. 7541+00 TO STA. 7542+00

R080411.DGN 4/18/2012

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	133	191

(2) CROSS SECTIONS



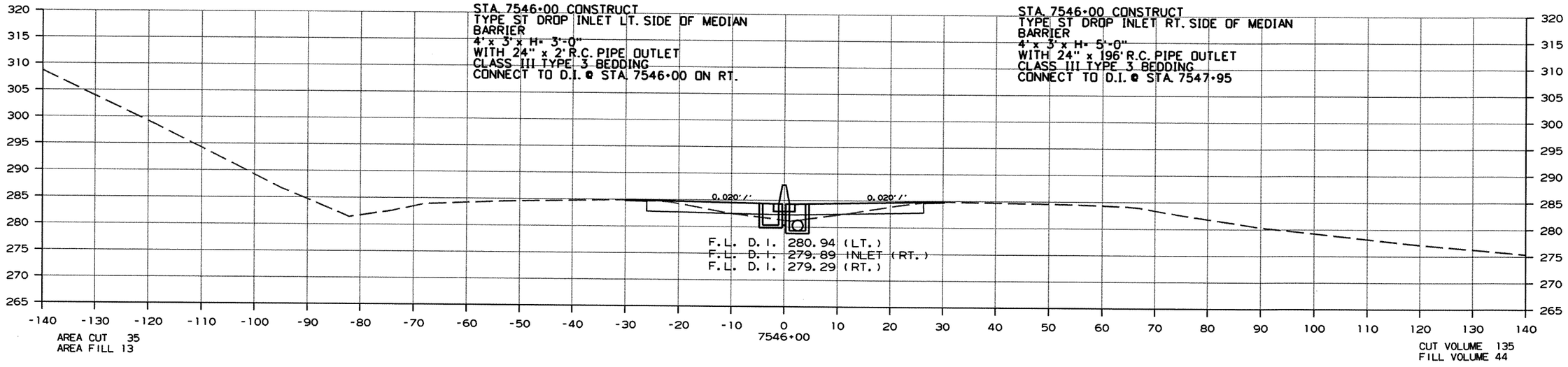


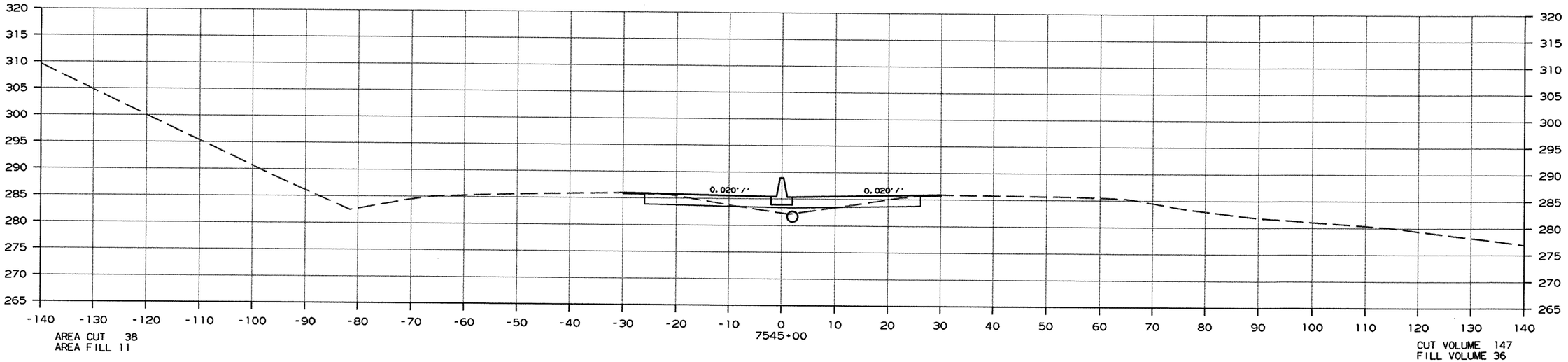
CROSS SECTION STA. 7543+00 TO STA. 7544+00

R080411.DGN 4/18/2012

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	134	191

(2) CROSS SECTIONS



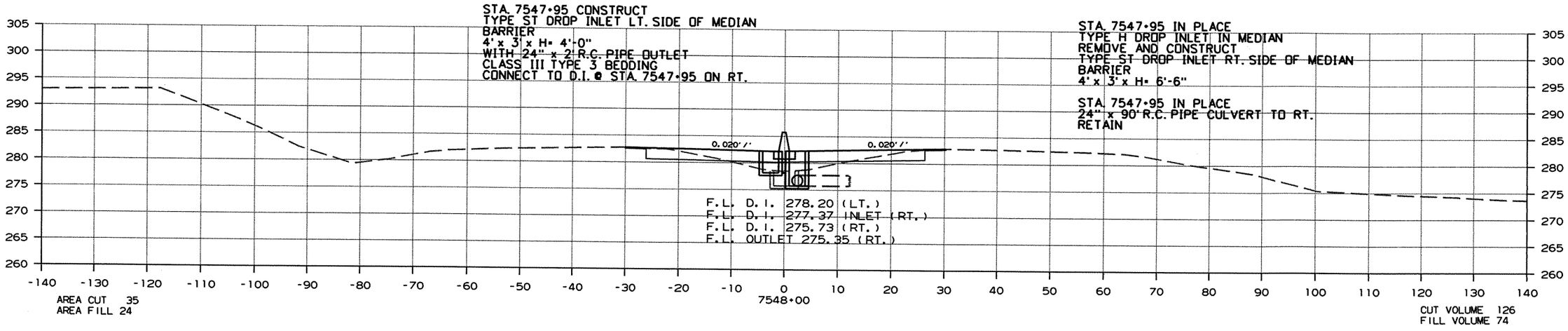


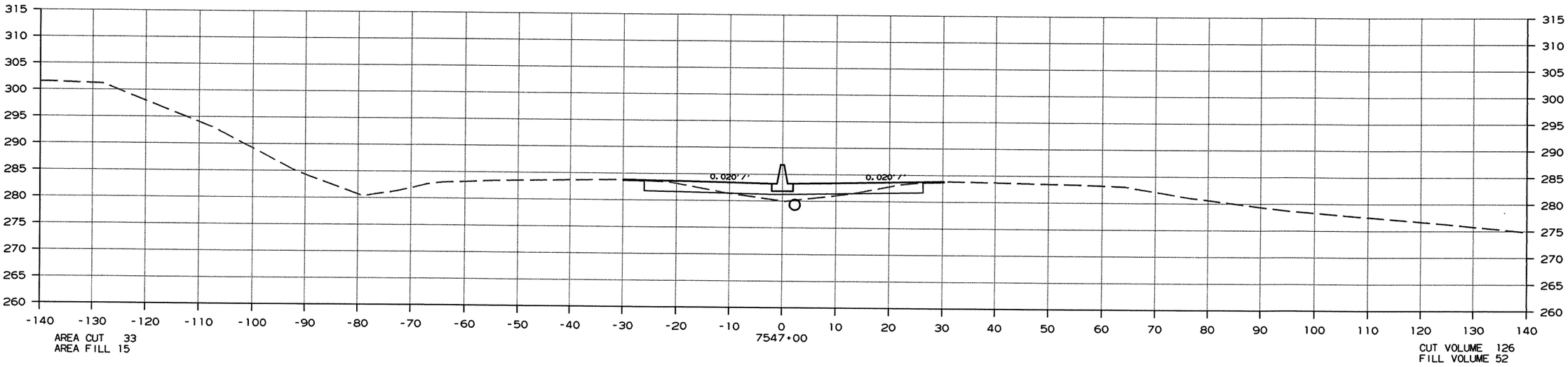
CROSS SECTION STA. 7545+00 TO STA. 7546+00

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	135	191

(2) CROSS SECTIONS



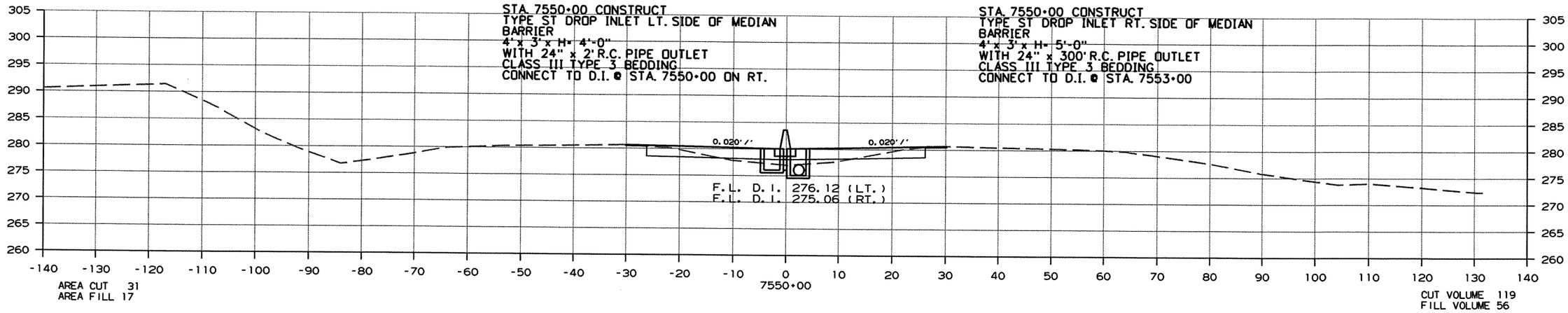


CROSS SECTION STA. 7547+00 TO STA. 7548+00

R080411.DGN 4/18/2012

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	136	191

(2) CROSS SECTIONS

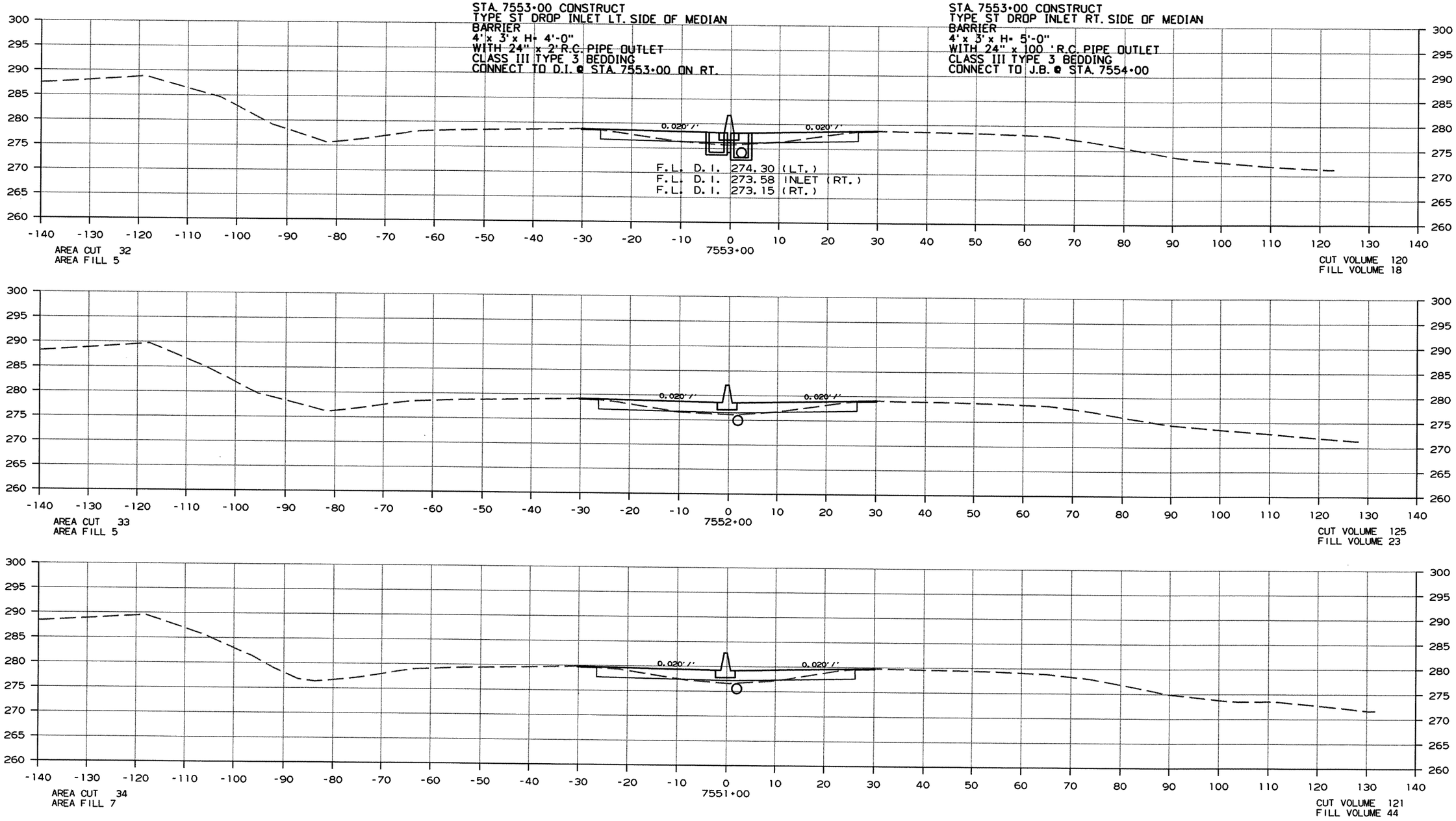


CROSS SECTION STA. 7549+00 TO STA. 7550+00

R080411.DGN 4/18/2012

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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				JOB NO.		080411	137	191

(2) CROSS SECTIONS

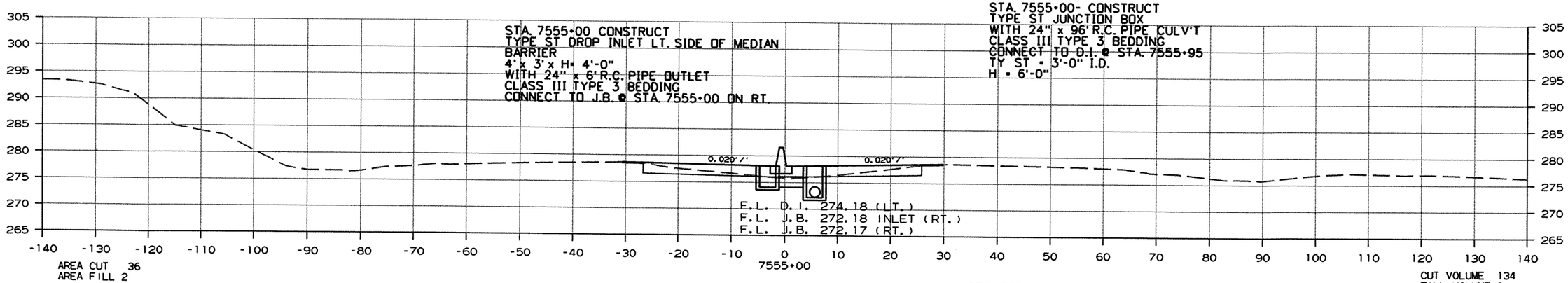


CROSS SECTION STA. 7551+00 TO STA. 7553+00

R080411.DGN 4/18/2012

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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				JOB NO.		080411	138	191

(2) CROSS SECTIONS

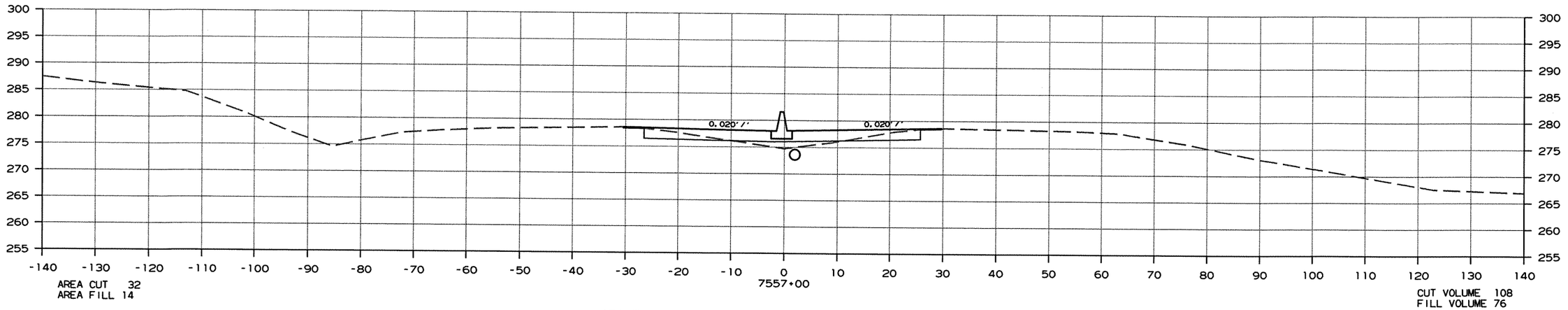


CROSS SECTION STA. 7554+00 TO STA. 7555+00

R080411.DGN 4/18/2012

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	139	191

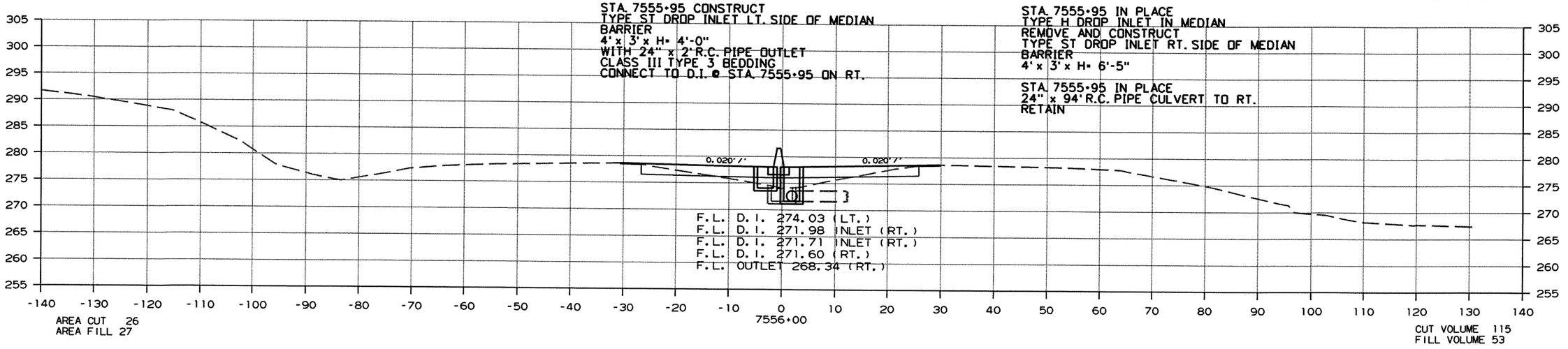
(2) CROSS SECTIONS



STA. 7555+95 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 4'-0"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7555+95 ON RT.

STA. 7555+95 IN PLACE
TYPE H DROP INLET IN MEDIAN
REMOVE AND CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 6'-5"

STA. 7555+95 IN PLACE
24" x 94' R.C. PIPE CULVERT TO RT.
RETAIN



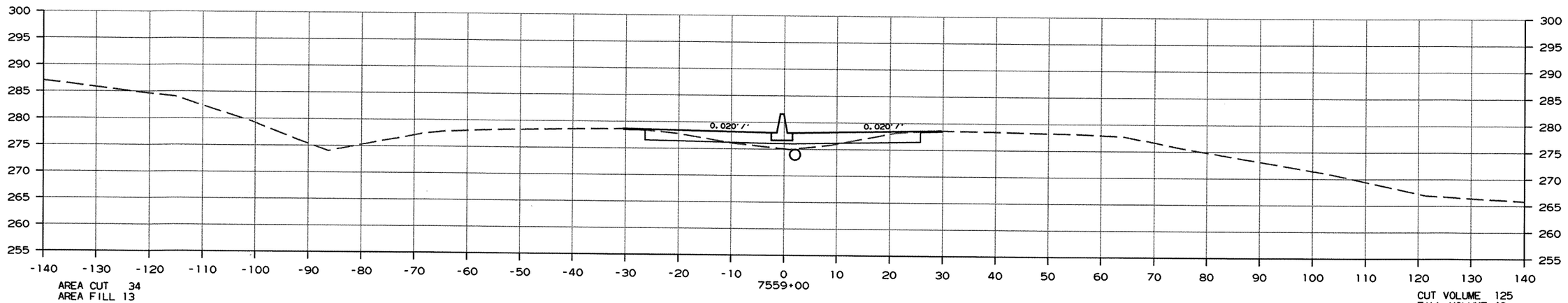
F.L. D.I. 274.03 (LT.)
F.L. D.I. 271.98 INLET (RT.)
F.L. D.I. 271.71 INLET (RT.)
F.L. D.I. 271.60 (RT.)
F.L. OUTLET 268.34 (RT.)

CROSS SECTION STA. 7556+00 TO STA. 7557+00

R080411.DGN 4/18/2012

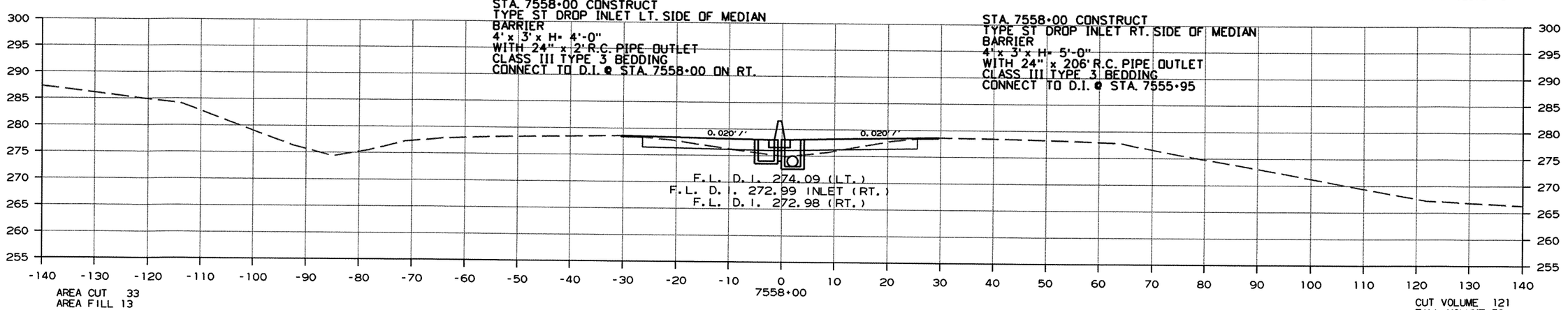
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	140	191

(2) CROSS SECTIONS



STA. 7558+00 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 4'-0"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7558+00 ON RT.

