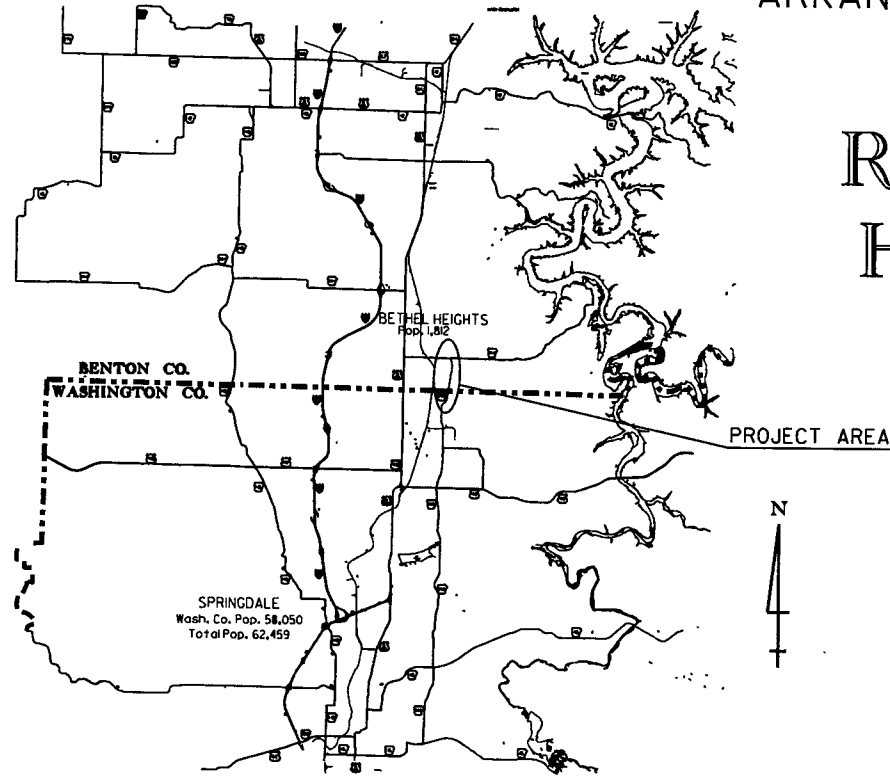


"A PARTIALLY CONTROLLED ACCESS FACILITY"

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.	012007	1
						2 RANDALL WOBBE LANE - HWY. 264 (SPRINGDALE) (S)		



VICINITY MAP

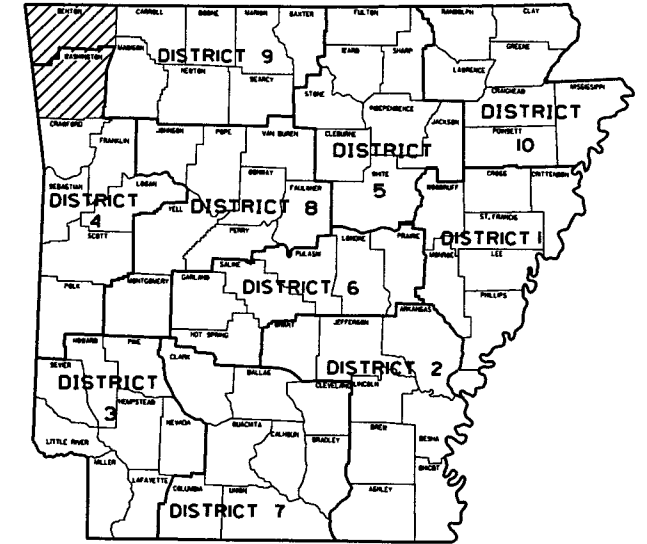
RANDALL WOBBE LANE -
HWY. 264 (SPRINGDALE) (S)

BENTON & WASHINGTON COUNTIES
ROUTE 265 SECTIONS 2 & 3

FEDERAL AID PROJ. STPC-9399(8)

JOB 012007

NOT TO SCALE



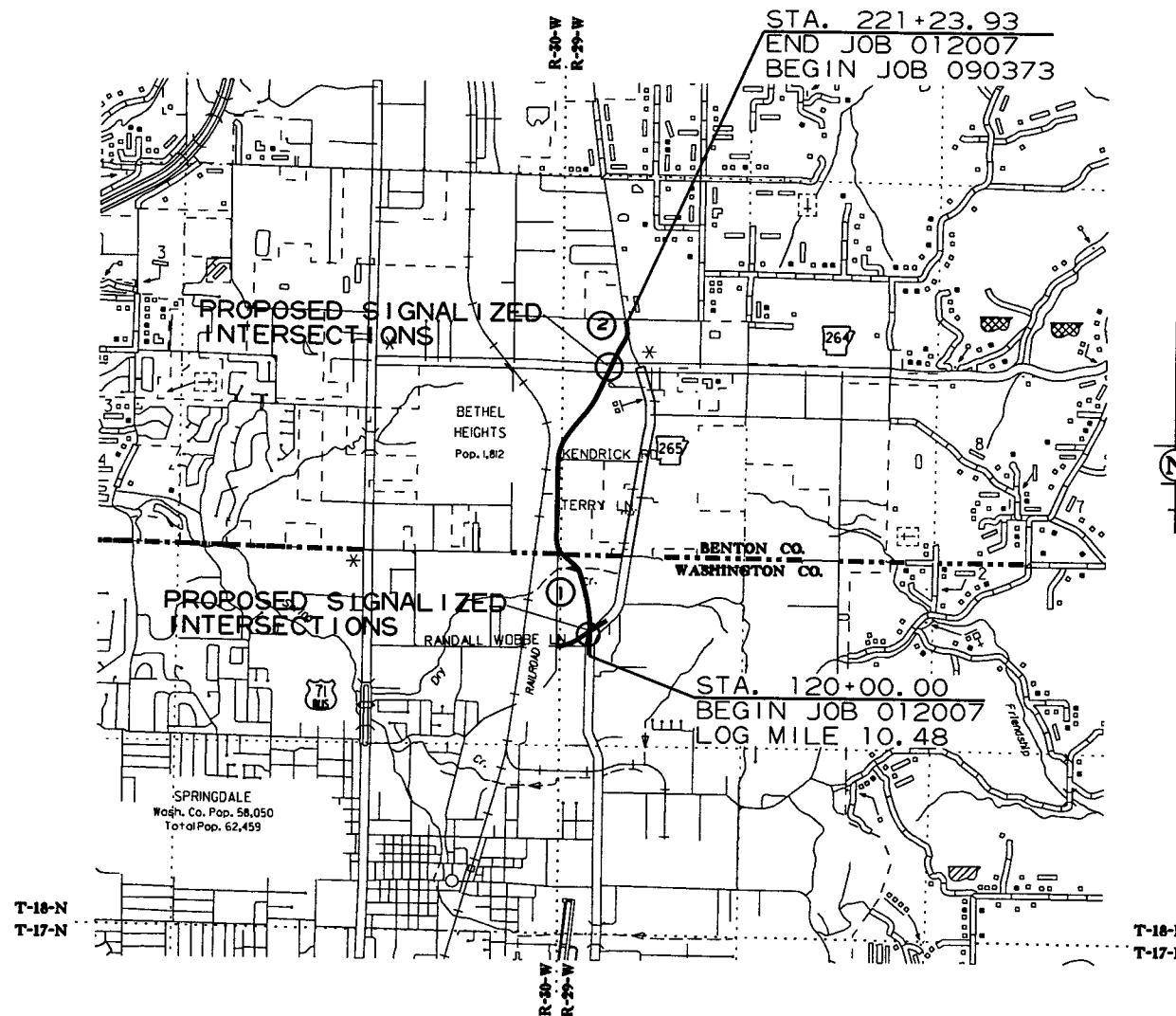
ARK. HWY. DIST. NOS. 4 & 9

DESIGN TRAFFIC DATA - HWY. 265

DESIGN YEAR	2017
2017 ADT	16500
2037 ADT	23000
2037 DHV	2530
DIRECTIONAL DISTRIBUTION	0.60
TRUCKS	5%
DESIGN SPEED	45 MPH

STRUCTURES OVER 20'-0" SPAN

- STA. 144+50 - CONSTRUCT
QUINT. 5' X 4' X 126'
R.C. BOX CULVERT
ON A 30° LT. FWD. SKEW
WITH 3:1 WINGWALLS LT. & RT.
Q50 = 573 CFS D.A. = 288 ACRES
SPAN = 28' - 8"
- STA. 208+48 CONSTRUCT
QUINT. 6' X 3' X 163' R.C. BOX CULVERT
ON A 15° RT. FWD. SKEW
WITH 3:1 WINGS LT. & RT.
Q50 = 420 CFS D.A. = 115 ACRES
SPAN = 33' - 8"



T-18-N
T-17-N

T-18-N
T-17-N

	BEGIN PROJECT	MID-POINT OF PROJECT	END PROJECT
LATITUDE	N 36°12'10"	N 36°12'55"	N 36°13'41"
LONGITUDE	W 94°07'02"	W 94°07'14"	W 94°06'48"

LENGTH OF PROJECT CALCULATED ALONG C.L.	
GROSS LENGTH OF PROJECT	10123.93 FEET OR 1.917 MILES
NET ROADWAY	10061.59 " 1.907 " "
NET BRIDGES	62.34 " 0.012 " "
NET PROJECT	10200.00 " 1.917 " "

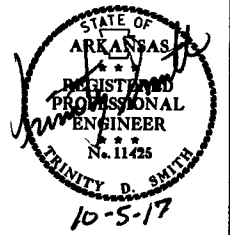
APPROVED



10-5-17
DEPUTY DIRECTOR
AND CHIEF ENGINEER

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. PROJ. NO.	STATE	FED. PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
						JOB NO. 012007	2	267

2 INDEX OF SHEETS AND STANDARD DRAWINGS



INDEX OF SHEETS

SHEET NO.	TITLE	BRIDGE NO.	DRWG. NO.
1	TITLE SHEET		
2	INDEX OF SHEETS AND STANDARD DRAWINGS		
3	GOVERNING SPECIFICATIONS AND GENERAL NOTES		
4 - 7	TYPICAL SECTIONS OF IMPROVEMENT		
8 - 17	SPECIAL DETAILS		
18 - 44	TEMPORARY EROSION CONTROL DETAILS		
45 - 57	MAINTENANCE OF TRAFFIC DETAILS		
58 - 66	PERMANENT PAVEMENT MARKING DETAILS		
67 - 76	QUANTITIES		
77 - 79	SUMMARY OF QUANTITIES AND REVISIONS		
80 - 95	SURVEY CONTROL DETAILS		
96 - 113	PLAN AND PROFILE SHEETS		
114	TRAFFIC SIGNAL NOTES		
115	SUMMARY OF TRAFFIC SIGNAL QUANTITIES		
116	TRAFFIC SIGNAL QUANTITIES - HWY. 265 AT RANDALL WOBBE LANE		
117 - 120	SIGNALIZATION PLAN SHEETS		
121	TRAFFIC SIGNAL QUANTITIES - HWY. 265 AT HWY. 264		
122 - 125	SIGNALIZATION PLAN SHEETS		
126	UTILITY RELOCATION - INDEX		
127 - 144	UTILITY RELOCATION		
145 - 150	UTILITY DETAIL		
151 - 267	CROSS SECTIONS		

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

ROADWAY STANDARD DRAWINGS

DRWG. NO.	TITLE	DATE
CG-1	CURBING DETAILS	11-29-07
DR-1	DETAILS OF DRIVEWAYS & ISLANDS	2-27-14
FES-1	FLARED END SECTION	10-18-96
FES-2	FLARED END SECTION	10-18-96
FPC-9	DETAILS OF DROP INLETS & JUNCTION BOXES	11-16-01
FPC-9E	DETAILS OF DROP INLETS (TYPE C)	8-22-02
FPC-9M	DETAILS OF DROP INLET (TYPE MO)	8-22-02
GR-7	GUARD RAIL DETAILS (TYPE C) STREET/ROAD BARRICADE OR TEMPORARY INSTALLATION	7-14-10
PBC-1	PRECAST CONCRETE BOX CULVERTS	1-28-15
PCC-1	CONCRETE PIPE CULVERT FILL HEIGHTS & BEDDING	2-27-14
PCM-1	METAL PIPE CULVERT FILL HEIGHTS & BEDDING	2-27-14
PM-1	PAVEMENT MARKING DETAILS	6-01-17
PU-1	DETAILS OF PIPE UNDERDRAIN	12-08-16
RCB-1	REINFORCED CONCRETE BOX CULVERT DETAILS	7-26-12
RCB-2	EXCAVATION PAY LIMITS, BACKFILL, & SOLID SODDING FOR BOX CULVERTS	11-20-03
SD-1	ANTENNA POLE	2-27-14
SD-4	LOOP DETECTOR INSTALLATION	9-12-13
SD-5	CONTROLLER CABINET UTILITY DRAWER	9-12-13
SD-6	HEAVY DUTY PULL BOX	9-02-15
SD-8	SIGNAL HEAD PLACEMENT	12-08-16
SD-9	SERVICE POINT	9-12-13
SD-11	STEEL POLE WITH MAST ARM	12-08-16
SE-2	TABLES AND METHOD OF SUPERELEVATION FOR TWO-WAY TRAFFIC	10-18-96
SI-1	DETAILS OF SPECIAL ITEMS	9-12-13
TC-1	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION	4-13-17
TC-2	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION	9-02-15
TC-3	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION	9-02-15
TEC-1	TEMPORARY EROSION CONTROL DEVICES	12-15-11
TEC-2	TEMPORARY EROSION CONTROL DEVICES	6-02-94
TEC-3	TEMPORARY EROSION CONTROL DEVICES	11-03-94
WF-1	WIRE FENCE TYPE A AND B	8-22-02
WF-2	WIRE FENCE WATER GAPS	4-20-79
WF-4	WIRE FENCE TYPE C AND D	8-22-02
WR-1	WHEELCHAIR RAMPS NEW CONSTRUCTION AND ALTERATIONS	11-10-05

9/25/2017

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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
10-19-17				6	ARK.			
10-31-17								
JOB NO.						012007	3	267

2 GOVERNING SPECIFICATIONS AND GEN. NOTES

GOVERNING SPECIFICATIONS (LIST 1 OF 2)

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

NUMBER	TITLE
ERRATA	ERRATA FOR THE BOOK OF STANDARD SPECIFICATIONS
FHWA-1273	REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS
FHWA-1273	SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - NOTICE TO CONTRACTORS
FHWA-1273	SUPPLEMENT - SPECIFIC EQUAL EMPLOYMENT OPPORTUNITY RESPONSIBILITIES (23 U.S.C. 140)
FHWA-1273	SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - GOALS AND TIMETABLES
FHWA-1273	SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - FEDERAL STANDARDS
FHWA-1273	SUPPLEMENT - TRAINING PROGRAM - JOB 012007
FHWA-1273	SUPPLEMENT - POSTERS AND NOTICES REQUIRED FOR FEDERAL-AID PROJECTS
FHWA-1273	SUPPLEMENT - WAGE RATE DETERMINATION
100-3	CONTRACTOR'S LICENSE
100-4	DEPARTMENT NAME CHANGE
102-2	ISSUANCE OF PROPOSALS
108-1	LIQUIDATED DAMAGES
108-2	WORK ALLOWED PRIOR TO ISSUANCE OF WORK ORDER
303-1	AGGREGATE BASE COURSE
400-1	TACK COATS
400-4	DESIGN AND QUALITY CONTROL OF ASPHALT MIXTURES
410-1	CONSTRUCTION REQUIREMENTS AND ACCEPTANCE OF ASPHALT CONCRETE PLANT MIX COURSES
604-1	RETROREFLECTIVE SHEETING FOR TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES
606-1	PIPE CULVERTS FOR SIDE DRAINS
620-1	MULCH COVER
JOB 012007	ABANDONMENT OF WATER AND SEWER LINES
JOB 012007	ANTENNA SUPPORT
JOB 012007	ARKANSAS STATE HIGHWAY CROSSINGS AND RAILROAD CROSSINGS FOR WATER AND SEWER MAINS
JOB 012007	BIDDING REQUIREMENTS AND CONDITIONS
JOB 012007	BROADBAND INTERNET SERVICE FOR ASPHALT CONCRETE PLANT
JOB 012007	BROADBAND INTERNET SERVICE FOR FIELD OFFICE
JOB 012007	BUTTERFLY VALVES
JOB 012007	CABINET DRAWER ASSEMBLY
JOB 012007	CARGO PREFERENCE ACT REQUIREMENTS
JOB 012007	CAST-IN-PLACE MANHOLES
JOB 012007	CATHODIC PROTECTION ON EXISTING WATER MAIN
JOB 012007	CAVE DISCOVERY
JOB 012007	CLEANUP, SEEDING, AND SOD FOR WATER AND SEWER FACILITIES
JOB 012007	CONCRETE AND REINFORCING STEEL FOR WATER AND SEWER FACILITIES
JOB 012007	CONCRETE THRUST COLLAR
JOB 012007	CONSTRUCTION IN SPECIAL FLOOD HAZARD AREAS
JOB 012007	CONSTRUCTION PROJECT INFORMATION SIGN
JOB 012007	COORDINATION OF WORK
JOB 012007	DELAY IN RIGHT OF WAY OCCUPANCY
JOB 012007	DENSITY TESTING FOR WATER AND SEWER MAINS
JOB 012007	DISADVANTAGED BUSINESS ENTERPRISE BIDDER'S RESPONSIBILITIES
JOB 012007	DISINFECTION OF WATER LINES
JOB 012007	DUCTILE IRON PIPE AND FITTINGS FOR GRAVITY SEWER LINES AND FORCE MAINS
JOB 012007	DUCTILE IRON PIPE AND FITTINGS FOR WATER MAINS
JOB 012007	ELECTRICAL CONDUCTORS FOR LUMINAIRES
JOB 012007	ELECTRICAL CONDUCTORS-IN-CONDUIT
JOB 012007	EXISTING WATER AND SEWER UTILITIES
JOB 012007	FINAL INSPECTION AND ACCEPTANCE OF WATER AND SEWER FACILITIES
JOB 012007	FIRE HYDRANTS
JOB 012007	FLEXIBLE BEGINNING OF WORK - CALENDAR DAY CONTRACT
JOB 012007	GATE VALVES
JOB 012007	GENERAL REQUIREMENTS FOR WATER AND SEWER FACILITIES
JOB 012007	GOALS FOR DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION
JOB 012007	HYDROSTATIC TESTING OF WATER LINES, SEWER FORCE MAINS, AND APPURTENANCES
JOB 012007	IP VIDEO DETECTION SYSTEM
JOB 012007	LED COUNTDOWN PEDESTRIAN SIGNAL HEAD
JOB 012007	LED LUMINAIRE ASSEMBLY (BUG UO TYPE)
JOB 012007	LED TRAFFIC SIGNAL HEAD
JOB 012007	LOW PRESSURE AIR TESTING OF GRAVITY SEWER LINES
JOB 012007	LINE STOP ON EXISTING WATER MAIN
JOB 012007	MANDATORY ELECTRONIC CONTRACT
JOB 012007	MANDATORY ELECTRONIC DOCUMENT SUBMITTAL
JOB 012007	MANDREL TESTING OF PVC SEWER LINES
JOB 012007	OFF-SITE RESTRAINING CONDITIONS FOR INDIANA AND NORTHERN LONG-EARED BATS
JOB 012007	OPERATION AND MAINTENANCE MANUALS FOR WATER AND SEWER FACILITIES
JOB 012007	PARTNERING REQUIREMENTS
JOB 012007	PERCENT WITHIN LIMITS/PAVEMENT SMOOTHNESS
JOB 012007	PLASTIC PIPE
JOB 012007	POLYETHYLENE ENCASUREMENT
JOB 012007	POLYVINYL CHLORIDE GRAVITY SEWER LINES AND FORCE MAINS
JOB 012007	PROSECUTION AND PROGRESS WITH BID SCHEDULE
JOB 012007	PROTECTIVE COATING FOR MANHOLES AND OTHER STRUCTURES
JOB 012007	REMOVAL OF PERMANENT PAVEMENT MARKINGS
JOB 012007	REMOVAL OF TRAFFIC SIGNAL EQUIPMENT
JOB 012007	REMOVING AND REPLACING TOPSOIL
JOB 012007	ROCK FILL

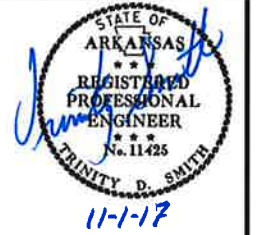
GOVERNING SPECIFICATIONS (LIST 2 OF 2)

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

NUMBER	TITLE
JOB 012007	SERVICE POINT ASSEMBLY (TRAFFIC CONTROL DEVICES)
JOB 012007	SHORING FOR CULVERTS
JOB 012007	SITE USE (A+C METHOD) - CALENDAR DAY CONTRACT
JOB 012007	SITE PREPARATION, EXCAVATION, AND FILL FOR WATER AND SEWER FACILITIES
JOB 012007	SOIL STABILIZATION
JOB 012007	SPECIAL CLEARING REQUIREMENTS
JOB 012007	STEEL ENCASUREMENT PIPE AND APPURTENANCES
JOB 012007	STORAGE AND HANDLING OF WATER AND SEWER MATERIALS
JOB 012007	STORM WATER POLLUTION PREVENTION PLAN
JOB 012007	STREET AND COUNTY ROAD CROSSINGS FOR WATER AND SEWER MAINS
JOB 012007	STREET NAME SIGN (MAST ARM MOUNTED)
JOB 012007	SUBMISSION OF ASPHALT CONCRETE HOT MIX ACCEPTANCE TEST RESULTS
JOB 012007	SUBMITTALS FOR WATER AND SEWER ITEMS
JOB 012007	SURFACE REMOVAL FOR WATER AND SEWER FACILITIES
JOB 012007	SYSTEM LOCAL CONTROLLER
JOB 012007	TAPPING SLEEVES AND VALVES
JOB 012007	TESTING AND CERTIFICATIONS FOR WATER AND SEWER FACILITIES
JOB 012007	TRACING WIRE AND CONNECTION PORTS
JOB 012007	UTILITY ADJUSTMENTS
JOB 012007	VACUUM TESTING OF MANHOLES
JOB 012007	VALUE ENGINEERING
JOB 012007	WARM MIX ASPHALT
JOB 012007	WATER AND SEWER MAIN PIPE BACKFILL MATERIAL AND AGGREGATE BASE COURSE
JOB 012007	WATER AND SEWER SERVICE CONNECTIONS
JOB 012007	WATER METERS, SERVICE LINES, AND APPURTENANCES
JOB 012007	WOVEN GEOTEXTILE FABRIC FOR SUBGRADE REINFORCEMENT

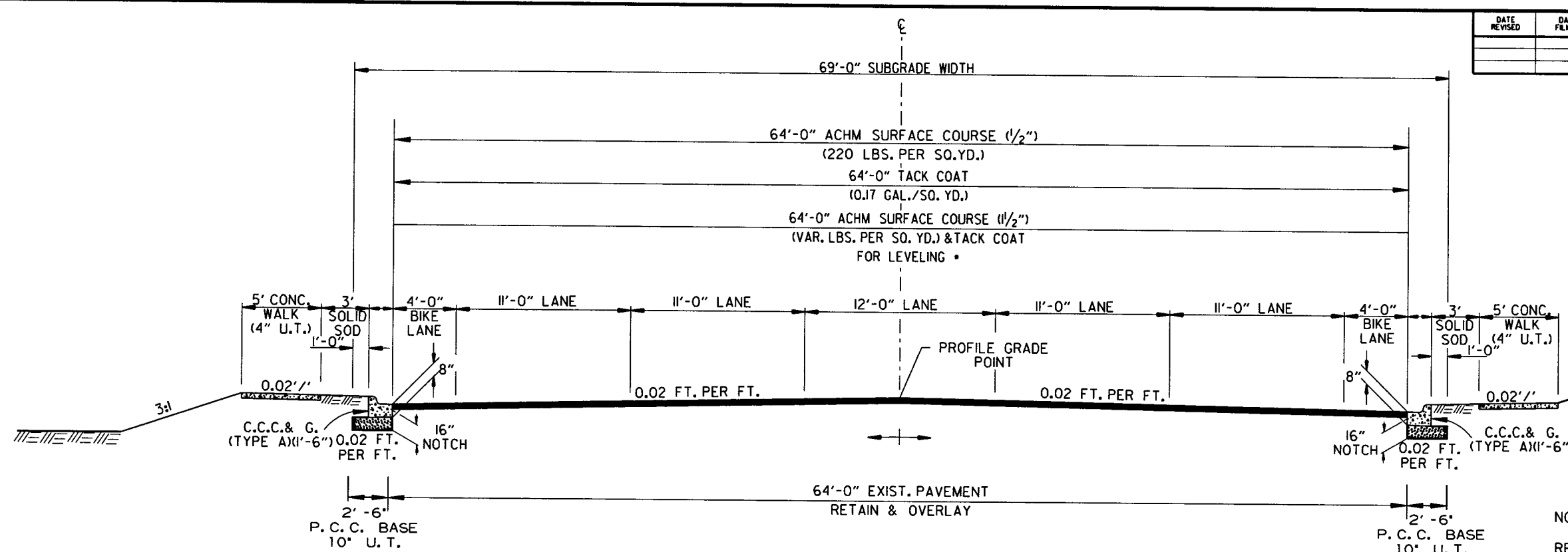
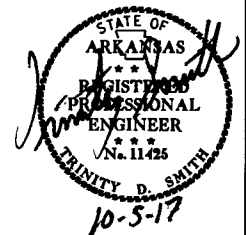
GENERAL NOTES

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



DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 012007							4	267

2 TYPICAL SECTIONS OF IMPROVEMENT



TYPICAL SECTION OF IMPROVEMENT
FULL DEPTH CURB & GUTTER
STA. 120+00.00 TO STA. 123+00.00

NOTES:

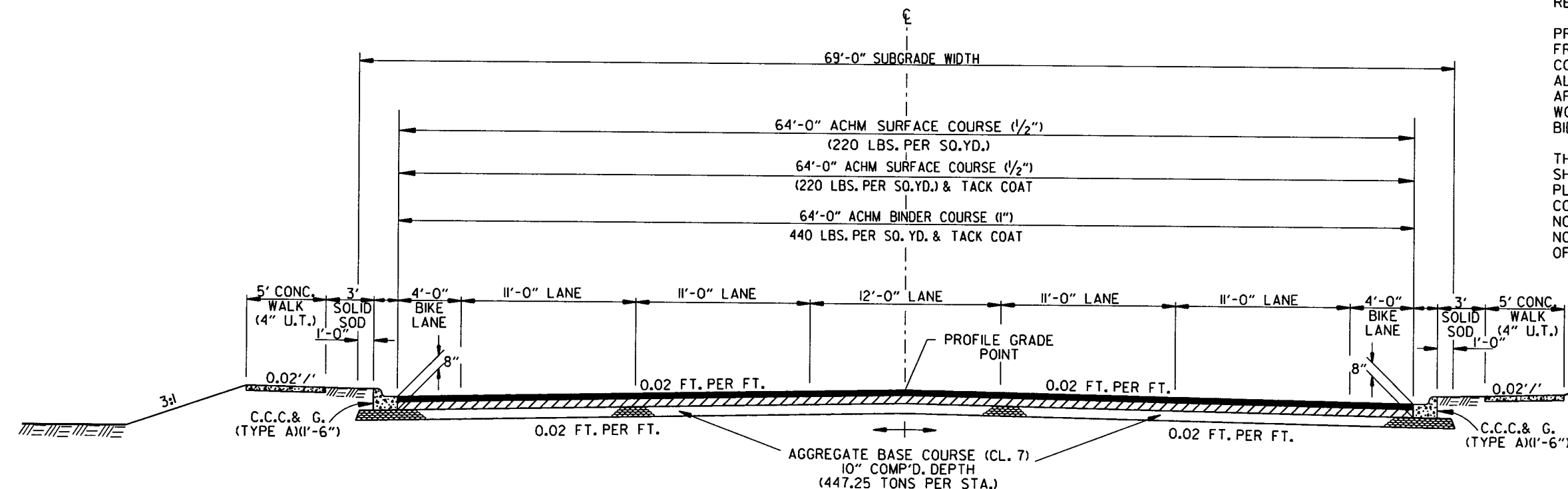
REFER TO CROSS SECTIONS FOR DEVIATION FROM THE NORMAL SLOPES. NO CHANGES SHALL BE MADE FROM THE PLANNED SLOPES WITHOUT THE APPROVAL OF THE ENGINEER.

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

REFER TO PLAN SHEETS FOR SIDEWALK LOCATIONS.

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

THE THICKNESS OF AGGREGATE BASE COURSE SHALL BE WITHIN PLUS OR MINUS 1" 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.



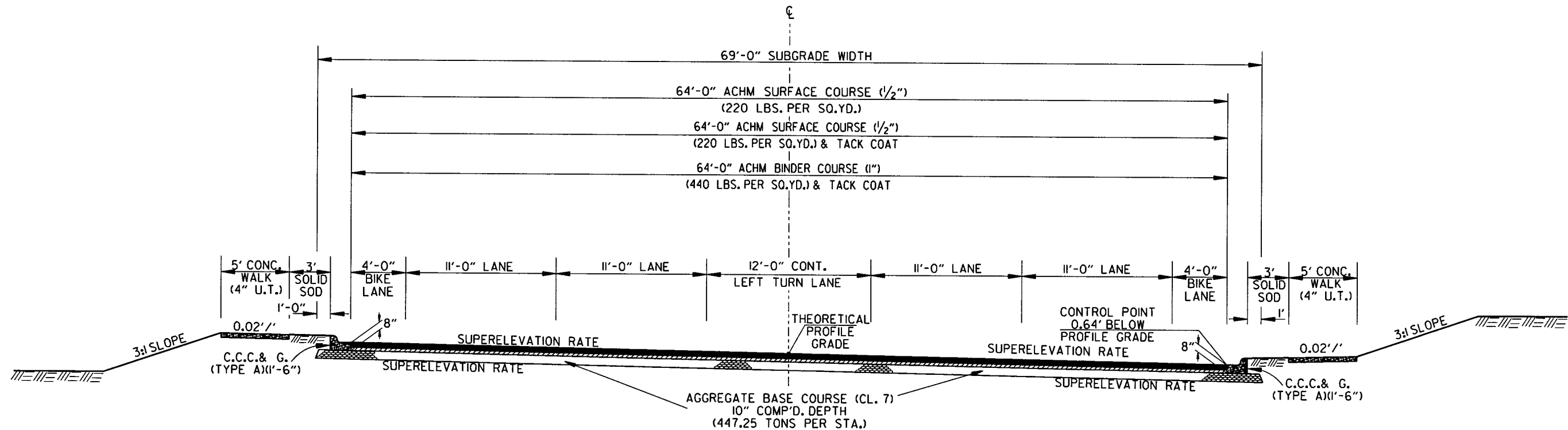
TYPICAL SECTION OF IMPROVEMENT
FULL DEPTH CURB & GUTTER
STA. 123+00.00 TO STA. 207+33.46
STA. 207+88.30 TO STA. 221+20.00

TYPICAL SECTIONS OF IMPROVEMENT

9/18/2017
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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. 012007	5	267

② TYPICAL SECTIONS OF IMPROVEMENT



TYPICAL SECTION OF IMPROVEMENT
SUPERELEVATION
FULL DEPTH CURB & GUTTER

STA. 123+00.00 TO STA. 142+03.69
 STA. 145+92.37 TO STA. 163+26.86
 STA. 170+09.82 TO STA. 183+35.51
 STA. 195+19.20 TO STA. 206+85.17
 STA. 214+78.10 TO STA. 220+93.10

NOTES:

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

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

REFER TO PLAN SHEETS FOR SIDEWALK LOCATIONS.

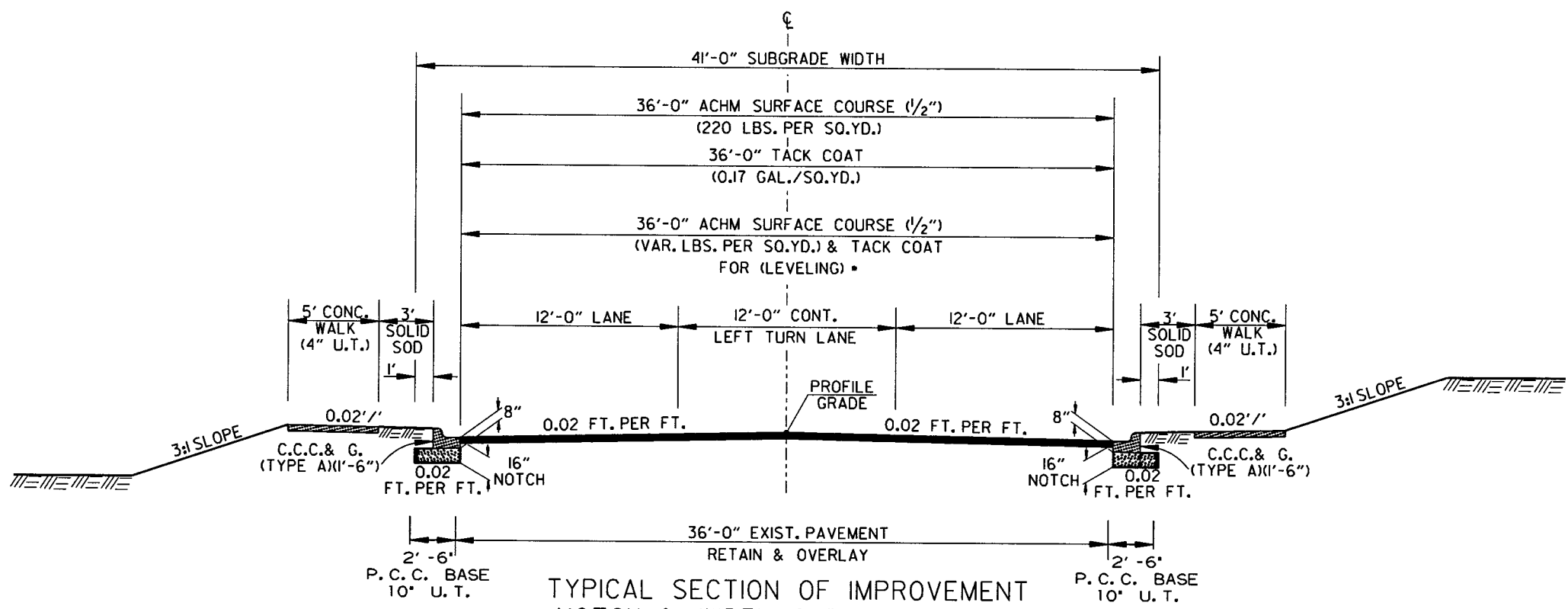
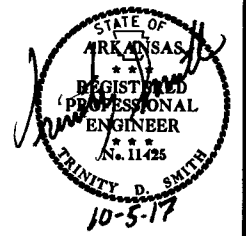
PRIOR TO AND DURING PLACEMENT OF PAVEMENT IN FRONT OF THE CURB AND GUTTER, THE CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE AT ALL TIMES. THE METHOD(S) USED SHALL BE APPROVED BY THE ENGINEER. PAYMENT FOR THIS WORK SHALL BE CONSIDERED INCLUDED IN THE PRICE BID FOR THE VARIOUS CONTRACT ITEMS.

THE THICKNESS OF AGGREGATE BASE COURSE SHALL BE WITHIN PLUS OR MINUS 1" 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.

TYPICAL SECTIONS OF IMPROVEMENT

DATE REVISED	DATE FILED	DATE REVISED	DATE FILED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
						JOB NO.	012007	6
								267

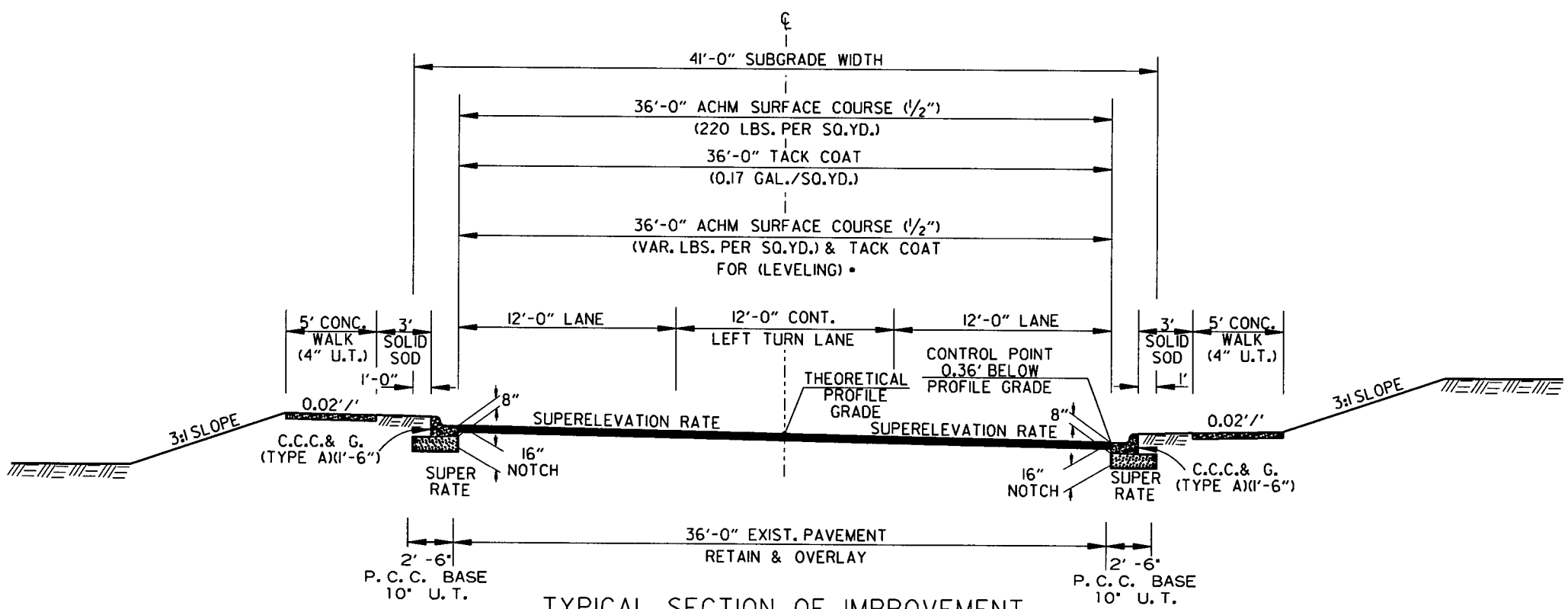
② TYPICAL SECTIONS OF IMPROVEMENT



TYPICAL SECTION OF IMPROVEMENT
NOTCH & WIDEN CURB & GUTTER

RANDALL WOBBE LANE
STA. 100+00.00 TO STA. 103+00.00
STA. 111+80.00 TO STA. 115+72.24

* TO BE USED IF AND WHERE
DIRECTED BY THE ENGINEER



TYPICAL SECTION OF IMPROVEMENT
SUPERELEVATION
NOTCH AND WIDEN CURB & GUTTER

RANDALL WOBBE LANE
STA. 100+00.00 TO STA. 103+00.00
STA. 111+80.00 TO STA. 115+72.24

* TO BE USED IF AND WHERE
DIRECTED BY THE ENGINEER

MIRROR FOR LEFT HAND CURVE.

NOTES:

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

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

REFER TO PLAN SHEETS FOR SIDEWALK LOCATIONS.

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

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

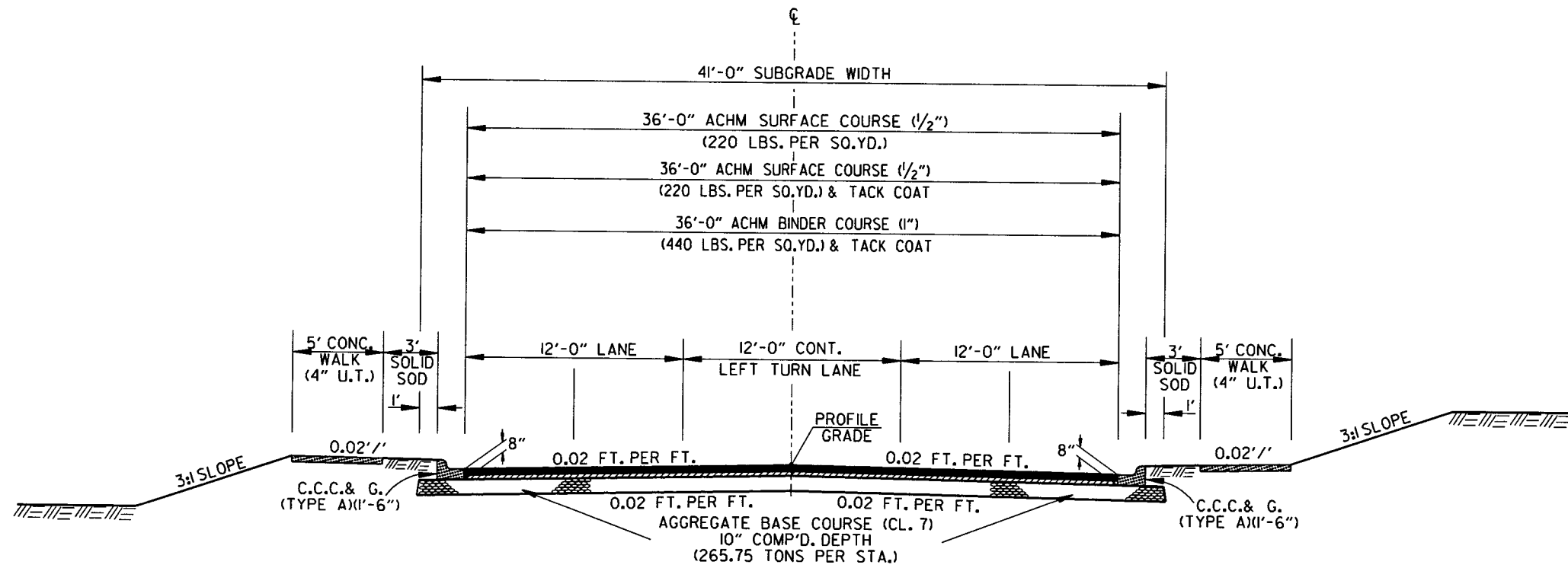
THE THICKNESS OF AGGREGATE BASE COURSE SHALL BE WITHIN PLUS OR MINUS 1" OF THE PLAN THICKNESS SHOWN. THE CONTRACTOR WILL CORRECT ANY DEFICIENT THICKNESS THAT DOES NOT MEET TOLERANCE INDICATED. PAYMENT WILL NOT BE MADE FOR MATERIAL PLACED IN EXCESS OF THE TOLERANCE INDICATED.

9/18/2017

RO12007KGT.DGN

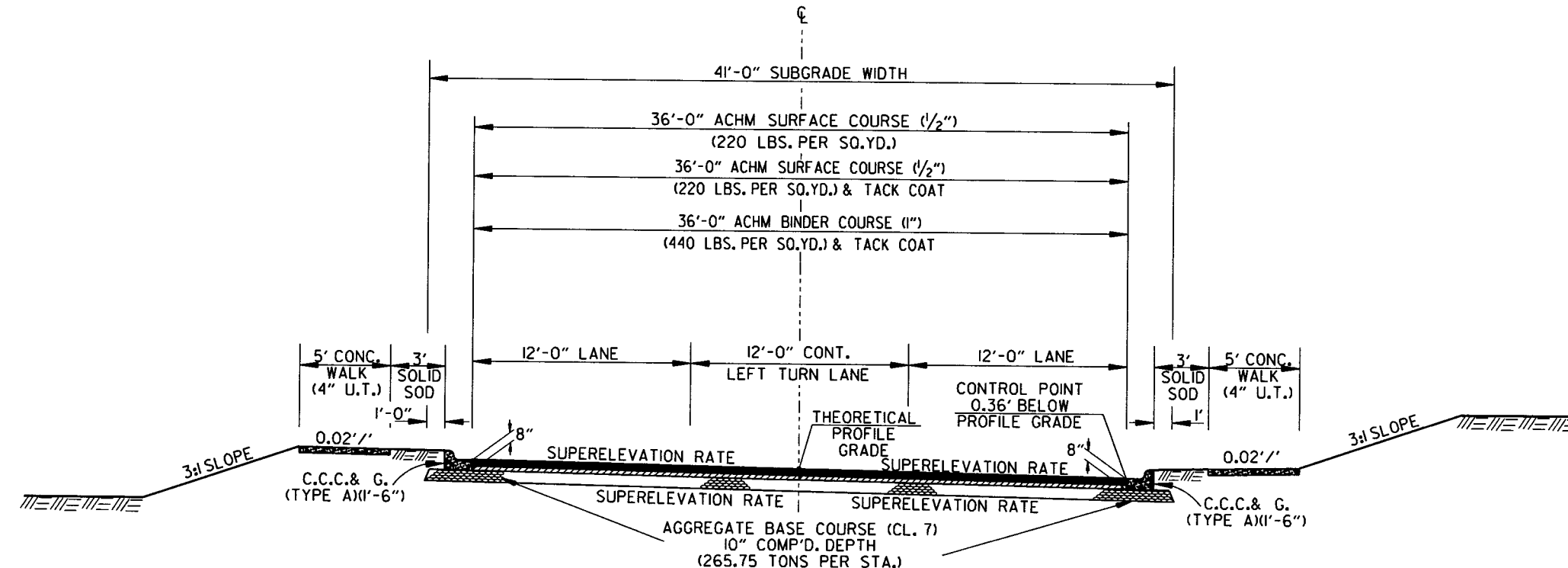
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		7	267

2 TYPICAL SECTIONS OF IMPROVEMENT



TYPICAL SECTION OF IMPROVEMENT
FULL DEPTH CURB & GUTTER

RANDALL WOBBE LANE
STA. 103+00.00 TO STA. 109+97.64
STA. 110+75.95 TO STA. 111+80.00



TYPICAL SECTION OF IMPROVEMENT
SUPERELEVATION
FULL DEPTH CURB & GUTTER

RANDALL WOBBE LANE
STA. 103+00.00 TO STA. 104+67.00

MIRROR FOR LEFT HAND CURVE.

NOTES:

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

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

REFER TO PLAN SHEETS FOR SIDEWALK LOCATIONS.

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

AFTER PLACING FINAL 2" OF SURFACE COURSE, THE EXISTING SLOPE SHALL BE REDRESSED AS DIRECTED BY THE ENGINEER PRIOR TO SEEDING IN ORDER TO MAINTAIN A UNIFORM SLOPE. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR VARIOUS CONTRACT ITEMS.

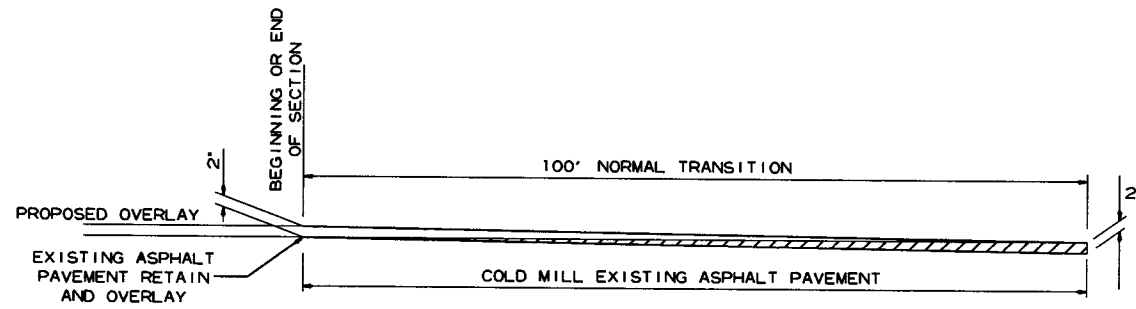
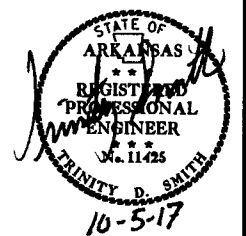
THE THICKNESS OF AGGREGATE BASE COURSE SHALL BE WITHIN PLUS OR MINUS 1" OF THE PLAN THICKNESS SHOWN. THE CONTRACTOR WILL CORRECT ANY DEFICIENT THICKNESS THAT DOES NOT MEET TOLERANCE INDICATED. PAYMENT WILL NOT BE MADE FOR MATERIAL PLACED IN EXCESS OF THE TOLERANCE INDICATED.

9/18/2017

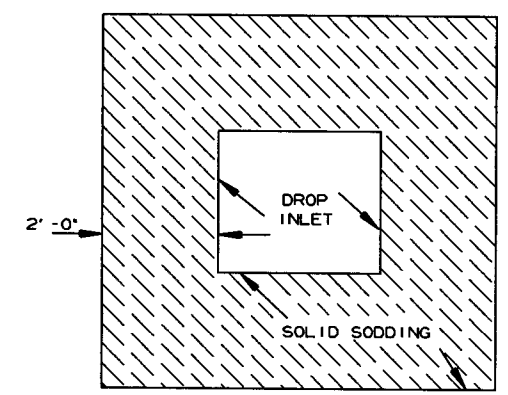
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DATE REVISED	DATE FILED	DATE REVISED	DATE FILED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
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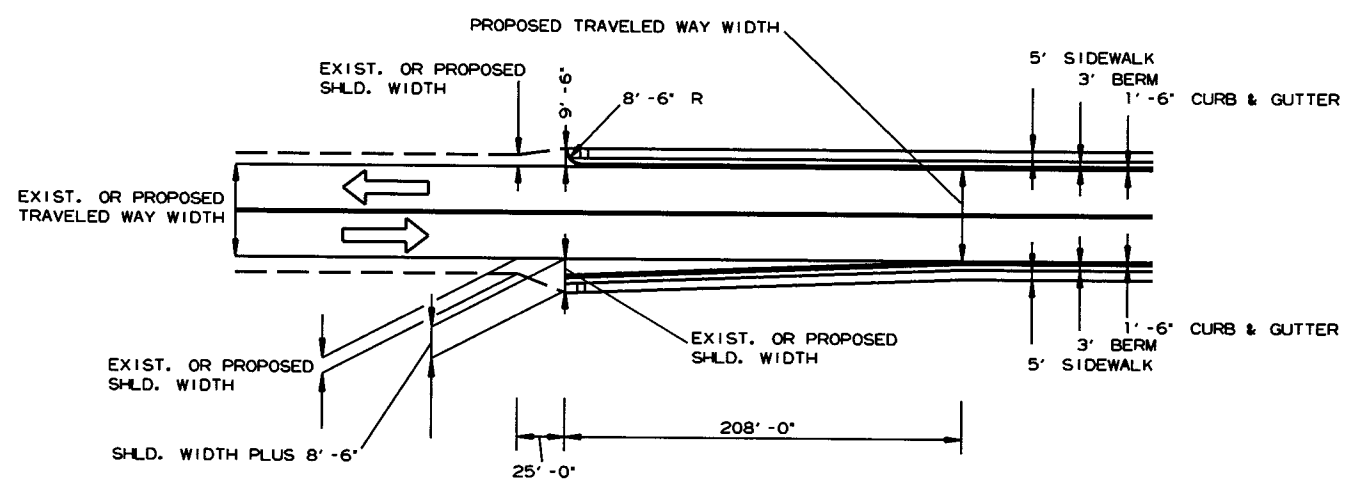
2 SPECIAL DETAILS



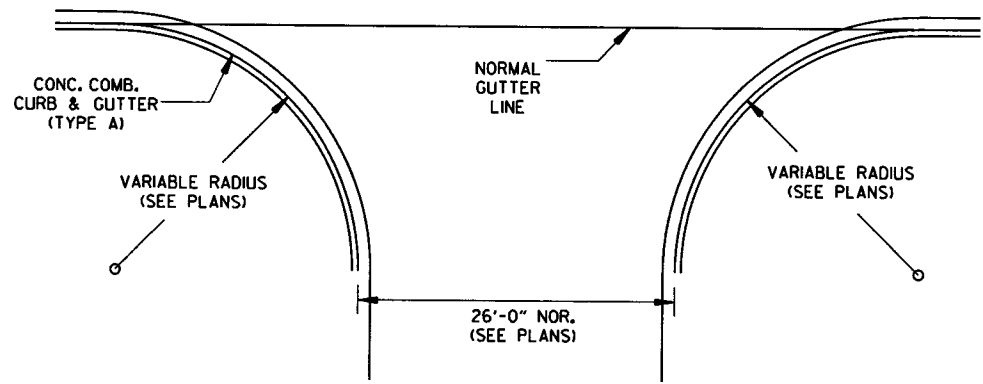
DETAIL FOR TRANSITIONS



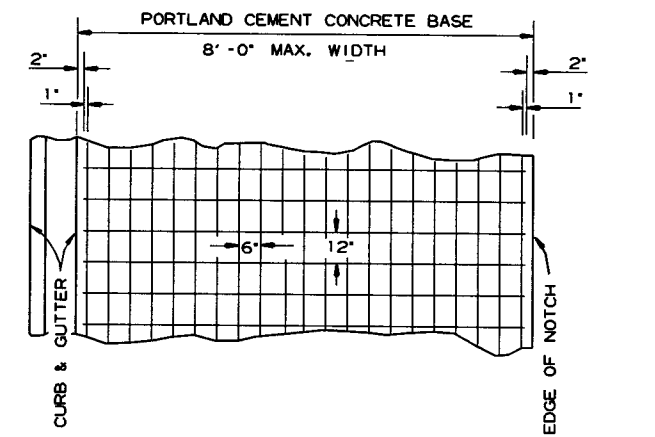
DETAIL FOR SOLID SODDING AROUND DROP INLETS



TRANSITION FROM OPEN SHOULDER TO CURB & GUTTER SECTION



DETAIL OF TURNOUTS, ASPHALT STREETS, COUNTY ROADS & STATE HIGHWAYS CURB & GUTTER SECTION



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

NOTES:

- LAP MESH FABRIC MIN. 12" LONGITUDINALLY AND MIN. 6" TRANSVERSELY.
- MESH FABRIC IS NOT REQUIRED WHEN WIDTH OF PORTLAND CEMENT CONCRETE BASE IS LESS THAN 12".
- MESH FABRIC (TYPE 3) WILL NOT BE PAID FOR DIRECTLY, BUT FULL COMPENSATION THEREFORE WILL BE CONSIDERED INCLUDED IN THE CONTRACT PRICE BID PER SQ. YD. FOR PORTLAND CEMENT CONCRETE BASE (10" U.T.)

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

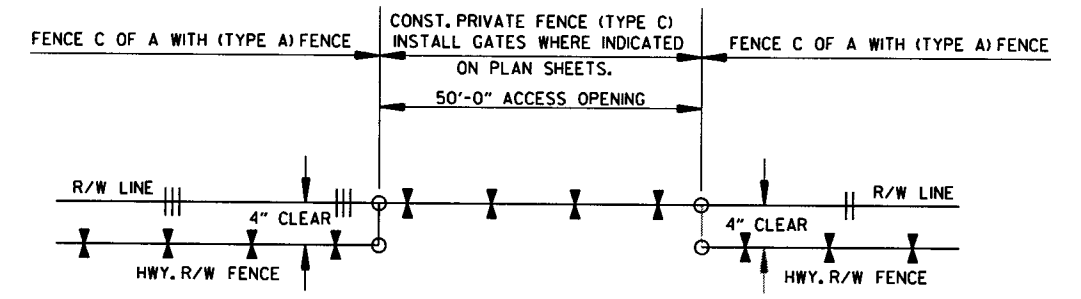
Job XXXXX
 Start Date Mo Year
 Est Completion Mo Year

IDRIVE
ARKANSAS.COM

27.9	11.1	6	23.1	27.9				
14.3	14.4	6	13.2	6	8	6.1	13.8	14.2
6.4	8.5	6	34.9	6	8	6	13.8	6.4
15.4	25.5	55.1						
16.4	63.4	16.2						
96								

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

CONSTRUCTION PROJECT INFORMATION SIGN



DETAIL OF ACCESS OPENINGS (NO SCALE)

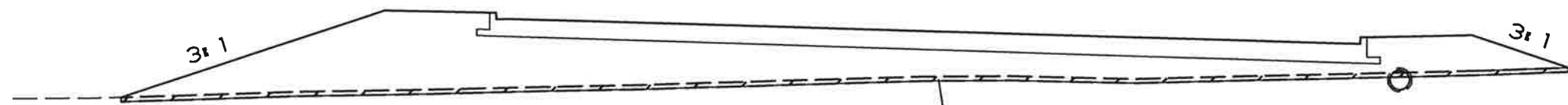
SPECIAL DETAILS

9/6/2017

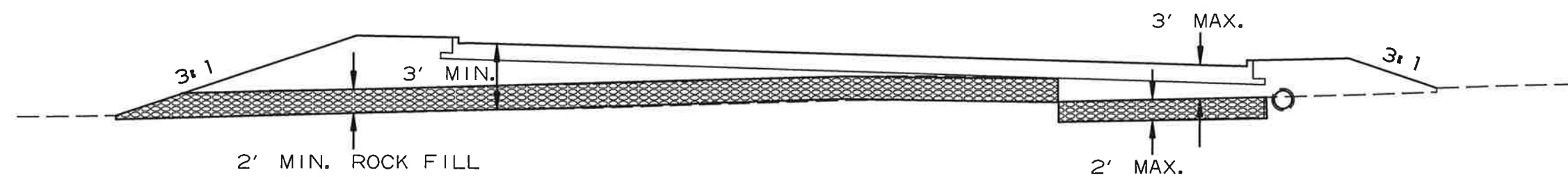
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DATE REVISED	DATE FILED	DATE REVISED	DATE FILED	FED. PROJ. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.		9	267
				JOB NO.	012007			

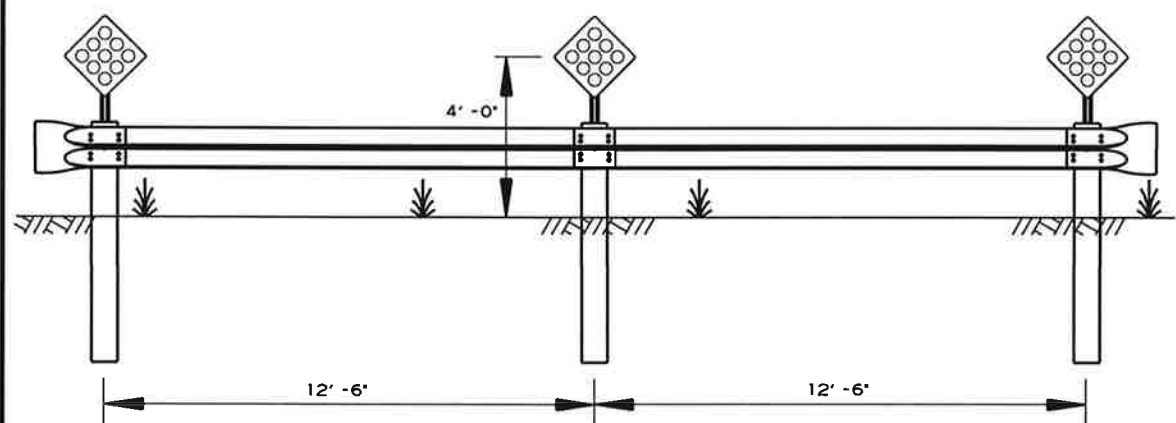
2 SPECIAL DETAILS



4" TOP SOIL REMOVED & REPLACED
IF AND WHERE DIRECTED BY THE ENGINEER
TOP SOIL REMOVAL

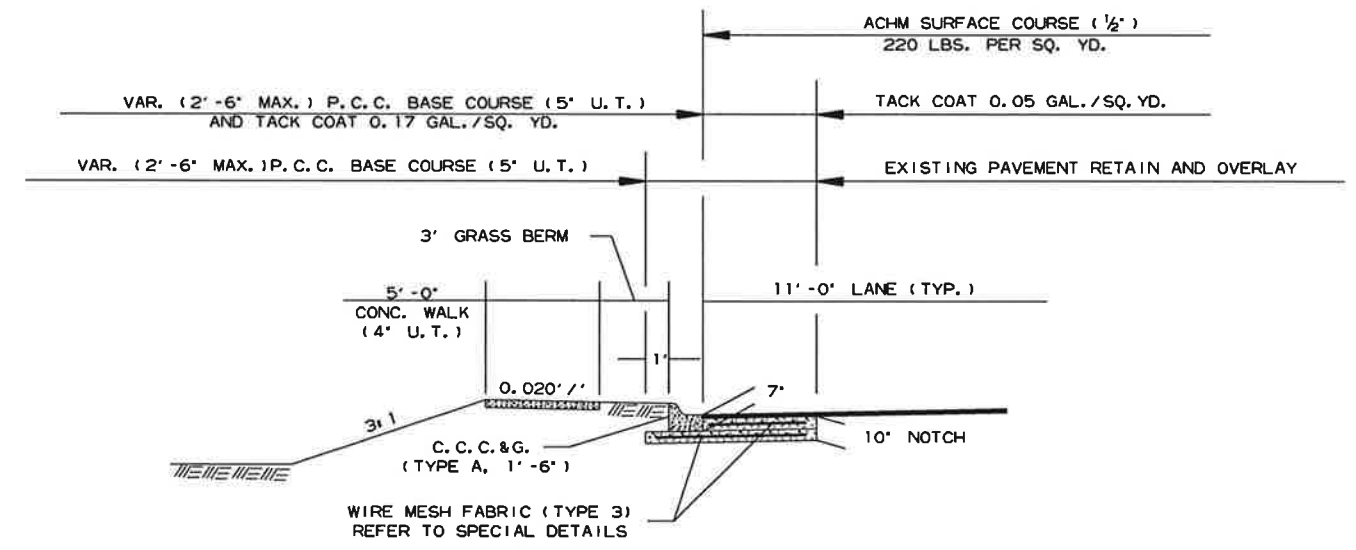


UNDERCUT AND ROCK FILL



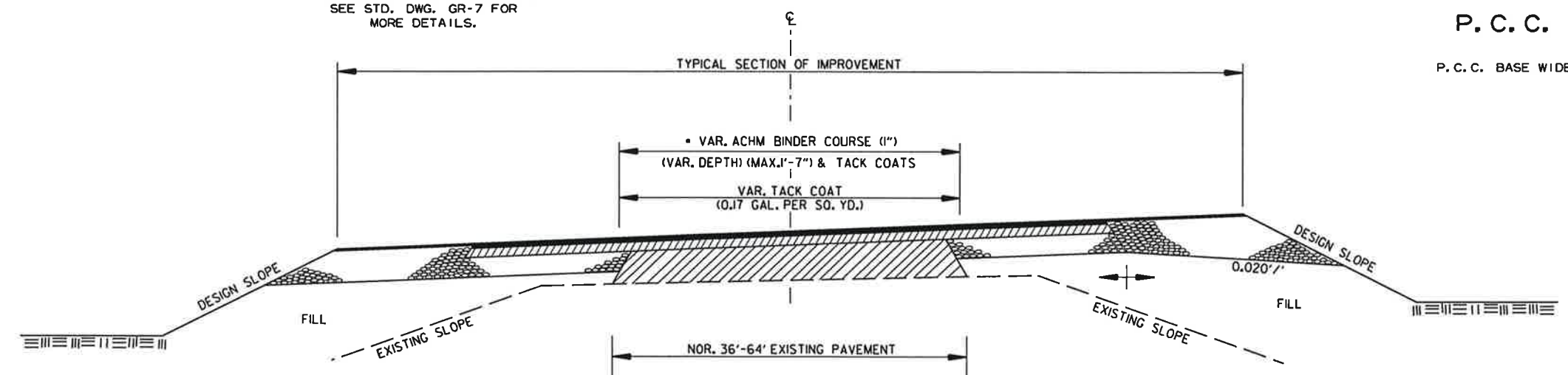
ROAD CLOSED DETAIL
TO BE USED WHERE EXISTING
ROADS WILL BE PERMANENTLY CLOSED.
SEE PLAN SHEETS FOR LOCATIONS
SEE STD. DWG. GR-7 FOR
MORE DETAILS.

CONSTRUCT
25 LIN. FT. TYPE "C" GUARDRAIL
WITH 3 RED DIAMOND REFLECTORS
MOUNTED ON U-CHANNEL POSTS
DIRECTLY BEHIND THE GUARDRAIL
AT A HEIGHT OF 4'-0".



P. C. C. BASE WIDENING DETAIL

P. C. C. BASE WIDENING TO BE USED AS SHOWN ON THE PLANS.



METHOD OF RAISING GRADE

• 10" AGGREGATE BASE COURSE (CLASS 7)
TO BE REPLACED WITH ACHM BINDER COURSE (1")

- NOTES:
- (1) THIS DETAIL TO BE USED ONLY WHERE DIRECTED BY THE ENGINEER.
 - (2) QUANTITIES FOR METHOD OF GRADE RAISE USING ASPHALT WERE CALCULATED ON THIS PROJECT AT LOCATIONS WHERE THE DISTANCE BETWEEN THE EXISTING ASPHALT ROADWAY AND THE PROPOSED SUBGRADE WAS ONE FOOT OR LESS.
 - (3) IN LOCATIONS WHERE THE DISTANCE BETWEEN THE PROPOSED SUBGRADE AND THE EXISTING ASPHALT ROADWAY IS MORE THAN ONE FOOT, SCARIFICATION OF THE EXISTING ASPHALT ROADWAY WILL BE REQUIRED AS STATED IN SECTION 210, SUBSECTION 210.09, OF THE STANDARD SPECIFICATIONS.

SPECIAL DETAILS

11/7/2017
R012007KGT.DGN

MID-SECTION

R.C. BOX SECTION	DESIGN FILL DEPTH (FT.)	D	S	H	T	B	C	W	OW	OH	SL	TOP SLAB REINFORCING STEEL				BOTTOM SLAB REINFORCING STEEL				SIDE WALL REINFORCING STEEL		INTERIOR WALL REINFORCING STEEL		TOP SLAB DISTRIBUTION REINFORCING STEEL		BOTTOM SLAB DISTRIBUTION REINFORCING STEEL		SIDE WALL DISTRIBUTION REINFORCING STEEL		INTERIOR WALL DISTRIBUTION REINFORCING STEEL		CLASS "S" CONCRETE	REINFORCING STEEL (GR 60)
												SIZE	SPACING	NO. REQ'D	LENGTH	SIZE	SPACING	NO. REQ'D	LENGTH	SIZE	SPACING	NO. REQ'D	LENGTH	SIZE	SPACING	NO. REQ'D	LENGTH	SIZE	SPACING	NO. REQ'D	LENGTH		

CLASS "S" CONCRETE	REINFORCING STEEL (GR 60)
215.99	27474

SHEET 1 OF 2
DETAILS OF R.C. BOX CULVERT
QUINTUPLE BARREL BOX CULVERT
STA. 144+50

SPECIAL DETAILS



INLET SLOPE SECTION(S)

R.C. BOX SECTION	DESIGN FILL DEPTH (FT.)	D	S	H	T	B	C	W	OW	OH	SL	TOP SLAB REINFORCING STEEL				BOTTOM SLAB REINFORCING STEEL				SIDE WALL REINFORCING STEEL		INTERIOR WALL REINFORCING STEEL		TOP SLAB DISTRIBUTION REINFORCING STEEL		BOTTOM SLAB DISTRIBUTION REINFORCING STEEL		SIDE WALL DISTRIBUTION REINFORCING STEEL		INTERIOR WALL DISTRIBUTION REINFORCING STEEL		CLASS "S" CONCRETE	REINFORCING STEEL (GR 60)
												SIZE	SPACING	NO. REQ'D	LENGTH	SIZE	SPACING	NO. REQ'D	LENGTH	SIZE	SPACING	NO. REQ'D	LENGTH	SIZE	SPACING	NO. REQ'D	LENGTH	SIZE	SPACING	NO. REQ'D	LENGTH		

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

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

INLET SKEWED END SECTION

SKEW (DEGREE)	SLOPE	DESIGN FILL DEPTH (FT.)	D	S	H	SECTION LENGTH	TOP SLAB THK.	HDWL DEPTH	BOTTOM SLAB THK.	SIDE WALL THK.	INTERIOR WALL THK.	OVERALL WIDTH	OVERALL HEIGHT	TOP SLAB REINFORCING STEEL				BOTTOM SLAB REINFORCING STEEL				SIDE WALL REINFORCING STEEL		INTERIOR WALL REINFORCING STEEL		TOP SLAB DISTRIBUTION REINFORCING STEEL		BOTTOM SLAB DISTRIBUTION REINFORCING STEEL		SIDE WALL DISTRIBUTION REINFORCING STEEL		INTERIOR WALL DISTRIBUTION REINFORCING STEEL		CLASS "S" CONCRETE (Includes HDWL)	REINFORCING STEEL (GR 60) (Includes HDWL)
														SIZE	SPACING	LENGTHS VARY	NO. REQ'D	SIZE	SPACING	LENGTHS VARY	NO. REQ'D	SIZE	SPACING	LENGTH	SIZE	SPACING	LENGTH	SIZE	SPACING	LENGTH	SIZE	SPACING	LENGTH		

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

INLET WINGWALL TABLE

OVER ALL WIDTH	CLEAR HEIGHT	FOOTING THK.	WING WALL THK.	BOX SKEW (DEG)	SLOPE	HDWL LENGTH	HEEL	WALL HEIGHT		WINGWALL ANGLE (DEGREE)	FOOTING WIDTH AT WALL END	WIDTH OF WING FOOTINGS AT HDWL		FOOTING DIMENSION PARALLEL WITH HDWL		LENGTH OF WINGWALLS		LENGTH OF FOOTING HEEL		CLASS "S" CONCRETE (Includes apron)	REINFORCING STEEL (Includes apron and laps if required)
								AT HDWL	AT WING END			WING A	WING B	WING A	WING B	WING A	WING B	WING A	WING B		
28'-8"	4'-0"	0'-9"	0'-8"	30	3:1	31'-11 3/8"	1'-0"	4'-10"	1'-4"	0	60	2'-3 3/4"	2'-7 7/8"	0'-7 3/4"	0'-3"	10'-6"	21'-0"	12'-4 5/8"	22'-10 5/8"	7.27	589

MID-SECTION BAR LAP TABLE

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

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

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



TABULAR DATA BY: WAC DATE: 7/27/2007
CHECKED BY: *[Signature]* DATE: 8/14/07

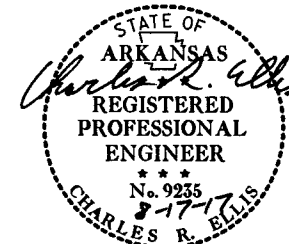
This drawing to be used in conjunction with SHEET 1 OF 4, "GENERAL DETAILS OF R.C. BOX CULVERT", "GENERAL NOTES & LONGITUDINAL SECTION LENGTH SCHEDULE", SHEET 3 OF 4, "GENERAL DETAILS OF R.C. BOX CULVERT", "DETAILS OF MULTI-BARREL R.C. BOX CULVERT", SHEET 4 OF 4, "GENERAL DETAILS OF R.C. BOX CULVERT",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

OUTLET WINGWALL TABLE

Table with columns for OVER ALL WIDTH, CLEAR HEIGHT, FOOTING THK, WING WALL THK, BOX SKEW (DEG), SLOPE, HDWL LENGTH, HEEL, WALL HEIGHT, WING WALL ANGLE, WINGWALL FOOTINGS AT HDWL, FOOTING DIMENSION PARALLEL WITH HDWL, LENGTH OF WING WALLS, LENGTH OF FOOTING HEEL, CLASS "S" CONCRETE, and REINFORCING STEEL.

Min. Bar Lap Length table with columns for Bar Size and Length.

Bar Fin Dia. Table with columns for Bar Size and Diameter.



TABULAR DATA BY: WAC DATE: 7/27/2017 CHECKED BY: [Signature] DATE: 8/14/17

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

OUTLET SKEWED END SECTION

Table with columns for SKEW (DEGREE), SLOPE, DESIGN FILL DEPTH (FT.), CLEAR SPAN (FT.), CLEAR HEIGHT (FT.), SECTION LENGTH, TOP SLAB THK., HDWL DEPTH, BOTTOM SLAB THK., SIDE WALL THK., INTERIOR WALL THK., OVERALL WIDTH, OVERALL HEIGHT, TOP SLAB REINFORCING STEEL, BOTTOM SLAB REINFORCING STEEL, SIDE WALL REINFORCING STEEL, INTERIOR WALL REINFORCING STEEL, TOP SLAB DISTRIBUTION REINFORCING STEEL, BOTTOM SLAB DISTRIBUTION REINFORCING STEEL, SIDE WALL DISTRIBUTION REINFORCING STEEL, INTERIOR WALL DISTRIBUTION REINFORCING STEEL, CLASS "S" CONCRETE, and REINFORCING STEEL.

OUTLET SLOPE SECTIONS

Table with columns for R.C. BOX SECTION, DESIGN FILL DEPTH (FT.), CLEAR SPAN (FT.), CLEAR HEIGHT (FT.), TOP SLAB THK., BOTTOM SLAB THK., SIDE WALL THK., INTERIOR WALL THK., OVERALL WIDTH, OVERALL HEIGHT, SECTION LENGTH (FT.), TOP SLAB REINFORCING STEEL, BOTTOM SLAB REINFORCING STEEL, SIDE WALL REINFORCING STEEL, INTERIOR WALL REINFORCING STEEL, TOP SLAB DISTRIBUTION REINFORCING STEEL, BOTTOM SLAB DISTRIBUTION REINFORCING STEEL, SIDE WALL DISTRIBUTION REINFORCING STEEL, INTERIOR WALL DISTRIBUTION REINFORCING STEEL, CLASS "S" CONCRETE, and REINFORCING STEEL.

Summary table for Class "S" Concrete and Reinforcing Steel with columns for CU YDS and LBS.

SHEET 2 OF 2 DETAILS OF R.C. BOX CULVERT QUINTUPLE BARREL BOX CULVERT STA. 144+50

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

Unless otherwise noted, all dimensions are in inches.

SPECIAL DETAILS



MID-SECTION

R.C. BOX SECTION		DESIGN FILL DEPTH (FT.)		CLEAR SPAN (FT.)		CLEAR HEIGHT (FT.)		TOP SLAB THK		BOTTOM SLAB THK		SIDE WALL THK		INTERIOR WALL THK		OVER ALL WIDTH		OVER ALL HEIGHT		SECTION LENGTH (FT.)		TOP SLAB REINFORCING STEEL				BOTTOM SLAB REINFORCING STEEL				SIDE WALL REINFORCING STEEL		INTERIOR WALL REINFORCING STEEL		TOP SLAB DISTRIBUTION REINF STEEL		BOTTOM SLAB DISTRIBUTION REINF STEEL		SIDE WALL DISTRIBUTION REINF STEEL		INTERIOR WALL DISTRIBUTION REINF STEEL						
D	S	H	T	B	C	W	OW	OH	SL	SIZE	L	SIZE	L	SIZE	L	SIZE	L	SIZE	L	SIZE	L	SIZE	L	SIZE	L	SIZE	L	SIZE	L	SIZE	L	SIZE	L	SIZE	L	SIZE	L	SIZE	L	SIZE	L					
A	2	6	3	10	10	6	8	33'-8"	4'-8"	150	4	33'-4"	8	34'-4"	8	33'-4"	18	100	4	33'-4"	4	34'-3"	4	33'-4"	24	75	4	10	360	4'-4"	4	12	1200	4'-4"	4	11	79	4	11	79	4	12	6	4	12	24

CLASS "S" CONCRETE	REINFORCING STEEL (GR 60)
CU YDS.	LBS
372.84	49362

INLET SLOPE SECTION(S)

R.C. BOX SECTION		DESIGN FILL DEPTH (FT.)		CLEAR SPAN (FT.)		CLEAR HEIGHT (FT.)		TOP SLAB THK		BOTTOM SLAB THK		SIDE WALL THK		INTERIOR WALL THK		OVER ALL WIDTH		OVER ALL HEIGHT		SECTION LENGTH (FT.)		TOP SLAB REINFORCING STEEL				BOTTOM SLAB REINFORCING STEEL				SIDE WALL REINFORCING STEEL		INTERIOR WALL REINFORCING STEEL		TOP SLAB DISTRIBUTION REINF STEEL		BOTTOM SLAB DISTRIBUTION REINF STEEL		SIDE WALL DISTRIBUTION REINF STEEL		INTERIOR WALL DISTRIBUTION REINF STEEL				
D	S	H	T	B	C	W	OW	OH	SL	SIZE	L	SIZE	L	SIZE	L	SIZE	L	SIZE	L	SIZE	L	SIZE	L	SIZE	L	SIZE	L	SIZE	L	SIZE	L	SIZE	L	SIZE	L	SIZE	L	SIZE	L					

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

INLET SKEWED END SECTION

SKEW (DEGREE)		SLOPE		DESIGN FILL DEPTH (FT.)		CLEAR SPAN (FT.)		CLEAR HEIGHT (FT.)		SECTION LENGTH		TOP SLAB THK.		HDWL DEPTH		BOTTOM SLAB THK		SIDE WALL THK		INTERIOR WALL THK.		OVERALL WIDTH		OVERALL HEIGHT		TOP SLAB REINFORCING STEEL				BOTTOM SLAB REINFORCING STEEL				SIDE WALL REINFORCING STEEL		INTERIOR WALL REINFORCING STEEL		TOP SLAB DISTRIBUTION REINFORCING STEEL		BOTTOM SLAB DISTRIBUTION REINFORCING STEEL		SIDE WALL DISTRIBUTION REINFORCING STEEL		INTERIOR WALL DISTRIBUTION REINFORCING STEEL		
SK	SL	D	S	H	T	B	C	W	OW	OH	SL	SIZE	L	SIZE	L	SIZE	L	SIZE	L	SIZE	L	SIZE	L	SIZE	L	SIZE	L	SIZE	L	SIZE	L	SIZE	L	SIZE	L	SIZE	L	SIZE	L	SIZE	L	SIZE	L			
15	3:1	2	6	3	6'-6"	10	3	10	6	8	33'-8"	4'-8"	4	5.5	17	7	10	4	12	4	9	18	4'-4"	4	12	64	4'-4"	4	11	79	4	11	79	4	12	6	4	12	3	6	4	12	6	4	12	3

CLASS "S" CONCRETE (includes HDWL)	REINFORCING STEEL (GR 60) (includes HDWL)
CU YDS	LBS
17.04	2557

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

INLET WINGWALL TABLE

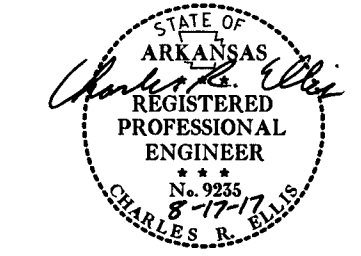
OVER ALL WIDTH		CLEAR HEIGHT		FOOTING THK		WING WALL THK		BOX SKEW (DEG)		SLOPE		HDWL LENGTH		HEEL		WALL HEIGHT		WINGWALL ANGLE (DEGREE)		FOOTING WIDTH AT WALL END		WIDTH OF WING FOOTINGS AT HDWL		FOOTING DIMENSION PARALLEL WITH HDWL		LENGTH OF WINGWALLS		LENGTH OF FOOTING HEEL		CLASS "S" CONCRETE (Includes apron)		REINFORCING STEEL (Includes apron and laps if required)	
OW	H	WB	CW	SK	SL	K	HL	WH1	WH2	AF1	AF2	WE	WF1	WF2	G1	G2	W1	W2	W3	W4	INLET	INLET	CU.YD	LBS.									
33'-8"	3'-0"	0'-9"	0'-8"	15	3	33'-9 7/8"	1'-0"	3'-10"	1'-0"	15	45	2'-2"	2'-2"	0'-3"	0'-3-1/2"	8'-6"	12'-0"	10'-4 5/8"	13'-10 5/8"	5.06	381												

MID-SECTION BAR LAP TABLE

# of Long Laps Req'd.	SL = Section Length
0	< 40 ft
1	> 40 ft - 78.0 ft
2	> 78.0 ft - 116.0 ft
3	> 116.0 ft - 154.0 ft
4	> 154.0 ft - 192.0 ft
5	> 192.0 ft - 230.0 ft
6	> 230.0 ft - 268.0 ft
7	> 268.0 ft - 306.0 ft
8	> 306.0 ft - 344.0 ft

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

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



TABULAR DATA BY: WAC DATE: 7/27/2017
 CHECKED BY: [Signature] DATE: 8/14/17

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

**SHEET 1 OF 2
 DETAILS OF R.C. BOX CULVERT
 QUINTUPLE BARREL BOX CULVERT
 STA. 208+48**

SPECIAL DETAILS

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

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



b012007_c2.dgn

OUTLET SLOPE SECTION(S)

Table for Outlet Slope Sections with columns for R.C. Box Section, Design Fill Depth, Clear Span, Clear Height, Top Slab Thk, Bottom Slab Thk, Side Wall Thk, Interior Wall Thk, Overall Width, Overall Height, Section Length, and Top/Bottom/Side/Interior Wall Reinforcing Steel.

Summary table for Outlet Slope Sections with columns for Class 'S' Concrete, Reinforcing Steel (Gr 60), CU YDS, and LBS.

OUTLET SKEWED END SECTION

Table for Outlet Skewed End Section with columns for Skew, Slope, Design Fill Depth, Clear Span, Clear Height, Section Length, Top Slab Thk, HDWL Depth, Bottom Slab Thk, Side Wall Thk, Interior Wall Thk, Overall Width, Overall Height, and Top/Bottom/Side Wall/Interior Wall Reinforcing Steel.

Summary table for Outlet Skewed End Section with columns for Class 'S' Concrete, Reinforcing Steel (Gr 60), CU YDS, and LBS.

OUTLET WINGWALL TABLE

Main table for Outlet Wingwall with columns for Wing, Bar Size, Max Spacing, No. Req'd, Lengths Vary, and various dimensions (OW, H, WB, CW, SK, SL, K, HL, WH1, WH2, AF1, AF2, WE, WF1, WF2, G1, G2, W1, W2, W3, W4).

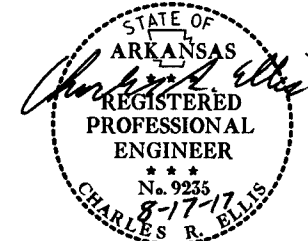
Table for Min Bar Lap Length with columns for Bar Size (#4-#8) and Lap Length (1'-9" to 4'-7").

Table for Bar Pin Dia with columns for Bar Size (#4-#8) and Pin Diameter (3" to 6").

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

Revision table with columns for Date Revised, Date Filmed, Date Revised, Date Filmed, Fed. Road Dist. No., State, Fed. Aid Proj. No., Sheet No., and Total Sheets.

SPECIAL DETAILS

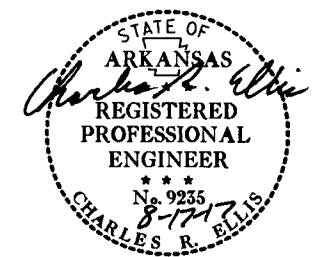


TABULAR DATA BY: WAC DATE: 7/27/2017 CHECKED BY: [Signature] DATE: 8/14/17

The required number of bars and lengths shown are for estimating purpose only. The actual number and length required shall be determined in field. Unless otherwise noted, all dimensions are in inches.

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		14	267

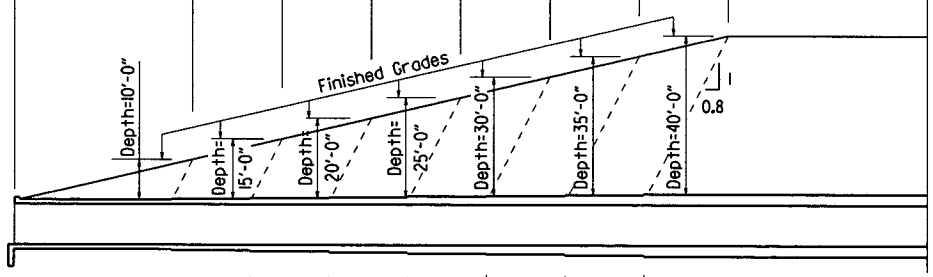
JOB NO. 012007 SPECIAL DETAILS



2:1 Slope	20'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
3:1 Slope	30'-0"	15'-0"	15'-0"	15'-0"	15'-0"	15'-0"	15'-0"
4:1 Slope	40'-0"	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"

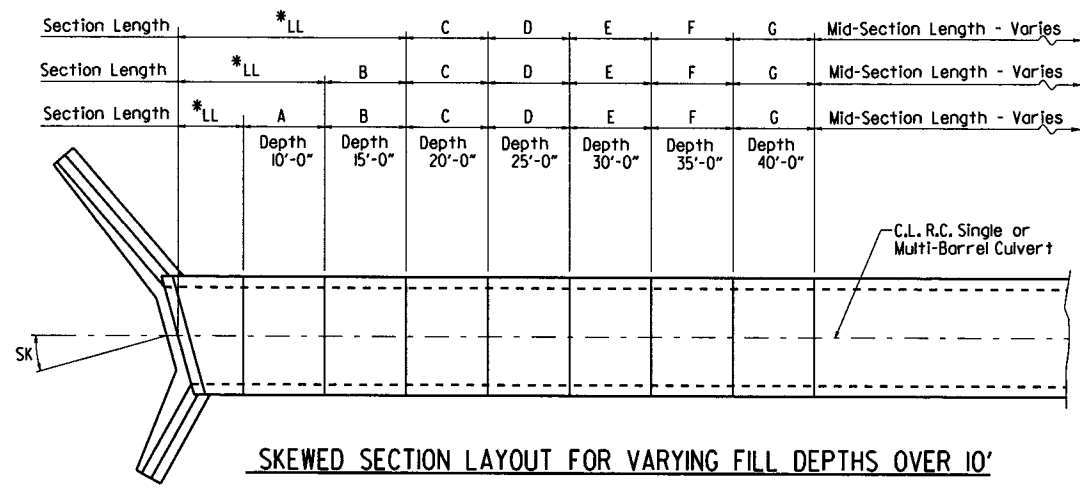
Note: For fill depths 10' and under, use Mid-Section full length of box culvert.

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



Slope Section Length @ 2:1 Slope	A=12'-0"	B=6'-0"	C=6'-0"	D=6'-0"	E=6'-0"	F=6'-0"	G=6'-0"	Mid-Section Length - Varies
Slope Section Length @ 3:1 Slope	A=22'-0"	B=11'-0"	C=11'-0"	D=11'-0"	E=11'-0"	F=11'-0"	G=11'-0"	Mid-Section Length - Varies
Slope Section Length @ 4:1 Slope	A=32'-0"	B=16'-0"	C=16'-0"	D=16'-0"	E=16'-0"	F=16'-0"	G=16'-0"	Mid-Section Length - Varies

LONGITUDINAL SECTION LENGTH SCHEDULE FOR VARYING FILL DEPTHS OVER 10'
Lengths for Non-Skewed Boxes



SKewed SECTION LAYOUT FOR VARYING FILL DEPTHS OVER 10'

GENERAL NOTES:

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

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

LIVE LOADING: HL-93

All concrete shall be Class S with a minimum 28-day compressive strength of 3,500 psi and shall be poured in the dry. All exposed corners to have 1/4" chamfers.

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

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

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

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

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

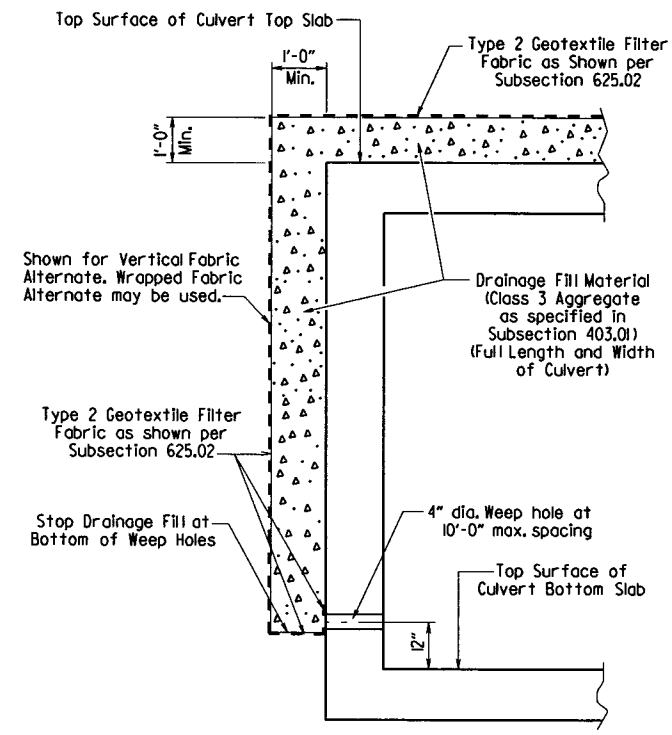
Weep Holes in wingwalls shall have a maximum horizontal spacing of 10'-0" and shall be spaced to clear all reinforcing steel. There shall be a minimum of two (2) weep holes in each wingwall. The drain opening shall be 4" diameter and shall be placed 12" above the top of the wingwall footing.

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

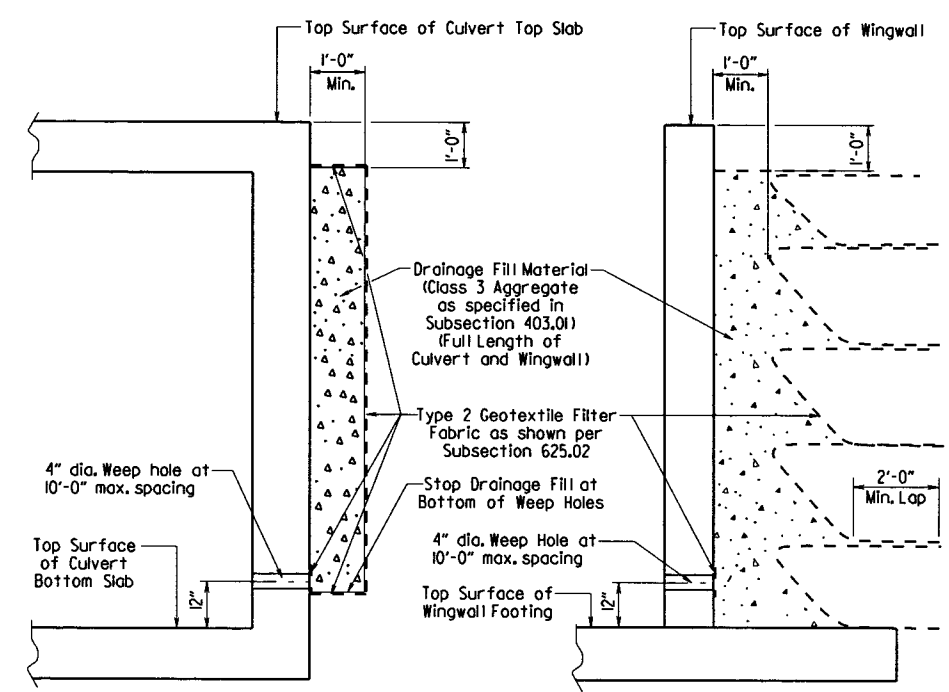
Membrane Waterproofing, Weep Holes, Geotextile Filter Fabric, and Drainage Fill Material will not be paid for directly but shall be considered subsidiary to Class S Concrete.

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

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



CULVERT DRAINAGE DETAIL FOR ROCK FILL
This detail shall be used when rock fill is specified for embankment construction.



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

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

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

WINGWALL & CULVERT DRAINAGE DETAIL

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



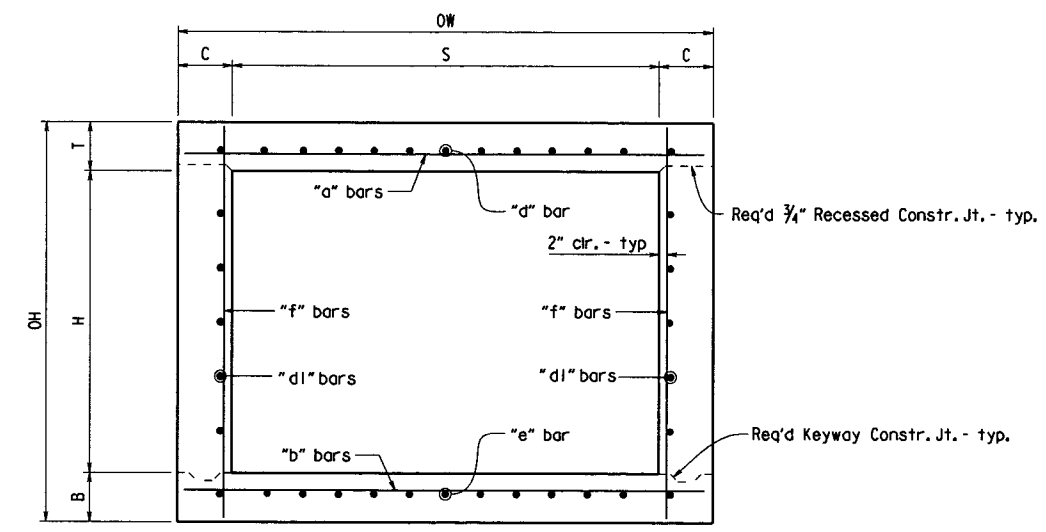
V 1.14 Culvert-General.dgn

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	012007	15	267	

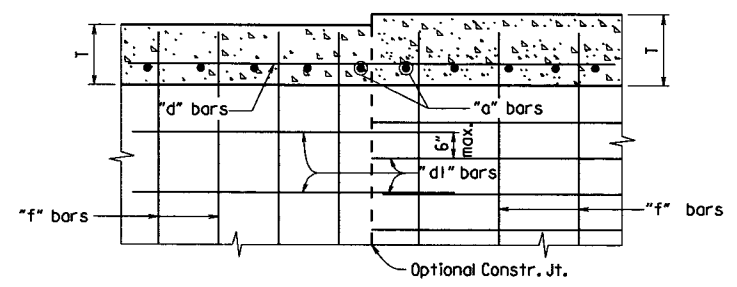
1 SPECIAL DETAILS



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

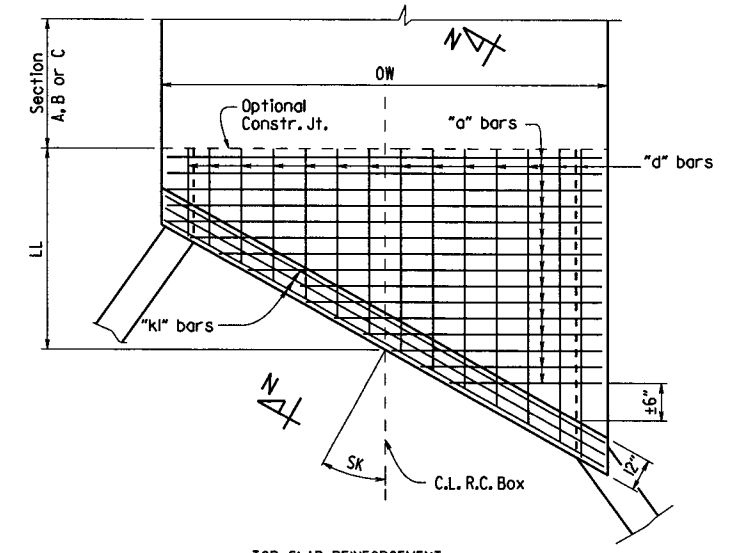


TYPICAL SECTION M-M

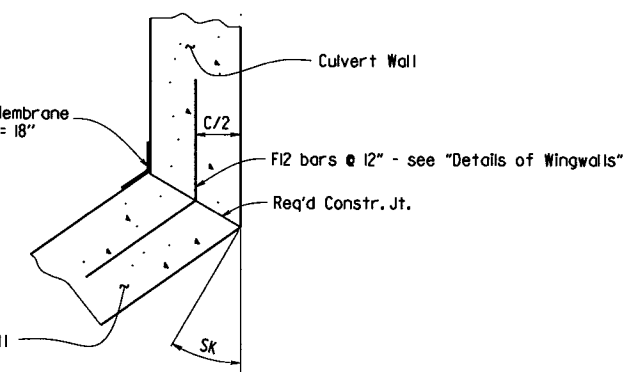


LONGITUDINAL LAP DETAIL AT CHANGE IN SECTIONS

TOP SLAB SHOWN, BOTTOM SLAB SIMILAR

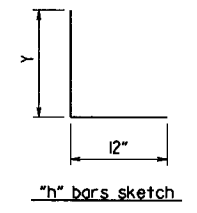


TOP SLAB REINFORCEMENT

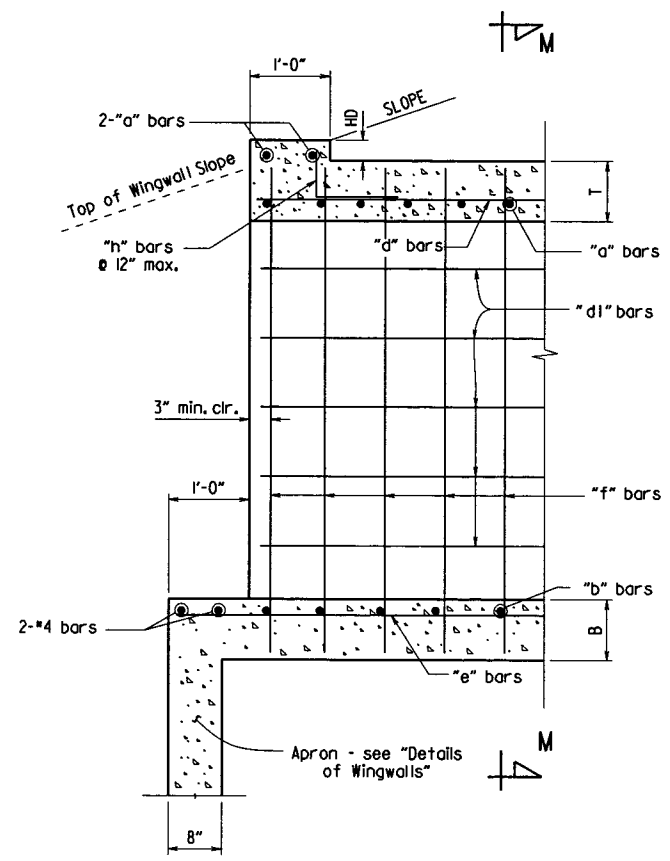


WINGWALL ATTACHMENT

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

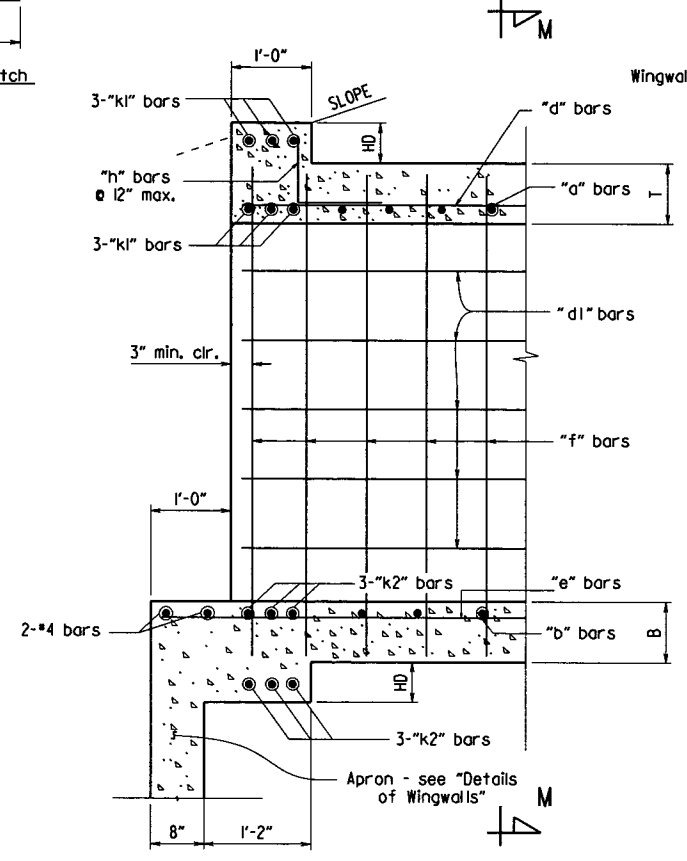


"h" bars sketch



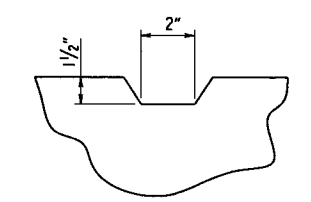
PART LONGITUDINAL SECTION

(Non-Skewed Ends)



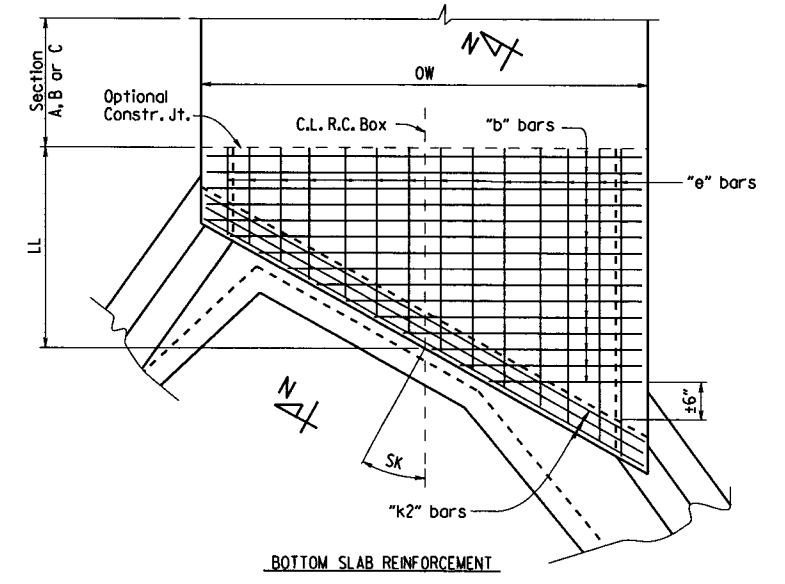
PART LONGITUDINAL SECTION N-N

(Skewed Ends)



TYPICAL KEYWAY DETAIL

(All Construction Joints)



BOTTOM SLAB REINFORCEMENT

SKewed END SECTION DETAILS

SHEET 2 OF 4
GENERAL DETAILS OF R.C. BOX CULVERT
DETAILS OF SINGLE BARREL
R.C. BOX CULVERT
SPECIAL DETAILS

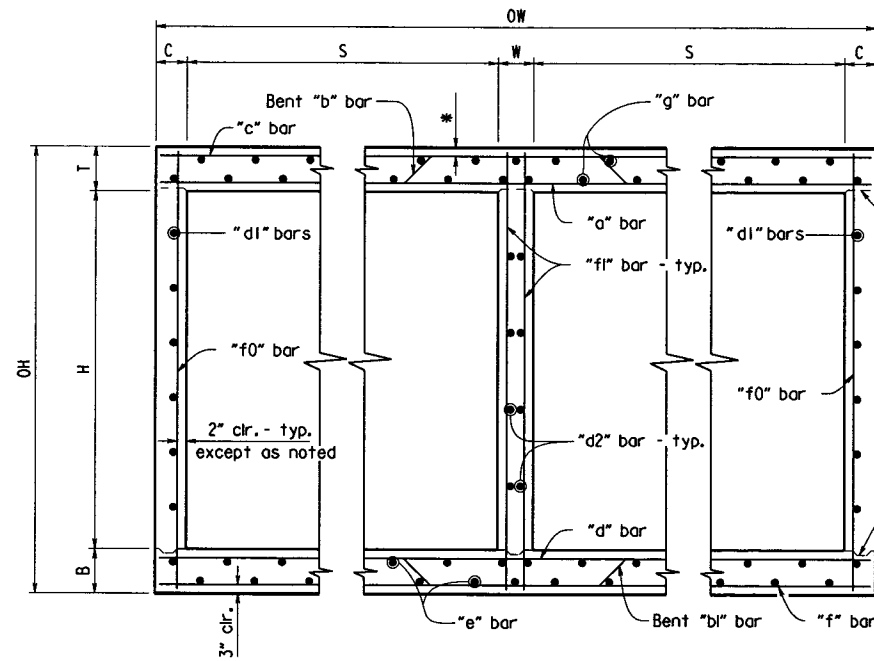
Culvert-General.dgn



DATE REVISED	DATE FILMED	REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	012007		16	267

*2" cl. for fill depth (D) greater than 2 ft.
 2 1/2" cl. for fill depth (D) equal to or less than 2 ft.

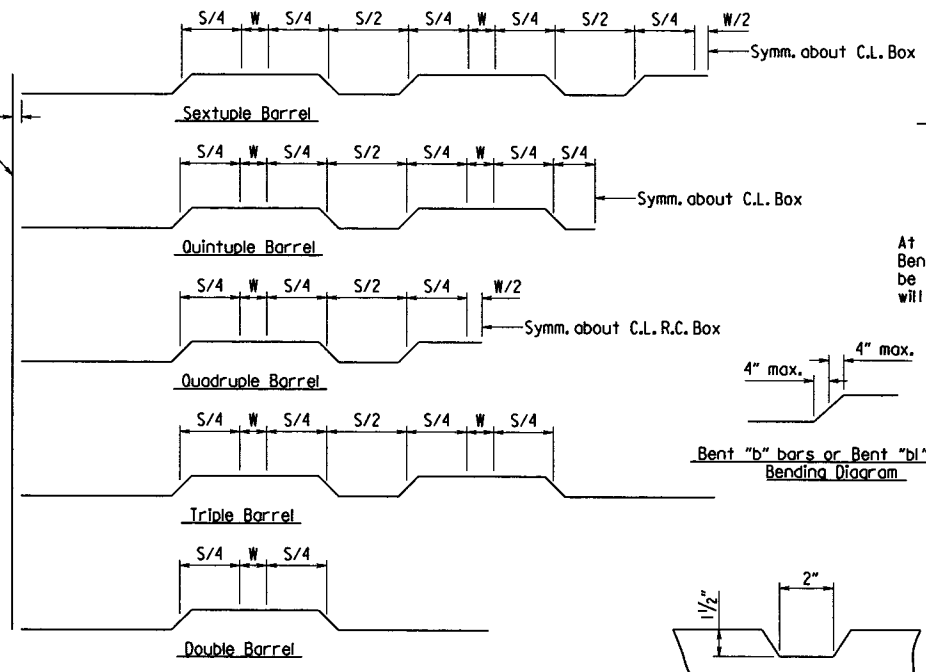
Note: When top slab of culvert serves as finished roadway surface, see General Notes on Sheet 1 of 4.



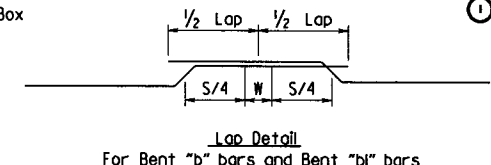
TYPICAL SECTION M-M

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

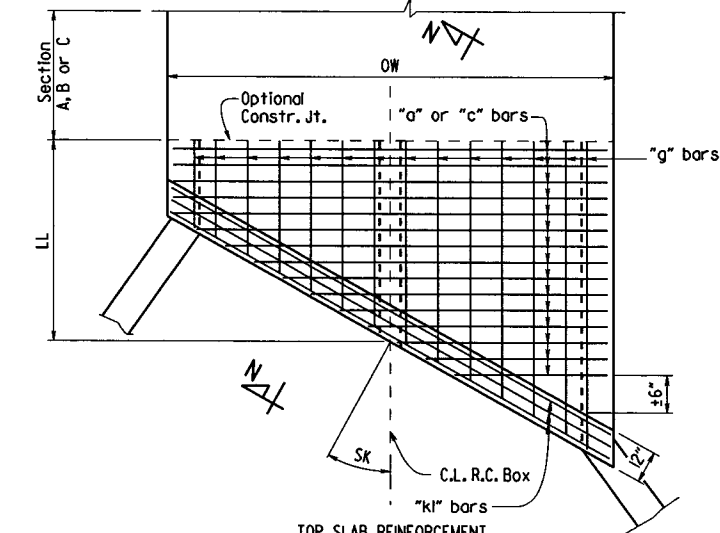
Bottom Slab
 Straight "d" bars shall alternate with Bent "bl" bars in top.
 Straight "f" bars shall alternate with Bent "bl" bars in bottom.



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

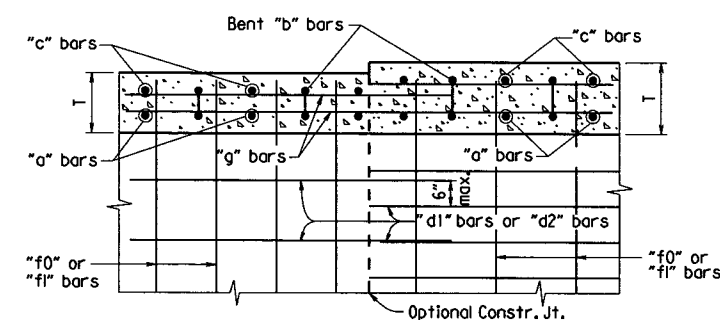


At the Contractor's option in lieu of providing Bent "b" or Bent "bl" bars, one bar top and bottom of equivalent size may be substituted for each bent bar. Payment for the reinforcing will be based on the weight of the "b" or "bl" bar.

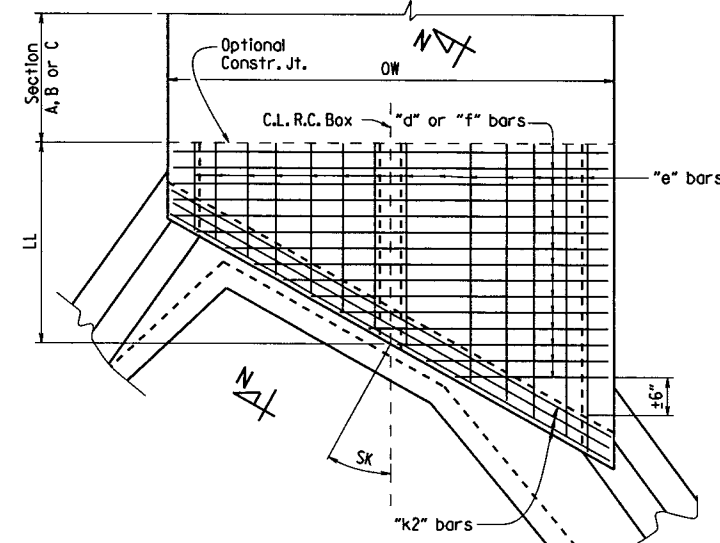


TOP SLAB REINFORCEMENT
 Straight "c" bars in top.
 Straight "a" bars in bottom.

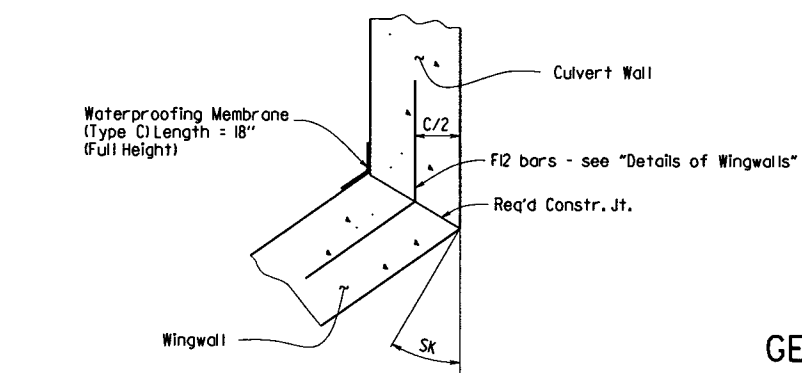
TYPICAL KEYWAY DETAIL
 (All Construction Joints)



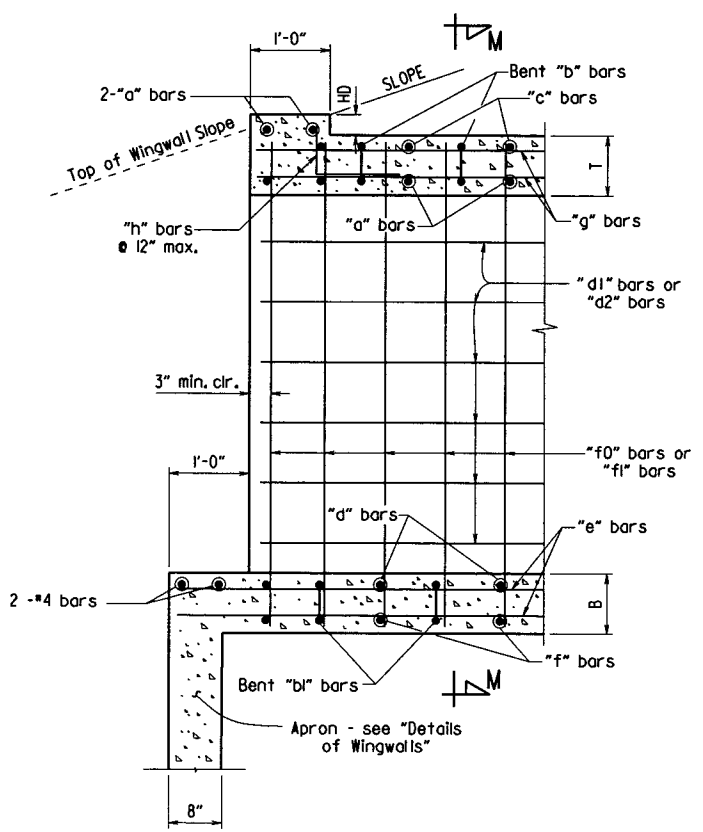
LONGITUDINAL LAP DETAIL AT CHANGE IN SECTIONS
 TOP SLAB SHOWN, BOTTOM SLAB SIMILAR



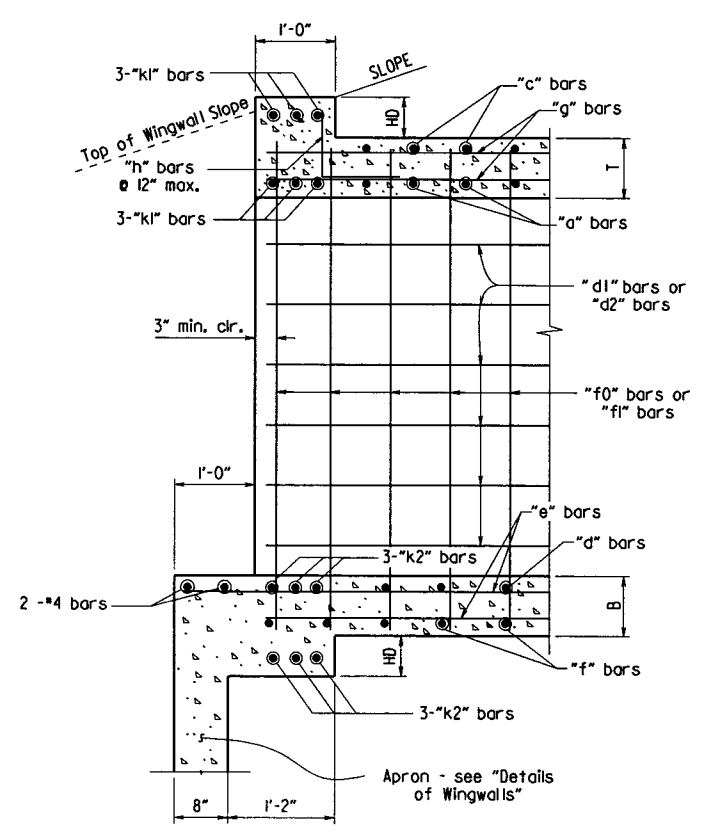
SKewed END SECTION DETAILS
 BOTTOM SLAB REINFORCEMENT
 Straight "d" bars in top.
 Straight "f" bars in bottom.



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



PART LONGITUDINAL SECTION
 (Non-Skewed Ends)

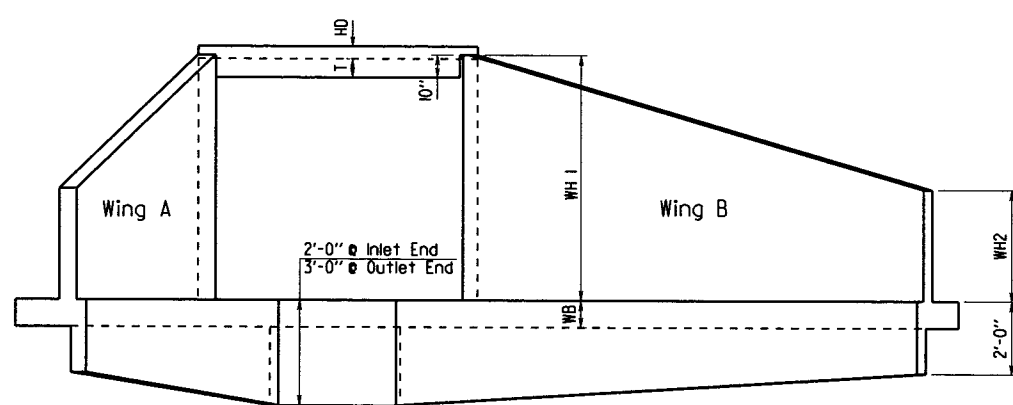


PART LONGITUDINAL SECTION N-N
 (Skewed Ends)

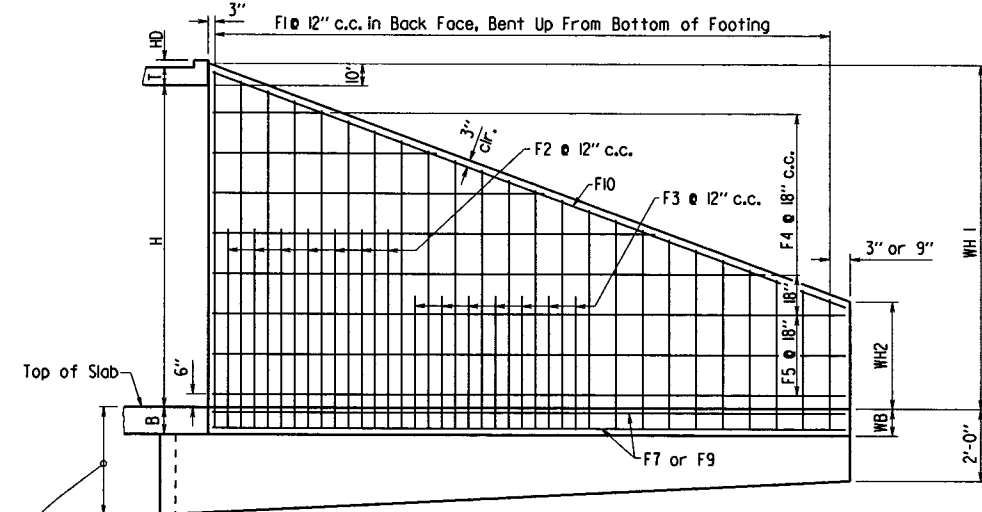
Culvert-General.dgn

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	012007		17	267

① SPECIAL DETAILS

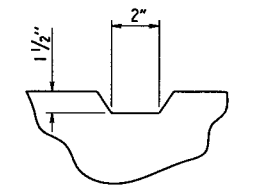


END ELEVATION
Flared Wingwalls Shown

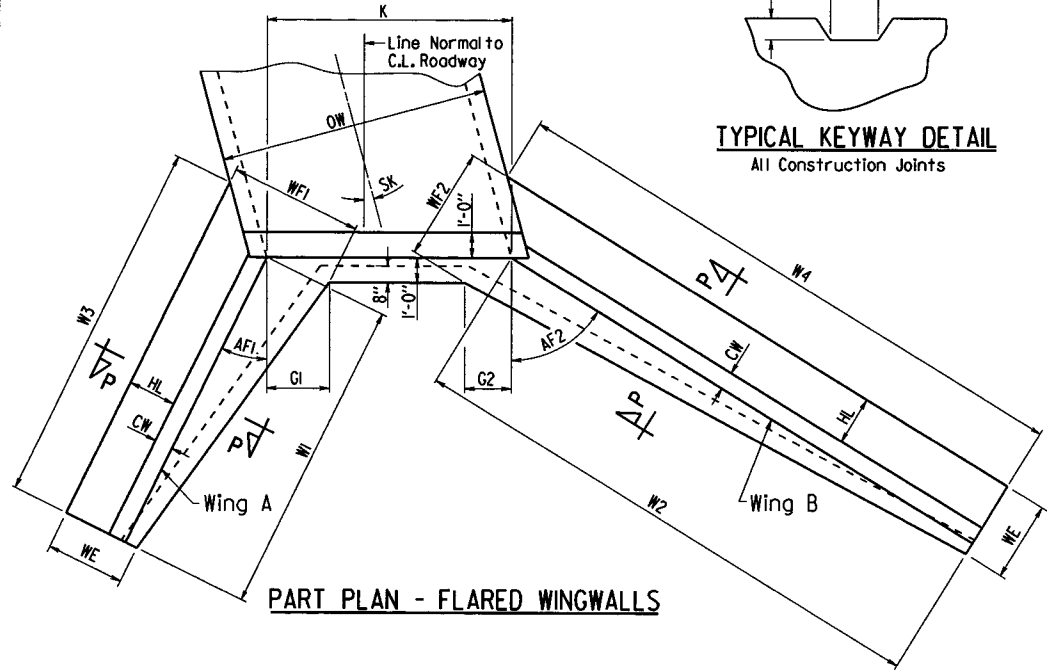


WINGWALL ELEVATION
Showing Back Face Reinforcement

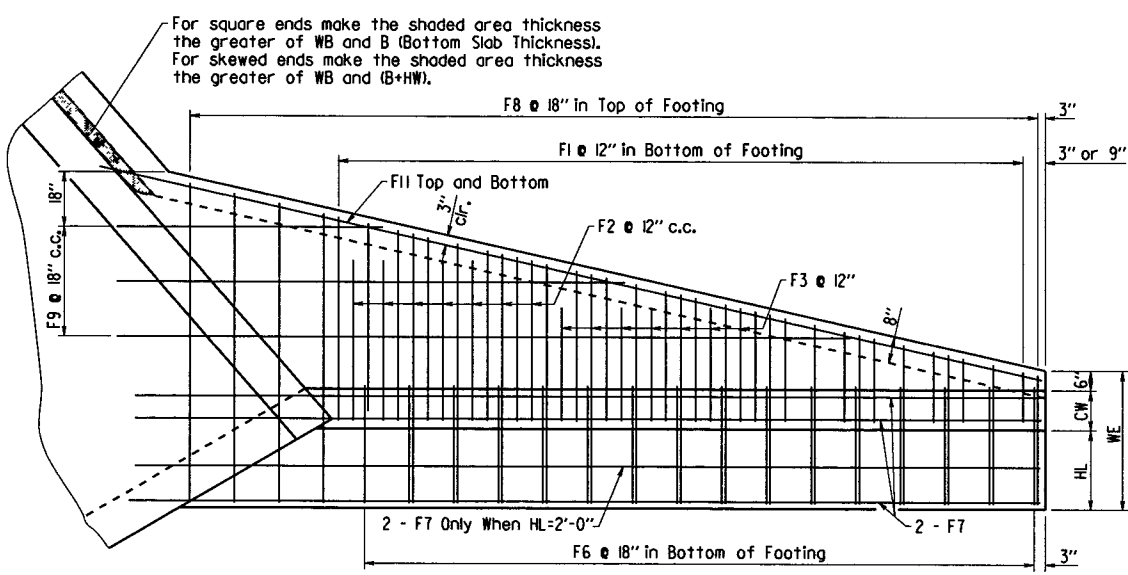
Note: See "Wingwall Section P-P" for additional details and reinforcing.



TYPICAL KEYWAY DETAIL
All Construction Joints

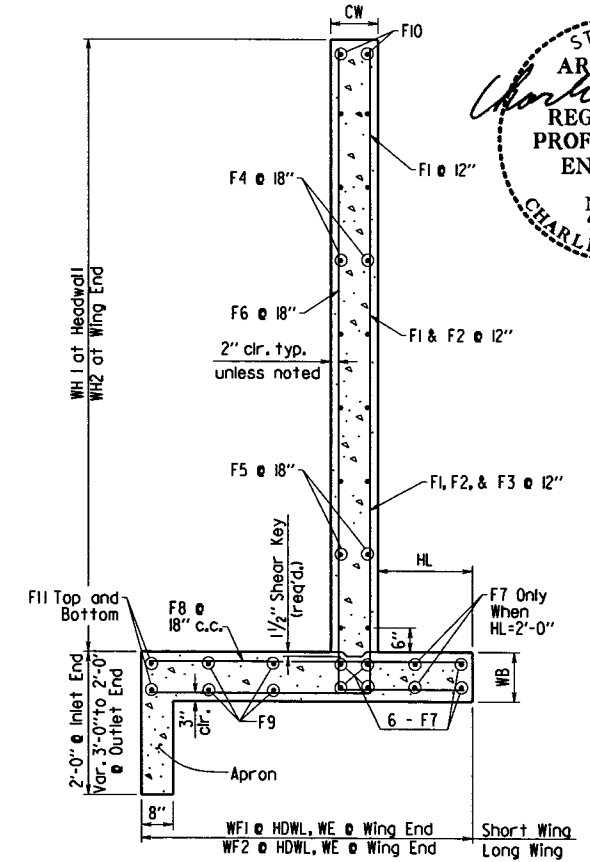


PART PLAN - FLARED WINGWALLS

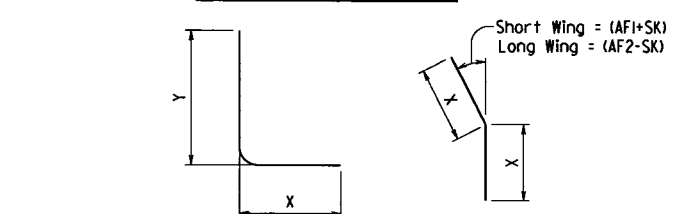


PLAN - FLARED WINGWALLS
Showing Footing Reinforcement

For square ends make the shaded area thickness the greater of WB and B (Bottom Slab Thickness).
For skewed ends make the shaded area thickness the greater of WB and (B+HW).

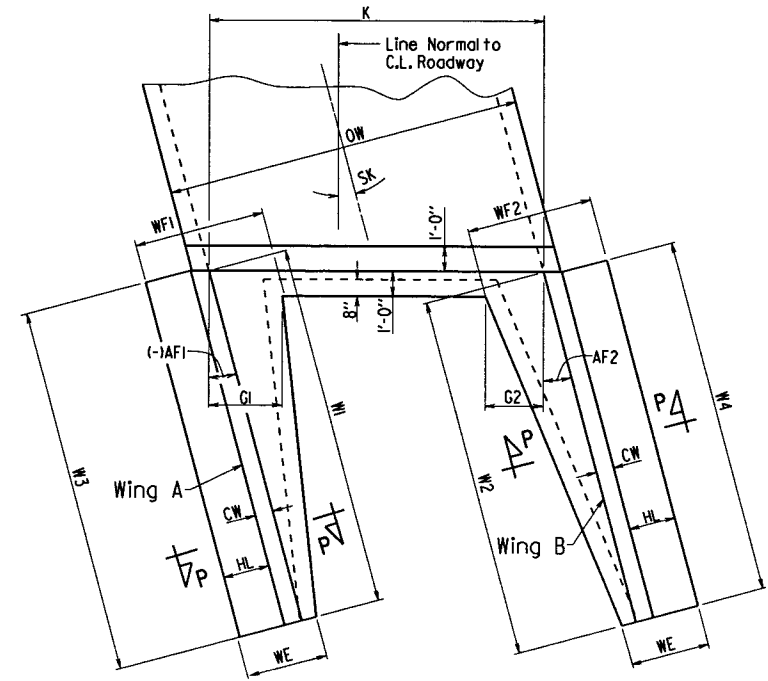


WINGWALL SECTION P-P

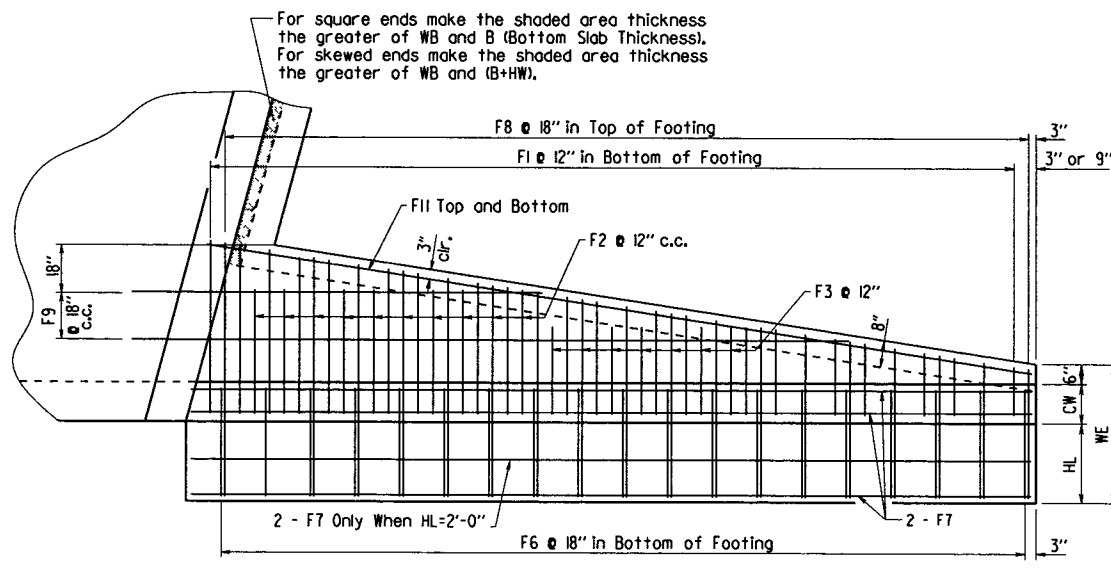


F1, F2, F3, & F6 BARS *F12 BAR

*F12 is a straight bar for parallel wingwalls

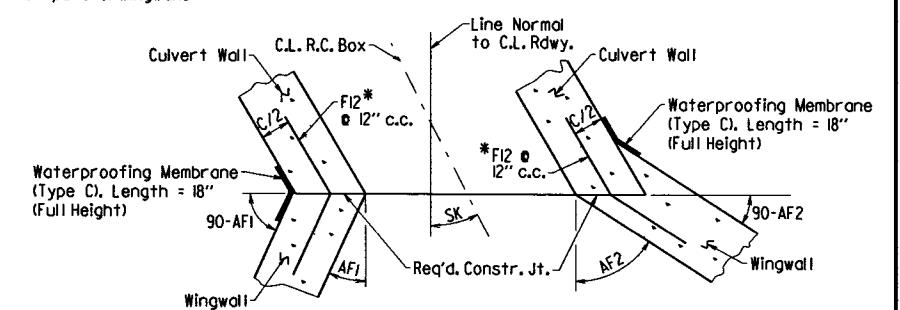


PART PLAN - PARALLEL WINGWALLS



PLAN - PARALLEL WINGWALLS
Showing Footing Reinforcement

For square ends make the shaded area thickness the greater of WB and B (Bottom Slab Thickness).
For skewed ends make the shaded area thickness the greater of WB and (B+HW).



CONSTRUCTION JOINTS
Flared Wingwalls Shown

SHEET 4 OF 4
GENERAL DETAILS OF R.C. BOX CULVERT
DETAILS OF WINGWALLS
SPECIAL DETAILS

Culvert-General.dgn

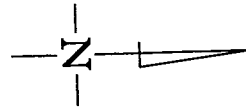
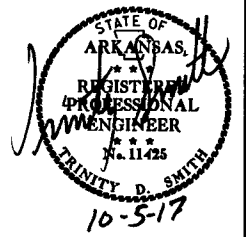


CLEARING AND GRUBBING STAGE

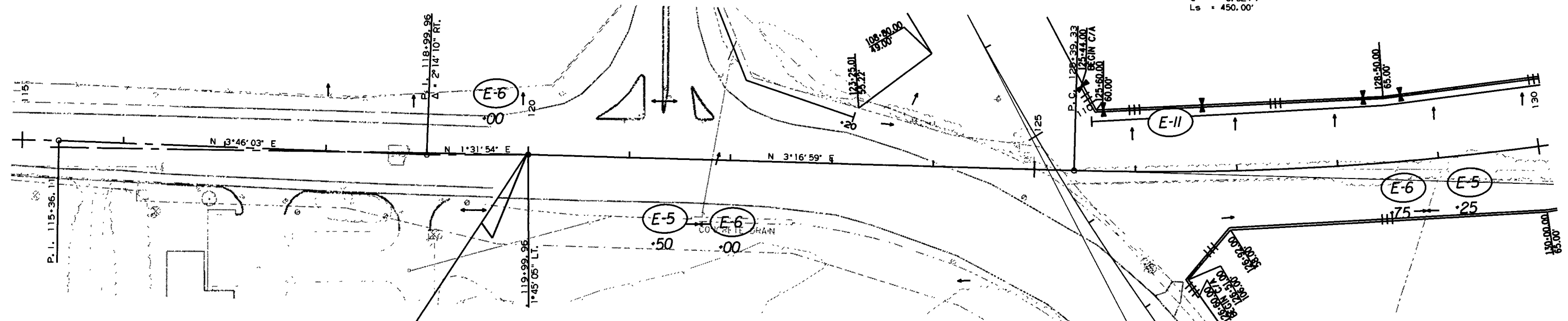
E-5 = 242 BAGS (11 LOCATIONS)
 E-6 = 39 CU. YDS. (13 LOCATIONS)
 E-11 = 9605 LIN. FT.

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.	012007	18	267	

2 TEMPORARY EROSION CONTROL DETAILS



P. I. = 133+56.90
 Δ = 31°51'20.7" LT.
 D = 2°00'00.0"
 T = 817.56'
 L = 1592.79'
 P. C. = 125+39.33
 P. T. = 141+32.12
 e = 0.024' /'
 Ls = 450.00'



STA. 120+00.00
 BEGIN JOB 012007
 LOG MILE 10.48

REVISIONS

DATE OF REVISION	REVISION

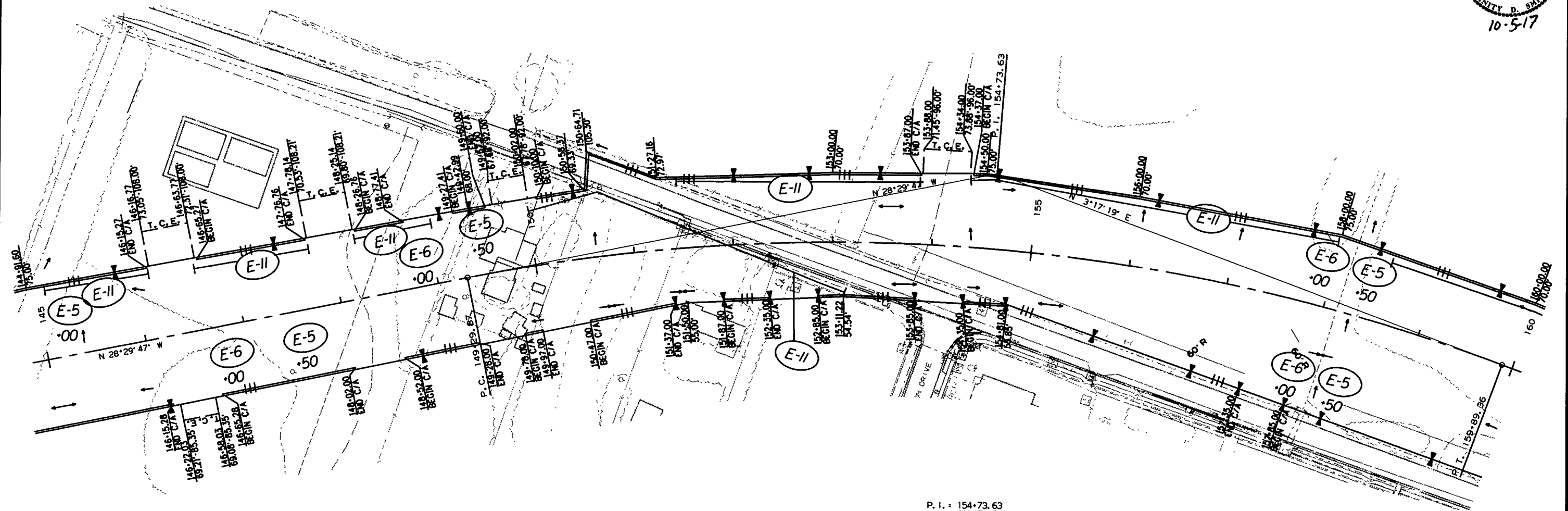
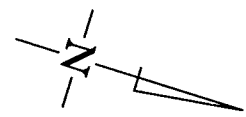
LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-7) = DROP INLET SILT FENCE
- (E-11) = SILT FENCE
- (E-14) = SEDIMENT BASIN
XX CU FT

TEMPORARY EROSION CONTROL DETAILS
 CLEARING AND GRUBBING STAGE

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. PROJ. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		20	267
				JOB NO.	012007			

2 TEMPORARY EROSION CONTROL DETAILS



P. I. = 154+73.63
 Δ = 31°47'05.1" RT.
 D = 3°00'00.0"
 T = 543.76'
 L = 1059.49'
 P.C. = 149+29.87
 P.T. = 159+89.36
 e = 0.028'/'
 Ls = 450.00'

REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
 - (E-6) = ROCK DITCH CHECKS
 - (E-7) = DROP INLET SILT FENCE
 - (E-II) = SILT FENCE
 - (E-III) = SEDIMENT BASIN
- XX CU FT

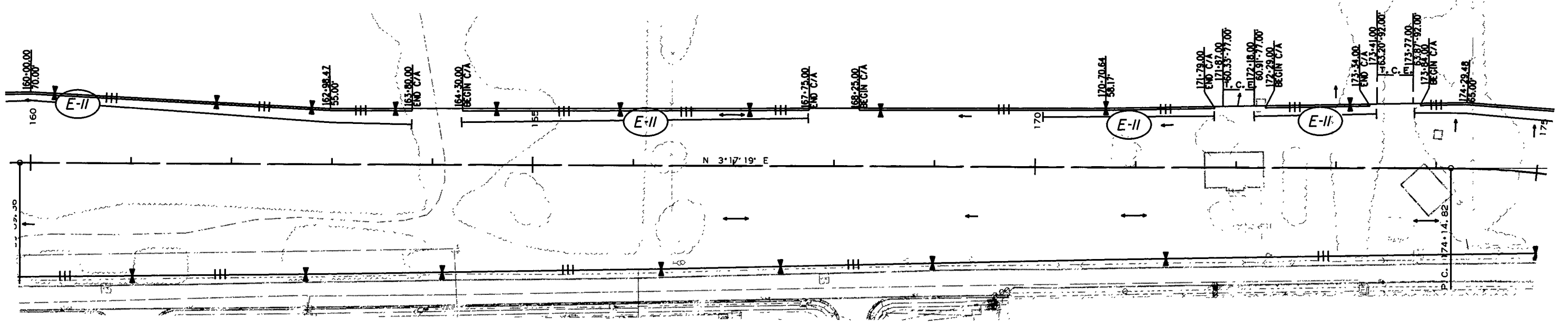
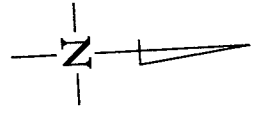
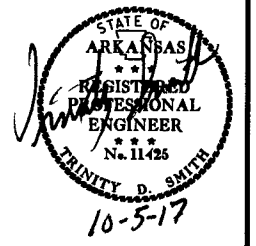
TEMPORARY EROSION CONTROL DETAILS
 CLEARING AND GRUBBING STAGE

8/3/2017

R012007KGT.DGN

DATE REVISED	DATE FILED	DATE REVISED	DATE FILED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 012007							21	267

② TEMPORARY EROSION CONTROL DETAILS



REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-7) = DROP INLET SILT FENCE
- (E-II) = SILT FENCE
- (E-14) = SEDIMENT BASIN
XX CU FT

P. I. = 176+82.22
 Δ = 37°23'16" RT.
 D = 7°15'00.0"
 T = 267.40'
 L = 515.69'
 P. C. = 174+14.82
 P. T. = 179+30.51
 e = 0.038' /'
 Ls = 540.00'

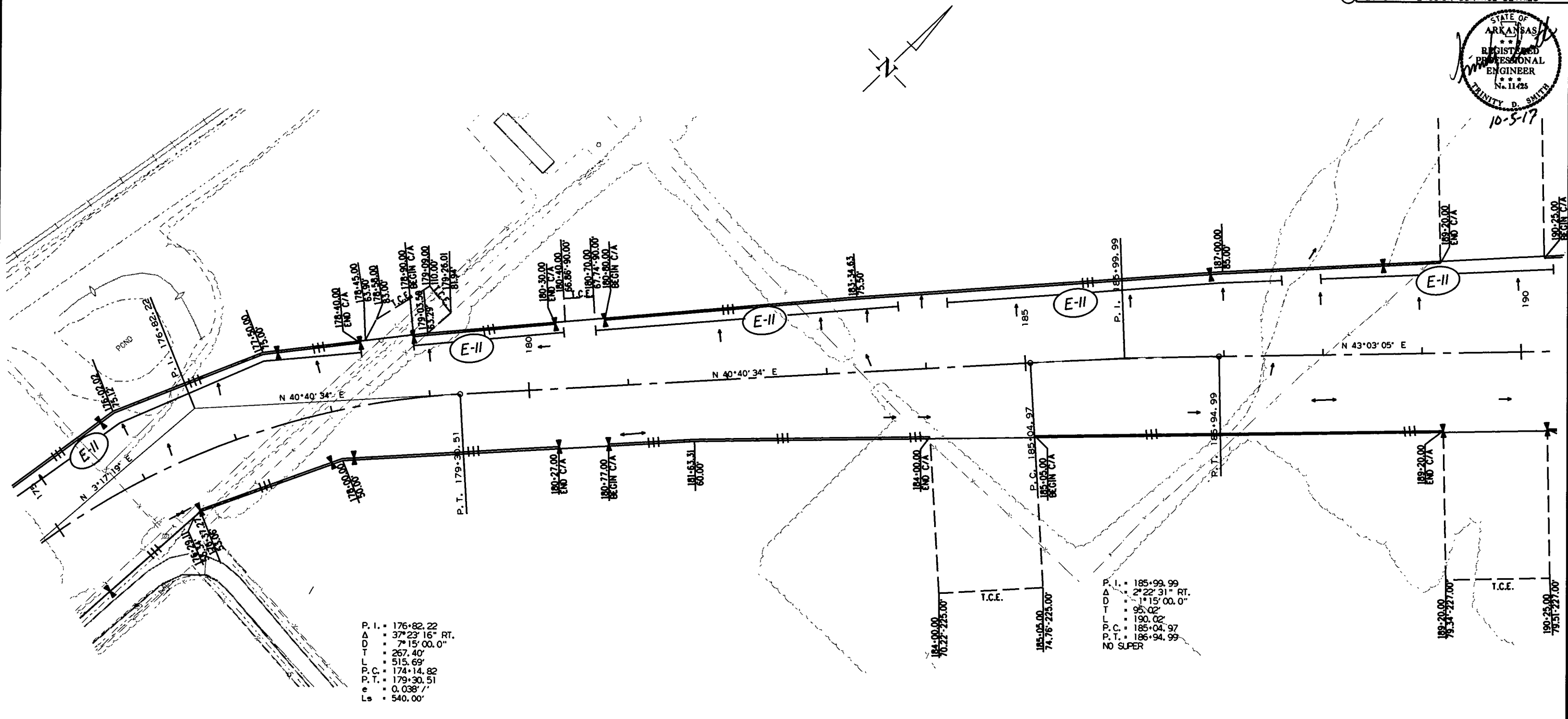
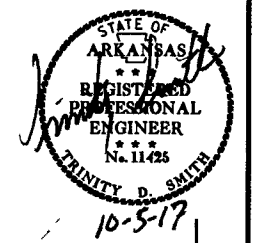
TEMPORARY EROSION CONTROL DETAILS
 CLEARING AND GRUBBING STAGE

8/3/2017

R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 012007							22	267

2 TEMPORARY EROSION CONTROL DETAILS



P. I. = 176+82.22
 Δ = 37°23'16" RT.
 D = 7'15" 00.0"
 T = 267.40'
 L = 515.69'
 P.C. = 174+14.82
 P.T. = 179+30.51
 e = 0.038' /'
 Ls = 540.00'

P. I. = 185+99.99
 Δ = 2°22'31" RT.
 D = 1'15" 00.0"
 T = 95.02'
 L = 190.02'
 P.C. = 185+04.97
 P.T. = 186+94.99
 NO SUPER

REVISIONS

DATE OF REVISION	REVISION

LEGEND

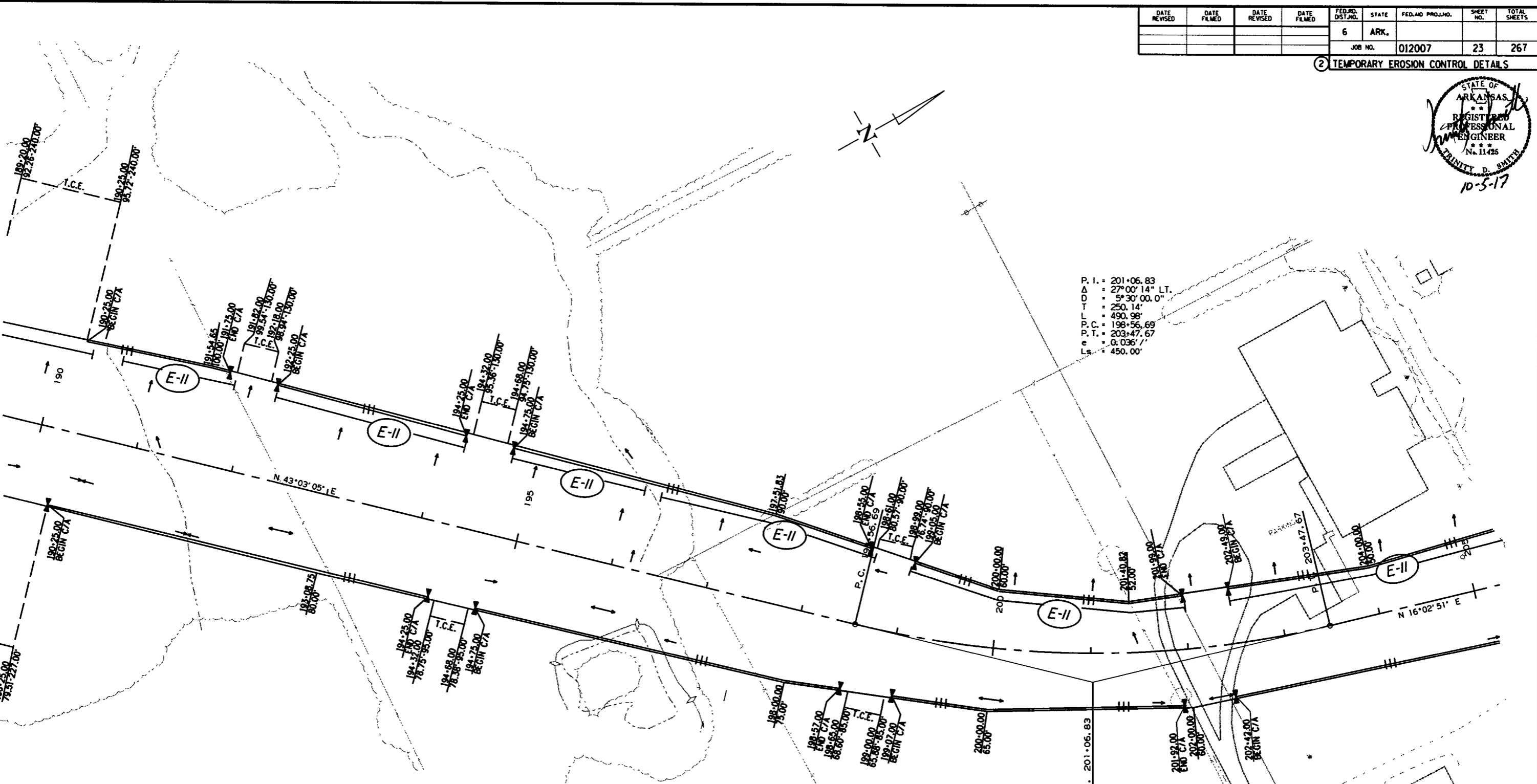
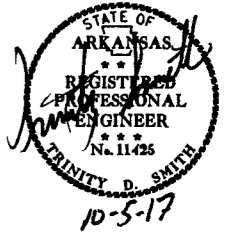
- (E-5) = SAND BAG DITCH CHECKS
 - (E-6) = ROCK DITCH CHECKS
 - (E-7) = DROP INLET SILT FENCE
 - (E-II) = SILT FENCE
 - (E-M) = SEDIMENT BASIN
- XX CU FT

TEMPORARY EROSION CONTROL DETAILS
 CLEARING AND GRUBBING STAGE

8/3/2017
 R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. PROJ. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		23	267
				JOB NO.	012007		23	267

② TEMPORARY EROSION CONTROL DETAILS



P. I. = 201+06.83
 A = 27° 00' 14\"/>

REVISIONS

DATE OF REVISION	REVISION

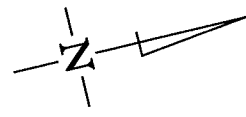
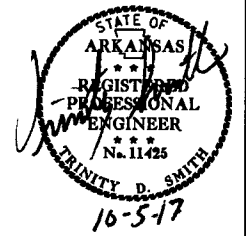
LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-7) = DROP INLET SILT FENCE
- (E-II) = SILT FENCE
- (E-14) = SEDIMENT BASIN
XX CU FT

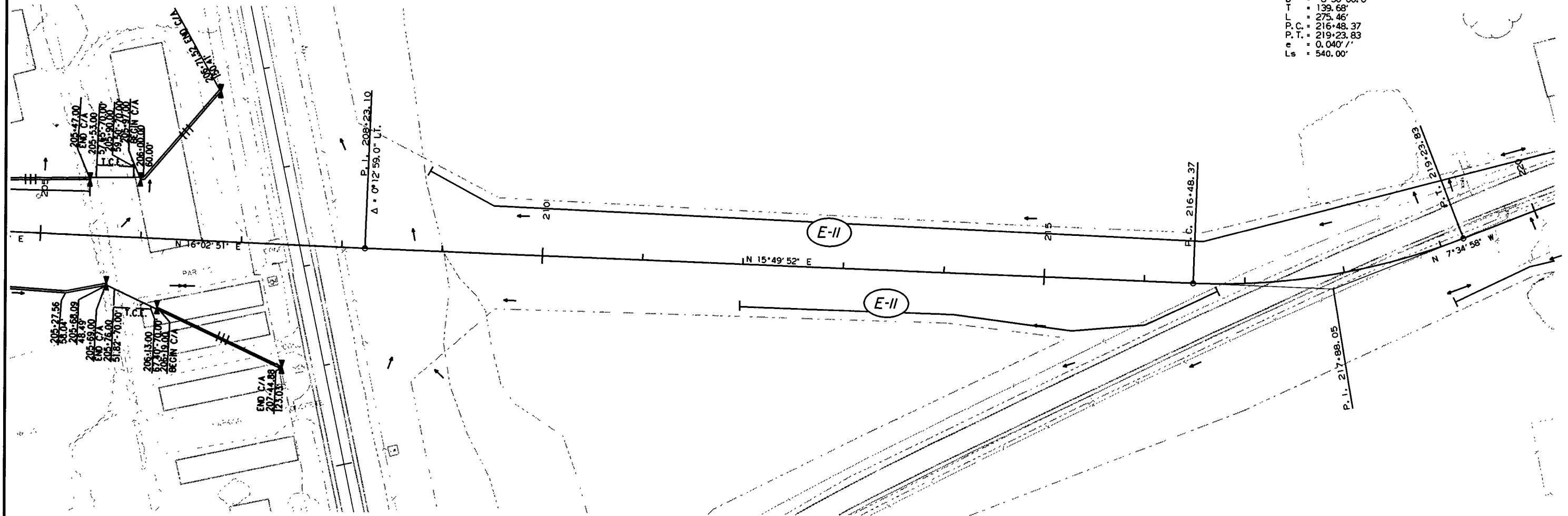
TEMPORARY EROSION CONTROL DETAILS
 CLEARING AND GRUBBING STAGE

DATE REVISED	DATE FILED	DATE REVISED	DATE FILED	FED. PROJ. NO.	STATE	FED. PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		24	267
				JOB NO.	012007			

② TEMPORARY EROSION CONTROL DETAILS



P. I. = 217+88.05
 Δ = 23°24'51" LT.
 D = 8°30'00.0"
 T = 139.68'
 L = 275.46'
 P.C. = 216+48.37
 P.T. = 219+23.83
 e = 0.040' /'
 Ls = 540.00'



REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
 - (E-6) = ROCK DITCH CHECKS
 - (E-7) = DROP INLET SILT FENCE
 - (E-II) = SILT FENCE
 - (E-14) = SEDIMENT BASIN
- XX CU FT

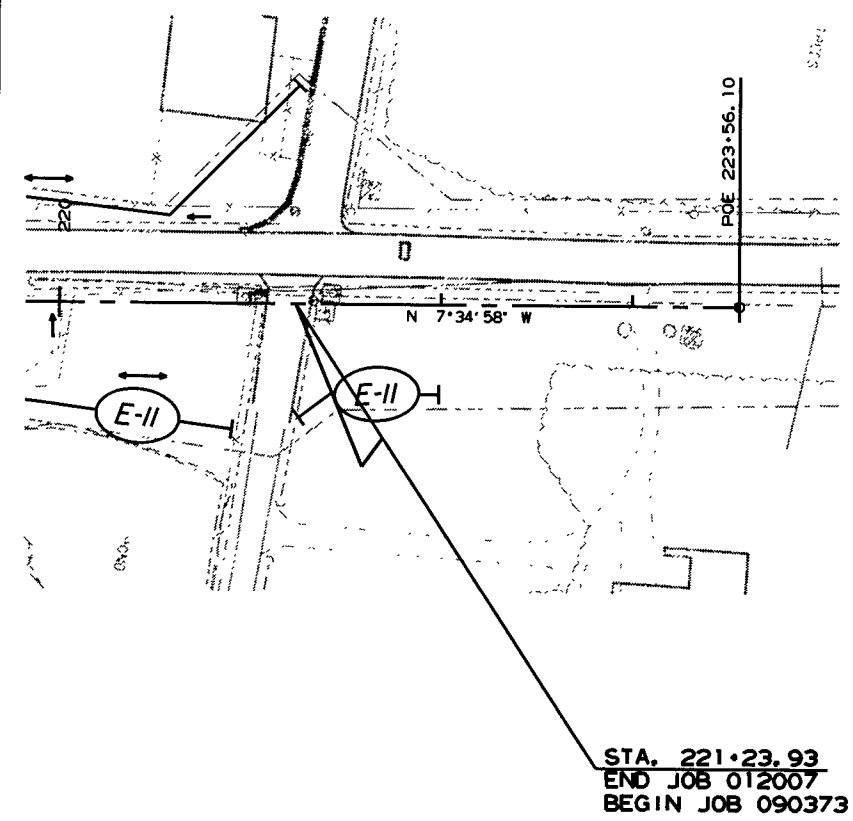
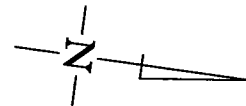
TEMPORARY EROSION CONTROL DETAILS
 CLEARING AND GRUBBING STAGE

8/3/2017

R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. PROJ. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
						012007	25	267

② TEMPORARY EROSION CONTROL DETAILS



STA. 221+23.93
 END JOB 012007
 BEGIN JOB 090373

REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-7) = DROP INLET SILT FENCE
- (E-II) = SILT FENCE
- (E-14) = SEDIMENT BASIN
XX CU FT

TEMPORARY EROSION CONTROL DETAILS
 CLEARING AND GRUBBING STAGE

8/3/2017
R012007KGT.DGN

REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-7) = DROP INLET SILT FENCE
- (E-11) = SILT FENCE
- (E-14) = SEDIMENT BASIN
XX CU FT

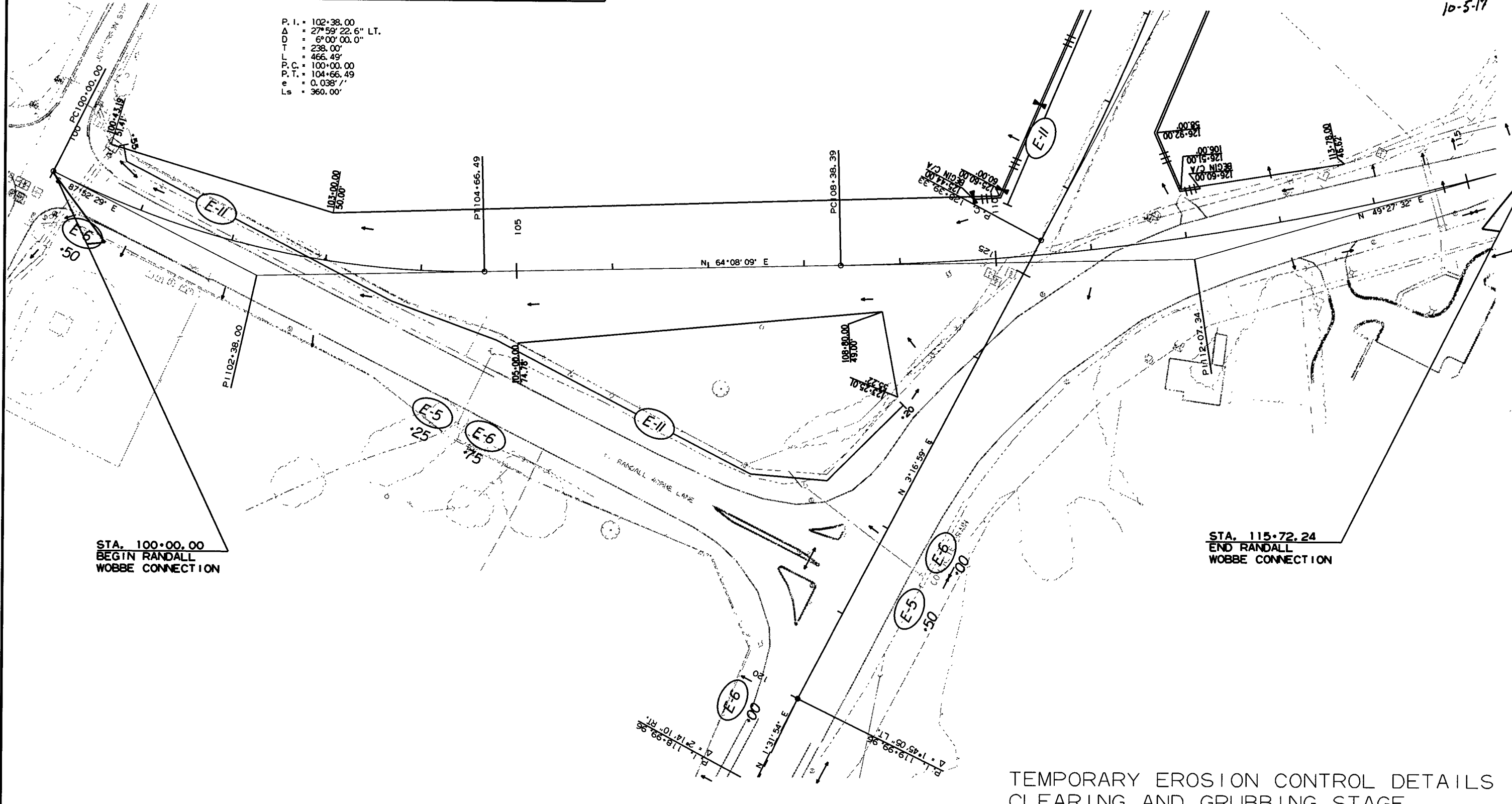
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		26	267

2 TEMPORARY EROSION CONTROL DETAILS

P. I. = 112+07.34
 Δ = 14°40'36.8" LT.
 D = 2°00'00.0"
 T = 368.94'
 L = 733.84'
 P. C. = 108+38.39
 P. T. = 115+72.24
 NO SUPER



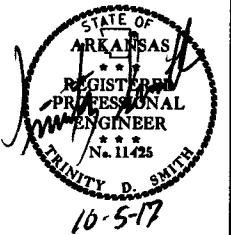
P. I. = 102+38.00
 Δ = 27°59'22.6" LT.
 D = 6°00'00.0"
 T = 238.00'
 L = 466.49'
 P. C. = 100+00.00
 P. T. = 104+66.49
 e = 0.038' / 1'
 Ls = 360.00'



TEMPORARY EROSION CONTROL DETAILS
 CLEARING AND GRUBBING STAGE

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	012007		27	267

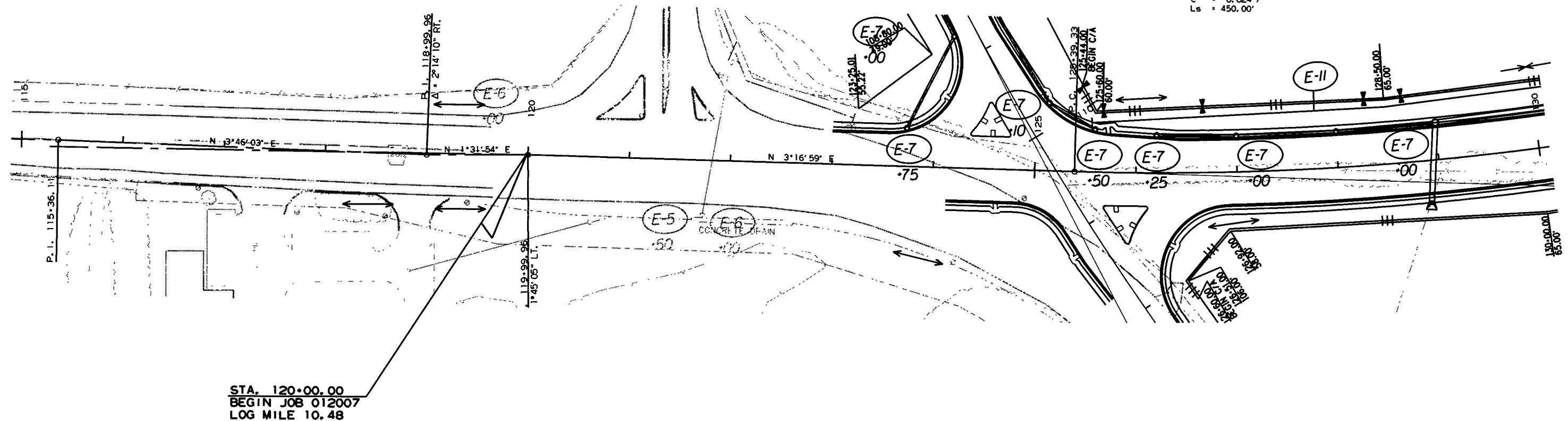
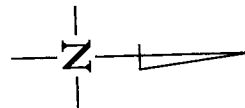
② TEMPORARY EROSION CONTROL DETAILS



STAGE 1

- E-5 = 242 BAGS (11 LOCATIONS)
- E-6 = 27 CU. YDS. (9 LOCATIONS)
- E-7 = 2300 LIN. FT. (92 LOCATIONS)
- E-11 = 4125 LIN. FT.
- E-14 = 1190 CU. YD.

P. I. = 133+56.90
 Δ = 31°51' 20.7" LT.
 D = 2°00' 00.0"
 T = 817.56'
 L = 1592.79'
 P. C. = 125+39.33
 P. T. = 141+32.12
 e = 0.024' /'
 Ls = 450.00'



STA. 120+00.00
 BEGIN JOB 012007
 LOG MILE 10.48

REVISIONS

DATE OF REVISION	REVISION

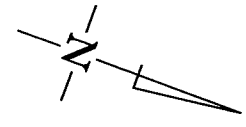
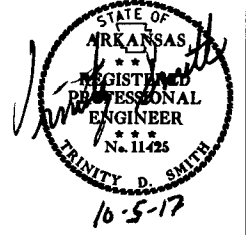
LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-7) = DROP INLET SILT FENCE
- (E-11) = SILT FENCE
- (E-14) = SEDIMENT BASIN
XX CU FT

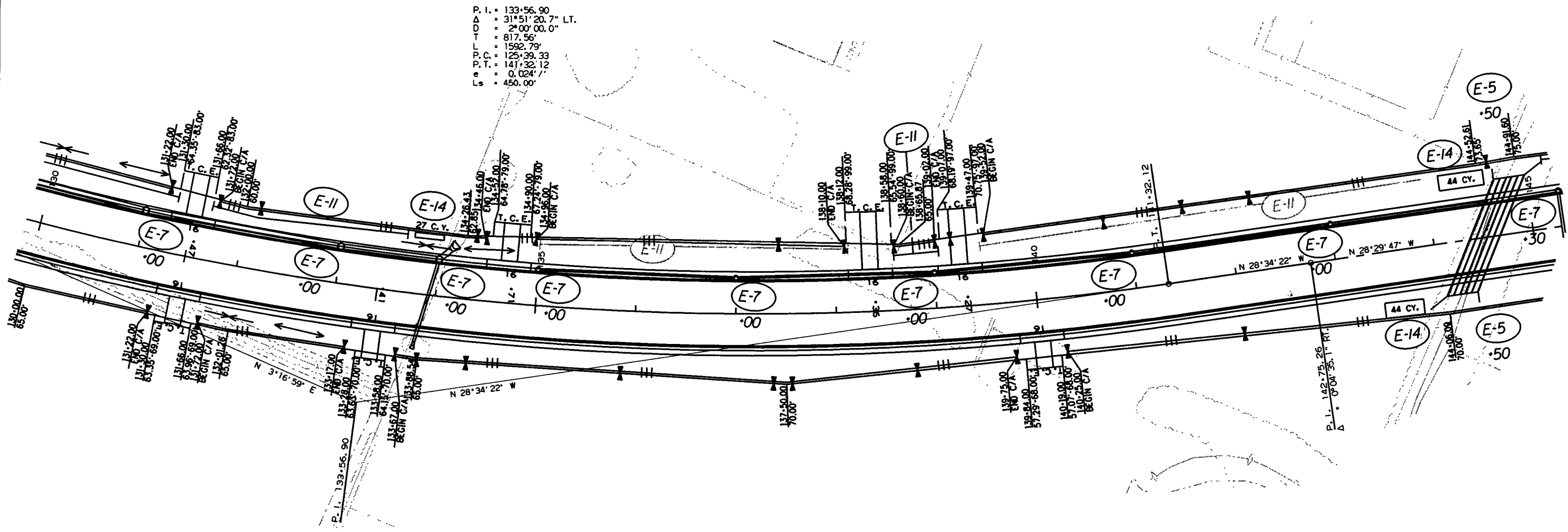
TEMPORARY EROSION CONTROL DETAILS
 STAGE 1

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. PROJ. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		012007	28	267

② TEMPORARY EROSION CONTROL DETAILS



P. I. = 133°56.90
 Δ = 31°51'20.7" LT.
 D = 2°00'00.0"
 T = 817.56'
 L = 1592.79'
 P.C. = 125°39.33
 P.T. = 141°32.12
 e = 0.024'
 Ls = 450.00'



REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-7) = DROP INLET SILT FENCE
- (E-11) = SILT FENCE
- (E-14) = SEDIMENT BASIN
- XX CU FT

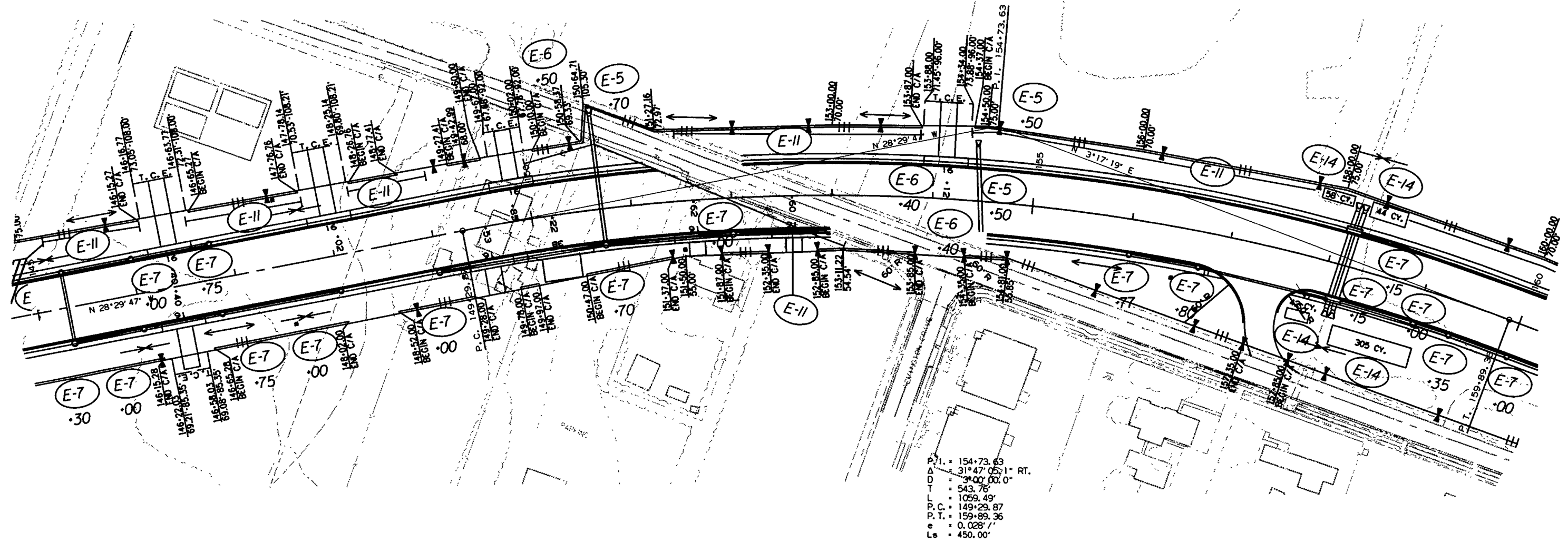
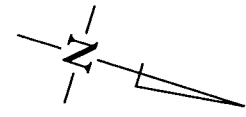
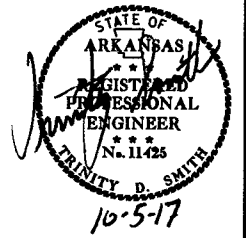
TEMPORARY EROSION CONTROL DETAILS
 STAGE 1

8/3/2017

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. PROJ. NO.	STATE	FED. PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	012007		29	267

② TEMPORARY EROSION CONTROL DETAILS



P.T. = 154+73.63
 Δ = 31° 47' 05.1" RT.
 D = 3' 00' 00.0"
 T = 543.76'
 L = 1059.49'
 P.C. = 149+29.87
 P.T. = 159+89.36
 e = 0.028' /'
 Ls = 450.00'

REVISIONS

DATE OF REVISION	REVISION

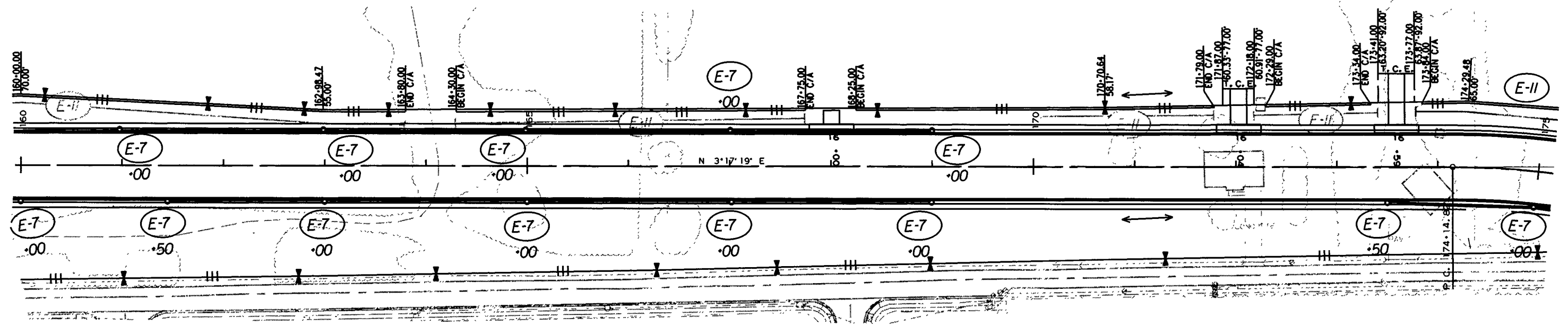
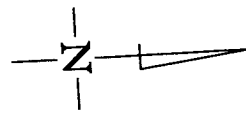
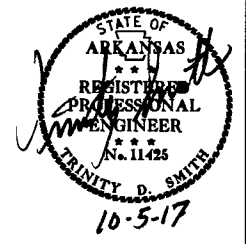
LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-7) = DROP INLET SILT FENCE
- (E-11) = SILT FENCE
- (E-14) = SEDIMENT BASIN
XX CU FT

TEMPORARY EROSION CONTROL DETAILS
 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.		30	267
				JOB NO.		012007		

② TEMPORARY EROSION CONTROL DETAILS



REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-7) = DROP INLET SILT FENCE
- (E-11) = SILT FENCE
- (E-14) = SEDIMENT BASIN
XX CU FT

P. I. = 176+82.22
 Δ = 37°23'16" RT.
 D = 7°15'00.0"
 T = 267.40'
 L = 515.69'
 P. C. = 174+14.82
 P. T. = 179+30.51
 e = 0.038' / '
 Ls = 540.00'

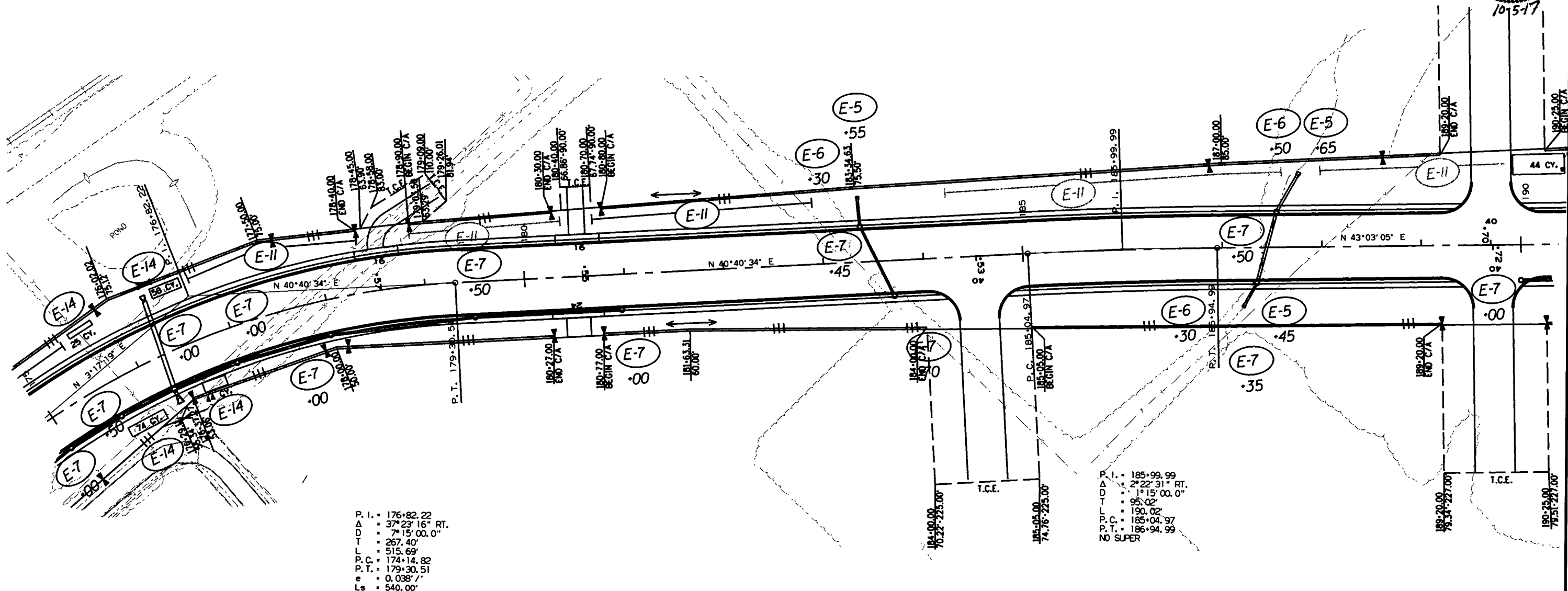
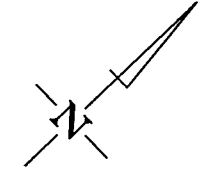
TEMPORARY EROSION CONTROL DETAILS
 STAGE 1

8/3/2017

R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		31	267
JOB NO. 012007								

② TEMPORARY EROSION CONTROL DETAILS



P. I. = 176° 82.22
 Δ = 37° 23' 16" RT.
 D = 7° 15' 00.0"
 T = 267.40'
 L = 515.69'
 P. C. = 174° 14.82
 P. T. = 179° 30.51
 e = 0.038' /'
 Ls = 540.00'

P. I. = 185° 99.99
 Δ = 2° 22' 31" RT.
 D = 1° 15' 00.0"
 T = 95.02'
 L = 190.02'
 P. C. = 185° 04.97
 P. T. = 186° 04.99
 NO SUPER

REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-7) = DROP INLET SILT FENCE
- (E-11) = SILT FENCE
- (E-14) = SEDIMENT BASIN
XX CU FT

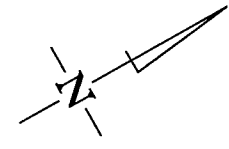
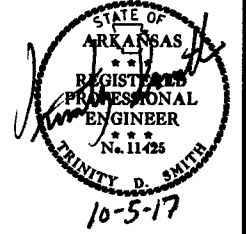
TEMPORARY EROSION CONTROL DETAILS
 STAGE 1

8/3/2017

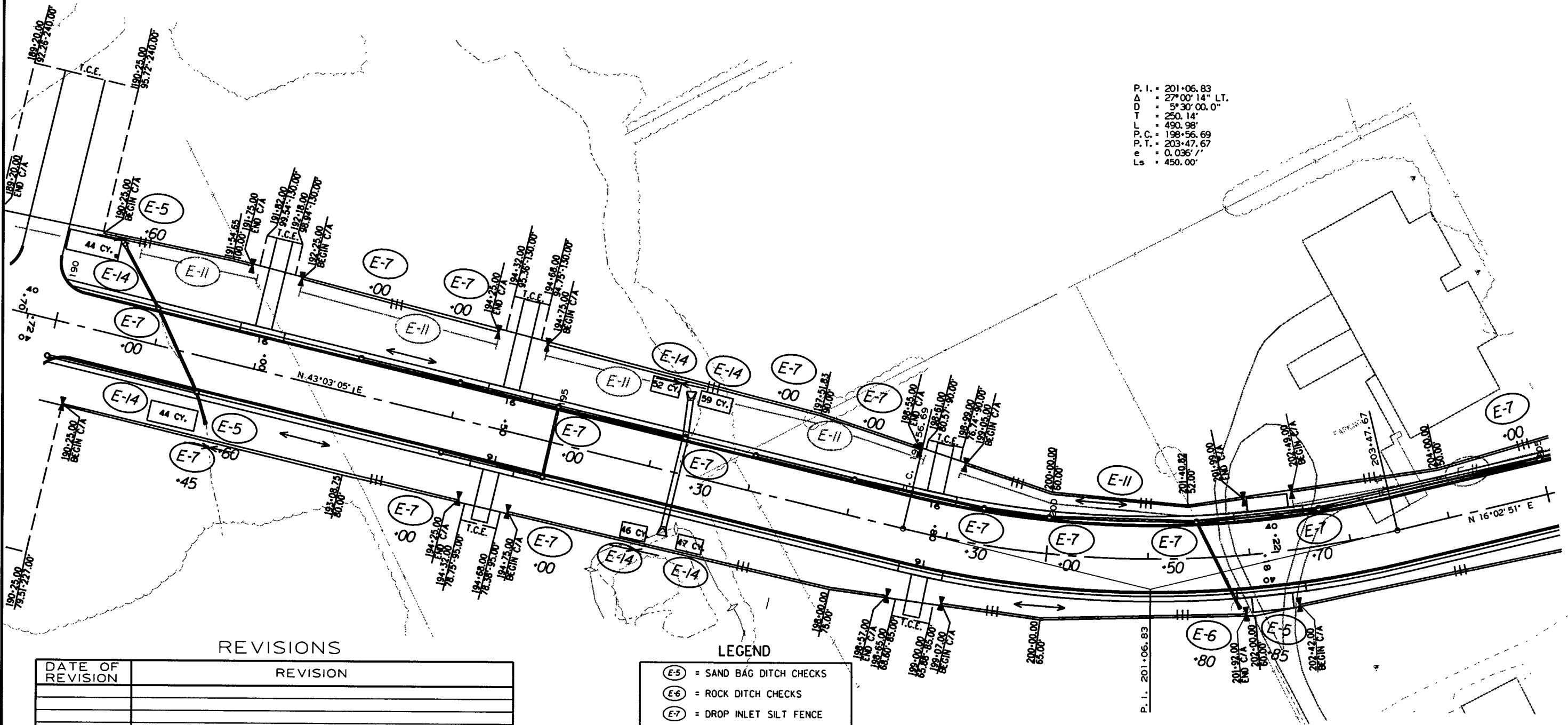
R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. PROJ. NO.	STATE	FED. PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
						012007	32	267

② TEMPORARY EROSION CONTROL DETAILS



P. I. = 201+06.83
 Δ = 27°00'14" LT.
 D = 5°30'00.0"
 T = 250.14'
 L = 490.98'
 P.C. = 198+56.69
 P.T. = 203+47.67
 e = 0.036' / 1'
 Ls = 450.00'



REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-7) = DROP INLET SILT FENCE
- (E-11) = SILT FENCE
- (E-14) = SEDIMENT BASIN
- XX CU FT

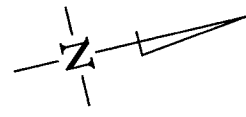
TEMPORARY EROSION CONTROL DETAILS
 STAGE 1

8/3/2017

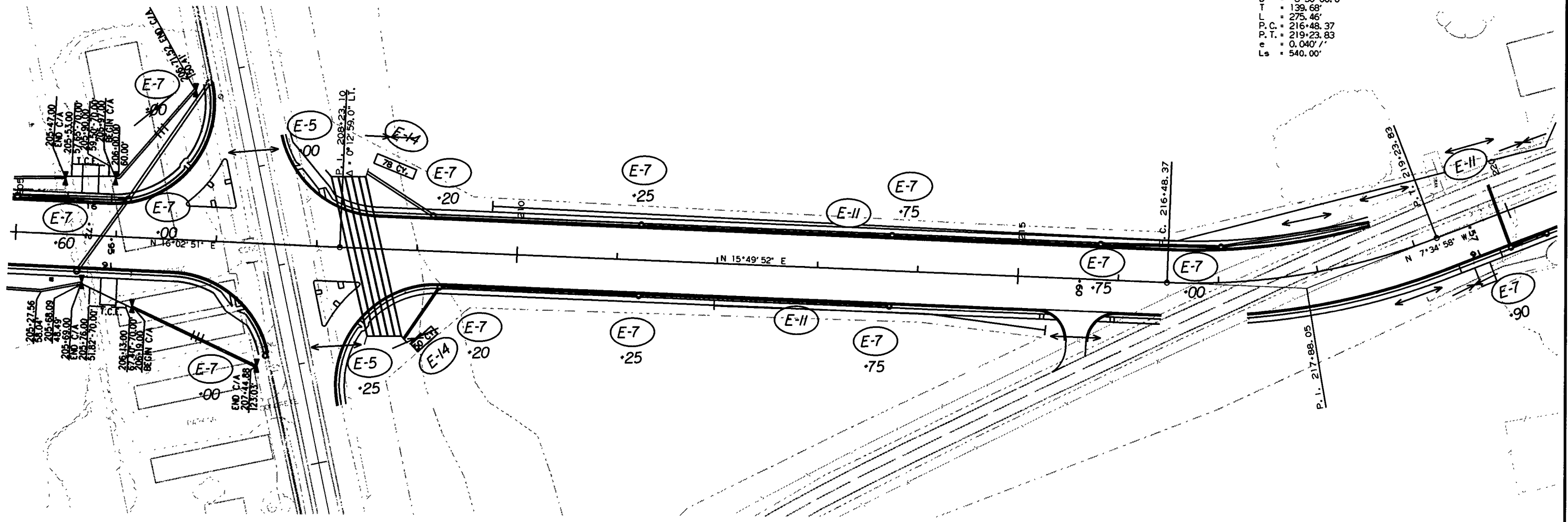
R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. PROJ. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		33	267
				JOB NO.	012007			

② TEMPORARY EROSION CONTROL DETAILS



P. I. = 217+88.05
 Δ = 23°24'51" LT.
 D = 8°30'00.0"
 T = 139.68'
 L = 275.46'
 P.C. = 216+48.37
 P.T. = 219+23.83
 e = 0.040' /'
 Ls = 540.00'



REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-7) = DROP INLET SILT FENCE
- (E-11) = SILT FENCE
- (E-14) = SEDIMENT BASIN
XX CU FT

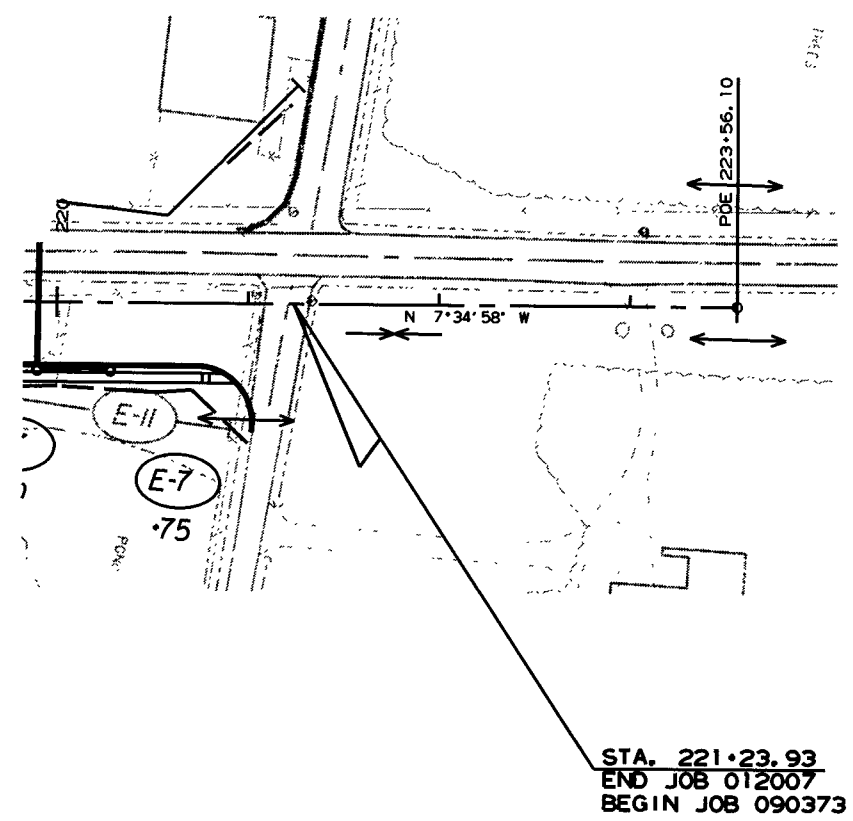
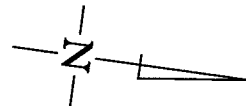
TEMPORARY EROSION CONTROL DETAILS
 STAGE 1

8/3/2017

R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
						012007	34	267

② TEMPORARY EROSION CONTROL DETAILS



STA. 221+23.93
 END JOB 012007
 BEGIN JOB 090373

REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-7) = DROP INLET SILT FENCE
- (E-11) = SILT FENCE
- (E-14) = SEDIMENT BASIN
XX CU FT

TEMPORARY EROSION CONTROL DETAILS
 STAGE 1

8/3/2017
 R012007KGT.DGN

REVISIONS

DATE OF REVISION	REVISION

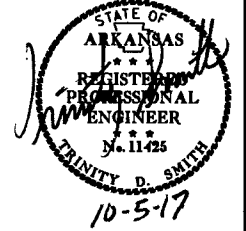
LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-7) = DROP INLET SILT FENCE
- (E-8) = SILT FENCE
- (E-9) = SEDIMENT BASIN

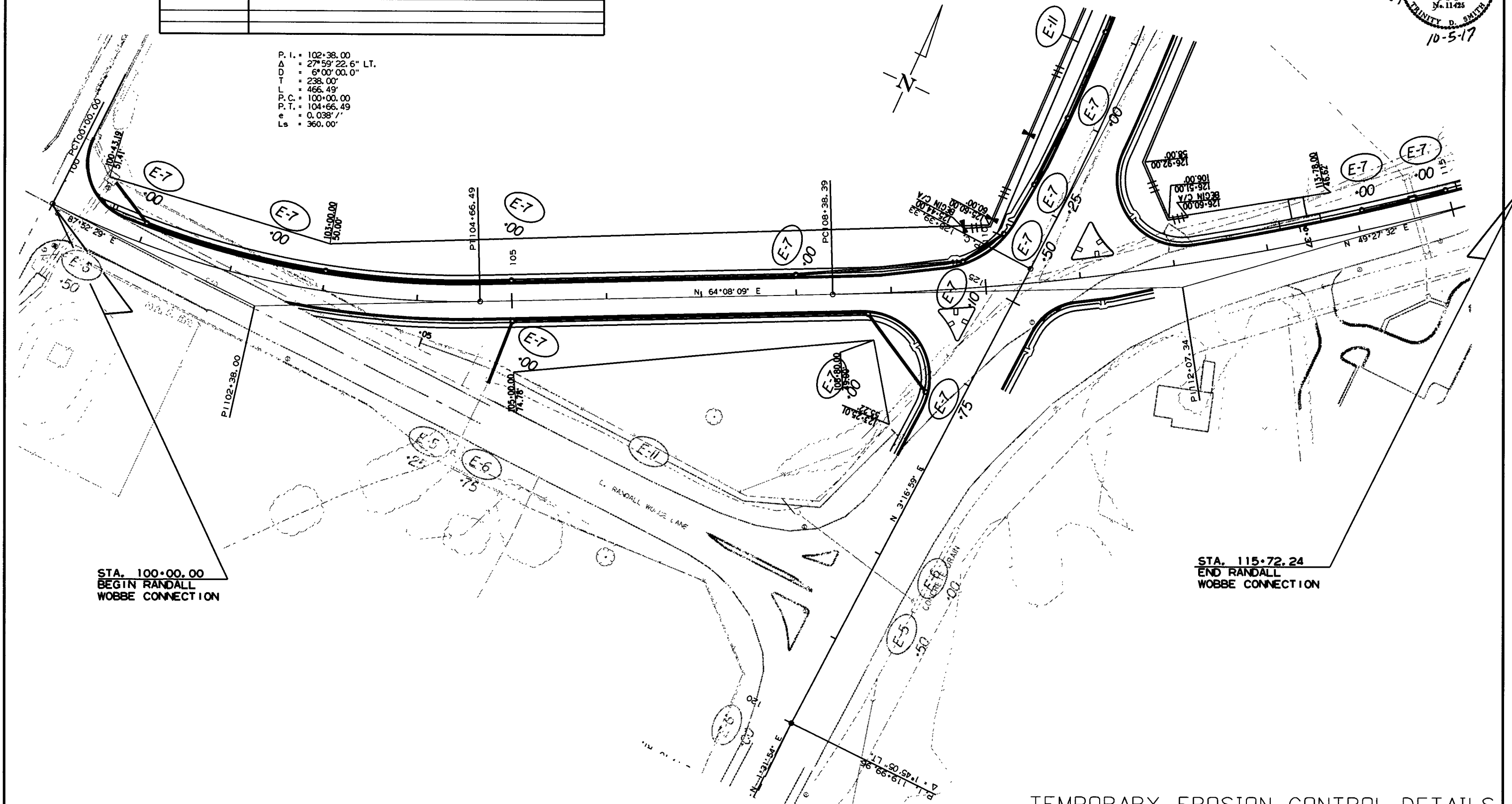
DATE REVISED	DATE FILED	DATE REVISED	DATE FILED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		35	267
				JOB NO.		012007	35	267

② TEMPORARY EROSION CONTROL DETAILS

P. I. = 112+07.34
 Δ = 14°40'36.8" LT.
 D = 2°00'00.0"
 T = 368.94'
 L = 733.84'
 P. C. = 108+38.39
 P. T. = 115+72.24
 NO SUPER



P. I. = 102+38.00
 Δ = 27°59'22.6" LT.
 D = 6°00'00.0"
 T = 238.00'
 L = 466.49'
 P. C. = 100+00.00
 P. T. = 104+66.49
 e = 0.038' /'
 Ls = 360.00'



STA. 100+00.00
 BEGIN RANDALL
 WOBBE CONNECTION

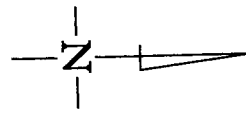
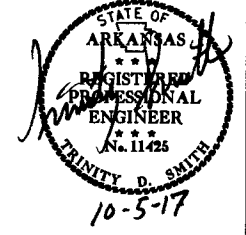
STA. 115+72.24
 END RANDALL
 WOBBE CONNECTION

TEMPORARY EROSION CONTROL DETAILS
 STAGE 1

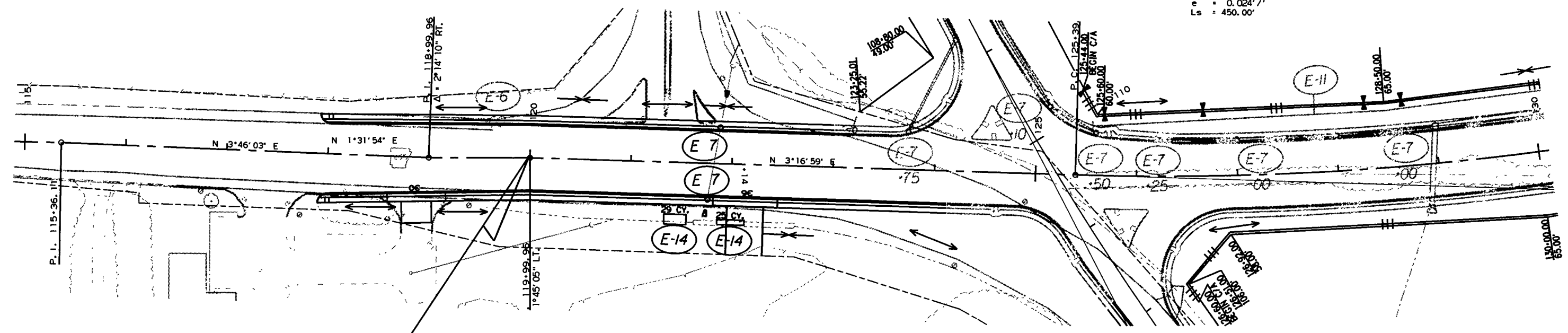
STAGE 2
 E-7 = 50 LIN. FT. (2 LOCATIONS)
 E-14 = 54 CU. YD.