STA. 7558+00 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 5'-0"
WITH 24" x 206' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7555+95

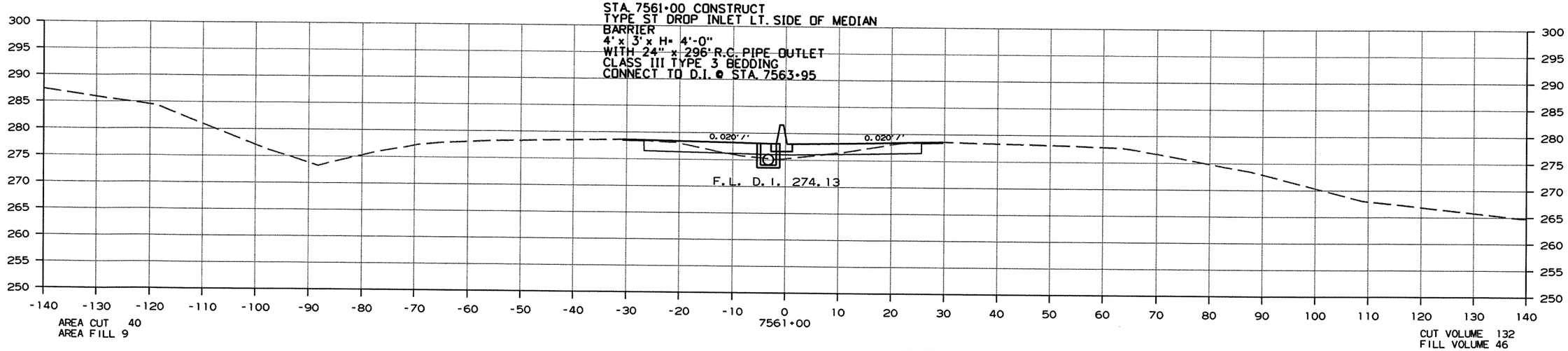


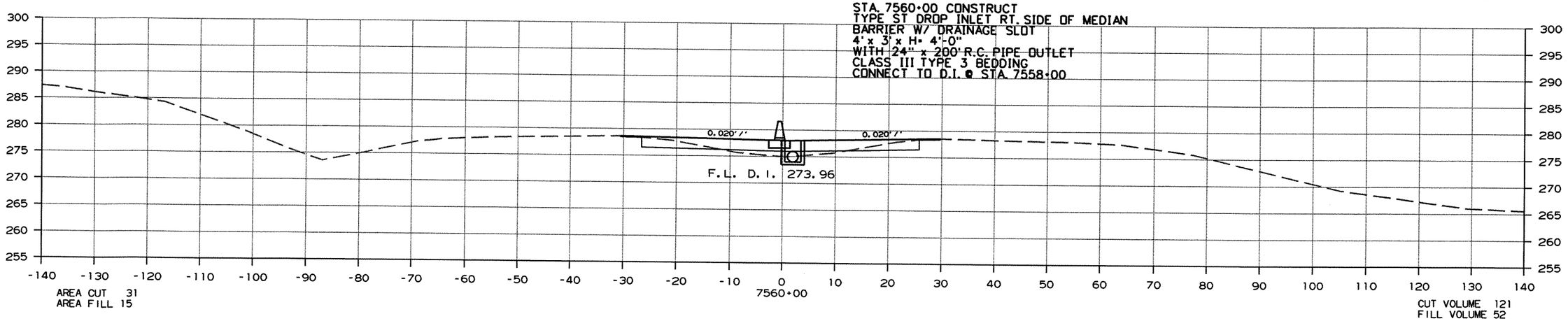
CROSS SECTION STA. 7558+00 TO STA. 7559+00

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	141	191

(2) CROSS SECTIONS



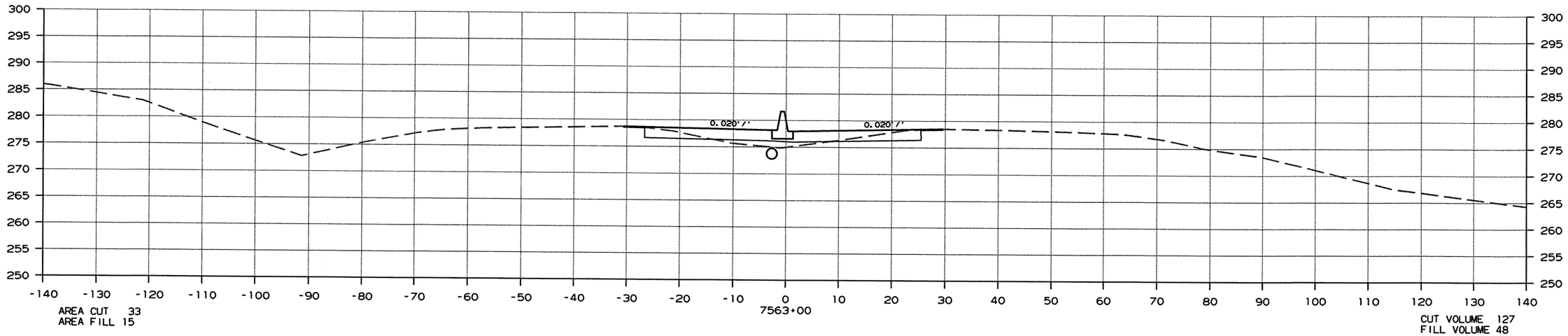


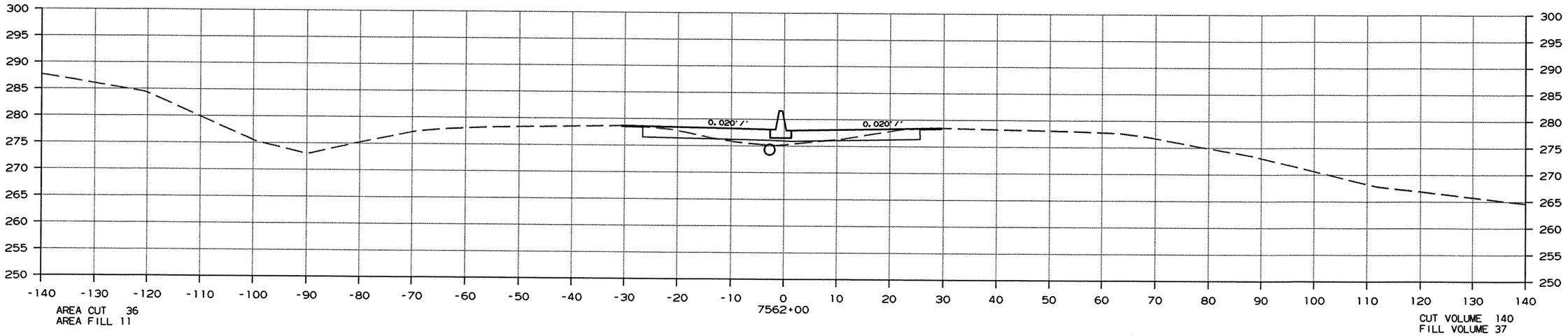
CROSS SECTION STA. 7560+00 TO STA. 7561+00

R080411.DGN 4/18/2012

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	142	191

(2) CROSS SECTIONS





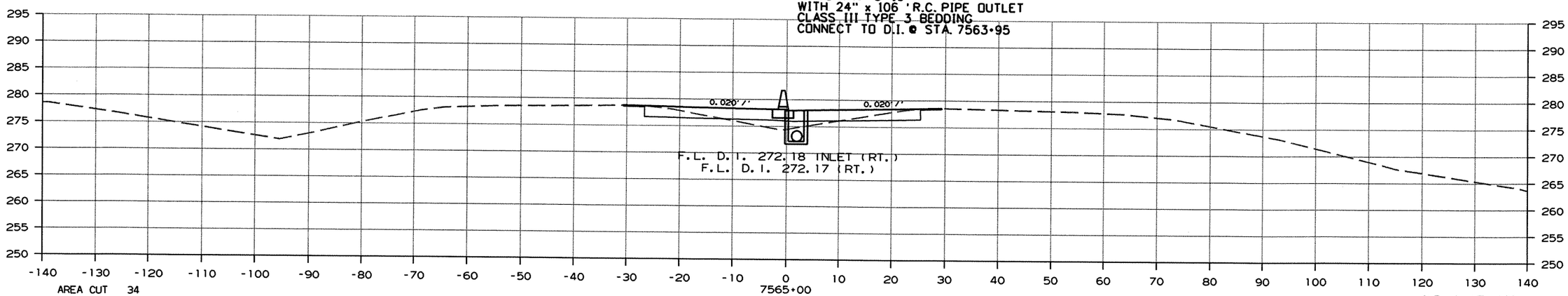
CROSS SECTION STA. 7562+00 TO STA. 7563+00

R080411.DGN 4/18/2012

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	143	191

(2) CROSS SECTIONS

STA. 7565+00 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN
BARRIER W/ DRAINAGE SLOT
4' x 3' x H= 5'-10"
WITH 24" x 106 'R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7563+95



F.L. D. I. 272.18 INLET (RT.)
F.L. D. I. 272.17 (RT.)

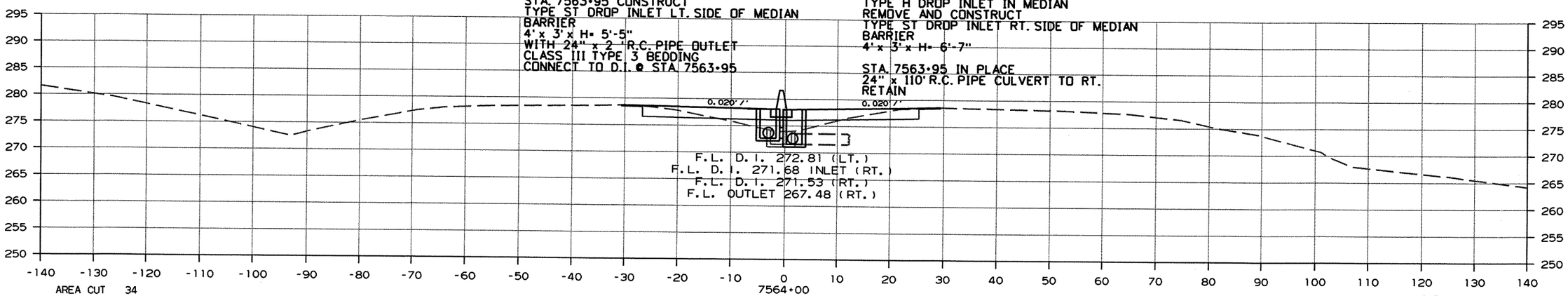
AREA CUT 34
AREA FILL 19

CUT VOLUME 126
FILL VOLUME 88

STA. 7563+95 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN
BARRIER
4' x 3' x H= 5'-5"
WITH 24" x 2 'R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7563+95

STA. 7563+95 IN PLACE
TYPE H DROP INLET IN MEDIAN
REMOVE AND CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN
BARRIER
4' x 3' x H= 6'-7"

STA. 7563+95 IN PLACE
24" x 110' R.C. PIPE CULVERT TO RT.
RETAIN



F.L. D. I. 272.81 (LT.)
F.L. D. I. 271.68 INLET (RT.)
F.L. D. I. 271.53 (RT.)
F.L. OUTLET 267.48 (RT.)

AREA CUT 34
AREA FILL 28

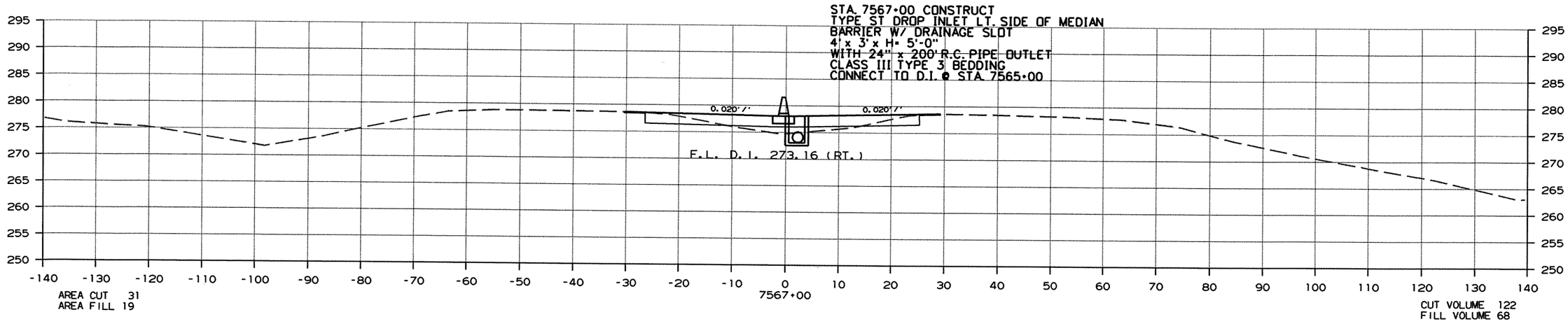
CUT VOLUME 124
FILL VOLUME 81

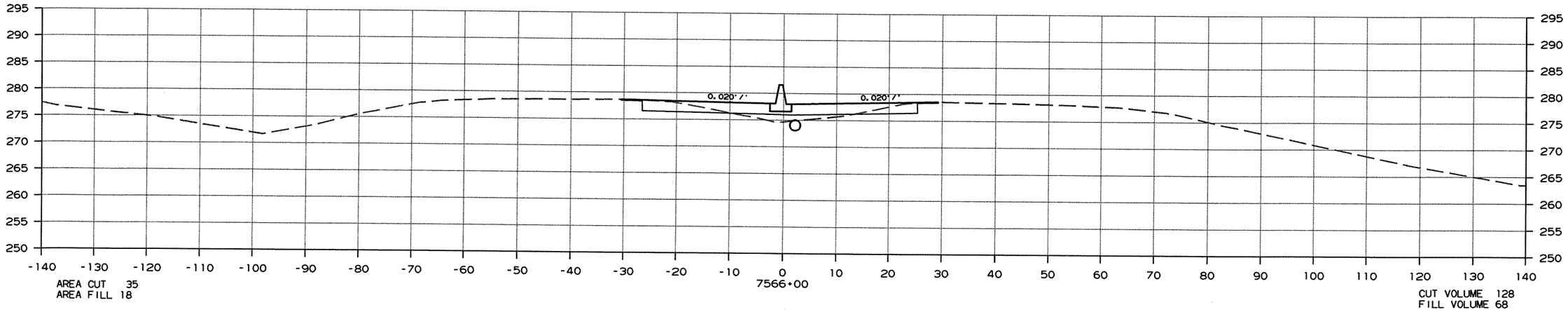
CROSS SECTION STA. 7564+00 TO STA. 7565+00

R080411.DGN 4/18/2012

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	144	191

(2) CROSS SECTIONS



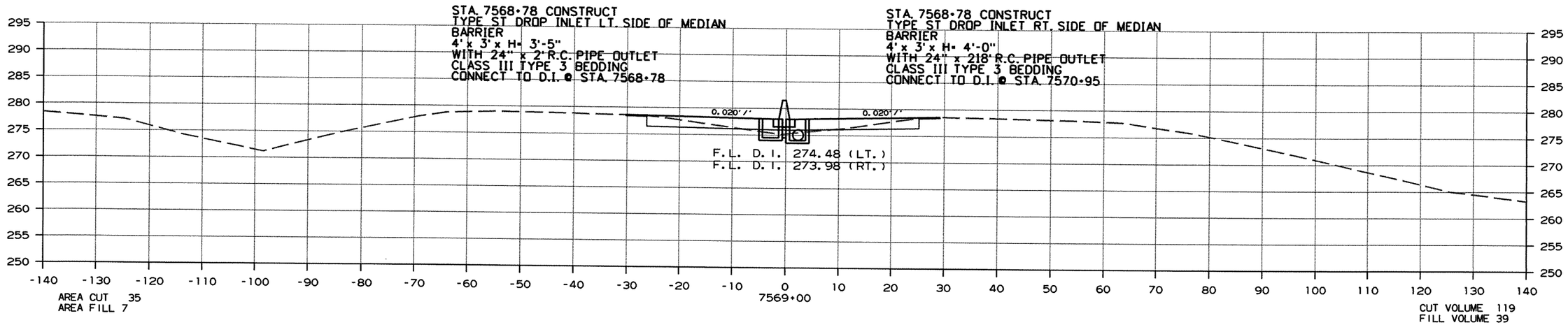


CROSS SECTION STA. 7566+00 TO STA. 7567+00

R080411.DGN 4/18/2012

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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(2) CROSS SECTIONS

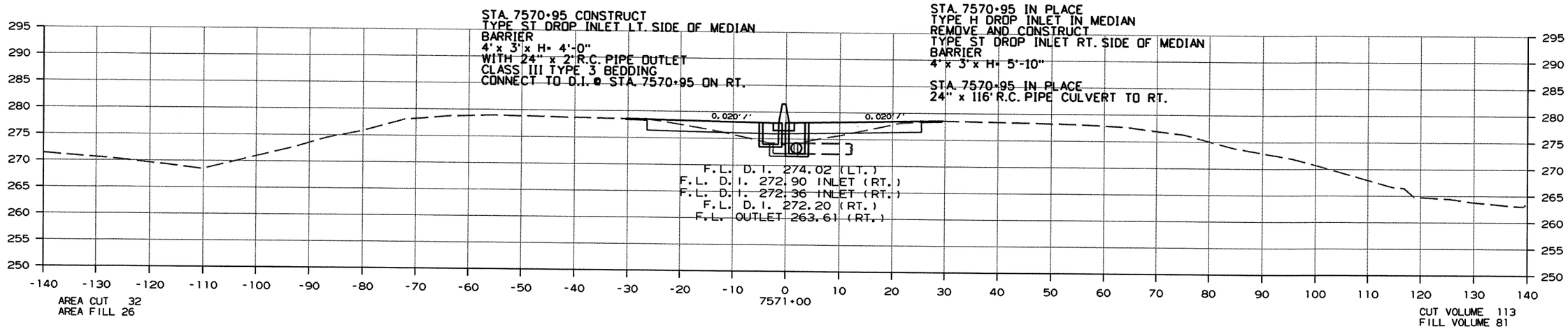


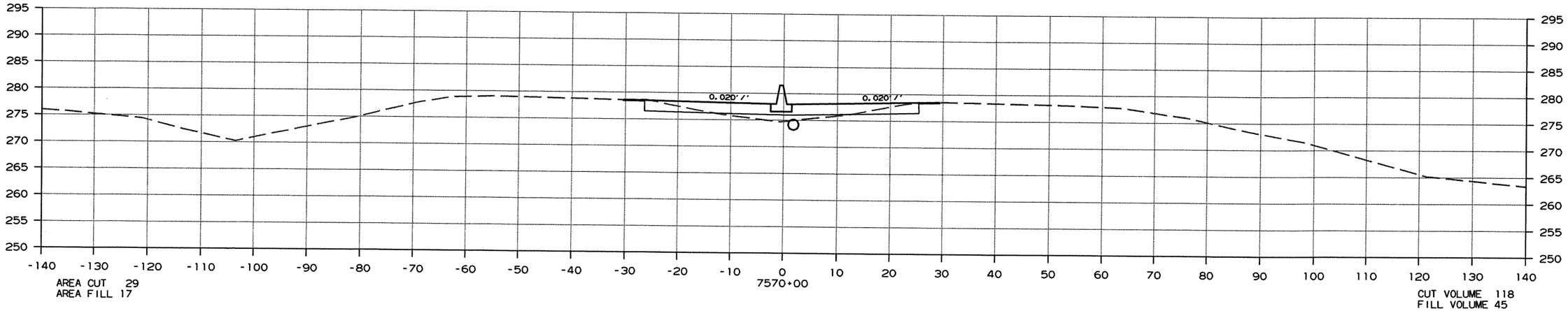
CROSS SECTION STA. 7568+00 TO STA. 7569+00

R080411.DGN 4/18/2012

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	146	191

(2) CROSS SECTIONS



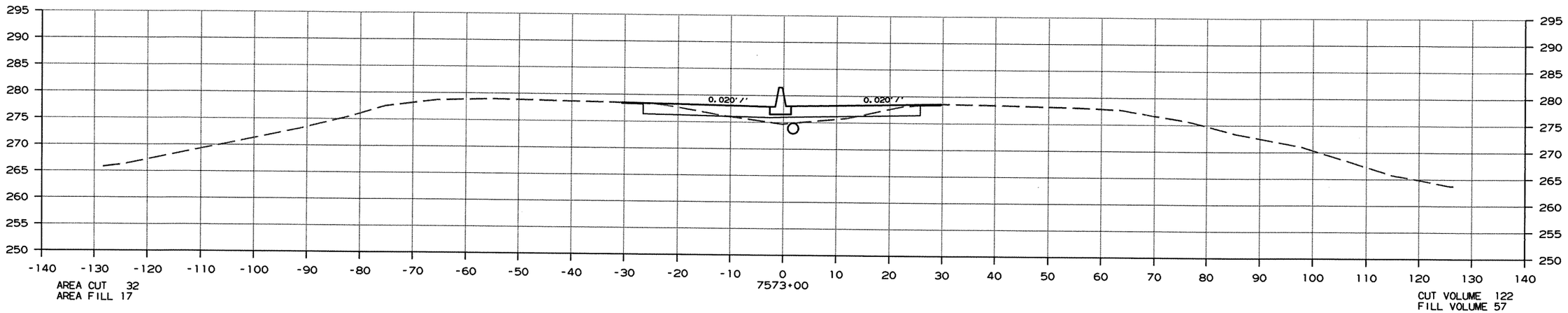


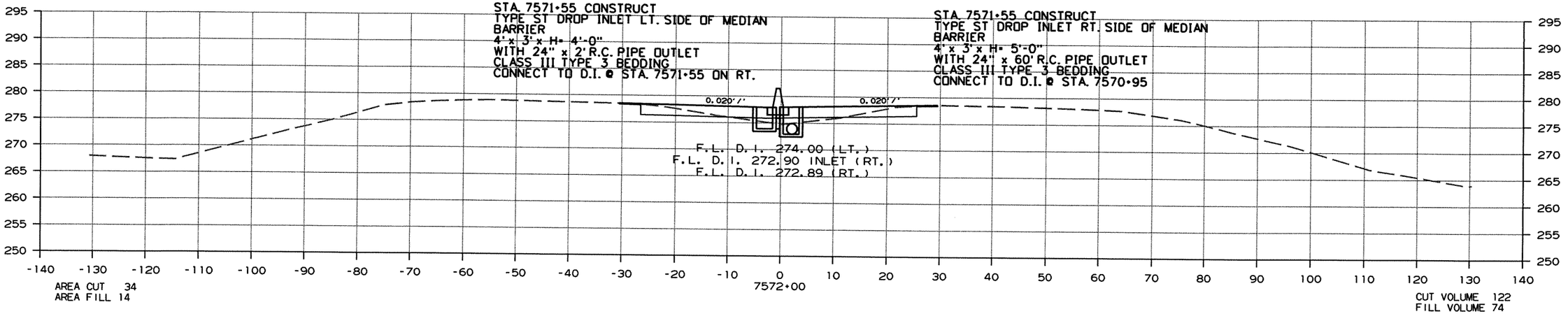
CROSS SECTION STA. 7570+00 TO STA. 7571+00

R080411.DGN 4/18/2012

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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				JOB NO.		080411	147	191

(2) CROSS SECTIONS



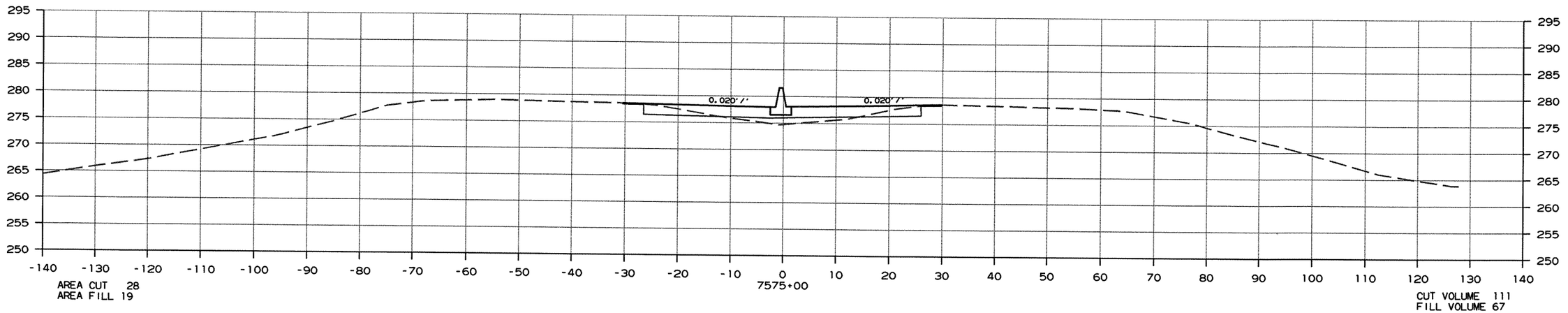


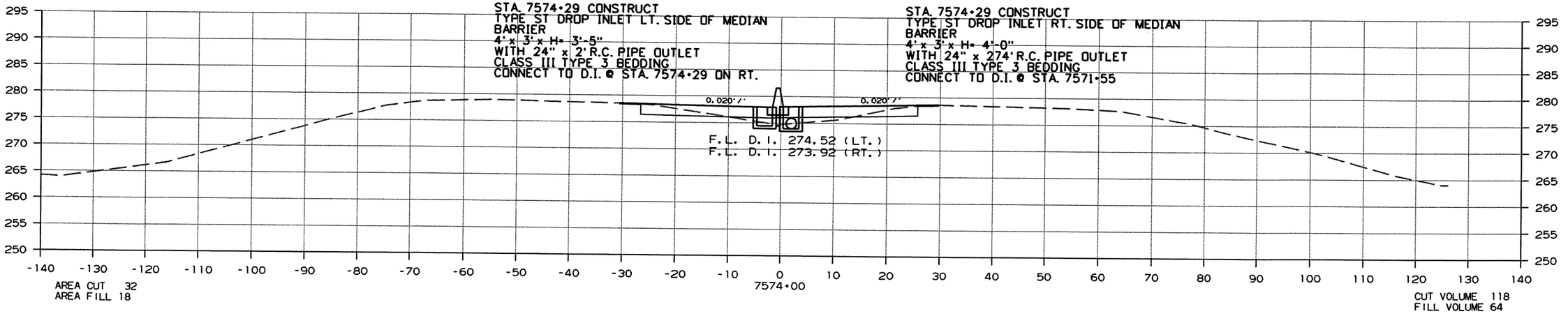
CROSS SECTION STA. 7572+00 TO STA. 7573+00

R080411.DGN 4/18/2012

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	148	191

(2) CROSS SECTIONS



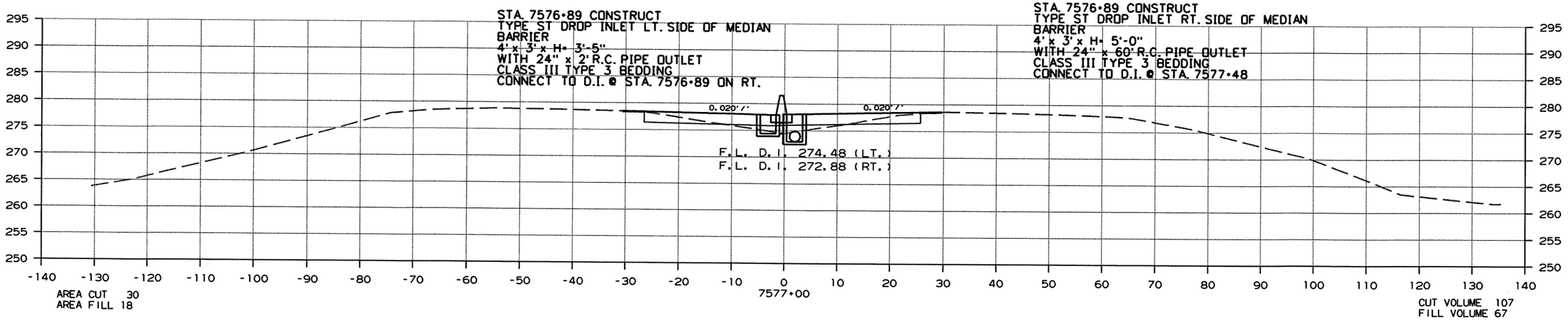


CROSS SECTION STA. 7574+00 TO STA. 7575+00

R080411.DGN 4/18/2012

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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				JOB NO.		080411	149	191

(2) CROSS SECTIONS

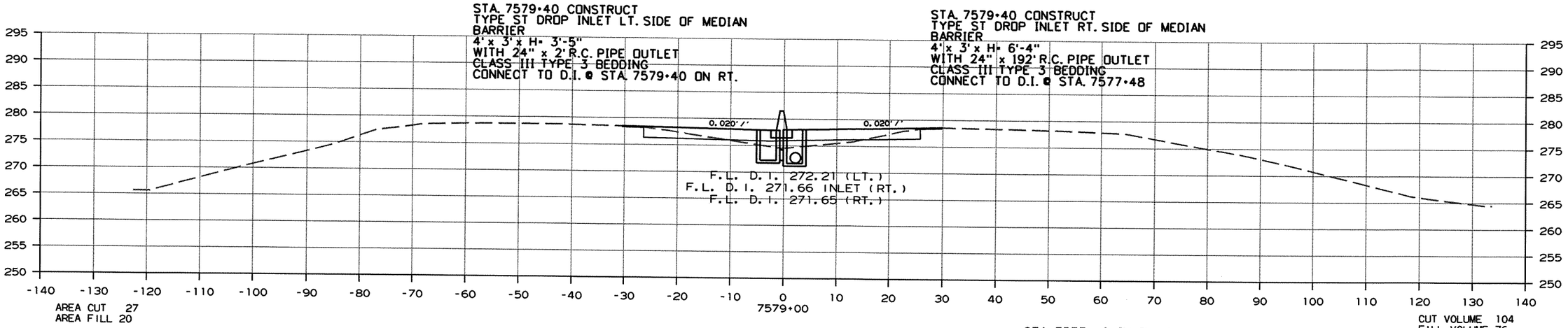


CROSS SECTION STA. 7576+00 TO STA. 7577+00

R080411.DGN 4/18/2012

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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				JOB NO.		080411	150	191

(2) CROSS SECTIONS

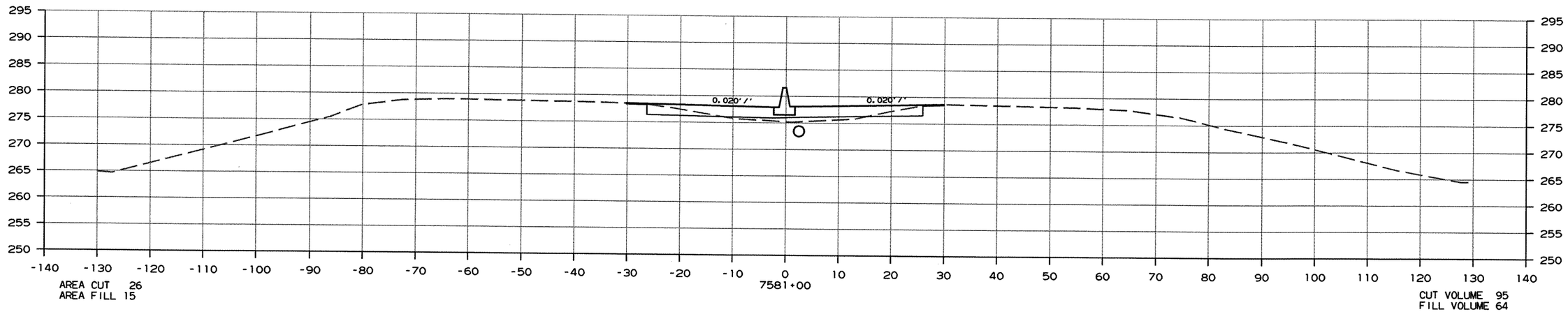


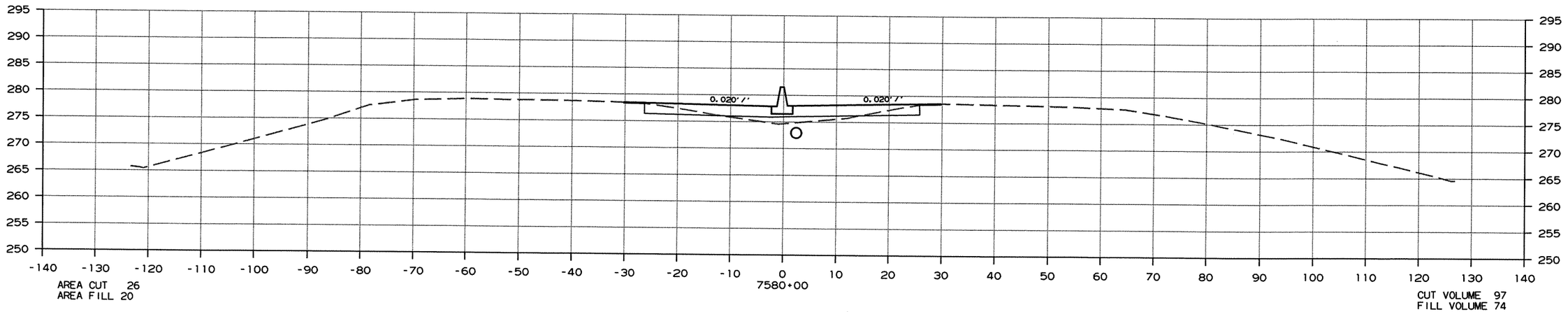
CROSS SECTION STA. 7578+00 TO STA. 7579+00

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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(2) CROSS SECTIONS



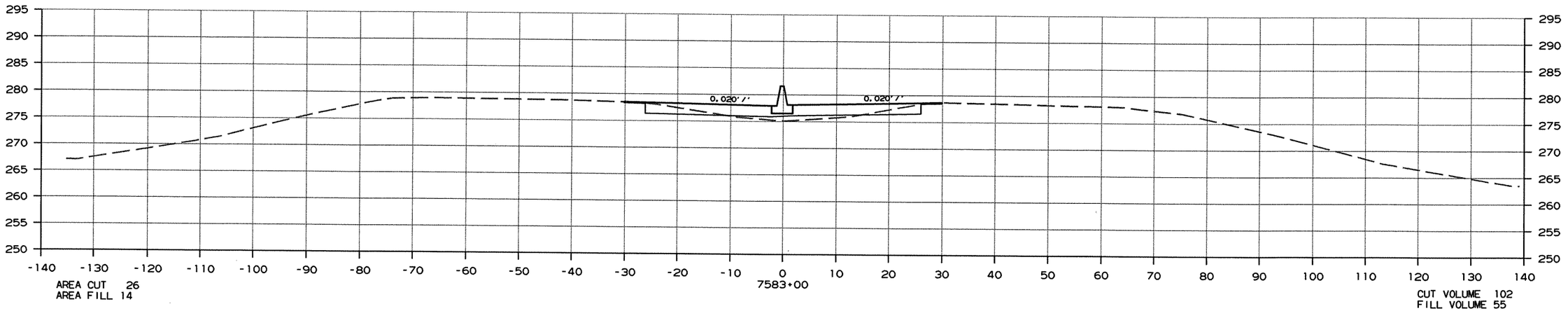


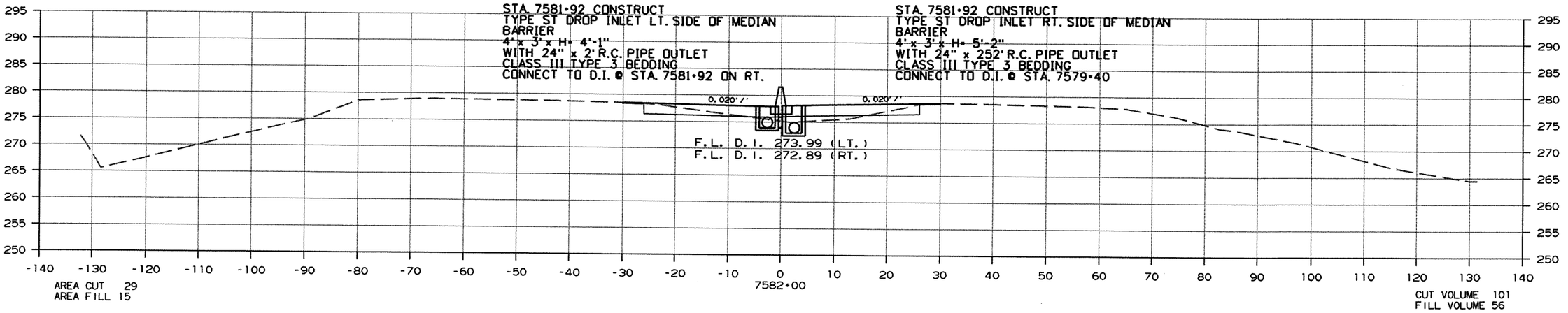
CROSS SECTION STA. 7580+00 TO STA. 7581+00

R080411.DGN 4/18/2012

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	152	191

(2) CROSS SECTIONS



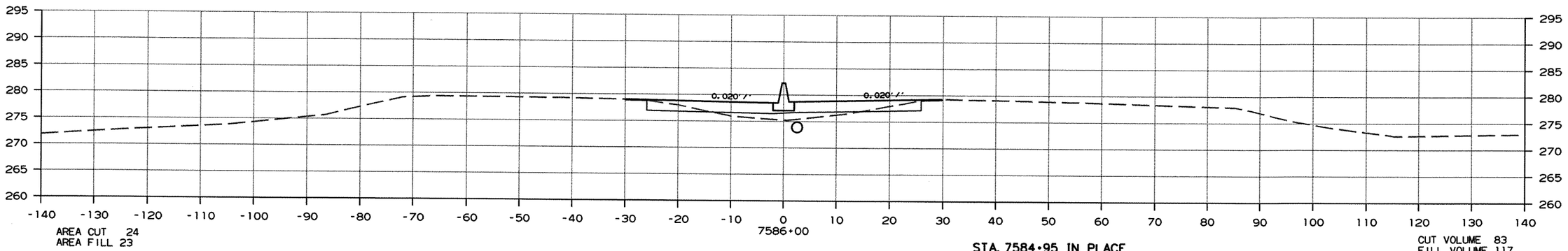


CROSS SECTION STA. 7582+00 TO STA. 7583+00

R080411.DGN 4/18/2012

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				6	ARK.			
				JOB NO.		080411	153	191

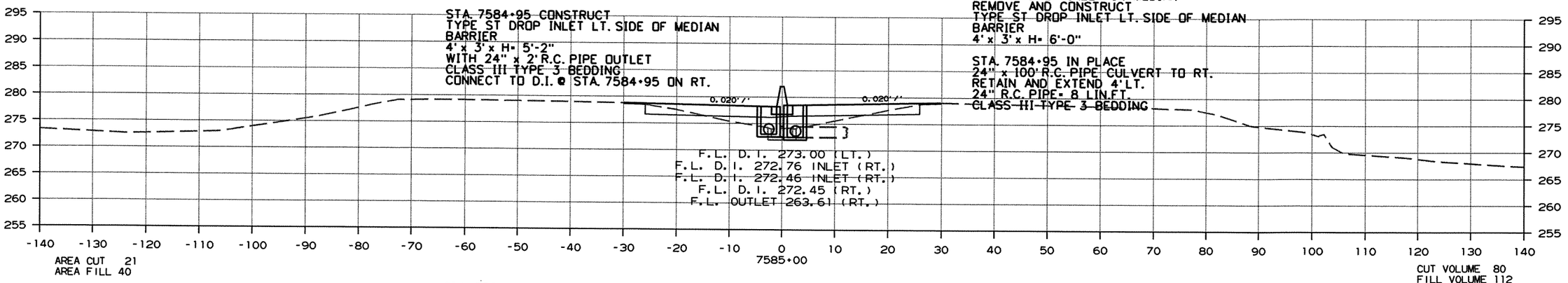
(2) CROSS SECTIONS



STA. 7584+95 IN PLACE
TYPE H DROP INLET IN MEDIAN
REMOVE AND CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN
BARRIER
4' x 3' x H= 6'-0"

STA. 7584+95 IN PLACE
24" x 100' R.C. PIPE CULVERT TO RT.
RETAIN AND EXTEND 4' LT.
24" R.C. PIPE= 8 LIN.FT.
CLASS III TYPE 3 BEDDING

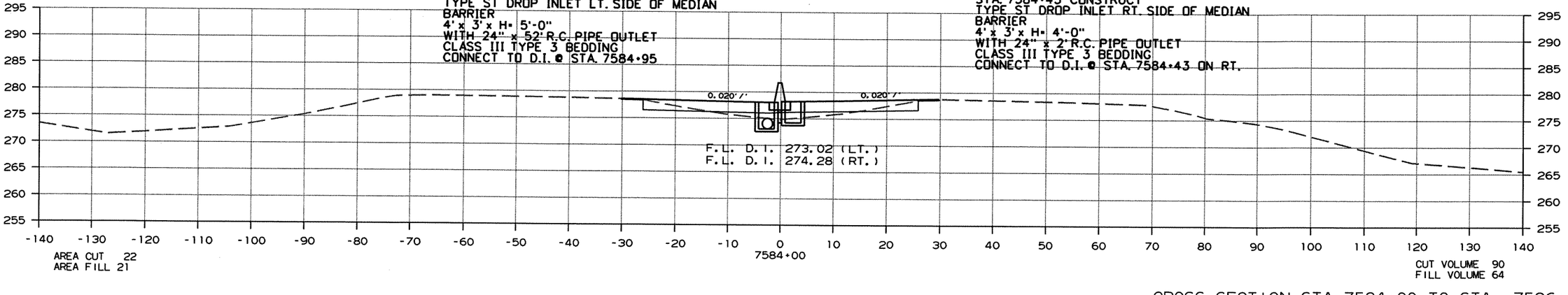
STA. 7584+95 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN
BARRIER
4' x 3' x H= 5'-2"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7584+95 ON RT.



F.L. D.I. 273.00 (LT.)
F.L. D.I. 272.76 INLET (RT.)
F.L. D.I. 272.46 INLET (RT.)
F.L. D.I. 272.45 (RT.)
F.L. OUTLET 263.61 (RT.)

STA. 7584+43 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN
BARRIER
4' x 3' x H= 5'-0"
WITH 24" x 52' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7584+95

STA. 7584+43 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN
BARRIER
4' x 3' x H= 4'-0"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7584+43 ON RT.



F.L. D.I. 273.02 (LT.)
F.L. D.I. 274.28 (RT.)

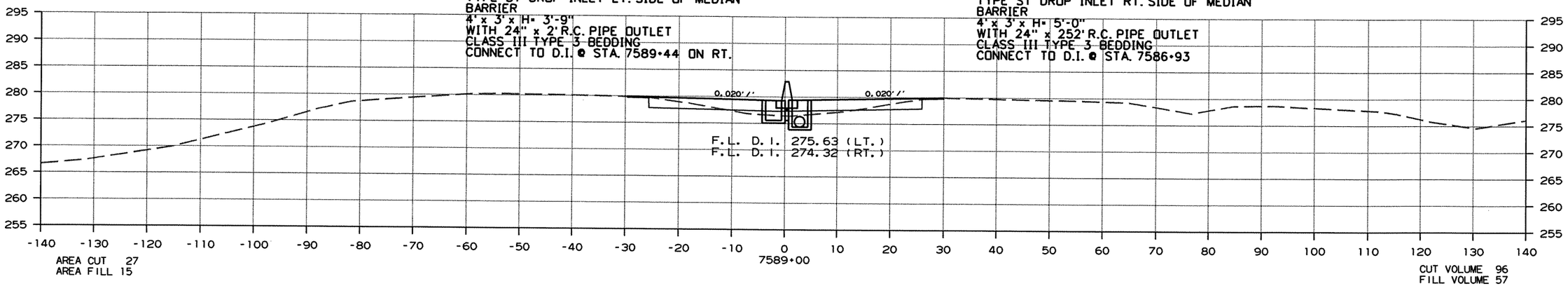
CROSS SECTION STA. 7584+00 TO STA. 7586+00

R080411.DGN 4/18/2012

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				6	ARK.			
				JOB NO.		080411	154	191

(2) CROSS SECTIONS

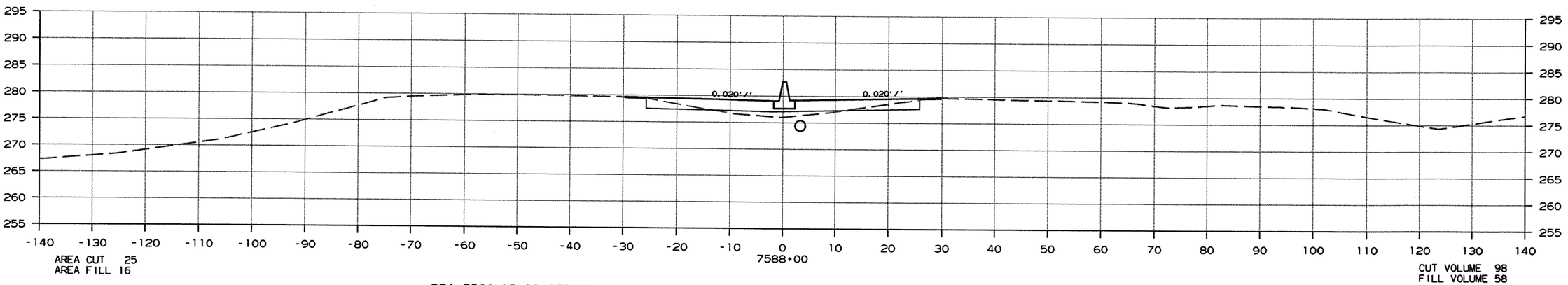
STA. 7589+44 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN
BARRIER
4' x 3' x H= 3'-9"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7589+44 ON RT.



AREA CUT 27
AREA FILL 15

STA. 7589+44 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN
BARRIER
4' x 3' x H= 5'-0"
WITH 24" x 252' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7586+93

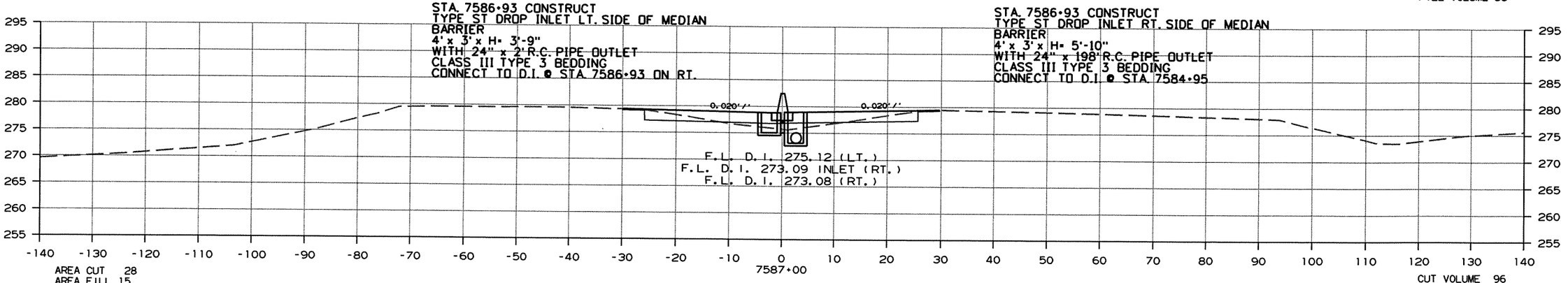
CUT VOLUME 96
FILL VOLUME 57



AREA CUT 25
AREA FILL 16

CUT VOLUME 98
FILL VOLUME 58

STA. 7586+93 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN
BARRIER
4' x 3' x H= 3'-9"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7586+93 ON RT.



AREA CUT 28
AREA FILL 15

STA. 7586+93 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN
BARRIER
4' x 3' x H= 5'-10"
WITH 24" x 198' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I @ STA. 7584+95

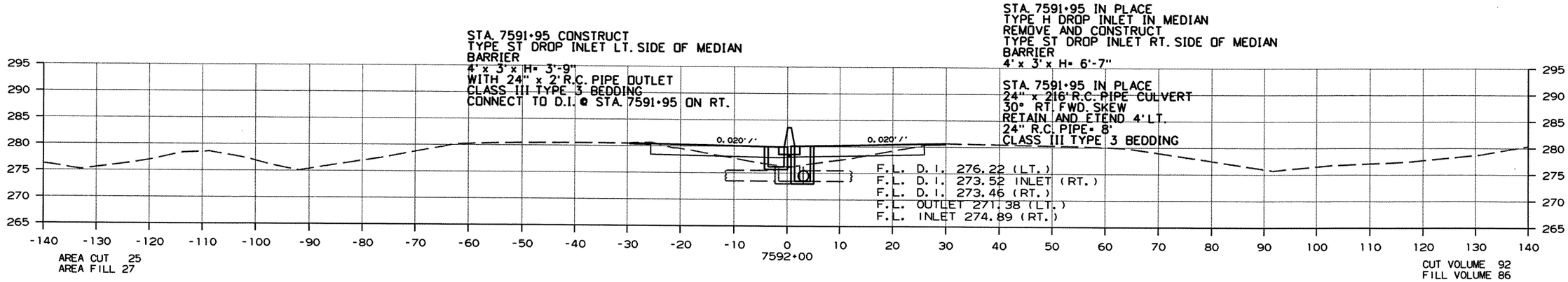
CUT VOLUME 96
FILL VOLUME 71

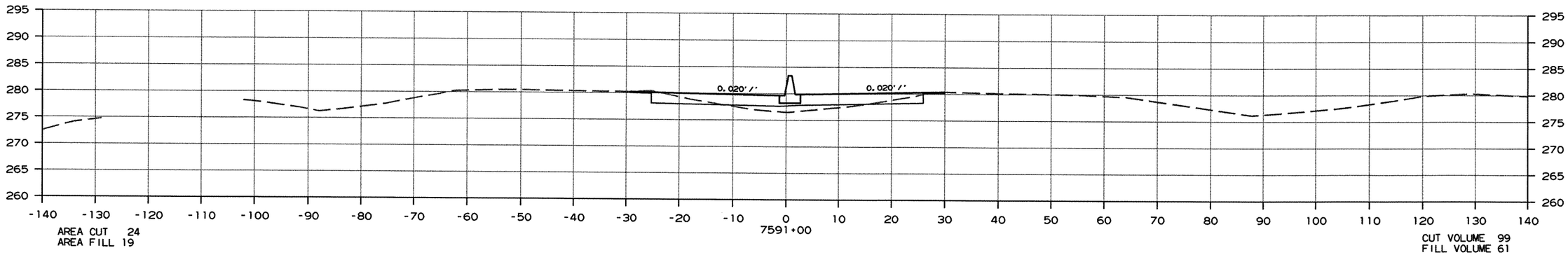
CROSS SECTION STA. 7587+00 TO STA. 7589+00

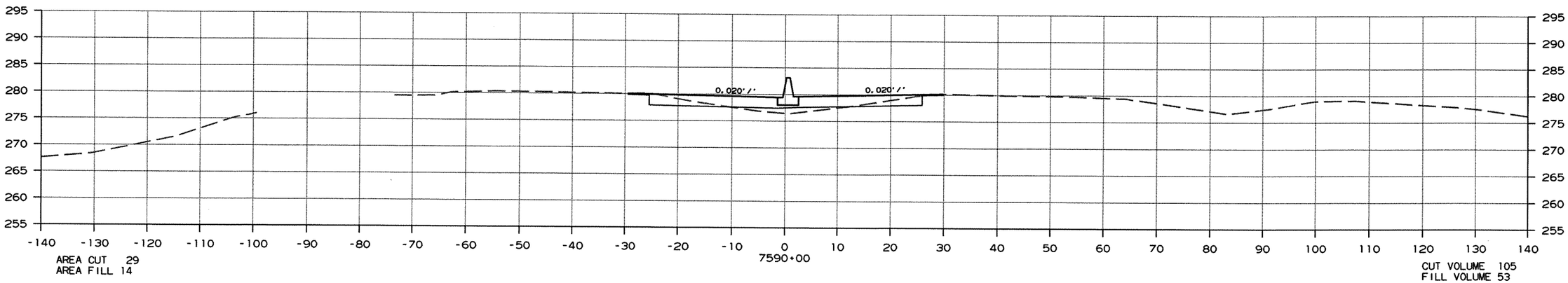
R080411.DGN 4/18/2012

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	155	191

(2) CROSS SECTIONS





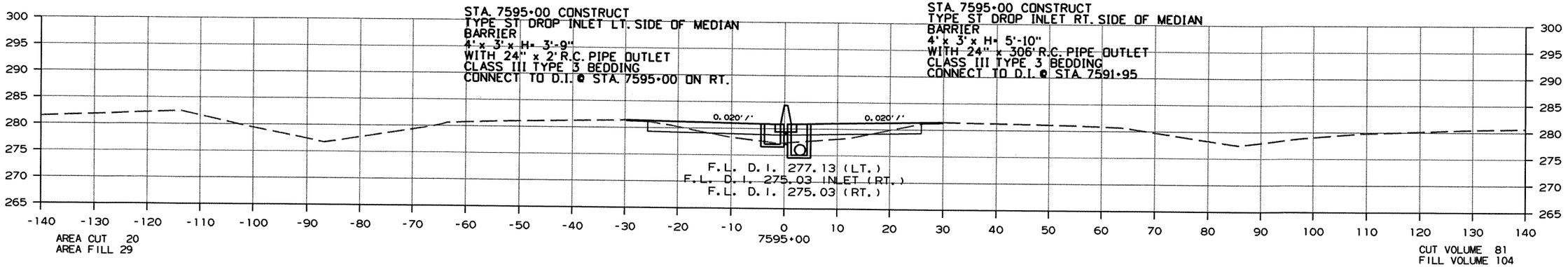


CROSS SECTION STA. 7590+00 TO STA. 7592+00

R080411.DGN 4/18/2012

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	156	191

(2) CROSS SECTIONS

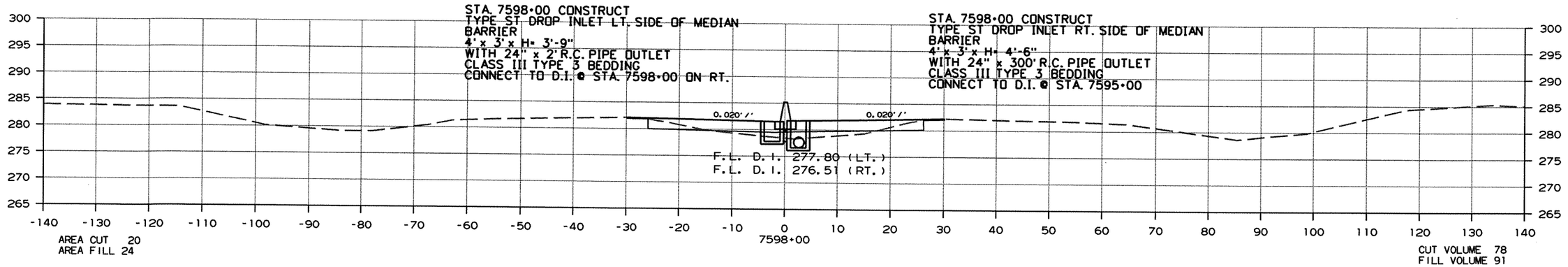


CROSS SECTION STA. 7593+00 TO STA. 7595+00

R080411.DGN 4/18/2012

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				6	ARK.			
				JOB NO.		080411	157	191