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		36	267

② TEMPORARY EROSION CONTROL DETAILS



P.I. = 133°56.90
 Δ = 31°51'20.7" LT.
 D = 2°00'00.0"
 T = 817.56'
 L = 1592.79'
 P.C. = 125+39.33
 P.T. = 141+32.12
 e = 0.024' /'
 Ls = 450.00'



STA. 120+00.00
 BEGIN JOB 012007
 LOG MILE 10.48

REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-7) = DROP INLET SILT FENCE
- (E-11) = SILT FENCE
- (E-14) = SEDIMENT BASIN
XX CU FT

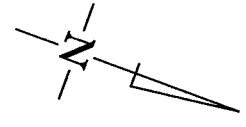
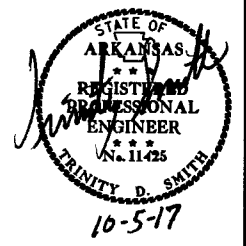
TEMPORARY EROSION CONTROL DETAILS
 STAGE 2

8/29/2017

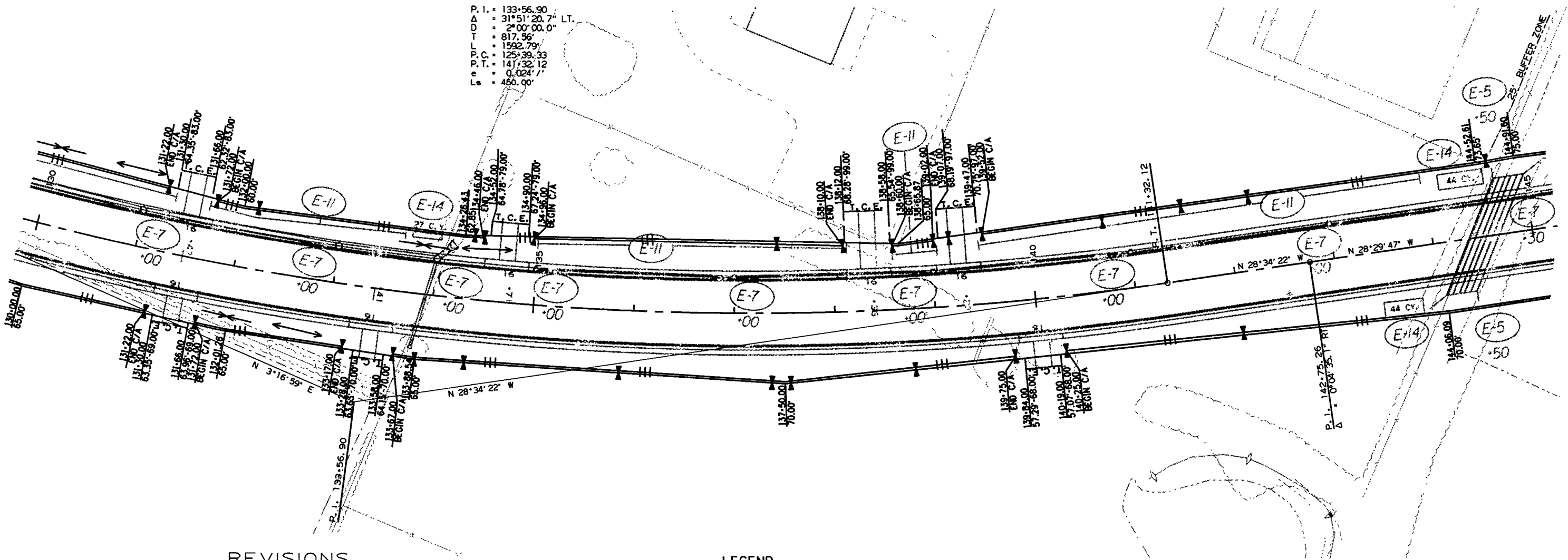
R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		37	267
				JOB NO.		012007		

② TEMPORARY EROSION CONTROL DETAILS



P. I. = 133+56.90
 Δ D = 31°51'20.7" LT.
 T = 2°00'00.0"
 L = 817.56'
 P.C. = 1592.79'
 P.T.C. = 125+39.33
 L = 141'32.12'
 E = 0.024' / 1'
 L = 450.00'



REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-7) = DROP INLET SILT FENCE
- (E-11) = SILT FENCE
- (E-14) = SEDIMENT BASIN

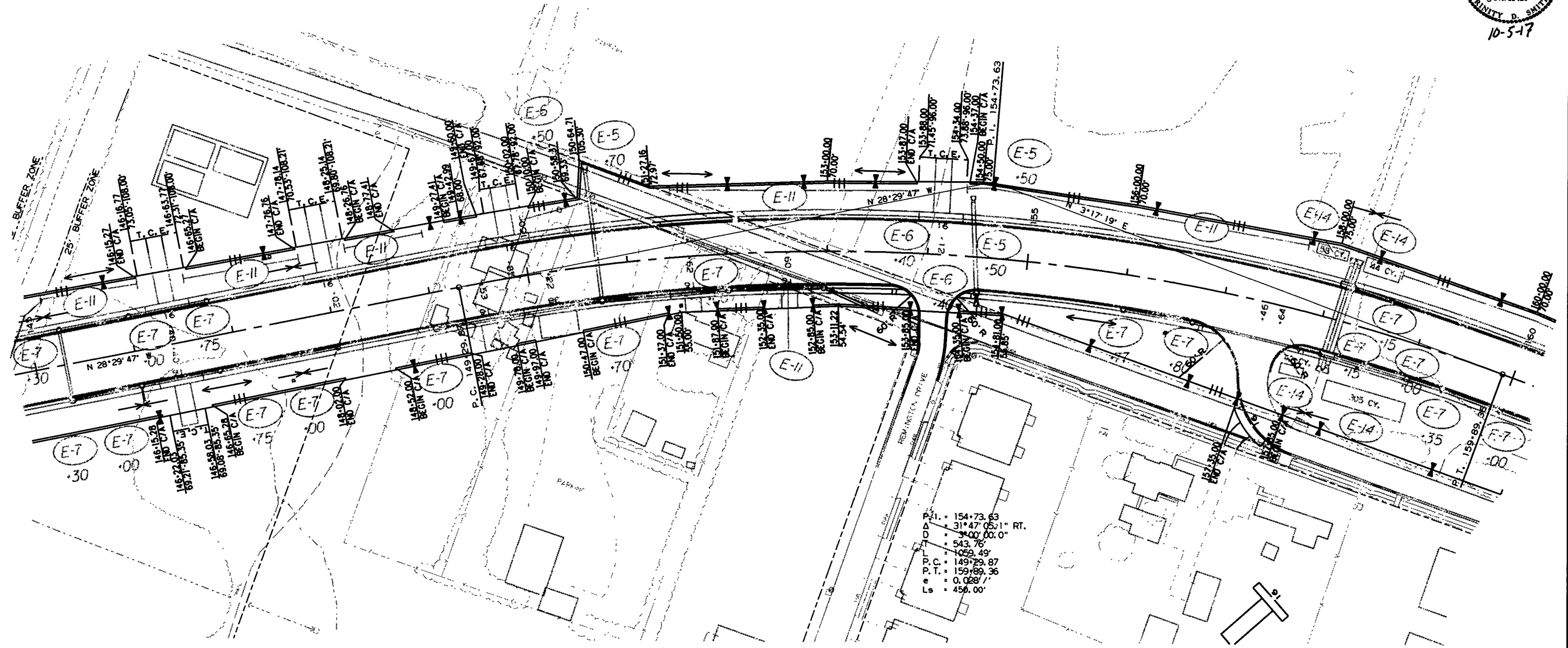
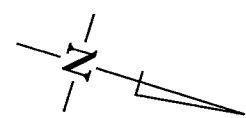
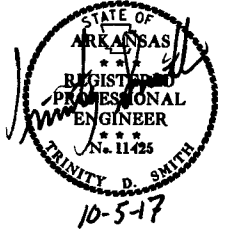
TEMPORARY EROSION CONTROL DETAILS
 STAGE 2

8/29/2017

R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		38	267
				JOB NO.		012007		

2 TEMPORARY EROSION CONTROL DETAILS



REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-7) = DROP INLET SILT FENCE
- (E-11) = SILT FENCE
- (E-14) = SEDIMENT BASIN
XX CU FT

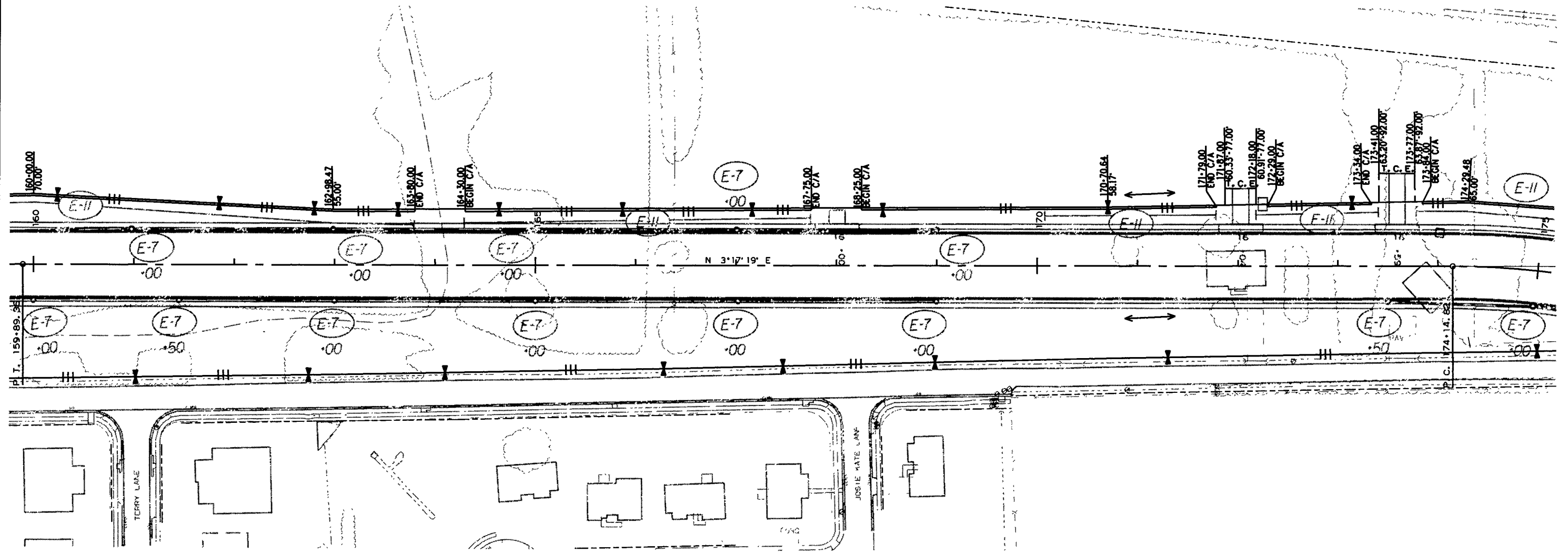
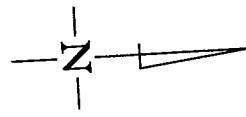
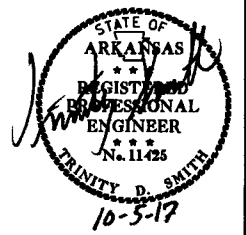
TEMPORARY EROSION CONTROL DETAILS
STAGE 2

8/29/2017

ROI2007KGT.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.	012007		39	267

② TEMPORARY EROSION CONTROL DETAILS



REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-7) = DROP INLET SILT FENCE
- (E-11) = SILT FENCE
- (E-14) = SEDIMENT BASIN
XX CU FT

P. I. = 176+82.22
 Δ = 37°23'16" RT.
 D = 7'15" 00.0"
 T = 267.40'
 B = 515.69'
 P. C. = 174+14.82
 P. T. = 179+30.51
 e = 0.038' /'
 Ls = 540.00'

TEMPORARY EROSION CONTROL DETAILS
 STAGE 2

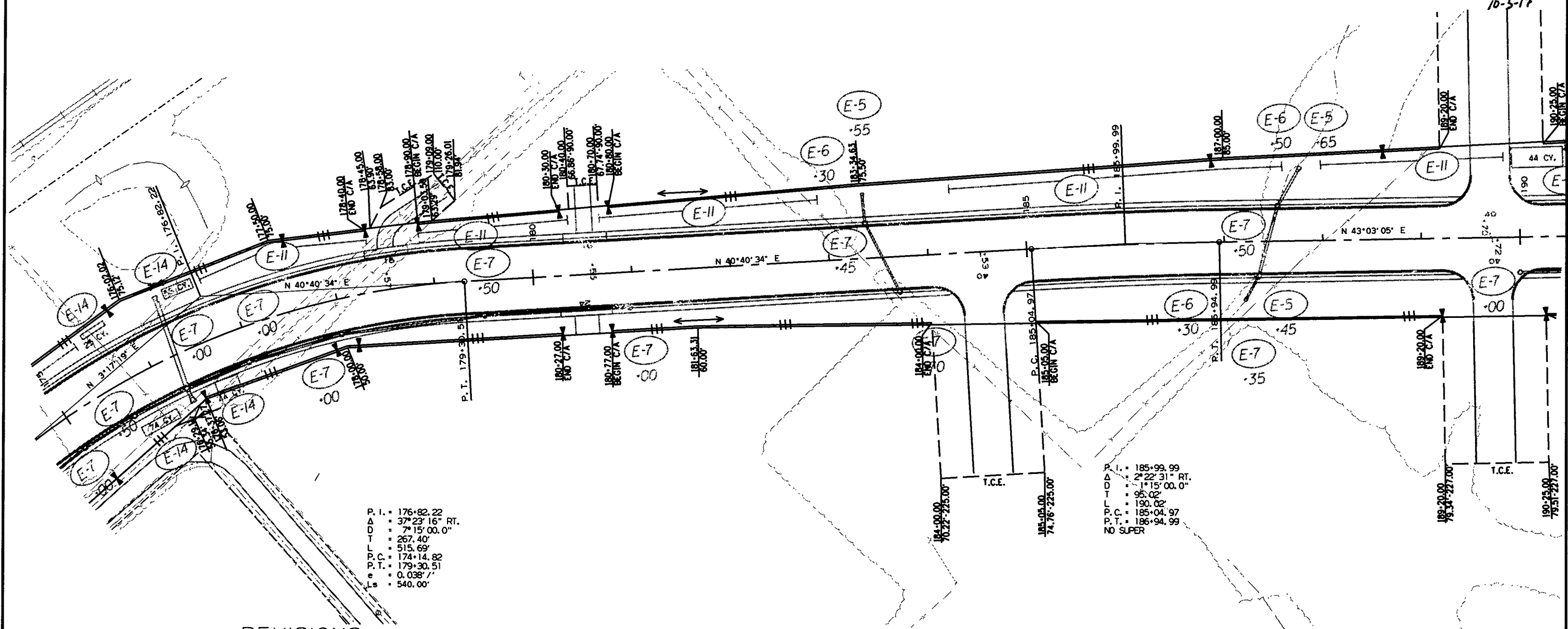
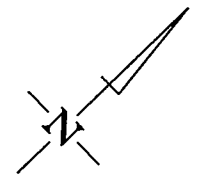
8/29/2017

RO12007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		40	267
				JOB NO.	012007			

② TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
 REGISTERED PROFESSIONAL ENGINEER
 TRINITY D. SMITH
 No. 11425
 10-5-17



P. I. = 176+82.22
 Δ = 37°23'16" RT.
 D = 7°15'00.0"
 L = 267.40'
 T = 515.69'
 P. C. = 174+14.82
 P. T. = 179+30.51
 e = 0.038' /'
 Ls = 540.00'

P. I. = 185+99.99
 Δ = 2°22'31" RT.
 D = 1°15'00.0"
 L = 95.02'
 T = 190.02'
 P. C. = 185+04.97
 P. T. = 186+94.99
 NO SUPER

REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-7) = DROP INLET SILT FENCE
- (E-11) = SILT FENCE
- (E-14) = SEDIMENT BASIN
XX CU FT

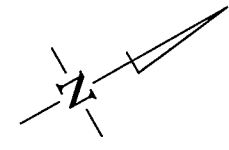
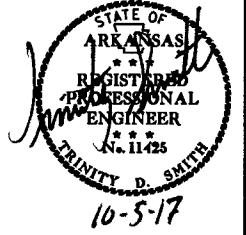
TEMPORARY EROSION CONTROL DETAILS
 STAGE 2

8/29/2017

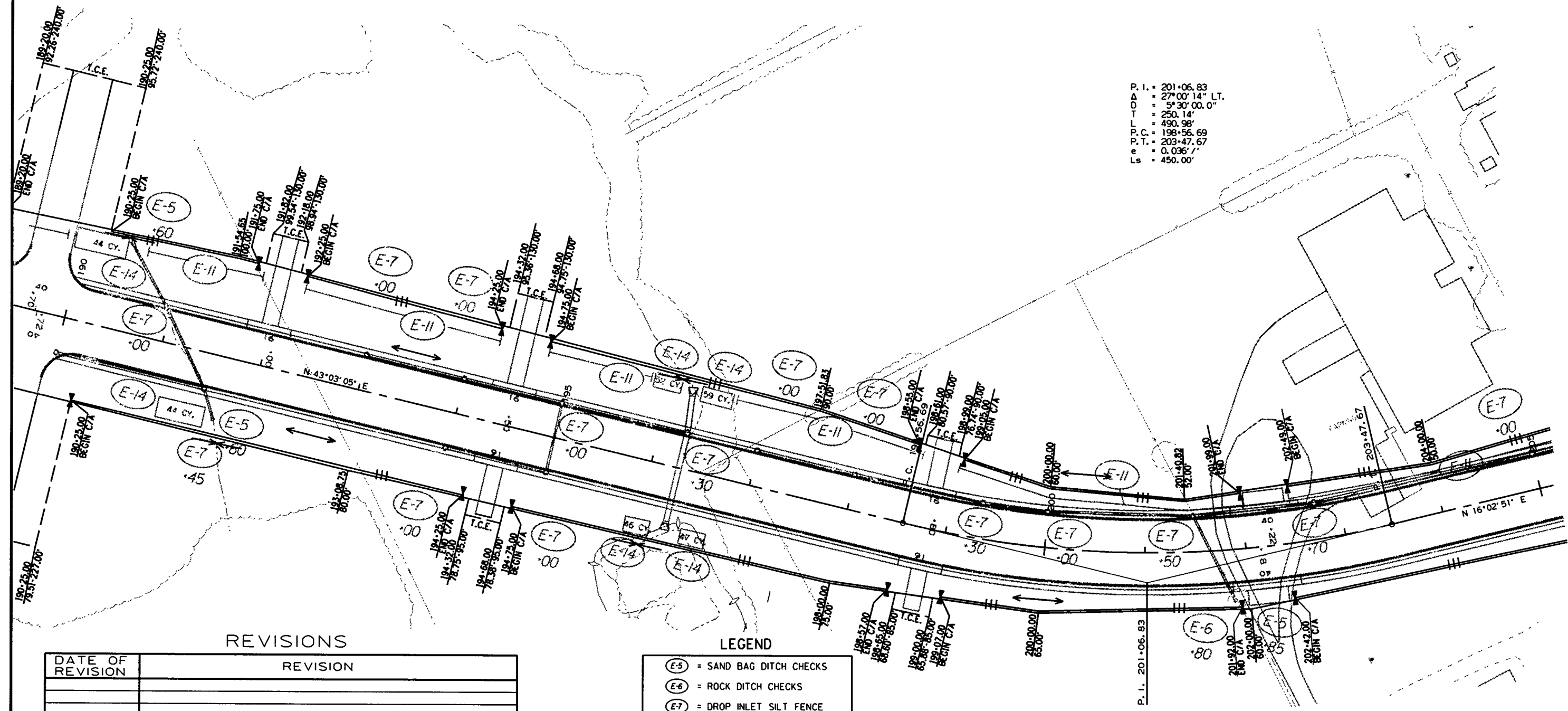
R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. PROJ. NO.	STATE	FED. PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		41	267
				JOB NO.	012007			

② TEMPORARY EROSION CONTROL DETAILS



P. I. = 201+06.83
 Δ = 27°00'14" LT.
 D = 5°30'00.0"
 T = 250.14'
 L = 490.98'
 P.C. = 198+56.69
 P.T. = 203+47.67
 e = 0.036' /'
 Ls = 450.00'



REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
 - (E-6) = ROCK DITCH CHECKS
 - (E-7) = DROP INLET SILT FENCE
 - (E-11) = SILT FENCE
 - (E-14) = SEDIMENT BASIN
- XX CU FT

TEMPORARY EROSION CONTROL DETAILS
 STAGE 2

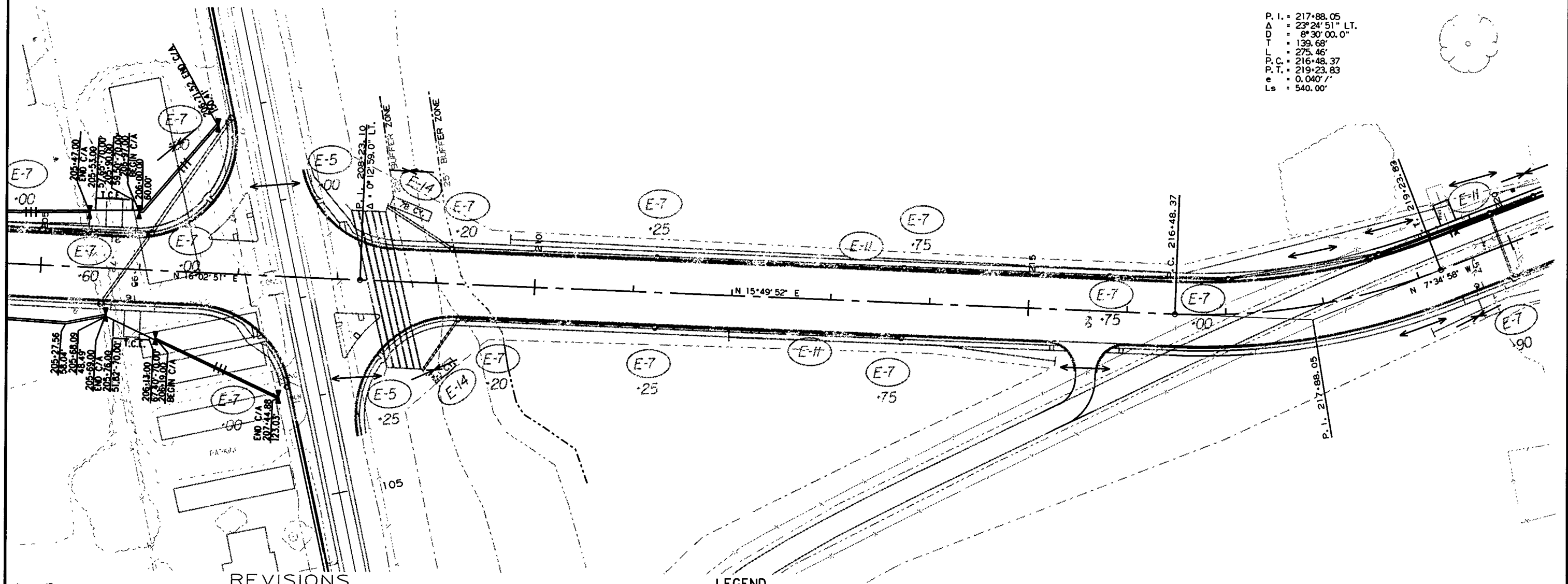
8/29/2017
 R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. PROJ. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		42	267

② TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
 REGISTERED PROFESSIONAL ENGINEER
 TRINITY D. SMITH
 No. 11425
 10-5-17

P. I. = 217° 88.05'
 Δ = 23° 24' 51" LT.
 D = 8° 30' 00.0"
 T = 139.68'
 P.C. = 275.46'
 P.T. = 216° 48.37'
 e = 0.040'
 Ls = 540.00'



REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-7) = DROP INLET SILT FENCE
- (E-11) = SILT FENCE
- (E-14) = SEDIMENT BASIN

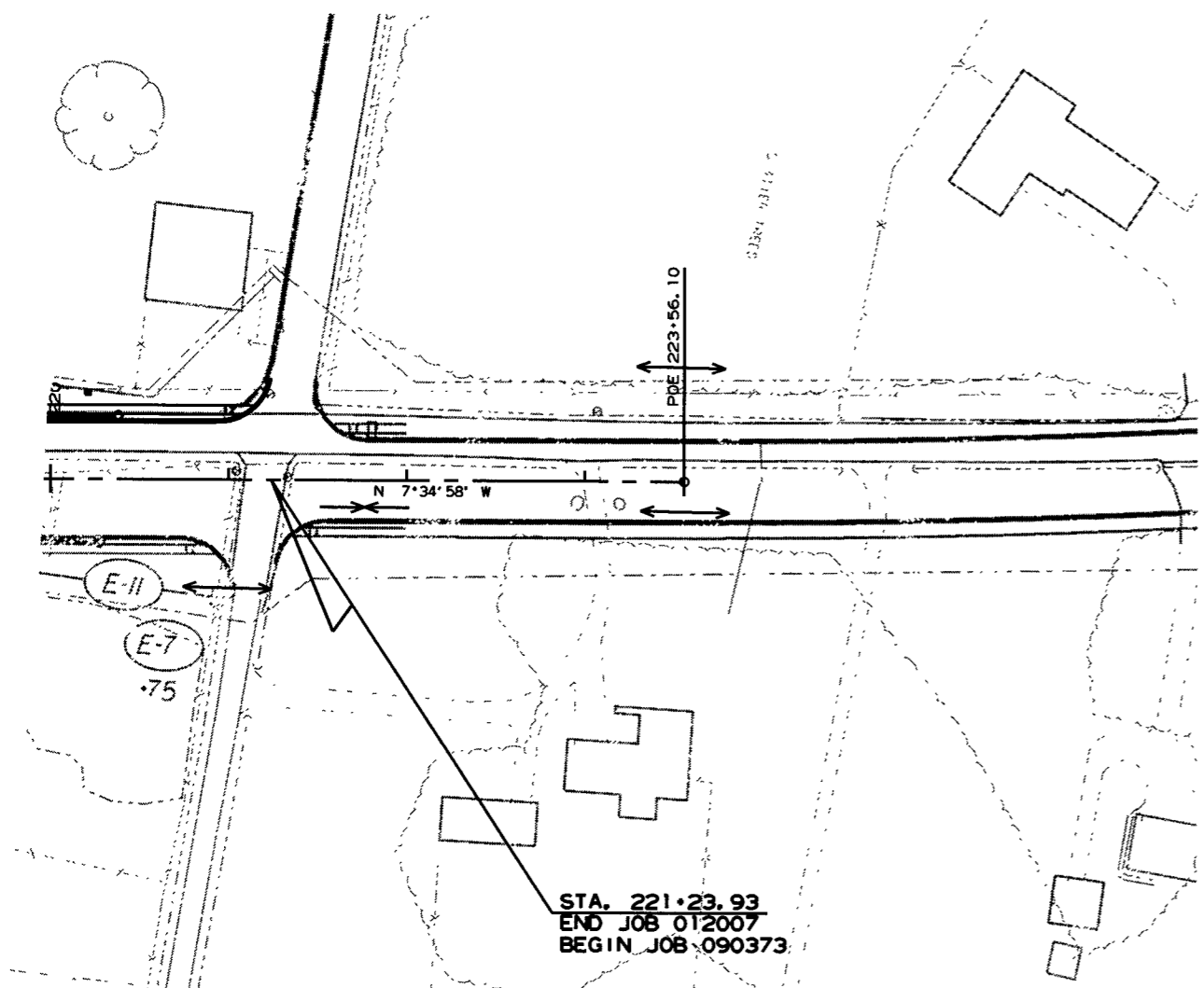
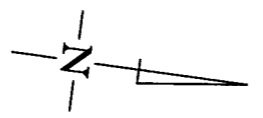
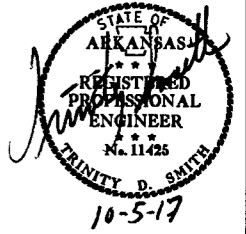
TEMPORARY EROSION CONTROL DETAILS
 STAGE 2

8/29/2017

R012007KGT.DGN

DATE REVISED	DATE FILED	DATE REVISED	DATE FILED	FED. AID DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 012007							43	267

2 TEMPORARY EROSION CONTROL DETAILS



REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-7) = DROP INLET SILT FENCE
- (E-11) = SILT FENCE
- (E-14) = SEDIMENT BASIN
XX CU FT

8/29/2017

R012007KGT.DGN

TEMPORARY EROSION CONTROL DETAILS
STAGE 2

REVISIONS

DATE OF REVISION	REVISION

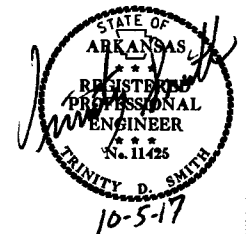
LEGEND

- (E-5) = SAND BAG DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-7) = DROP INLET SILT FENCE
- (E-11) = SILT FENCE
- (E-14) = SEDIMENT BASIN
XX CU FT

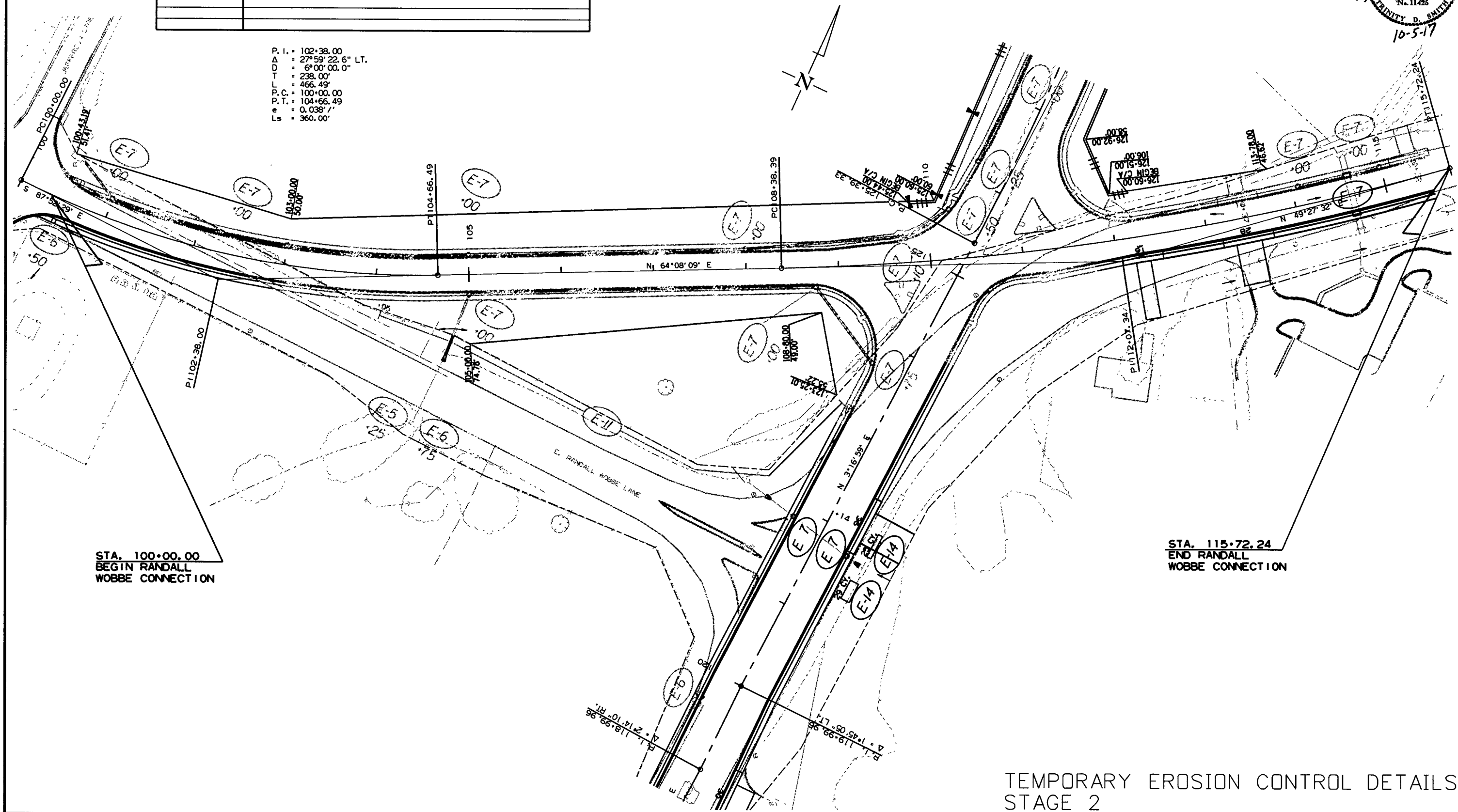
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. DIST. NO.	STATE	FED. PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		44	267

2 TEMPORARY EROSION CONTROL DETAILS

P.I. = 112+07.34
 Δ = 14°40'36.8" LT.
 D = 2°00'00.0"
 T = 368.94'
 L = 733.84'
 P.C. = 108+38.39
 P.T. = 115+72.24
 NO SUPER



P.I. = 102+38.00
 Δ = 27°59'22.6" LT.
 D = 6°00'00.0"
 T = 238.00'
 L = 466.49'
 P.C. = 100+00.00
 P.T. = 104+66.49
 e = 0.038' /'
 Ls = 360.00'



STA. 100+00.00
 BEGIN RANDALL
 WOBBE CONNECTION

STA. 115+72.24
 END RANDALL
 WOBBE CONNECTION

TEMPORARY EROSION CONTROL DETAILS STAGE 2

SEQUENCE OF CONSTRUCTION:

STAGE 1:
 RAMP JEFFERSON ST. TRAFFIC ACROSS PROPOSED HWY. 265 FROM STA. 151+45 - STA. 154+50 USING METHOD OF RAISING GRADE.
 RAMP OLD WIRE RD. TRAFFIC ACROSS PROPOSED HWY. 265 FROM STA. 216+50 - STA. 221+23.93 USING METHOD OF RAISING GRADE.
 TAPER HWY. 265 TRAFFIC TO STAGE 1 ALIGNMENT AS SHOWN.
 CONSTRUCT NEW LOCATION ON LT. FROM STA. 123+08 - STA. 151+45, AND STA. 152+15 - STA. 218+60.
 CONSTRUCT NEW LOCATION ON RT. FROM STA. 124+10 - STA. 152+90, STA. 154+50 - STA. 216+50, AND STA. 217+00 - STA. 221+00.

STAGE 2:
 SHIFT HWY. 265 TRAFFIC ONTO STAGE 1 CONSTRUCTION AS SHOWN.
 SHIFT RANDALL WOBBE TRAFFIC ONTO STAGE 1 CONSTRUCTION AS SHOWN.
 COMPLETE HWY. 265 CONSTRUCTION ON LT. FROM STA. 120+00 - STA. 123+08 AND STA. 218+60 - STA. 221+00 ON LT.
 CONSTRUCT CURB AND GUTTER ON LT. FROM STA. 151+45 - STA. 152+15.
 COMPLETE HWY. 265 CONSTRUCTION ON RT. FROM STA. 120+00 - STA. 124+10 AND STA. 216+50 - STA. 217+00.
 CONSTRUCT CURB AND GUTTER ON RT. FROM STA. 152+90 - STA. 154+50.
 COMPLETE TIE-INS ON RT. AT REMINGTON ST. AND JEFFERSON ST.

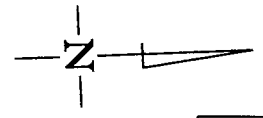
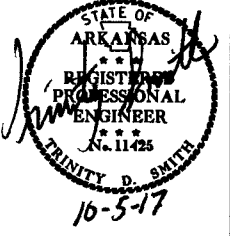
STAGE 3:
 SHIFT TRAFFIC TO CONST. C.L.
 CONSTRUCT ISLANDS AT HWY. 265/RANDALL WOBBE AND HWY. 265/HWY. 264 INTERSECTIONS.
 PLACE FINAL 2" SURFACE COURSE AND INSTALL PERMANENT PAVEMENT MARKINGS.

MAINTENANCE OF TRAFFIC STAGE 1 QUANTITIES

SIGNS = 476 SQ. FT.
 BARRICADES LT. = 128 LIN. FT.
 BARRICADES RT. = 128 LIN. FT.
 VERTICAL PANELS = 7 EACH
 TRAFFIC DRUMS = 145 EACH
 CONSTRUCTION PAVEMENT MARKINGS = 8100 LIN. FT.
 CONSTRUCTION PAVEMENT MARKINGS (ARROWS) = 1 EACH
 REMOVAL OF PERMANENT PAVEMENT MARKINGS = 5669 LIN. FT.
 REMOVAL OF PERMANENT PAVEMENT MARKINGS (ARROWS) = 1 EACH

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		45	267
				JOB NO.	012007			

② MAINTENANCE OF TRAFFIC DETAILS



DO NOT PASS

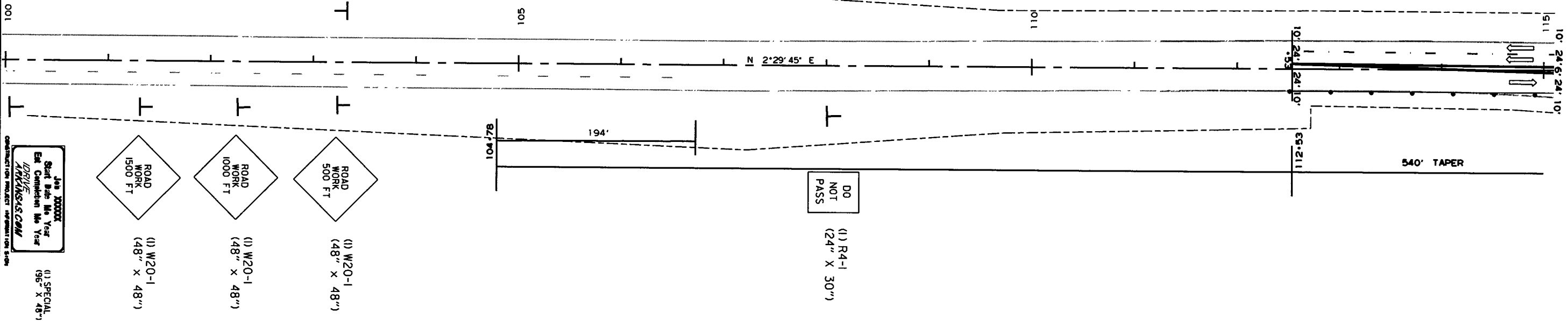
(1) R4-1
(24" X 30")

RIGHT SHOULDER CLOSED

(1) W21-5a
(36" X 36")

TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER

END WORK ROAD WORK
(1) G20-2
(48" X 24")

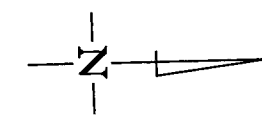
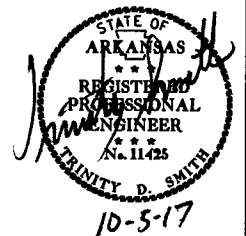


Job 30000
 Start Date: No Year
 Est. Completion: No Year
 DRIVE
 ARKANSAS
 (1) SPECIAL
 (96" X 48")

MAINTENANCE OF TRAFFIC DETAILS
 STAGE 1

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. PROJ. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		46	267
				JOB NO.	012007		46	267

② MAINTENANCE OF TRAFFIC DETAILS



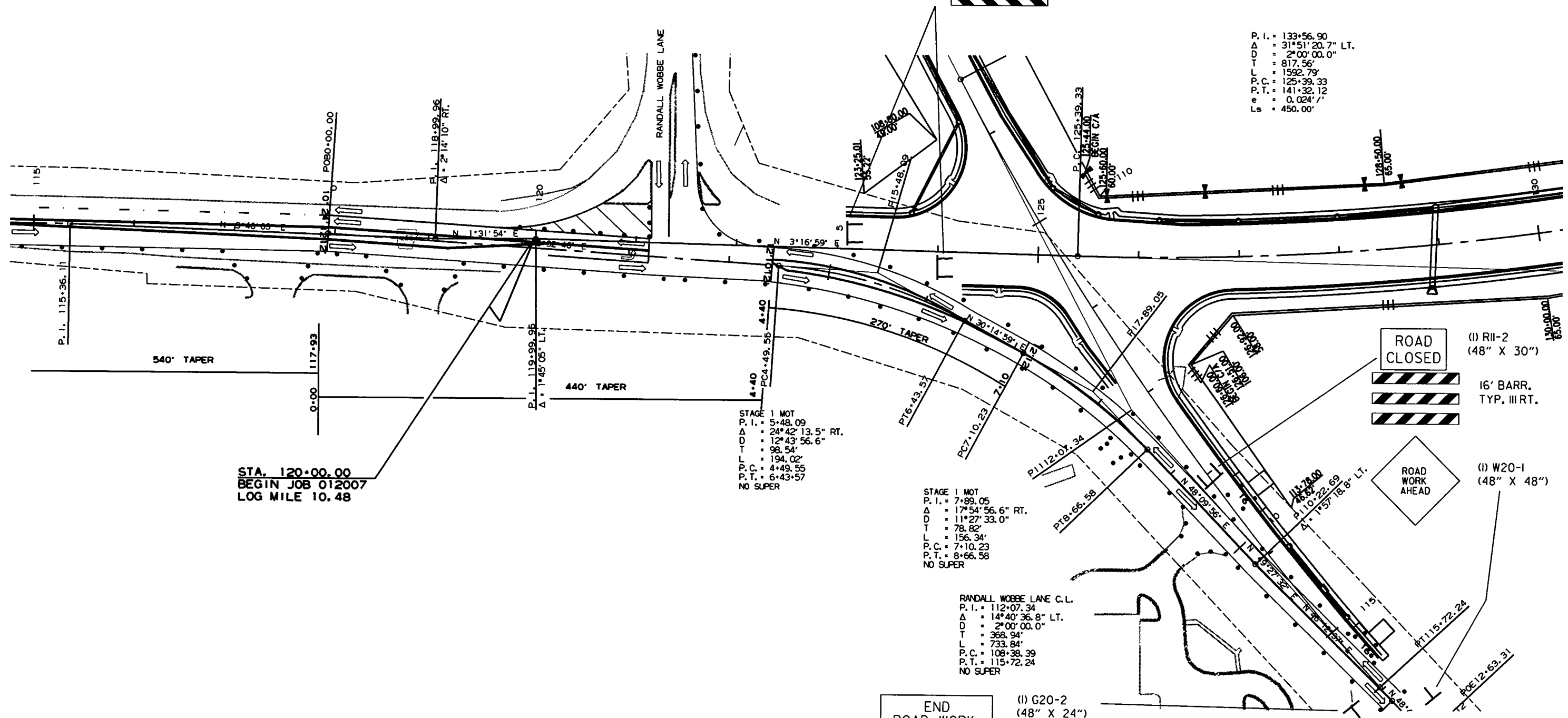
(I) R11-2
(48" X 30")

ROAD
CLOSED

16' BARR.
TYP. III LT.



P. I. = 133+56.90
 Δ = 31°51'20.7" LT.
D = 2°00'00.0"
T = 817.56'
L = 1592.79'
P. C. = 125+39.33
P. T. = 141+32.12
e = 0.024' /'
Ls = 450.00'



STA. 120+00.00
BEGIN JOB 012007
LOG MILE 10.48

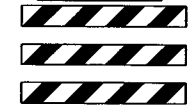
STAGE 1 MOT
P. I. = 5+48.09
 Δ = 24°42'13.5" RT.
D = 12°43'56.6"
T = 98.54'
L = 194.02'
P. C. = 4+49.55
P. T. = 6+43+57
NO SUPER

STAGE 1 MOT
P. I. = 7+89.05
 Δ = 17°54'56.6" RT.
D = 11°27'33.0"
T = 78.82'
L = 156.34'
P. C. = 7+10.23
P. T. = 8+66.58
NO SUPER

RANDALL WOBBE LANE C.L.
P. I. = 112+07.34
 Δ = 14°40'36.8" LT.
D = 2°00'00.0"
T = 368.94'
L = 733.84'
P. C. = 108+38.39
P. T. = 115+72.24
NO SUPER

ROAD
CLOSED

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



16' BARR.
TYP. III RT.



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

END
ROAD WORK

(I) G20-2
(48" X 24")

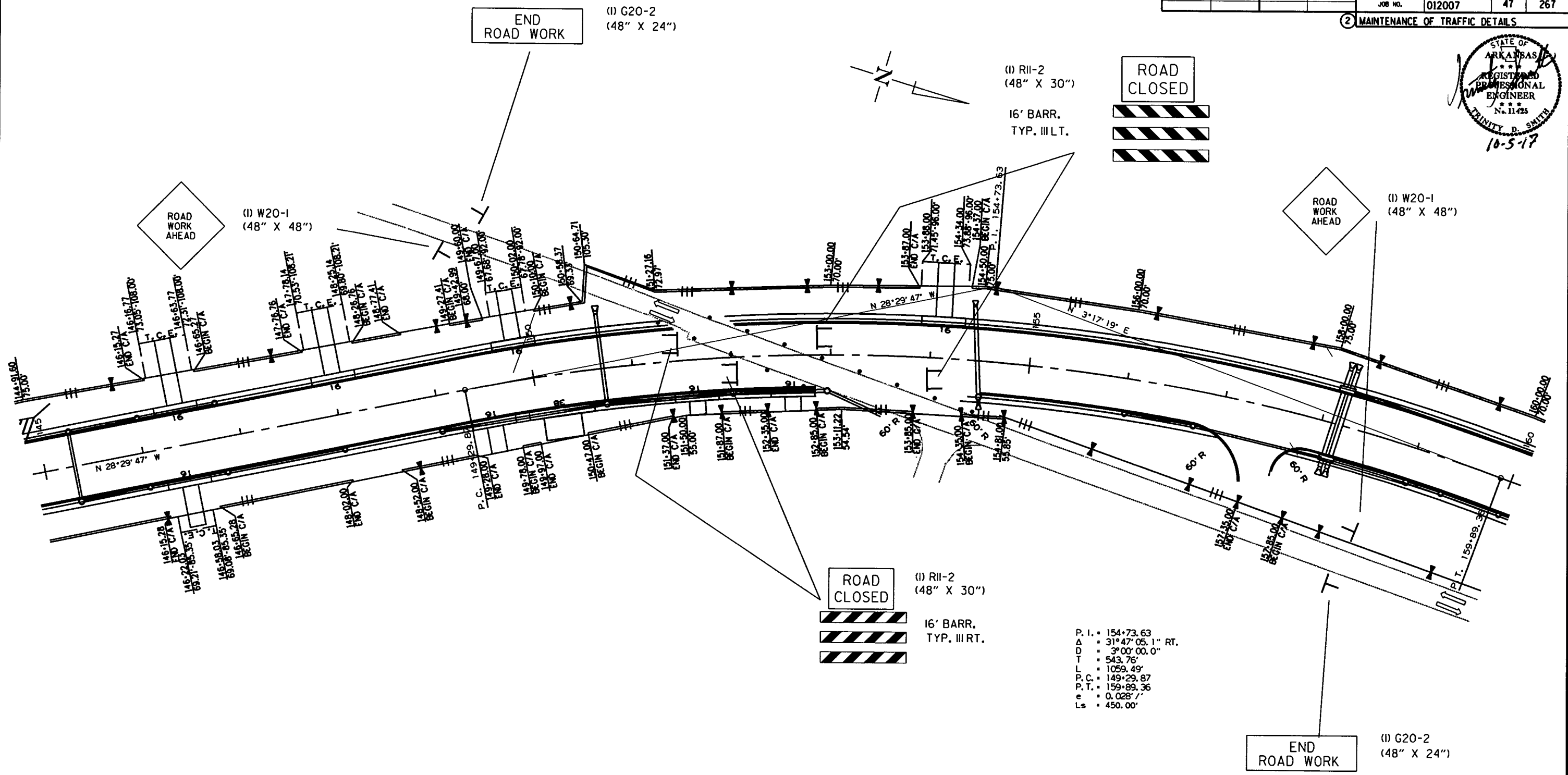
MAINTENANCE OF TRAFFIC DETAILS
STAGE 1

9/28/2017

RO12007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. PROJ. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		47	267
				JOB NO.	012007			

② MAINTENANCE OF TRAFFIC DETAILS



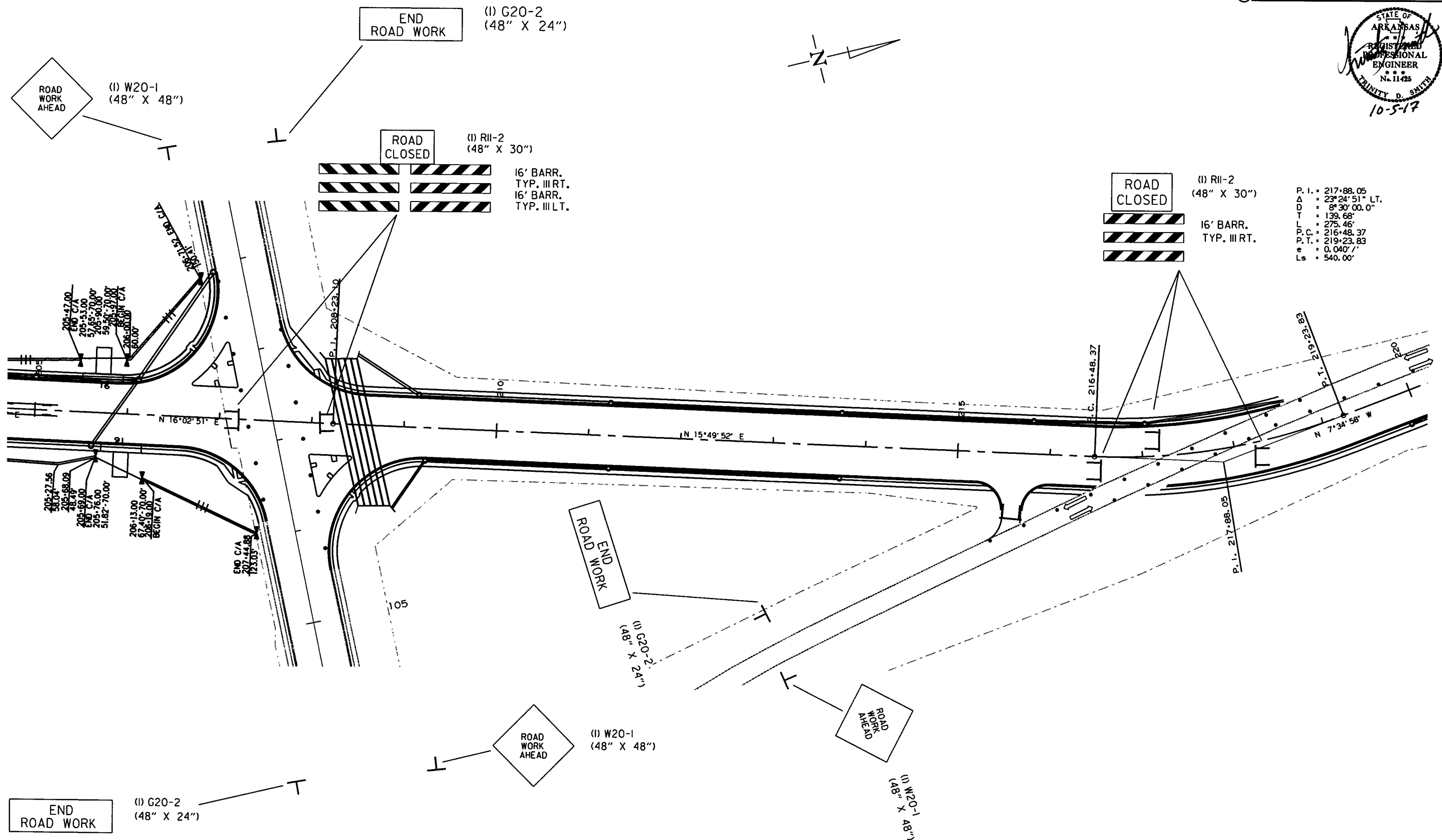
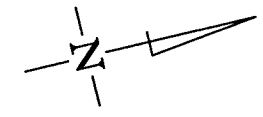
9/28/2017

R012007KGT.DGN

MAINTENANCE OF TRAFFIC DETAILS
STAGE 1

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 012007							48	267

② MAINTENANCE OF TRAFFIC DETAILS



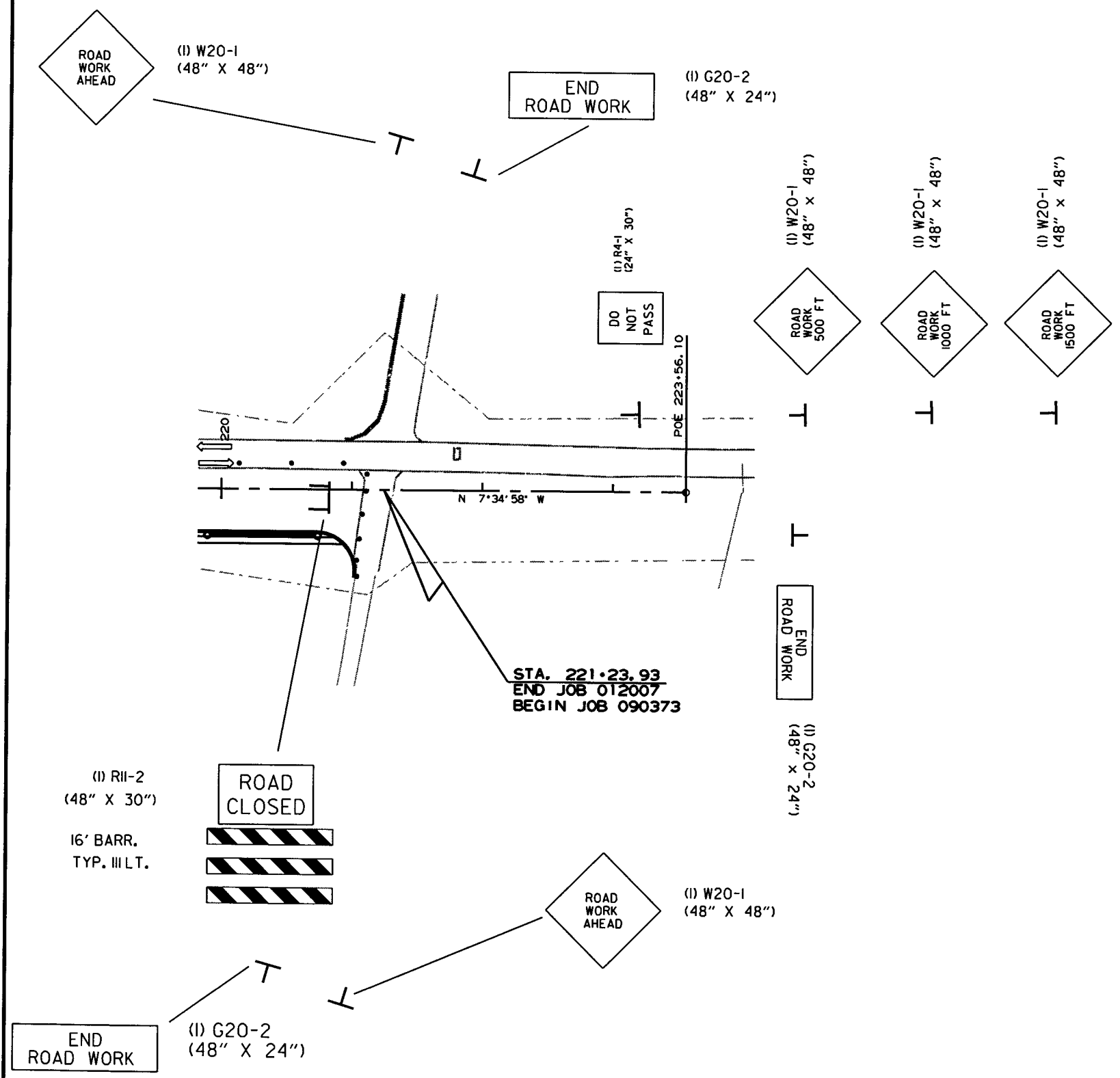
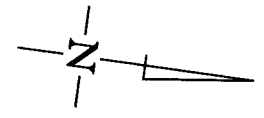
MAINTENANCE OF TRAFFIC DETAILS
STAGE 1

9/28/2017

R012007KGT.DGN

DATE REVISED	DATE FILED	DATE REVISED	DATE FILED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		49	267
				JOB NO.		012007	49	267

2 MAINTENANCE OF TRAFFIC DETAILS



JOB XXXXX
 Start Date Mo Year
 Est. Completion Mo Year
 ARKINSAS.COM
 CONSTRUCTION PROJECT INFORMATION SYSTEM

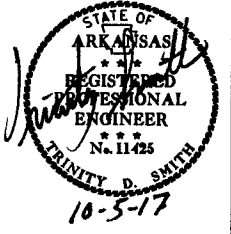
9/28/2017

R012007KGT.DGN

MAINTENANCE OF TRAFFIC DETAILS
 STAGE 1

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	012007		50	267

② MAINTENANCE OF TRAFFIC DETAILS



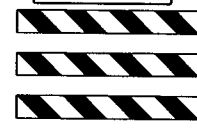
END ROAD WORK

(I) G20-2
(48" X 24")

ROAD CLOSED

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

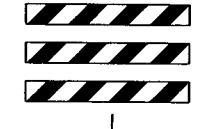
16' BARR.
TYP. III LT.



ROAD CLOSED

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

16' BARR.
TYP. III RT.



RANDALL WOBBE LANE C.L.
P.I. = 102+38.00
Δ = 27°59'22.6" LT.
D = 6°00'00.0"
T = 238.00'
L = 466.49'
P.C. = 100+00.00
P.T. = 104+66.49
e = 0.038' /'
Ls = 360.00'

RANDALL WOBBE LANE C.L.
P.I. = 112+07.34
Δ = 14°40'36.8" LT.
D = 2°00'00.0"
T = 368.94'
L = 733.84'
P.C. = 108+38.39
P.T. = 115+72.24
NO SUPER

7 VERTICAL PANELS
40' O.C.

ROAD WORK AHEAD

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

STA. 100+00.00
BEGIN RANDALL
WOBBE CONNECTION

STAGE 1 MOT
P.I. = 7+89.05
Δ = 17°54'56.6" RT.
D = 11°27'33.0"
T = 78.82'
L = 156.34'
P.C. = 7+10.23
P.T. = 8+66.58
NO SUPER

STAGE 1 MOT
P.I. = 5+48.09
Δ = 24°42'13.5" RT.
D = 12°43'56.6"
T = 98.54'
L = 194.02'
P.C. = 4+49.55
P.T. = 6+43+57
NO SUPER

STA. 115+72.24
END RANDALL
WOBBE CONNECTION

9/28/2017

RO12007KGT.DGN

MAINTENANCE OF TRAFFIC DETAILS
STAGE 1

SEQUENCE OF CONSTRUCTION:

STAGE 1:
 RAMP JEFFERSON ST. TRAFFIC ACROSS PROPOSED HWY. 265 FROM STA. 151+45 - STA. 154+50 USING METHOD OF RAISING GRADE.
 RAMP OLD WIRE RD. TRAFFIC ACROSS PROPOSED HWY. 265 FROM STA. 216+50 - STA. 221+23.93 USING METHOD OF RAISING GRADE.
 TAPER HWY. 265 TRAFFIC TO STAGE 1 ALIGNMENT AS SHOWN.
 CONSTRUCT NEW LOCATION ON LT. FROM STA. 123+08 - STA. 151+45, AND STA. 152+15 - STA. 218+60.
 CONSTRUCT NEW LOCATION ON RT. FROM STA. 124+10 - STA. 152+90, STA. 154+50 - STA. 216+50, AND STA. 217+00 - STA. 221+00.

STAGE 2:
 SHIFT HWY. 265 TRAFFIC ONTO STAGE 1 CONSTRUCTION AS SHOWN.
 SHIFT RANDALL WOBBE TRAFFIC ONTO STAGE 1 CONSTRUCTION AS SHOWN.
 COMPLETE HWY. 265 CONSTRUCTION ON LT. FROM STA. 120+00 - STA. 123+08 AND STA. 218+60 - STA. 221+00 ON LT.
 CONSTRUCT CURB AND GUTTER ON LT. FROM STA. 151+45 - STA. 152+15.
 COMPLETE HWY. 265 CONSTRUCTION ON RT. FROM STA. 120+00 - STA. 124+10 AND STA. 216+50 - STA. 217+00.
 CONSTRUCT CURB AND GUTTER ON RT. FROM STA. 152+90 - STA. 154+50.
 COMPLETE TIE-INS ON RT. AT REMINGTON ST. AND JEFFERSON ST.

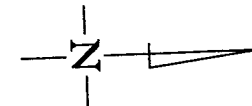
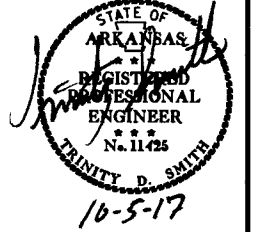
STAGE 3:
 SHIFT TRAFFIC TO CONST. C.L.
 CONSTRUCT ISLANDS AT HWY. 265/RANDALL WOBBE AND HWY. 265/HWY. 264 INTERSECTIONS.
 PLACE FINAL 2" SURFACE COURSE AND INSTALL PERMANENT PAVEMENT MARKINGS.

MAINTENANCE OF TRAFFIC STAGE 2 QUANTITIES

SIGNS = 380 SQ. FT.
 BARRICADES LT. = 32 LIN. FT.
 BARRICADES RT. = 80 LIN. FT.
 VERTICAL PANELS = 14 EACH
 TRAFFIC DRUMS = 117 EACH
 CONSTRUCTION PAVEMENT MARKINGS = 52520 LIN. FT.
 CONSTRUCTION PAVEMENT MARKINGS (ARROWS) = 5 EACH
 REMOVAL OF CONSTRUCTION PAVEMENT MARKINGS = 4684 LIN. FT.
 REMOVAL OF PERMANENT PAVEMENT MARKINGS = 1783 LIN. FT.

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. PROJ. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		51	267
				JOB NO.		012007		

② MAINTENANCE OF TRAFFIC DETAILS



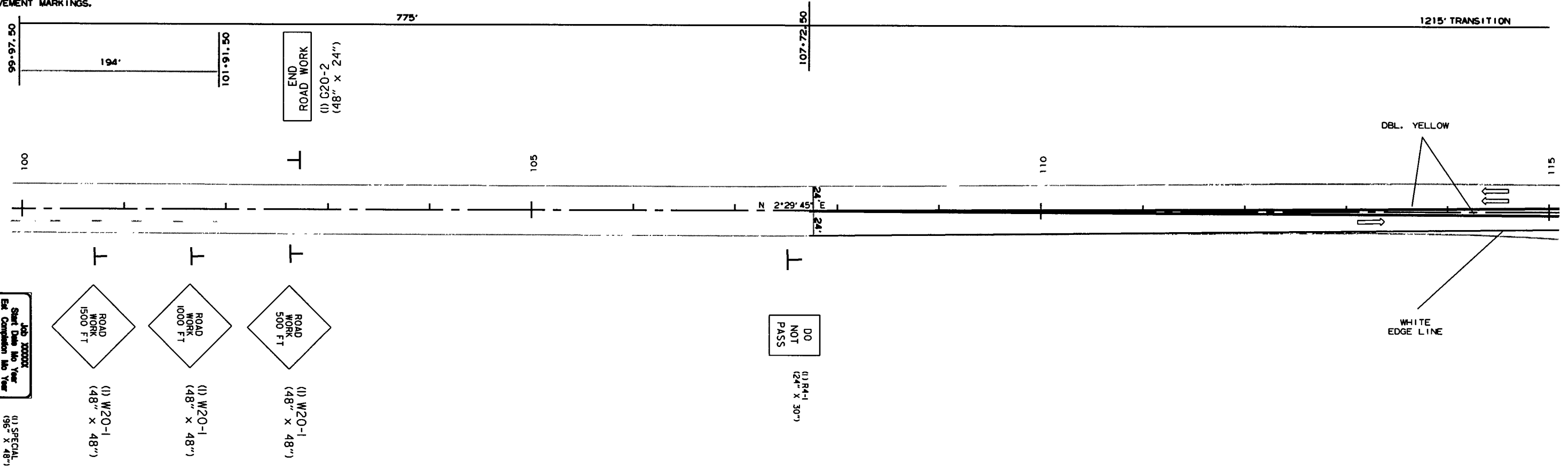
DO NOT PASS

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

RIGHT SHOULDER CLOSED

(1) W21-5a (36" X 36")

TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER



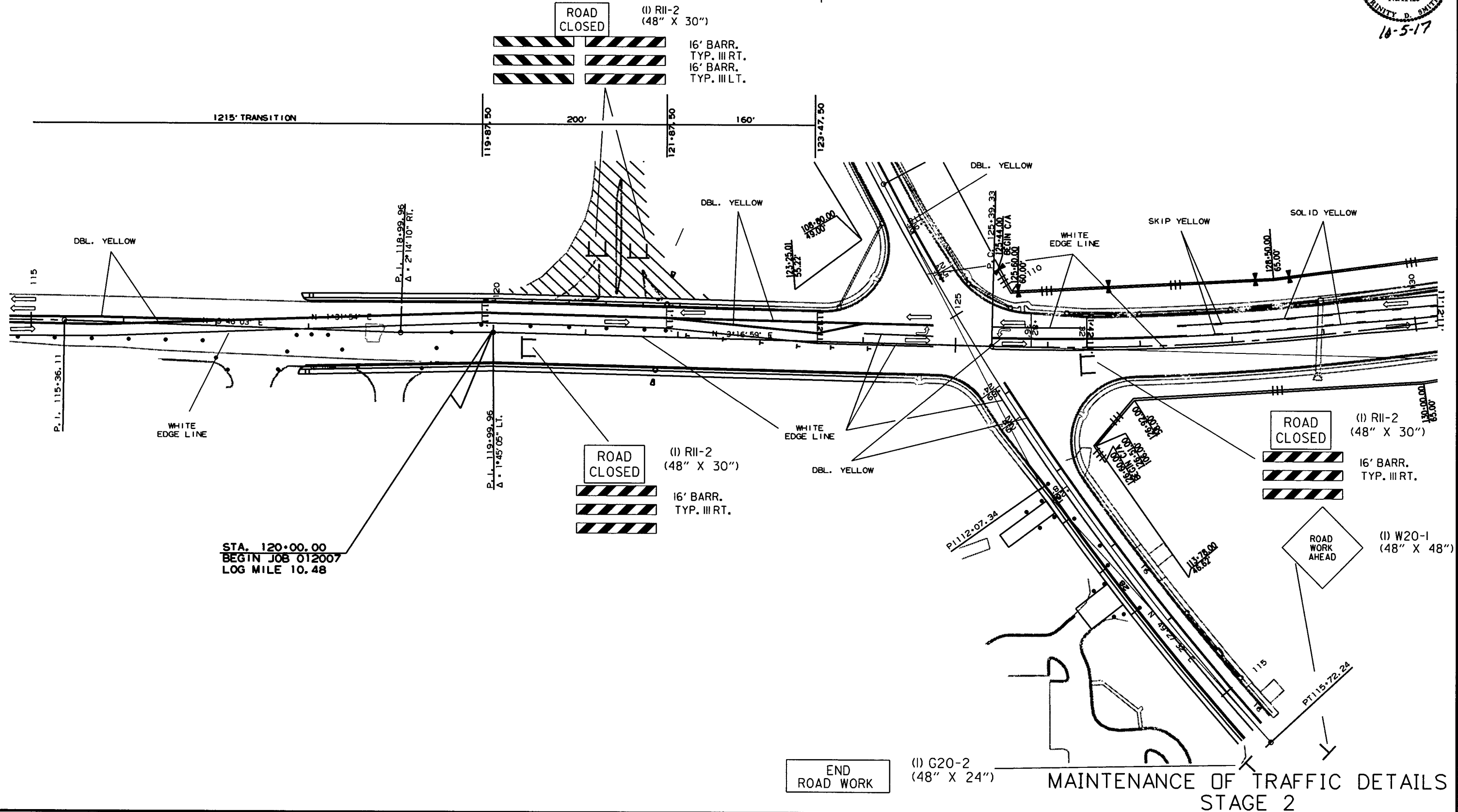
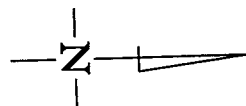
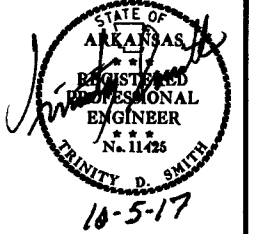
Job XXXXXX
 Start Date Mo Year
 Est. Completion Mo Year
 ARKANSAS.COM
 (1) SPECIAL (96" X 48")

MAINTENANCE OF TRAFFIC DETAILS
 STAGE 2

 OBLITERATION AREA

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.	012007		52	267

② MAINTENANCE OF TRAFFIC DETAILS

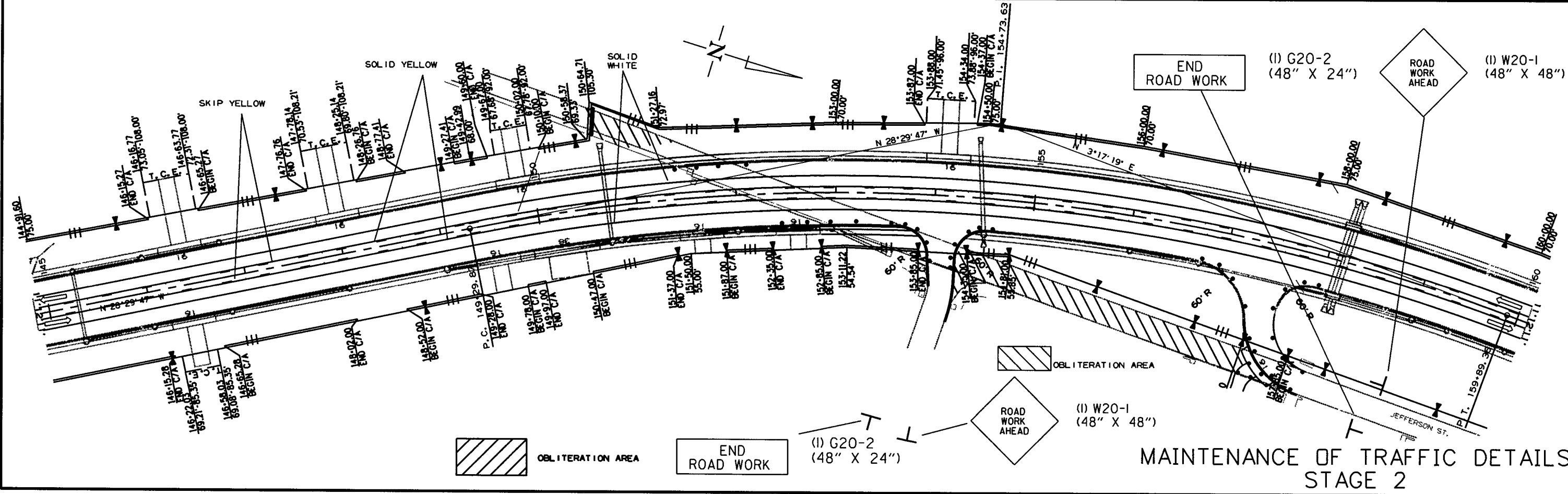
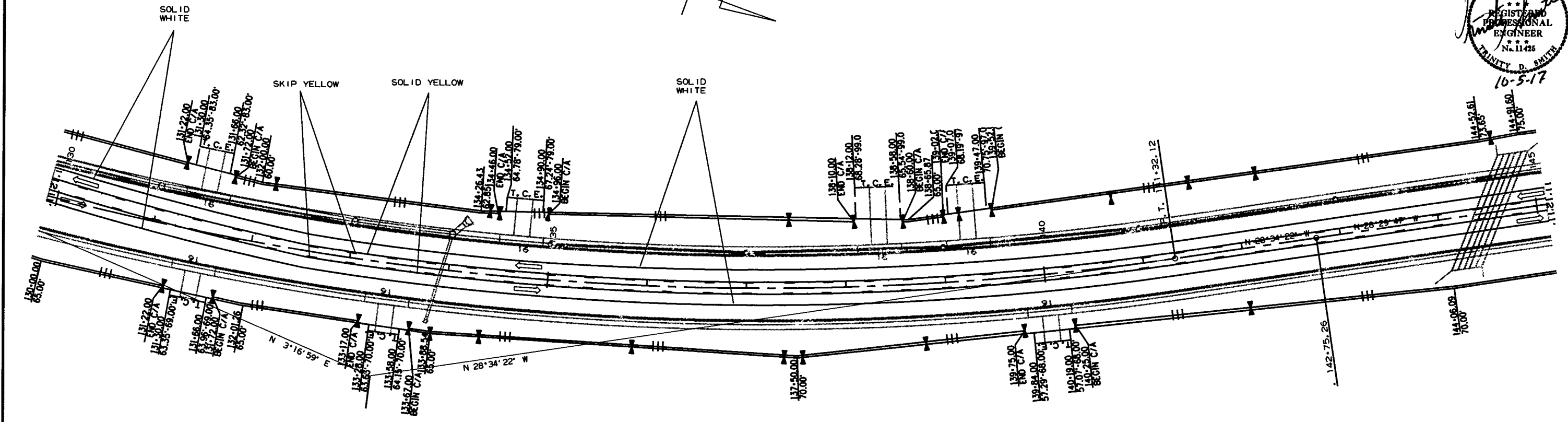
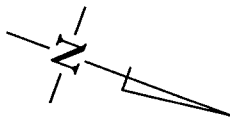
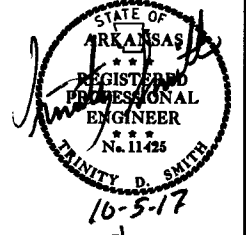


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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		53	267
				JOB NO.	012007			

② MAINTENANCE OF TRAFFIC DETAILS

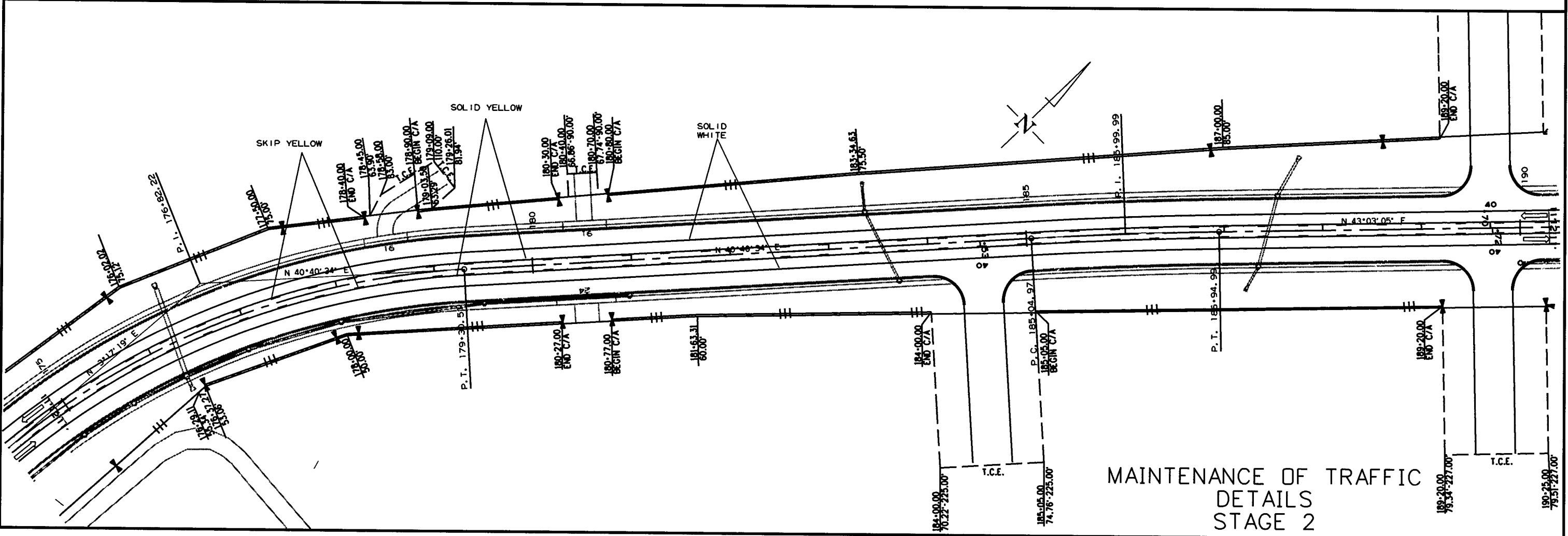
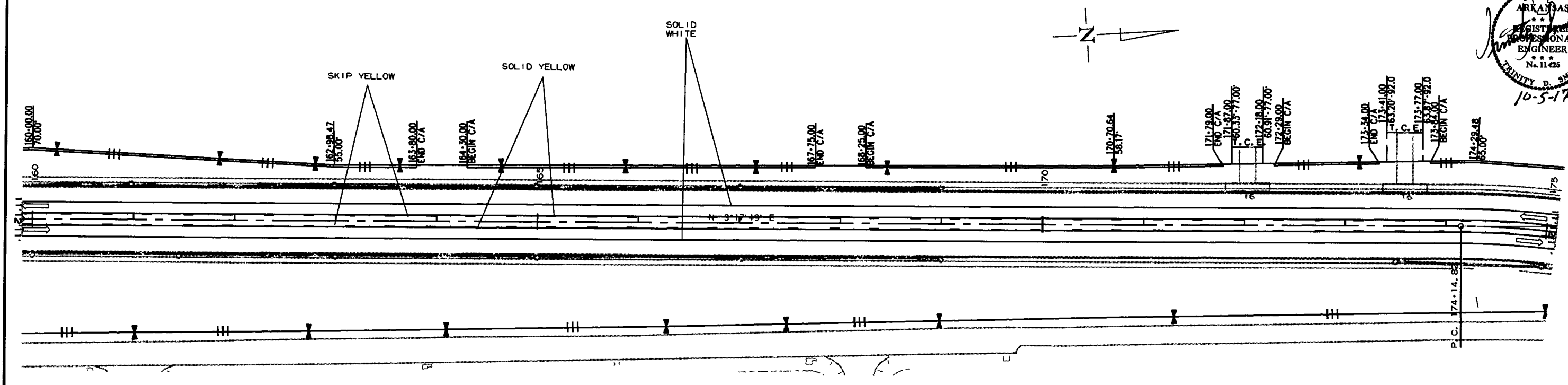


9/28/2017
R012007KGT.DGN

MAINTENANCE OF TRAFFIC DETAILS
STAGE 2

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		54	267
				JOB NO.	012007			

② MAINTENANCE OF TRAFFIC DETAILS



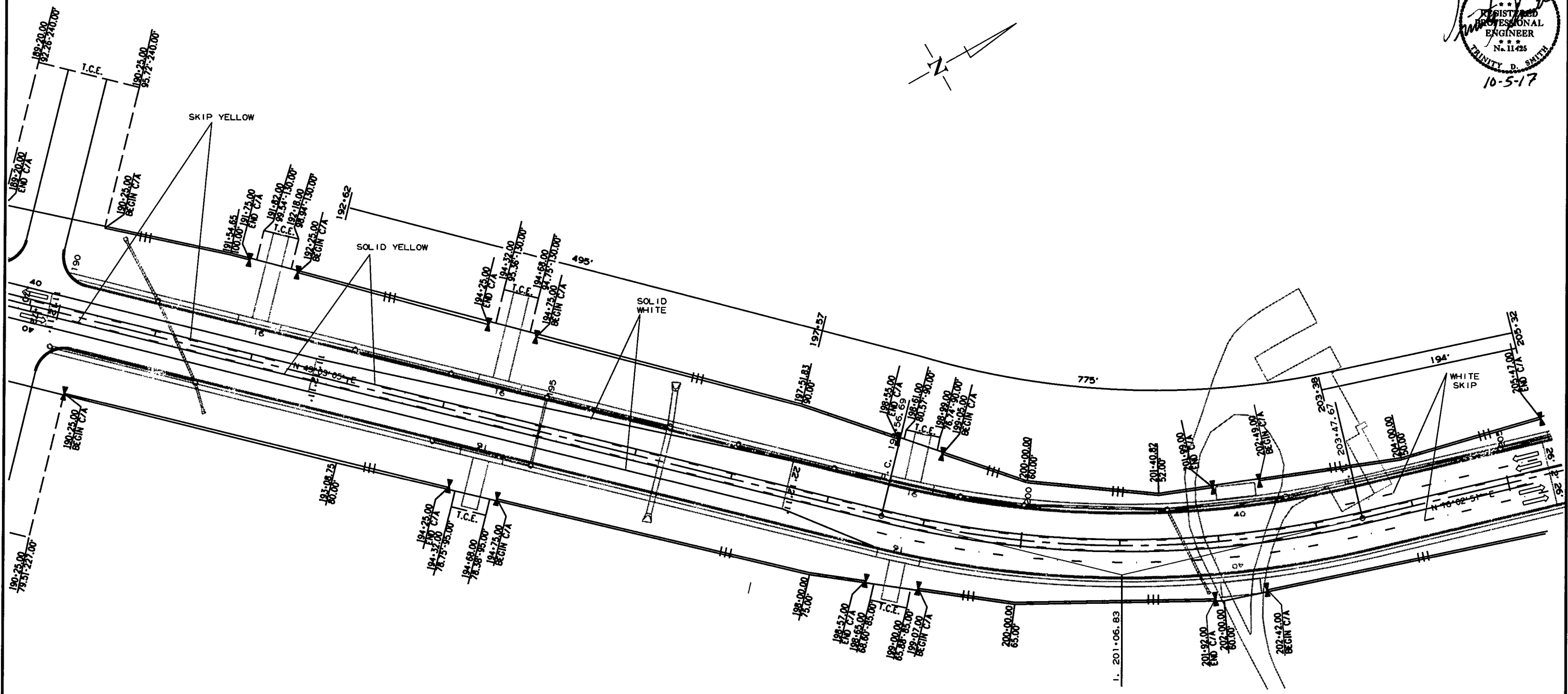
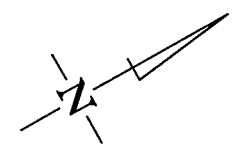
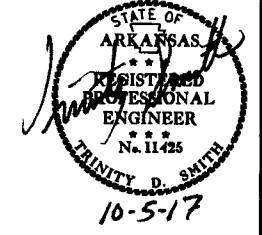
MAINTENANCE OF TRAFFIC
DETAILS
STAGE 2

9/28/2017

R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
						012007	55	267

② MAINTENANCE OF TRAFFIC DETAILS



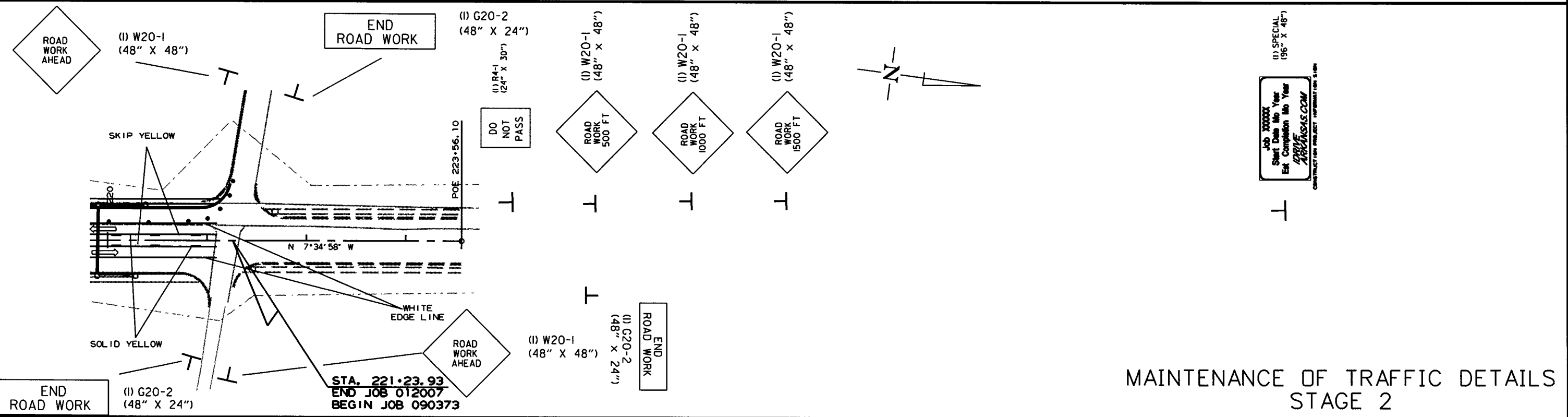
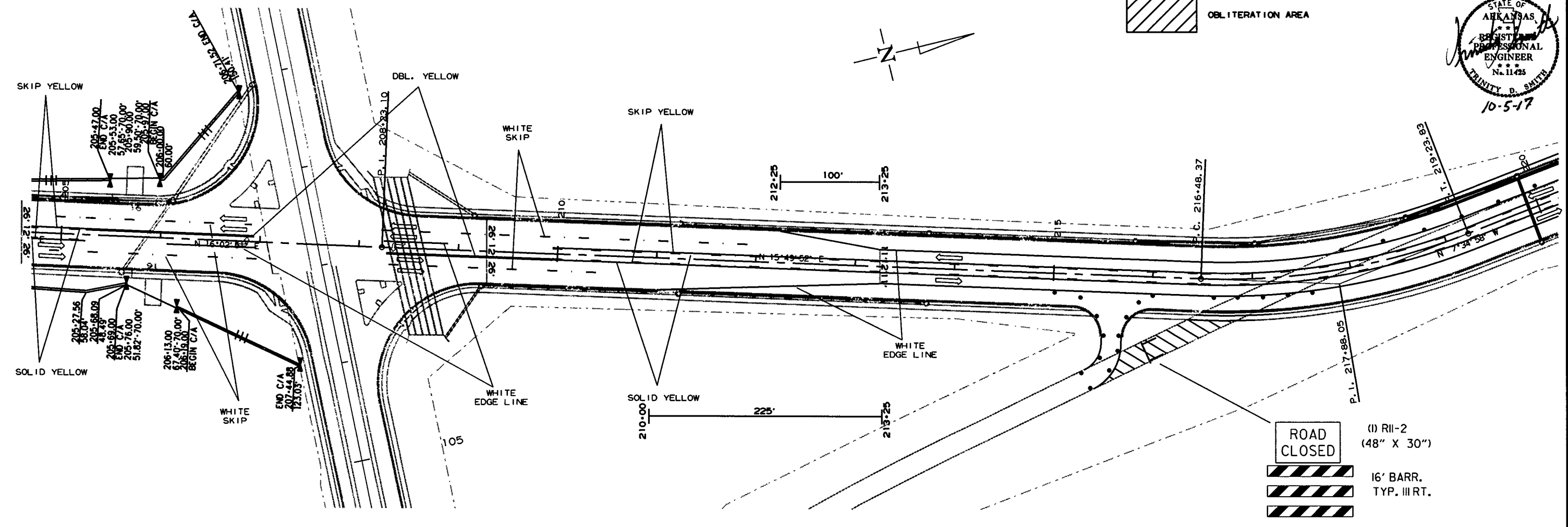
9/28/2017

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MAINTENANCE OF TRAFFIC DETAILS
STAGE 2

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 012007							56	267

② MAINTENANCE OF TRAFFIC DETAILS

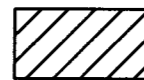


MAINTENANCE OF TRAFFIC DETAILS
STAGE 2

R012007KGT.DGN 9/28/2017

END ROAD WORK

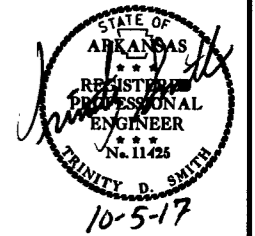
(I) G20-2 (48" X 24")



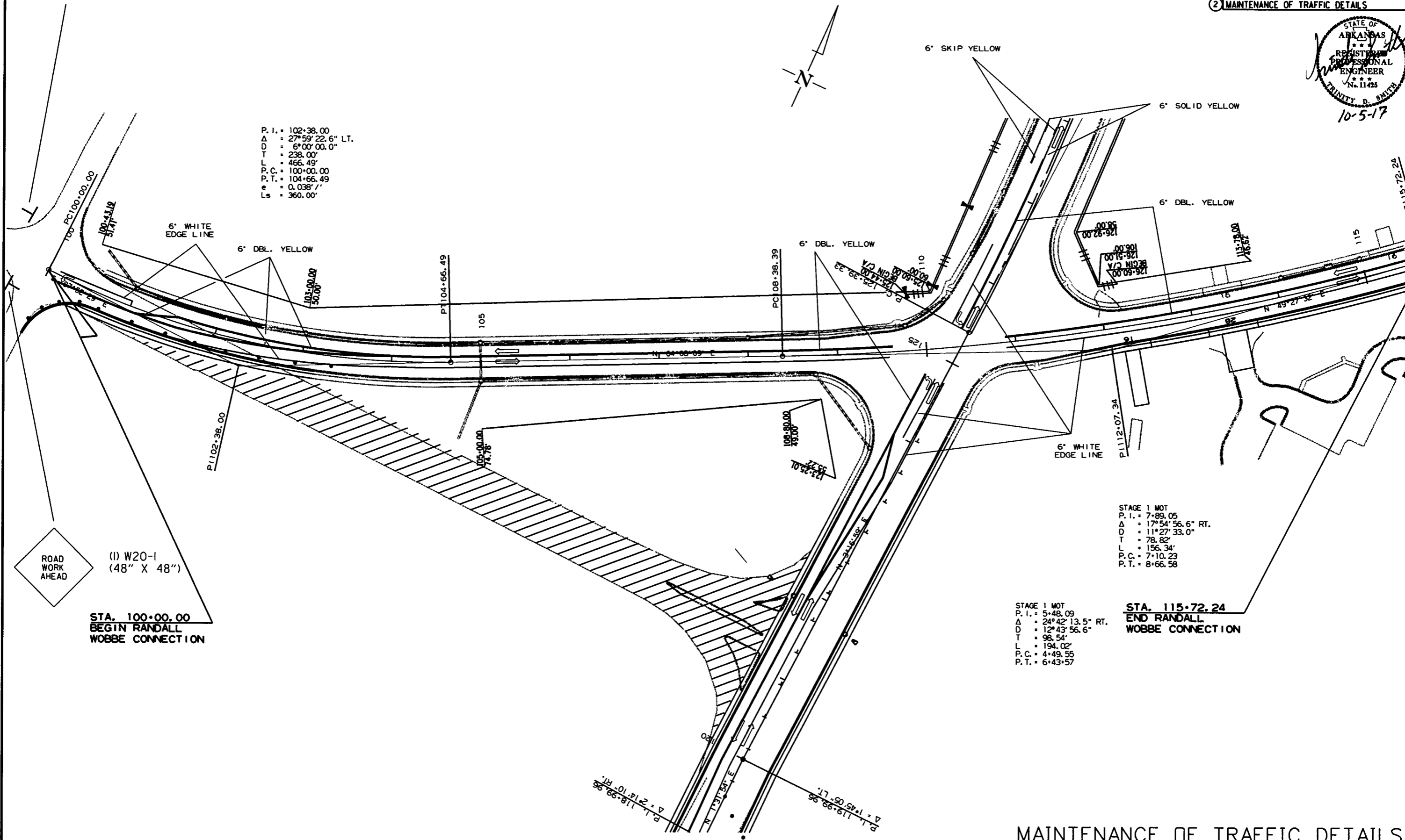
OBLITERATION AREA

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		57	267
JOB NO. 012007								

2 MAINTENANCE OF TRAFFIC DETAILS



P. I. = 102°38.00
 Δ = 27°59' 22.6" LT.
 D = 6°00' 00.0"
 T = 238.00'
 L = 466.49'
 P. C. = 100+00.00
 P. T. = 104+66.49
 e = 0.038' /'
 Ls = 360.00'



ROAD WORK AHEAD

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

STA. 100+00.00 BEGIN RANDALL WOBBE CONNECTION

STAGE 1 MOT
 P. I. = 7°59.05
 Δ = 17°54' 56.6" RT.
 D = 11°27' 33.0"
 T = 78.82'
 L = 156.34'
 P. C. = 7+10.23
 P. T. = 8+66.58

STAGE 1 MOT
 P. I. = 5°48.09
 Δ = 24°42' 13.5" RT.
 D = 12°43' 56.6"
 T = 98.54'
 L = 194.02'
 P. C. = 4+49.55
 P. T. = 6+43+57

STA. 115+72.24 END RANDALL WOBBE CONNECTION

9/28/2017 R012007KGT.DGN

MAINTENANCE OF TRAFFIC DETAILS STAGE 2

SEQUENCE OF CONSTRUCTION:

STAGE 1:
 RAMP JEFFERSON ST. TRAFFIC ACROSS PROPOSED HWY. 265 FROM STA. 151+45 - STA. 154+50 USING METHOD OF RAISING GRADE.
 RAMP OLD WIRE RD. TRAFFIC ACROSS PROPOSED HWY. 265 FROM STA. 216+50 - STA. 221+23.93 USING METHOD OF RAISING GRADE.
 TAPER HWY. 265 TRAFFIC TO STAGE 1 ALIGNMENT AS SHOWN.
 CONSTRUCT NEW LOCATION ON LT. FROM STA. 123+08 - STA. 151+45, AND STA. 152+15 - STA. 218+60.
 CONSTRUCT NEW LOCATION ON RT. FROM STA. 124+10 - STA. 152+90, STA. 154+50 - STA. 216+50, AND STA. 217+00 - STA. 221+00.

STAGE 2:
 SHIFT HWY. 265 TRAFFIC ONTO STAGE 1 CONSTRUCTION AS SHOWN.
 SHIFT RANDALL WOBBE TRAFFIC ONTO STAGE 1 CONSTRUCTION AS SHOWN.
 COMPLETE HWY. 265 CONSTRUCTION ON LT. FROM STA. 120+00 - STA. 123+08 AND STA. 218+60 - STA. 221+00 ON LT.
 CONSTRUCT CURB AND GUTTER ON LT. FROM STA. 151+45 - STA. 152+15.
 COMPLETE HWY. 265 CONSTRUCTION ON RT. FROM STA. 120+00 - STA. 124+10 AND STA. 216+50 - STA. 217+00.
 CONSTRUCT CURB AND GUTTER ON RT. FROM STA. 152+90 - STA. 154+50.
 COMPLETE TIE-INS ON RT. AT REMINGTON ST. AND JEFFERSON ST.

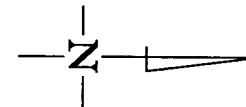
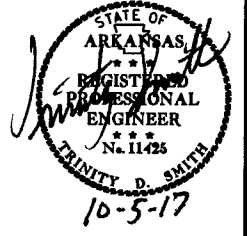
STAGE 3:
 SHIFT TRAFFIC TO CONST. C.L.
 CONSTRUCT ISLANDS AT HWY. 265/RANDALL WOBBE AND HWY. 265/HWY. 264 INTERSECTIONS.
 PLACE FINAL 2" SURFACE COURSE AND INSTALL PERMANENT PAVEMENT MARKINGS.

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	012007		58	267

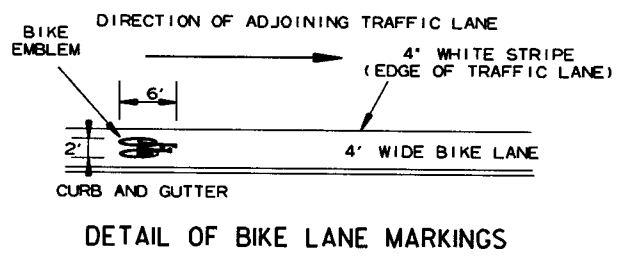
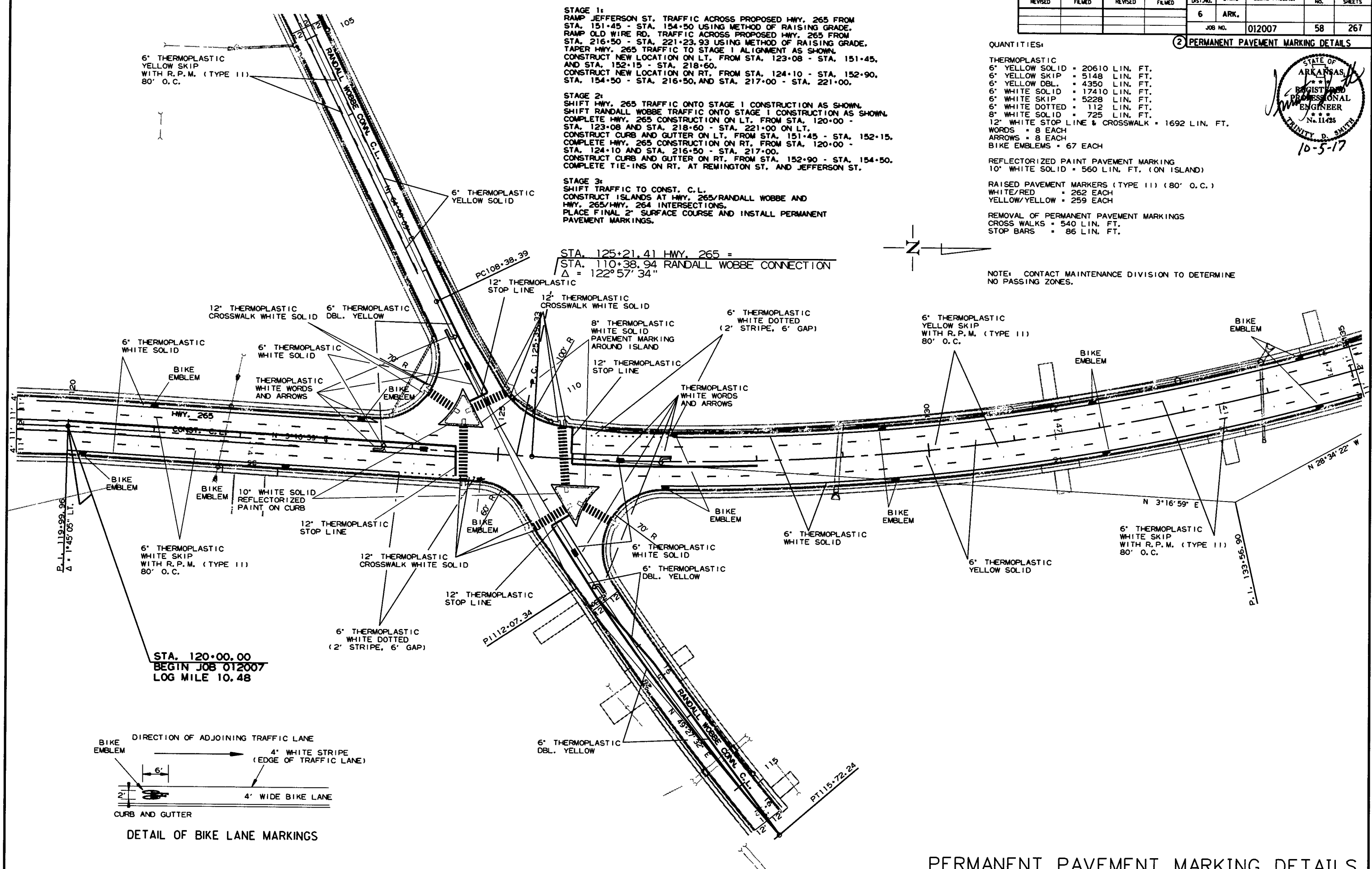
PERMANENT PAVEMENT MARKING DETAILS

QUANTITIES:

- THERMOPLASTIC
 - 6" YELLOW SOLID = 20610 LIN. FT.
 - 6" YELLOW SKIP = 5148 LIN. FT.
 - 6" YELLOW DBL. = 4350 LIN. FT.
 - 6" WHITE SOLID = 17410 LIN. FT.
 - 6" WHITE SKIP = 5228 LIN. FT.
 - 6" WHITE DOTTED = 112 LIN. FT.
 - 8" WHITE SOLID = 725 LIN. FT.
 - 12" WHITE STOP LINE & CROSSWALK = 1692 LIN. FT.
 - WORDS = 8 EACH
 - ARROWS = 8 EACH
 - BIKE EMBLEMS = 67 EACH
- REFLECTORIZED PAINT PAVEMENT MARKING
 - 10" WHITE SOLID = 560 LIN. FT. (ON ISLAND)
- RAISED PAVEMENT MARKERS (TYPE 11) (80" O.C.)
 - WHITE/RED = 262 EACH
 - YELLOW/YELLOW = 259 EACH
- REMOVAL OF PERMANENT PAVEMENT MARKINGS
 - CROSS WALKS = 540 LIN. FT.
 - STOP BARS = 86 LIN. FT.



NOTE: CONTACT MAINTENANCE DIVISION TO DETERMINE NO PASSING ZONES.

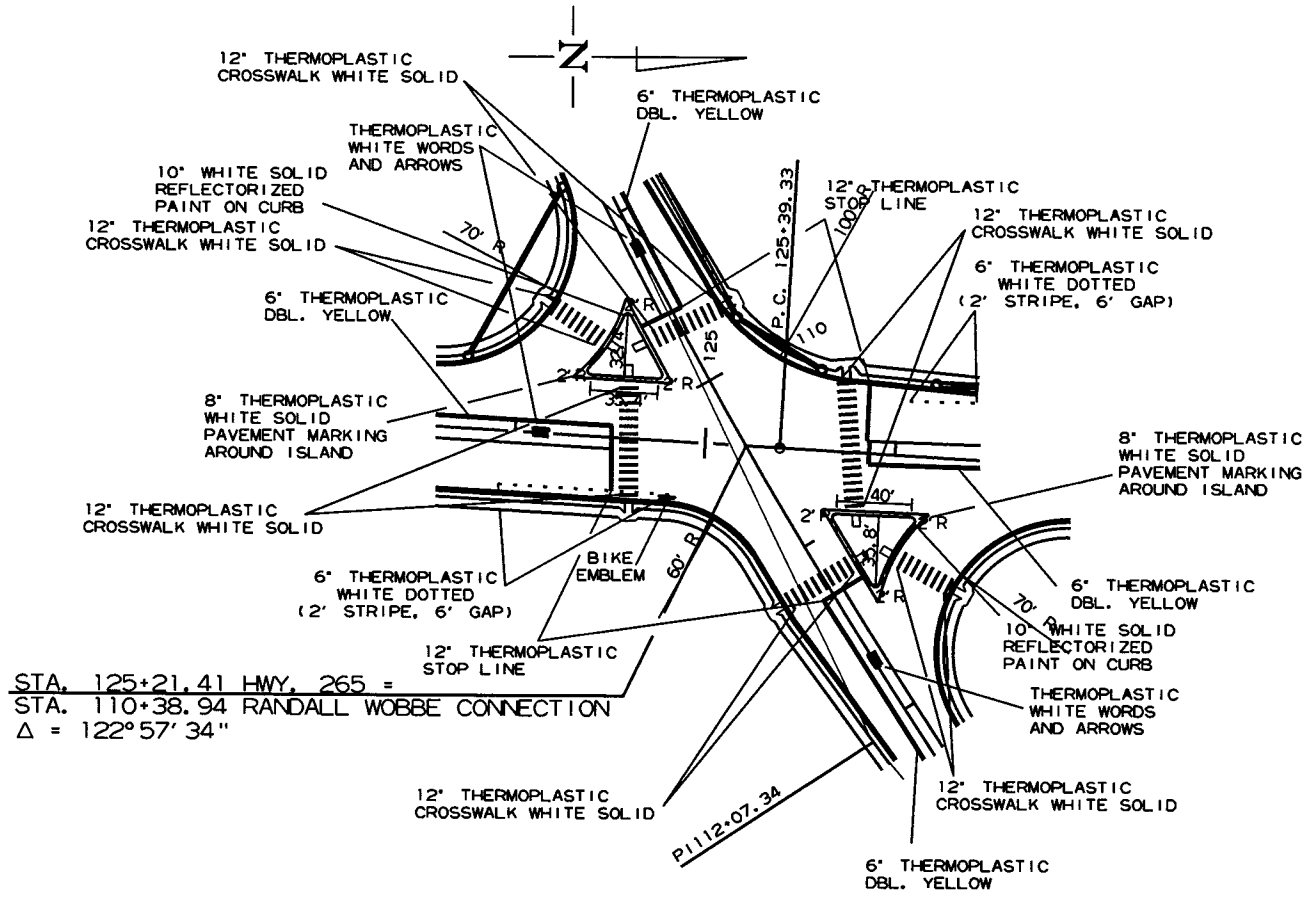
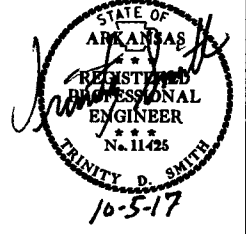


PERMANENT PAVEMENT MARKING DETAILS

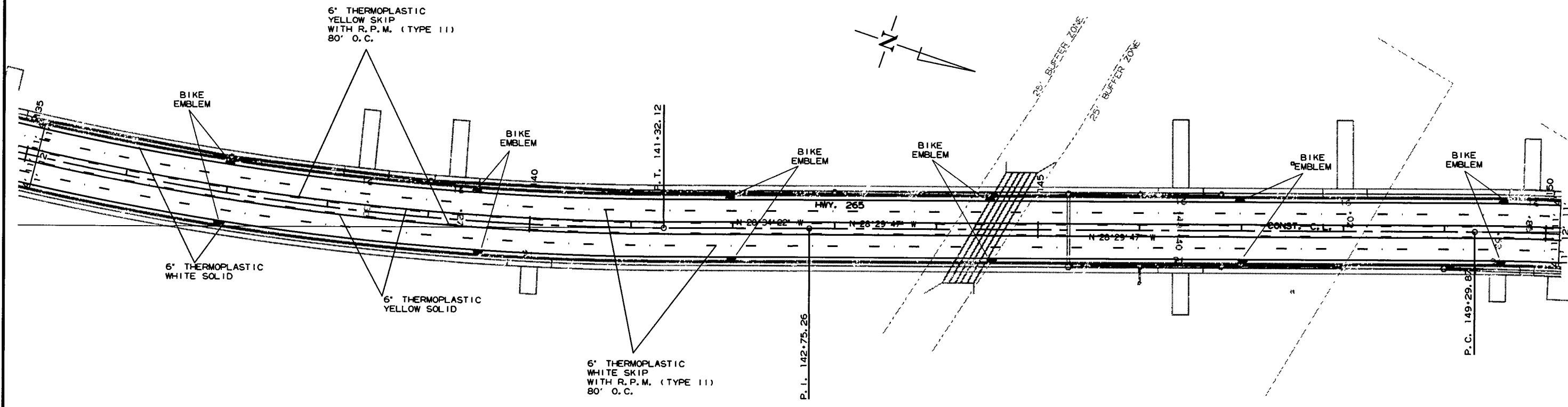
9/18/2017 R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. NO. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		59	267
				JOB NO. 012007				

2 PERMANENT PAVEMENT MARKING DETAILS



STA. 125+21.41 HWY. 265 =
 STA. 110+38.94 RANDALL WOBBE CONNECTION
 $\Delta = 122^\circ 57' 34''$



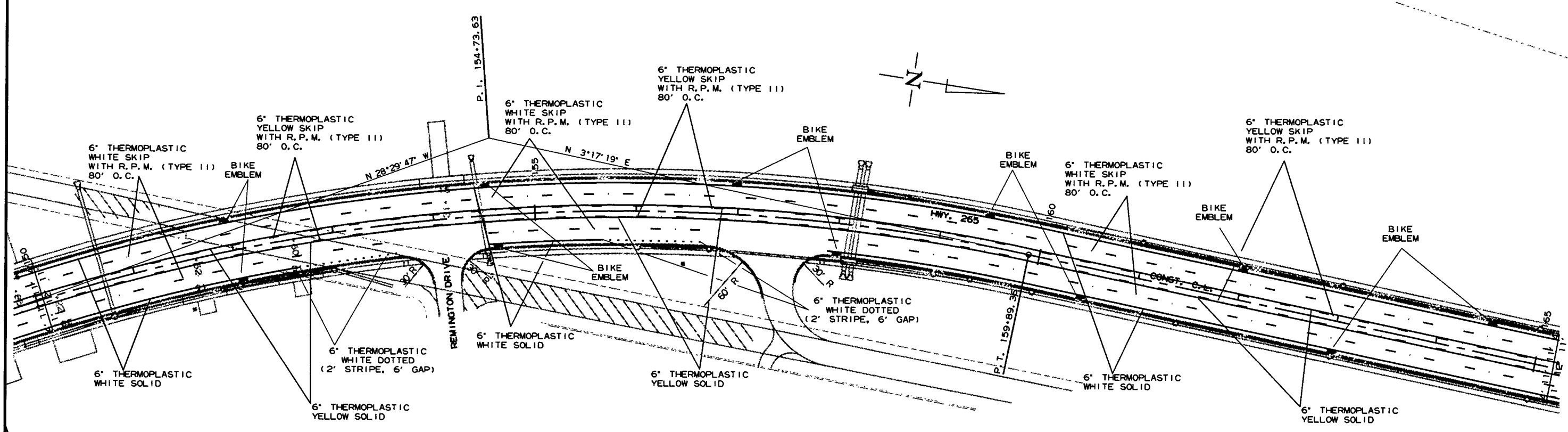
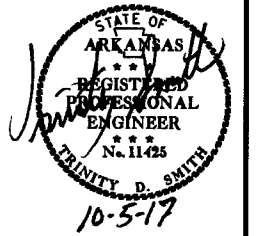
PERMANENT PAVEMENT MARKING DETAILS

9/18/2017

RO12007KGT.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. 012007							60	267

2 PERMANENT PAVEMENT MARKING DETAILS



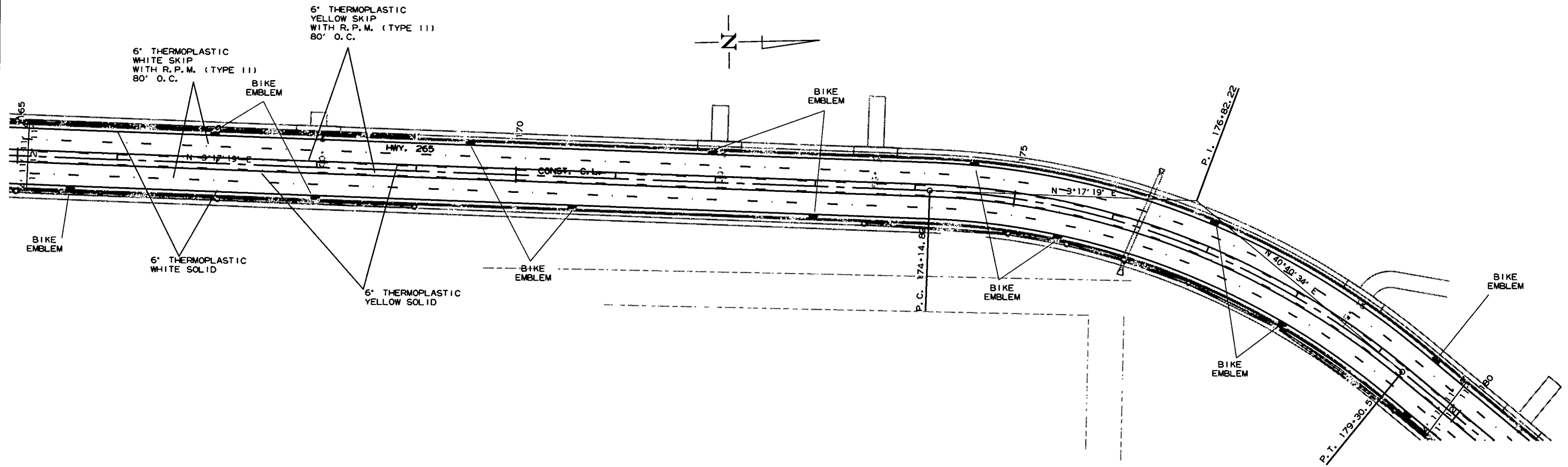
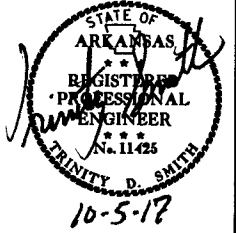
9/18/2017

R012007KGT.DGN

PERMANENT PAVEMENT MARKING DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 012007							61	267

② PERMANENT PAVEMENT MARKING DETAILS



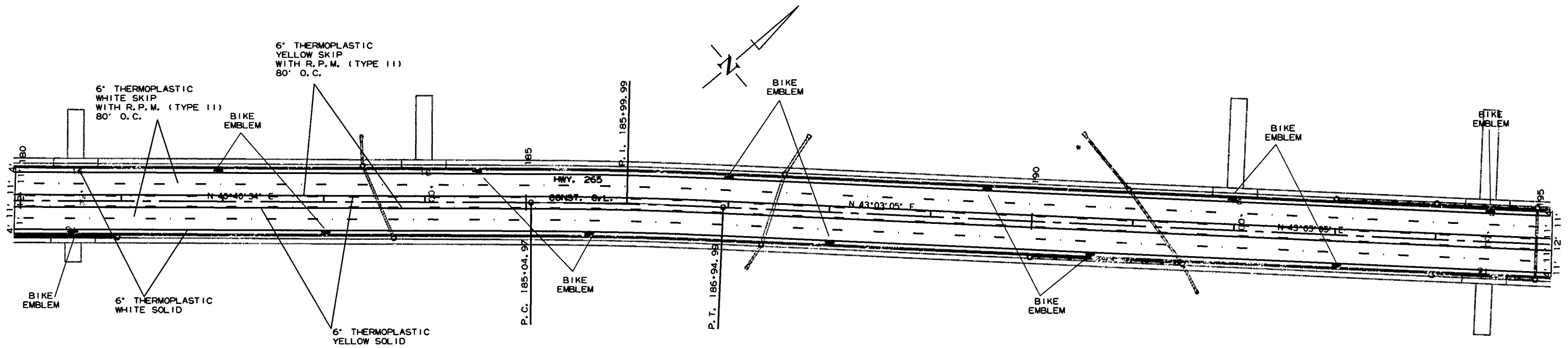
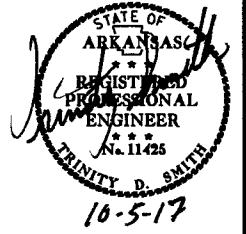
9/18/2017

R012007KGT.DGN

PERMANENT PAVEMENT MARKING 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. 012007							62	267

② PERMANENT PAVEMENT MARKING DETAILS

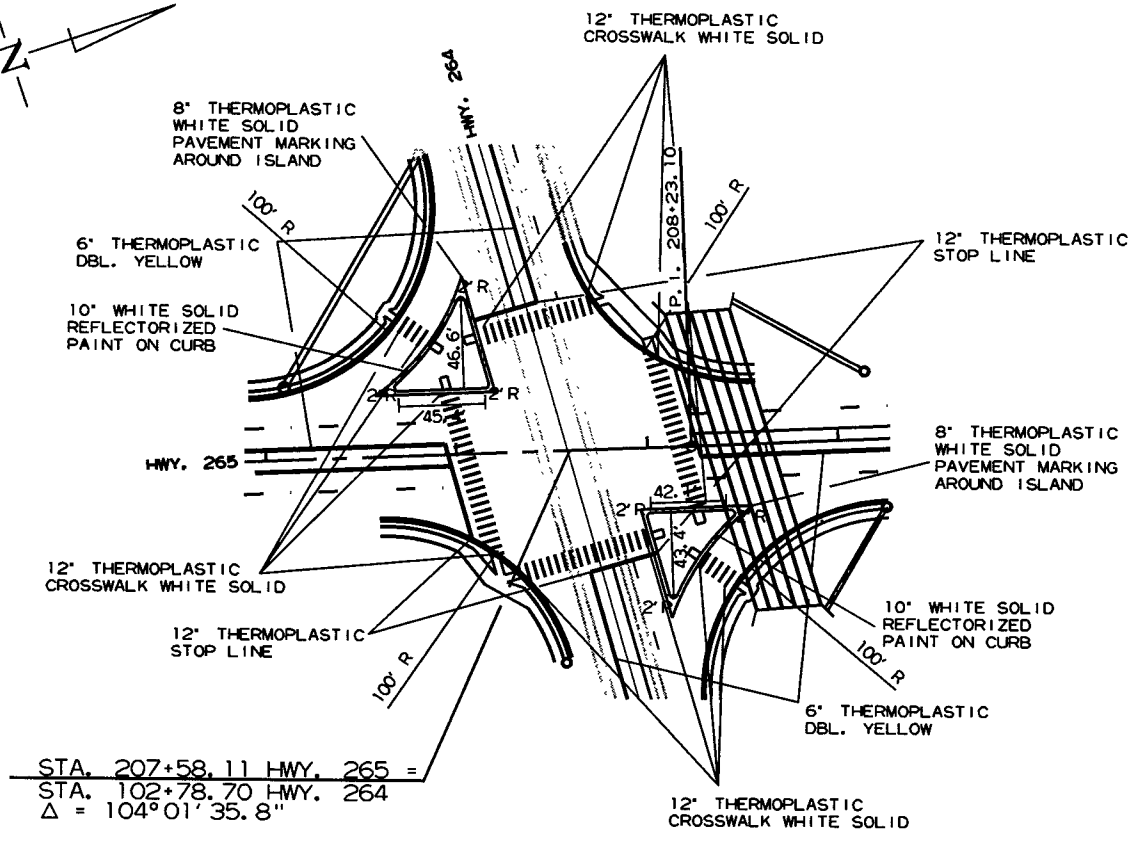


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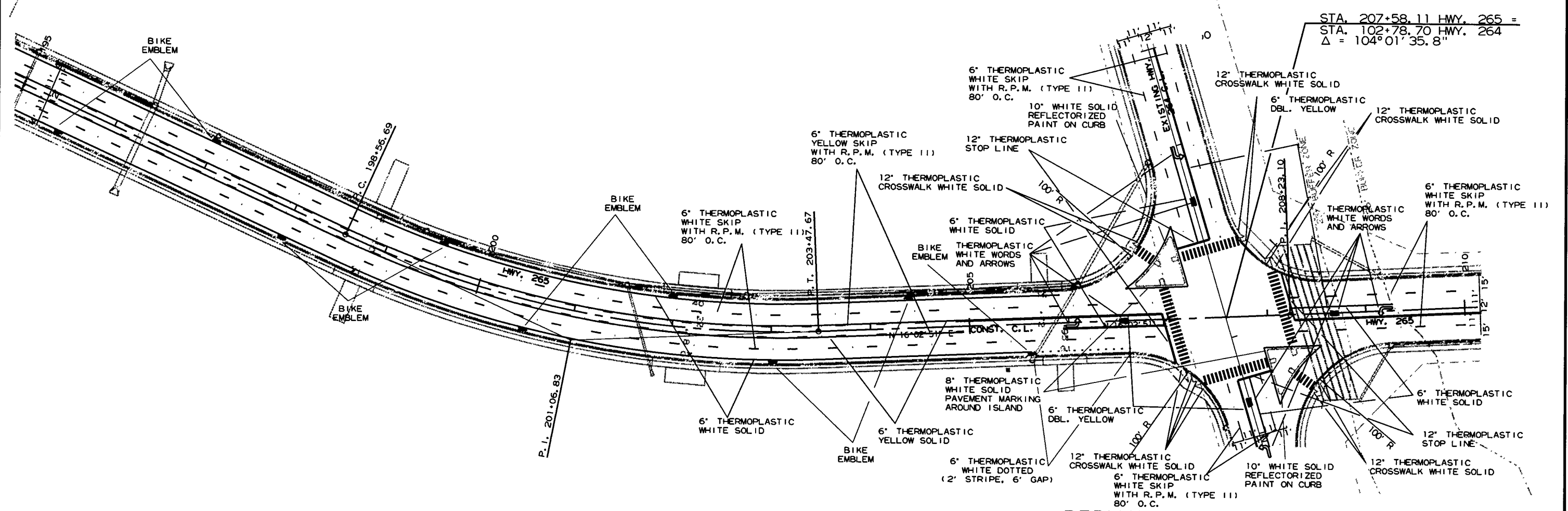
PERMANENT PAVEMENT MARKING DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	012007		63	267

2 PERMANENT PAVEMENT MARKING DETAILS



STA. 207+58.11 HWY. 265 =
 STA. 102+78.70 HWY. 264
 $\Delta = 104^{\circ}01'35.8''$



STA. 207+58.11 HWY. 265 =
 STA. 102+78.70 HWY. 264
 $\Delta = 104^{\circ}01'35.8''$

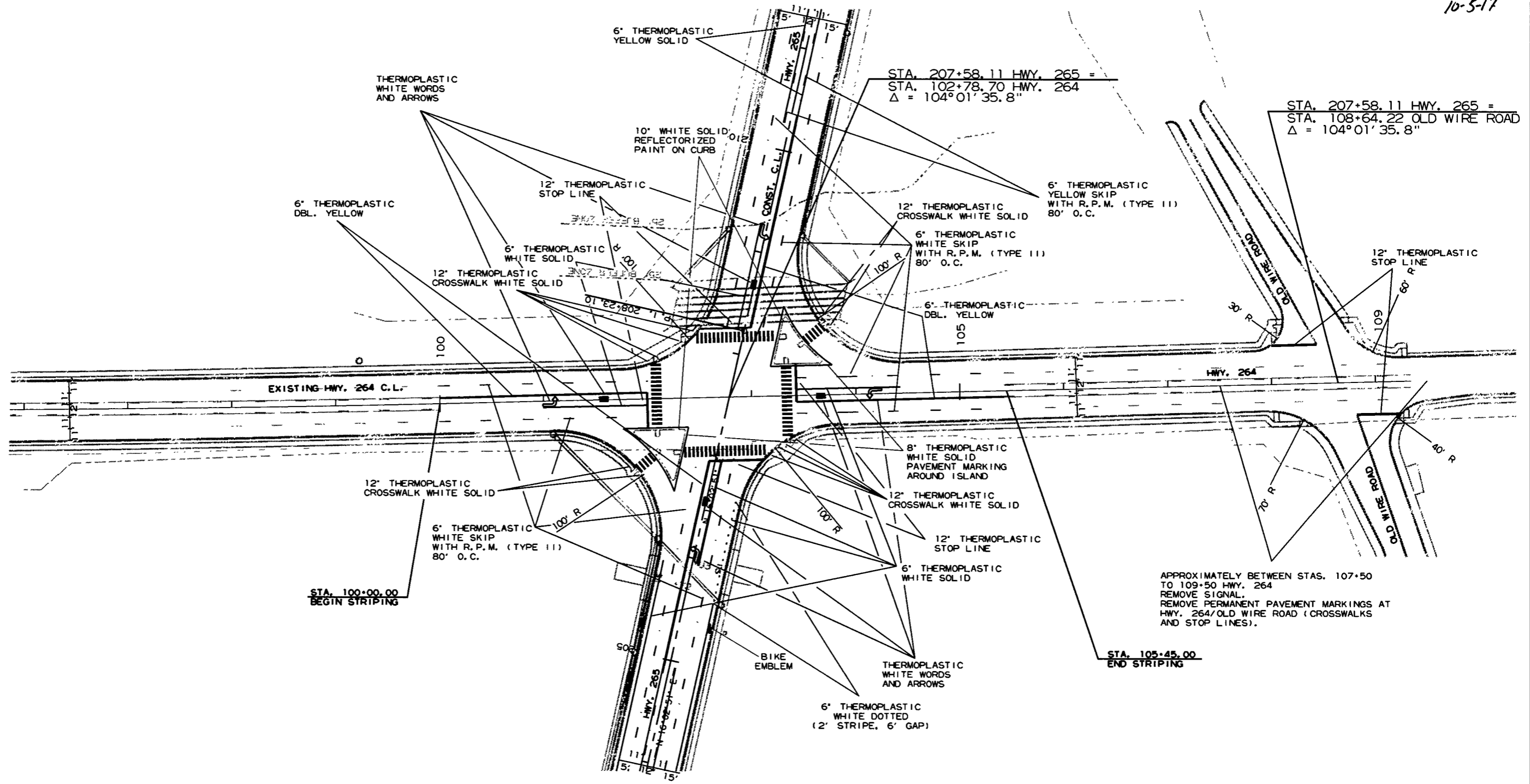
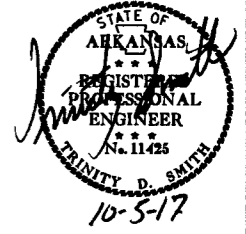
PERMANENT PAVEMENT MARKING DETAILS

9/18/2017

R012007KCT.DGN

DATE REVISED	DATE FILED	DATE REVISED	DATE FILED	FED. PROJ. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	012007		64	267

② PERMANENT PAVEMENT MARKING DETAILS



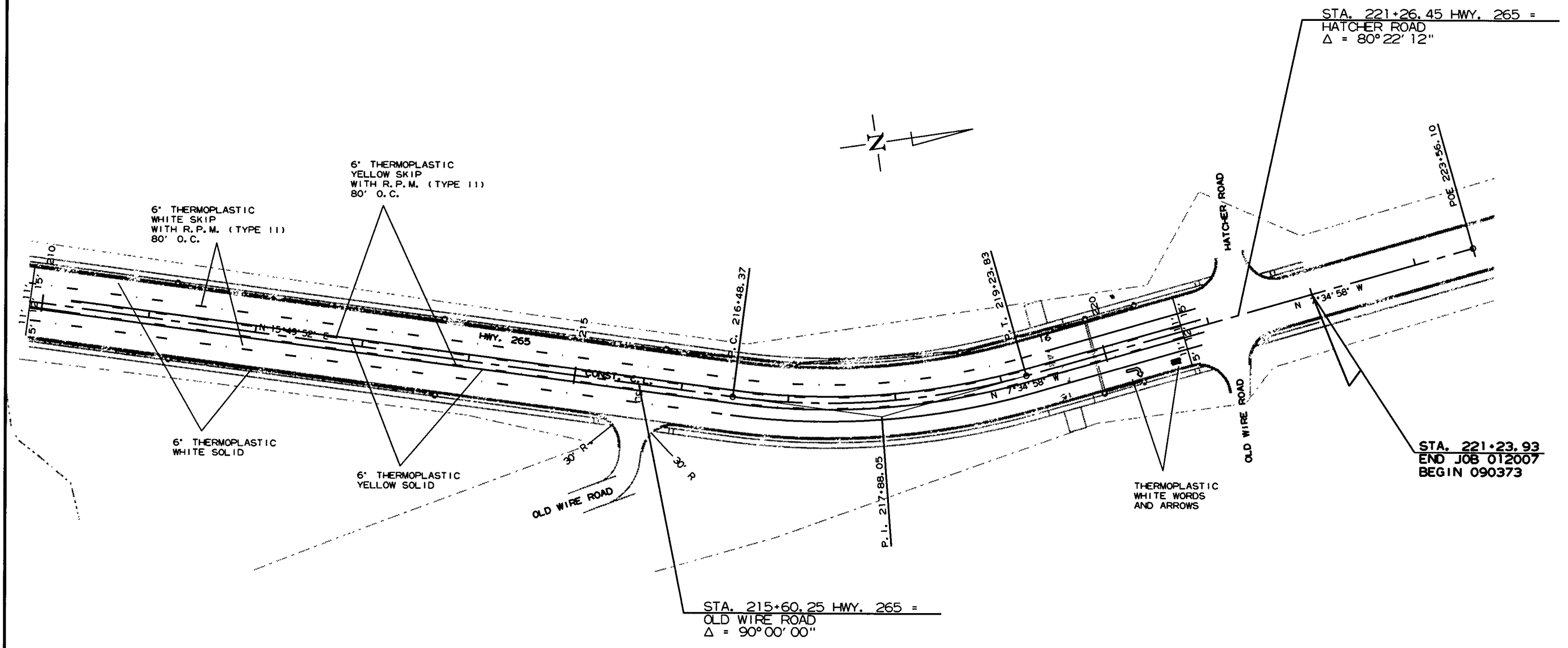
APPROXIMATELY BETWEEN STAS. 107+50 TO 109+50 HWY. 264 REMOVE SIGNAL. REMOVE PERMANENT PAVEMENT MARKINGS AT HWY. 264/OLD WIRE ROAD (CROSSWALKS AND STOP LINES).

PERMANENT PAVEMENT MARKING DETAILS

9/18/2017
R012007KCT.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.	012007		65	267

② PERMANENT PAVEMENT MARKING DETAILS



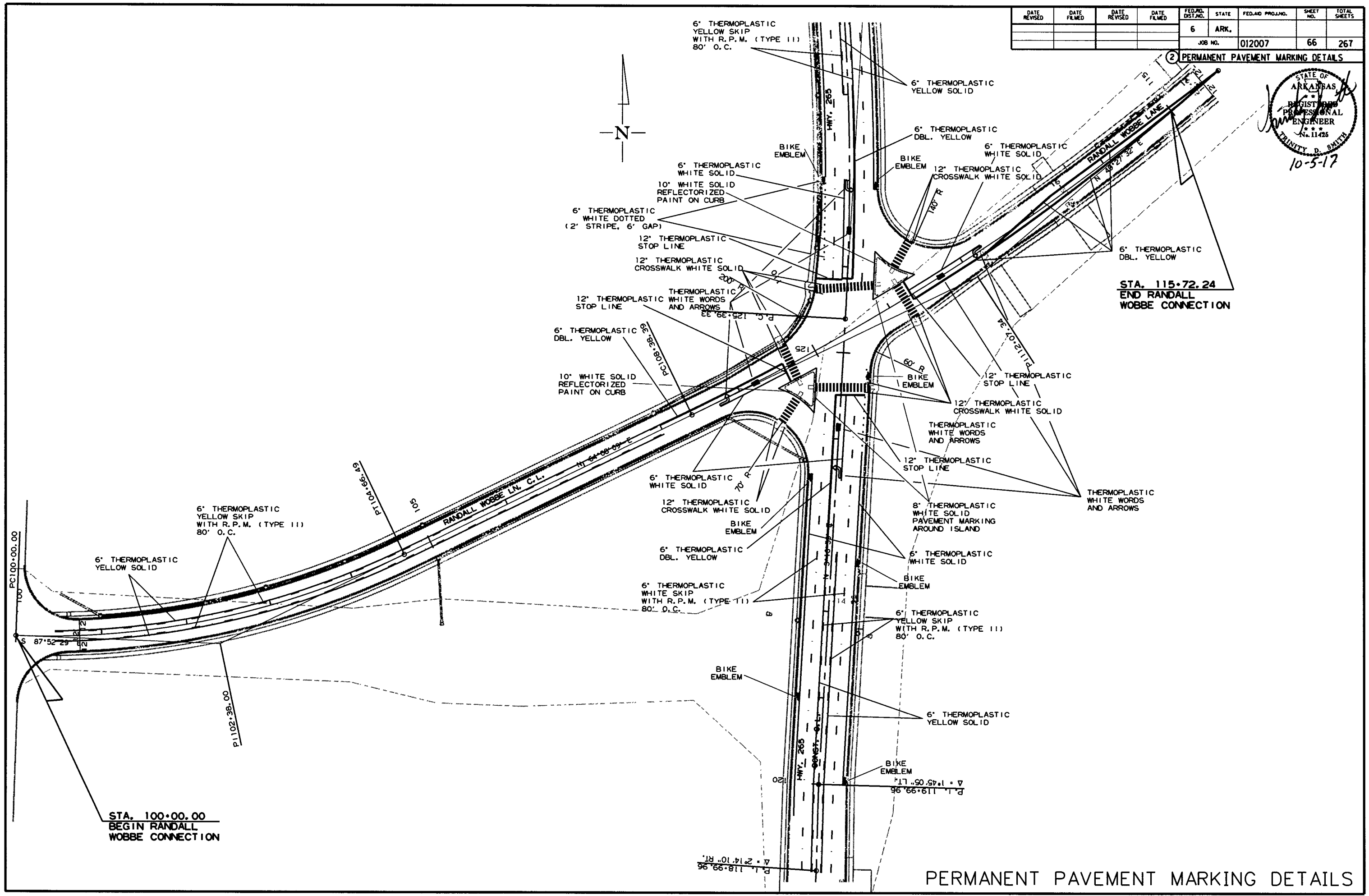
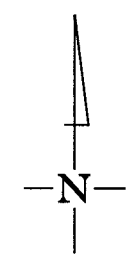
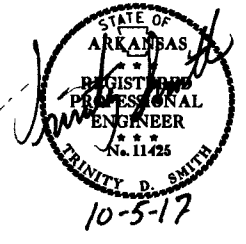
9/18/2017

RO12007KGT.DGN

PERMANENT PAVEMENT MARKING DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		66	267
				JOB NO.	012007			

PERMANENT PAVEMENT MARKING DETAILS



STA. 115+72.24
END RANDALL
WOBBE CONNECTION

STA. 100+00.00
BEGIN RANDALL
WOBBE CONNECTION

PERMANENT PAVEMENT MARKING DETAILS

9/18/2017

R012007KGT.DGN

DATE REVISED	DATE FILED	DATE REVISED	DATE FILED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
10-31-17				6	ARK.			
						JOB NO. 012007	67	267

2 QUANTITIES



ADVANCE WARNING SIGNS AND DEVICES

SIGN NUMBER	DESCRIPTION	SIGN SIZE	STAGE 1	STAGE 2	STAGE 3	MAXIMUM NUMBER REQUIRED	TOTAL SIGNS REQUIRED		CONSTRUCTION PROJECT INFORMATION SIGN UPDATE	VERTICAL PANELS	TRAFFIC DRUMS	BARRICADES (TYPE III)	
			LIN. FT. - EACH				NO.	SQ. FT.				RIGHT	LEFT
								EACH	EACH	LIN. FT.			
W20-1	ROAD WORK 1500 FT.	48"x48"	2	2	2	2	2	32.0					
W20-1	ROAD WORK 1000 FT.	48"x48"	2	2	2	2	2	32.0					
W20-1	ROAD WORK 500 FT.	48"x48"	2	2	2	2	2	32.0					
W20-1	ROAD WORK AHEAD	48"x48"	8	6	7	8	8	128.0					
G20-2	END ROAD WORK	48"x24"	10	8	9	10	10	80.0					
R11-2	ROAD CLOSED	48"x30"	8	5		8	8	80.0					
R4-1	DO NOT PASS	24"x30"	2	2		2	2	10.0					
W21-5a	RIGHT SHOULDER CLOSED	36"x36"	2			2	2	18.0					
SPECIAL	CONSTRUCTION PROJECT INFORMATION SIGN	96"x48"	2	2	2	2	2	64.0					
	CONSTRUCTION PROJECT INFORMATION SIGN UPDATE								10				
	VERTICAL PANELS		7	14		14				14			
	TRAFFIC DRUMS		145	117		145					145		
	TYPE III BARRICADE-RT. (16')		8	5		8						128	
	TYPE III BARRICADE-LT. (16')		8	2		8							128
TOTALS:								476.0	10	14	145	128	128

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

CONSTRUCTION PAVEMENT MARKINGS AND PERMANENT PAVEMENT MARKINGS

DESCRIPTION	STAGE 1	STAGE 2	STAGE 3	REMOVAL OF PERMANENT PAVEMENT MARKINGS	CONSTRUCTION PAVEMENT MARKINGS	CONSTRUCTION PAVEMENT MARKINGS	REMOVAL OF PERMANENT PAVEMENT MARKING	REMOVAL OF CONSTRUCTION PAVEMENT MARKINGS	RAISED PAVEMENT MARKERS		THERMOPLASTIC PAVEMENT MARKING						REFLECTORIZED PAINT PAVEMENT MARKING				
	LIN. FT. - EACH								LIN. FT.		EACH		LIN. FT.		LIN. FT.						
											ARROWS	ARROWS	TYPE II (WHITE/RED)	TYPE II (YEL/YEL)	6" WHITE	6" YELLOW		8" WHITE	8" YELLOW	12" WHITE	12" YELLOW
REMOVAL OF PERMANENT PAVEMENT MARKINGS	5669	1783	626	8078																	
CONSTRUCTION PAVEMENT MARKINGS	8100	52520			60620																
CONSTRUCTION PAVEMENT MARKINGS (ARROWS)	1	5				6															
REMOVAL OF PERMANENT PAVEMENT MARKING (ARROWS)	1						1														
REMOVAL OF CONSTRUCTION PAVEMENT MARKINGS		4684						4684													
RAISED PAVEMENT MARKERS TYPE II (WHITE/RED)			262						262												
RAISED PAVEMENT MARKERS TYPE II (YEL/YEL)			259							259											
THERMOPLASTIC PAVEMENT MARKING WHITE (6")			22750								22750										
THERMOPLASTIC PAVEMENT MARKING YELLOW (6")			30108									30108									
THERMOPLASTIC PAVEMENT MARKING WHITE (8")			725										725								
THERMOPLASTIC PAVEMENT MARKING WHITE (12")			1692											1692							
THERMOPLASTIC PAVEMENT MARKING (WORDS)			8												8						
THERMOPLASTIC PAVEMENT MARKING (ARROWS)			8													8					
THERMOPLASTIC PAVEMENT MARKING (BIKE EMBLEMS)			67														67				
REFLECTORIZED PAINT PAVEMENT MARKING WHITE (10")			560																560		
TOTALS:				8078	60620	6	1	4684	262	259	22750	30108	725	1692	8	8	67		560		

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

10/10/2017

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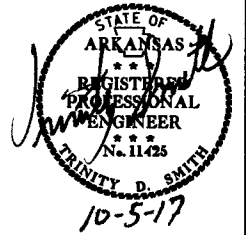
QUANTITIES

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.	012007
							68	267

REMOVAL AND DISPOSAL OF FENCE

STATION	STATION	LOCATION	FENCE	GATES
			LIN. FT.	EACH
123+25	131+01	MAIN LANES - LT. & RT.	880	
132+25	125+25	MAIN LANES - LT.	205	
125+25	132+14	MAIN LANES - RT.	700	
138+10	138+60	MAIN LANES - LT.	50	
144+40		MAIN LANES - LT. & RT.	170	
149+02		MAIN LANES - LT. & RT.	160	
150+25		MAIN LANES - LT. & RT.	190	
150+25	150+60	MAIN LANES - LT.	200	1
151+10	151+45	MAIN LANES - LT.	80	1
151+12	153+25	MAIN LANES - LT.	200	
151+45	152+30	MAIN LANES - RT.	150	1
152+40	152+55	MAIN LANES - RT.	50	1
171+00		MAIN LANES - RT.	150	
174+35	188+58	MAIN LANES - LT. & RT.	640	
175+00		MAIN LANES - RT.	150	
175+80	176+82	MAIN LANES - LT. & RT.	180	
178+35		MAIN LANES - RT.	150	
183+35		MAIN LANES - LT. & RT.	190	
187+10	189+00	MAIN LANES - LT. & RT.	260	
191+80	193+20	MAIN LANES - LT. & RT.	240	
207+75	208+39	MAIN LANES - LT. & RT.	275	
215+30	218+52	MAIN LANES - LT. & RT.	340	
216+65	221+05	MAIN LANES - LT. & RT.	713	
218+70	219+40	MAIN LANES - LT.	76	
219+55	221+31	MAIN LANES - LT.	299	
100+72	104+52	RANDALL WOBBE CONN. LT. & RT.	399	
104+70	105+00	RANDALL WOBBE CONN RT.	34	
TOTALS:			7131	4

2 QUANTITIES



REMOVAL AND DISPOSAL OF CULVERTS

STATION	DESCRIPTION	PIPE CULVERTS
		EACH
121+82	REMOVE 30' LT. & 6' RT. OF EXIST. 24" X 147' R.C. PIPE CULVERT	2
152+56	24" X 6' C.M.P. - MAIN LANES	1
153+12	24" X 177' C.M.P. - MAIN LANES	1
153+59	6" X 57' PLASTIC PIPE CULVERT - MAIN LANES	1
155+62	6" X 351' PLASTIC PIPE CULVERT - MAIN LANES	1
219+49	15" X 25' PLASTIC PIPE CULVERT - MAIN LANES	1
219+75	12" X 19' PLASTIC PIPE CULVERT - MAIN LANES	1
104+56	24" X 79' R.C. PIPE CULVERT - RANDALL WOBBE CONN.	1
105+18	18" X 28' C.M.P. - RANDALL WOBBE CONN	1
113+37	24" X 62' R.C.P. - RANDALL WOBBE CONN.	1
115+32	12" X 52' C.M.P. - RANDALL WOBBE CONN.	1
TOTAL:		12

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

REMOVAL AND DISPOSAL OF ITEMS

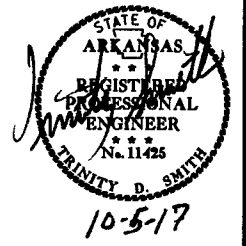
STATION	STATION	LOCATION	CURB	CURB AND GUTTER	CONCRETE ISLANDS	WALKS	WELL	POSTS	CONCRETE SLABS	SEPTIC SYSTEM	SIGN FOUNDATIONS	BUILDINGS	SIGNS
			LIN. FT.	LIN. FT.	SQ. YD.	SQ. YD.	EACH	EACH	SQ. YD.	EACH	EACH	EACH	EACH
149+35		MAIN LANES - RT.										1	
149+65		MAIN LANES - LT.								1		1	
149+65		MAIN LANES - LT. & RT.										1	
149+75		MAIN LANES - LT.									1		1
149+75		MAIN LANES - RT.										1	
150+00		MAIN LANES - RT.										2	
150+20		MAIN LANES - LT.					1					1	
150+20		MAIN LANES - LT.						1					
152+00		MAIN LANES - RT.								1		1	
153+50		MAIN LANES - RT.						1					
154+20		MAIN LANES - RT.						1					
172+00		MAIN LANES - LT. & RT.								1		1	
172+50		MAIN LANES - LT. & RT.							5				
173+00		MAIN LANES - LT. & RT.										1	
206+40		MAIN LANES - LT. & RT.										1	
206+40		MAIN LANES - RT.										3	
206+90	207+57	MAIN LANES - LT. & RT.		275		153							
207+60	208+27	MAIN LANES - LT. & RT.		275		153							
120+67	121+14	MAIN LANES - LT.			112								
121+33	121+37	MAIN LANES - LT.			80								
121+59	121+82	MAIN LANES - LT.			37								
101+09	103+03	HWY. 264	194										
101+74	103+03	HWY. 264	129										
TOTALS:			323	550	229	306	1	3	5	3	1	14	1

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QUANTITIES

2 QUANTITIES



4" PIPE UNDERDRAIN

STATION	STATION	LOCATIONS	4" PIPE UNDERDRAINS	UNDERDRAIN OUTLET PROTECTORS
			LIN. FT.	EACH
100+00.00	104+67.00	MAIN LANES	547	3
121+00.00	142+03.69	MAIN LANES	2464	10
145+92.37	163+26.86	MAIN LANES	2014	8
170+11.51	183+37.72	MAIN LANES	1566	7
195+19.20	206+85.17	MAIN LANES	1366	6
214+78.09	220+93.09	MAIN LANES	735	4
* ENTIRE PROJECT TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER			1000	5
TOTALS:			9692	43

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

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

BENCH MARKS

STATION	LOCATION	BENCH MARKS
		EACH
144+50	MAIN LANES IN RT. HEADWALL	1
208+48	MAIN LANES IN RT. HEADWALL	1
TOTAL:		2

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

CLEARING AND GRUBBING

STATION	STATION	LOCATION	CLEARING	GRUBBING
			STATION	STATION
102+00	103+00	MAIN LANES	1	1
104+00	113+00	MAIN LANES	9	9
115+00	119+00	MAIN LANES	4	4
122+00	132+00	MAIN LANES	10	10
133+00	135+00	MAIN LANES	2	2
137+00	141+00	MAIN LANES	4	4
144+00	153+00	MAIN LANES	9	9
158+00	167+00	MAIN LANES	9	9
170+00	180+00	MAIN LANES	10	10
182+00	185+00	MAIN LANES	3	3
187+00	198+00	MAIN LANES	11	11
205+00	206+00	MAIN LANES	1	1
218+00	219+00	MAIN LANES	1	1
TOTALS:			74	74

SELECTED PIPE BEDDING

LOCATION	SELECTED PIPE BEDDING
	CU. YD.
* ENTIRE PROJECT TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER	850
TOTAL:	850

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

SOIL LOG

STATION	LOCATION	DEPTH	LIQUID LIMIT	PLASTICITY INDEX	AASHTO CLASSIFICATION	COLOR
		FEET				
101+00	41LT *	0-5'	35	20	A-6(15)	BROWN
101+00	15LT *	0-5'	26	11	A-6(6)	BROWN
115+00	24RT A	0-5'	22	8	A-4(2)	BROWN
115+00	24RT **	0-5'	23	8	A-4(4)	BROWN
115+00	41LT A	0-5'	19	4	A-4(0)	BROWN
115+00	34RT *	0-2.5Z	28	13	A-6(5)	BROWN
115+00	32RT A	0-5'	25	11	A-6(5)	BROWN
123+00	CL	0-5'	27	11	A-6(7)	BROWN
123+00	CL *	0-5'	31	15	A-6(11)	BROWN
131+00	CL *	0-2Z	23	8	A-4(2)	BROWN
139+00	CL	0-4.2Z	34	19	A-6(9)	BROWN
139+00	50RT	0-5'	27	14	A-6(5)	BROWN
147+00	20RT	0-5'	32	15	A-6(7)	BROWN
155+00	CL	0-5'	31	19	A-6(10)	BROWN
155+00	19RT	0-5'	29	16	A-6(10)	BROWN
163+00	18RT	0-5'	24	11	A-6(2)	BROWN
163+00	CL	0-5'	26	12	A-6(3)	BROWN
171+00	CL	0-5'	25	12	A-6(5)	BROWN
171+00	7RT	0-5'	24	10	A-4(5)	BROWN
179+00	CL	0-4.0Z	23	7	A-4(4)	BROWN
187+00	CL	0-5'	24	6	A-4(4)	BROWN
195+00	CL	0-5'	26	11	A-6(6)	BROWN
203+00	CL	0-5'	36	24	A-6(18)	BROWN
203+00	CL	0-5'	35	22	A-6(16)	BROWN
211+00	CL	0-5'	28	9	A-4(2)	BR/RD
219+00	4LT	0-5'	36	22	A-6(10)	RED
219+00	17LT	0-5'	34	21	A-6(10)	RED

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

DUMPED RIPRAP AND FILTER BLANKET

STATION	LOCATION	DUMPED RIPRAP	FILTER BLANKET
		CU. YD.	SQ. YD.
144+50	OUTLET OF PIPE CULVERT LT.	25	49
150+69	OUTLET OF PIPE CULVERT LT.	1	2
154+52	OUTLET OF PIPE CULVERT LT.	1	2
176+50	OUTLET OF PIPE CULVERT LT.	4	7
183+38	OUTLET OF PIPE CULVERT LT.	1	1
187+54	OUTLET OF PIPE CULVERT LT.	4	7
190+95	OUTLET OF PIPE CULVERT LT.	1	1
196+28	OUTLET OF PIPE CULVERT LT.	5	10
208+48	OUTLET OF PIPE CULVERT LT.	24	48
* TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER		8	15
TOTALS:		74	142

*NOTE: QUANTITY ESTIMATED. SEE SECTION 104.03 OF THE STANDARD SPECIFICATIONS

NOTE: FILTER BLANKET SHALL BE GEOTEXTILE FABRIC (TYPE 5)

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.		70	267
				JOB NO.	012007			

2 QUANTITIES



EARTHWORK

STATION	STATION	LOCATION / DESCRIPTION	UNCLASSIFIED EXCAVATION	COMPACTED EMBANKMENT	ROCK FILL	*REMOVING AND REPLACING TOPSOIL	* SOIL STABILIZATION	WOVEN GEOTEXTILE FABRIC
				NORMAL				SQ. YD.
			CU. YD.				TON	
118+00.00	221+23.93	STAGE 1-MAIN LANES	37805	44361	52073			106944
100+00.00	115+00.00	STAGE 1-RANDALL WOBBE CONN.	5712	1696	2993			9500
118+00.00	221+23.93	STAGE 2-MAIN LANES	2858	1917				
100+00.00	115+00.00	STAGE 2-RANDALL WOBBE CONN.	2754	352				
ENTIRE PROJECT		APPROACHES	85	4410				
ENTIRE PROJECT		OBLITERATION OF EXISTING ROADWAY	2502					
154+12.00		REMINGTON DRIVE TURNOUT		5				
161+00.00		JEFFERSON ST. TURNOUT	5	35				
215+60.00		OLD WIRE ROAD TURNOUT	30	10				
184+53.00		CITY OF SPRINGDALE TURNOUT ON RT.	65					
189+70.00		CITY OF SPRINGDALE TURNOUT ON LT.		1700				
189+72.00		CITY OF SPRINGDALE TURNOUT ON RT.		355				
144+50.00		CHANNEL CHANGE - MAIN LANES	36					
208+48.00		CHANNEL CHANGE - MAIN LANES	651					
105+00.00		CHANNEL CHANGE - RANDALL WOBBE CONN.	97					
121+82.00		CHANNEL CHANGE - MAIN LANES	20					
ENTIRE PROJECT		TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER				7000	100	
TOTALS:			52620	54841	55066	7000	100	116444

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

MAILBOXES

LOCATION	MAILBOXES	MAILBOX SUPPORTS
		(SINGLE) EACH
ENTIRE PROJECT	2	2
TOTALS:	2	2

CONCRETE ISLAND

STATION	LOCATION	CURB FACE TYPE	CONCRETE ISLAND SQ.YD.
109+50	RT. OF RANDALL WOBBE CONN.	C	79
110+94	LT. OF RANDALL WOBBE CONN.	C	95
206+71	LT. OF MAIN LANES	C	132
207+99	RT. OF MAIN LANES	C	118
TOTAL:			424

EROSION CONTROL

STATION	STATION	LOCATION	PERMANENT EROSION CONTROL					TEMPORARY EROSION CONTROL									
			SEEDING	LIME	MULCH COVER	WATER	SECOND SEEDING APPLICATION	TEMPORARY SEEDING	MULCH COVER	WATER	SAND BAG DITCH CHECKS	ROCK DITCH CHECKS	DROP INLET SILT FENCE	SILT FENCE	SEDIMENT BASIN	OBLITERATION OF SEDIMENT BASIN	*SEDIMENT REMOVAL & DISPOSAL
			ACRE	TON	ACRE	M.GAL.	ACRE	ACRE	ACRE	M.GAL.	BAG	CU.YD.	CU.YD.	CU.YD.	CU.YD.	CU.YD.	CU.YD.
ENTIRE PROJECT		CLEARING AND GRUBBING															
ENTIRE PROJECT		STAGE 1	4.20	8.40	4.20	428.4	4.20	4.20	85.7	242	39	2300	4125	1190	1190	1448	
ENTIRE PROJECT		STAGE 2	0.45	0.90	0.45	45.9	0.45	0.45	9.2			50		54	54	56	
*ENTIRE PROJECT TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER.			2.00	4.00	2.00	204.0	2.00	2.00	40.8	440	60	500				59	
TOTALS:			6.65	13.30	6.65	678.3	6.65	42.02	42.02	857.2	924	126	2850	13930	1244	1244	1950

BASIS OF ESTIMATE:
 LIME2 TONS / ACRE OF SEEDING
 WATER.....102.0 M.G. / ACRE OF SEEDING
 WATER.....20.4 M.G. / ACRE OF TEMPORARY SEEDING
 SAND BAG DITCH CHECKS.....22 BAGS / LOCATION
 ROCK DITCH CHECKS.....3 CU.YD./LOCATION

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

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

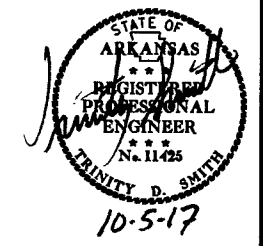
QUANTITIES

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DATE REVISED	DATE FLUED	DATE REVISED	DATE FLUED	FED. DIST. NO.	STATE	FED. PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
						JOB NO. 012007	74	267

2 QUANTITIES



STRUCTURES (BOX 2 OF 2)

STATION	DESCRIPTION	REINFORCED CONCRETE PIPE CULVERT (CLASS III)								SIDE DRAIN	PIPE CULVERT STORM DRAIN ALTERNATES 1 & 2								FLARED END SECTIONS FOR R.C. PIPE CULVERTS								DROP INLETS				YARD DRAINS	SPAN	HEIGHT	LENGTH	CLASS S CONCRETE ROADWAY	REINF. STEEL - ROADWAY (GRADE 60)	UNCL. EXC. FOR STR. ROADWAY	SOLID SODDING	WATER	STD. DWG. NOS.					
		18"		24"		30"		36"			42"		54"		60"		72"		84"		96"		108"		120"		C	MO	4"	8"											CU. YD	POUND	CU. YD.	SQ. YD.	M. GAL.
		LIN. FT.		LIN. FT.		LIN. FT.		LIN. FT.			LIN. FT.		LIN. FT.		LIN. FT.		LIN. FT.		LIN. FT.		LIN. FT.		LIN. FT.		LIN. FT.																				
MAIN LANES																																													
200+00	CONSTRUCT D I ON LT W/4' EXT & PIPE OUTLET									140																																			
201+49	CONSTRUCT D I ON LT W/4' EXT & R.C. PIPE INLET W/F E S AND PIPE OUTLET	94								116											1																								
202+74	CONSTRUCT D I ON LT W/4' EXT & PIPE OUTLET																																												
205+00	CONSTRUCT D I ON LT W/4' EXT & PIPE OUTLET																																												
205+62	CONSTRUCT D I ON RT. W/4' EXT. W/O OPENING IN BACK & R.C. PIPE OUTLET	83								106																																			
206+11	CONSTRUCT D I ON LT W/4' EXT & PIPE OUTLET																																												
206+50	CONSTRUCT YARD DRAIN ON RT								88																																				
209+15	CONSTRUCT D I ON LT W/8' EXT & PIPE OUTLET									77																																			
209+24	CONSTRUCT D I ON RT. W/8' EXT & R.C. PIPE INLET W/F E S AND PIPE OUTLET	9							60												1																								
211+23	CONSTRUCT D I ON LT W/8' EXT & PIPE OUTLET									204																																			
211+23	CONSTRUCT D I ON RT. W/8' EXT & PIPE OUTLET								195																																				
213+73	CONSTRUCT D I ON LT W/8' EXT & PIPE OUTLET								246																																				
213+73	CONSTRUCT D I ON RT. W/8' EXT & PIPE OUTLET								246																																				
215+81	CONSTRUCT D I ON LT W/8' EXT & PIPE OUTLET								204																																				
217+04	CONSTRUCT D I ON LT W/8' EXT & PIPE OUTLET								116																																				
218+68	CONSTRUCT D I ON LT W/4' EXT & PIPE OUTLET								151																																				
219+90	CONSTRUCT D I ON RT. W/4' EXT. W/O OPENING IN BACK & R.C. PIPE OUTLET	67																																											
219+91	CONSTRUCT D I ON LT W/4' EXT. W/O OPENING IN BACK & PIPE OUTLET								116																																				
220+28	CONSTRUCT YARD DRAIN ON LT								18																																				
220+38	CONSTRUCT D I ON RT. W/4' EXT & PIPE OUTLET								80																																				
220+38	CONSTRUCT D I ON LT W/4' EXT & PIPE OUTLET								80																																				
AS DIRECTED BY THE ENGINEER																																													
RANDALL WOBBE LANE																																													
101+00	CONSTRUCT D I ON LT W/8' EXT & PIPE OUTLET								52																																				
103+00	CONSTRUCT D I ON LT W/8' EXT & PIPE OUTLET								191																																				
105+00	CONSTRUCT D I ON LT W/8' EXT & PIPE OUTLET								192																																				
105+00	CONSTRUCT D I ON RT. W/8' EXT & R.C. PIPE OUTLET	9																			1																								
108+00	CONSTRUCT D I ON LT W/8' EXT & PIPE OUTLET								296																																				
108+75	CONSTRUCT D I ON RT. W/4' EXT & PIPE OUTLET								375																																				
109+79	CONSTRUCT D I ON LT W/4' EXT & PIPE OUTLET								174																																				
114+07	CONSTRUCT D I ON LT W/8' EXT & PIPE OUTLET								51																																				
114+62	CONSTRUCT D I ON LT W/8' EXT																																												
114+62	CONSTRUCT D I ON RT.																																												
115+00	CONSTRUCT D I ON LT W/8' EXT & PIPE OUTLET								30																																				
SUBTOTALS (BOX 2 OF 2):																																													
SUBTOTALS (BOX 1 OF 2):																																													
STRUCTURES OVER 20' - 0" SPAN																																													
144+50	CONSTRUCT QUINT R.C. BOX CULVERT ON 30° LT FWD SKEW																																												
208+48	CONSTRUCT QUINT R.C. BOX CULVERT ON 15° RT FWD SKEW																																												
SUBTOTALS (BOX 2 OF 2) STRUCTURES OVER 20' SPAN:																																													
TOTALS:																																													
BASIS OF ESTIMATE																																													
WATER 12.6 GAL. / SQ YD OF SOLID SODDING																																													

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

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

R012007KGT.DGN 9/12/2017

QUANTITIES

DATE REVISED	DATE FILED	DATE REVISED	DATE FILED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-8-17				6	ARK.			
							JOB NO.	012007
							SHEET NO.	75
							TOTAL SHEETS	267

ASPHALT CONCRETE PATCHING FOR MAINTENANCE OF TRAFFIC

LOCATION	TON	TACK COAT
		GALLON
ENTIRE PROJECT - TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER	50	100
TOTALS:	50	100

BASIS OF ESTIMATE:
 ASPHALT CONCRETE PATCHING FOR MAINTENANCE OF TRAFFIC...25 TON/MILE
 TACK COAT FOR MAINTENANCE OF TRAFFIC.....50 GAL./MILE

ACHM PATCHING OF EXISTING ROADWAY

DESCRIPTION	TON
ENTIRE PROJECT - TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER	25
TOTAL:	25

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

QUANTITIES



COLD MILLING ASPHALT PAVEMENT

STATION	STATION	LOCATION	AVG. WIDTH	COLD MILLING ASPHALT PAVEMENT
			FEET	SQ. YD.
118+00.00	120+00.00	MAIN LANES	64.00	1422.22
115+72.24	116+72.24	RANDALL WOBBE CONN.	38.50	427.78
TOTAL:				1850.00

NOTE: AVERAGE MILLING DEPTH 1".

CONCRETE BASE

STATION	STATION	LOCATION	LENGTH	PORTLAND CEMENT CONCRETE BASE		
				AVG. WID.	10" U.T.	
				FEET	FEET	SQ. YD.
100+00.00	103+00.00	MAIN LANES LT. & RT.	300.00	5.00	166.67	
111+80.00	115+72.24	MAIN LANES LT. & RT.	392.24	5.00	217.91	
TOTAL:						384.58

BASE AND SURFACING

STATION	STATION	LOCATION	LENGTH	AGGREGATE BASE COURSE (CLASS 7)		TACK COAT				ACHM BINDER COURSE (1")				ACHM SURFACE COURSE (1/2")			
				TON / STATION	TON	AVG. WID.	SQ.YD.	GALLONS / SQ.YD.	GALLON	AVG. WID.	SQ.YD.	POUND / SQ.YD.	PG 64-22	AVG. WID.	SQ.YD.	POUND / SQ.YD.	PG 64-22
MAIN LANES																	
118+00.00	120+00.00	MAIN LANES - TRANSITION	200.00	51.75	103.50	83.50	1855.56	0.17	315.45	13.00	288.89	440.00	63.56	70.50	1566.67	440.00	344.67
120+00.00	123+00.00	MAIN LANES - NOTCH AND WIDEN	300.00	272.25	816.75	116.00	3866.67	0.17	657.33	47.00	1566.67	440.00	344.67	69.00	2300.00	440.00	506.00
123+00.00	207+33.46	MAIN LANES - FULL DEPTH	8433.46	447.25	37718.65	128.00	119942.54	0.05	5997.13	64.00	59971.27	440.00	13193.68	64.00	59971.27	440.00	13193.68
205+91.91	209+24.87	HWY. 264/HWY. 265 INTERSECTION - ADD'L.	332.96	VAR.	814.67	VAR.	1163.81	0.05	58.19	VAR.	1163.81	440.00	256.04	VAR.	1163.81	440.00	256.04
207+88.30	221+20.00	MAIN LANES - FULL DEPTH	1331.70	447.25	5956.03	128.00	18939.73	0.05	946.99	64.00	9469.87	440.00	2083.37	64.00	9469.87	440.00	2083.37
221+20.00	221+23.93	MAIN LANES - MILL AND INLAY	3.93			44.00	19.21	0.17	3.27				44.00	19.21	440.00	4.23	
100+00.00	105+45.00	HWY. 264 - MILL AND INLAY	545.00			56.00	3391.11	0.17	576.49				56.00	3391.11	440.00	746.04	
184+53		MAIN LANES TURNOUT ON RT.			103.00		177.00	0.05	8.85		177.00	440.00	38.94		177.00	220.00	19.47
189+70		MAIN LANES TURNOUT ON LT.			103.00		177.00	0.05	8.85		177.00	440.00	38.94		177.00	220.00	19.47
189+72		MAIN LANES TURNOUT ON RT.			103.00		177.00	0.05	8.85		177.00	440.00	38.94		177.00	220.00	19.47
99+00.00	100+00.00	RANDALL WOBBE LANE - MILL AND INLAY	100.00			72.00	800.00	0.17	136.00	36.00	400.00	440.00	88.00	36.00	400.00	440.00	88.00
100+00.00	103+00.00	RANDALL WOBBE LANE - NOTCH AND WIDEN	300.00			72.00	2400.00	0.17	408.00	36.00	1200.00	440.00	264.00	36.00	1200.00	440.00	264.00
103+00.00	109+97.64	RANDALL WOBBE LANE - FULL DEPTH	697.64	265.75	1853.98	72.00	5581.12	0.05	279.06	36.00	2790.56	440.00	613.92	36.00	2790.56	440.00	613.92
110+75.95	111+80.00	RANDALL WOBBE LANE - FULL DEPTH	104.05	265.75	276.51	72.00	832.40	0.05	41.62	36.00	416.20	440.00	91.56	36.00	416.20	440.00	91.56
111+80.00	115+72.24	RANDALL WOBBE LANE - OVERLAY	392.24			41.00	1786.87	0.17	303.77	5.00	217.91	440.00	47.94	36.00	1568.96	440.00	345.17
115+72.24	116+72.24	RANDALL WOBBE LANE - TRANSITION	100.00	16.25	16.25	48.00	533.33	0.17	90.67	8.00	88.89	440.00	19.56	40.00	444.44	440.00	97.78
ADDITIONAL FOR LEVELING																	
152+00.00	152+75.00	MAIN LANES	75.00			VAR.	216.67	VAR.	36.83					VAR.	216.67	VAR.	23.83
220+20.00	222+00.00	MAIN LANES	180.00			VAR.	880.00	VAR.	149.60					VAR.	880.00	VAR.	96.80
100+00.00	103+00.00	RANDALL WOBBE LANE	300.00			VAR.	1672.96	VAR.	284.40					VAR.	1672.96	VAR.	184.03
115+00.00	115+72.24	RANDALL WOBBE LANE	72.24			VAR.	454.43	VAR.	77.25					VAR.	454.43	VAR.	49.99
ADDITIONAL FOR METHOD OF RAISING GRADE																	
146+45.00	151+45.00	JEFFERSON ROAD RAMP TO HWY. 265	500.00			96.00	5333.33	0.05	266.67	24.00	1333.33	2092.20	1394.80				
153+75.00	156+25.00	JEFFERSON ROAD RAMP TO HWY. 265	250.00			96.00	2666.67	0.05	133.33	24.00	666.67	2092.20	697.40				
216+50.00	221+23.93	MAIN LANES	473.93			43.40	2285.40	0.05	114.27	21.70	1142.70	880.00	502.79				
TOTALS:					47865.34		175152.81		10902.87		81247.77		19778.11		88457.16		19047.52

BASIS OF ESTIMATE:
 ACHM SURFACE COURSE (1/2").....94.0% MIN. AGGR.....6.0% ASPHALT BINDER
 ACHM BINDER COURSE (1").....95.0% MIN. AGGR.....5.0% ASPHALT BINDER
 MAXIMUM NUMBER OF GYRATIONS = 115 FOR PG 64-22
 TACK COAT QUANTITIES WERE CALCULATED USING THE EMULSIFIED ASPHALT RATES. REFER TO SS-400-1 FOR THE RESIDUAL ASPHALT APPLICATION RATES.