(2) CROSS SECTIONS

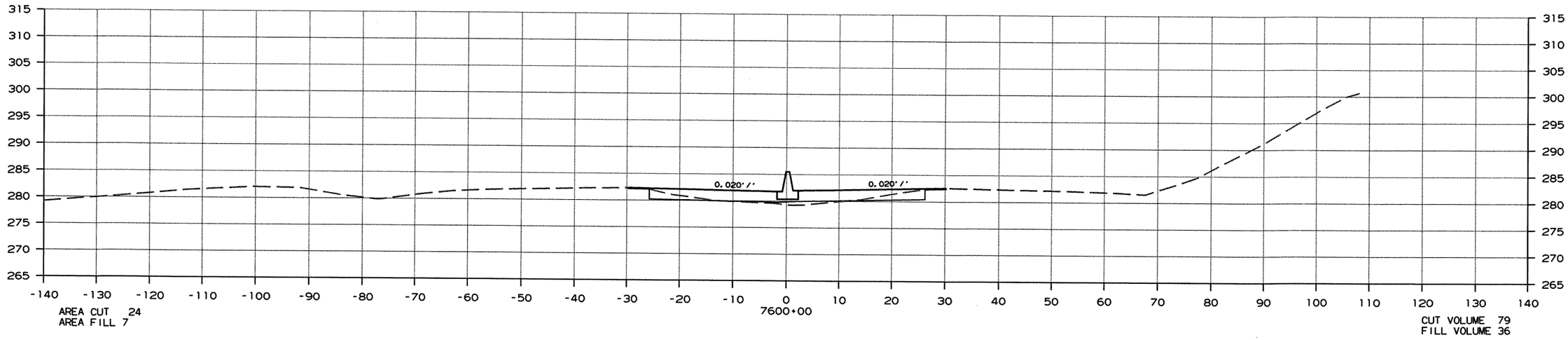


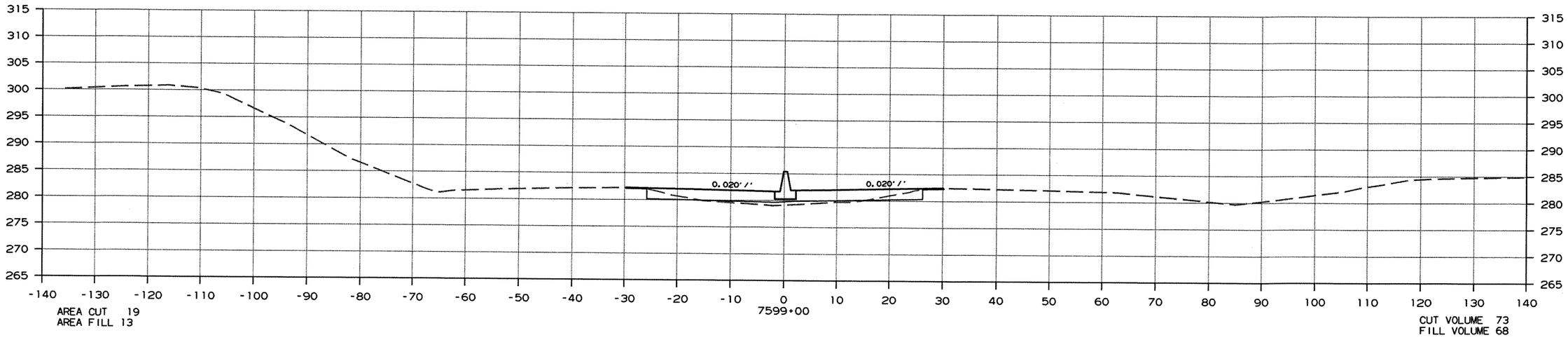
CROSS SECTION STA. 7596+00 TO STA. 7598+00

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	158	191

(2) CROSS SECTIONS



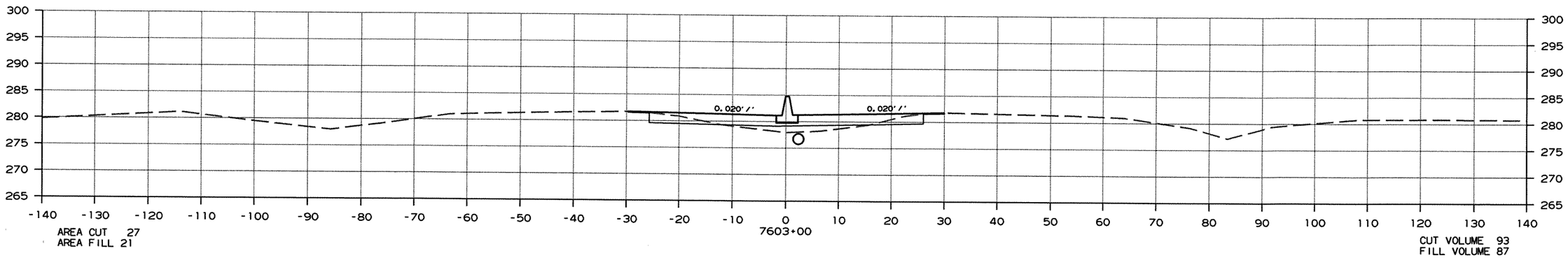


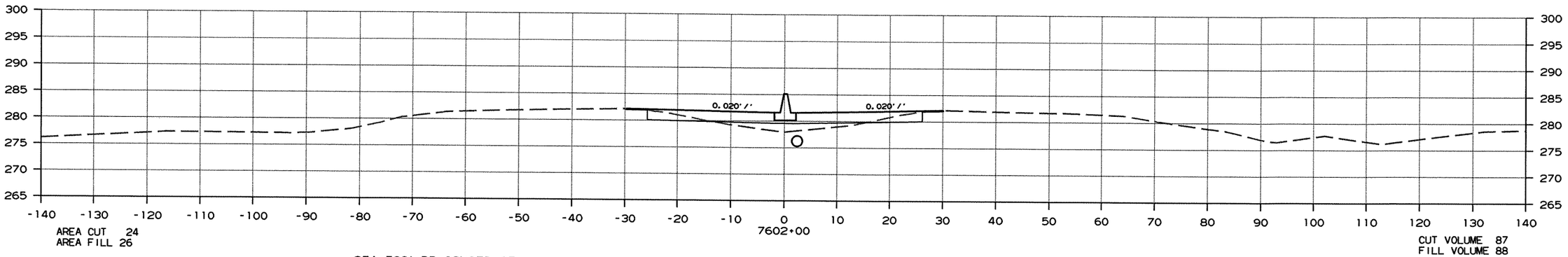
CROSS SECTION STA. 7599+00 TO STA. 7600+00

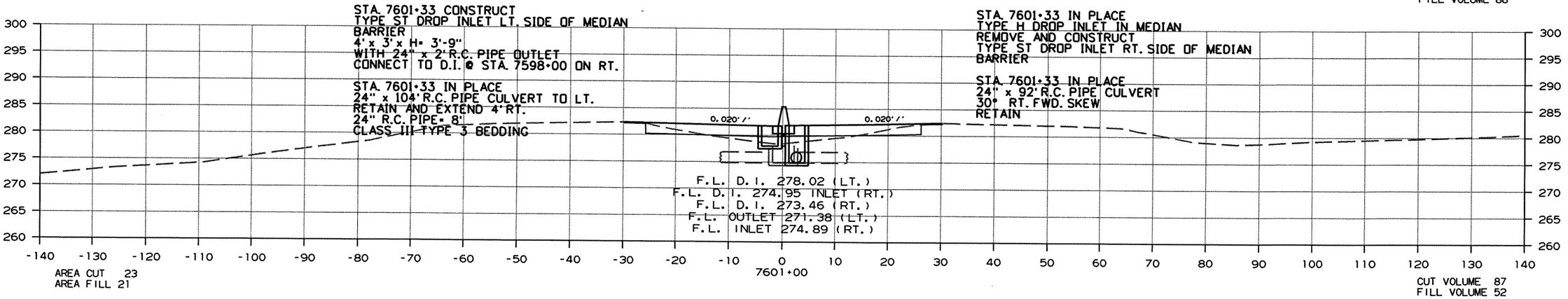
R080411.DGN 4/18/2012

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	159	191

(2) CROSS SECTIONS





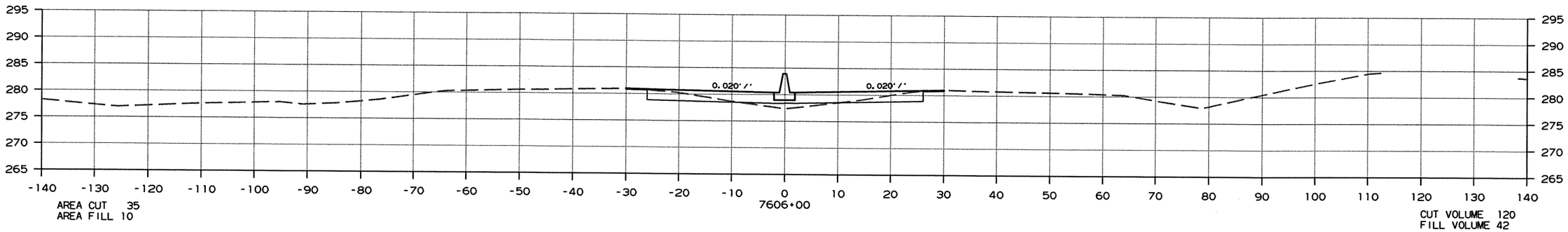


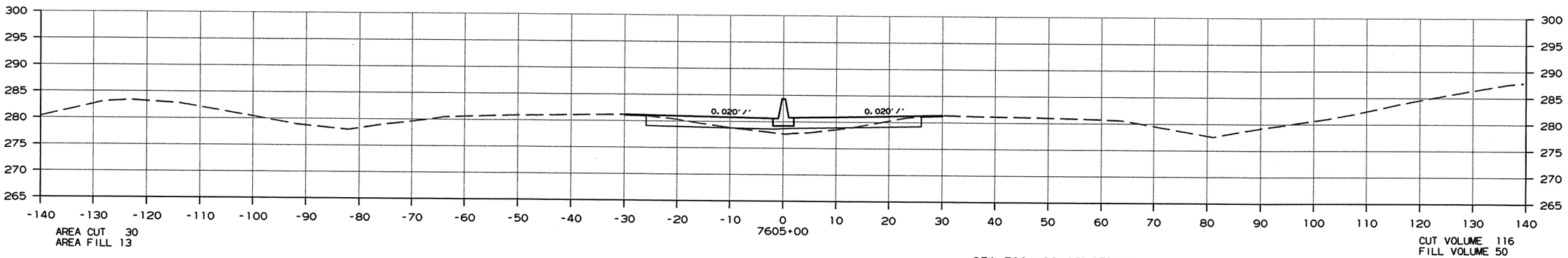
CROSS SECTION STA. 7601+00 TO STA. 7603+00

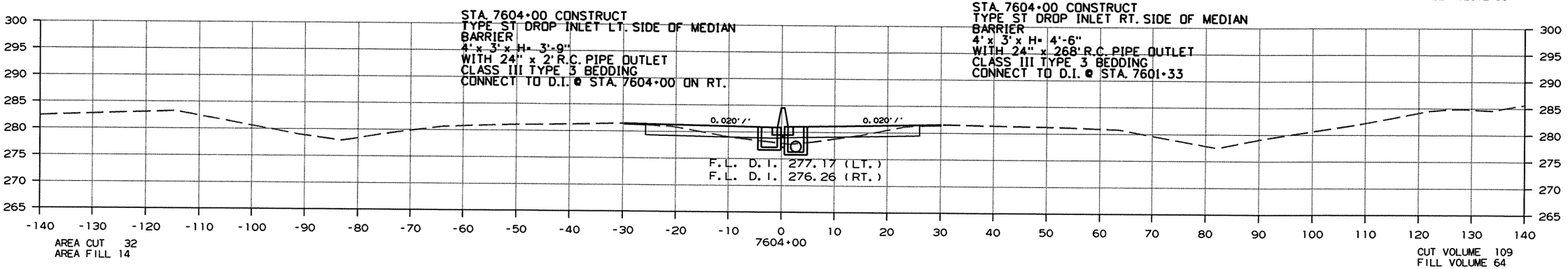
R080411.DGN 4/18/2012

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	160	191

(2) CROSS SECTIONS





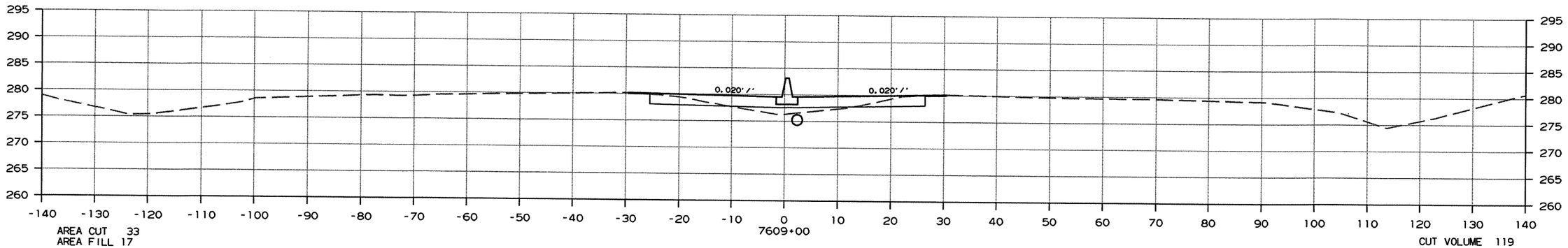


CROSS SECTION STA. 7604+00 TO STA. 7606+00

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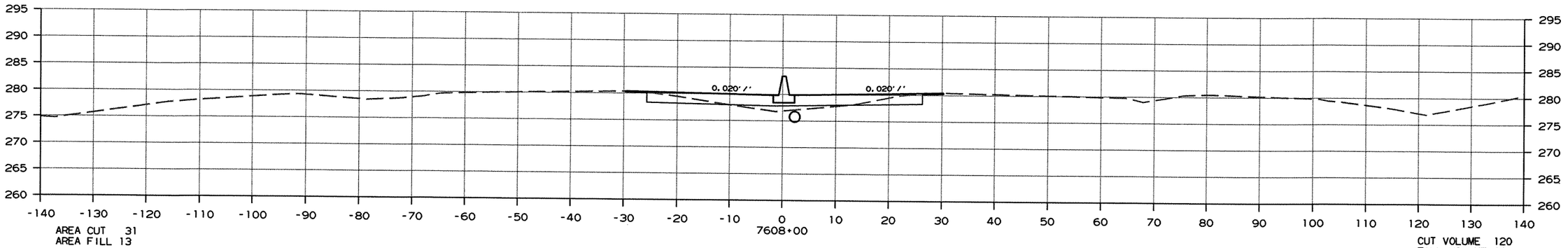
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	161	191

(2) CROSS SECTIONS



AREA CUT 33
AREA FILL 17

CUT VOLUME 119
FILL VOLUME 55

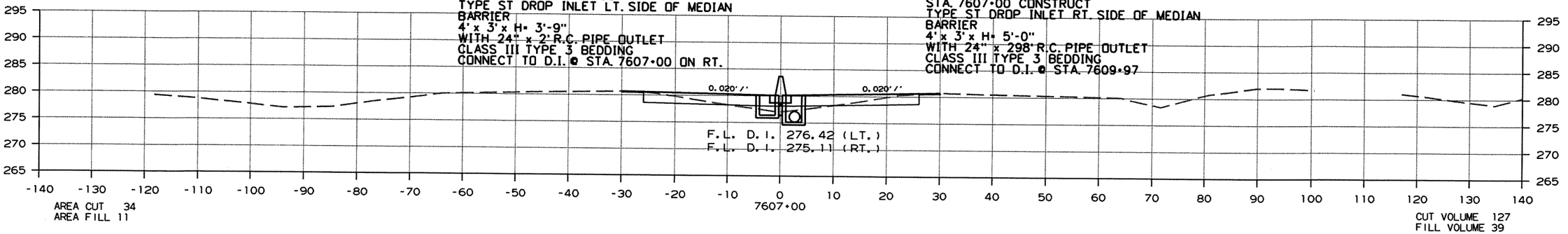


AREA CUT 31
AREA FILL 13

CUT VOLUME 120
FILL VOLUME 44

STA. 7607+00 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN
BARRIER
4' x 3' x H= 3'-9"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7607+00 ON RT.

STA. 7607+00 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN
BARRIER
4' x 3' x H= 5'-0"
WITH 24" x 298' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7609+97



F.L. D.I. 276.42 (LT.)
F.L. D.I. 275.11 (RT.)

AREA CUT 34
AREA FILL 11

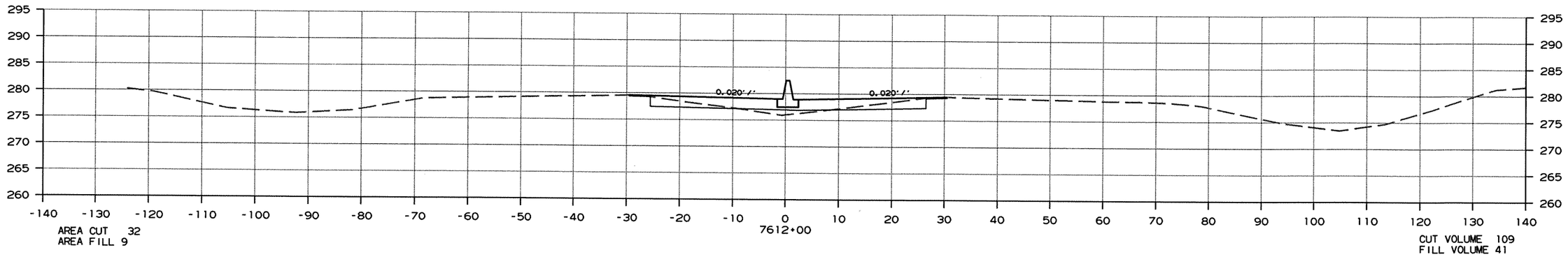
CUT VOLUME 127
FILL VOLUME 39

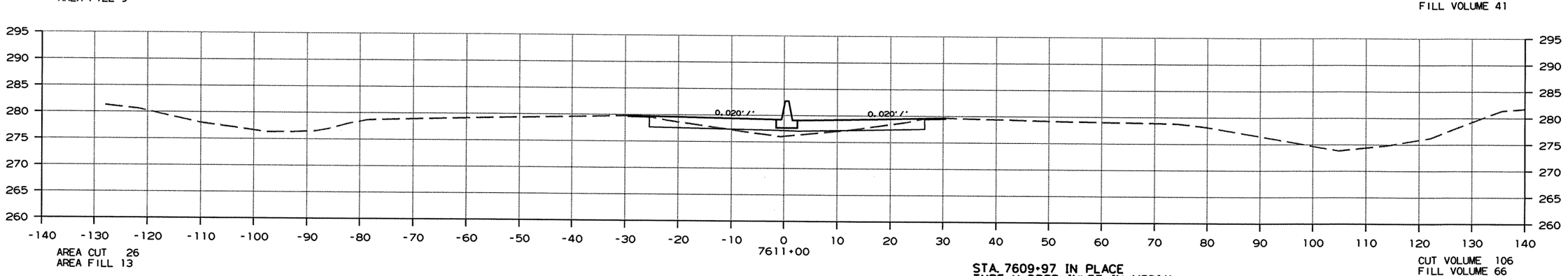
CROSS SECTION STA. 7607+00 TO STA. 7609+00

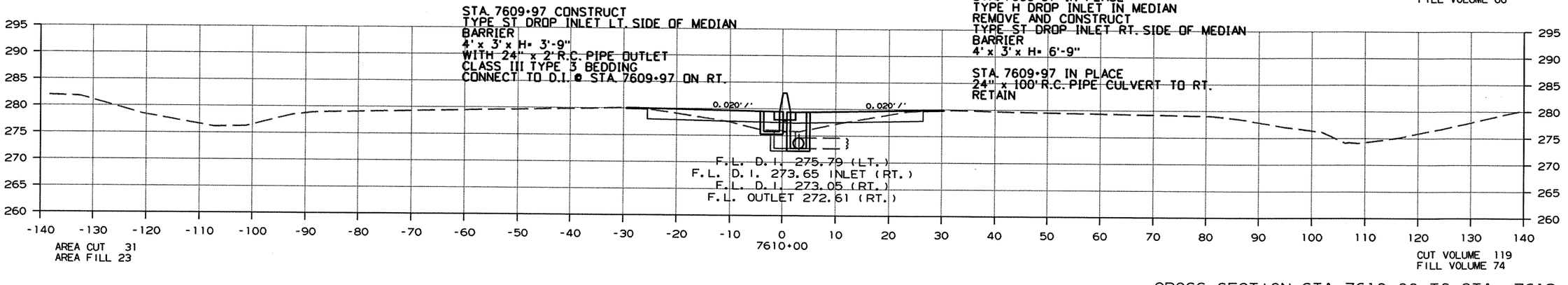
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				6	ARK.			
				JOB NO.		080411	162	191

(2) CROSS SECTIONS





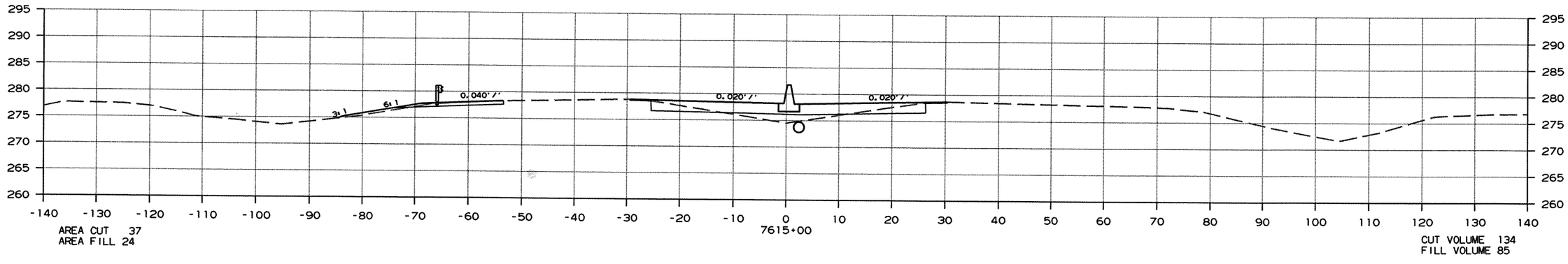


CROSS SECTION STA. 7610+00 TO STA. 7612+00

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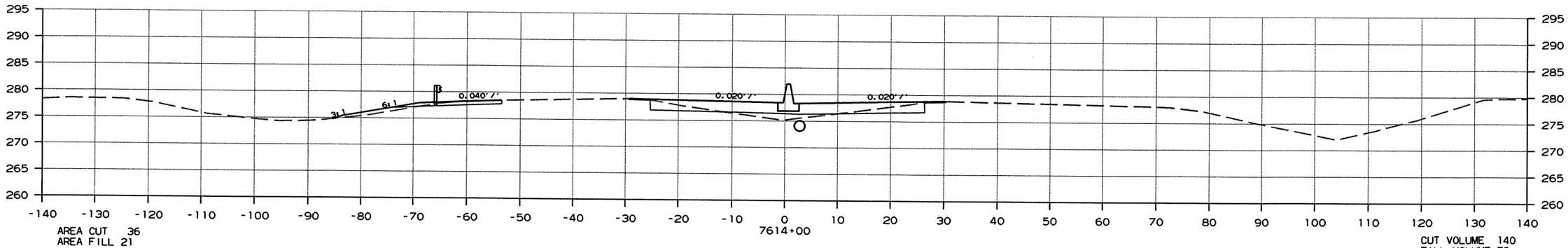
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	163	191

(2) CROSS SECTIONS



AREA CUT 37
AREA FILL 24

CUT VOLUME 134
FILL VOLUME 85

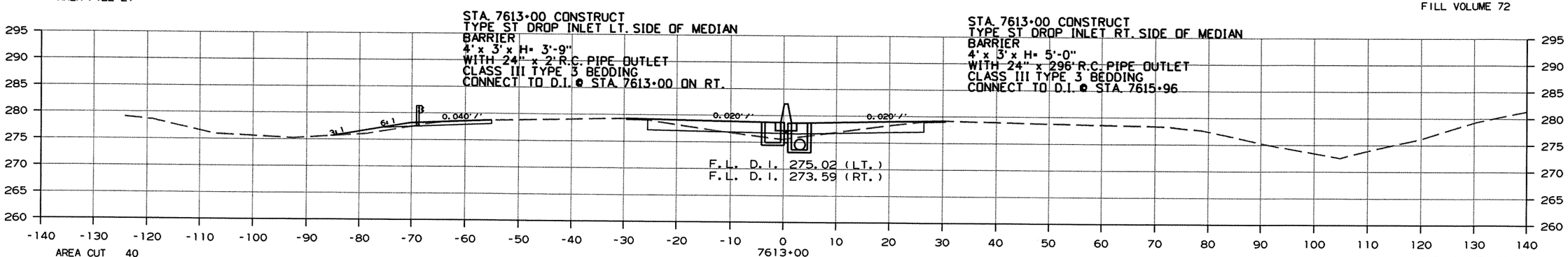


AREA CUT 36
AREA FILL 21

CUT VOLUME 140
FILL VOLUME 72

STA. 7613+00 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN
BARRIER
4' x 3' x H= 3'-9"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7613+00 ON RT.

STA. 7613+00 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN
BARRIER
4' x 3' x H= 5'-0"
WITH 24" x 296' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7615+96



F.L. D.I. 275.02 (LT.)
F.L. D.I. 273.59 (RT.)

AREA CUT 40
AREA FILL 17

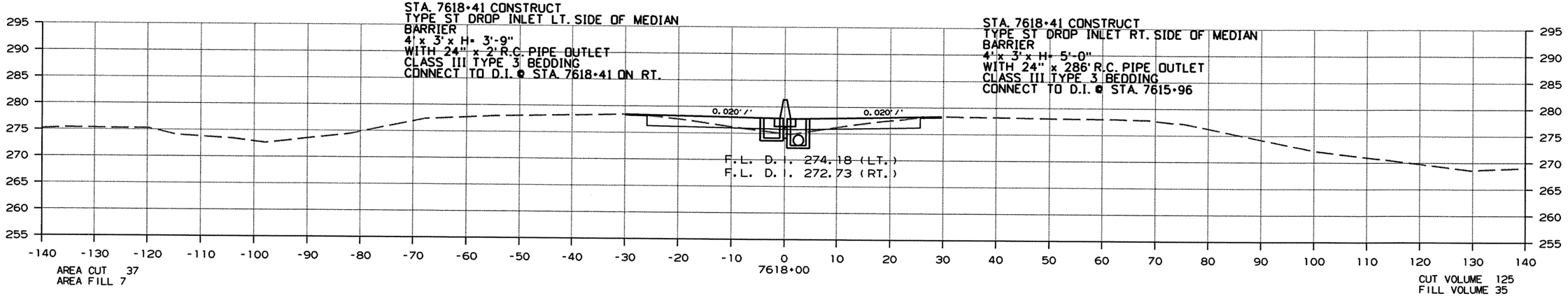
CUT VOLUME 134
FILL VOLUME 49

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CROSS SECTION STA. 7613+00 TO STA. 7615+00

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	164	191

(2) CROSS SECTIONS

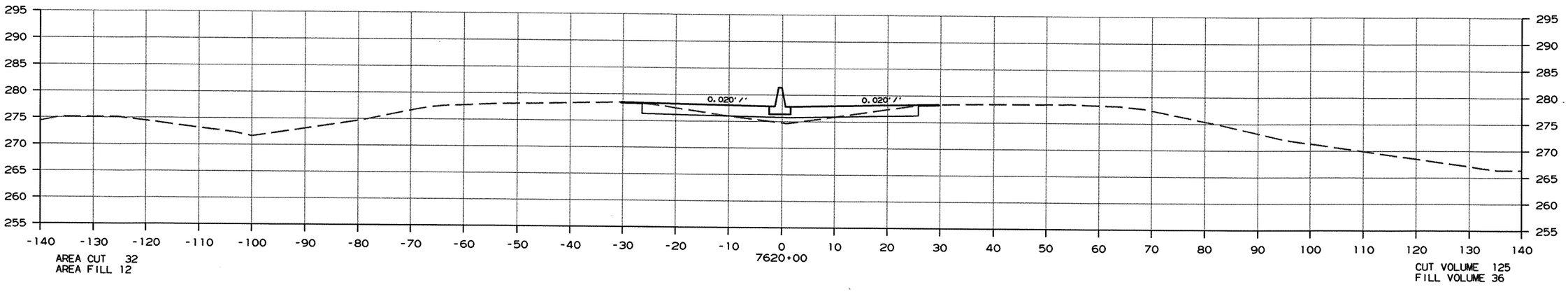


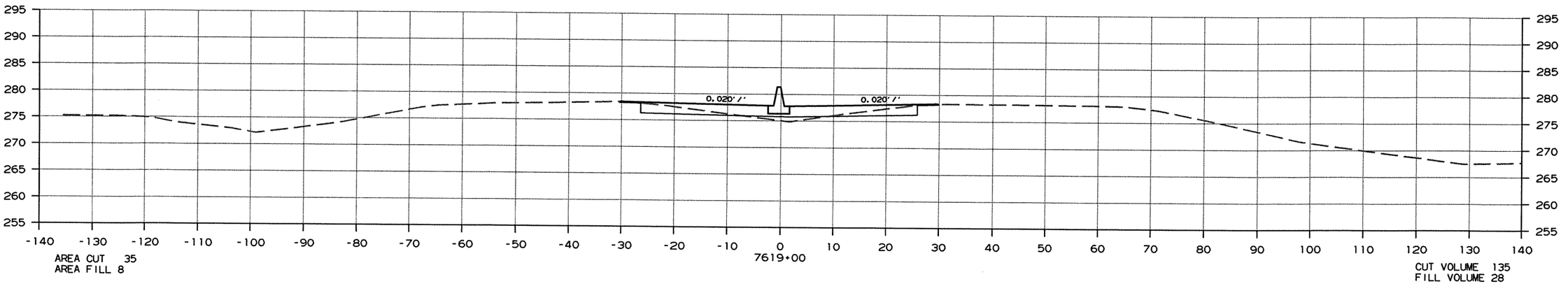
CROSS SECTION STA. 7616+00 TO STA. 7618+00

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	165	191

(2) CROSS SECTIONS



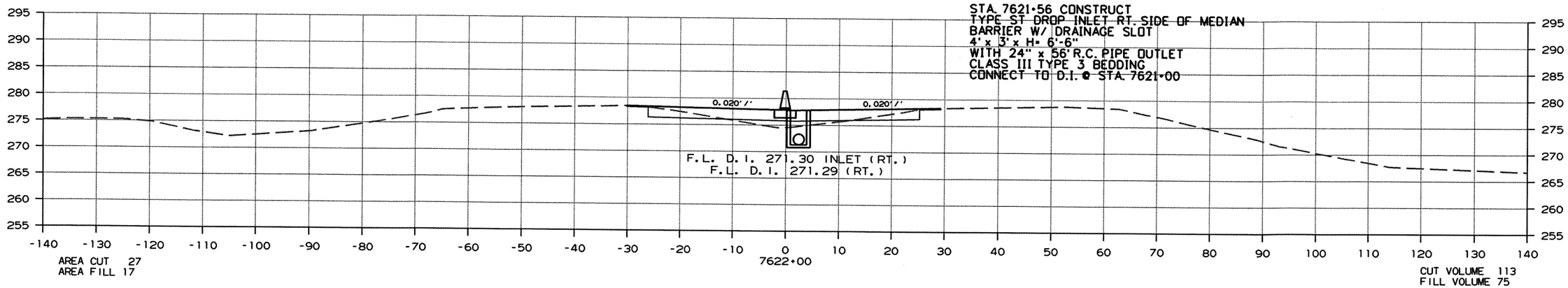


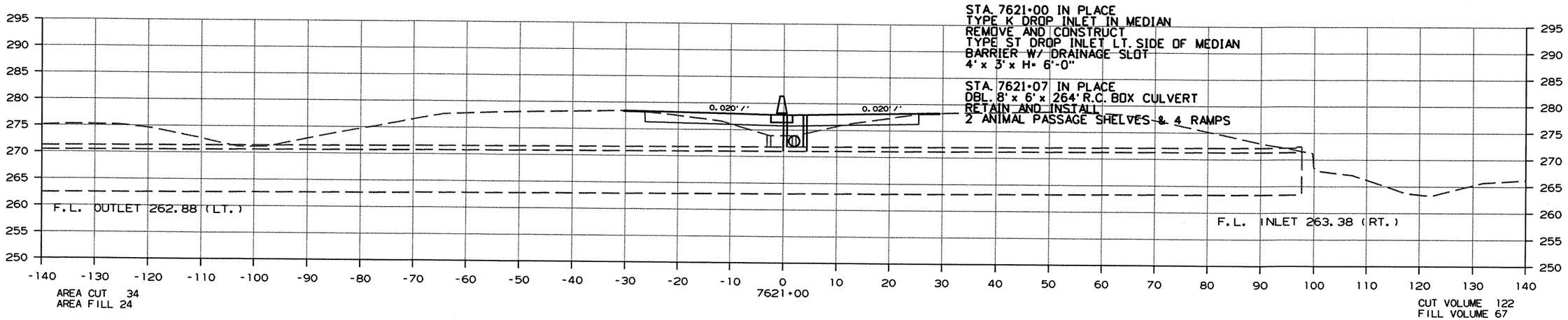
CROSS SECTION STA. 7619+00 TO STA. 7620+00

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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(2) CROSS SECTIONS



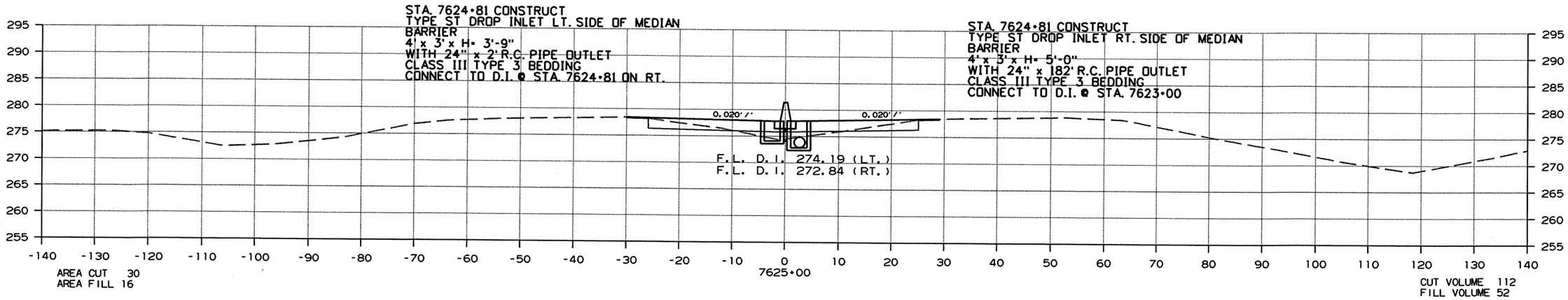


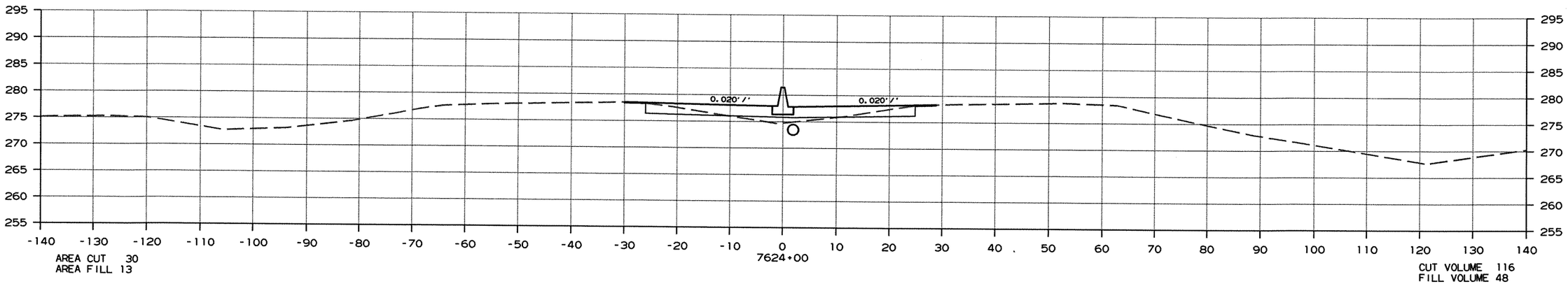
CROSS SECTION STA. 7621+00 TO STA. 7622+00

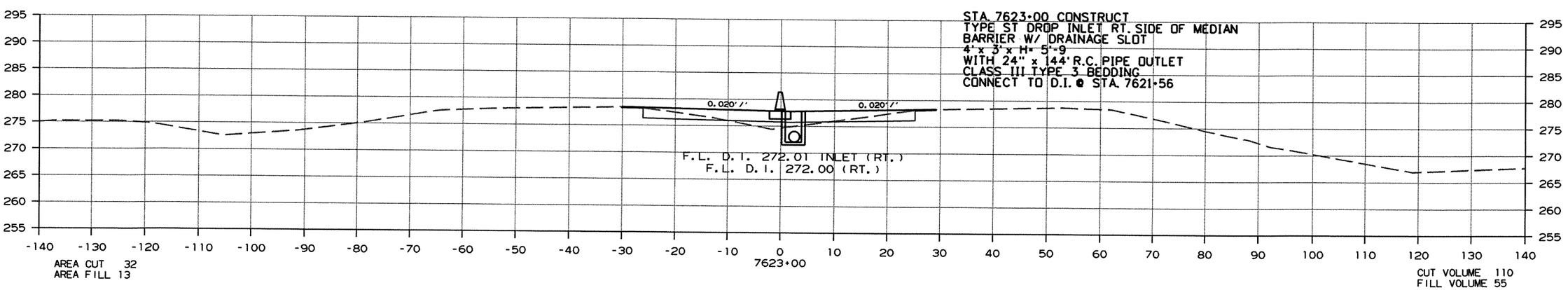
R080411.DGN 4/18/2012

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	167	191

(2) CROSS SECTIONS





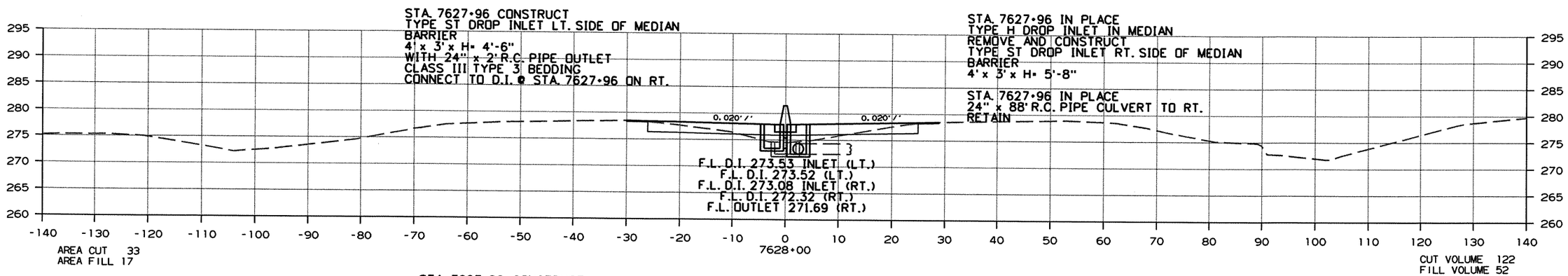


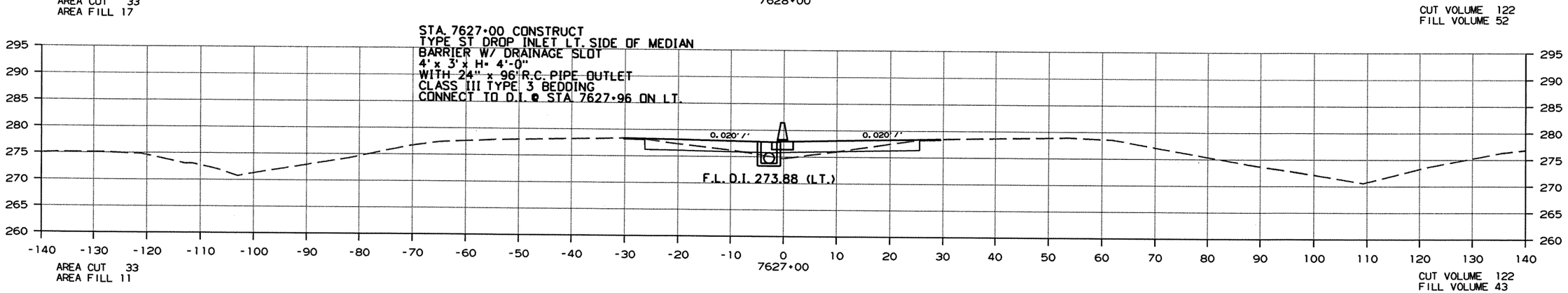
CROSS SECTION STA. 7623+00 TO STA. 7625+00

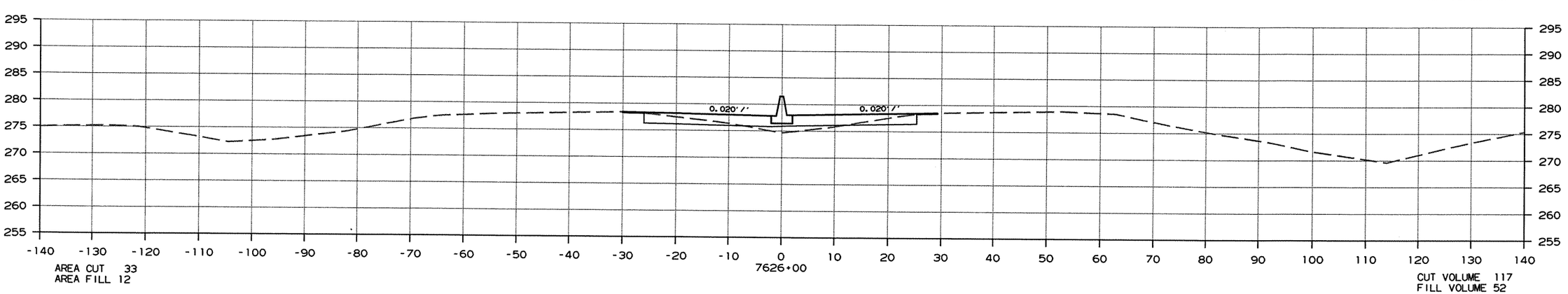
R080411.DGN 4/18/2012

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	168	191

(2) CROSS SECTIONS





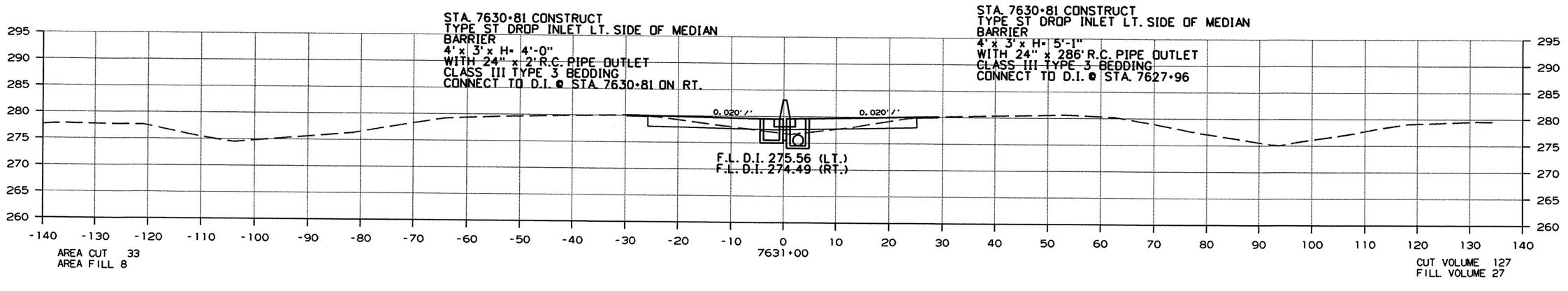


CROSS SECTION STA. 7626+00 TO STA. 7628+00

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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				JOB NO.		080411	169	191

(2) CROSS SECTIONS

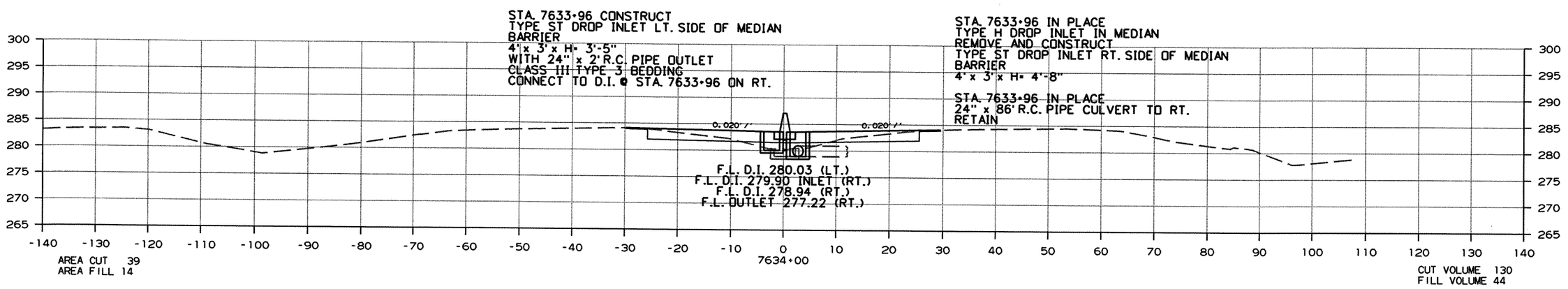


CROSS SECTION STA. 7629+00 TO STA. 7631+00

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	170	191

(2) CROSS SECTIONS

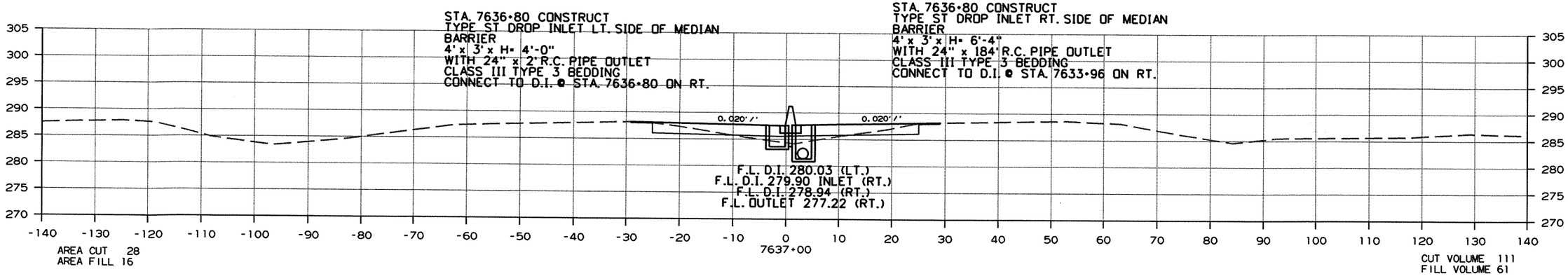


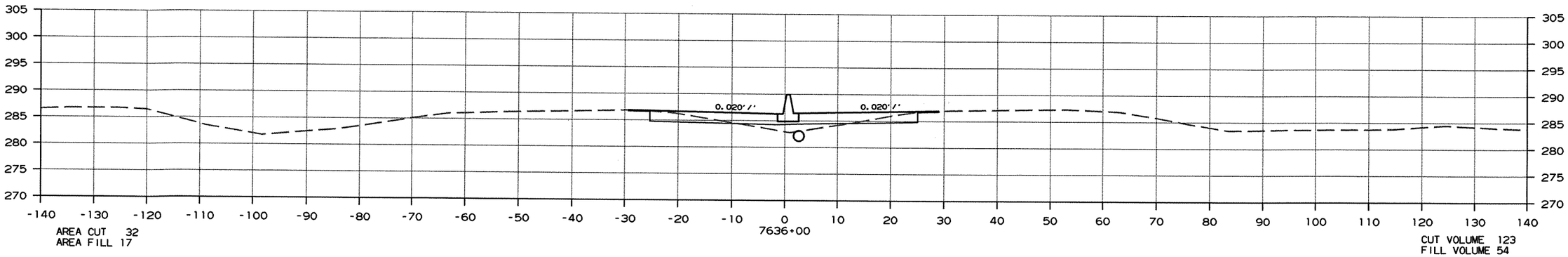
CROSS SECTION STA. 7632+00 TO STA. 7634+00