QUANTITIES

10/10/2017

RO12007KCT.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.	012007		76	267

2 QUANTITIES



DRIVEWAYS & TURNOUTS

STATION	SIDE	LOCATION	WIDTH FEET	**MODIFIED CURB		PORTLAND CEMENT CONCRETE DRIVEWAY SQ. YD.	ACHM SURFACE COURSE (1/2") 220 LBS. PER SQ. YD. (PG 64-22)		AGGREGATE BASE COURSE (CLASS 7) TON	SIDE DRAINS 18" 30" LIN. FT.		STANDARD DRAWINGS
				STATION	STATION		SQ. YD.	TON		TON	TON	
122+14	RT.	MAIN LANES	36	121+82	122+46	56.89	185.60	20.42	75.79			
131+47	LT.	MAIN LANES	16	131+25	131+69	39.11	73.51	8.09	30.02			
131+47	RT.	MAIN LANES	16	131+25	131+69	39.11	47.29	5.20	19.31			
133+41	RT.	MAIN LANES	16	133+19	133+63	39.11	50.54	5.56	20.64			
134+71	LT.	MAIN LANES	16	134+49	134+93	39.11	66.68	7.33	27.23			
138+36	LT.	MAIN LANES	16	138+14	138+58	39.11	101.80	11.20	41.57			
139+27	LT.	MAIN LANES	16	139+05	139+49	39.11	98.38	10.82	40.17			
140+00	RT.	MAIN LANES	16	139+78	140+22	39.11	47.04	5.17	19.21			
146+40	LT.	MAIN LANES	16	146+18	146+62	39.11	118.15	13.00	48.24			
146+40	RT.	MAIN LANES	16	146+18	146+62	39.11	72.21	7.94	29.49			
148+02	LT.	MAIN LANES	16	147+80	148+24	39.11	118.45	13.03	48.37			
149+53	RT.	MAIN LANES	16	149+31	149+75	39.11	46.56	5.12	19.01			
149+85	LT.	MAIN LANES	16	149+63	150+07	39.11	88.04	9.68	35.95			
150+22	RT.	MAIN LANES	38	149+89	150+55	58.67	94.92	10.44	38.76			
151+62	RT.	MAIN LANES	16	151+40	151+84	39.11	24.14	2.66	9.86			
152+60	RT.	MAIN LANES	16	152+38	152+82	39.11	25.78	2.84	10.53			
154+09	RT.	REMINGTON DRIVE TURNOUT	30	153+80	154+38		511.33	56.25	208.79			
154+12	LT.	MAIN LANES	16	153+90	154+34	39.11	96.39	10.60	39.36			
157+45	RT.	JEFFERSON ST. TURNOUT	30	157+16	157+74		1330.13	146.31	543.14			
157+64	RT.	DRIVE OFF JEFFERSON ST. TURNOUT	16	157+42	157+86	39.11	8.89	0.98	3.63			
168+00	LT.	MAIN LANES	16	167+78	168+22	39.11	23.86	2.62	9.74			
172+04	LT.	MAIN LANES	16	171+82	172+26	39.11	62.61	6.89	25.57			
173+59	LT.	MAIN LANES	16	173+37	173+81	39.11	89.42	9.84	36.51			
178+57	LT.	MAIN LANES	16	178+35	178+79	39.11	139.25	15.32	56.86			
180+52	RT.	MAIN LANES	24	180+26	180+78	46.22	50.43	5.55	20.59			
180+55	LT.	MAIN LANES	16	180+33	180+77	39.11	84.92	9.34	34.68			
183+42	RT.	MAIN LANES	24	183+16	183+68	46.22	54.61	6.01	22.30			
184+00	LT.	MAIN LANES	16	183+78	184+22	39.11	110.54	12.16	45.14			
184+53	RT.	CITY OF SPRINGDALE STREET	40	184+19	184+87							
189+70	LT.	CITY OF SPRINGDALE STREET	40	189+36	190+04							
189+72	RT.	CITY OF SPRINGDALE STREET	40	189+38	190+06							
192+00	LT.	MAIN LANES	16	191+78	192+22	39.11	156.76	17.24	64.01	56		PCC-1, PCM-1, PCP-1, PCP-2
194+50	RT.	MAIN LANES	16	194+28	194+72	39.11	89.26	9.82	36.45			
194+50	LT.	MAIN LANES	16	194+28	194+72	39.11	156.69	17.24	63.98			
198+80	LT.	MAIN LANES	16	198+58	199+02	39.11	71.59	7.87	29.23			
198+80	RT.	MAIN LANES	16	198+58	199+02	39.11	84.73	9.32	34.60			
202+18	RT.	MAIN LANES	40	201+84	202+52	60.44	62.22	6.84	25.41			
202+22	LT.	MAIN LANES	40	201+88	202+56	60.44	57.82	6.36	23.61			
205+72	LT.	MAIN LANES	16	205+50	205+94	39.11	50.28	5.53	20.53			
205+95	RT.	MAIN LANES	16	205+73	206+17	39.11	47.15	5.19	19.25			
215+60	RT.	OLD WIRE RD. TURNOUT	20	215+36	215+84		403.09	44.34	164.60	32		PCC-1, PCM-1, PCP-1, PCP-2
219+48	LT.	MAIN LANES	16	219+26	219+70	39.11	17.78	1.96	7.26			
219+57	RT.	MAIN LANES	16	219+35	219+79	39.11	17.78	1.96	7.26			
112+28	RT.	RANDALL WOBBE LANE/HWY. 265 CONN.	16	112+06	112+50	39.11	110.06	12.11	44.94			
113+37	LT.	RANDALL WOBBE LANE/HWY. 265 CONN.	16	113+15	113+59	39.11	36.20	3.98	14.78			
113+37	RT.	RANDALL WOBBE LANE/HWY. 265 CONN.	16	113+15	113+59	39.11	76.68	8.43	31.31			
115+32	LT.	RANDALL WOBBE LANE/HWY. 265 CONN.	16	115+10	115+54	39.11	36.43	4.01	14.88			
*ENTIRE PROJECT TEMPORARY DRIVES									500.00			
TOTALS:						1697.73	5295.99	582.57	2662.56	32	56	

BASIS OF ESTIMATE:
 ACHM SURFACE COURSE (1/2") 94.0% MIN. AGGR. 6.0% ASPHALT BINDER
 MAXIMUM NUMBER OF GYRATIONS = 115 FOR PG 64-22

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

** FOR INFORMATION ONLY

9/12/2017

R012007KGT.DGN

SUMMARY OF QUANTITIES (BOX 1 OF 3)

ITEM NUMBER	ITEM	QUANTITY	UNIT
SP & 201	CLEARING	74	STATION
201	GRUBBING	74	STATION
202	REMOVAL AND DISPOSAL OF CURB	323	LIN. FT.
202	REMOVAL AND DISPOSAL OF CURB AND GUTTER	550	LIN. FT.
202	REMOVAL AND DISPOSAL OF WELL	1	EACH
202	REMOVAL AND DISPOSAL OF FENCE	7131	LIN. FT.
202	REMOVAL AND DISPOSAL OF GATES	4	EACH
202	REMOVAL AND DISPOSAL OF POSTS	3	EACH
202	REMOVAL AND DISPOSAL OF CONCRETE SLABS	5	SQ. YD.
202	REMOVAL AND DISPOSAL OF CONCRETE ISLANDS	229	SQ. YD.
202	REMOVAL AND DISPOSAL OF WALKS	306	SQ. YD.
202	REMOVAL AND DISPOSAL OF SIGN FOUNDATIONS	1	EACH
202	REMOVAL AND DISPOSAL OF PIPE CULVERTS	12	EACH
202	REMOVAL AND DISPOSAL OF BUILDINGS	14	EACH
202	REMOVAL AND DISPOSAL OF SIGNS	1	EACH
202	REMOVAL AND DISPOSAL OF SEPTIC SYSTEM	3	EACH
202	REMOVAL AND DISPOSAL OF FIRE HYDRANT	1	EACH
206	FLOWABLE SELECT MATERIAL	214	CU. YD.
210	UNCLASSIFIED EXCAVATION	52620	CU. YD.
210	COMPACTED EMBANKMENT	54841	CU. YD.
SP & 210	ROCK FILL	55066	CU. YD.
SP	REMOVING AND REPLACING TOPSOIL	7000	CU. YD.
SP & 210	SOIL STABILIZATION	100	TON
SS & 303	AGGREGATE BASE COURSE (CLASS 7)	51844	TON
309	PORTLAND CEMENT CONCRETE BASE (10" UNIFORM THICKNESS)	385	SQ. YD.
SS & 401	TACK COAT	11003	GAL.
SP, SS, & 406	MINERAL AGGREGATE IN ACHM BINDER COURSE (1")	18789	TON
SP, SS, & 406	ASPHALT BINDER (PG 64-22) IN ACHM BINDER COURSE (1")	989	TON
SP, SS, & 407	MINERAL AGGREGATE IN ACHM SURFACE COURSE (1/2")	18786	TON
SP, SS, & 407	ASPHALT BINDER (PG 64-22) IN ACHM SURFACE COURSE (1/2")	1199	TON
412	COLD MILLING ASPHALT PAVEMENT	1850	SQ. YD.
SP, SS & 414	ASPHALT CONCRETE PATCHING FOR MAINTENANCE OF TRAFFIC	50	TON
SP, SS, & 415	ACHM PATCHING OF EXISTING ROADWAY	25	TON
505	PORTLAND CEMENT CONCRETE DRIVEWAY	1697.73	SQ. YD.
601	MOBILIZATION	1.00	LUMP SUM
SP & 602	FURNISHING FIELD OFFICE	1	EACH
603	MAINTENANCE OF TRAFFIC	1.00	LUMP SUM
SS & 604	SIGNS	476	SQ. FT.
SP, SS, & 604	CONSTRUCTION PROJECT INFORMATION SIGN UPDATE	10	EACH
SS & 604	BARRICADES	256	LIN. FT.
SS & 604	TRAFFIC DRUMS	145	EACH
604	CONSTRUCTION PAVEMENT MARKINGS	60620	LIN. FT.
604	CONSTRUCTION PAVEMENT MARKINGS (ARROWS)	6	EACH
604	REMOVAL OF CONSTRUCTION PAVEMENT MARKINGS	4684	LIN. FT.
604	REMOVAL OF PERMANENT PAVEMENT MARKINGS (ARROWS)	1	EACH
SP & 604	REMOVAL OF PERMANENT PAVEMENT MARKINGS	8078	LIN. FT.
SS & 604	VERTICAL PANELS	14	EACH
606	18" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)	358	LIN. FT.
606	18" REINFORCED CONCRETE PIPE CULVERTS (CLASS III) (ALTERNATE NO. 1)	7563	LIN. FT.
606	18" SMOOTH LINED POLYMER PRECOATED METALLIC COATED CORRUGATED STEEL PIPE (ALTERNATE NO. 2)	7563	LIN. FT.
606	24" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)	629	LIN. FT.
606	24" REINFORCED CONCRETE PIPE CULVERTS (CLASS III) (ALTERNATE NO. 1)	1382	LIN. FT.
606	24" SMOOTH LINED POLYMER PRECOATED METALLIC COATED CORRUGATED STEEL PIPE (ALTERNATE NO. 2)	1382	LIN. FT.
606	30" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)	94	LIN. FT.
606	30" REINFORCED CONCRETE PIPE CULVERTS (CLASS III) (ALTERNATE NO. 1)	708	LIN. FT.
606	30" SMOOTH LINED POLYMER PRECOATED METALLIC COATED CORRUGATED STEEL PIPE (ALTERNATE NO. 2)	708	LIN. FT.
606	36" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)	178	LIN. FT.
606	36" REINFORCED CONCRETE PIPE CULVERTS (CLASS III) (ALTERNATE NO. 1)	80	LIN. FT.
606	36" SMOOTH LINED POLYMER PRECOATED METALLIC COATED CORRUGATED STEEL PIPE (ALTERNATE NO. 2)	80	LIN. FT.
606	42" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)	88	LIN. FT.
606	54" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)	107	LIN. FT.
606	22" X 14" REINFORCED CONCRETE ARCH PIPE CULVERTS (CLASS III) (ALTERNATE NO. 1)	161	LIN. FT.
606	21" X 15" SMOOTH LINED POLYMER PRECOATED METALLIC COATED CORRUGATED STEEL ARCH PIPE (ALTERNATE NO. 2)	161	LIN. FT.
606	51" X 31" REINFORCED CONCRETE ARCH PIPE CULVERTS (CLASS III)	83	LIN. FT.
606	51" X 31" REINFORCED CONCRETE ARCH PIPE CULVERTS (CLASS III) (ALTERNATE NO. 1)	476	LIN. FT.
606	51" X 31" SMOOTH LINED POLYMER PRECOATED METALLIC COATED CORRUGATED STEEL ARCH PIPE (ALTERNATE NO. 2)	476	LIN. FT.
SS & 606	12" SIDE DRAIN	869	LIN. FT.
SP, SS, & 606	18" SIDE DRAIN	32	LIN. FT.
SP, SS, & 606	30" SIDE DRAIN	56	LIN. FT.
606	18" FLARED END SECTIONS FOR REINFORCED CONCRETE PIPE CULVERTS	9	EACH
606	24" FLARED END SECTIONS FOR REINFORCED CONCRETE PIPE CULVERTS	6	EACH
606	30" FLARED END SECTIONS FOR REINFORCED CONCRETE PIPE CULVERTS	2	EACH
606	36" FLARED END SECTIONS FOR REINFORCED CONCRETE PIPE CULVERTS	4	EACH
606	42" FLARED END SECTIONS FOR REINFORCED CONCRETE PIPE CULVERTS	1	EACH
606	54" FLARED END SECTIONS FOR REINFORCED CONCRETE PIPE CULVERTS	2	EACH
606	51" X 31" FLARED END SECTIONS FOR REINFORCED CONCRETE ARCH PIPE CULVERTS	2	EACH
606	SELECTED PIPE BEDDING	850	CU. YD.
609	DROP INLETS (TYPE C)	4	EACH
609	DROP INLETS (TYPE MO)	94	EACH
609	DROP INLET EXTENSIONS (4')	53	EACH
609	DROP INLET EXTENSIONS (8')	29	EACH
609	YARD DRAINS	17	EACH
611	UNDERDRAIN OUTLET PROTECTORS	43	EACH
611	4" PIPE UNDERDRAINS	9692	LIN. FT.
615	PAVEMENT REPAIR OVER CULVERTS (CONCRETE)	10.9	CU. YD.
615	PAVEMENT REPAIR OVER CULVERTS (ASPHALT)	220	TON
617	GUARDRAIL (TYPE C)	25	LIN. FT.

* DENOTES ALTERNATE BID ITEMS.

DATE REVISED	DATE FILED	DATE REVISED	DATE FILED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
10-31-17				6	ARK.			
11-7-17								
11-8-17						JOB NO. 012007	77	267

2 SUMMARY OF QUANTITIES



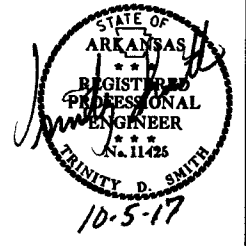
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	012007		78	267

SUMMARY OF QUANTITIES (BOX 2 OF 3)

② SUMMARY OF QUANTITIES

ITEM NUMBER	ITEM	QUANTITY	UNIT
619	WIRE FENCE (TYPE A)	13684	LIN. FT.
619	WIRE FENCE (TYPE C)	1950	LIN. FT.
619	WIRE FENCE (TYPE D)	2582	LIN. FT.
619	16' STEEL GATES (ALTERNATE NO. 1)	35	EACH
619	16' ALUMINUM GATES (ALTERNATE NO. 2)	35	EACH
620	LIME	13	TON
620	SEEDING	6.65	ACRE
SS & 620	MULCH COVER	48.67	ACRE
620	WATER	1624.2	M. GAL.
621	TEMPORARY SEEDING	42.02	ACRE
621	SILT FENCE	13930	LIN. FT.
621	SAND BAG DITCH CHECKS	924	BAG
621	DROP INLET SILT FENCE	2850	LIN. FT.
621	SEDIMENT BASIN	1244	CU. YD.
621	OBLITERATION OF SEDIMENT BASIN	1244	CU. YD.
621	SEDIMENT REMOVAL AND DISPOSAL	1950	CU. YD.
621	ROCK DITCH CHECKS	126	CU. YD.
623	SECOND SEEDING APPLICATION	6.65	ACRE
624	SOLID SODDING	7036	SQ. YD.
SP	WOVEN GEOTEXTILE FABRIC	116444	SQ. YD.
626	EROSION CONTROL MATTING (CLASS 3)	7074	SQ. YD.
632	CONCRETE ISLAND	424	SQ. YD.
633	CONCRETE WALKS	11043	SQ. YD.
634	CONCRETE COMBINATION CURB AND GUTTER (TYPE A) (1' 6")	21736	LIN. FT.
635	ROADWAY CONSTRUCTION CONTROL	1.00	LUMP SUM
637	MAILBOXES	2	EACH
637	MAILBOX SUPPORTS (SINGLE)	2	EACH
641	WHEELCHAIR RAMPS (TYPE 2)	43	SQ. YD.
641	WHEELCHAIR RAMPS (TYPE 3)	120	SQ. YD.
641	WHEELCHAIR RAMPS (TYPE 4)	128	SQ. YD.
SP & 701	SYSTEM LOCAL CONTROLLER TS2-TYPE 2, E-NET (8 PHASES)	2	EACH
SP	ETHERNET SWITCH, T100 HARDENED (8-PORT)	2	EACH
SP	E-NET CABLE (EXTERIOR CAT 5E)	150	LIN. FT.
SP	ANTENNA SUPPORT (SHOE BASE, 50' HT.)	1	EACH
SP	LOCAL RADIO (E-NET 5.8) WITH ANTENNA	2	EACH
SP & 706	TRAFFIC SIGNAL HEAD, LED, (3 SECTION, 1 WAY)	18	EACH
SP & 706	TRAFFIC SIGNAL HEAD, LED, (4 SECTION, 1 WAY)	8	EACH
SP & 707	COUNTDOWN PEDESTRIAN SIGNAL HEAD, LED	16	EACH
708	TRAFFIC SIGNAL CABLE (6C/14 A.W.G.)	4581	LIN. FT.
708	TRAFFIC SIGNAL CABLE (7C/14 A.W.G.)	514	LIN. FT.
708	TRAFFIC SIGNAL CABLE (20C/14 A.W.G.)	1152	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/8 A.W.G., E.G.C.)	1247	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/12 A.W.G., E.G.C.)	508	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (2C/6 A.W.G.)	40	LIN. FT.
SP	ELECTRICAL CONDUCTORS FOR LUMINAIRES	1540	LIN. FT.
709	GALVANIZED STEEL CONDUIT (1.25")	40	LIN. FT.
710	NON-METALLIC CONDUIT (1.25")	40	LIN. FT.
710	NON-METALLIC CONDUIT (2")	80	LIN. FT.
710	NON-METALLIC CONDUIT (3")	1311	LIN. FT.
711	CONCRETE PULL BOX (TYPE 1)	1	EACH
711	CONCRETE PULL BOX (TYPE 2)	6	EACH
711	CONCRETE PULL BOX (TYPE 1 HD)	2	EACH
711	CONCRETE PULL BOX (TYPE 2 HD)	7	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (0')	2	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (38')	2	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (40')	2	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (42')	2	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (50')	1	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (58')	1	EACH
SP	LED LUMINAIRE ASSEMBLY	8	EACH
715	TRAFFIC SIGNAL PEDESTAL POLE WITH FOUNDATION	4	EACH
SP	SERVICE POINT ASSEMBLY (2 CIRCUITS)	2	EACH
SP	REMOVAL OF TRAFFIC SIGNAL EQUIPMENT	1.00	LUMP SUM
718	REFLECTORIZED PAINT PAVEMENT MARKING WHITE (10")	560	LIN. FT.
719	THERMOPLASTIC PAVEMENT MARKING WHITE (6")	22750	LIN. FT.
719	THERMOPLASTIC PAVEMENT MARKING WHITE (8")	725	LIN. FT.
719	THERMOPLASTIC PAVEMENT MARKING WHITE (12")	1692	LIN. FT.
719	THERMOPLASTIC PAVEMENT MARKING YELLOW (6")	30108	LIN. FT.
719	THERMOPLASTIC PAVEMENT MARKING (WORDS)	8	EACH
719	THERMOPLASTIC PAVEMENT MARKING (ARROWS)	8	EACH
719	THERMOPLASTIC PAVEMENT MARKING (BKE EMBLEMS)	67	EACH
721	RAISED PAVEMENT MARKERS (TYPE II)	521	EACH
SP	18" STREET NAME SIGN	8	EACH
SP & 733	VIDEO DETECTOR (IP)	18	EACH
733	VIDEO CABLE	3097	LIN. FT.
733	VIDEO MONITOR (CLR)	2	EACH
SP & 733	VEHICLE DETECTOR RACK (16 CHANNEL)	2	EACH
SP & 733	CENTRAL CONTROL UNIT (8 CHANNEL)	4	EACH
SP & 733	VIDEO PROCESSOR, EDGE CARD IP (2 CAMERA)	10	EACH

* DENOTES ALTERNATE BID ITEMS



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DATE REVISION	DATE FILMED	DATE REVISION	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
10-19-17		11-8-17		6	ARK.			
10-31-17								
11-7-17								
						JOB NO. 012007	79	267

2 SUMMARY OF QUANTITIES AND REVISIONS



SUMMARY OF QUANTITIES (BOX 3 OF 3)

ITEM NUMBER	ITEM	QUANTITY	UNIT
816	FILTER BLANKET	142	SQ. YD.
816	DUMPED RIPRAP	74	CU. YD.
SP	6" RESTRAINED JOINT DUCTILE IRON PIPE WATER MAIN, CLASS 50	40	LIN. FT.
SP	8" DUCTILE IRON PIPE WATER MAIN, CLASS 50	118	LIN. FT.
SP	8" RESTRAINED JOINT DUCTILE IRON PIPE WATER MAIN, CLASS 50	204	LIN. FT.
SP	16" DUCTILE IRON PIPE WATER MAIN, CLASS 50	344	LIN. FT.
SP	16" RESTRAINED JOINT DUCTILE IRON PIPE WATER MAIN, CLASS 50	187	LIN. FT.
SP	24" DUCTILE IRON PIPE WATER MAIN, CLASS 50	447	LIN. FT.
SP	24" RESTRAINED JOINT DUCTILE IRON PIPE WATER MAIN, CLASS 50	632	LIN. FT.
SP	16" X 16" TAPPING SLEEVE, 16" TAPPING VALVE WITH BOX	3	EACH
SP	24" X 24" TAPPING SLEEVE, 24" TAPPING VALVE WITH BOX	1	EACH
SP	36" X 8" TAPPING SLEEVE, 8" TAPPING VALVE WITH BOX	1	EACH
SP	DUCTILE IRON PIPE WATER MAIN FITTINGS	10500	POUND
SP	1" POLYETHYLENE SERVICE TUBING	705	LIN. FT.
SP	2" POLYETHYLENE CASING	595	LIN. FT.
SP	CONCRETE THRUST COLLAR ON 8" WATER MAIN	1	EACH
SP	CONCRETE THRUST COLLAR ON 16" WATER MAIN	1	EACH
SP	CONCRETE THRUST COLLAR ON 24" WATER MAIN	2	EACH
SP	6" GATE VALVE WITH BOX	4	EACH
SP	8" GATE VALVE WITH BOX	2	EACH
SP	16" BUTTERFLY VALVE WITH BOX	1	EACH
SP	24" BUTTERFLY VALVE WITH BOX	2	EACH
SP	FIRE HYDRANT (3 WAY)	5	EACH
SP	SET OF GUARD POSTS FOR FIRE HYDRANT	5	EACH
SP	SINGLE WATER METER SETTING (INC. METER BOX AND SHUT OFF VALVE)	8	EACH
SP	LINE STOP ON EXISTING 16" WATER MAIN	2	EACH
SP	LINE STOP ON EXISTING 24" WATER MAIN	1	EACH
SP	CUT AND CAP EXISTING WATER MAIN (16")	2	EACH
SP	CUT AND CAP EXISTING WATER MAIN (24")	1	EACH
SP	TRACING WIRE CONNECTION PORT	10	EACH
SP	CATHODIC PROTECTION ON EXISTING 36" WATER MAIN	1.00	LUMP SUM
SP	8" PVC SDR-26 SEWER MAIN	385	LIN. FT.
SP	8" RESTRAINED JOINT DUCTILE IRON PIPE SEWER MAIN, CLASS 50	117	LIN. FT.
SP	MANHOLE (4' DIAMETER)	4	EACH
SP	PLUG EXISTING SANITARY SEWER (8")	2	EACH
SP	POLYETHYLENE ENCASEMENT FOR 6" AND 8" DUCTILE IRON PIPE	479	LIN. FT.
SP	POLYETHYLENE ENCASEMENT FOR 16" DUCTILE IRON PIPE	520	LIN. FT.
SP	16" STEEL CASING BY DIRECT BURY	224	LIN. FT.
SP	16" SPLIT STEEL CASING	120	LIN. FT.
SP	POLYETHYLENE ENCASEMENT FOR 24" DUCTILE IRON PIPE	1079	LIN. FT.
SP	36" STEEL CASING BY DIRECT BURY	315	LIN. FT.
SP	ABANDON EXISTING MANHOLE	1	EACH
SP	ABANDON EXISTING VALVE	3	EACH
SP	ABANDON EXISTING WATER METER SETTING AND SERVICE LINE	7	EACH
STRUCTURES OVER 20' SPAN			
801	UNCLASSIFIED EXCAVATION FOR STRUCTURES-ROADWAY	237	CU. YD.
802	CLASS S CONCRETE-ROADWAY	693.48	CU. YD.
804	REINFORCING STEEL-ROADWAY (GRADE 60)	90700	POUND

REVISIONS

DATE	REVISION	SHEET NUMBER
10/19/2017	REVISED SP TITLE "POLYVINYL CHLORIDE (PVC) GRAVITY SEWER MAIN" TO "POLYVINYL CHLORIDE GRAVITY SEWER LINES AND FORCE MAINS"; REVISED SP "SITE PREPARATION, EXCAVATION, AND FILL FOR WATER AND SEWER FACILITIES". REMOVED PAY ITEM - "ACT 291, TRENCH AND EXCAVATION SAFETY SYSTEM FOR WATER AND SEWER MAINS".	3, 79, & 126
10/31/2017	ADDED SP "CONSTRUCTION PROJECT INFORMATION SIGN"; ADDED PAY ITEM CONSTRUCTION PROJECT INFORMATION SIGN UPDATE	3, 67, 77, & 79
11/7/2017	REPLACED EMBANKMENT DETAILS; REVISED EARTHWORK QUANTITIES; REVISED CROSS SECTIONS TO SHOW ROCK FILL AND UNDERCUT; REVISED SP "BIDDING REQUIREMENTS AND CONDITIONS"	9, 70, 77, 79, & 151-267
11/8/2017	REVISED BASE AND SURFACING QUANTITIES	75, 77 & 79

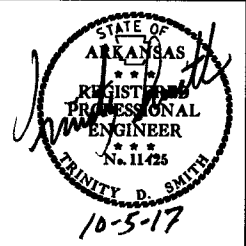
SUMMARY OF QUANTITIES AND REVISIONS

10/10/2017

R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. DIST. NO.	STATE	FED. PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	012007		80	267

2 SURVEY CONTROL DETAILS



SURVEY CONTROL COORDINATES

Project Name: s012007.alg
 Date: 7/31/2008
 Coordinate System: ARKANSAS STATE PLANE - NORTH ZONE BASED ON GPS CONTROL, PROJECTED TO GROUND.
 Units: U.S. SURVEY FOOT

Point Name	Northing	Easting	Elev	Feature	Description
1	686515.4054	687757.3446	1375.38	SU	*5/8" REBAR W/ 2" ALUM. CAP
2	687690.3762	687945.4973	1394.36	SU	*5/8" REBAR W/ 2" ALUM. CAP
3	688236.0400	688648.9185	1406.89	SU	*5/8" REBAR W/ 2" ALUM. CAP
4	689281.5552	688816.3595	1396.25	SU	*5/8" REBAR W/ 2" ALUM. CAP
5	690634.5249	689073.2598	1408.65	SU	*5/8" REBAR W/ 2" ALUM. CAP
6	691653.5253	689296.2330	1426.64	SU	*5/8" REBAR W/ 2" ALUM. CAP
7	692356.1134	689391.4901	1431.58	SU	*5/8" REBAR W/ 2" ALUM. CAP
8	693118.9628	689605.4607	1430.17	SU	*5/8" REBAR W/ 2" ALUM. CAP
9	693732.5511	689705.7079	1413.93	SU	*5/8" REBAR W/ 2" ALUM. CAP
10	694504.9296	689600.7973	1394.26	SU	*5/8" REBAR W/ 2" ALUM. CAP
11	694980.2545	689457.1901	1383.98	SU	*5/8" REBAR W/ 2" ALUM. CAP
12	695399.0152	689208.7565	1380.32	SU	*5/8" REBAR W/ 2" ALUM. CAP
100	687290.3114	685979.6694	1348.97	GPS	*NGS BM G309
101	687292.3817	687917.7109	1386.05	GPS	*AHTD GPS
108	697165.1198	688896.2073	1389.10	GPS	*AHTD GPS
109	698849.7281	688757.5701	1381.12	GPS	*AHTD GPS
134	695863.6963	689099.5597	1385.20	SU	*5/8" REBAR W/ 2" ALUM. CAP
901	686350.5607	687821.3346	1372.77	BM	*SQ CUT IN CB RIGHT OF C/L
902	687249.6701	687789.9725	1385.77	BM	*SQ CUT IN CENTER ISLAND
903	688103.1950	688527.8336	1401.96	BM	*SQ CUT CONCRETE SLAB WM
904	689266.5900	688840.9135	1397.76	BM	*SQ CUT HOWL RT C/L
905	690624.3815	689054.2391	1407.93	BM	*SQ CUT BACK CB LT C/L
906	691565.5496	689294.5892	1428.20	BM	*CPS IN CP RT OF CL
907	692541.7030	689486.0905	1432.03	BM	*SQ CUT CENTER HW RT OF CL
908	693710.3400	689631.5767	1415.96	BM	*CPS IN CP LT OF CL
909	694993.8462	689464.5342	1384.25	BM	*SQ CUT IN A PA

*Note - Rebar and Cap - Standard - 5/8" Rebar with 2" Aluminum Cap stamped
 *(standard markings common to all caps), or as indicated
 (other markings indicated in the point description of the individual point).
 USE CAF = 1.0 FOR STAKEOUT FOR THIS PROJECT
 A PROJECT CAF OF 0.9999386648 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, 012007G1.CTL
 HORIZONTAL DATUM: NAD 83 (1997)
 VERTICAL DATUM: NAVD 88

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: 720041 - 720041A
 720040 - 720040A, 720014 - 720042, 040054 - 040054A
 CONVERGENCE ANGLE: 0-99-99.9 LEFT/RIGHT AT LT: N 36-09-03.52417 LG: W094-07-07.36432
 GRID AZIMUTH = ASTRONOMICAL AZIMUTH - CONVERGENCE ANGLE.

CONST C.L.

POINT NO.	TYPE	STATION	NORTHING	EASTING
8000	POB	99+75.25	685092.3289	687733.8696
8001	PI	115+36.11	686651.7133	687801.8411
8002	PI	118+99.96	687014.7698	687825.7493
8003	PI	119+99.96	687114.7348	687828.4220
8004	PC	125+39.33	687653.2280	687859.3111
8006	PT	141+32.12	689187.4402	687515.1133
8007	PI	142+75.26	689313.1476	687446.6531
8008	PC	149+29.87	689888.4474	687134.3394
8010	PT	159+89.36	690909.2006	686906.1015
8011	PC	174+14.82	692332.3159	686987.8713
8013	PT	179+30.51	692802.0777	687177.4990
8014	PC	185+04.97	693237.7511	687551.9223
8016	PT	186+94.99	693379.2518	687678.7222
8017	PC	198+56.69	694228.1596	688471.7658
8019	PT	203+47.67	694651.3349	688711.6693
8020	PI	208+23.10	695108.2312	688843.0925
8021	PC	216+48.37	695902.1999	689068.2290
8023	PT	219+23.83	696175.0379	689087.9018
8024	POE	223+56.10	696603.5309	689030.8589

RANDALL WOBBE CONNECTION C.L.

POINT NO.	TYPE	STATION	NORTHING	EASTING
8100	PC	100+00.00	687284.3711	686894.3973
8102	PT	104+66.49	687379.3697	687346.3907
8103	PC	108+38.39	687541.6078	687681.0375
8105	PT	115+72.24	687942.3656	688293.3957

STAGE 1 MOT

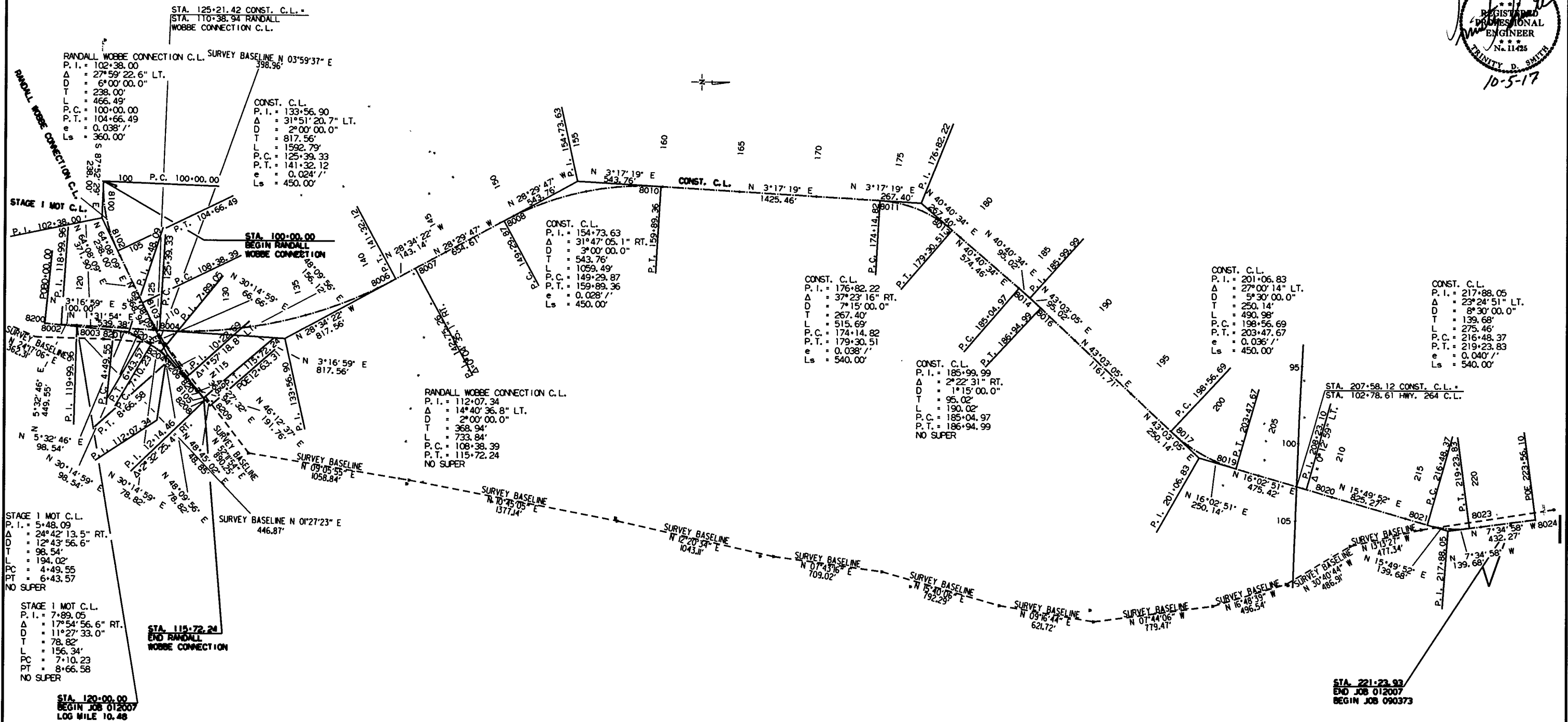
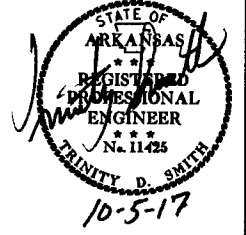
POINT NO.	TYPE	STATION	NORTHING	EASTING
8200	POB	0+00.00	686908.27	687817.68
8201	PC	4+49.55	687355.72	687861.13
8203	PT	6+43.57	687538.93	687920.29
8204	PC	7+10.23	687596.51	687953.88
8206	PT	8+66.58	687717.16	688052.30
8207	PI	10+22.69	687821.29	688168.62
8208	PI	12+14.46	687953.99	688307.05
8209	POE	12+63.31	687986.20	688343.78

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
						JOB NO. 012007	81	267

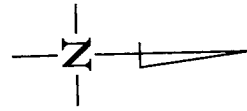
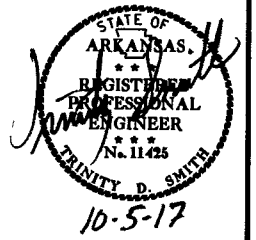
2 SURVEY CONTROL DETAILS



9/12/2017
R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. PROJ. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		82	267

2 SURVEY CONTROL DETAILS



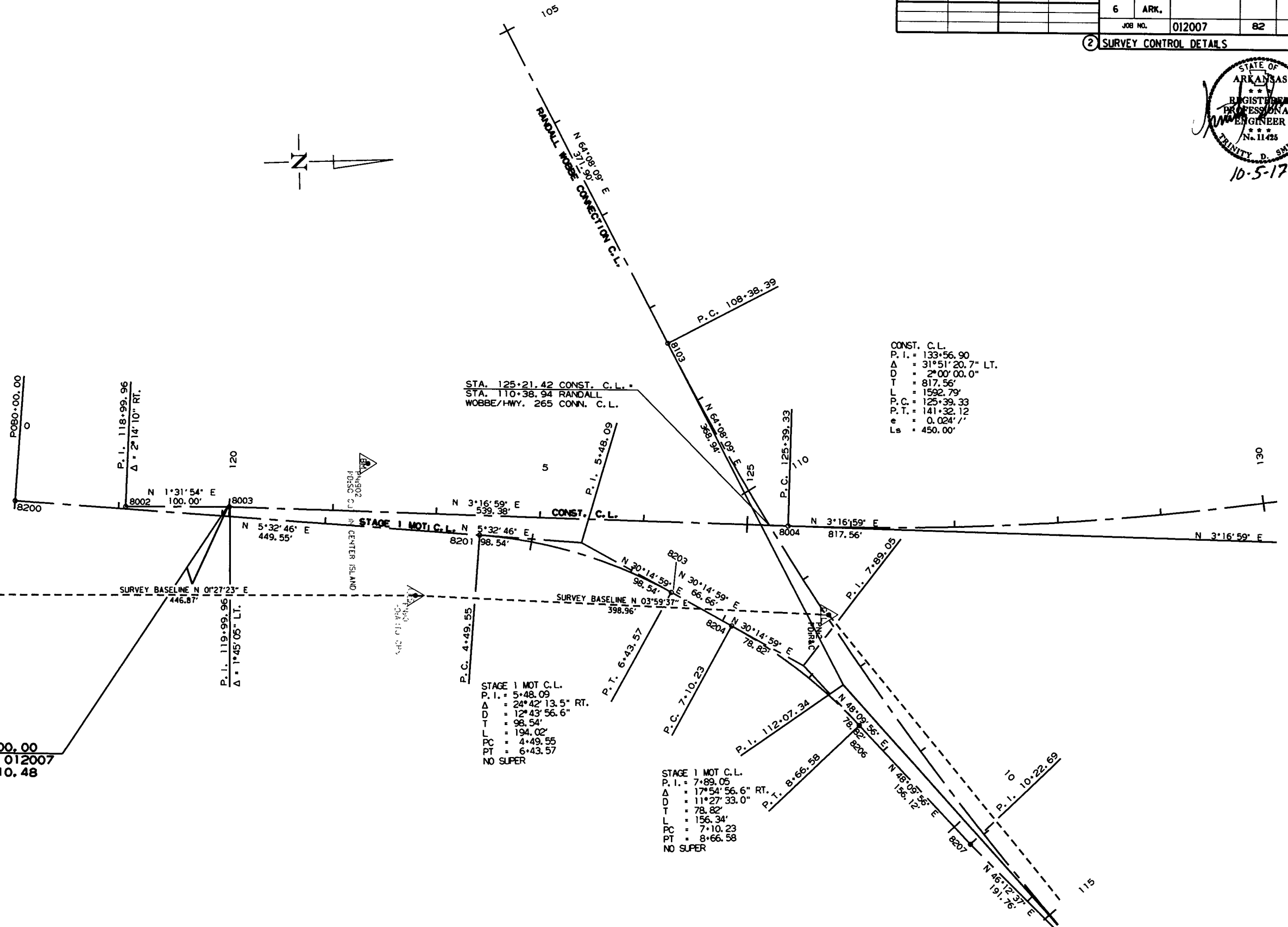
CONST. C.L.
 P. I. = 133+56.90
 Δ = 31°51'20.7" LT.
 D = 2°00'00.0"
 T = 817.56'
 L = 1592.79'
 P.C. = 125+39.33
 P.T. = 141+32.12
 e = 0.024' /'
 Ls = 450.00'

STA. 120+00.00
 BEGIN JOB 012007
 LOG MILE 10.48

STA. 125+21.42 CONST. C.L.
 STA. 110+38.94 RANDALL
 WOBBE/HWY. 265 CONN. C.L.

STAGE 1 MOT. C.L.
 P. I. = 5+48.09
 Δ = 24°42'13.5" RT.
 D = 12°43'56.6"
 T = 98.54'
 L = 194.02'
 PC = 4+49.55
 PT = 6+43.57
 NO SUPER

STAGE 1 MOT. C.L.
 P. I. = 7+89.05
 Δ = 17°54'56.6" RT.
 D = 11°27'33.0"
 T = 78.82'
 L = 156.34'
 PC = 7+10.23
 PT = 8+66.58
 NO SUPER

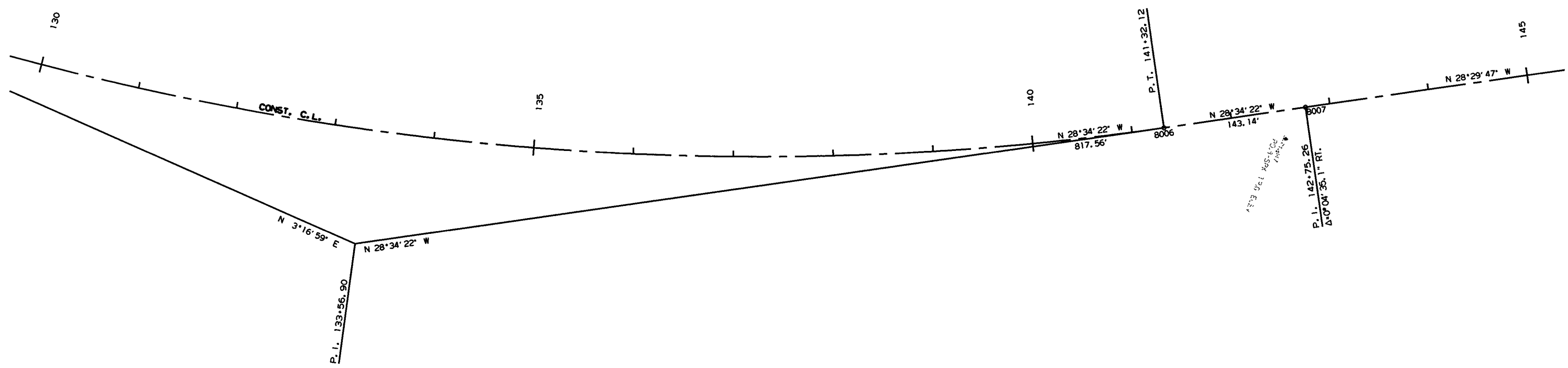
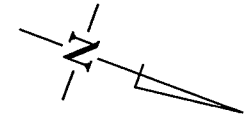


DATE REVISED	DATE FILED	DATE REVISED	DATE FILED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS	
				6	ARK.				
JOB NO.							012007	83	267

2 SURVEY CONTROL DETAILS



CONST. C.L.
P.I. = 133.56.90
Δ = 31°51'20.7" LT.
D = 2°00'00.0"
T = 817.56'
L = 1592.79'
P.C. = 125+39.33
P.T. = 141+32.12
e = 0.024' /'
Ls = 450.00'

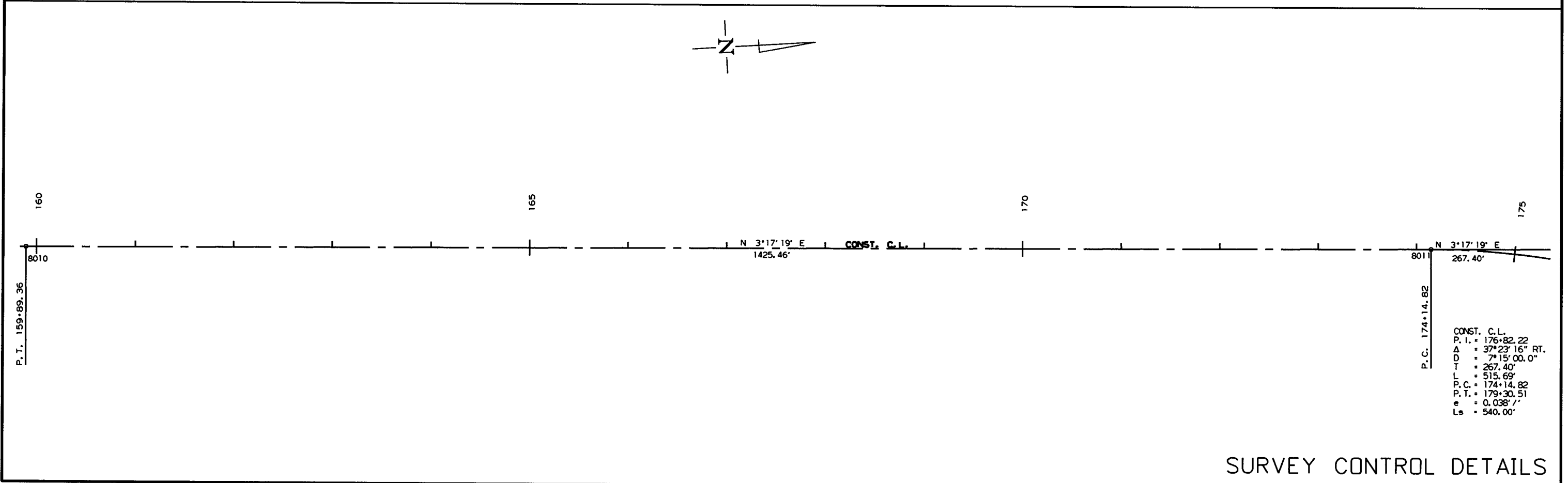
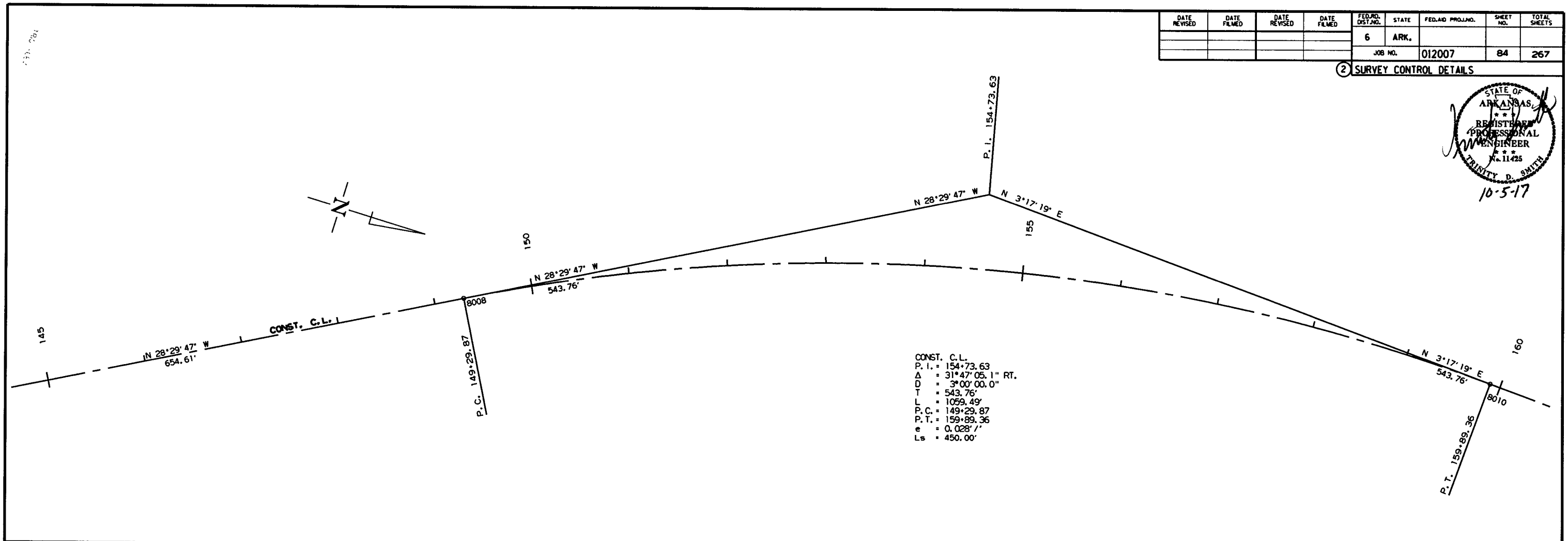
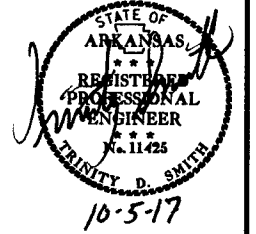


9/12/2017

R012007KGT.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.	012007		84	267

2 SURVEY CONTROL DETAILS



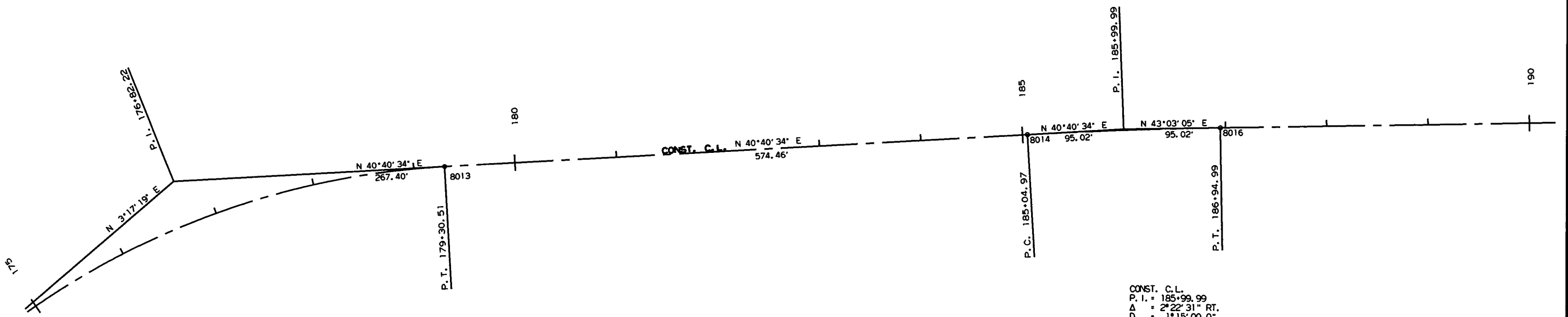
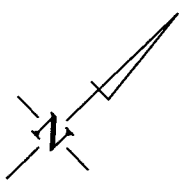
SURVEY CONTROL DETAILS

9/12/2017

R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. PROJ. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS	
				6	ARK.		85	267	
JOB NO.							012007		

2 SURVEY CONTROL DETAILS



CONST. C.L.
 P. I. = 176+82.22
 Δ = 37°23'16" RT.
 D = 7°15'00.0"
 T = 267.40'
 L = 515.69'
 P.C. = 174+14.82
 P.T. = 179+30.51
 e = 0.038'/
 L_s = 540.00'

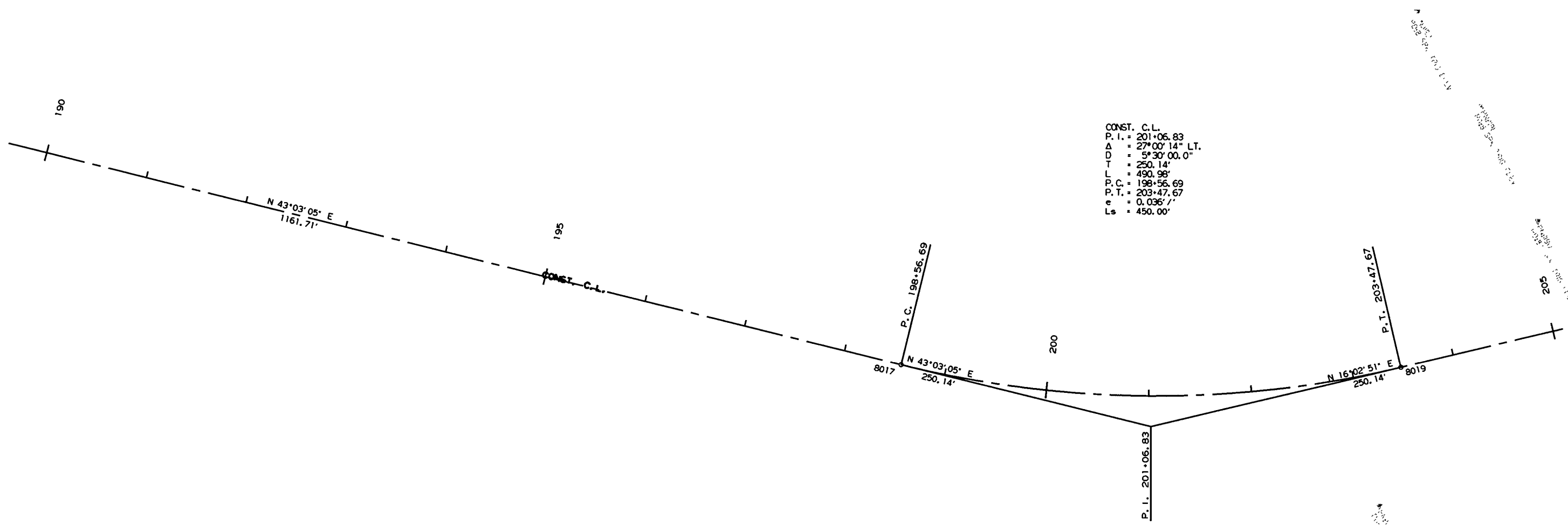
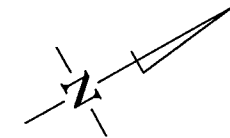
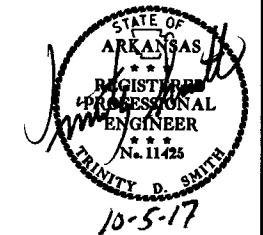
CONST. C.L.
 P. I. = 185+99.99
 Δ = 2°22'31" RT.
 D = 1°15'00.0"
 T = 95.02'
 L = 190.02'
 P.C. = 185+04.97
 P.T. = 186+94.99
 NO SUPER

9/12/2017

R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. NO. DIST. NO.	STATE	FED. AD PROJ. NO.	SHEET NO.	TOTAL SHEETS	
				6	ARK.				
JOB NO.							012007	86	267

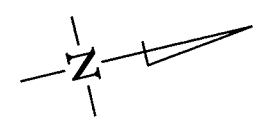
2 SURVEY CONTROL DETAILS



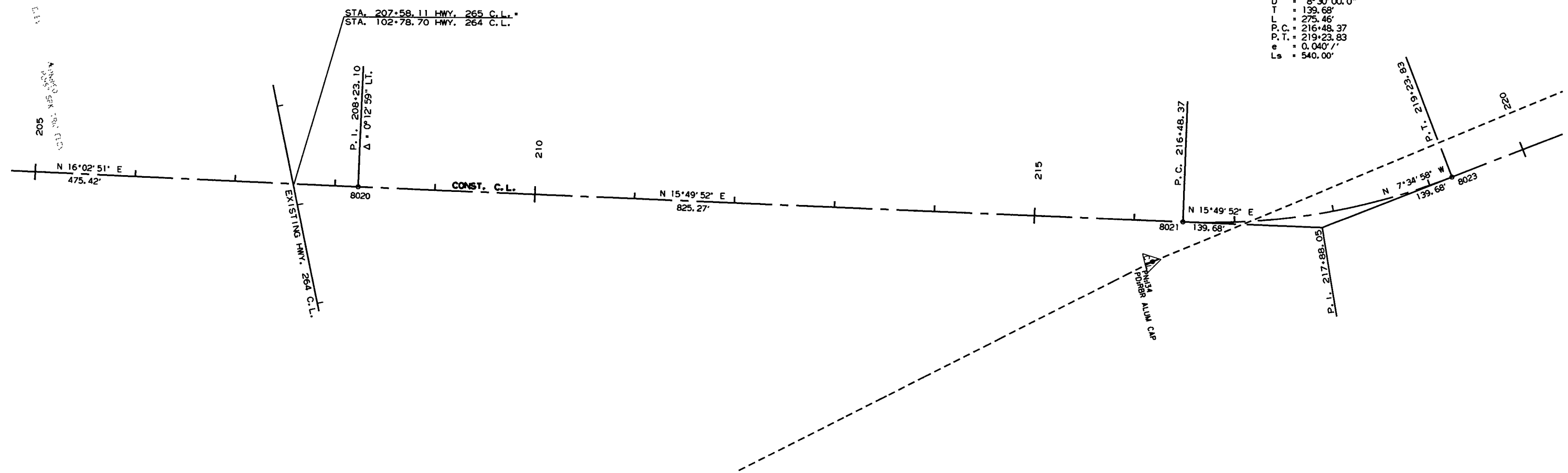
9/12/2017
R012007KCT.DGN

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. 012007							87	267

2 SURVEY CONTROL DETAILS



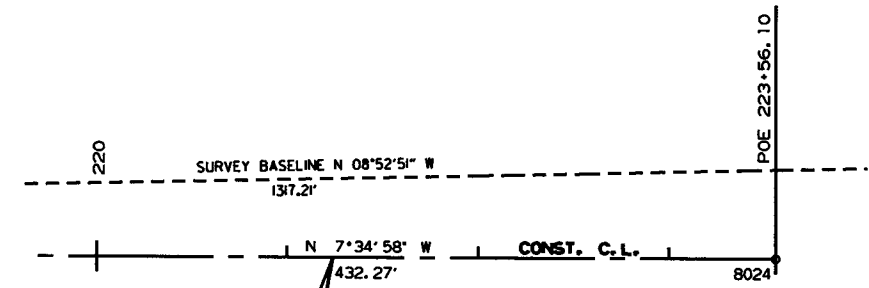
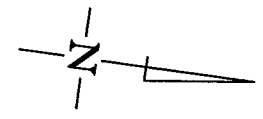
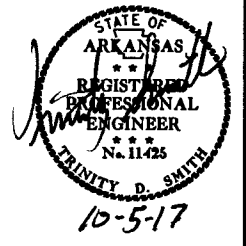
CONST. C.L.
 P. I. = 217+88.05
 Δ = 23°24'51" LT.
 D = 8°30'00.0"
 T = 139.68'
 L = 275.46'
 P. C. = 216+48.37
 P. T. = 219+23.83
 e = 0.040'/'
 Ls = 540.00'



9/12/2017
 R012007KST.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	012007		88	267

2 SURVEY CONTROL DETAILS



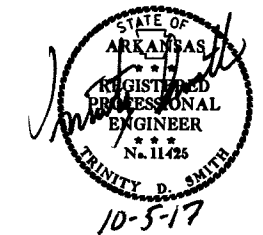
STA. 221+23.93
 END JOB 012007
 BEGIN JOB 090373

9/12/2017

R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. NO. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 012007							89	267

2 SURVEY CONTROL DETAILS



RANDALL WOBBE CONNECTION C.L.
P.I. = 112+07.34
Δ = 14°40'36.8" LT.
D = 2°00'00.0"
T = 368.94'
L = 733.84'
P.C. = 108+38.39
P.T. = 115+72.24
NO SUPER

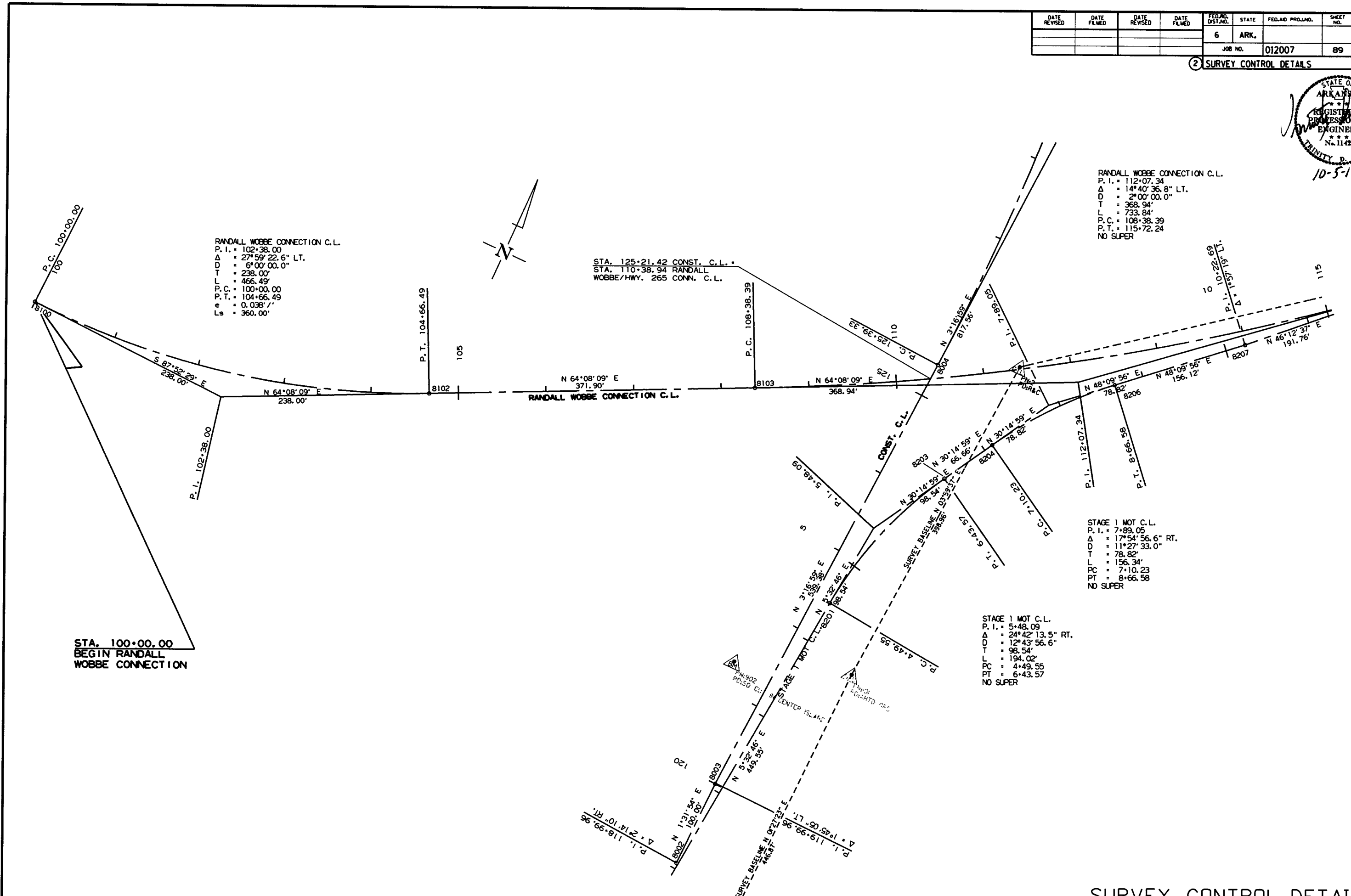
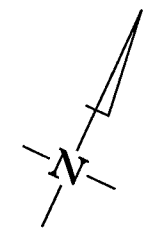
RANDALL WOBBE CONNECTION C.L.
P.I. = 102+38.00
Δ = 27°59'22.6" LT.
D = 6°00'00.0"
T = 238.00'
L = 466.49'
P.C. = 100+00.00
P.T. = 104+66.49
e = 0.038' /'
Ls = 360.00'

STA. 125+21.42 CONST. C.L.
STA. 110+38.94 RANDALL
WOBBE/HWY. 265 CONN. C.L.

STAGE 1 MOT C.L.
P.I. = 7+89.05
Δ = 17°54'56.6" RT.
D = 11°27'33.0"
T = 78.82'
L = 156.34'
PC = 7+10.23
PT = 8+66.58
NO SUPER

STAGE 1 MOT C.L.
P.I. = 5+48.09
Δ = 24°42'13.5" RT.
D = 12°43'56.6"
T = 98.54'
L = 194.02'
PC = 4+49.55
PT = 6+43.57
NO SUPER

STA. 100+00.00
BEGIN RANDALL
WOBBE CONNECTION

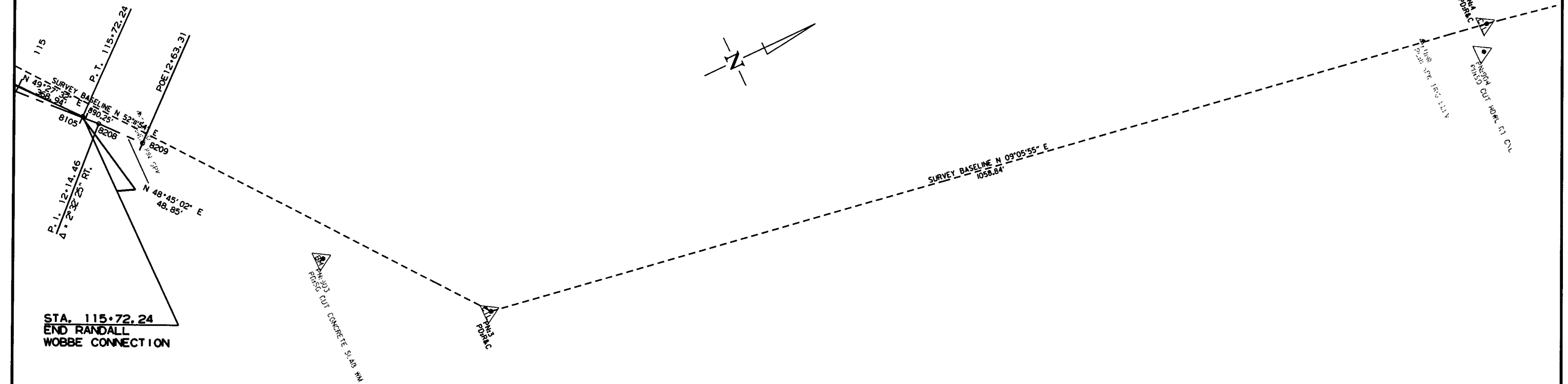


9/12/2017

R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. PROJ. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	012007		90	267

2 SURVEY CONTROL DETAILS

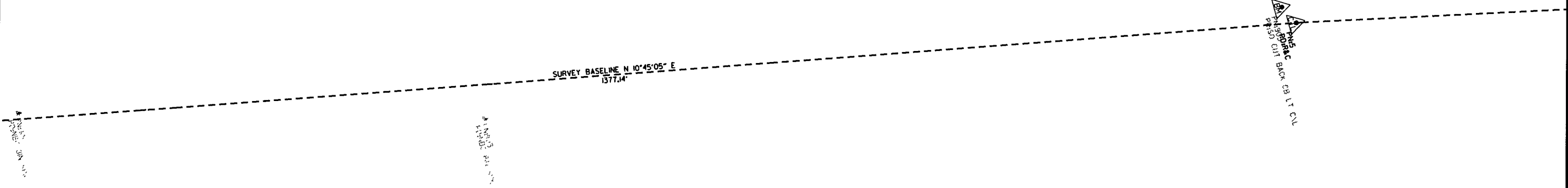


9/12/2017
R012007KGT.DGN

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.						012007	91	267

② SURVEY CONTROL DETAILS

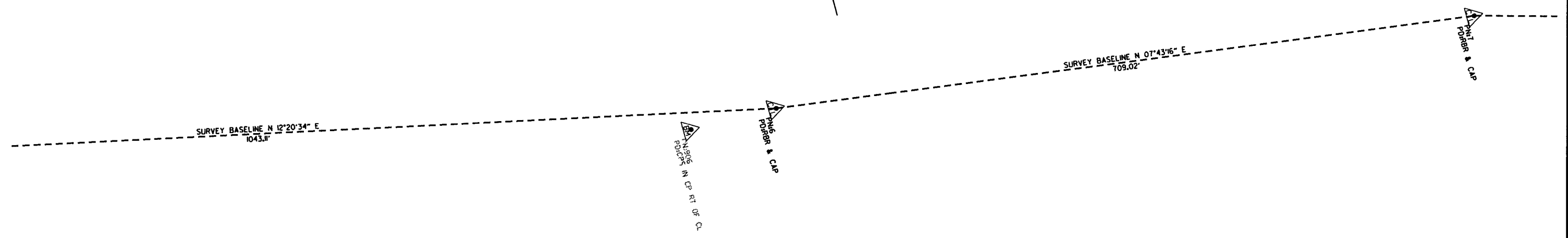
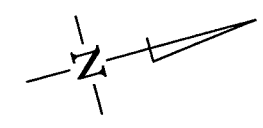
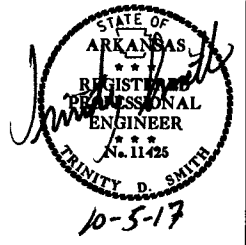


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R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS	
				6	ARK.				
JOB NO.							012007	92	267

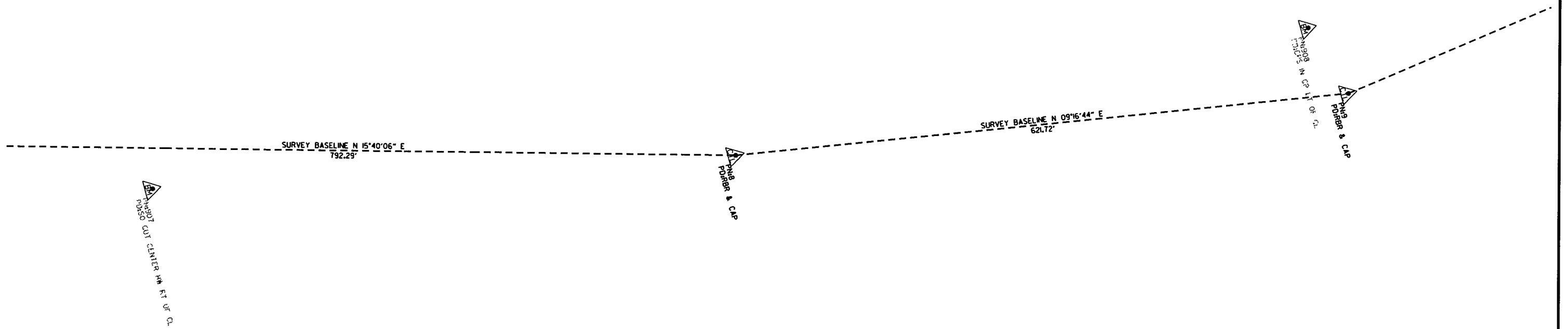
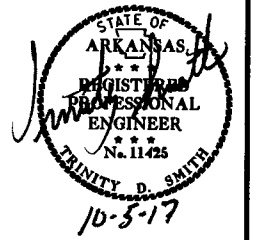
② SURVEY CONTROL DETAILS



9/12/2017
 R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. PROJ. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO.						012007	93	267

② SURVEY CONTROL DETAILS



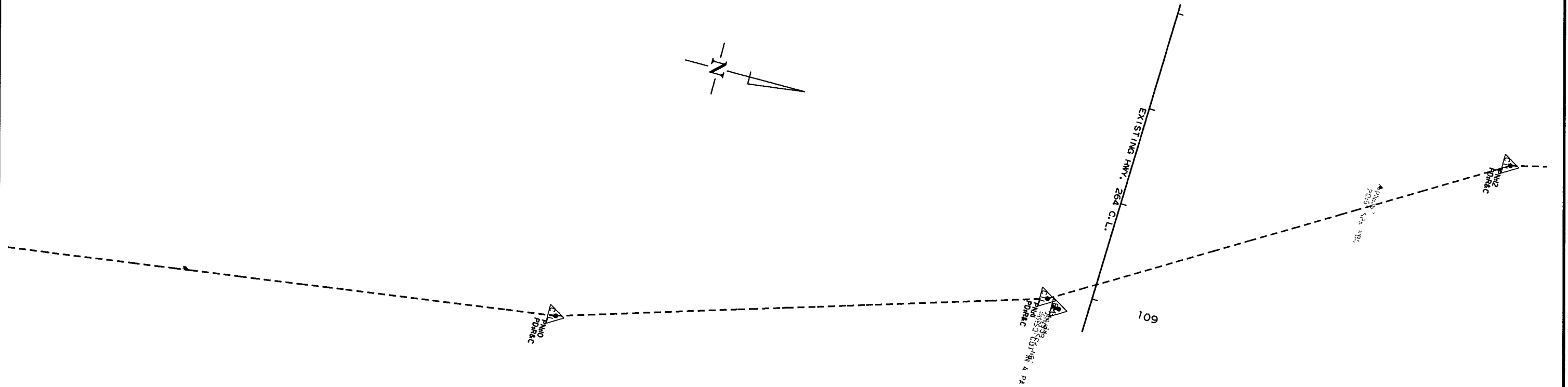
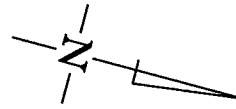
9/12/2017

R012007KGT.DGN

SURVEY CONTROL DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	012007		94	267

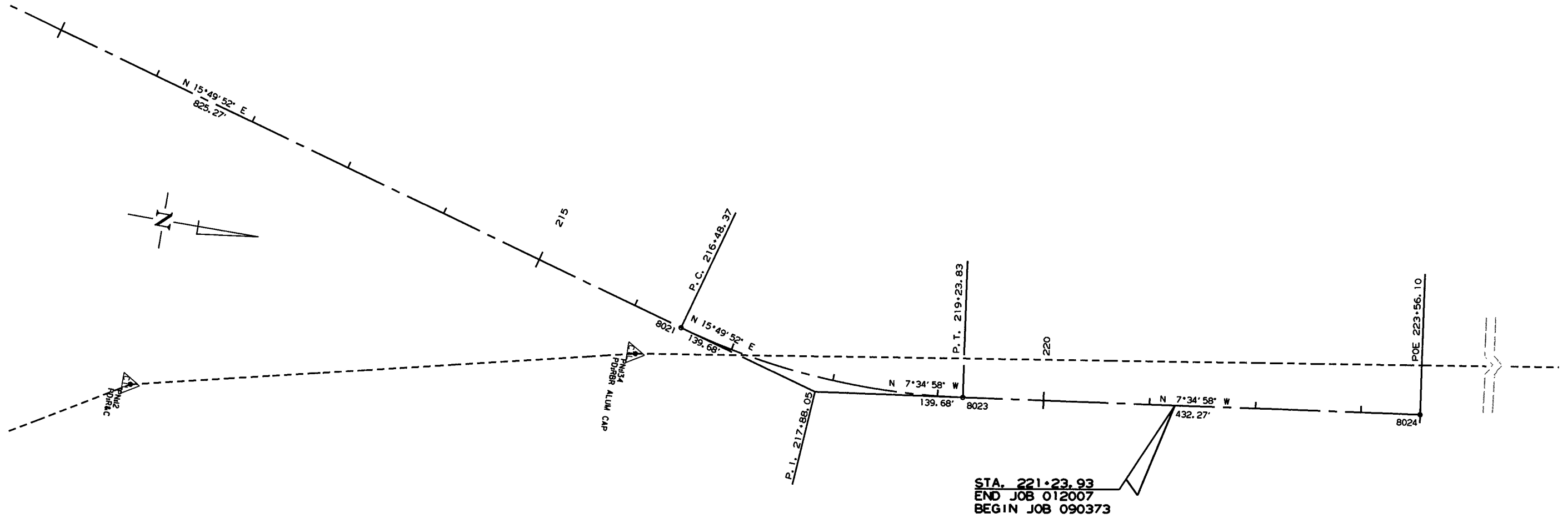
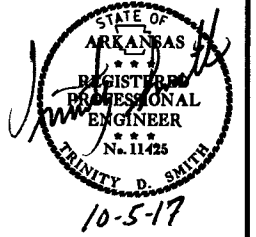
② SURVEY CONTROL DETAILS



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.	012007		95	267

2 SURVEY CONTROL DETAILS

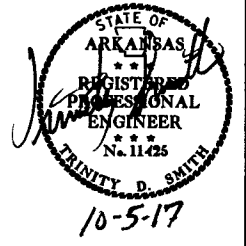


9/12/2017

RO12007KGT.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.	012007		96	267

2 PLAN AND PROFILE SHEETS



STA. 118+00.00 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 2.7 SQ. YDS.

STA. 121+87.00 - CONSTRUCT
DI ON LT. H = 5'-10"
CONNECT EXISTING 24" R.C. CROSS DRAIN
TY C = 4' x 4'
TY MO = 4' DIA.
D.A. = 14 ACRES Q50 = 32 C.F.S.

STA. 123+73.00 - CONSTRUCT
DI ON LT. H = 5'-10"
WITH 4' EXTENSION
& 18" X 73' PIPE OUTLET
CONNECT TO D.I. ON RT. @ STA. 108+75.00
TY C = 4' x 4'
TY MO = 4' DIA.
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 73 LIN. FT.
18" SLPPMCCS PIPE (CLASS III)
(TYPE 2 BEDDING) = 73 LIN. FT.

STA. 125+58.00 - CONSTRUCT
DI ON LT. H = 4'-0"
WITH 4' EXTENSION
& 18" X 52' PIPE OUTLET
CONNECT TO D.I. ON LT. @ STA. 109+79.00
TY C = 4' x 4'
TY MO = 4' DIA.
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 52 LIN. FT.
18" SLPPMCCS PIPE (CLASS III)
(TYPE 2 BEDDING) = 52 LIN. FT.

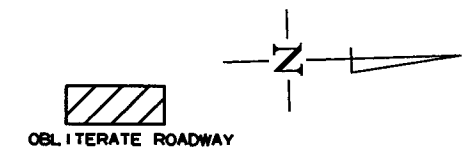
STA. 126+21.00 - CONSTRUCT
DI ON LT. H = 3'-6"
WITH 4' EXTENSION
& 24" X 74' PIPE OUTLET
CONNECT TO D.I. ON LT. @ STA. 127+00.00
TY C = 4' x 4'
TY MO = 4' DIA.
24" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 74 LIN. FT.
24" SLPPMCCS PIPE (CLASS III)
(TYPE 2 BEDDING) = 74 LIN. FT.

STA. 127+00.00 - CONSTRUCT
DI ON LT. H = 3'-11"
WITH 4' EXTENSION
& 24" X 95' PIPE OUTLET
CONNECT TO D.I. ON LT. @ STA. 128+00.00
TY C = 4' x 4'
TY MO = 4' DIA.
24" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 95 LIN. FT.
24" SLPPMCCS PIPE (CLASS III)
(TYPE 2 BEDDING) = 95 LIN. FT.

STA. 128+00.00 - CONSTRUCT
DI ON LT. H = 4'-3"
WITH 4' EXTENSION
& 24" X 94' PIPE OUTLET
CONNECT TO D.I. ON LT. @ STA. 129+00.00
TY C = 4' x 4'
TY MO = 4' DIA.
24" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 94 LIN. FT.
24" SLPPMCCS PIPE (CLASS III)
(TYPE 2 BEDDING) = 94 LIN. FT.

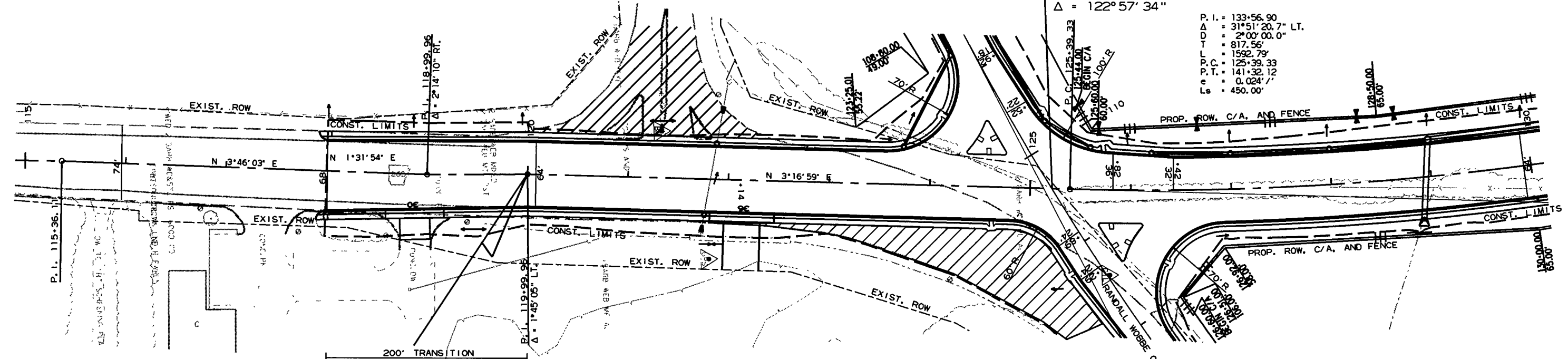
STA. 129+00.00 - CONSTRUCT
DI ON LT. H = 5'-1"
WITH 4' EXTENSION
& 51" X 31" X 192" ARCH PIPE OUTLET
CONNECT TO D.I. ON LT. @ STA. 131+00.00
& 51" X 31" X 80" R.C. ARCH PIPE INLET WITH FES
TY C = 6' x 6'
TY MO = 6' DIA.
51" X 31" R.C. ARCH PIPE (CLASS III)
(TYPE 3 BEDDING) = 272 LIN. FT.
51" X 31" SLPPMCCS ARCH PIPE (CLASS III)
(TYPE 2 BEDDING) = 192 LIN. FT.
51" X 31" F.E.S. = 1 EACH
D.A. = 26 ACRES Q50 = 53 C.F.S.

STA. 125+21.41 HWY. 265 =
STA. 110+38.94 RANDALL WOBBE CONNECTION
 $\Delta = 122^\circ 57' 34''$
P.I. = 133+56.90
 $\Delta = 31^\circ 51' 20.7''$ LT.
D = 2'00'00.0"
T = 817.56'
L = 1592.79'
P.C. = 125+39.33
P.T. = 141+32.12
e = 0.024'/'
Ls = 450.00'



REMOVAL AND DISPOSAL OF FENCE

STATION	STATION	LOCATION	LIN. FT.
123+25	131+01	LT.	880



STA. 120+00.00
BEGIN JOB 012007
LOG MILE 10.48

STA. 118+00.00 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 2.7 SQ. YDS.

STA. 119+74.00 IN PLACE
24" X 187' R.C. PIPE CULVERT
ON RT. SIDE
RETAIN

STA. 121+76.00 - CONSTRUCT
DI ON RT. H = 5'-8"
CONNECT EXISTING 24" R.C. CROSS DRAIN
TY C = 4' x 4'
TY MO = 4' DIA.
D.A. = 14 ACRES Q50 = 32 C.F.S.

STA. 121+82.00 IN PLACE
24" X 147' R.C. PIPE CULVERT
REMOVE 30' LT. & 6' RT. OF EXISTING
24" R.C. PIPE CULVERT AND ADD
24" F.E.S. LT. & RT.
RETAIN 111'
24" F.E.S. = 2 EACH

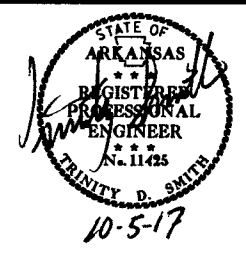
STA. 122+14 CONST.
APPROACH ON RT. = 165 CU. YDS.

STA. 124+60.25 CONSTRUCT
TYPE 4 WHEELCHAIR RAMP ON RT.
= 7.4 SQ. YDS.

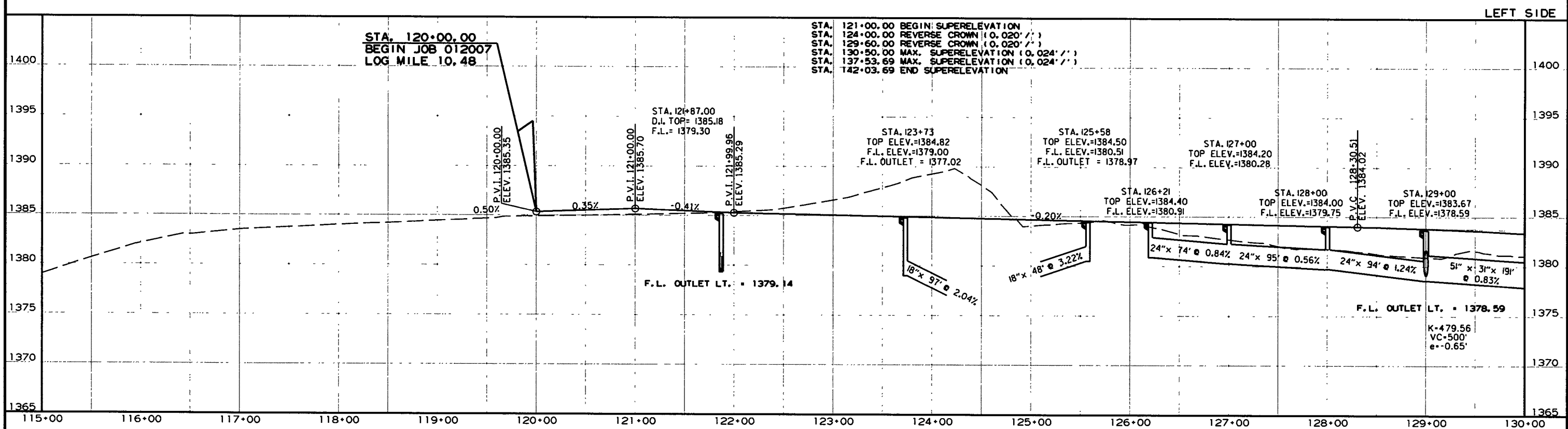
REMOVAL AND DISPOSAL OF FENCE

STATION	STATION	LOCATION	LIN. FT.
123+25	131+01	RT.	880

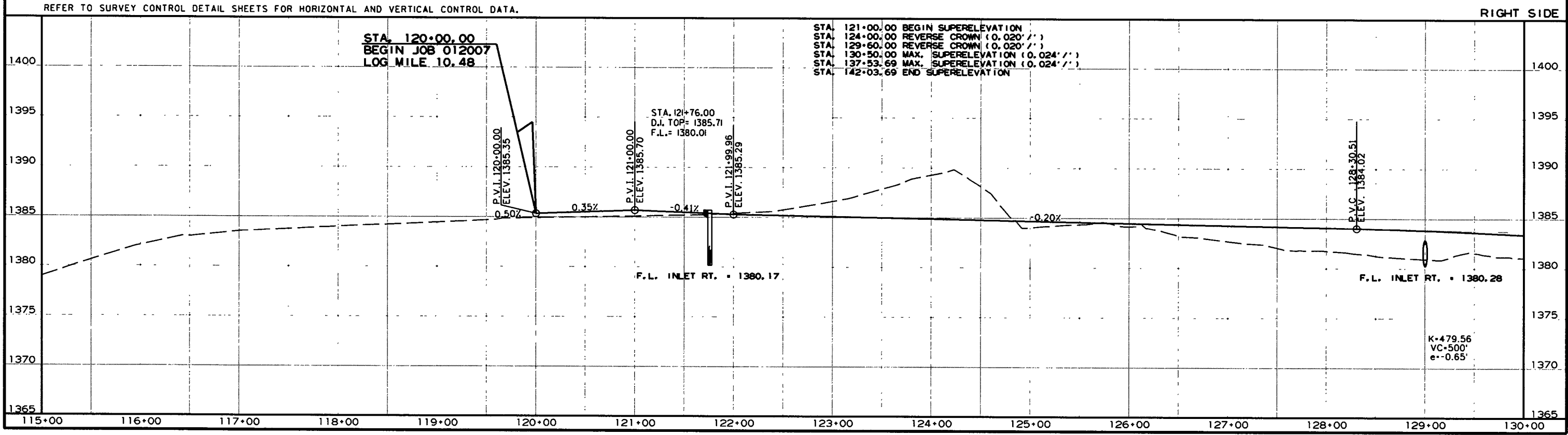
DATE REVISED	DATE FILED	DATE REVISED	DATE FILED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		97	267



2 PLAN AND PROFILE SHEETS



REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.



R012007KGT.DGN 9/11/2017

STA. 131+00.00 - CONSTRUCT
 DI ON LT. H = 5'-7"
 WITH 4' EXTENSION
 & 51" X 31" X 191' ARCH PIPE OUTLET
 CONNECT TO D.I. ON LT. @ STA. 133+00.00
 TY C = 4' X 6'
 TY MO = 6' DIA.
 51" X 31" R.C. ARCH PIPE (CLASS III)
 (TYPE 3 BEDDING) = 191 LIN. FT.
 51" X 31" SLPPMCCS ARCH PIPE (CLASS III)
 (TYPE 2 BEDDING) = 191 LIN. FT.

STA. 131+47 CONST.
 APPROACH ON LT. = 45 CU. YDS.

STA. 133+00.00 - CONSTRUCT
 DI ON LT. H = 4'-10"
 WITH 4' EXTENSION
 & 51" X 31" X 93' ARCH PIPE OUTLET
 CONNECT TO D.I. ON LT. @ STA. 134+00.00
 TY C = 4' X 6'
 TY MO = 6' DIA.
 51" X 31" R.C. ARCH PIPE (CLASS III)
 (TYPE 3 BEDDING) = 93 LIN. FT.
 51" X 31" SLPPMCCS ARCH PIPE (CLASS III)
 (TYPE 2 BEDDING) = 93 LIN. FT.

16' GATES		
STATION	SIDE	16' GATES
131+47	LT.	1
134+71	LT.	1
138+36	LT.	1
139+27	LT.	1

REMOVAL AND DISPOSAL OF FENCE

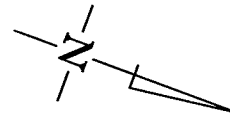
STATION	STATION	LOCATION	LIN. FT.
123+25	131+01	LT.	880
138+10	138+60	LT.	50
144+40		LT.	170

STA. 134+00.00 - CONSTRUCT
 DI ON LT. H = 4'-4"
 WITH 4' EXTENSION
 & 51" X 31" X 3' R.C. ARCH PIPE OUTLET
 WITH FES
 & 24" X 83' R.C. PIPE INLET WITH FES
 TY C = 6' X 6'
 TY MO = 6' DIA.
 51" X 31" R.C. ARCH PIPE (CLASS III)
 (TYPE 3 BEDDING) = 3 LIN. FT.
 24" R.C. PIPE (CLASS III)
 (TYPE 3 BEDDING) = 83 LIN. FT.
 24" F.E.S. = 1 EACH
 51" X 31" F.E.S. = 1 EACH
 D.A. = 33 ACRES Q50 = 49 C.F.S.

STA. 134+71 CONST.
 APPROACH ON LT. = 45 CU. YDS.

STA. 135+00.00 - CONSTRUCT
 DI ON LT. H = 4'-4"
 WITH 4' EXTENSION
 & 18" X 193' PIPE OUTLET
 CONNECT TO D.I. ON LT. @ STA. 137+00.00
 TY C = 4' X 4'
 TY MO = 4' DIA.
 18" R.C. PIPE (CLASS III)
 (TYPE 3 BEDDING) = 193 LIN. FT.
 18" SLPPMCCS PIPE (CLASS III)
 (TYPE 2 BEDDING) = 193 LIN. FT.

P.I. = 133+56.90
 $\Delta = 31^\circ 51' 20.7''$ LT.
 $D = 2^\circ 00' 00.0''$
 $T = 817.56'$
 $L = 1592.79'$
 $P.C. = 125+39.33$
 $P.T. = 141+32.12$
 $e = 0.024' /'$
 $L_s = 450.00'$



STA. 137+00.00 - CONSTRUCT
 DI ON LT. H = 4'-8"
 WITH 4' EXTENSION
 & 18" X 193' PIPE OUTLET
 CONNECT TO D.I. ON LT. @ STA. 139+00.00
 TY C = 4' X 4'
 TY MO = 4' DIA.
 18" R.C. PIPE (CLASS III)
 (TYPE 3 BEDDING) = 193 LIN. FT.
 18" SLPPMCCS PIPE (CLASS III)
 (TYPE 2 BEDDING) = 193 LIN. FT.

STA. 138+36 CONST.
 APPROACH ON LT. = 125 CU. YDS.

STA. 139+00.00 - CONSTRUCT
 DI ON LT. H = 4'-11"
 WITH 4' EXTENSION
 & 18" X 193' PIPE OUTLET
 CONNECT TO D.I. ON LT. @ STA. 141+00.00
 TY C = 4' X 4'
 TY MO = 4' DIA.
 18" R.C. PIPE (CLASS III)
 (TYPE 3 BEDDING) = 193 LIN. FT.
 18" SLPPMCCS PIPE (CLASS III)
 (TYPE 2 BEDDING) = 193 LIN. FT.

STA. 139+27 CONST.
 APPROACH ON LT. = 120 CU. YDS.

STA. 141+00.00 - CONSTRUCT
 DI ON LT. H = 5'-3"
 WITH 4' EXTENSION
 & 18" X 196' PIPE OUTLET
 CONNECT TO D.I. ON LT. @ STA. 143+00.00
 TY C = 4' X 4'
 TY MO = 4' DIA.
 18" R.C. PIPE (CLASS III)
 (TYPE 3 BEDDING) = 196 LIN. FT.
 18" SLPPMCCS PIPE (CLASS III)
 (TYPE 2 BEDDING) = 196 LIN. FT.

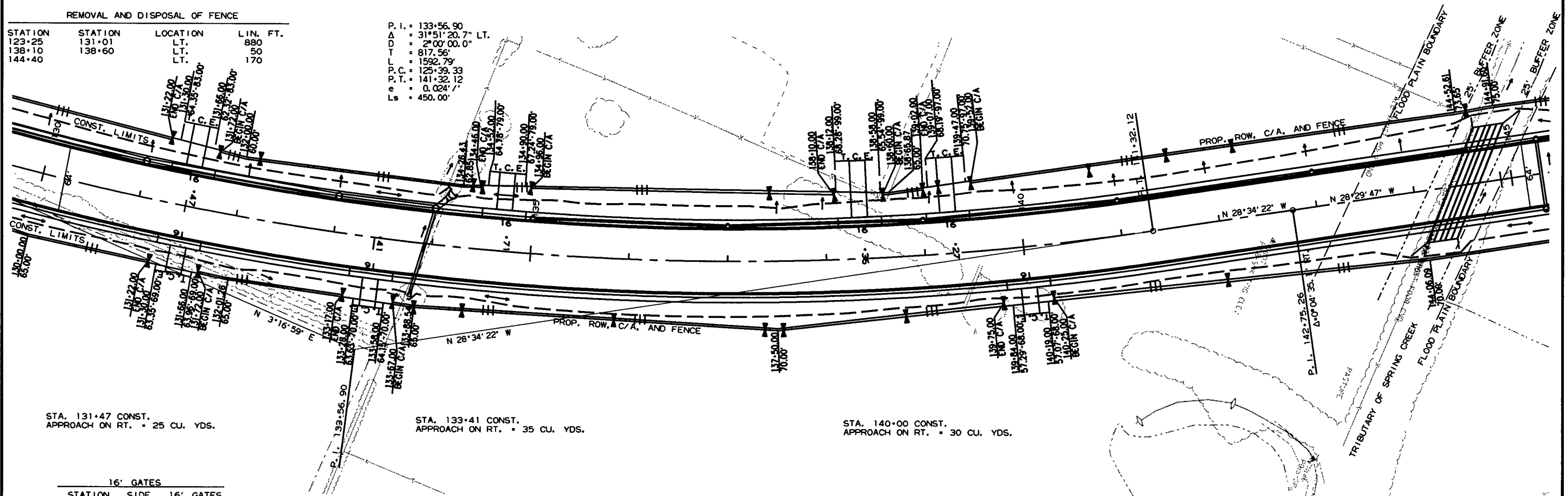
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. DIST. NO.	STATE	FED. PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO.						012007	98	267

2 PLAN AND PROFILE SHEETS



STA. 143+00.00 - CONSTRUCT
 DI ON LT. H = 6'-6"
 WITH 4' EXTENSION
 & 18" X 158' PIPE OUTLET
 CONNECT TO R.C. BOX CULVERT
 TY C = 4' X 4'
 TY MO = 4' DIA.
 18" R.C. PIPE (CLASS III)
 (TYPE 3 BEDDING) = 158 LIN. FT.
 18" SLPPMCCS PIPE (CLASS III)
 (TYPE 2 BEDDING) = 158 LIN. FT.

STA. 144+50 - CONSTRUCT
 QUINT. 5' X 4' X 126'
 R.C. BOX CULVERT
 ON A 30° LT. FWD. SKEW
 WITH 3:1 WINGWALLS LT. & RT.
 Q50 = 573 CFS D.A. = 288 ACRES
 SPAN = 28'-8"
 D.A. = 288 ACRES Q50 = 573 C.F.S.



STA. 131+47 CONST.
 APPROACH ON RT. = 25 CU. YDS.

STA. 133+41 CONST.
 APPROACH ON RT. = 35 CU. YDS.

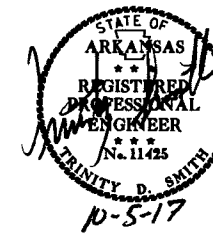
STA. 140+00 CONST.
 APPROACH ON RT. = 30 CU. YDS.

16' GATES		
STATION	SIDE	16' GATES
131+47	RT.	1
133+41	RT.	1
140+00	RT.	1

REMOVAL AND DISPOSAL OF FENCE

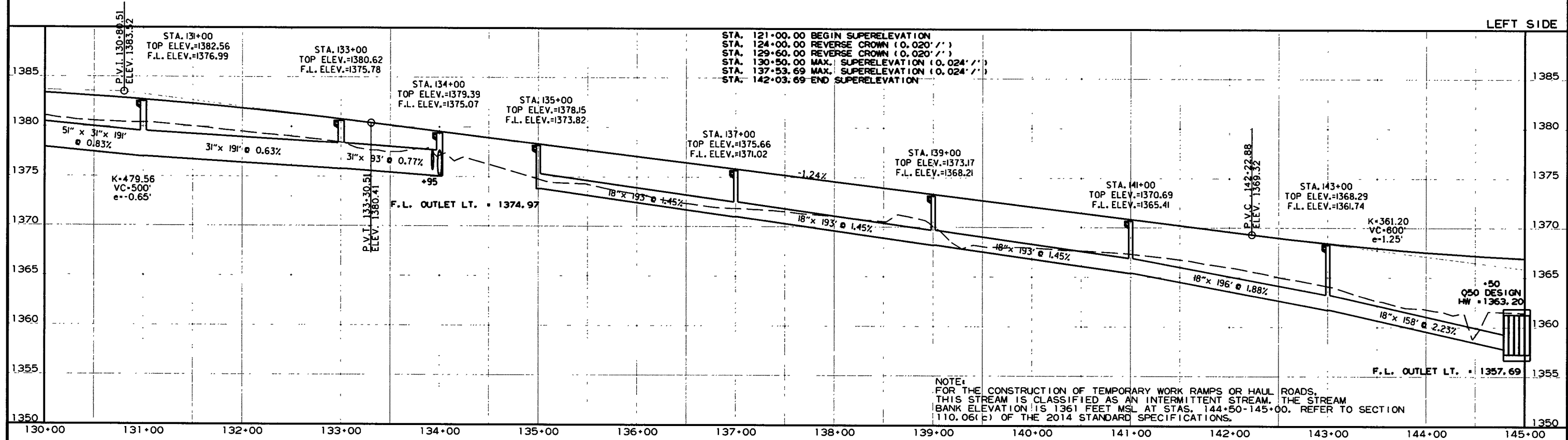
STATION	STATION	LOCATION	LIN. FT.
160+15	161+21	LT.	115
164+70	165+11	LT.	42
166+94	167+63	LT.	76

APPROXIMATE FLOOD PLAIN BOUNDARIES
 STA. 143+37 TO STA. 144+92

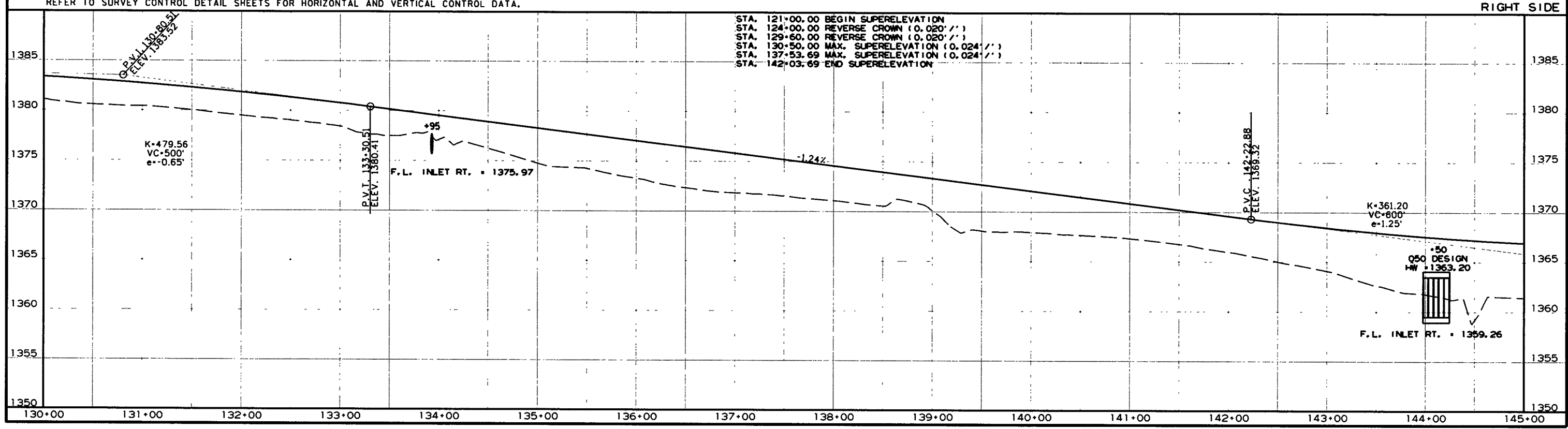


DATE REVISED	DATE FILED	DATE REVISED	DATE FILED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		99	267

2 PLAN AND PROFILE SHEETS



REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.



9/11/2017 RO12007KGT.DGN

STA. 145+30.00 - CONSTRUCT
DI ON LT. H = 7'-9"
WITH 4' EXTENSION
& 24" X 47" PIPE OUTLET
CONNECT TO R.C. BOX CULVERT
TY C = 4' X 4'
TY MO = 4' DIA.
24" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 47 LIN. FT.
24" SLPPMCCS PIPE (CLASS III)
(TYPE 2 BEDDING) = 47 LIN. FT.

STA. 146+01.00 - CONSTRUCT
DI ON LT. H = 6'-2"
WITH 4' EXTENSION
& 18" X 67" PIPE OUTLET
CONNECT TO D.I. ON LT. @ STA. 145+30.00
TY C = 4' X 4'
TY MO = 4' DIA.
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 67 LIN. FT.
18" SLPPMCCS PIPE (CLASS III)
(TYPE 2 BEDDING) = 67 LIN. FT.

STA. 146+80.00 - CONSTRUCT
DI ON LT. H = 5'-9"
WITH 4' EXTENSION
& 18" X 75" PIPE OUTLET
CONNECT TO D.I. ON LT. @ STA. 146+01.00
TY C = 4' X 4'
TY MO = 4' DIA.
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 75 LIN. FT.
18" SLPPMCCS PIPE (CLASS III)
(TYPE 2 BEDDING) = 75 LIN. FT.

STA. 148+02 CONST.
APPROACH ON LT. = 200 CU. YDS.

STA. 149+85 CONST.
APPROACH ON LT. = 80 CU. YDS.

STA. 147+50 CONSTRUCT
YARD DRAIN &
12" X 70" SIDE DRAIN
ON LT.

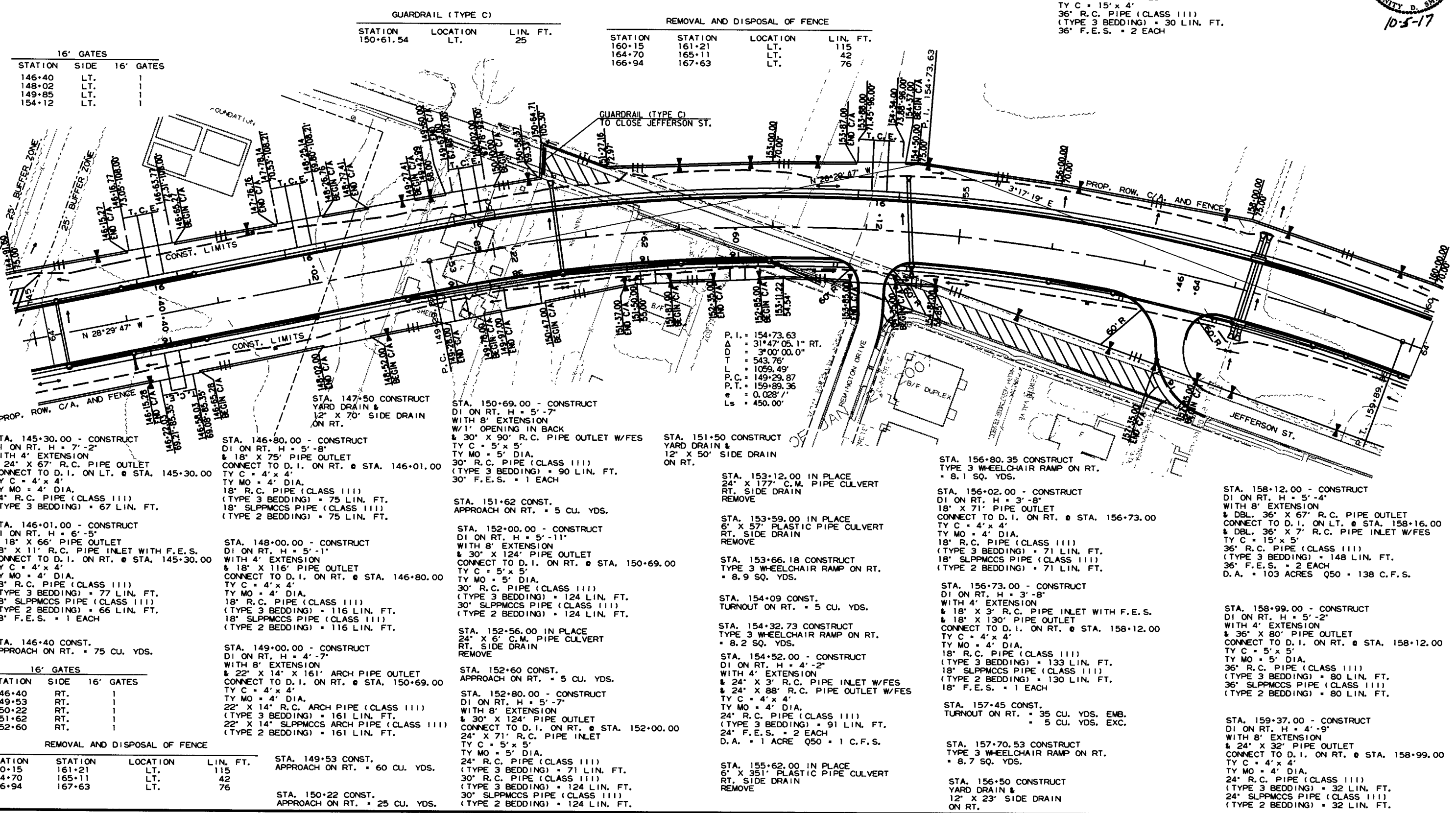
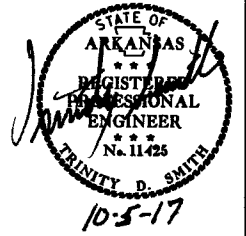
STA. 146+40 CONST.
APPROACH ON LT. = 205 CU. YDS.

STA. 154+12 CONST.
APPROACH ON LT. = 115 CU. YDS.

STA. 158+16.00 - CONSTRUCT
DI ON LT. H = 7'-11"
DBL. 36" X 15" R.C.
PIPE OUTLET W/ FES
TY C = 15' X 4'
36" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 30 LIN. FT.
36" F.E.S. = 2 EACH

DATE REWISED	DATE FILMED	DATE REWISED	DATE FILMED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 012007							100	267

2 PLAN AND PROFILE SHEETS



16' GATES

STATION	SIDE	16' GATES
146+40	LT.	1
148+02	LT.	1
149+85	LT.	1
154+12	LT.	1

GUARDRAIL (TYPE C)

STATION	LOCATION	LIN. FT.
150+61.54	LT.	25

REMOVAL AND DISPOSAL OF FENCE

STATION	STATION	LOCATION	LIN. FT.
160+15	161+21	LT.	115
164+70	165+11	LT.	42
166+94	167+63	LT.	76

STA. 145+30.00 - CONSTRUCT
DI ON RT. H = 7'-2"
WITH 4' EXTENSION
& 24" X 67" R.C. PIPE OUTLET
CONNECT TO D.I. ON LT. @ STA. 145+30.00
TY C = 4' X 4'
TY MO = 4' DIA.
24" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 67 LIN. FT.

STA. 146+80.00 - CONSTRUCT
DI ON RT. H = 5'-8"
WITH 4' EXTENSION
& 18" X 75" PIPE OUTLET
CONNECT TO D.I. ON RT. @ STA. 146+01.00
TY C = 4' X 4'
TY MO = 4' DIA.
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 75 LIN. FT.
18" SLPPMCCS PIPE (CLASS III)
(TYPE 2 BEDDING) = 75 LIN. FT.

STA. 150+69.00 - CONSTRUCT
DI ON RT. H = 5'-7"
WITH 8' EXTENSION
W/ 1' OPENING IN BACK
& 30" X 90" R.C. PIPE OUTLET W/FES
TY C = 5' X 5'
TY MO = 5' DIA.
30" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 90 LIN. FT.
30" F.E.S. = 1 EACH

STA. 151+50 CONSTRUCT
YARD DRAIN &
12" X 50" SIDE DRAIN
ON RT.

STA. 146+01.00 - CONSTRUCT
DI ON RT. H = 6'-5"
& 18" X 66" PIPE OUTLET
& 18" X 11" R.C. PIPE INLET WITH F.E.S.
CONNECT TO D.I. ON RT. @ STA. 145+30.00
TY C = 4' X 4'
TY MO = 4' DIA.
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 77 LIN. FT.
18" SLPPMCCS PIPE (CLASS III)
(TYPE 2 BEDDING) = 66 LIN. FT.
18" F.E.S. = 1 EACH

STA. 148+00.00 - CONSTRUCT
DI ON RT. H = 5'-1"
WITH 4' EXTENSION
& 18" X 116" PIPE OUTLET
CONNECT TO D.I. ON RT. @ STA. 146+80.00
TY C = 4' X 4'
TY MO = 4' DIA.
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 116 LIN. FT.
18" SLPPMCCS PIPE (CLASS III)
(TYPE 2 BEDDING) = 116 LIN. FT.

STA. 151+62 CONST.
APPROACH ON RT. = 5 CU. YDS.

STA. 152+00.00 - CONSTRUCT
DI ON RT. H = 5'-11"
WITH 8' EXTENSION
& 30" X 124" PIPE OUTLET
CONNECT TO D.I. ON RT. @ STA. 150+69.00
TY C = 5' X 5'
TY MO = 5' DIA.
30" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 124 LIN. FT.
30" SLPPMCCS PIPE (CLASS III)
(TYPE 2 BEDDING) = 124 LIN. FT.

STA. 153+12.00 IN PLACE
24" X 177" C.M. PIPE CULVERT
RT. SIDE DRAIN
REMOVE

STA. 153+59.00 IN PLACE
6" X 57" PLASTIC PIPE CULVERT
RT. SIDE DRAIN
REMOVE

STA. 153+66.18 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 8.9 SQ. YDS.

STA. 154+09 CONST.
TURNOUT ON RT. = 5 CU. YDS.

STA. 154+32.73 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 8.2 SQ. YDS.

STA. 154+52.00 - CONSTRUCT
DI ON RT. H = 4'-2"
WITH 4' EXTENSION
& 24" X 3" R.C. PIPE INLET W/FES
& 24" X 88" R.C. PIPE OUTLET W/FES
TY C = 4' X 4'
TY MO = 4' DIA.
24" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 91 LIN. FT.
24" F.E.S. = 2 EACH
D.A. = 1 ACRE Q50 = 1 C.F.S.

STA. 156+80.35 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 8.1 SQ. YDS.

STA. 156+02.00 - CONSTRUCT
DI ON RT. H = 3'-8"
WITH 8' EXTENSION
& 18" X 71" PIPE OUTLET
CONNECT TO D.I. ON RT. @ STA. 156+73.00
TY C = 4' X 4'
TY MO = 4' DIA.
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 71 LIN. FT.
18" SLPPMCCS PIPE (CLASS III)
(TYPE 2 BEDDING) = 71 LIN. FT.

STA. 156+73.00 - CONSTRUCT
DI ON RT. H = 3'-8"
WITH 4' EXTENSION
& 18" X 3" R.C. PIPE INLET WITH F.E.S.
& 18" X 130" PIPE OUTLET
CONNECT TO D.I. ON RT. @ STA. 158+12.00
TY C = 4' X 4'
TY MO = 4' DIA.
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 133 LIN. FT.
18" SLPPMCCS PIPE (CLASS III)
(TYPE 2 BEDDING) = 130 LIN. FT.
18" F.E.S. = 1 EACH

STA. 157+45 CONST.
TURNOUT ON RT. = 35 CU. YDS. EMB.
= 5 CU. YDS. EXC.

STA. 157+70.53 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 8.7 SQ. YDS.

STA. 156+50 CONSTRUCT
YARD DRAIN &
12" X 23" SIDE DRAIN
ON RT.

STA. 158+12.00 - CONSTRUCT
DI ON RT. H = 5'-4"
WITH 8' EXTENSION
& DBL. 36" X 67" R.C. PIPE OUTLET
CONNECT TO D.I. ON LT. @ STA. 158+16.00
& DBL. 36" X 7" R.C. PIPE INLET W/FES
TY C = 15' X 5'
36" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 148 LIN. FT.
36" F.E.S. = 2 EACH
D.A. = 103 ACRES Q50 = 138 C.F.S.

STA. 158+99.00 - CONSTRUCT
DI ON RT. H = 5'-2"
WITH 4' EXTENSION
& 36" X 80" PIPE OUTLET
CONNECT TO D.I. ON RT. @ STA. 158+12.00
TY C = 5' X 5'
TY MO = 5' DIA.
36" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 80 LIN. FT.
36" SLPPMCCS PIPE (CLASS III)
(TYPE 2 BEDDING) = 80 LIN. FT.

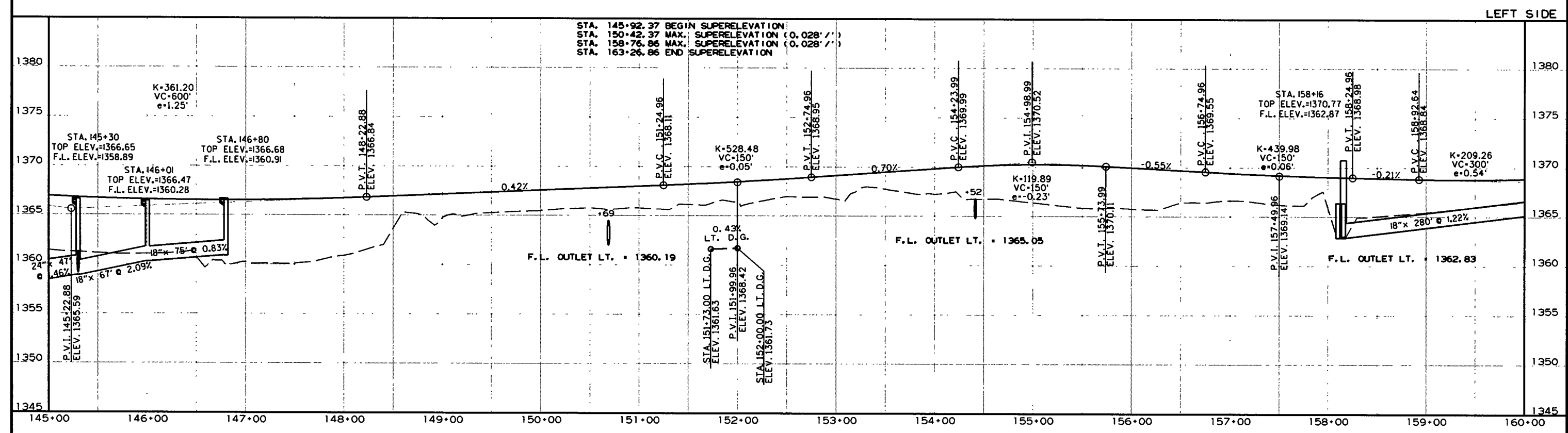
STA. 159+37.00 - CONSTRUCT
DI ON RT. H = 4'-9"
WITH 8' EXTENSION
& 24" X 32" PIPE OUTLET
CONNECT TO D.I. ON RT. @ STA. 158+99.00
TY C = 4' X 4'
TY MO = 4' DIA.
24" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 32 LIN. FT.
24" SLPPMCCS PIPE (CLASS III)
(TYPE 2 BEDDING) = 32 LIN. FT.

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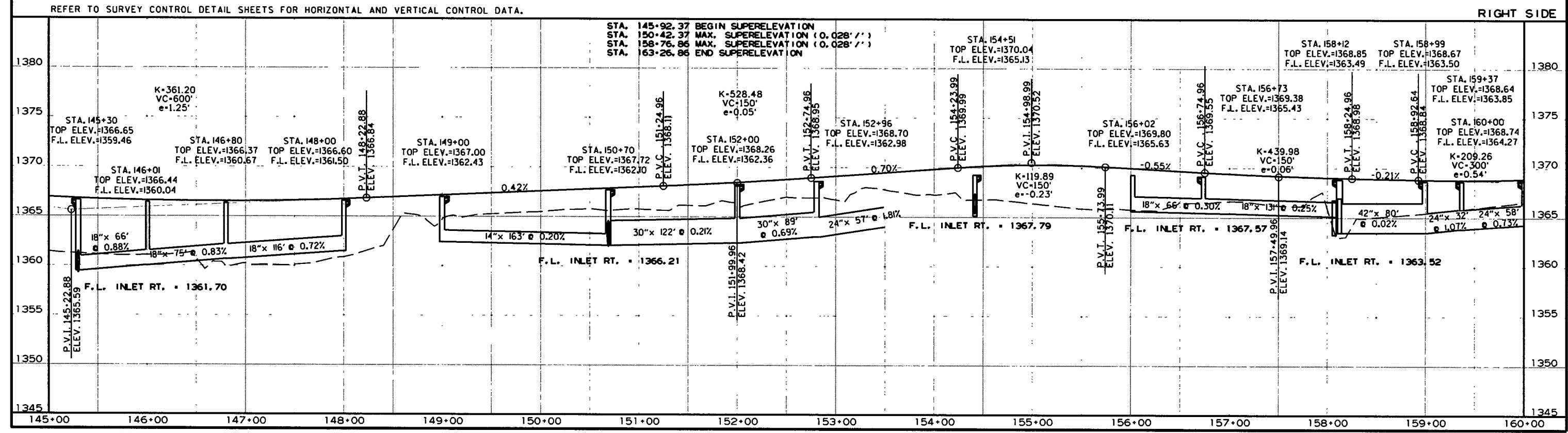


DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 012007							101	267

2 PLAN AND PROFILE SHEETS



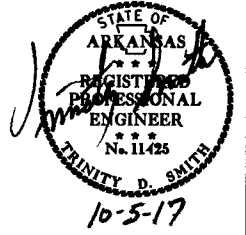
REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.



R012007KGI.DGN 9/11/2017

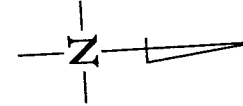
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
						JOB NO. 012007	102	267

2 PLAN AND PROFILE SHEETS



STA. 172+04 CONST.
APPROACH ON LT. = 40 CU. YDS.

STA. 173+59 CONST.
APPROACH ON LT. = 70 CU. YDS.



STA. 160+98.00 - CONSTRUCT
DI ON LT. H = 3'-9"
WITH 4' EXTENSION
& 18" X 280' PIPE OUTLET
CONNECT TO D.I. ON LT. @ STA. 158+16.00
TY C = 4' X 4'
TY MO = 4' DIA.
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 280 LIN. FT.
18" SLPPMCCS PIPE (CLASS III)
(TYPE 2 BEDDING) = 280 LIN. FT.

STA. 162+99.00 - CONSTRUCT
DI ON LT. H = 3'-9"
WITH 4' EXTENSION
& 18" X 197' PIPE OUTLET
CONNECT TO D.I. ON LT. @ STA. 160+98.00
TY C = 4' X 4'
TY MO = 4' DIA.
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 197 LIN. FT.
18" SLPPMCCS PIPE (CLASS III)
(TYPE 2 BEDDING) = 197 LIN. FT.

STA. 169+00.00 - CONSTRUCT
DI ON LT. H = 3'-8"
WITH 8' EXTENSION
& 18" X 195' PIPE OUTLET
CONNECT TO D.I. ON LT. @ STA. 167+01.00
TY C = 4' X 4'
TY MO = 4' DIA.
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 195 LIN. FT.
18" SLPPMCCS PIPE (CLASS III)
(TYPE 2 BEDDING) = 195 LIN. FT.

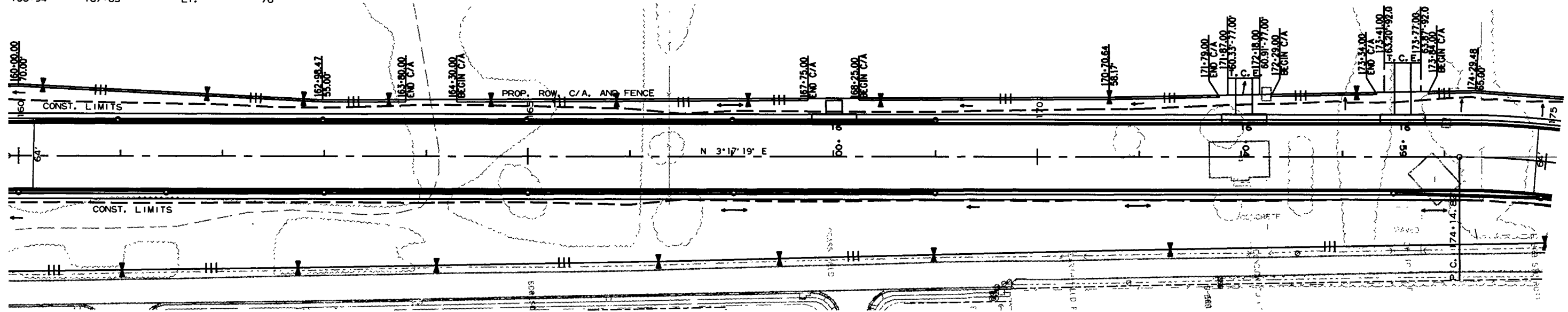
STATION	SIDE	16' GATES
168+00	LT.	1
172+02	LT.	1
173+59	LT.	1

STA. 164+99.00 - CONSTRUCT
DI ON LT. H = 3'-8"
WITH 4' EXTENSION
& 18" X 196' PIPE OUTLET
CONNECT TO D.I. ON LT. @ STA. 162+99.00
TY C = 4' X 4'
TY MO = 4' DIA.
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 196 LIN. FT.
18" SLPPMCCS PIPE (CLASS III)
(TYPE 2 BEDDING) = 196 LIN. FT.

STA. 167+01.00 - CONSTRUCT
DI ON LT. H = 3'-8"
WITH 4' EXTENSION
WITH OPENING IN BACK
& 18" X 198' PIPE OUTLET
CONNECT TO D.I. ON LT. @ STA. 164+99.00
TY C = 4' X 4'
TY MO = 4' DIA.
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 198 LIN. FT.
18" SLPPMCCS PIPE (CLASS III)
(TYPE 2 BEDDING) = 198 LIN. FT.

STATION	STATION	LOCATION	LIN. FT.
160+15	161+21	LT.	115
164+70	165+11	LT.	42
166+94	167+63	LT.	76

STA. 168+00 CONST.
APPROACH ON LT. = 5 CU. YDS.



STA. 160+00.00 - CONSTRUCT
DI ON RT. H = 4'-6"
WITH 4' EXTENSION
& 24" X 58' PIPE OUTLET
CONNECT TO D.I. ON RT. @ STA. 159+37.00
TY C = 4' X 4'
TY MO = 4' DIA.
24" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 58 LIN. FT.
24" SLPPMCCS PIPE (CLASS III)
(TYPE 2 BEDDING) = 58 LIN. FT.

STA. 163+00.00 - CONSTRUCT
DI ON RT. H = 3'-8"
WITH 4' EXTENSION
WITH OPENING IN BACK
& 18" X 151' PIPE OUTLET
CONNECT TO D.I. ON RT. @ STA. 161+45.00
TY C = 4' X 4'
TY MO = 4' DIA.
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 151 LIN. FT.
18" SLPPMCCS PIPE (CLASS III)
(TYPE 2 BEDDING) = 151 LIN. FT.

STA. 167+02.00 - CONSTRUCT
DI ON RT. H = 3'-8"
WITH 4' EXTENSION
WITH OPENING IN BACK
& 18" X 198' PIPE OUTLET
CONNECT TO D.I. ON RT. @ STA. 165+00.00
TY C = 4' X 4'
TY MO = 4' DIA.
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 198 LIN. FT.
18" SLPPMCCS PIPE (CLASS III)
(TYPE 2 BEDDING) = 198 LIN. FT.

STA. 173+50.00 - CONSTRUCT
DI ON RT. H = 4'-0"
WITH 8' EXTENSION
WITH OPENING IN BACK
& 18" X 141' PIPE OUTLET
CONNECT TO D.I. ON RT. @ STA. 174+99.00
TY C = 4' X 4'
TY MO = 4' DIA.
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 141 LIN. FT.
18" SLPPMCCS PIPE (CLASS III)
(TYPE 2 BEDDING) = 141 LIN. FT.

P.I. = 176+82.22
Δ = 37°23'16" RT.
D = 7°15'00.0"
L = 267.40'
T = 515.69'
P.C. = 174+14.82
P.T. = 179+30.51
e = 0.038'/'
Ls = 540.00'

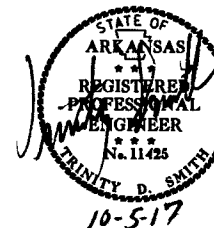
STA. 161+45.00 - CONSTRUCT
DI ON RT. H = 4'-11"
WITH 4' EXTENSION
WITH OPENING IN BACK
& 24" X 141' PIPE OUTLET
CONNECT TO D.I. ON RT. @ STA. 160+00.00
TY C = 4' X 4'
TY MO = 4' DIA.
24" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 141 LIN. FT.
24" SLPPMCCS PIPE (CLASS III)
(TYPE 2 BEDDING) = 141 LIN. FT.

STA. 165+00.00 - CONSTRUCT
DI ON RT. H = 3'-8"
WITH 4' EXTENSION
WITH OPENING IN BACK
& 18" X 196' PIPE OUTLET
CONNECT TO D.I. ON RT. @ STA. 163+00.00
TY C = 4' X 4'
TY MO = 4' DIA.
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 196 LIN. FT.
18" SLPPMCCS PIPE (CLASS III)
(TYPE 2 BEDDING) = 196 LIN. FT.

STA. 168+99.00 - CONSTRUCT
DI ON RT. H = 3'-8"
WITH 8' EXTENSION
WITH OPENING IN BACK
& 18" X 194' PIPE OUTLET
CONNECT TO D.I. ON RT. @ STA. 167+02.00
TY C = 4' X 4'
TY MO = 4' DIA.
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 194 LIN. FT.
18" SLPPMCCS PIPE (CLASS III)
(TYPE 2 BEDDING) = 194 LIN. FT.

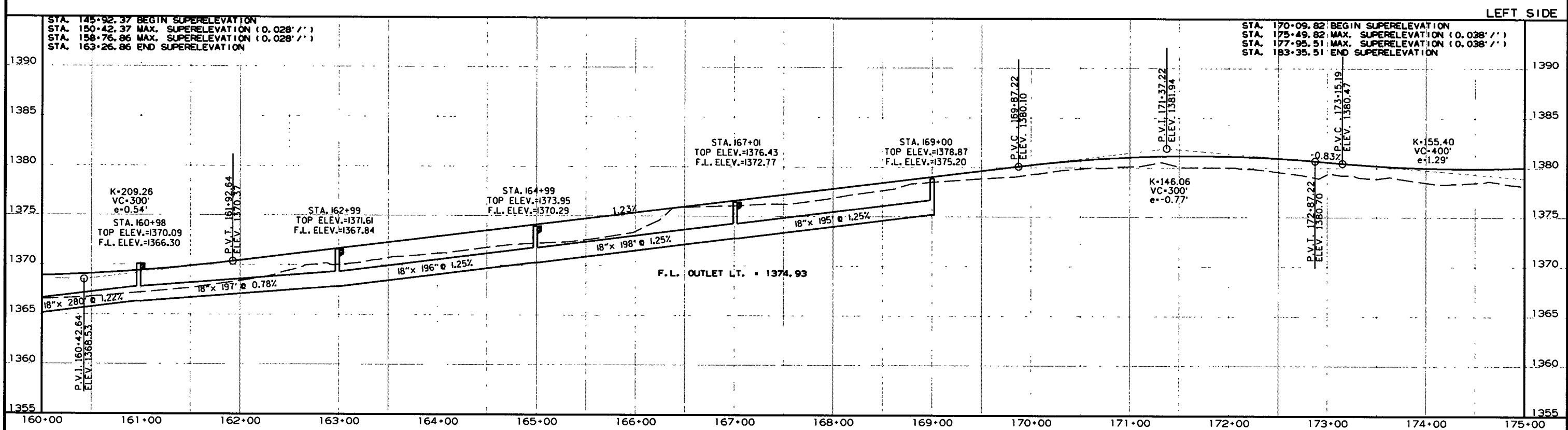
STA. 174+99.00 - CONSTRUCT
DI ON RT. H = 4'-9"
WITH 8' EXTENSION
WITH OPENING IN BACK
& 18" X 55' PIPE OUTLET
CONNECT TO D.I. ON RT. @ STA. 175+61.00
TY C = 4' X 4'
TY MO = 4' DIA.
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 55 LIN. FT.
18" SLPPMCCS PIPE (CLASS III)
(TYPE 2 BEDDING) = 55 LIN. FT.

STATION	STATION	LOCATION	LIN. FT.
160+15	161+21	LT.	115
164+70	165+11	LT.	42
166+94	167+63	LT.	76

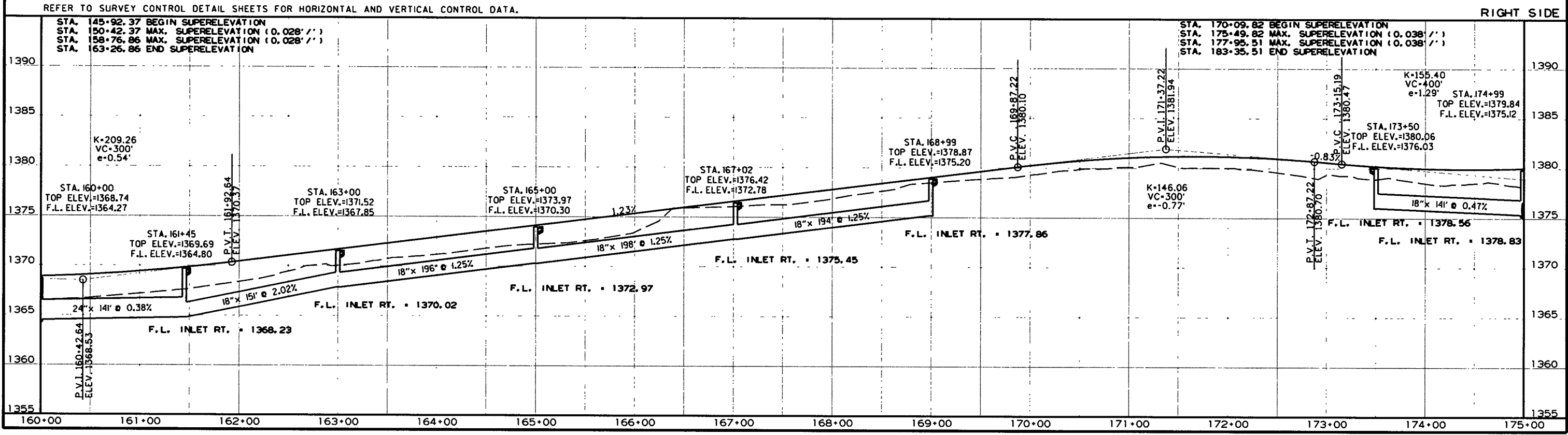


DATE REVISION	DATE FILED	DATE REVISION	DATE FILED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 012007							103	267

2 PLAN AND PROFILE SHEETS



REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.



9/11/2017
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REMOVAL AND DISPOSAL OF FENCE

STATION	STATION	LOCATION	LIN. FT.
160+15	161+21	LT.	115
164+70	165+11	LT.	42
166+94	167+63	LT.	76

16' GATES

STATION	SIDE	16' GATES
178+57	LT.	1
180+54	LT.	1
183+98	LT.	1

STA. 178+57 CONST.
APPROACH ON LT. = 115 CU. YDS.

STA. 180+54 CONST.
APPROACH ON LT. = 60 CU. YDS.

STA. 183+38.00 - CONSTRUCT
DI ON LT. H = 3'-10"
WITH 4' EXTENSION
& 18" X 17' R.C. PIPE OUTLET WITH FES
TY C = 4' X 4'
TY MO = 4' DIA.
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 17 LIN. FT.
18" F.E.S. = 1 EACH

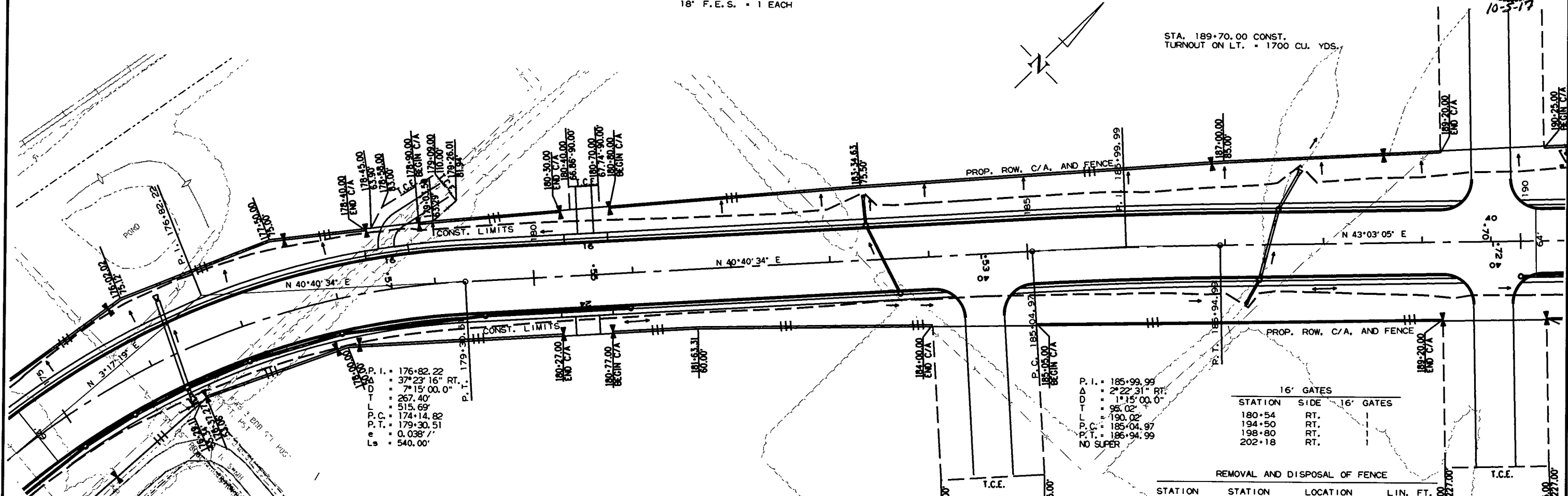
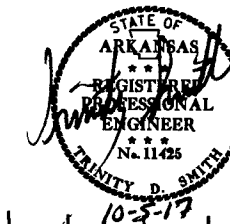
STA. 184+00 CONST.
APPROACH ON LT. = 95 CU. YDS.

STA. 187+54.00 - CONSTRUCT
DI ON LT. H = 7'-0"
& 24" X 31' R.C. PIPE OUTLET WITH FES
TY C = 4' X 4'
TY MO = 4' DIA.
24" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 31 LIN. FT.
24" F.E.S. = 1 EACH

STA. 189+70.00 CONST.
TURNOUT ON LT. = 1700 CU. YDS.

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	012007		104	267

2 PLAN AND PROFILE SHEETS



P.I. = 176+82.22
Δ = 37°23'16" RT
D = 7°15'00.0" RT
T = 267.40'
L = 515.69'
P.C. = 174+14.82
P.T. = 179+30.51
e = 0.038' /'
Ls = 540.00'

P.I. = 185+99.99
Δ = 2°22'31" RT
D = 1°15'00.0" RT
T = 95.02'
L = 190.02'
P.C. = 185+04.87
P.T. = 186+94.99
NO SUPER

STATION	SIDE	16' GATES
180+54	RT.	1
194+50	RT.	1
198+80	RT.	1
202+18	RT.	1

STATION	STATION	LOCATION	LIN. FT.
160+15	161+21	LT.	115
164+70	165+11	LT.	42
166+94	167+63	LT.	76

STA. 175+61.00 - CONSTRUCT
DI ON RT. H = 5'-6"
& 18" X 65' PIPE OUTLET
CONNECT TO D.I. ON RT. @ STA. 176+23.00
TY C = 4' X 4'
TY MO = 4' DIA.
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 65 LIN. FT.
18" SLPPMCCS PIPE (CLASS III)
(TYPE 2 BEDDING) = 65 LIN. FT.

STA. 176+95.00 - CONSTRUCT
DI ON RT. H = 6'-7"
WITH 4' EXTENSION
& 24" X 64' PIPE OUTLET
CONNECT TO D.I. ON RT. @ STA. 176+23.00
TY C = 4' X 4'
TY MO = 4' DIA.
24" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 64 LIN. FT.
24" SLPPMCCS PIPE (CLASS III)
(TYPE 2 BEDDING) = 64 LIN. FT.

STA. 179+49.00 - CONSTRUCT
DI ON RT. H = 5'-6"
WITH 8' EXTENSION
& 24" X 142' PIPE OUTLET
CONNECT TO D.I. ON RT. @ STA. 177+97.00
TY C = 4' X 4'
TY MO = 4' DIA.
24" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 142 LIN. FT.
24" SLPPMCCS PIPE (CLASS III)
(TYPE 2 BEDDING) = 142 LIN. FT.

STA. 183+42 CONST.
APPROACH ON RT. = 5 CU. YDS. EXC.

STA. 183+69.00 - CONSTRUCT
DI ON RT. H = 3'-6"
WITH 8' EXTENSION
WITH OPENING IN BACK
& 18" X 74' R.C. PIPE OUTLET
CONNECT TO D.I. ON LT. @ STA. 183+38.00
TY C = 4' X 4'
TY MO = 4' DIA.
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 74 LIN. FT.

STA. 189+72.00 INSTALL
30" X 56' PIPE CULVERT ON RT.
CONST. TURNOUT ON RT. = 355 CU. YDS.

STA. 176+23.00 - CONSTRUCT
DI ON RT. H = 6'-9"
WITH 4' EXTENSION
& 42" X 88' R.C. PIPE OUTLET WITH FES
& 30" X 4' R.C. PIPE INLET WITH FES
TY C = 6' X 4'
TY MO = 6' DIA.
30" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 4 LIN. FT.
42" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 88 LIN. FT.
30" F.E.S. = 1 EACH
42" F.E.S. = 1 EACH
D.A. = 13 ACRES Q50 = 24 C.F.S.

STA. 177+97.00 - CONSTRUCT
DI ON RT. H = 6'-11"
WITH 4' EXTENSION
& 24" X 93' PIPE OUTLET
CONNECT TO D.I. ON RT. @ STA. 176+95.00
TY C = 4' X 4'
TY MO = 4' DIA.
24" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 93 LIN. FT.
24" SLPPMCCS PIPE (CLASS III)
(TYPE 2 BEDDING) = 93 LIN. FT.

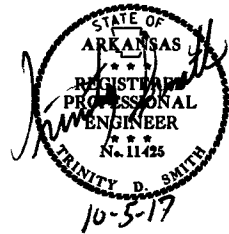
STA. 180+54 CONST.
APPROACH ON RT. = 5 CU. YDS.

STA. 180+96.00 - CONSTRUCT
DI ON RT. H = 4'-2"
WITH 8' EXTENSION
WITH OPENING IN BACK
& 24" X 145' PIPE OUTLET
CONNECT TO D.I. ON RT. @ STA. 179+49.00
TY C = 4' X 4'
TY MO = 4' DIA.
24" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 145 LIN. FT.
24" SLPPMCCS PIPE (CLASS III)
(TYPE 2 BEDDING) = 145 LIN. FT.

STA. 184+53.00 CONST.
TURNOUT ON RT. = 65 CU. YDS. EXC.

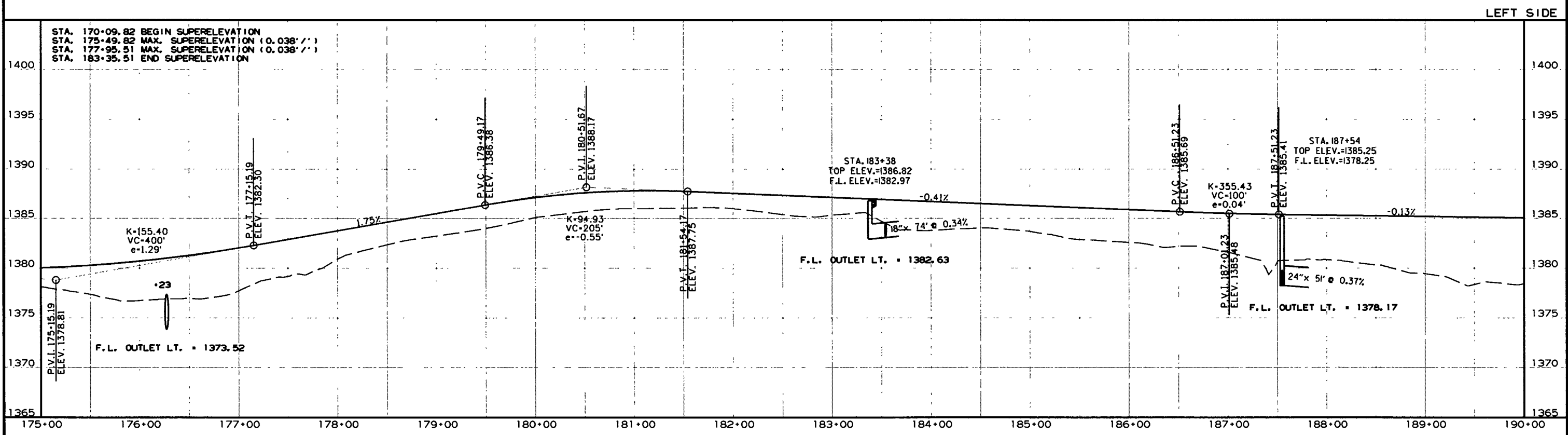
STA. 187+34.00 - CONSTRUCT
DI ON RT. H = 5'-3"
WITH 4' EXTENSION
& 24" X 69' R.C. PIPE OUTLET
CONNECT TO D.I. ON LT. @ STA. 187+54.00
& 18" X 17' R.C. PIPE INLET WITH FES
TY C = 4' X 4'
TY MO = 4' DIA.
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 17 LIN. FT.
24" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 69 LIN. FT.
18" F.E.S. = 1 EACH
D.A. = 4 ACRES Q50 = 5 C.F.S.

STA. 190+00.00 - CONSTRUCT
DI ON RT. H = 6'-0"
& 18" X 147' PIPE OUTLET
CONNECT TO D.I. ON RT. @ STA. 191+51.00
TY C = 4' X 4'
TY MO = 4' DIA.
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 147 LIN. FT.
18" SLPPMCCS PIPE (CLASS III)
(TYPE 2 BEDDING) = 147 LIN. FT.

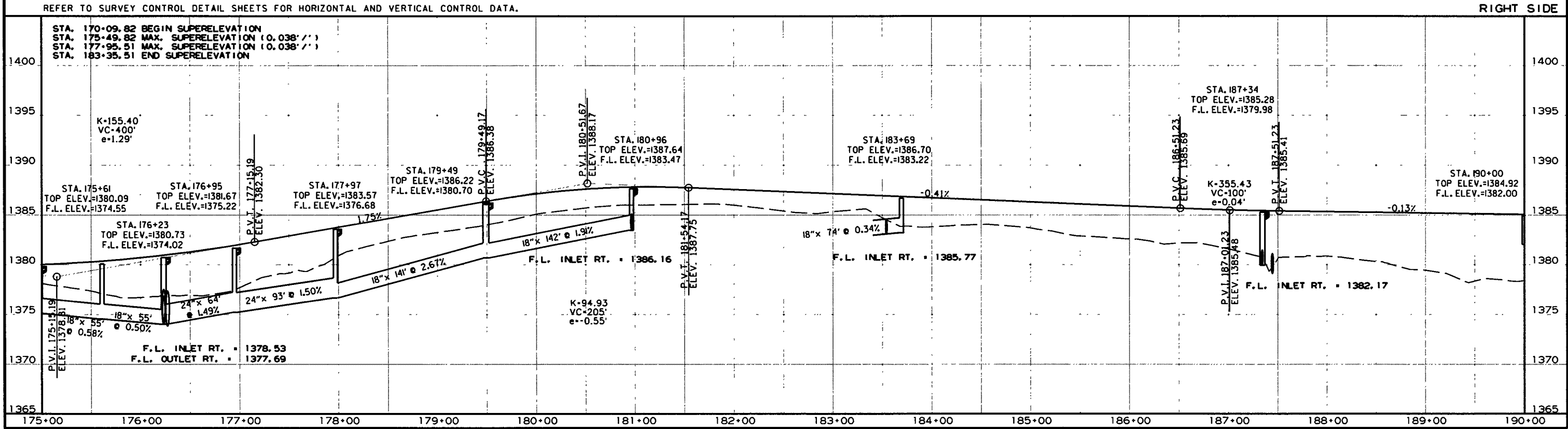


DATE REVISED	DATE FILED	DATE REVISED	DATE FILED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 012007							105	267

2 PLAN AND PROFILE SHEETS



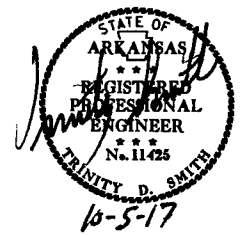
REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.



9/11/2017 RO12007KGT.DGN

DATE REVISED	DATE FILED	DATE REVISED	DATE FILED	FED. DIST. NO.	STATE	FED. PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		106	267
				JOB NO.	012007			

2 PLAN AND PROFILE SHEETS



STA. 190+95.00 - CONSTRUCT
DI ON LT. H = 6'-10"
WITH 4' EXTENSION
& 18" X 40' R.C. PIPE OUTLET WITH FES
TY C = 4' X 4'
TY MO = 4' DIA.
18" R.C. PIPE (CLASS IIII)
(TYPE 3 BEDDING) = 40 LIN. FT.
18" F.E.S. = 1 EACH

STA. 194+00.00 - CONSTRUCT
DI ON LT. H = 5'-4"
& 18" X 96' PIPE OUTLET
CONNECT TO D.I. ON LT. @ STA. 195+00.00
TY C = 4' X 4'
TY MO = 4' DIA.
18" R.C. PIPE (CLASS IIII)
(TYPE 3 BEDDING) = 96 LIN. FT.
18" SLPPMCCS PIPE (CLASS IIII)
(TYPE 2 BEDDING) = 96 LIN. FT.

STA. 196+28.00 - CONSTRUCT
DI ON LT. H = 8'-1"
WITH 4' EXTENSION
& 54" X 20' R.C. PIPE OUTLET WITH FES
& 54" X 87' R.C. PIPE INLET WITH FES
TY C = 6' X 4'
TY MO = 6' DIA.
54" R.C. PIPE (CLASS IIII)
(TYPE 3 BEDDING) = 107 LIN. FT.
54" F.E.S. = 2 EACH
D.A. = 75 ACRES Q50 = 92 C.F.S.

STA. 199+32.00 - CONSTRUCT
DI ON LT. H = 2'-9"
WITH 4' EXTENSION
& 18" X 61' PIPE OUTLET
CONNECT TO D.I. ON LT. @ STA. 200+00.00
TY C = 4' X 4'
TY MO = 4' DIA.
18" R.C. PIPE (CLASS IIII)
(TYPE 3 BEDDING) = 61 LIN. FT.
18" SLPPMCCS PIPE (CLASS IIII)
(TYPE 2 BEDDING) = 61 LIN. FT.

STA. 202+22 CONST.
APPROACH ON LT. = 15 CU. YDS.

STA. 202+74.00 - CONSTRUCT
DI ON LT. H = 6'-10"
WITH 4' EXTENSION
& 30" X 218' PIPE OUTLET
CONNECT TO D.I. ON LT. @ STA. 205+00.00
TY C = 5' X 5'
TY MO = 5' DIA.
30" R.C. PIPE (CLASS IIII)
(TYPE 3 BEDDING) = 218 LIN. FT.
30" SLPPMCCS PIPE (CLASS IIII)
(TYPE 2 BEDDING) = 218 LIN. FT.

STA. 205+00.00 - CONSTRUCT
DI ON LT. H = 5'-1"
WITH 4' EXTENSION
& 30" X 106' PIPE OUTLET
CONNECT TO D.I. ON LT. @ STA. 206+11.00
TY C = 5' X 5'
TY MO = 5' DIA.
30" R.C. PIPE (CLASS IIII)
(TYPE 3 BEDDING) = 106 LIN. FT.
30" SLPPMCCS PIPE (CLASS IIII)
(TYPE 2 BEDDING) = 106 LIN. FT.

STA. 192+00 CONST.
APPROACH ON LT. = 150 CU. YDS.

STA. 194+50 CONST.
APPROACH ON LT. = 195 CU. YDS.

STA. 197+00.00 - CONSTRUCT
DI ON LT. H = 2'-3"
& 18" X 96' PIPE OUTLET
CONNECT TO D.I. ON LT. @ STA. 198+00.00
TY C = 4' X 4'
TY MO = 4' DIA.
18" R.C. PIPE (CLASS IIII)
(TYPE 3 BEDDING) = 96 LIN. FT.
18" SLPPMCCS PIPE (CLASS IIII)
(TYPE 2 BEDDING) = 96 LIN. FT.

STA. 200+00.00 - CONSTRUCT
DI ON LT. H = 3'-2"
WITH 4' EXTENSION
& 18" X 140' PIPE OUTLET
CONNECT TO D.I. ON LT. @ STA. 201+49.00
TY C = 4' X 4'
TY MO = 4' DIA.
18" R.C. PIPE (CLASS IIII)
(TYPE 3 BEDDING) = 140 LIN. FT.
18" SLPPMCCS PIPE (CLASS IIII)
(TYPE 2 BEDDING) = 140 LIN. FT.

STA. 193+00.00 - CONSTRUCT
DI ON LT. H = 4'-0"
& 18" X 96' PIPE OUTLET
CONNECT TO D.I. ON LT. @ STA. 194+00.00
TY C = 4' X 4'
TY MO = 4' DIA.
18" R.C. PIPE (CLASS IIII)
(TYPE 3 BEDDING) = 96 LIN. FT.
18" SLPPMCCS PIPE (CLASS IIII)
(TYPE 2 BEDDING) = 96 LIN. FT.

STA. 195+00.00 - CONSTRUCT
DI ON LT. H = 6'-9"
& 18" X 123' PIPE OUTLET
CONNECT TO D.I. ON LT. @ STA. 196+28.00
TY C = 4' X 4'
TY MO = 4' DIA.
18" R.C. PIPE (CLASS IIII)
(TYPE 3 BEDDING) = 123 LIN. FT.
18" SLPPMCCS PIPE (CLASS IIII)
(TYPE 2 BEDDING) = 123 LIN. FT.

STA. 198+00.00 - CONSTRUCT
DI ON LT. H = 2'-7"
WITH 4' EXTENSION
& 18" X 126' PIPE OUTLET
CONNECT TO D.I. ON LT. @ STA. 199+32.00
TY C = 4' X 4'
TY MO = 4' DIA.
18" R.C. PIPE (CLASS IIII)
(TYPE 3 BEDDING) = 126 LIN. FT.
18" SLPPMCCS PIPE (CLASS IIII)
(TYPE 2 BEDDING) = 126 LIN. FT.

STA. 201+49.00 - CONSTRUCT
DI ON LT. H = 5'-2"
WITH 4' EXTENSION
& 18" X 94' R.C. PIPE INLET WITH FES
& 24" X 116' PIPE OUTLET
CONNECT TO D.I. ON LT. @ STA. 202+74.00
TY C = 4' X 4'
TY MO = 4' DIA.
18" R.C. PIPE (CLASS IIII)
(TYPE 3 BEDDING) = 94 LIN. FT.
24" R.C. PIPE (CLASS IIII)
(TYPE 3 BEDDING) = 116 LIN. FT.
24" SLPPMCCS PIPE (CLASS IIII)
(TYPE 2 BEDDING) = 116 LIN. FT.
18" F.E.S. = 1 EACH
D.A. = 10 ACRES Q50 = 14 C.F.S.

STA. 198+80 CONST.
APPROACH ON LT. = 25 CU. YDS.

REMOVAL AND DISPOSAL OF FENCE

STATION	STATION	LOCATION	LIN. FT.
160+15	161+21	LT.	115
164+70	165+11	LT.	42
166+94	167+63	LT.	76

P.I. = 201+06.83
Δ = 27°00'14" LT.
D = 5°30'00.0"
T = 250.14'
L = 490.98'
P.C. = 198+56.69
P.T. = 203+47.67
e = 0.0367'
Ls = 450.00'

16' GATES

STATION	SIDE	16' GATES
192+00	LT.	1
194+50	LT.	1
198+80	LT.	1
202+22	LT.	1

REMOVAL AND DISPOSAL OF FENCE

STATION	STATION	LOCATION	LIN. FT.
160+15	161+21	LT.	115
164+70	165+11	LT.	42
166+94	167+63	LT.	76

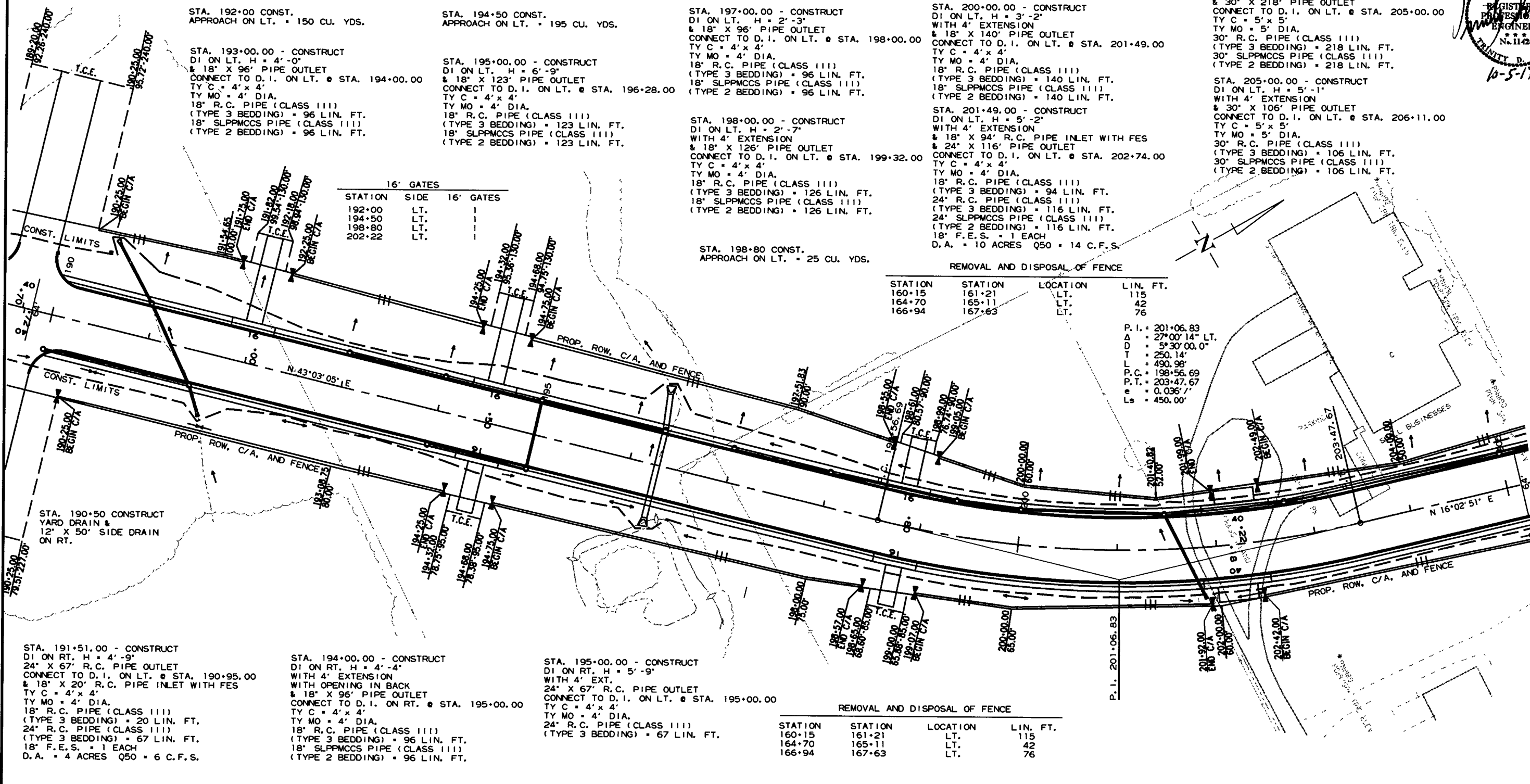
16' GATES

STATION	SIDE	16' GATES
194+50	RT.	1
198+80	RT.	1
202+18	RT.	1

STA. 194+50 CONST.
APPROACH ON RT. = 55 CU. YDS.

STA. 198+80 CONST.
APPROACH ON RT. = 25 CU. YDS.

STA. 202+18 CONST.
APPROACH ON RT. = 15 CU. YDS.



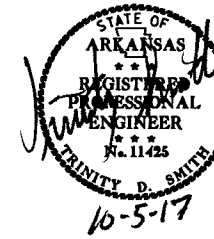
STA. 191+51.00 - CONSTRUCT
DI ON RT. H = 4'-9"
24" X 67' R.C. PIPE OUTLET
CONNECT TO D.I. ON LT. @ STA. 190+95.00
& 18" X 20' R.C. PIPE INLET WITH FES
TY C = 4' X 4'
TY MO = 4' DIA.
18" R.C. PIPE (CLASS IIII)
(TYPE 3 BEDDING) = 20 LIN. FT.
24" R.C. PIPE (CLASS IIII)
(TYPE 3 BEDDING) = 67 LIN. FT.
18" F.E.S. = 1 EACH
D.A. = 4 ACRES Q50 = 6 C.F.S.

STA. 194+00.00 - CONSTRUCT
DI ON RT. H = 4'-4"
WITH 4' EXTENSION
WITH OPENING IN BACK
& 18" X 96' PIPE OUTLET
CONNECT TO D.I. ON RT. @ STA. 195+00.00
TY C = 4' X 4'
TY MO = 4' DIA.
18" R.C. PIPE (CLASS IIII)
(TYPE 3 BEDDING) = 96 LIN. FT.
18" SLPPMCCS PIPE (CLASS IIII)
(TYPE 2 BEDDING) = 96 LIN. FT.

STA. 195+00.00 - CONSTRUCT
DI ON RT. H = 5'-9"
WITH 4' EXT.
24" X 67' R.C. PIPE OUTLET
CONNECT TO D.I. ON LT. @ STA. 195+00.00
TY C = 4' X 4'
TY MO = 4' DIA.
24" R.C. PIPE (CLASS IIII)
(TYPE 3 BEDDING) = 67 LIN. FT.

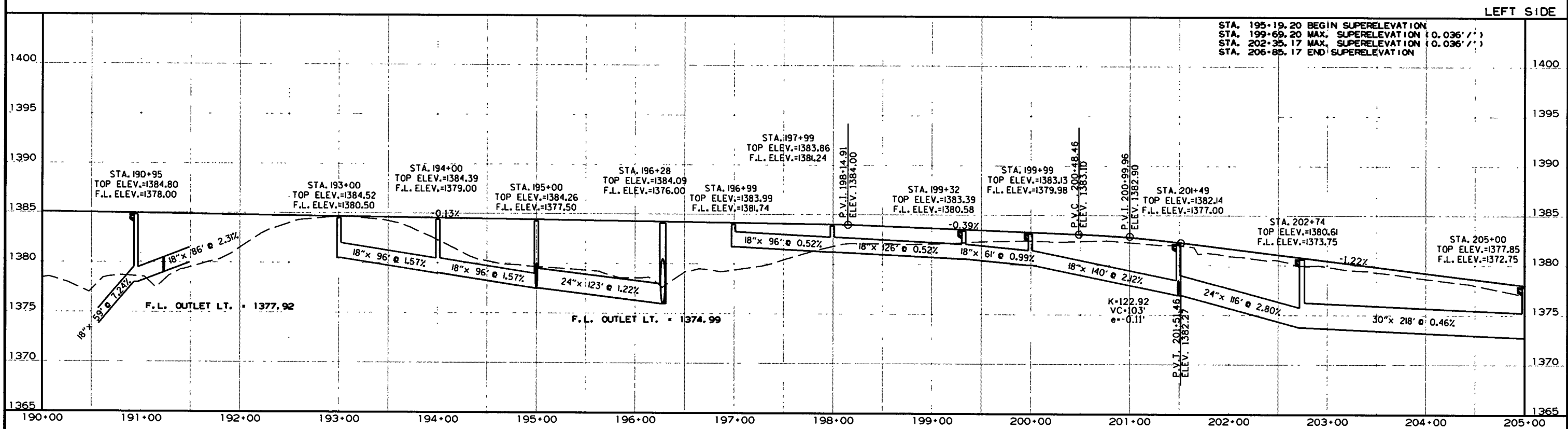
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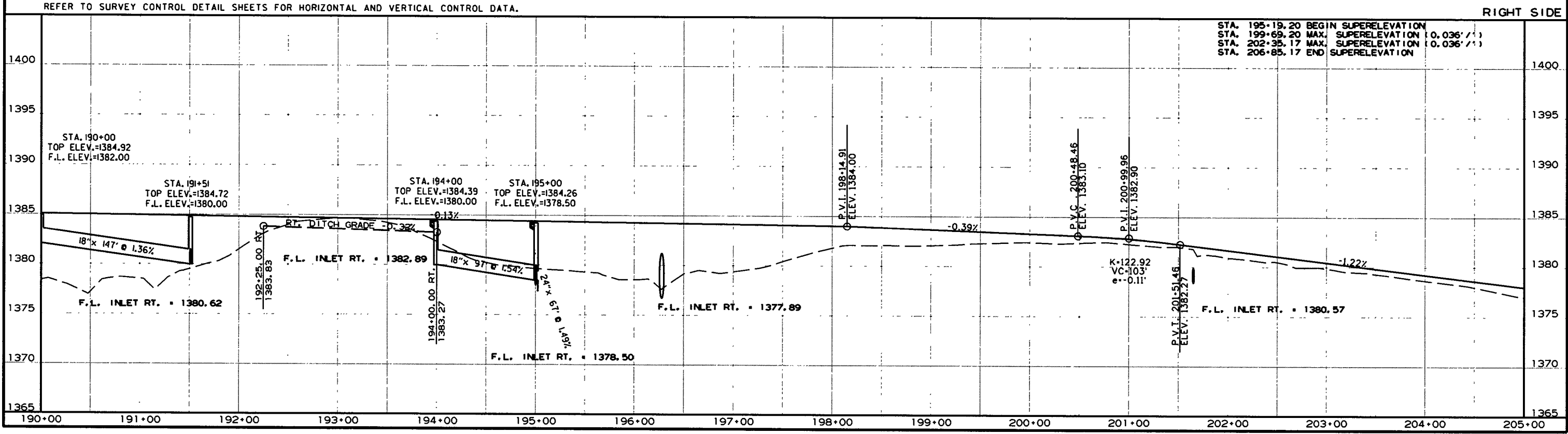


DATE REVISED	DATE FILED	DATE REVISED	DATE FILED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		107	267

2 PLAN AND PROFILE SHEETS



REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.



9/11/2017
R012007KGT.DGN

STA. 205+72 CONST.
APPROACH ON LT. = 25 CU. YDS.

STA. 206+11.00 - CONSTRUCT
DI ON LT. H = 5'-1"
WITH 4' EXTENSION
& 30" X 136' PIPE OUTLET
CONNECT TO EXISTING D.I. ON HWY. 264
TY C = 5' X 5'
TY MO = 5' DIA.
30" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 136 LIN. FT.
30" SLPPMCCS PIPE (CLASS III)
(TYPE 2 BEDDING) = 136 LIN. FT.

STA. 206+64.74 CONSTRUCT
TYPE 4 WHEELCHAIR RAMP ON LT.
= 7.8 SQ. YDS.

STA. 206+88.14 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 2.5 SQ. YDS.

STA. 206+94.22 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 3.0 SQ. YDS.

STA. 207+06.82 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 2.7 SQ. YDS.

STA. 207+74.22 CONSTRUCT
TYPE 4 WHEELCHAIR RAMP ON LT.
= 62.8 SQ. YDS.

STA. 207+58.11 HWY. 265 =
STA. 102+78.70 HWY. 264
 $\Delta = 104^{\circ}01'35.8''$

STA. 208+48 CONSTRUCT
QUINT. 6' X 3' X 163' R.C. BOX CULVERT
ON A 15° RT. FWD. SKEW
WITH 3:1 WINGS LT. & RT.
D.A. = 115 ACRES Q50 = 420 CFS
SPAN = 33'-8"

STA. 209+15.00 - CONSTRUCT
DI ON LT. H = 5'-5"
WITH 8' EXTENSION
& 24" X 77' PIPE OUTLET
CONNECT TO R.C. BOX CULVERT
TY C = 4' X 4'
TY MO = 4' DIA.
24" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 77 LIN. FT.
24" SLPPMCCS PIPE (CLASS III)
(TYPE 2 BEDDING) = 77 LIN. FT.
D.A. = 12' Q50 = 17 C.F.S.

STA. 211+23.00 - CONSTRUCT
DI ON LT. H = 6'-7"
WITH 8' EXTENSION
& 24" X 204' PIPE OUTLET
CONNECT TO D.I. ON LT. @ STA. 209+15.00
TY C = 4' X 4'
TY MO = 4' DIA.
24" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 204 LIN. FT.
24" SLPPMCCS PIPE (CLASS III)
(TYPE 2 BEDDING) = 204 LIN. FT.

STA. 213+73.00 - CONSTRUCT
DI ON LT. H = 5'-1"
WITH 8' EXTENSION
& 18" X 246' PIPE OUTLET
CONNECT TO D.I. ON LT. @ STA. 211+23.00
TY C = 4' X 4'
TY MO = 4' DIA.
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 246 LIN. FT.
18" SLPPMCCS PIPE (CLASS III)
(TYPE 2 BEDDING) = 246 LIN. FT.

STA. 215+81.00 - CONSTRUCT
DI ON LT. H = 4'-8"
WITH 8' EXTENSION
& 18" X 204' PIPE OUTLET
CONNECT TO D.I. ON LT. @ STA. 213+73.00
TY C = 4' X 4'
TY MO = 4' DIA.
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 204 LIN. FT.
18" SLPPMCCS PIPE (CLASS III)
(TYPE 2 BEDDING) = 204 LIN. FT.

STA. 217+04.00 - CONSTRUCT
DI ON LT. H = 4'-0"
WITH 8' EXTENSION
& 18" X 116' PIPE OUTLET
CONNECT TO D.I. ON LT. @ STA. 215+81.00
TY C = 4' X 4'
TY MO = 4' DIA.
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 116 LIN. FT.
18" SLPPMCCS PIPE (CLASS III)
(TYPE 2 BEDDING) = 116 LIN. FT.

STA. 218+68.00 - CONSTRUCT
DI ON LT. H = 4'-3"
WITH 4' EXTENSION
& 18" X 151' PIPE OUTLET
CONNECT TO D.I. ON LT. @ STA. 217+04.00
TY C = 4' X 4'
TY MO = 4' DIA.
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 151 LIN. FT.
18" SLPPMCCS PIPE (CLASS III)
(TYPE 2 BEDDING) = 151 LIN. FT.

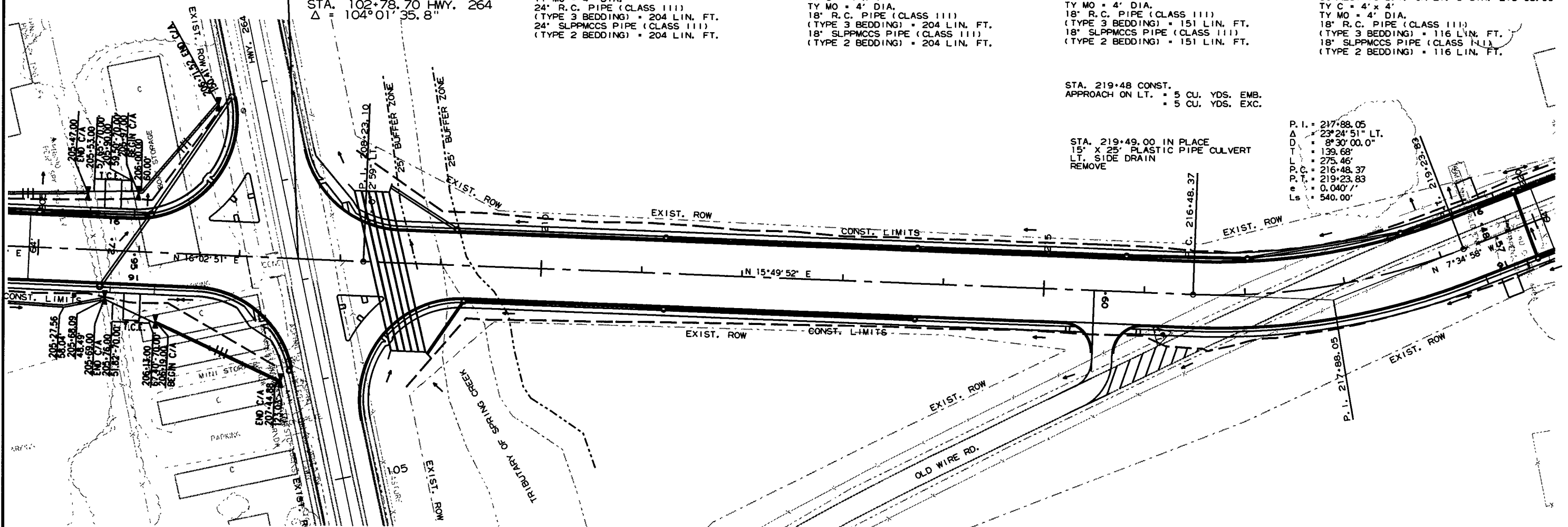
STA. 219+91.00 - CONSTRUCT
DI ON LT. H = 4'-1"
WITH 4' EXTENSION
WITH OPENING IN BACK
& 18" X 116' PIPE OUTLET
CONNECT TO D.I. ON LT. @ STA. 218+68.00
TY C = 4' X 4'
TY MO = 4' DIA.
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 116 LIN. FT.
18" SLPPMCCS PIPE (CLASS III)
(TYPE 2 BEDDING) = 116 LIN. FT.

STA. 219+48 CONST.
APPROACH ON LT. = 5 CU. YDS. EMB.
= 5 CU. YDS. EXC.

STA. 219+49.00 IN PLACE
15" X 25' PLASTIC PIPE CULVERT
LT. SIDE DRAIN
REMOVE

P.I. = 217+88.05
 $\Delta = 23^{\circ}24'51''$ LT.
D = 8'30"00"
T = 139.68'
L = 275.46'
P.C. = 216+48.37
P.T. = 219+23.83
e = 0.0407'
Ls = 540.00'

16' GATES		
STATION	SIDE	16' GATES
205+72	LT.	1



STA. 205+62.00 - CONSTRUCT
DI ON RT. H = 5'-9"
WITH 4' EXTENSION
WITH OPENING IN BACK
& 24" X 83' R.C. PIPE OUTLET
CONNECT TO D.I. ON LT. @ STA. 206+11.00
TY C = 4' X 4'
TY MO = 4' DIA.
24" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 83 LIN. FT.

STA. 205+95 CONST.
APPROACH ON RT. = 25 CU. YDS.

STA. 206+50 CONSTRUCT
YARD DRAIN &
12" X 88' SIDE DRAIN
ON RT.

STA. 206+99.00 CONSTRUCT
TYPE 2 WHEELCHAIR RAMP ON RT.
= 45.6 SQ. YDS.

STA. 208+00.54 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 3.4 SQ. YDS.

STA. 208+19.05 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 2.5 SQ. YDS.

STA. 208+22.44 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 3.7 SQ. YDS.

STA. 208+43.44 CONSTRUCT
TYPE 4 WHEELCHAIR RAMP ON RT.
= 8.0 SQ. YDS.

STA. 209+24.00 - CONSTRUCT
DI ON RT. H = 4'-6"
WITH 8' EXTENSION
WITH 18" X 9' R.C. PIPE INLET WITH F.E.S.
& 18" X 60' PIPE OUTLET
CONNECT TO R.C. BOX CULVERT
TY C = 4' X 4'
TY MO = 4' DIA.
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 69 LIN. FT.
18" SLPPMCCS PIPE (CLASS III)
(TYPE 2 BEDDING) = 60 LIN. FT.
18" F.E.S. = 1 EACH

STA. 211+23.00 - CONSTRUCT
DI ON RT. H = 4'-8"
WITH 8' EXTENSION
& 18" X 195' PIPE OUTLET
CONNECT TO D.I. ON RT. @ STA. 209+24.00
TY C = 4' X 4'
TY MO = 4' DIA.
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 195 LIN. FT.
18" SLPPMCCS PIPE (CLASS III)
(TYPE 2 BEDDING) = 195 LIN. FT.

STA. 213+73.00 - CONSTRUCT
DI ON RT. H = 4'-7"
WITH 8' EXTENSION
& 18" X 246' PIPE OUTLET
CONNECT TO D.I. ON RT. @ STA. 211+23.00
TY C = 4' X 4'
TY MO = 4' DIA.
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 246 LIN. FT.
18" SLPPMCCS PIPE (CLASS III)
(TYPE 2 BEDDING) = 246 LIN. FT.

STA. 215+23.20 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 7.5 SQ. YDS.

STA. 215+60 INSTALL
18" X 32' PIPE CULVERT ON RT.
CONST. TURNOUT ON RT. = 10 CU. YDS. EMB.
= 30 CU. YDS. EXC.

STA. 215+80.45 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 7.5 SQ. YDS.

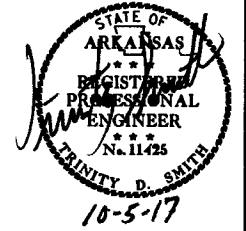
STA. 219+57 CONST.
APPROACH ON RT. = 5 CU. YDS.

STA. 219+75.00 IN PLACE
12" X 19' PLASTIC PIPE CULVERT
RT. SIDE DRAIN
REMOVE

STA. 219+90.00 - CONSTRUCT
DI ON RT. H = 3'-11"
WITH 4' EXTENSION
WITH OPENING IN BACK
& 18" X 67' R.C. PIPE OUTLET
CONNECT TO D.I. ON LT. @ STA. 219+91.00
TY C = 4' X 4'
TY MO = 4' DIA.
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 67 LIN. FT.

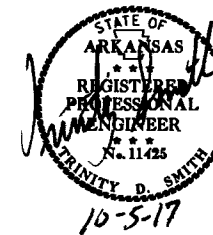
DATE REVISED	DATE FILED	DATE REVISED	DATE FILED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 012007							108	267

2 PLAN AND PROFILE SHEETS



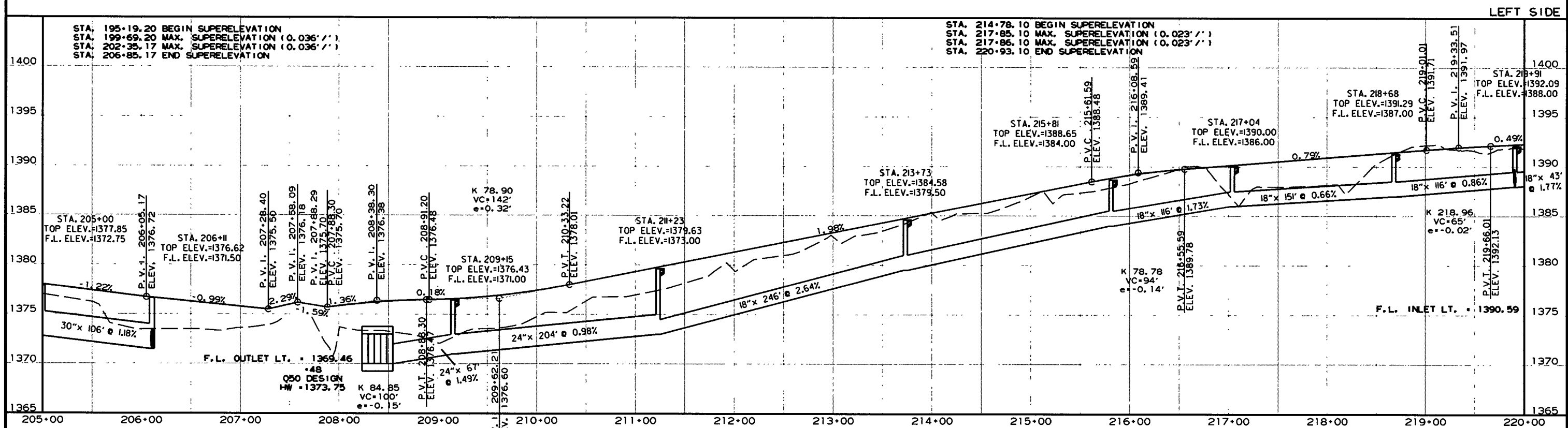
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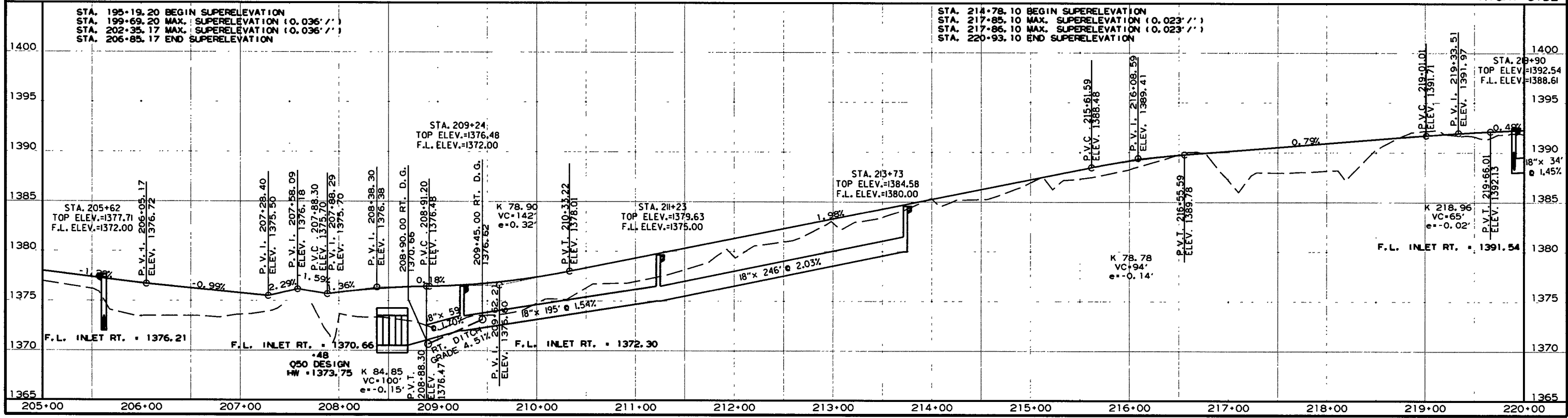


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2 PLAN AND PROFILE SHEETS



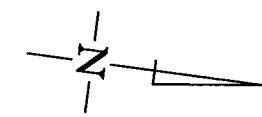
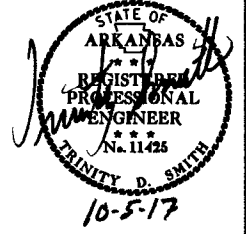
REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.



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				6	ARK.			
						JOB NO. 012007	NO	267

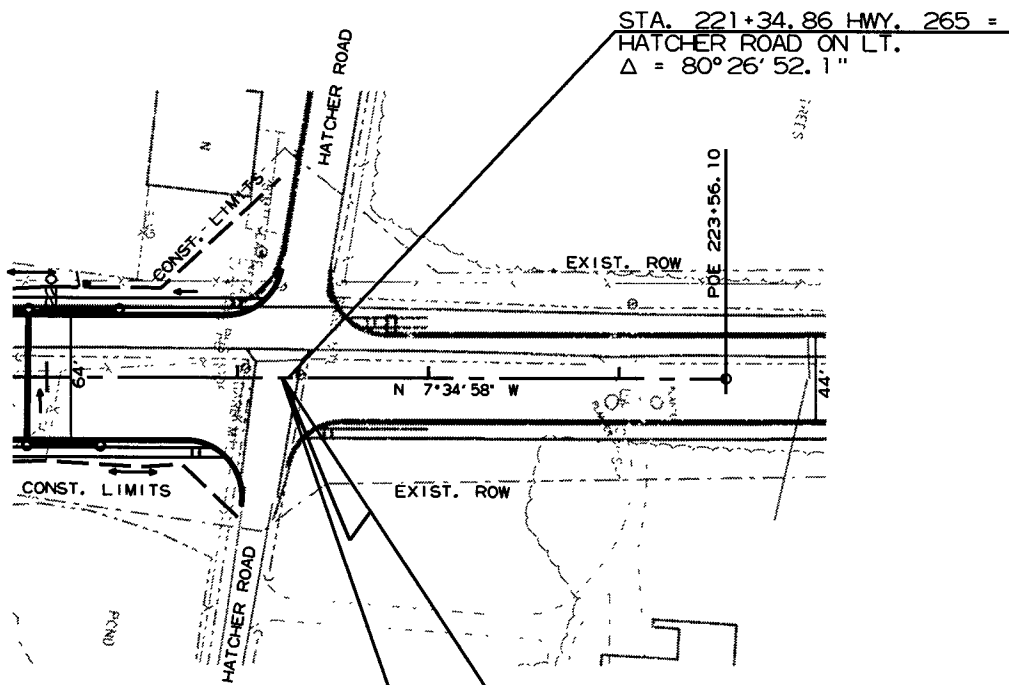
② PLAN AND PROFILE SHEETS



STA. 220+20 CONSTRUCT
YARD DRAIN ON LT.
& 12" X 18" PIPE OUTLET
CONNECT TO D.I. ON LT. @ STA. 220+38.00
12" SIDE DRAIN = 18 LIN. FT.

STA. 220+98.10 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 7.5 SQ. YDS.

STA. 220+38.00 - CONSTRUCT
DI ON LT. H = 3'-6"
WITH 4' EXTENSION
& 18" X 47' PIPE OUTLET
CONNECT TO D.I. ON LT. @ STA. 219+91.00
TY C = 4' X 4'
TY MO = 4' DIA.
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 47 LIN. FT.
18" SLPPMCCS PIPE (CLASS III)
(TYPE 2 BEDDING) = 47 LIN. FT.



STA. 220+28.00 - CONSTRUCT
DI ON RT. H = 4'-0"
WITH 4' EXTENSION
& 18" X 38' PIPE OUTLET
CONNECT TO D.I. ON RT. @ STA. 219+90.00
TY C = 4' X 4'
TY MO = 4' DIA.
18" R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 38 LIN. FT.
18" SLPPMCCS PIPE (CLASS III)
(TYPE 2 BEDDING) = 38 LIN. FT.

STA. 221+23.93
END JOB 012007
BEGIN JOB 090373

STA. 221+15.66 HWY. 265 =
HATCHER ROAD ON RT.
 $\Delta = 79^\circ 47' 18.6''$

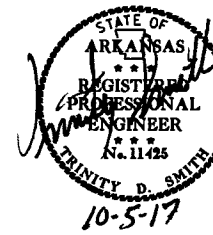
STA. 220+76.20 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 7.5 SQ. YDS.

STA. 221+22.00 IN PLACE
15" X 26" PLASTIC PIPE CULVERT
RT. SIDE DRAIN
RETAIN

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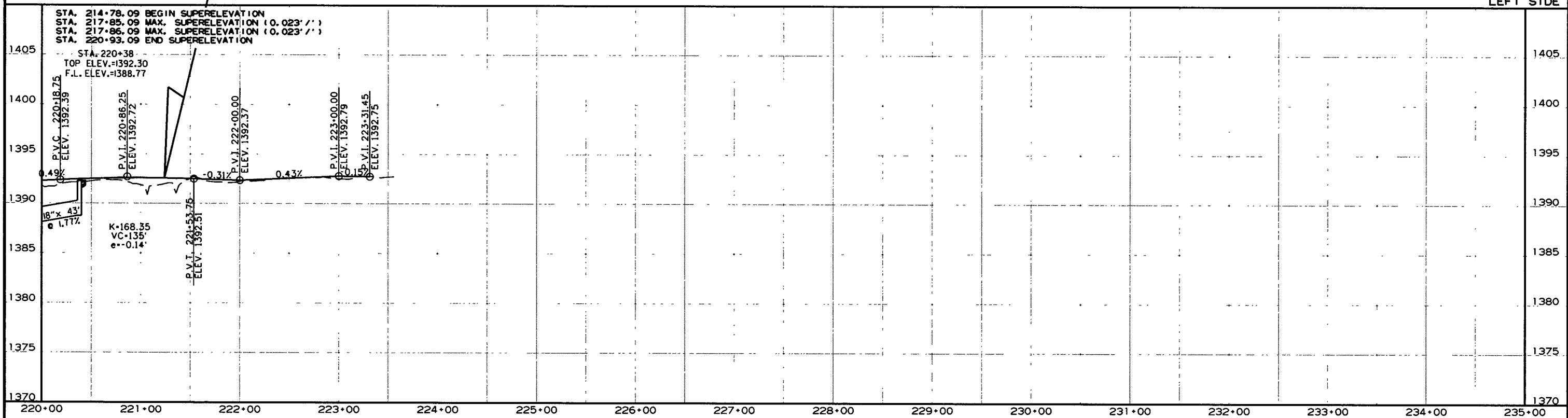
DATE REVISED	DATE FILED	DATE REVISED	DATE FILED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
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2 PLAN AND PROFILE SHEETS

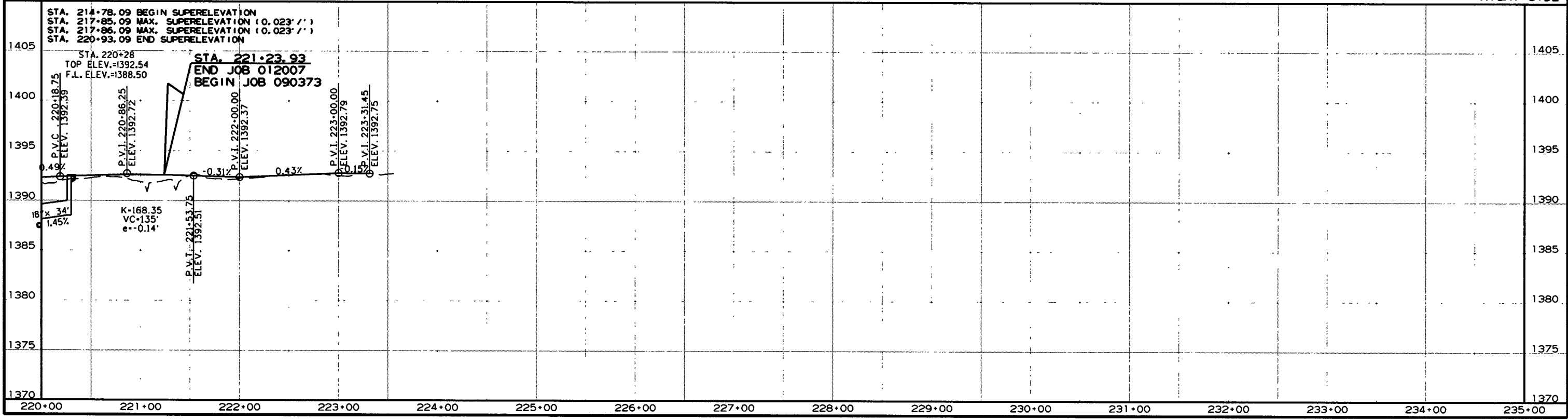
STA. 221+23.93
END JOB 012007
BEGIN JOB 090373

LEFT SIDE



REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

RIGHT SIDE



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STA. 100+42.70 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 8.7 SQ. YDS.