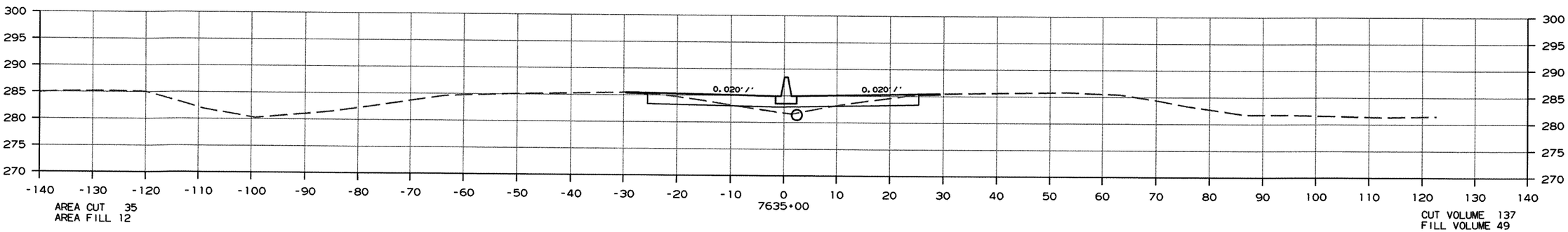
R080411.DGN 4/18/2012

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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				JOB NO.		080411	171	191

(2) CROSS SECTIONS





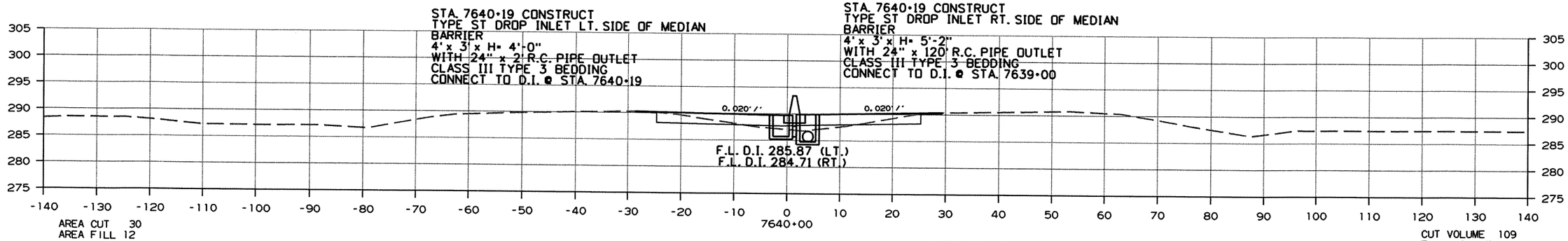


CROSS SECTION STA. 7635+00 TO STA. 7637+00

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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(2) CROSS SECTIONS

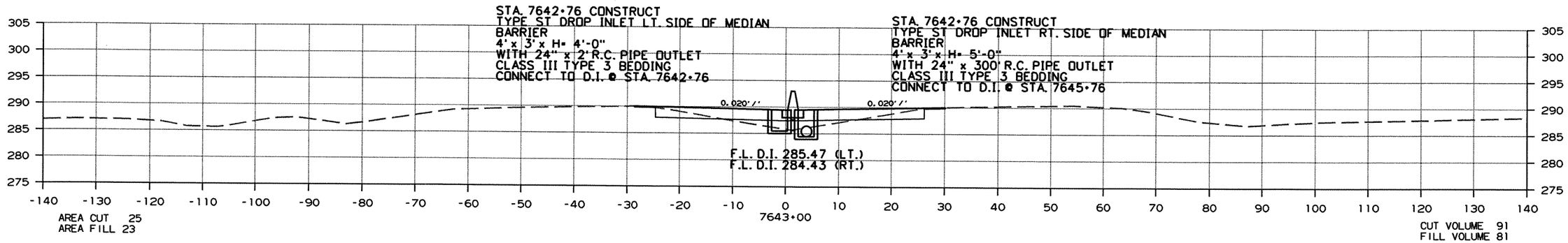


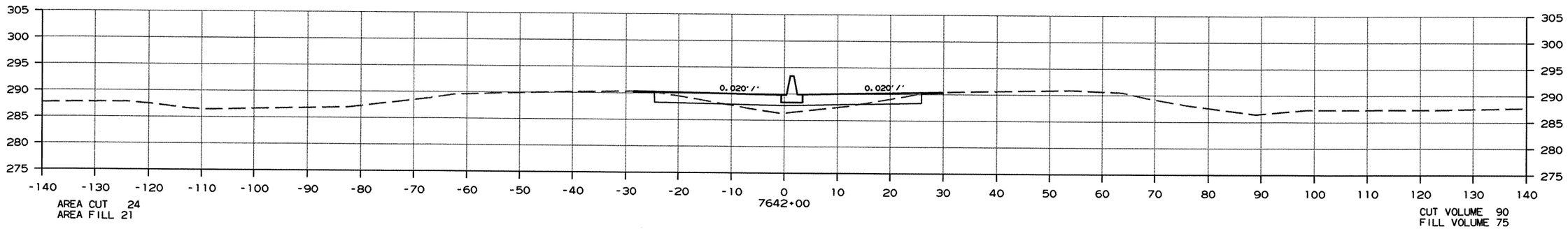
CROSS SECTION STA. 7638+00 TO STA. 7640+00

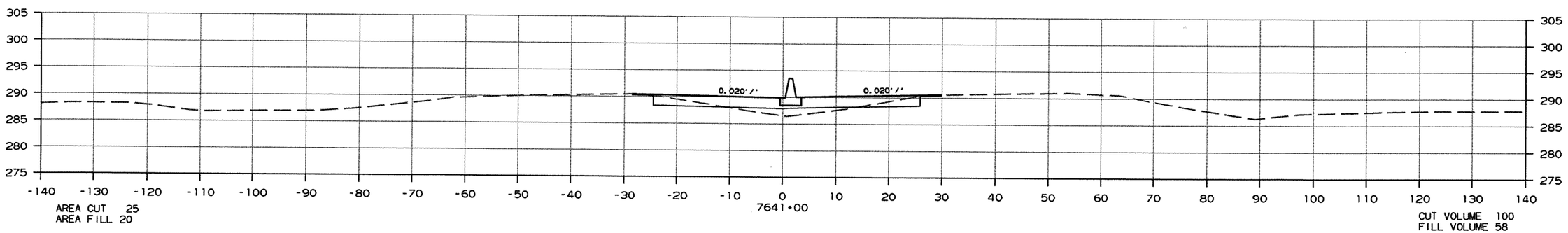
R080411.DGN 4/18/2012

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	173	191

(2) CROSS SECTIONS





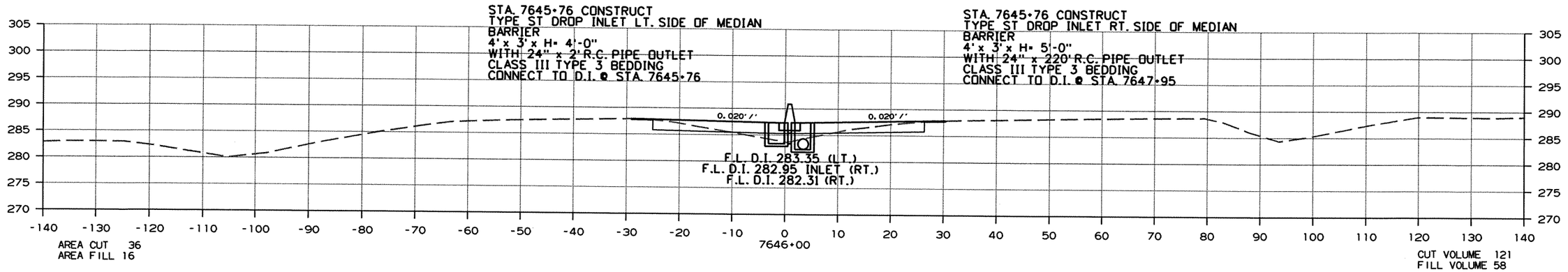


CROSS SECTION STA. 7641+00 TO STA. 7643+00

R080411.DGN 4/18/2012

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	174	191

(2) CROSS SECTIONS

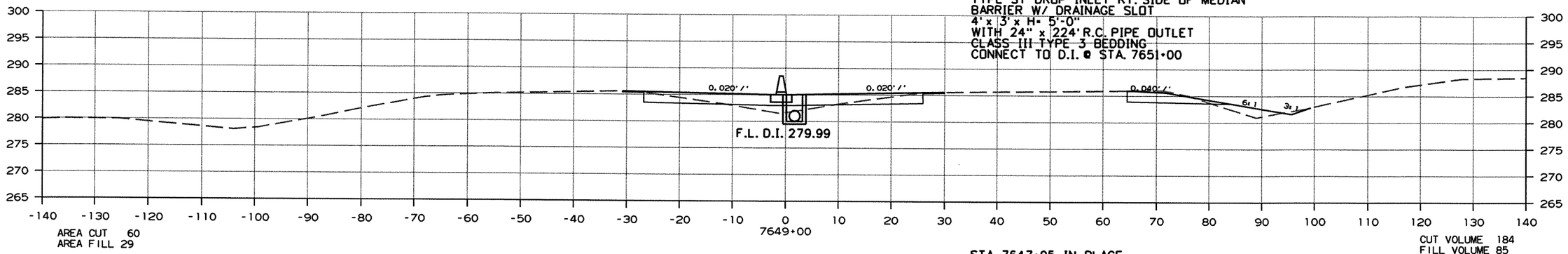


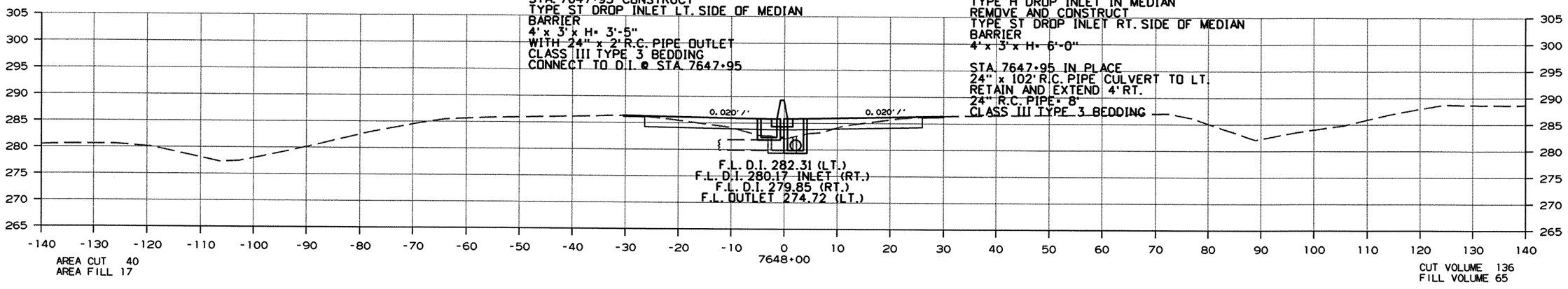
CROSS SECTION STA. 7644+00 TO STA. 7646+00

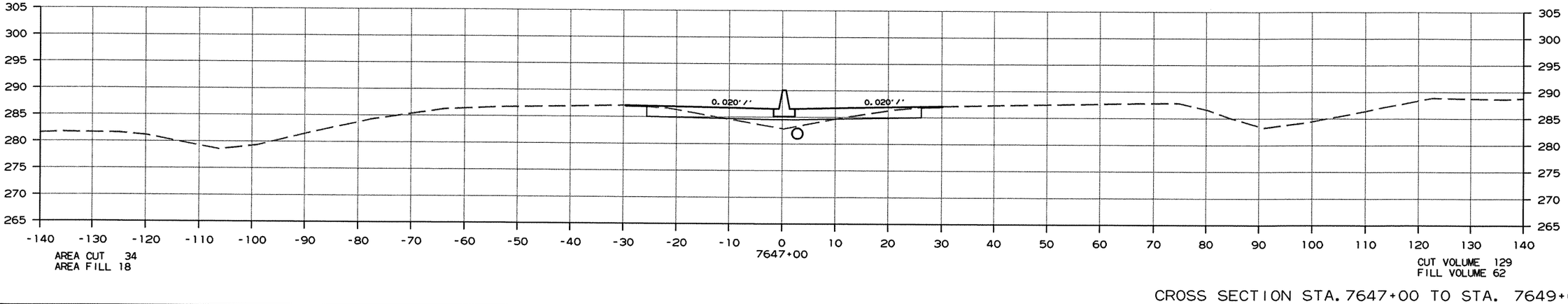
R080411.DGN 4/18/2012

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	175	191

(2) CROSS SECTIONS





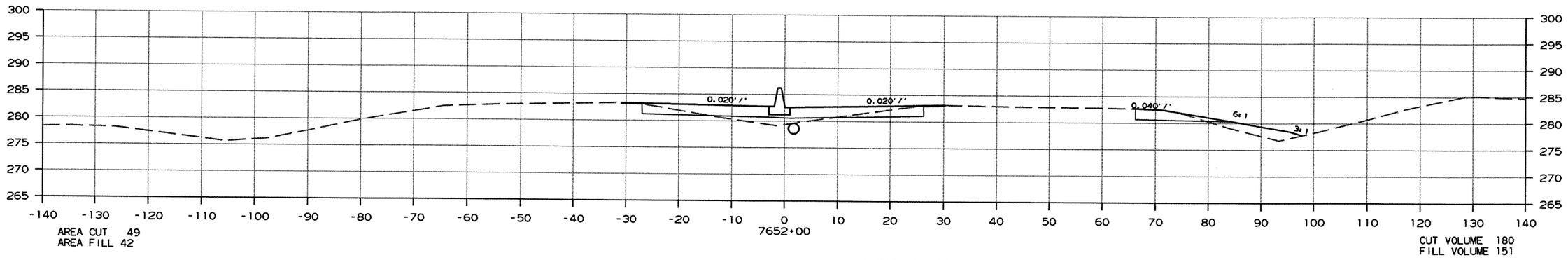


CROSS SECTION STA. 7647+00 TO STA. 7649+00

R080411.DGN 4/18/2012

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	176	191

(2) CROSS SECTIONS

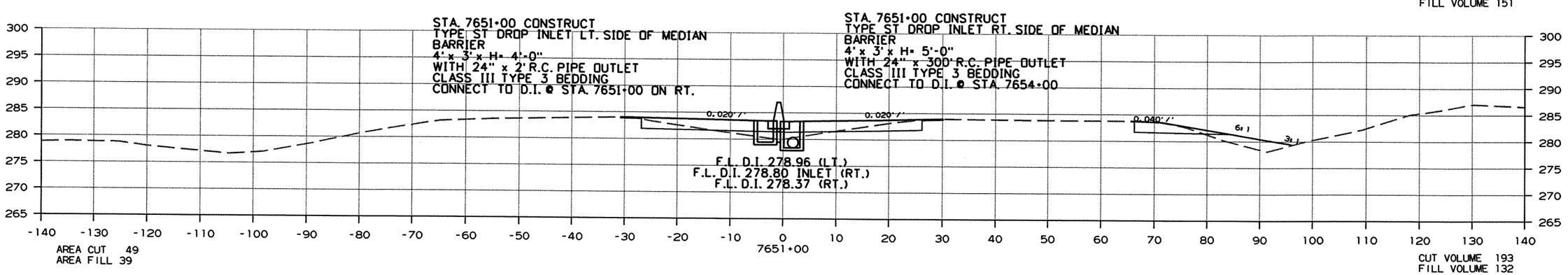


AREA CUT 49
AREA FILL 42

CUT VOLUME 180
FILL VOLUME 151

STA. 7651+00 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN
BARRIER
4' x 3' x H= 4'-0"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7651+00 ON RT.

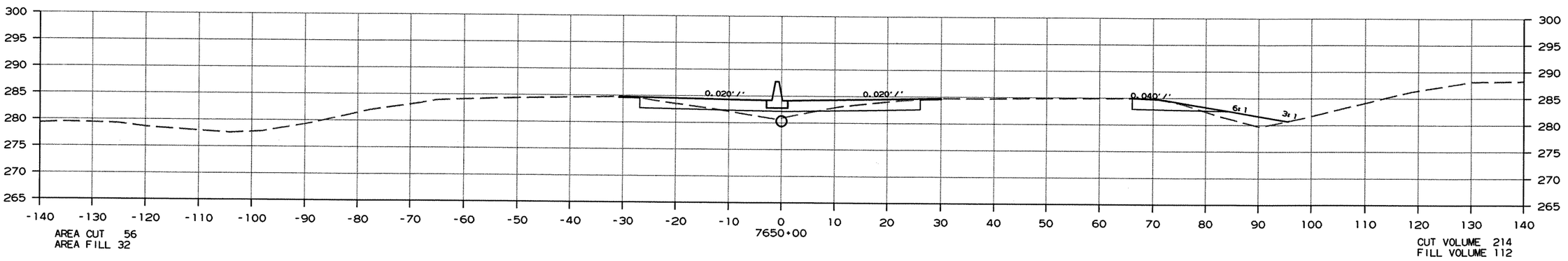
STA. 7651+00 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN
BARRIER
4' x 3' x H= 5'-0"
WITH 24" x 300' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7654+00



F.L. D.I. 278.96 (LT.)
F.L. D.I. 278.80 INLET (RT.)
F.L. D.I. 278.37 (RT.)

AREA CUT 49
AREA FILL 39

CUT VOLUME 193
FILL VOLUME 132



AREA CUT 56
AREA FILL 32

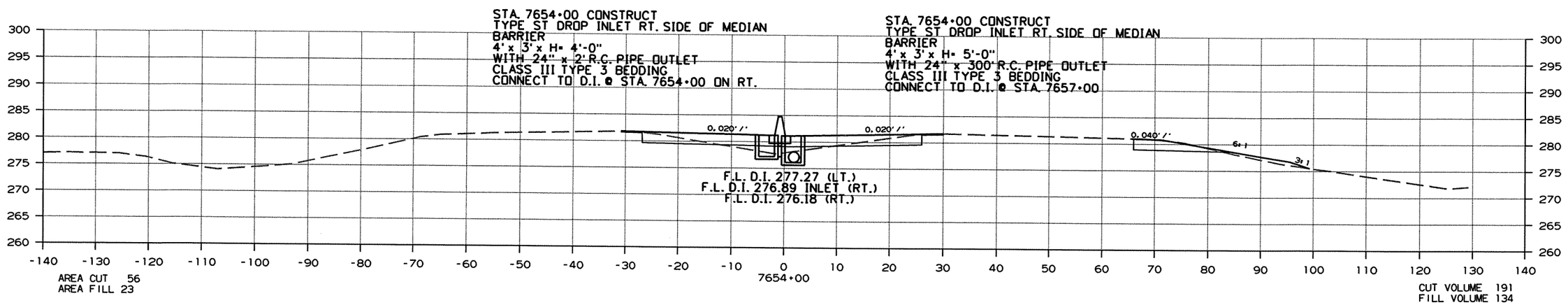
CUT VOLUME 214
FILL VOLUME 112

CROSS SECTION STA. 7650+00 TO STA. 7652+00

R080411.DGN 4/18/2012

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	177	191

(2) CROSS SECTIONS

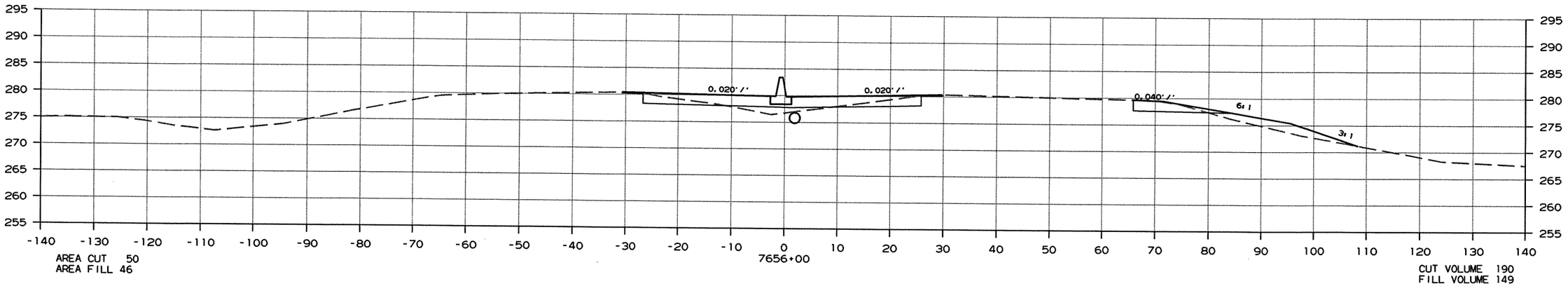


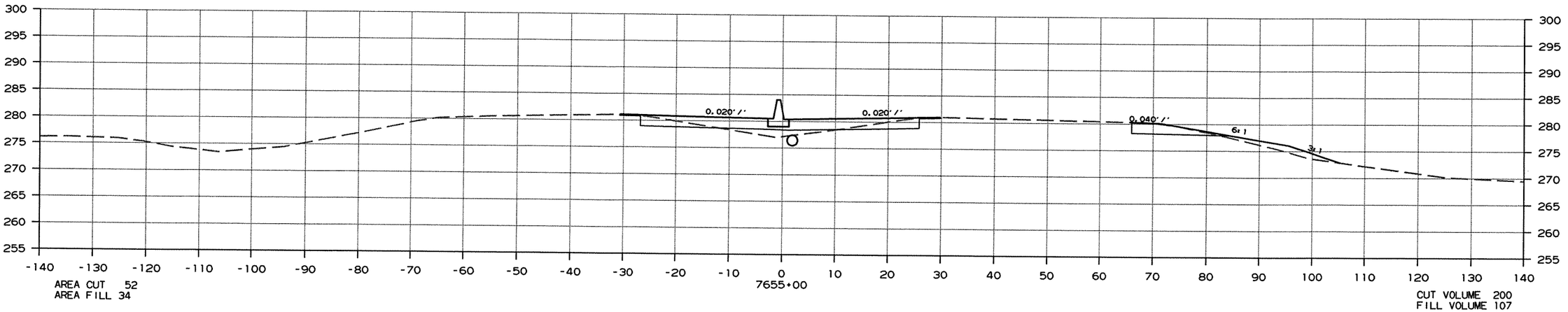
CROSS SECTION STA. 7653+00 TO STA. 7654+00

R080411.DGN 4/18/2012

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	178	191

(2) CROSS SECTIONS



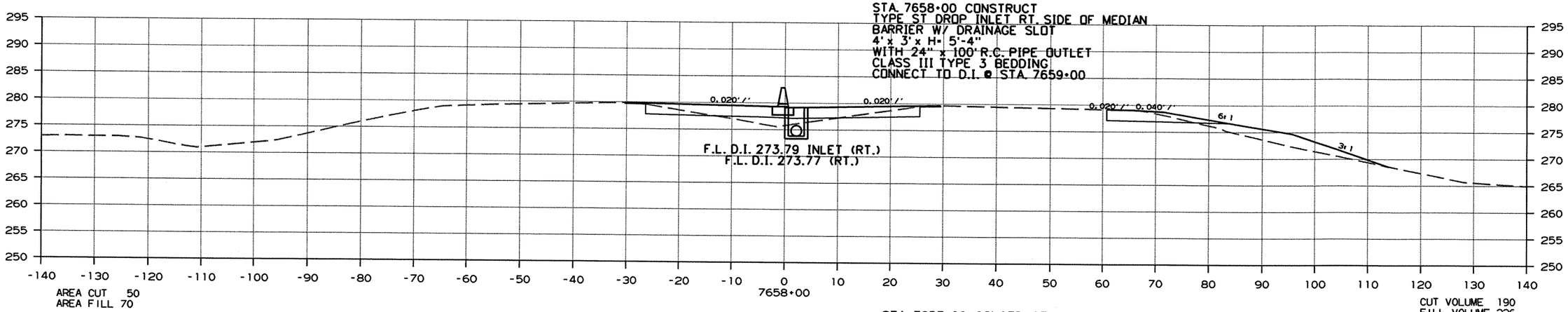


CROSS SECTION STA. 7655+00 TO STA. 7656+00

R080411.DGN 4/18/2012

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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				JOB NO.		080411	179	191

(2) CROSS SECTIONS

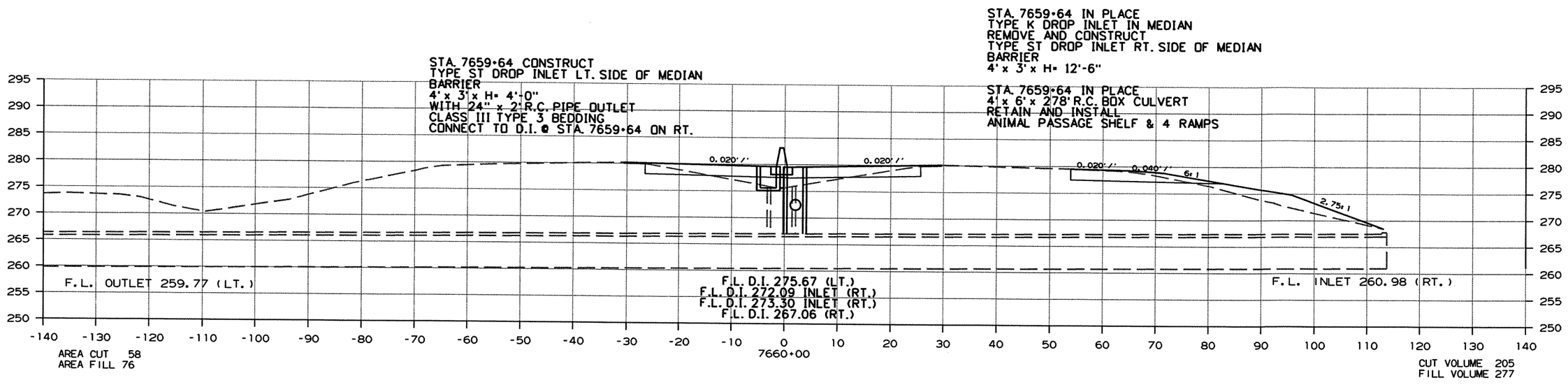


CROSS SECTION STA. 7657+00 TO STA. 7658+00

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(2) CROSS SECTIONS

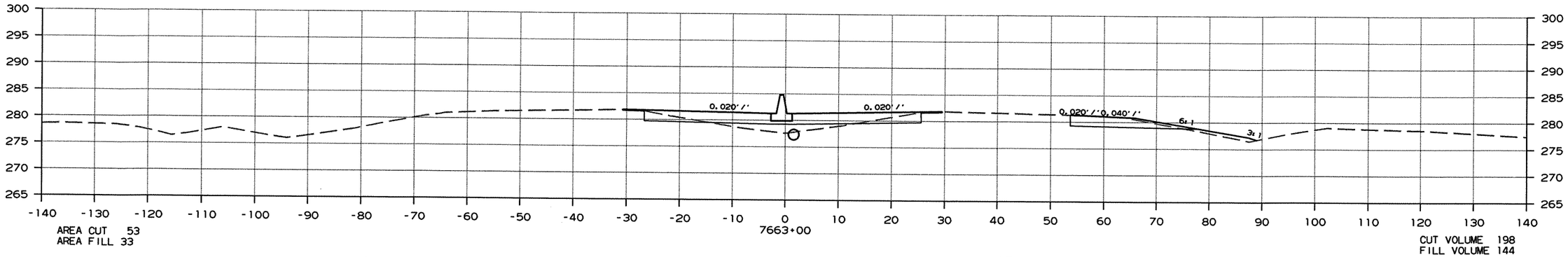


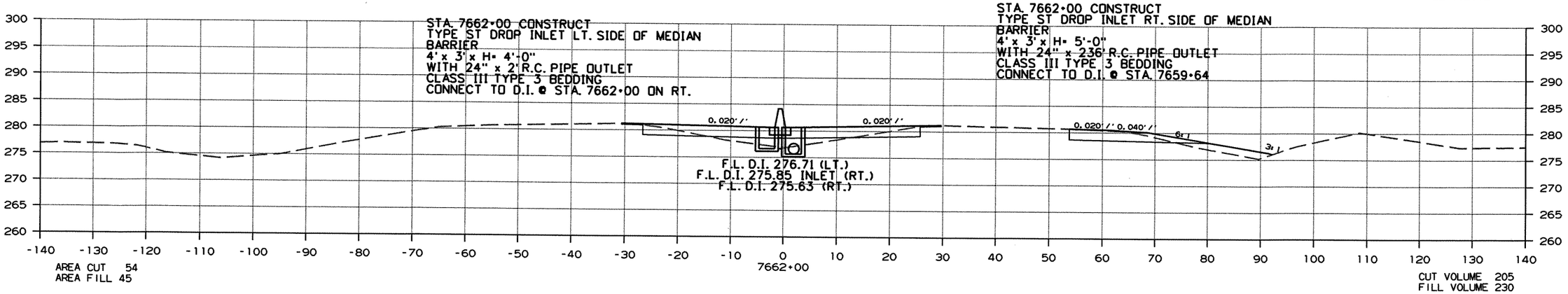
CROSS SECTION STA. 7659+00 TO STA. 7660+00

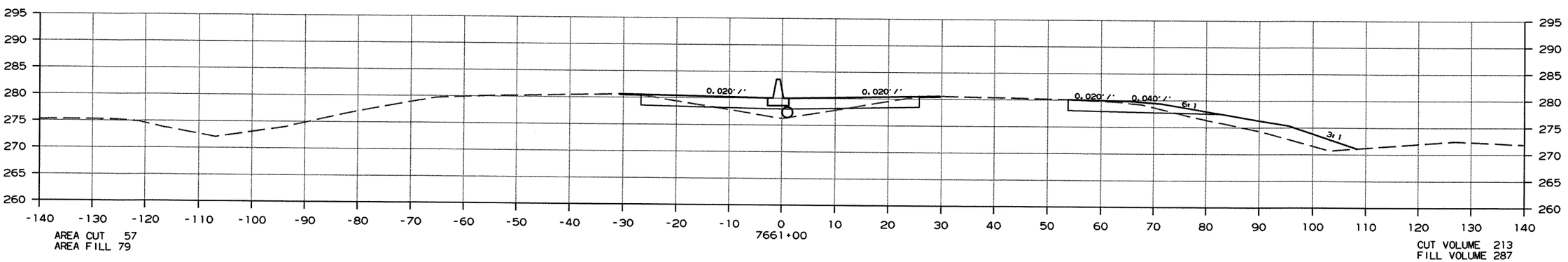
R080411.DGN 4/18/2012

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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(2) CROSS SECTIONS





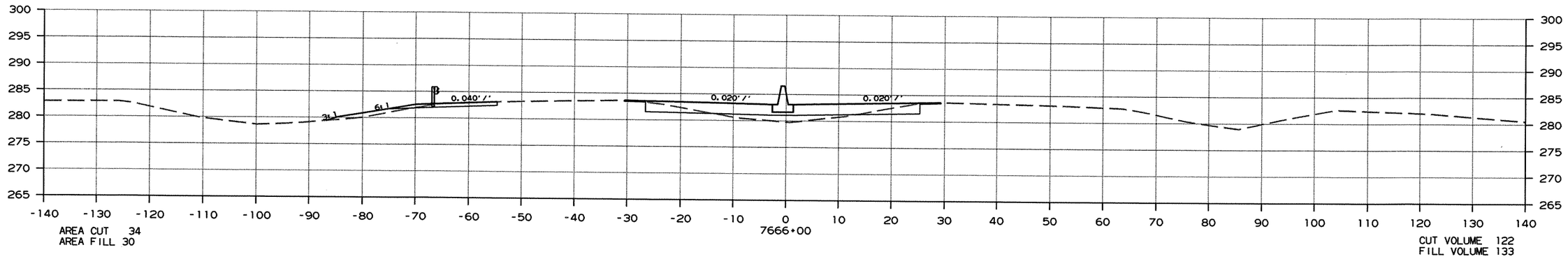


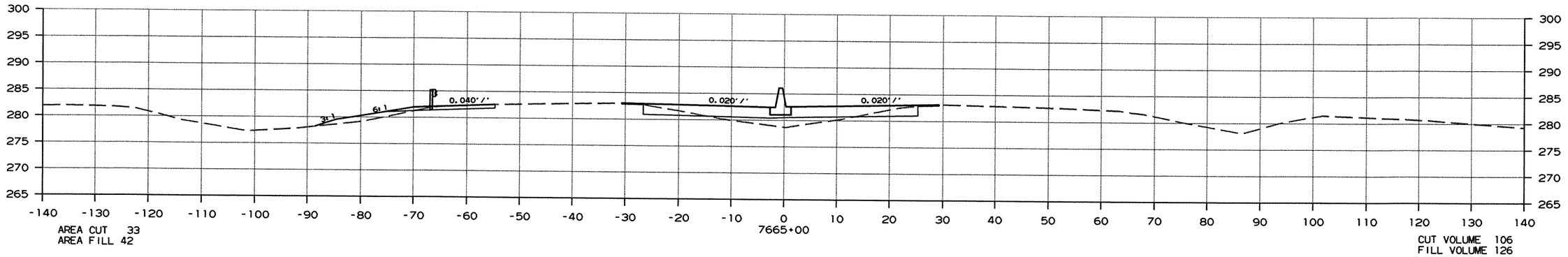
CROSS SECTION STA. 7661+00 TO STA. 7663+00

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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				JOB NO.		080411	182	191

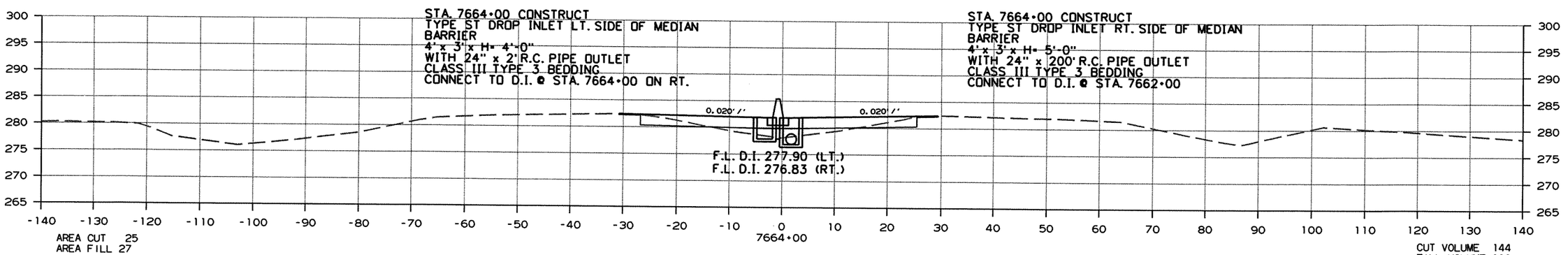
(2) CROSS SECTIONS





STA. 7664+00 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 4'-0"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7664+00 ON RT.

STA. 7664+00 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN BARRIER
4' x 3' x H= 5'-0"
WITH 24" x 200' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7662+00

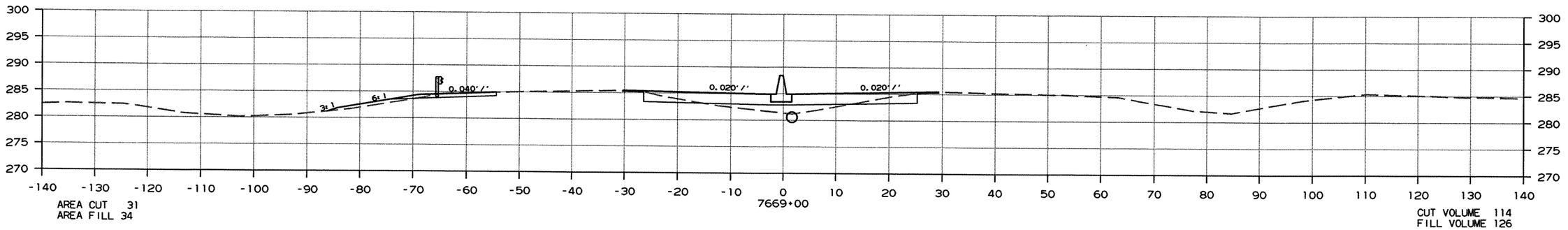


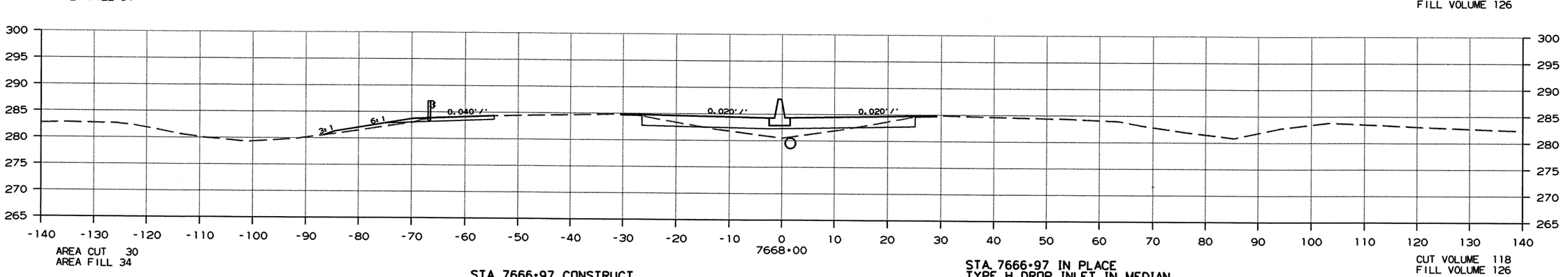
CROSS SECTION STA. 7664+00 TO STA. 7666+00

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	183	191

(2) CROSS SECTIONS

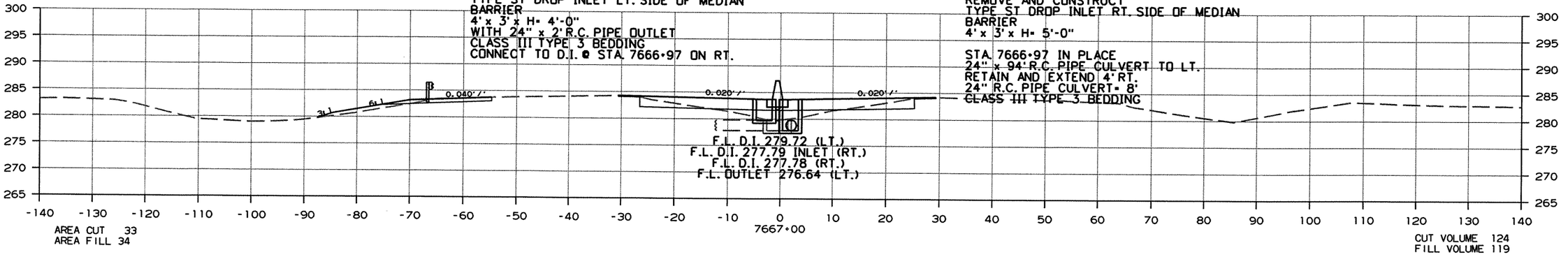




STA. 7666+97 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN
BARRIER
4' x 3' x H= 4'-0"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7666+97 ON RT.

STA. 7666+97 IN PLACE
TYPE H DROP INLET IN MEDIAN
REMOVE AND CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN
BARRIER
4' x 3' x H= 5'-0"

STA. 7666+97 IN PLACE
24" x 94' R.C. PIPE CULVERT TO LT.
RETAIN AND EXTEND 4' RT.
24" R.C. PIPE CULVERT= 8'
CLASS III TYPE 3 BEDDING

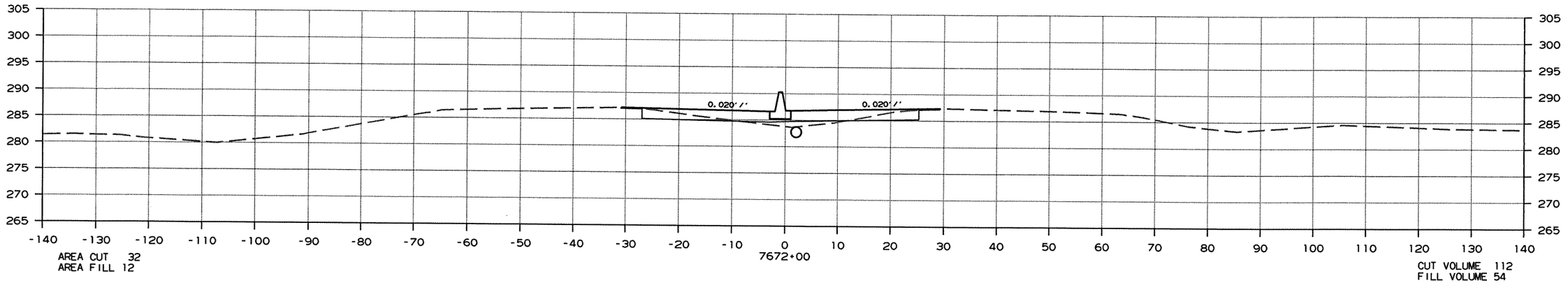


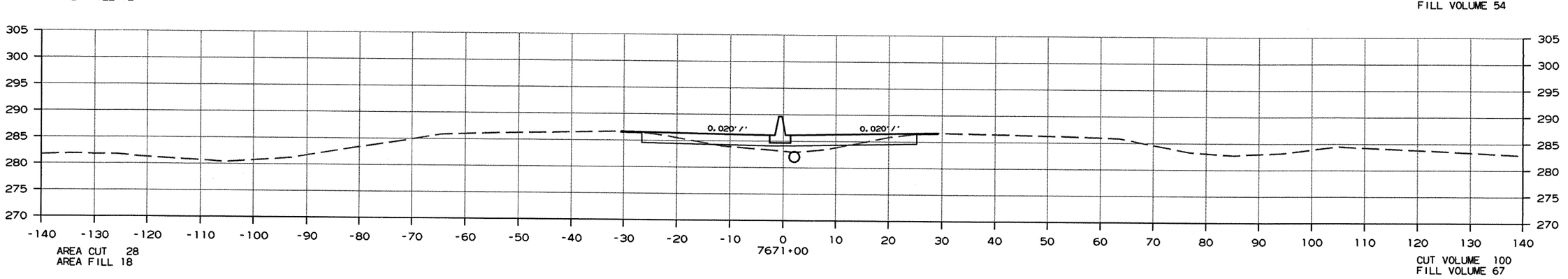
CROSS SECTION STA. 7667+00 TO STA. 7669+00

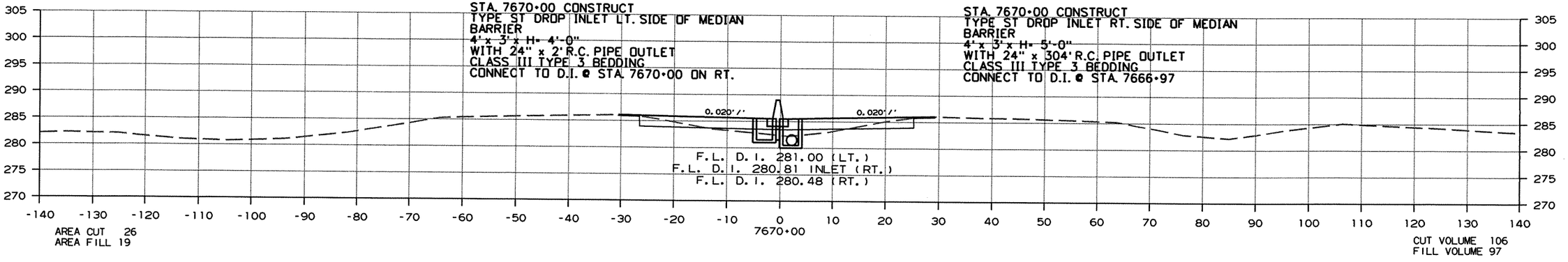
R080411.DGN 4/18/2012

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	184	191

(2) CROSS SECTIONS





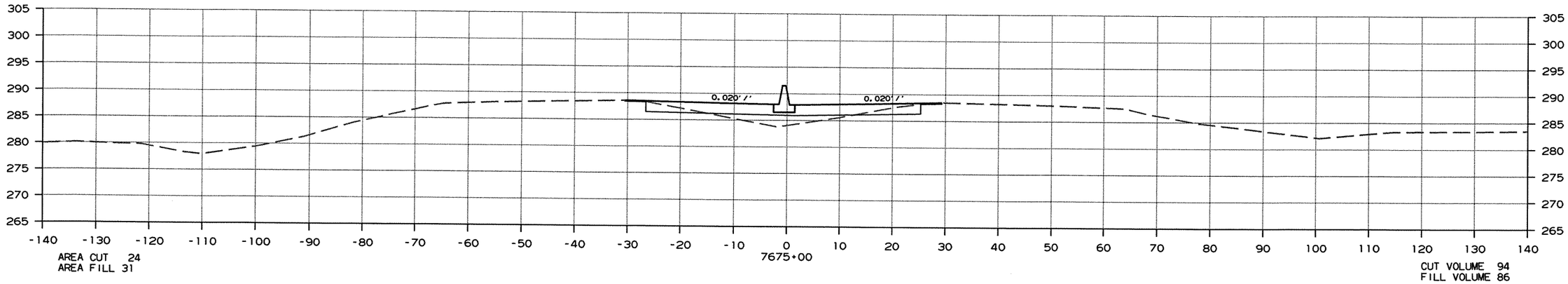


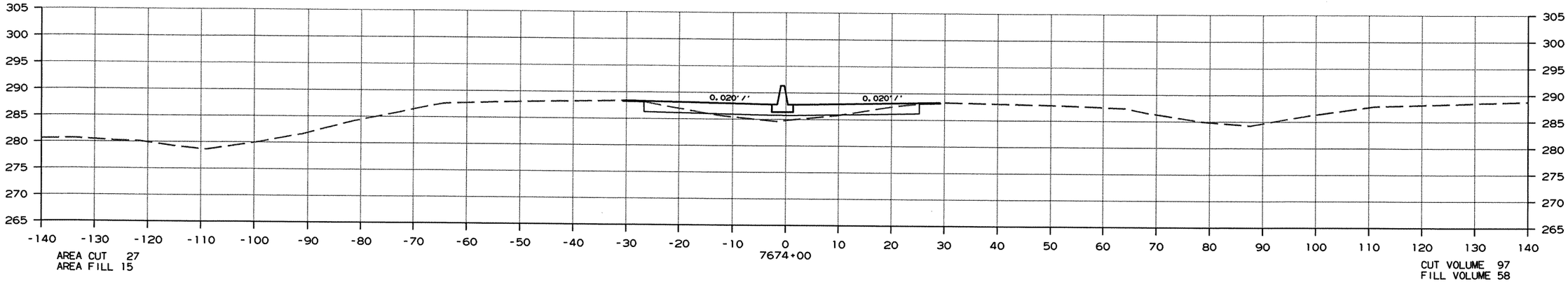
CROSS SECTION STA. 7670+00 TO STA. 7672+00

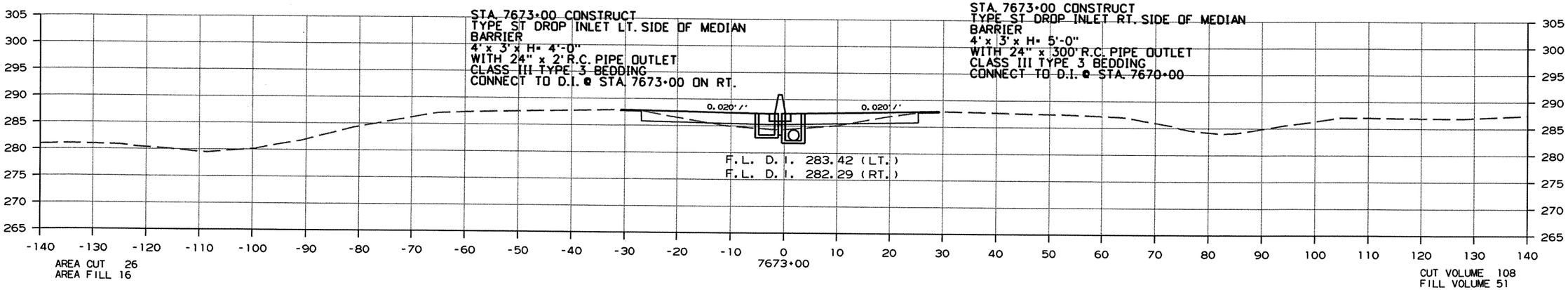
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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	185	191

(2) CROSS SECTIONS





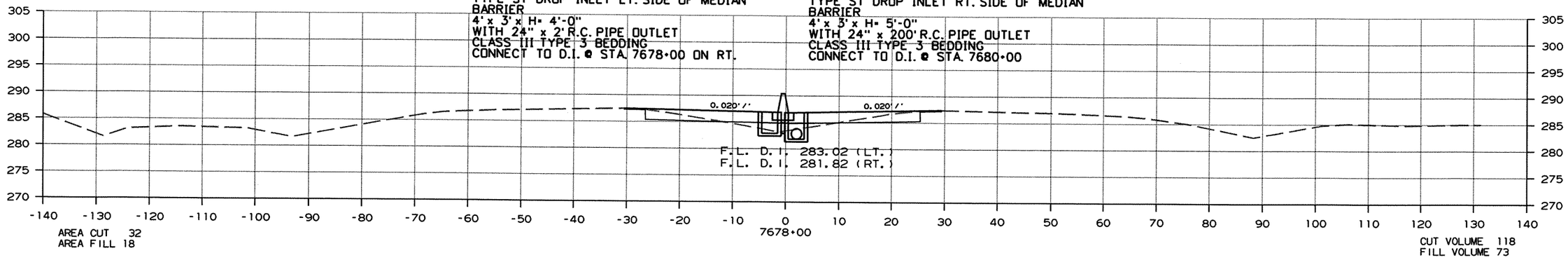


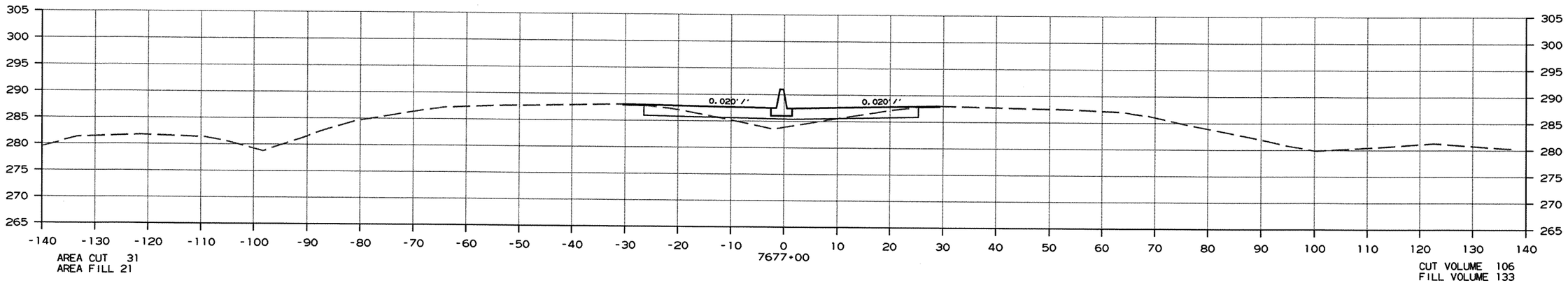
CROSS SECTION STA. 7673+00 TO STA. 7675+00