STA. 101+00.00 - CONSTRUCT
DI ON LT. H = 5'-2"
WITH 8' EXTENSION
& 18" X 52' PIPE OUTLET
CONNECT TO EXISTING D.I. ON LT.
TY C = 4' X 4'
TY MO = 4' DIA.
18" R.C. PIPE (CLASS IIII)
(TYPE 3 BEDDING) = 52 LIN. FT.
18" SLPPMCCS PIPE (CLASS IIII)
(TYPE 2 BEDDING) = 52 LIN. FT.

STA. 103+00.00 - CONSTRUCT
DI ON LT. H = 5'-8"
WITH 8' EXTENSION
& 18" X 191' PIPE OUTLET
CONNECT TO D.I. ON LT. @ STA. 101+00.00
TY C = 4' X 4'
TY MO = 4' DIA.
18" R.C. PIPE (CLASS IIII)
(TYPE 3 BEDDING) = 191 LIN. FT.
18" SLPPMCCS PIPE (CLASS IIII)
(TYPE 2 BEDDING) = 191 LIN. FT.

STA. 105+00.00 - CONSTRUCT
DI ON LT. H = 5'-0"
WITH 8' EXTENSION
& 18" X 192' PIPE OUTLET
CONNECT TO D.I. ON LT. @ STA. 103+00.00
TY C = 4' X 4'
TY MO = 4' DIA.
18" R.C. PIPE (CLASS IIII)
(TYPE 3 BEDDING) = 192 LIN. FT.
18" SLPPMCCS PIPE (CLASS IIII)
(TYPE 2 BEDDING) = 192 LIN. FT.

STA. 108+00.00 - CONSTRUCT
DI ON LT. H = 4'-11"
WITH 8' EXTENSION
& 18" X 296' PIPE OUTLET
CONNECT TO D.I. ON LT. @ STA. 105+00.00
TY C = 4' X 4'
TY MO = 4' DIA.
18" R.C. PIPE (CLASS IIII)
(TYPE 3 BEDDING) = 296 LIN. FT.
18" SLPPMCCS PIPE (CLASS IIII)
(TYPE 2 BEDDING) = 296 LIN. FT.

STA. 109+67.08 CONSTRUCT
TYPE 4 WHEELCHAIR RAMP ON LT.
= 8.9 SQ. YDS.

STA. 109+79.00 - CONSTRUCT
DI ON LT. H = 4'-9"
WITH 4' EXTENSION
& 18" X 174' PIPE OUTLET
CONNECT TO D.I. ON LT. @ STA. 108+00.00
TY C = 4' X 4'
TY MO = 4' DIA.
18" R.C. PIPE (CLASS IIII)
(TYPE 3 BEDDING) = 174 LIN. FT.
18" SLPPMCCS PIPE (CLASS IIII)
(TYPE 2 BEDDING) = 174 LIN. FT.

STA. 110+27.89 CONSTRUCT
TYPE 4 WHEELCHAIR RAMP ON LT.
= 12.0 SQ. YDS.

STA. 110+98.81 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 2.7 SQ. YDS.

STA. 111+18.44 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 2.7 SQ. YDS.

STA. 111+21.22 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON LT.
= 2.7 SQ. YDS.

STA. 111+59.53 CONSTRUCT
TYPE 4 WHEELCHAIR RAMP ON LT.
= 7.7 SQ. YDS.

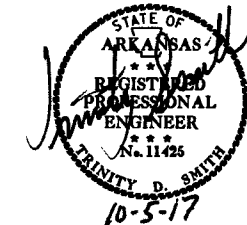
STA. 113+37 CONST.
APPROACH ON LT. = 5 CU. YDS. EMB.
= 5 CU. YDS. EXC.

STA. 114+07.00 - CONSTRUCT
DI ON LT. H = 3'-6"
WITH 8' EXTENSION
& 18" X 51' PIPE OUTLET
CONNECT TO D.I. ON LT. @ STA. 114+62.00
TY C = 4' X 4'
TY MO = 4' DIA.
18" R.C. PIPE (CLASS IIII)
(TYPE 3 BEDDING) = 51 LIN. FT.
18" SLPPMCCS PIPE (CLASS IIII)
(TYPE 2 BEDDING) = 51 LIN. FT.

STA. 114+62.00 - CONSTRUCT
DI ON LT. H = 6'-5"
WITH 8' EXTENSION
CONNECT DBL. EXISTING R.C. PIPE INLET
TY C = 8' X 4'

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PLAN AND PROFILE SHEETS



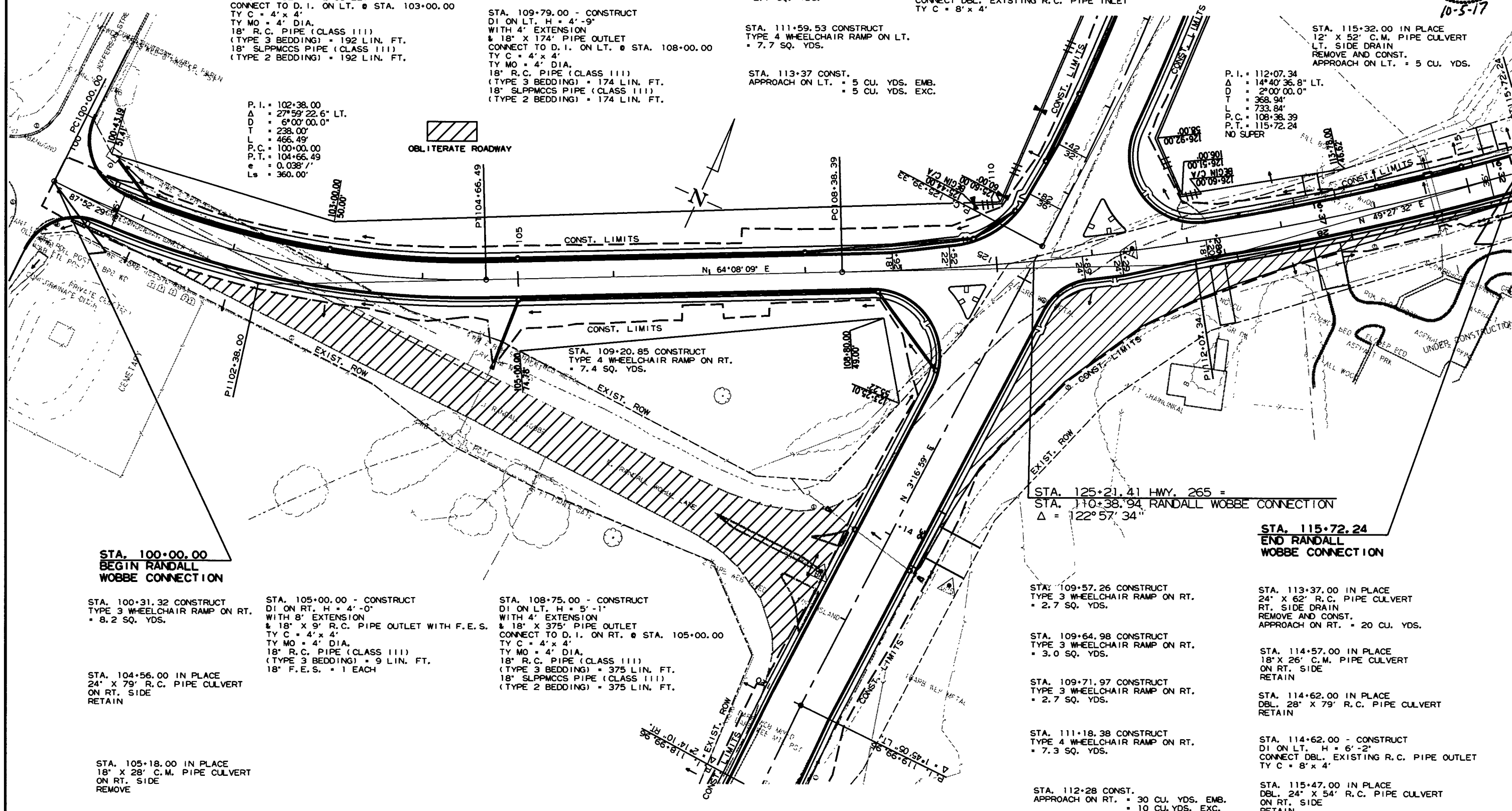
STA. 115+00.00 - CONSTRUCT
DI ON LT. H = 4'-10"
WITH 8' EXTENSION
& 18" X 30' PIPE OUTLET
CONNECT TO D.I. ON LT. @ STA. 114+62.00
TY C = 4' X 4'
TY MO = 4' DIA.
18" R.C. PIPE (CLASS IIII)
(TYPE 3 BEDDING) = 30 LIN. FT.
18" SLPPMCCS PIPE (CLASS IIII)
(TYPE 2 BEDDING) = 30 LIN. FT.

STA. 115+32.00 IN PLACE
12" X 52' C.M. PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND CONST.
APPROACH ON LT. = 5 CU. YDS.

P.I. = 112+07.34
Δ = 14°40'36.8" LT.
D = 2°00'00.0"
T = 368.94'
L = 733.84'
P.C. = 108+36.39
P.T. = 115+72.24
NO SUPER

P.I. = 102+38.00
Δ = 27°59'22.6" LT.
D = 6°00'00.0"
T = 238.00'
L = 466.49'
P.C. = 100+00.00
P.T. = 104+66.49
e = 0.0387'
Ls = 360.00'

OBLITERATE ROADWAY



STA. 100+00.00
BEGIN RANDALL
WOBBE CONNECTION

STA. 100+31.32 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 8.2 SQ. YDS.

STA. 104+56.00 IN PLACE
24" X 79' R.C. PIPE CULVERT
ON RT. SIDE
RETAIN

STA. 105+18.00 IN PLACE
18" X 28' C.M. PIPE CULVERT
ON RT. SIDE
REMOVE

STA. 105+00.00 - CONSTRUCT
DI ON RT. H = 4'-0"
WITH 8' EXTENSION
& 18" X 9' R.C. PIPE OUTLET WITH F.E.S.
TY C = 4' X 4'
TY MO = 4' DIA.
18" R.C. PIPE (CLASS IIII)
(TYPE 3 BEDDING) = 9 LIN. FT.
18" F.E.S. = 1 EACH

STA. 108+75.00 - CONSTRUCT
DI ON LT. H = 5'-1"
WITH 4' EXTENSION
& 18" X 375' PIPE OUTLET
CONNECT TO D.I. ON RT. @ STA. 105+00.00
TY C = 4' X 4'
TY MO = 4' DIA.
18" R.C. PIPE (CLASS IIII)
(TYPE 3 BEDDING) = 375 LIN. FT.
18" SLPPMCCS PIPE (CLASS IIII)
(TYPE 2 BEDDING) = 375 LIN. FT.

STA. 109+20.85 CONSTRUCT
TYPE 4 WHEELCHAIR RAMP ON RT.
= 7.4 SQ. YDS.

STA. 125+21.41 HWY. 265 =
STA. 110+38.94 RANDALL WOBBE CONNECTION
Δ = 122°57'34"

STA. 115+72.24
END RANDALL
WOBBE CONNECTION

STA. 109+57.26 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 2.7 SQ. YDS.

STA. 109+64.98 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 3.0 SQ. YDS.

STA. 109+71.97 CONSTRUCT
TYPE 3 WHEELCHAIR RAMP ON RT.
= 2.7 SQ. YDS.

STA. 111+18.38 CONSTRUCT
TYPE 4 WHEELCHAIR RAMP ON RT.
= 7.3 SQ. YDS.

STA. 112+28 CONST.
APPROACH ON RT. = 30 CU. YDS. EMB.
= 10 CU. YDS. EXC.

STA. 113+37.00 IN PLACE
24" X 62' R.C. PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND CONST.
APPROACH ON RT. = 20 CU. YDS.

STA. 114+57.00 IN PLACE
18" X 26' C.M. PIPE CULVERT
ON RT. SIDE
RETAIN

STA. 114+62.00 IN PLACE
DBL. 28" X 79' R.C. PIPE CULVERT
RETAIN

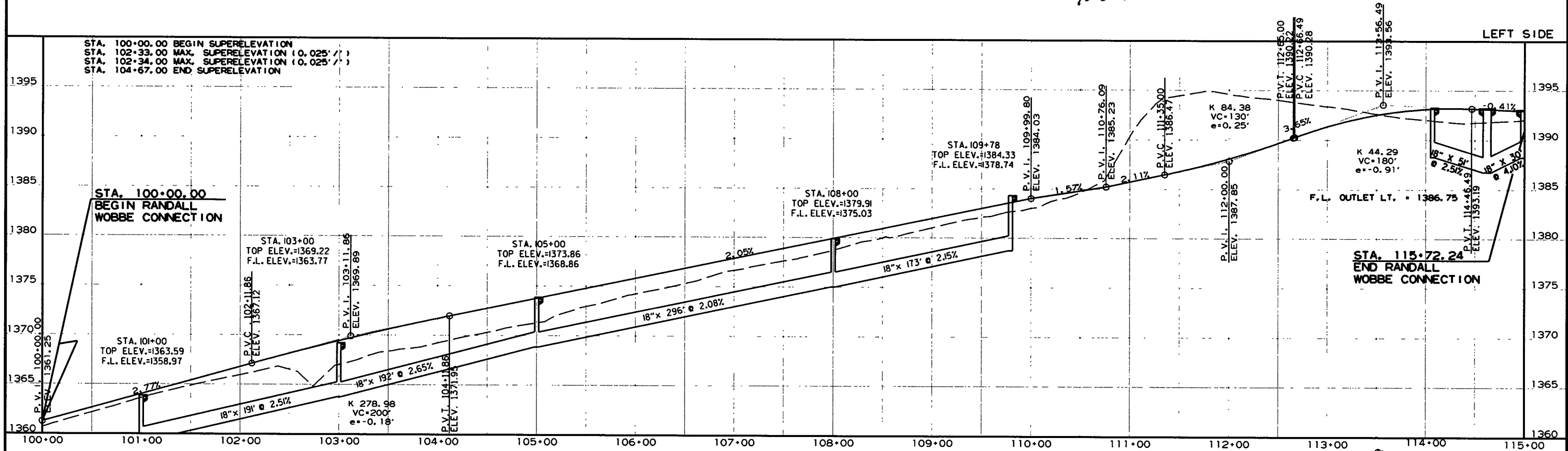
STA. 114+62.00 - CONSTRUCT
DI ON LT. H = 6'-2"
CONNECT DBL. EXISTING R.C. PIPE OUTLET
TY C = 8' X 4'

STA. 115+47.00 IN PLACE
DBL. 24" X 54' R.C. PIPE CULVERT
ON RT. SIDE
RETAIN

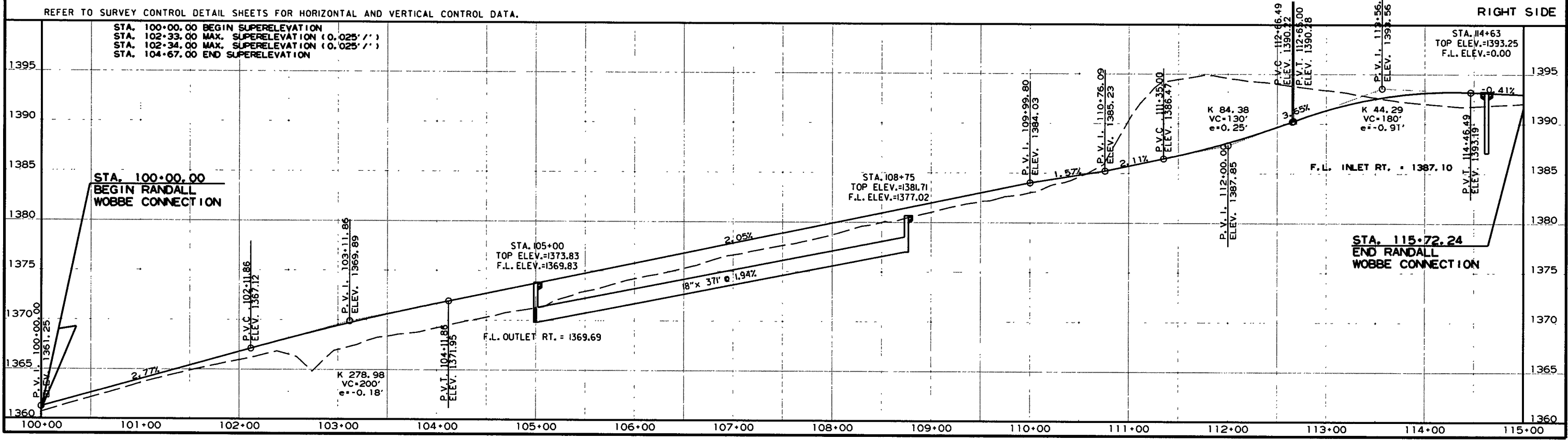


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2 PLAN AND PROFILE SHEETS



REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

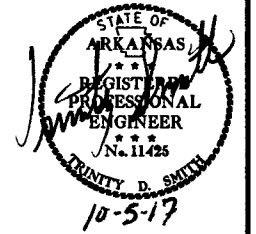


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TRAFFIC SIGNAL NOTES:

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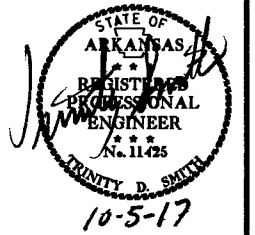
② TRAFFIC SIGNAL NOTES



1. PERFORM ELECTRICAL WORK IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE NFPA 70 (2014) NATIONAL ELECTRICAL CODE, NFPA 101 (2012) LIFE SAFETY CODE, STATE ELECTRICAL CODE AND LOCAL ELECTRICAL CODE.
2. EXTEND GREEN EQUIPMENT GROUNDING CONDUCTOR (E.G.C.) FROM GROUND BAR AT MAIN BREAKER TO CONTROL PANEL AND TO FIRST POLE. SOLIDLY BOND E.G.C. TO GROUND LUG OF CONTROL CABINET AND TO POLE GROUND. ENSURE THAT ONLY ONE NEUTRAL-TO-GROUND BOND EXISTS IN THE SYSTEM AND THAT IT IS AT THE MAIN BREAKER.
3. ELECTRICAL SERVICE SHALL BE PROVIDED BY THE CITY/COUNTY TO A SERVICE POLE WITH EXTERNAL RAINTIGHT BREAKER (MAIN BREAKER), GALVANIZED STEEL SERVICE RISER, METER LOOP (IF REQUIRED), AND WEATHERHEAD AT A MUTUALLY ACCEPTABLE POINT WITHIN THE RIGHT-OF-WAY. IF THE SERVICE POINT IS OVER 10 FEET FROM THE CONTROLLER, THE CONTRACTOR SHALL PROVIDE AND INSTALL A SEPARATE TWO CIRCUIT EXTERNAL BREAKER (SECONDARY BREAKER) ON OR NEAR THE TRAFFIC SIGNAL CONTROLLER CABINET AND SHALL INSTALL CONDUIT, ELECTRICAL SERVICE WIRE (2c#6 USE RATED, WITH GROUND TYPICAL), AND PERFORM WIRING TO TAP INTO THE CITY'S/COUNTY'S MAIN BREAKER AS PART OF THIS CONTRACT. CONDUIT IS PAID FOR AS A SEPARATE ITEM OF THIS CONTRACT. TWO CIRCUIT BREAKERS, CONSIDERED SUBSIDIARY TO THE CONTROL EQUIPMENT, ARE NEEDED WHERE STREET LIGHTING IS INCLUDED. AS PART OF THE SIGNAL INSTALLATION, STREET LIGHTING CIRCUIT (2c#12 A.W.G. UF RATED, TYPICAL) SHALL BE KEPT FROM THE CIRCUIT SERVING THE TRAFFIC SIGNAL CONTROL EQUIPMENT FROM THE POINT OF TIE-IN AT THE SECONDARY BREAKER PROVIDED BY THE CONTRACTOR.
4. CONTRACTOR SHALL CONNECT A SEPARATE NEUTRAL FOR EACH LOAD SWITCH REPRESENTED ON EACH SIGNAL POLE.
5. TRAFFIC CONTROLLER CABINET AND LAYOUT SHALL BE SUCH THAT IT IS NOT NECESSARY TO SHUT DOWN POWER OR REMOVE LOAD SWITCHES IN ORDER TO EASILY TEST OR MODIFY DETECTOR INPUTS TO THE CONTROLLER.
6. CONTROLLER CABINET SHALL BE WIRED SUCH THAT DURING FLASH OPERATIONS POWER TO THE LOAD SWITCHES CANNOT BACKFEED TO LOAD SWITCH POWER BUSS.
7. ALL PARTS OF THIS INSTALLATION SHALL BE IN ACCORDANCE WITH THE AHTD STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, STANDARD DRAWINGS AND WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITIONS.
8. CONDUIT INSTALLED UNDER ROADWAY SURFACES SHALL BE INSTALLED BY PUSHING OR BORING METHODS. IF THE ENGINEER DETERMINES THIS IS NOT FEASIBLE, THEN A TRENCHING METHOD AS SHOWN IN THE STANDARD DRAWINGS MAY BE USED.
9. TRAFFIC SIGNAL POLES SHALL BE GALVANIZED. BACKPLATES SHALL BE SUPPLIED FOR ALL SIGNAL HEADS.
10. PAVEMENT MARKING SHOWN FOR REFERENCE ONLY. SEE PERMANENT PAVEMENT MARKING DETAILS.
11. FOUNDATION FOR ALL POLES SHALL BE EXTENDED IF NECESSARY TO ACCOMMODATE THE REQUIREMENTS FOR SIGNAL HEAD CLEARANCE ABOVE ROADWAY ONLY AT LOCATIONS WHERE THE GROUND ELEVATION AT THE POLE IS BELOW THE ELEVATION OF THE ROADWAY (SEE NOTES ON STANDARD DRAWING). PAYMENT WILL BE INCLUDED IN SECTION 714 TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION OF THE AHTD STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, CURRENT EDITION.
12. ALL CONCRETE PULL BOXES SHALL BE (TYPE 2 HD) UNLESS OTHERWISE INDICATED. ALL CONDUIT SHALL BE THREE (3") INCH DIAMETER UNLESS SPECIFIED ON PLANS.
13. CONTRACTOR SHALL NOTIFY ALL EXISTING UTILITY OWNERS BEFORE BEGINNING WORK ON THIS PROJECT.
14. LUMINAIRE ASSEMBLIES SHALL BE OF THE FULL CUTOFF TYPE.
15. HARDWARE INPUTS MAY BE DETERMINED BY SUPPLIER. EACH DETECTOR OUTPUT SHALL INPUT THE CONTROLLER THROUGH A SEPARATE INPUT UNLESS OTHERWISE NOTED AND BE PROGRAMMED TO ACTUATE THE ASSOCIATED PHASE. COMBINATION (COMB.) DETECTORS SHALL ALSO BE PROGRAMMED TO PROVIDE VEHICLE COUNT/OCCUPANCY DATA.
16. THE LOCAL RADIO WITH ANTENNA SHALL BE COMPATIBLE WITH THE EXISTING CLOSED LOOP COORDINATION SYSTEM IN THE CITY/COUNTY.
17. TO DETERMINE UTILITY CLEARANCES ABOVE THE TRAFFIC SIGNAL POLE, REFER TO THE POLE SCHEDULE FOR VERTICAL SHAFT HEIGHT. WHERE THE POLE SCHEDULE INDICATES THAT A LUMINAIRE ARM WILL BE USED, THIRTY-EIGHT (38') FEET SHOULD BE USED TO DETERMINE UTILITY CLEARANCE ABOVE THE LUMINAIRE ARM. WHERE THE POLE SCHEDULE INDICATES A TRAFFIC SIGNAL POLE WITHOUT A LUMINAIRE ARM, A HEIGHT OF TWENTY-ONE (21') FEET SHOULD BE USED TO DETERMINE UTILITY CLEARANCE ABOVE THE TRAFFIC SIGNAL MAST ARM. AN ADDITIONAL SIX (6') FEET SHOULD BE USED DIRECTLY ABOVE "VIDEO DETECTOR" AT LOCATIONS SHOWN ON THE SIGNAL PLANS.
18. THE DESIRABLE MINIMUM DISTANCE FROM THE FACE OF ROADWAY CURB OR SHOULDER EDGE TO THE FACE OF NON-BREAKAWAY POLE OR OBSTRUCTION IS SIX (6') FEET. REFER TO TRAFFIC SIGNAL PLANS FOR SPECIFIC LOCATION OF POLES, CONTROLLER AND ANY OTHER NON-BREAKAWAY OBSTRUCTIONS. REFER TO "DESIGN PARAMETERS, MINIMUM CLEAR ZONE DISTANCE" FOR MINIMUM DISTANCE FROM THE EDGE OF TRAVELED WAY TO THE FACE OF A NON-BREAKAWAY POLE OR OBSTRUCTION. TRAFFIC SIGNAL POLES OR ANY OTHER NON-BREAKAWAY OBSTRUCTION SHALL NOT BE INSTALLED WITHIN THE CLEAR ZONE.
19. AS DETERMINED BY THE ENGINEER, FOUNDATION EMBEDMENT MAY BE DECREASED BY A MAXIMUM OF TWO FEET IF COMPETENT ROCK IS ENCOUNTERED PRIOR TO ACHIEVING PLAN EMBEDMENT AND AT LEAST HALF OF THE REMAINING PLAN EMBEDMENT LENGTH IS KEYED INTO COMPETENT ROCK.
20. CONNECTION OF TRAFFIC SIGNAL DISPLAY TO FIELD WIRING SHALL UTILIZE AN APPROVED TERMINAL STRIP BEHIND HAND-HOLE COVER AT BASE OF POLE. TERMINAL STRIP SHALL PROVIDE PROTECTION TO PREVENT EXPOSURE TO THE PUBLIC IN THE EVENT THAT POLE COVER IS MISSING. PAYMENT FOR TERMINAL STRIPS SHALL BE INCLUDED IN ITEM 714 TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION OF THE AHTD STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, CURRENT EDITION.
21. CONTROLLER CABINET LAYOUT AND ORIENTATION SHALL CONFORM TO IMSA STANDARDS.
22. ONE VIDEO PROGRAMMING MODULE SHALL BE PROVIDED FOR AIMING AND SETUP OF DETECTORS IF THE VIDEO SYSTEM CANNOT BE ADJUSTED THROUGH HARDWARE AND SOFTWARE PROVIDED BY ITEMS WITHIN THE JOB.
23. TRAFFIC SIGNAL CONTRACTOR MUST NOTIFY RESIDENT ENGINEER OR ASSIGNED DEPARTMENT PROJECT INSPECTOR EACH DAY PRIOR TO SIGNAL RELATED WORK. NO WORK ON TRAFFIC SIGNALS WILL BE ALLOWED OR APPROVED WITHOUT THIS PRIOR NOTIFICATION.
24. ALL STEEL POLES SHALL BE DESIGNED TO MEET THE AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, 4th EDITION (2001) WITH 2003 AND 2006 INTERIMS.
25. DOOR PANEL TEST PUSH BUTTONS SHALL ACTUATE INDICATED PHASES. DETECTOR ASSIGNMENTS AND/OR SIDE PANEL JUMPERS MAY REQUIRE MODIFICATION.
26. ALL SYSTEM DETECTOR RACKS AND ASSOCIATED EQUIPMENT SHALL BE PROTECTED BY THE MAIN CONTROLLER CABINET POWER SURGE PROTECTION.
27. NEW TRAFFIC SIGNAL AT HWY. 264 AND HWY. 265 MUST BE OPERATIONAL PRIOR TO THE REMOVAL OF EXISTING SIGNAL AT HWY. 264 AND OLD WIRE ROAD.
28. TRAFFIC SIGNAL EQUIPMENT REMOVED FROM THE INTERSECTION SHALL BE THE PROPERTY OF THE CITY OF SPRINGDALE (SEE SPECIAL PROVISION).

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② SUMMARY OF TRAFFIC SIGNAL QUANTITIES



SUMMARY OF TRAFFIC SIGNAL QUANTITIES

ITEM NUMBER	ITEM	HWY. 265 AT RANDALL WOBBE LN.	HWY. 265 AT HWY. 264	QUANTITY	UNIT
SP & 701	SYSTEM LOCAL CONTROLLER TS2-TYPE 2, E-NET (8 PHASES)	1	1	2	EACH
SP	ETHERNET SWITCH, T100 HARDENED (8-PORT)	1	1	2	EACH
SP	E-NET CABLE (EXTERIOR CAT 5E)	75	75	150	LIN. FT.
SP	ANTENNA SUPPORT (SHOE BASE, 50' HT.)	1		1	EACH
SP	LOCAL RADIO (E-NET 5.8) WITH ANTENNA	1	1	2	EACH
SP & 706	TRAFFIC SIGNAL HEAD, LED, (3 SECTION, 1 WAY)	8	10	18	EACH
SP & 706	TRAFFIC SIGNAL HEAD, LED, (4 SECTION, 1 WAY)	4	4	8	EACH
SP & 707	COUNTDOWN PEDESTRIAN SIGNAL HEAD, LED	8	8	16	EACH
708	TRAFFIC SIGNAL CABLE (5C/14 A.W.G.)	2318	2263	4581	LIN. FT.
708	TRAFFIC SIGNAL CABLE (7C/14 A.W.G.)	240	274	514	LIN. FT.
708	TRAFFIC SIGNAL CABLE (20C/14 A.W.G.)	571	581	1152	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/8 A.W.G., E.G.C.)	634	613	1247	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/12 A.W.G., E.G.C.)	253	255	508	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (2C/6 A.W.G.)	20	20	40	LIN. FT.
SP	ELECTRICAL CONDUCTORS FOR LUMINAIRES	739	801	1540	LIN. FT.
709	GALVANIZED STEEL CONDUIT (1.25")	20	20	40	LIN. FT.
710	NON-METALLIC CONDUIT (1.25")	20	20	40	LIN. FT.
710	NON-METALLIC CONDUIT (2")	40	40	80	LIN. FT.
710	NON-METALLIC CONDUIT (3")	592	719	1311	LIN. FT.
711	CONCRETE PULL BOX (TYPE 1)		1	1	EACH
711	CONCRETE PULL BOX (TYPE 2)	3	3	6	EACH
711	CONCRETE PULL BOX (TYPE 1 HD)	1	1	2	EACH
711	CONCRETE PULL BOX (TYPE 2 HD)	4	3	7	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (0')	2		2	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (38')	2		2	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (40')	2		2	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (42')		2	2	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (50')		1	1	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (56')		1	1	EACH
SP	LED LUMINAIRE ASSEMBLY	4	4	8	EACH
715	TRAFFIC SIGNAL PEDESTAL POLE WITH FOUNDATION	1	3	4	EACH
SP	SERVICE POINT ASSEMBLY (2 CIRCUITS)	1	1	2	EACH
SP	REMOVAL OF TRAFFIC SIGNAL EQUIPMENT		1.00	1.00	LUMP SUM
SP	18" STREET NAME SIGN	4	4	8	EACH
SP & 733	VIDEO DETECTOR (IP)	9	9	18	EACH
733	VIDEO CABLE	1412	1685	3097	LIN. FT.
733	VIDEO MONITOR (CLR)	1	1	2	EACH
SP & 733	VEHICLE DETECTOR RACK (16 CHANNEL)	1	1	2	EACH
SP & 733	CENTRAL CONTROL UNIT (8 CHANNEL)	2	2	4	EACH
SP & 733	VIDEO PROCESSOR, EDGE CARD IP (2 CAMERA)	5	5	10	EACH

* ONE SPARE VIDEO DETECTOR AND ONE SPARE VIDEO PROCESSOR SHALL BE SUPPLIED FOR EACH TRAFFIC SIGNAL INSTALLATION.

LOCATION: RANDALL WOBBE LANE - HWY. 264 (SPRINGDALE) (S)
 CITY: SPRINGDALE & BETHEL HEIGHTS
 COUNTY: BENTON & WASHINGTON
 DISTRICT: 4&9 SCALE: N/A DRAWN BY: GWE

DATE: 09-19-17 FILE NAME: t012007_job.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.	012007		116	267

② SIGNALIZATION PLAN SHEET

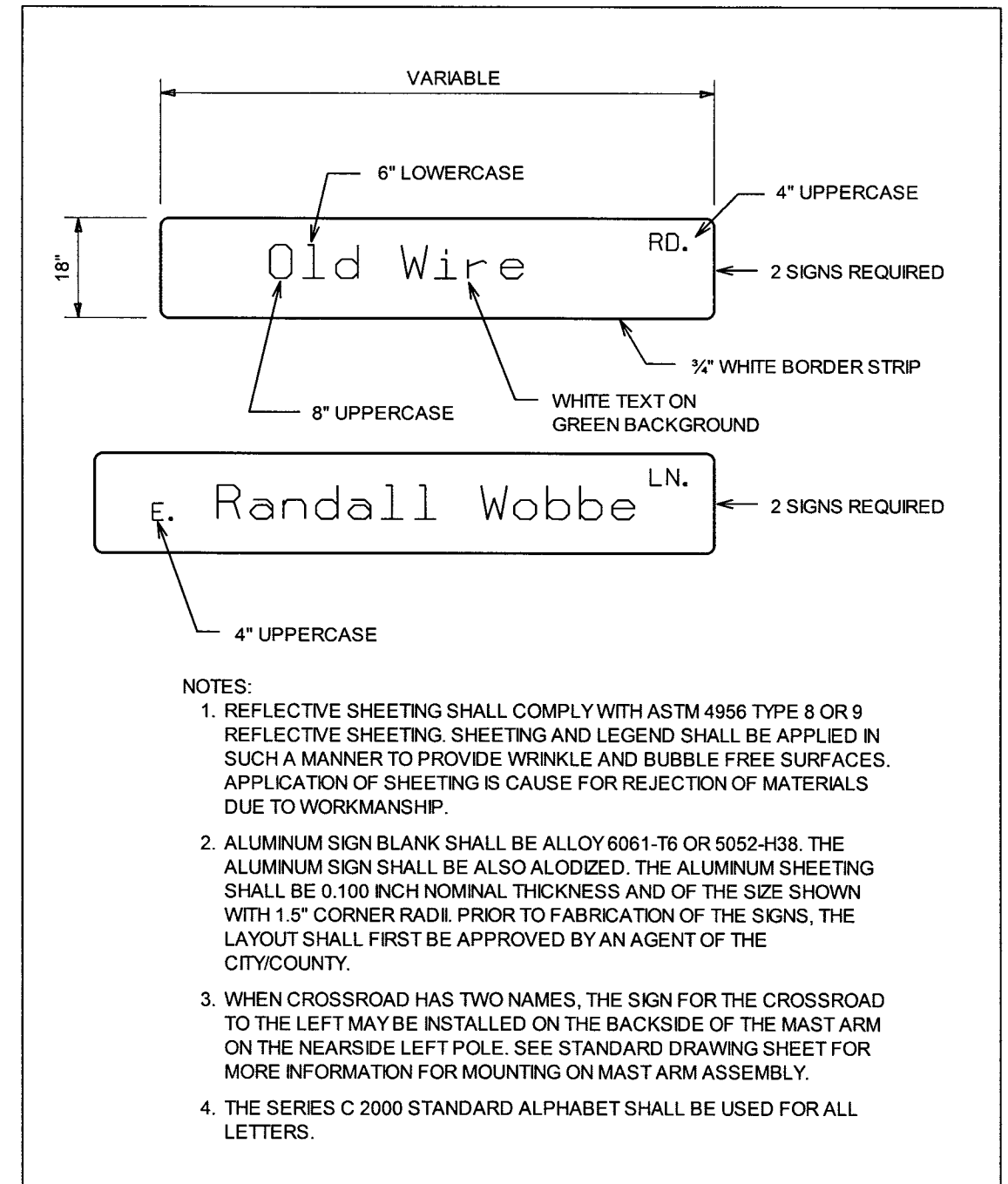


OVERHEAD STREET NAME MARKER STANDARD MAST ARM MOUNTED

TRAFFIC SIGNAL QUANTITIES

ITEM NUMBER	ITEM	QUANTITY	UNIT
SP & 701	SYSTEM LOCAL CONTROLLER TS2-TYPE 2, E-NET (8 PHASES)	1	EACH
SP	ETHERNET SWITCH, T100 HARDENED (8-PORT)	1	EACH
SP	E-NET CABLE (EXTERIOR CAT 5E)	75	LN. FT.
SP	ANTENNA SUPPORT (SHOE BASE, 50' HT)	1	EACH
SP	LOCAL RADIO (E-NET 5 8) WITH ANTENNA	1	EACH
SP & 706	TRAFFIC SIGNAL HEAD, LED, (3 SECTION, 1 WAY)	8	EACH
SP & 706	TRAFFIC SIGNAL HEAD, LED, (4 SECTION, 1 WAY)	4	EACH
SP & 707	COUNTDOWN PEDESTRIAN SIGNAL HEAD, LED	8	EACH
708	TRAFFIC SIGNAL CABLE (5C/14 A.W.G.)	2318	LN. FT.
708	TRAFFIC SIGNAL CABLE (7C/14 A.W.G.)	240	LN. FT.
708	TRAFFIC SIGNAL CABLE (20C/14 A.W.G.)	571	LN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/8 A.W.G., E.G.C.)	634	LN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/12 A.W.G., E.G.C.)	253	LN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (2C/6 A.W.G.)	20	LN. FT.
SP	ELECTRICAL CONDUCTORS FOR LUMINAIRES	739	LN. FT.
709	GALVANIZED STEEL CONDUIT (1.25")	20	LN. FT.
710	NON-METALLIC CONDUIT (1.25")	20	LN. FT.
710	NON-METALLIC CONDUIT (2")	40	LN. FT.
710	NON-METALLIC CONDUIT (3")	592	LN. FT.
711	CONCRETE PULL BOX (TYPE 2)	3	EACH
711	CONCRETE PULL BOX (TYPE 1 HD)	1	EACH
711	CONCRETE PULL BOX (TYPE 2 HD)	4	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (0')	2	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (38')	2	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (40')	2	EACH
SP	LED LUMINAIRE ASSEMBLY	4	EACH
715	TRAFFIC SIGNAL PEDESTAL POLE WITH FOUNDATION	1	EACH
SP	SERVICE POINT ASSEMBLY (2 CIRCUITS)	1	EACH
SP	18" STREET NAME SIGN	4	EACH
SP & 733	VIDEO DETECTOR (IP)	9	EACH
733	VIDEO CABLE	1412	LN. FT.
733	VIDEO MONITOR (CLR)	1	EACH
SP & 733	VEHICLE DETECTOR RACK (16 CHANNEL)	1	EACH
SP & 733	CENTRAL CONTROL UNIT (8 CHANNEL)	2	EACH
SP & 733	VIDEO PROCESSOR, EDGE CARD IP (2 CAMERA)	5	EACH

* ONE SPARE VIDEO DETECTOR AND ONE SPARE VIDEO PROCESSOR SHALL BE SUPPLIED.

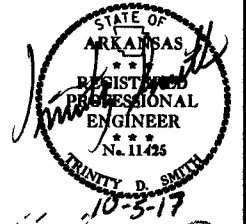


LOCATION: HWY. 265/RANDALL WOBBE LANE
 CITY: SPRINGDALE
 COUNTY: WASHINGTON
 DISTRICT: 4 SCALE: N/A DRAWN BY: GWE

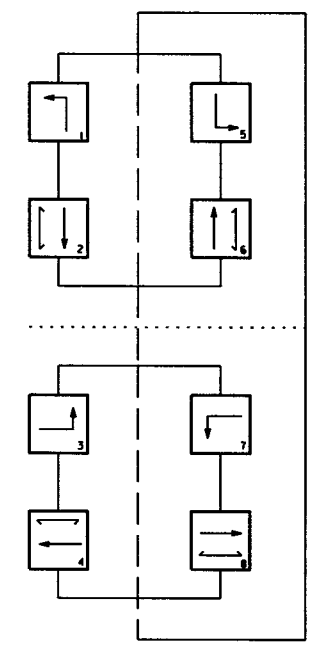
DATE: 09-19-17 FILE NAME: t012007-01.dgn

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		117	267

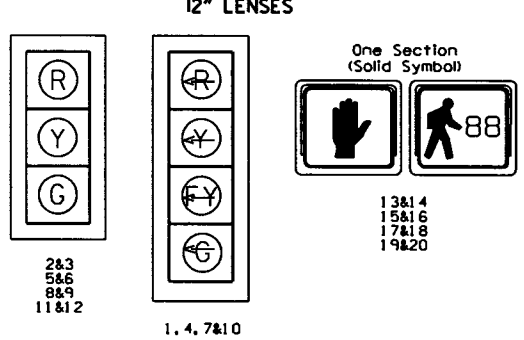
2 SIGNALIZATION PLAN SHEET



PHASING DIAGRAM

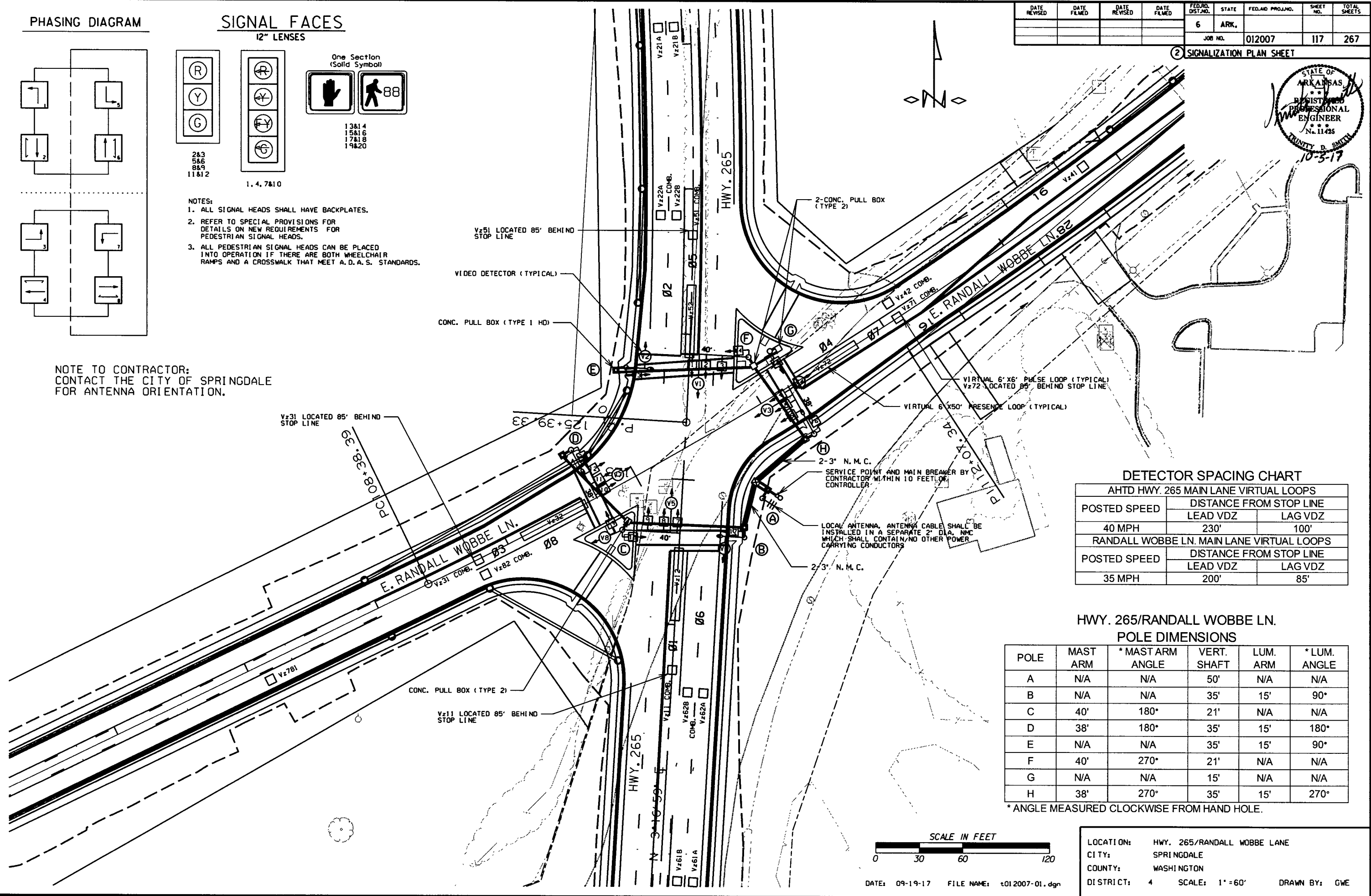


SIGNAL FACES



- NOTES:
1. ALL SIGNAL HEADS SHALL HAVE BACKPLATES.
 2. REFER TO SPECIAL PROVISIONS FOR DETAILS ON NEW REQUIREMENTS FOR PEDESTRIAN SIGNAL HEADS.
 3. ALL PEDESTRIAN SIGNAL HEADS CAN BE PLACED INTO OPERATION IF THERE ARE BOTH WHEELCHAIR RAMPS AND A CROSSWALK THAT MEET A. D. A. S. STANDARDS.

NOTE TO CONTRACTOR:
CONTACT THE CITY OF SPRINGDALE
FOR ANTENNA ORIENTATION.



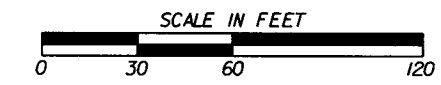
DETECTOR SPACING CHART

AHTD HWY. 265 MAIN LANE VIRTUAL LOOPS		
POSTED SPEED	DISTANCE FROM STOP LINE	
	LEAD VDZ	LAG VDZ
40 MPH	230'	100'
RANDALL WOBBE LN. MAIN LANE VIRTUAL LOOPS		
POSTED SPEED	DISTANCE FROM STOP LINE	
	LEAD VDZ	LAG VDZ
35 MPH	200'	85'

HWY. 265/RANDALL WOBBE LN. POLE DIMENSIONS

POLE	MAST ARM	*MAST ARM ANGLE	VERT. SHAFT	LUM. ARM	*LUM. ANGLE
A	N/A	N/A	50'	N/A	N/A
B	N/A	N/A	35'	15'	90°
C	40'	180°	21'	N/A	N/A
D	38'	180°	35'	15'	180°
E	N/A	N/A	35'	15'	90°
F	40'	270°	21'	N/A	N/A
G	N/A	N/A	15'	N/A	N/A
H	38'	270°	35'	15'	270°

* ANGLE MEASURED CLOCKWISE FROM HAND HOLE.

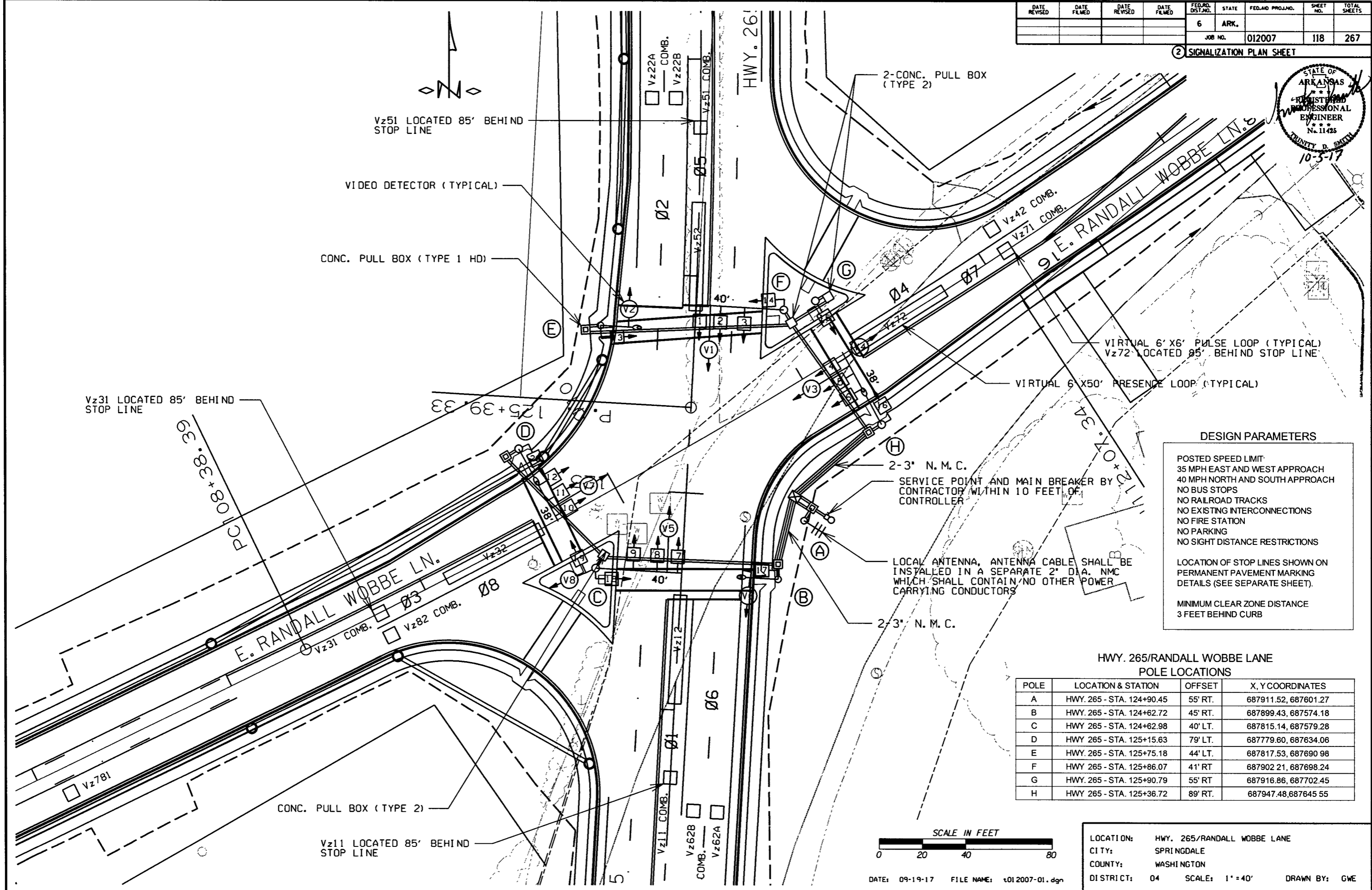
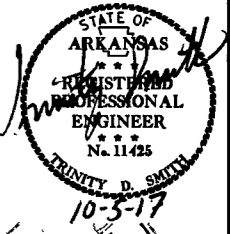


DATE: 09-19-17 FILE NAME: t012007-01.dgn

LOCATION: HWY. 265/RANDALL WOBBE LANE
 CITY: SPRINGDALE
 COUNTY: WASHINGTON
 DISTRICT: 4 SCALE: 1" = 60' DRAWN BY: GWE

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.							012007	118	267

② SIGNALIZATION PLAN SHEET



DESIGN PARAMETERS

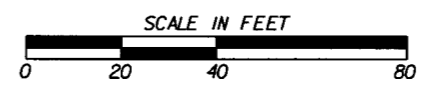
POSTED SPEED LIMIT
35 MPH EAST AND WEST APPROACH
40 MPH NORTH AND SOUTH APPROACH
NO BUS STOPS
NO RAILROAD TRACKS
NO EXISTING INTERCONNECTIONS
NO FIRE STATION
NO PARKING
NO SIGHT DISTANCE RESTRICTIONS

LOCATION OF STOP LINES SHOWN ON PERMANENT PAVEMENT MARKING DETAILS (SEE SEPARATE SHEET).

MINIMUM CLEAR ZONE DISTANCE
3 FEET BEHIND CURB

**HWY. 265/RANDALL WOBBE LANE
POLE LOCATIONS**

POLE	LOCATION & STATION	OFFSET	X, Y COORDINATES
A	HWY. 265 - STA. 124+90.45	55' RT.	687911.52, 687601.27
B	HWY. 265 - STA. 124+62.72	45' RT.	687899.43, 687574.18
C	HWY. 265 - STA. 124+62.98	40' LT.	687815.14, 687579.28
D	HWY. 265 - STA. 125+15.63	79' LT.	687779.60, 687634.06
E	HWY. 265 - STA. 125+75.18	44' LT.	687817.53, 687690.98
F	HWY. 265 - STA. 125+86.07	41' RT.	687902.21, 687698.24
G	HWY. 265 - STA. 125+90.79	55' RT.	687916.86, 687702.45
H	HWY. 265 - STA. 125+36.72	89' RT.	687947.48, 687645.55

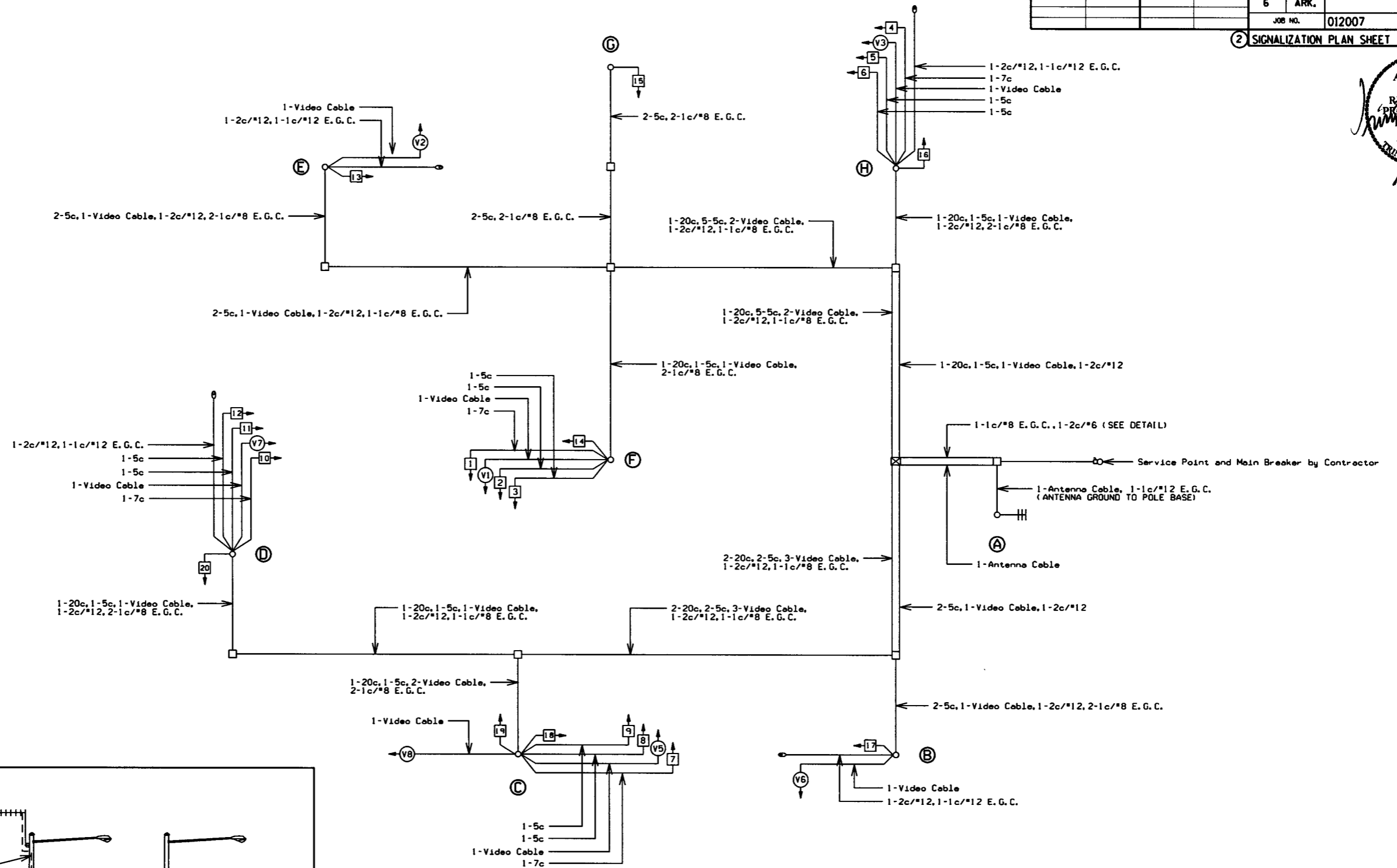
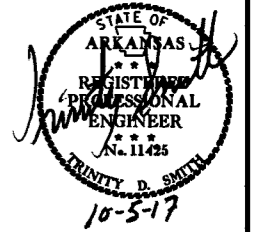


DATE: 09-19-17 FILE NAME: t012007-01.dgn

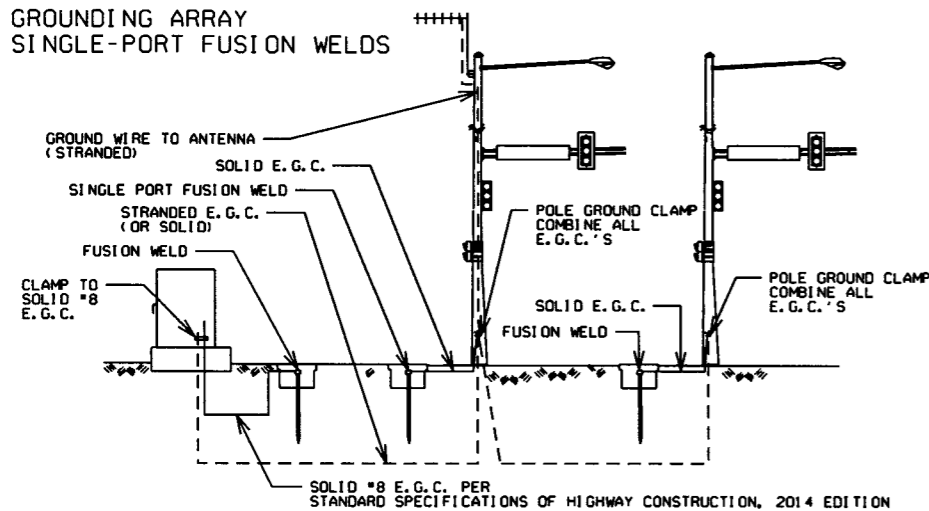
LOCATION: HWY. 265/RANDALL WOBBE LANE
CITY: SPRINGDALE
COUNTY: WASHINGTON
DISTRICT: 04 SCALE: 1" = 40' DRAWN BY: GWE

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. PROJ. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
							JOB NO.	012007
							SHEET NO.	119
							TOTAL SHEETS	267

2 SIGNALIZATION PLAN SHEET



**GROUNDING ARRAY
SINGLE-PORT FUSION WELDS**



WIRING DIAGRAM

NOTES TO CONTRACTOR:

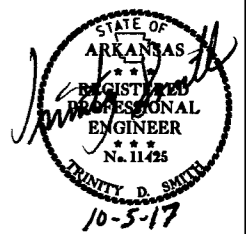
1. ONE SEPARATE 1-5c IS RUN TO EACH POLE FOR THE PEDESTRIAN PUSH BUTTON.
2. ALL DETECTOR RACK CHANNELS, INCLUDING UNUSED, SHALL BE BROUGHT TO TERMINAL STRIP IN DETECTOR AREA OF CABINET.
3. THE LOCAL GOVERNMENT SHALL BE RESPONSIBLE FOR PROVIDING POWER TO THE SERVICE POINT.

LOCATION: HWY. 265/RANDALL WOBBE LANE
 CITY: SPRINGDALE
 COUNTY: WASHINGTON
 DISTRICT: 4 SCALE: N/A DRAWN BY: GWE

DATE: 09-19-17 FILE NAME: t012007.01.dgn

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. NO. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	012007		120	267

2 SIGNALIZATION PLAN SHEET



INTERVAL CHART

SIGNAL FACES	HWY. 265/RANDALL WOBBE LANE														FLASH SEQ.	
	I+5	CLR.	I+6	CLR.	2+5	CLR.	2+6	CLR.	3+7	CLR.	3+8	CLR.	4+7	CLR.		4+8
1	←	•	←	•	→	•••	→	•••	←	←	←	←	←	←	←	←
2&3	R	R	G	••	R	R	G	••	R	R	R	R	R	R	R	R
4	←	←	←	←	←	←	←	←	•	←	•	→	•••	→	•••	←
5&6	R	R	R	R	R	R	R	R	R	R	G	••	R	R	G	••
7	←	•	→	•••	←	•	→	•••	←	←	←	←	←	←	←	←
8&9	R	R	R	R	G	••	G	••	R	R	R	R	R	R	R	R
10	←	←	←	←	←	←	←	←	•	→	•••	←	•	→	•••	←
11&12	R	R	R	R	R	R	R	R	R	R	R	G	••	G	••	R
13&14	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	W	FDW	W	FDW
15&16	DW	DW	W	FDW	DW	DW	W	FDW	DW	DW	DW	DW	DW	DW	DW	DW
17&18	DW	DW	DW	DW	DW	DW	DW	DW	DW	W	FDW	DW	DW	W	FDW	BLK
19&20	DW	DW	DW	DW	W	FDW	W	FDW	DW	DW	DW	DW	DW	DW	DW	BLK

- DENOTES GREEN OR YELLOW ARROW DEPENDING ON NEXT PHASE
- DENOTES GREEN OR YELLOW BALL DEPENDING ON NEXT PHASE
- DENOTES FLASHING YELLOW ARROW OR YELLOW ARROW DEPENDING ON NEXT PHASE

DETECTOR CHART

DETECTOR SYSTEM DESCRIPTION: JOB 012007											
HWY. 265/RANDALL WOBBE LANE DETECTOR ASSIGNMENTS				HARDWARE INPUTS BY SUPPLIER			PROGRAM ASSIGNMENTS			COMMENTS	TUBE LENGTHS
DET. ID #	LOCATION DIRECTION	TPYE	DET. #	CAB. TRM. #	AMP CHN. #	CON. IMP. #	PHS	SYSTEM DET. #	MASTER SYSTEM DETECTOR NUMBERS		
Vz11	NB LEFT TURN FAR	COMB.			1	V9	1	1		CAMERA V1	46"
Vz12	NB LEFT TURN	LOCAL			2	V1	1			CAMERA V1	46"
Vz21 A&B	SB ADVANCE	LOCAL			5	V2	2			CAMERA V2	23"
Vz22 A&B	SB NEAR	COMB.			6	V10	2	2		CAMERA V5	37"
Vz31	EB LEFT TURN FAR	COMB.			9	V11	3	3		CAMERA V3	74"
Vz32	EB LEFT TURN	LOCAL			10	V3	3			CAMERA V3	74"
Vz41	WB ADVANCE	LOCAL			13	V4	4			CAMERA V4	74"
Vz42	WB NEAR	COMB.			14	V12	4	4		CAMERA V7	58"
Vz51	SB LEFT TURN FAR	COMB.			7	V13	5	5		CAMERA V5	37"
Vz52	SB LEFT TURN	LOCAL			8	V5	5			CAMERA V5	37"
Vz61 A&B	NB ADVANCE	LOCAL			3	V6	6			CAMERA V6	23"
Vz62 A&B	NB NEAR	COMB.			4	V14	6	6		CAMERA V1	46"
Vz71	WB LEFT TURN FAR	COMB.			15	V15	7	7		CAMERA V7	58"
Vz72	WB LEFT TURN	LOCAL			16	V7	7			CAMERA V7	58"
Vz81	EB ADVANCE	LOCAL			11	V8	8			CAMERA V8	74"
Vz82	EB NEAR	COMB.			12	V16	8	8		CAMERA V3	74"
PB2 A&B	RANDALL WOBBE W. LEG	PED.				P2	2				
PB4 A&B	HWY. 265 N. LEG	PED.				P4	4				
PB6 A&B	RANDALL WOBBE E. LEG	PED.				P6	6				
PB8 A&B	HWY. 265 N. LEG	PED.				P8	8				
SPARE											

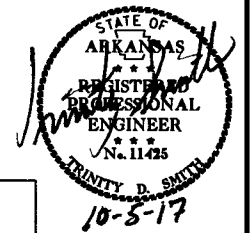
CONTROLLER INPUT ABBREVIATIONS:
V = VEHICLE INPUT
D = SYSTEM OR AUXILIARY INPUT
P = PEDESTRIAN INPUT

NOTE: "AMP CHN =" REFERS TO THE RACK OUTPUT POSITION.
THIS IS WIRED TO CONTROLLER INPUT DETECTOR NUMBER WHICH IS PROGRAMMED TO ACTUATE THE DESIGNATED PHASE.
EXAMPLE: V9 = SYSTEM DETECTOR 1, V10 = SYSTEM DETECTOR 2

LOCATION: HWY. 265/RANDALL WOBBE LANE
CITY: SPRINGDALE
COUNTY: WASHINGTON
DISTRICT: 4 SCALE: N/A DRAWN BY: GWE

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. PROJ. NO.	STATE	FED. PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
						JOB NO. 012007	121	267

2 SIGNALIZATION PLAN SHEET



TRAFFIC SIGNAL QUANTITIES

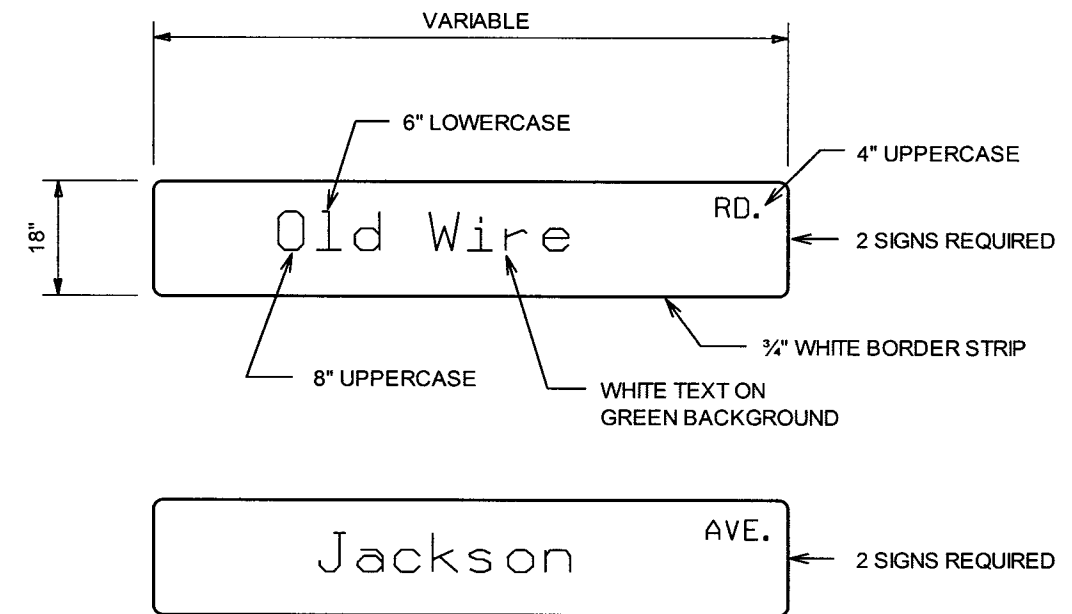
ITEM NUMBER	ITEM	QUANTITY	UNIT
SP & 701	SYSTEM LOCAL CONTROLLER TS2-TYPE 2, E-NET (8 PHASES)	1	EACH
SP	ETHERNET SWITCH, T100 HARDENED (8-PORT)	1	EACH
SP	E-NET CABLE (EXTERIOR CAT 5E)	75	LIN. FT.
SP	LOCAL RADIO (E-NET 5.8) WITH ANTENNA	1	EACH
SP & 706	TRAFFIC SIGNAL HEAD, LED, (3 SECTION, 1 WAY)	10	EACH
SP & 706	TRAFFIC SIGNAL HEAD, LED, (4 SECTION, 1 WAY)	4	EACH
SP & 707	COUNTDOWN PEDESTRIAN SIGNAL HEAD, LED	8	EACH
708	TRAFFIC SIGNAL CABLE (5C/14 A.W.G.)	2263	LIN. FT.
708	TRAFFIC SIGNAL CABLE (7C/14 A.W.G.)	274	LIN. FT.
708	TRAFFIC SIGNAL CABLE (20C/14 A.W.G.)	581	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/8 A.W.G., E.G.C.)	613	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/12 A.W.G., E.G.C.)	255	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (2C/6 A.W.G.)	20	LIN. FT.
SP	ELECTRICAL CONDUCTORS FOR LUMINAIRES	801	LIN. FT.
709	GALVANIZED STEEL CONDUIT (1.25")	20	LIN. FT.
710	NON-METALLIC CONDUIT (1.25")	20	LIN. FT.
710	NON-METALLIC CONDUIT (2")	40	LIN. FT.
710	NON-METALLIC CONDUIT (3")	719	LIN. FT.
711	CONCRETE PULL BOX (TYPE 1)	1	EACH
711	CONCRETE PULL BOX (TYPE 2)	3	EACH
711	CONCRETE PULL BOX (TYPE 1 HD)	1	EACH
711	CONCRETE PULL BOX (TYPE 2 HD)	3	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (42')	2	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (50')	1	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (56')	1	EACH
SP	LED LUMINAIRE ASSEMBLY	4	EACH
715	TRAFFIC SIGNAL PEDESTAL POLE WITH FOUNDATION	3	EACH
SP	SERVICE POINT ASSEMBLY (2 CIRCUITS)	1	EACH
SP	REMOVAL OF TRAFFIC SIGNAL EQUIPMENT	1.00	LUMP SUM
SP	18" STREET NAME SIGN	4	EACH
SP & 733	VIDEO DETECTOR (IP)	9	EACH
733	VIDEO CABLE	1685	LIN. FT.
733	VIDEO MONITOR (CLR)	1	EACH
SP & 733	VEHICLE DETECTOR RACK (16 CHANNEL)	1	EACH
SP & 733	CENTRAL CONTROL UNIT (8 CHANNEL)	2	EACH
SP & 733	VIDEO PROCESSOR, EDGE CARD IP (2 CAMERA)	5	EACH

* ONE SPARE VIDEO DETECTOR AND ONE SPARE VIDEO PROCESSOR SHALL BE SUPPLIED

REMOVAL OF TRAFFIC SIGNAL NOTE:

THE EXISTING TRAFFIC SIGNAL AT THE INTERSECTION OF HWY. 264 & OLD WIRE ROAD SHALL REMAIN IN OPERATION UNTIL THE PROPOSED TRAFFIC SIGNAL AT THE INTERSECTION OF HWY. 264/HWY. 265 IS OPERATIONAL. REMOVE THE EXISTING TRAFFIC SIGNAL EQUIPMENT AT THE INTERSECTION OF HWY. 264/OLD WIRE ROAD.

OVERHEAD STREET NAME
MARKER STANDARD
MAST ARM MOUNTED



NOTES:

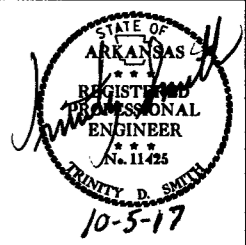
- REFLECTIVE SHEETING SHALL COMPLY WITH ASTM 4956 TYPE 8 OR 9 REFLECTIVE SHEETING. SHEETING AND LEGEND SHALL BE APPLIED IN SUCH A MANNER TO PROVIDE WRINKLE AND BUBBLE FREE SURFACES. APPLICATION OF SHEETING IS CAUSE FOR REJECTION OF MATERIALS DUE TO WORKMANSHIP.
- ALUMINUM SIGN BLANK SHALL BE ALLOY 6061-T6 OR 5052-H38. THE ALUMINUM SIGN SHALL BE ALSO ALODIZED. THE ALUMINUM SHEETING SHALL BE 0.100 INCH NOMINAL THICKNESS AND OF THE SIZE SHOWN WITH 1.5" CORNER RADII. PRIOR TO FABRICATION OF THE SIGNS, THE LAYOUT SHALL FIRST BE APPROVED BY AN AGENT OF THE CITY/COUNTY.
- WHEN CROSSROAD HAS TWO NAMES, THE SIGN FOR THE CROSSROAD TO THE LEFT MAY BE INSTALLED ON THE BACKSIDE OF THE MAST ARM ON THE NEAR SIDE LEFT POLE. SEE STANDARD DRAWING SHEET FOR MORE INFORMATION FOR MOUNTING ON MAST ARM ASSEMBLY.
- THE SERIES C 2000 STANDARD ALPHABET SHALL BE USED FOR ALL LETTERS.

LOCATION: HWY. 265/HWY. 264
CITY: BETHEL HEIGHTS
COUNTY: BENTON
DISTRICT: 9 SCALE: N/A DRAWN BY: GWE

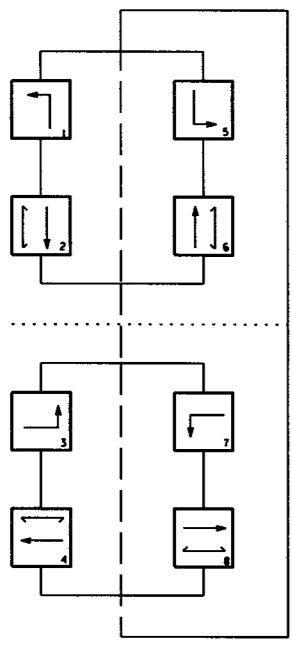
DATE: 09-19-17 FILE NAME: t012007-02.dgn

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 012007							122	267

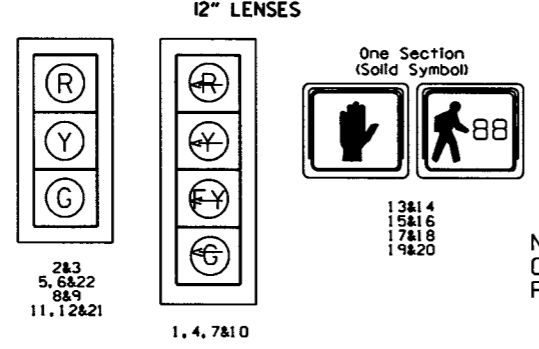
2 SIGNALIZATION PLAN SHEET



PHASING DIAGRAM

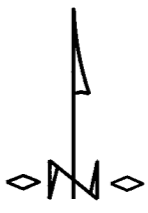


SIGNAL FACES



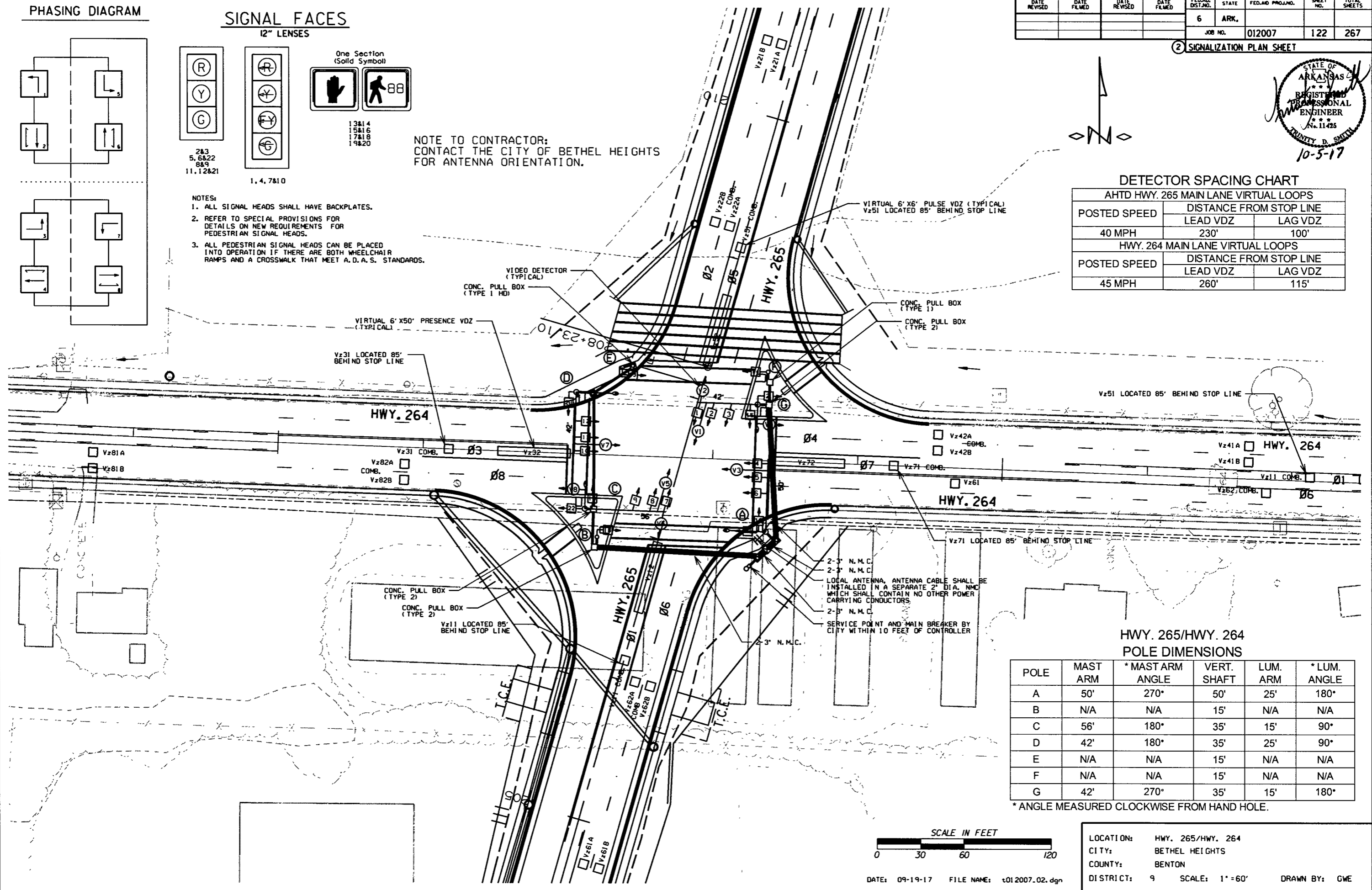
- NOTES:
1. ALL SIGNAL HEADS SHALL HAVE BACKPLATES.
 2. REFER TO SPECIAL PROVISIONS FOR DETAILS ON NEW REQUIREMENTS FOR PEDESTRIAN SIGNAL HEADS.
 3. ALL PEDESTRIAN SIGNAL HEADS CAN BE PLACED INTO OPERATION IF THERE ARE BOTH WHEELCHAIR RAMPS AND A CROSSWALK THAT MEET A. D. A. S. STANDARDS.

NOTE TO CONTRACTOR:
CONTACT THE CITY OF BETHEL HEIGHTS FOR ANTENNA ORIENTATION.



DETECTOR SPACING CHART

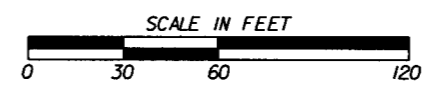
AHTD HWY. 265 MAIN LANE VIRTUAL LOOPS		
POSTED SPEED	DISTANCE FROM STOP LINE	
	LEAD VDZ	LAG VDZ
40 MPH	230'	100'
HWY. 264 MAIN LANE VIRTUAL LOOPS		
POSTED SPEED	DISTANCE FROM STOP LINE	
	LEAD VDZ	LAG VDZ
45 MPH	260'	115'



HWY. 265/HWY. 264 POLE DIMENSIONS

POLE	MAST ARM	* MAST ARM ANGLE	VERT. SHAFT	LUM. ARM	* LUM. ANGLE
A	50'	270°	50'	25'	180°
B	N/A	N/A	15'	N/A	N/A
C	56'	180°	35'	15'	90°
D	42'	180°	35'	25'	90°
E	N/A	N/A	15'	N/A	N/A
F	N/A	N/A	15'	N/A	N/A
G	42'	270°	35'	15'	180°

* ANGLE MEASURED CLOCKWISE FROM HAND HOLE.



DATE: 09-19-17 FILE NAME: t012007.02.dgn

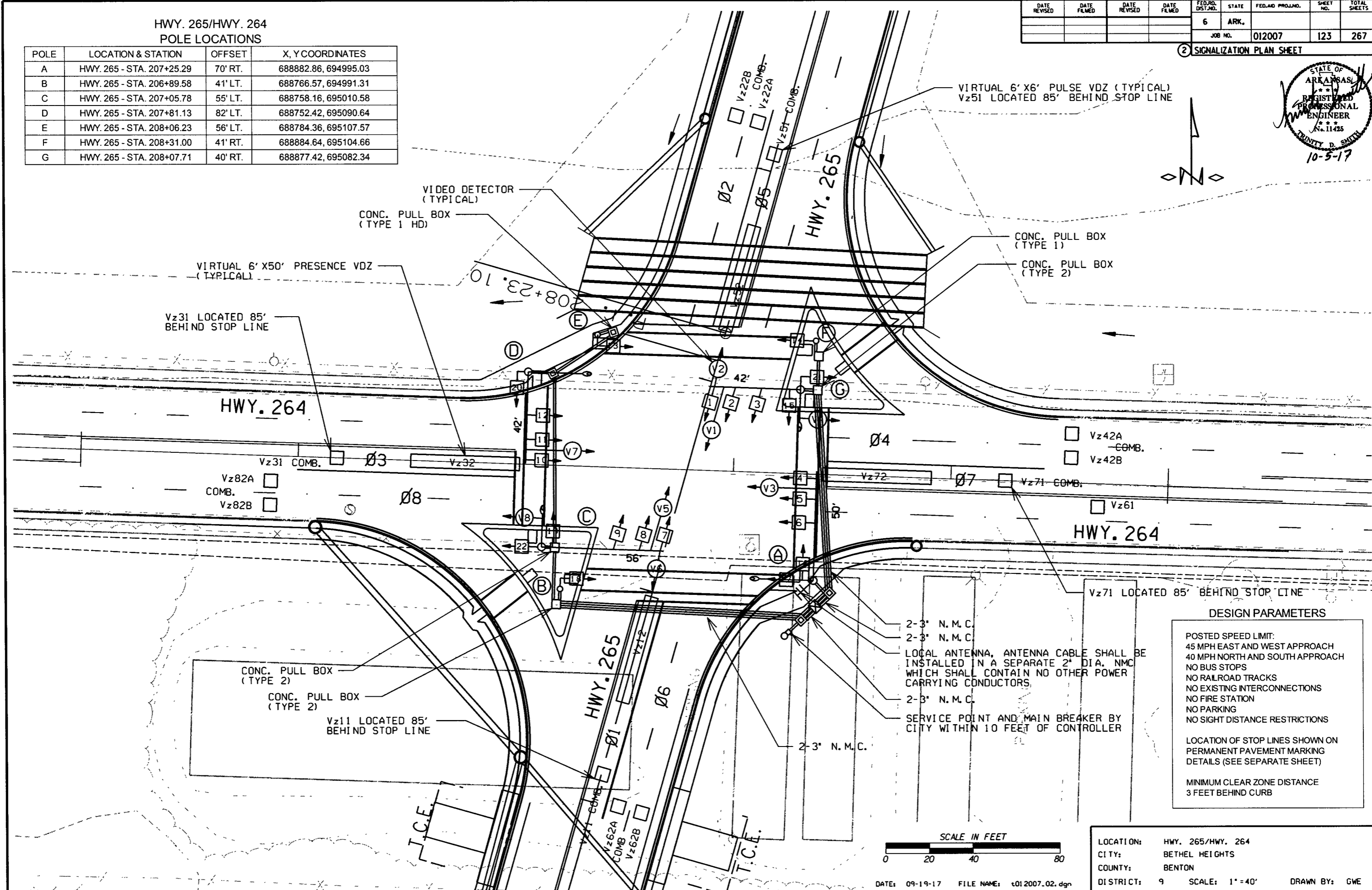
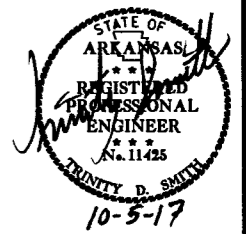
LOCATION: HWY. 265/HWY. 264
 CITY: BETHEL HEIGHTS
 COUNTY: BENTON
 DISTRICT: 9 SCALE: 1" = 60' DRAWN BY: GWE

HWY. 265/HWY. 264
POLE LOCATIONS

POLE	LOCATION & STATION	OFFSET	X, Y COORDINATES
A	HWY. 265 - STA. 207+25.29	70' RT.	688882.86, 694995.03
B	HWY. 265 - STA. 206+89.58	41' LT.	688766.57, 694991.31
C	HWY. 265 - STA. 207+05.78	55' LT.	688758.16, 695010.58
D	HWY. 265 - STA. 207+81.13	82' LT.	688752.42, 695090.64
E	HWY. 265 - STA. 208+06.23	56' LT.	688784.36, 695107.57
F	HWY. 265 - STA. 208+31.00	41' RT.	688884.64, 695104.66
G	HWY. 265 - STA. 208+07.71	40' RT.	688877.42, 695082.34

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		123	267
				JOB NO.	012007			

2 SIGNALIZATION PLAN SHEET



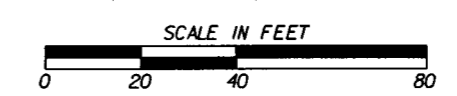
2-3" N.M.C.
2-3" N.M.C.
LOCAL ANTENNA, ANTENNA CABLE SHALL BE INSTALLED IN A SEPARATE 2" DIA. NMC WHICH SHALL CONTAIN NO OTHER POWER CARRYING CONDUCTORS.
2-3" N.M.C.
SERVICE POINT AND MAIN BREAKER BY CITY WITHIN 10 FEET OF CONTROLLER

DESIGN PARAMETERS

POSTED SPEED LIMIT:
45 MPH EAST AND WEST APPROACH
40 MPH NORTH AND SOUTH APPROACH
NO BUS STOPS
NO RAILROAD TRACKS
NO EXISTING INTERCONNECTIONS
NO FIRE STATION
NO PARKING
NO SIGHT DISTANCE RESTRICTIONS

LOCATION OF STOP LINES SHOWN ON PERMANENT PAVEMENT MARKING DETAILS (SEE SEPARATE SHEET)

MINIMUM CLEAR ZONE DISTANCE 3 FEET BEHIND CURB

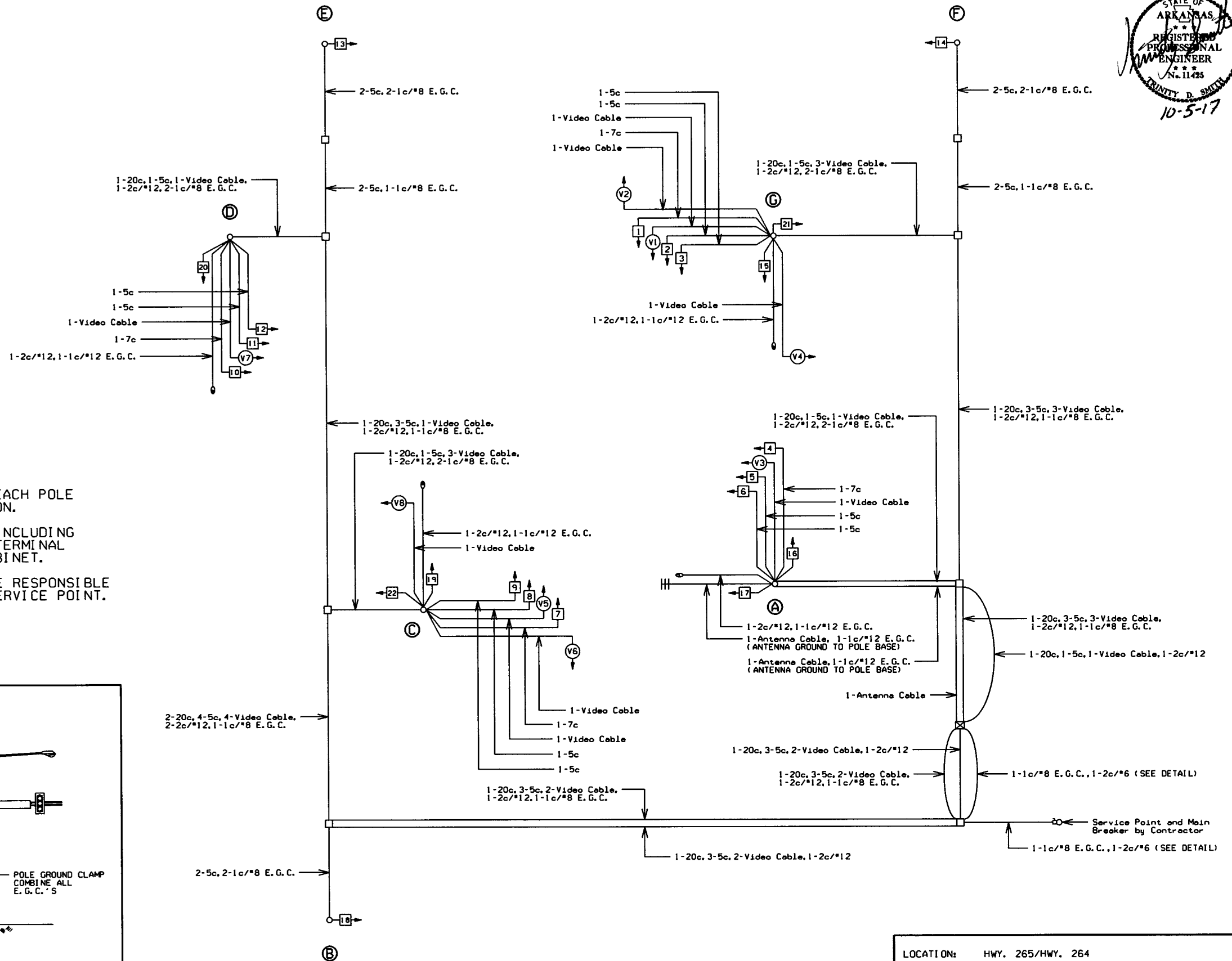
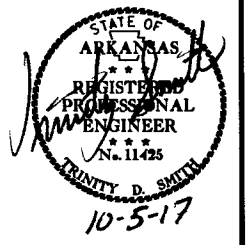


LOCATION: HWY. 265/HWY. 264
CITY: BETHEL HEIGHTS
COUNTY: BENTON
DISTRICT: 9
SCALE: 1" = 40'
DRAWN BY: GWE

DATE: 09-19-17 FILE NAME: t012007.02.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.	012007		124	267

2 SIGNALIZATION PLAN SHEET

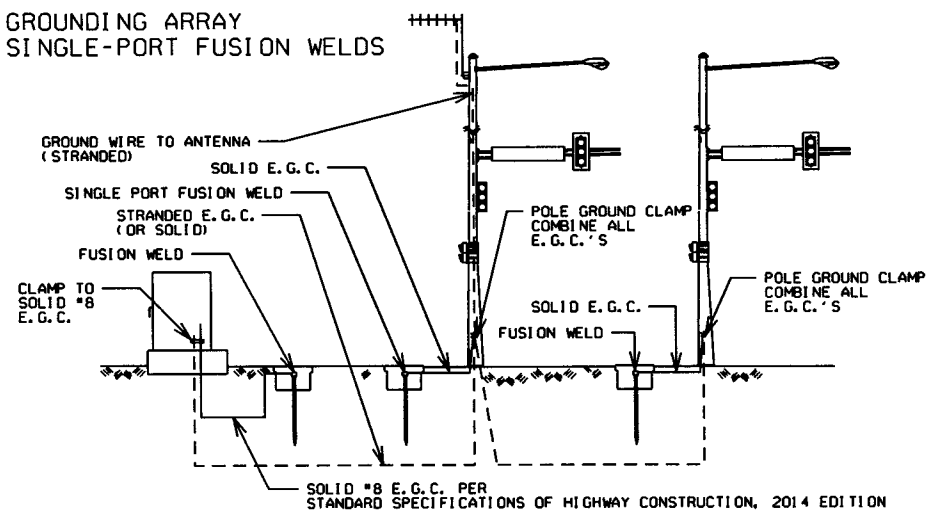


WIRING DIAGRAM

NOTES TO CONTRACTOR:

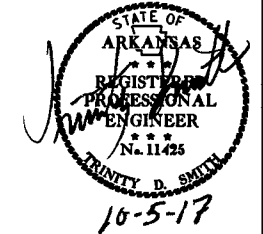
1. ONE SEPARATE 1-5c IS RUN TO EACH POLE FOR THE PEDESTRIAN PUSH BUTTON.
2. ALL DETECTOR RACK CHANNELS, INCLUDING UNUSED, SHALL BE BROUGHT TO TERMINAL STRIP IN DETECTOR AREA OF CABINET.
3. THE LOCAL GOVERNMENT SHALL BE RESPONSIBLE FOR PROVIDING POWER TO THE SERVICE POINT.

GROUNDING ARRAY SINGLE-PORT FUSION WELDS



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.	012007		125	267

2 SIGNALIZATION PLAN SHEET



INTERVAL CHART

SIGNAL FACES	HWY. 265/HWY. 264														FLASH SEQ.		
	1+5	CLR.	1+6	CLR.	2+5	CLR.	2+6	CLR.	3+7	CLR.	3+8	CLR.	4+7	CLR.		4+8	CLR.
1	←	•	←	•	←Y	•••	←Y	•••	←	←	←	←	←	←	←	←	←
2&3	R	R	G	••	R	R	G	••	R	R	R	R	R	R	R	R	R
4	←	←	←	←	←	←	←	←	←	•	←	•	←Y	•••	←Y	•••	←
5,6&22	R	R	R	R	R	R	R	R	R	R	G	••	R	R	G	••	R
7	←	•	←Y	•••	←	•	←Y	•••	←	←	←	←	←	←	←	←	←
8&9	R	R	R	R	G	••	G	••	R	R	R	R	R	R	R	R	R
10	←	←	←	←	←	←	←	←	←	•	←Y	•••	←	•	←Y	•••	←
11,12&21	R	R	R	R	R	R	R	R	R	R	R	R	G	••	G	••	R
13&14	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	W	FDW	W	FDW	BLK
15&16	DW	DW	W	FDW	DW	DW	W	FDW	DW	DW	DW	DW	DW	DW	DW	DW	BLK
17&18	DW	DW	DW	DW	DW	DW	DW	DW	DW	W	FDW	DW	DW	W	FDW	BLK	
19&20	DW	DW	DW	DW	W	FDW	W	FDW	DW	DW	DW	DW	DW	DW	DW	DW	BLK

- DENOTES GREEN OR YELLOW ARROW DEPENDING ON NEXT PHASE
- DENOTES GREEN OR YELLOW BALL DEPENDING ON NEXT PHASE
- DENOTES FLASHING YELLOW ARROW OR YELLOW ARROW DEPENDING ON NEXT PHASE

DETECTOR CHART

DETECTOR SYSTEM DESCRIPTION: JOB 012007											
HWY. 265/HWY. 264 DETECTOR ASSIGNMENTS				HARDWARE INPUTS BY SUPPLIER			PROGRAM ASSIGNMENTS			COMMENTS	TUBE LENGTHS
DET ID #	LOCATION DIRECTION	TPYE	DET. #	CAB. TRM #	AMP CHN. #	CON. IMP. #	PHS	SYSTEM DET. #	MASTER SYSTEM DETECTOR NUMBERS		
Vz11	NB LEFT TURN FAR	COMB			1	V9	1	1		CAMERA V1	23"
Vz12	NB LEFT TURN	LOCAL			2	V1	1			CAMERA V1	23"
Vz21 A&B	SB ADVANCE	LOCAL			5	V2	2			CAMERA V2	74"
Vz22 A&B	SB NEAR	COMB			6	V10	2	2		CAMERA V5	23"
Vz31	EB LEFT TURN FAR	COMB.			9	V11	3	3		CAMERA V3	74"
Vz32	EB LEFT TURN	LOCAL			10	V3	3			CAMERA V3	74"
Vz41 A&B	WB ADVANCE	LOCAL			13	V4	4			CAMERA V4	23"
Vz42 A&B	WB NEAR	COMB.			14	V12	4	4		CAMERA V7	74"
Vz51	SB LEFT TURN FAR	COMB.			7	V13	5	5		CAMERA V5	23"
Vz52	SB LEFT TURN	LOCAL			8	V5	5			CAMERA V5	23"
Vz61 A&B	NB ADVANCE	LOCAL			3	V6	6			CAMERA V6	74"
Vz62 A&B	NB NEAR	COMB			4	V14	6	6		CAMERA V1	23"
Vz71	WB LEFT TURN FAR	COMB.			15	V15	7	7		CAMERA V7	74"
Vz72	WB LEFT TURN	LOCAL			16	V7	7			CAMERA V7	74"
Vz81 A&B	EB ADVANCE	LOCAL			11	V8	8			CAMERA V8	23"
Vz82 A&B	EB NEAR	COMB			12	V16	8	8		CAMERA V3	74"
PB2 A&B	HWY 264 W. LEG	PED.				P2	2				
PB4 A&B	HWY 265 N LEG	PED.				P4	4				
PB6 A&B	HWY. 264 E LEG	PED.				P6	6				
PB8 A&B	HWY. 265 S LEG	PED.				P8	8				
										SPARE	

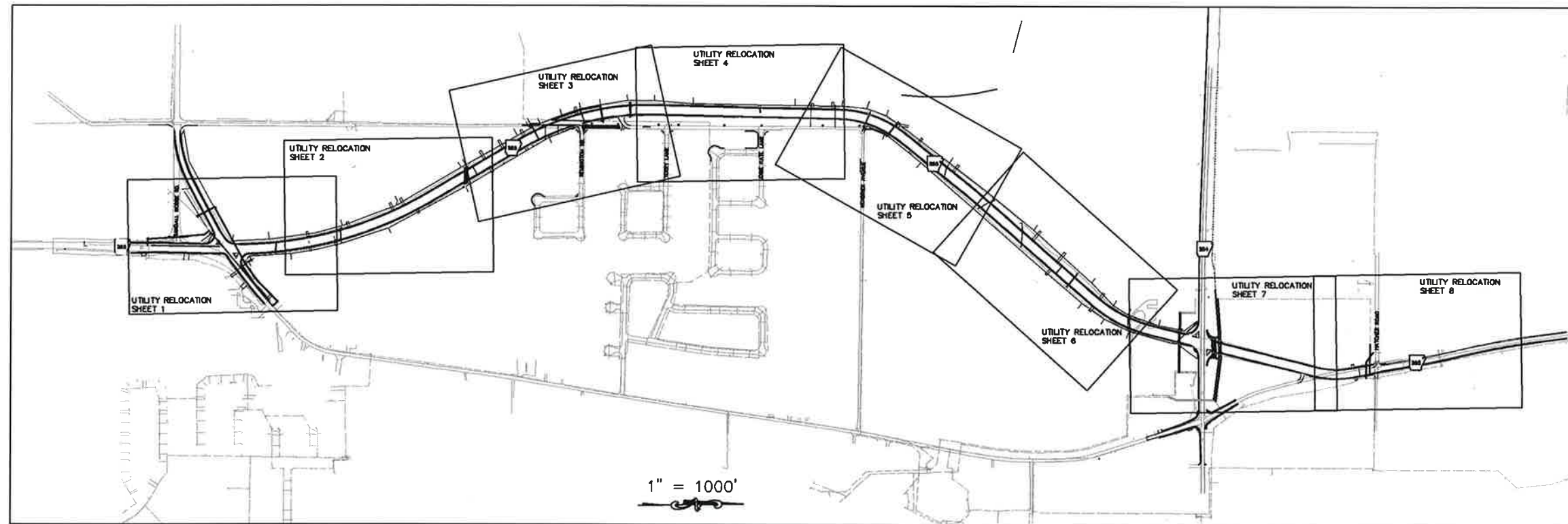
CONTROLLER INPUT ABBREVIATIONS
V = VEHICLE INPUT
D = SYSTEM OR AUXILIARY INPUT
P = PEDESTRIAN INPUT

NOTE: "AMP CHN =" REFERS TO THE RACK OUTPUT POSITION
THIS IS WIRED TO CONTROLLER INPUT DETECTOR NUMBER WHICH IS PROGRAMMED TO ACTUATE THE DESIGNATED PHASE.

LOCATION: HWY. 265/HWY. 264
CITY: BETHEL HEIGHTS
COUNTY: BENTON
DISTRICT: 9 SCALE: N/A DRAWN BY: GWE

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
10-19-17				6	ARK.			
						JOB NO. 012007	126	267

2 UTILITY RELOCATION INDEX



LOCATION MAP

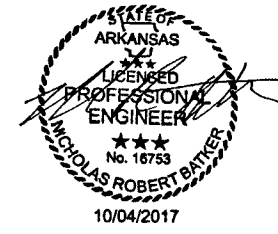
SHEET INDEX

- 126. UTILITY RELOCATION INDEX AND QUANTITIES
- 127. UTILITY RELOCATION SHEET (1 OF 8)
- 128. UTILITY RELOCATION SHEET (2 OF 8)
- 129. UTILITY RELOCATION SHEET (3 OF 8)
- 130. UTILITY RELOCATION SHEET (4 OF 8)
- 131. UTILITY RELOCATION SHEET (5 OF 8)
- 132. UTILITY RELOCATION SHEET (6 OF 8)
- 133. UTILITY RELOCATION SHEET (7 OF 8)
- 134. UTILITY RELOCATION SHEET (8 OF 8)
- 135. UTILITY RELOCATION 16" WATER PLAN AND PROFILE
- 136. UTILITY RELOCATION 24" WATER PLAN AND PROFILE (SHEET 1 OF 2)
- 137. UTILITY RELOCATION 24" WATER PLAN AND PROFILE (SHEET 2 OF 2)
- 138. UTILITY RELOCATION 8" SANITARY SEWER PLAN AND PROFILE
- 139. UTILITY RELOCATION 36" WATER PLAN AND PROFILE
- 140. UTILITY RELOCATION 8" WATER PLAN AND PROFILE (STA. 0+00 - STA. 3+22)
- 141. UTILITY RELOCATION 8" WATER PLAN AND PROFILE (STA. 0+00 - STA. 4+56)
- 142. UTILITY RELOCATION 24" & 48" WATER PLAN AND PROFILE
- 143. UTILITY RELOCATION 8" WATER PLAN AND PROFILE (STA. 0+00 - STA. 2+09)
- 144. UTILITY RELOCATION 48" WATER PLAN AND PROFILE
- 145. UTILITY DETAIL (SHEET 1 OF 6)
- 146. UTILITY DETAIL (SHEET 2 OF 6)
- 147. UTILITY DETAIL (SHEET 3 OF 6)
- 148. UTILITY DETAIL (SHEET 4 OF 6)
- 149. UTILITY DETAIL (SHEET 5 OF 6)
- 150. UTILITY DETAIL (SHEET 6 OF 6)

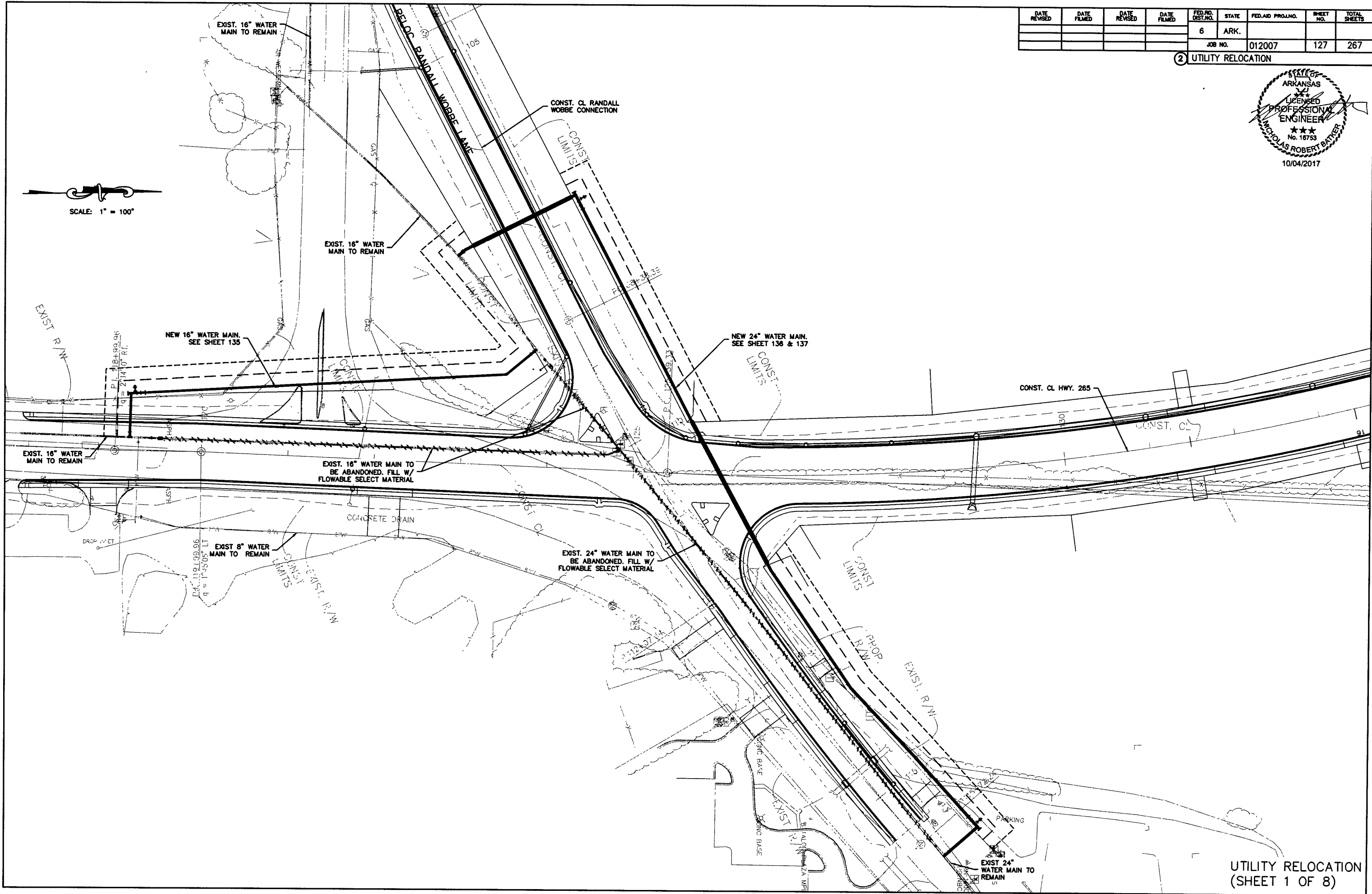
SUMMARY OF UTILITY RELOCATION QUANTITIES				SUMMARY OF UTILITY RELOCATION QUANTITIES			
ITEM NUMBER	ITEM	QUANTITY	UNIT	ITEM NUMBER	ITEM	QUANTITY	UNIT
SP	6" RESTRAINED JOINT DUCTILE IRON PIPE WATER MAIN, CLASS 50	40	LIN. FT.	SP	LINE STOP ON EXISTING 16" WATER MAIN	2	EACH
SP	8" DUCTILE IRON PIPE WATER MAIN, CLASS 50	118	LIN. FT.	SP	LINE STOP ON EXISTING 24" WATER MAIN	1	EACH
SP	8" RESTRAINED JOINT DUCTILE IRON PIPE WATER MAIN, CLASS 50	204	LIN. FT.	SP	CUT AND CAP EXISTING WATER MAIN (16")	2	EACH
SP	16" DUCTILE IRON PIPE WATER MAIN, CLASS 50	344	LIN. FT.	SP	CUT AND CAP EXISTING WATER MAIN (24")	1	EACH
SP	16" RESTRAINED JOINT DUCTILE IRON PIPE WATER MAIN, CLASS 50	187	LIN. FT.	SP	TRACING WIRE CONNECTION PORT	10	EACH
SP	24" DUCTILE IRON PIPE WATER MAIN, CLASS 50	447	LIN. FT.	SP	CATHODIC PROTECTION ON EXISTING 36" WATER MAIN	1.00	LUMP SUM
SP	24" RESTRAINED JOINT DUCTILE IRON PIPE WATER MAIN, CLASS 50	632	LIN. FT.	SP	8" PVC SDR-26 SEWER MAIN	385	LIN. FT.
SP	16" X 16" TAPPING SLEEVE, 16" TAPPING VALVE WITH BOX	3	EACH	SP	8" RESTRAINED JOINT DUCTILE IRON PIPE SEWER MAIN, CLASS 50	117	LIN. FT.
SP	24" X 24" TAPPING SLEEVE, 24" TAPPING VALVE WITH BOX	1	EACH	SP	MANHOLE (4' DIAMETER)	4	EACH
SP	36" X 8" TAPPING SLEEVE, 8" TAPPING VALVE WITH BOX	1	EACH	SP	PLUG EXISTING SANITARY SEWER (8")	2	EACH
SP	DUCTILE IRON PIPE WATER MAIN FITTINGS	10500	POUND	SP	POLYETHYLENE ENCASUREMENT FOR 6" AND 8" DUCTILE IRON PIPE	479	LIN. FT.
SP	1" POLYETHYLENE SERVICE TUBING	705	LIN. FT.	SP	POLYETHYLENE ENCASUREMENT FOR 16" DUCTILE IRON PIPE	520	LIN. FT.
SP	2" POLYETHYLENE CASING	595	LIN. FT.	SP	16" STEEL CASING BY DIRECT BURY	224	LIN. FT.
SP	CONCRETE THRUST COLLAR ON 8" WATER MAIN	1	EACH	SP	16" SPLIT STEEL CASING	120	LIN. FT.
SP	CONCRETE THRUST COLLAR ON 16" WATER MAIN	1	EACH	SP	POLYETHYLENE ENCASUREMENT FOR 24" DUCTILE IRON PIPE	1079	LIN. FT.
SP	CONCRETE THRUST COLLAR ON 24" WATER MAIN	2	EACH	SP	36" STEEL CASING BY DIRECT BURY	315	LIN. FT.
SP	6" GATE VALVE WITH BOX	4	EACH	SP	ABANDON EXISTING MANHOLE	1	EACH
SP	8" GATE VALVE WITH BOX	2	EACH	SP	ABANDON EXISTING VALVE	3	EACH
SP	16" BUTTERFLY VALVE WITH BOX	1	EACH	SP	ABANDON EXISTING WATER METER SETTING AND SERVICE LINE	7	EACH
SP	24" BUTTERFLY VALVE WITH BOX	2	EACH	202	REMOVAL AND DISPOSAL OF FIRE HYDRANT	1	EACH
SP	FIRE HYDRANT (3 WAY)	5	EACH	206	FLOWABLE SELECT MATERIAL	200	CU. YD.
SP	SET OF GUARD POSTS FOR FIRE HYDRANT	5	EACH	615	PAVEMENT REPAIR OVER CULVERTS (ASPHALT)	220	TONS
SP	SINGLE WATER METER SETTING (INC. METER BOX AND SHUT-OFF VALVE)	8	EACH				

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		127	267
							JOB NO.	012007

2 UTILITY RELOCATION



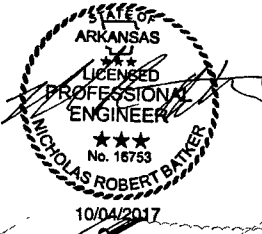
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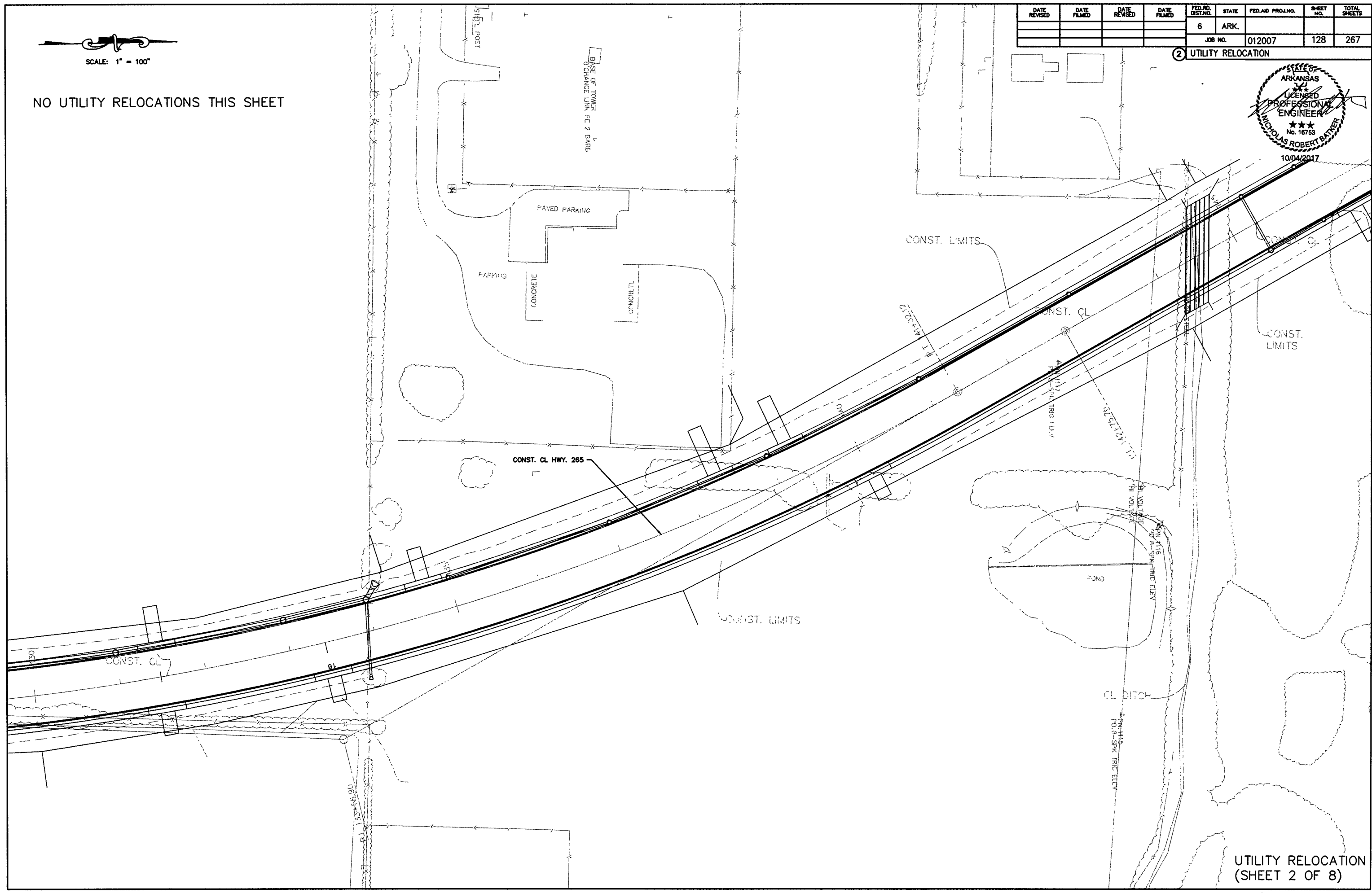
DATE PLOTTED: 10/11/2017

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. NO. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 012007							128	267

2 UTILITY RELOCATION



NO UTILITY RELOCATIONS THIS SHEET

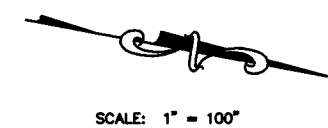
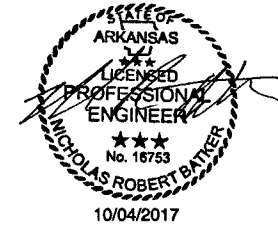


UTILITY RELOCATION
(SHEET 2 OF 8)

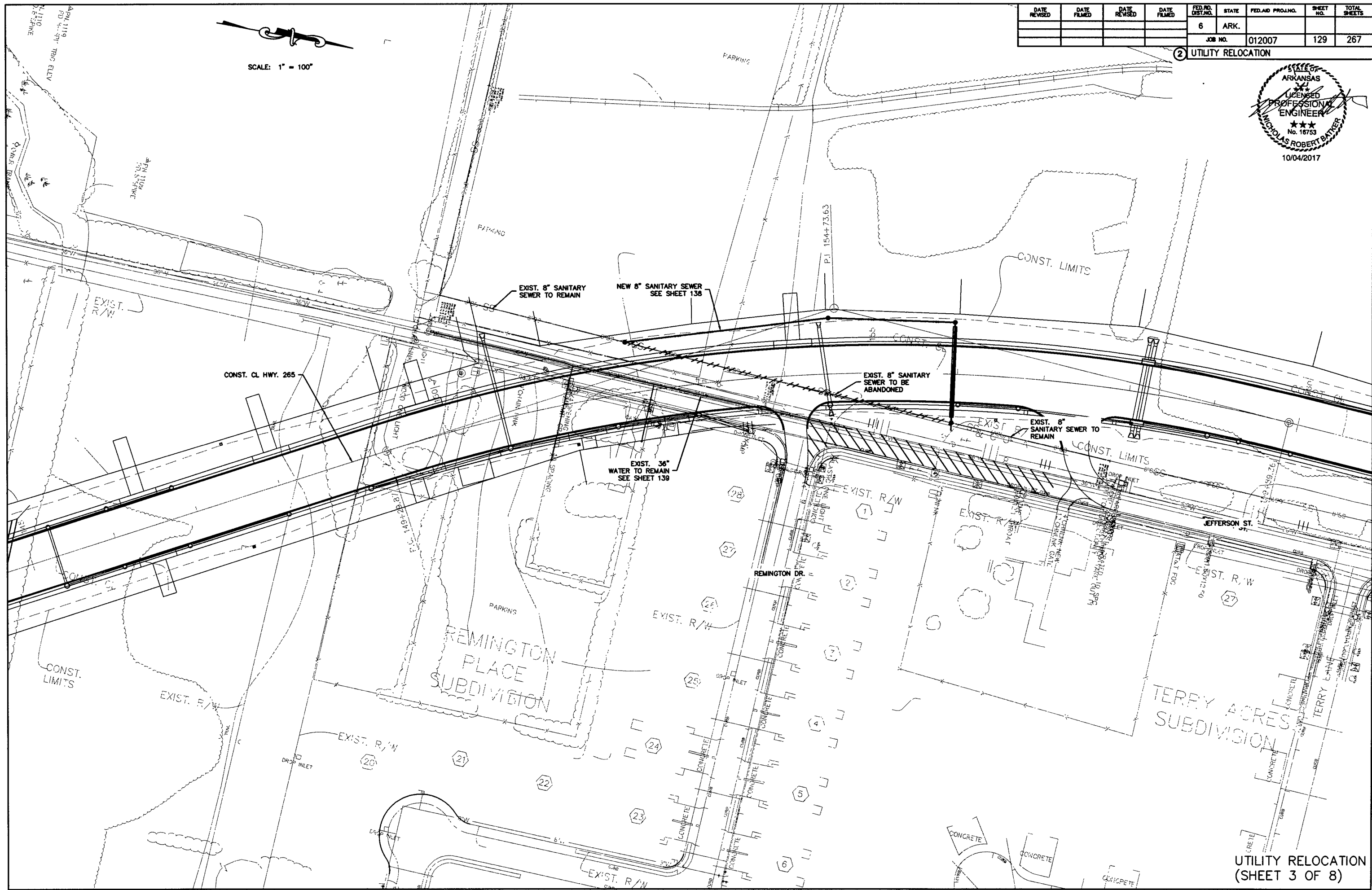
PLOT BY: JRC/ADWC
 10/24/17

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. NO. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 012007							129	267

2 UTILITY RELOCATION



SCALE: 1" = 100'



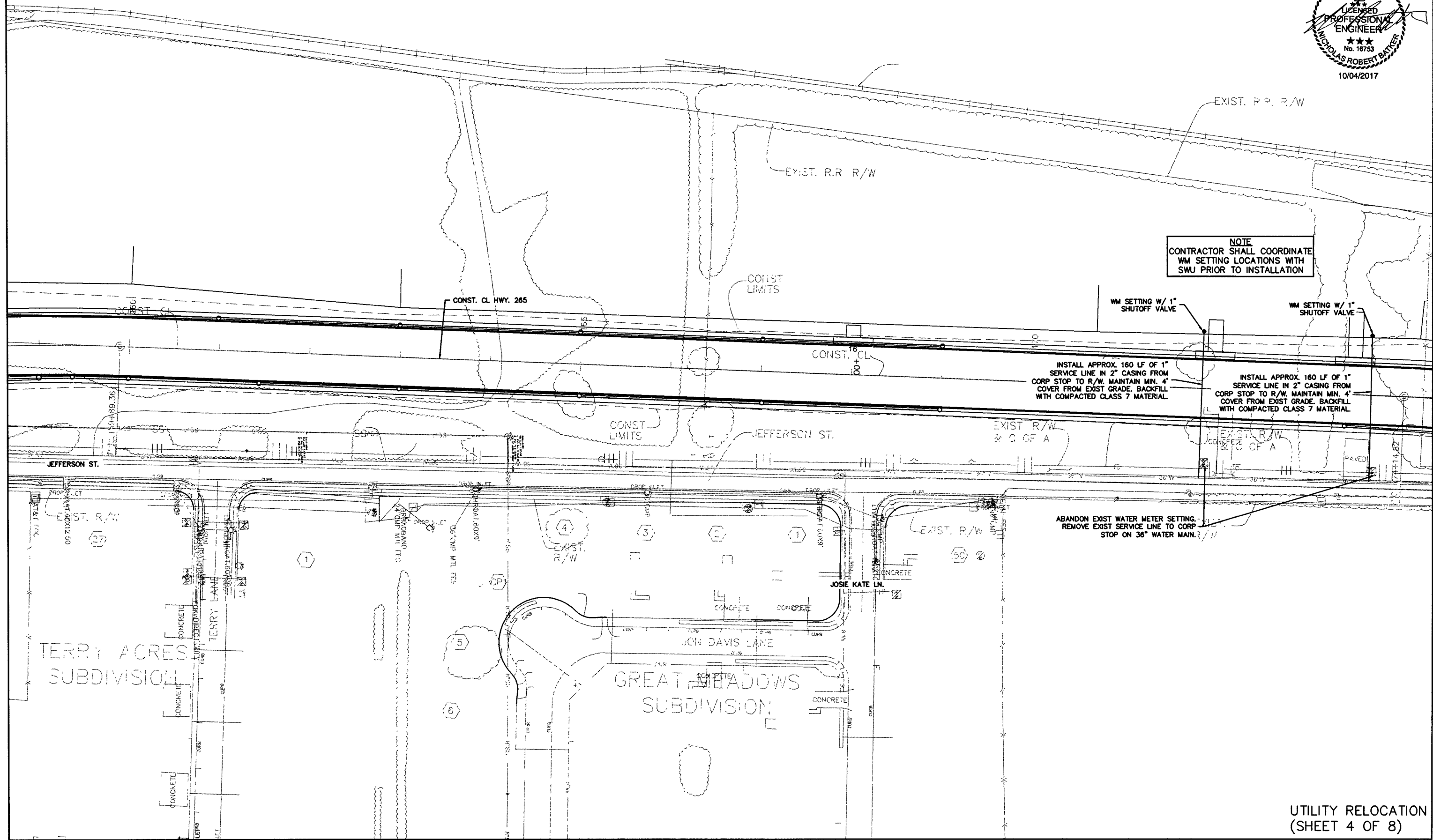
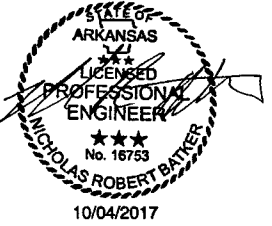
DATE: 11/14/2017

UTILITY RELOCATION
(SHEET 3 OF 8)

SCALE: 1" = 100'

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. NO. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS	
				6	ARK.				
							JOB NO. 012007	130	267

2 UTILITY RELOCATION



NOTE
CONTRACTOR SHALL COORDINATE
WM SETTING LOCATIONS WITH
SWU PRIOR TO INSTALLATION

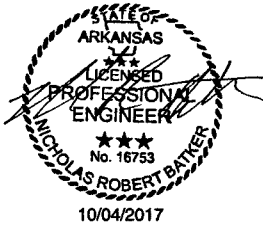
INSTALL APPROX. 160 LF OF 1"
SERVICE LINE IN 2" CASING FROM
CORP STOP TO R/W. MAINTAIN MIN. 4'
COVER FROM EXIST GRADE. BACKFILL
WITH COMPACTED CLASS 7 MATERIAL.

INSTALL APPROX. 160 LF OF 1"
SERVICE LINE IN 2" CASING FROM
CORP STOP TO R/W. MAINTAIN MIN. 4'
COVER FROM EXIST GRADE. BACKFILL
WITH COMPACTED CLASS 7 MATERIAL.

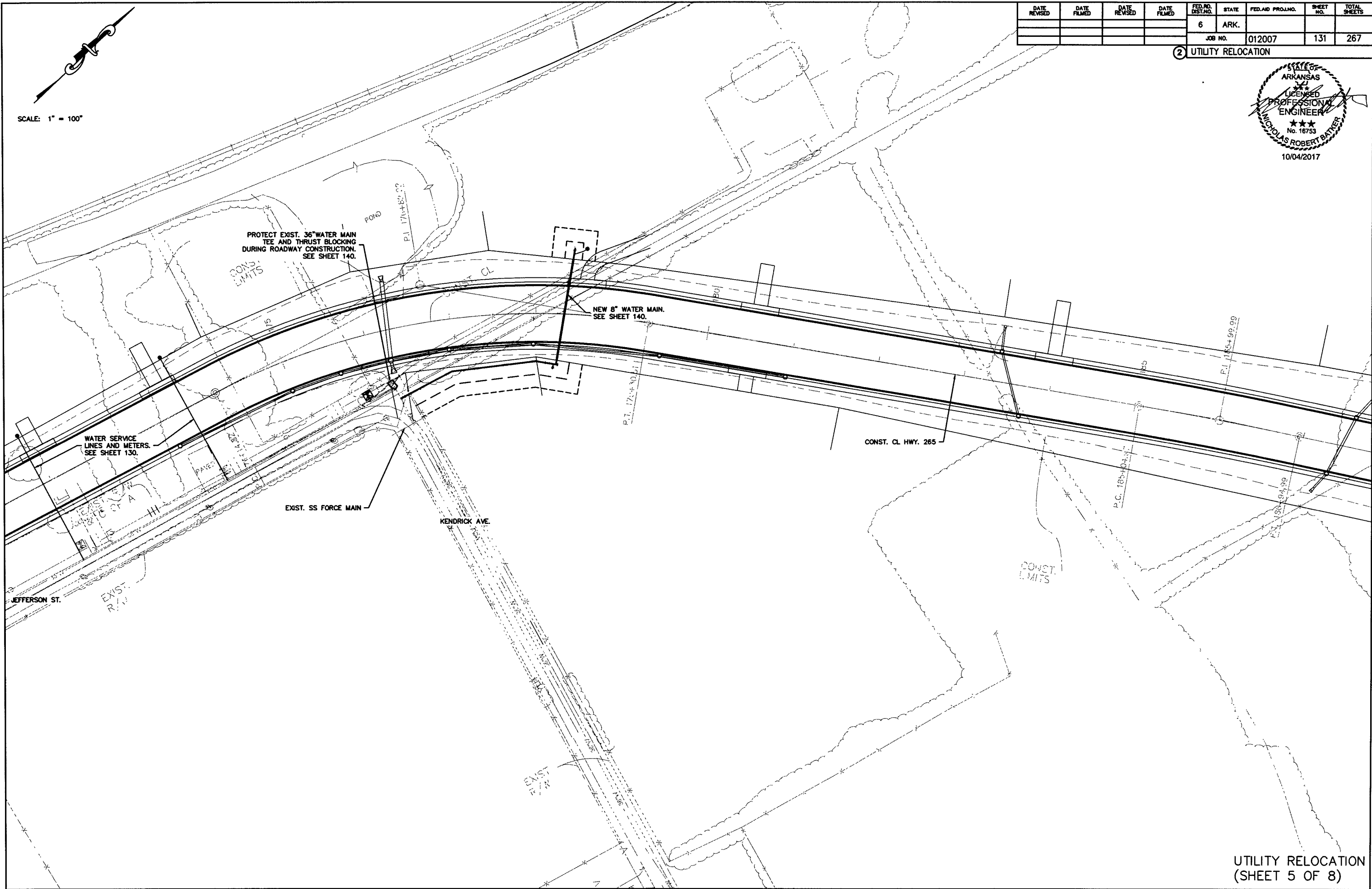
ABANDON EXIST WATER METER SETTING.
REMOVE EXIST SERVICE LINE TO CORP
STOP ON 36" WATER MAIN. R/W

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.							012007	131	267

2 UTILITY RELOCATION



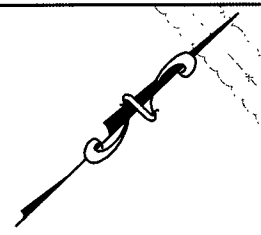
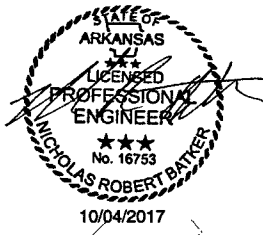
SCALE: 1" = 100'



UTILITY RELOCATION
(SHEET 5 OF 8)

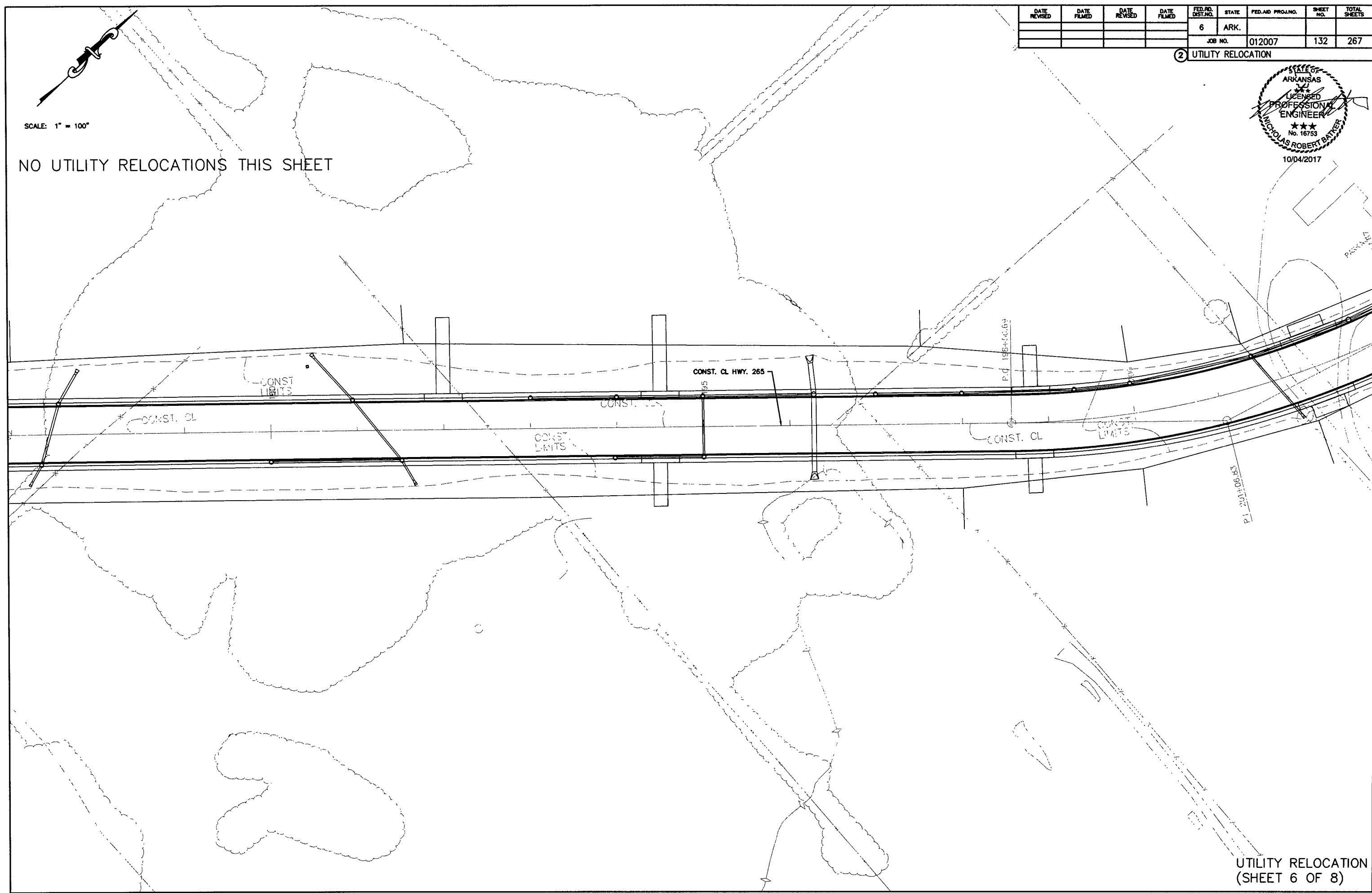
DATE REVISED	DATE FILED	DATE REVISED	DATE FILED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	012007		132	267

② UTILITY RELOCATION



SCALE: 1" = 100'

NO UTILITY RELOCATIONS THIS SHEET



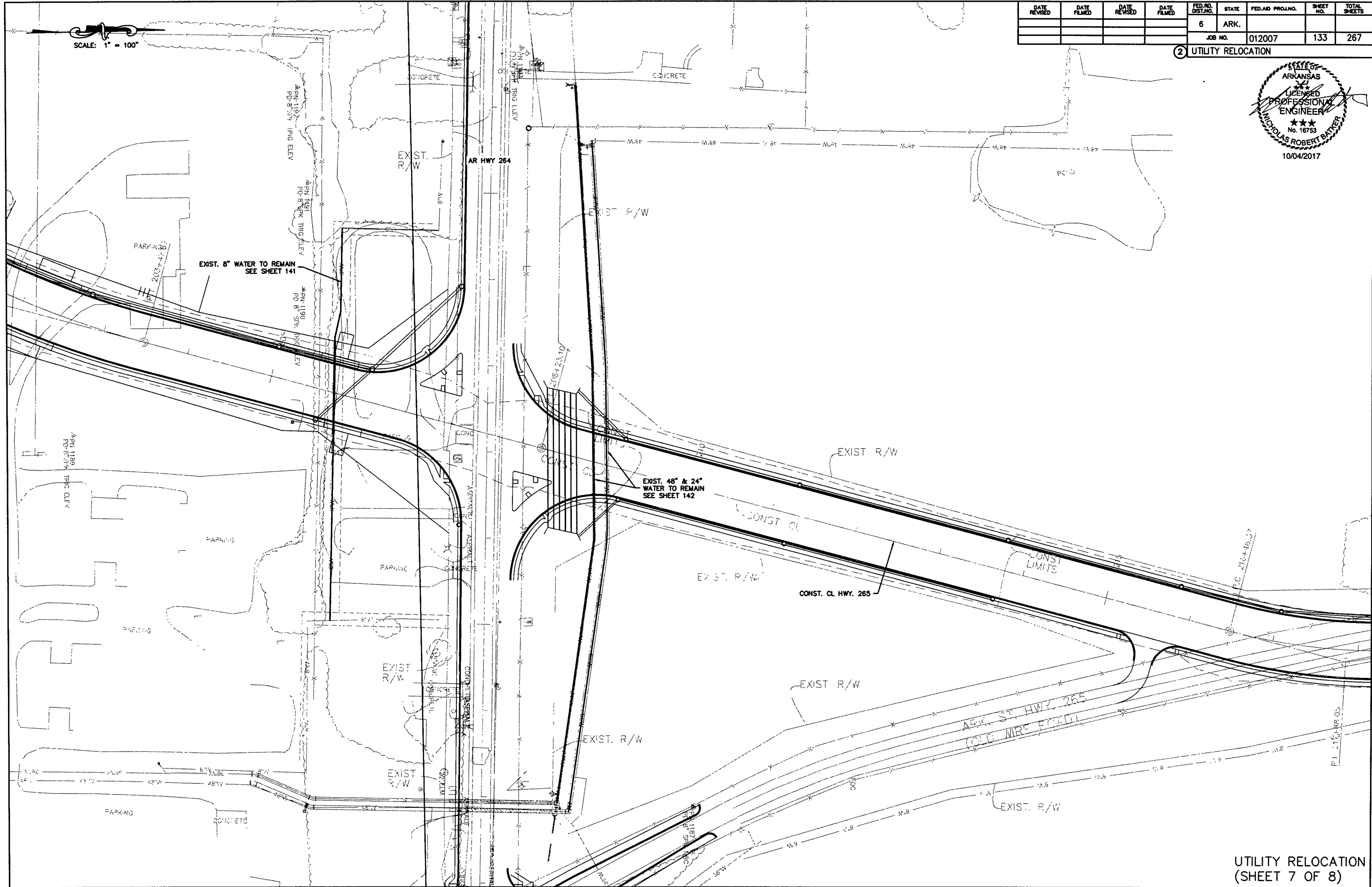
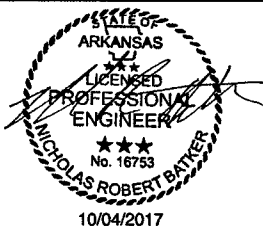
UTILITY RELOCATION
(SHEET 6 OF 8)

P.O. 198+00.69

SCALE: 1" = 100'

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. NO. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
						JOB NO.	012007	133
							267	

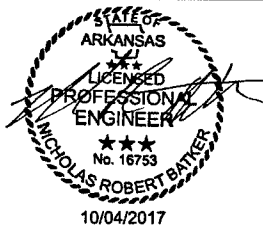
2 UTILITY RELOCATION



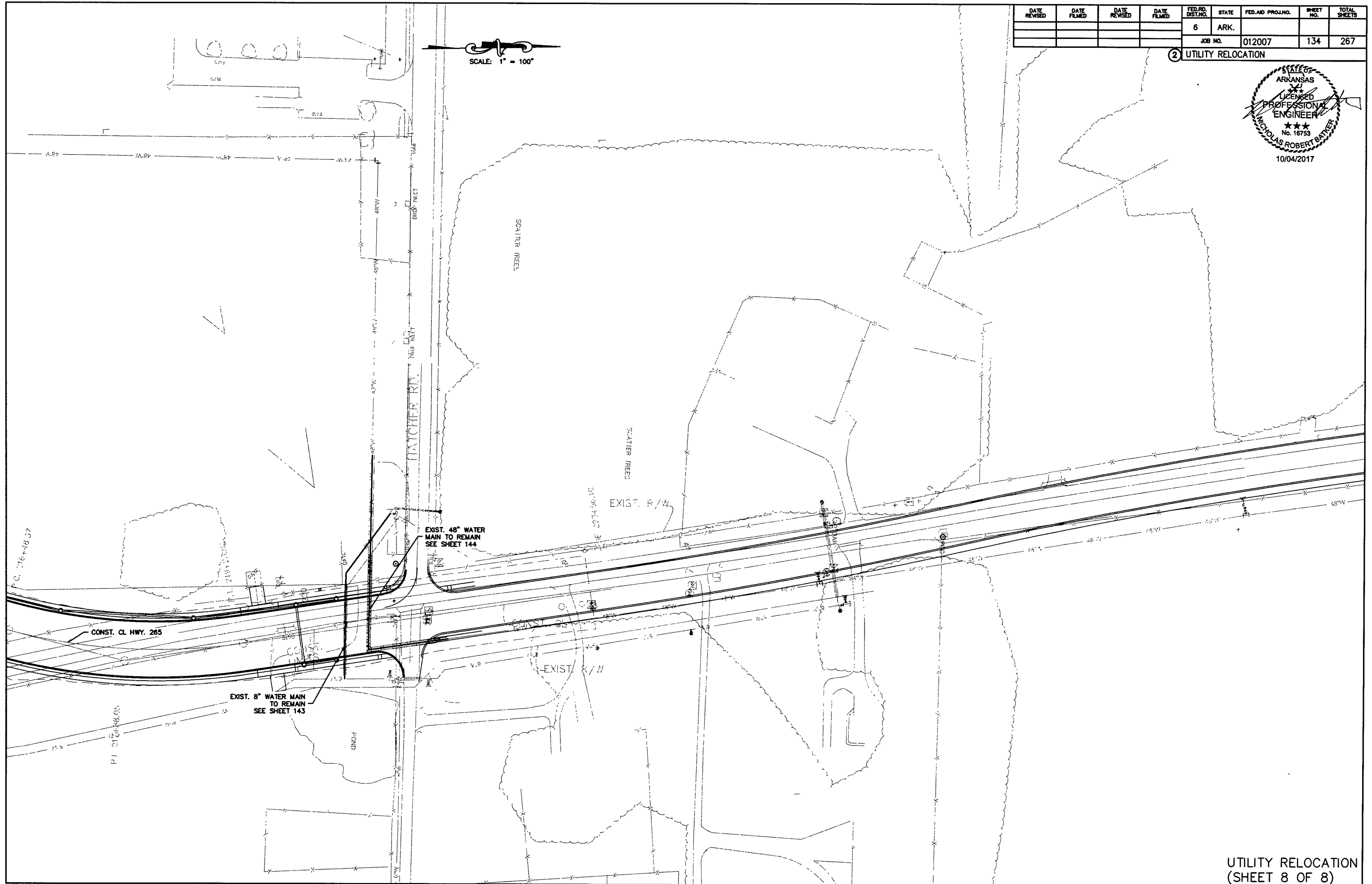
UTILITY RELOCATION (SHEET 7 OF 8)

DATE REVISED	DATE FILED	DATE REVISED	DATE FILED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 012007							134	267

② UTILITY RELOCATION



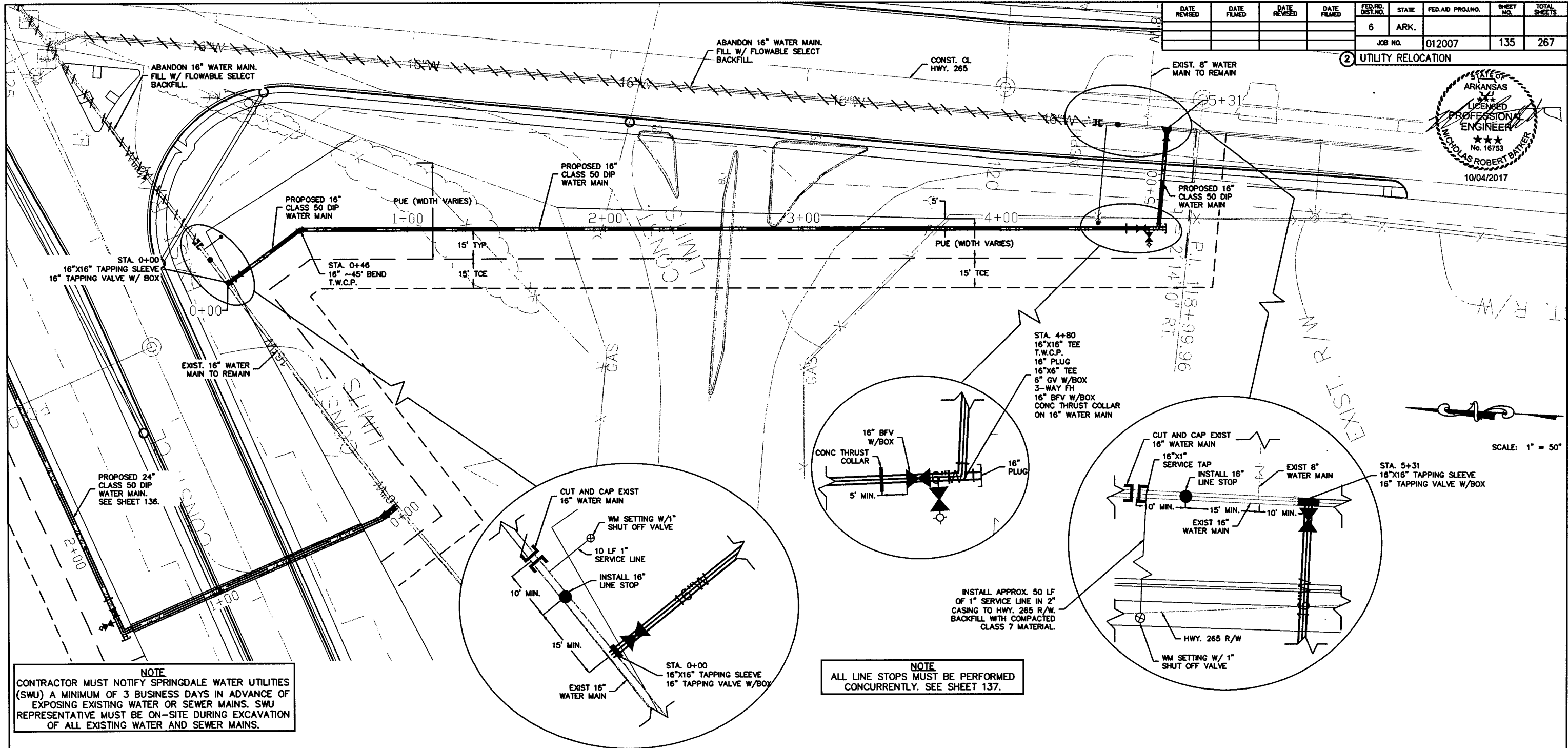
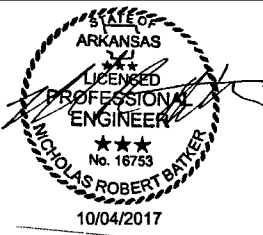
SCALE: 1" = 100'



UTILITY RELOCATION
(SHEET 8 OF 8)

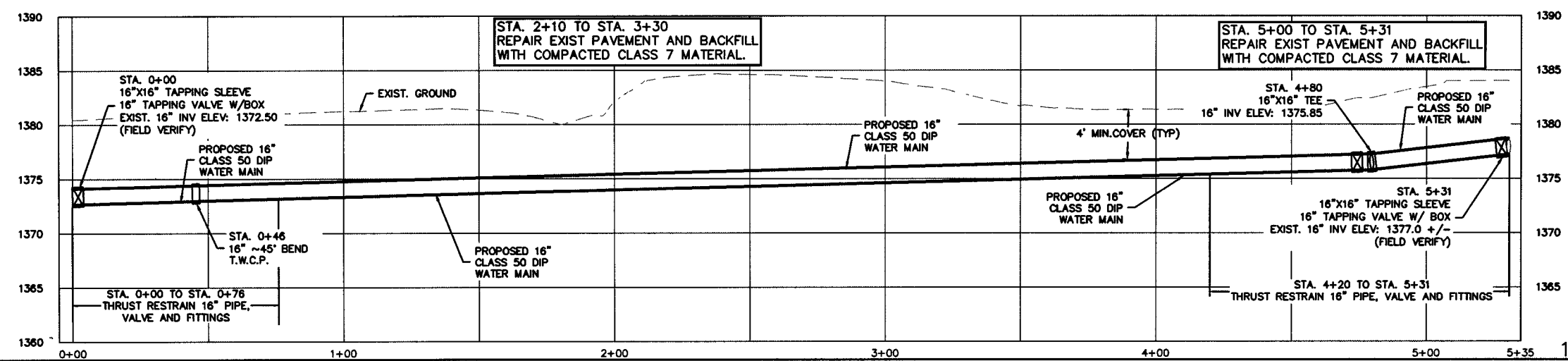
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
						JOB NO. 012007	135	267

2 UTILITY RELOCATION



NOTE
CONTRACTOR MUST NOTIFY SPRINGDALE WATER UTILITIES (SWU) A MINIMUM OF 3 BUSINESS DAYS IN ADVANCE OF EXPOSING EXISTING WATER OR SEWER MAINS. SWU REPRESENTATIVE MUST BE ON-SITE DURING EXCAVATION OF ALL EXISTING WATER AND SEWER MAINS.

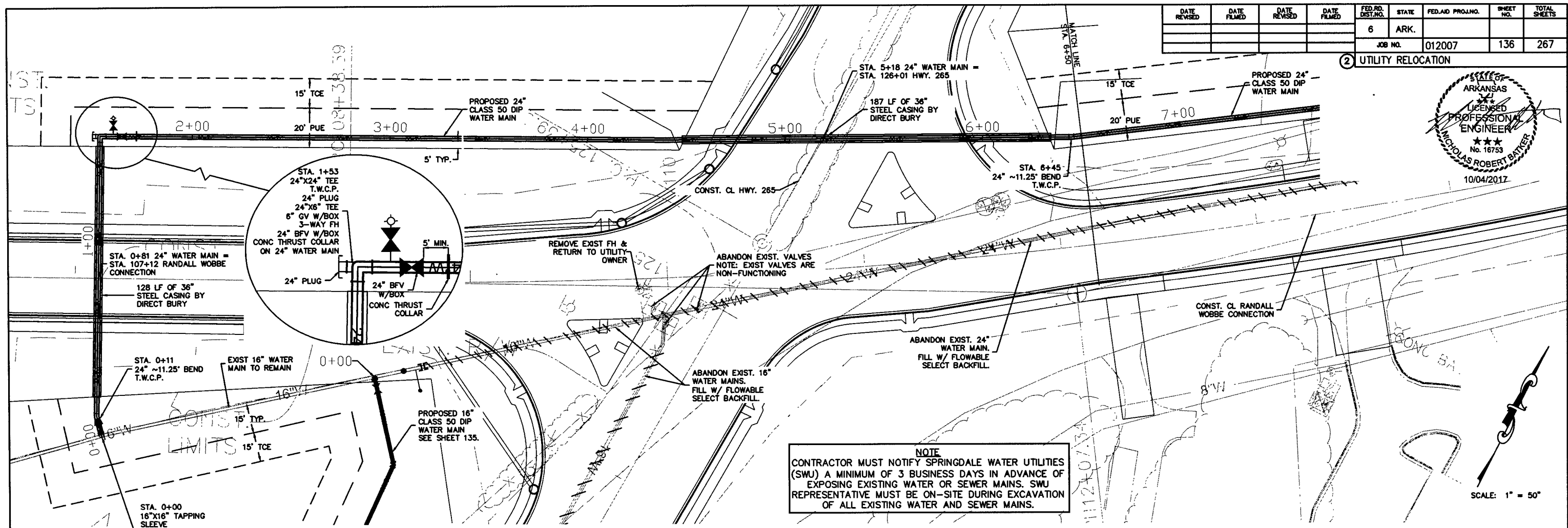
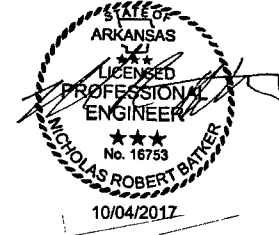
NOTE
ALL LINE STOPS MUST BE PERFORMED CONCURRENTLY. SEE SHEET 137.



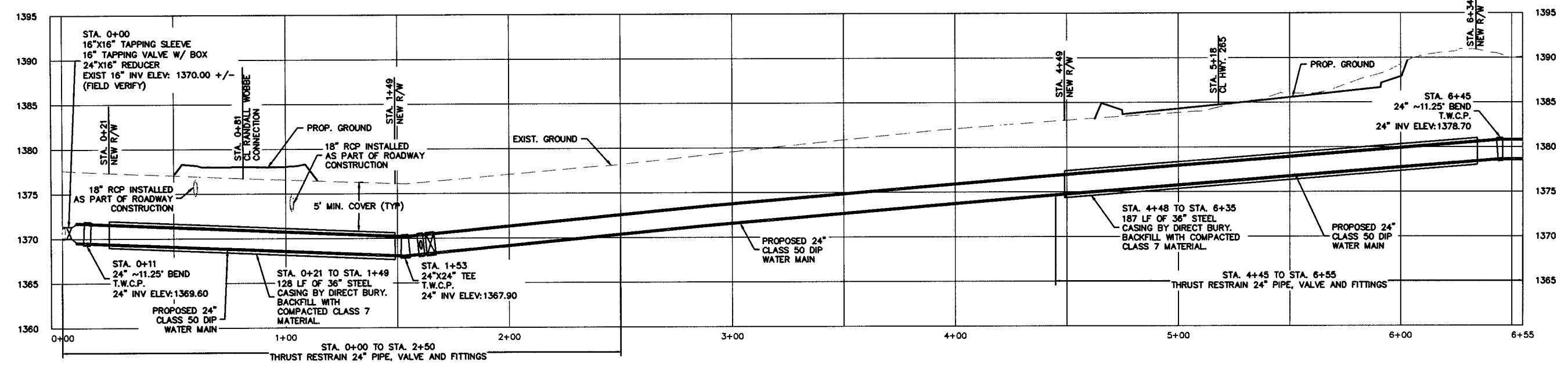
UTILITY RELOCATION
16" WATER PLAN AND PROFILE

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. 012007							136	267

2 UTILITY RELOCATION



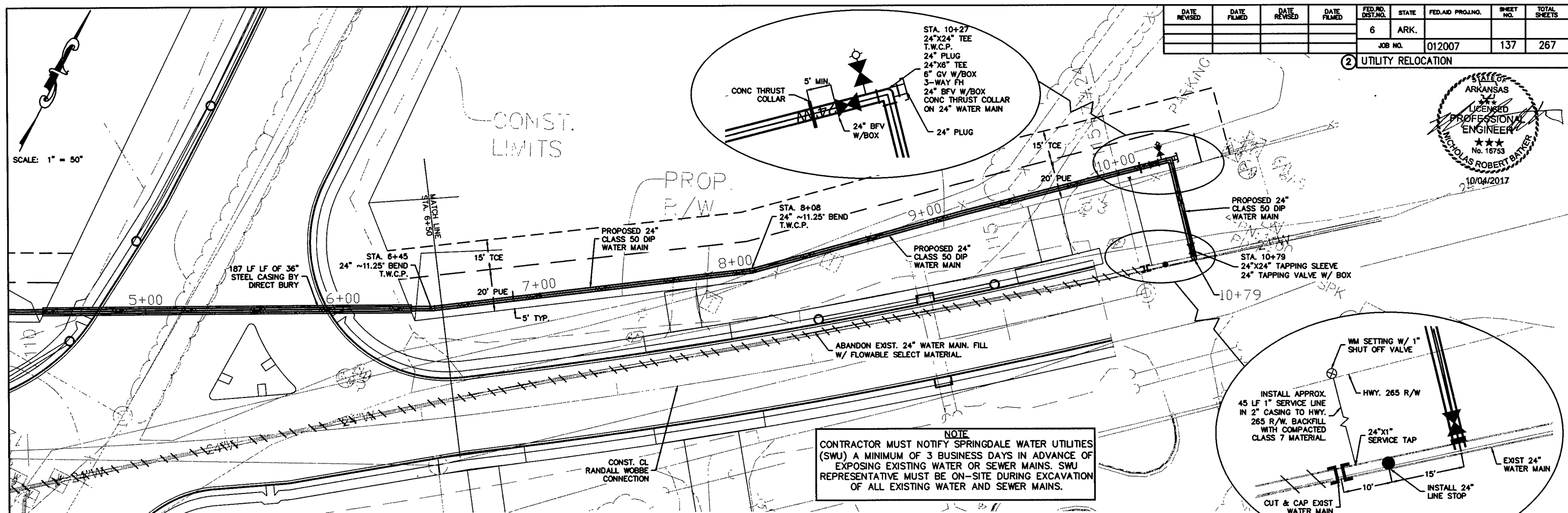
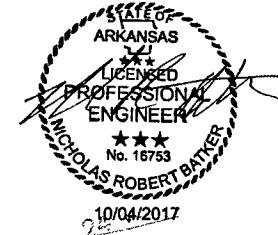
NOTE
 CONTRACTOR MUST NOTIFY SPRINGDALE WATER UTILITIES (SWU) A MINIMUM OF 3 BUSINESS DAYS IN ADVANCE OF EXPOSING EXISTING WATER OR SEWER MAINS. SWU REPRESENTATIVE MUST BE ON-SITE DURING EXCAVATION OF ALL EXISTING WATER AND SEWER MAINS.



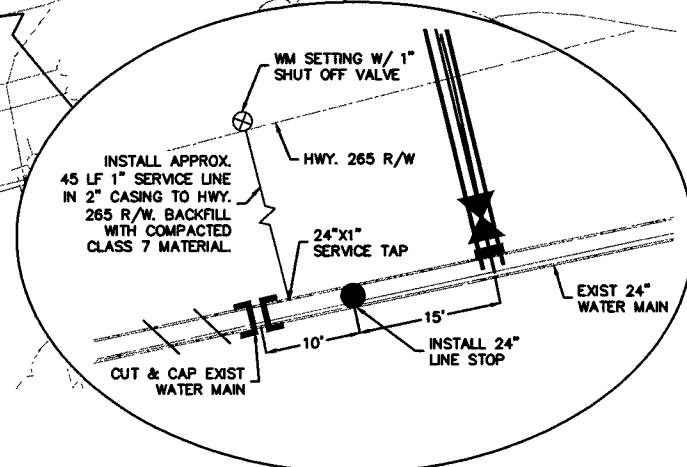
UTILITY RELOCATION
 24" WATER PLAN AND PROFILE
 (SHEET 1 OF 2)

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. NO. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 012007							137	267

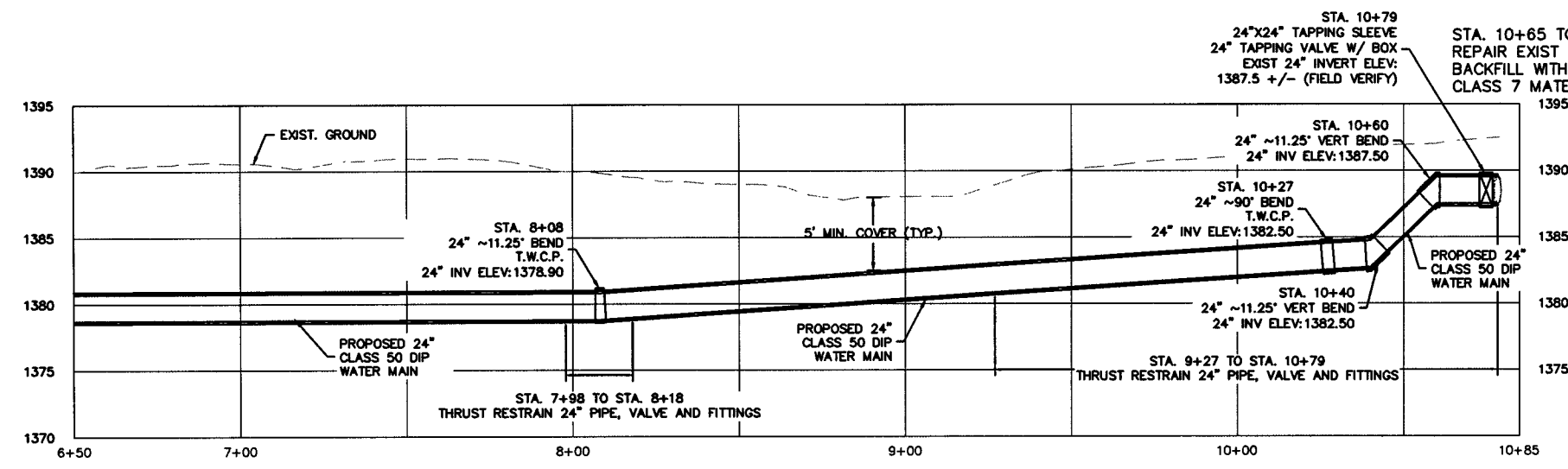
2 UTILITY RELOCATION



NOTE
 CONTRACTOR MUST NOTIFY SPRINGDALE WATER UTILITIES (SWU) A MINIMUM OF 3 BUSINESS DAYS IN ADVANCE OF EXPOSING EXISTING WATER OR SEWER MAINS. SWU REPRESENTATIVE MUST BE ON-SITE DURING EXCAVATION OF ALL EXISTING WATER AND SEWER MAINS.



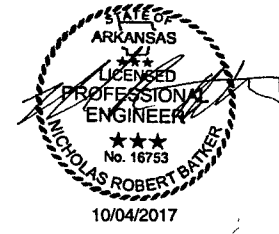
NOTE
 ALL LINE STOPS MUST BE PERFORMED CONCURRENTLY. SEE SHEET 135.



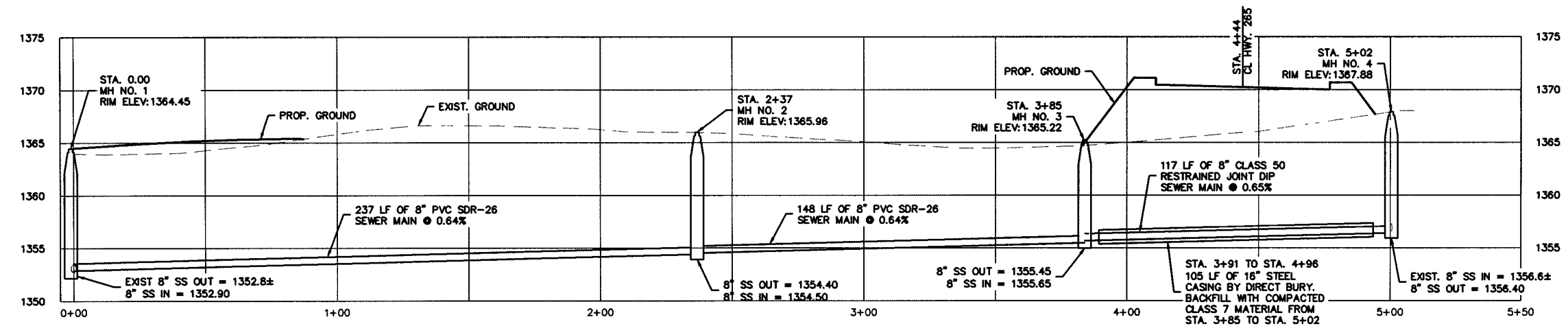
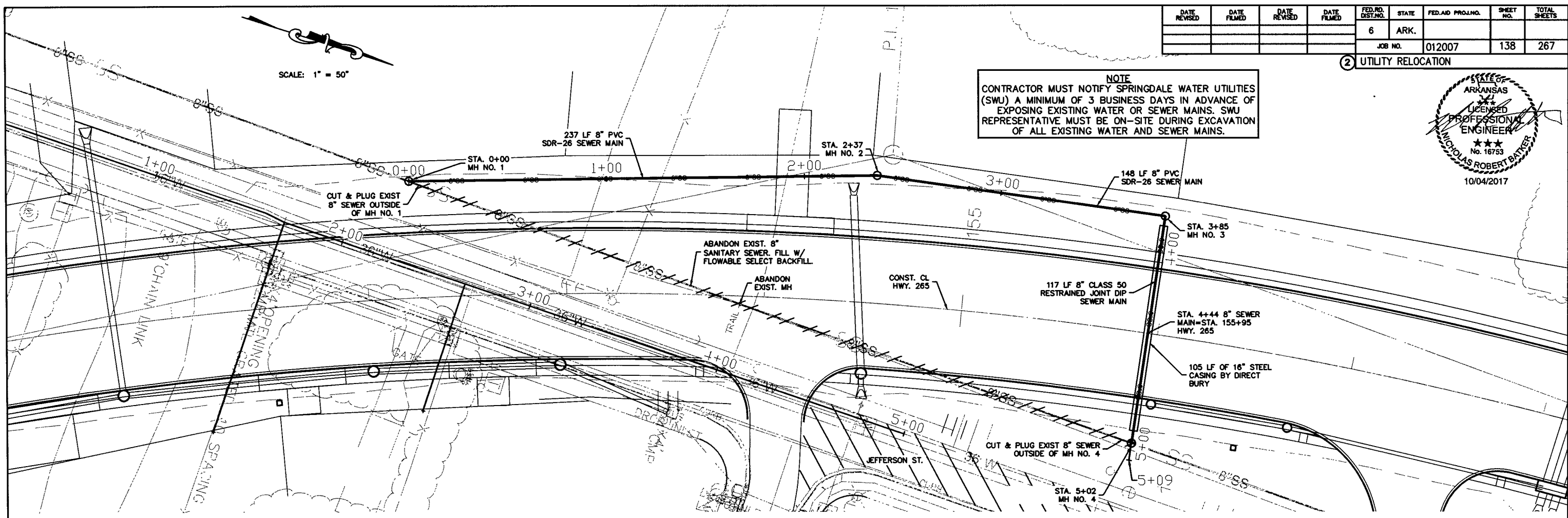
NOTE
 CONTRACTOR SHALL VERIFY DEPTH OF EXISTING 24-inch WATER MAIN IN OLD WIRE ROAD PRIOR TO ORDERING FITTINGS/MATERIALS.

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. NO. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 012007							138	267

2 UTILITY RELOCATION



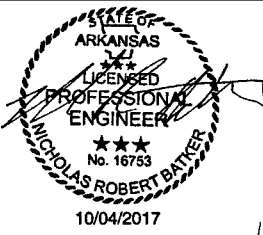
NOTE
 CONTRACTOR MUST NOTIFY SPRINGDALE WATER UTILITIES (SWU) A MINIMUM OF 3 BUSINESS DAYS IN ADVANCE OF EXPOSING EXISTING WATER OR SEWER MAINS. SWU REPRESENTATIVE MUST BE ON-SITE DURING EXCAVATION OF ALL EXISTING WATER AND SEWER MAINS.



NOTE
 LENGTHS AND SLOPES PROVIDED ARE BASED ON DISTANCE FROM CENTER TO CENTER OF MANHOLES.

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
							JOB NO. 012007	139 267

2 UTILITY RELOCATION

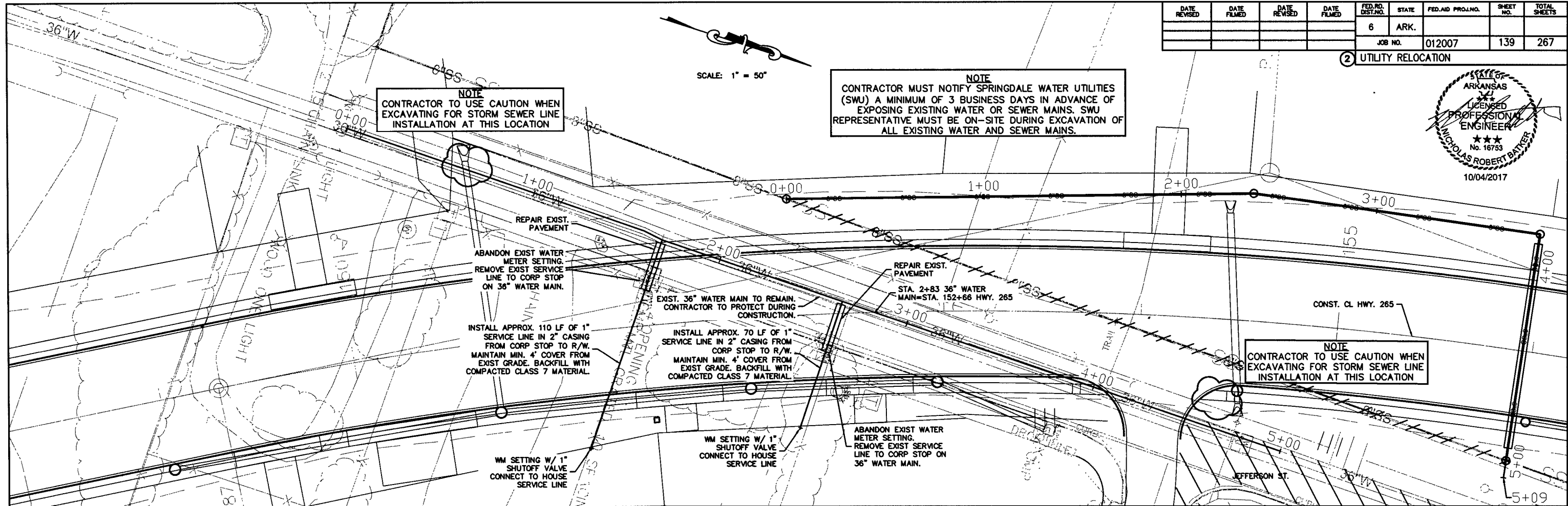


SCALE: 1" = 50'

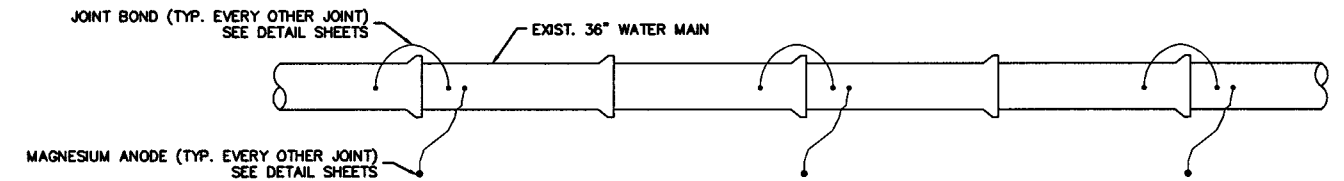
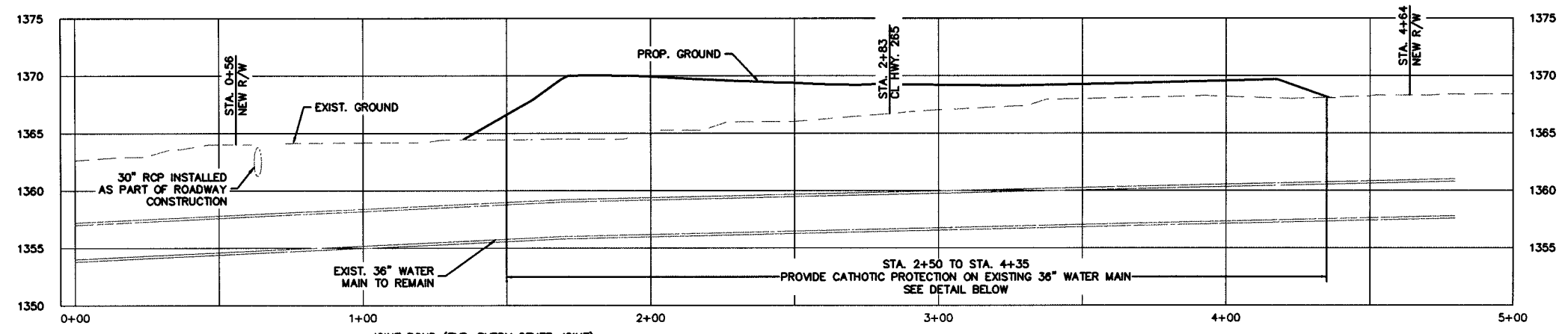
NOTE
CONTRACTOR MUST NOTIFY SPRINGDALE WATER UTILITIES (SWU) A MINIMUM OF 3 BUSINESS DAYS IN ADVANCE OF EXPOSING EXISTING WATER OR SEWER MAINS. SWU REPRESENTATIVE MUST BE ON-SITE DURING EXCAVATION OF ALL EXISTING WATER AND SEWER MAINS.

NOTE
CONTRACTOR TO USE CAUTION WHEN EXCAVATING FOR STORM SEWER LINE INSTALLATION AT THIS LOCATION

NOTE
CONTRACTOR TO USE CAUTION WHEN EXCAVATING FOR STORM SEWER LINE INSTALLATION AT THIS LOCATION



NOTE
CONTRACTOR SHALL LOCATE EXIST. HOUSE SERVICE LINES AND COORDINATE WM SETTING LOCATIONS WITH SWU PRIOR TO INSTALLATION.

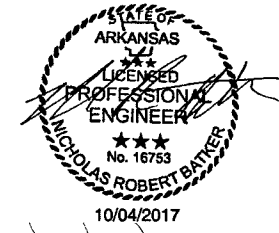


CATHODIC PROTECTION DETAIL
N.T.S.

DATE PLOTTED: 10/15/17

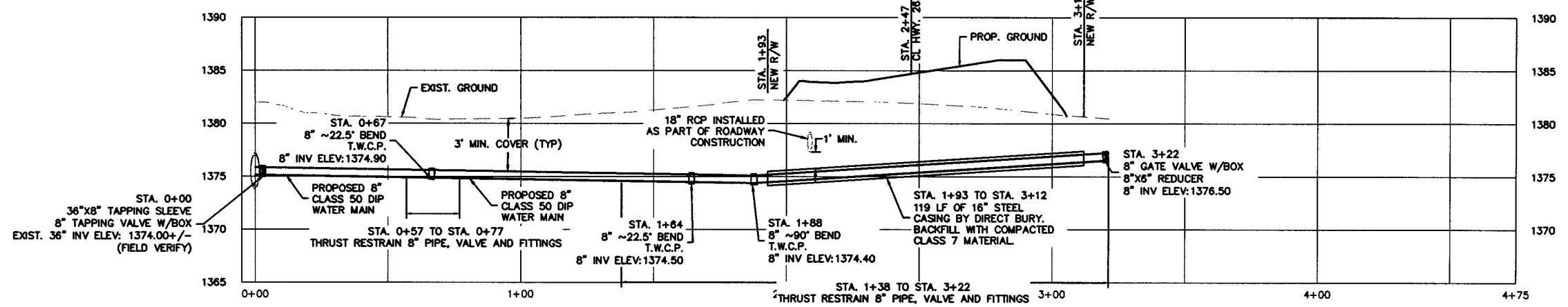
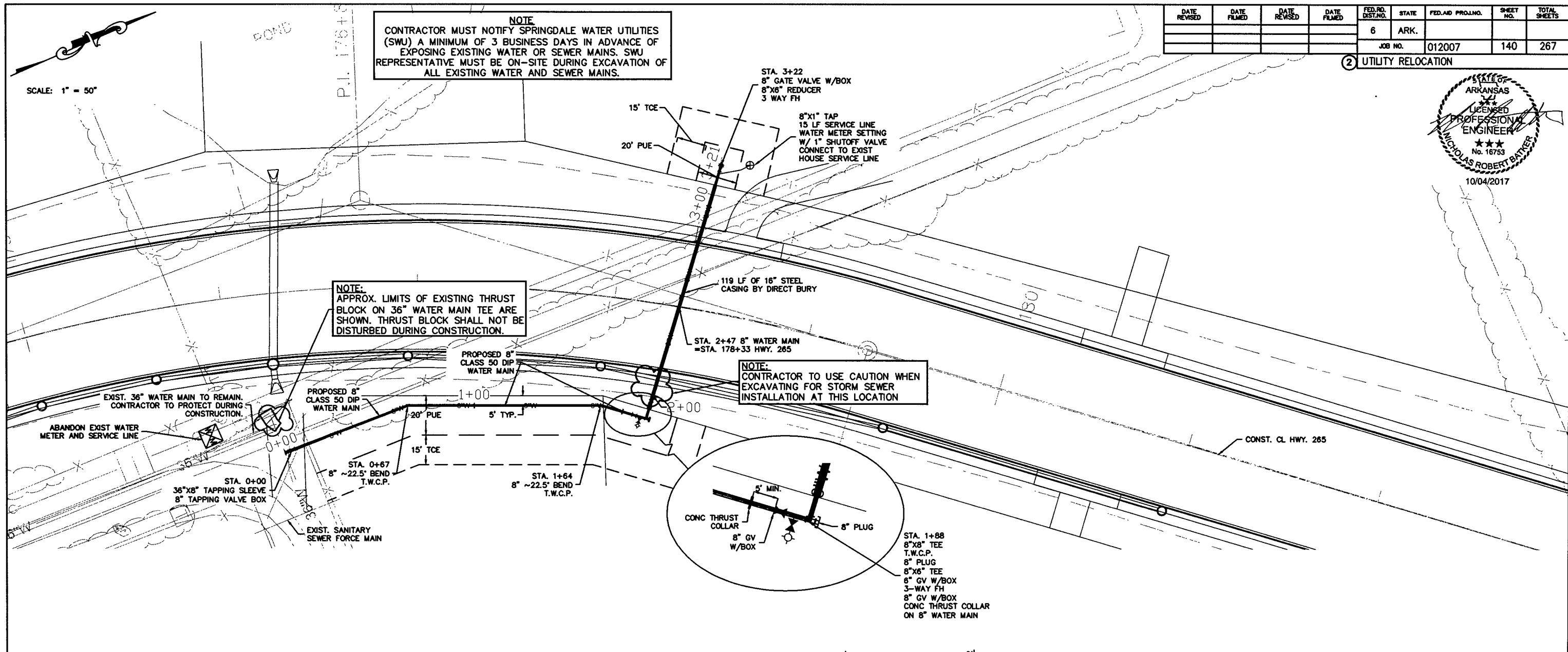
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	012007		140	267

2 UTILITY RELOCATION



NOTE
CONTRACTOR MUST NOTIFY SPRINGDALE WATER UTILITIES (SWU) A MINIMUM OF 3 BUSINESS DAYS IN ADVANCE OF EXPOSING EXISTING WATER OR SEWER MAINS. SWU REPRESENTATIVE MUST BE ON-SITE DURING EXCAVATION OF ALL EXISTING WATER AND SEWER MAINS.

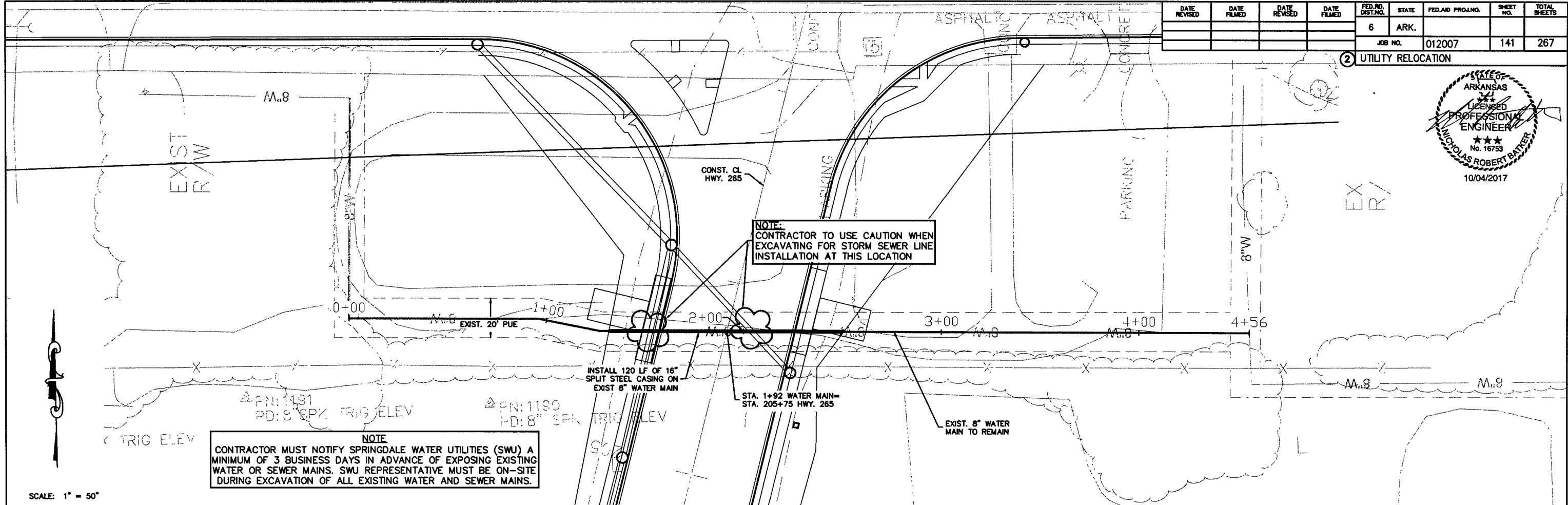
SCALE: 1" = 50'



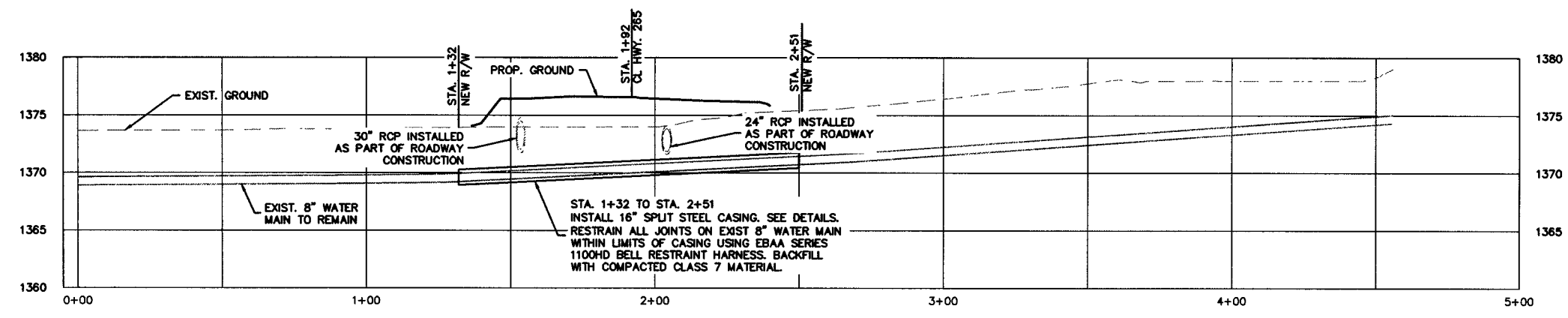
UTILITY RELOCATION
8" WATER PLAN AND PROFILE (STA. 0+00 - STA. 3+22)

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. NO. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 012007							141	267

② UTILITY RELOCATION



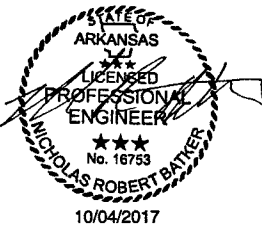
NOTE
 CONTRACTOR MUST NOTIFY SPRINGDALE WATER UTILITIES (SWU) A MINIMUM OF 3 BUSINESS DAYS IN ADVANCE OF EXPOSING EXISTING WATER OR SEWER MAINS. SWU REPRESENTATIVE MUST BE ON-SITE DURING EXCAVATION OF ALL EXISTING WATER AND SEWER MAINS.



UTILITY RELOCATION
 8" WATER PLAN AND PROFILE (STA. 0+00 - STA. 4+56)

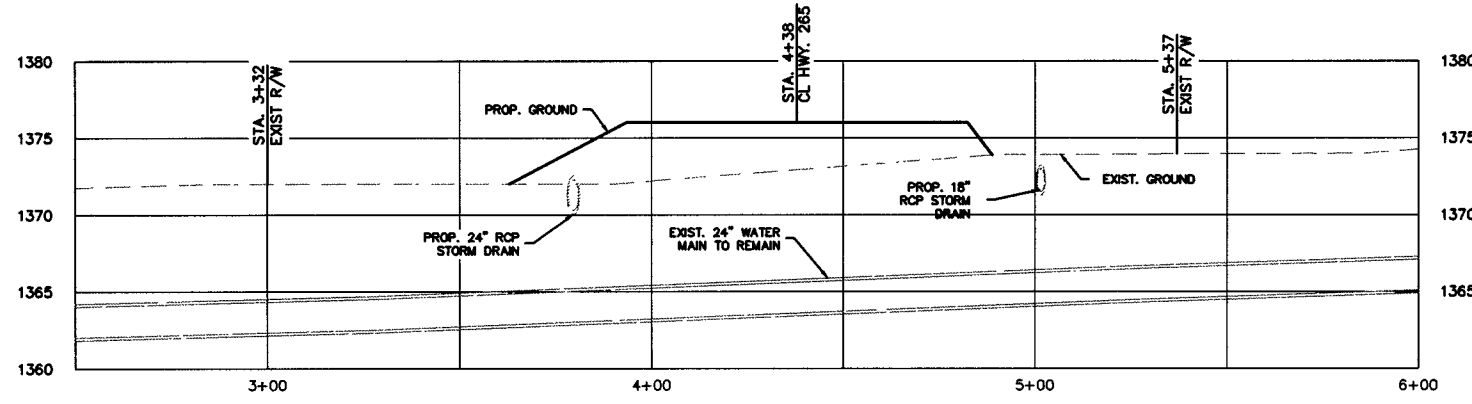
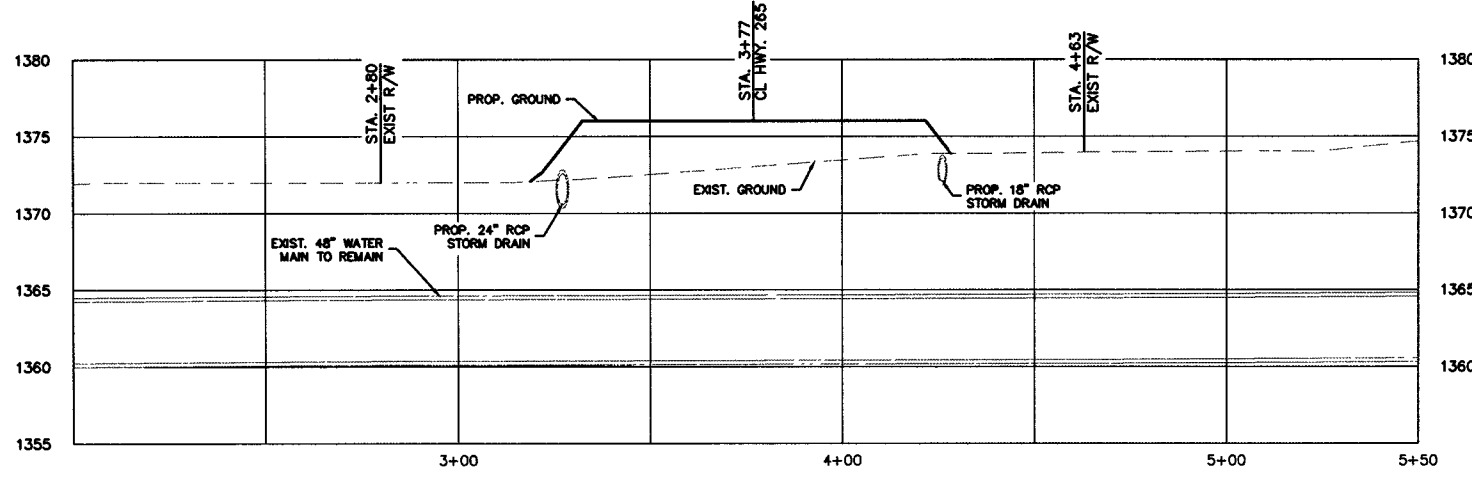
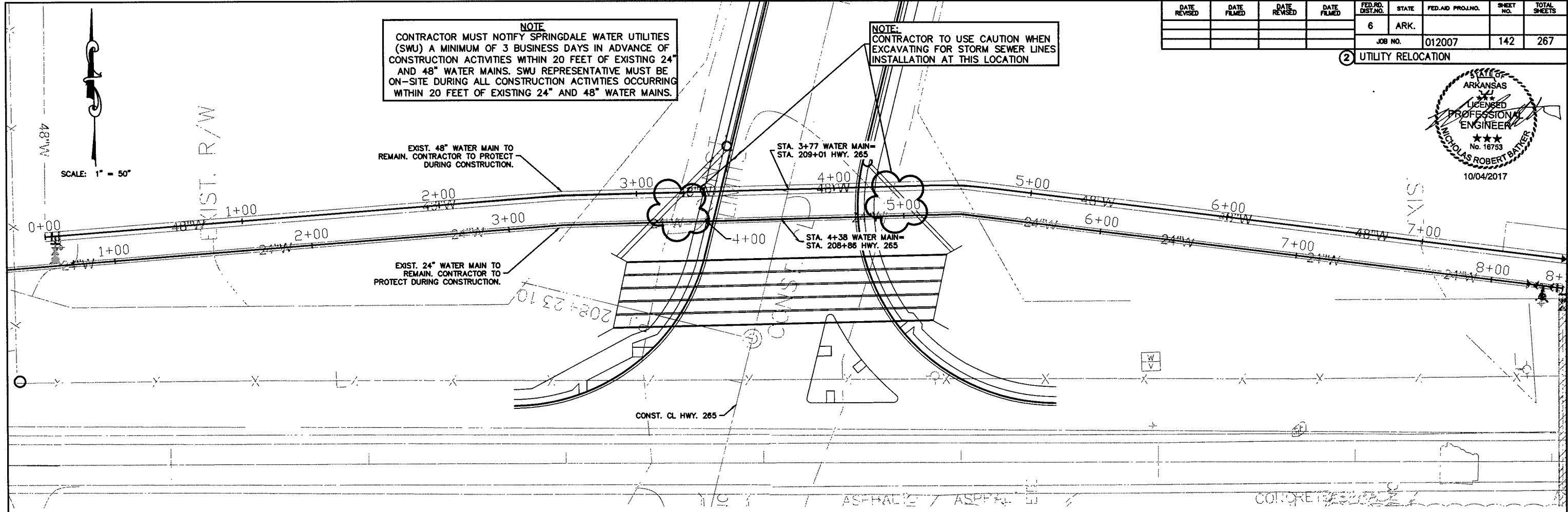
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 012007							142	267

2 UTILITY RELOCATION



NOTE
 CONTRACTOR MUST NOTIFY SPRINGDALE WATER UTILITIES (SWU) A MINIMUM OF 3 BUSINESS DAYS IN ADVANCE OF CONSTRUCTION ACTIVITIES WITHIN 20 FEET OF EXISTING 24" AND 48" WATER MAINS. SWU REPRESENTATIVE MUST BE ON-SITE DURING ALL CONSTRUCTION ACTIVITIES OCCURRING WITHIN 20 FEET OF EXISTING 24" AND 48" WATER MAINS.

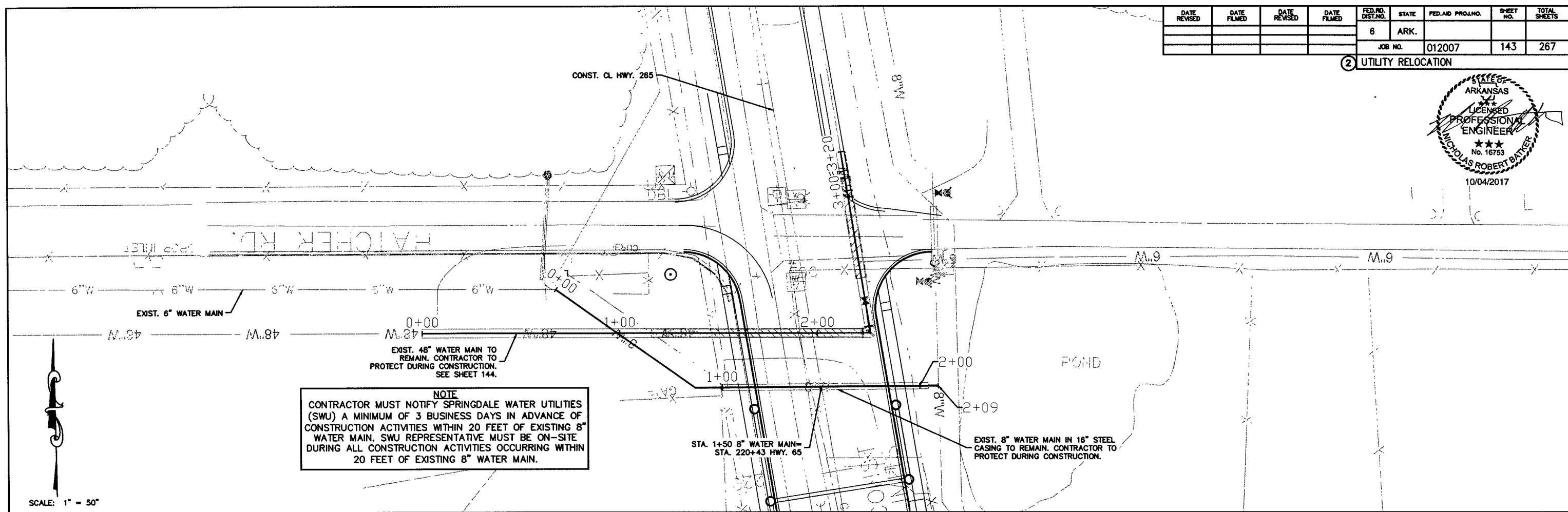
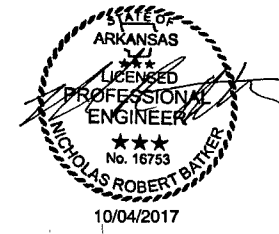
NOTE:
 CONTRACTOR TO USE CAUTION WHEN EXCAVATING FOR STORM SEWER LINES INSTALLATION AT THIS LOCATION



UTILITY RELOCATION
 24" AND 48" WATER
 PLAN AND PROFILE

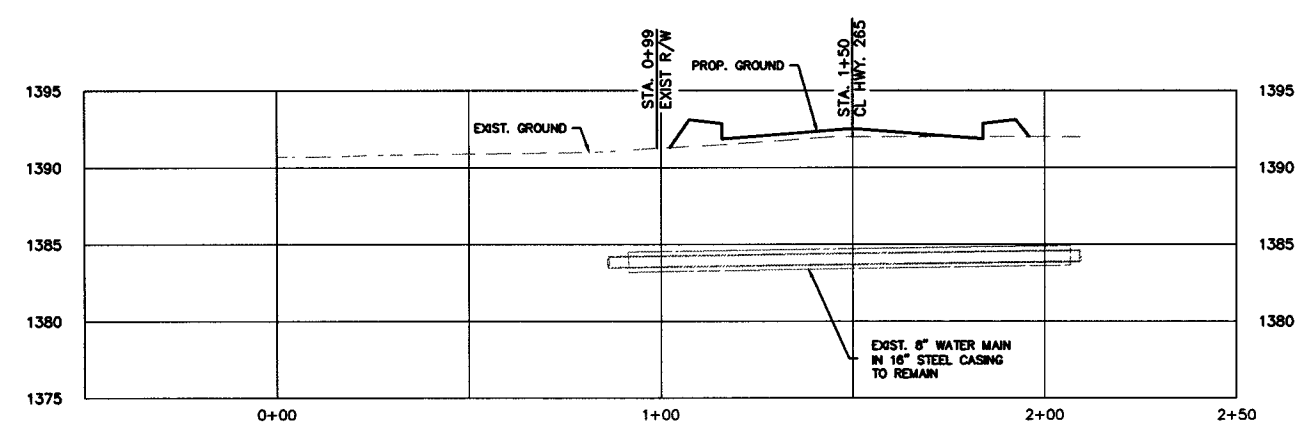
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
							JOB NO. 012007	143 267

2 UTILITY RELOCATION



NOTE
 CONTRACTOR MUST NOTIFY SPRINGDALE WATER UTILITIES (SWU) A MINIMUM OF 3 BUSINESS DAYS IN ADVANCE OF CONSTRUCTION ACTIVITIES WITHIN 20 FEET OF EXISTING 8" WATER MAIN. SWU REPRESENTATIVE MUST BE ON-SITE DURING ALL CONSTRUCTION ACTIVITIES OCCURRING WITHIN 20 FEET OF EXISTING 8" WATER MAIN.

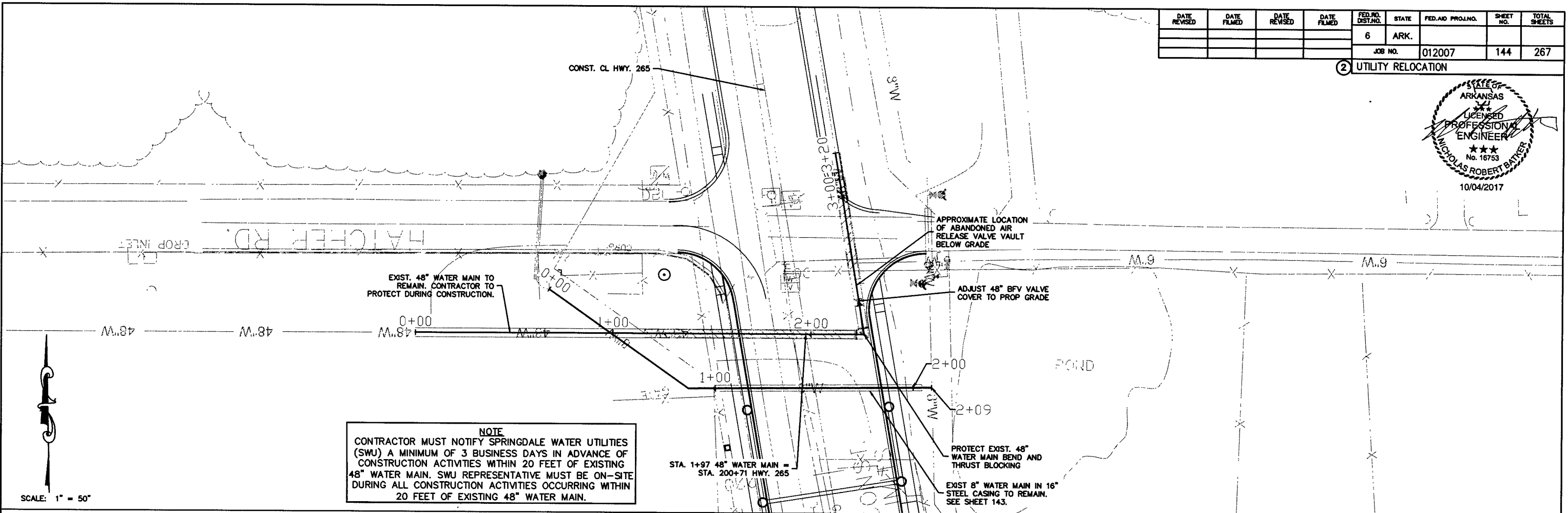
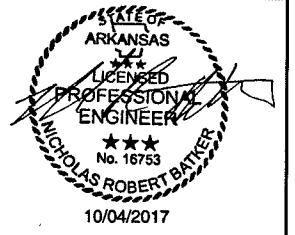
SCALE: 1" = 50'



UTILITY RELOCATION
 8" WATER PLAN AND PROFILE (STA. 0+00 - STA. 2+09)

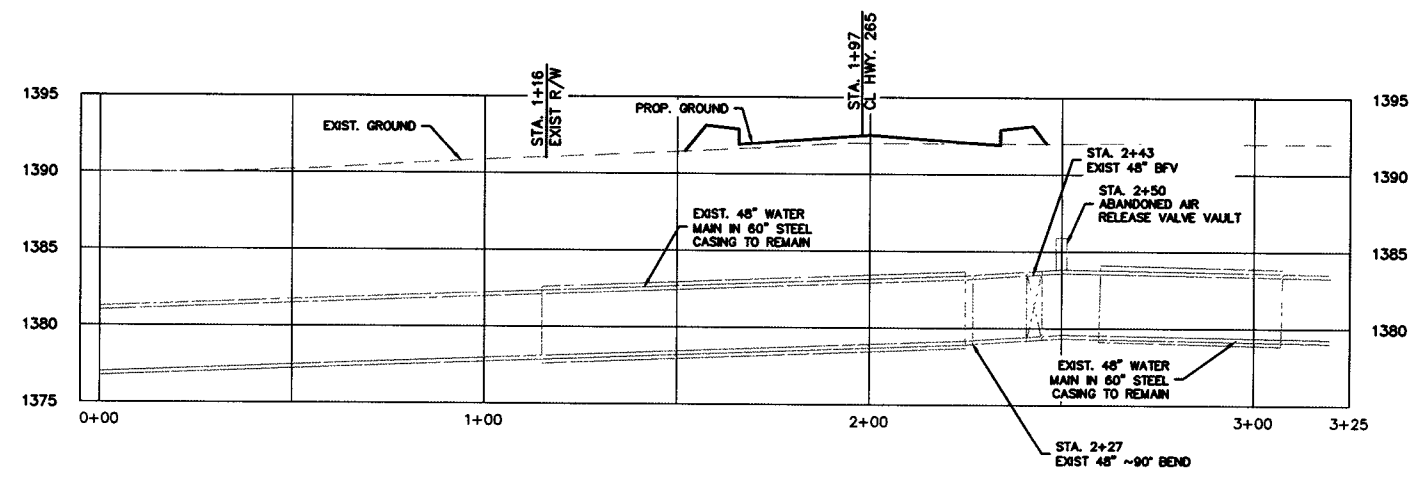
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
							144	267

② UTILITY RELOCATION



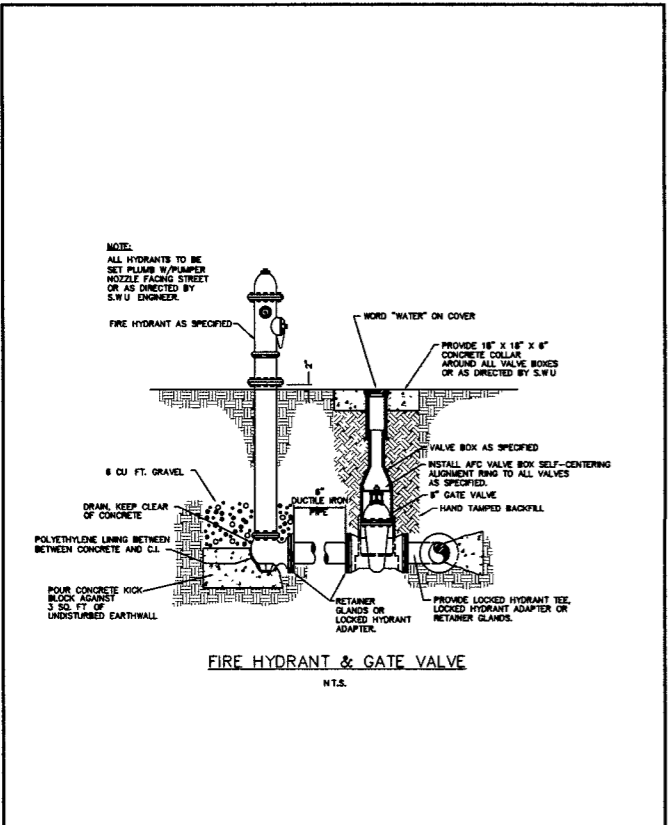
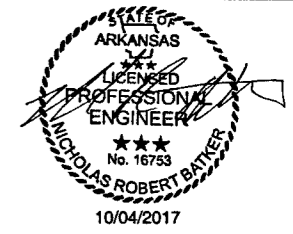
NOTE
 CONTRACTOR MUST NOTIFY SPRINGDALE WATER UTILITIES (SWU) A MINIMUM OF 3 BUSINESS DAYS IN ADVANCE OF CONSTRUCTION ACTIVITIES WITHIN 20 FEET OF EXISTING 48" WATER MAIN. SWU REPRESENTATIVE MUST BE ON-SITE DURING ALL CONSTRUCTION ACTIVITIES OCCURRING WITHIN 20 FEET OF EXISTING 48" WATER MAIN.

SCALE: 1" = 50'



DATE REVISION	DATE FILED	DATE REVISION	DATE FILED	FED. NO. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	012007	145	267	

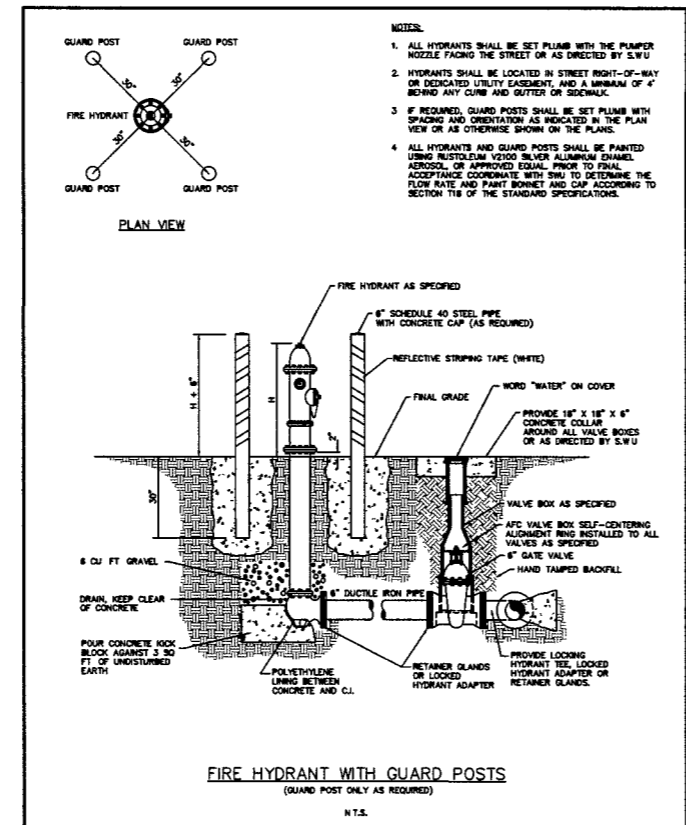
2 UTILITY DETAIL



SPRINGDALE WATER UTILITIES

STANDARD DETAILS FOR WATER AND SEWER CONSTRUCTION

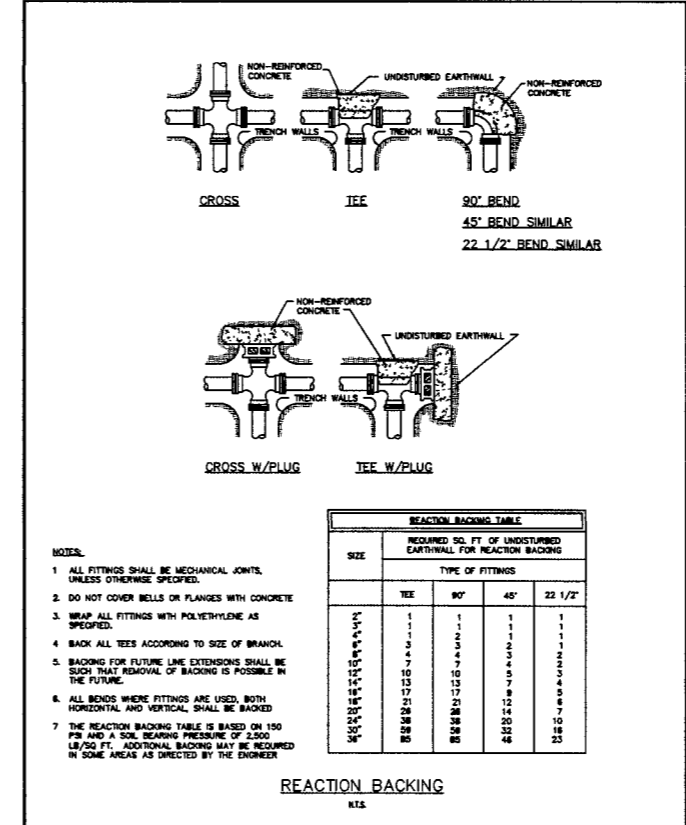
DATE: MARCH 2008



SPRINGDALE WATER UTILITIES

STANDARD DETAILS FOR WATER AND SEWER CONSTRUCTION

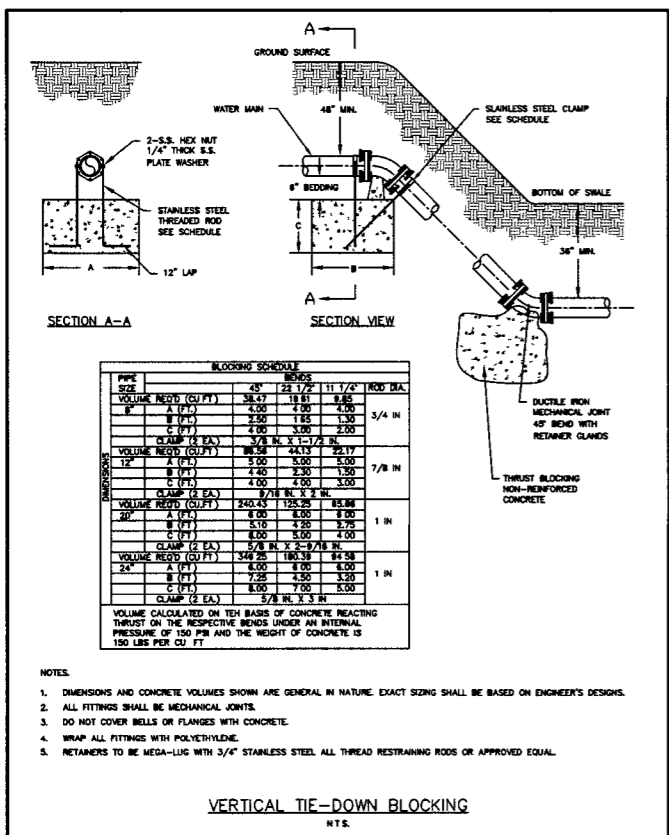
DATE: AUGUST 2014



SPRINGDALE WATER UTILITIES

STANDARD DETAILS FOR WATER AND SEWER CONSTRUCTION

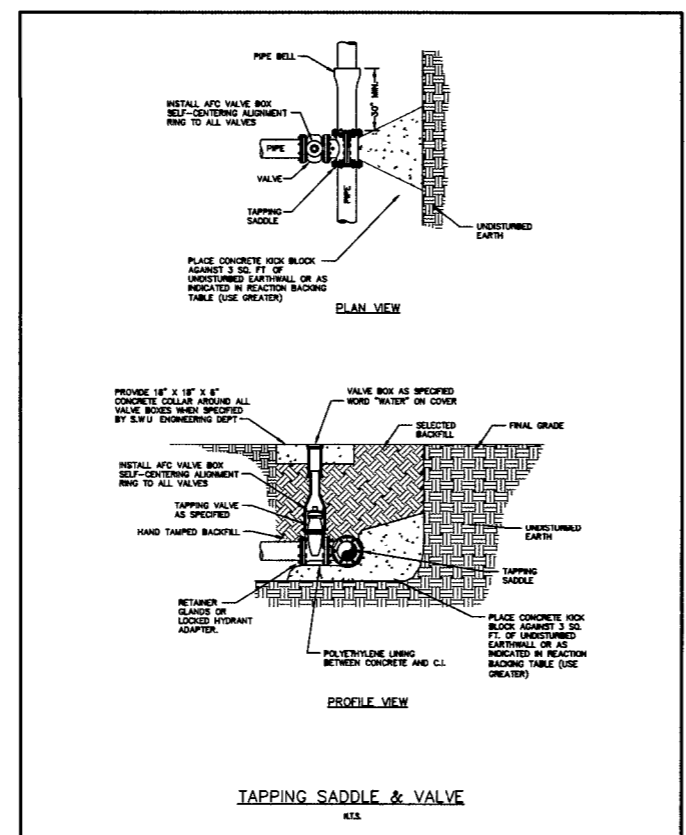
DATE: MARCH 2008



SPRINGDALE WATER UTILITIES

STANDARD DETAILS FOR WATER AND SEWER CONSTRUCTION

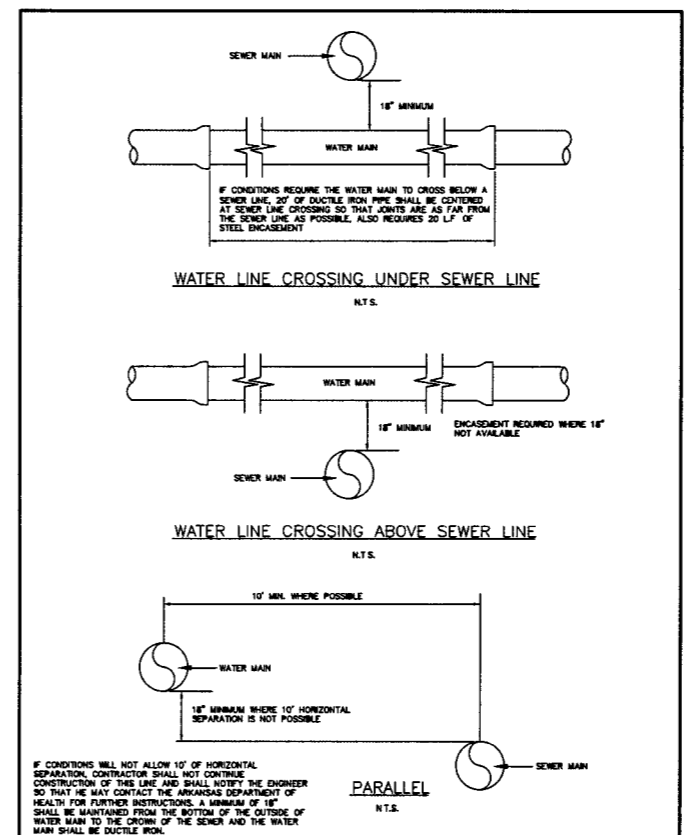
DATE: MARCH 2008



SPRINGDALE WATER UTILITIES

STANDARD DETAILS FOR WATER AND SEWER CONSTRUCTION

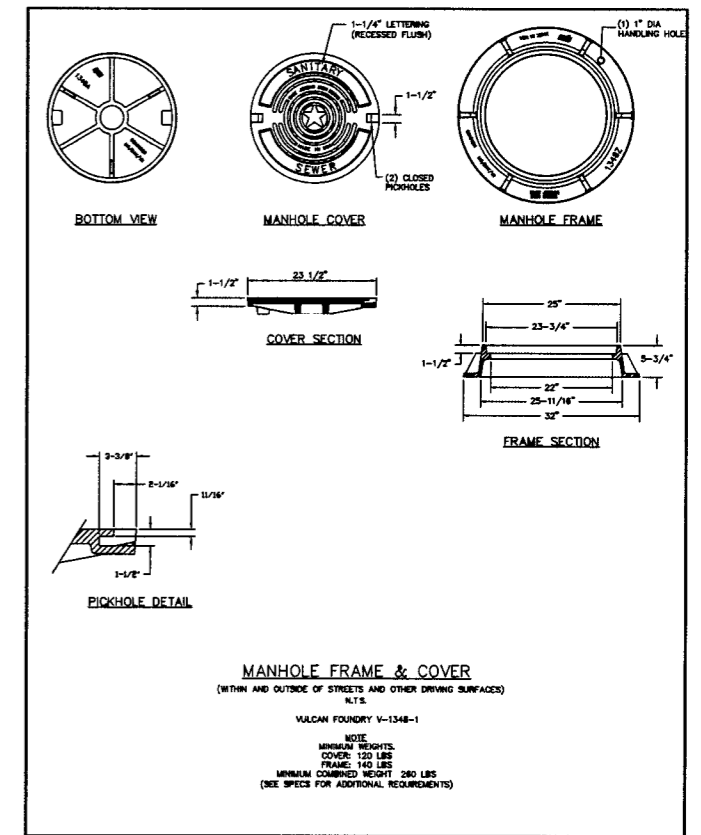
DATE: AUGUST 2014



SPRINGDALE WATER UTILITIES

STANDARD DETAILS FOR WATER AND SEWER CONSTRUCTION

DATE: MARCH 2008



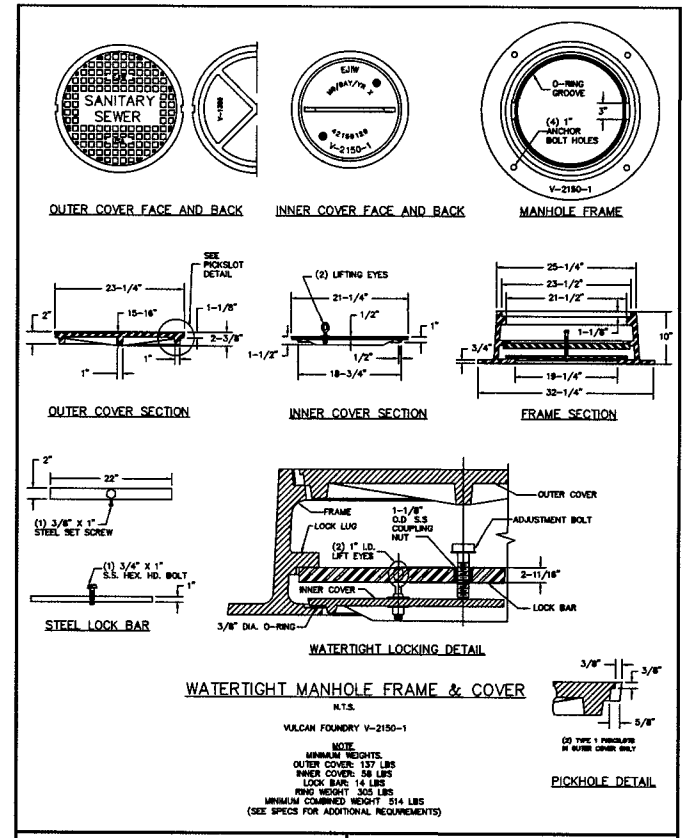
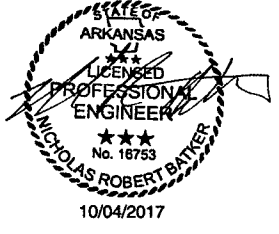
SPRINGDALE WATER UTILITIES

STANDARD DETAILS FOR WATER AND SEWER CONSTRUCTION

DATE: MARCH 2008

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.	012007	146	267	

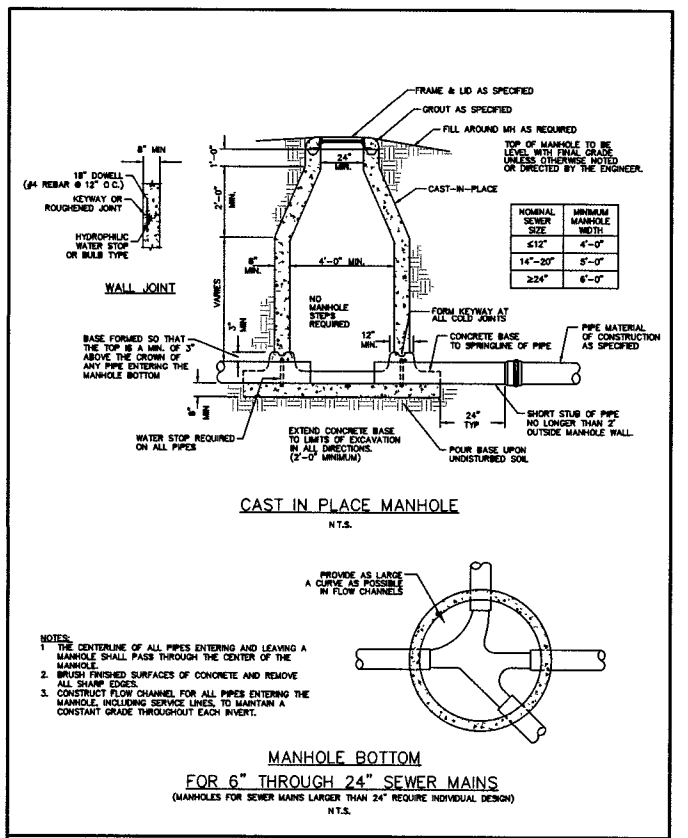
UTILITY DETAIL



SPRINGDALE WATER UTILITIES

STANDARD DETAILS FOR WATER AND SEWER CONSTRUCTION

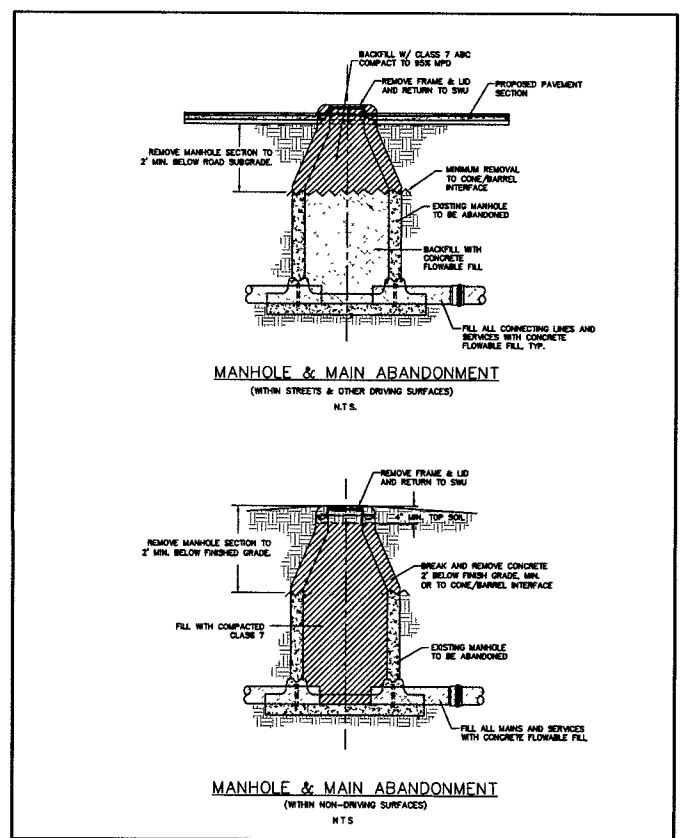
DATE: MARCH 2008



SPRINGDALE WATER UTILITIES

STANDARD DETAILS FOR WATER AND SEWER CONSTRUCTION

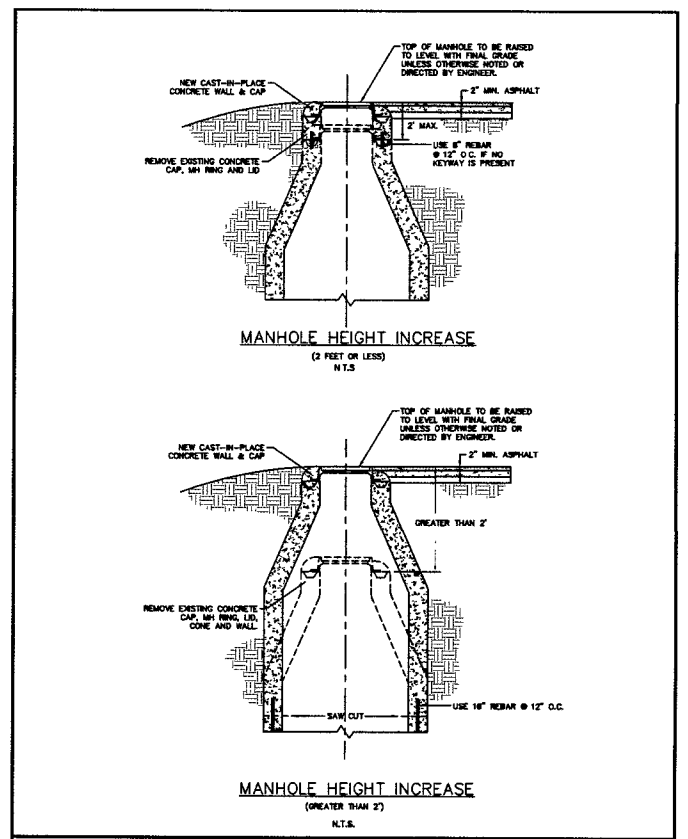
DATE: MARCH 2008



SPRINGDALE WATER UTILITIES

STANDARD DETAILS FOR WATER AND SEWER CONSTRUCTION

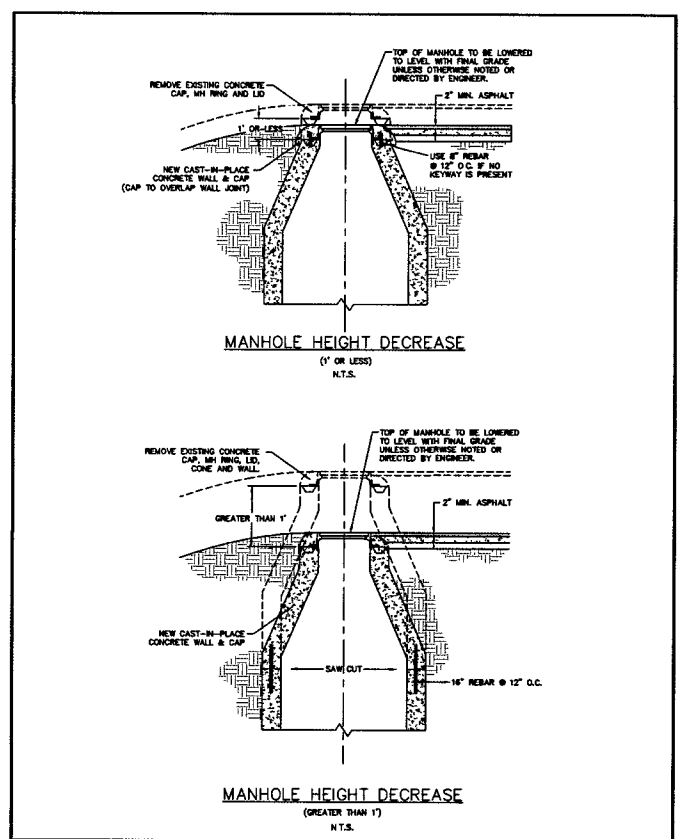
DATE: MARCH 2008



SPRINGDALE WATER UTILITIES

STANDARD DETAILS FOR WATER AND SEWER CONSTRUCTION

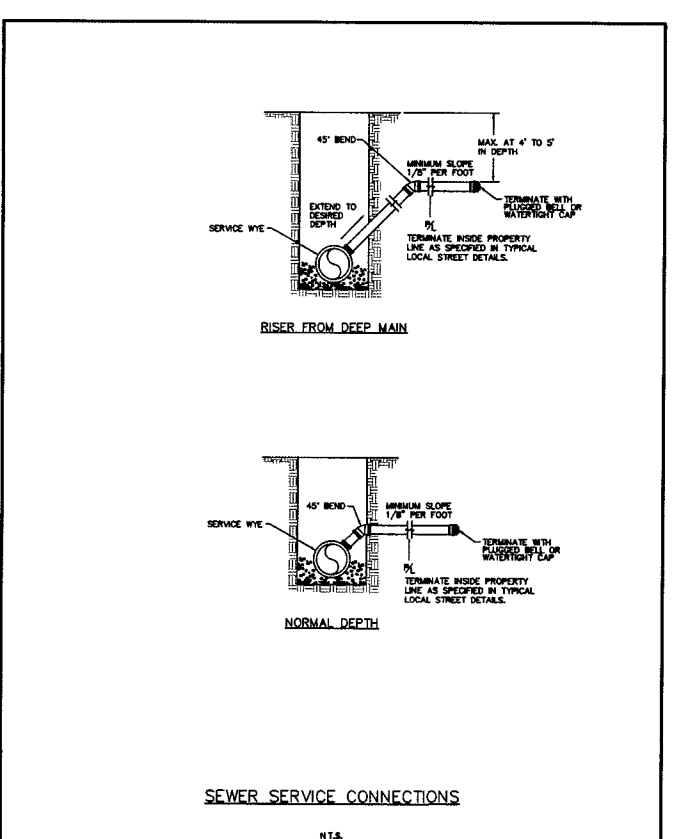
DATE: MARCH 2008



SPRINGDALE WATER UTILITIES

STANDARD DETAILS FOR WATER AND SEWER CONSTRUCTION

DATE: MARCH 2008



SPRINGDALE WATER UTILITIES

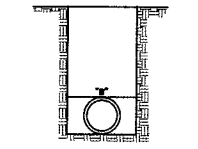
STANDARD DETAILS FOR WATER AND SEWER CONSTRUCTION

DATE: MARCH 2008

NOMINAL PIPE DIAMETER	T
3" AND 4"	2'-4"
6"	2'-6"
8"	2'-8"
10"	2'-10"
12"	3'-0"
14"	3'-2"
16"	3'-4"
18"	3'-6"
20"	3'-8"
24"	4'-0"
27"	4'-4"
30"	4'-8"
36"	5'-0"
42"	5'-6"
48"	6'-0"

TRENCH WIDTH SCHEDULE

NOTES:
TRENCH WIDTH SHALL BE AS SET FORTH IN AISH/AIWA 800, INCLUDED AS THE TABLE ON THIS SHEET. LARGER TRENCH WIDTHS MAY BE NECESSARY FOR THE PLACEMENT OF A TRENCH SUPPORT SYSTEM OR AS OTHERWISE REQUIRED.



TYPICAL PIPE TRENCH

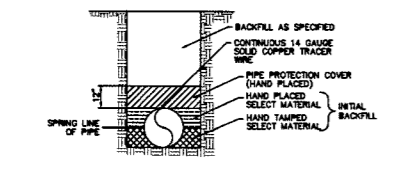
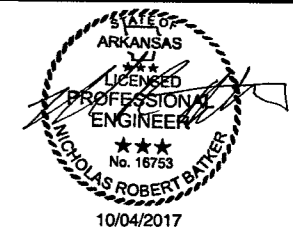
SPRINGDALE WATER UTILITIES

STANDARD DETAILS FOR WATER AND SEWER CONSTRUCTION

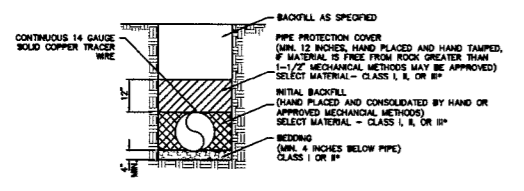
DATE: MARCH 2008

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.	012007		147	267

UTILITY DETAIL



D.I. PRESSURE WATER PIPE TRENCH
(STANDARD LAYING CONDITION "TYPE 2")
N.T.S.



D.I. PRESSURE PIPE TRENCH FOR FORCE MAINS
(STANDARD LAYING CONDITION "TYPE 3")
N.T.S.

NOTE: SEE STANDARD DETAIL M-1, "TRACER WIRE CONNECTION PORT" FOR TRACER WIRE PORT SPACING

* CLASS I, II, AND III AS DEFINED IN ASTM D2487 AND THE PIPE BACKFILL MATERIAL AND AGGREGATE BASE COURSE FILL SECTION OF THE SPECIFICATIONS

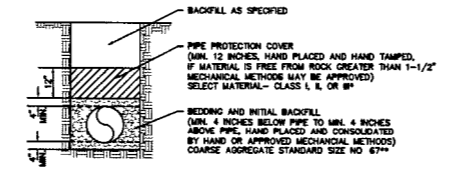
** STANDARD SIZE NO. 87 AS DEFINED IN ASTM D448

SPRINGDALE WATER UTILITIES

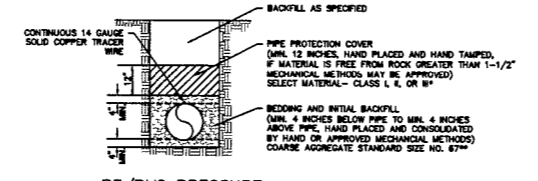
STANDARD DETAILS FOR WATER AND SEWER CONSTRUCTION

300 ONE AVENUE - P.O. BOX 700 - SPRINGDALE, ARKANSAS 72705-0700 (479) 751-5750

DRAWN BY: TJS CHECKED BY: S-18 DATE: AUGUST 2014



D.I./PVC GRAVITY SEWER PIPE TRENCH
(STANDARD LAYING CONDITION "TYPE 5")
N.T.S.



PE/PVC PRESSURE SEWER PIPE TRENCH
(STANDARD LAYING CONDITION "TYPE 5")
N.T.S.

NOTE: SEE STANDARD DETAIL M-1, "TRACER WIRE CONNECTION PORT" FOR TRACER WIRE PORT SPACING

* CLASS I, II, AND III AS DEFINED IN ASTM D2487 AND THE PIPE BACKFILL MATERIAL AND AGGREGATE BASE COURSE FILL SECTION OF THE SPECIFICATIONS

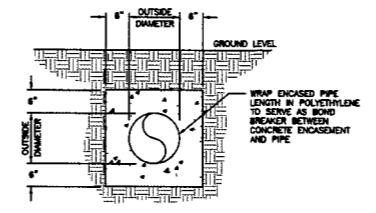
** STANDARD SIZE NO. 87 AS DEFINED IN ASTM D448

SPRINGDALE WATER UTILITIES

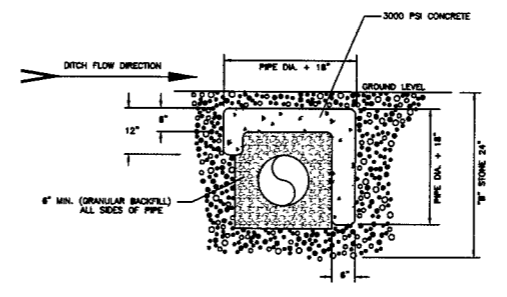
STANDARD DETAILS FOR WATER AND SEWER CONSTRUCTION

300 ONE AVENUE - P.O. BOX 700 - SPRINGDALE, ARKANSAS 72705-0700 (479) 751-5750

DRAWN BY: TJS CHECKED BY: S-19 DATE: AUGUST 2014



CONCRETE ENCASUREMENT
(WHERE SHOWN ON PLANS)
N.T.S.



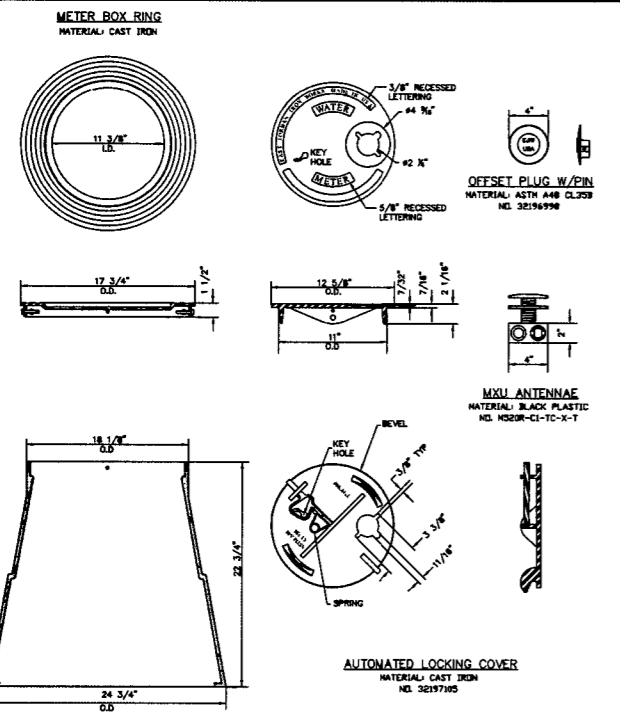
CONCRETE CAP
N.T.S.

SPRINGDALE WATER UTILITIES

STANDARD DETAILS FOR WATER AND SEWER CONSTRUCTION

300 ONE AVENUE - P.O. BOX 700 - SPRINGDALE, ARKANSAS 72705-0700 (479) 751-5750

DRAWN BY: JMK CHECKED BY: S-20 DATE: OCTOBER 2014



METER BOX MATERIAL: WHITE PLASTIC BOX WITH RING EAST JORDAN IRON WORKS 34P24 A-TYPE 18X24X24 OR APPROVED EQUAL

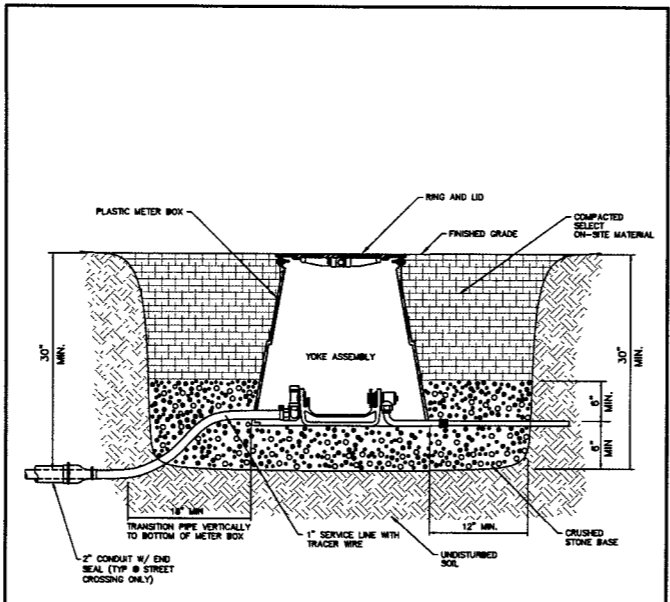
STANDARD METER BOX N.T.S.

SPRINGDALE WATER UTILITIES

STANDARD DETAILS FOR WATER AND SEWER CONSTRUCTION

300 ONE AVENUE - P.O. BOX 700 - SPRINGDALE, ARKANSAS 72705-0700 (479) 751-5750

DRAWN BY: TJS CHECKED BY: S-22 DATE: AUGUST 2014



STANDARD METER BOX INSTALLATION
SPLIT 5/8" x 3/4" METER SETTER (SHOWN)
SINGLE 5/8" x 3/4" AND 1" METER SETTERS (SIMILAR)
N.T.S.

NOTES:

- 2" CONDUITS TO BE INSTALLED ON ALL STREET CROSSINGS AND SHALL EXTEND FROM BACK OF SIDEWALK TO BACK OF SIDEWALK.
- ALL SERVICE TUBING SHALL HAVE 30° MIN. COVER EXCEPT FOR TRANSITION TO METER BOX AS SHOWN ABOVE.
- SEE "TECHNICAL SPECIFICATIONS" FOR MATERIAL AND INSTALLATION SPECIFICATIONS.

SPRINGDALE WATER UTILITIES

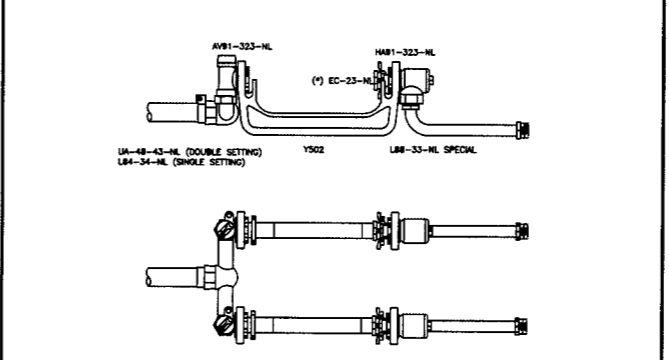
STANDARD DETAILS FOR WATER AND SEWER CONSTRUCTION

300 ONE AVENUE - P.O. BOX 700 - SPRINGDALE, ARKANSAS 72705-0700 (479) 751-5750

DRAWN BY: TJS CHECKED BY: S-23 DATE: OCTOBER 2014

SINGLE SETTING MATERIAL LIST

QTY	DESCRIPTION	EDWD	CATALOG NUMBER	MUELLER	AV. McDONALD
1	INLET CONNECTION	UA-34-NL		P-18531H	74779M-22 1/2x3/4
1	YOKE ANGLE KEY VALVE	AV91-323-NL		H-1427BN	7480Y 3/4x3/4
1	YOKE BAR	Y502		H-5020	14-2
1	YOKE ANGLE CHECK VALVE	HA81-323-NL		H-1424BN	702-3YE 3/3
1	OUTLET CONNECTION	LA8-33-NL SPECIAL		H-1553BN	710UPP 33x30x28
1	METER BOX ASSEMBLY	S4P-18240240 W/LID			



TYPICAL 5/8" DOUBLE METER SETTING
YOKE ASSEMBLY, 5/8" x 3/4" METER 3/4" COPPER OR PE P.A. TO 3/4" CTS PLASTIC OR MP N.T.S.

NOTES:

ALL MATERIALS INSTALLED IN POTABLE WATER SYSTEMS ARE REQUIRED TO COMPLY WITH THE FEDERAL DEFINITION OF LEAD FREE CONTAINED IN PUBLIC LAW 111-350.

*METER AND EXPANSION CONNECTION EC-23-NL ARE PROVIDED BY THE DEPARTMENT

SPRINGDALE WATER UTILITIES

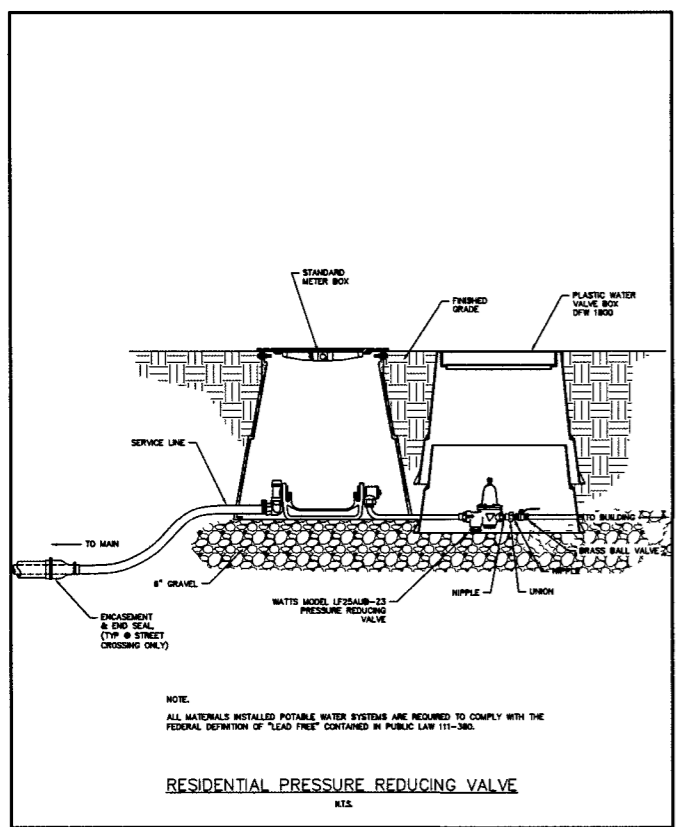
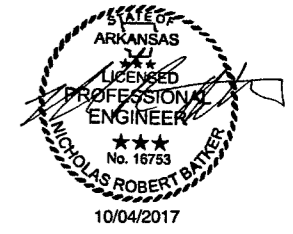
STANDARD DETAILS FOR WATER AND SEWER CONSTRUCTION

300 ONE AVENUE - P.O. BOX 700 - SPRINGDALE, ARKANSAS 72705-0700 (479) 751-5750

DRAWN BY: TJS CHECKED BY: S-25 DATE: AUGUST 2014

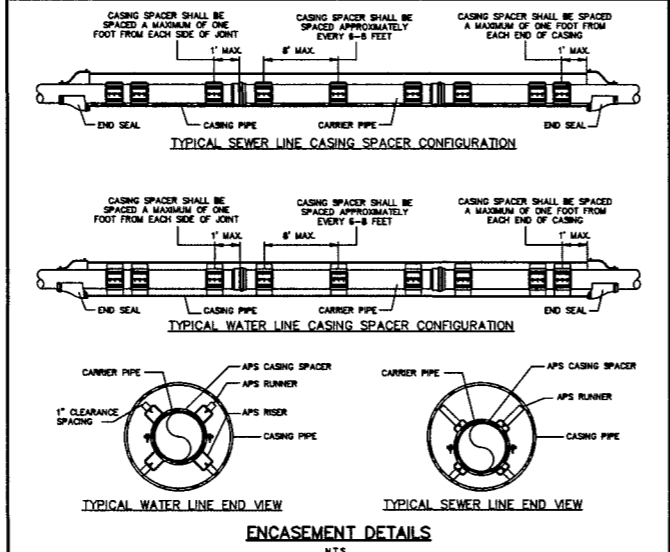
DATE REVISION	DATE FILED	DATE REVISION	DATE FILED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
						JOB NO. 012007	148	267

UTILITY DETAIL



RESIDENTIAL PRESSURE REDUCING VALVE
N.T.S.

SPRINGDALE WATER UTILITIES
 STANDARD DETAILS FOR WATER AND SEWER CONSTRUCTION
 DRAWN BY: CAG DRAWING NO: S-28 DATE: AUGUST 2014



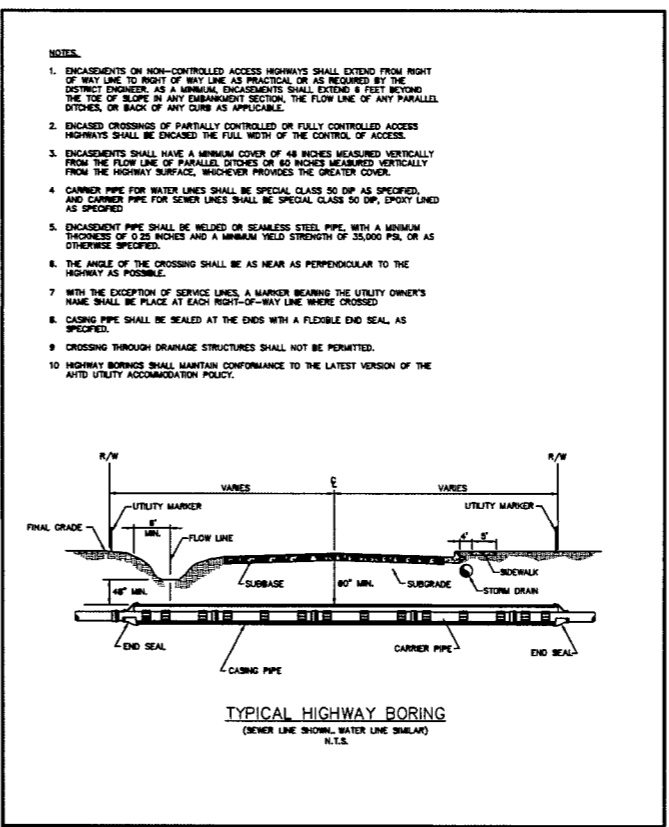
ENCASUREMENT DETAILS
N.T.S.

ENCASUREMENT/CARRIER PIPE SIZING CHART
 WATER AND SEWER MAINS SHALL BE SPECIAL CLASS 50 DUCTILE IRON PIPE (SEWER MAINS SHALL BE EPOXY LINED)

CARRIER PIPE NOM. SIZE	CARRIER PIPE O.D.	CARRIER PIPE BELL O.D.	CASING PIPE NOM. SIZE	CASING PIPE O.D.
8"	8.90	11.00	12"	12.00
10"	10.90	13.00	16"	16.00
12"	12.90	15.00	20"	20.00
14"	14.90	17.00	24"	24.00
16"	16.90	19.00	30"	30.00
18"	18.90	21.00	36"	36.00
20"	20.90	23.00	42"	42.00
24"	24.90	27.00	48"	48.00

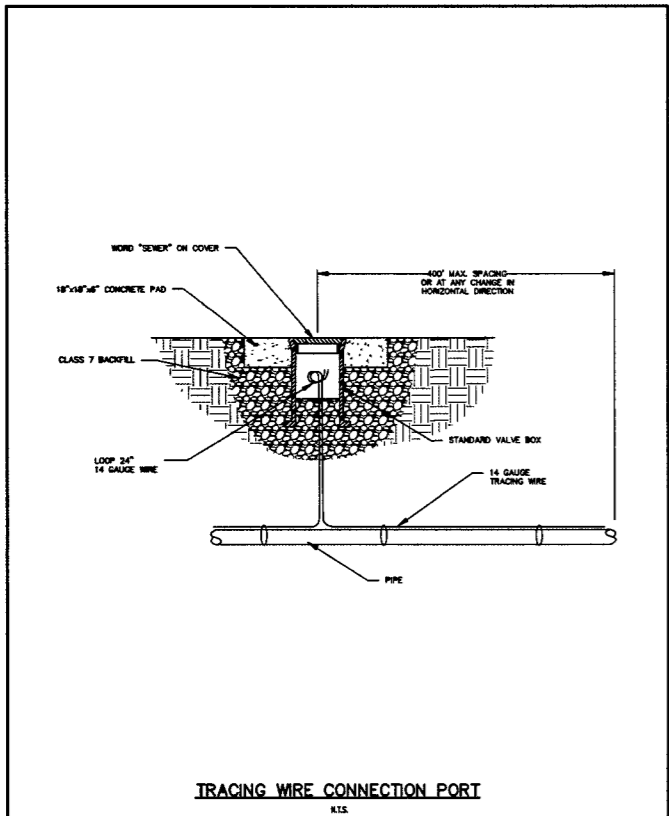
* ALL ENCASUREMENT PIPE SHALL BE NEW AND HAVE A MINIMUM WALL THICKNESS OF 0.25 INCHES.

SPRINGDALE WATER UTILITIES
 STANDARD DETAILS FOR WATER AND SEWER CONSTRUCTION
 DRAWN BY: KJM/ANJ DRAWING NO: S-31 DATE: MARCH 2008



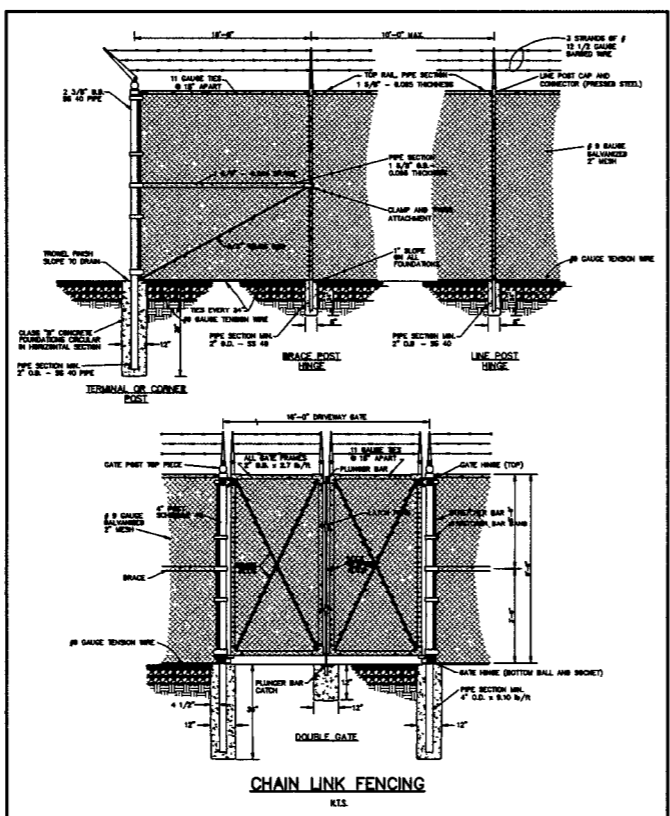
TYPICAL HIGHWAY BORING
N.T.S.

SPRINGDALE WATER UTILITIES
 STANDARD DETAILS FOR WATER AND SEWER CONSTRUCTION
 DRAWN BY: KJM/ANJ DRAWING NO: S-32 DATE: AUGUST 2014



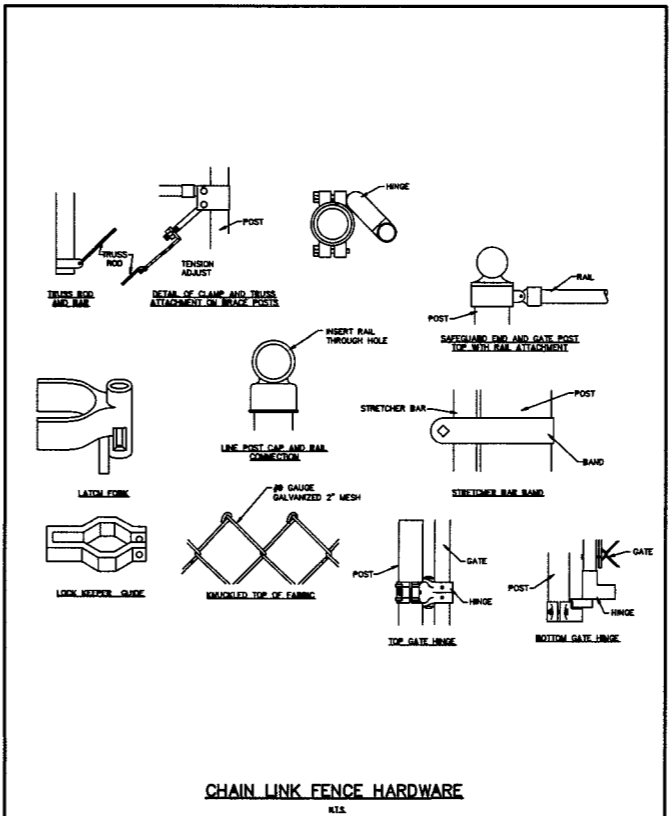
TRACING WIRE CONNECTION PORT
N.T.S.

SPRINGDALE WATER UTILITIES
 MISCELLANEOUS DETAILS FOR WATER AND SEWER CONSTRUCTION
 DRAWN BY: CAG DRAWING NO: M-1 DATE: MARCH 2008



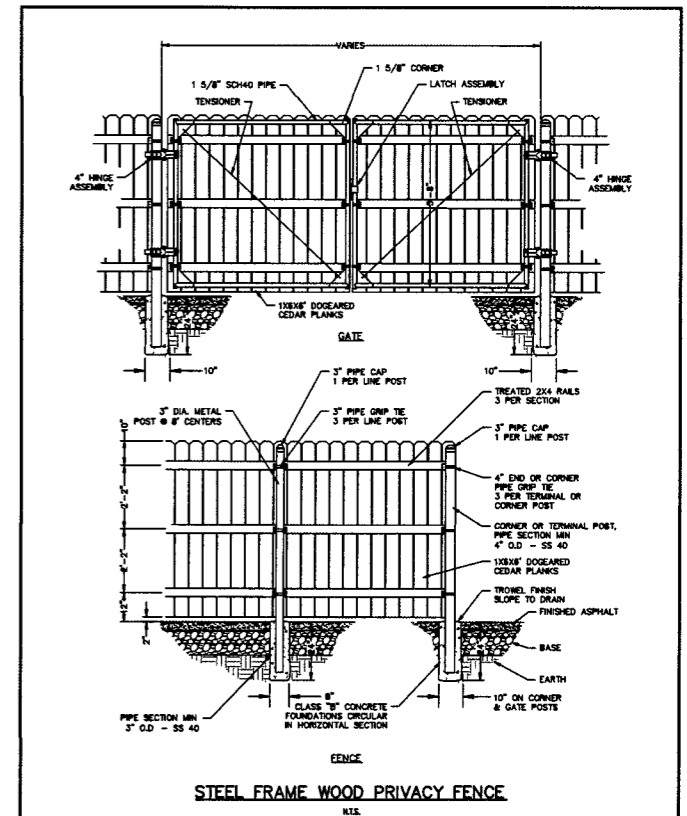
CHAIN LINK FENCING
N.T.S.

SPRINGDALE WATER UTILITIES
 MISCELLANEOUS DETAILS FOR WATER AND SEWER CONSTRUCTION
 DRAWN BY: CAG DRAWING NO: M-3 DATE: MARCH 2008



CHAIN LINK FENCE HARDWARE
N.T.S.

SPRINGDALE WATER UTILITIES
 MISCELLANEOUS DETAILS FOR WATER AND SEWER CONSTRUCTION
 DRAWN BY: CAG DRAWING NO: M-4 DATE: MARCH 2008

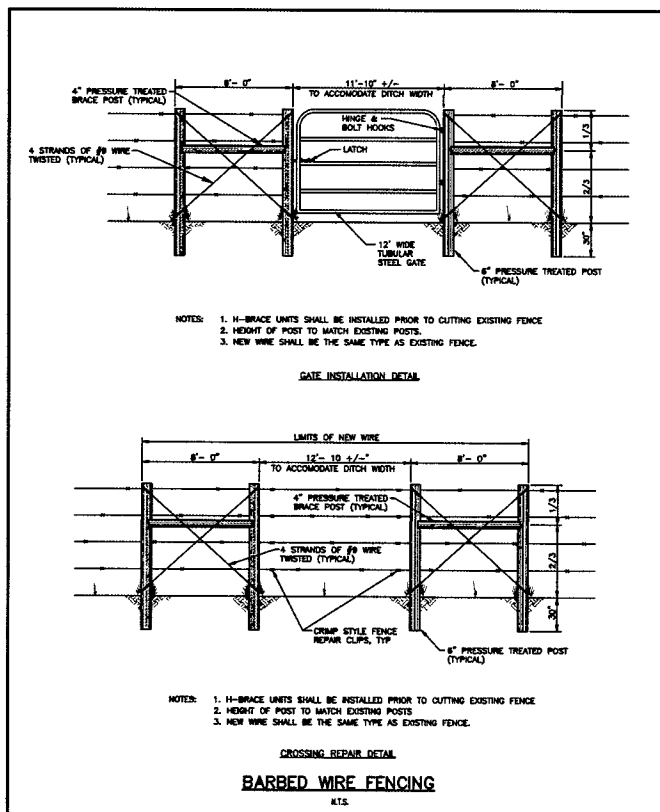
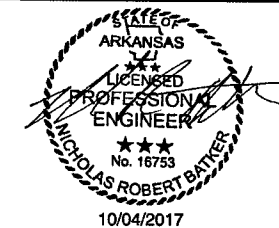


STEEL FRAME WOOD PRIVACY FENCE
N.T.S.

SPRINGDALE WATER UTILITIES
 MISCELLANEOUS DETAILS FOR WATER AND SEWER CONSTRUCTION
 DRAWN BY: CAG DRAWING NO: M-5 DATE: MARCH 2008

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	012007		149	267

2 UTILITY DETAIL

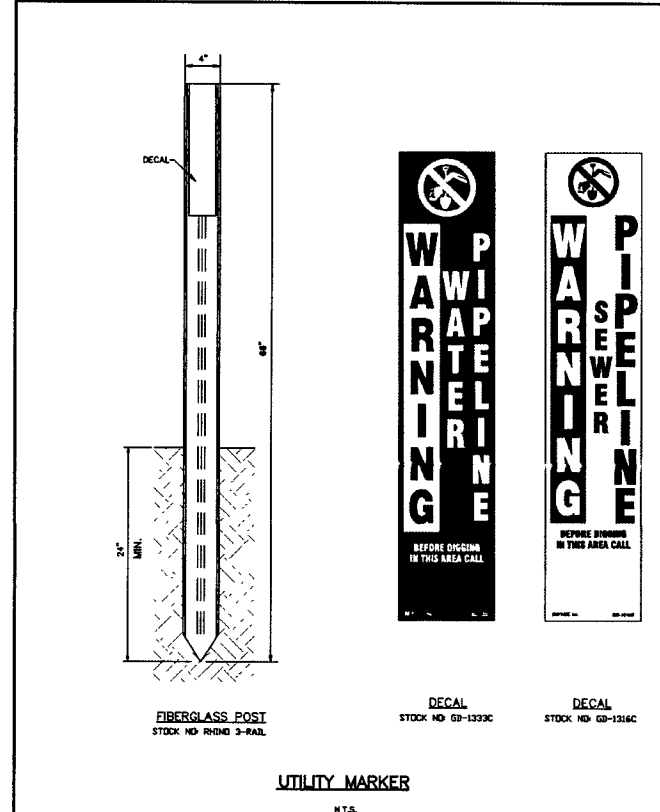


SPRINGDALE WATER UTILITIES

MISCELLANEOUS DETAILS FOR WATER AND SEWER CONSTRUCTION

328 OAK AVENUE • P.O. BOX 780 • SPRINGDALE, ARKANSAS • 72766-0780 • (479) 791-6751

DRAWN BY: CAG DRAWING NO.: M-6 DATE: MARCH 2008

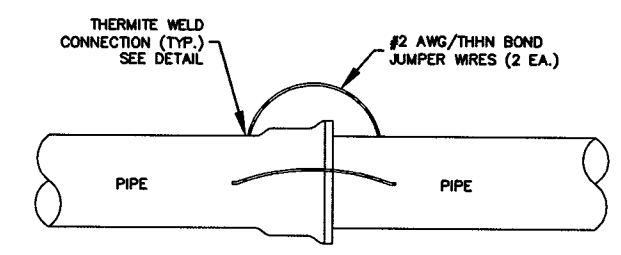


SPRINGDALE WATER UTILITIES

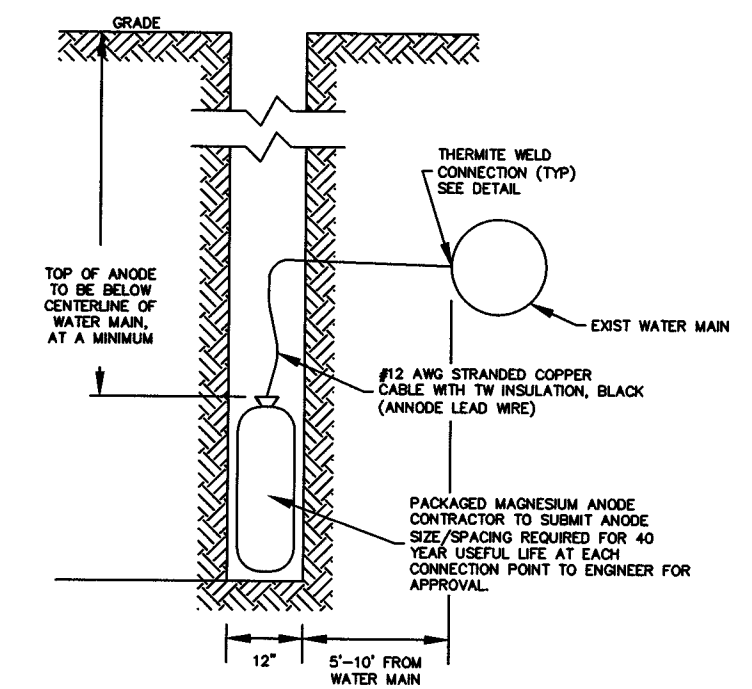
MISCELLANEOUS DETAILS FOR WATER AND SEWER CONSTRUCTION

328 OAK AVENUE • P.O. BOX 780 • SPRINGDALE, ARKANSAS • 72766-0780 • (479) 791-6751

DRAWN BY: TJS DRAWING NO.: M-7 DATE: MARCH 2008

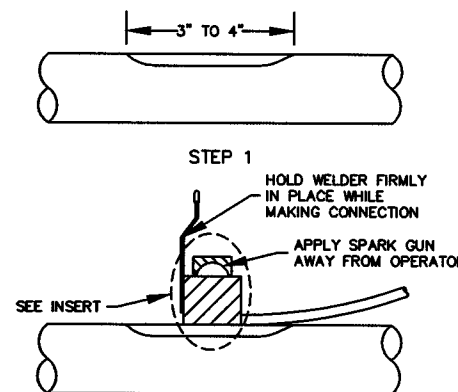


BONDING ACROSS BELL & SPIGOT JOINT
N.T.S.

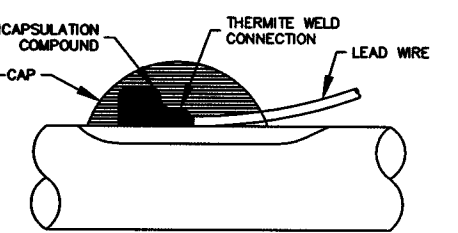


ANODE INSTALLATION
N.T.S.

REMOVE PIPELINE COATING, FILE PIPE TO BRIGHT METAL, AND DRY ANY MOISTURE WITH A TOWEL.

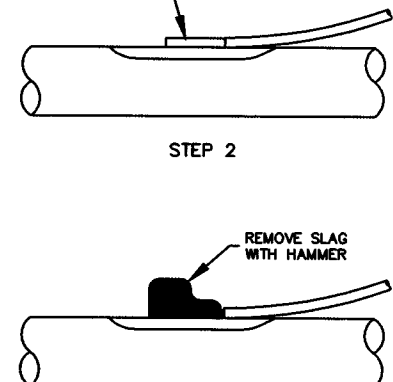


STEP 3

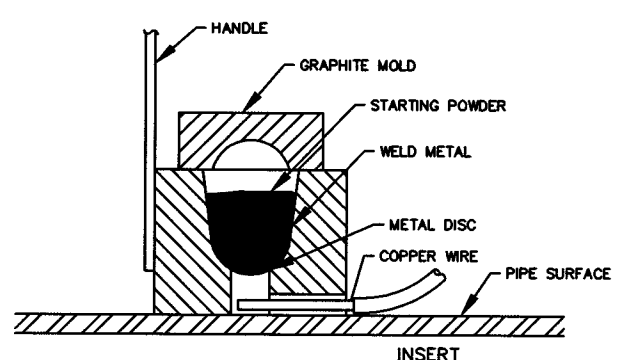


STEP 5

STRIP INSULATION FROM WIRE (SEE NOTE NO. 1)



STEP 4



INSERT

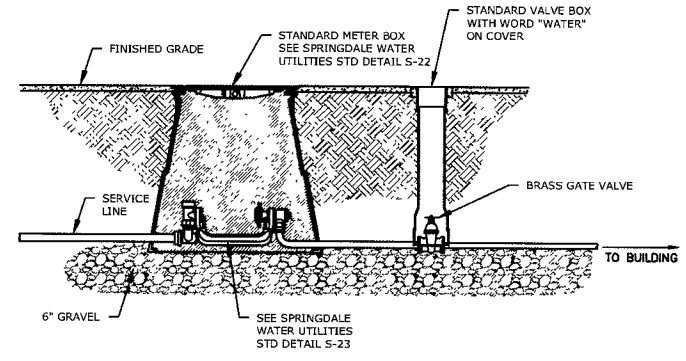
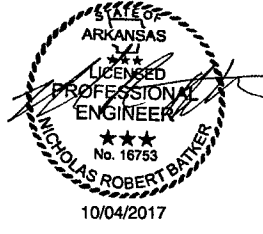
GENERAL PROCEDURE

- WHEN USING NO. 10 TO NO. 14 AWG SOLID OR STRANDED WIRE, IT BE NECESSARY TO INSTALL A COPPER SLEEVE OF ADEQUATE SIZE OVER THE BARE END OF THE SAME WIRE AND CRIMP IN PLACE BEFORE ATTEMPTING TO MAKE THE CONNECTION. THE WIRE SHOULD PROTRUDE AT LEAST 1/8" FROM THE END OF THE SLEEVE.
- INSERT THE CONDUCTOR INTO THE MOLD NOTING ANY SPECIAL INFORMATION UNDER "POSITIONING" FOR APPLICATION TYPE IN THE MANUFACTURERS INSTRUCTIONS PACKAGED WITH THE WELDER.
- INSERT STEEL DISK IN BOTTOM OF CAVITY INSIDE MOLD. POUR THE WELD METAL INTO MOLD BEING CAREFUL NOT TO UPSET THE STEEL DISK. SQUEEZE THE BOTTOM OF THE TUBE TO LOOSEN ALL THE STARTING POWDER AND SPREAD IT EVENLY OVER THE WELD METAL. PLACE A SMALL AMOUNT OF STARTING POWDER ON THE TOP EDGE OF THE MOLD UNDER THE COVER OPENING FOR EASY IGNITION.
- CLOSE COVER AND IGNITE WITH THE FLINT GUN. MOVE THE FLINT GUN AWAY QUICKLY TO PREVENT FOULING. IF FLINT GUN SHOULD BECOME FOULED, SOAK IT IN HOUSEHOLD AMMONIA.
- AFTER IGNITION, HOLD THE WELDER IN PLACE FOR A MOMENT TO ALLOW THE WELD TO SOLIDIFY. AFTER THE WELD HAS COOLED, REMOVE THE SLAG WITH A CHIPPING HAMMER OR WIRE BRUSH.
- COAT CONNECTION AND THE ENTIRE PREPARED SURFACE.
- CLEAN THE COVER EVERY 8 TO 10 WELDS.
- WET OR DAMP MOLDS WILL PRODUCE POROUS WELDS. MOLDS MUST BE DRIED OUT BEFORE ATTEMPTING TO WELD.
- CONNECTIONS ARE TO BE PLACED A MINIMUM OF 3" APART. UNSUCCESSFUL WELDS ARE TO BE ABANDONED AND MOVED TO ANOTHER PREPARED SURFACE NOT LESS THAN 3" AWAY.

THERMITE WELD CONNECTION
N.T.S.

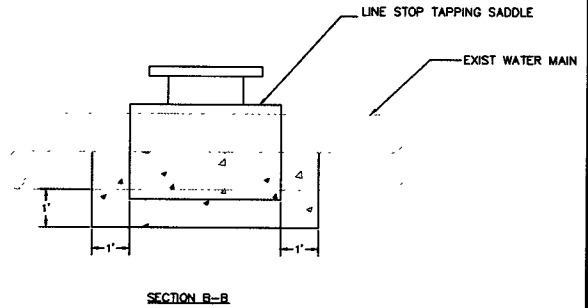
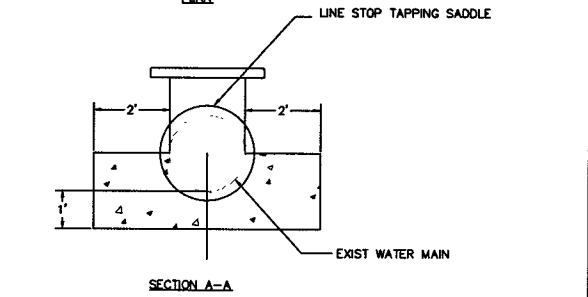
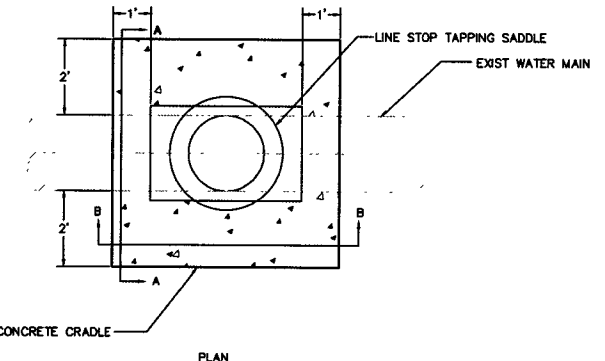
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	012007		150	267

2 UTILITY DETAIL



NOTES:
 ALL MATERIALS INSTALLED POTABLE WATER SYSTEMS ARE REQUIRED TO COMPLY WITH THE FEDERAL DEFINITION OF "LEAD FREE" CONTAINED IN PUBLIC LAW 111-380.
 SHUTOFF VALVE AND STD VALVE BOX SHALL BE INSTALLED ONLY IF EXISTING SERVICE LINE DOES NOT HAVE A PRESSURE REDUCING VALVE. IF EXISTING PRESSURE REDUCING VALVE IS PRESENT, A NEW PRESSURE REDUCING VALVE, SHUTOFF VALVE AND METER BOX WILL BE REQUIRED SEE SEPARATE DETAIL.

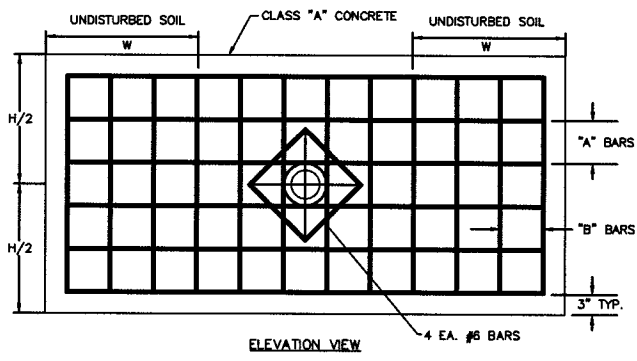
WATER SERVICE SHUTOFF VALVE
 N.T.S.



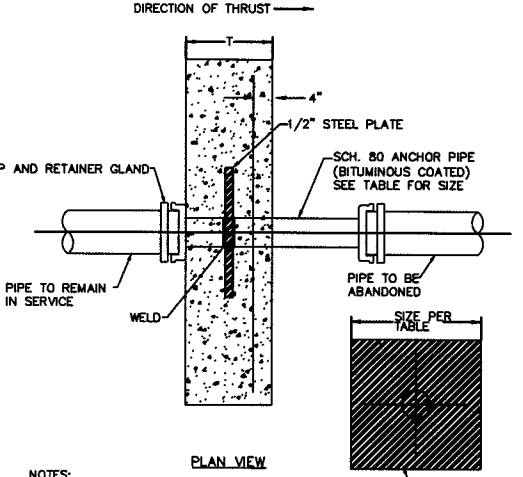
CONCRETE CRADLE FOR LINE STOP
 N.T.S.

NOTE: SEE TECHNICAL REQUIREMENTS SECTION T12 FOR CONCRETE AND REINFORCING STEEL SPECIFICATIONS.

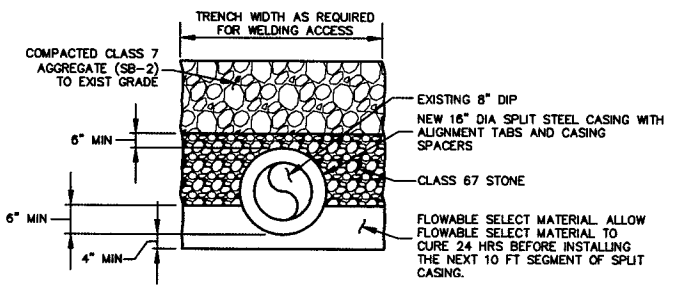
PIPE SIZE	DIMENSIONS				REINFORCING BARS	ANCHOR PLATE DIMENSIONS	ANCHOR PIPE DIAMETER
	W	H	T	M			
6"	1.5'	2.0'	1.0'	M.J. RETAINER GLAND	#6 @ 6"	12"x12"	4"
8"	1.5'	2.5'	1.0'	M.J. RETAINER GLAND	#6 @ 6"	14"x14"	4"
12"	2.0'	4.0'	1.5'	M.J. RETAINER GLAND	#6 @ 6"	18"x18"	6"
16"	3.0'	5.0'	2.0'	M.J. RETAINER GLAND	#6 @ 6"	24"x24"	8"
24"	3.5'	6.0'	2.0'	M.J. RETAINER GLAND	#7 @ 6"	30"x30"	8"



CUT AND CAP DETAIL
 N.T.S.

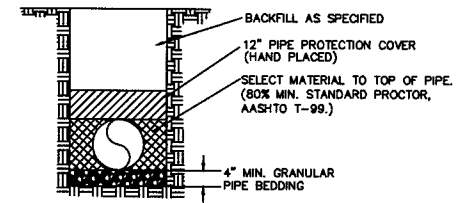


NOTES:
 1. PIPE SURFACES SHALL BE CLEANED OF ALL FOREIGN MATERIAL BEFORE CONCRETE COLLAR IS POURED.
 2. SPACE LIMITATIONS MAY REQUIRE ANCHOR COLLAR TO BE A VERTICAL CANTILEVER DESIGN.

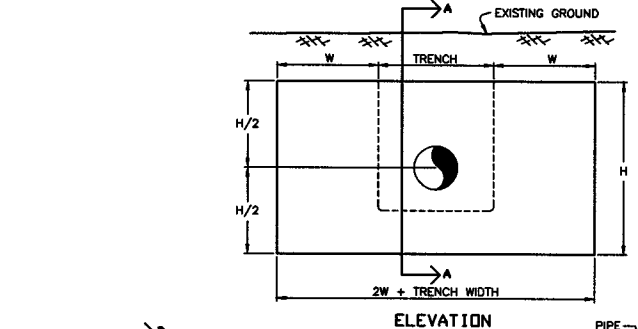


CROSS SECTION SPLIT CASING INSTALLATION
 N.T.S.

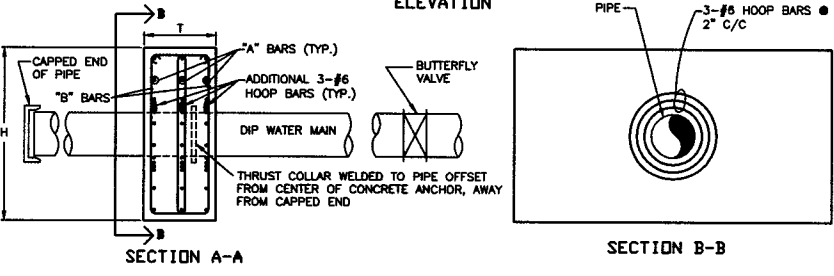
NOTE: THE CONTRACTOR MAY INSTALL THE MIDDLE 10 FT SECTION OF SPLIT CASING THE FIRST DAY, THEN EXTEND 10 FT EACH DIRECTION ON SUBSEQUENT DAYS (20' PER DAY).



TYPICAL DUCTILE IRON PRESSURE PIPE TRENCH (16-INCH AND 24-INCH WATER MAINS)
 N.T.S.



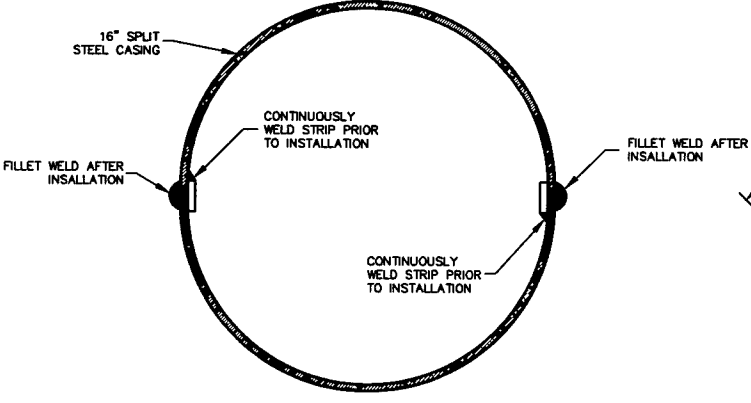
NOTE: ALL CONCRETE USED FOR THRUST COLLARS SHALL BE CLASS A.



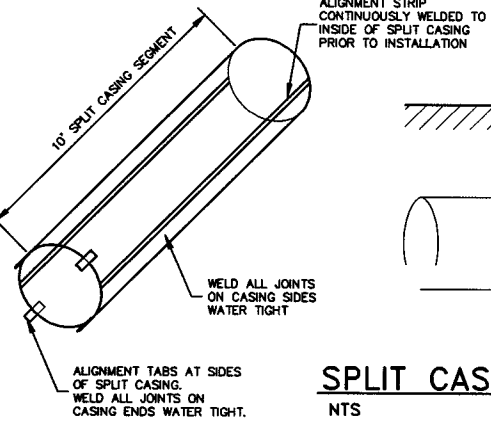
PIPE SIZE	DIMENSIONS				REINFORCING BARS	ANCHOR PLATE DIMENSIONS	ANCHOR PIPE DIAMETER
	W	H	T	M			
6"	1.5'	2.0'	1.0'	M.J. RETAINER GLAND	#6 @ 6"	12"x12"	4"
8"	1.5'	2.5'	1.0'	M.J. RETAINER GLAND	#6 @ 6"	14"x14"	4"
12"	2.0'	4.0'	1.5'	M.J. RETAINER GLAND	#6 @ 6"	18"x18"	6"
16"	3.0'	5.0'	2.0'	M.J. RETAINER GLAND	#6 @ 6"	24"x24"	8"
20"	3.0'	5.0'	2.0'	M.J. RETAINER GLAND	#6 @ 6"	24"x24"	8"
24"	3.5'	6.0'	2.0'	1 1/2" x 0.38" THRUST COLLAR	#6 @ 6"	30"x30"	8"
30"	6.5'	6.0'	2.5'	2" x 0.5" THRUST COLLAR	#6 @ 6"	30"x30"	8"
36"	7.0'	7.0'	2.5'	2" x 0.5" THRUST COLLAR	#6 @ 6"	30"x30"	8"
48"	8.0'	10.0'	2.5'	3 1/8" x 0.75" THRUST COLLAR	#6 @ 6"	30"x30"	8"

THRUST COLLAR DETAILS
 N.T.S.

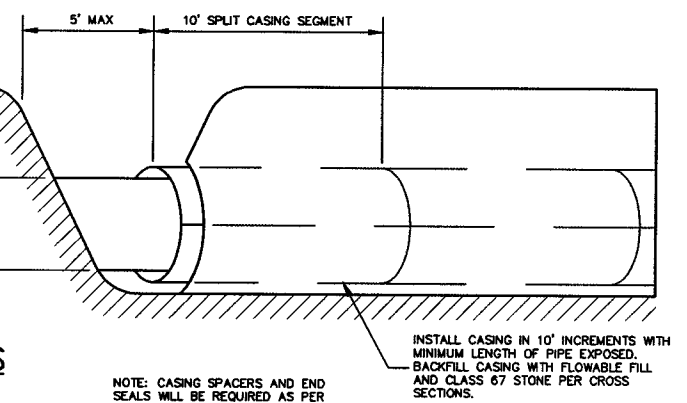
(DESIGN BASED ON 150 PSI PIPE PRESSURE AND 2000 PSF SOIL BEARING)



SPLIT CASING END DETAIL



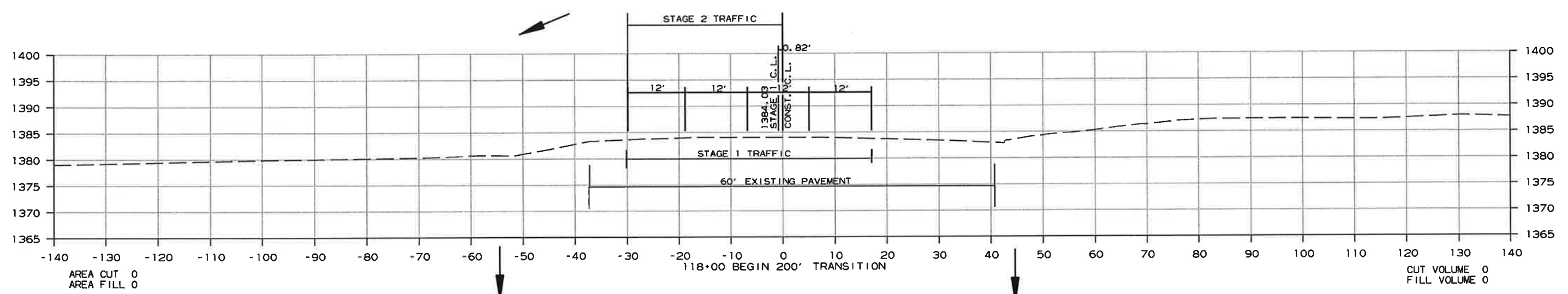
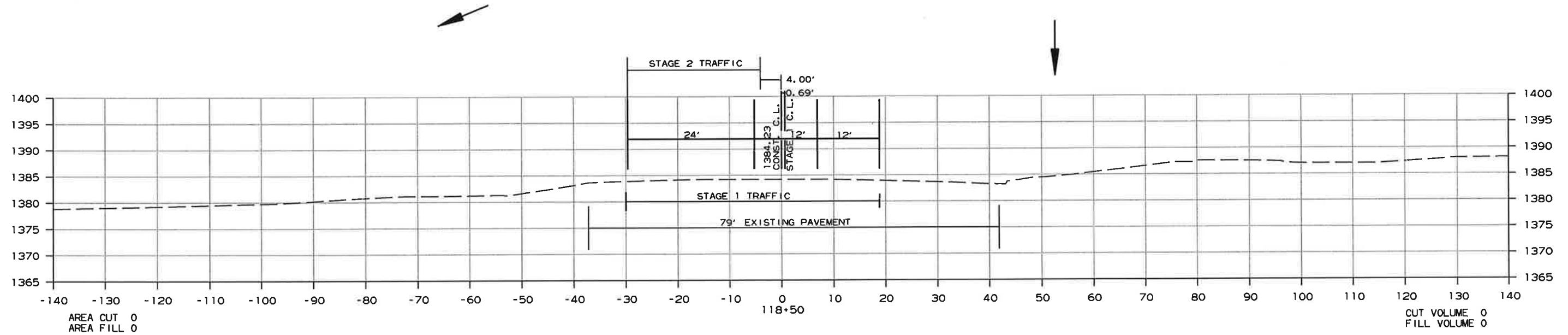
SPLIT CASING DETAILS
 N.T.S.



NOTE: CASING SPACERS AND END SEALS WILL BE REQUIRED AS PER SWJ STANDARD DETAIL 5-31.

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
JOB NO. 012007							151	267

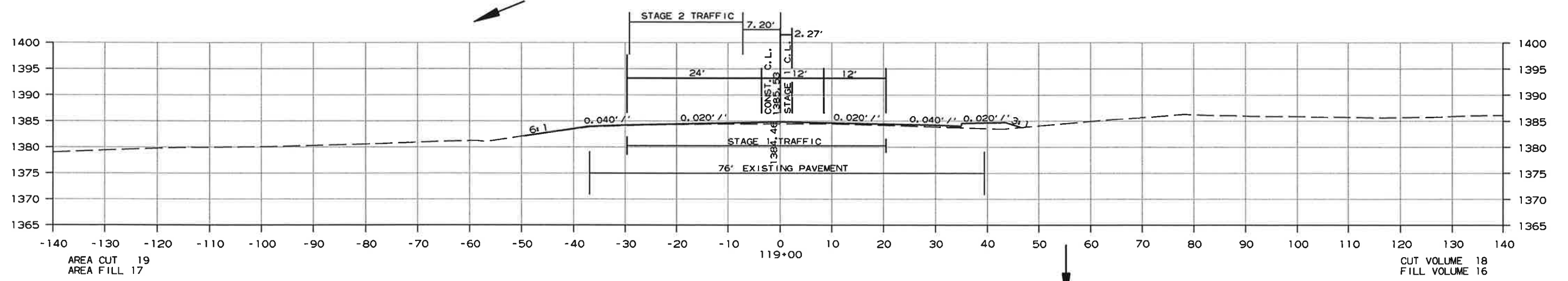
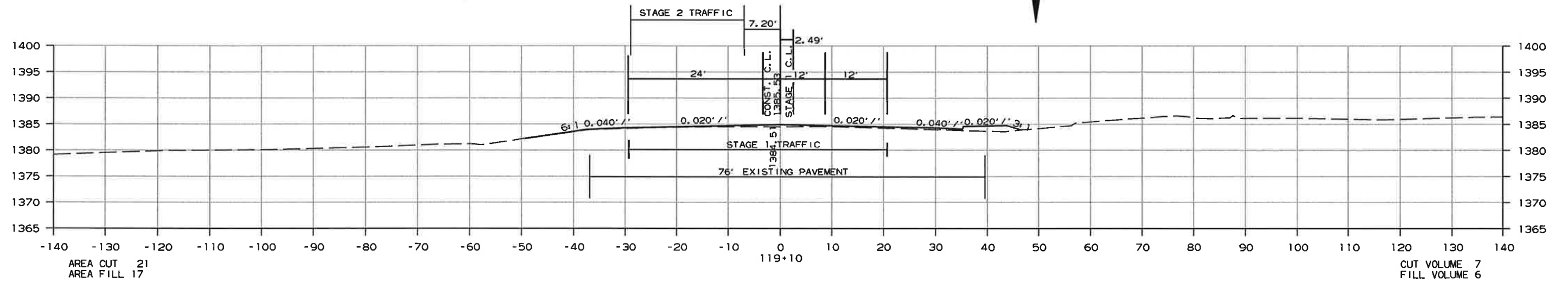
2 CROSS SECTIONS



CROSS SECTION STA. 118+00 TO STA. 118+50

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	152	267

② CROSS SECTIONS

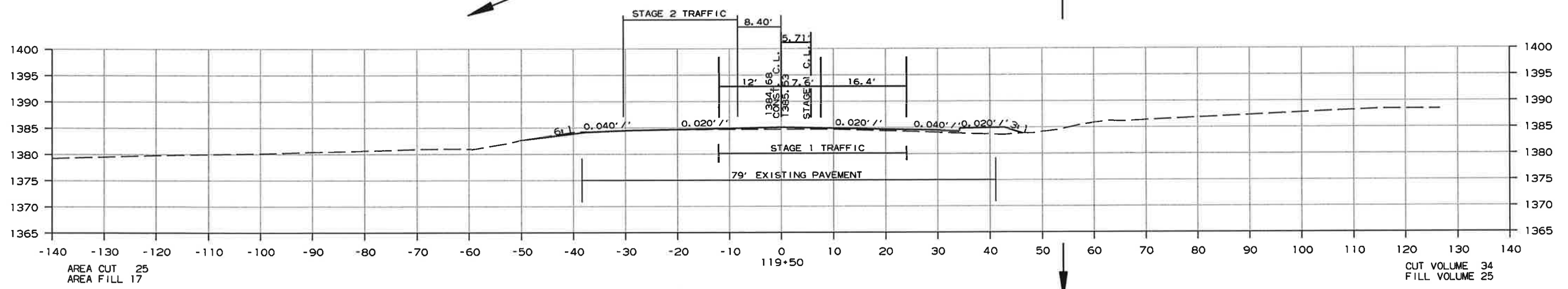
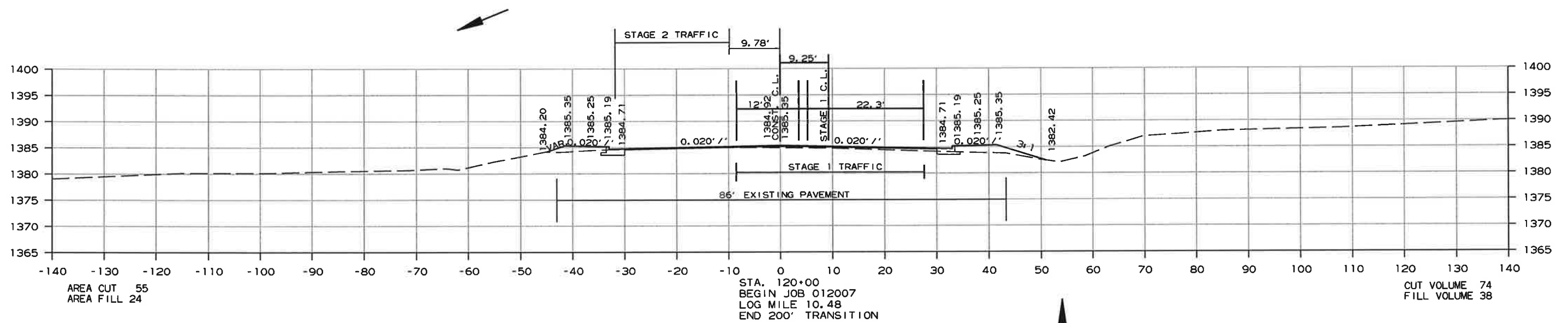


CROSS SECTION STA. 119+00 TO STA. 119+10

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DATE REVISED	DATE FILED	DATE REVISED	DATE FILED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	153	267

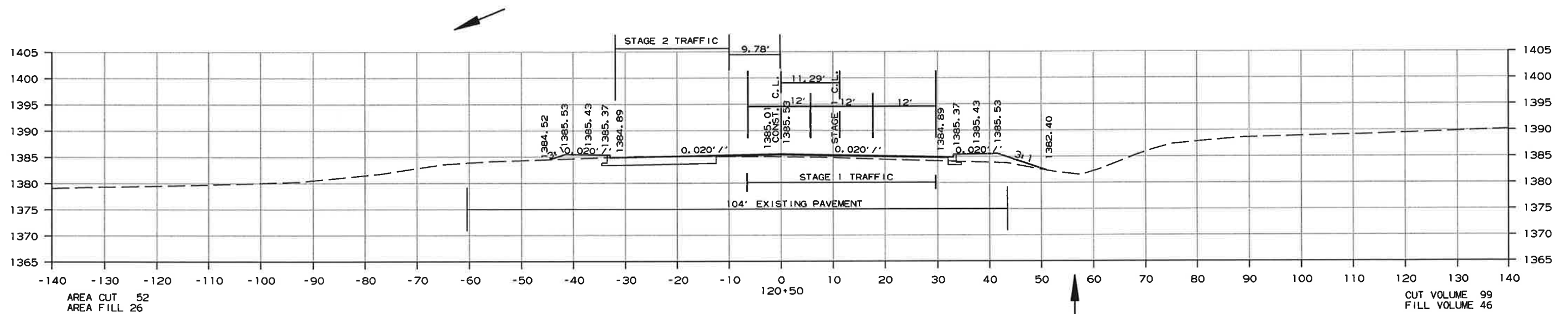
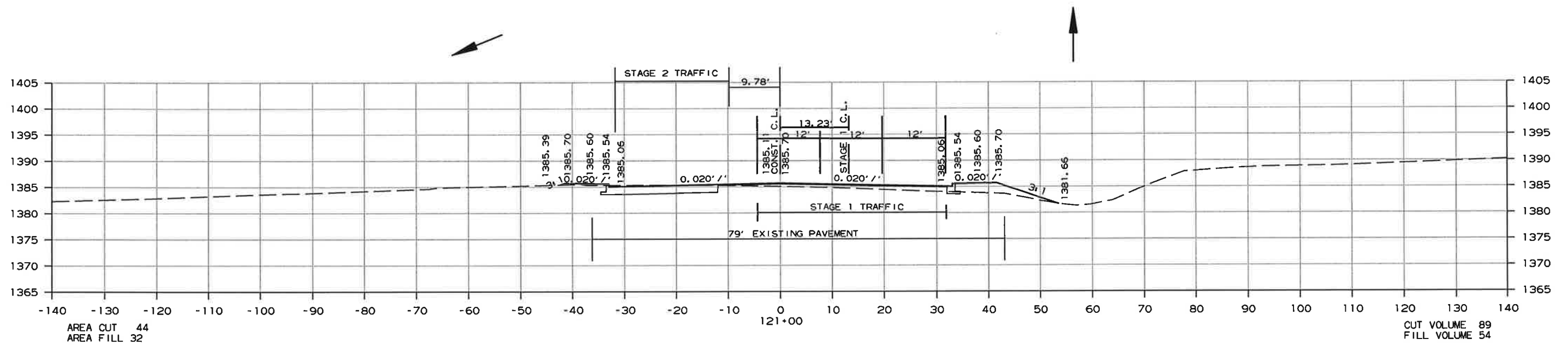
2 CROSS SECTIONS



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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	154	267

2 CROSS SECTIONS



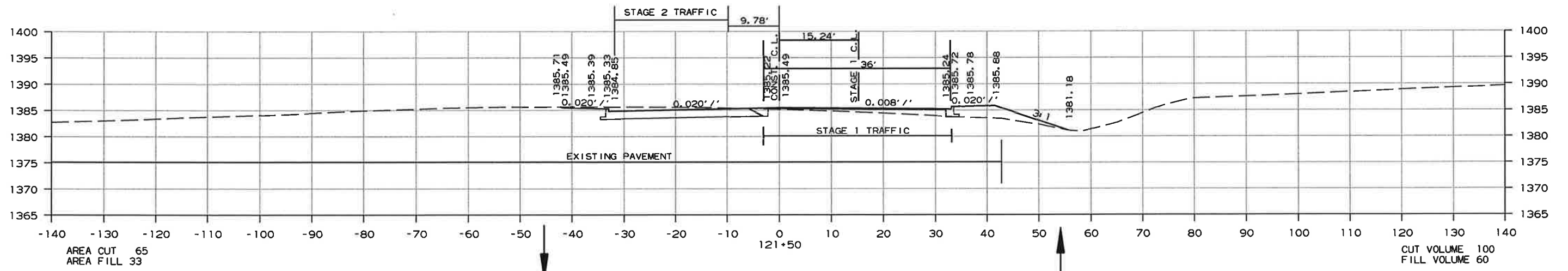
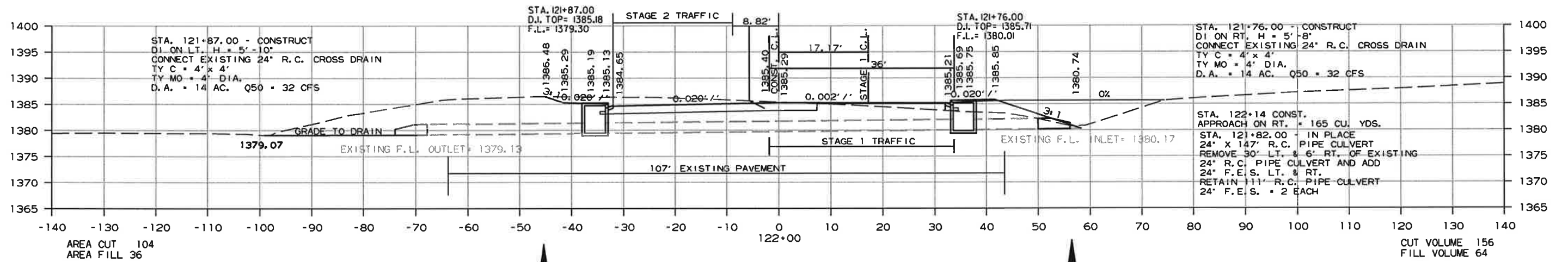
CROSS SECTION STA. 120+50 TO STA. 121+00

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DATE REVISED	DATE FILED	DATE REVISED	DATE FILED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	155	267

2 CROSS SECTIONS



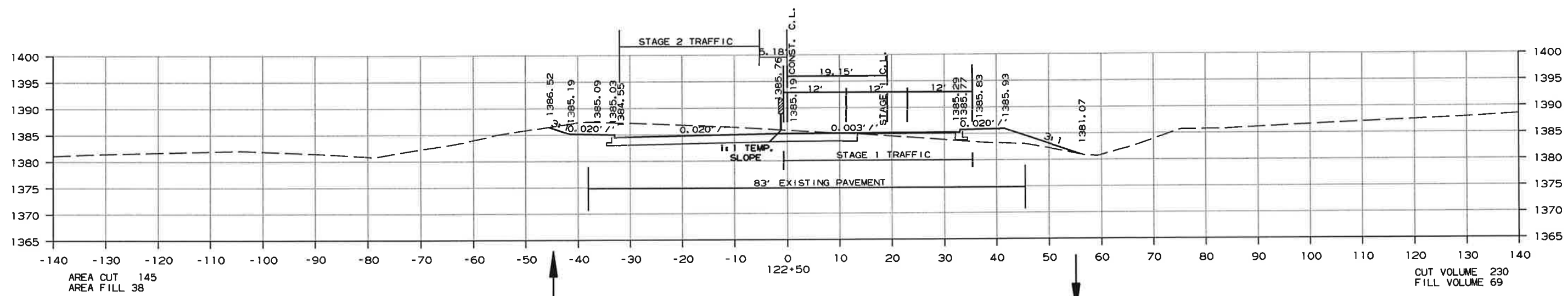
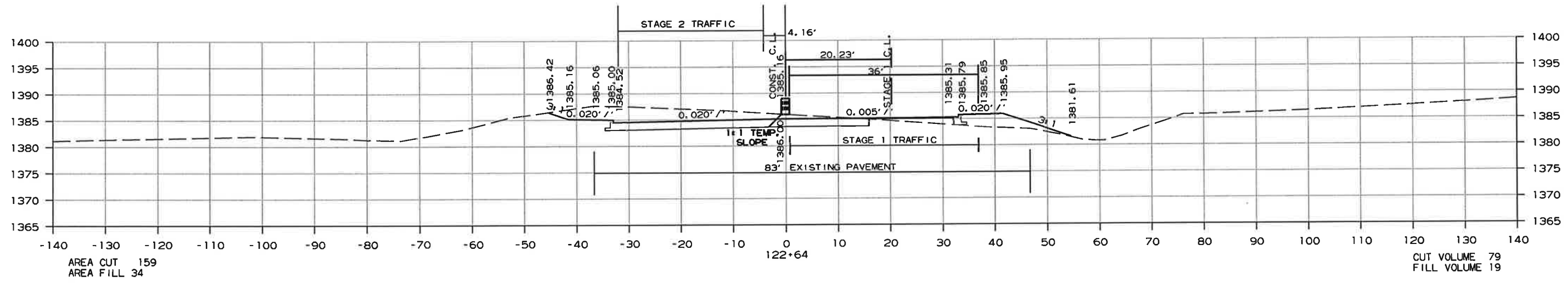
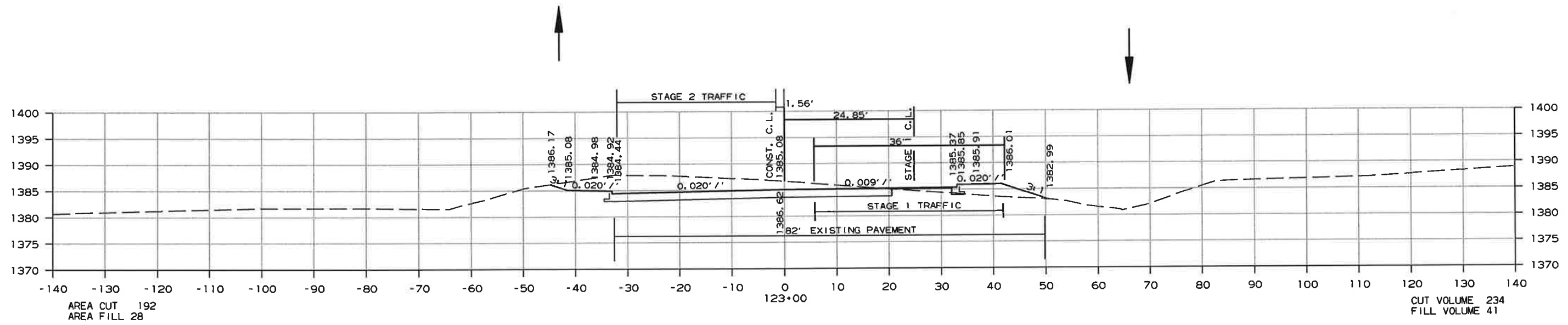
CROSS SECTION STA. 121+50 TO STA. 122+00

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R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	156	267

2 CROSS SECTIONS

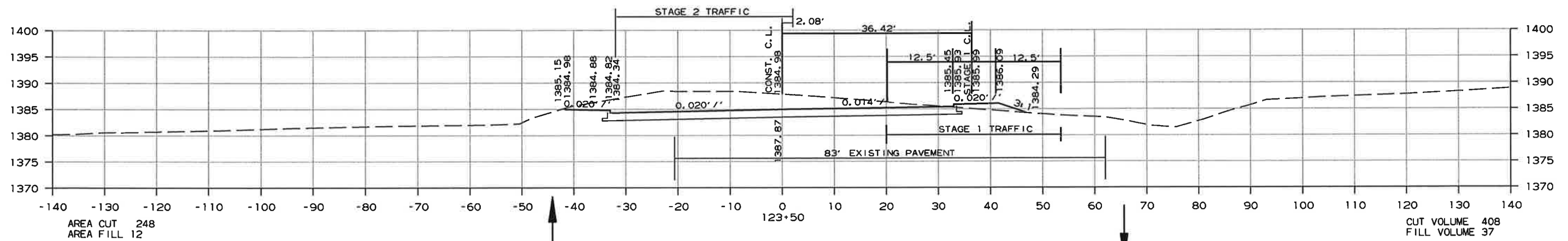
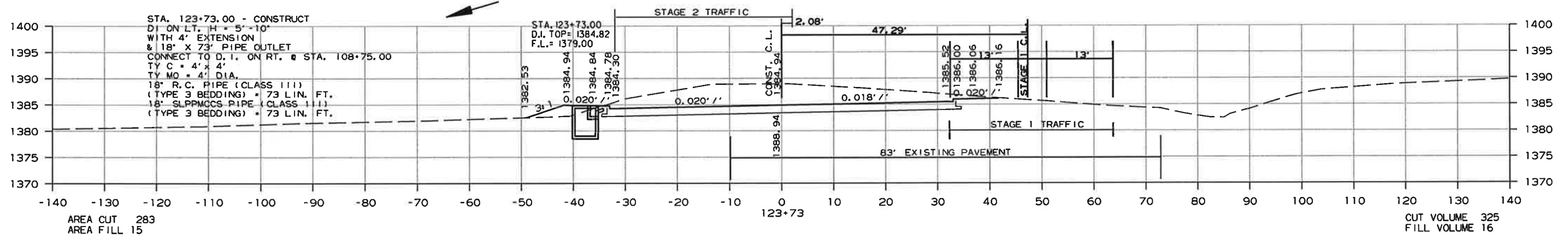
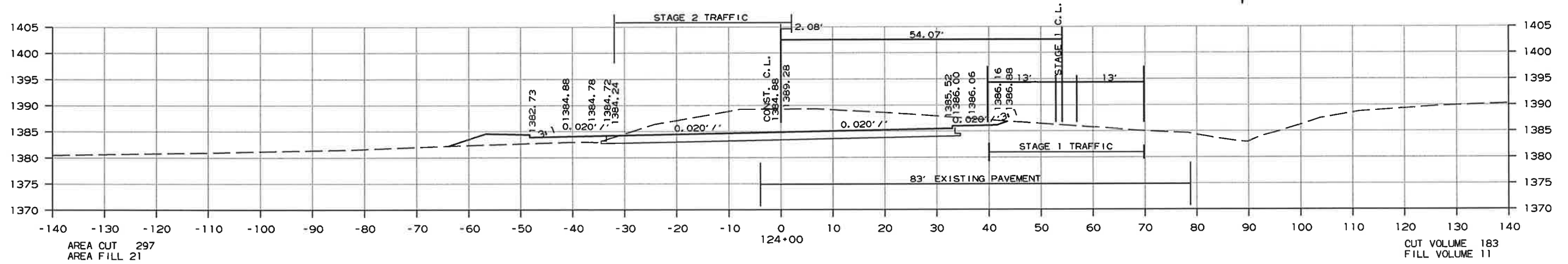


CROSS SECTION STA. 122+50 TO STA. 123+00

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
JOB NO. 012007							157	267

2 CROSS SECTIONS



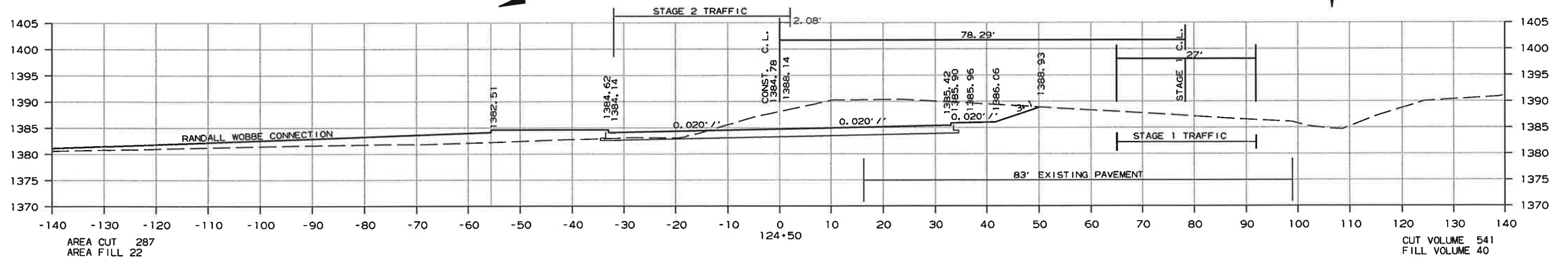
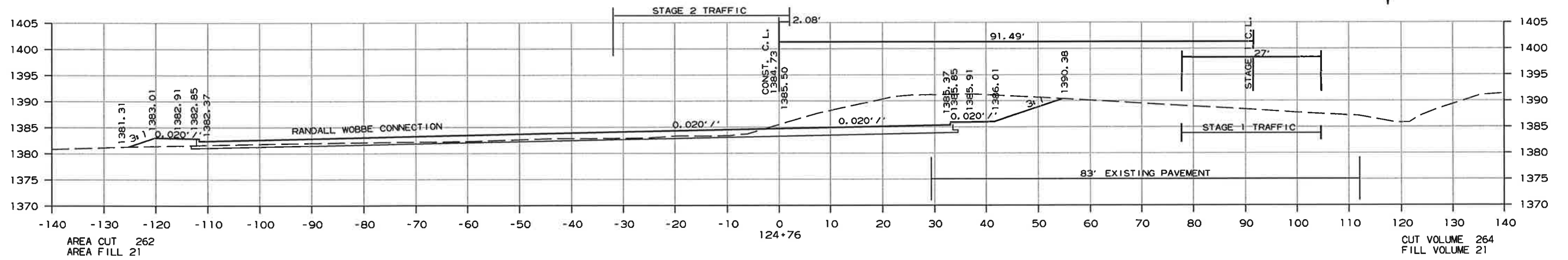
CROSS SECTION STA. 123+50 TO STA. 124+00

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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
11-7-17				6	ARK.			
						JOB NO. 012007	158	267

2 CROSS SECTIONS



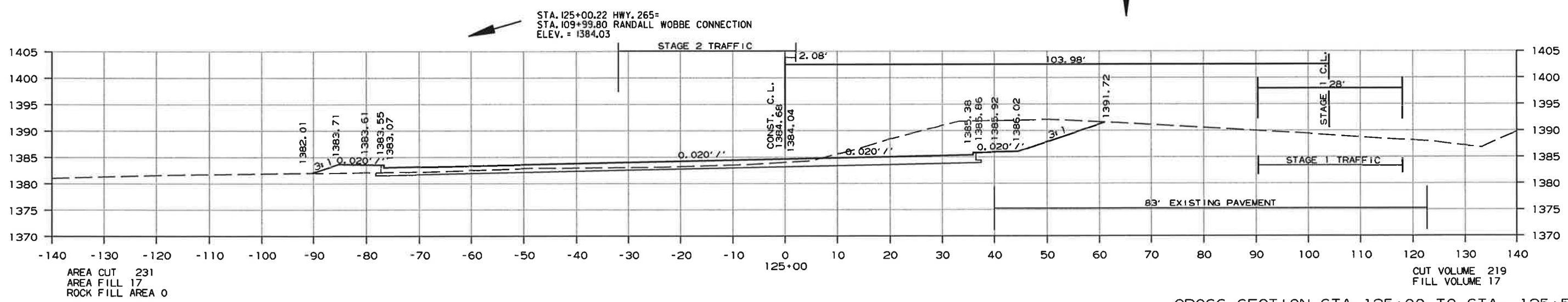
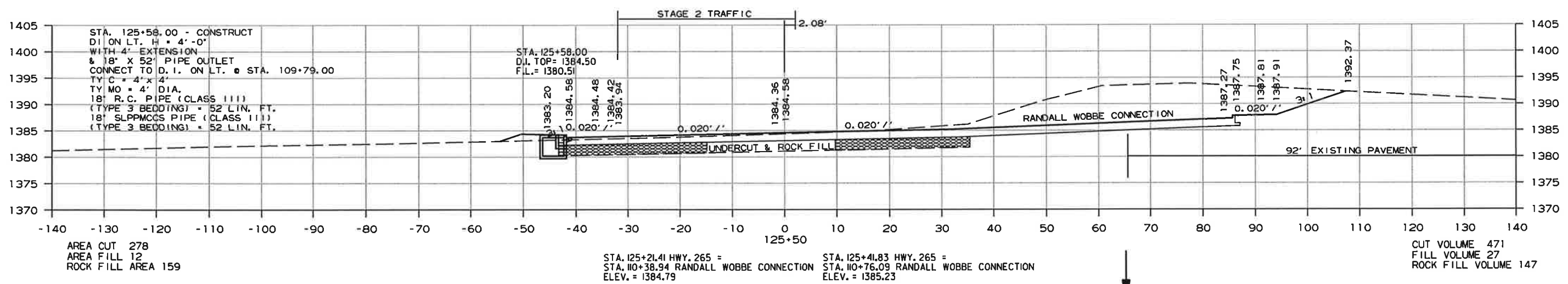
CROSS SECTION STA. 124+50 TO STA. 124+76

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	159	267

2 CROSS SECTIONS

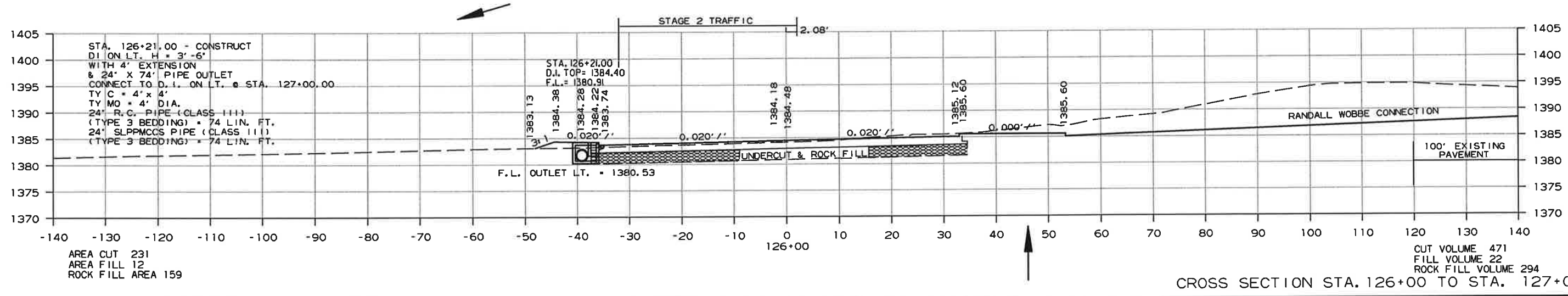
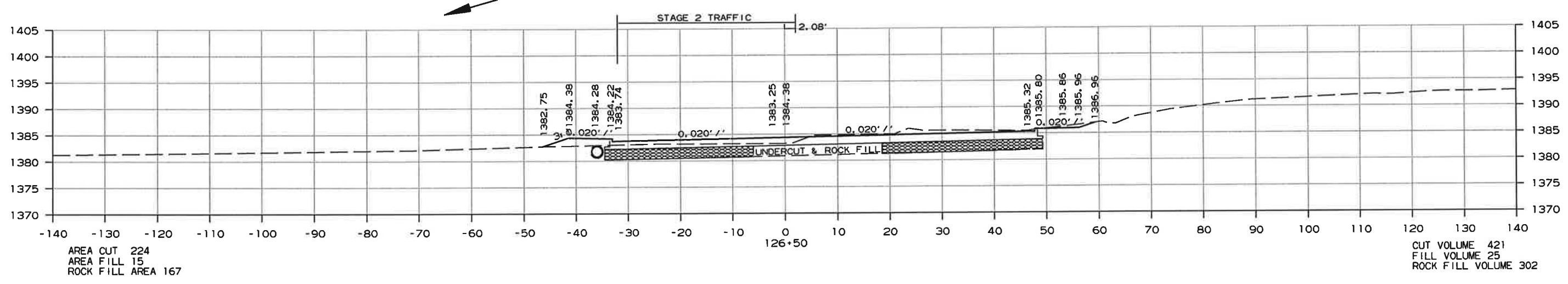
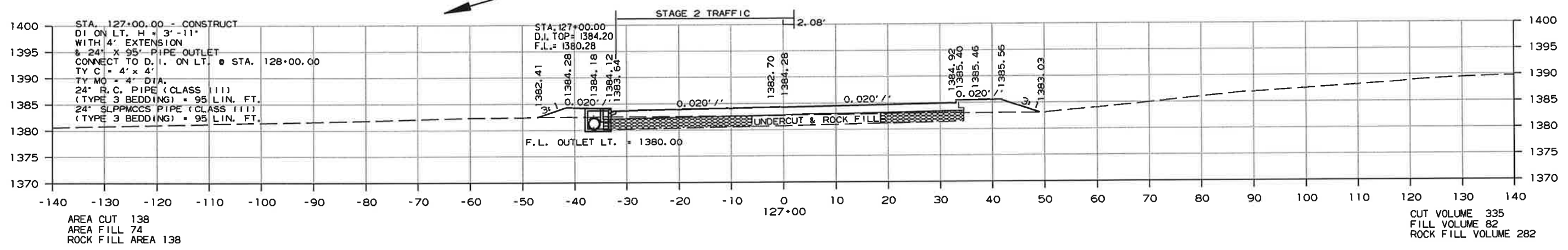


CROSS SECTION STA. 125+00 TO STA. 125+50

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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
11-7-17				6	ARK.			
JOB NO. 012007							160	267

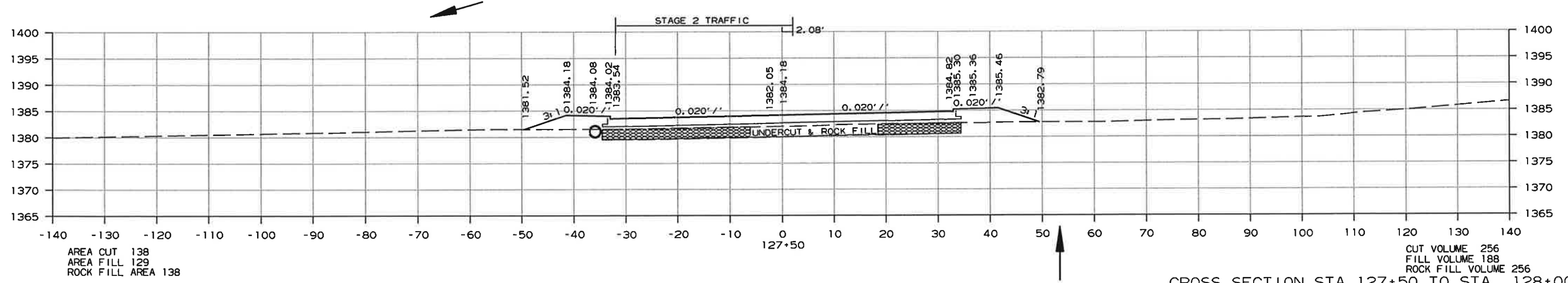
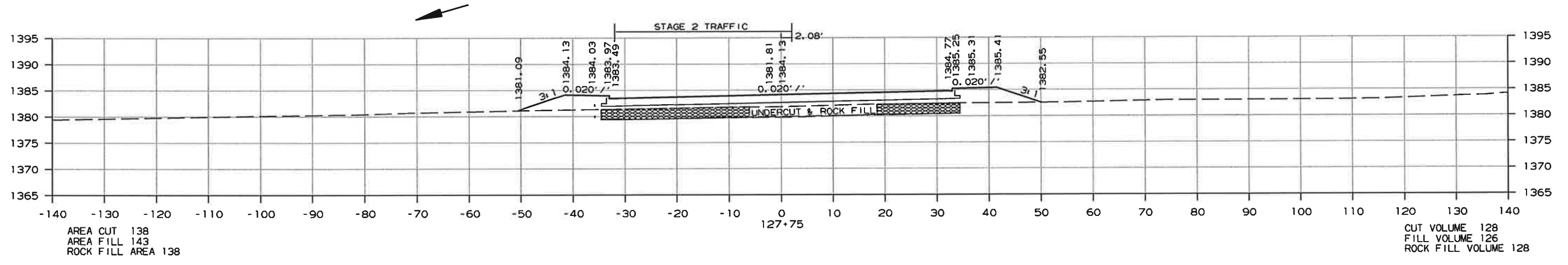
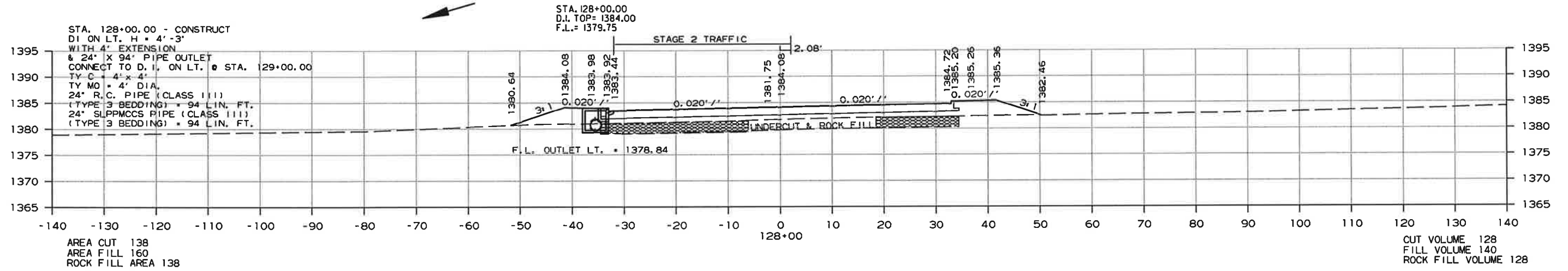
2 CROSS SECTIONS



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DATE REVISED	DATE FILED	DATE REVISED	DATE FILED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
JOB NO. 012007							161	267

2 CROSS SECTIONS

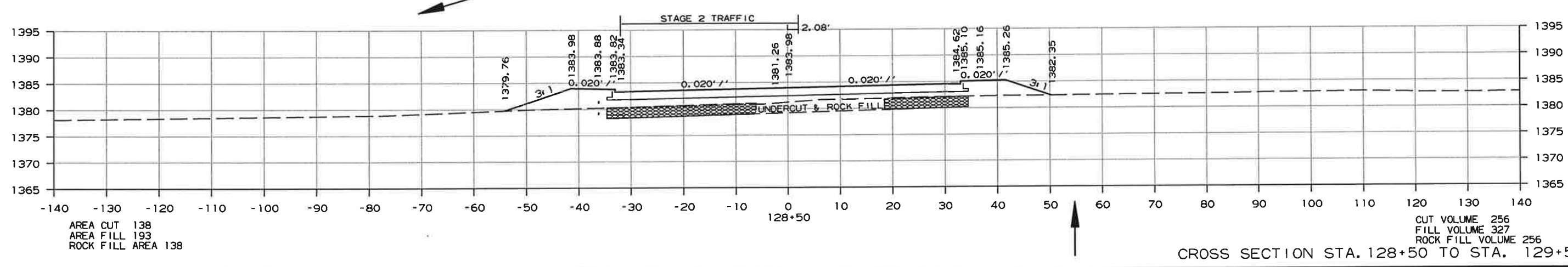
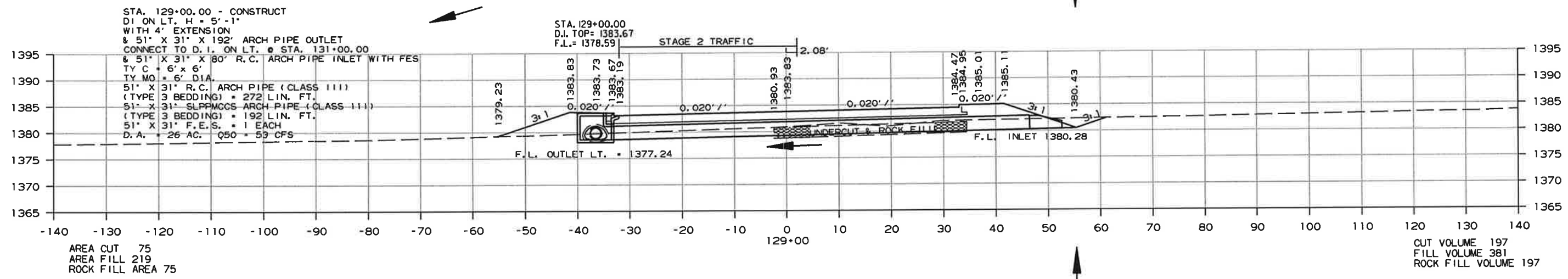
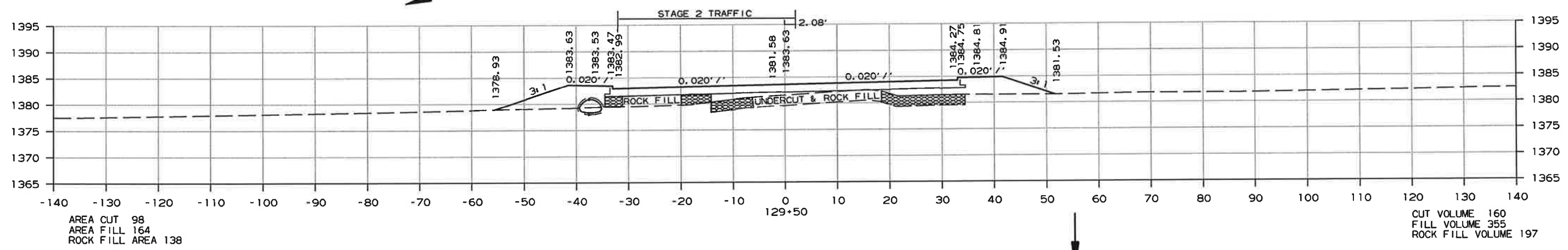


CROSS SECTION STA. 127+50 TO STA. 128+00

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. NO. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
JOB NO. 012007							162	267

2 CROSS SECTIONS

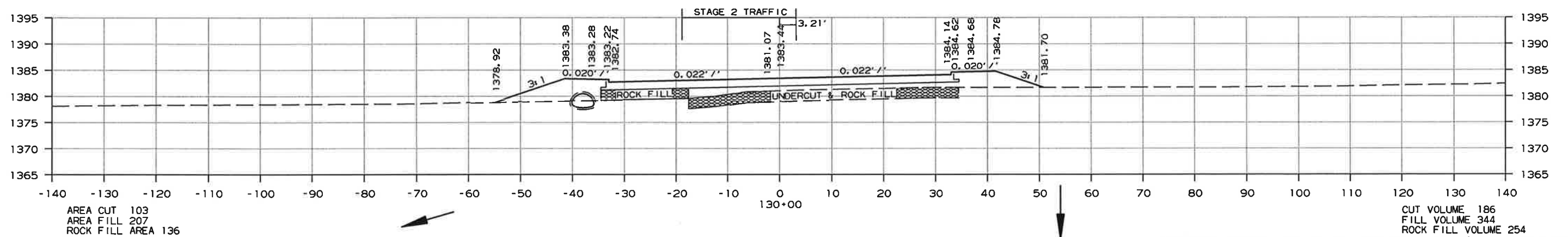
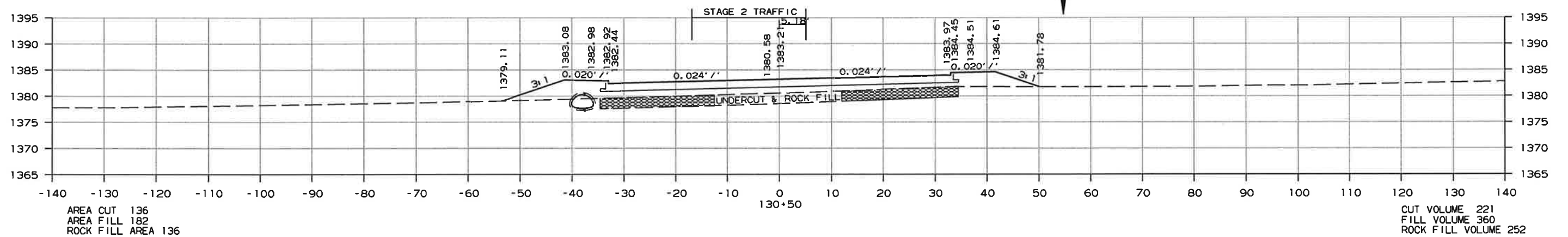
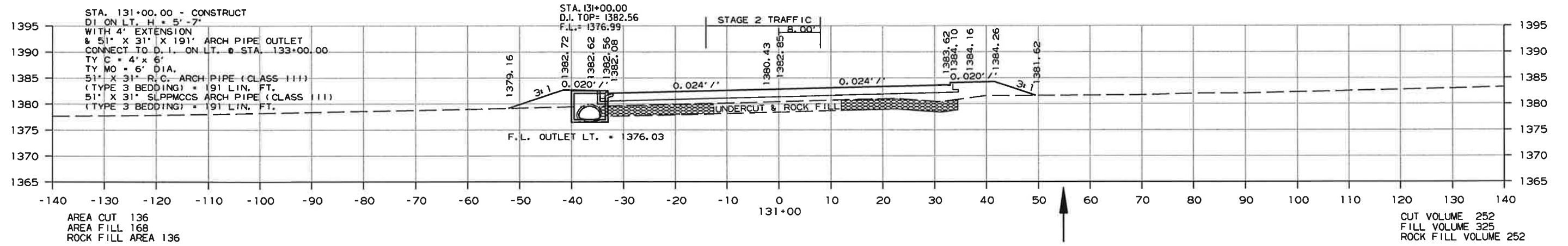


CROSS SECTION STA. 128+50 TO STA. 129+50

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. AID DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	163	267

2 CROSS SECTIONS



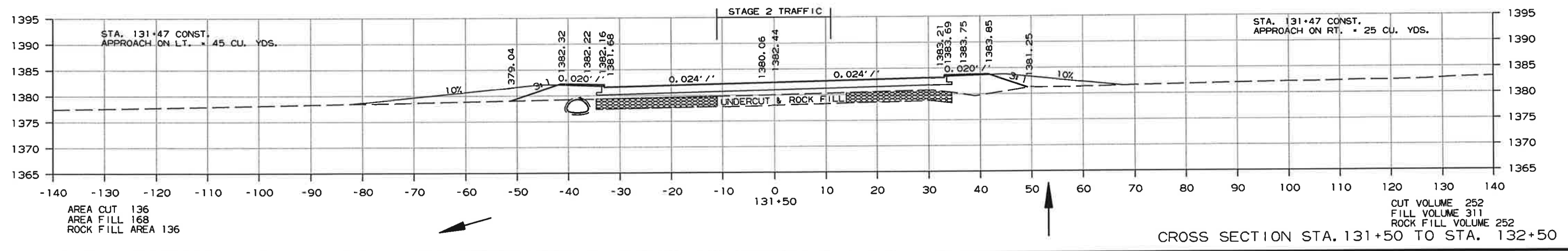
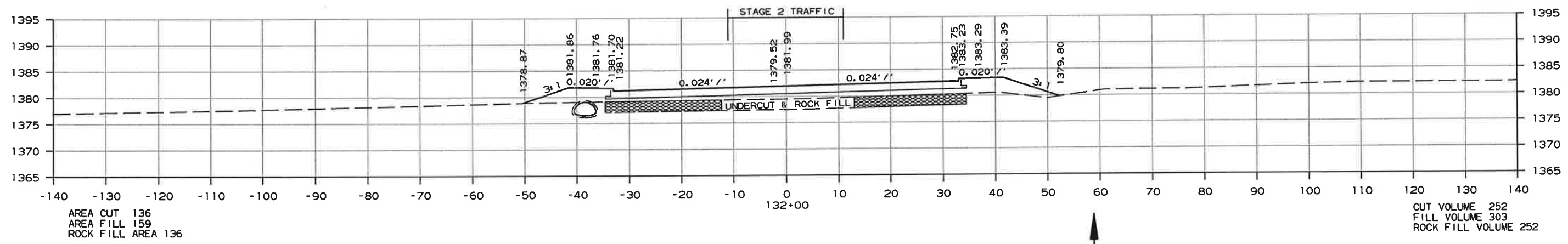
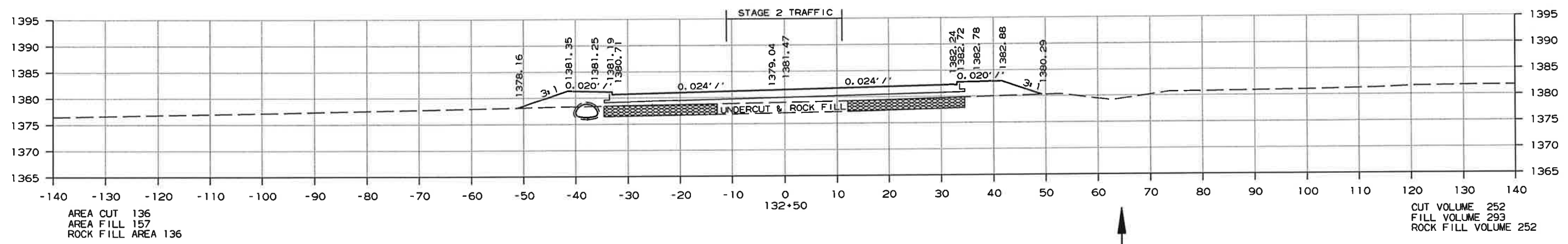
CROSS SECTION STA. 130+00 TO STA. 131+00

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	164	267

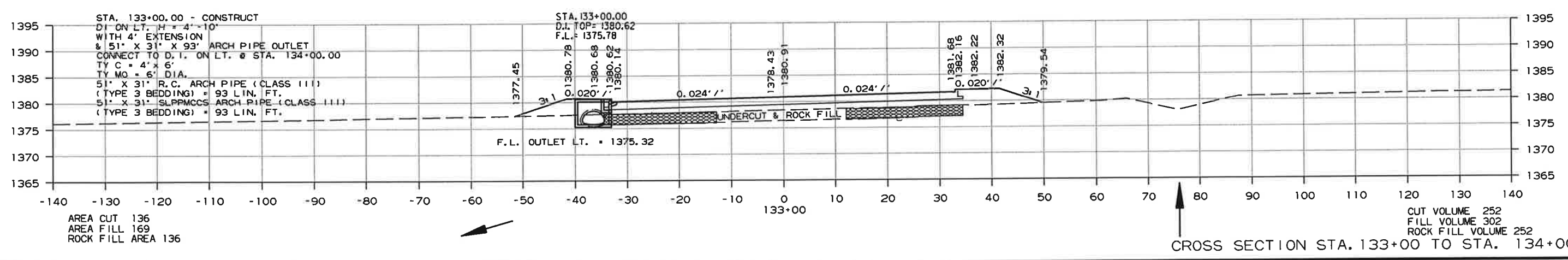
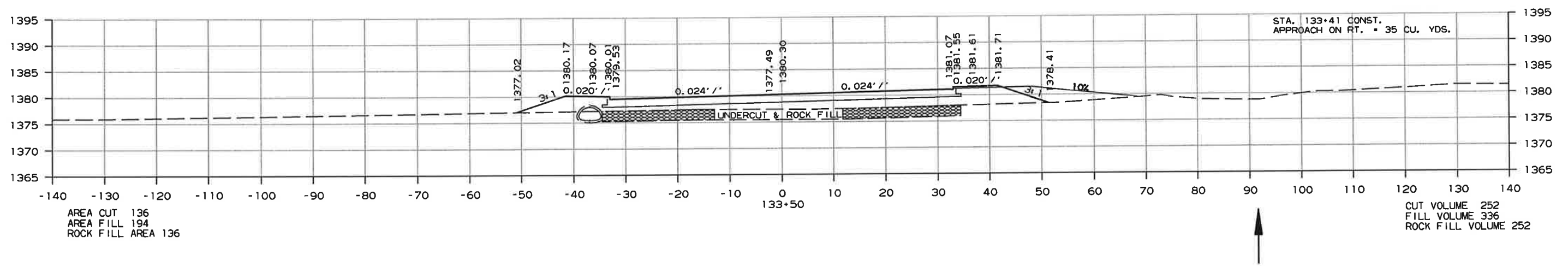
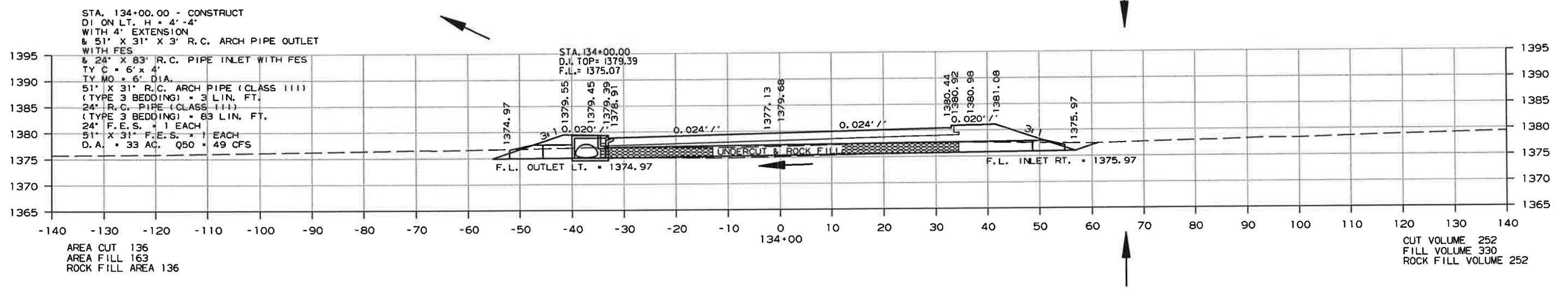
2 CROSS SECTIONS



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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
11-7-17				6	ARK.			
						JOB NO. 012007	165	267

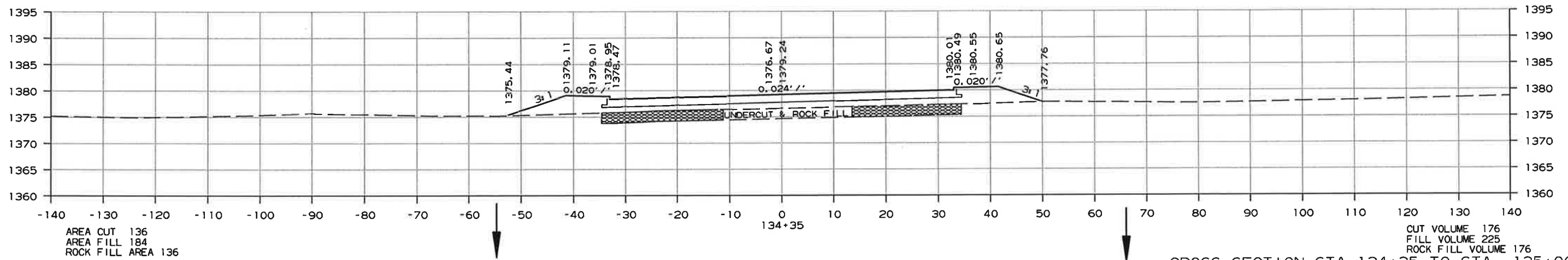
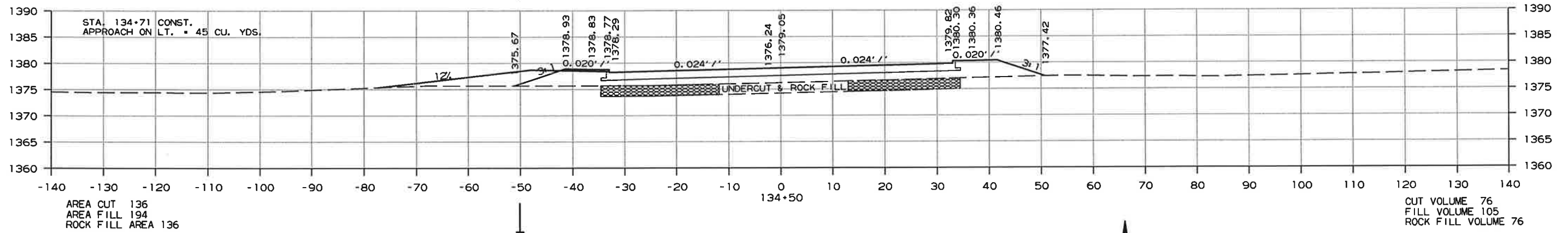
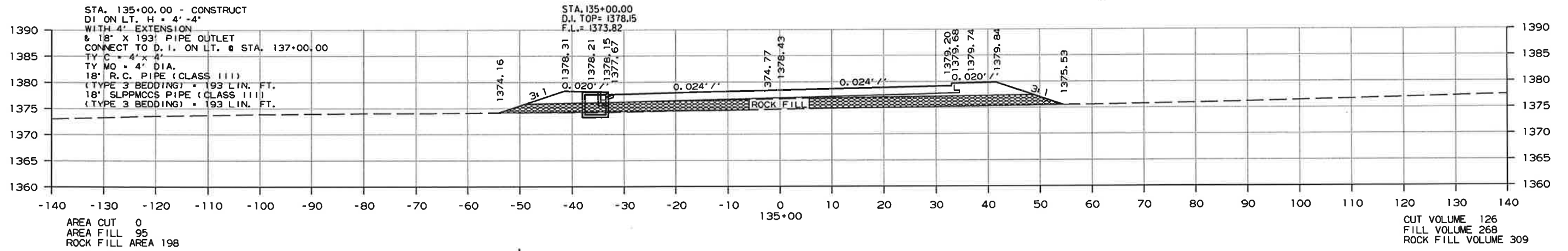
2 CROSS SECTIONS



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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. NO. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
JOB NO. 012007							166	267

2 CROSS SECTIONS



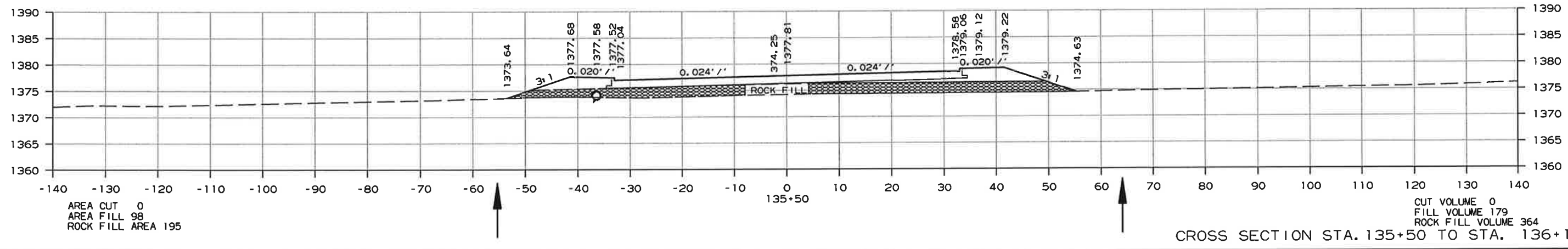
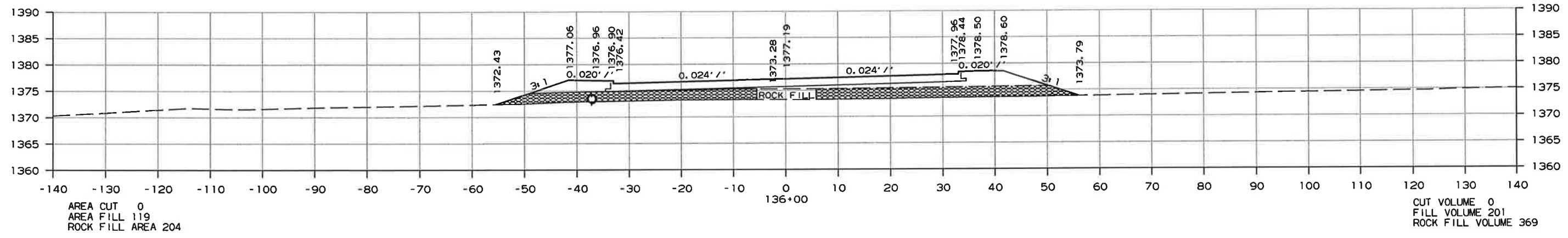
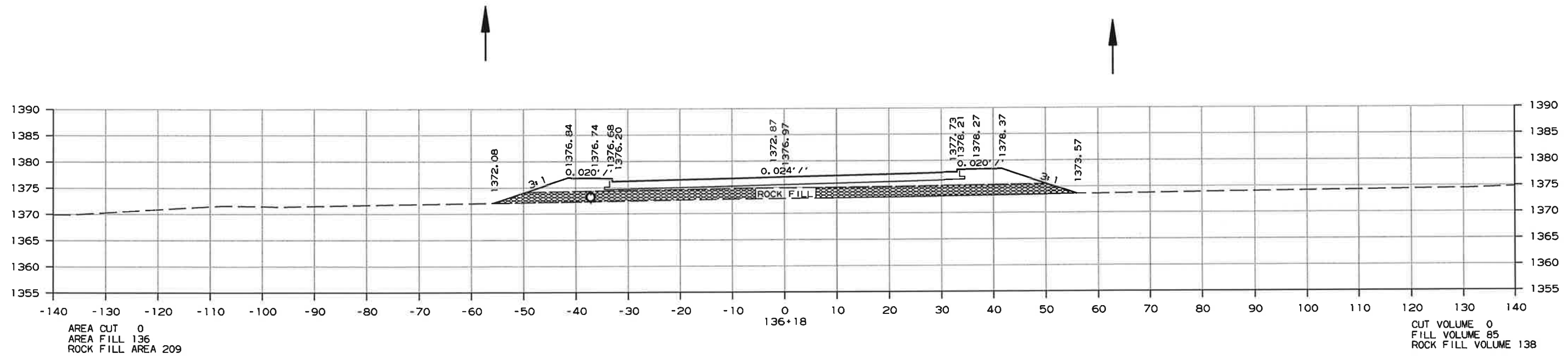
CROSS SECTION STA. 134+35 TO STA. 135+00

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DATE REVISED	DATE FILED	DATE REVISED	DATE FILED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
				JOB NO.	012007		167	267

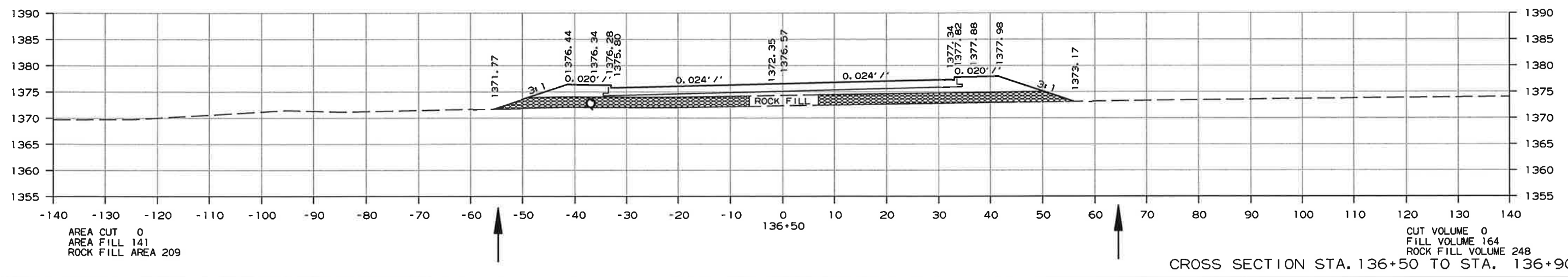
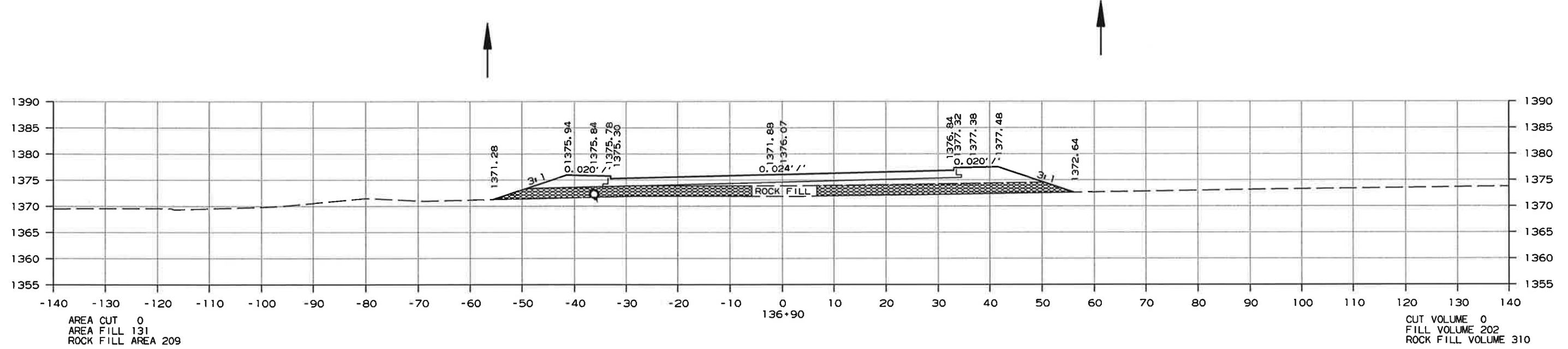
2 CROSS SECTIONS



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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	168	267

2 CROSS SECTIONS

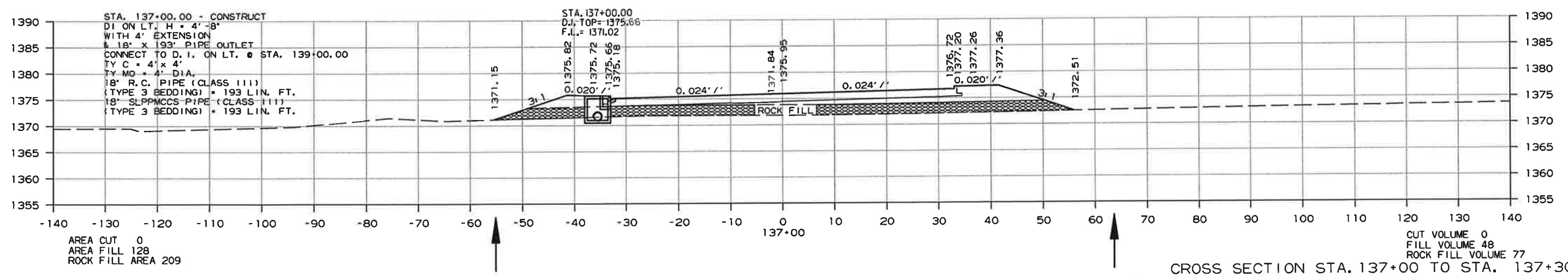
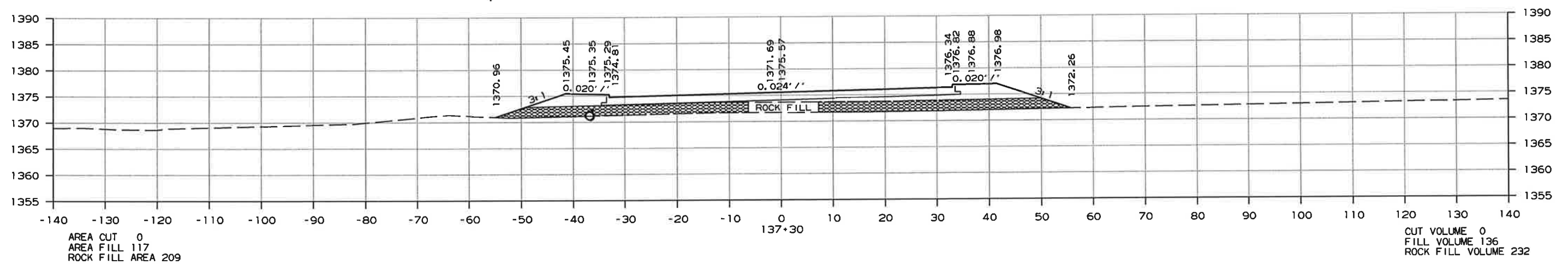


CROSS SECTION STA. 136+50 TO STA. 136+90

9/12/2017 R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
JOB NO. 012007							169	267

2 CROSS SECTIONS

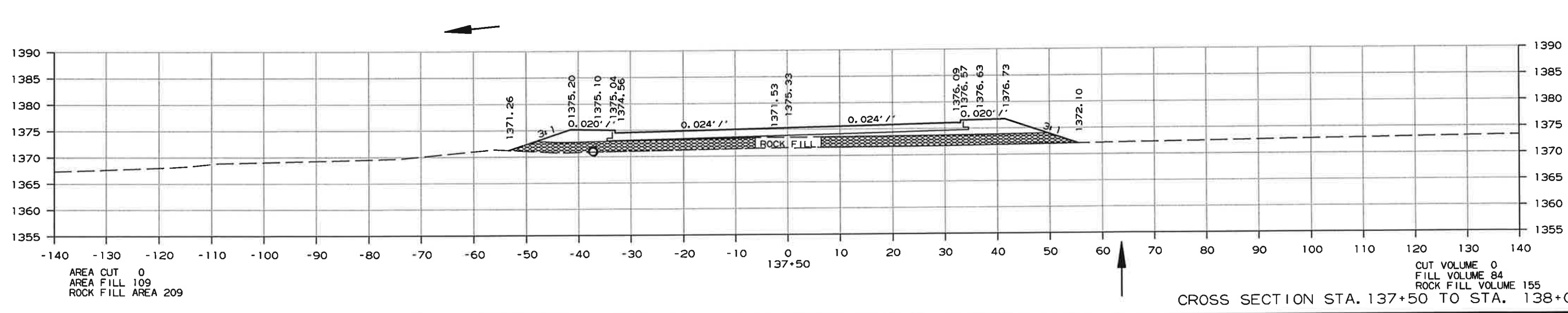
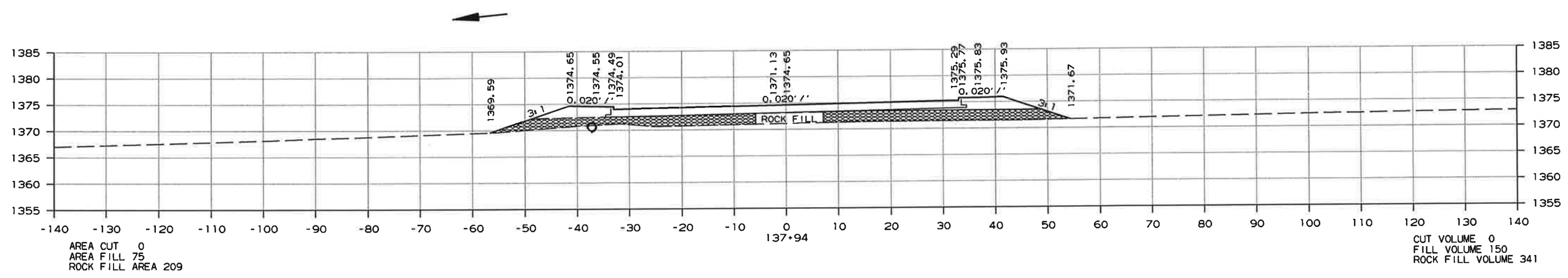
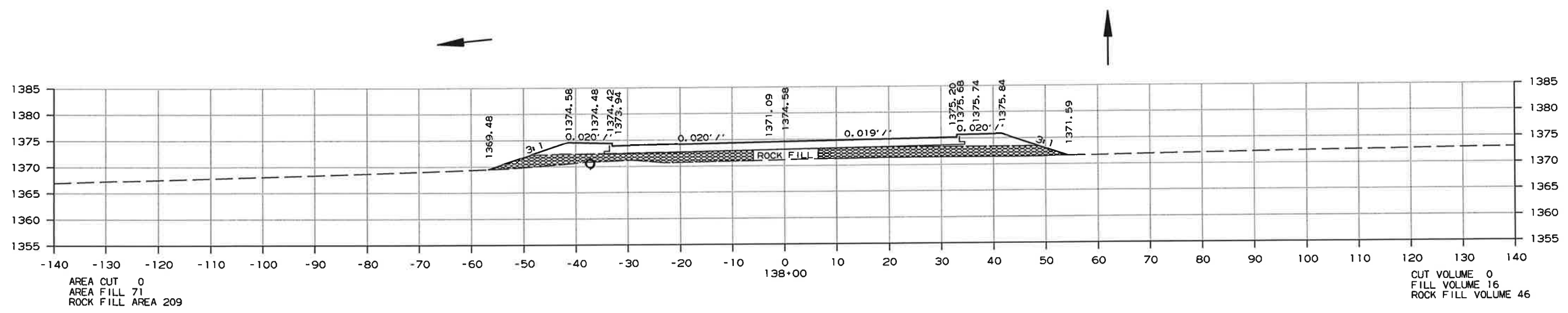


CROSS SECTION STA. 137+00 TO STA. 137+30

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R012007KCT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
JOB NO. 012007							170	267

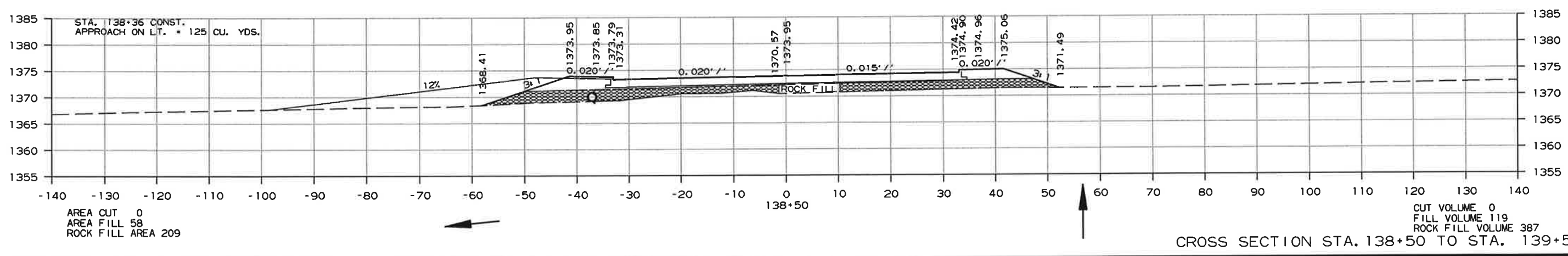
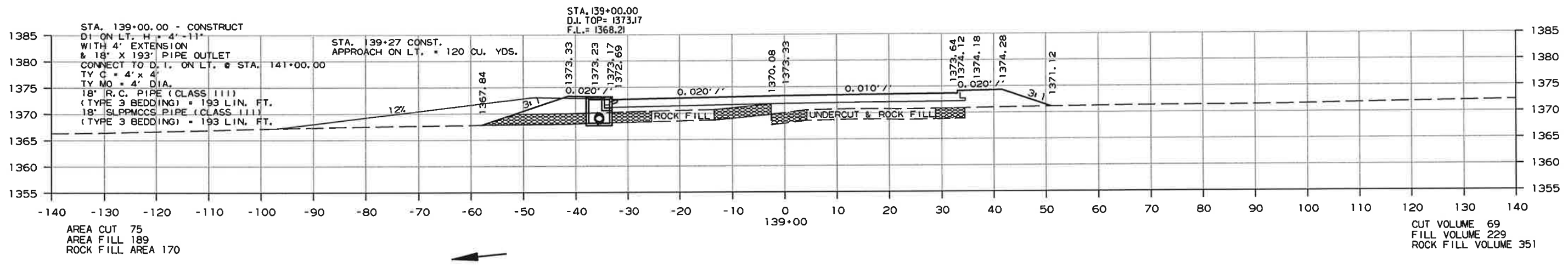
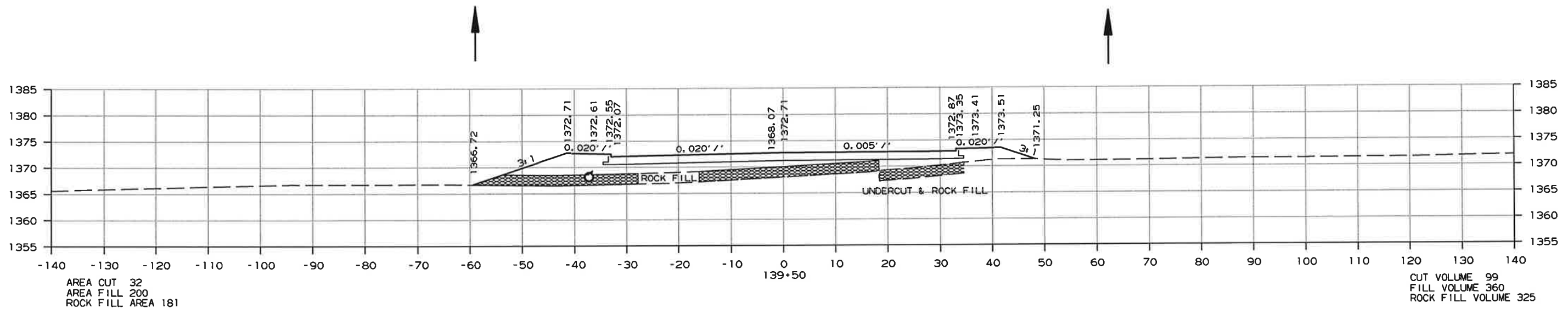
2 CROSS SECTIONS



CROSS SECTION STA. 137+50 TO STA. 138+00

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	171	267

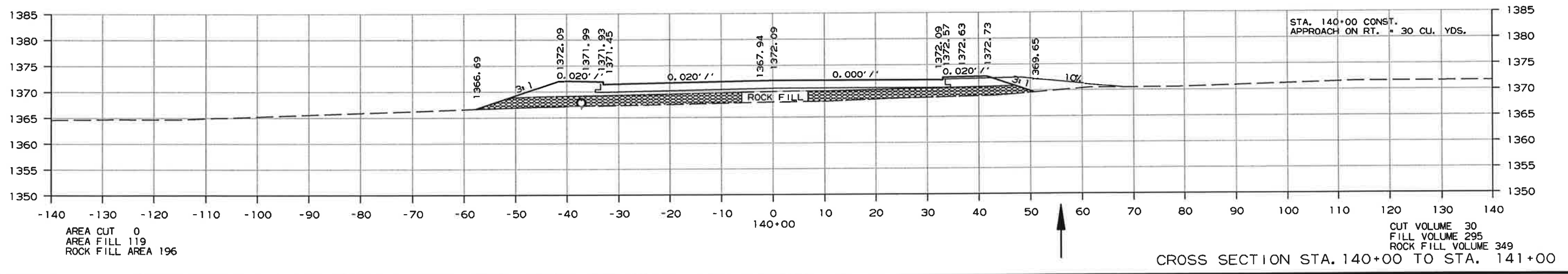
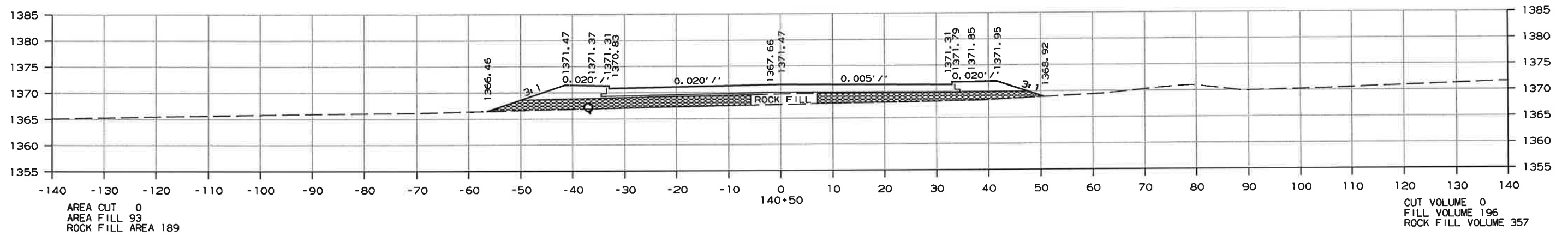
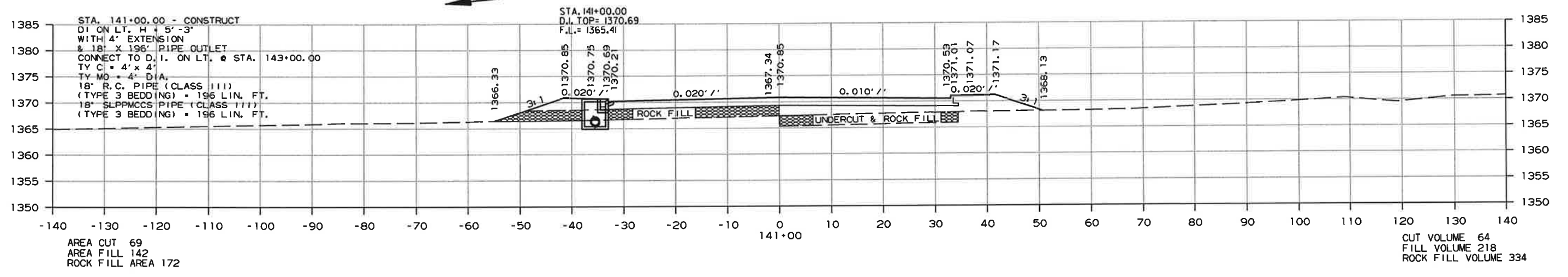
2 CROSS SECTIONS



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R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	172	267

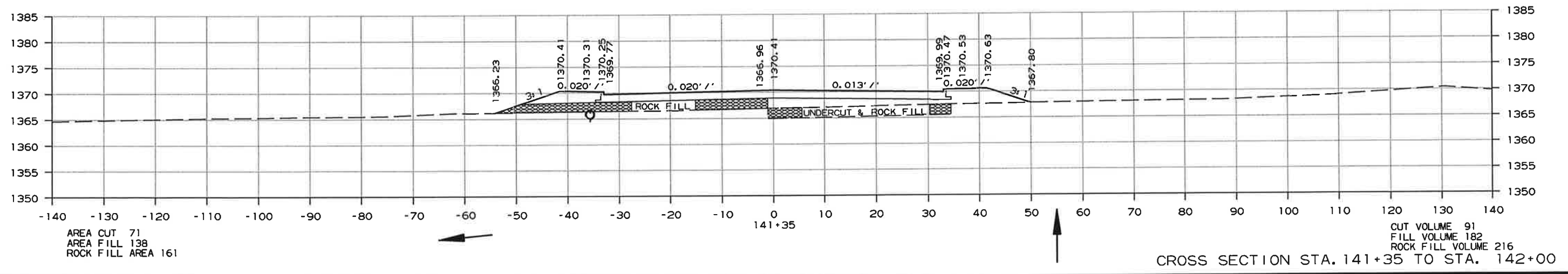
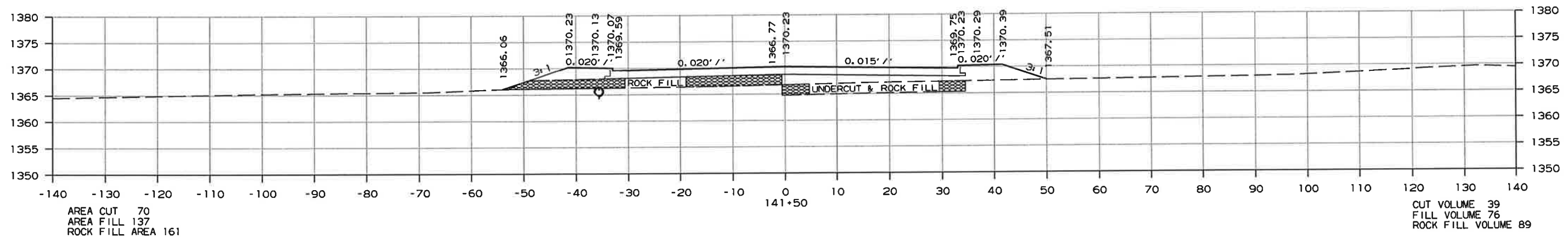
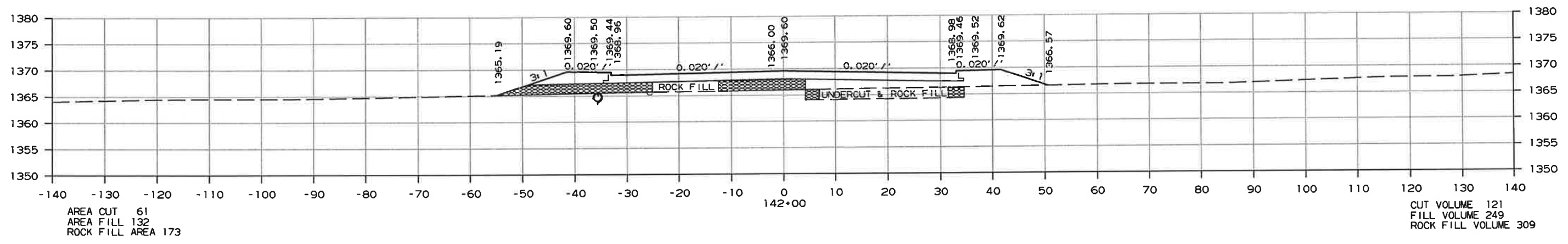
2 CROSS SECTIONS



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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
11-7-17				6	ARK.			
JOB NO. 012007							173	267

2 CROSS SECTIONS

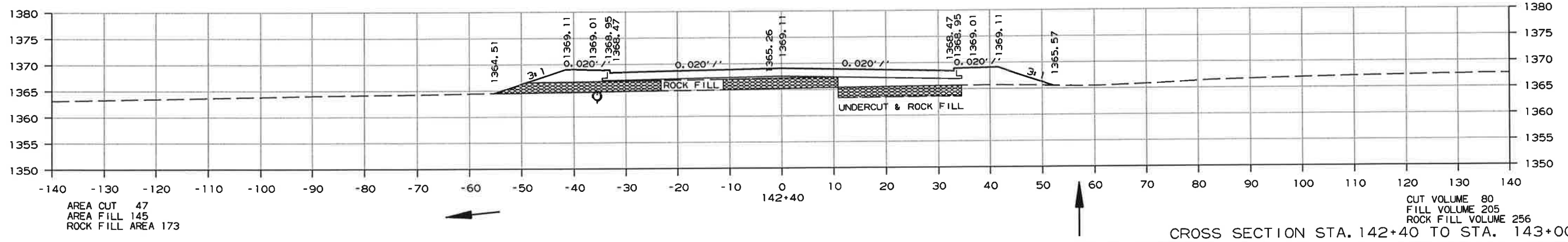
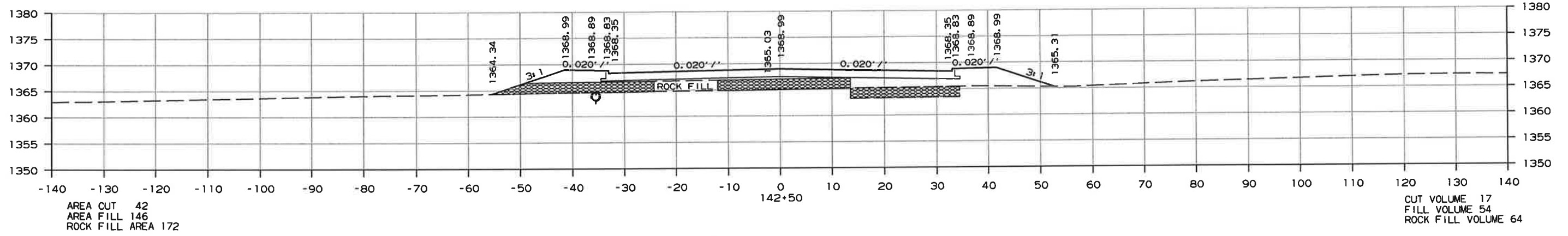
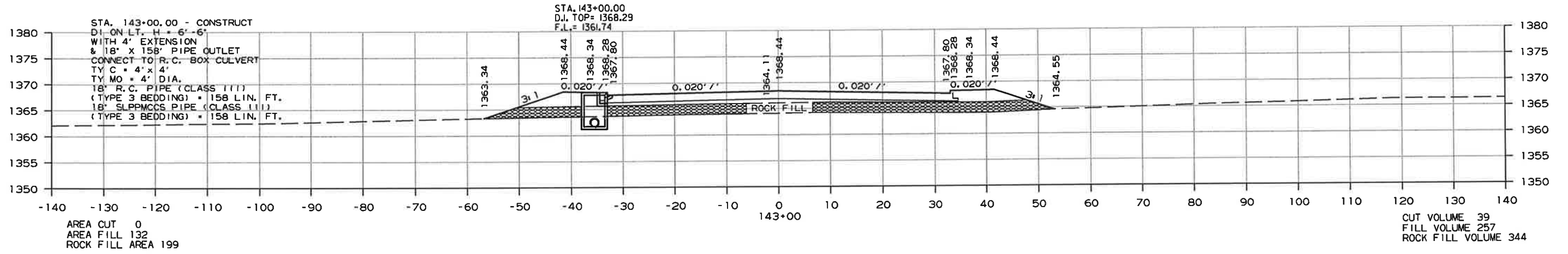


CROSS SECTION STA. 141+35 TO STA. 142+00

9/12/2017 RO12007K01.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	174	267

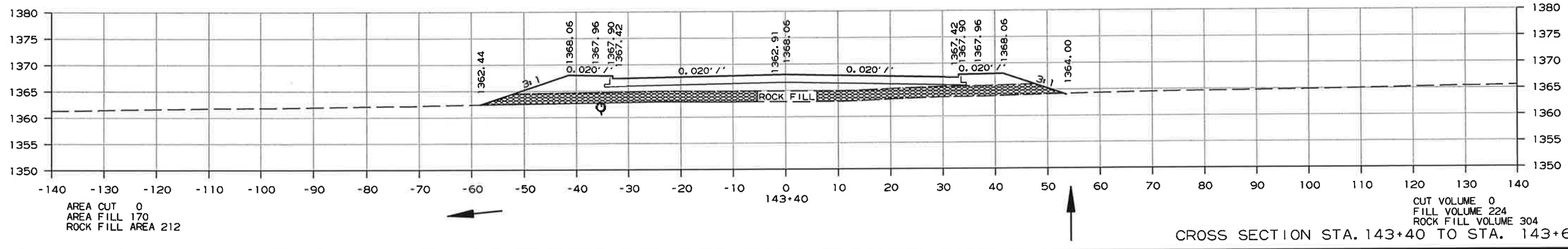
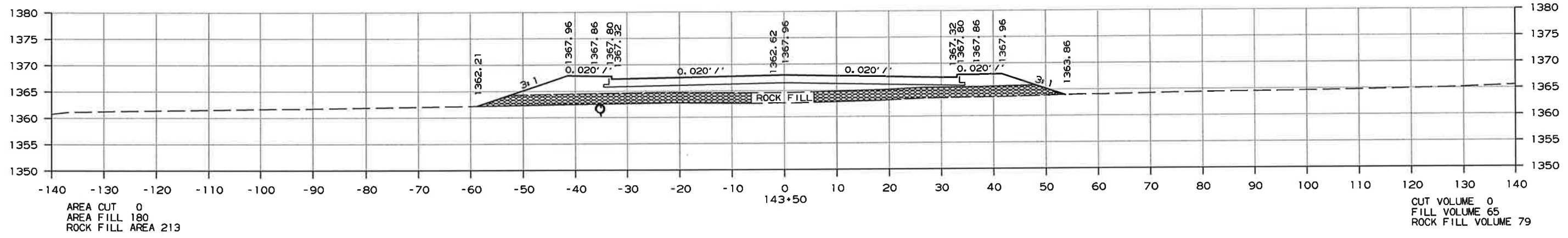
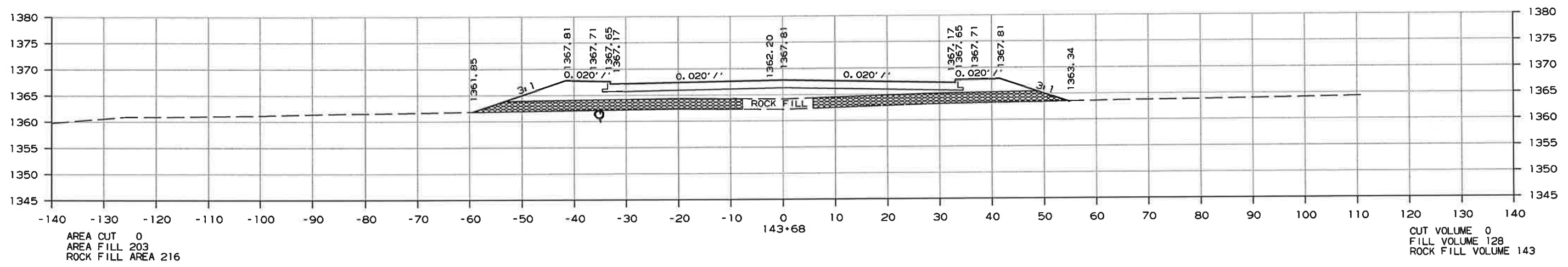
2 CROSS SECTIONS



9/12/2017
 R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	175	267

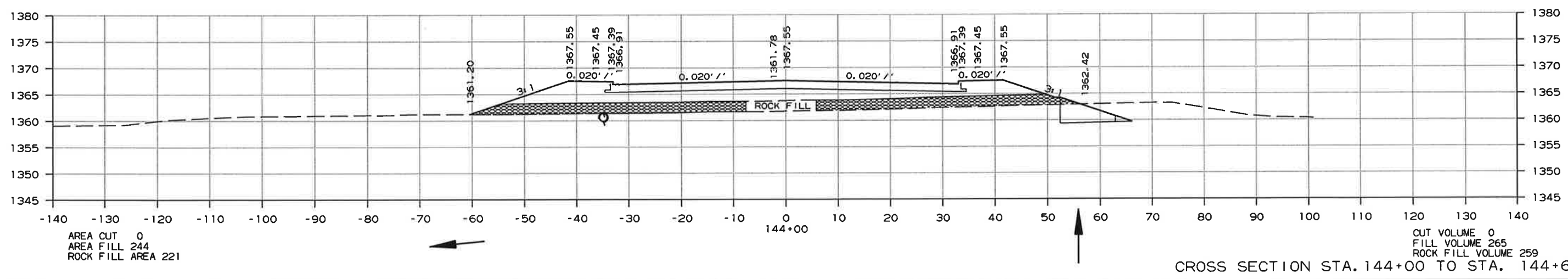
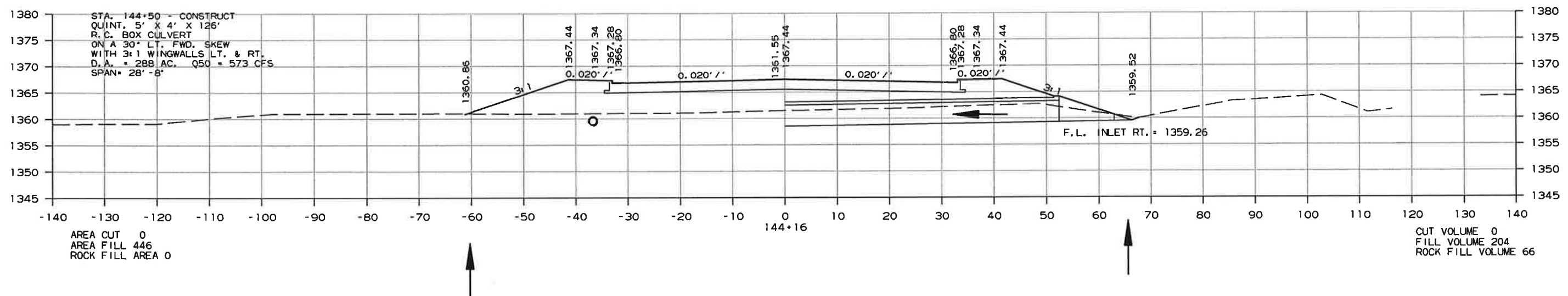
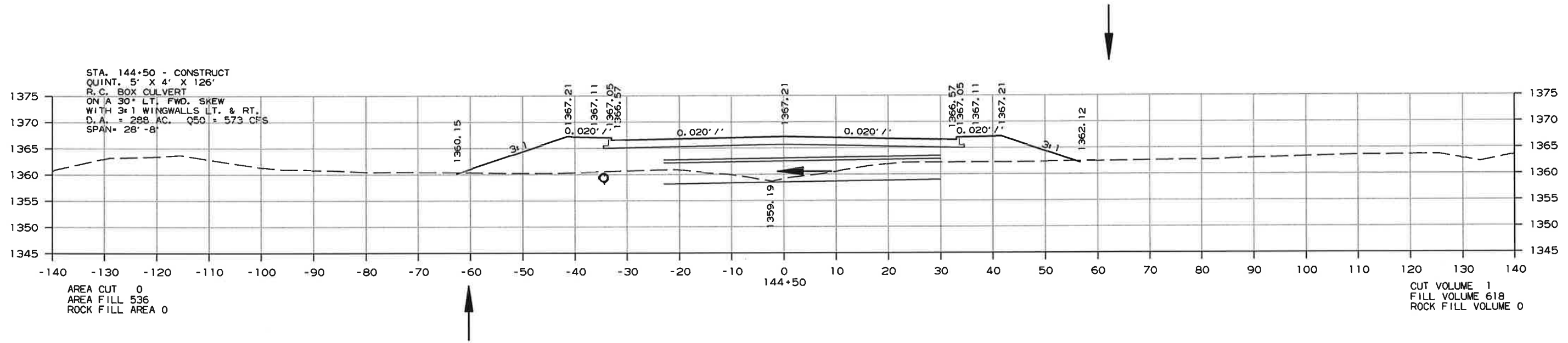
2 CROSS SECTIONS



9/12/2017
R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. RD. PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	176	267

2 CROSS SECTIONS

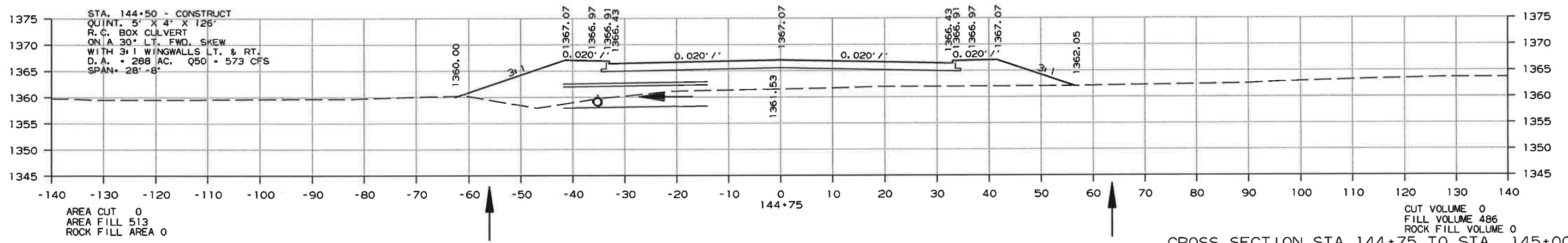
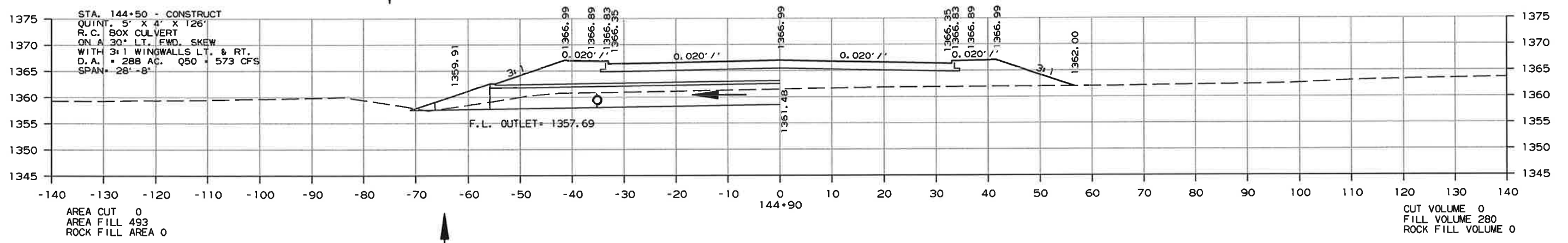
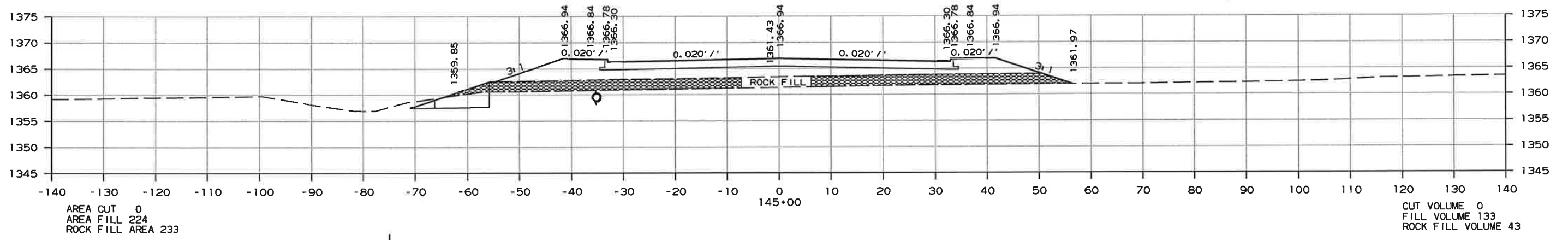


CROSS SECTION STA. 144+00 TO STA. 144+63

9/12/2017
R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
JOB NO. 012007							177	267

2 CROSS SECTIONS

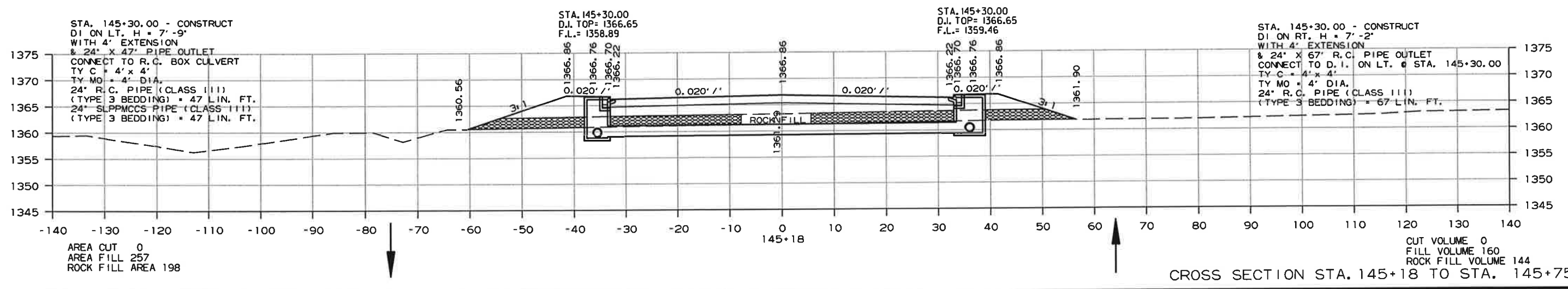
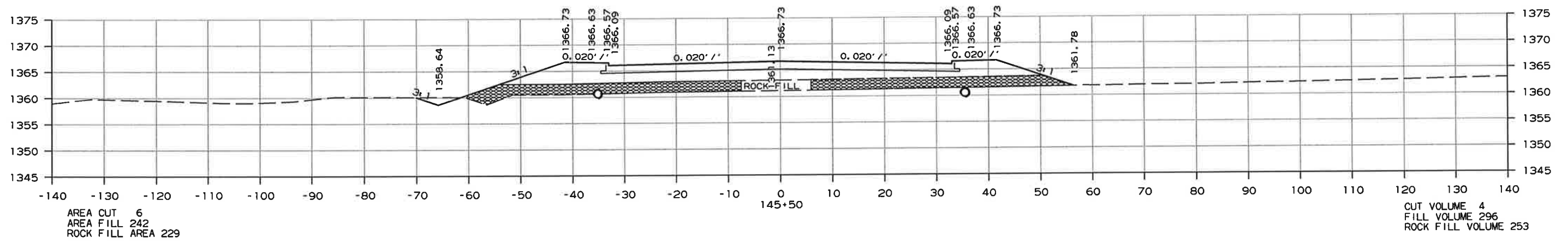
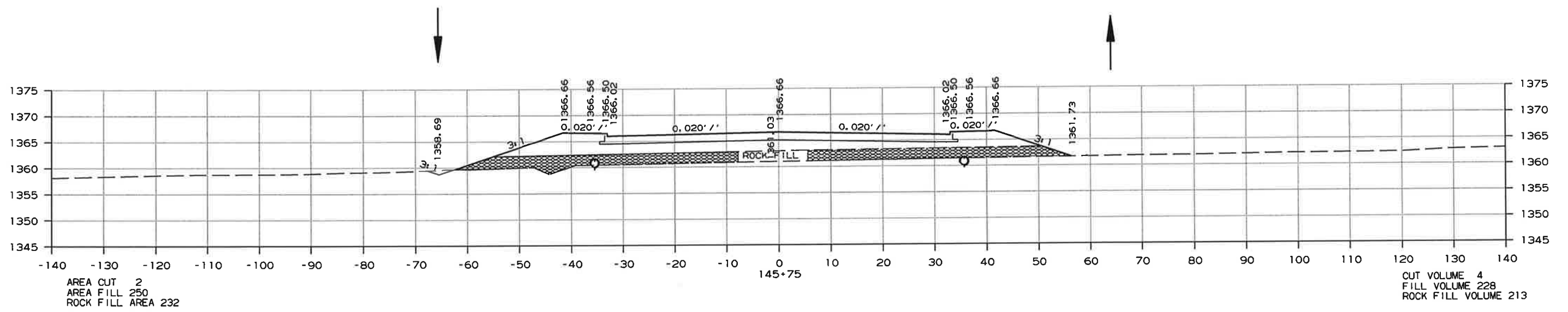


CROSS SECTION STA. 144+75 TO STA. 145+00

9/12/2017
R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
JOB NO. 012007							178	267

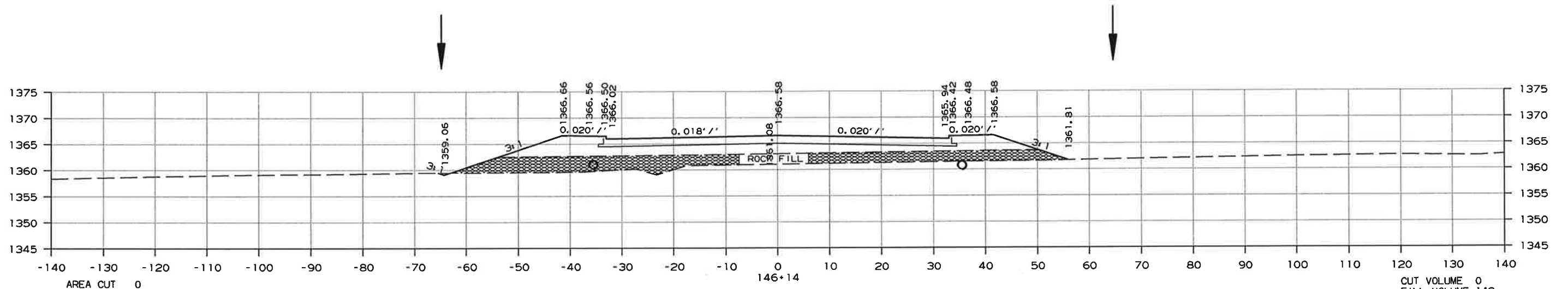
2 CROSS SECTIONS



9/12/2017
R012007KGT.DGN

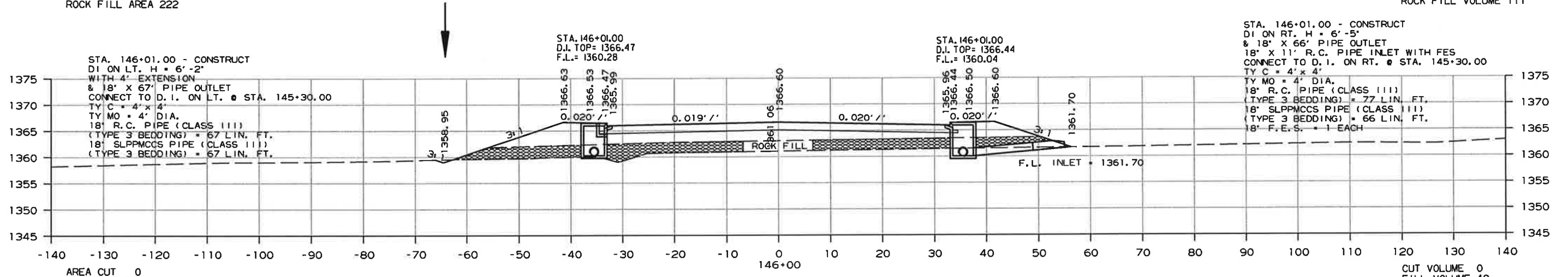
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
JOB NO. 012007							179	267

② CROSS SECTIONS



AREA CUT 0
AREA FILL 269
ROCK FILL AREA 222

CUT VOLUME 0
FILL VOLUME 142
ROCK FILL VOLUME 111



STA. 146+01.00 - CONSTRUCT
DI ON LT. H = 6'-2"
WITH 4' EXTENSION
& 18" X 67' PIPE OUTLET
CONNECT TO D.I. ON LT. @ STA. 145+30.00
TY C = 4' X 4'
TY MO = 4' DIA.
18' R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 67 LIN. FT.
18' SLPPMCCS PIPE (CLASS III)
(TYPE 3 BEDDING) = 67 LIN. FT.