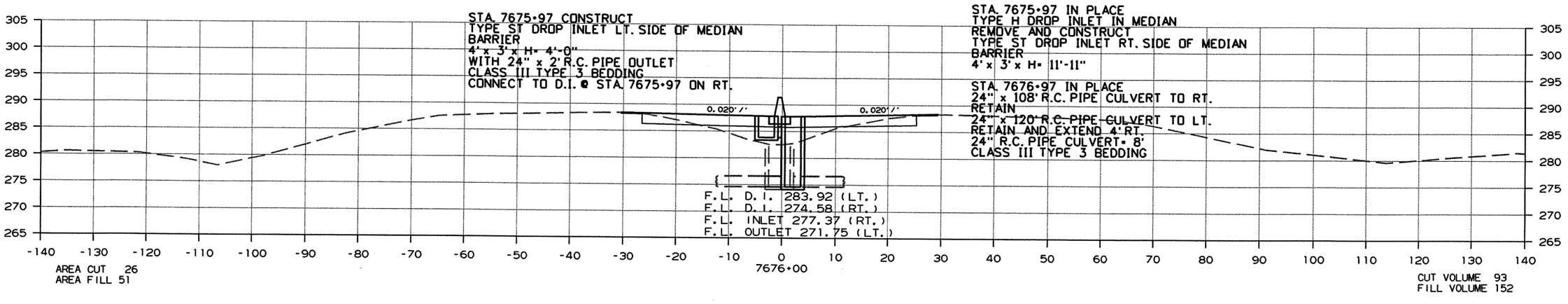
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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	186	191

(2) CROSS SECTIONS





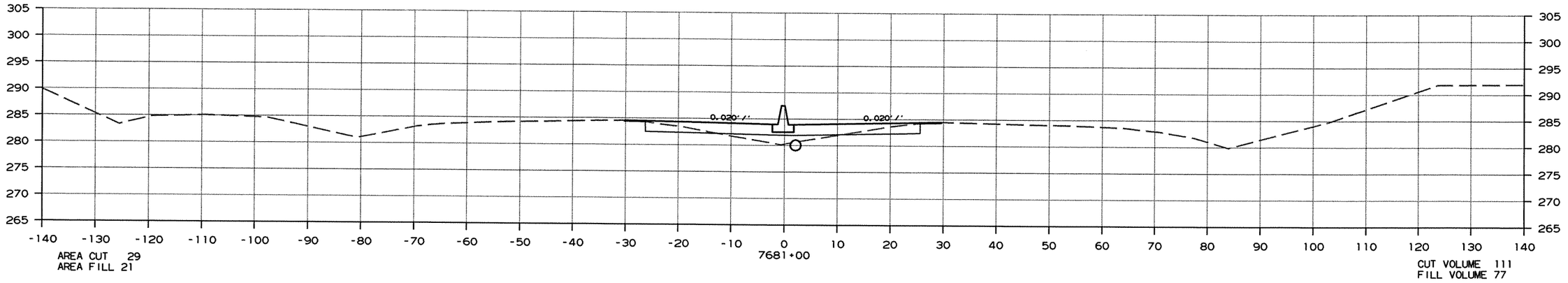


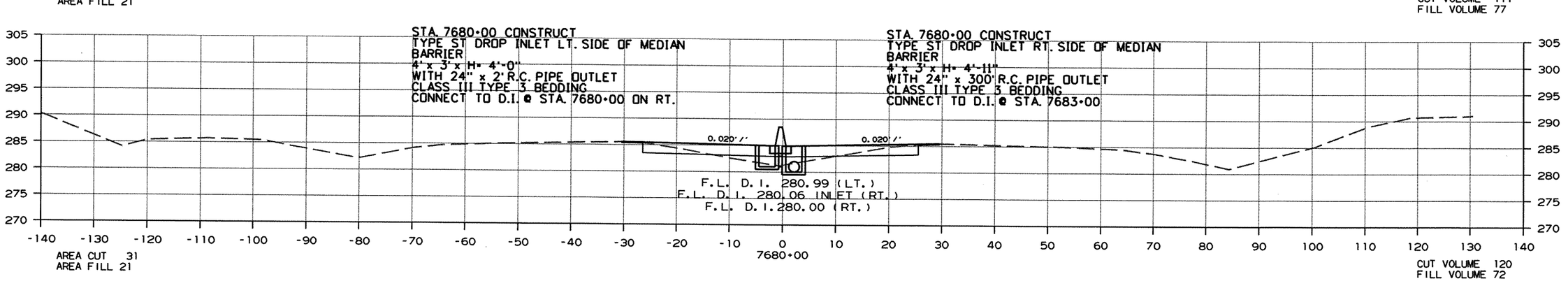
CROSS SECTION STA. 7676+00 TO STA. 7678+00

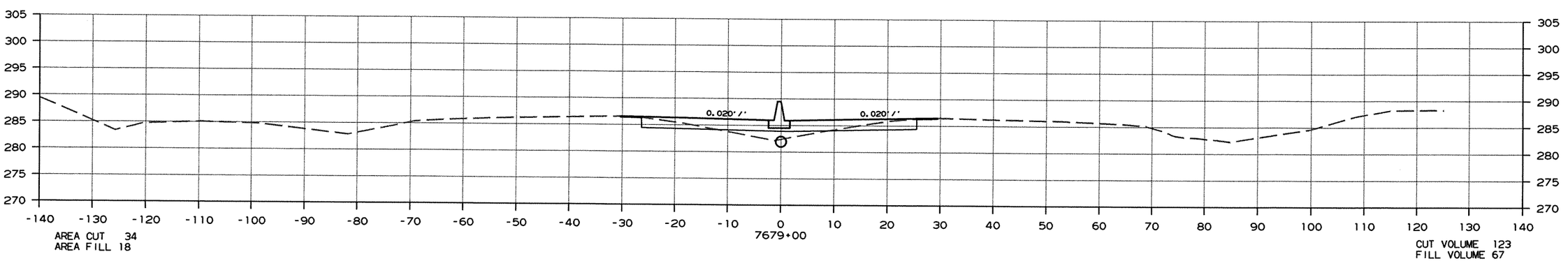
R080411.DGN 4/18/2012

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	187	191

(2) CROSS SECTIONS





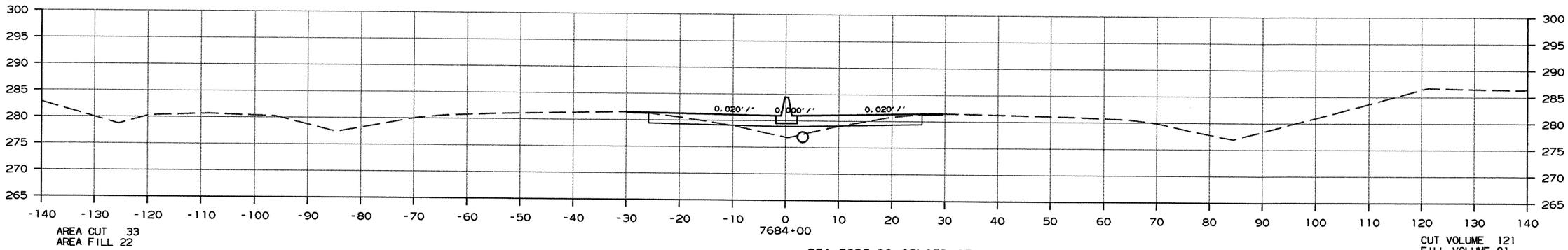


CROSS SECTION STA. 7679+00 TO STA. 7681+00

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	188	191

(2) CROSS SECTIONS

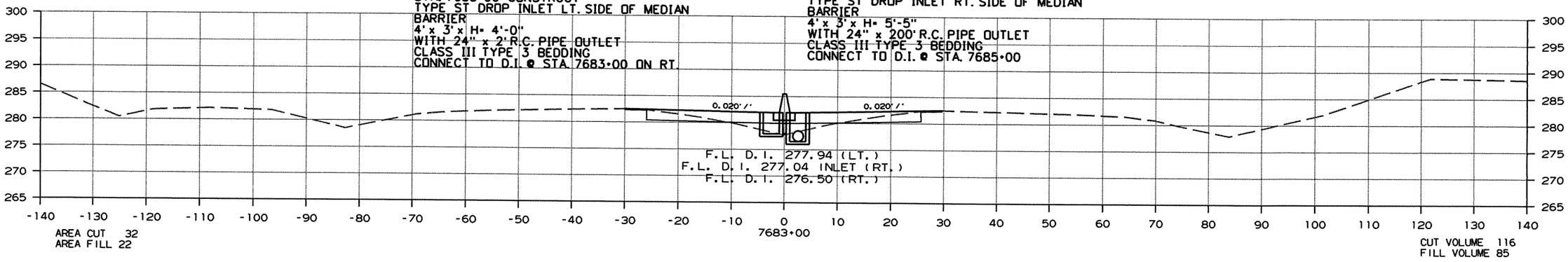


AREA CUT 33
AREA FILL 22

CUT VOLUME 121
FILL VOLUME 81

STA. 7683+00 CONSTRUCT
TYPE ST DROP INLET LT. SIDE OF MEDIAN
BARRIER
4' x 3' x H= 4'-0"
WITH 24" x 2' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7683+00 ON RT.

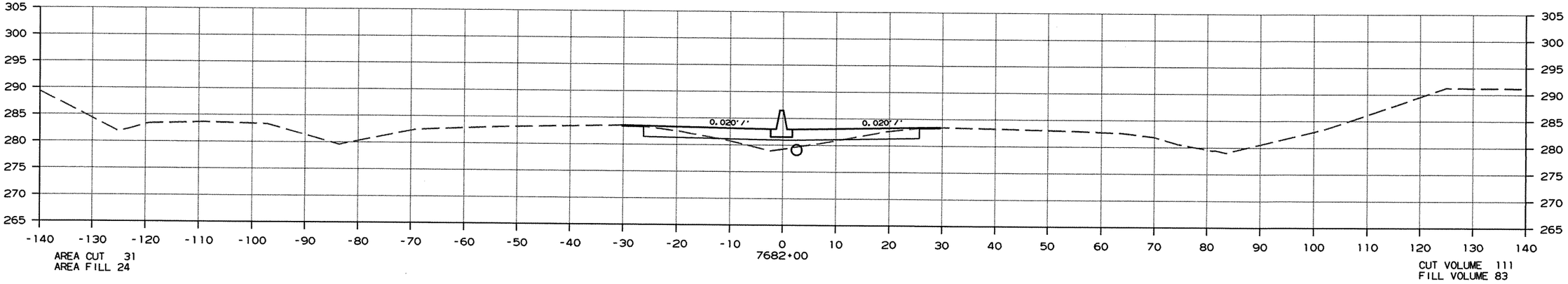
STA. 7683+00 CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN
BARRIER
4' x 3' x H= 5'-5"
WITH 24" x 200' R.C. PIPE OUTLET
CLASS III TYPE 3 BEDDING
CONNECT TO D.I. @ STA. 7685+00



F.L. D.I. 277.94 (LT.)
F.L. D.I. 277.04 INLET (RT.)
F.L. D.I. 276.50 (RT.)

AREA CUT 32
AREA FILL 22

CUT VOLUME 116
FILL VOLUME 85



AREA CUT 31
AREA FILL 24

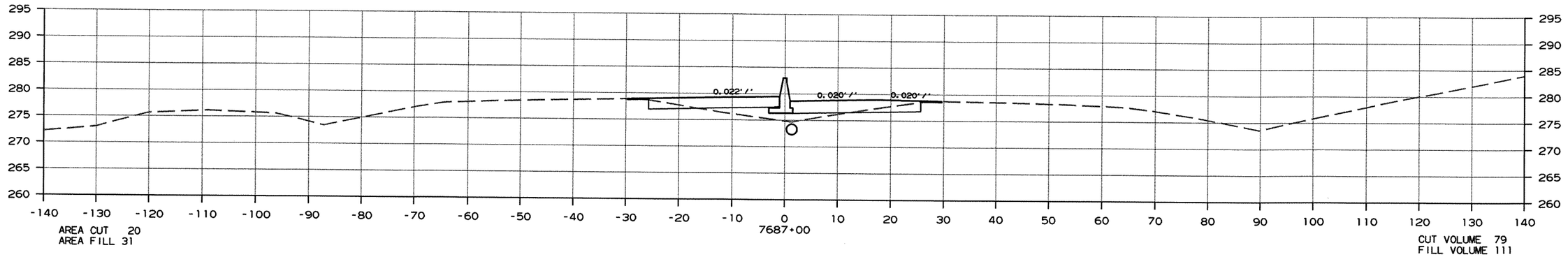
CUT VOLUME 111
FILL VOLUME 83

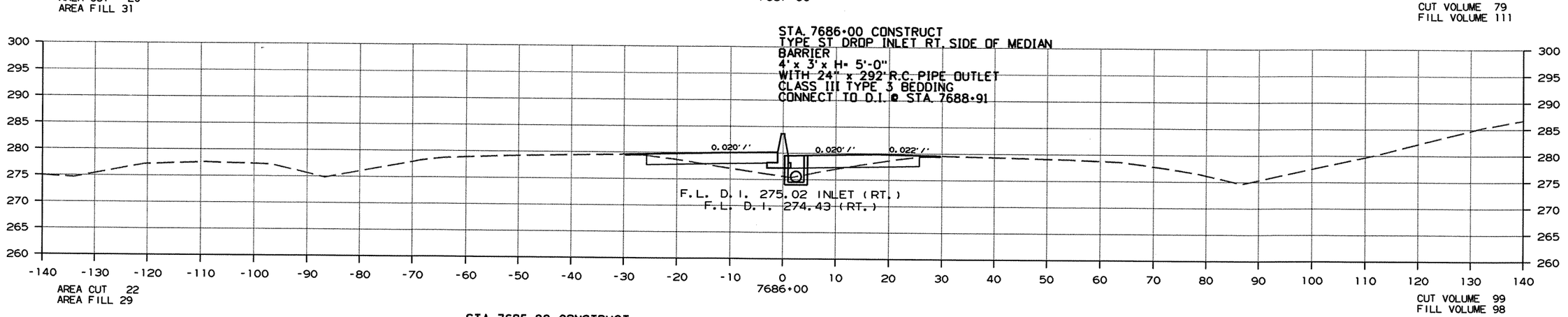
CROSS SECTION STA. 7682+00 TO STA. 7684+00

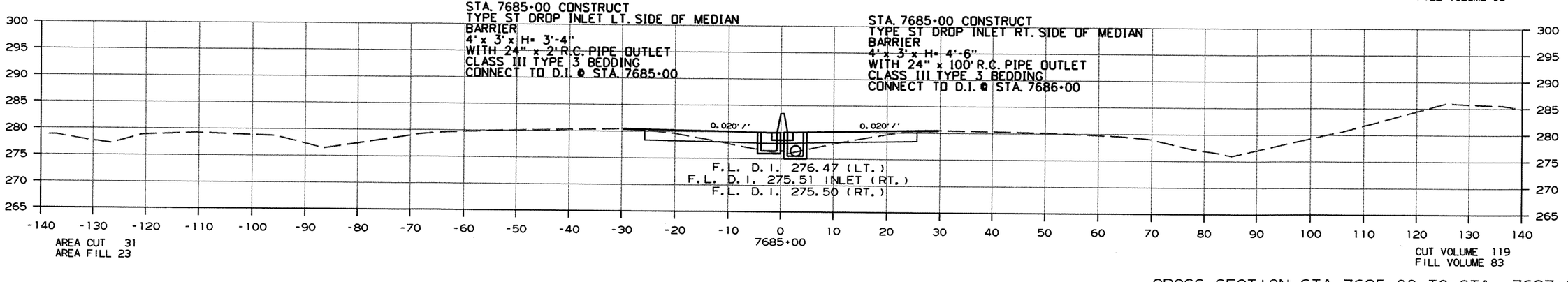
R080411.DGN 4/18/2012

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	189	191

(2) CROSS SECTIONS





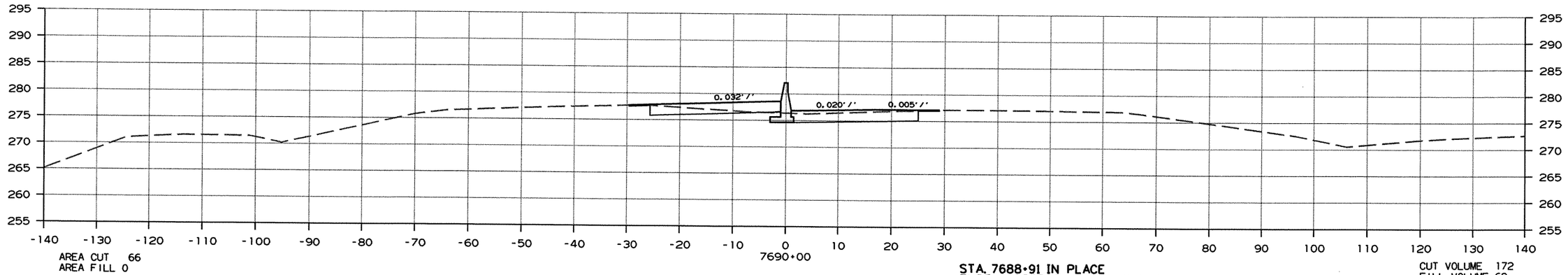


CROSS SECTION STA. 7685+00 TO STA. 7687+00

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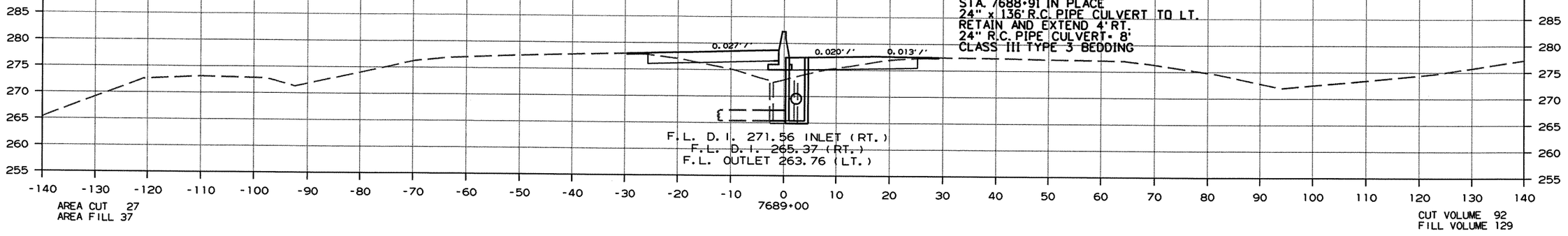
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	190	191

(2) CROSS SECTIONS

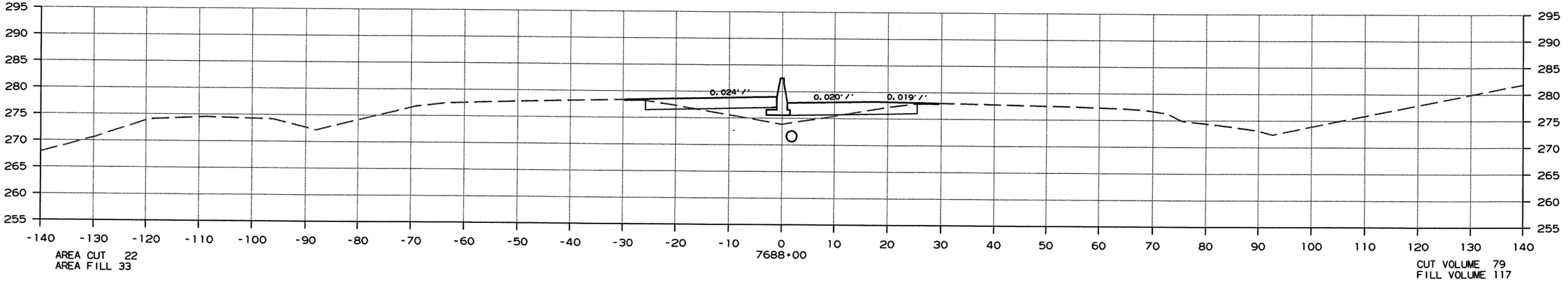


STA. 7688+91 IN PLACE
TYPE H DROP INLET IN MEDIAN
REMOVE AND CONSTRUCT
TYPE ST DROP INLET RT. SIDE OF MEDIAN
BARRIER
4' x 3' x H= 11'-11"

STA. 7688+91 IN PLACE
24" x 136' R.C. PIPE CULVERT TO LT.
RETAIN AND EXTEND 4' RT.
24" R.C. PIPE CULVERT= 8'
CLASS III TYPE 3 BEDDING



F.L. D.I. 271.56 INLET (RT.)
F.L. D.I. 265.37 (RT.)
F.L. OUTLET 263.76 (LT.)

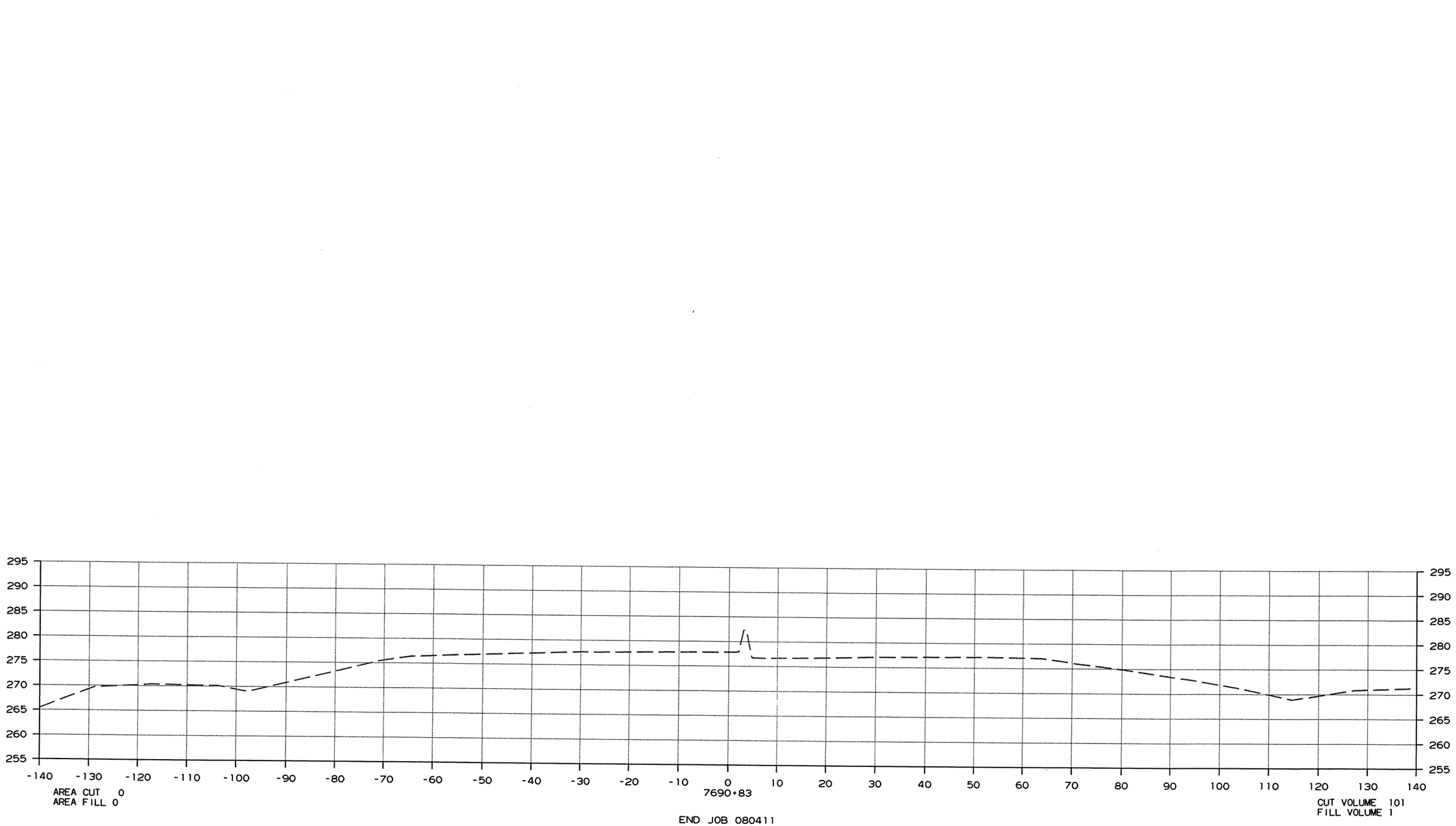


CROSS SECTION STA. 7688+00 TO STA. 7690+00

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080411	191	191

(2) CROSS SECTIONS



END JOB 080411

CROSS SECTION STA. 7690+83 TO STA. 7690+83

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