STA. 146+01.00
D.I. TOP = 1366.47
F.L. = 1360.28

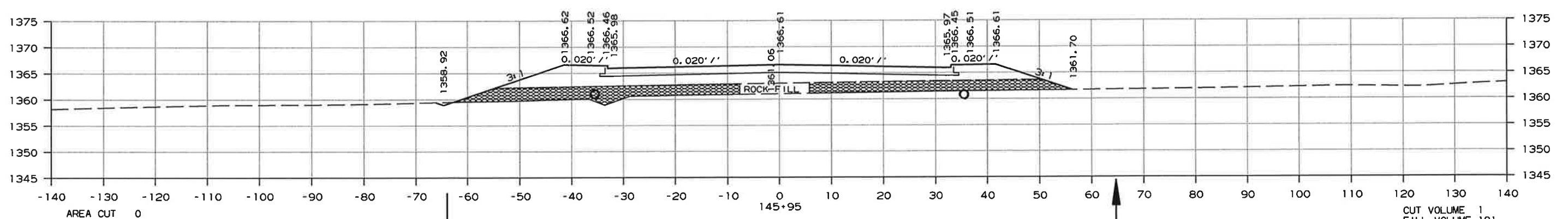
STA. 146+01.00
D.I. TOP = 1366.44
F.L. = 1360.04

STA. 146+01.00 - CONSTRUCT
DI ON RT. H = 6'-5"
& 18" X 66' PIPE OUTLET
18" X 11' R.C. PIPE INLET WITH FES
CONNECT TO D.I. ON RT. @ STA. 145+30.00
TY C = 4' X 4'
TY MO = 4' DIA.
18' R.C. PIPE (CLASS III)
(TYPE 3 BEDDING) = 77 LIN. FT.
18' SLPPMCCS PIPE (CLASS III)
(TYPE 3 BEDDING) = 66 LIN. FT.
18' F.E.S. = 1 EACH

F.L. INLET = 1361.70

AREA CUT 0
AREA FILL 277
ROCK FILL AREA 206

CUT VOLUME 0
FILL VOLUME 48
ROCK FILL VOLUME 42



AREA CUT 0
AREA FILL 238
ROCK FILL AREA 242

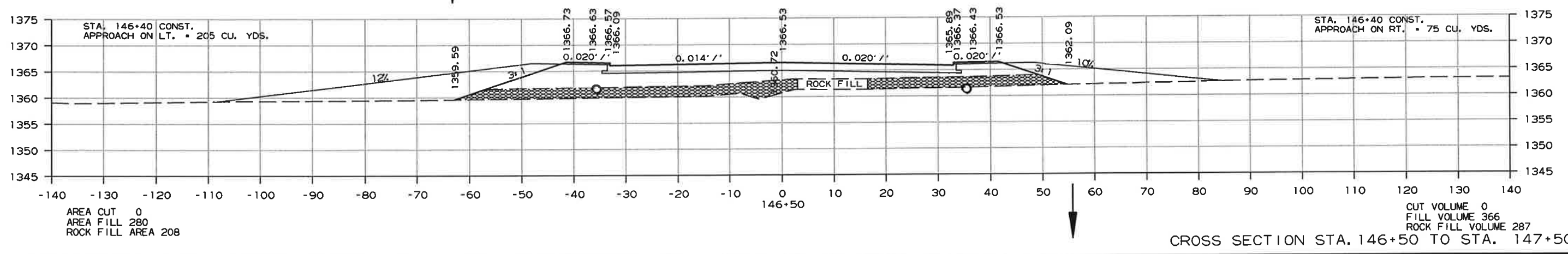
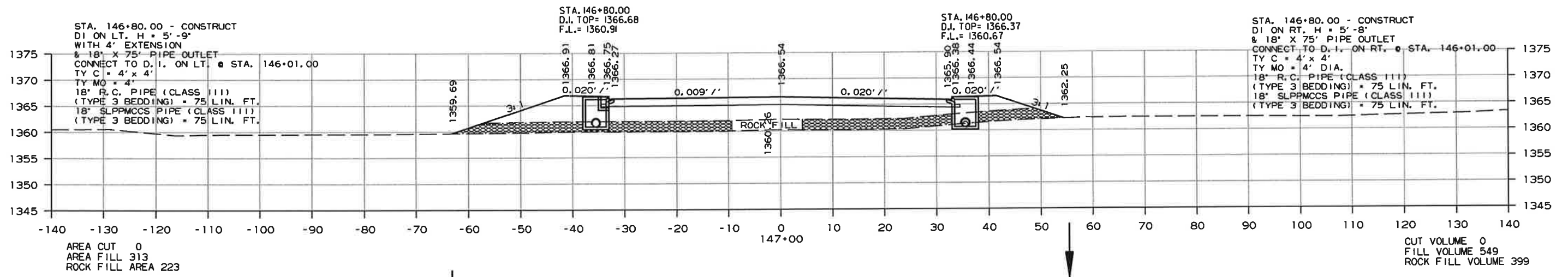
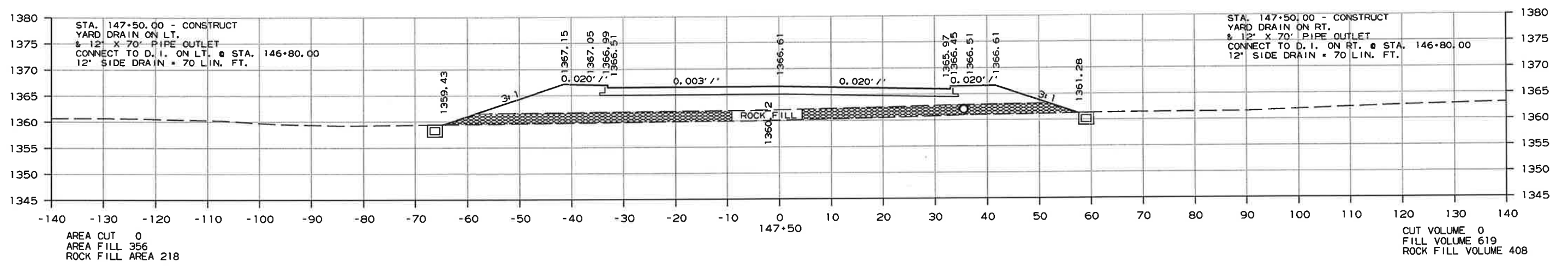
CUT VOLUME 1
FILL VOLUME 181
ROCK FILL VOLUME 176

CROSS SECTION STA. 145+95 TO STA. 146+14

9/12/2017 R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
				JOB NO.	012007		180	267

2 CROSS SECTIONS

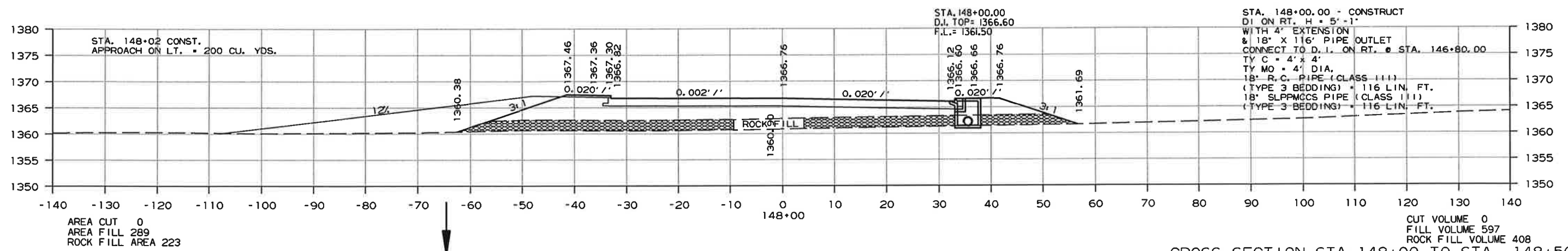
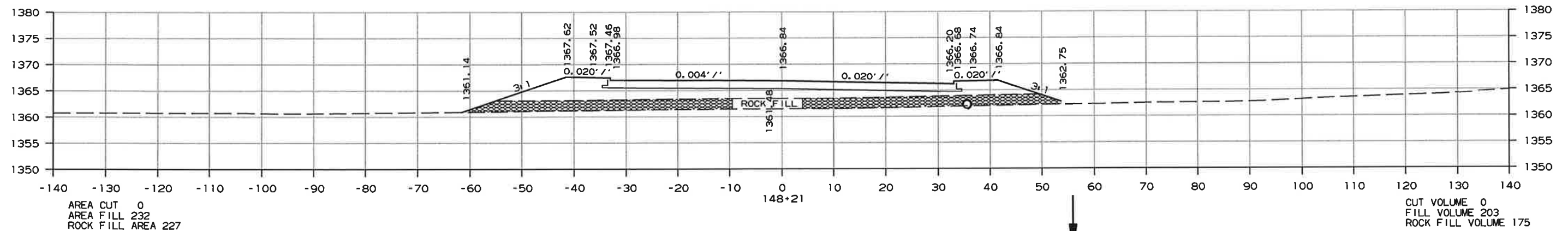
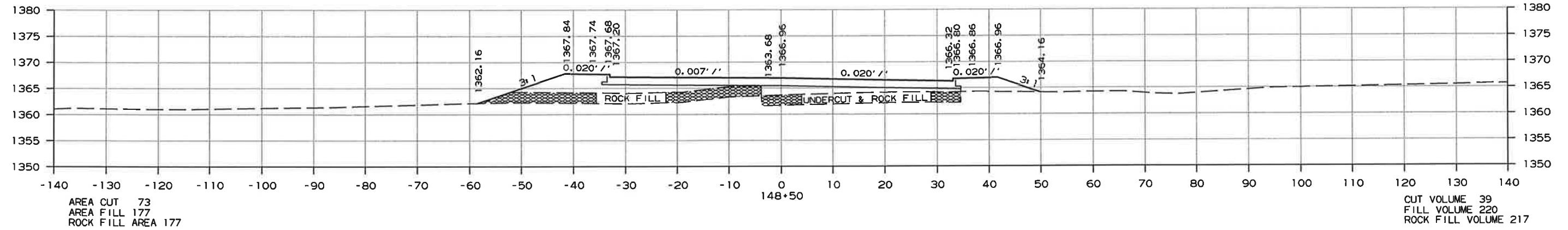


CROSS SECTION STA. 146+50 TO STA. 147+50

9/12/2017
R012007KGT.DGN

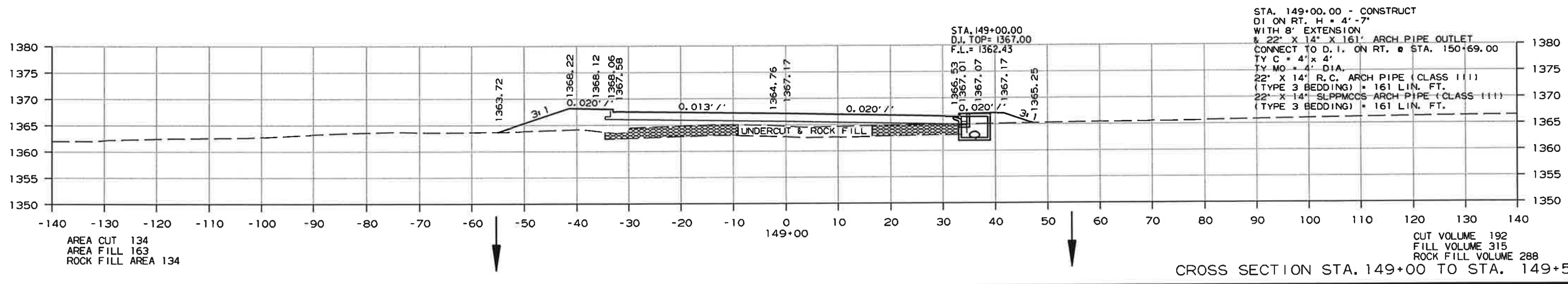
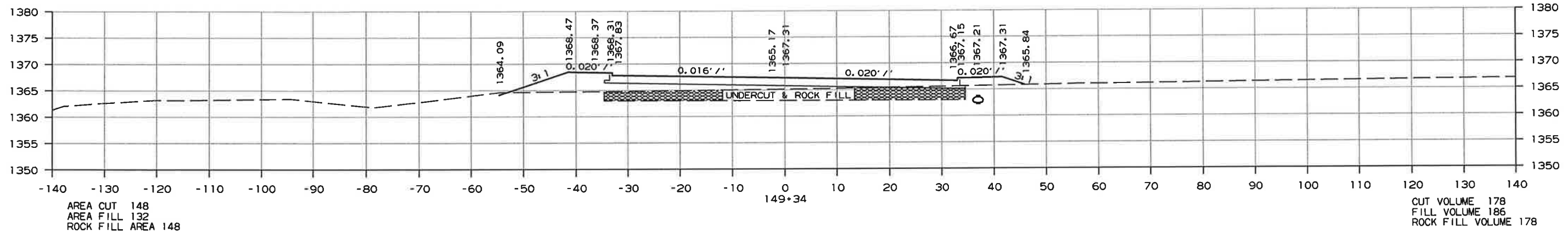
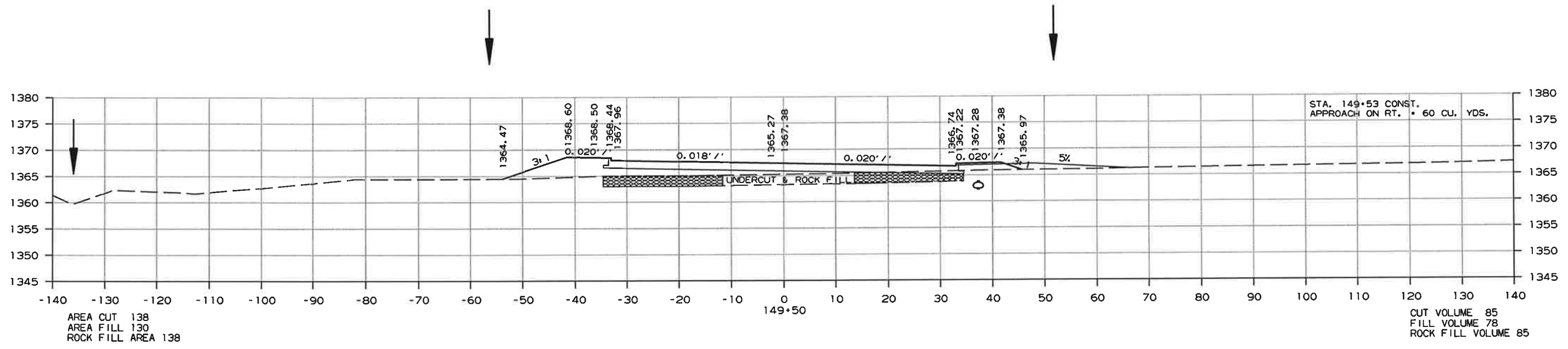
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	IBI	267

2 CROSS SECTIONS



DATE REVISED	DATE FILED	DATE REVISED	DATE FILED	FED. NO. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
JOB NO. 012007							182	267

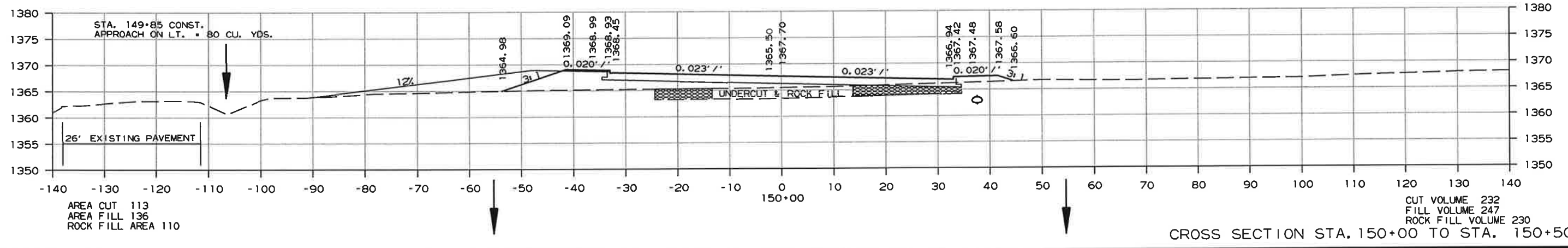
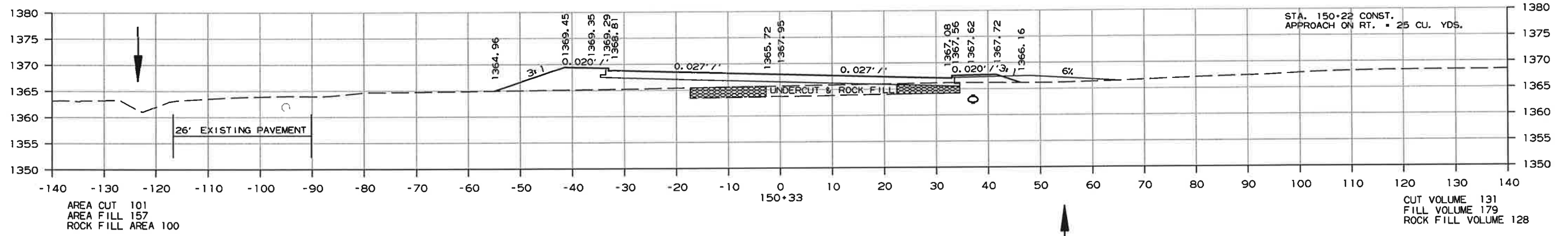
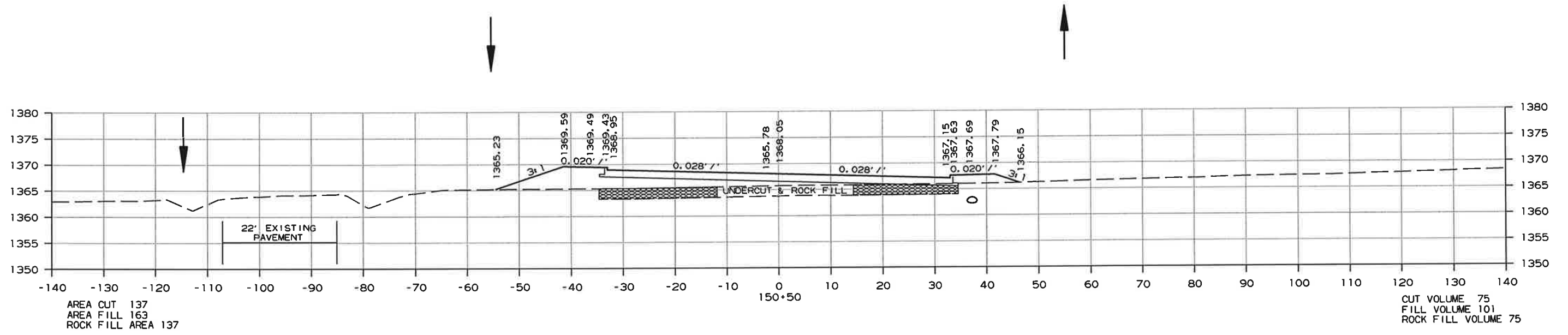
2 CROSS SECTIONS



9/12/2017
R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
JOB NO. 012007							183	267

2 CROSS SECTIONS

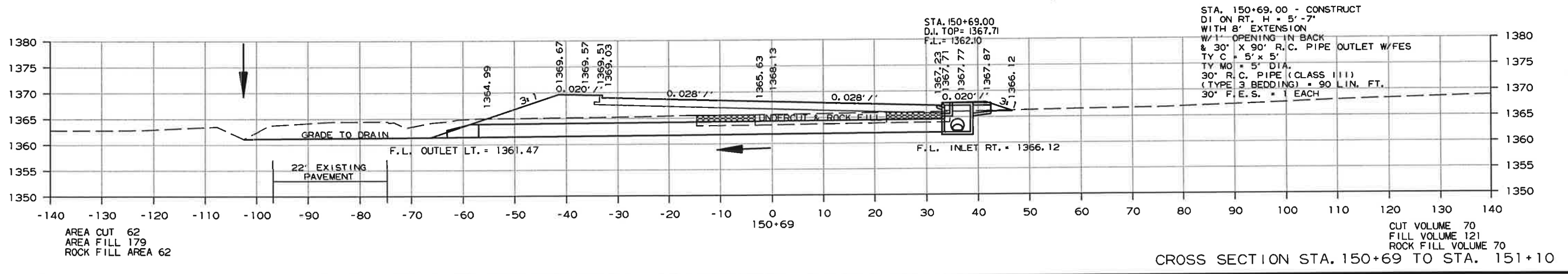
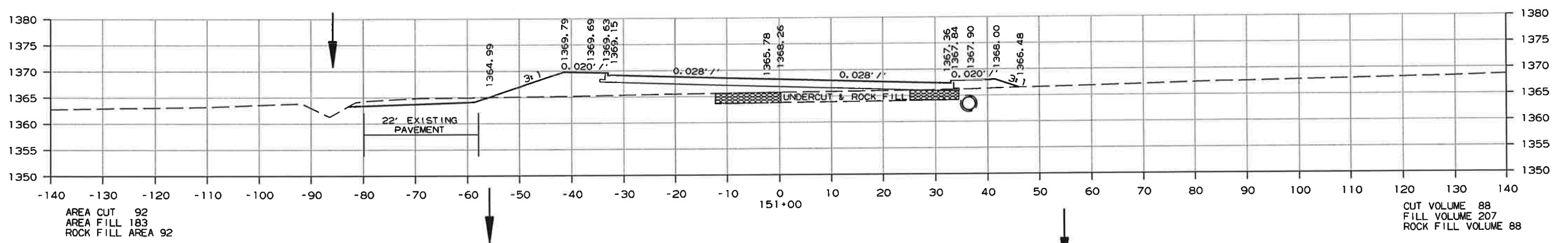
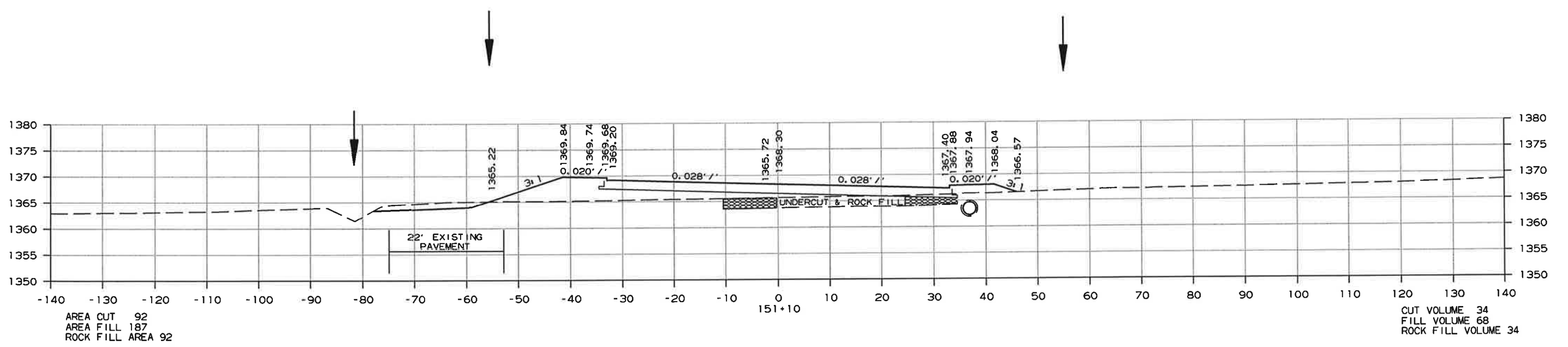


CROSS SECTION STA. 150+00 TO STA. 150+50

9/12/2017
R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
JOB NO. 012007							184	267

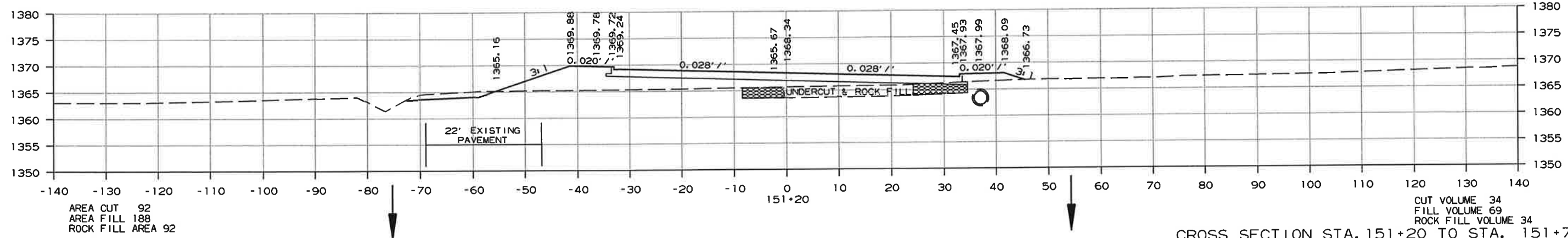
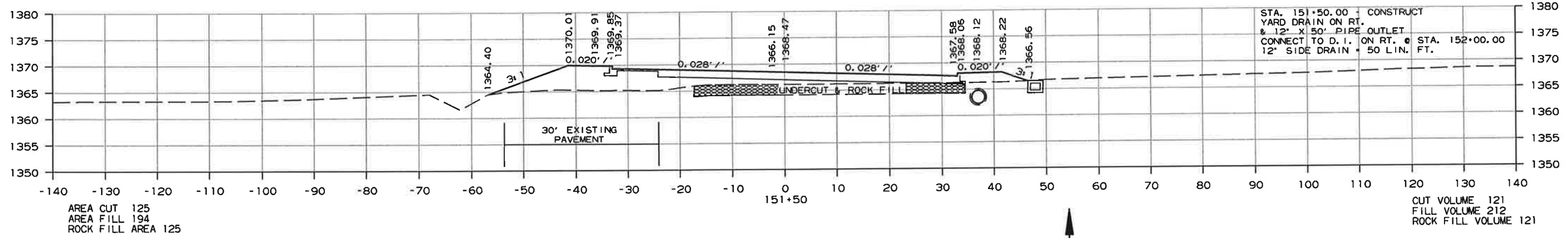
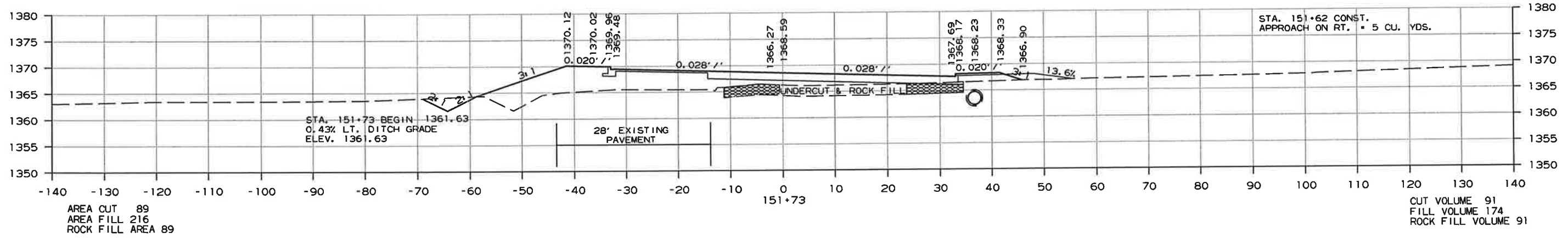
2 CROSS SECTIONS



9/12/2017 R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	185	267

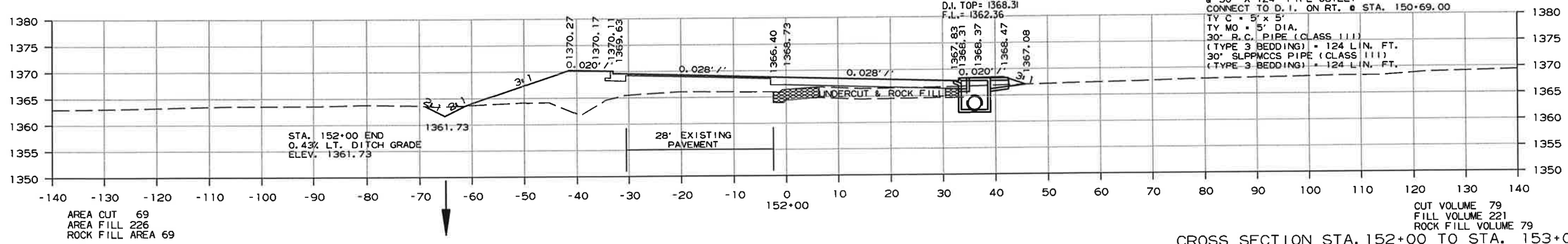
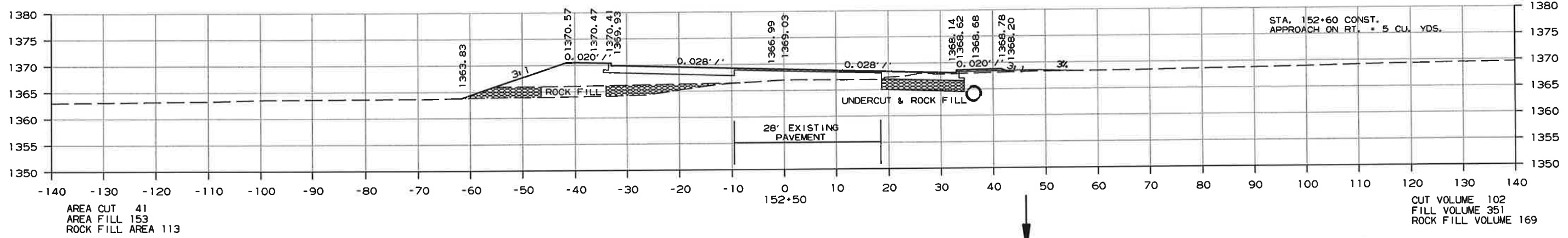
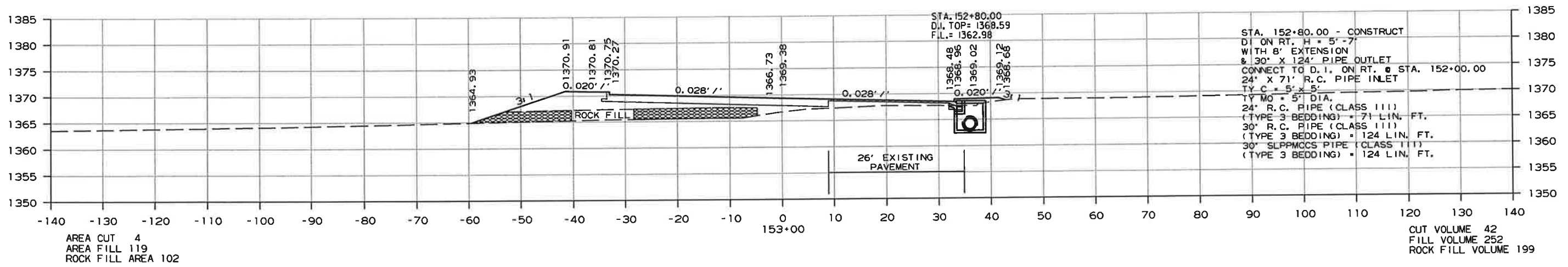
2 CROSS SECTIONS



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R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	186	267

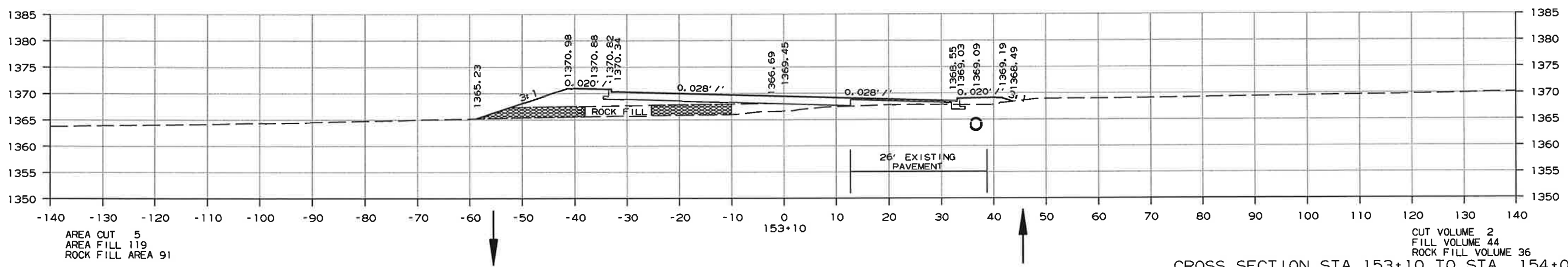
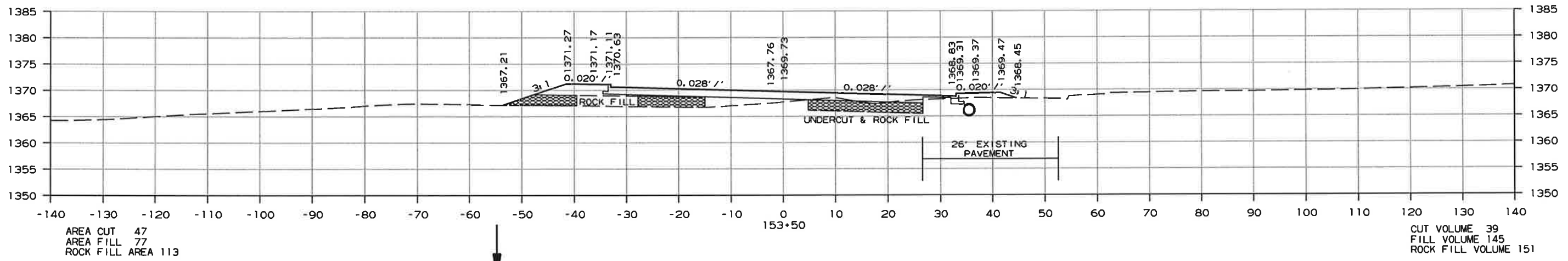
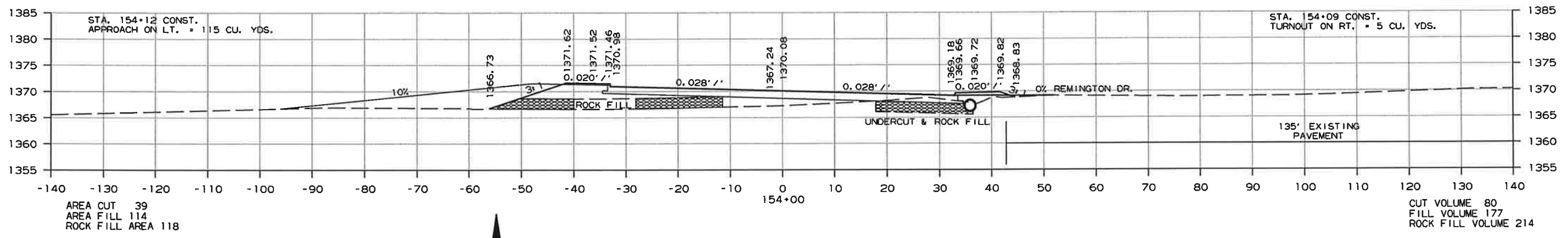
2 CROSS SECTIONS



9/12/2017
R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
JOB NO. 012007							187	267

2 CROSS SECTIONS

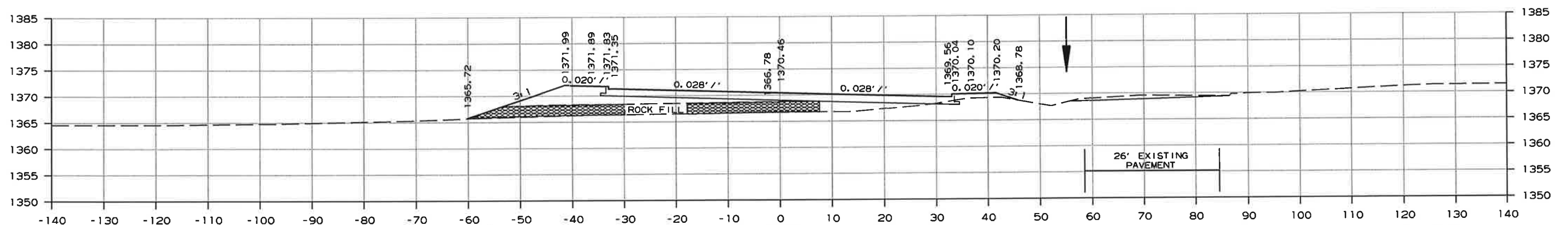


CROSS SECTION STA. 153+10 TO STA. 154+00

9/12/2017 R012007KGT.DGN

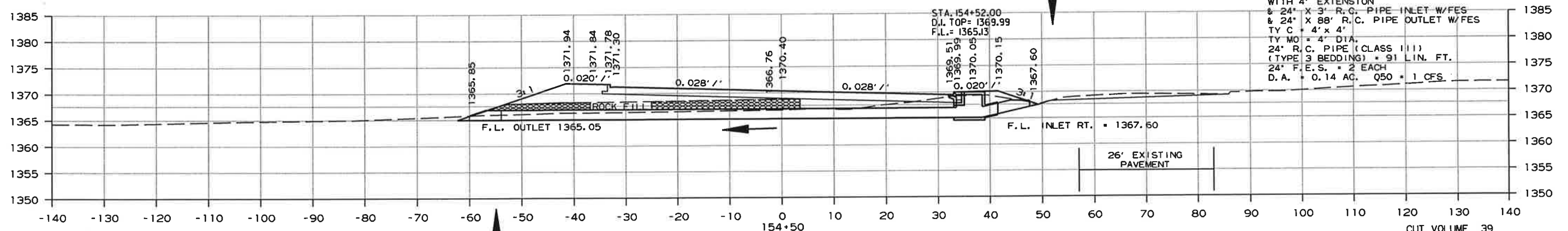
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
JOB NO. 012007							188	267

2 CROSS SECTIONS



AREA CUT 1
 AREA FILL 144
 ROCK FILL AREA 127

CUT VOLUME 1
 FILL VOLUME 76
 ROCK FILL VOLUME 52



STA. 154+52.00 - CONSTRUCT
 DI ON RT. H = 4'-2"
 WITH 4' EXTENSION
 & 24" X 3" R.C. PIPE INLET W/FES
 & 24" X 88" R.C. PIPE OUTLET W/FES
 TY C = 4' X 4'
 TY MO = 4" DIA.
 24" R.C. PIPE (CLASS III)
 (TYPE 3 BEDDING) * 91 LIN. FT.
 24" F.E.S. = 2 EACH
 D. A. = 0.14 AC. Q50 = 1 CFS

AREA CUT 3
 AREA FILL 172
 ROCK FILL AREA 87

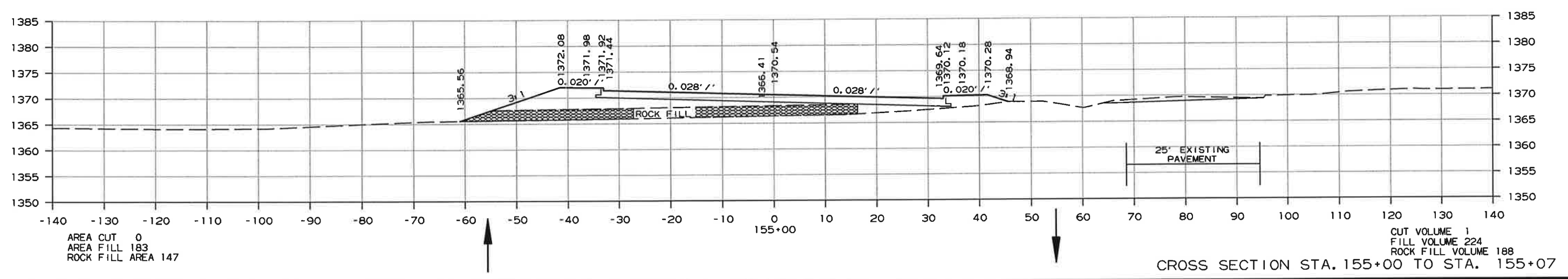
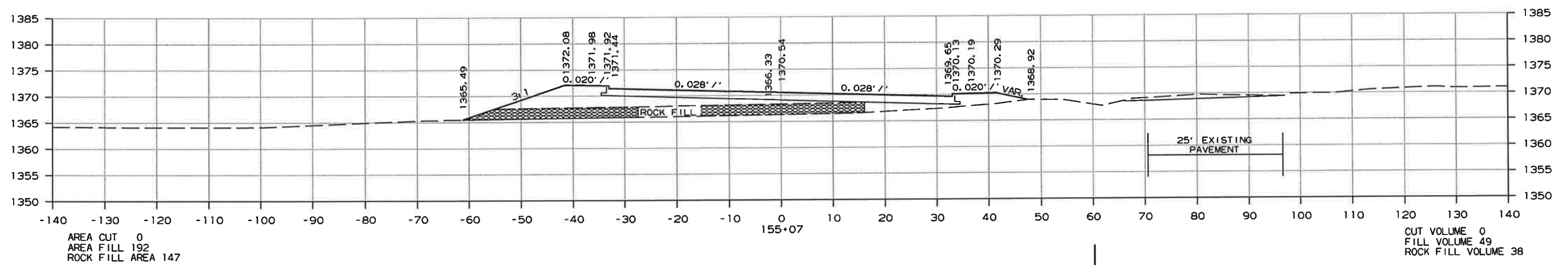
CUT VOLUME 39
 FILL VOLUME 265
 ROCK FILL VOLUME 190

CROSS SECTION STA. 154+50 TO STA. 154+63

9/12/2017 R012007KCT.DGN

DATE REVISED	DATE FILED	DATE REVISED	DATE FILED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
JOB NO. 012007							189	267

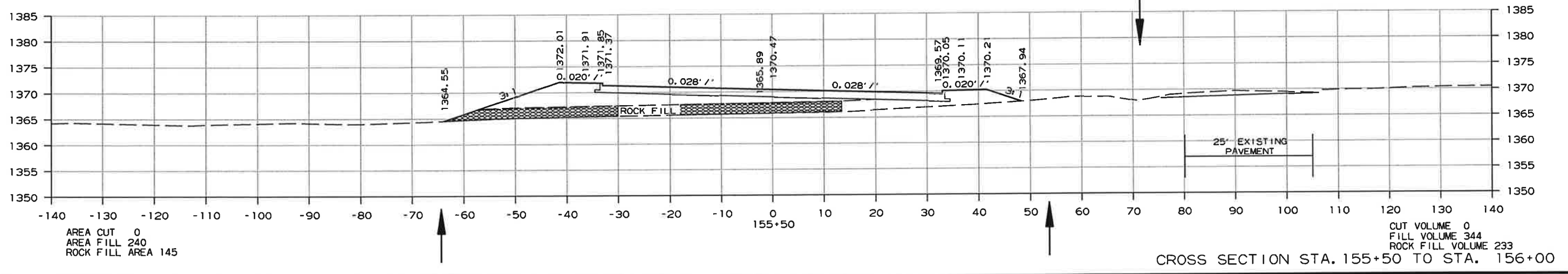
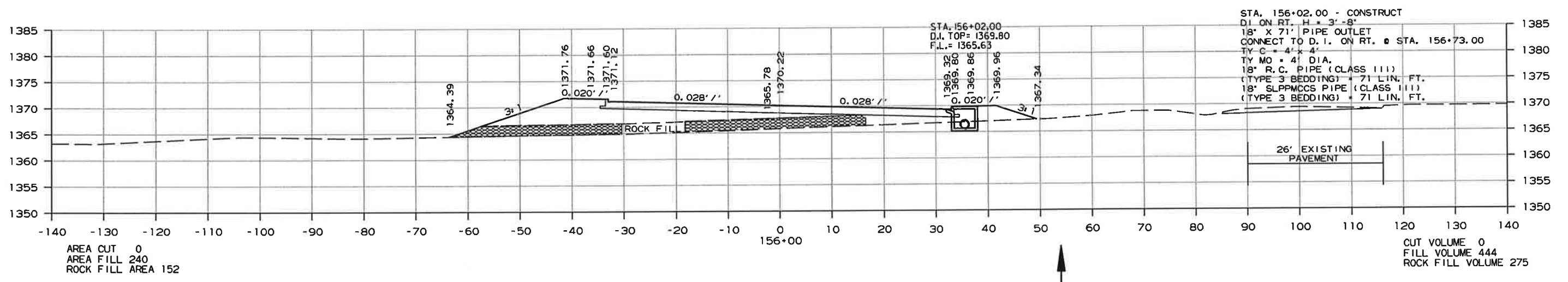
2 CROSS SECTIONS



9/12/2017
 R012007KCT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	190	267

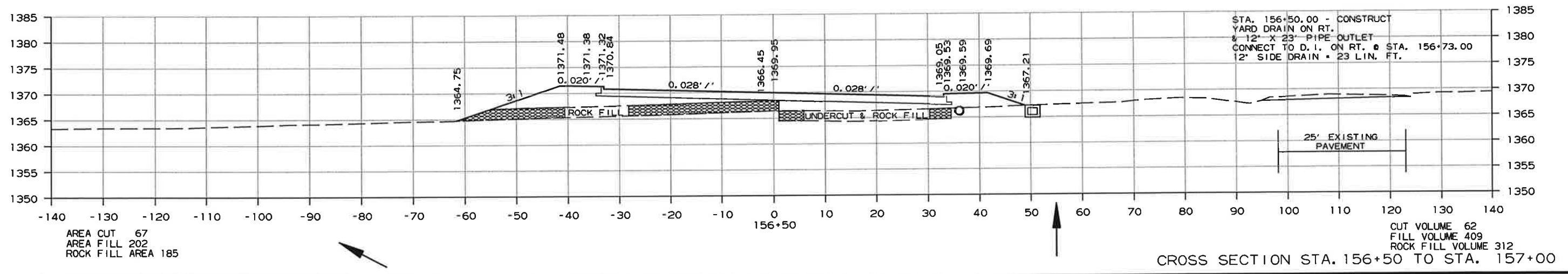
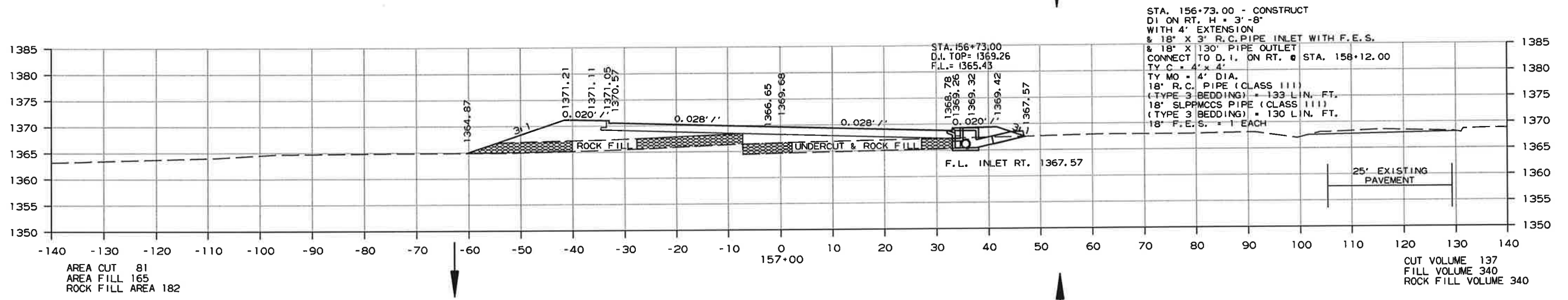
2 CROSS SECTIONS



9/12/2017
 R012007KCT.DGN

DATE REVISED	DATE FILED	DATE REVISED	DATE FILED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS	
11-7-17				6	ARK.				
							JOB NO. 012007	191	267

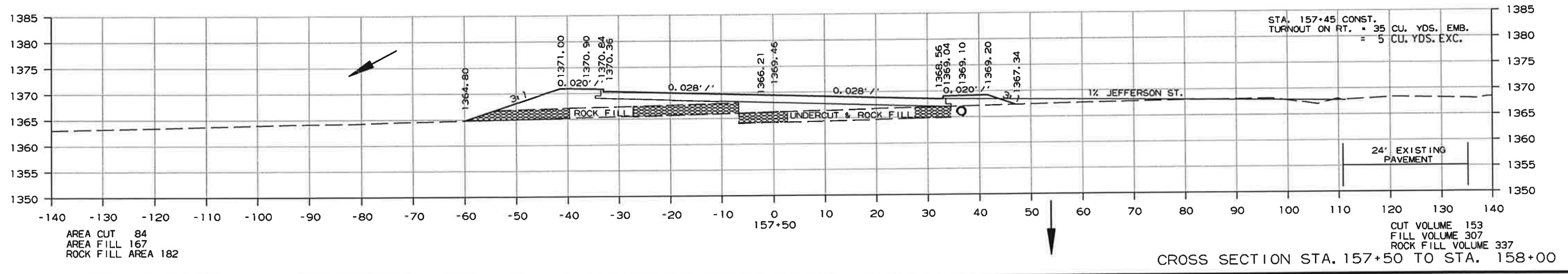
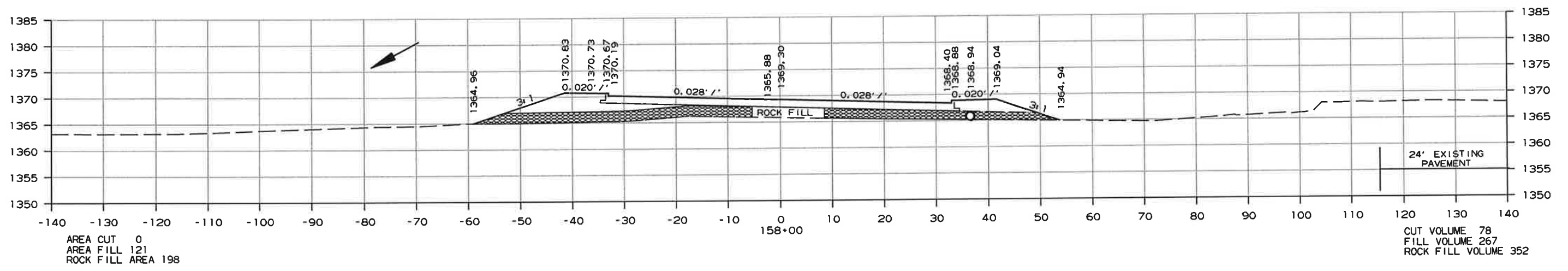
2 CROSS SECTIONS



9/12/2017
 R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	192	267

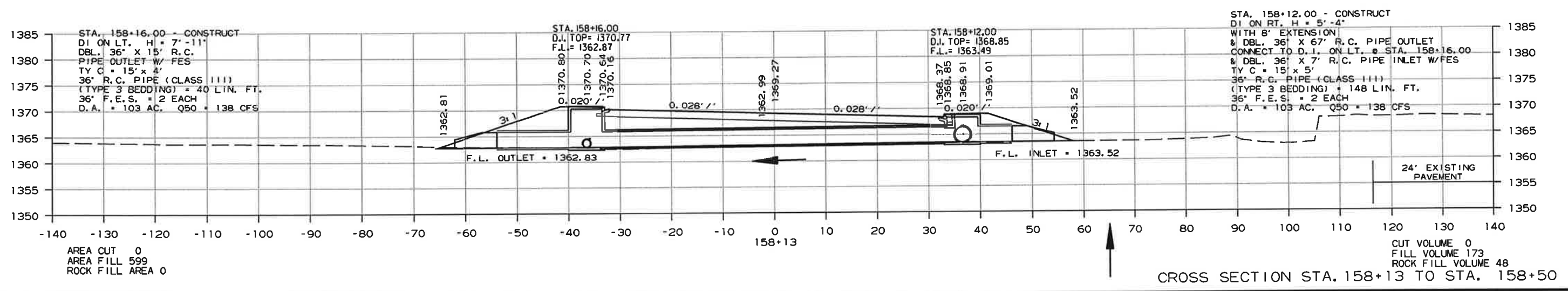
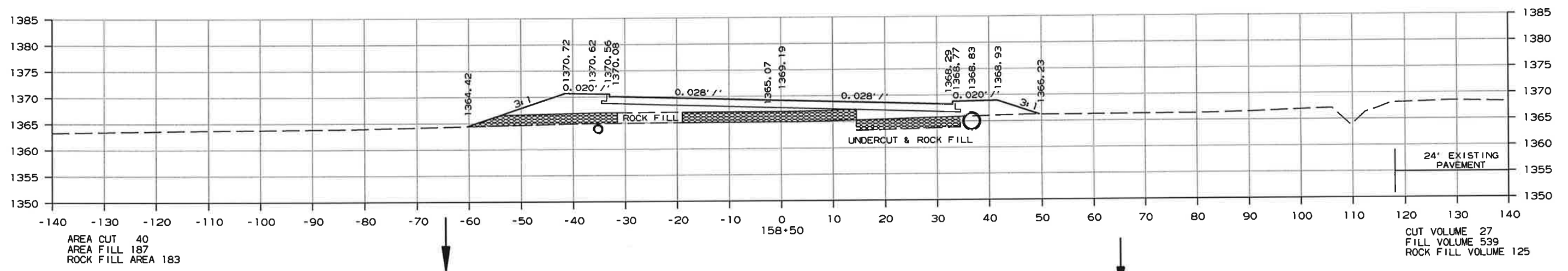
2 CROSS SECTIONS



9/12/2017
R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. NO. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
JOB NO. 012007							193	267

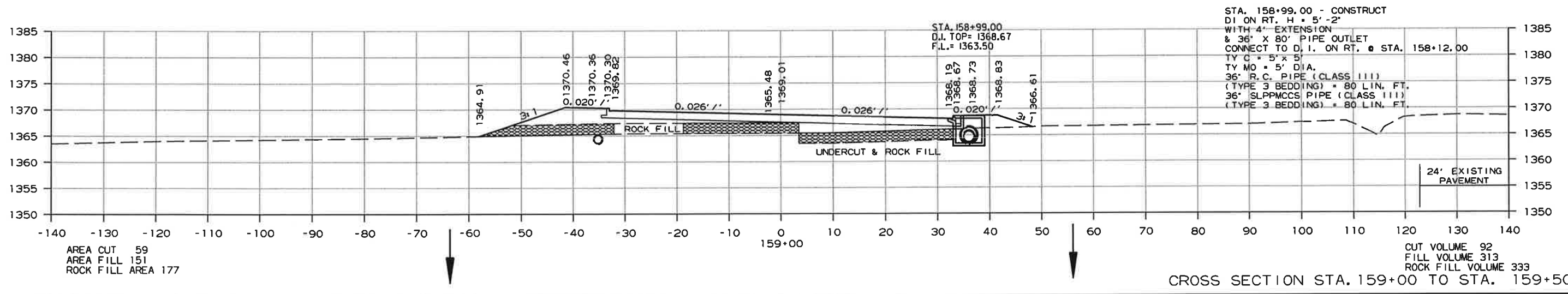
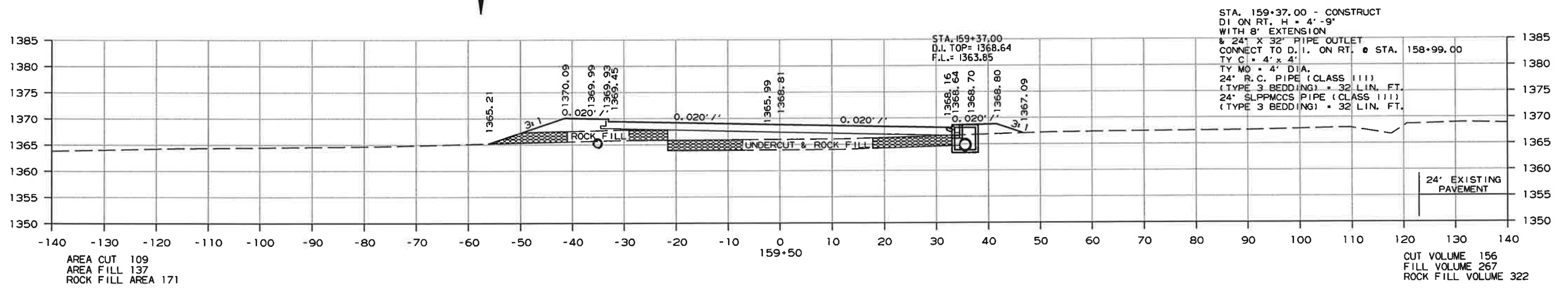
2 CROSS SECTIONS



9/12/2017
R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
JOB NO. 012007							194	267

2 CROSS SECTIONS

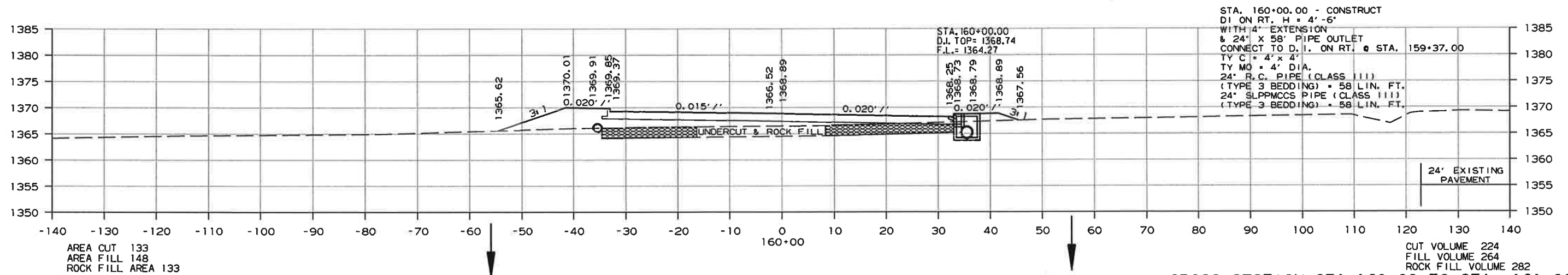
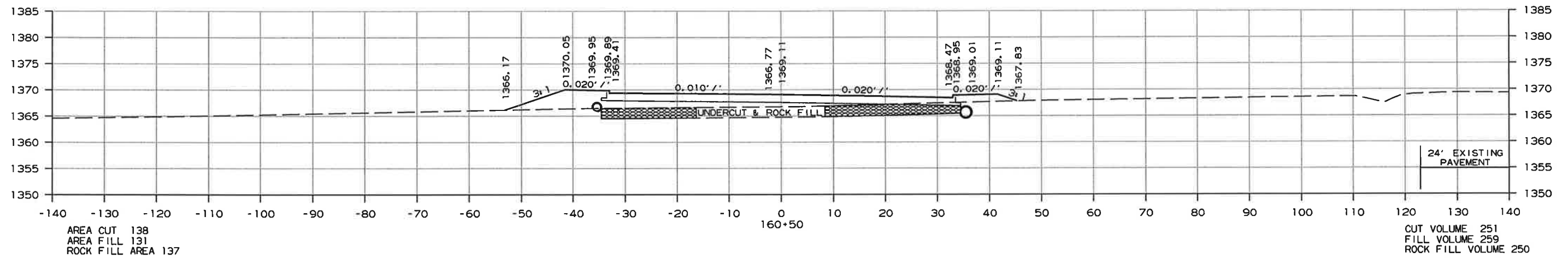
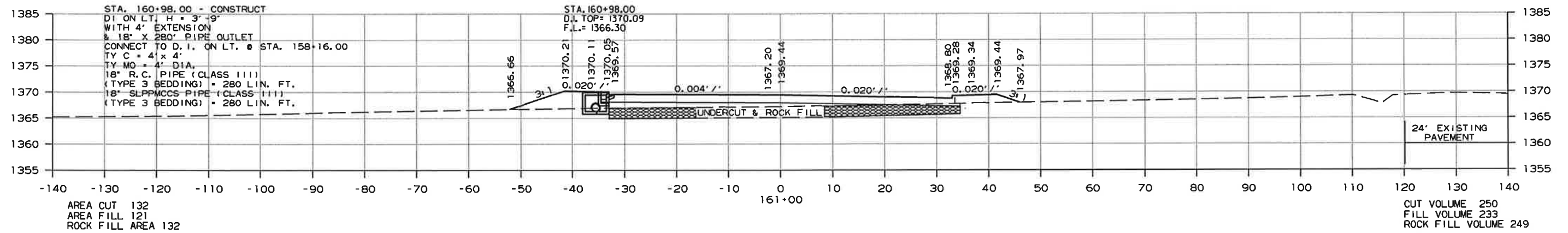


CROSS SECTION STA. 159+00 TO STA. 159+50

9/12/2017
 R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
				JOB NO.	012007		195	267

② CROSS SECTIONS



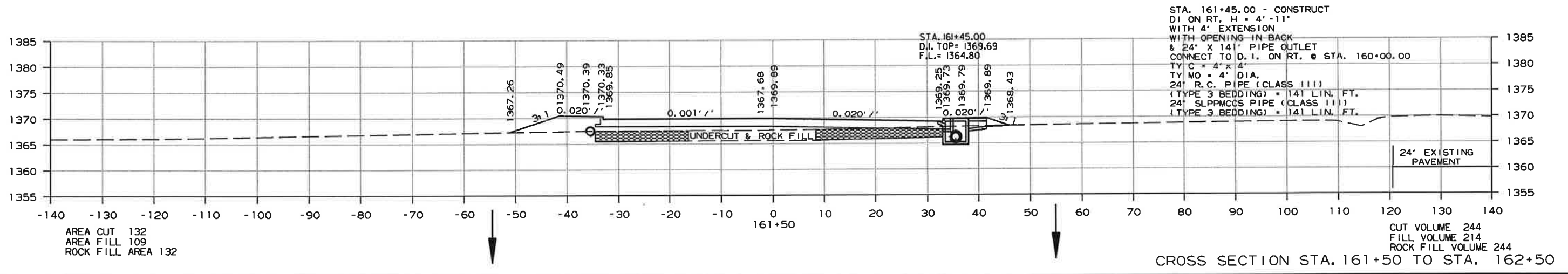
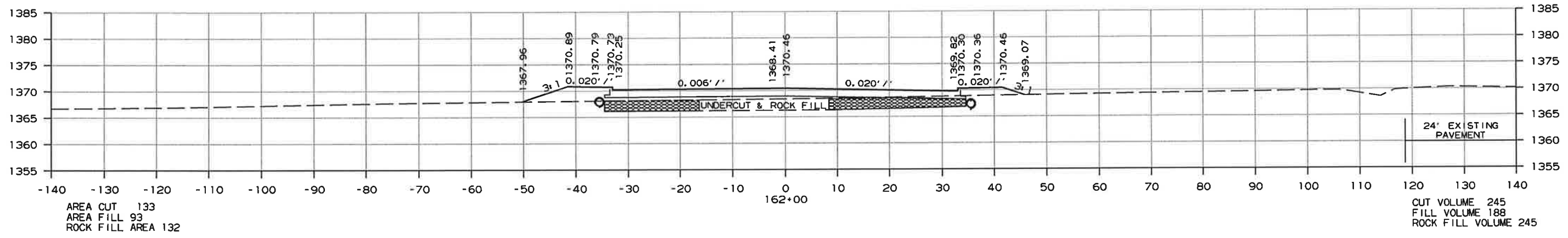
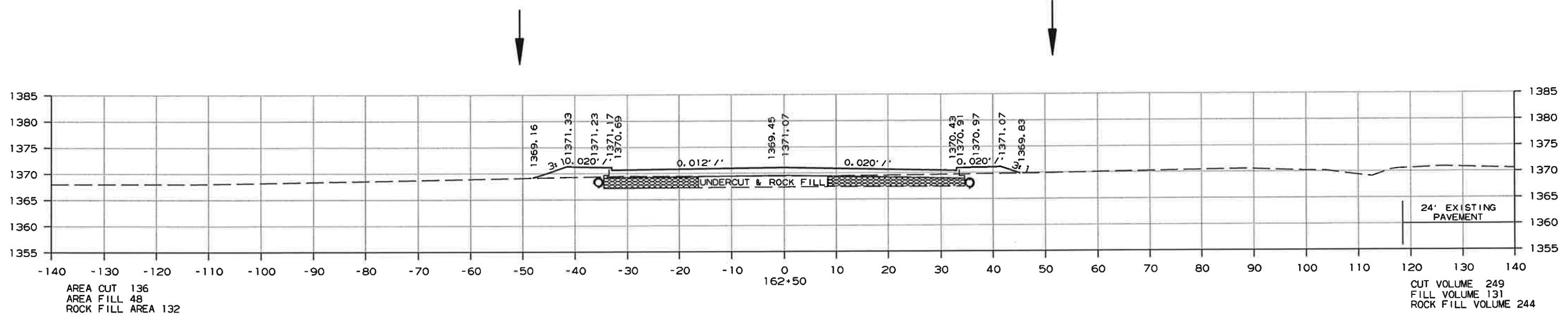
CROSS SECTION STA. 160+00 TO STA. 161+00

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	196	267

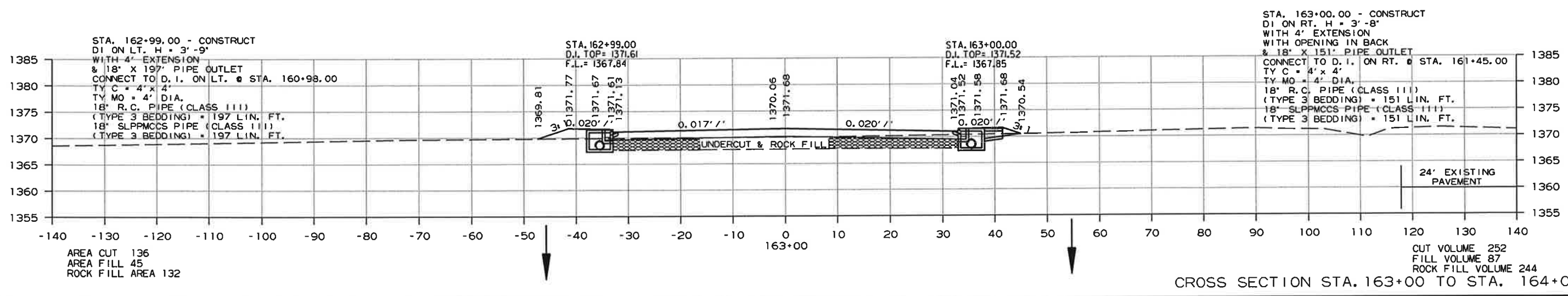
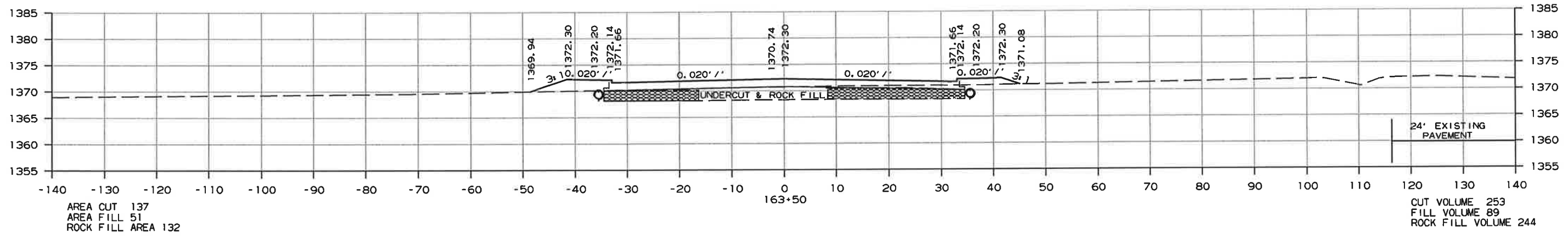
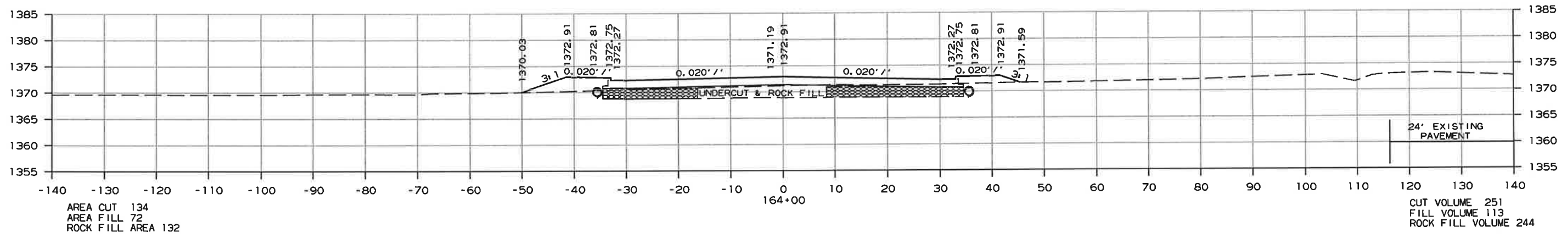
2 CROSS SECTIONS



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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
11-7-17				6	ARK.			
						JOB NO. 012007	197	267

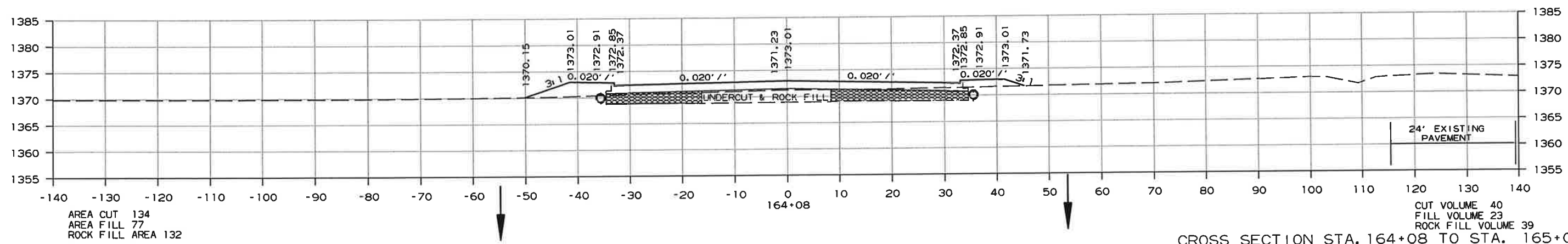
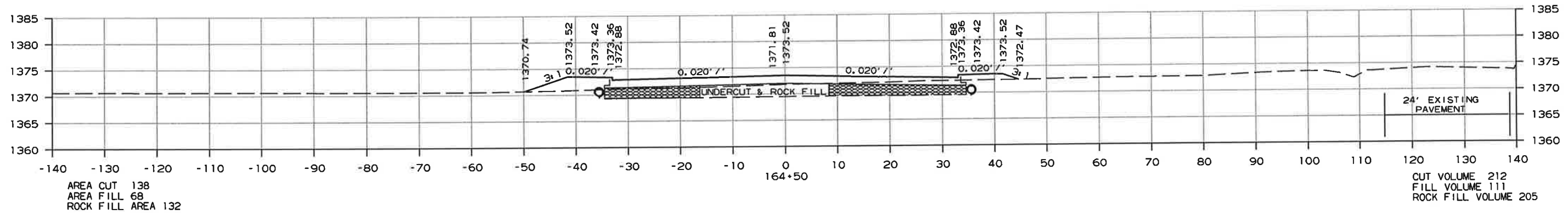
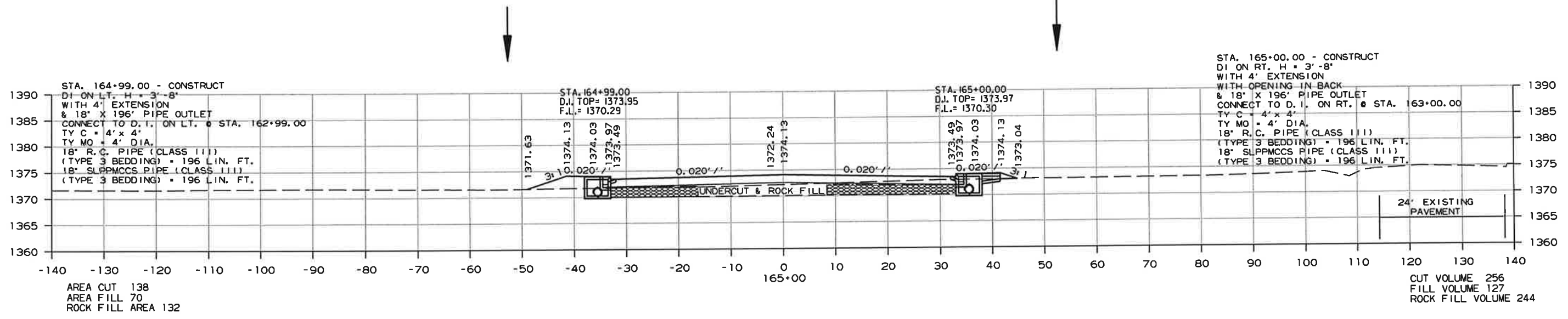
2 CROSS SECTIONS



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R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. PROJ. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	198	267

2 CROSS SECTIONS

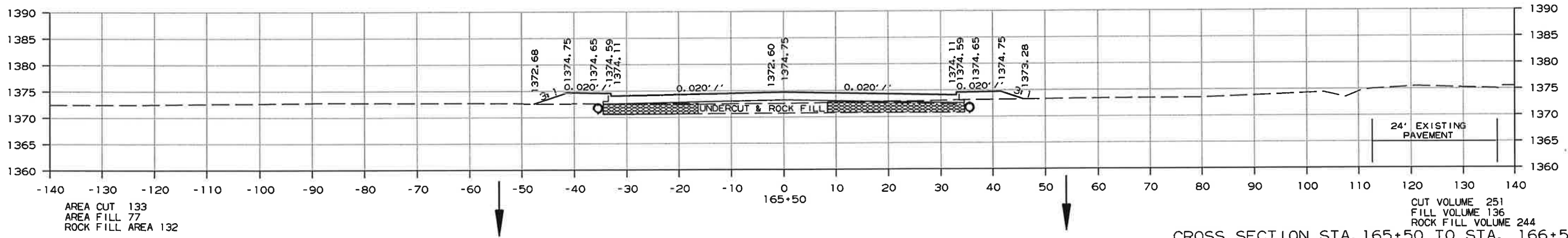
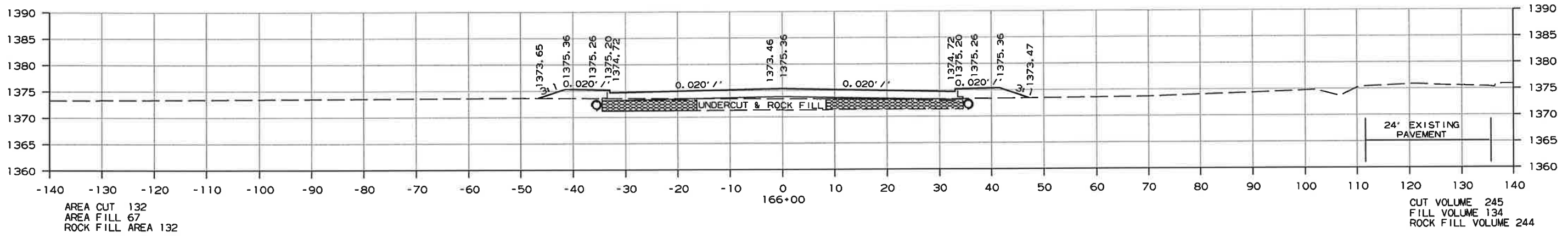
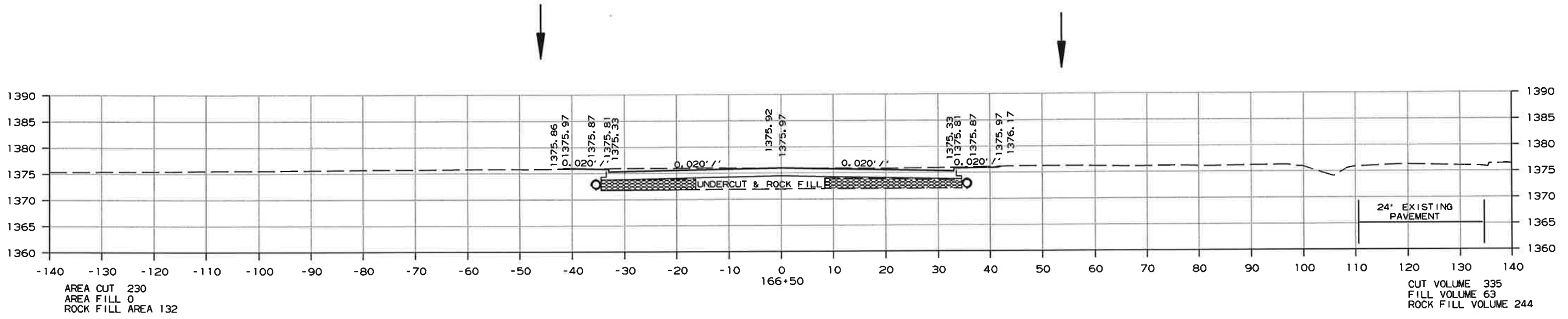


CROSS SECTION STA. 164+08 TO STA. 165+00

9/12/2017 RO12007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	199	267

2 CROSS SECTIONS

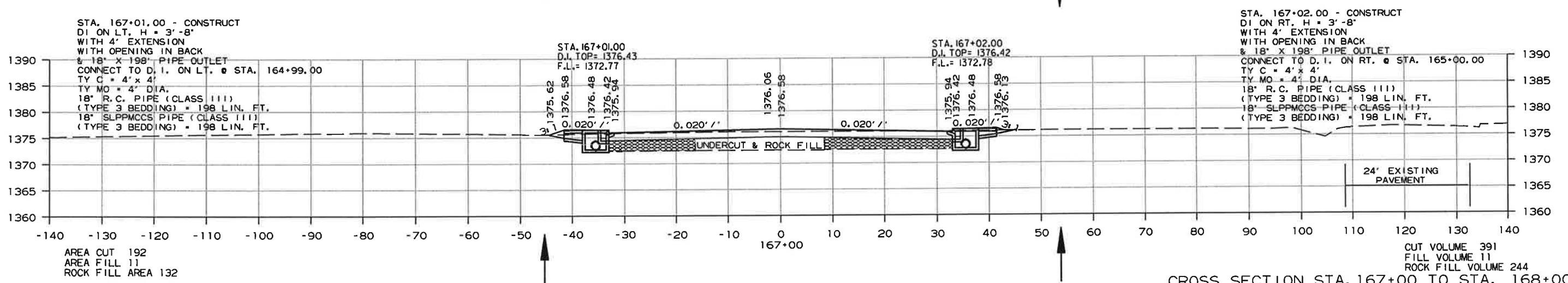
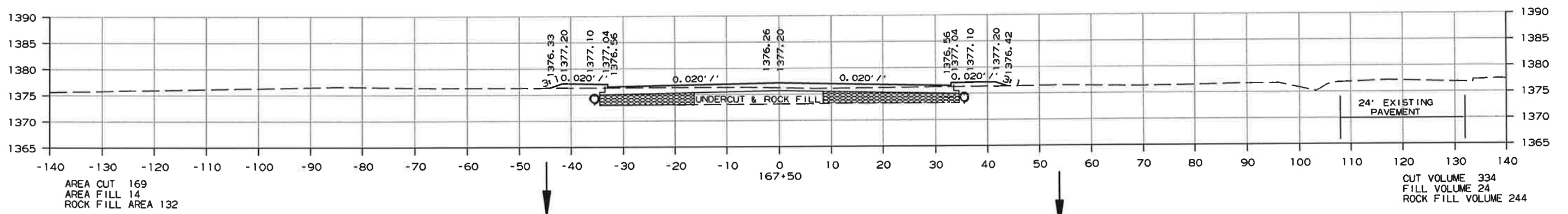
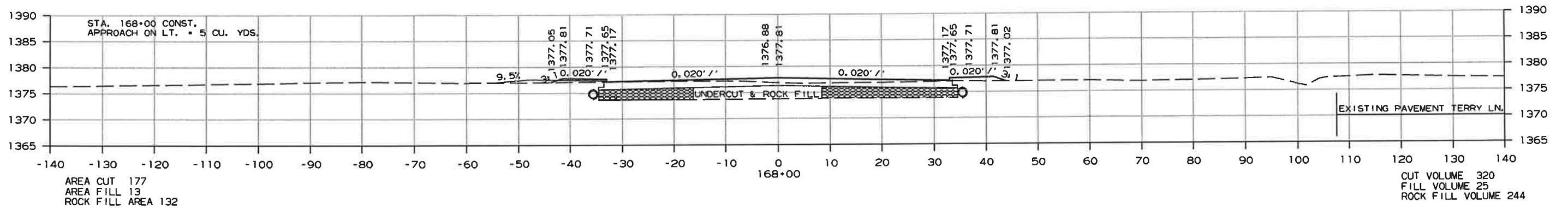


CROSS SECTION STA. 165+50 TO STA. 166+50

9/12/2017
R012007KCT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. PROJ. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	200	267

2 CROSS SECTIONS

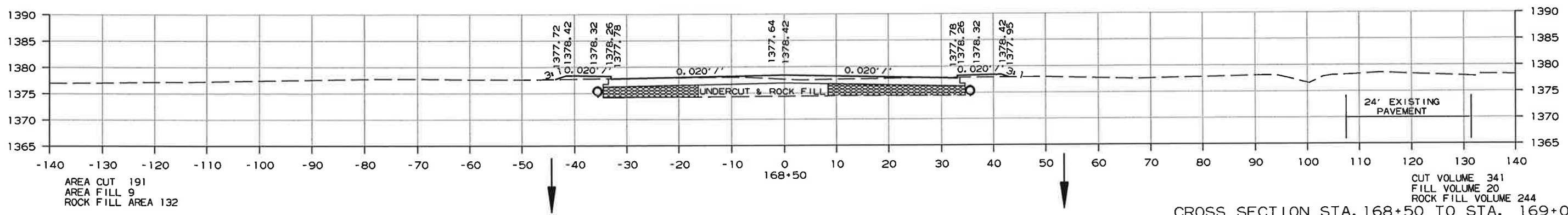
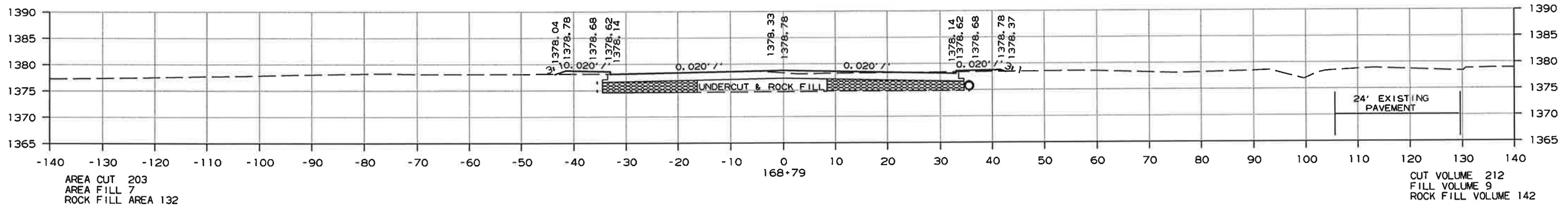
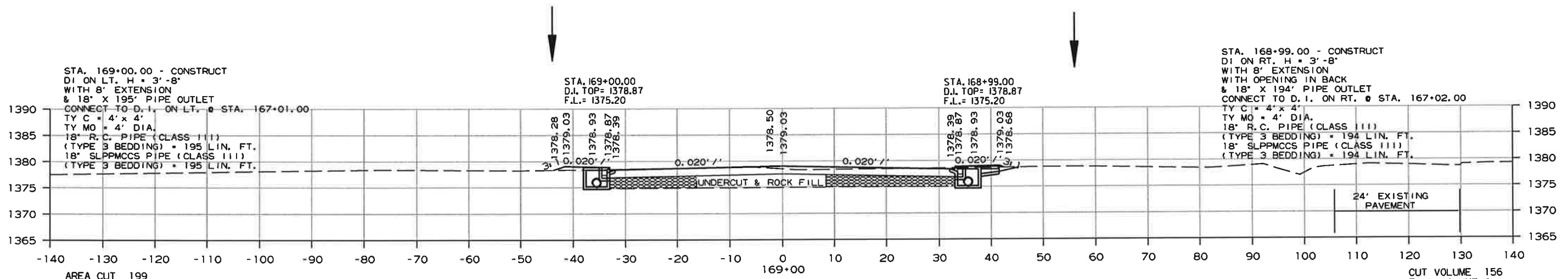


CROSS SECTION STA. 167+00 TO STA. 168+00

9/12/2017 R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
JOB NO. 012007							201	267

2 CROSS SECTIONS

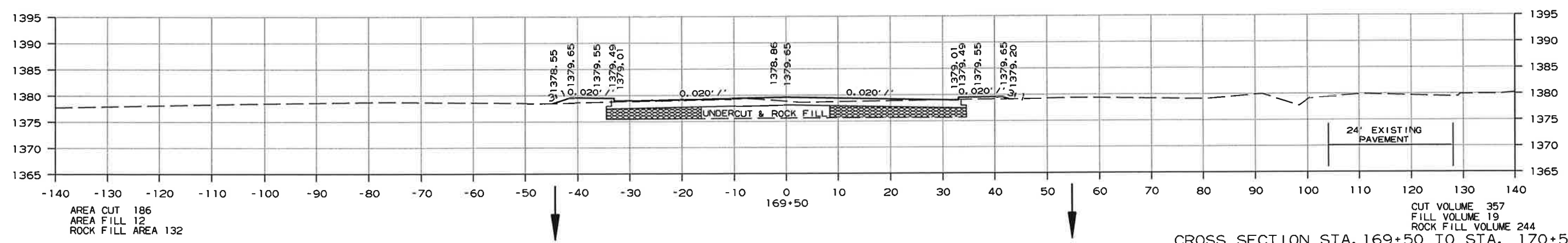
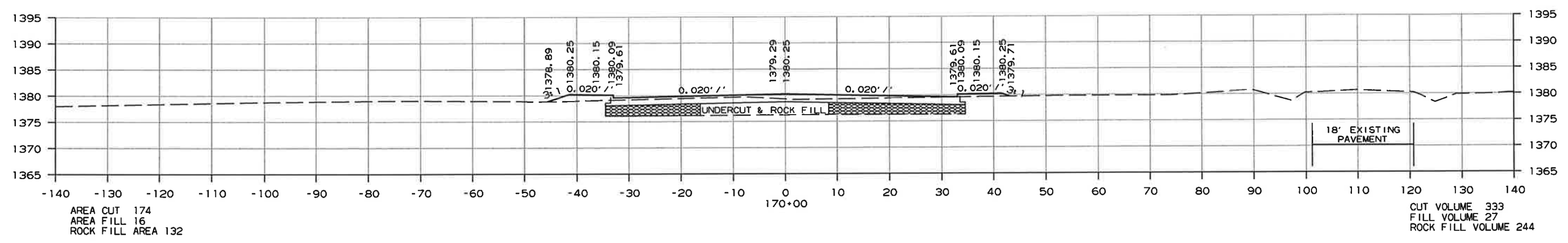
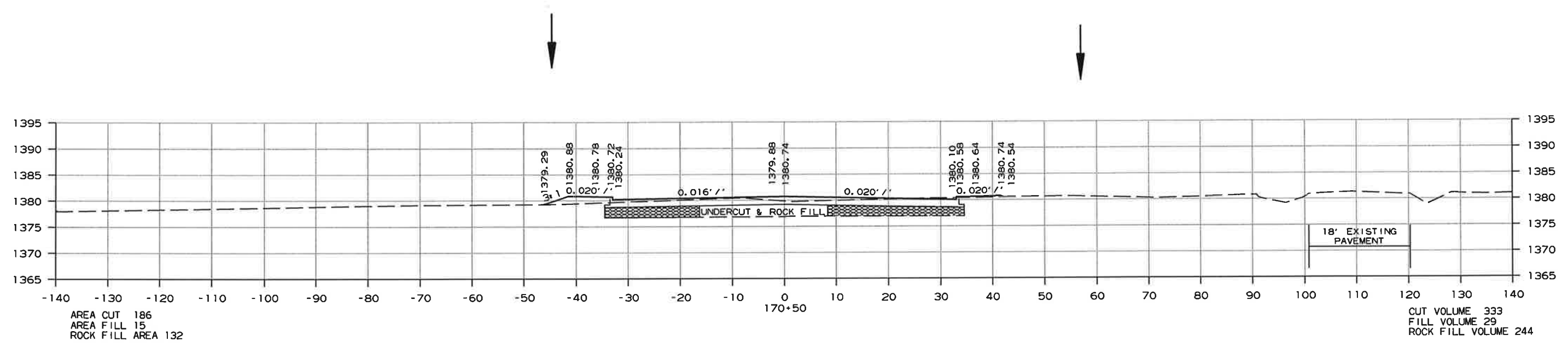


CROSS SECTION STA. 168+50 TO STA. 169+00

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 R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
JOB NO. 012007							202	267

2 CROSS SECTIONS

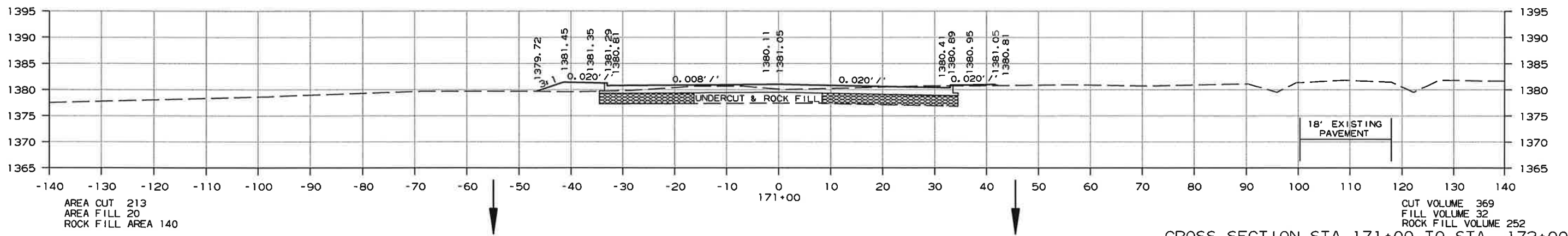
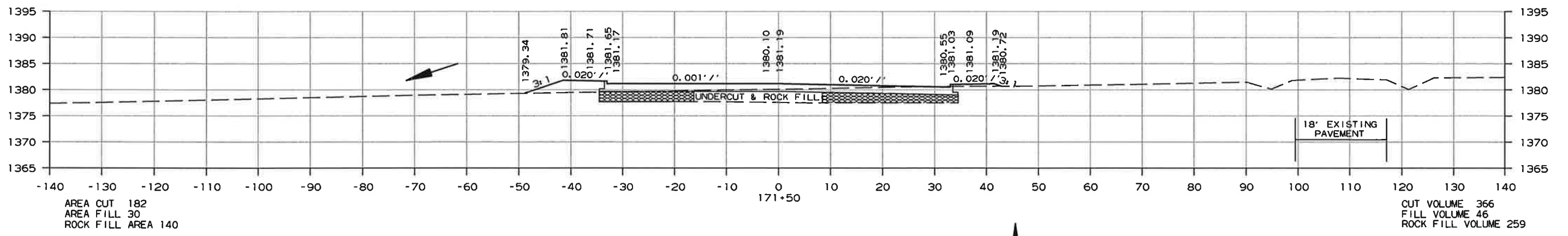
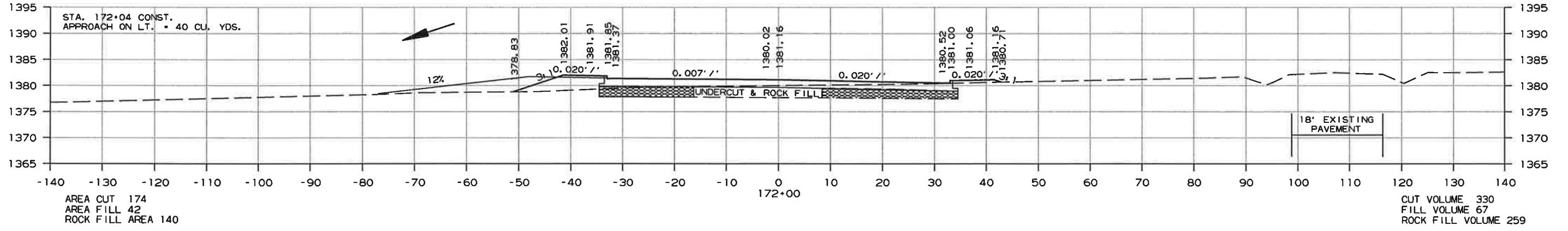


CROSS SECTION STA. 169+50 TO STA. 170+50

9/12/2017 R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	203	267

2 CROSS SECTIONS

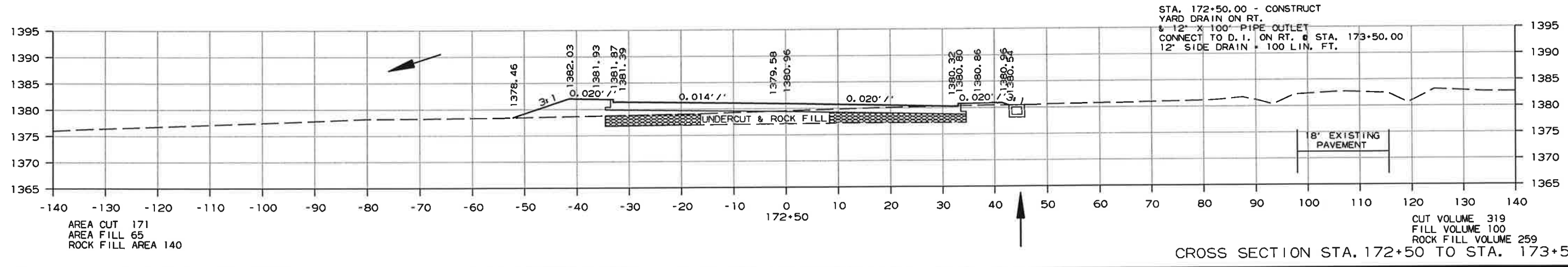
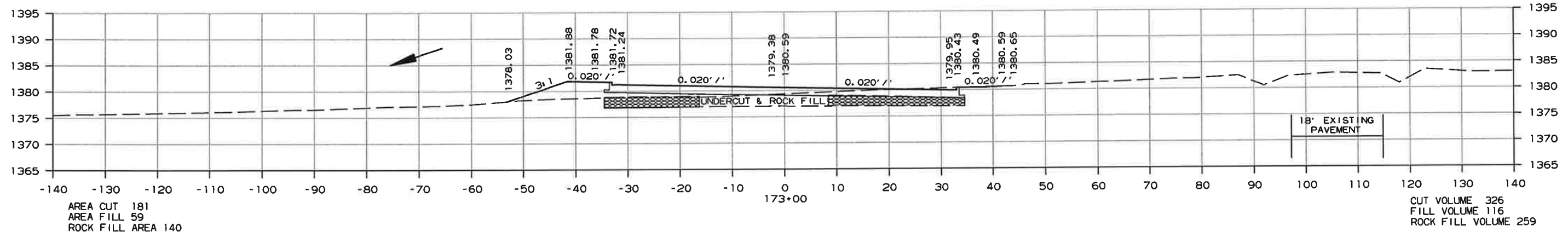
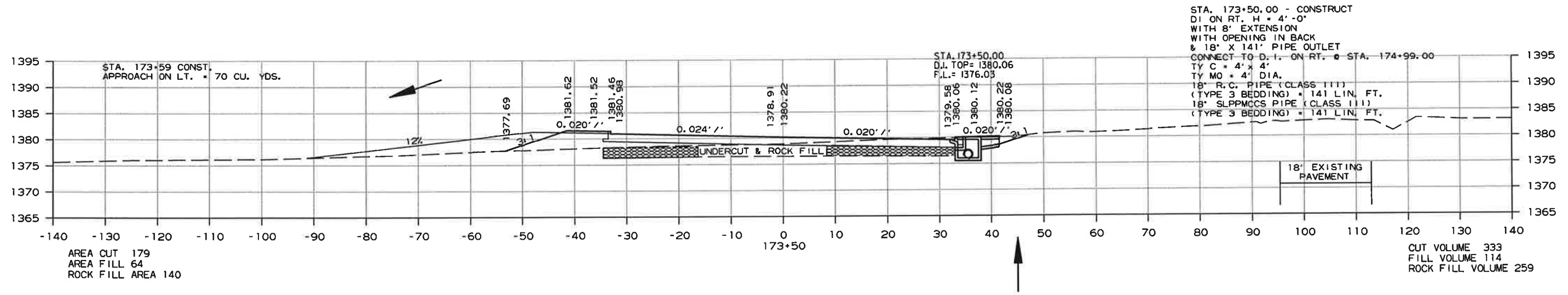


CROSS SECTION STA. 171+00 TO STA. 172+00

9/12/2017
R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	204	267

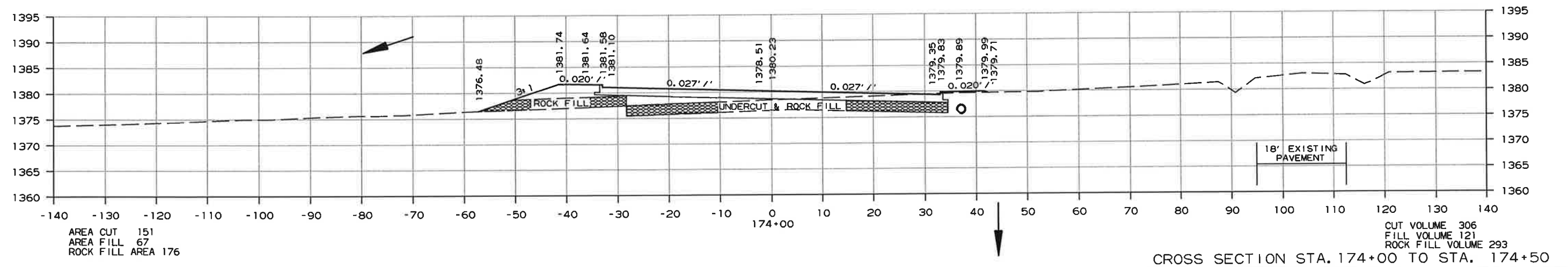
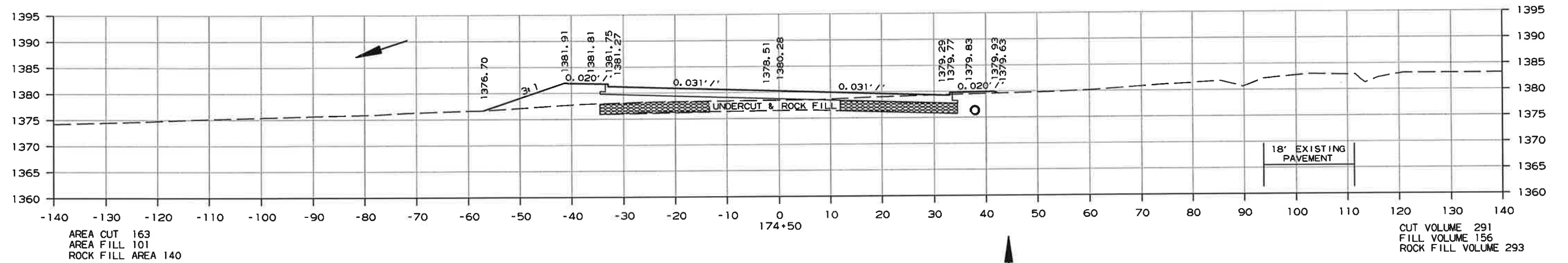
2 CROSS SECTIONS



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DATE REVISED	DATE FILED	DATE REVISED	DATE FILED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	205	267

2 CROSS SECTIONS



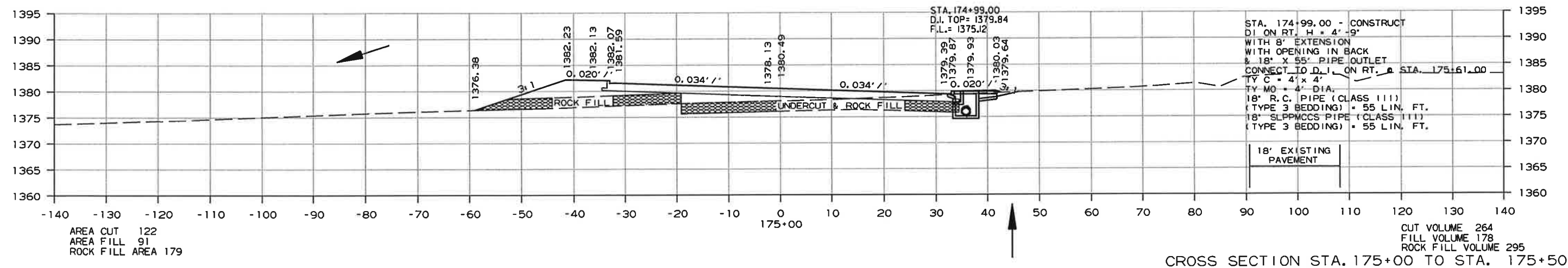
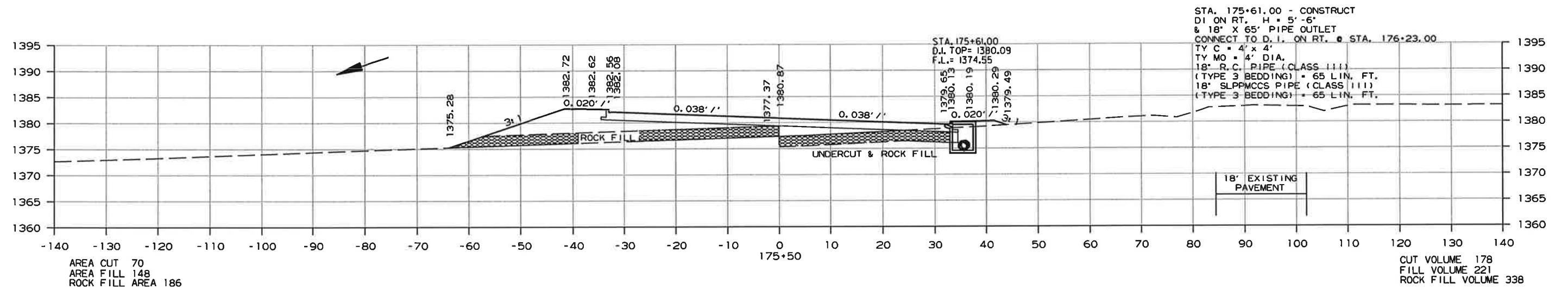
CROSS SECTION STA. 174+00 TO STA. 174+50

9/12/2017

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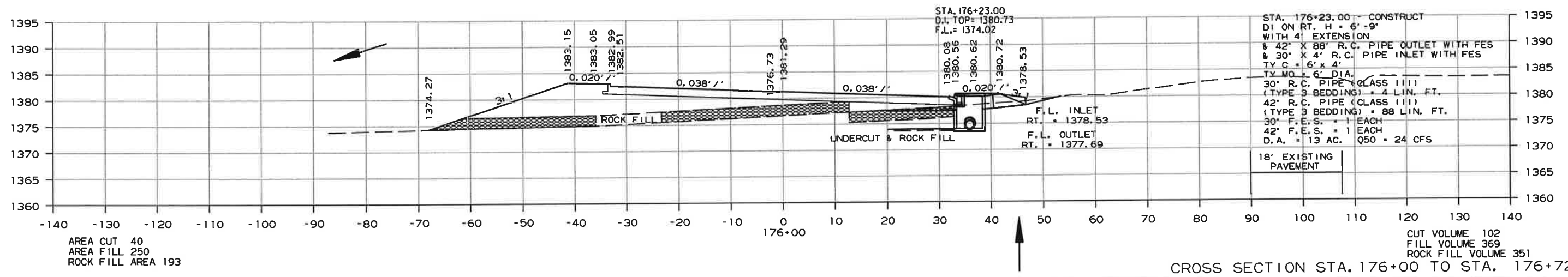
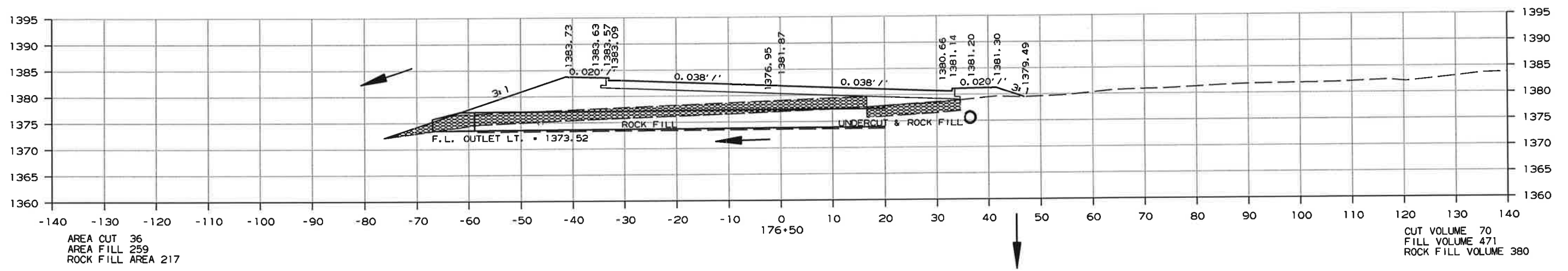
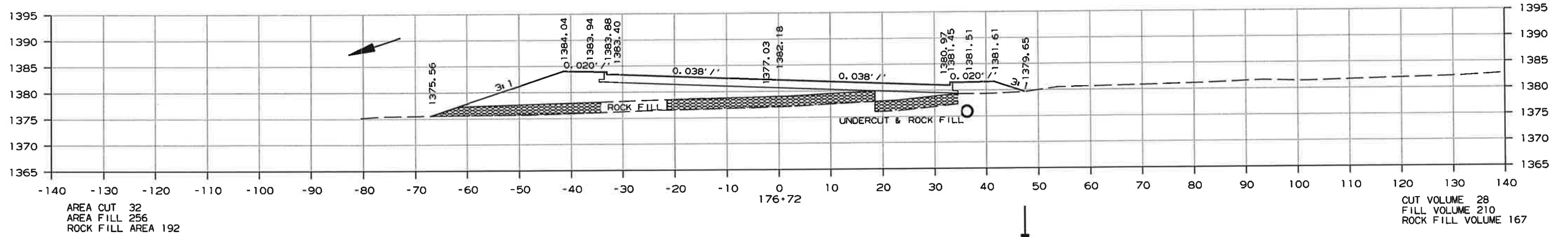
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	206	267

2 CROSS SECTIONS



DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
JOB NO. 012007							207	267

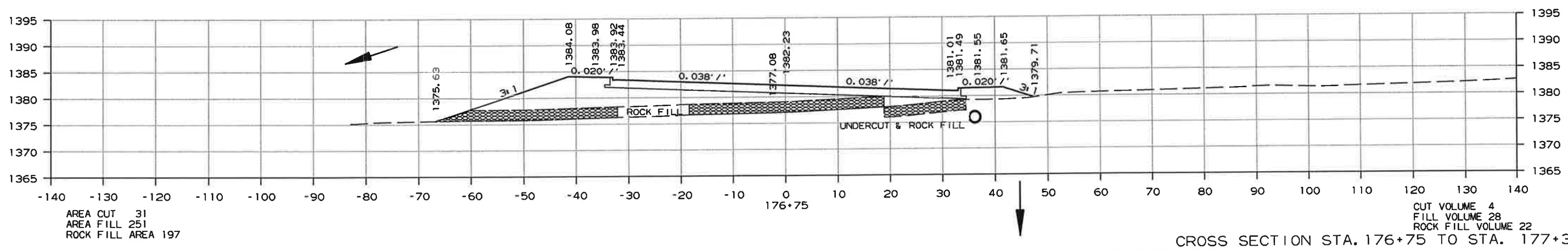
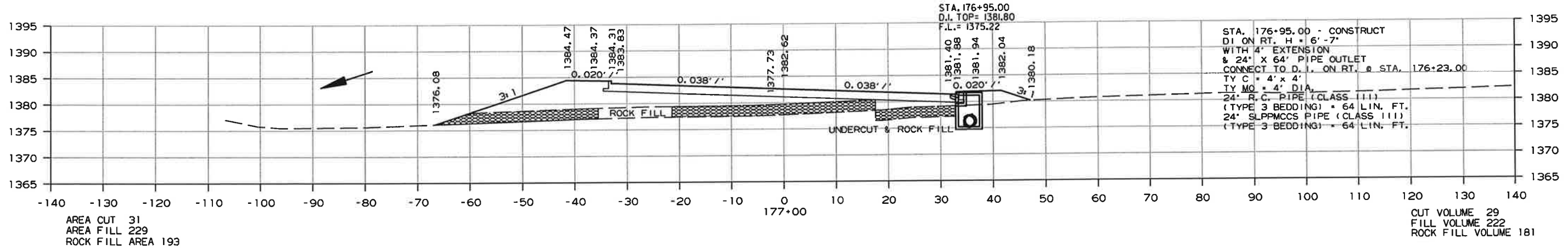
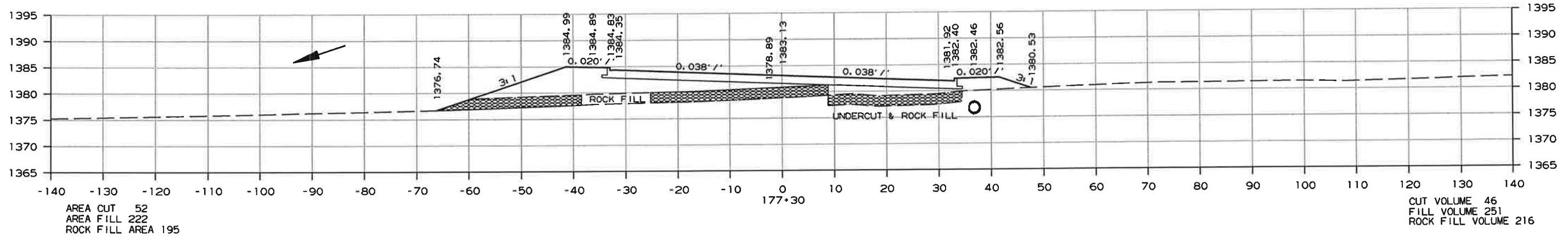
2 CROSS SECTIONS



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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
11-7-17				6	ARK.			
						JOB NO. 012007	208	267

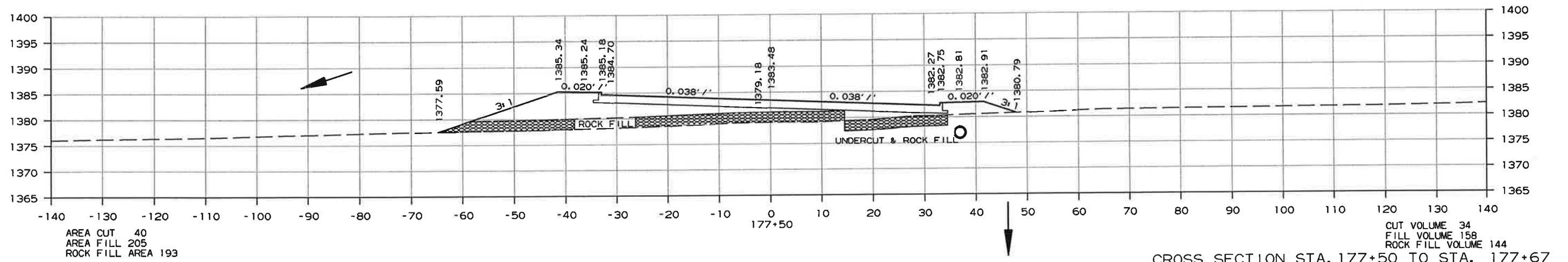
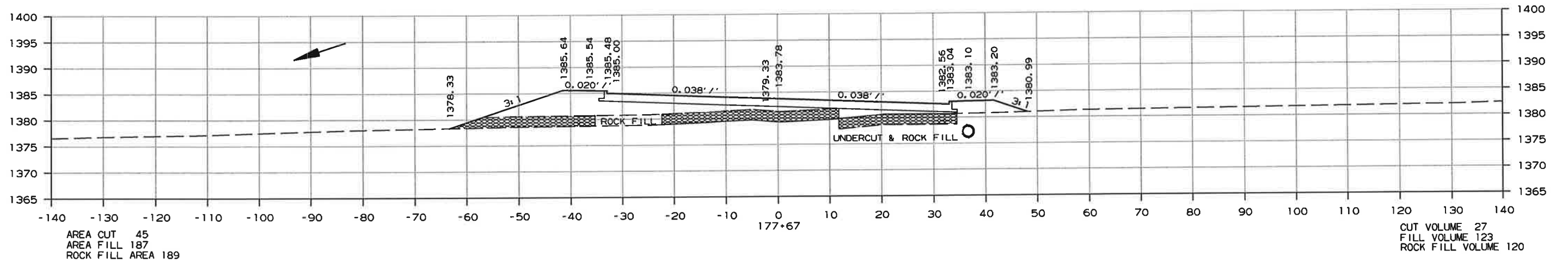
2 CROSS SECTIONS



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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	209	267

2 CROSS SECTIONS



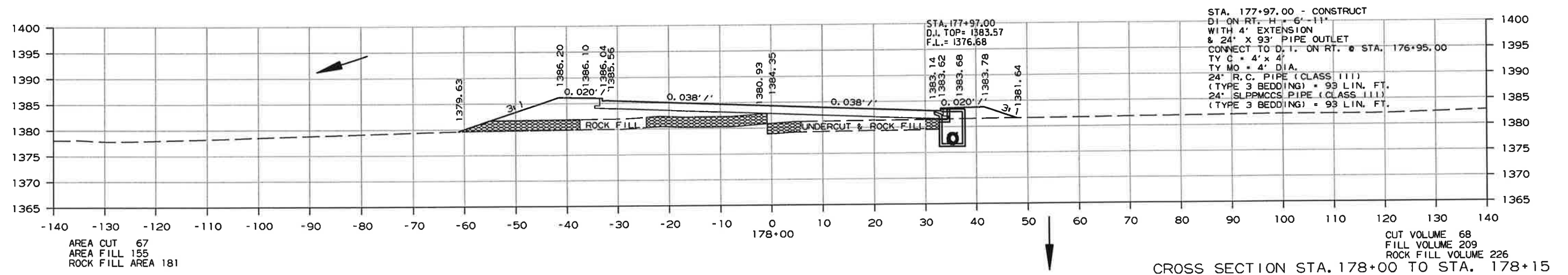
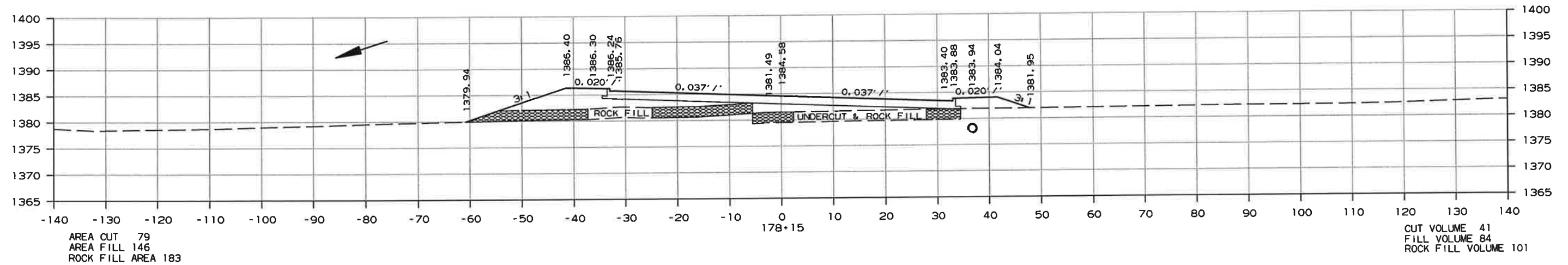
CROSS SECTION STA. 177+50 TO STA. 177+67

9/12/2017

R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	210	267

2 CROSS SECTIONS

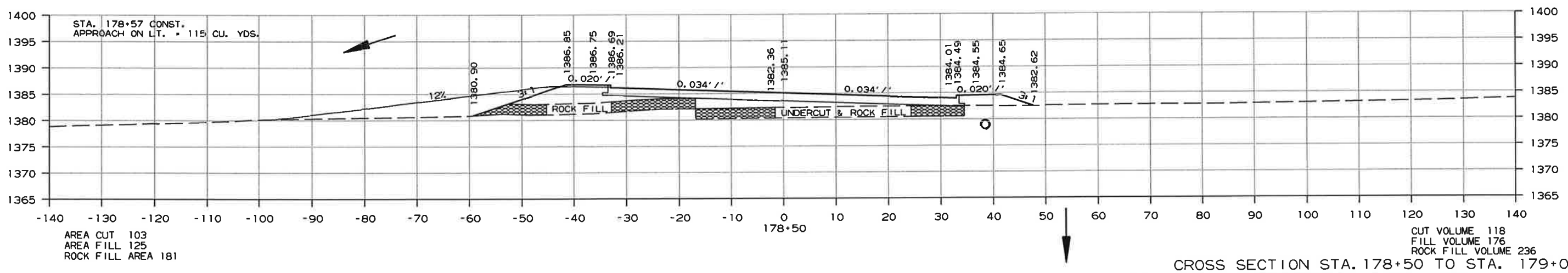
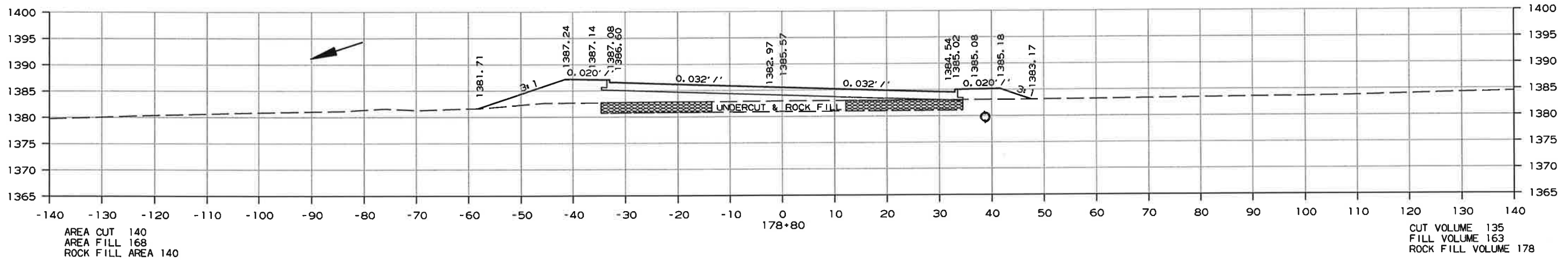
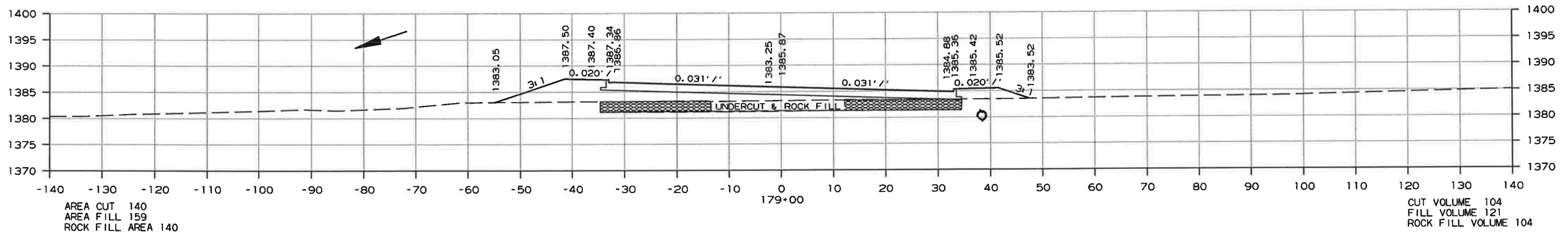


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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	211	267

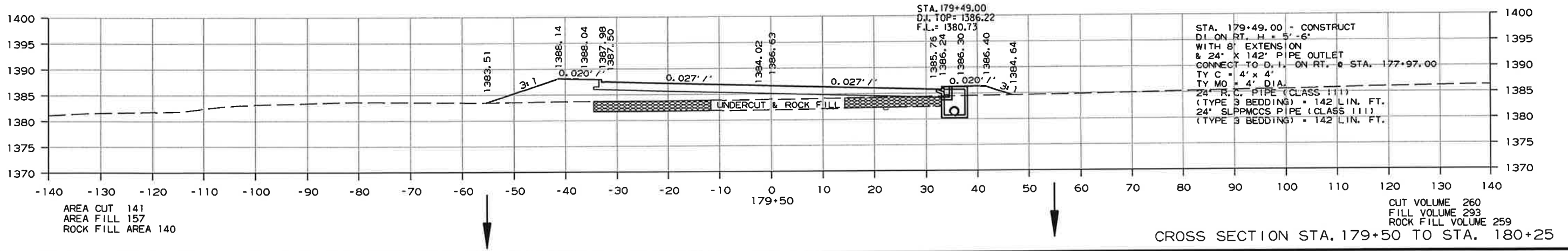
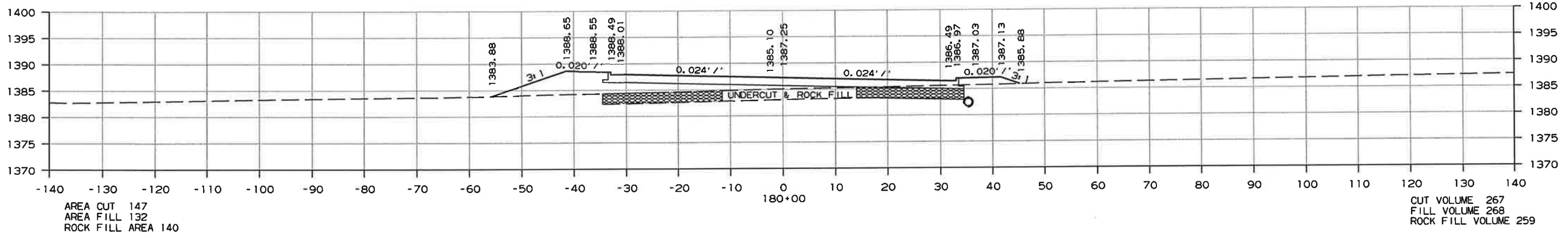
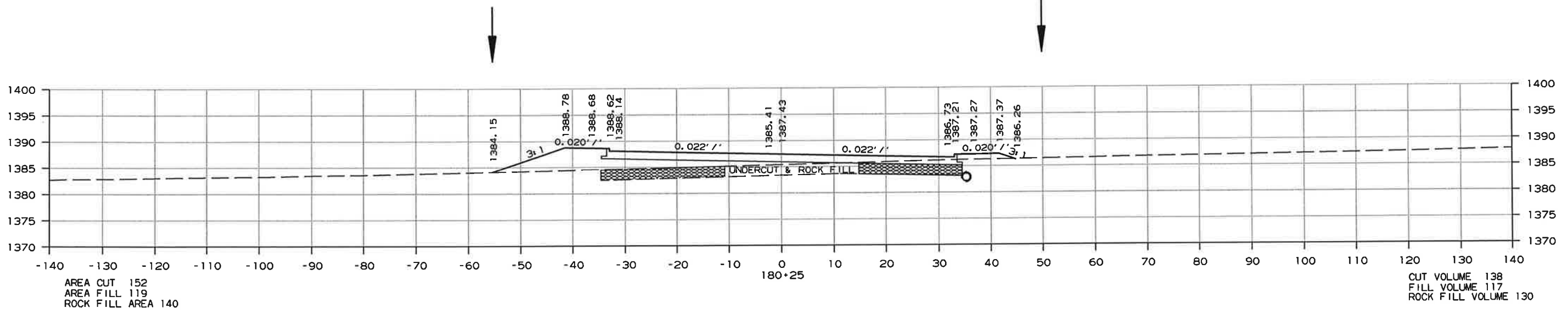
2 CROSS SECTIONS



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R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
JOB NO. 012007							212	267

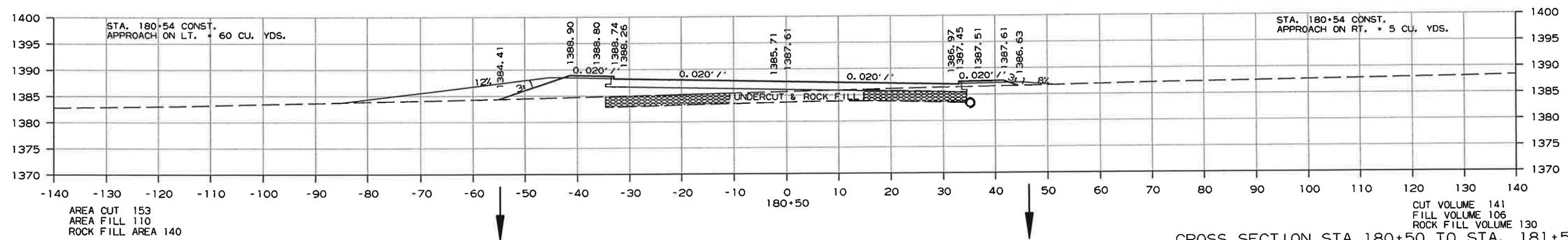
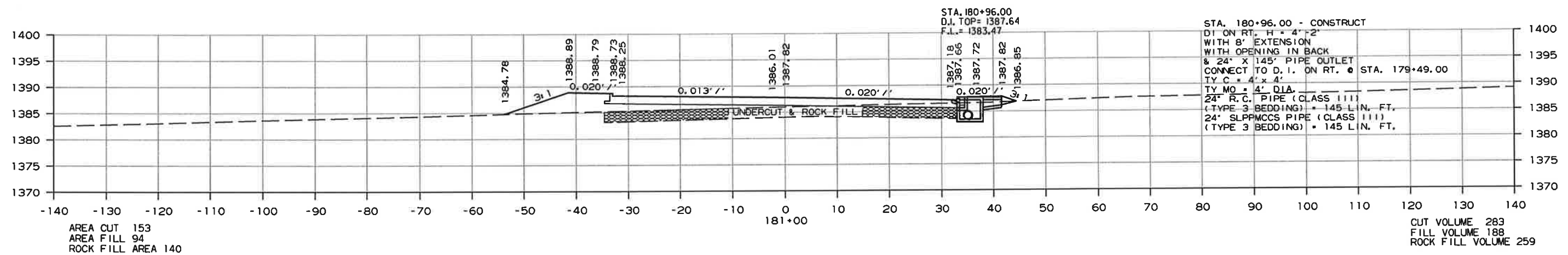
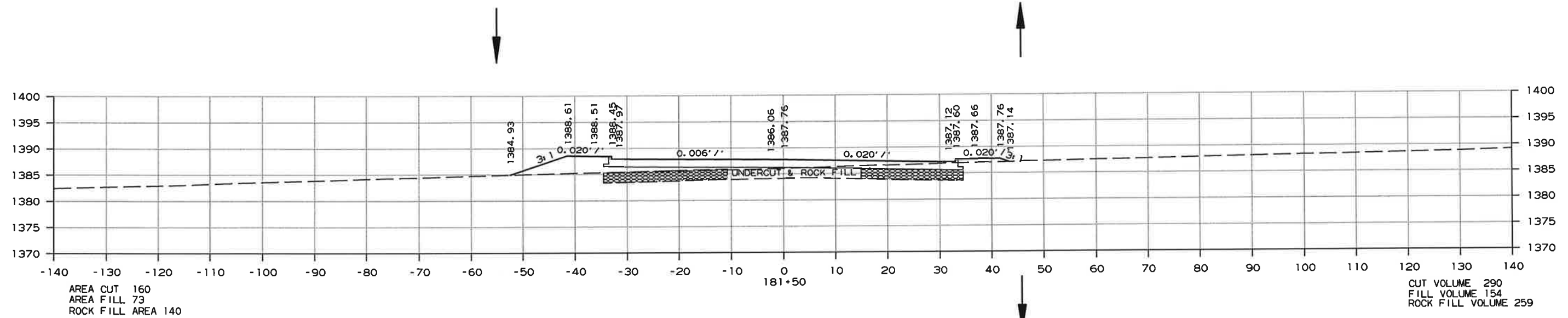
2 CROSS SECTIONS



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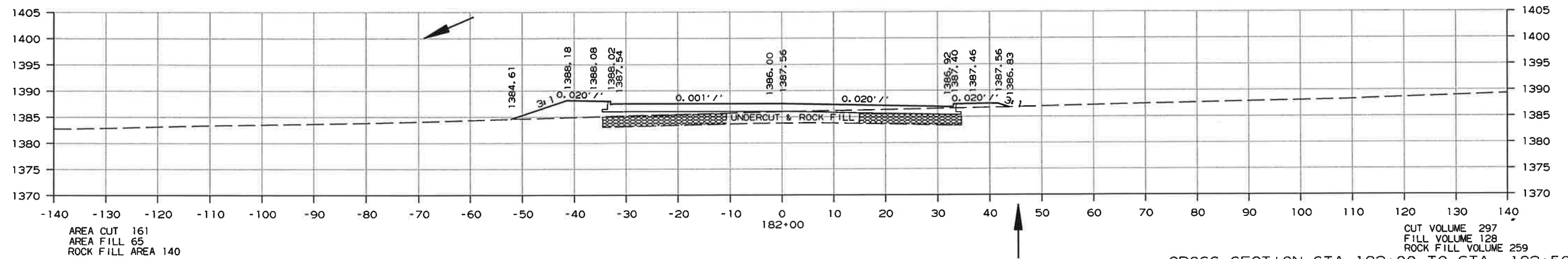
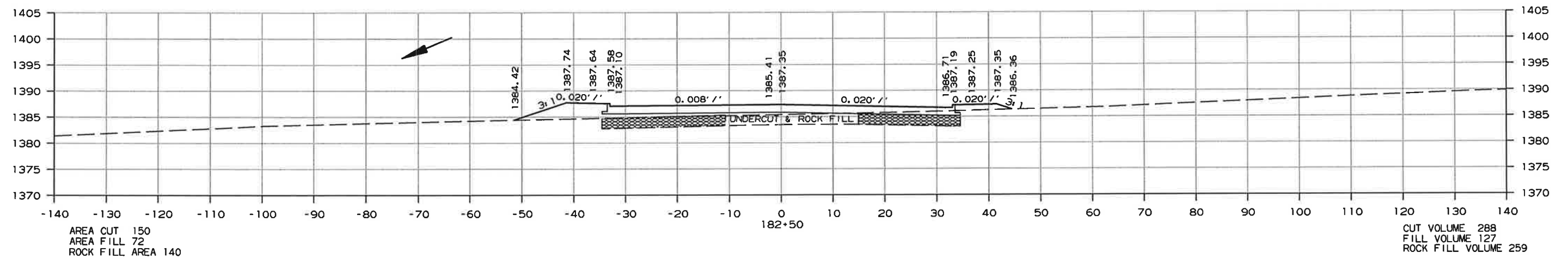
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	213	267

2 CROSS SECTIONS



DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	214	267

2 CROSS SECTIONS

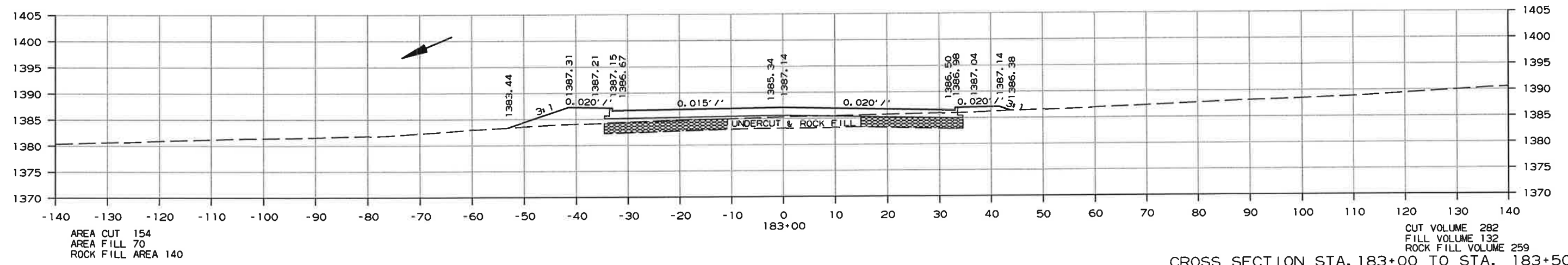
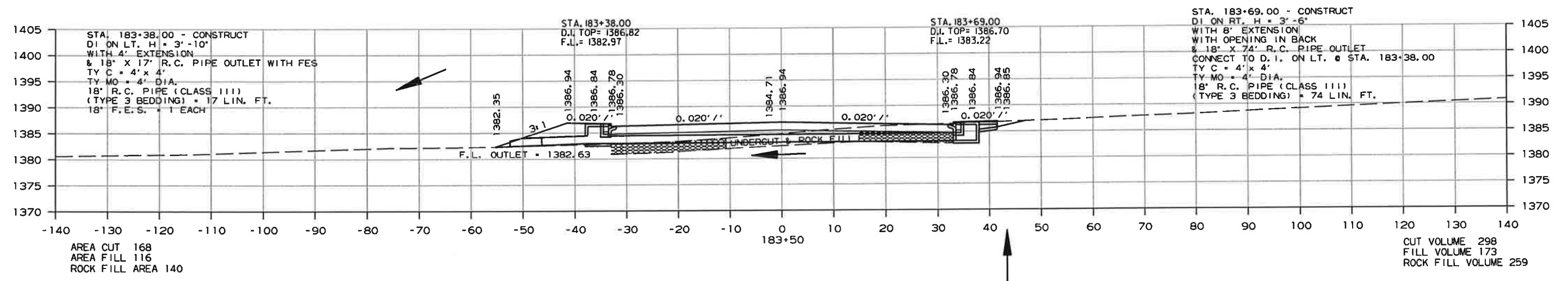


CROSS SECTION STA. 182+00 TO STA. 182+50

9/12/2017
R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	215	267

2 CROSS SECTIONS

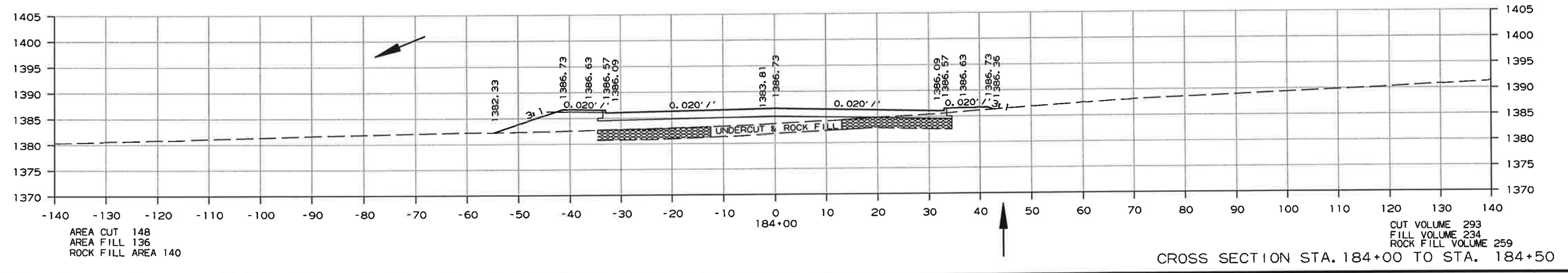
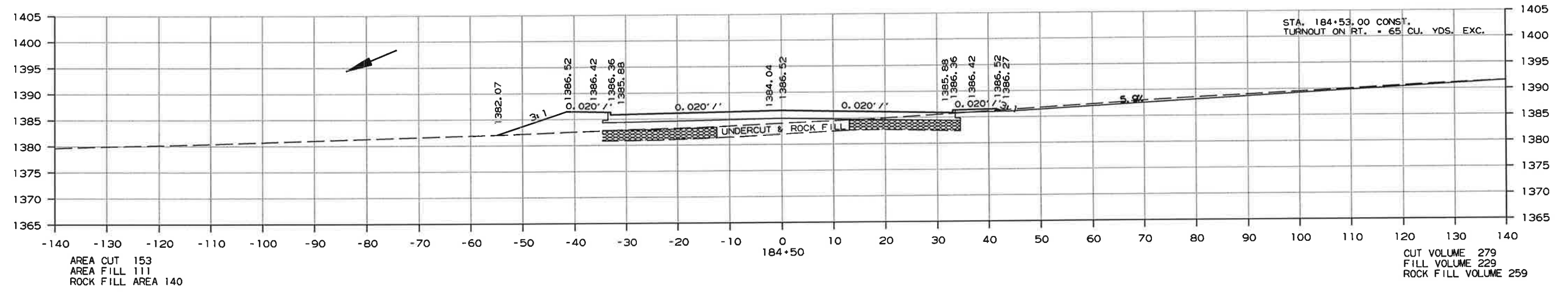


CROSS SECTION STA. 183+00 TO STA. 183+50

9/12/2017 R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	216	267

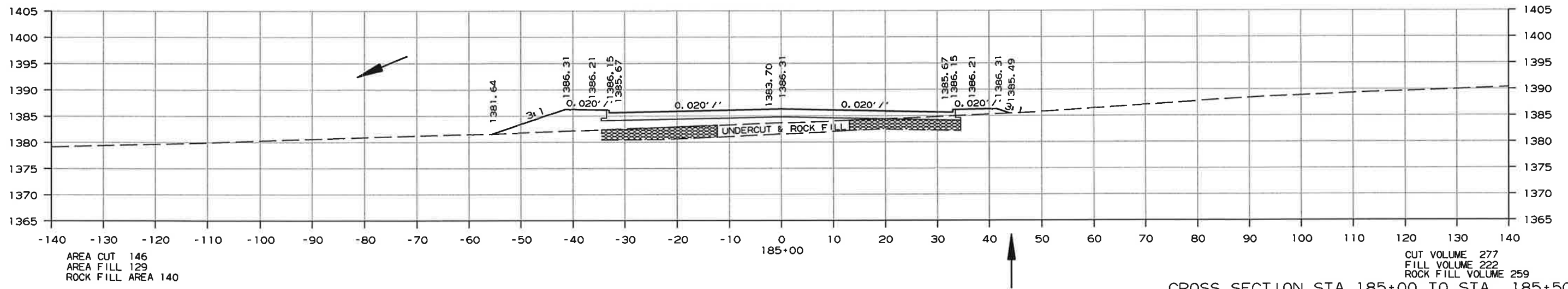
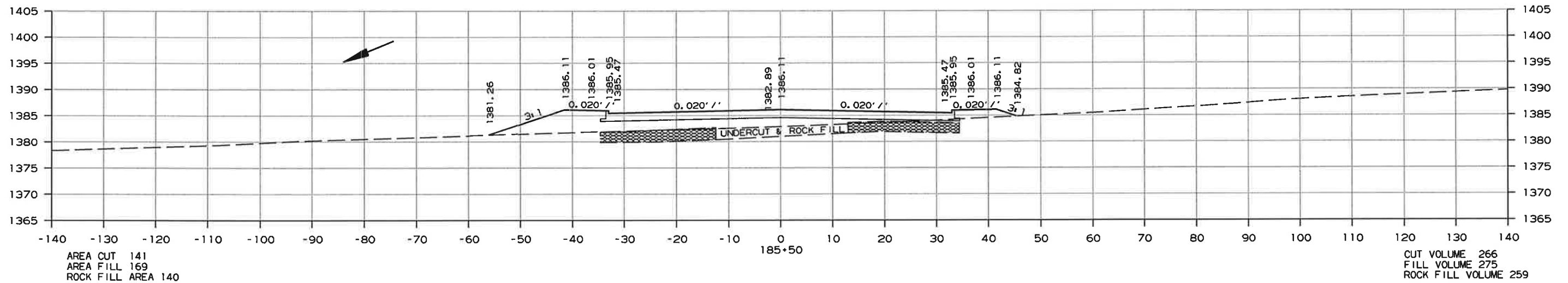
2 CROSS SECTIONS



9/12/2017
R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. AID DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	217	267

2 CROSS SECTIONS

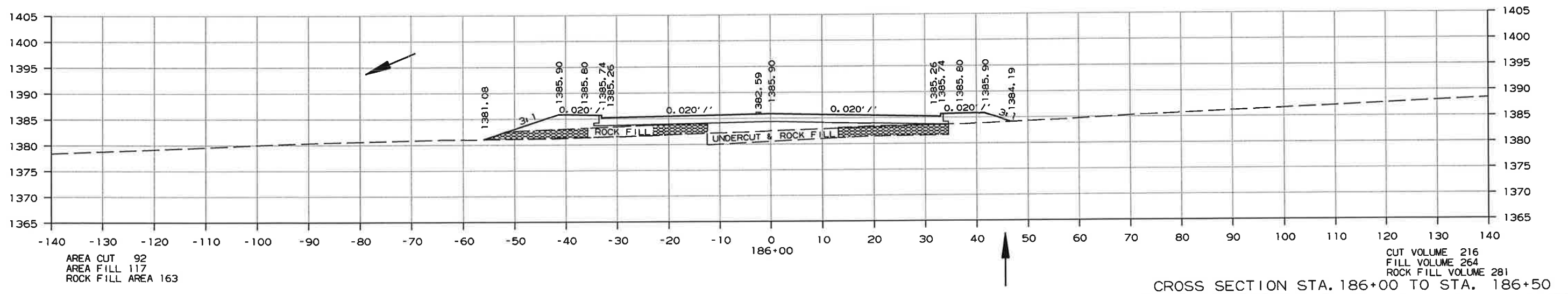
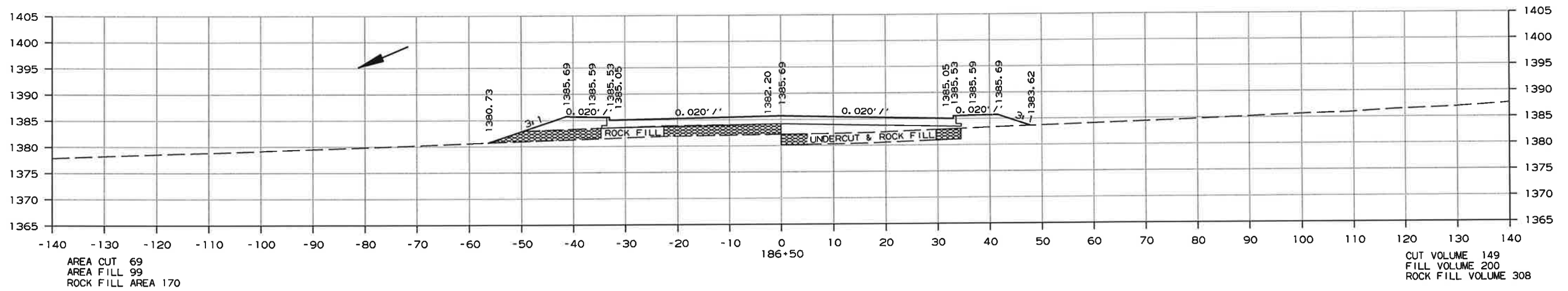


CROSS SECTION STA. 185+00 TO STA. 185+50

9/12/2017 R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	218	267

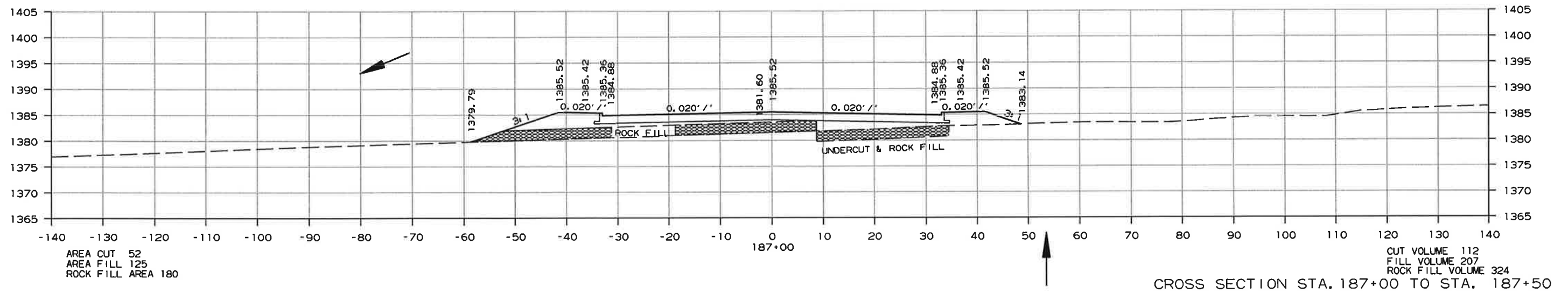
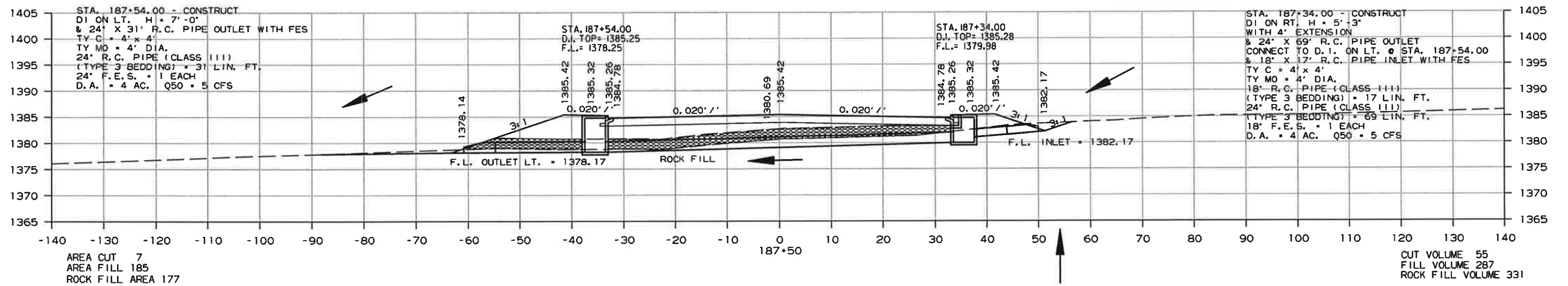
2 CROSS SECTIONS



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DATE REVISED	DATE FILED	DATE REVISED	DATE FILED	FED. NO. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	219	267

2 CROSS SECTIONS

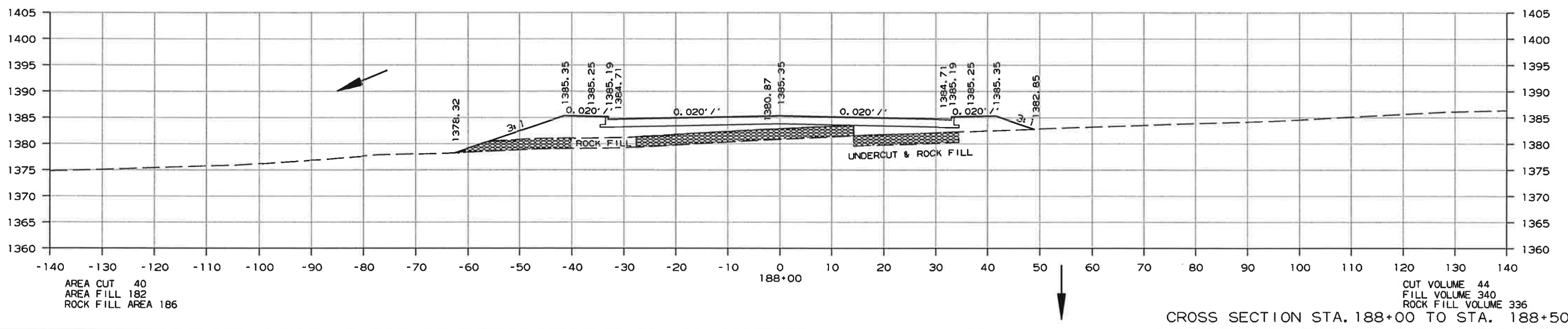
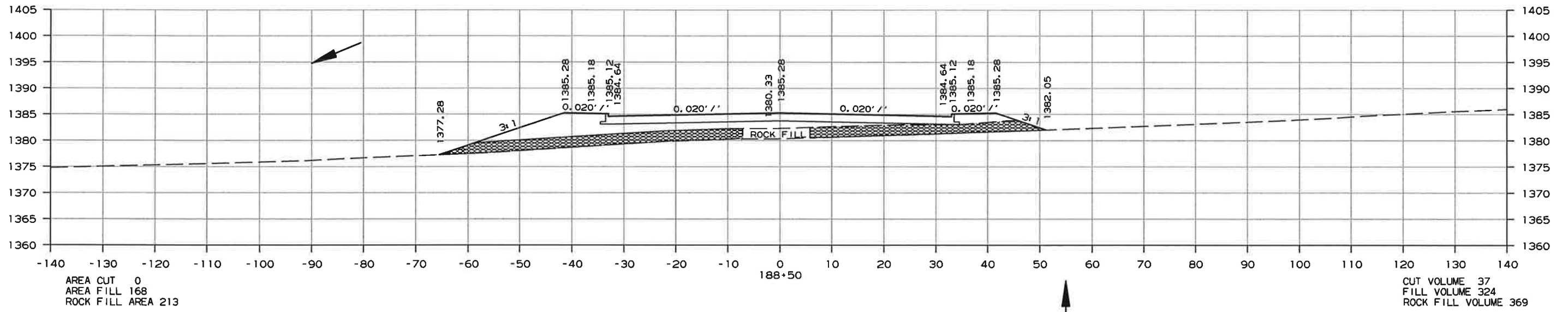


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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. NO. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	220	267

② CROSS SECTIONS

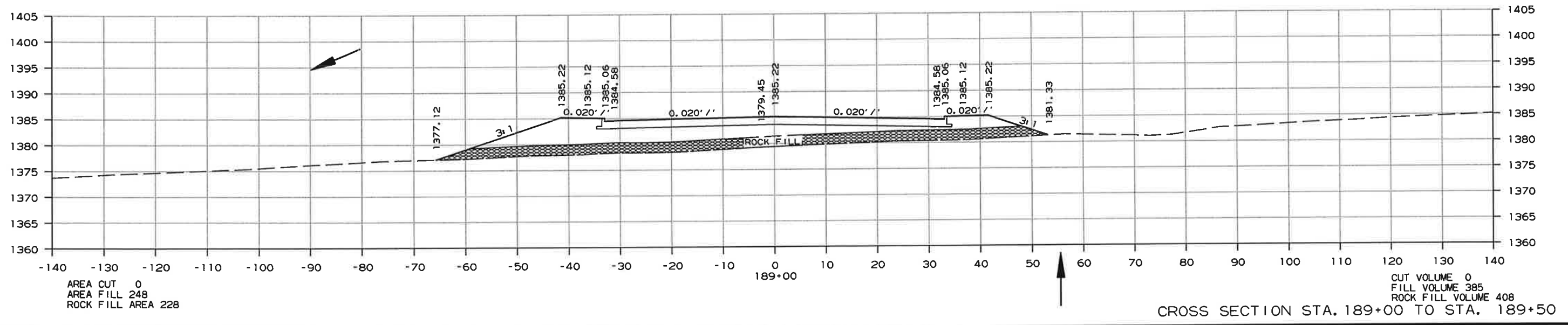
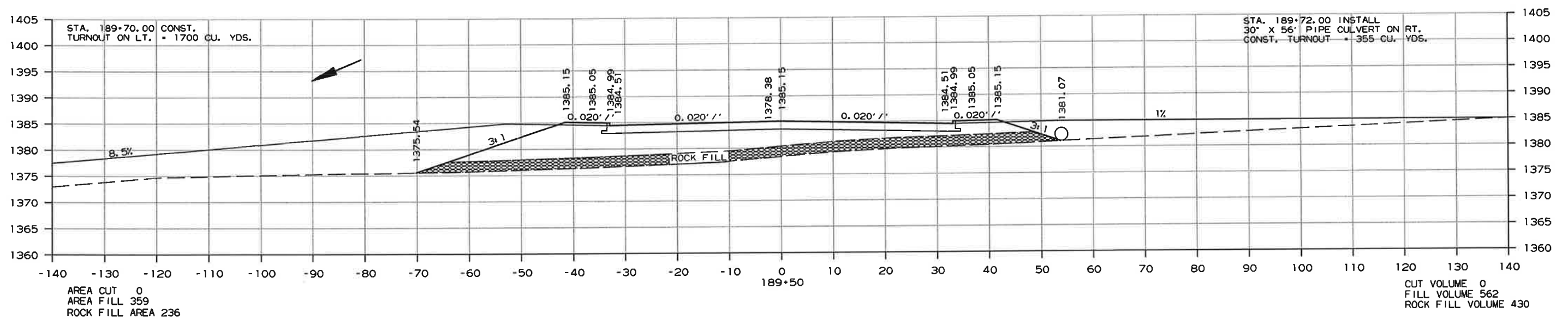


CROSS SECTION STA. 188+00 TO STA. 188+50

9/12/2017 R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
JOB NO. 012007							221	267

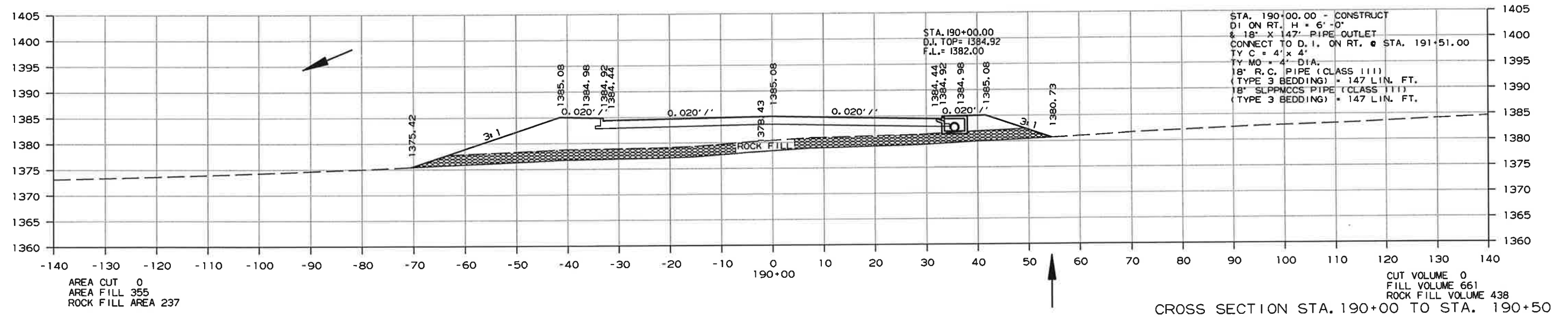
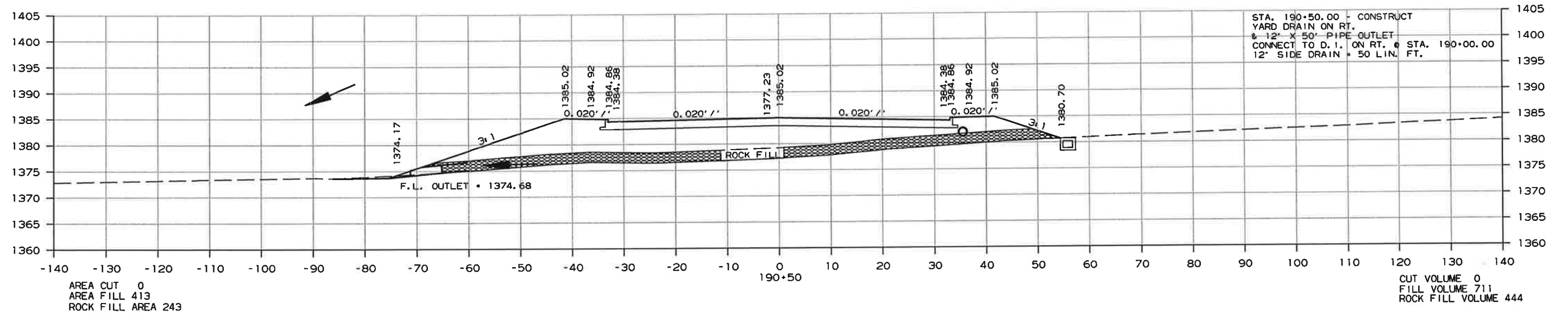
2 CROSS SECTIONS



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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	222	267

2 CROSS SECTIONS

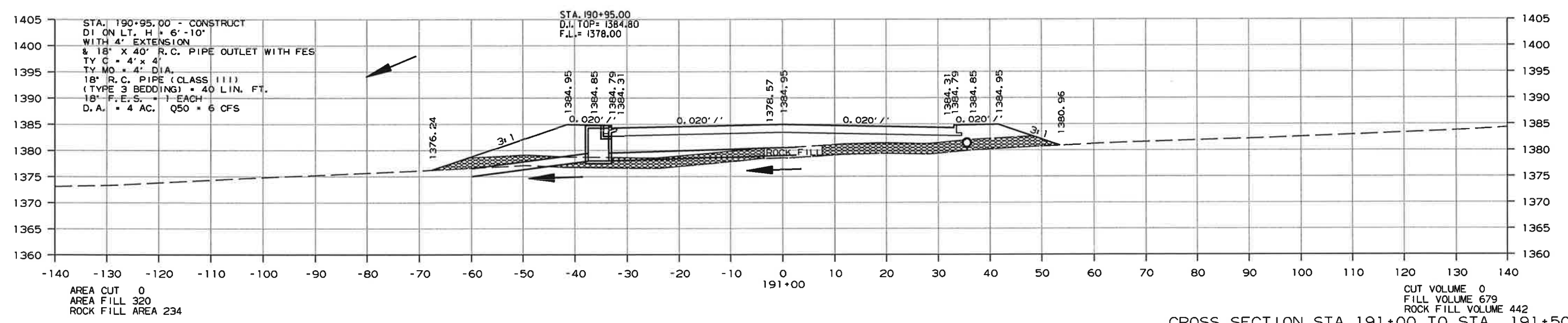
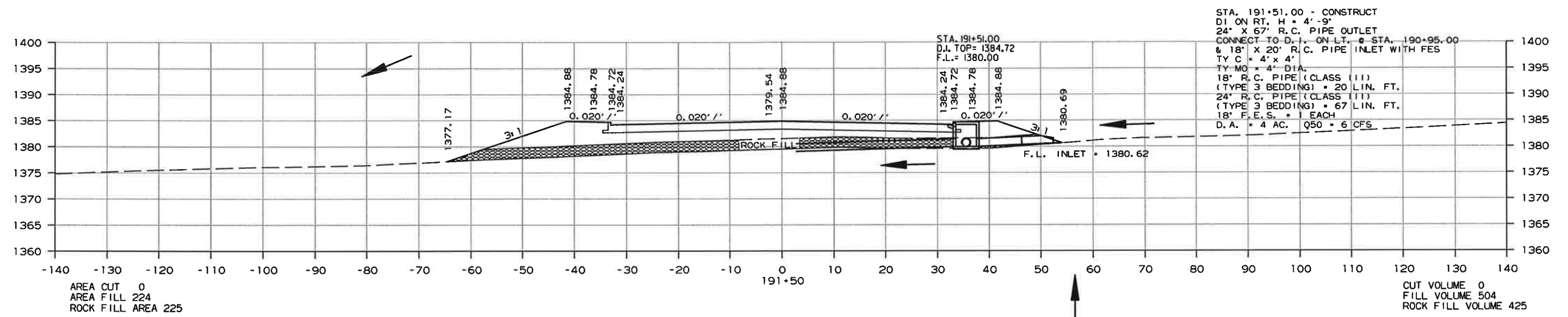


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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. NO. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	223	267

2 CROSS SECTIONS

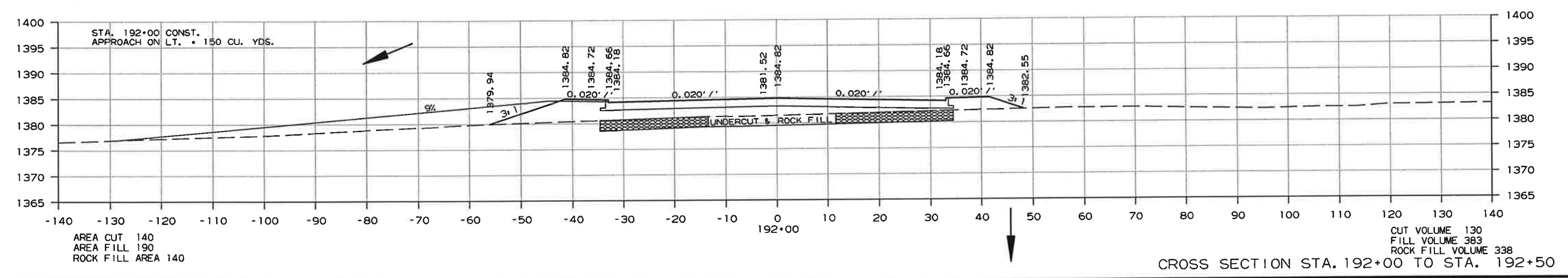
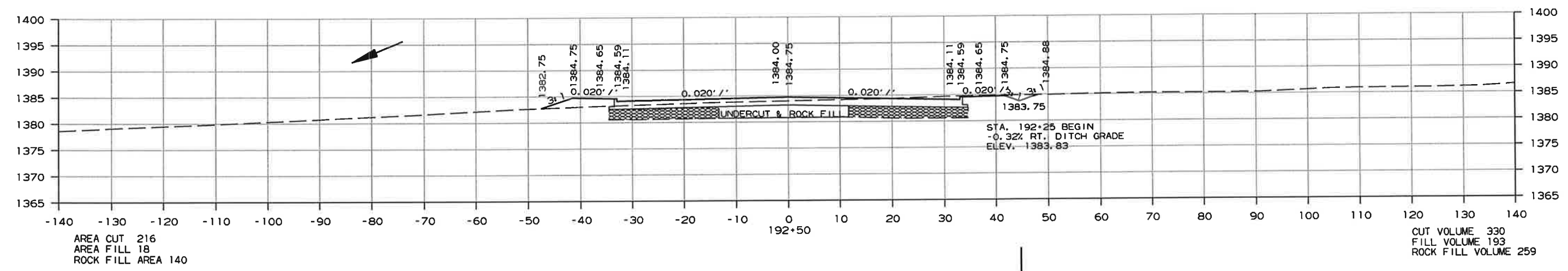


CROSS SECTION STA. 191+00 TO STA. 191+50

9/12/2017
 R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	224	267

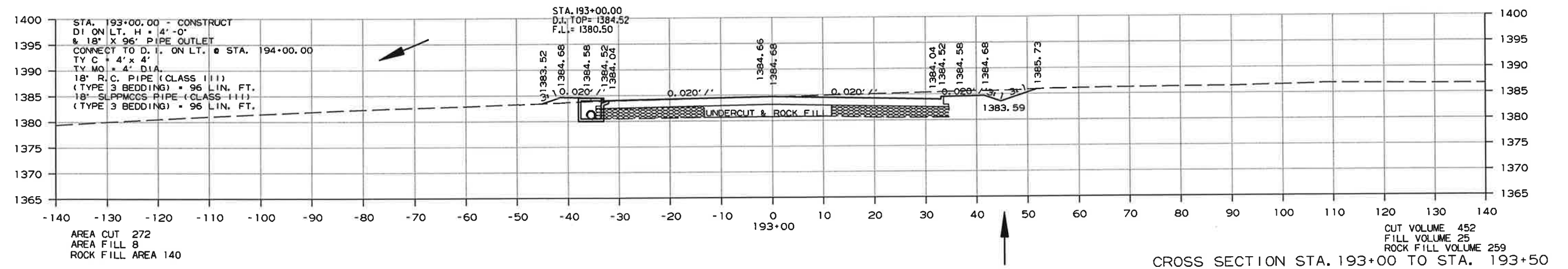
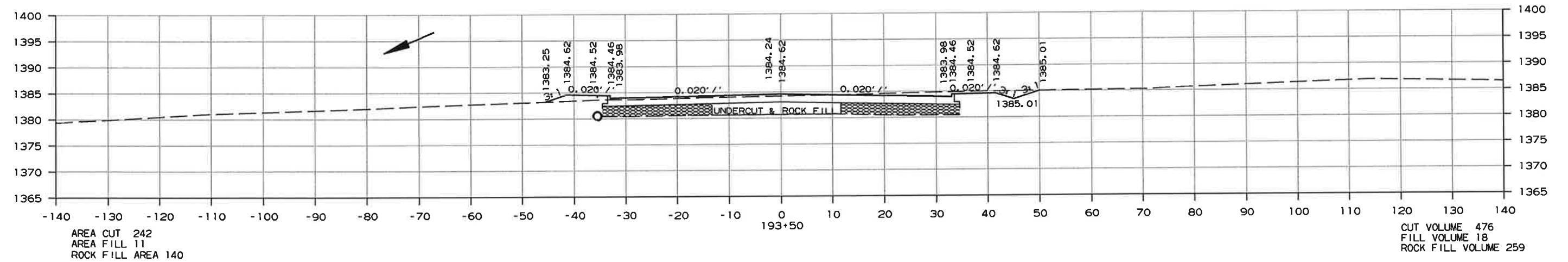
2 CROSS SECTIONS



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R012007KGT.DGN

DATE REVISED	DATE FILED	DATE REVISED	DATE FILED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	225	267

2 CROSS SECTIONS

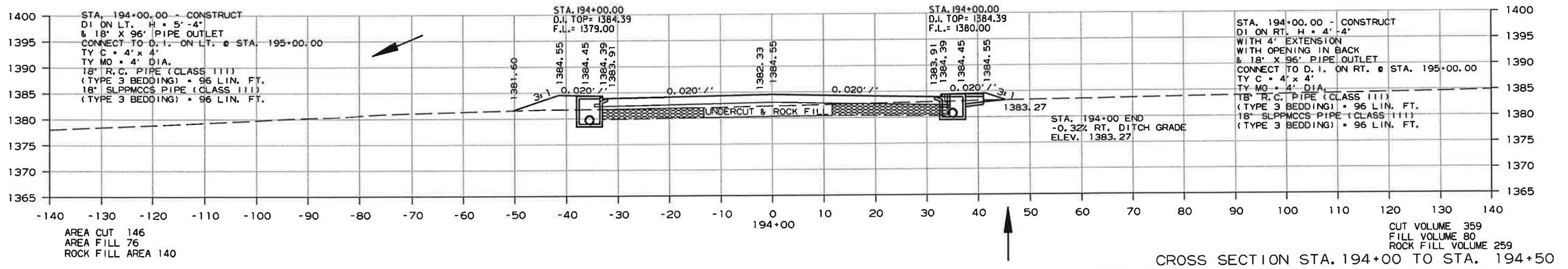
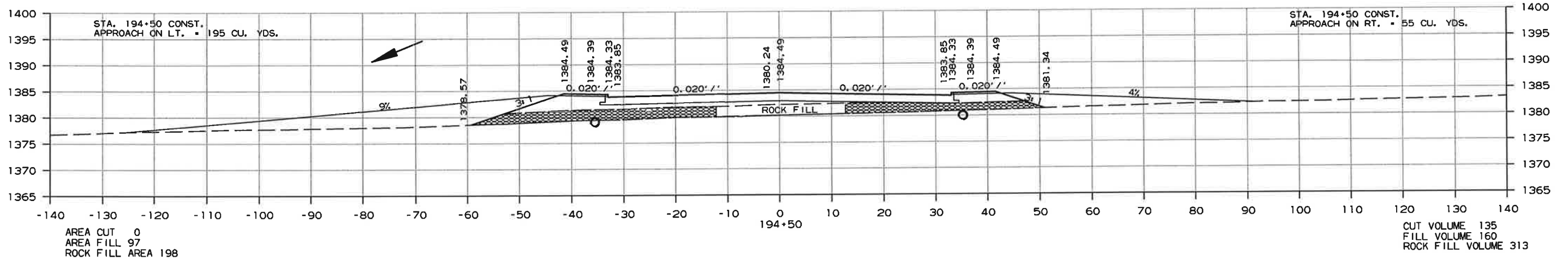


CROSS SECTION STA. 193+00 TO STA. 193+50

9/12/2017 R012007KCT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. PROJ. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	226	267

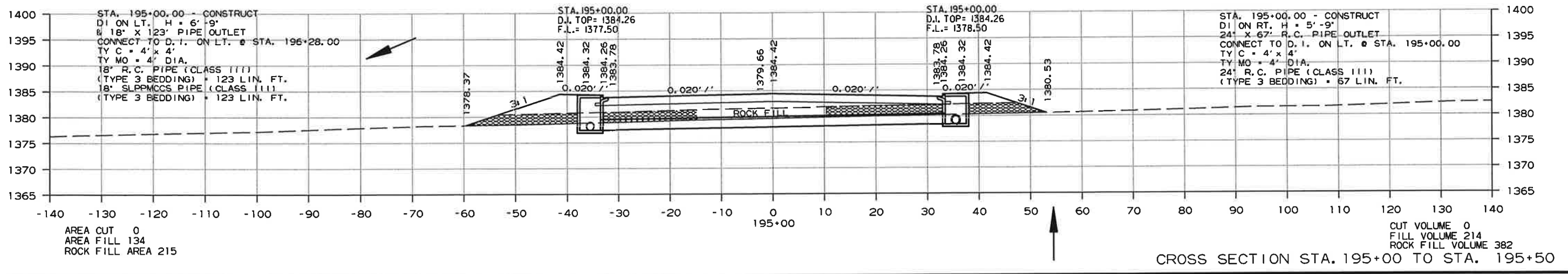
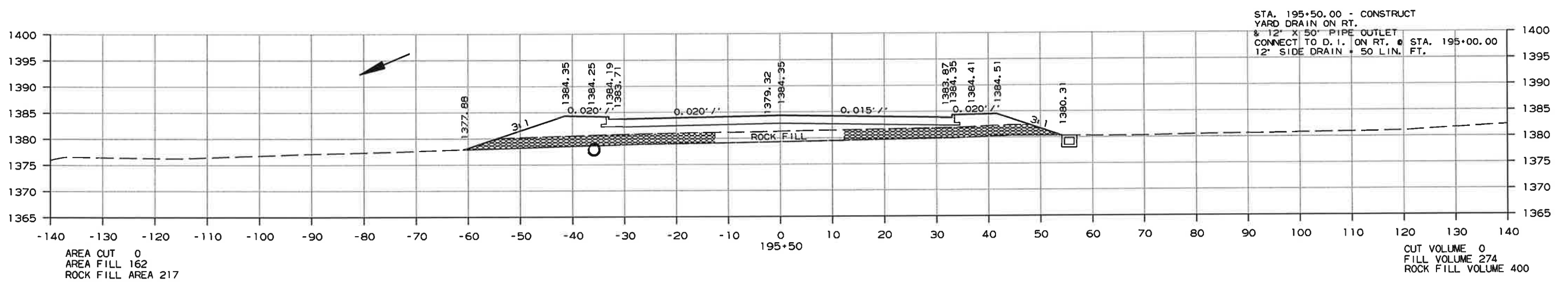
2 CROSS SECTIONS



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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
11-7-17				6	ARK.			
						JOB NO. 012007	227	267

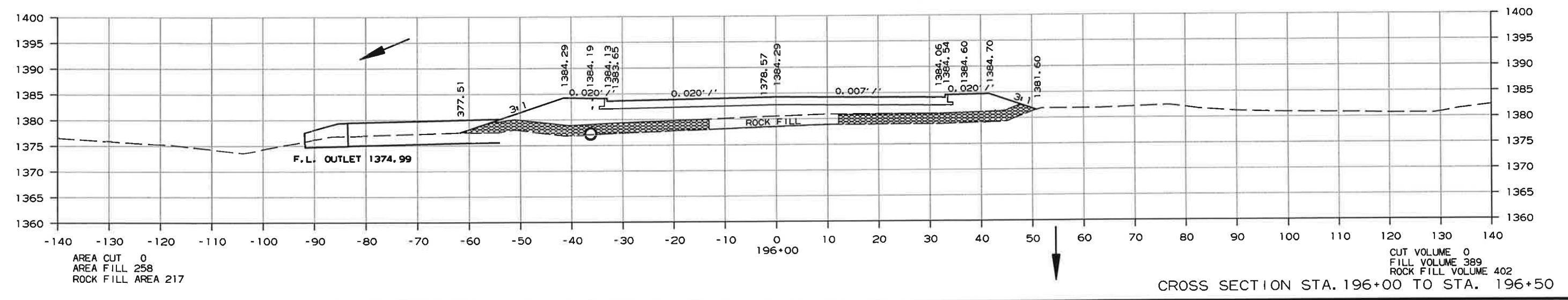
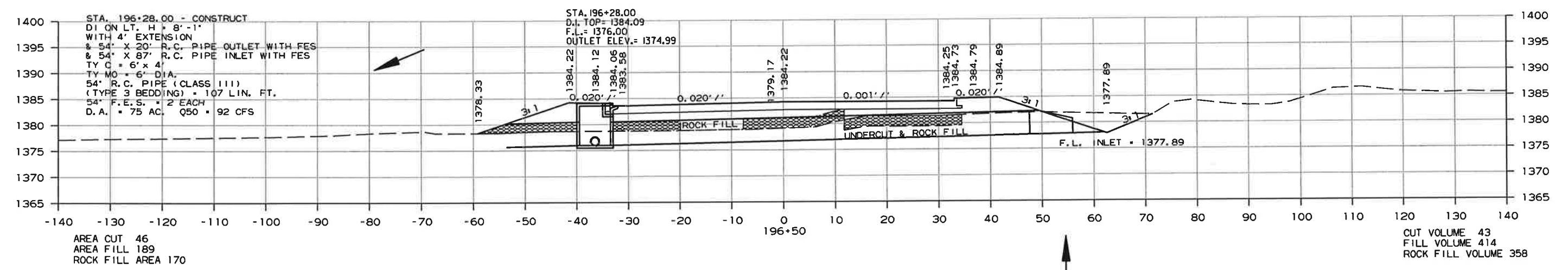
2 CROSS SECTIONS



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R012007KGT.DGN

DATE REVISED	DATE FILED	DATE REVISED	DATE FILED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	228	267

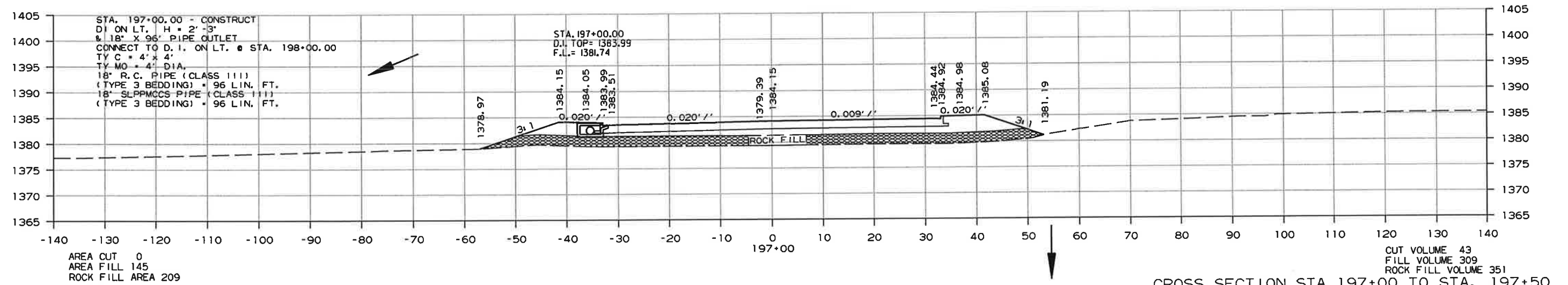
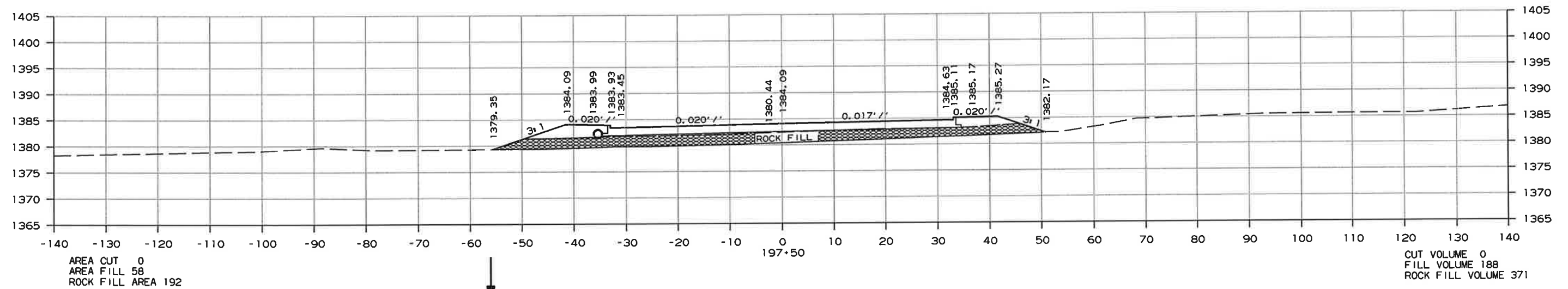
2 CROSS SECTIONS



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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	229	267

2 CROSS SECTIONS

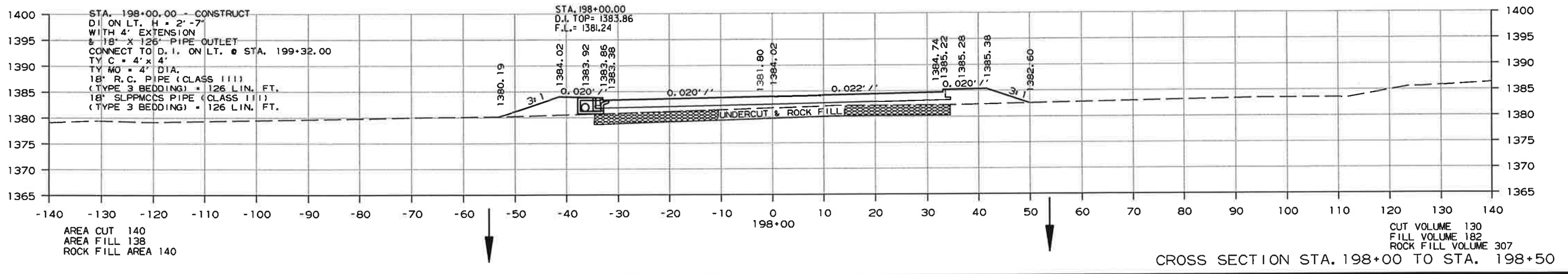
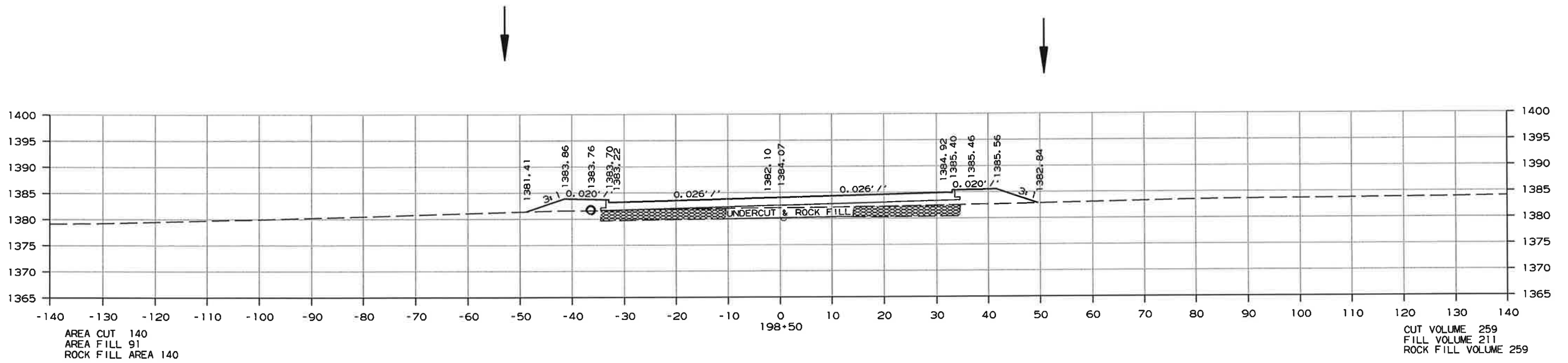


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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	230	267

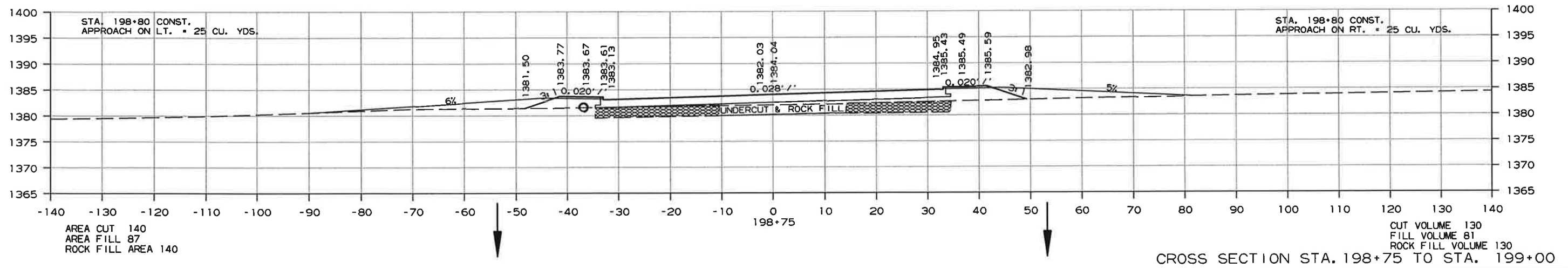
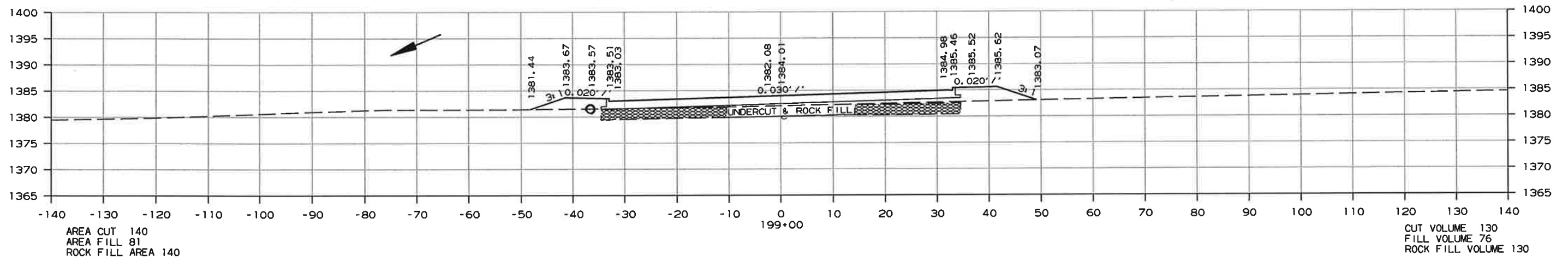
2 CROSS SECTIONS



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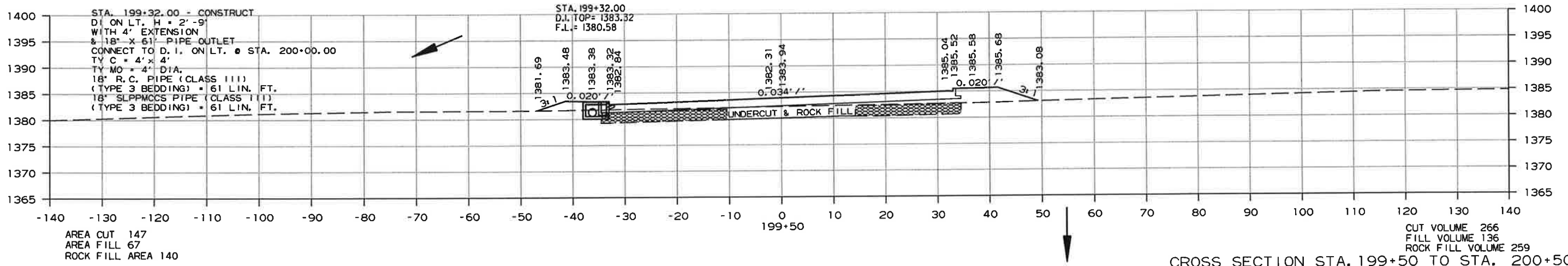
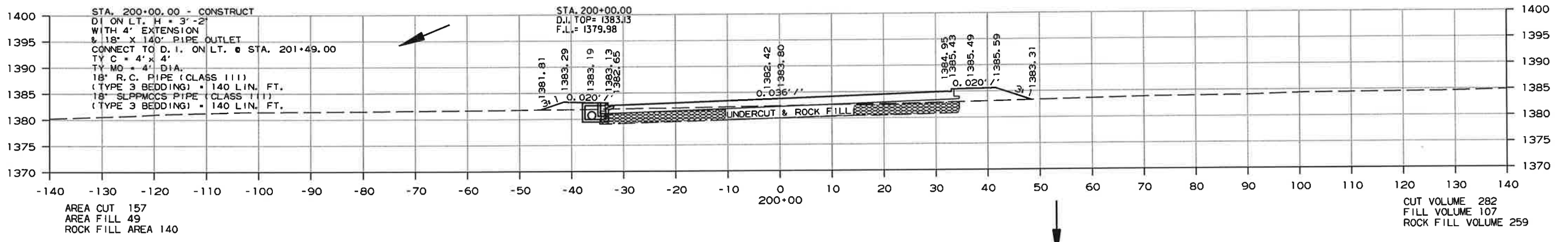
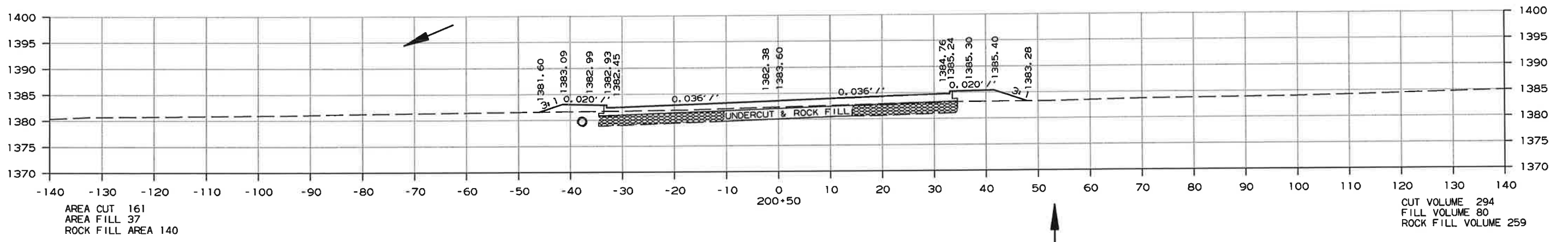
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	231	267

② CROSS SECTIONS



DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	232	267

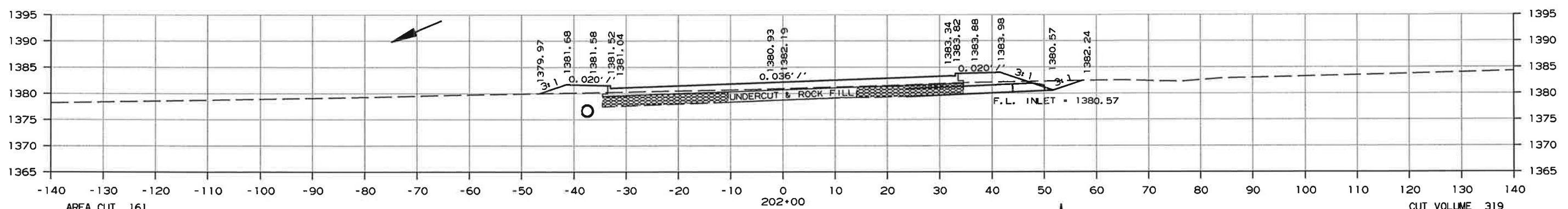
2 CROSS SECTIONS



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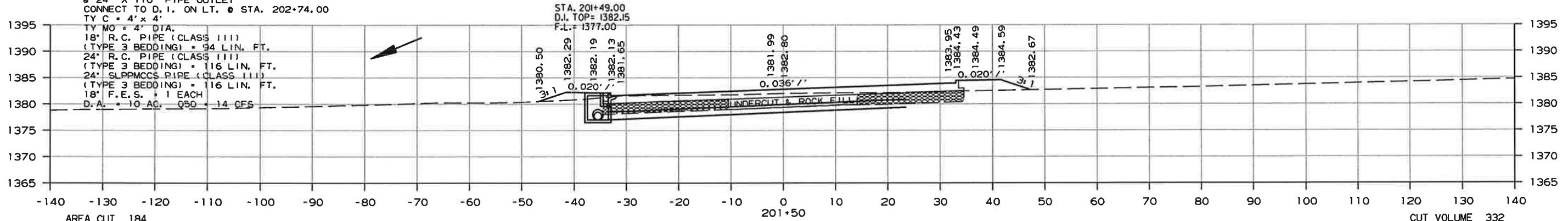
DATE REVISED	DATE FILED	DATE REVISED	DATE FILED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
JOB NO. 012007							233	267

② CROSS SECTIONS



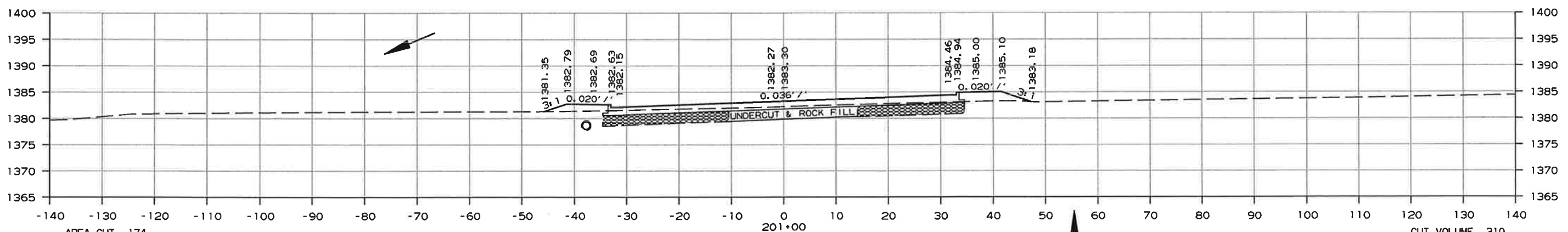
AREA CUT 161
 AREA FILL 34
 ROCK FILL AREA 140
 STA. 201+49.00 - CONSTRUCT
 D.I. ON LT. H = 5'-2"
 WITH 4' EXTENSION
 & 18" X 94' R.C. PIPE INLET WITH FES
 & 24" X 116' PIPE OUTLET
 CONNECT TO D.I. ON LT. @ STA. 202+74.00
 TY C = 4' x 4'
 TY MO = 4" DIA.
 18" R.C. PIPE (CLASS III)
 (TYPE 3 BEDDING) = 94 LIN. FT.
 24" R.C. PIPE (CLASS III)
 (TYPE 3 BEDDING) = 116 LIN. FT.
 24" SLPPMCCS PIPE (CLASS III)
 (TYPE 3 BEDDING) = 116 LIN. FT.
 18" F.E.S. = 1 EACH
 D.A. = 10 AC. Q50 = 14 CFS

CUT VOLUME 319
 FILL VOLUME 65
 ROCK FILL VOLUME 259



AREA CUT 184
 AREA FILL 35
 ROCK FILL AREA 140

CUT VOLUME 332
 FILL VOLUME 62
 ROCK FILL VOLUME 259



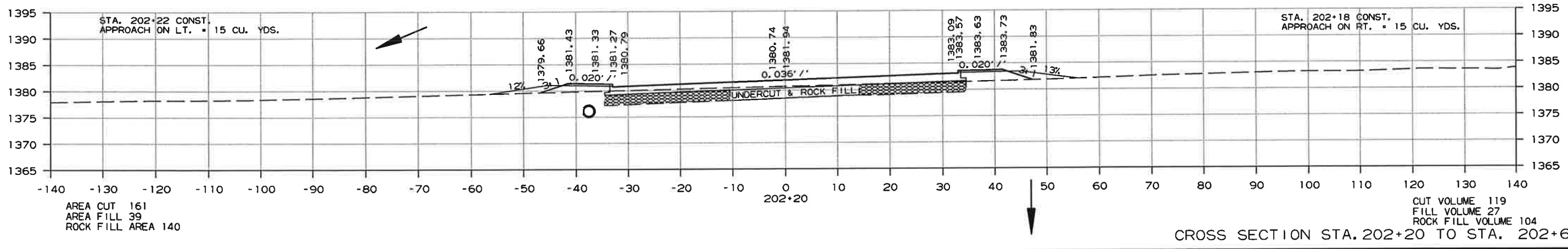
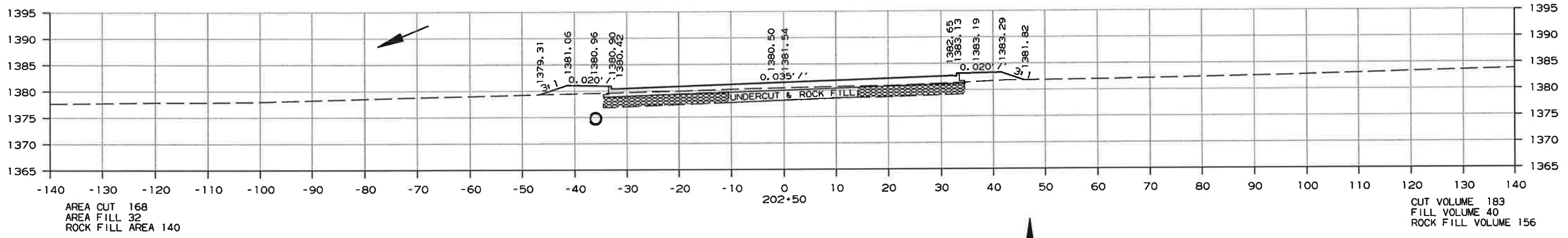
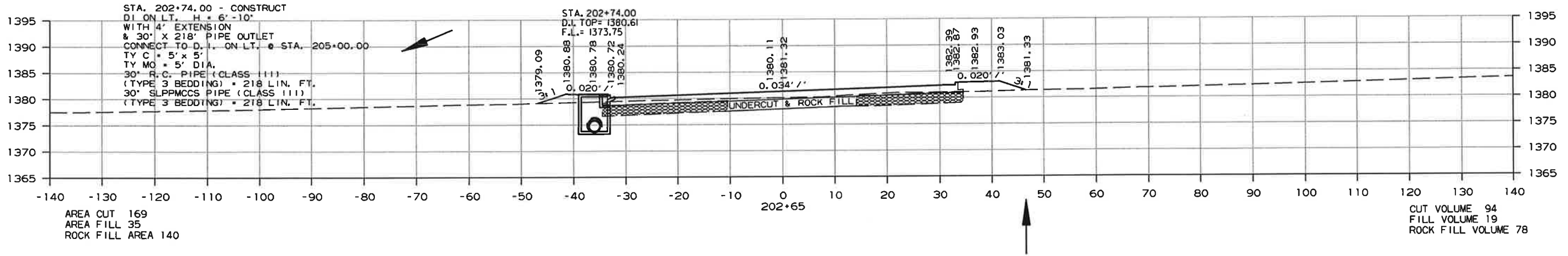
AREA CUT 174
 AREA FILL 32
 ROCK FILL AREA 140

CUT VOLUME 310
 FILL VOLUME 63
 ROCK FILL VOLUME 259

CROSS SECTION STA. 201+00 TO STA. 202+00

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	234	267

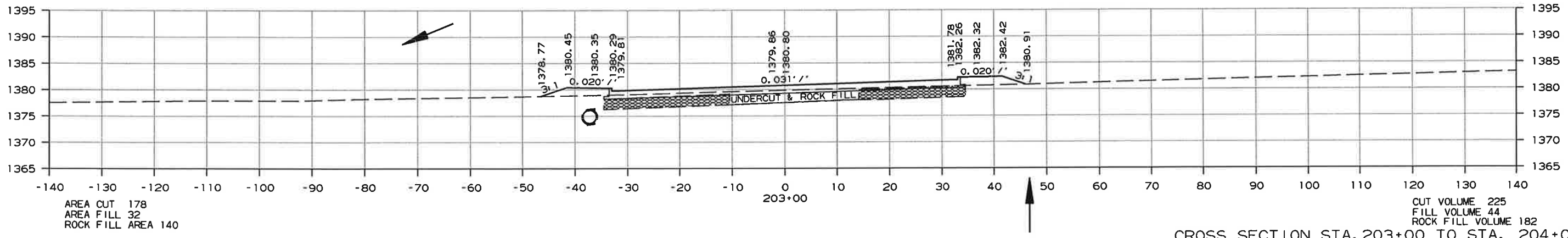
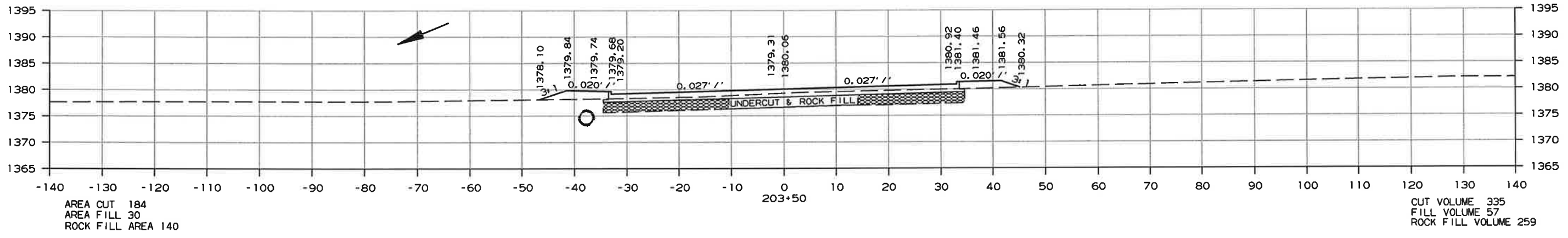
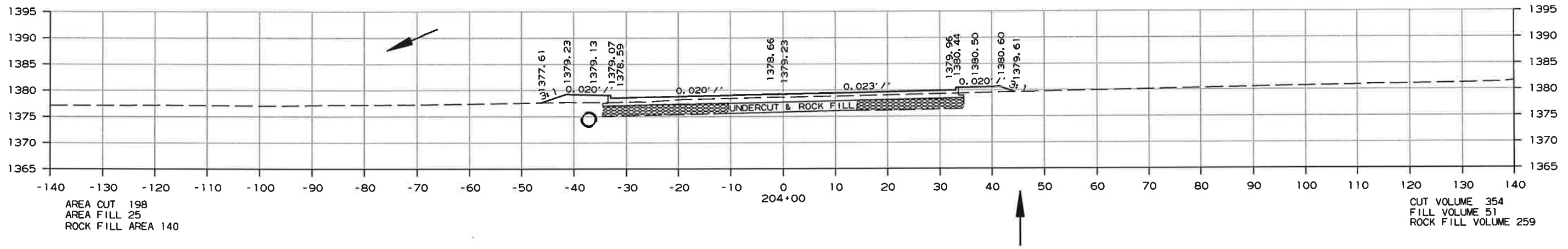
2 CROSS SECTIONS



9/12/2017
 R012007KGT.DGN

DATE REVISED	DATE FILED	DATE REVISED	DATE FILED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	235	267

2 CROSS SECTIONS

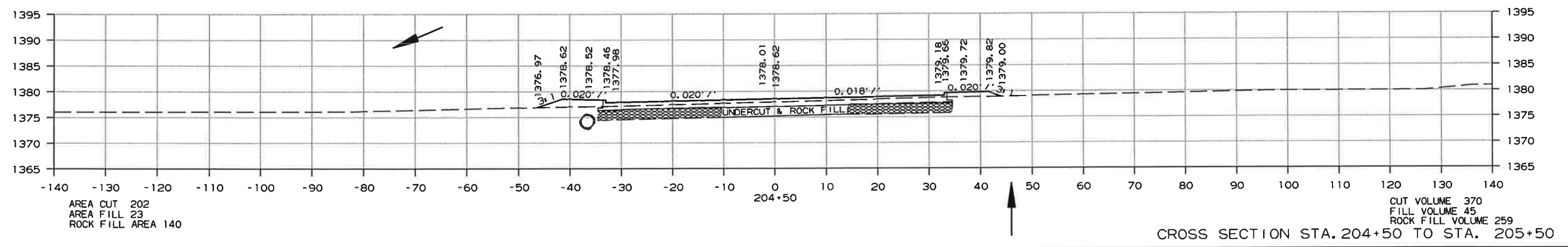
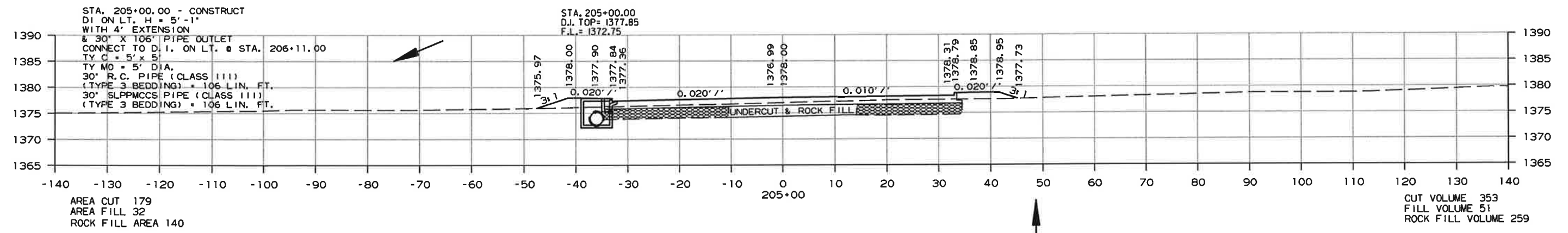


CROSS SECTION STA. 203+00 TO STA. 204+00

9/12/2017
R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
				JOB NO.	012007		236	267

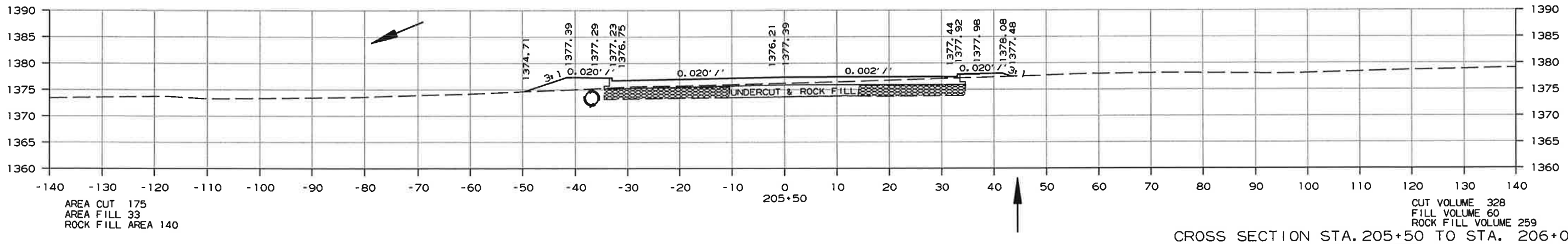
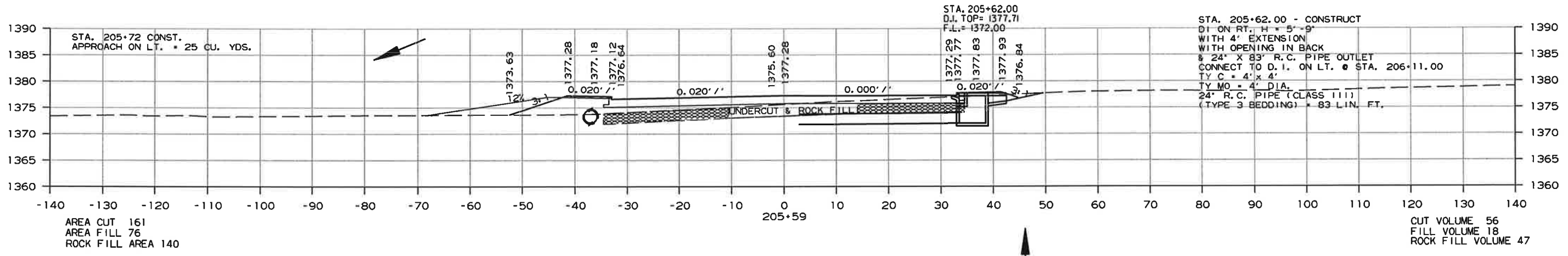
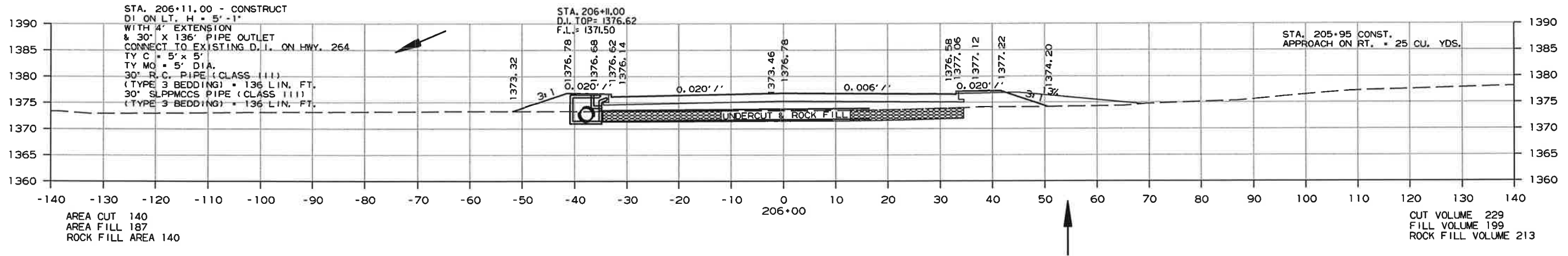
2 CROSS SECTIONS



9/12/2017
R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
				JOB NO.	012007		237	267

2 CROSS SECTIONS

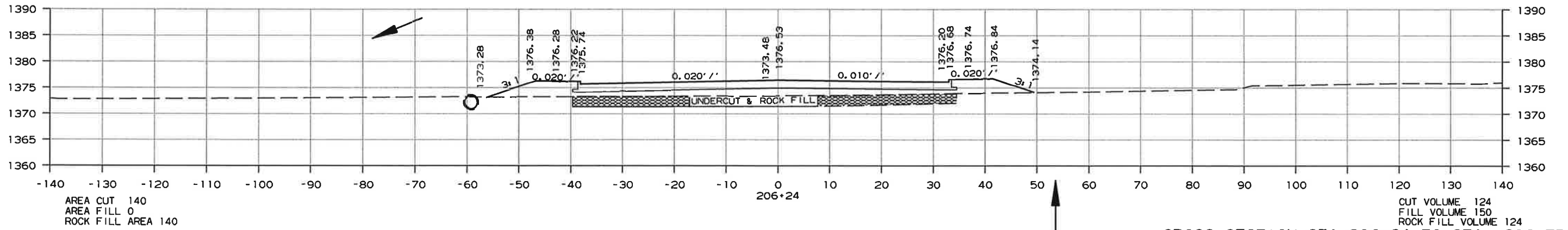
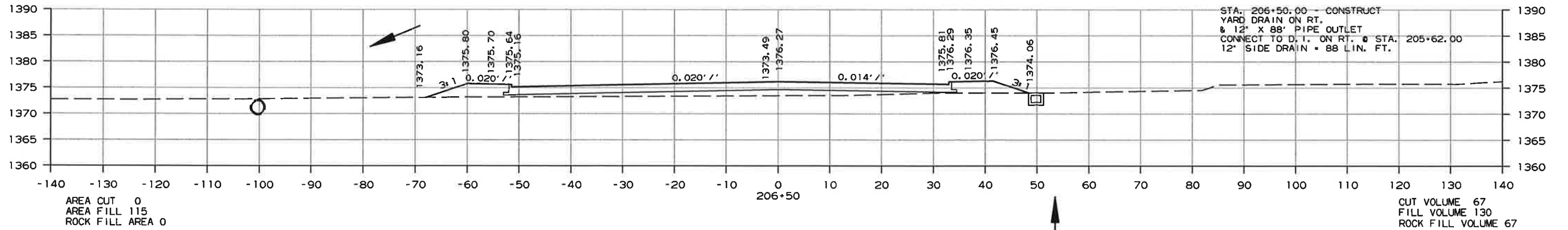
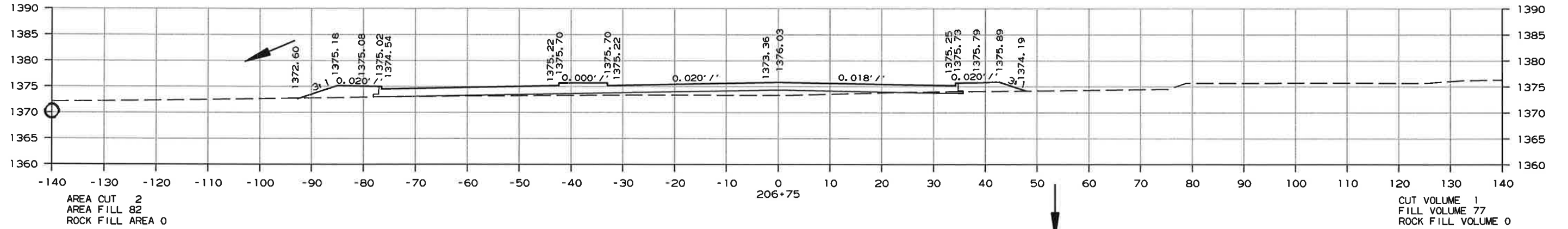


CROSS SECTION STA. 205+50 TO STA. 206+00

9/12/2017
R012007KGT.DGN

DATE REVISED	DATE FILED	DATE REVISED	DATE FILED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	238	267

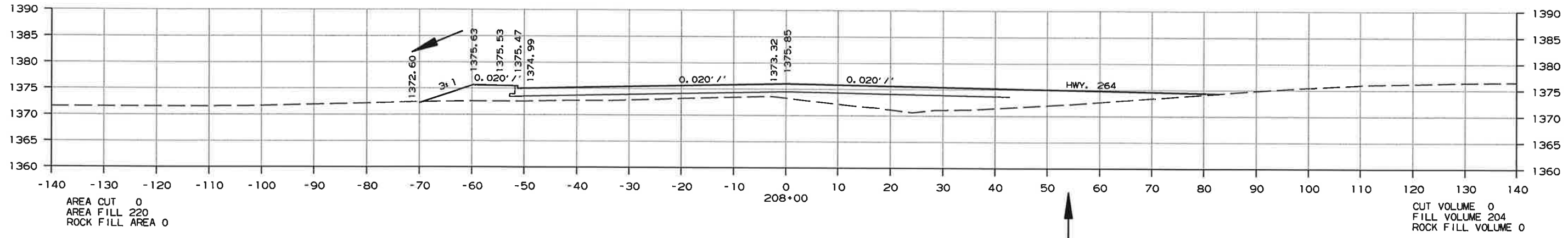
2 CROSS SECTIONS



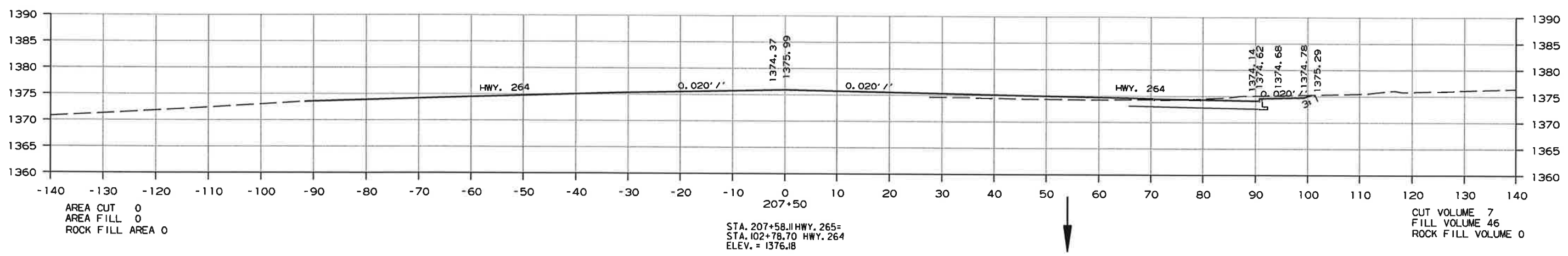
CROSS SECTION STA. 206+24 TO STA. 206+75

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	239	267

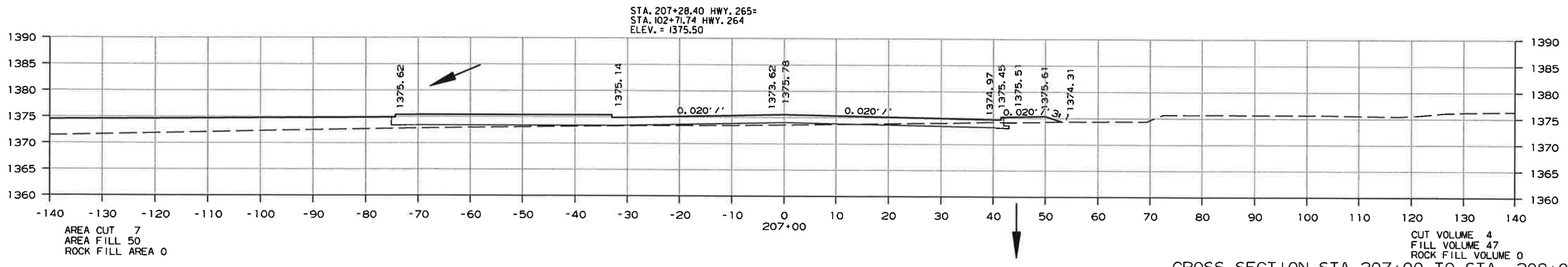
2 CROSS SECTIONS



STA. 207+88.35 HWY. 265 =
 STA. 102+85.63 HWY. 264
 ELEV. = 1375.70



STA. 207+58.11 HWY. 265 =
 STA. 102+78.70 HWY. 264
 ELEV. = 1376.18



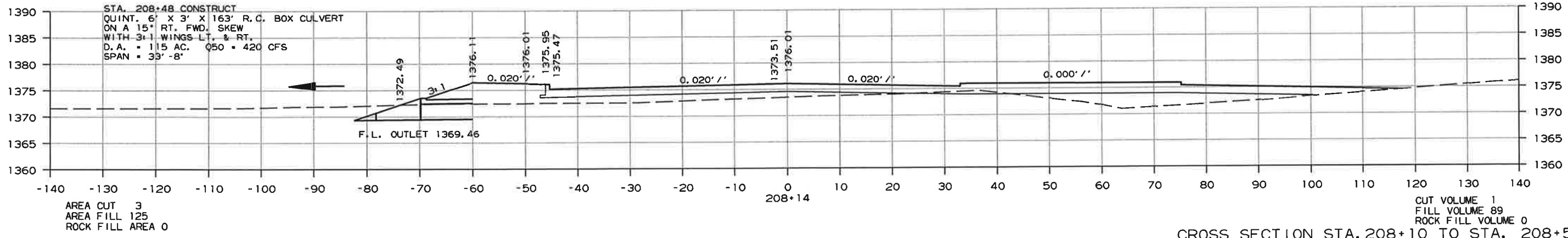
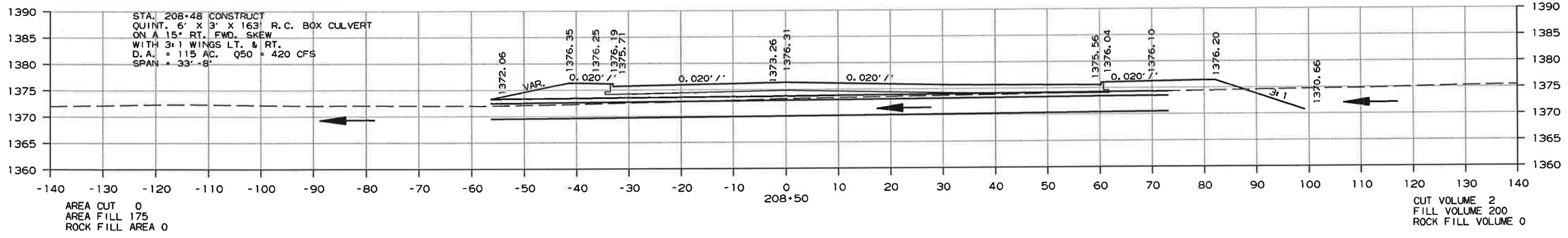
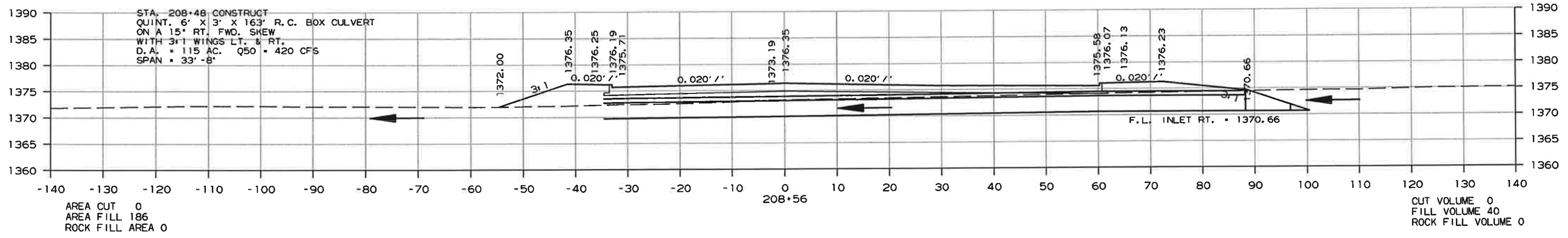
STA. 207+28.40 HWY. 265 =
 STA. 102+71.74 HWY. 264
 ELEV. = 1375.50

CROSS SECTION STA. 207+00 TO STA. 208+00

9/12/2017
 R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	240	267

2 CROSS SECTIONS

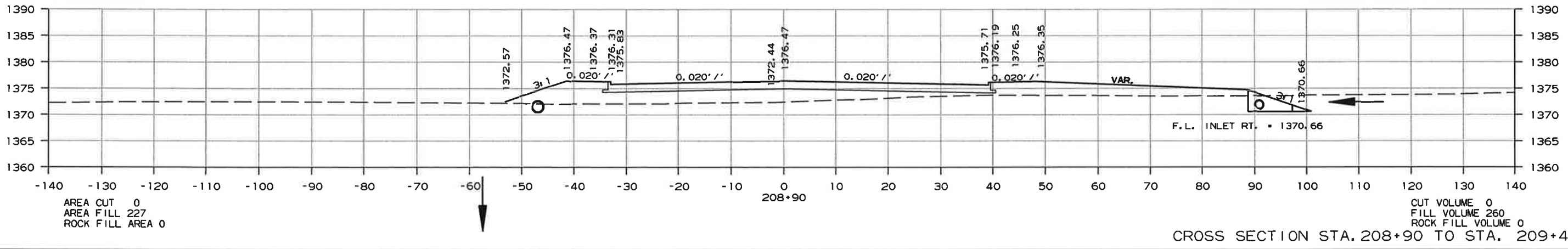
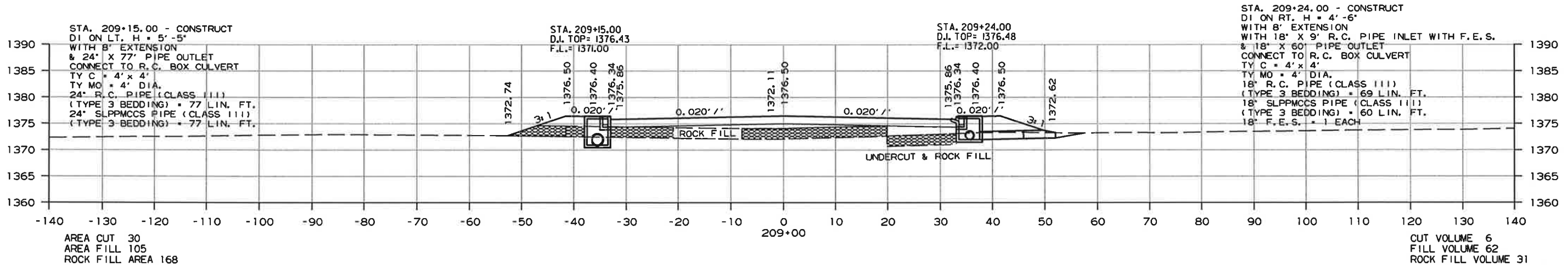
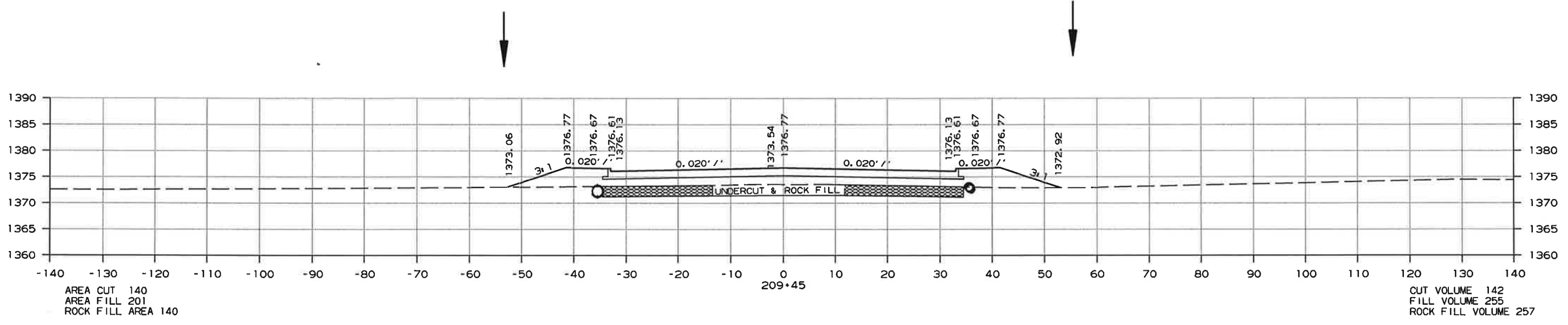


CROSS SECTION STA. 208+10 TO STA. 208+56

9/12/2017
R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
				JOB NO.	012007		241	267

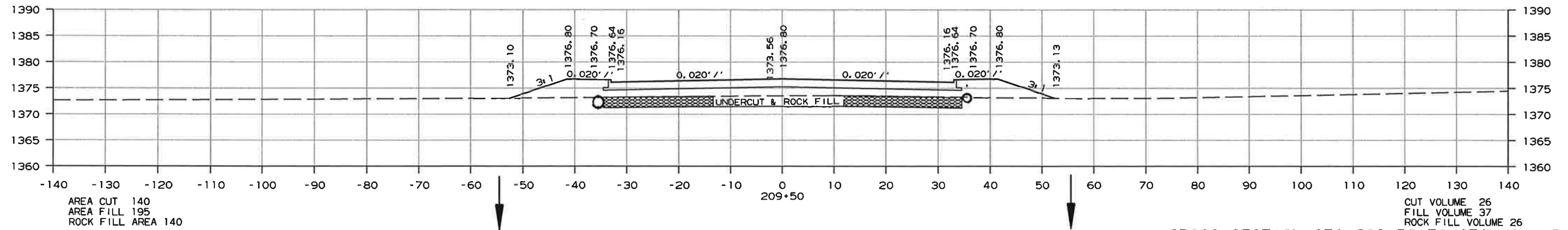
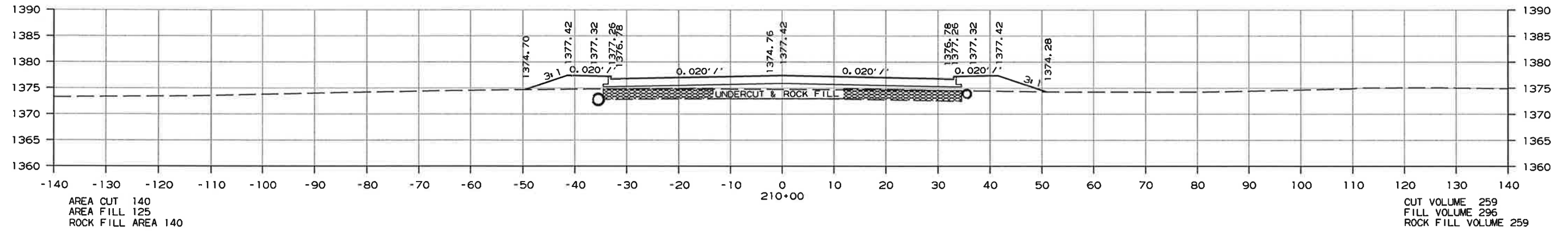
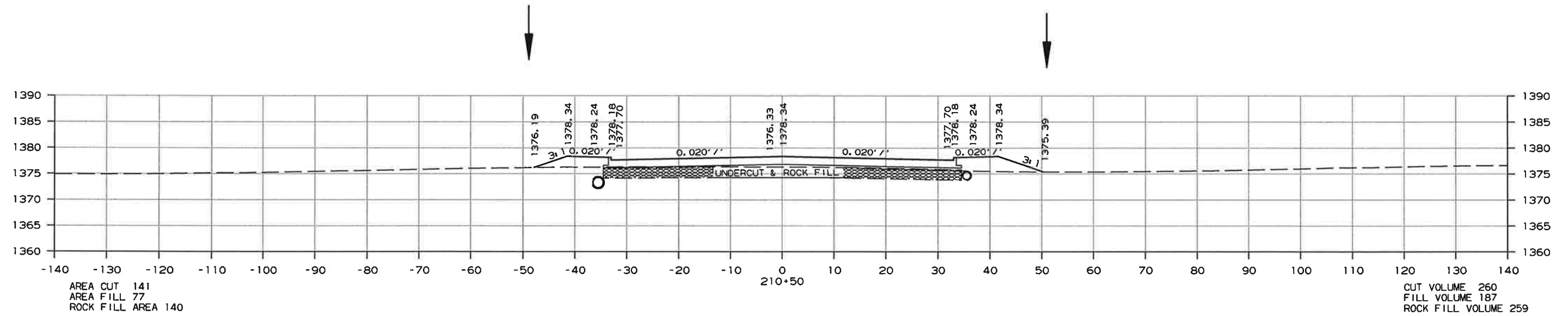
2 CROSS SECTIONS



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R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
JOB NO. 012007							242	267

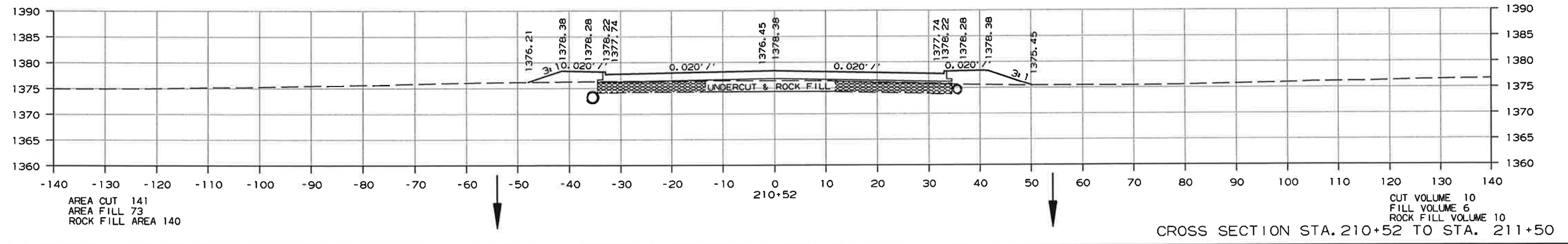
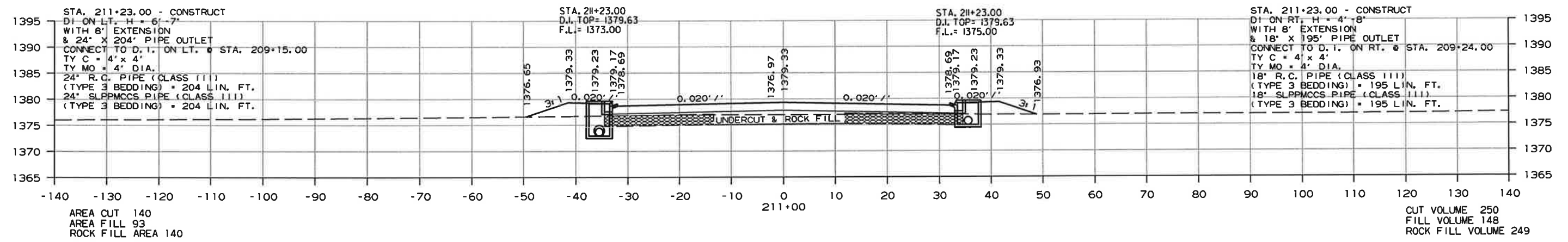
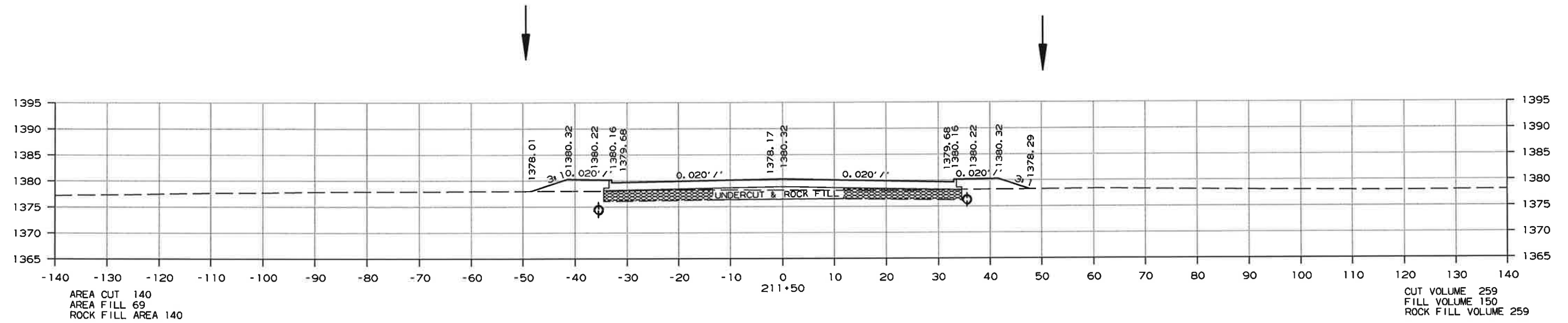
2 CROSS SECTIONS



CROSS SECTION STA. 209+50 TO STA. 210+50

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	243	267

2 CROSS SECTIONS

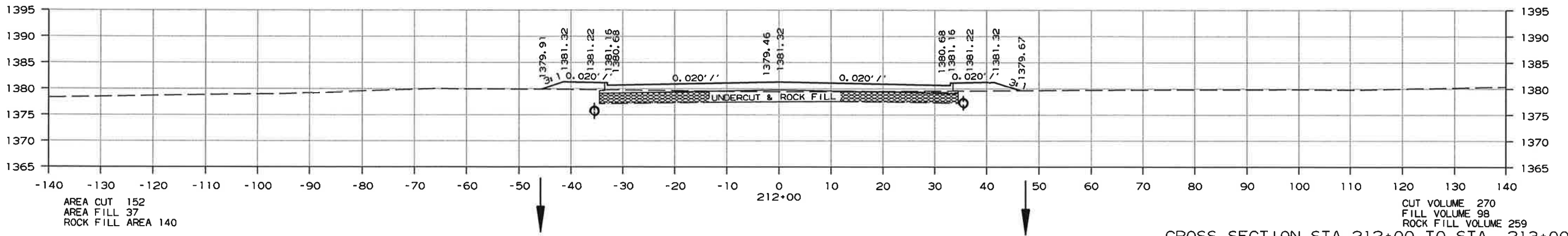
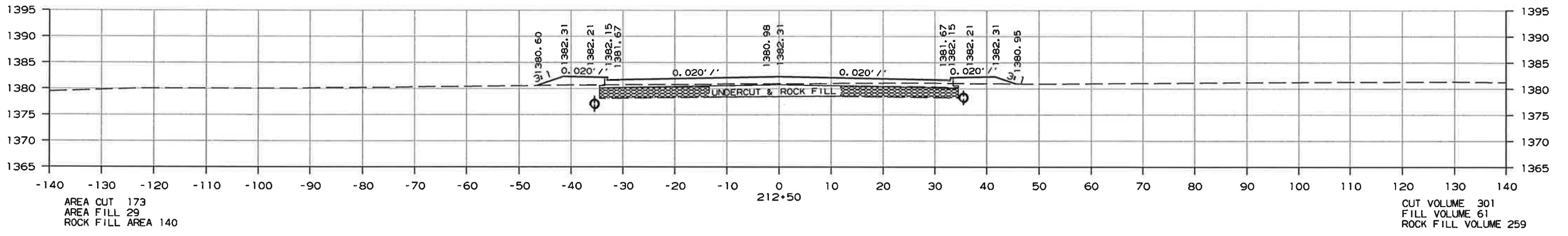
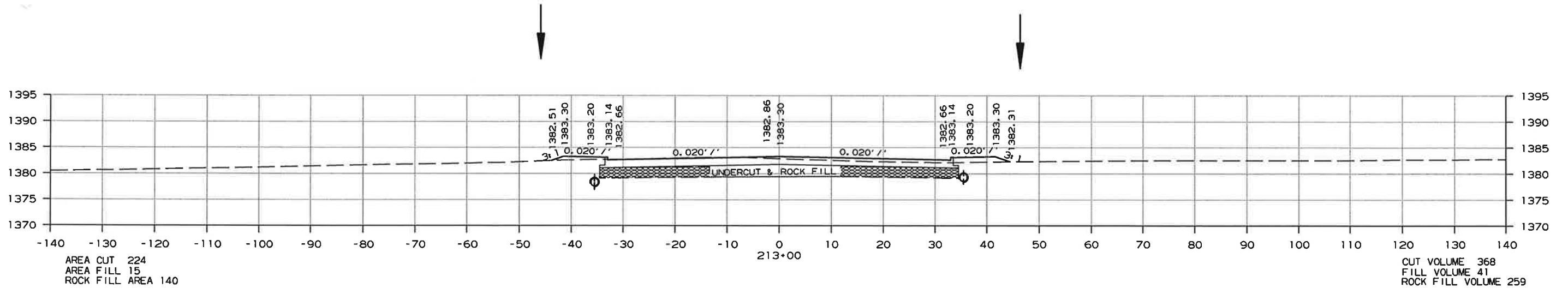


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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	244	267

2 CROSS SECTIONS

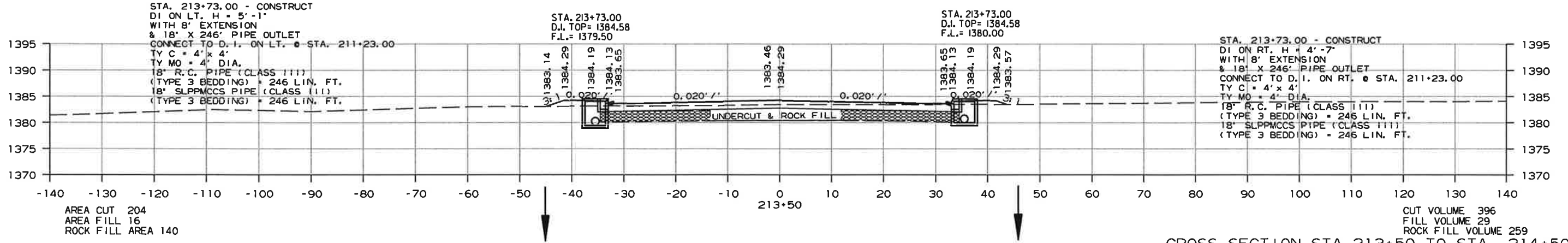
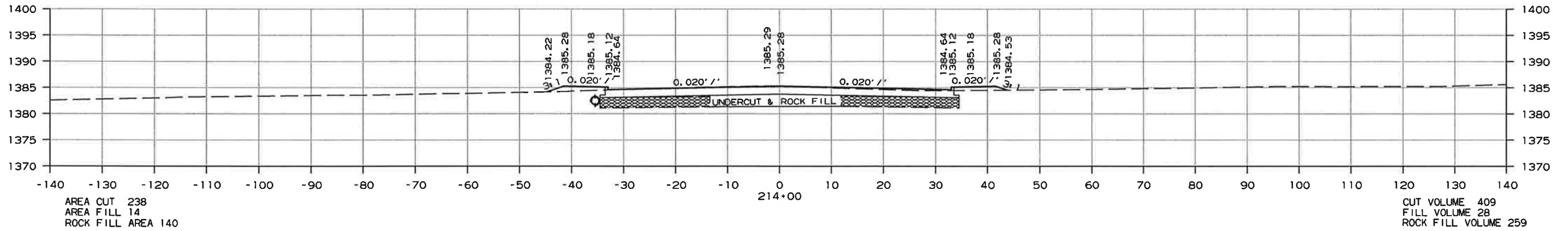
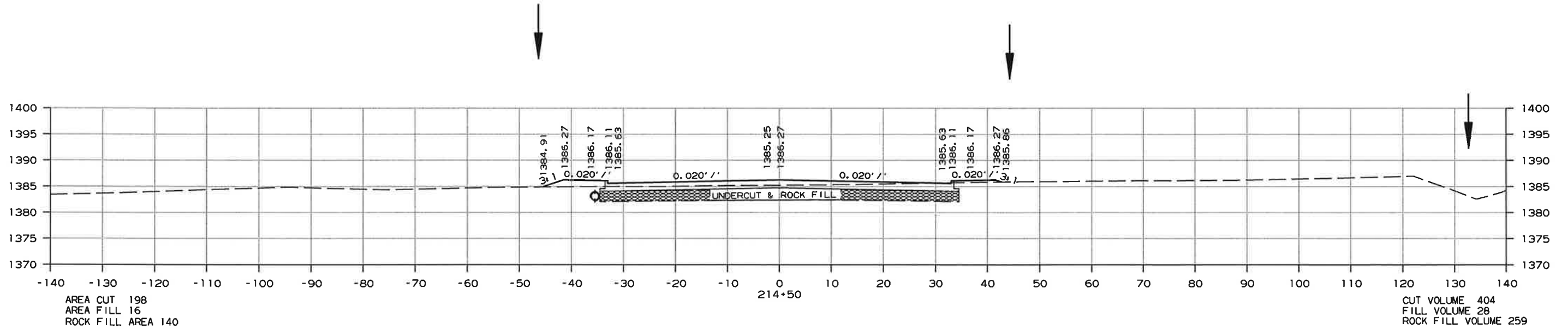


CROSS SECTION STA. 212+00 TO STA. 213+00

9/12/2017
R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	245	267

2 CROSS SECTIONS

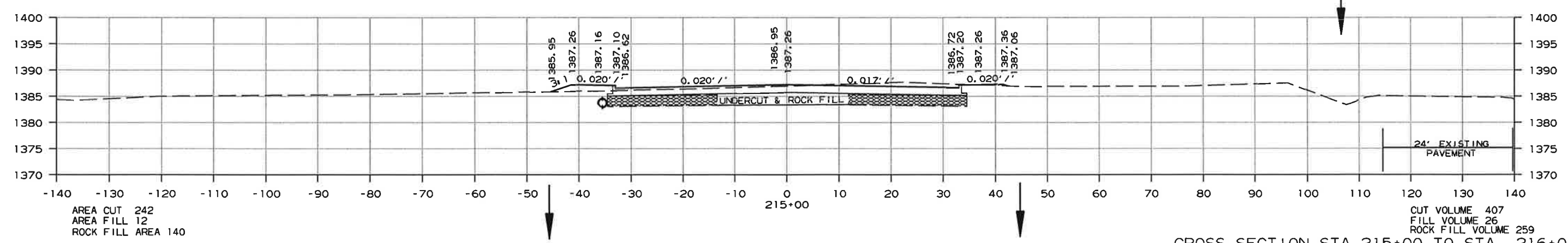
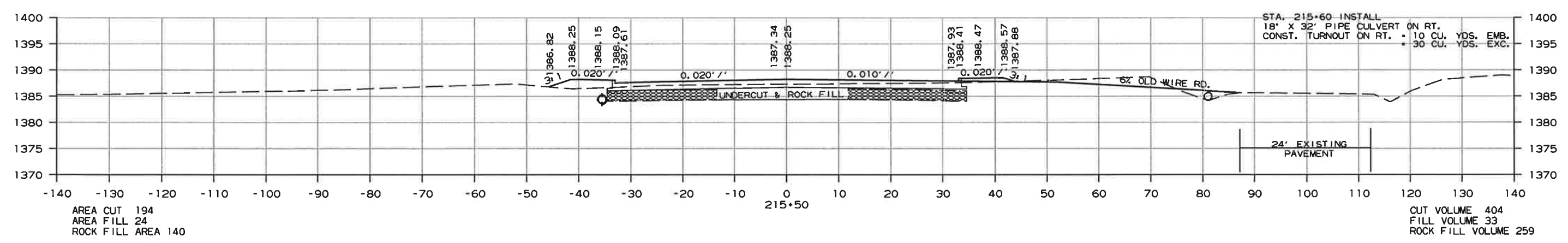
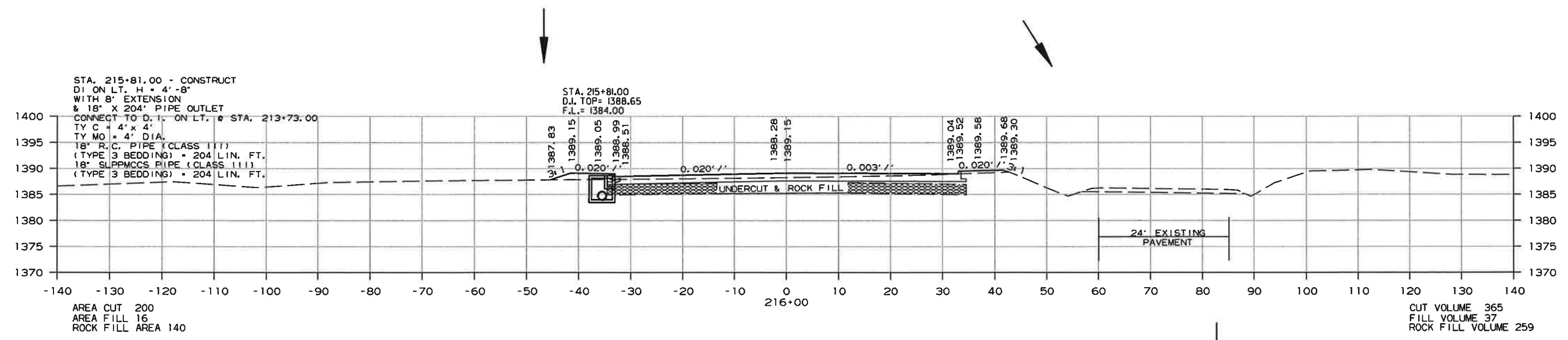


CROSS SECTION STA. 213+50 TO STA. 214+50

9/12/2017
R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
JOB NO. 012007							246	267

2 CROSS SECTIONS

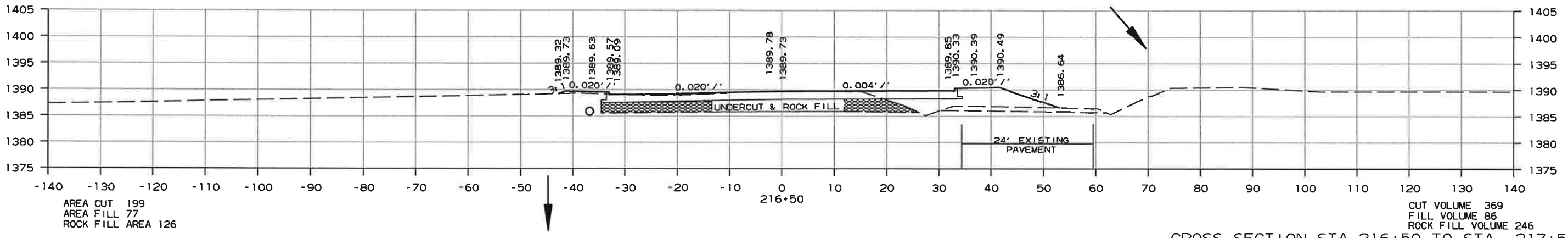
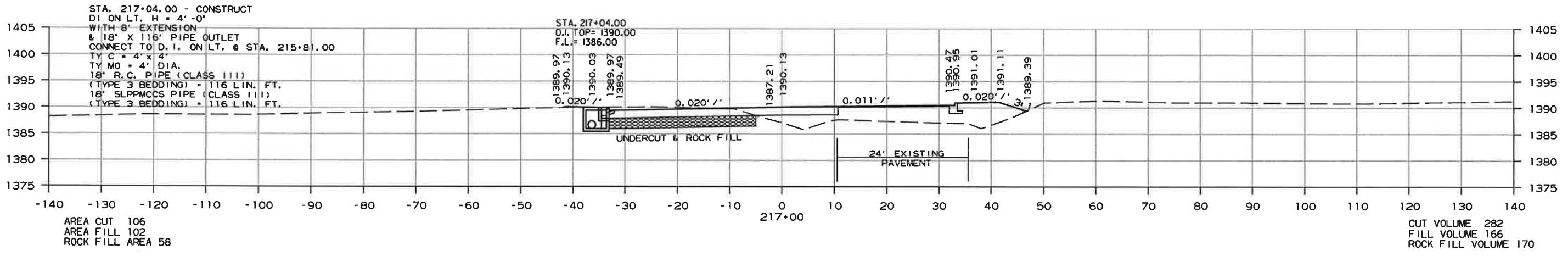
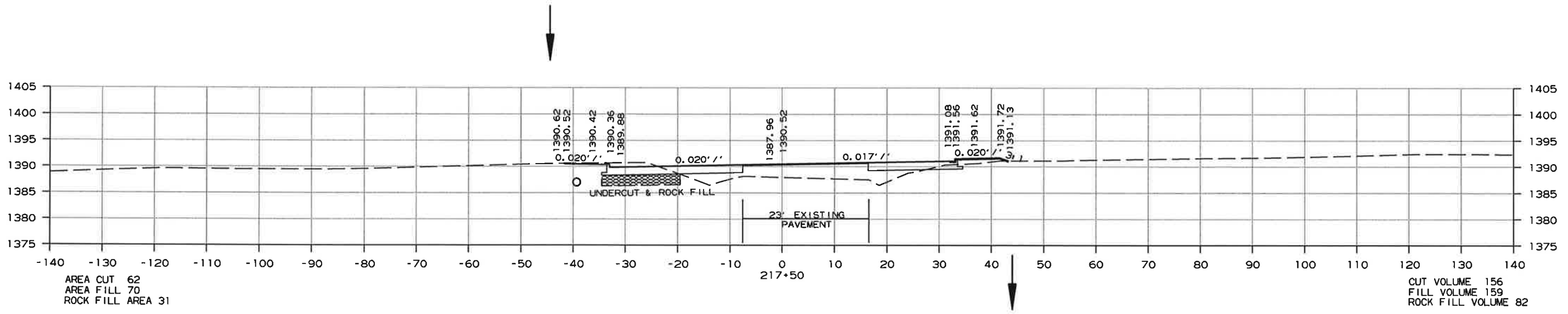


CROSS SECTION STA. 215+00 TO STA. 216+00

9/12/2017
R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
				JOB NO.	012007		247	267

2 CROSS SECTIONS

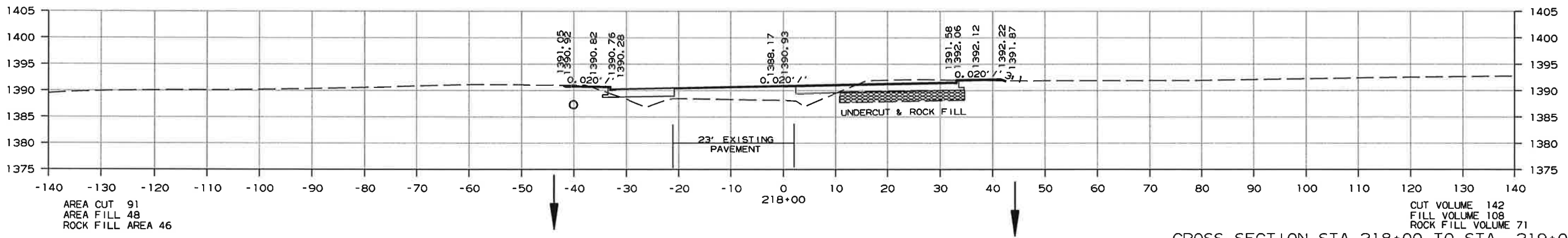
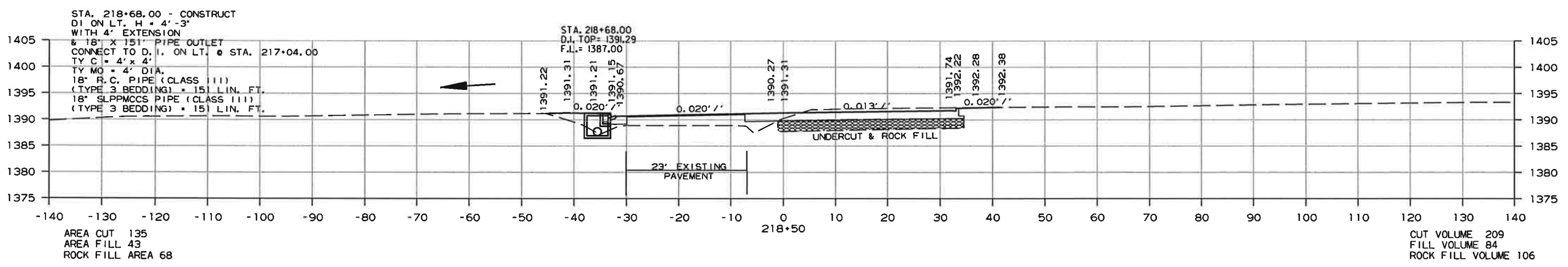
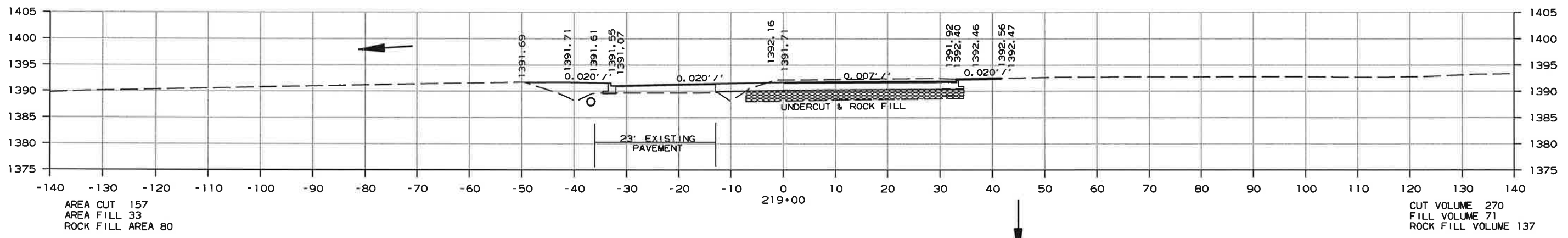


CROSS SECTION STA. 216+50 TO STA. 217+50

9/12/2017
R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	248	267

2 CROSS SECTIONS

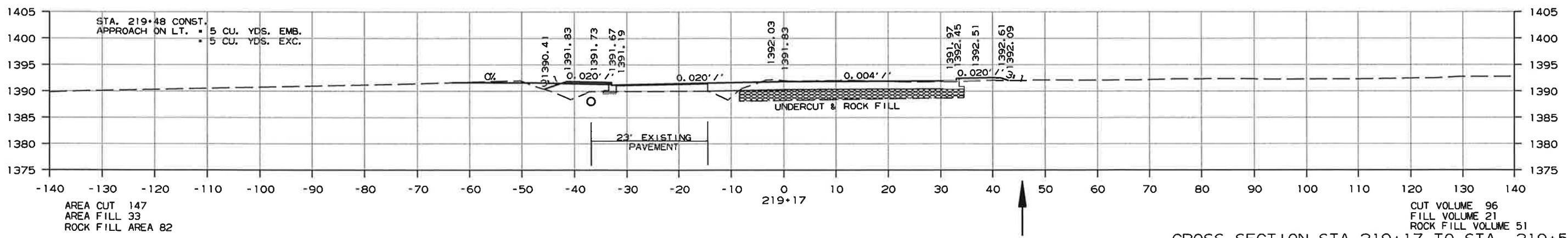
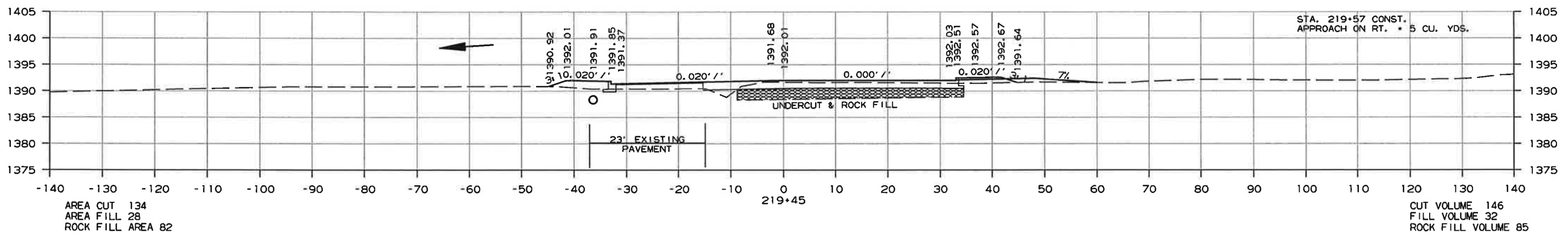
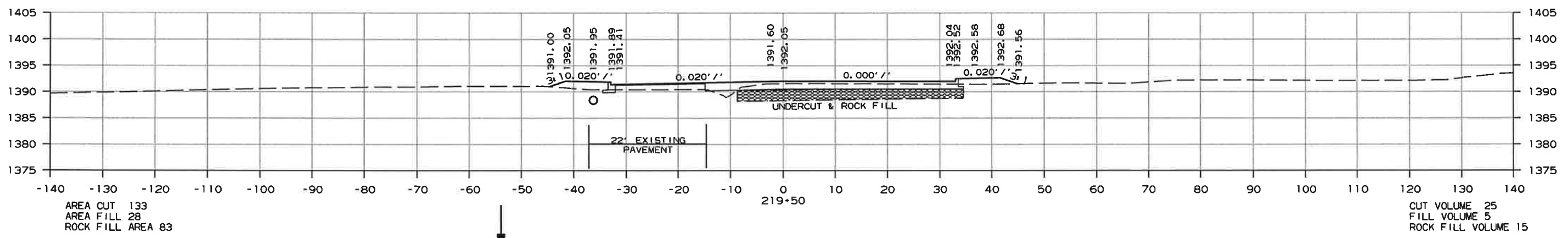


CROSS SECTION STA. 218+00 TO STA. 219+00

9/12/2017
R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
				JOB NO.	012007		249	267

2 CROSS SECTIONS

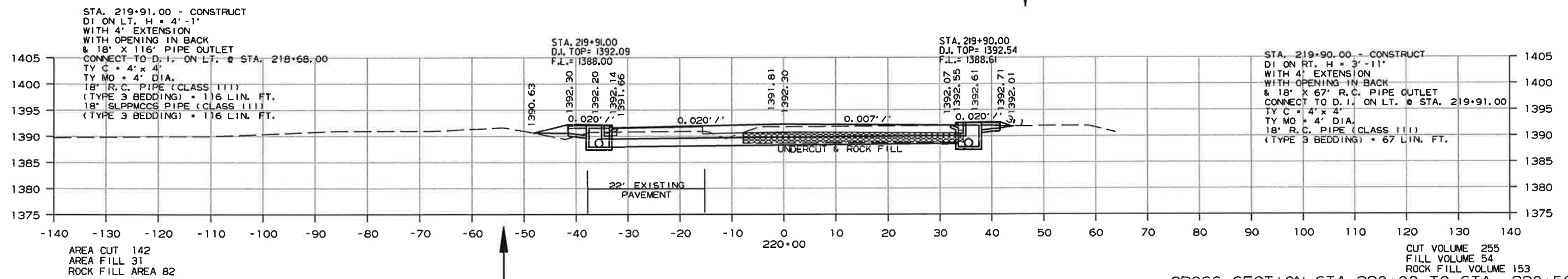
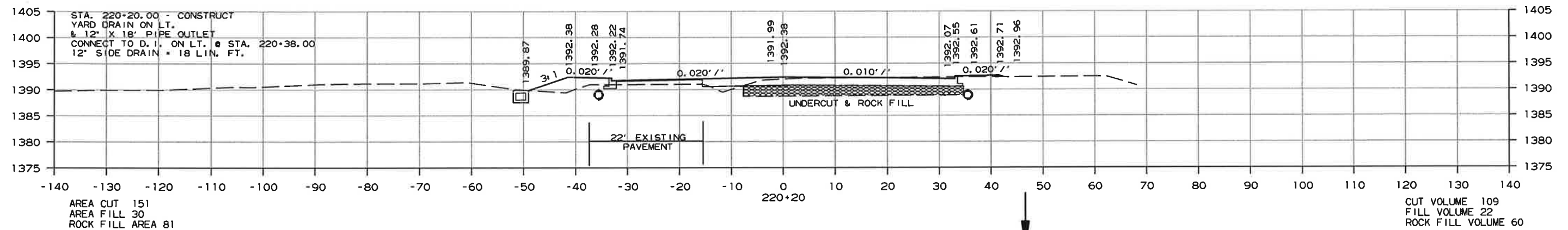
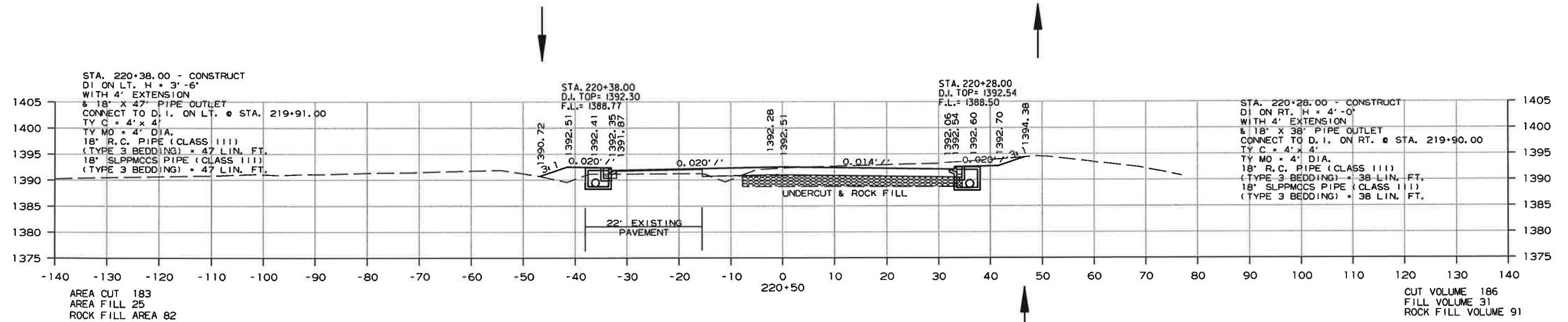


CROSS SECTION STA. 219+17 TO STA. 219+50

9/12/2017
R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. NO. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	250	267

2 CROSS SECTIONS

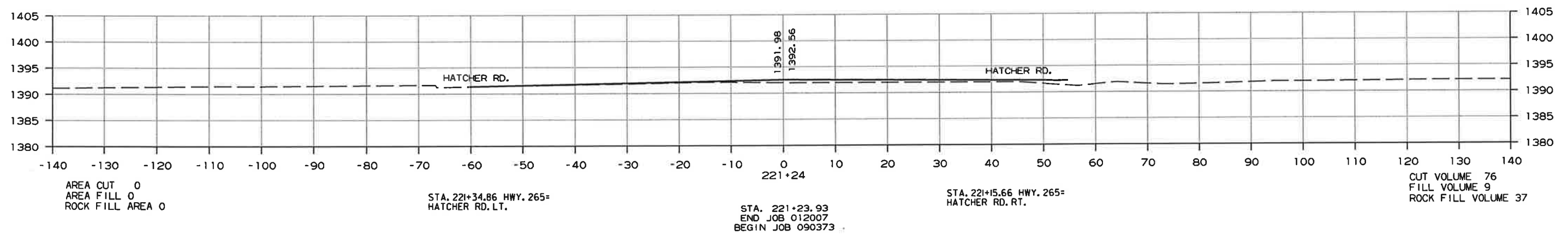
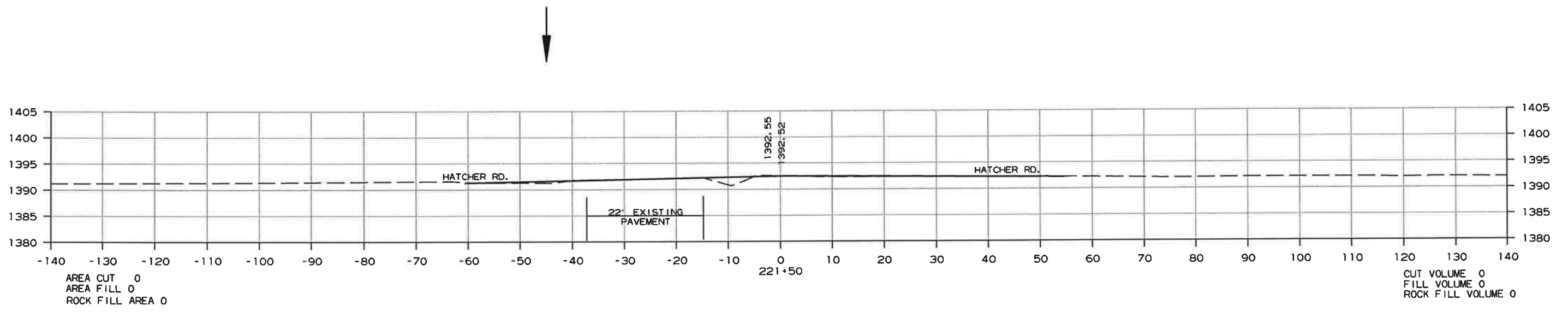


CROSS SECTION STA. 220+00 TO STA. 220+50

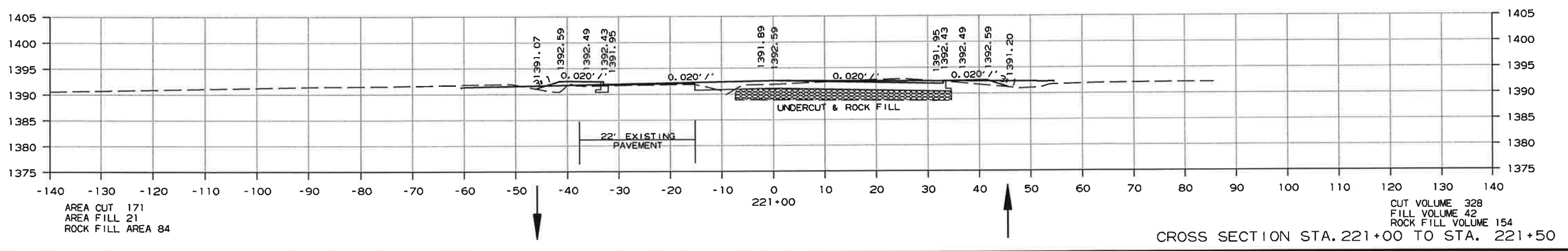
9/12/2017
R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	251	267

2 CROSS SECTIONS



STA. 221+34.86 HWY. 265= HATCHER RD. LT.
 STA. 221+23.93 END JOB 012007 BEGIN JOB 090373
 STA. 221+5.66 HWY. 265= HATCHER RD. RT.



CROSS SECTION STA. 221+00 TO STA. 221+50

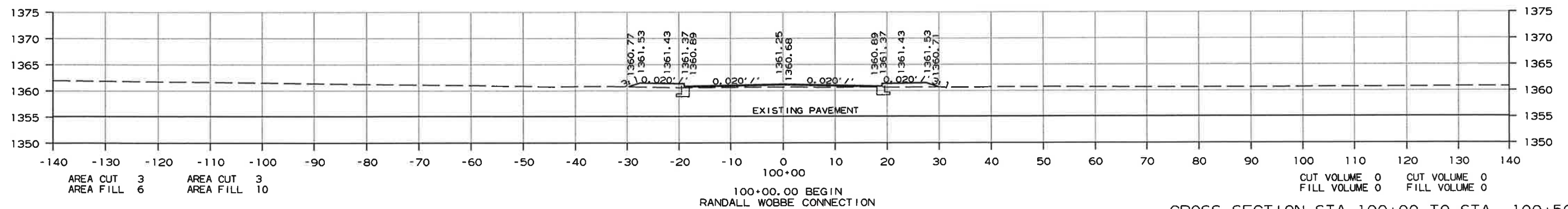
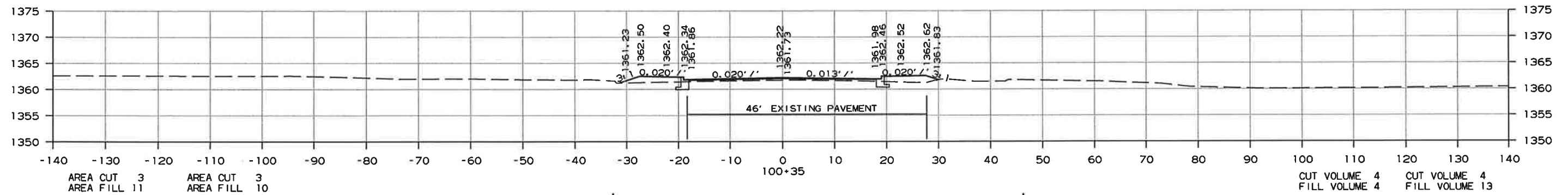
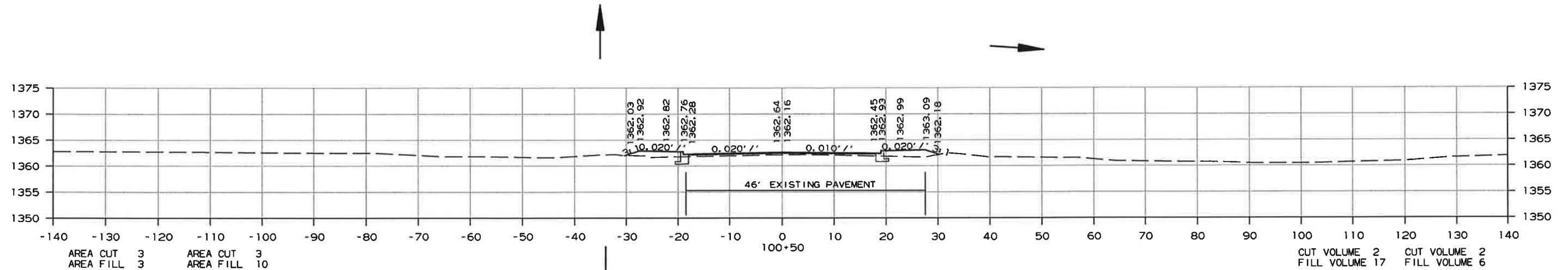
9/12/2017
 R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
JOB NO. 012007							252	267

2 CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2



CROSS SECTION STA. 100+00 TO STA. 100+50

9/29/2017

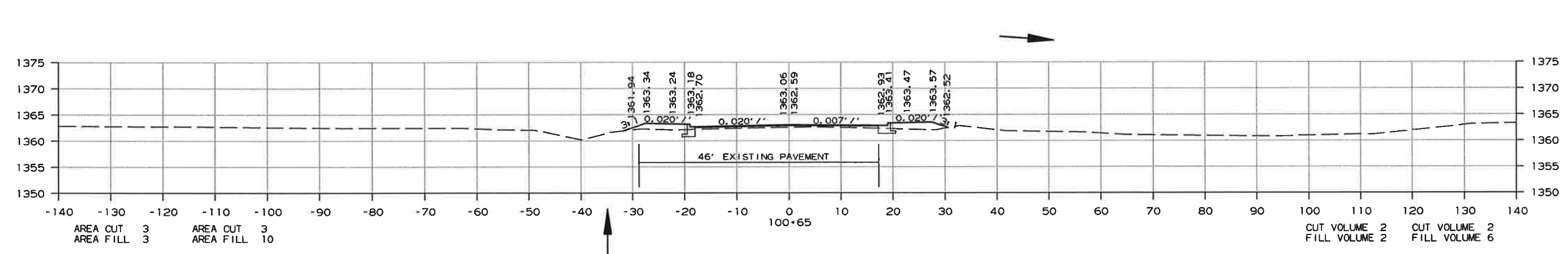
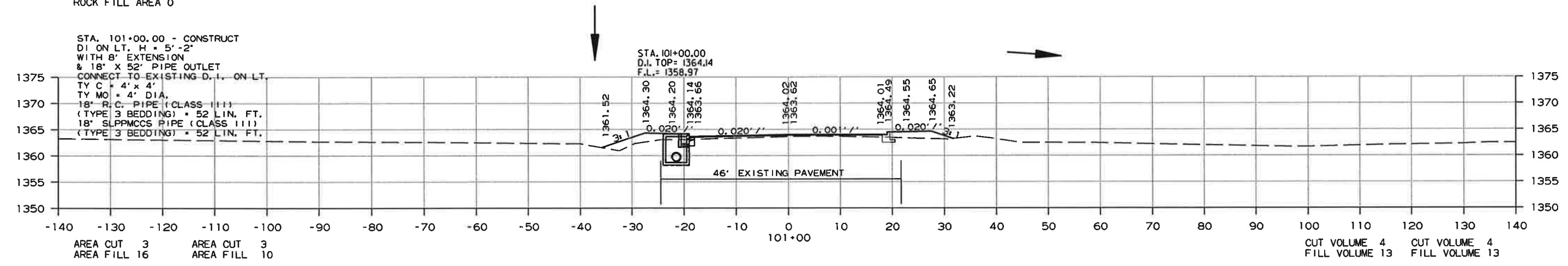
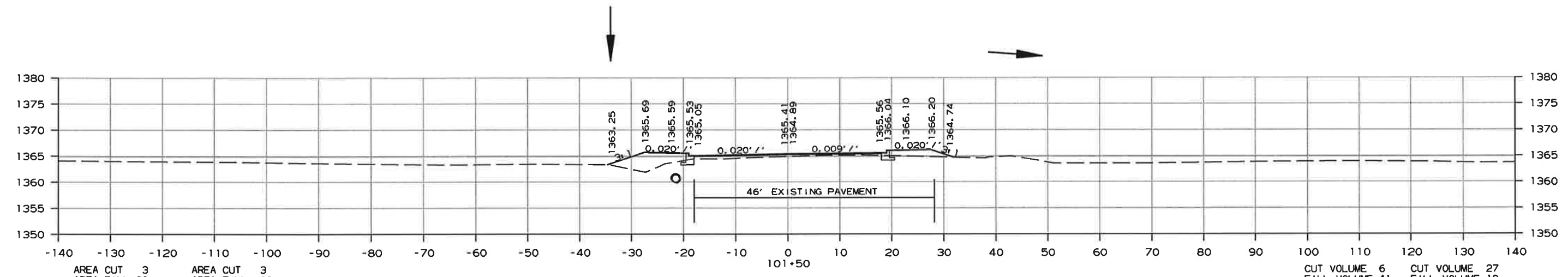
R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
							JOB NO. 012007	253 267

2 CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2



CROSS SECTION STA. 100+65 TO STA. 101+50

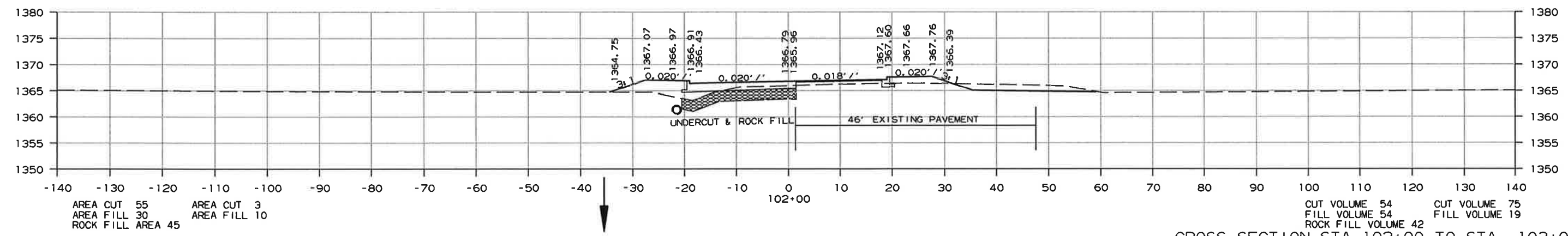
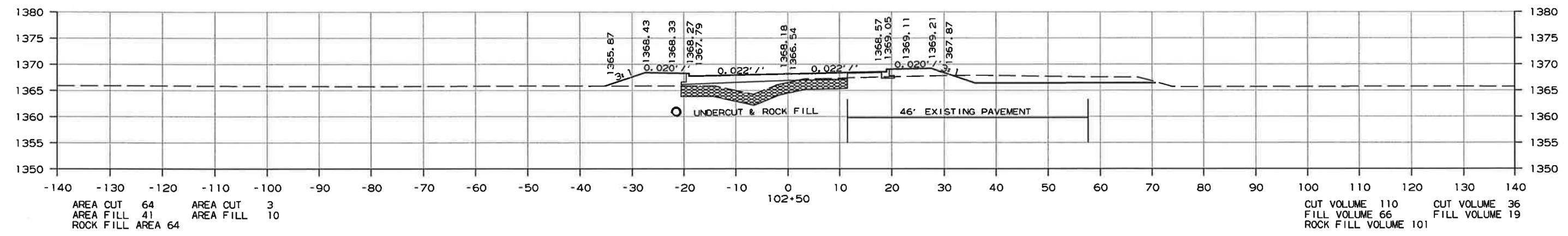
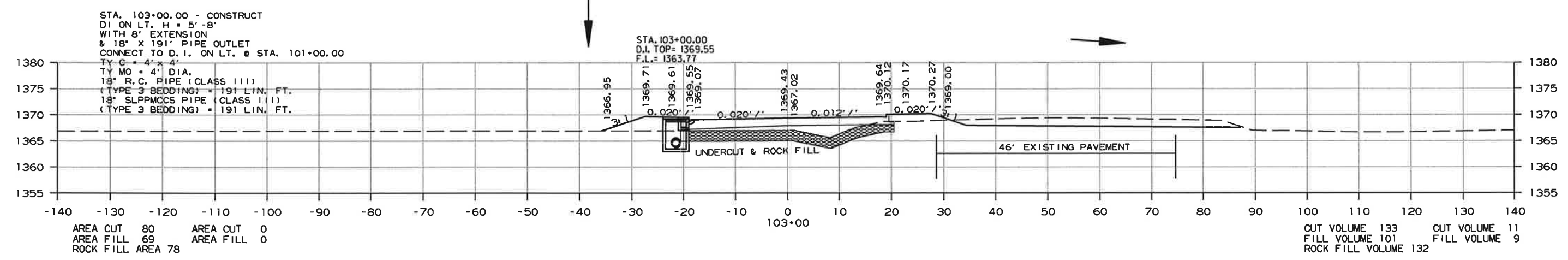
9/29/2017
R012007KCT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	254	267

2 CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2



CROSS SECTION STA. 102+00 TO STA. 103+00

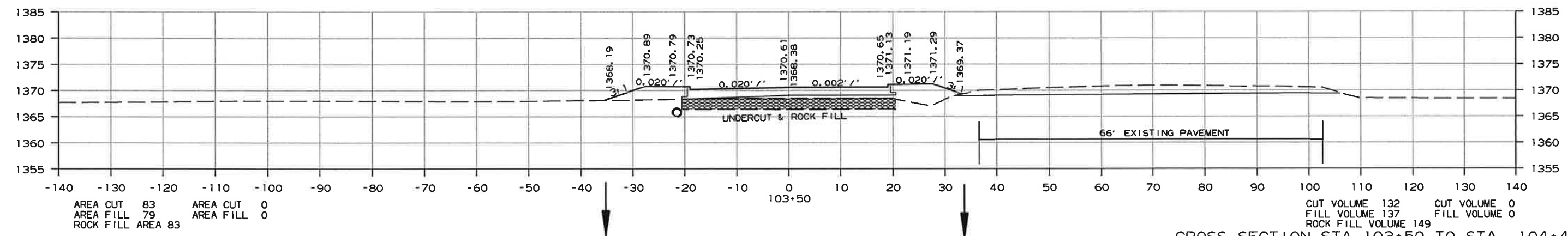
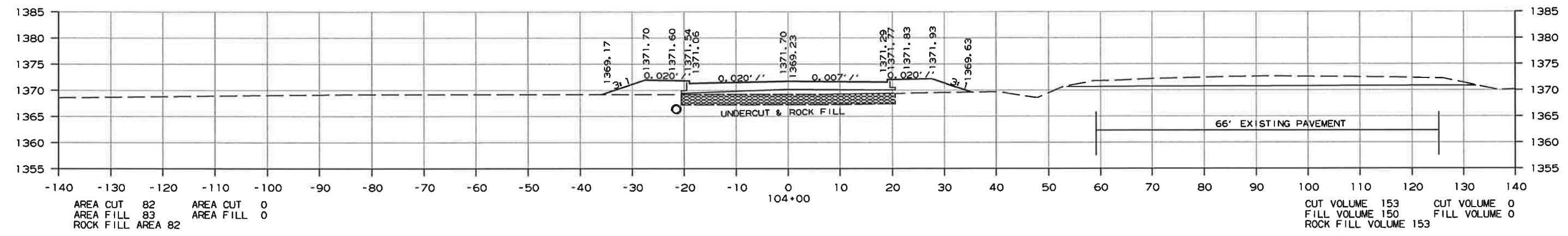
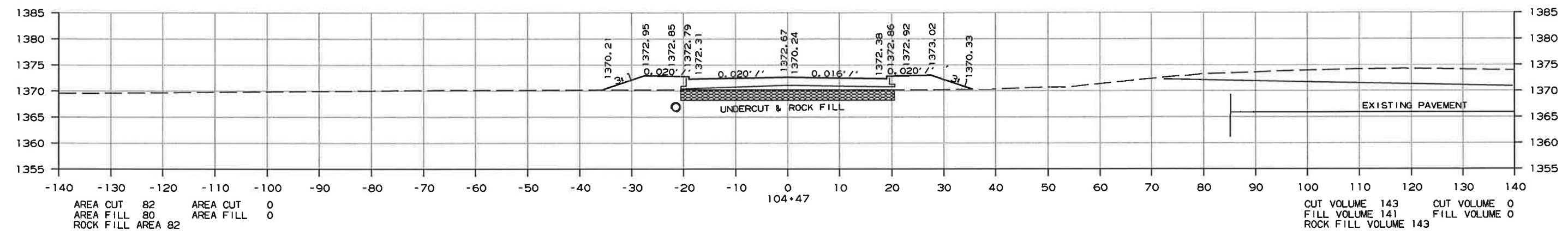
9/29/2017
 R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	255	267

2 CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2



CROSS SECTION STA. 103+50 TO STA. 104+47

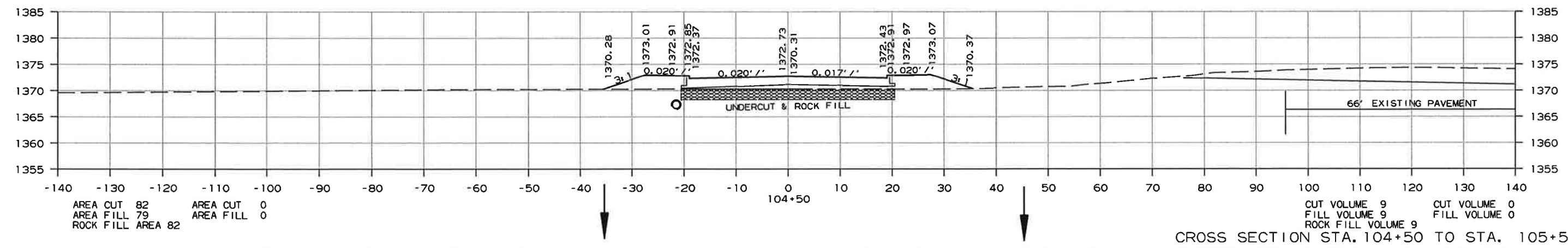
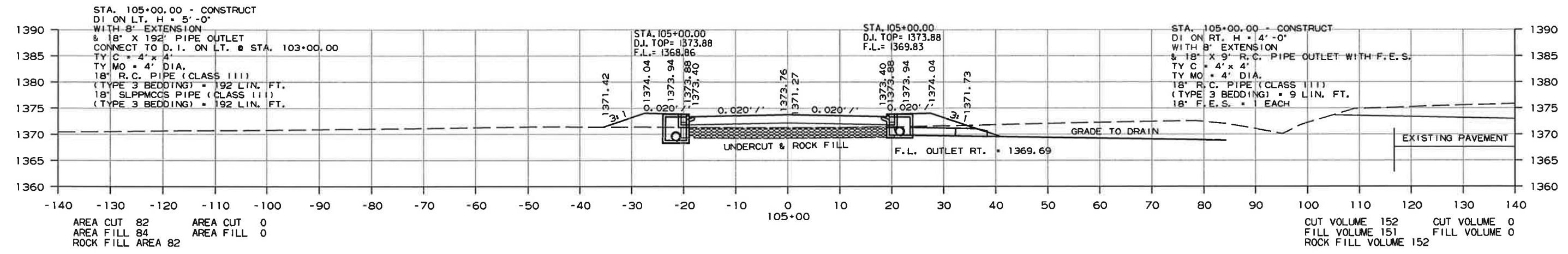
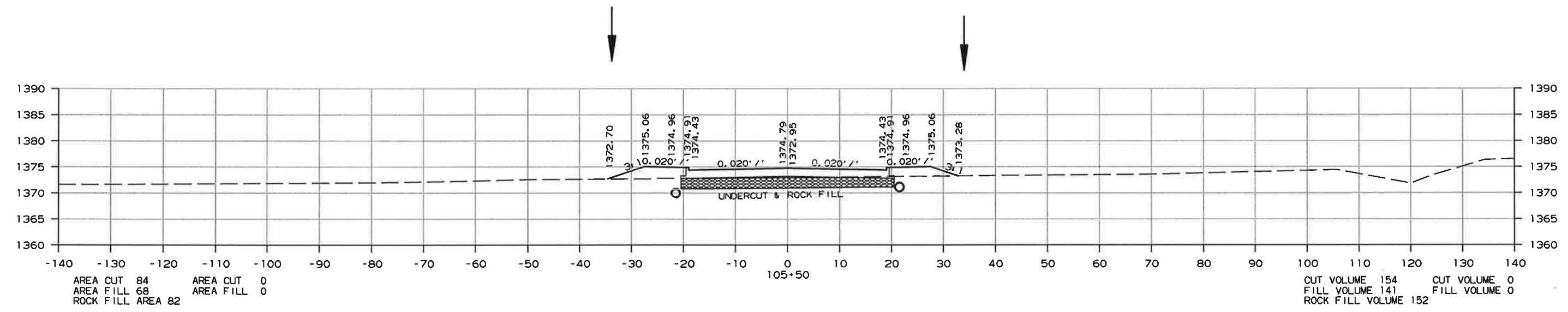
9/29/2017 R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. NO. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
				JOB NO.	012007		256	267

② CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2



CROSS SECTION STA. 104+50 TO STA. 105+50

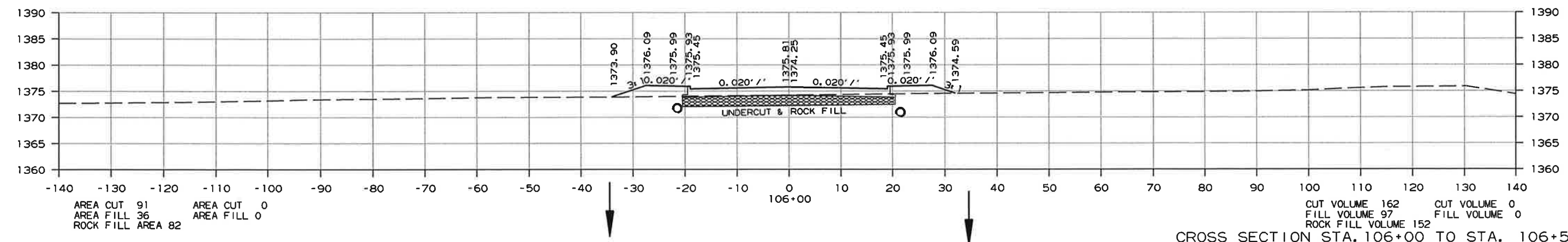
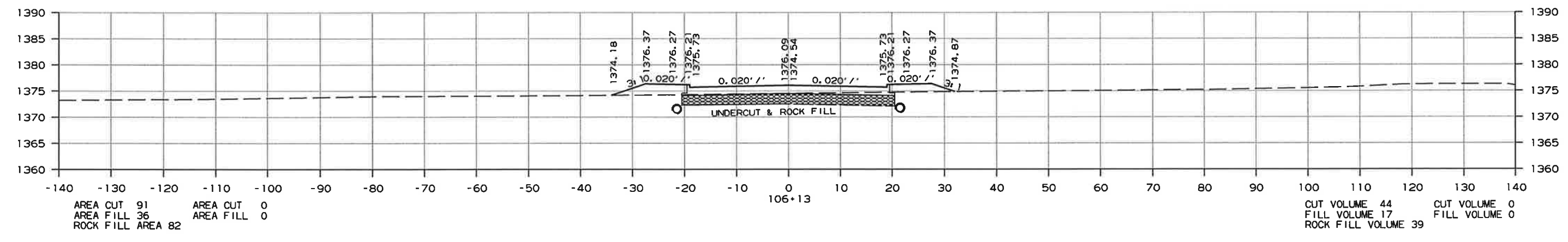
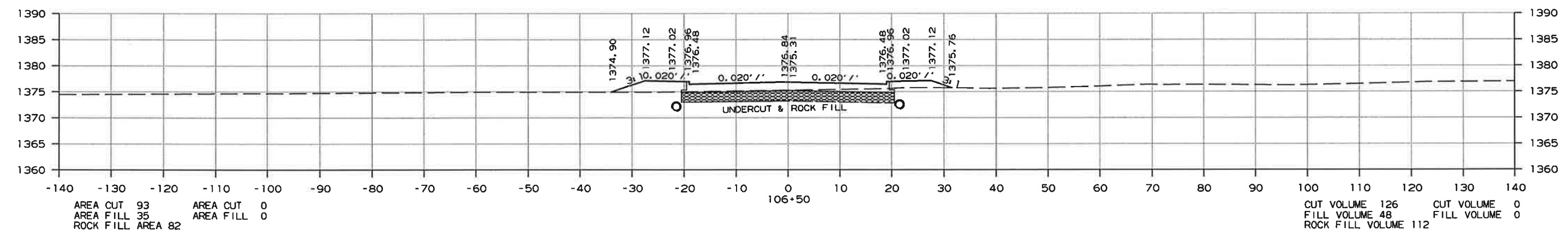
9/29/2017
R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
				JOB NO.	012007		257	267

2 CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2



CROSS SECTION STA. 106+00 TO STA. 106+50

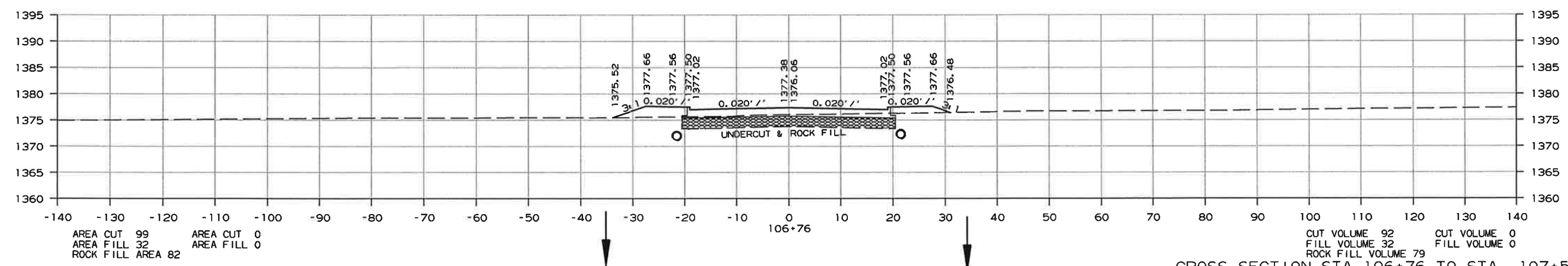
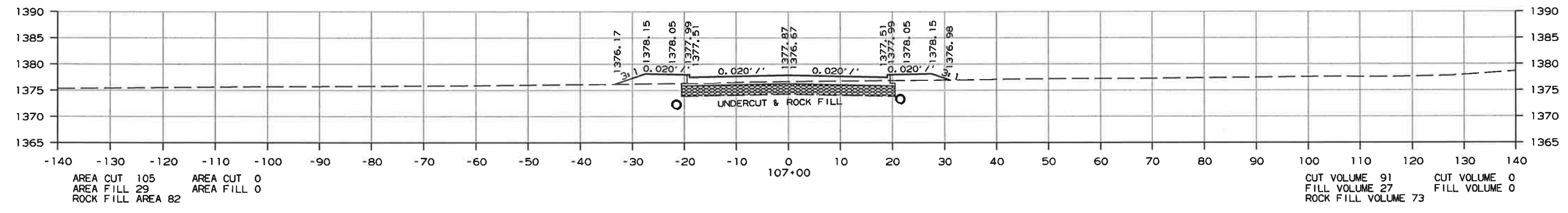
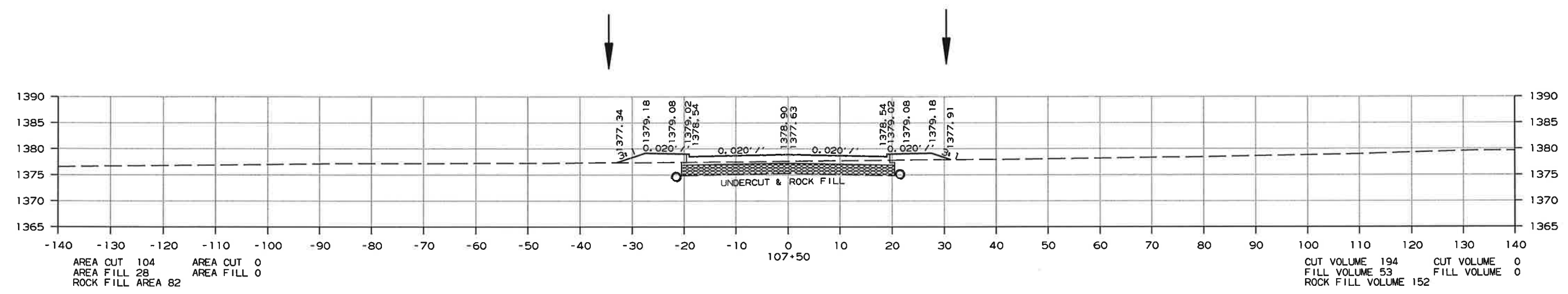
9/29/2017
R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
				JOB NO.	012007		258	267

② CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2



CROSS SECTION STA. 106+76 TO STA. 107+50

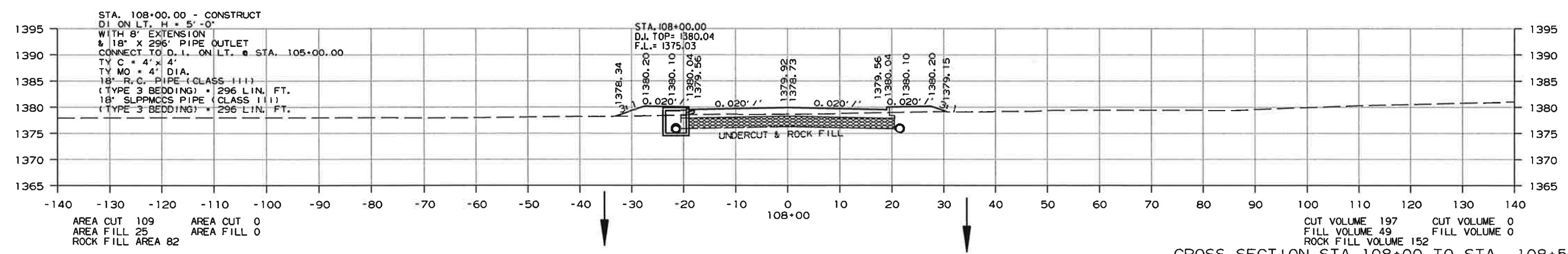
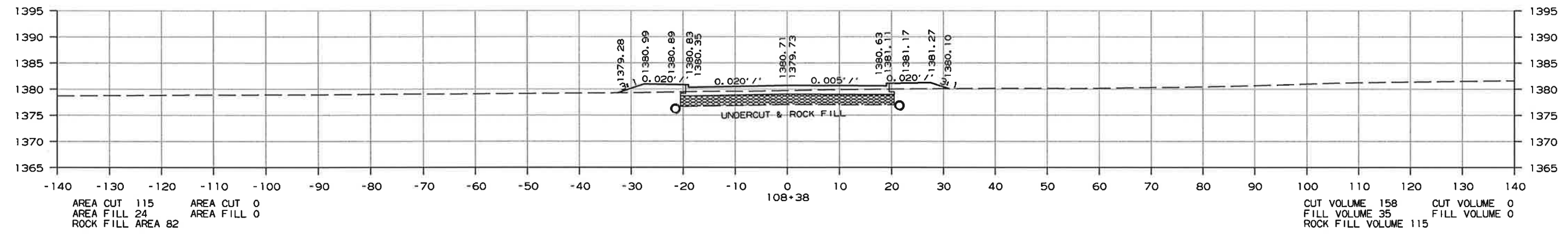
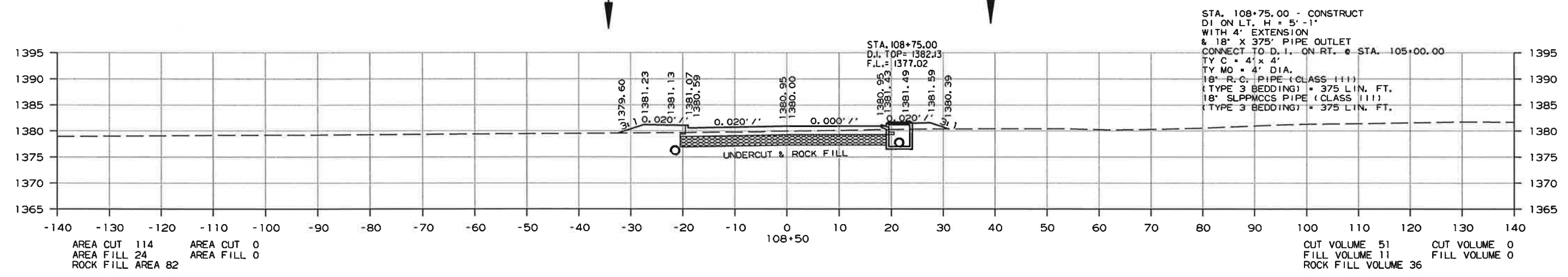
9/29/2017
R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
JOB NO. 012007							259	267

2 CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2



CROSS SECTION STA. 108+00 TO STA. 108+50

9/29/2017
 R012007KGT.DGN

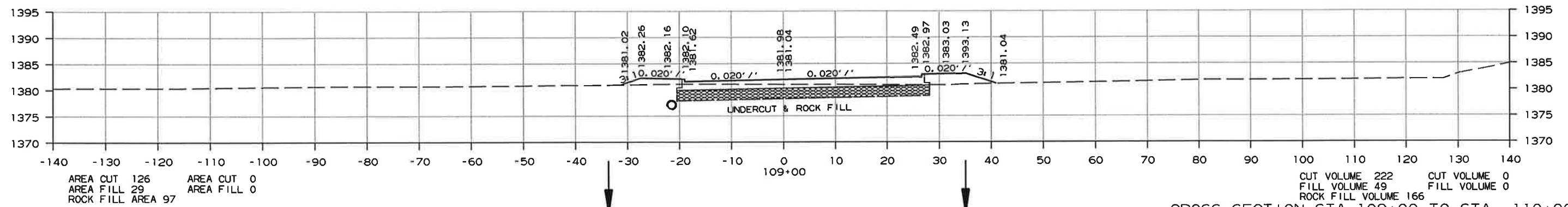
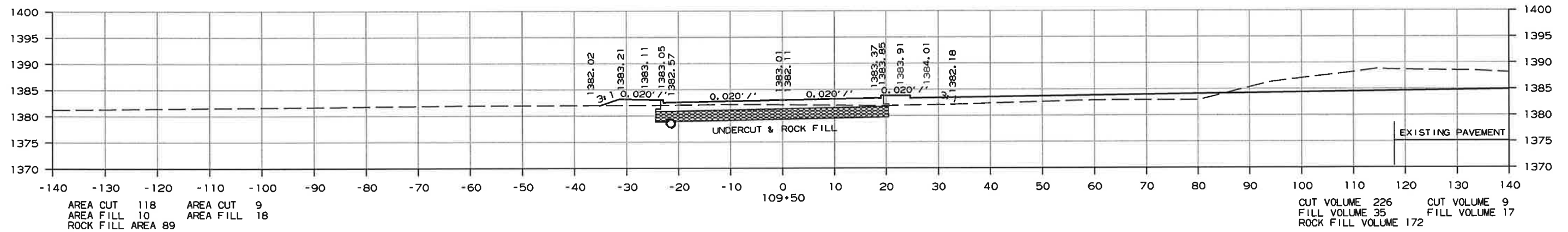
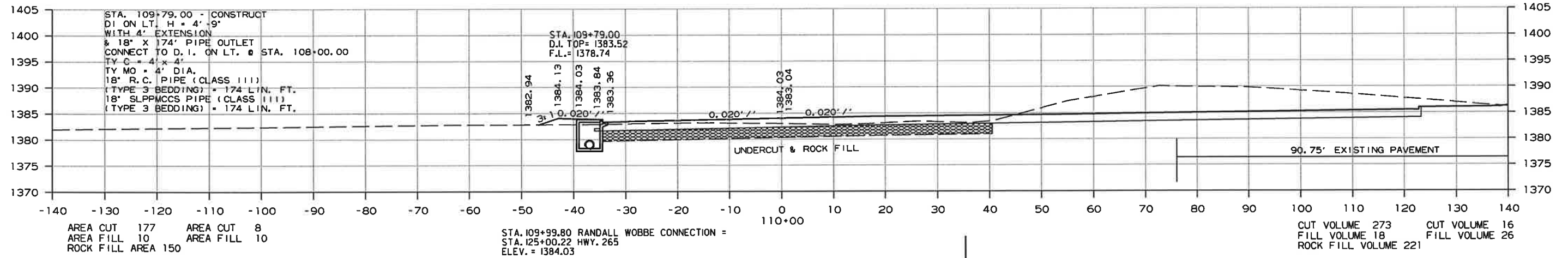
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	260	267

② CROSS SECTIONS

STA. 110+38.94 RANDALL WOBBE CONNECTION =
 STA. 125+21.4 HWY. 265
 ELEV. = 1384.79

STAGE 1 STAGE 2

STAGE 1 STAGE 2



CROSS SECTION STA. 109+00 TO STA. 110+00

9/29/2017

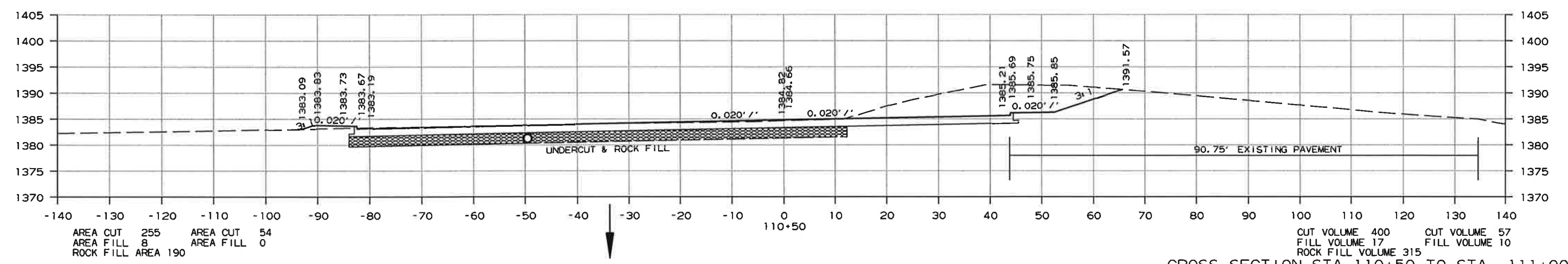
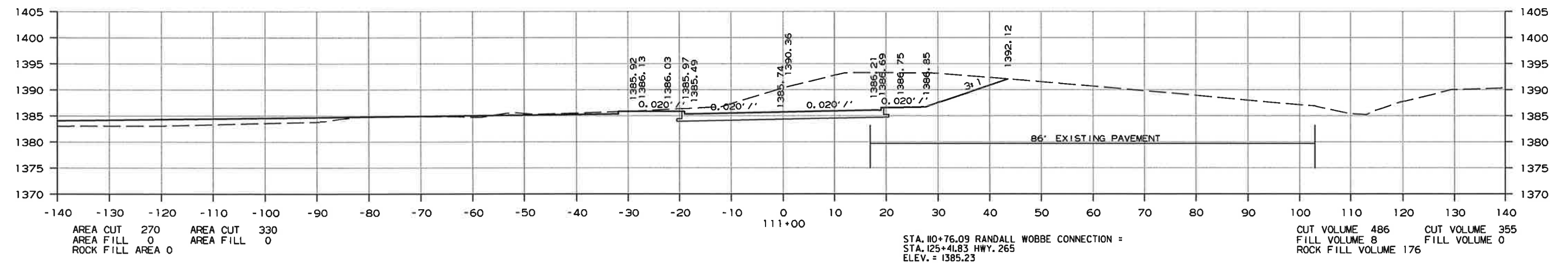
R012007KCT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
JOB NO. 012007							261	267

② CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2



CROSS SECTION STA. 110+50 TO STA. 111+00

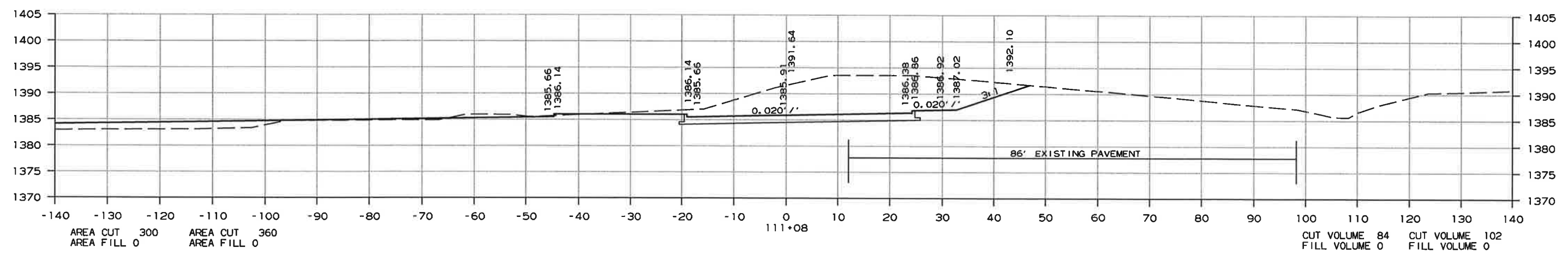
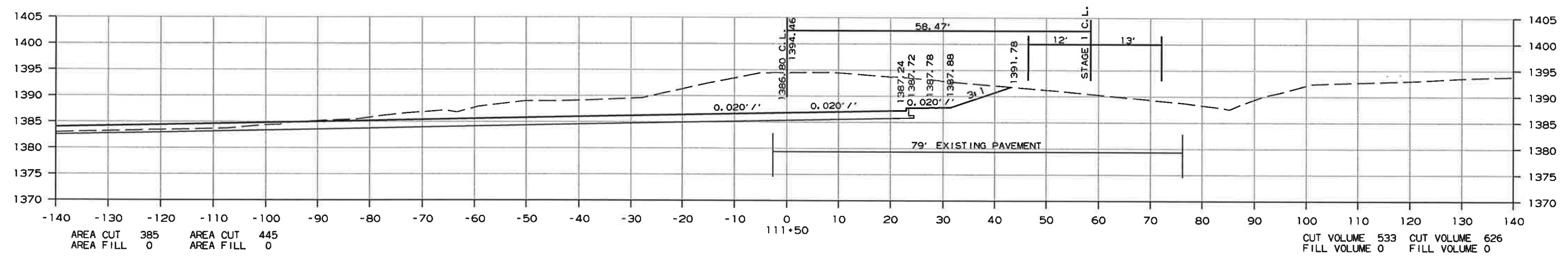
9/29/2017
 R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	262	267

2 CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2



CROSS SECTION STA. 111+08 TO STA. 111+50

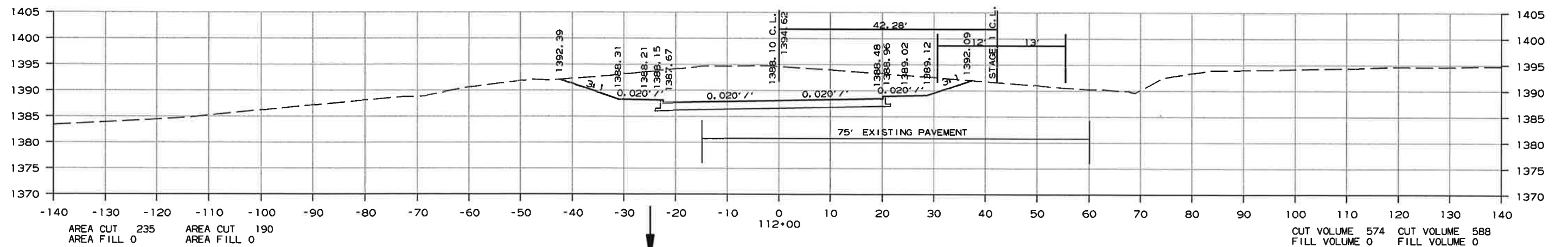
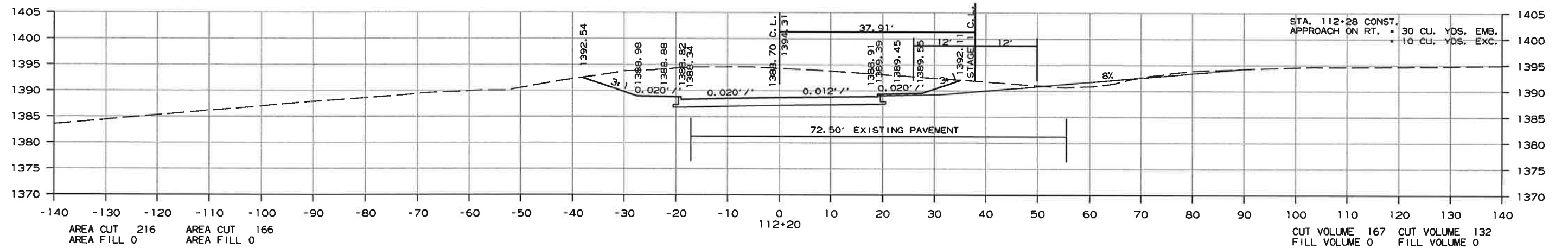
9/29/2017 R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	263	267

2 CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2



CROSS SECTION STA. 112+00 TO STA. 112+20

9/29/2017

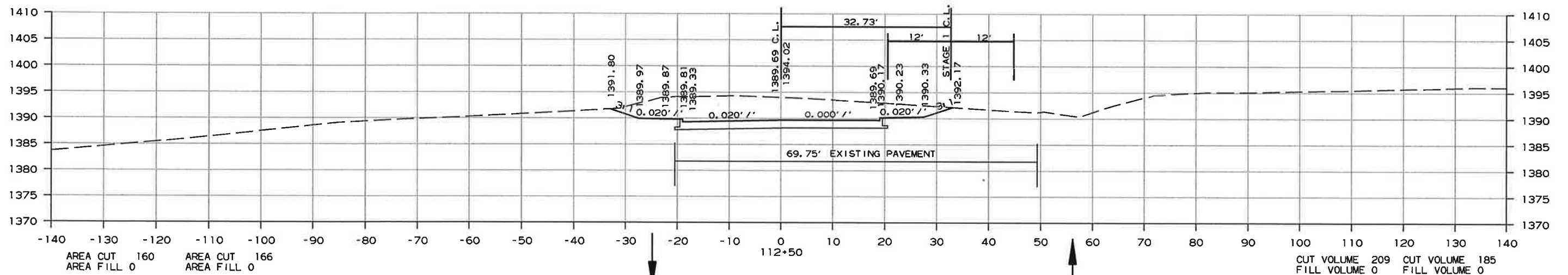
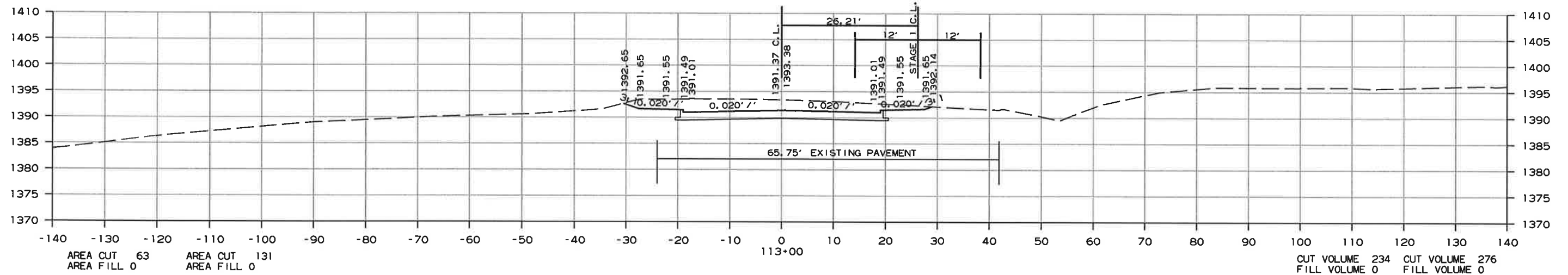
R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	264	267

2 CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2



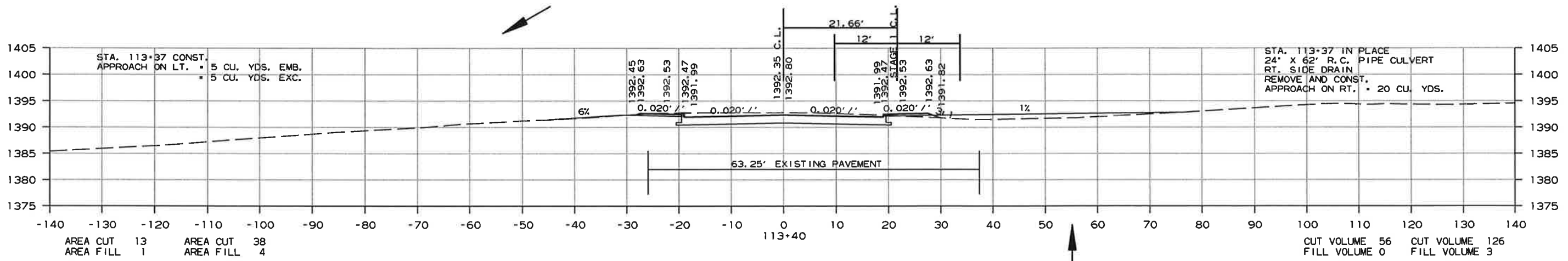
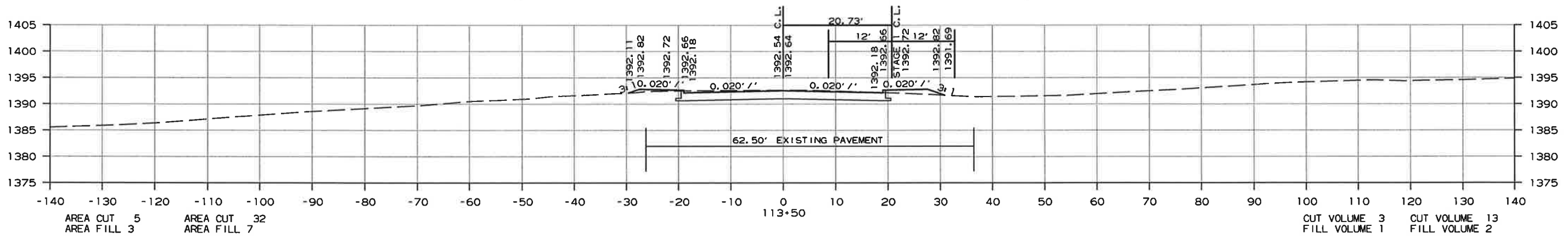
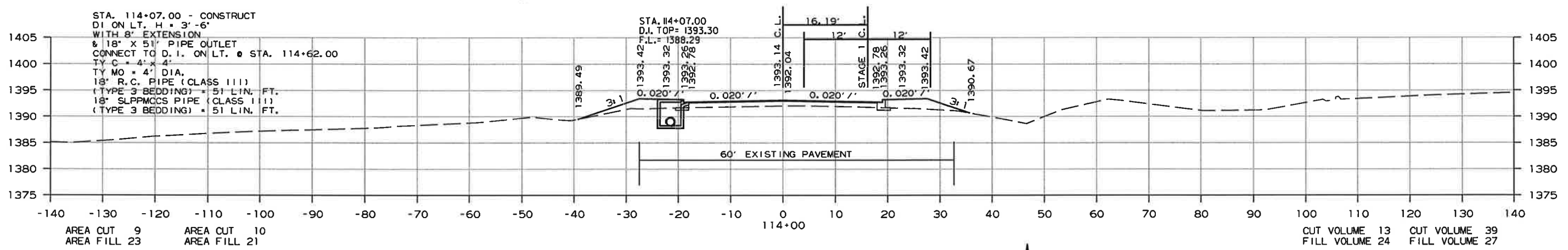
CROSS SECTION STA. 112+50 TO STA. 113+00

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
						JOB NO. 012007	265	267

2 CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2



CROSS SECTION STA. 113+40 TO STA. 114+00

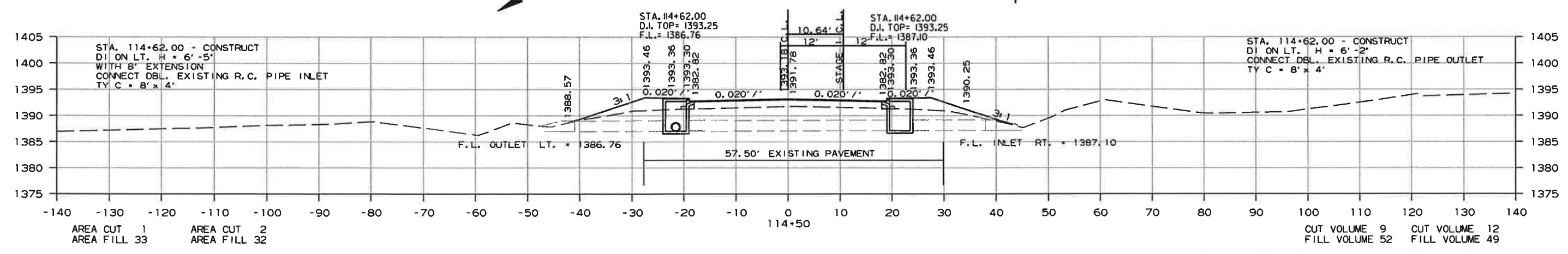
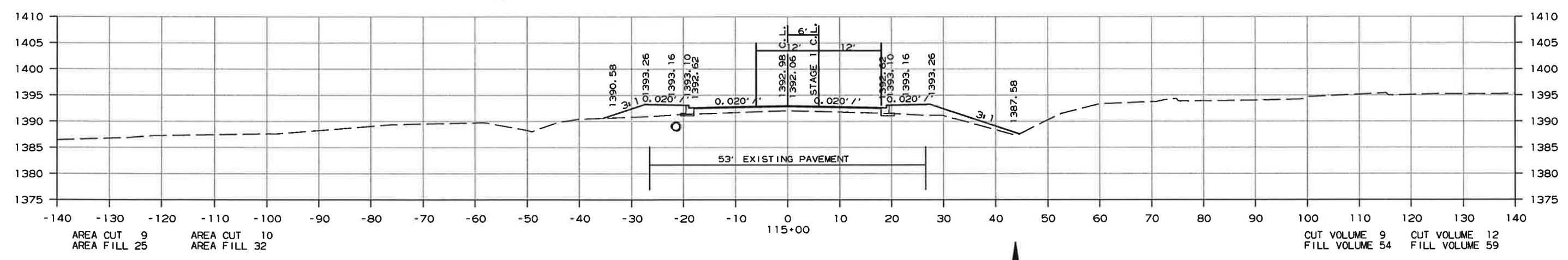
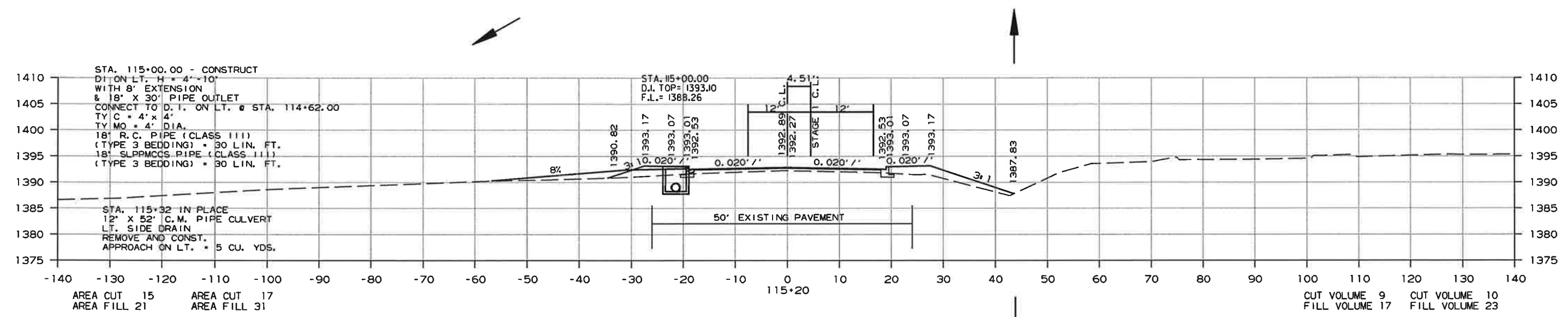
9/29/2017
 R012007KGT.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
JOB NO. 012007							266	267

2 CROSS SECTIONS

STAGE 1 STAGE 2

STAGE 1 STAGE 2



CROSS SECTION STA. 114+50 TO STA. 115+20

9/29/2017 RO12007KGT.DGN

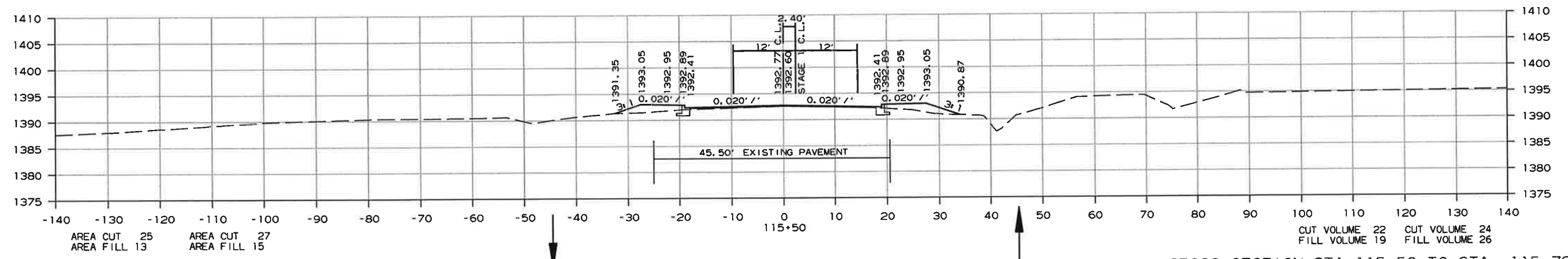
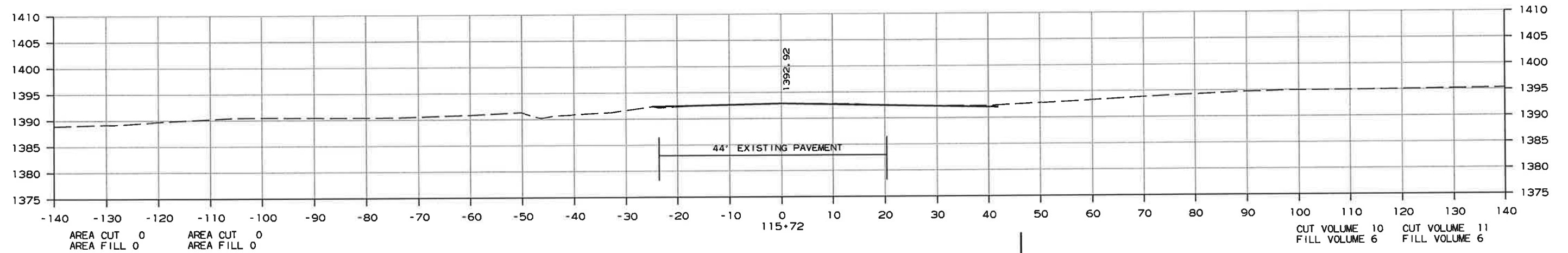
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-7-17				6	ARK.			
JOB NO. 012007							267	267

② CROSS SECTIONS

STAGE 1 STAGE 2

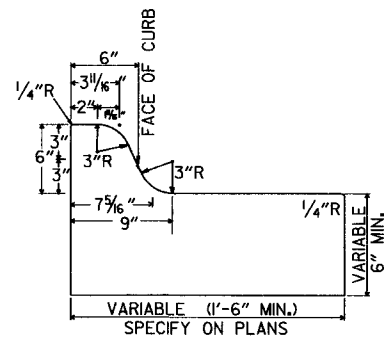
STAGE 1 STAGE 2

115+72.24 END
RANDALL WOBBE CONNECTION

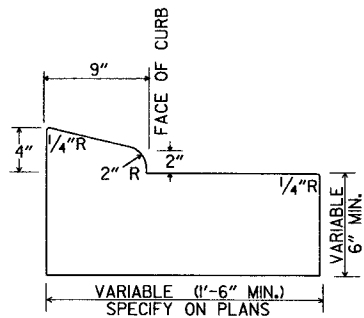


CROSS SECTION STA. 115+50 TO STA. 115+72

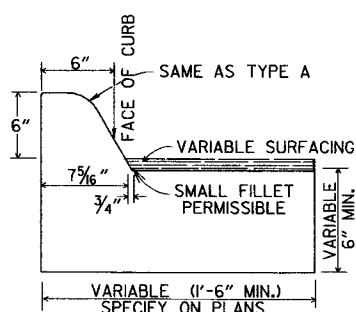
9/29/2017
R012007KGT.DGN



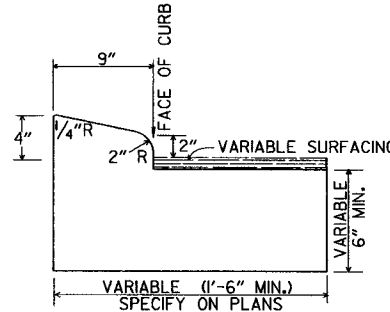
TYPE A



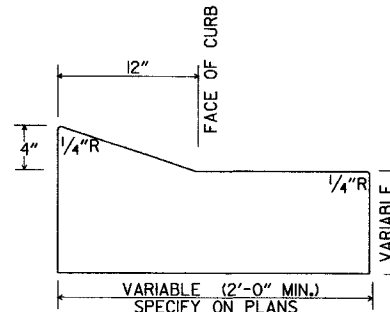
TYPE B-1



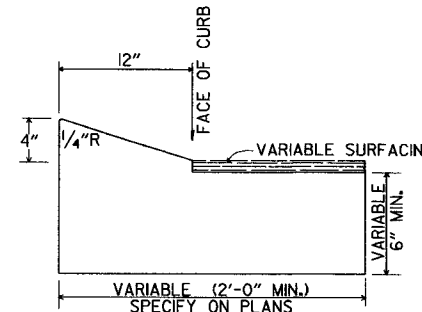
TYPE C



TYPE B-2

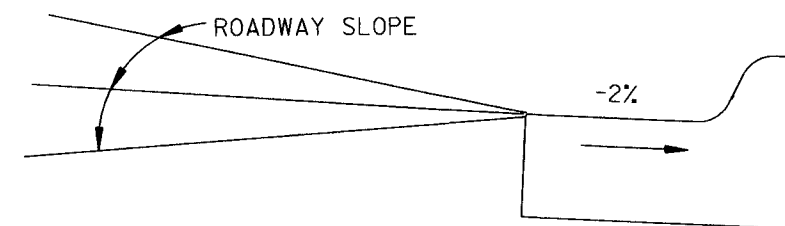


TYPE E-1

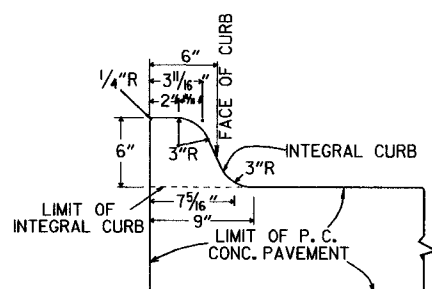


TYPE E-2

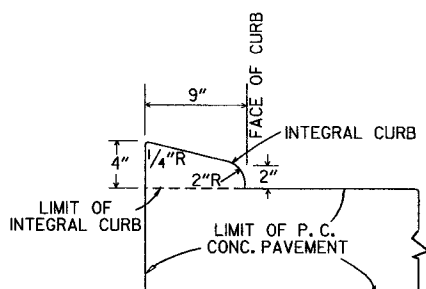
CONCRETE COMBINATION CURB AND GUTTER



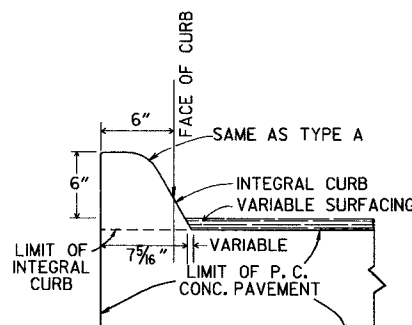
DETAIL OF GUTTER SLOPE
GUTTER SHALL BE CONSTRUCTED ON 2% SLOPE AWAY FROM ROADWAY, REGARDLESS OF ROADWAY SLOPE.



TYPE A

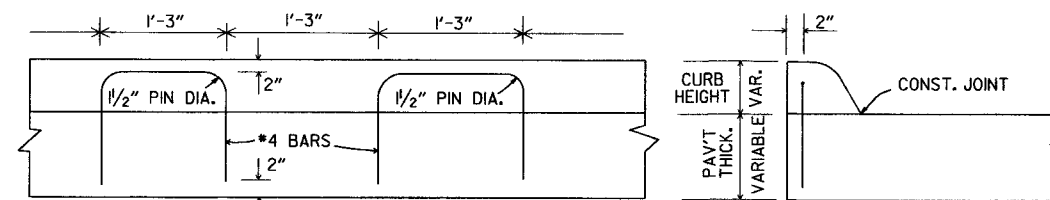


TYPE B



TYPE C

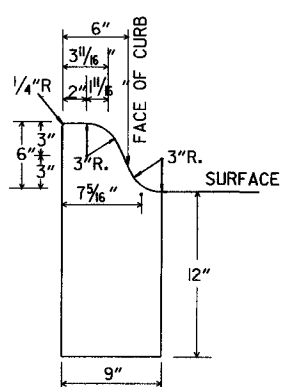
INTEGRAL CURB



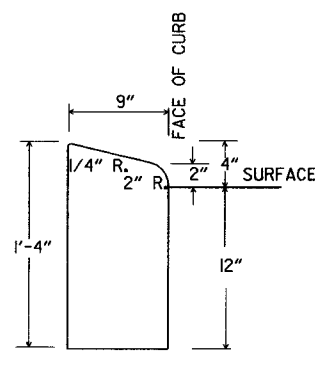
LONGITUDINAL SECTION

ELEVATION

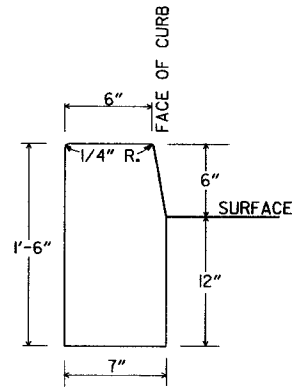
ALTERNATE CONSTRUCTION METHOD FOR INTEGRAL CURB



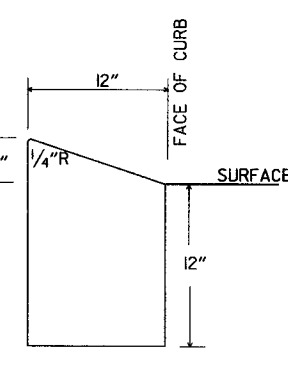
TYPE A



TYPE B

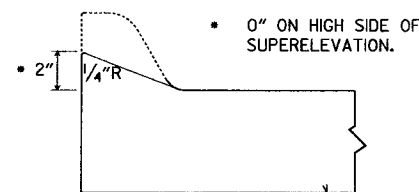


TYPE D



TYPE E

CONCRETE CURB



NOTE: USE MODIFIED CURB AS SPECIFIED ON STD. DR-1. COMPENSATION FOR MODIFIED CURB WILL BE CONSIDERED INCLUDED IN THE PRICE BID FOR THE TYPE OF CURB OR CURB AND GUTTER SPECIFIED.

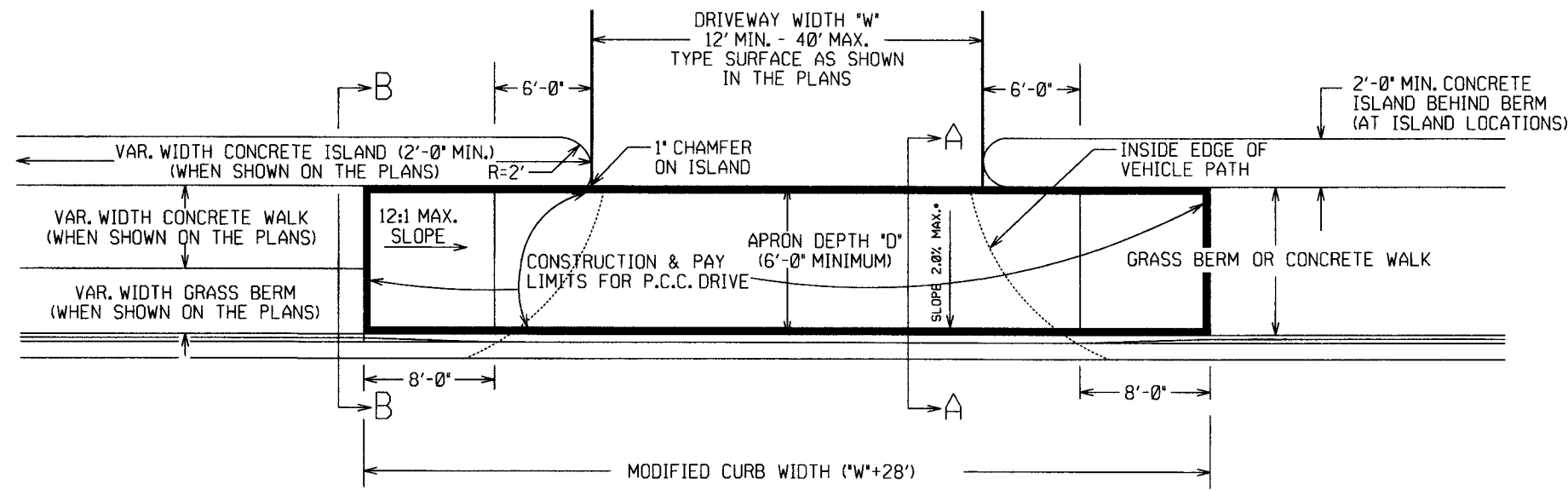
DETAILS OF MODIFIED CURB

DATE	REVISION	DATE FILMED
11-29-07	REVISED GUTTER SLOPE & MODIFIED CURB DETAILS	
11-10-05	ADDED DETAILS OF TYPE E CURBS	
11-16-01	REVISED CONCRETE CURB TYPE B	
11-18-98	REVISED MODIFIED CURB	
6-2-94	ADDED NOTE TO SPECIAL MODIFIED CURB	
8-5-93	CORRECTED GUTTER SLOPE	8-5-93
10-1-92	ADDED DETAILS OF GUTTER SLOPE	10-1-92
5-24-90	ADDED DETAILS OF MODIFIED CURB	5-24-90
11-30-89	VARIABLE DEPTH TYPE A & B I	11-30-89
7-15-88	REVISED MODIFIED CURB	630-7-15-88
11-1-73	REVISED MODIFIED CURB	500-11-1-73
10-2-72	REVISED AND REDRAWN	512-10-2-72

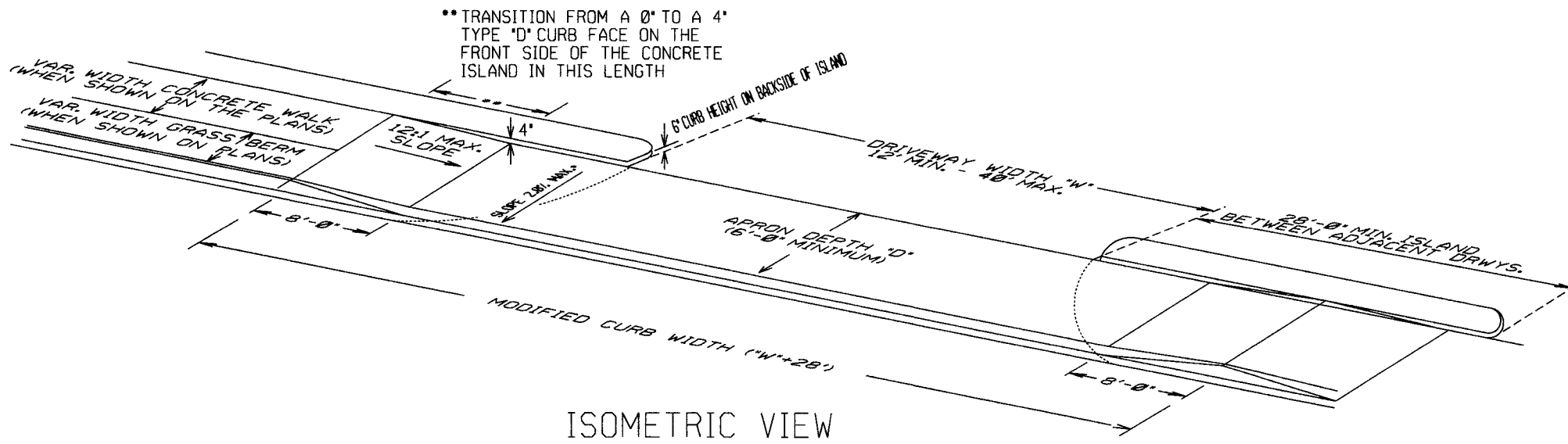
ARKANSAS STATE HIGHWAY COMMISSION

CURBING DETAILS

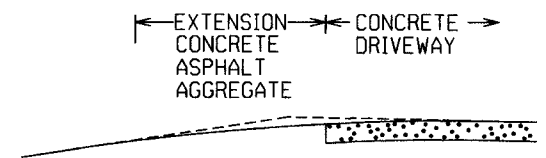
STANDARD DRAWING CG-1



PLAN VIEW



ISOMETRIC VIEW

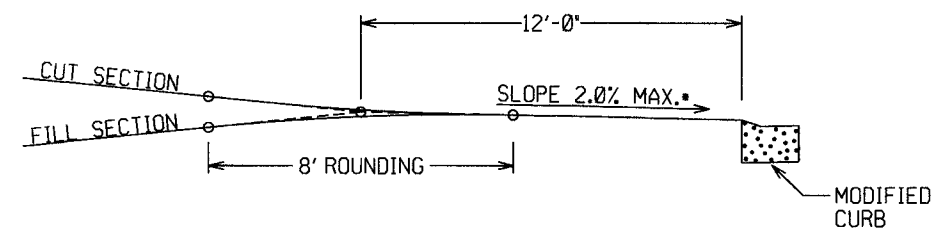


EXTENSION TYPICAL SECTIONS

- 1: CONCRETE - 6" P.C. CONCRETE DRIVEWAY
- 2: ASPHALT - 2" ACHM SURFACE COURSE (1/2")
4" ACHM BINDER COURSE (1") OR
4" ACHM BASE COURSE (1-1/2")
- 3: ASPHALT - 2" ACHM SURFACE COURSE (1/2")
7" AGGREGATE BASE COURSE
- 4: AGGREGATE - 6" AGGREGATE BASE COURSE

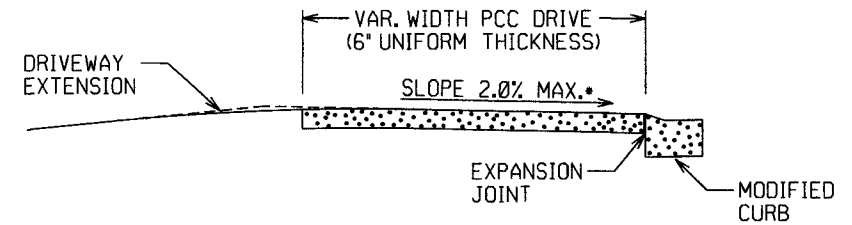
THE TYPE OF EXTENSION SHALL BE AS SHOWN IN THE PLANS. THE CONTRACTOR MAY, WITH THE APPROVAL OF THE ENGINEER, SUBSTITUTE A LOWER NUMBERED TYPE OF EXTENSION IN LIEU OF THE TYPE SPECIFIED IN THE PLANS, BUT AT NO ADDITIONAL COST TO THE DEPARTMENT.

DRIVEWAY EXTENSION DETAILS

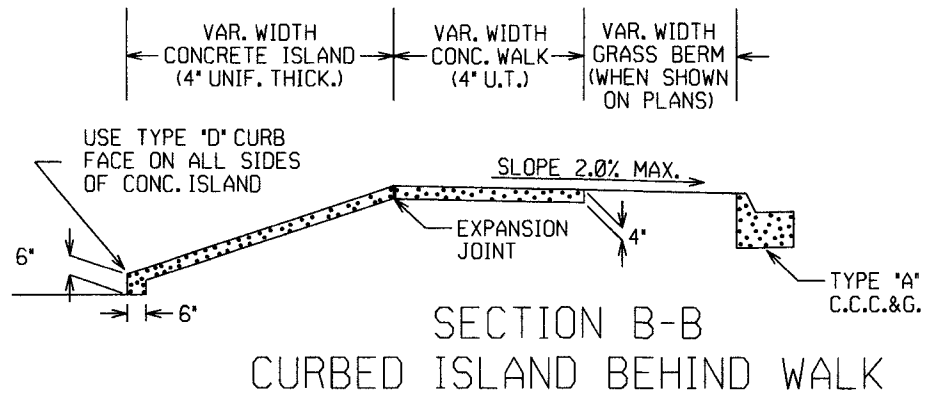


DRIVEWAY VERTICAL ALIGNMENT DETAILS

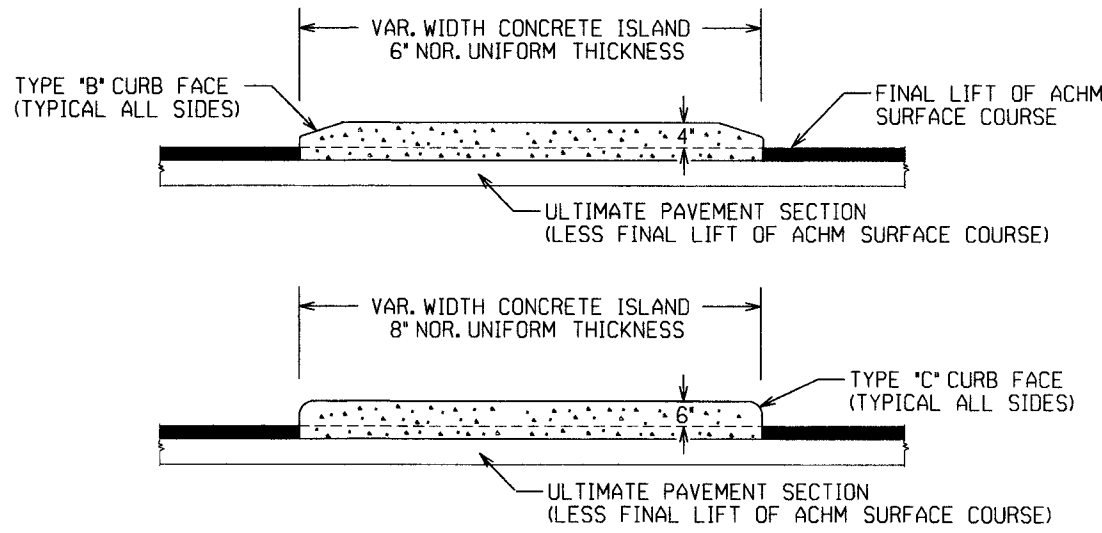
NOTE: DRIVEWAYS MAY NOT BE SLOPED AWAY FROM THE ROADWAY UNLESS APPROVED BY THE ENGINEER.



SECTION A-A



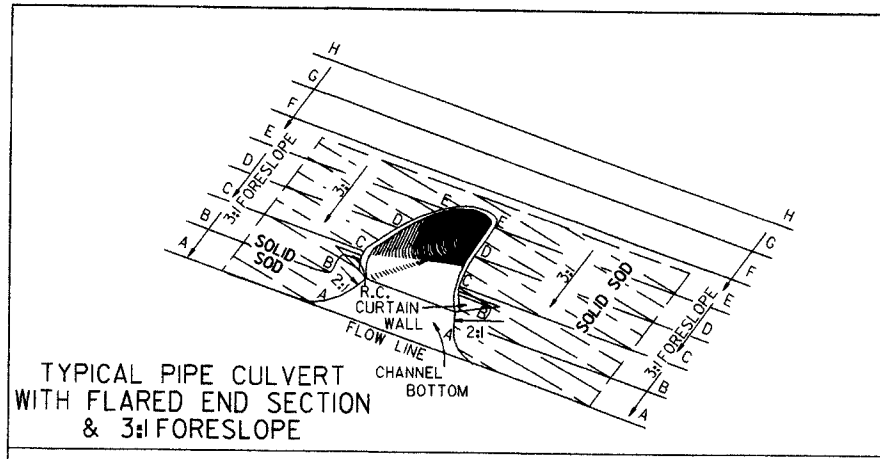
SECTION B-B
CURBED ISLAND BEHIND WALK



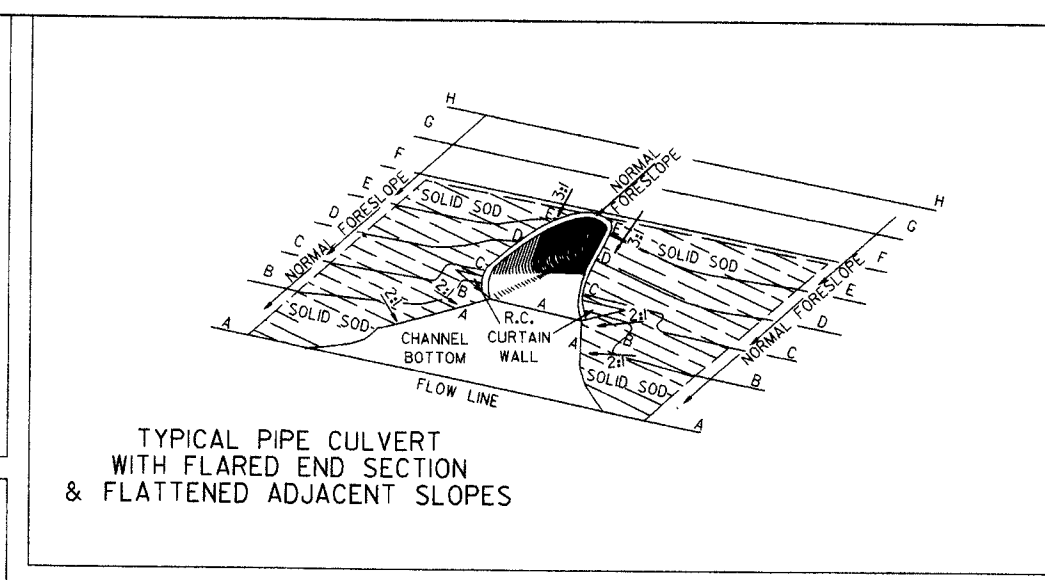
CURBED ISLANDS FOR CHANNELIZATION

REFER TO PLANS FOR TYPE OF CURB FACE TO BE USED. NO DIRECT PAYMENT WILL BE MADE FOR THE CURB FACES SHOWN ON THE ISLAND DETAILS. PAYMENT FOR THE CURB FACE WILL BE INCLUDED IN THE UNIT PRICE BID FOR THE ITEM "CONCRETE ISLAND".

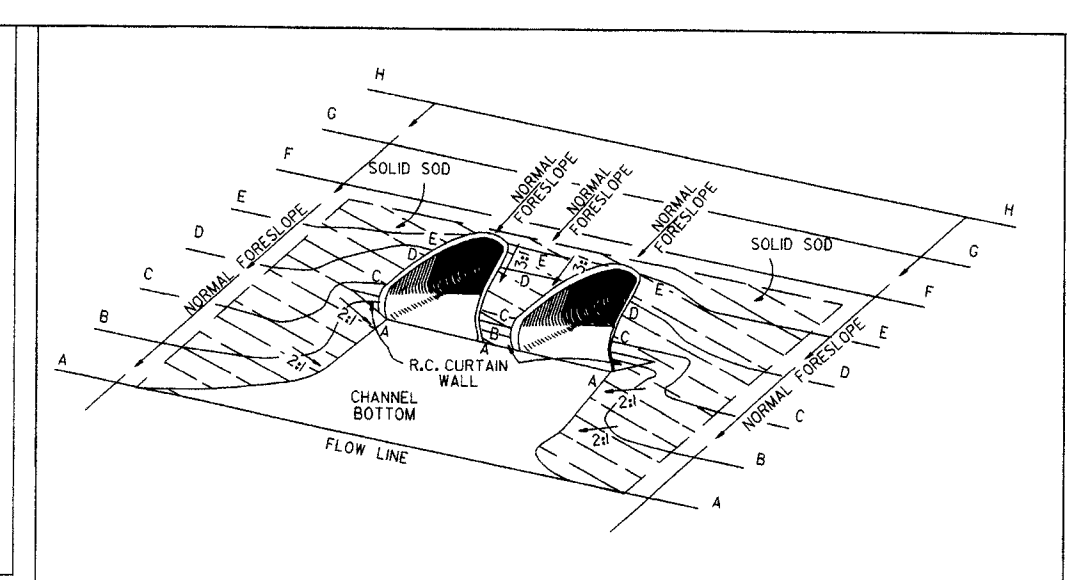
DATE	REV	DATE FILMED	DESCRIPTION
2-27-14			REVISED PLAN & ISOMETRIC VIEW
11-29-07			ADDED CHANNELIZATION ISLAND WITH TYPE C CURB FACE & REVISED DRIVEWAY SLOPE NOTE & VERTICAL ALIGNMENT DETAIL
11-10-05			REV. APRON SLOPE & DEPTH OF AGG. BASE.
8-22-02			ADDED ISLAND DETAILS & NOTES
3-30-00			REV. MOD. CURB WIDTH & TRANS. NOTE
11-19-98			REVISED NOTES
11-18-98			REDRAWN AND REISSUED



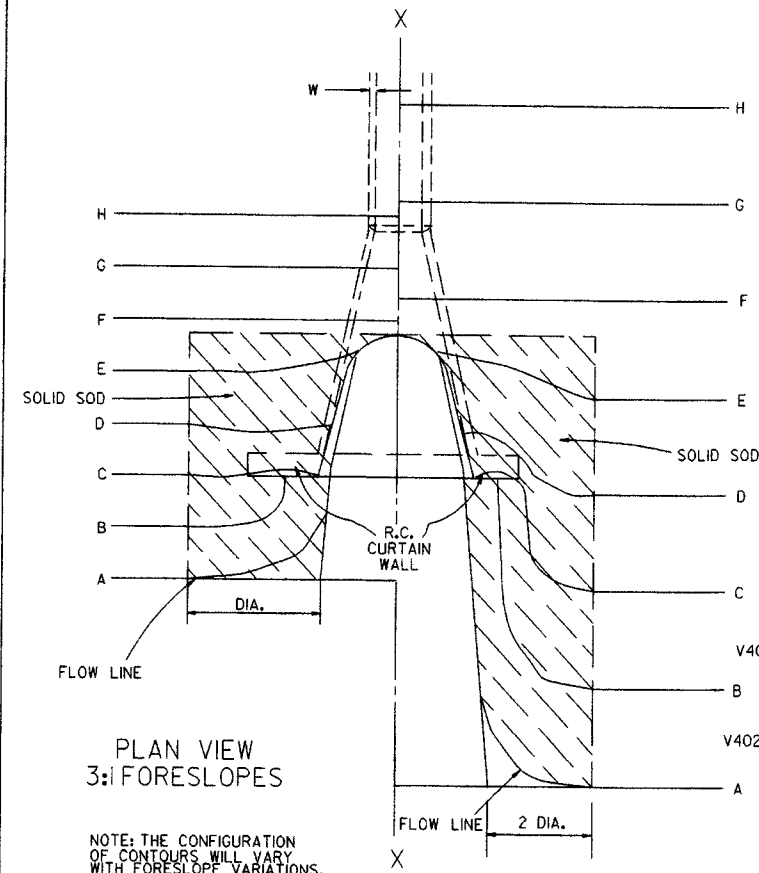
TYPICAL PIPE CULVERT WITH FLARED END SECTION & 3:1 FORESLOPE



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

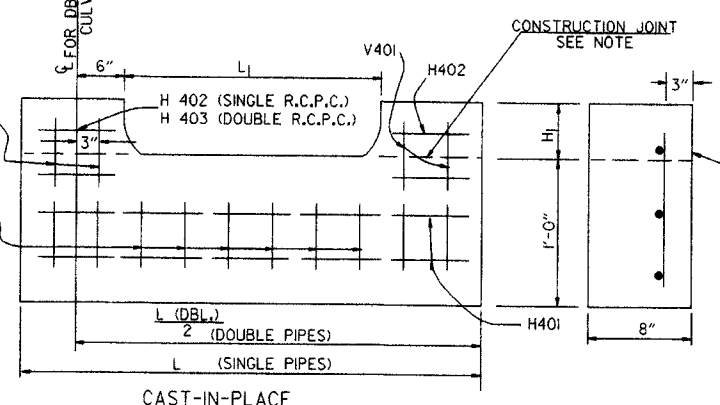
PIPE DIA.	H ₁	L ₁	L	L (DBL.) 2	SINGLE R.C.P.C.		DOUBLE R.C.P.C.	
					CONC.	REINF. STEEL	CONC.	REINF. STEEL
					CU. YDS.	LBS.	CU. YDS.	LBS.
18"	11 1/2"	3'-5"	8'-0"	6'-3"	0.31	27.7	0.45	39.5
24"	1'-0 1/2"	4'-6"	9'-6"	7'-6"	0.37	33.4	0.53	48.0
30"	1'-3 1/2"	5'-7"	11'-0"	9'-0"	0.45	39.0	0.67	59.0
36"	1'-7"	6'-8"	13'-0"	10'-6"	0.58	52.6	0.83	73.9
42"	2'-1 1/2"	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'-9 1/2"	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.

REINFORCING STEEL SCHEDULE

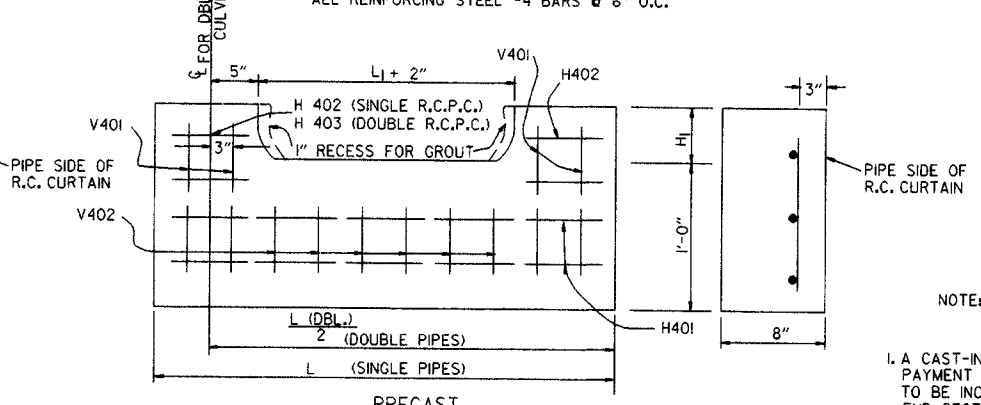
PIPE DIA.	SINGLE R.C. PIPE CULVERT								DOUBLE R.C. PIPE CULVERT									
	H401		H402		V401		V402		H401		H402		H403		V401		V402	
	L	NO.	L	NO.	L	NO.	L	NO.	L	NO.	L	NO.	L	NO.	L	NO.	L	NO.
18"	7'-8"	2	1'-11 1/2"	4	1'-7 1/2"	8	8"	8	12'-2"	2	1'-11 1/2"	4	8"	2	1'-7 1/2"	10	8"	14
24"	9'-2"	2	2'-2"	4	1'-8 1/2"	10	8"	9	14'-8"	2	2'-2"	4	8"	2	1'-8 1/2"	12	8"	18
30"	10'-8"	2	2'-4 1/2"	4	1'-11 1/2"	10	8"	12	17'-8"	2	2'-4 1/2"	4	8"	2	1'-11 1/2"	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'-9 1/2"	8	2'-9 1/2"	16	8"	15	23'-8"	2	3'-9 1/2"	8	8"	4	2'-9 1/2"	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'-8 1/2"	12	3'-5 1/2"	20	8"	17	27'-8"	2	4'-8 1/2"	12	8"	6	3'-5 1/2"	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.



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.

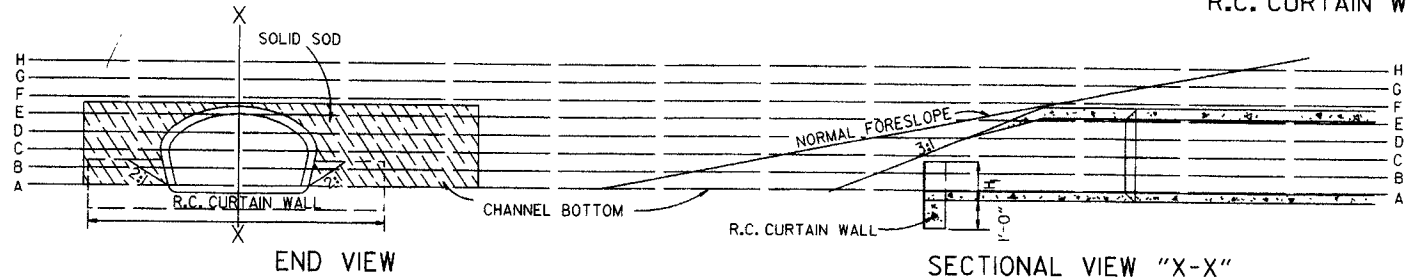
R.C. CURTAIN WALL DETAILS

SOLID SODDING

PIPE DIA.	SINGLE R.C.P.C.						DOUBLE R.C.P.C.					
	3:1	4:1	6:1	3:1	4:1	6:1	SO. YDS.	SO. YDS.	SO. YDS.	SO. YDS.	SO. YDS.	SO. YDS.
18"	5	7	12	6	8	13	5	7	12	6	8	13
24"	8	12	19	9	13	20	8	12	19	9	13	20
30"	13	18	29	14	19	30	13	18	29	14	19	30
36"	17	26	41	18	28	43	17	26	41	18	28	43
42"	23	35	55	25	37	57	23	35	55	25	37	57
48"	31	46	88	31	48	70	31	46	88	31	48	70
54"	41	62	127	41	67	97	41	62	127	41	67	97
60"	55	87	194	55	97	137	55	87	194	55	97	137
72"	84	132	306	84	156	219	84	132	306	84	156	219

NOTE: QUANTITIES SHOWN ABOVE ARE FOR ONE (1) END OF F.E.S.

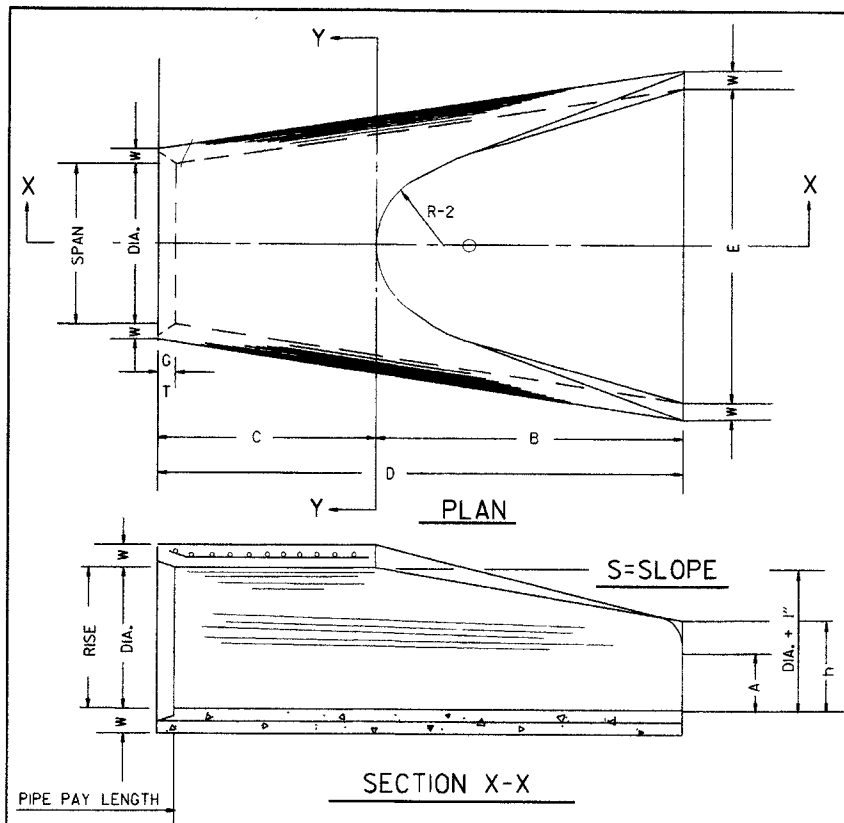
- GENERAL NOTES
- A CAST-IN-PLACE OR PRECAST CURTAIN WALL MAY BE USED. PAYMENT FOR THE CURTAIN WALL SHALL BE CONSIDERED TO BE INCLUDED IN THE UNIT PRICE BID EACH FOR FLARED END SECTIONS OF THE SEVERAL SIZES, WHICH PRICE SHALL BE FULL COMPENSATION FOR FURNISHING ALL MATERIALS INCLUDING REINFORCING STEEL AND CONCRETE; FOR FORMS, MIXING AND PLACING; FOR EXCAVATION AND BACKFILL; AND FOR ALL LABOR, TOOLS, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE WORK.
 - ALL EXPOSED EDGES SHALL BE CHAMFERED 3/4".
 - 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.
 - WELDED WIRE MESH 3 x 3 W/10 x W10 MAY BE USED IN LIEU OF REINFORCING BARS.



END VIEW

SECTIONAL VIEW "X-X"

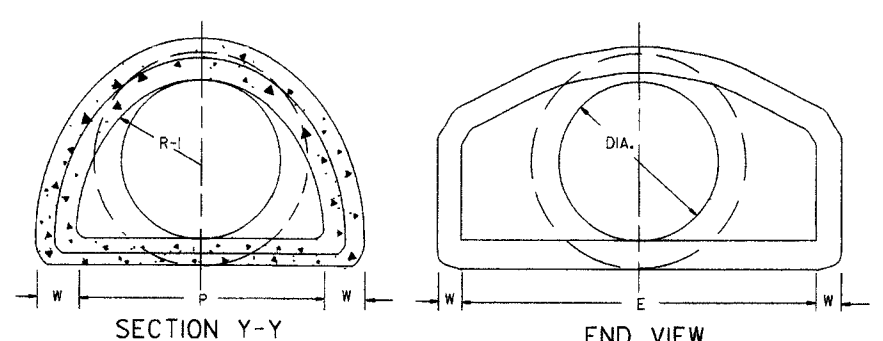
10-18-96	ADDED NOTE TO SOLID SODDING	10-18-96	ARKANSAS STATE HIGHWAY COMMISSION
10-12-95	CORRECTED SPELLING		
11-3-94	ADDED GENERAL NOTE NO. 4		
8-15-91	REV. CURTAIN WALL QUANT. STEEL SCH. & SOLID SOD QUANT.		
3-2-81	ALLOW PRECAST IN 2 OR MORE PIECES CHAMFER EDGES		
5-15-80	ADDED PRECAST WALL & GENERAL NOTES		
10-2-72	REVISED AND REDRAWN		
DATE	REVISION	FILMED	STANDARD DRAWING FES-1



END SECTION FOR REINFORCED CONCRETE PIPE CULVERTS

TABLE OF DIMENSIONS

DIA.	WALL	A	B	C	D	E	S	DIA. + 1"	P	R-1	R-2	G-T	WT.	h
18"	2 1/2"	9"	2'-3"	3'-10"	6'-1"	3'-0"	3:1	19"	29"	15 1/2"	12"	2"	1000	1'-0 1/2"
24"	3"	9 1/2"	3'-7 1/2"	2'-6"	6'-1 1/2"	4'-0"	3:1	25"	33 3/8"	16 1/8"	14"	2 1/2"	1600	1'-1 1/2"
30"	3 1/2"	1'-0"	4'-6"	1'-7 3/4"	6'-1 3/4"	5'-0"	3:1	31"	37"	18 1/2"	15"	3 1/4"	1940	1'-4 5/8"
36"	4"	1'-3"	5'-3"	2'-10 3/4"	8'-1 1/4"	6'-0"	3:1	37"	47 1/8"	24 3/8"	20"	3 1/2"	4100	1'-8"
42"	4 1/2"	1'-9"	5'-3"	2'-11"	8'-2"	6'-6"	3:1	43"	53 1/8"	27 1/2"	22"	3 1/2"	5380	2'-2 1/2"
48"	5"	2'-0"	6'-0"	2'-2"	8'-2"	7'-0"	3:1	49"	56 1/2"	28 1/2"	22"	3 1/2"	6550	2'-6"
54"	5 1/2"	2'-4"	6'-6"	1'-10"	8'-4"	7'-6"	3:1	55"	65 1/2"	33 1/8"	24"	4"	8750	2'-10 1/2"
60"	6"	2'-10"	6'-6"	1'-10"	8'-4"	8'-0"	3:1	61"	72 1/2"	36 1/8"	24"	4"	9270	3'-5"
72"	7"	3'-10"	6'-6"	1'-10"	8'-4"	9'-0"	3:1	73"	77 1/8"	38 3/8"	24"	5"	13250	4'-6"

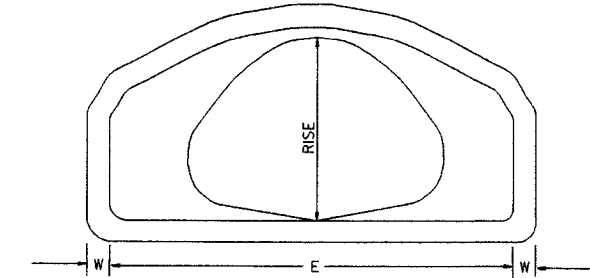


NOTE: TONGUE END ON UPSTREAM SECTION
GROOVE END ON DOWNSTREAM SECTION

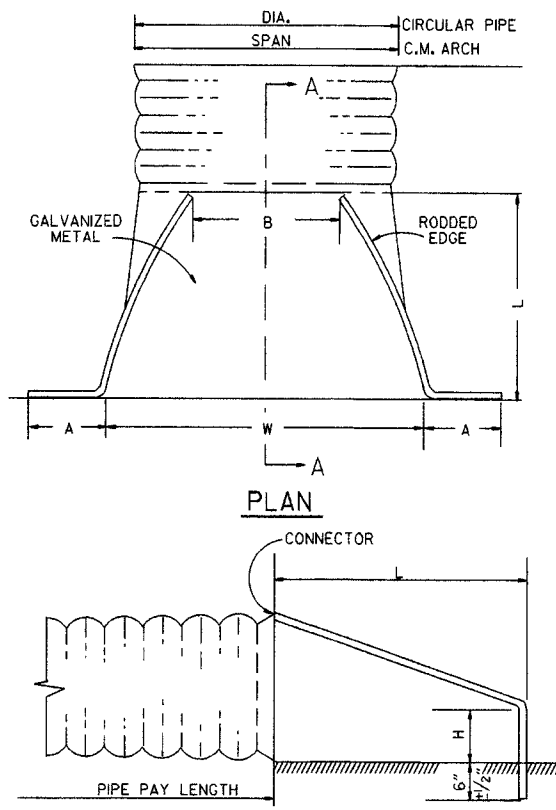
ARCH PIPE

EQUIV. DIA.	* SPAN		* RISE		W	A	B	C	D	E	P	R2	G-T	S
	AASHTO M 206	AHD NOMINAL	AASHTO M 206	AHD NOMINAL										
15	18	18	11	11	2"	4"	2'-0"	4'-0"	6'-0"	3'-0"	29"	12"	1 1/2"	2 1/2:1
18	22	22	13 1/2	14	2 1/2"	5"	2'-0"	4'-1"	6'-1"	3'-6"	32 1/8"	13"	2 1/2"	2 1/2:1
21	26	26	15 1/2	16	2 3/4"	7"	2'-3"	3'-10"	6'-1"	4'-0"	34 1/8"	14"	2 1/2"	2 1/2:1
24	28 1/2	29	18	18	3"	9"	2'-3"	3'-10"	6'-1"	5'-0"	36 1/8"	15"	2 1/2"	2 1/2:1
30	36 1/4	36	22 1/2	23	3 1/2"	10"	3'-0"	3'-0 1/2"	6'-1 1/2"	6'-0"	47 1/8"	20"	3"	2 1/2:1
36	43 3/4	44	26 3/4	27	4"	10 1/2"	4'-0"	2'-1 1/2"	6'-1 1/2"	6'-6"	54 3/8"	22"	3 1/2"	2 1/2:1
42	51 1/8	51	31 5/8	31	4 1/2"	11 1/2"	4'-7"	1'-10 1/4"	6'-5 1/4"	7'-2"	59 1/2"	23"	3 3/4"	2 1/2:1
48	58 1/2	59	36	36	5"	1'-3"	5'-3"	2'-10 3/4"	8'-1 3/4"	7'-10"	70 5/8"	24"	4 1/4"	2 1/2:1
54	65	65	40	40	5 1/2"	1'-7"	5'-3"	2'-11"	8'-2"	8'-6"	72 1/8"	24"	4 3/4"	2 1/2:1
60	73	73	45	45	6"	1'-10"	5'-6"	2'-8"	8'-2"	9'-0"	77 3/8"	24"	5"	2 1/2:1

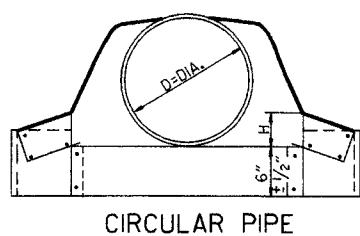
* THE MEASURED SPAN AND RISE SHALL NOT VARY MORE THAN ± 2 PER CENT FROM THE VALUES SPECIFIED BY AASHTO M 206.



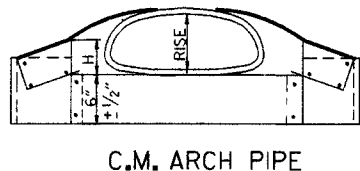
END VIEW CONCRETE ARCH PIPE



END SECTIONS FOR CORRUGATED METAL PIPE CULVERTS



CIRCULAR PIPE



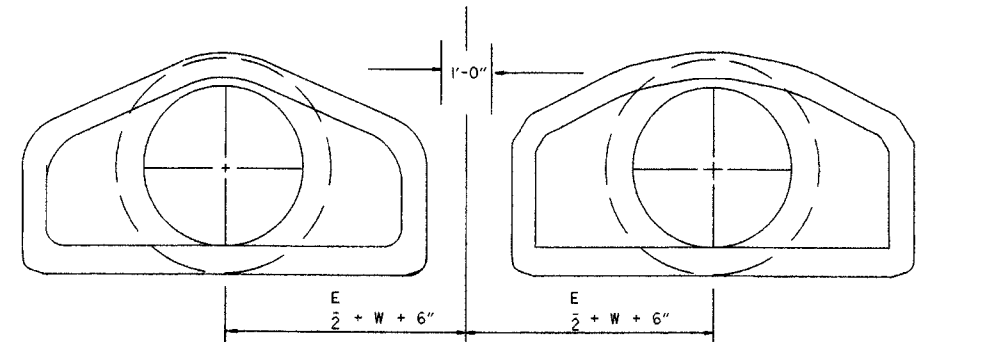
C.M. ARCH PIPE

CIRCULAR PIPE

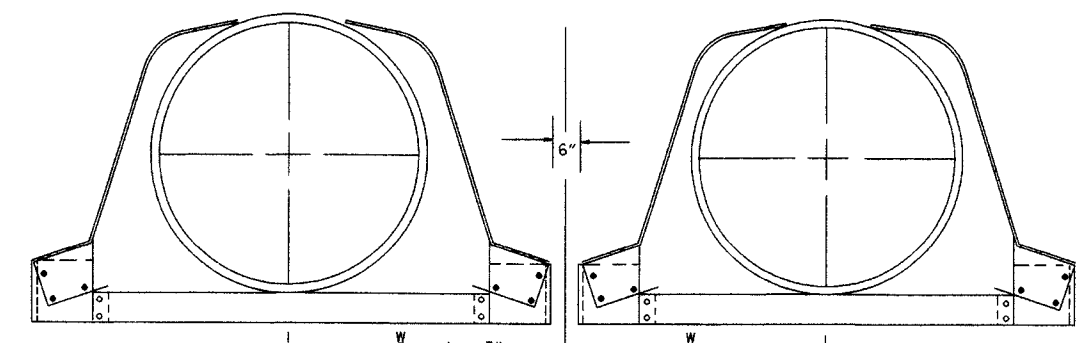
D. DIA.	GAUGE	A	B. MAX.	H	L	W ±	S
12	16	6	6	6	21	24	2 1/2:1
15	16	7	8	6	26	30	2 1/2:1
18	16	8	10	6	31	36	2 1/2:1
21	16	9	12	6	36	42	2 1/2:1
24	16	10	13	6	41	48	2 1/2:1
30	14	12	16	8	51	60	2 1/2:1
36	14	14	19	9	60	72	2 1/2:1
42	12	16	22	11	69	84	2 1/2:1
48	12	18	27	12	78	90	2 1/2:1
54	12	18	30	12	84	102	2:1
60	12	18	33	12	87	114	1 3/4:1
66	12	18	36	12	87	120	1 1/2:1
72	12	18	39	12	87	126	1 1/3:1

C.M. ARCH PIPE

EQUIV. DIA.	SPAN	RISE	A	B. MAX.	H	L	W ±	S	GAUGE
15"	17	13	7	9	6	19	30	2 1/2:1	16
18"	21	15	7	10	6	23	36	2 1/2:1	16
21"	24	18	8	12	6	28	42	2 1/2:1	16
24"	28	20	9	14	6	32	48	2 1/2:1	16
30"	35	24	10	16	6	39	60	2 1/2:1	14
36"	42	29	12	18	8	46	75	2 1/2:1	14
42"	49	33	13	21	9	53	85	2 1/2:1	12
48"	57	38	18	26	12	63	90	2 1/2:1	12
54"	64	43	18	30	12	70	102	2 1/4:1	12
60"	71	47	18	33	12	77	114	2 1/4:1	12

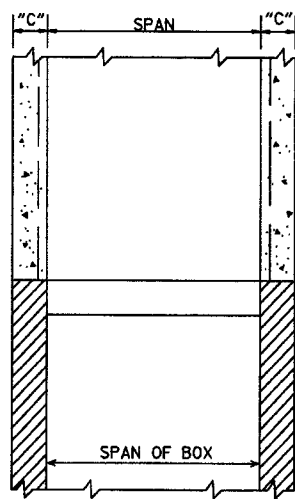


MULTIPLE R.C. PIPE CULVERTS

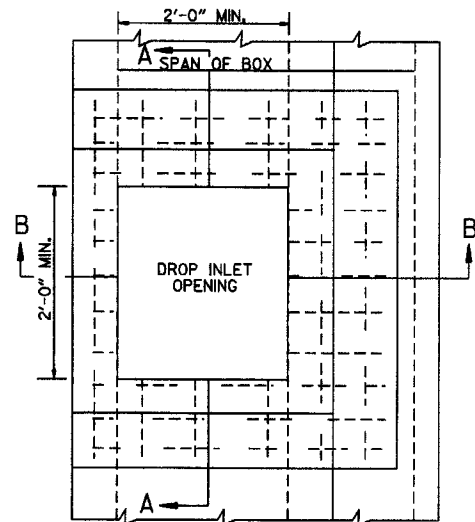


MULTIPLE C.M. PIPE CULVERTS

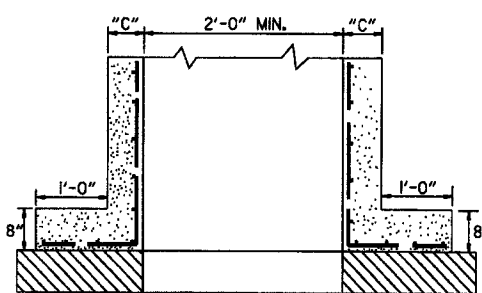
10-18-96	REVISED ASTM REF. TO AASHTO	10-18-96	ARKANSAS STATE HIGHWAY COMMISSION
5-15-80	REVISED DISTANCE BETWEEN MULTIPLE R.C.P. F.E.S.	664-5-15-80	
7-14-78	C.M. ARCH SIZES TO CONFORM WITH AASHTO SIZES	752-7-14-78	
8-22-75	ADDED MULTIPLE PIPE CULVERTS	517-8-22-75	FLARED END SECTION
12-5-74	REMOVED NOTE 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	STANDARD DRAWING FES-2
DATE	REVISION	FILMED	



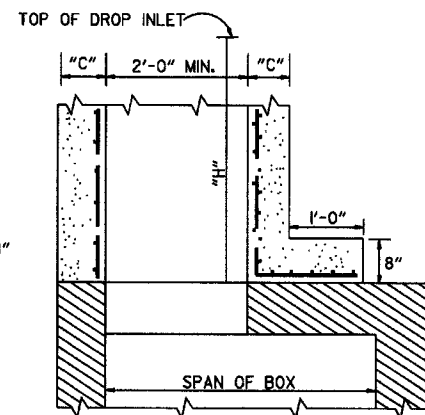
SECTION B-B



PLAN

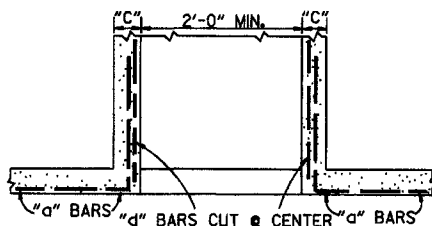


SECTION A-A

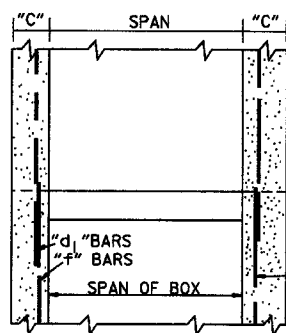


SECTION B-B

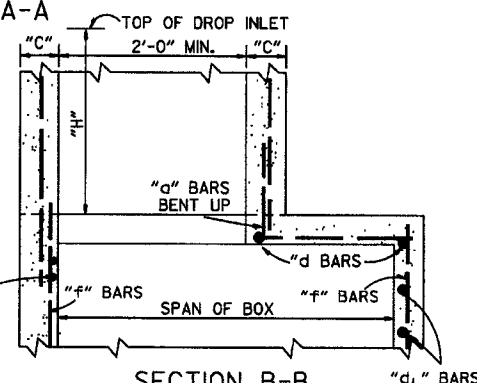
METHOD OF CONSTRUCTING DROP INLET ON EXISTING R.C. BOX CULVERT



SECTION A-A



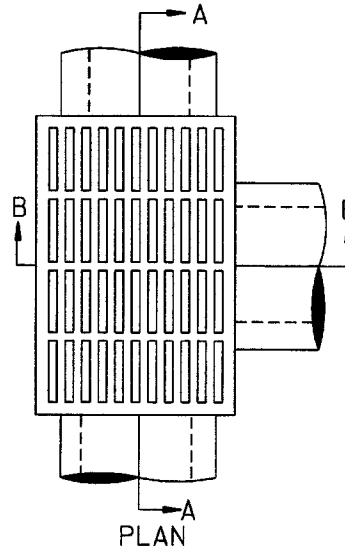
SECTION B-B



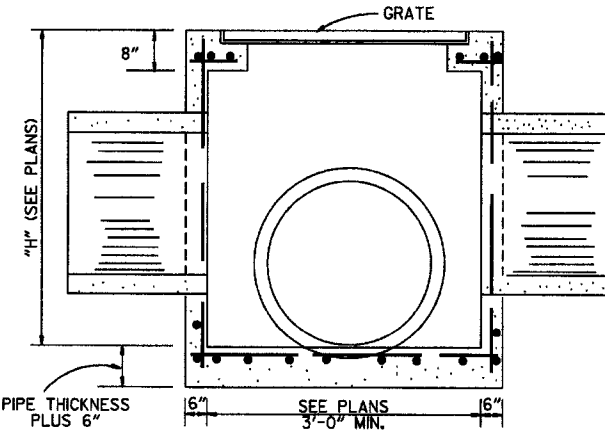
SECTION B-B

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.



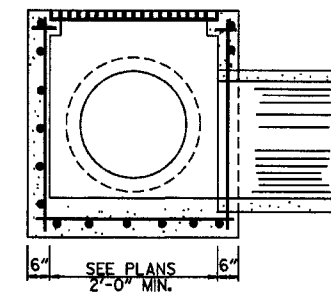
PLAN



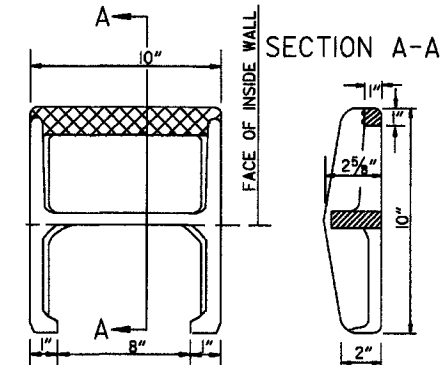
SECTION A-A

DROP INLET (TYPE E)

NOTE: REINF. BARS TO BE #4 BARS ON 6" CTRS. WITH 1/2" MIN. COVER. THIS TYPE DROP INLET TO BE USED WHERE NOT SUBJECTED TO TRAFFIC.



SECTION B-B

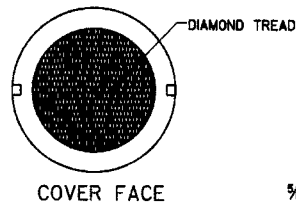


APPROX. WEIGHT = 11 LBS. (CAST IRON)

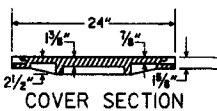
PLAN

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

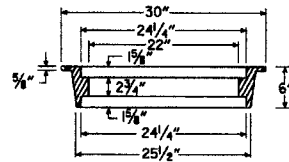
DETAIL OF STEP FOR DROP INLET



COVER FACE



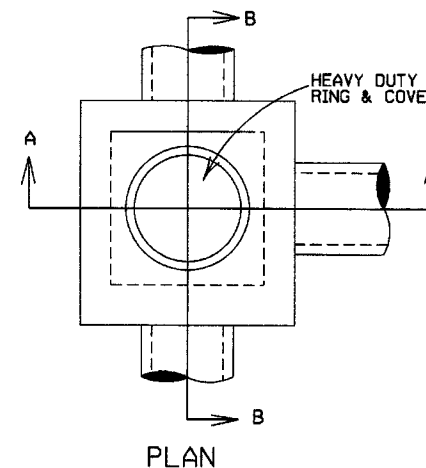
COVER SECTION



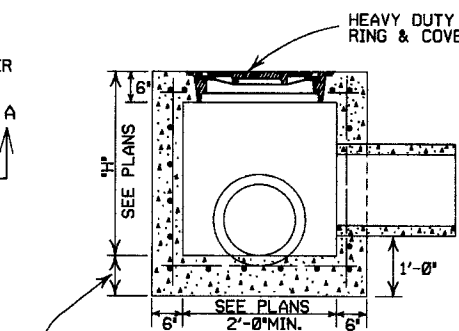
RING SECTION

APPROXIMATE TOTAL WEIGHT = 333 LBS.

HEAVY DUTY RING & COVER



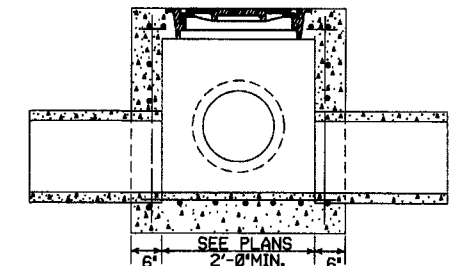
PLAN



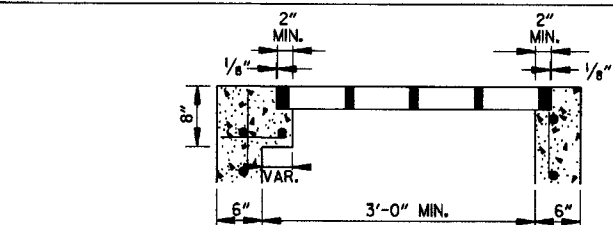
SECTION A-A

JUNCTION BOX (TYPE E)

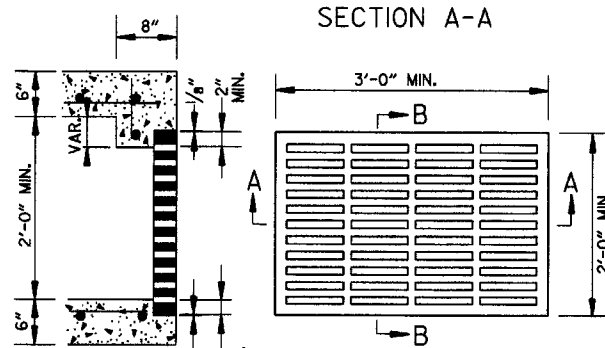
NOTE: REINF. BARS TO BE #4 BARS ON 6" CTRS. WITH 1/2" MIN. COVER. THIS TYPE JUNCTION BOX TO BE USED WHERE NOT SUBJECTED TO TRAFFIC.



SECTION B-B



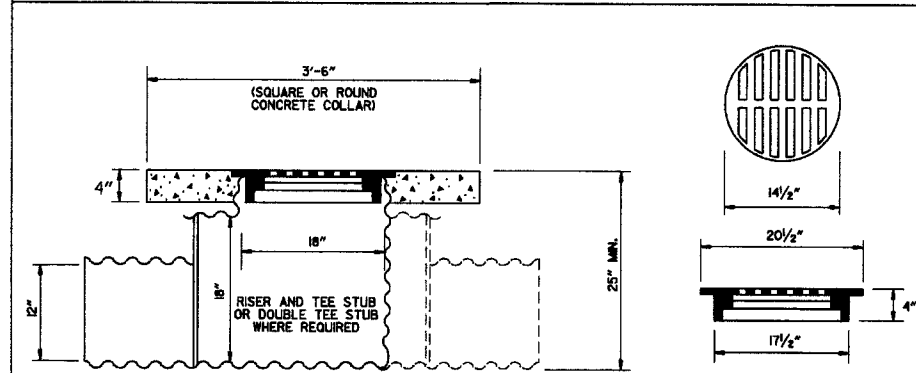
SECTION A-A



SECTION B-B

APPROXIMATE MINIMUM WATERWAY OPENING = 260 SQ. IN.

GRATE FOR TYPE E DROP INLET



DETAIL OF YARD DRAIN

NOTE: CONCRETE COLLAR TO BE CAST IN PLACE. 12" PIPE CULVERTS TO BE MEASURED AND PAID FOR AS "12" SIDE DRAIN".

USE NEENAH R-590I-C OR EQUIVALENT BICYCLE SAFE FRAME AND GRATE

- GENERAL NOTES:
1. ALL EXPOSED CORNERS SHALL BE 3/4" 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 3/4" 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 M05 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	
7-12-00		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

NOTE: WHEN AN INLET IS PLACED ADJACENT TO CONCRETE PAVEMENT, THE GUTTER DEPRESSION SHALL BE FORMED IN CONCRETE PAVEMENT.

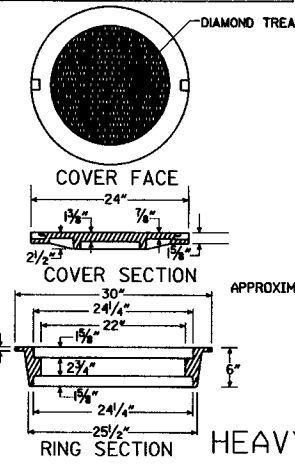
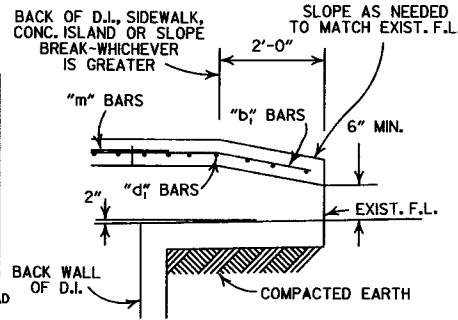
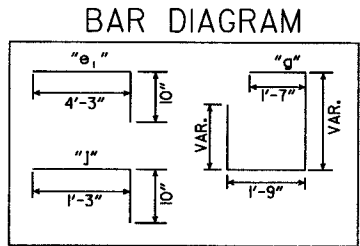
4'-0" LENGTH DROP INLET DROP INLET EXTENSION

PIPE SIZE	MIN. WIDTH	HEIGHT 5'-0"		PLUS OR MINUS PER LIN. FT. OF HEIGHT		4'-0"		8'-0"	
		CLASS A CONC. CU. YDS.	REINF. STEEL POUNDS	CLASS A CONC. CU. YDS.	REINF. STEEL POUNDS	CLASS A CONC. CU. YDS.	REINF. STEEL POUNDS	CLASS A CONC. CU. YDS.	REINF. STEEL POUNDS
18"	2'-6"	1.77	156	0.28	22	0.58	38	0.87	72
24"	2'-6"	1.79	156	0.28	22				
30"	3'-2"	2.39	205	0.30	26				
36"	3'-8"	2.63	236	0.32	28				
42"	4'-4"	2.95	250	0.34	30				
48"	4'-10"	3.21	265	0.36	32				
						DEDUCT FROM QUANTITY COMPUTED FOR EACH EXTENSION ADDED.			
						0.04	3		

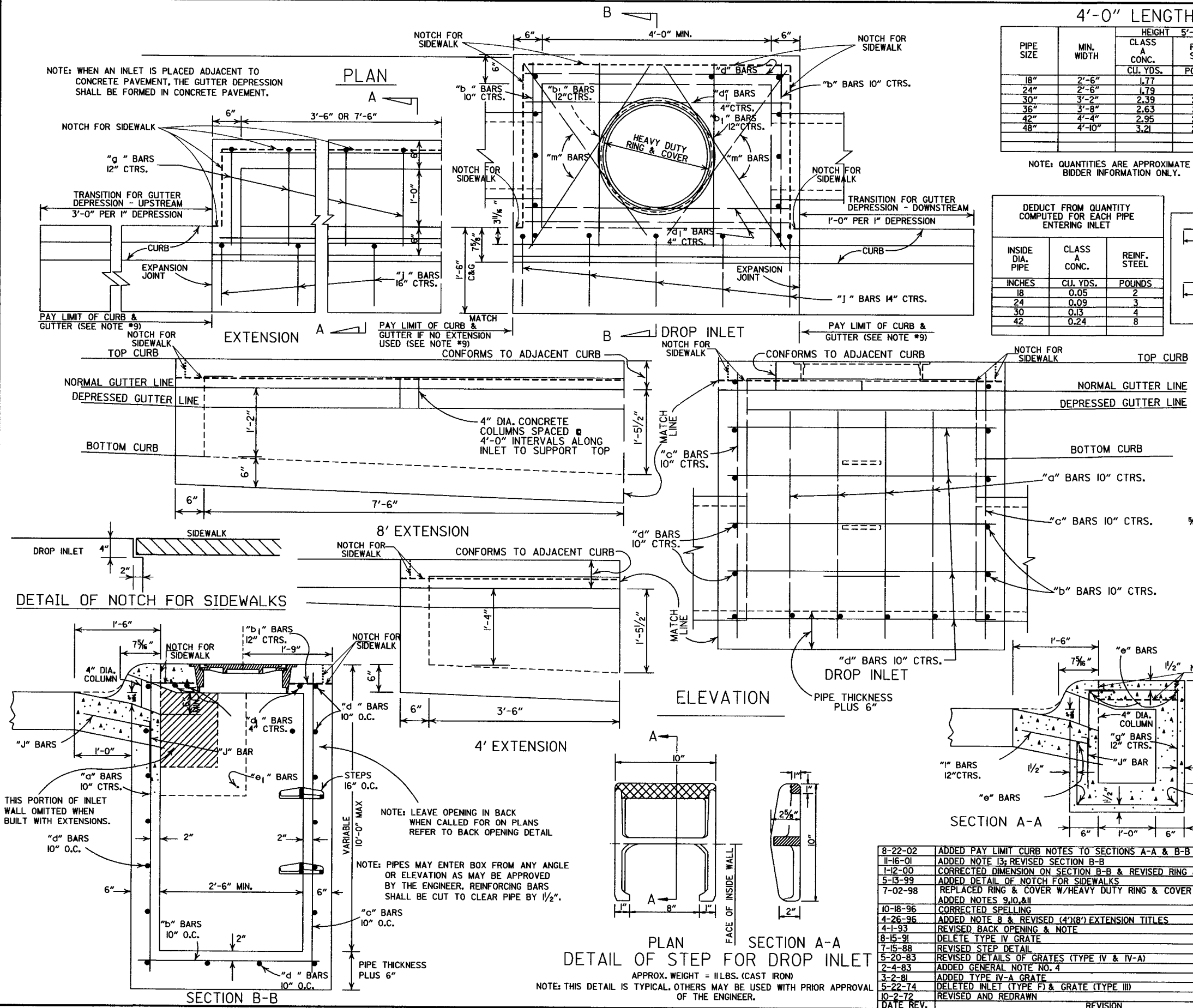
NOTE: QUANTITIES ARE APPROXIMATE AND ARE SHOWN FOR BIDDER INFORMATION ONLY.

DEDUCT FROM QUANTITY COMPUTED FOR EACH PIPE ENTERING INLET

INSIDE DIA. PIPE	CLASS A CONC. CU. YDS.	REINF. STEEL POUNDS
18	0.05	2
24	0.09	3
30	0.13	4
42	0.24	8



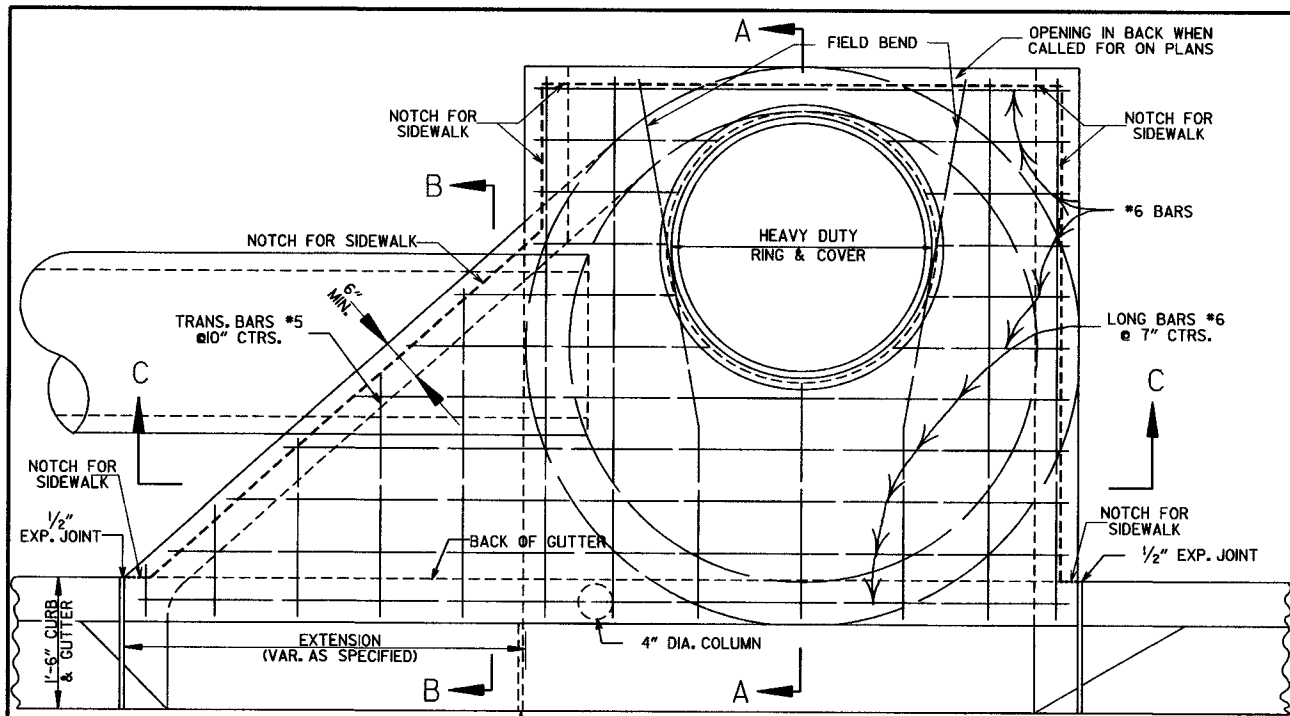
- GENERAL NOTES:
- ALL EXPOSED CORNERS TO HAVE 3/4" CHAMFER.
 - STEPS SHALL BE INSTALLED IN ALL INLETS 4'-0" HIGH AND OVER OF AS APPROVED BY THE ENGINEER.
 - ALL REINF. BARS SHALL BE #4 AND HAVE 1/2" COVER.
 - DROP INLETS AND EXTENSION ON CURVED SECTIONS SHALL CONFORM TO THE CURVATURE OF THE CURB.
 - THIS DROP INLET MAY BE CONSTRUCTED ON NEW OR EXISTING R.C. BOX CULVERT AS SHOWN ON F.P.C.-9.
 - WHEN PLANS CALL FOR DROP INLET OVER 10'-0" HIGH, FLOOR AND WALLS SHALL BE CONSTRUCTED AS SHOWN FOR TYPE "RM" DROP INLET (F.P.C.-9D).
 - HEAVY DUTY RING SHALL ALWAYS BE INSTALLED WITH FLANGE ON TOP.
 - DURING CONSTRUCTION OF THE ROADWAY THE CONTRACTOR SHALL MAINTAIN DRAINAGE INTO OR AROUND THE DROP INLET AS APPROVED BY THE ENGINEER.
 - PAYMENT FOR CURB AND/OR CURB AND GUTTER WITHIN THE LIMITS OF DROP INLETS AND DROP INLET EXTENSIONS SHALL BE CONSIDERED INCLUDED IN PAYMENT MADE FOR DROP INLETS AND/OR DROP INLET EXTENSIONS.
 - 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 M103 CLASS 35B & AASHTO M306.
 - HEAVY DUTY RING AND COVER SHALL NOT BE PAINTED.
 - 4"x2" NOTCH SHALL BE FORMED IN ALL DROP INLETS TO SUPPORT SIDEWALK CONSTRUCTION. REFER TO DETAIL OF NOTCH FOR SIDEWALKS.
 - 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.



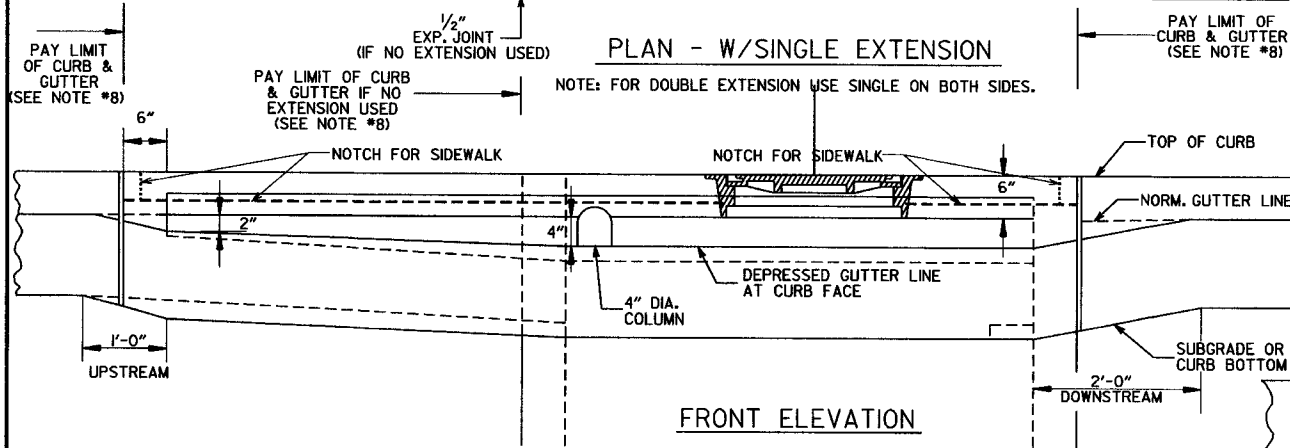
PLAN SECTION A-A
DETAIL OF STEP FOR DROP INLET
APPROX. WEIGHT = 11 LBS. (CAST IRON)
NOTE: THIS DETAIL IS TYPICAL. OTHERS MAY BE USED WITH PRIOR APPROVAL OF THE ENGINEER.

DATE	REV.	REVISION	DATE FILMED
8-22-02		ADDED PAY LIMIT CURB NOTES TO SECTIONS A-A & B-B	
11-16-01		ADDED NOTE 13; REVISED SECTION B-B	
1-12-00		CORRECTED DIMENSION ON SECTION B-B & REVISED RING & COVER	
5-13-99		ADDED DETAIL OF NOTCH FOR SIDEWALKS	
7-02-98		REPLACED RING & COVER W/HEAVY DUTY RING & COVER	
		ADDED NOTES 9, 10, & 11	
10-18-96		CORRECTED SPELLING	
4-26-96		ADDED NOTE 8 & REVISED (4'x8') EXTENSION TITLES	10-18-96
4-1-93		REVISED BACK OPENING & NOTE	
8-15-91		DELETE TYPE IV GRATE	
7-15-88		REVISED STEP DETAIL	
5-20-83		REVISED DETAILS OF GRATES (TYPE IV & IV-A)	
2-4-83		ADDED GENERAL NOTE NO. 4	
3-2-81		ADDED TYPE IV-A GRATE	
5-22-74		DELETED INLET (TYPE F) & GRATE (TYPE III)	
10-2-72		REVISED AND REDRAWN	

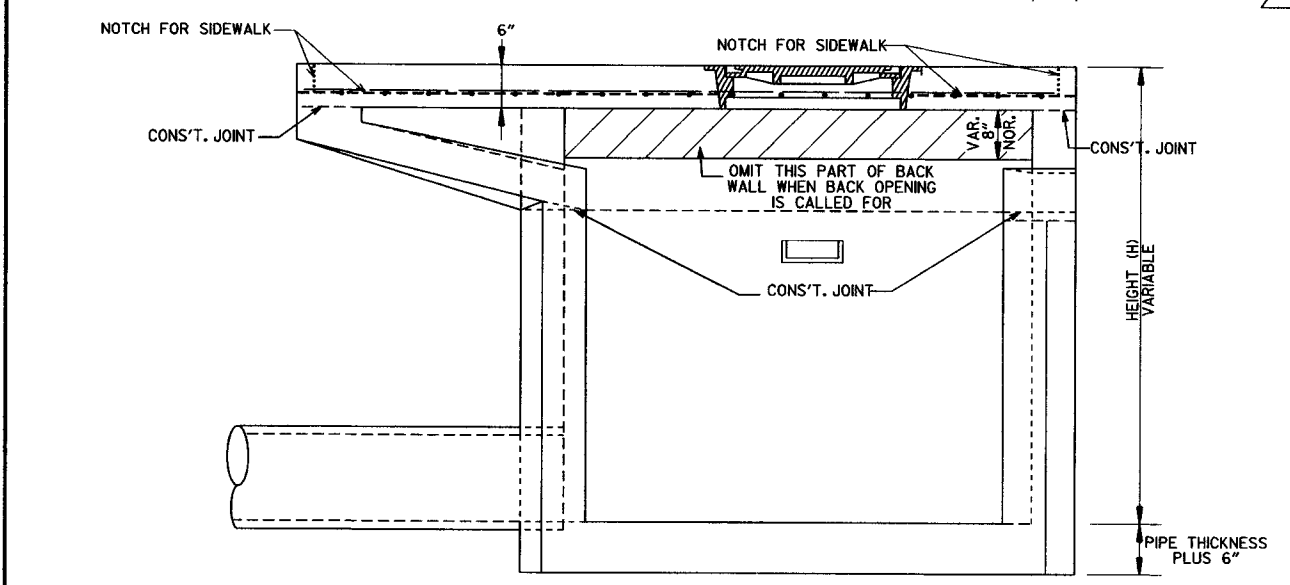
ARKANSAS STATE HIGHWAY COMMISSION
DETAILS OF DROP INLETS
(TYPE C)
STANDARD DRAWING FPC-9E



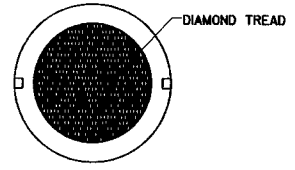
PLAN - W/SINGLE EXTENSION



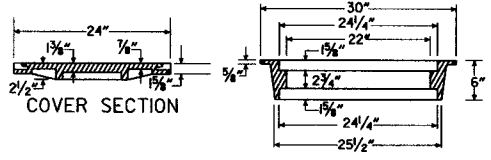
FRONT ELEVATION



SECTION C-C

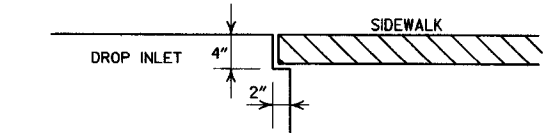


COVER FACE

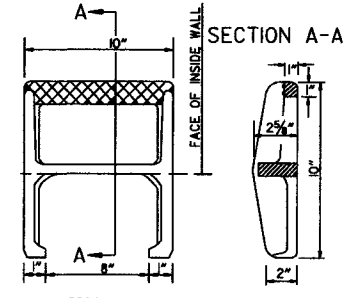


HEAVY DUTY RING & COVER

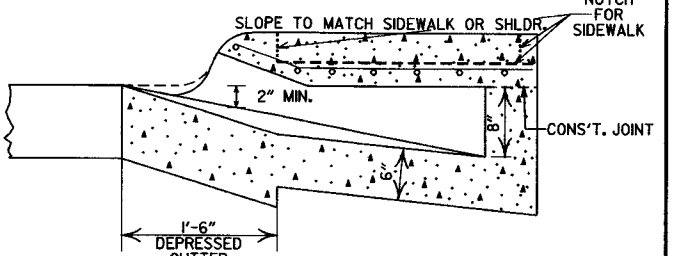
1. HEAVY DUTY RING AND COVER SHALL BE CONSTRUCTED OF CAST IRON AND SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR GRAY IRON CASTINGS AASHTO M105 CLASS 35B & AASHTO M306.
2. HEAVY DUTY RING AND COVER SHALL NOT BE PAINTED.
3. HEAVY DUTY RING SHALL ALWAYS BE INSTALLED WITH FLANGE ON TOP.



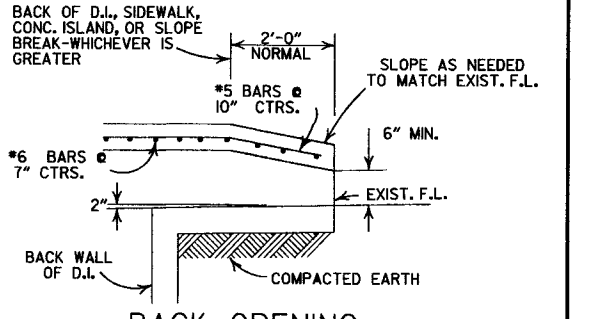
DETAIL OF NOTCH FOR SIDEWALKS



DETAIL OF STEP FOR DROP INLET



SECTION B-B



BACK OPENING

WHEN OPENING IN BACK IS CALLED FOR ON PLANS EXTEND OPENING AS SHOWN IN DETAIL. PAYMENT TO BE INCLUDED IN PRICE BID FOR DROP INLET (TYPE MO).

- GENERAL NOTES:
1. ALL EXPOSED CORNERS TO HAVE 3/4" CHAMFER.
 2. STEPS SHALL BE INSTALLED IN ALL INLETS 4'-0" HIGH AND OVER OR AS DIRECTED BY THE ENGINEER.
 3. ALL REINFORCING BARS SHALL BE GRADE 60 AND HAVE MIN. 1/2" COVER.
 4. DROP INLETS AND EXTENSION ON CURVED SECTIONS SHALL CONFORM TO THE CURVATURE OF THE CURB.
 5. 4" DIA. COLUMNS SPACED AT MAX. 4'-0" INTERVALS SHALL BE INSTALLED ALONG INLET AND EXTENSION TO SUPPORT TOP.
 6. BASE AND INLET WALLS SHALL BE CAST MONOLITHICALLY.
 7. THE THROAT SHALL BE CAST INTEGRALLY WITH THE GUTTER.
 8. PAYMENT FOR CURB AND/OR CURB AND GUTTER WITHIN THE LIMITS OF DROP INLETS AND DROP INLET EXTENSIONS SHALL BE CONSIDERED INCLUDED IN PAYMENT MADE FOR DROP INLETS AND/OR DROP INLET EXTENSIONS.
 9. PIPES MAY ENTER DROP INLET FROM ANY ANGLE OR ELEVATION AS MAY BE APPROVED BY THE ENGINEER.
 10. APPROPRIATE SIZE TYPE C DROP INLETS MAY BE SUBSTITUTED FOR TYPE MO DROP INLETS AS APPROVED BY THE ENGINEER. PAYMENT TO BE AS DROP INLET (TYPE MO).
 11. DURING CONSTRUCTION OF THE ROADWAY THE CONTRACTOR SHALL MAINTAIN DRAINAGE INTO OR AROUND THE DROP INLET AS APPROVED BY THE ENGINEER.
 12. 4"x2" NOTCH SHALL BE FORMED IN ALL DROP INLETS TO SUPPORT SIDEWALK CONSTRUCTION. REFER TO DETAIL OF NOTCH FOR SIDEWALKS.
 13. DIMENSIONS SHOWN FOR RING AND COVER ARE TYPICAL. THE CONTRACTOR MAY SUBSTITUTE SIMILAR CASTINGS WITH THE APPROVAL OF THE ENGINEER, REQUESTING APPROVAL FOR CASTING DESIGNS MAY BE MADE BY REFERRING TO PREVIOUSLY APPROVED DRAWINGS.

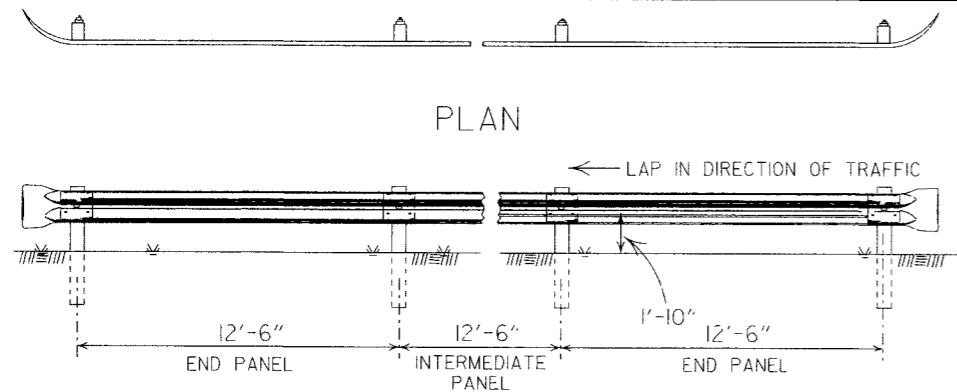
DIA. OF D.I.	DIA. OF OUTLET PIPE	MINIMUM WALL THICKNESS	
		CAST IN PLACE	PRECAST
4" I.D.	12" THRU 27"	6"	5"
5" I.D.	30" THRU 42"	8"	6"
6" I.D.	48" THRU 54"	8"	7"

DATE	REVISIONS	DATE PLUMED
8-22-02	ADDED PAY LIMIT CURB NOTES TO SECTIONS A-A & B-B	
11-16-01	ADDED NOTE 13	
1-12-00	REVISED HEAVY DUTY RING & COVER	
5-13-99	ADDED NOTCH DETAIL FOR SIDEWALKS	
7-02-98	REP. NOTE 8, REM. PLAN DET., REV. PICTURE FOR NEW RING & COVER, ADDED HEAVY DUTY RING & COVER AND DETAIL OF STEP FOR DROP INLET	
4-26-98	ADDED NOTE 11, ADJ. OPENING DIMENSION	
10-23-95	CORRECTED MIN. COVER OF D.I. IN BOX	
10-20-95	CORRECTED DIAMETER OF D.I. IN BOX	
12-2-95	TYPE C TO MO (OPEN BACK DETAIL)	
11-3-95	REVISED GENERAL NOTES	1-3-94
11-3-95	ADDED BACK OPEN DETAIL & NOTE	1-3-94
11-3-95	REVISED NOTES 11, 2 & ADDED BK OPEN DETAIL	1-3-94
11-3-95	ADDED NOTE NO. 12	1-30-89
5-21-95	ADDED EXTEND NOTE TO SECTION A-A	8-6-72-88
11-14-94	MODIFIED WALL THICKNESS	11-14-94
6-12-87	ISSUED	4-2-87

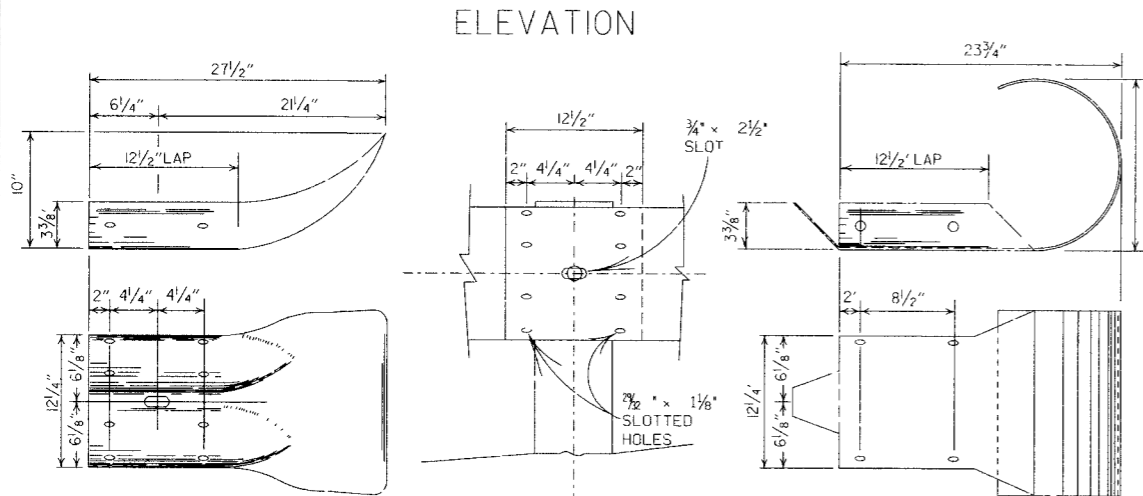
ARKANSAS STATE HIGHWAY COMMISSION

DETAILS OF DROP INLET (TYPE MO)

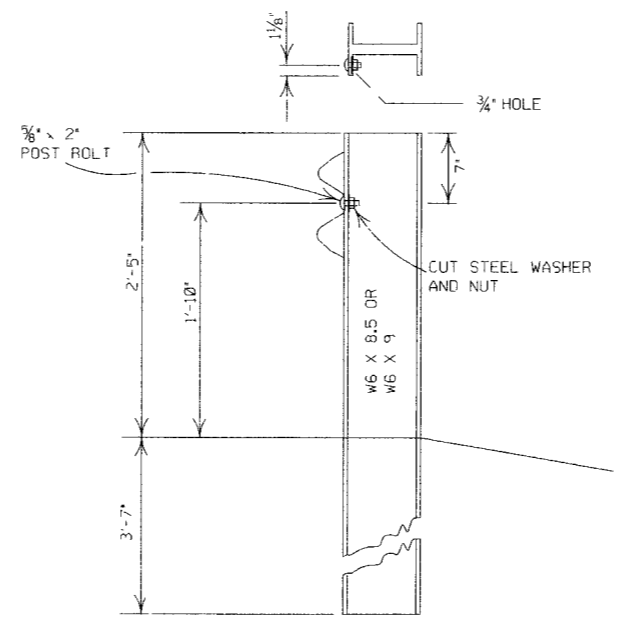
STANDARD DRAWING FPC-9M



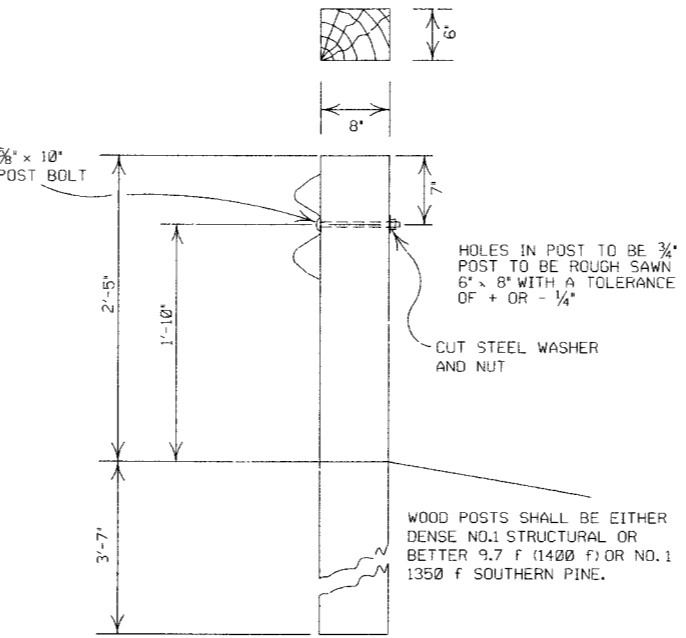
PLAN



ELEVATION



STEEL POST

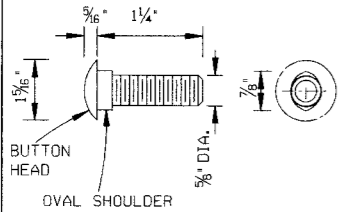


WOOD POST

TERMINAL SECTION

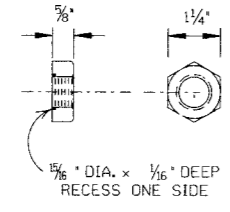
RAIL SPLICE

TERMINAL SECTION

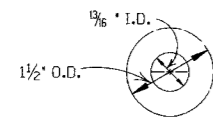


SPLICE BOLT

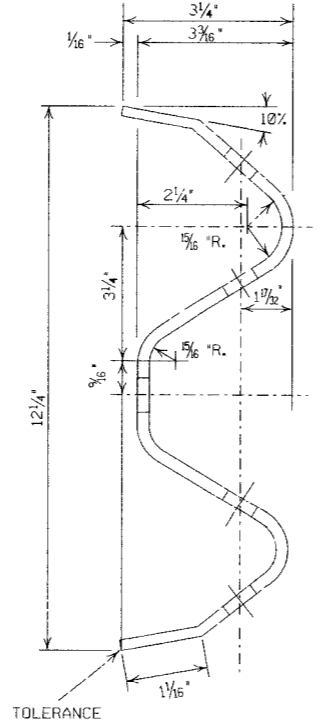
NOTE: POST BOLT SAME EXCEPT LENGTH.



NUT



CUT STEEL WASHER



SECTION THRU RAIL

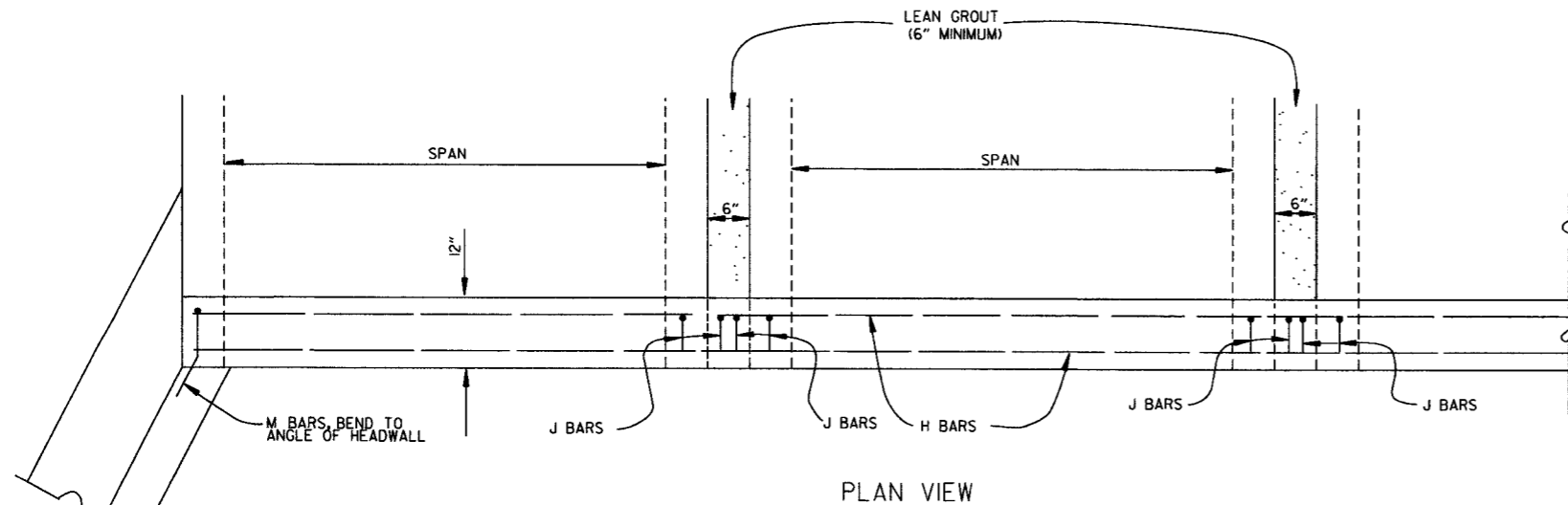
DETAILS OF POST CONNECTIONS

7-14-10	RAISED HEIGHT OF GUARD RAIL 1"	
8-22-02	REVISED DIMENSION ON STEEL POST	
11-16-01	REVISED STEEL AND WOOD POST	
8-12-98	REMOVED CONCRETE POST	
10-18-96	CHANGED WOOD POST NOTE	10-18-96
6-2-94	ADDED ALTERNATE STEEL POST SIZE	
8-5-93	REVISED STEEL POSTS SIZE	8-5-93
8-15-91	DELETE STEEL PLATE WASHER & ADDED TYPE C TO TITLE	8-15-91
10-30-87	REMOVED DET. PLCMNT. ON HWY.	555-11-20-87
1-4-83	GRADE FOR WOOD POSTS	679-1-4-83
10-1-77	HARDENED WASHER	922-10-1-72
10-2-72	REVISED & REDRAWN	521-10-2-72
DATE	REVISION	DATE FILM

ARKANSAS STATE HIGHWAY COMMISSION

GUARD RAIL DETAILS
(TYPE C)
STREET / ROAD BARRICADE OR
TEMPORARY INSTALLATION

STANDARD DRAWING GR-7



BAR LIST

BAR	NO.	SIZE	LENGTH	BAR BENDING DIAGRAM
H	2	#4	•	
I	•	#4	•	
J	•	#4	1'-5"	
L	•	#4	3'-2"	
M	•	#4	1'-8"	

• NOTE: LENGTH AND NUMBER OF BARS VARIES WITH SIZE OF CULVERT

GENERAL NOTES

WINGS, CURTAIN WALLS AND APRONS SHALL BE TIED TO THE PRECAST CULVERT SECTION BY CASTING BARS IN CULVERT END SECTIONS AS SHOWN OR BY DOWELING AND GROUTING. J BARS AND M BARS SHALL BE EMBEDDED A MINIMUM OF 10" IN PRECAST BOX.

WINGS, FOOTINGS, APRONS AND CURTAIN WALLS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPLICABLE WING DRAWING. STEEL AND CONCRETE QUANTITIES WILL BE ADJUSTED TO FIT THE IN-PLACE WIDTH & HEIGHT OF THE PRECAST CONCRETE BOX CULVERTS.

ALL EXPOSED CORNERS TO HAVE 3/4" CHAMFERS.

WINGWALLS AND FOOTINGS MAY BE ADJUSTED IN THE FIELD AS DIRECTED BY THE ENGINEER.

ALL CONCRETE, REINFORCING STEEL, LEAN GROUT, MEMBRANE WATERPROOFING, DRAINAGE FILL MATERIAL, GEOTEXTILE FILTER FABRIC, LABOR, MATERIALS AND EQUIPMENT REQUIRED FOR INSTALLING PRECAST BOX CULVERTS WILL NOT BE PAID FOR DIRECTLY BUT WILL BE CONSIDERED TO BE INCLUDED IN THE PRICE BID FOR THE ITEMS AS SPECIFIED IN SECTION 607 OF THE STANDARD SPECIFICATIONS.

LEAN GROUT SHALL CONSIST OF A SAND CEMENT MIXTURE MEETING THE FOLLOWING REQUIREMENTS: PORTLAND CEMENT SHALL BE TYPE I AND SHALL MEET THE REQUIREMENTS OF AASHTO M 85. SAND SHALL MEET THE REQUIREMENTS OF FINE AGGREGATE AS SPECIFIED IN SECTION 802.02 OF THE STANDARD SPECIFICATIONS. THE SAND CEMENT MIXTURE SHALL CONSIST OF NOT LESS THAN 1.5 SACKS OF PORTLAND CEMENT PER TON OF MATERIAL MIXTURE. THE MIXTURE SHALL CONTAIN SUFFICIENT WATER TO HYDRATE THE CEMENTS. THE SAND CEMENT MIXTURE SHALL BE PLACED IN MAXIMUM 8 INCH THICK LIFTS, LOOSE MEASURE, AND THOROUGHLY RODDED AND TAMPED AROUND BOX TO THOROUGHLY FILL ALL VOIDS.

MEMBRANE WATERPROOFING CONFORMING TO THE REQUIREMENTS OF SECTION 815 OF THE STANDARD SPECIFICATIONS SHALL BE APPLIED TO ALL BOX CULVERT JOINTS.

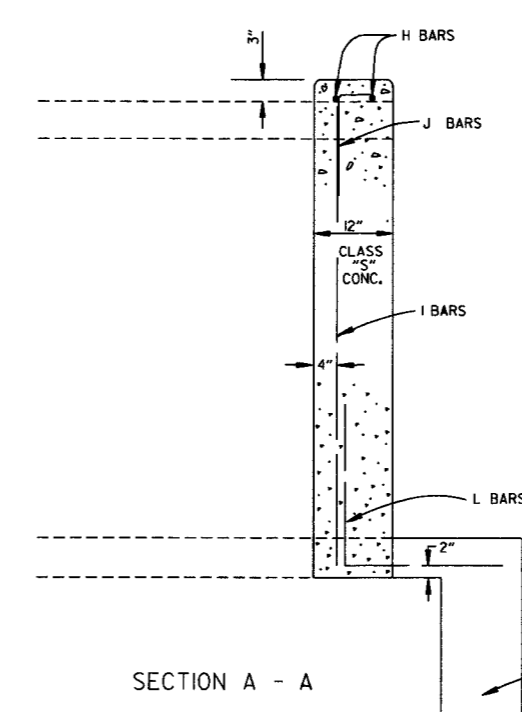
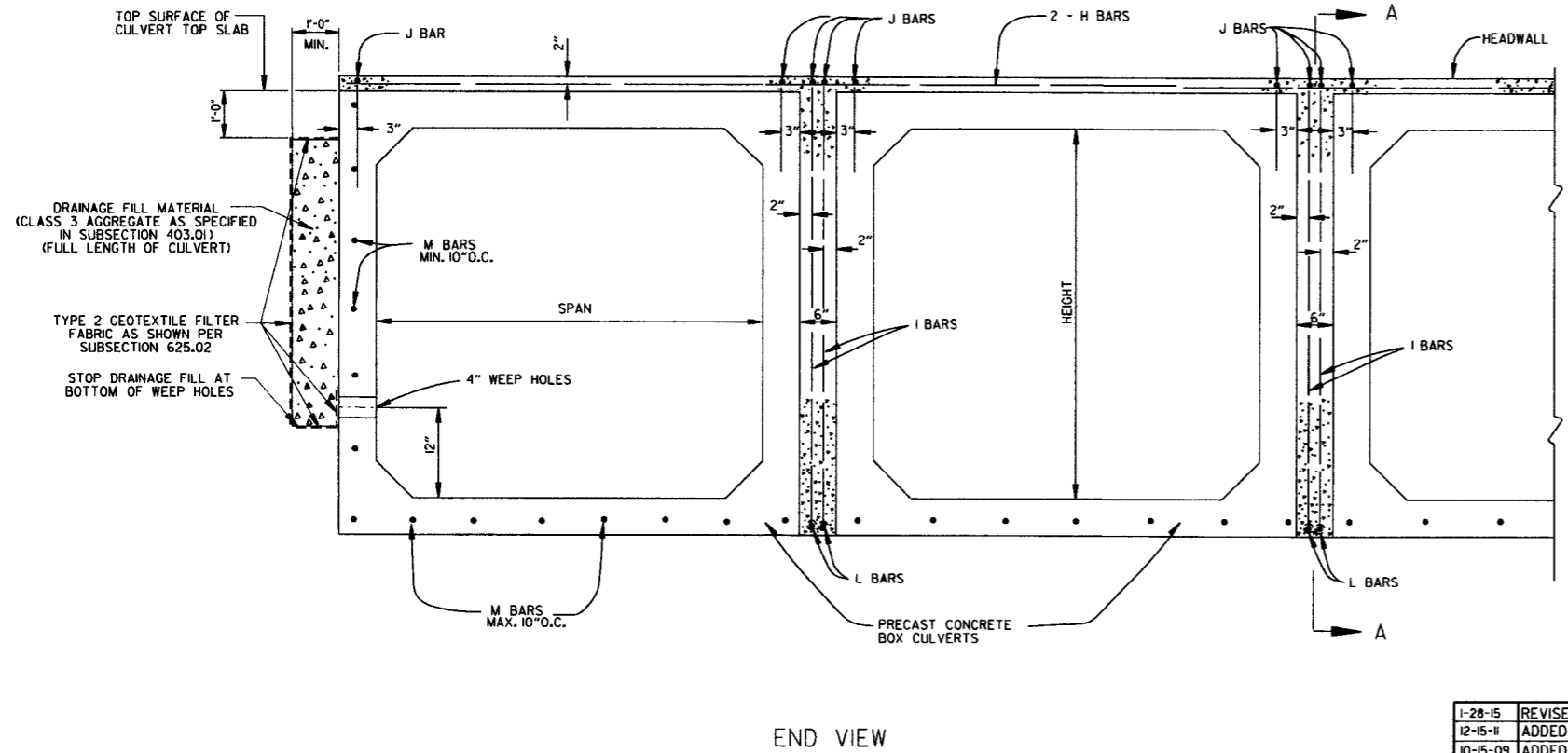
THE MEMBRANE WATERPROOFING WILL BE REQUIRED ON THE TOP EXTERNAL JOINT AND SHALL EXTEND 1 FOOT DOWN THE SIDES OF THE CULVERT.

IN OUTER BARRELS, ONE WEEP HOLE IS REQUIRED IN EXTERIOR WALLS OF EACH PRECAST CULVERT SECTION. WEEP HOLES SHALL HAVE A MAXIMUM HORIZONTAL SPACING OF 10'-0" IN THE ASSEMBLED CULVERT AND SHALL BE SPACED TO CLEAR ALL REINFORCING STEEL. THE DRAIN OPENING SHALL BE 4" DIAMETER AND SHALL BE PLACED 12" ABOVE THE TOP OF THE BOTTOM SLAB.

DRAINAGE FILL MATERIAL WITH GEOTEXTILE FABRIC IS REQUIRED AT THE EXTERIOR WALLS OF THE ASSEMBLED CULVERT, SEE DETAILS ON THIS DRAWING.

MINIMUM WIDTH SHALL BE 12" (6" ON EACH SIDE OF JOINT). ON MULTIPLE BARREL CULVERTS, MEMBRANE WATERPROOFING SHALL BE APPLIED TO EACH BARREL AS DESCRIBED ABOVE.

WITH THE APPROVAL OF THE ENGINEER, THE CONTRACTOR WILL BE ALLOWED TO SUBSTITUTE, AT NO ADDITIONAL COST TO THE DEPARTMENT, FLOWABLE SELECT MATERIAL CONFORMING TO SECTION 206 OF THE STANDARD SPECIFICATIONS IN LIEU OF LEAN GROUT.



DATE	REVISION	DATE FILMED
1-28-15	REVISED GEOTEXTILE FABRIC PLACEMENT	
12-15-11	ADDED NOTE & DTLS FOR WEEP HOLE AND DRAINAGE FILL	
10-15-09	ADDED GENERAL NOTE	
8-10-05	REVISED SPACING OF "M" BARS	
4-10-03	REVISED GENERAL NOTES	
10-18-96	CORRECTED AASHTO REF.	
10-1-92	ADDED NOTE FOR MEMBRANE WATERPROOFING	
8-15-91	ADDED NOTE FOR LEAN GROUT	
11-8-90	REVISED FOR 1991 SPECS	
11-30-89	ISSUED: JABE	

ARKANSAS STATE HIGHWAY COMMISSION
PRECAST CONCRETE BOX CULVERTS
 STANDARD DRAWING PBC-1

CORRUGATED STEEL PIPE (ROUND)

PIPE DIAMETER (INCHES)	① MINIMUM COVER TOP OF PIPE TO TOP OF GROUND "H" (FEET)	MAX. FILL HEIGHT "H" ABOVE TOP OF PIPE (FEET)				
		METAL THICKNESS (INCHES)				
		0.064	0.079	0.109	0.138	0.168
2 1/2 INCH BY 1/2 INCH CORRUGATION RIVETED, WELDED, OR HELICAL LOCK-SEAM						
12	1	84	91			
15	1	67	73			
18	1	56	61			
24	1	42	46	59		
30	2	34	36	47		
36	2		30	39	41	
42	2		43	67	70	73
48	2		37	58	61	64
② 3 INCH BY 1 INCH OR 5 INCH BY 1 INCH CORRUGATION RIVETED, WELDED, BOLTED, OR HELICAL LOCK-SEAM						
36	1	48	60	88	111	118
42	1	41	51	72	90	102
48	1	36	45	64	77	85
54	2	32	40	59	71	79
60	2	29	36	53	64	71
66	2	26	33	47	58	64
72	2	24	30	44	53	59
78	2		28	41	49	54
84	2		26	38	45	51
90	2		24	35	43	45
96	2		22	33	40	44
102	2			31	38	42
108	2			30	35	39
114	2			28	34	37
120	2			27	32	35

CONSTRUCTION SEQUENCE

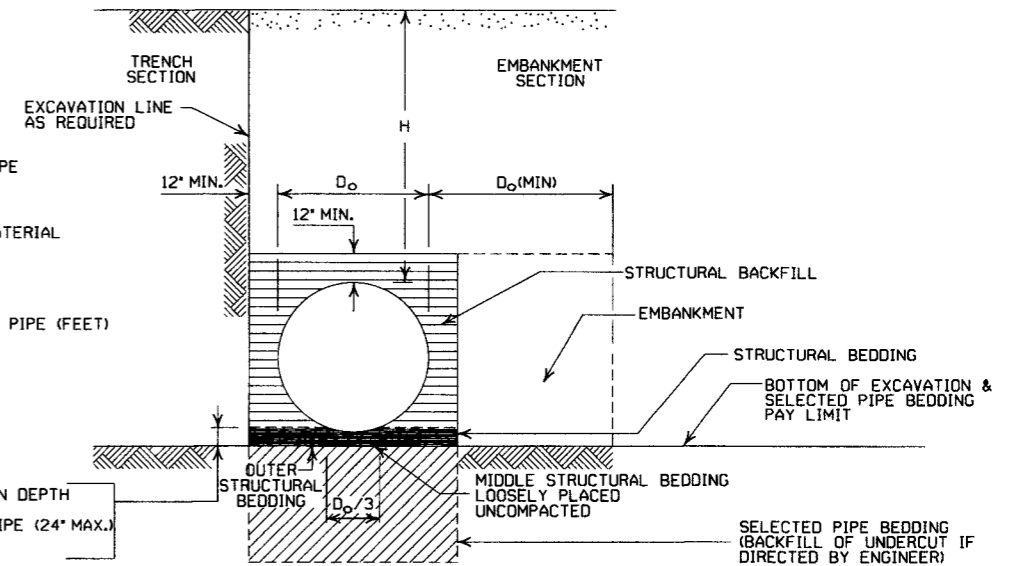
1. PLACE STRUCTURAL BEDDING MATERIAL TO GRADE. DO NOT COMPACT.
2. INSTALL PIPE TO GRADE.
3. COMPACT STRUCTURAL BEDDING OUTSIDE THE MIDDLE THIRD OF THE PIPE.
4. COMPLETE STRUCTURAL BACKFILL OPERATION BY WORKING FROM SIDE TO SIDE OF THE PIPE. THE SIDE TO SIDE STRUCTURAL BACKFILL DIFFERENTIAL SHALL NOT EXCEED 24 INCHES OR 1/3 THE SIZE OF THE PIPE, WHICHEVER IS LESS.

NOTE: STRUCTURAL BACKFILL AND STRUCTURAL BEDDING MATERIAL WILL NOT BE PAID FOR SEPARATELY, BUT COMPENSATION WILL BE CONSIDERED TO BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF METAL PIPE.

INSTALLATION TYPE	MATERIAL REQUIREMENTS FOR STRUCTURAL BACKFILL AND STRUCTURAL BEDDING
TYPE 1	AGGREGATE BASE COURSE (CLASS 4, 5, 6, OR 7)
TYPE 2	SELECTED MATERIALS (CLASS SM-1, SM-2, OR SM-4) OR TYPE 1 INSTALLATION MATERIAL ③

③ SM-3 WILL NOT BE ALLOWED.

- LEGEND -**
- D_o = OUTSIDE DIAMETER OF PIPE
 - MAX. = MAXIMUM
 - MIN. = MINIMUM
 - [Hatched Pattern] = STRUCTURAL BACKFILL MATERIAL
 - [Diagonal Lines] = UNDISTURBED SOIL
 - [Dotted Pattern] = EQUIV. DIA. = EQUIVALENT DIAMETER
 - H = FILL COVER HEIGHT OVER PIPE (FEET)



EMBANKMENT AND TRENCH INSTALLATIONS

1. STRUCTURAL BACKFILL, EMBANKMENT, AND OUTER STRUCTURAL BEDDING MATERIAL SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OR CLASS OF MATERIAL USED.
2. INSTALLATION TYPE 1 OR 2 MAY BE USED FOR CORRUGATED STEEL OR ALUMINUM PIPE (ROUND).
3. INSTALLATION TYPE 1 SHALL BE USED FOR CORRUGATED STEEL OR ALUMINUM PIPE ARCHES WITH 2 1/2" x 1/2" CORRUGATION.
4. INSTALLATION TYPE 1 OR 2 MAY BE USED FOR CORRUGATED STEEL OR ALUMINUM PIPE ARCHES WITH 3" x 1" OR 5" x 1" CORRUGATION.

GENERAL NOTES

1. METAL PIPE CULVERT CONSTRUCTION SHALL CONFORM TO ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION), WITH APPLICABLE SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS, UNLESS OTHERWISE NOTED IN THE PLANS, SECTION AND SUBSECTION REFER TO THE STANDARD CONSTRUCTION SPECIFICATIONS.
2. METAL PIPE CULVERT DESIGN SHALL CONFORM TO AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, FIFTH EDITION (2010) WITH 2010 INTERIMS.
3. METAL PIPE CULVERT MATERIALS AND INSTALLATIONS SHALL CONFORM TO SECTION 606 AND JOB SPECIAL PROVISION "METAL PIPE".
4. ALL PIPE SHALL BE PROTECTED DURING CONSTRUCTION BY A COVER SUFFICIENT TO PREVENT DAMAGE FROM PASSAGE OF EQUIPMENT.
5. THE MINIMUM TRENCH WIDTH SHALL BE THE OUTSIDE DIAMETER OF THE PIPE PLUS 24 INCHES. THE MAXIMUM ALLOWABLE TRENCH WIDTH SHALL BE THE MINIMUM WIDTH PRACTICABLE FOR WORKING CONDITIONS.
6. MULTIPLE PIPE CULVERTS SHALL BE INSTALLED WITH A MINIMUM CLEARANCE OF 24 INCHES BETWEEN STRINGS OF PIPE. REFER TO STD. DWG. FES-2 FOR MINIMUM CLEARANCE WHERE FLARED END SECTIONS ARE USED.
7. IMPERVIOUS MATERIAL SHOULD BE PLACED AS DIRECTED BY THE ENGINEER AT THE ENDS OF THE CULVERT TO PREVENT LOSS OF STRUCTURAL BEDDING WHEN PERVIOUS MATERIAL IS USED FOR STRUCTURAL BEDDING AND/OR BACKFILL.
8. WHEN DIRECTED BY THE ENGINEER, UNSUITABLE MATERIAL THAT IS ENCOUNTERED AT THE BOTTOM OF THE EXCAVATED TRENCH (BELOW THE AREA IDENTIFIED AS "STRUCTURAL BEDDING" ABOVE) WILL BE EXCAVATED AND REPLACED WITH SELECTED PIPE BEDDING. THE QUANTITY OF MATERIAL REQUIRED TO BACKFILL THE UNDERCUT AREA UP TO THE SELECTED PIPE BEDDING PAY LIMIT DESIGNATED ABOVE WILL BE MEASURED AND PAID FOR AS "SELECTED PIPE BEDDING."
9. WHEN THE EXISTING MATERIAL EXCAVATED FOR THE PIPE TRENCH IS DETERMINED BY THE ENGINEER TO BE UNSUITABLE FOR BACKFILLING THE PIPE (ABOVE THE AREA IDENTIFIED AS STRUCTURAL BACKFILL), BORROW MATERIAL OR MATERIAL FROM THE ROADWAY EXCAVATION WILL BE USED TO BACKFILL THE PIPE. IF SUITABLE MATERIAL IS NOT AVAILABLE, THE ENGINEER MAY AUTHORIZE THE USE OF "SELECTED PIPE BACKFILL."

CORRUGATED ALUMINUM PIPE (ROUND)

PIPE DIAMETER (INCHES)	① MINIMUM COVER TOP OF PIPE TO TOP OF GROUND "H" (FEET)	MAX. FILL HEIGHT "H" ABOVE TOP OF PIPE (FEET)				
		METAL THICKNESS IN INCHES				
		0.060	0.075	0.105	0.135	0.164
2 1/2 INCH BY 1/2 INCH CORRUGATION RIVETED OR HELICAL LOCK-SEAM						
12	1	45	45			
18	2	30	30	52		
24	2	22	22	39	41	
30	2		18	31	32	34
36	2.5		15	26	27	28
42	2			43	43	44
48	2			40	41	43
54	2			35	37	38
60	2				33	34
66	2					31
72	2					29

EQUIVALENT METAL THICKNESSES AND GAUGES

METAL THICKNESS IN INCHES			GAUGE NUMBER
STEEL			
ZINC COATED	UNCOATED	ALUMINUM	
0.064	0.0598	0.060	16
0.079	0.0747	0.075	14
0.109	0.1046	0.105	12
0.138	0.1345	0.135	10
0.168	0.1644	0.164	8

CORRUGATED METAL PIPE ARCHES

EQUIV. DIA. (INCHES)	PIPE DIMENSION SPAN X RISE (INCHES)	MINIMUM CORNER RADIUS (INCHES)	STEEL				ALUMINUM			
			MIN. THICKNESS REQUIRED INCHES	① MIN. HEIGHT OF FILL, "H" (FT.)		MIN. THICKNESS REQUIRED INCHES	① MIN. HEIGHT OF FILL, "H" (FT.)			
				INSTALLATION			INSTALLATION			
				TYPE 1	TYPE 1		TYPE 1	TYPE 1		
2 1/2 INCH BY 1/2 INCH CORRUGATION RIVETED, WELDED, OR HELICAL LOCK-SEAM										
15	17x13	3	0.064	2	15	0.060	2	15		
18	21x15	3	0.064	2	15	0.060	2	15		
21	24x18	3	0.064	2,25	15	0.060	2,25	15		
24	28x20	3	0.064	2,5	15	0.075	2,5	15		
30	35x24	3	0.079	3	12	0.075	3	12		
36	42x29	3 1/2	0.079	3	12	0.105	3	12		
42	49x33	4	0.079	3	12	0.105	3	12		
48	57x38	5	0.109	3	13	0.135	3	13		
54	64x43	6	0.109	3	14	0.135	3	14		
60	71x47	7	0.138	3	15	0.135	3	14		
66	77x52	8	0.168	3	15					
72	83x57	9	0.168	3	15					
② 3 INCH BY 1 INCH OR 5 INCH BY 1 INCH CORRUGATION RIVETED, WELDED, OR HELICAL LOCK-SEAM										
			INSTALLATION				INSTALLATION			
			TYPE 2		TYPE 1		TYPE 2		TYPE 1	
36	40x31	5	0.079	3	2	12	15			
42	46x36	6	0.079	3	2	13	15			
48	53x41	7	0.079	3	2	13	15			
54	60x46	8	0.079	3	2	13	15			
60	66x51	9	0.079	3	2	13	15			
66	73x55	12	0.079	3	2	15	15			
72	81x59	14	0.079	3	2	15	15			
78	87x63	14	0.079	3	2	15	15			
84	95x67	16	0.109	3	2	15	15			
90	103x71	16	0.109	3	2	15	15			
96	112x75	18	0.109	3	2	15	15			
102	117x79	18	0.109	3	2	15	15			
108	128x83	18	0.138	3	2	15	15			

① FOR MINIMUM COVER VALUES, "H" SHALL INCLUDE A MINIMUM 12" OF PAVEMENT AND/OR BASE.

② WHERE THE STANDARD 2 1/2" x 1/2" CORRUGATION AND GAUGE IS SPECIFIED FOR A GIVEN DIAMETER, A PIPE OF THE SAME DIAMETER WITH A 3" x 1" OR 5" x 1" CORRUGATION MAY BE SUBSTITUTED, PROVIDING IT IS GAUGED FOR A FILL HEIGHT CONDITION EQUAL TO OR GREATER THAN THE MAXIMUM FILL HEIGHT CONDITION FOR THE SPECIFIED GAUGE AND CORRUGATION.

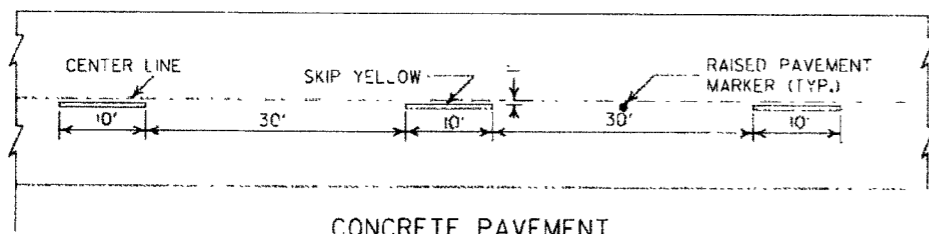
DATE	REVISION	DATE FILMED
2-27-14	REVISED GENERAL NOTE 1	
12-15-11	REVISED FOR LRFD DESIGN SPECS	
3-30-00	REVISED INSTALLATIONS	
11-06-97	ISSUED	

ARKANSAS STATE HIGHWAY COMMISSION

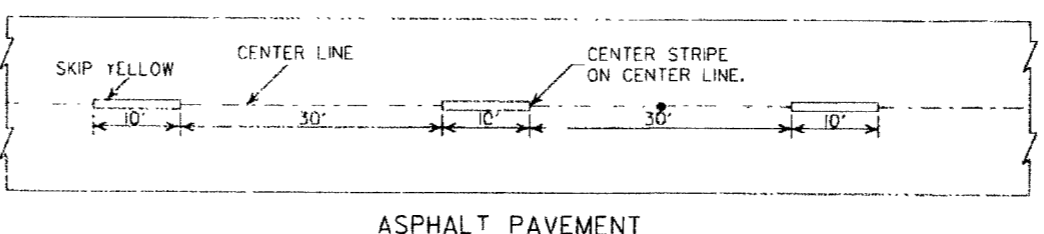
METAL PIPE CULVERT FILL HEIGHTS & BEDDING

STANDARD DRAWING PCM-1



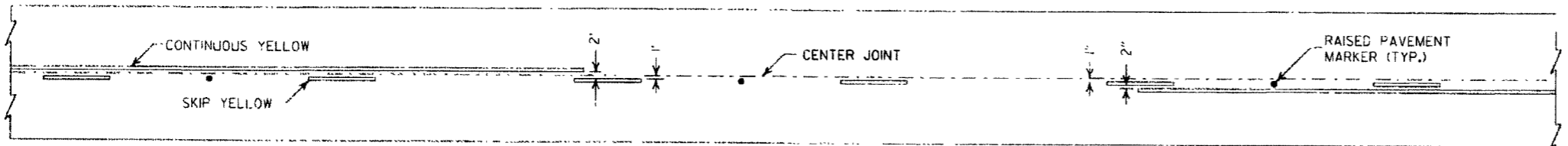


CONCRETE PAVEMENT

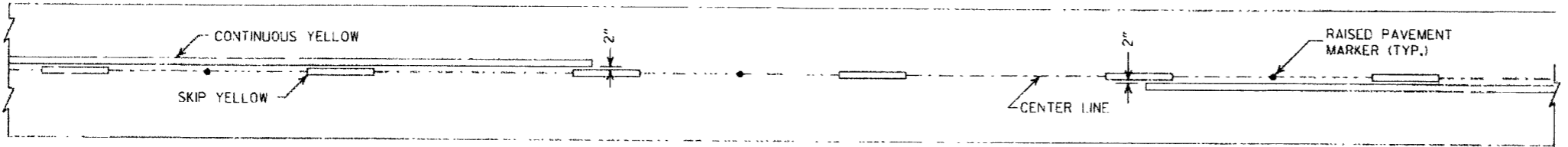


ASPHALT PAVEMENT

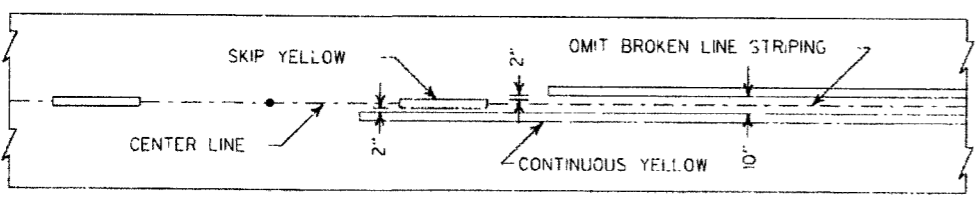
BROKEN LINE STRIPING



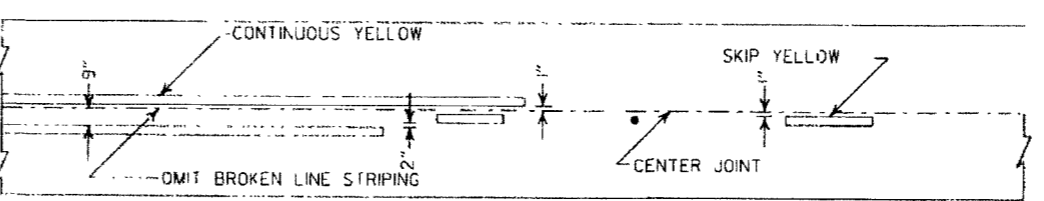
SOLID LINE STRIPING ON CONCRETE PAVEMENT



SOLID LINE STRIPING ON ASPHALT PAVEMENT

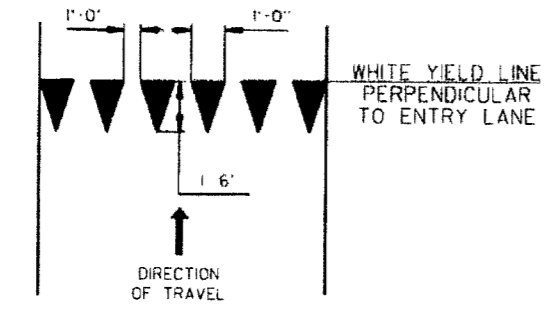


ASPHALT PAVEMENT

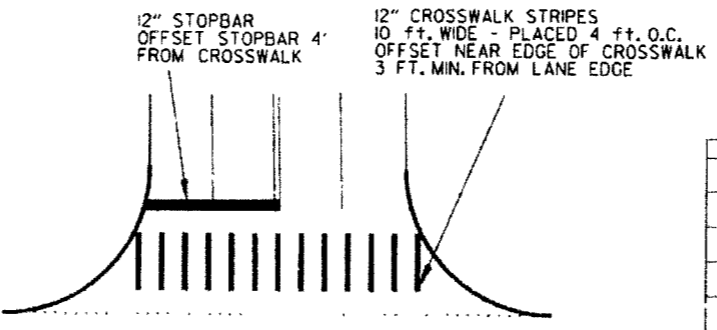


CONCRETE PAVEMENT

STRIPING AT ADJACENT NO PASSING LANES

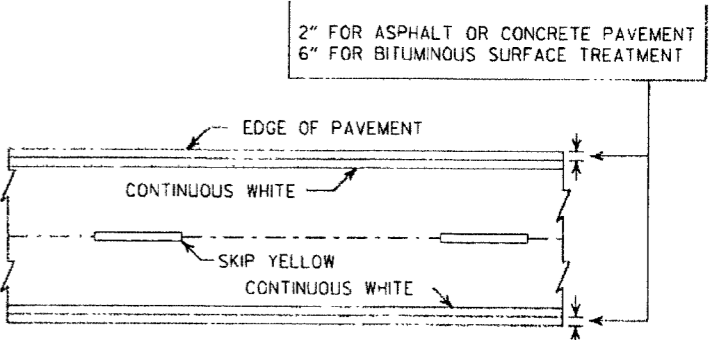


YIELD LINE DETAIL



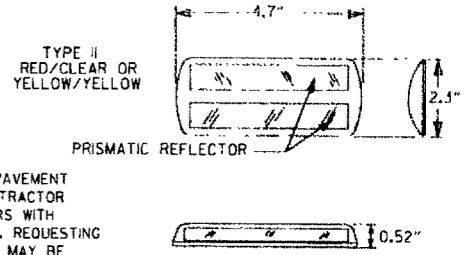
CROSSWALK AND STOPBAR DETAILS

- NOTES:
1. REFER TO THE STRIPING DETAILS FOR PAVEMENT MARKING LINE WIDTHS.
 2. THIS DRAWING SHALL BE USED IN CONJUNCTION WITH THE LATEST REVISED ADDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES."
 3. RAISED PAVEMENT MARKERS SHALL BE PLACED ON AN 80 FEET SPACING UNLESS OTHERWISE SHOWN IN THE PLANS.



PAVEMENT EDGE LINE MARKING

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



DETAIL OF STANDARD RAISED PAVEMENT MARKERS

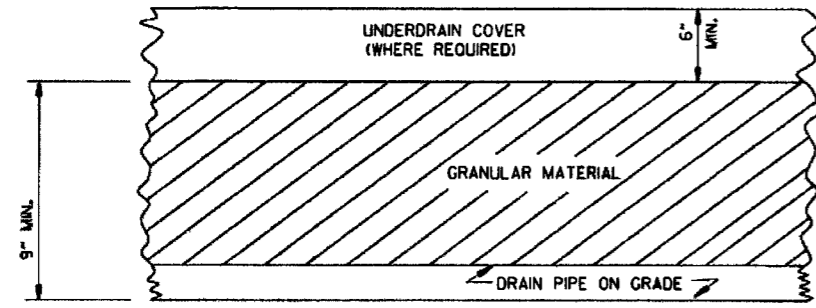
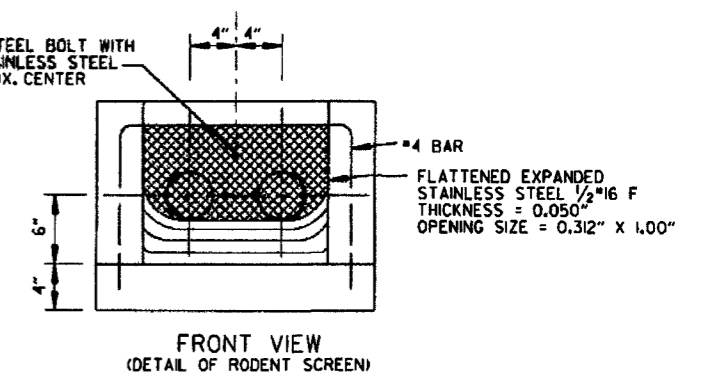
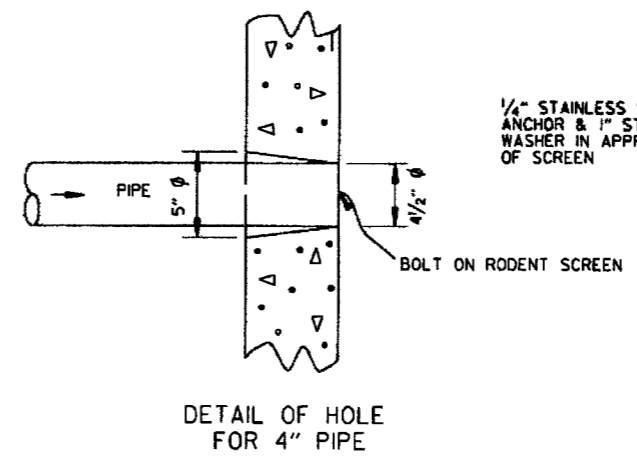
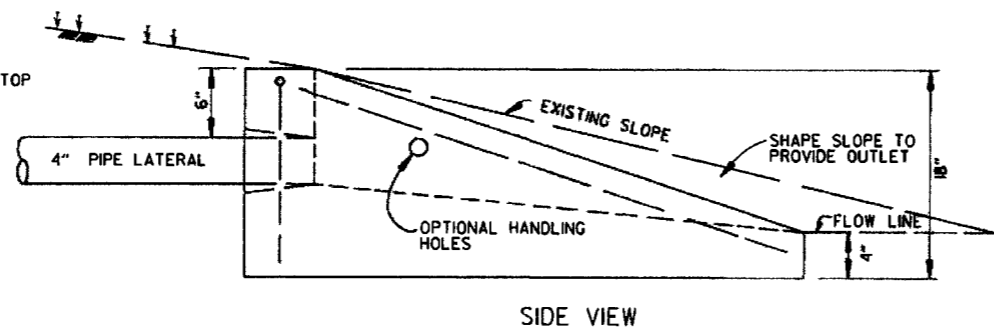
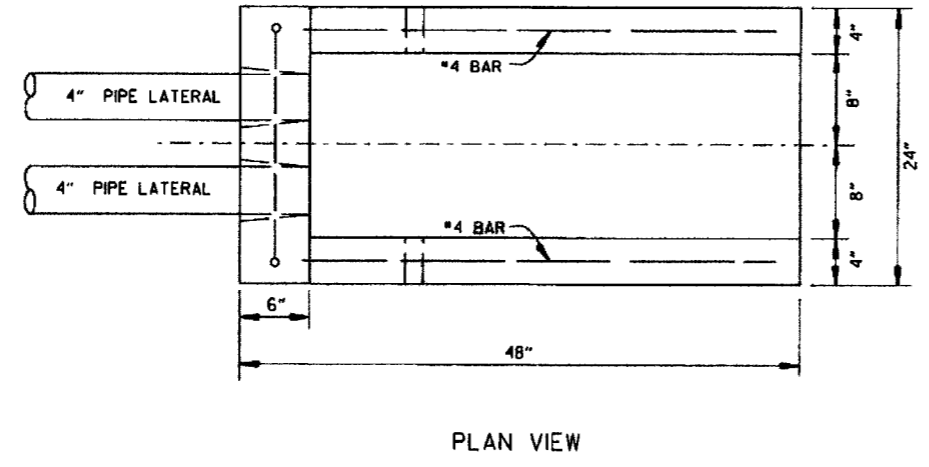
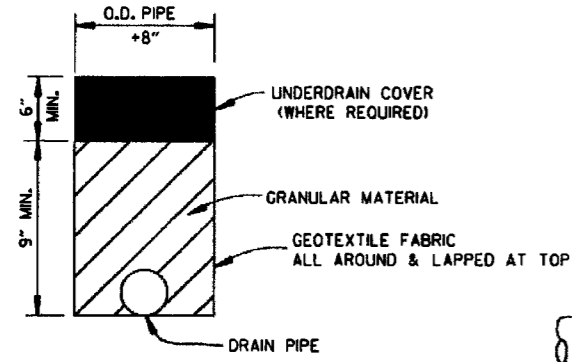
6-1-17	ADDED YIELD LINE DETAIL	
5-12-16	REVISED LINE WIDTHS, SPACING, & NOTES	
9-12-13	REVISED DETAIL OF STANDARD RAISED PAVEMENT MARKERS	
11-17-10	REVISED GENERAL NOTES & REMOVED PLOWABLE PAVT MRKRS	
11-18-04	REVISED NOTE 2 & GENERAL NOTES	
8-22-02	ADDED CROSSWALK & STOPBAR DTLS.	
7-02-98	ADDED DETAILS OF STD. RAISED PAVT. MARKERS	
4-26-96	REV. NOTES 3&4; ADDED R.P.M.	
9-30-80	DRAWN	1-9-30-80
	REVISION	FILMED

ARKANSAS STATE HIGHWAY COMMISSION

PAVEMENT MARKING DETAILS

STANDARD DRAWING PM-1

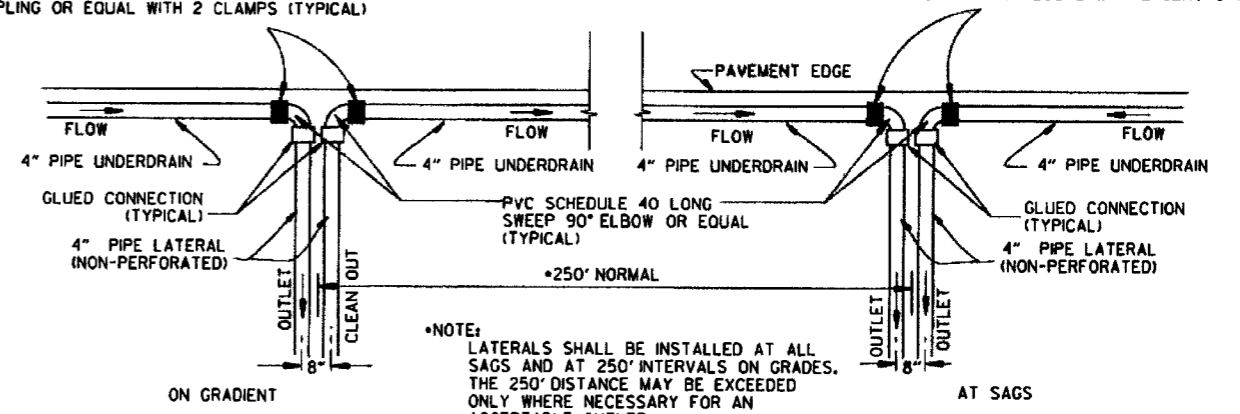
NOTE:
 1. UNLESS OTHERWISE SPECIFIED ON THE PLANS, THE UNDERDRAIN COVER SHALL BE THOROUGHLY COMPACTED EARTH AND SHALL BE SUBSIDIARY TO PIPE UNDERDRAIN.
 2. GRANULAR MATERIAL SHALL BE WRAPPED WITH GEOTEXTILE FABRIC, LAP FABRIC 12" OR THE WIDTH OF THE TRENCH AT THE TOP.



FERNCO 1056-44 (4" CI/PLASTIC) OR FERNCO 1051-44 (4" AC/DIOR 4" CI/PLASTIC) COUPLING OR EQUAL WITH 2 CLAMPS (TYPICAL)

UNDERDRAIN OUTLET PROTECTORS

FERNCO 1056-44 (4" CI/PLASTIC) OR FERNCO 1051-44 (4" AC/DIOR 4" CI/PLASTIC) COUPLING OR EQUAL WITH 2 CLAMPS (TYPICAL)



NOTE: LATERALS SHALL BE INSTALLED AT ALL SAGS AND AT 250' INTERVALS ON GRADES. THE 250' DISTANCE MAY BE EXCEEDED ONLY WHERE NECESSARY FOR AN ACCEPTABLE OUTLET.

DETAIL OF PIPE UNDERDRAIN LATERALS WHEN PLACED ALONG PAVEMENT EDGE

NOTE: PVC PIPE FOR LATERALS SHALL MEET THE REQUIREMENTS OF ASTM D 1785 (LATEST REVISION) FOR SCHEDULE 40 PIPE.

NOTES FOR PIPE UNDERDRAINS

1. GEOTEXTILE FABRIC SHALL MEET THE REQUIREMENTS OF SECTION 625 FOR TYPE I. PAYMENT FOR GEOTEXTILE FABRIC AND GRANULAR FILTER MATERIAL SHALL BE INCLUDED IN THE PRICE BID PER LIN. FT. FOR "4" PIPE UNDERDRAINS" IN ACCORDANCE WITH SECTION 610 OF THE STANDARD SPECIFICATIONS.
2. 4" NON-PERFORATED SCHEDULE 40 PVC PIPE LATERALS WITH OUTLET PROTECTORS SHALL BE INSTALLED AS SHOWN HEREON. LATERALS WILL BE MEASURED AND PAID FOR AS "4" PIPE UNDERDRAINS." UNDERDRAIN OUTLET PROTECTORS WILL BE MEASURED AND PAID FOR BY THE UNIT IN ACCORDANCE WITH SECTION 610 OF THE STANDARD SPECIFICATIONS.
3. EXISTING 4" PIPE UNDERDRAINS MAY BE CONNECTED TO PROPOSED DROP INLETS OR EXTENDED WHERE DIRECTED BY THE ENGINEER. PAYMENT FOR CONNECTING TO DROP INLETS SHALL BE CONSIDERED INCLUDED IN THE PRICE BID FOR "4" PIPE UNDERDRAINS."
4. THE LOCATION OF ALL LATERALS SHALL BE MARKED WITH 4" X 12" PERMANENT PAVEMENT MARKING TAPE (TYPE III WHITE) AT THE OUTSIDE EDGE OF THE SHOULDER, PLACED TRANSVERSE TO TRAFFIC. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR THE VARIOUS CONTRACT ITEMS.
5. PAYMENT FOR THE RODENT SCREEN SHALL BE INCLUDED IN THE PRICE BID PER EACH FOR "UNDERDRAIN OUTLET PROTECTORS."
6. ANY EXISTING UNDERDRAINS THAT INTERFERE WITH INSTALLATION OF THE NEW UNDERDRAIN SYSTEM SHALL BE REMOVED AND DISPOSED OF AS DIRECTED BY THE ENGINEER. PAYMENT WILL BE CONSIDERED INCLUDED IN THE PRICE BID FOR THE VARIOUS CONTRACT ITEMS. EXISTING UNDERDRAIN OUTLET PROTECTORS SHALL BE REMOVED UNDER THE ITEM "REMOVAL AND DISPOSAL OF UNDERDRAIN OUTLET PROTECTORS."
7. AT LOCATIONS WHERE A SINGLE LATERAL IS USED THE CONTRACTOR SHALL HAVE THE FOLLOWING OPTIONS: 1. INSTALL OUTLET PROTECTOR AS SHOWN ON STANDARD DRAWING PU-1 AND GROUT THE UNUSED HOLE OR 2. INSTALL AN OUTLET PROTECTOR WITH A SINGLE HOLE.

DATE	REVISION	DATE FILMED
12-8-16	ADDED NOTES FOR PIPE UNDERDRAINS, REVISED RODENT SCREEN DETAIL AND NOTES, REMOVED NOTE 1 FOR GRANULAR MATERIAL, ADDED NOTE FOR GEOTEXTILE FABRIC	
4-10-03	REVISED NOTE 3	
1-12-00	REVISED DETAIL OF UNDERDRAIN LATERALS	
11-18-98	REVISED NOTE	
10-18-96	REVISED MIN. DEPTH & GEOTEXTILE FABRIC	
4-26-96	ADDED LATERAL NOTE, 5 1/2" 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 POLYETHYLENE PIPE	8-15-91
11-8-90	DELETED ALTERNATE NOTE	11-8-90
1-25-90	ADDED 4" SNAP ADAPTER	1-25-90
11-30-89	DEL. (SUBGRADE) ADDED (WHERE REQUIRED)	11-30-89
7-15-88	ISSUED P.L.M.	647-7-15-88

ARKANSAS STATE HIGHWAY COMMISSION

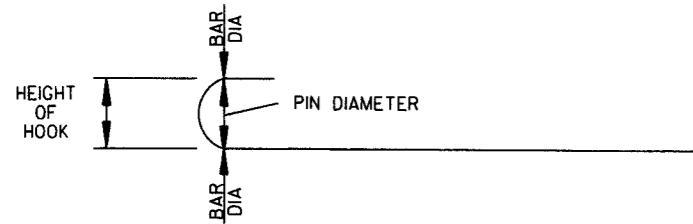
DETAILS OF PIPE UNDERDRAIN

STANDARD DRAWING PU-1

STEEL FABRICATION: REINFORCING STEEL FABRICATION SHALL CONFORM TO THE DIMENSIONS LISTED IN THE TABLE BELOW:

BAR SIZE	PIN DIAMETER	HOOK EXTENSION "K"
3	2 1/4"	4"
4	3"	4 1/2"
5	3 3/4"	5"
6	4 1/2"	6"
7	5 1/4"	7"
8	6"	8"

IF THE OVERALL HEIGHT OF THE HOOK (SEE DIAGRAM BELOW) FOR A "b", "b1", "b2" or "b3" BENT BAR IS GREATER THAN THE CORRESPONDING TOP OR BOTTOM SLAB THICKNESS, LESS 2 3/4 INCHES, EACH BENT BAR SHALL BE REPLACED WITH ONE HOOKED BAR AND ONE STRAIGHT BAR, USING LENGTHS AS SHOWN IN THE TABLE BELOW. THE TWO BARS SHALL BE THE SAME DIAMETER AS, AND PLACED AT THE SAME SPACING AS, THE "b", "b1", "b2" OR "b3" BENT BARS THEY REPLACE.



NOTE: DIMENSIONS OF BARS ARE MEASURED OUT TO OUT OF BARS.

OVERALL HEIGHT OF HOOKED BAR DIAGRAM

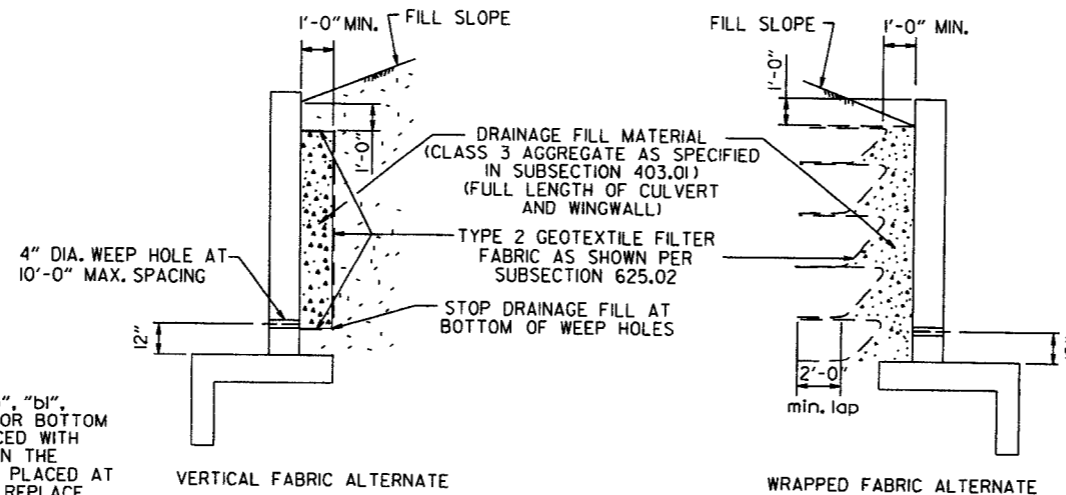
THE HOOKED BARS SHALL BE PLACED IN THE BOTTOM OF THE TOP SLAB AND THE TOP OF THE BOTTOM SLAB. THE STRAIGHT BARS SHALL BE PLACED IN THE TOP OF THE TOP SLAB AND THE BOTTOM OF THE BOTTOM SLAB. SEE TABLE BELOW FOR LENGTHS OF REPLACEMENT HOOKED AND STRAIGHT BARS.

FOR SKEWED CULVERTS, THE REPLACEMENT STRAIGHT BAR MAY HAVE TO BE CUT IN FIELD TO FIT.

REPLACEMENT BAR LENGTHS TABLE

BAR SIZE: "b", "b1", "b2" OR "b3"	LENGTH OF HOOKED BAR	LENGTH OF STRAIGHT BAR
*4	L + 1' - 0"	SEE "c" BAR LENGTH
*5	L + 1' - 2"	SEE "c" BAR LENGTH
*6	L + 1' - 4"	SEE "c" BAR LENGTH
*7	L + 1' - 8"	SEE "c" BAR LENGTH
*8	L + 1' - 10"	SEE "c" BAR LENGTH
*9	L + 2' - 6"	SEE "c" BAR LENGTH

L = "OW" - 3 INCHES



WINGWALL & CULVERT DRAINAGE DETAIL

REINFORCED CONCRETE BOX CULVERT GENERAL NOTES

CONCRETE SHALL BE CLASS S WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3500 PSI. REINFORCING STEEL SHALL BE AASHTO M 31 OR M 53, GRADE 60.

CONSTRUCTION AND MATERIALS FOR WINGWALL & CULVERT DRAINAGE, INCLUDING WEEP HOLES AND GRANULAR MATERIAL, SHALL BE SUBSIDIARY TO THE BID ITEM, "CLASS S CONCRETE".

MEMBRANE WATERPROOFING SHALL CONFORM TO THE REQUIREMENTS OF SECTION 815 OF THE STANDARD SPECIFICATIONS.

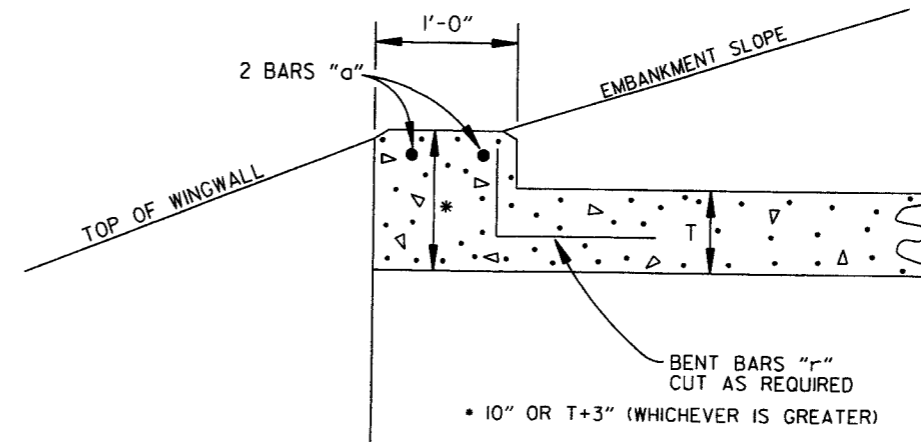
MEMBRANE WATERPROOFING SHALL BE APPLIED TO ALL CONSTRUCTION JOINTS IN THE TOP SLAB AND THE SIDEWALLS OF R.C. BOX CULVERTS AS DIRECTED BY THE ENGINEER. NO PAYMENT SHALL BE MADE FOR THIS ITEM, BUT PAYMENT WILL BE CONSIDERED TO BE INCLUDED IN THE VARIOUS ITEMS BID FOR THE R.C. BOX CULVERT.

REINFORCING STEEL TOLERANCES: THE TOLERANCES FOR REINFORCING STEEL SHALL MEET THOSE LISTED IN "MANUAL OF STANDARD PRACTICE" PUBLISHED BY CONCRETE REINFORCING STEEL INSTITUTE (CRSI) EXCEPT THAT THE TOLERANCE FOR TRUSS BARS SUCH AS FIGURE 3 ON PAGE 7-4 OF THE CRSI MANUAL SHALL BE MINUS ZERO TO PLUS 1/2 INCH.

WEEP HOLES IN BOX CULVERT WALLS SHALL HAVE A MAXIMUM HORIZONTAL SPACING OF 10'-0" AND SHALL BE SPACED TO CLEAR ALL REINFORCING STEEL. THE DRAIN OPENING SHALL BE 4" DIAMETER AND SHALL BE PLACED 12" ABOVE THE TOP OF THE BOTTOM SLAB.

WEEP HOLES IN WINGWALLS SHALL HAVE A MAXIMUM HORIZONTAL SPACING OF 10'-0" AND SHALL BE SPACED TO CLEAR ALL REINFORCING STEEL. THERE SHALL BE A MINIMUM OF TWO (2) WEEP HOLES IN EACH WINGWALL. THE DRAIN OPENING SHALL BE 4" DIAMETER AND SHALL BE PLACED 12" ABOVE THE TOP OF THE WINGWALL FOOTING.

THE REQUIREMENTS SHOWN ON THIS DRAWING SHALL SUPERCEDE THE CORRESPONDING REQUIREMENTS ON ALL REINFORCED CONCRETE BOX CULVERT STANDARD DRAWINGS.



NOTE: FOR ALL SKEWED R.C. BOX CULVERTS THE LENGTH "K" OF THE MODIFIED HEADWALL SHALL BE EQUAL TO THE ROADWAY LENGTH "RL". THE ENDS OF THE HEADWALL SHALL BE CONSTRUCTED PARALLEL TO THE SKEW ANGLE OF THE BOX CULVERT.

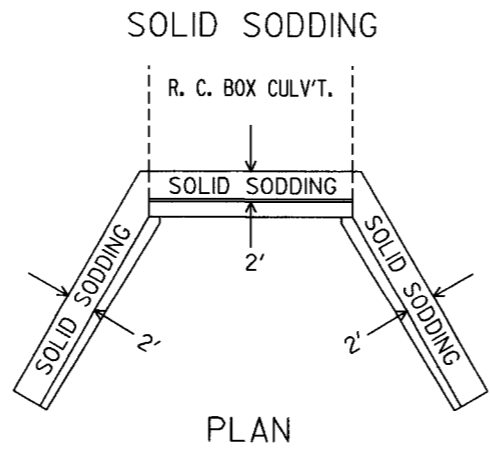
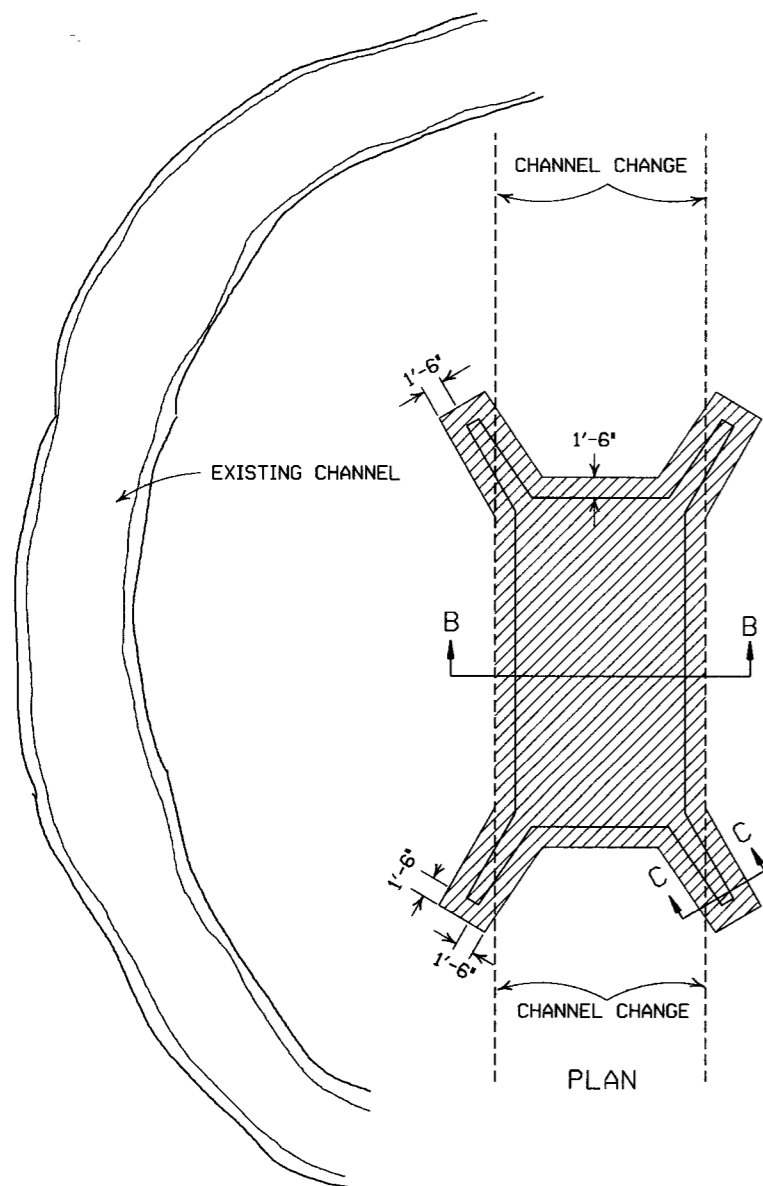
R.C. BOX CULVERT HEADWALL MODIFICATIONS

DATE	REVISION	DATE FILMED
7/26/12	REV. DRAINAGE FILL MATERIAL & DETAIL	
12/15/11	REQUIRE WEEP HOLES IN BOX CULVERT WALLS	
5-25-06	REV. GEN. NOTES AND DETAILS FOR WEEP HOLES; BAR DIAGRAM	
11-16-01	ADDED WINGWALL DRAINAGE DETAIL/EDITED GEN. NOTES	
10-18-96	REV. ASTM REF. TO AASHTO & ADDED BAR DIAGRAM	
10-12-95	MOVED SOLID SODDING DETAIL TO RCB-2	
6-2-94	ADDED SOLID SODDING PLAN DETAIL	
8-5-93	REVISED PIN DIAMETER TO SPECS.	
8-15-91	DRAWN AND ISSUED	

ARKANSAS STATE HIGHWAY COMMISSION

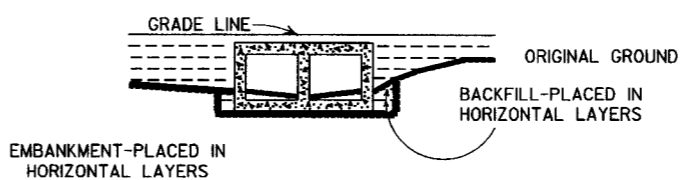
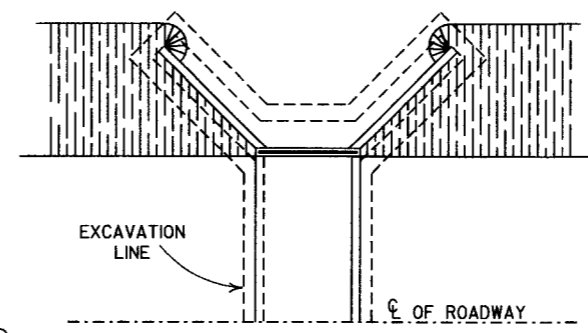
REINFORCED CONCRETE BOX CULVERT DETAILS

STANDARD DRAWING RCB-1

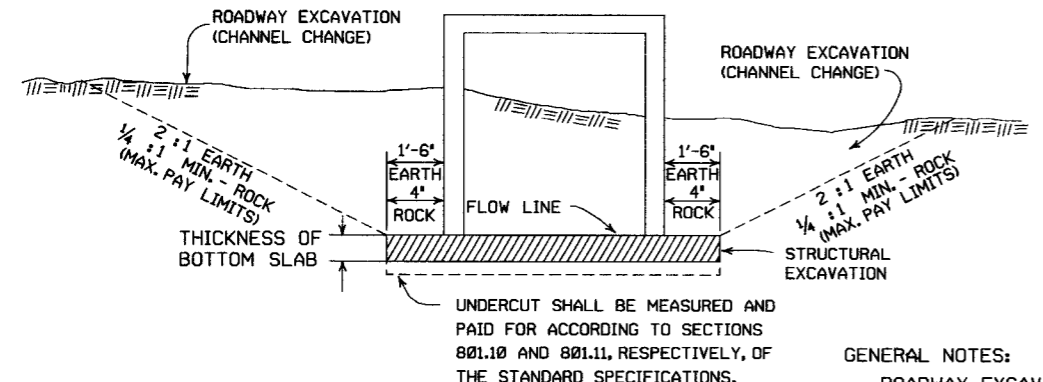
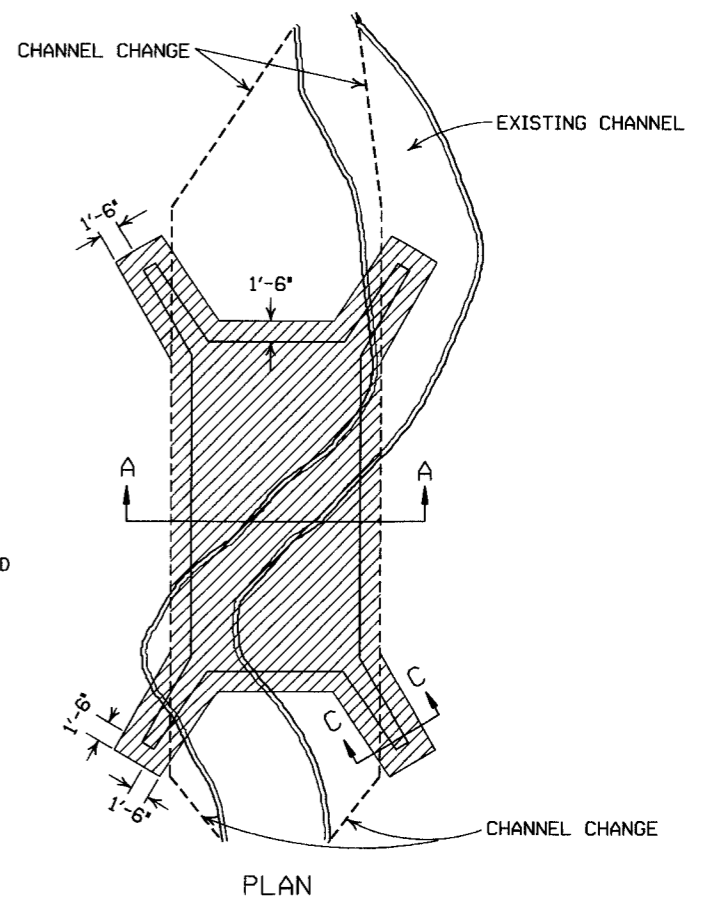


PARTIAL SECTION SHOWING SOLID SODDING AT HEADWALLS AND WING WALLS

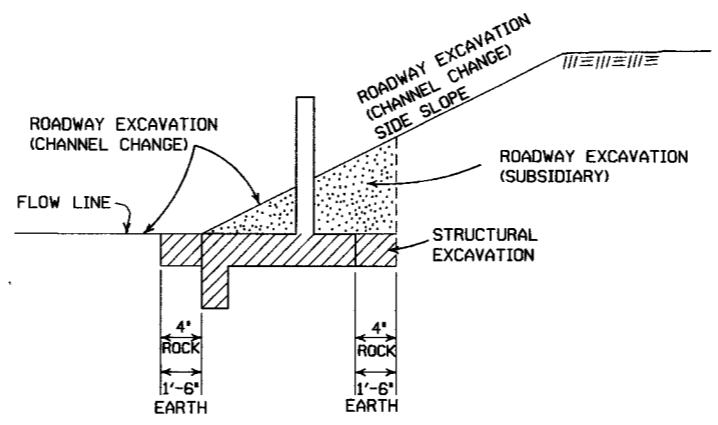
NOTE: LENGTH MEASURED ALONG THE CENTER OF 2' STRIP OF SOLID SODDING.



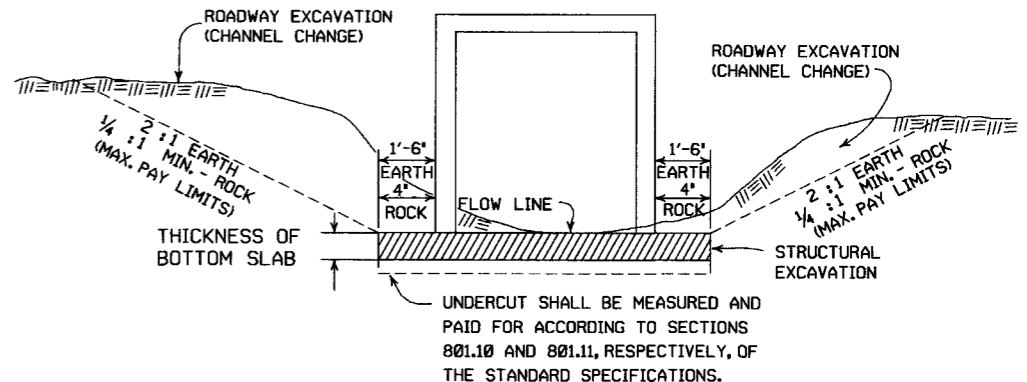
LONGITUDINAL SECTION
BACKFILL DETAILS FOR BOX CULVERT



SECTION B-B
DETAILS FOR NEW CHANNELS



SECTION C-C



SECTION A-A
DETAILS THROUGH EXISTING CHANNELS

GENERAL NOTES:
 ROADWAY EXCAVATION (CHANNEL CHANGE) WILL BE PAID FOR AT R.C. BOX CULVERT LOCATIONS. IT WILL BE PAID TO THE LIMITS ACTUALLY CUT AND WILL BE CONFINED TO THAT PORTION OF THE INDICATED AREA THAT IS ABOVE THE FLOW LINE. ROADWAY EXCAVATION (CHANNEL CHANGE) SHALL BE MEASURED BY CROSS SECTIONS AND VOLUMES COMPUTED BY AVERAGE END AREA METHOD. ALL CHANNEL CHANGES SHALL BE BROUGHT TO GRADE PRIOR TO MAKING ANY EXCAVATION FOR STRUCTURES.
 EXCAVATION FOR STRUCTURES WILL BE PAID FOR AT ALL R.C. BOX CULVERT LOCATIONS. IT WILL BE PAID TO THE LIMITS SHOWN AND SHALL BE CONFINED TO THAT PORTION OF THE INDICATED AREA THAT IS BELOW THE CHANNEL FLOW LINE.
 ROADWAY EXCAVATION SHOWN IN SECTION C-C ABOVE AS SUBSIDIARY WILL NOT BE MEASURED OR PAID FOR DIRECTLY, BUT PAYMENT WILL BE CONSIDERED TO BE INCLUDED IN THE VARIOUS ITEMS OF EXCAVATION.

11-20-03	REVISED SECTION A-A NOTE	
8-22-02	REVISED SECTION B-B NOTE	
10-12-95	COMBINED 1891B AND 1888A	
1-4-83	REVISED GENERAL NOTES	674-1-4-83
	AND ADDED MAXIMUM PAY LIMIT NOTES.	
2-2-76	EXCAV. PAY LIMITS	917-2-2-76
10-2-72	REVISED AND REDRAWN	564-10-16-72
DATE	REVISION	FILMED

ARKANSAS STATE HIGHWAY COMMISSION
**EXCAVATION PAY LIMITS,
 BACKFILL, & SOLID SODDING
 FOR BOX CULVERTS**
 STANDARD DRAWING RCB-2

DESIGN SPECIFICATIONS: AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, 4TH EDITION (2001) WITH 2003 AND 2006 INTERIMS.

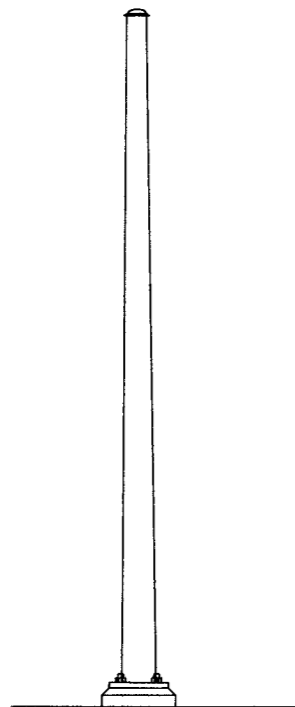
USE FATIGUE CATEGORY II.

CONSTRUCTION SPECIFICATIONS: ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION) WITH APPLICABLE SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS.

BASE WIND SPEED: 90 MPH

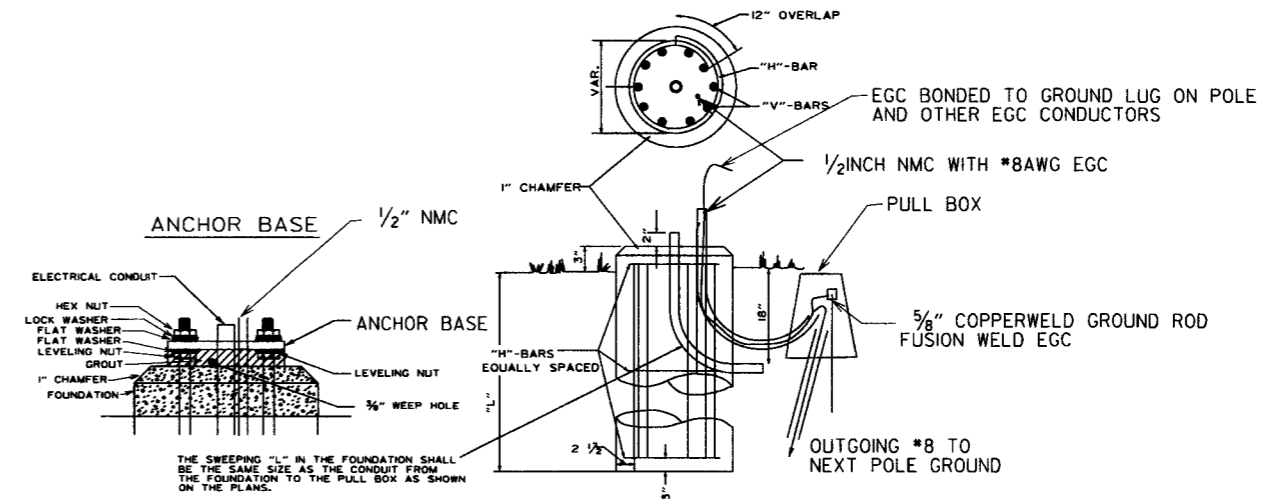
STEEL MEMBERS CONSIDERED MAIN LOAD CARRYING MEMBERS WITH A THICKNESS GREATER THAN 1/2" SHALL MEET THE LONGITUDINAL CHARPY V-NOTCH TEST SPECIFIED IN SUBSECTION 807.05 OF THE STANDARD SPECIFICATIONS.

THE GROUND ROD SHALL BE FUSION WELDED TO A 1C/#8 A.W.G. SOLID COPPER GROUND WIRE. ATTACHMENT TO THE PRIMARY GROUND MAY BE BY AN APPROVED CLAMP. THE ROD IS TO BE LOCATED IN THE CONCRETE PULL BOX PAID FOR SEPARATELY AS SHOWN ON THE PLANS.



ANTENNA POLE

NOTE: COMMUNICATION CABLE SHIELD SHALL BE TIED TO GROUND AT ONLY ONE POINT (MASTER CABINET). THE SHIELD SHALL BE MAINTAINED CONTINUOUS (THROUGH ALL SPLICES). PLEASE REFER TO TESTING PROCEDURES IN SPECIAL PROVISIONS.



TYPICAL FOUNDATION DETAILS

POLE FOUNDATION MINIMUM DIMENSIONS AND STEEL REINFORCING.

POLE HEIGHT	FOUNDATION DIAMETER	DEPTH * L'	VERTICAL	HORIZONTAL	TIE SPACING
20.0'	30"	5' - 6"	12-#7	*4	5 SP @ 12"
25.0'	30"	6' - 0"	12-#7	*4	6 SP @ 11"
30.0'	30"	6' - 6"	12-#7	*4	6 SP @ 12"
35.0'	30"	7' - 0"	12-#7	*4	7 SP @ 11"
40.0'	30"	7' - 6"	12-#7	*4	7 SP @ 12"
45.0'	36"	8' - 6"	13-#8	*4	8 SP @ 12"
50.0'	36"	9' - 6"	13-#8	*4	9 SP @ 12"
55.0'	36"	10' - 0"	13-#8	*4	10 SP @ 11"
60.0'	36"	10' - 6"	13-#8	*4	10 SP @ 12"
65.0'	36"	11' - 0"	13-#8	*4	12 SP @ 10 1/2"
70.0'	36"	11' - 6"	13-#8	*4	11 SP @ 12"
75.0'	42"	13' - 0"	18-#8	*4	14 SP @ 10 1/2"
80.0'	42"	13' - 6"	18-#8	*4	13 SP @ 12"
85.0'	42"	14' - 6"	18-#8	*4	14 SP @ 12"
90.0'	42"	15' - 0"	18-#8	*4	18 SP @ 9 1/2"

ALL CONCRETE SHALL BE CLASS "S" WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH F'C=3500 PSI. CONCRETE SHALL BE POURED IN THE DRY AND ALL EXPOSED CORNERS CHAMFERED 3/4" UNLESS NOTED OTHERWISE.

ALL REINFORCING STEEL SHALL CONFORM TO AASHTO M31 OR M53, GRADE 40 (YIELD STRENGTH=40,000 PSI).

PROVIDE 3" CLEAR TIES. DETAIL 3" TO FIRST TIE AT TOP OF SHAFT.

2-27-14	REVISED NOTES.	
9-12-13	ISSUED AS STANDARD DRAWING	
5-21-09	REVISED GROUNDING	
7-31-08	REVISED GROUNDING	
4-18-08	REVISED AASHTO NOTES	
4-17-08	REVISED TO 2001 AASHTO STANDARDS	
9-6-00	ISSUED	
DATE	REVISION	DATE FILM

ARKANSAS STATE HIGHWAY COMMISSION

ANTENNA POLE

STANDARD DRAWING SD-1

LOOP DETECTOR INSTALLATION AND TESTING

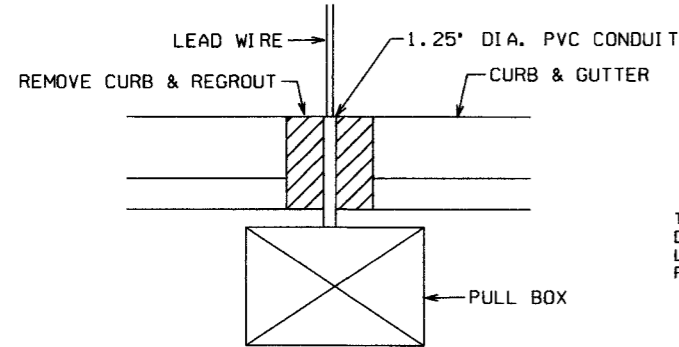
NOTES:

1. LOOPS WITH A PERIMETER GREATER THAN 40' SHALL HAVE TWO TURNS. LOOPS WITH A PERIMETER LESS THAN OR EQUAL TO 40' SHALL HAVE THREE TURNS, UNLESS OTHERWISE NOTED ON THE PLANS. QUADRUPOLE LOOPS SHALL BE TWO TURNS (2-4-2 CONFIGURATION) UNLESS OTHERWISE NOTED.
2. LOOP AND FEEDER WIRE SHALL BE CONTINUOUS WITHOUT SPLICES EXCEPT AT THE LOOP/FEEDER WIRE SPLICE AS SHOWN. SPLICE SHALL BE ROSIN SOLDERED AND WATERPROOFED WITH AN ACCEPTED SPLICE KIT. DRAIN WIRE SHALL BE GROUNDED IN CABINET AND INSULATED AT LOOP TO FEEDER SPLICE.
3. THE LOOP TO FEEDER SPLICE, FEEDER JACKET AND JACKET OF LOOP WIRE IN DUCT SHALL BE COMPLETELY SEALED AND WATERPROOFED.
4. CONTRACTOR MAY MAKE CONNECTIONS TO SIGNAL CABLE AND LOOP TO FEEDER CONNECTION AT TERMINAL STRIPS MOUNTED TO POLE INSIDE HAND HOLD COVER AS SHOWN IN DETAIL. TERMINALS MUST BE EASILY ACCESSIBLE, BUT PROTECTED AGAINST ACCIDENTAL CONTACT. CONNECTION OF POWER CARRYING CIRCUITS MUST BE SEPARATED FROM LOOP OR LOGIC CIRCUITS. ALL CONNECTIONS TO TERMINAL STRIPS SHALL UTILIZE SPADE LUGS OR AS APPROVED BY THE ENGINEER.
5. EACH LOOP SHALL HAVE A SEPARATE "FEEDER WIRE" UNLESS OTHERWISE NOTED. ALL FEEDER WIRES SHALL BE LABELED AS TO LOOP NUMBER AS DESIGNATED ON THE PLANS.
6. ALL LOOP WIRE ENTERING PULL BOXES SHALL BE ENCLOSED IN CONDUIT. EACH LOOP WIRE SHALL ENTER PULL BOX OR POLE BASE THROUGH A SEPARATE PIECE OF ONE INCH (1") CONDUIT.
7. LOOP WIRE FROM LOOP TO CONDUIT IS NOT TWISTED. LOOP WIRE IN THE CONDUIT MUST BE TWISTED TWO TO FIVE TURNS PER FOOT.
8. WARRANTY PERIOD FOR LOOPS SHALL NOT COMMENCE UNTIL TESTED BY THE CONTRACTOR AND ACCEPTED BY THE ENGINEER. CONTRACTOR SHALL PERFORM TEST AND PROVIDE A RECORD TO THE ENGINEER AS LISTED IN THE DETECTOR LOOP TESTING PROCEDURE.
9. UNLESS OTHERWISE APPROVED BY THE ENGINEER, BACKER ROD SHALL BE INSTALLED IN SHORT SECTIONS SPACED NOT MORE THAN 18" APART AND WEDGED INTO SLOT TO HOLD CABLE IN PLACE. CABLE SHALL BE TOTALLY ENCAPSULATED IN SEALER.
10. "HOT POUR" SEALER SHALL NOT BE ALLOWED WITH 705-LOOP WIRING IN DUCT.
11. WHERE UNDERGROUND SPLICES OF SIGNAL CABLE ARE REQUIRED, CONNECTIONS SHALL BE SOLDERED AND COMPLETELY WATERPROOFED TO THE SATISFACTION OF THE ENGINEER. WATERPROOFING SHALL EXTEND A MINIMUM OF TWO INCHES PAST THE SIGNAL CABLE JACKET AND SHALL COMPLETELY COVER ALL INDIVIDUAL CONDUCTORS OF THE SIGNAL CABLE. WATERPROOFING DOES NOT APPLY TO CONNECTIONS MADE IN POLE BASES.
12. CONTRACTOR SHALL CONNECT A SEPARATE NEUTRAL FOR EACH LOAD SWITCH REPRESENTED ON EACH SIGNAL POLE. ONLY ONE NEUTRAL IS REQUIRED FOR PEDESTRIAN SIGNALS. A SEPARATE 5C (TYPICAL) IS PROVIDED FOR PEDESTRIAN PUSH BUTTONS.
13. TRAFFIC CONTROLLER CABINET AND LAYOUT SHALL BE SUCH THAT IT IS NOT NECESSARY TO SHUT DOWN POWER OR REMOVE LOAD SWITCHES IN ORDER TO EASILY TEST OR MODIFY DETECTOR INPUTS TO CONTROLLER. CONTROLLER CABINET SHALL BE WIRED SUCH POWER TO LOAD SWITCHES CANNOT BACKFEED TO LOAD SWITCH POWER BUSS DURING FLASH OPERATION.

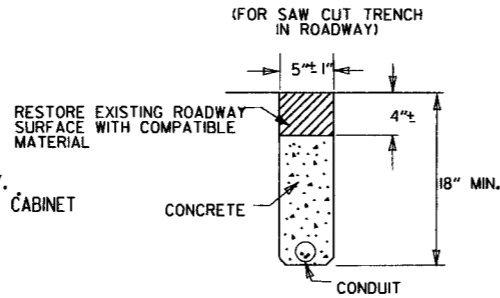
TYPICAL PROCEDURE FOR DETECTOR LOOP TESTING

- ① DISCONNECT AND TEST CONTINUITY (< 10 OHMS) IF CONTINUITY IS BAD, GO TO TEST 3
- ② TEST INSULATION (@ 500 VOLT TEST > 10 MEG-OHM) IF TESTS 1 & 2 ARE GOOD, NO FURTHER TESTING IS NECESSARY. RECORDED RESULTS CONSIST OF TESTS 1 & 2 FROM CONTROL CABINET WITH FEEDER WIRE CONNECTED TO LOOP.
- ③ OPEN SPLICE (DO NOT BREAK CONNECTION) REPEAT TEST 1 & 2 IF TEST 3 IS BAD, GO TO TEST 4
- ④ BREAK SPLICE, INSTALL JUMPER IN CABINET, REPEAT TESTS 1 & 2 SEPARATELY FOR FEEDER AND FOR LOOP

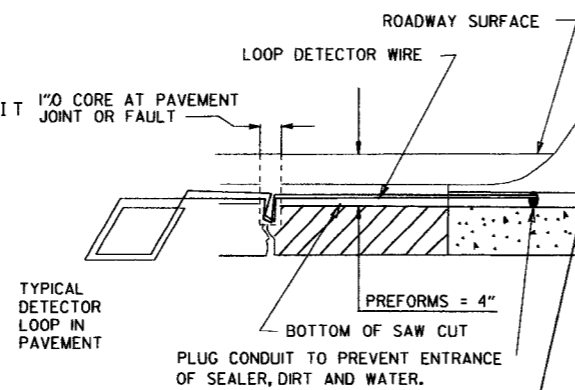
FAILURES TYPICALLY RESULT FROM BROKEN WIRE IN PAVEMENT, FAULTY INSULATION OF LOOP OR FEEDER WIRE, OR POORLY INSULATED SPLICE CONNECTION.



TRENCHING DETAIL



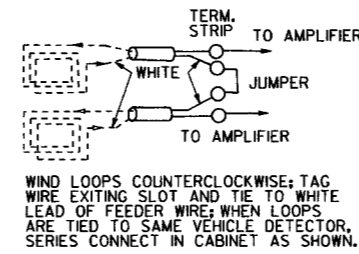
NOTE: CONDUIT SHALL BE INSTALLED IN CURB AS SHOWN OR AS DIRECTED BY THE ENGINEER. END OF CONDUIT SHALL BE WATER-TIGHT.



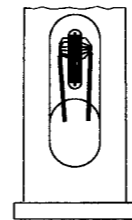
SECTION A-A
1'-6" CONCRETE COMBINATION CURB AND GUTTER

ALTERNATE - WHEN INSTALLING PREFORMS ON SUBSTRATE, LEAD-INS MAY BE INSTALLED IN CONDUIT UNDERNEATH THE CURB AND GUTTER.

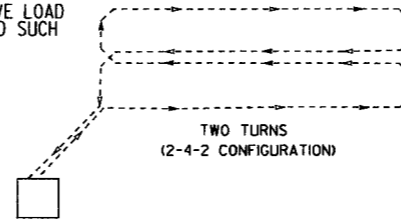
SERIES CONNECTED LOOPS



HANDHOLE TERMINAL

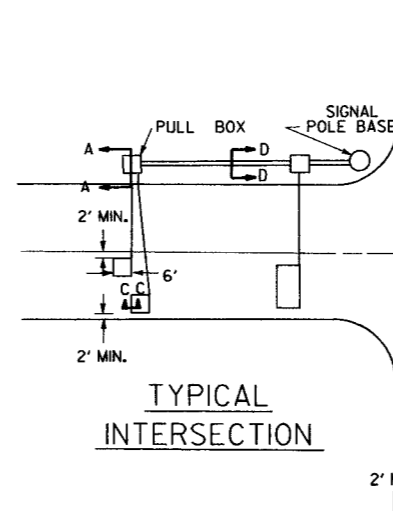


QUADRUPOLE LOOP

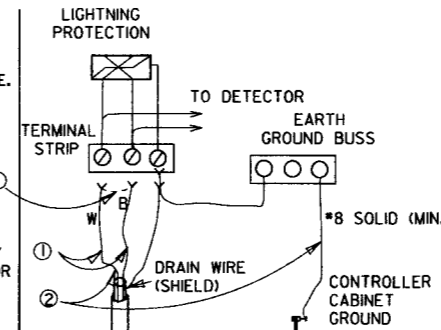


NOTE: PULL BOX COVERS SHALL BE NON-METALLIC AND NON-CONDUCTIVE.

TYPICAL INTERSECTION



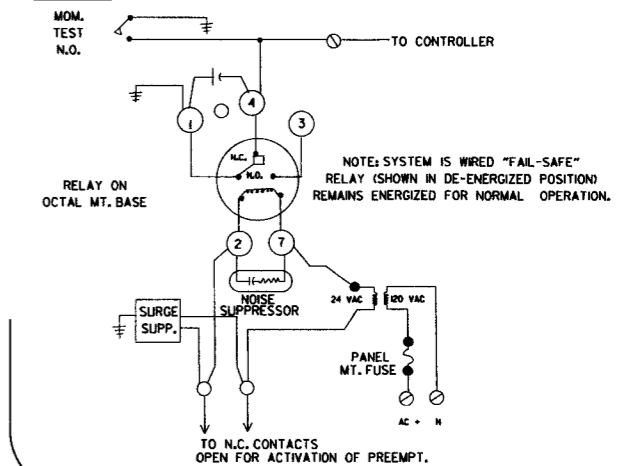
(TYPICAL)



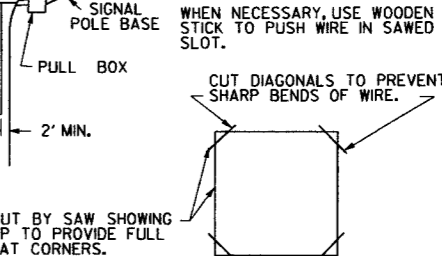
X - DISCONNECT IF TESTS ①, ② & ③ FAIL

SPECIAL NOTE
IF FEEDER WIRE JACKET IS LEFT UNSEALED AND WATER IS ALLOWED TO ENTER JACKET, CONTRACTOR WILL BE REQUIRED TO REPLACE FEEDER AT NO COST TO THE DEPARTMENT.

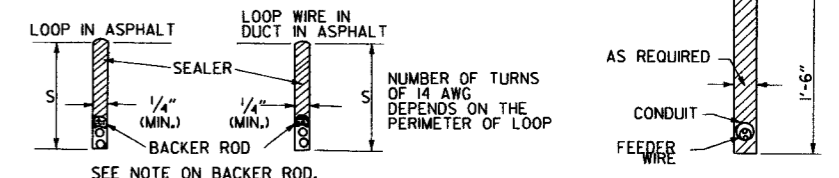
TRAFFIC SIGNAL PRE-EMPTION INTERFACE WIRING DIAGRAM



NOTE: SYSTEM IS WIRED "FAIL-SAFE" RELAY (SHOWN IN DE-ENERGIZED POSITION) REMAINS ENERGIZED FOR NORMAL OPERATION.



TYPICAL SECTIONS FOR PULSE AND PRESENCE LOOP DETECTORS



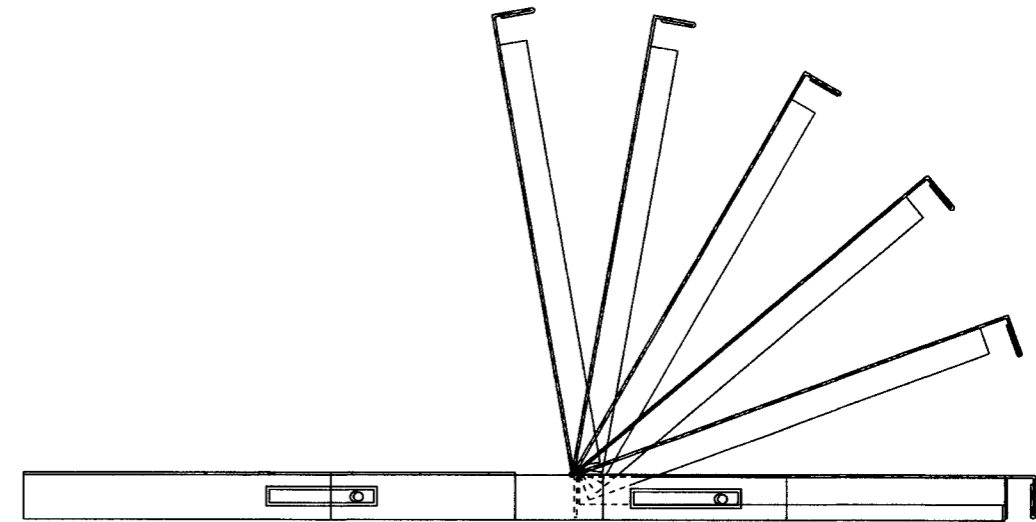
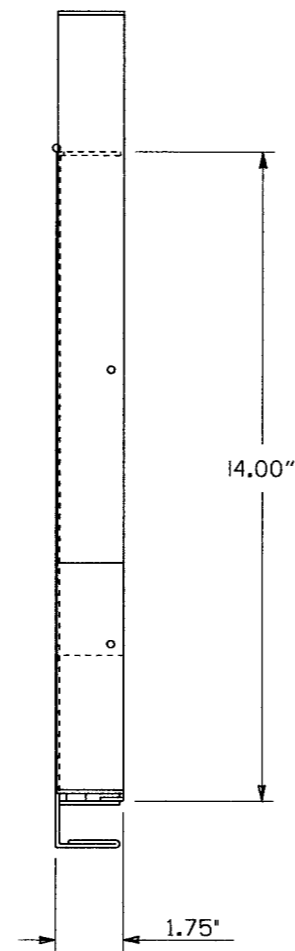
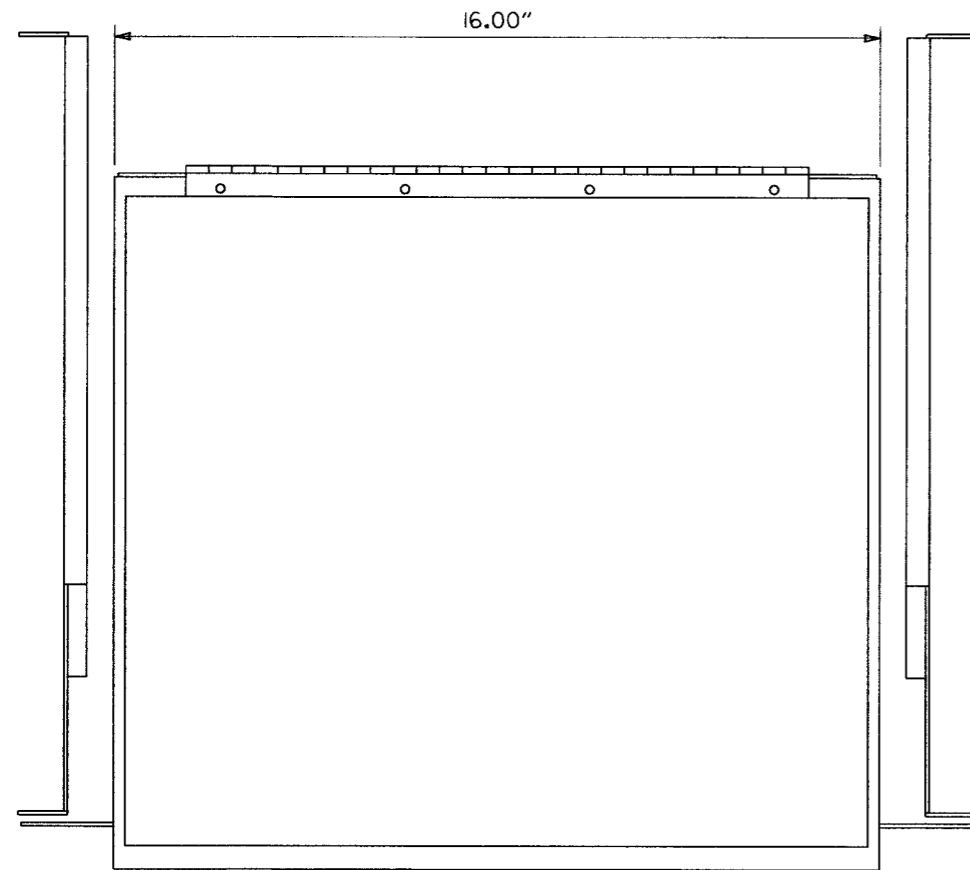
SECTION C-C

S=2 1/2" IN ASPHALT
S=1 1/2" IN CONCRETE

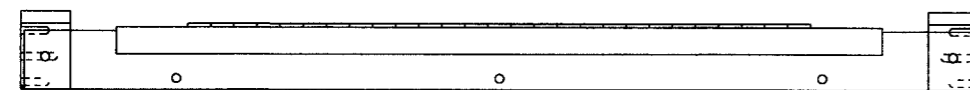
9-12-13	ISSUED AS STANDARD DRAWING		
5-17-01	REVISED		
4-11-01	REVISED		
2-4-00	REVISED PRE-EMPTION TEST SWITCH		
11-18-98	REVISED NOTES		
11-21-95	ISSUED		
DATE	REVISION	DATE FILED	

ARKANSAS STATE HIGHWAY COMMISSION
LOOP DETECTOR INSTALLATION
STANDARD DRAWING SD-4

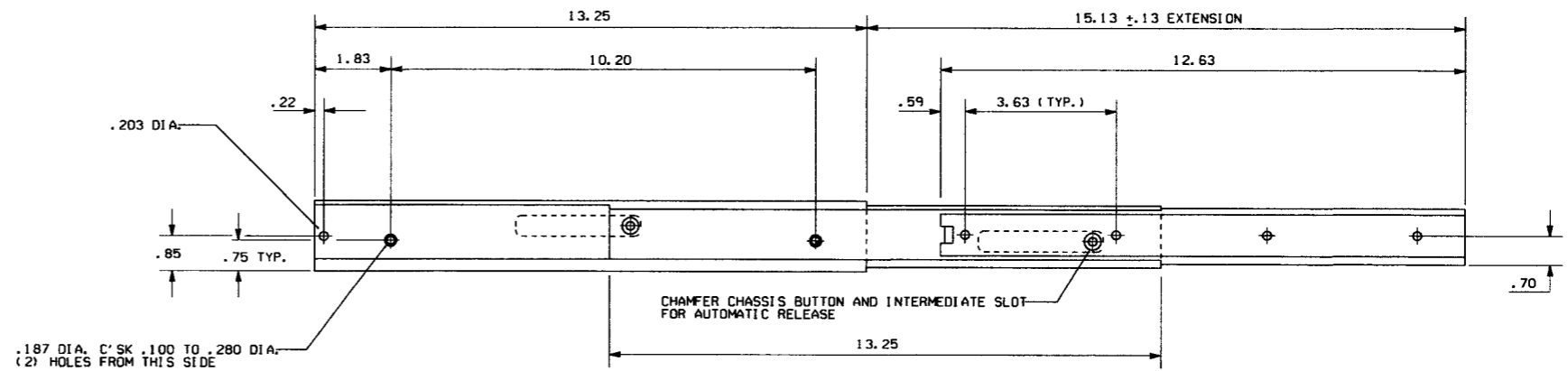
DRAWER PLAN VIEW



- NOTES:
 1. RIGHT HAND SLIDE SHOWN, LEFT SLIDE OPPOSITE.
 2. GENERAL DEVICES (CC3002-99-0102) OR EQUAL AND CONTAINS (1) RIGHT HAND SLIDE ASSEMBLY, (1) LEFT HAND SLIDE ASSEMBLY.
 3. ALL HARDWARE NECESSARY TO FASTEN SLIDE ASSEMBLY TO UNDERSIDE OF CONTROLLER SHELF SHALL BE INCLUDED.



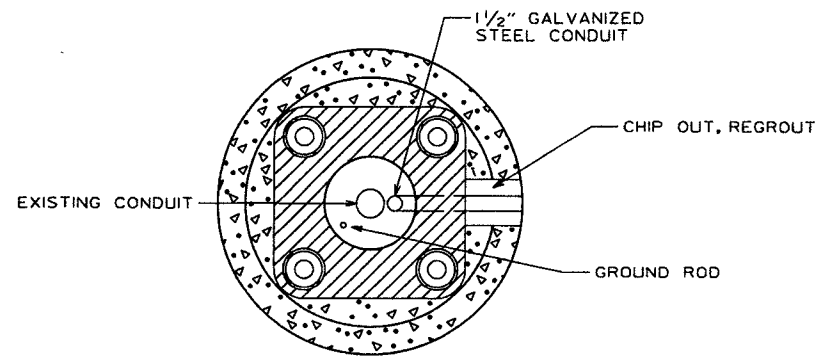
FRONT VIEW



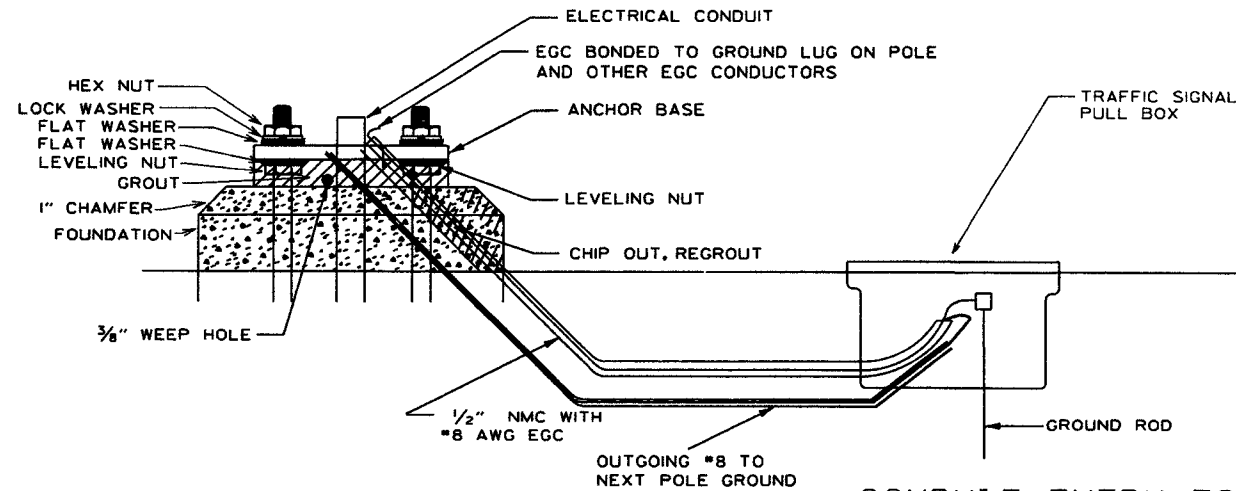
RIGHT SIDE ASSEMBLY

			ARKANSAS STATE HIGHWAY COMMISSION
			CONTROLLER CABINET UTILITY DRAWER
9-12-13	ISSUED AS STANDARD DRAWING		
6-15-05	ISSUED		
DATE	REVISION	DATE FILM	STANDARD DRAWING SD-5

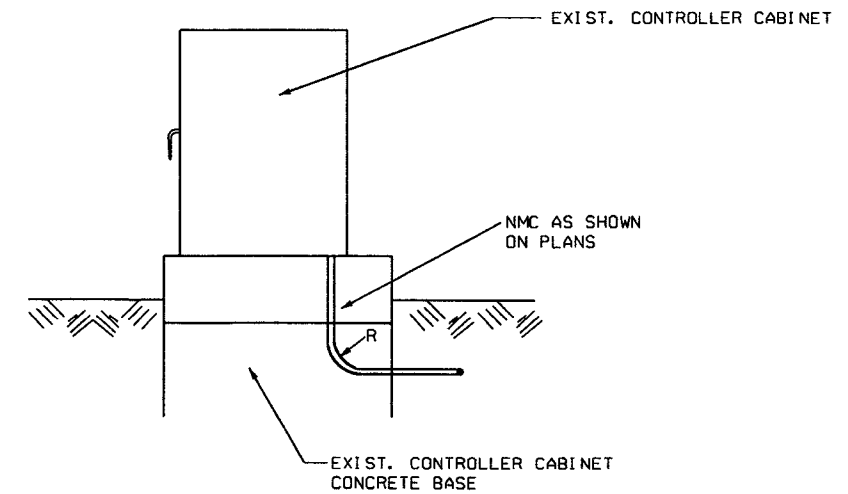
CONDUIT ENTRY TO EXISTING POLE BASE



ANCHOR BASE



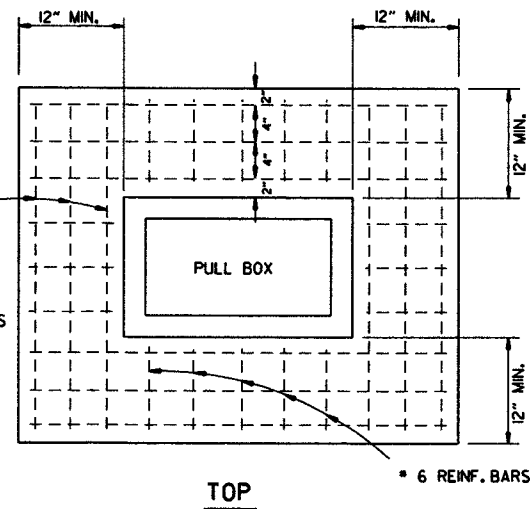
CONDUIT ENTRY TO EXISTING CONTROLLER CABINET



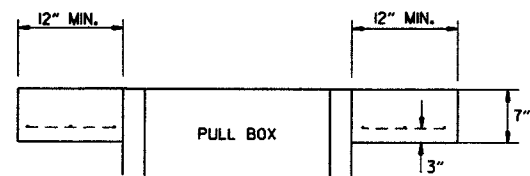
NOTE: ENTRY TO CABINET SHALL BE THROUGH A CUT IN THE BASE SUFFICIENT TO PROVIDE ADEQUATE CONDUIT RADIUS FOR ITEM.

3- #6 REINF. BARS EACH SIDE

NOTE: ALL REINFORCING BARS TO BE GRADE 60

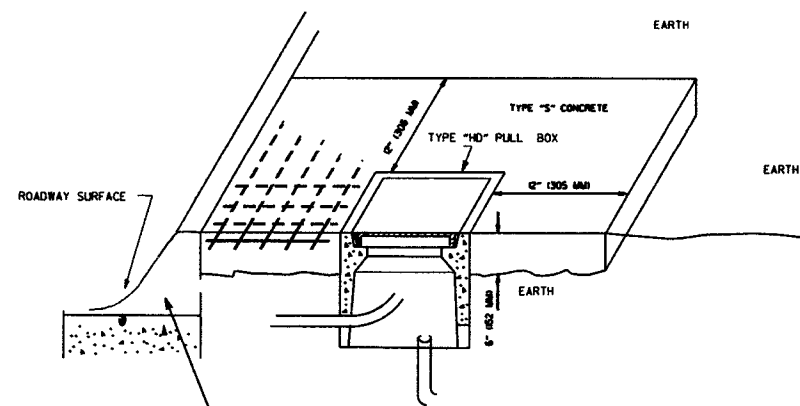


TOP



ELEVATION

TYPE "HD" CONCRETE PULL BOX DETAIL



2" CLEAR FROM TOP (TOLERANCE +/- 0.5")

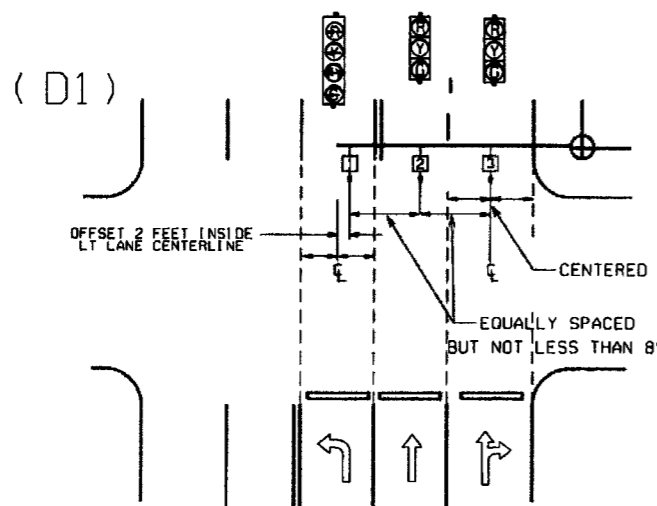
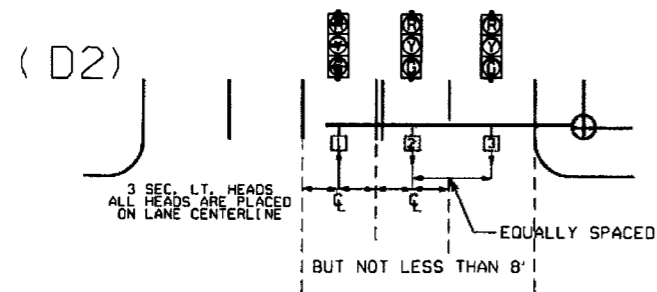
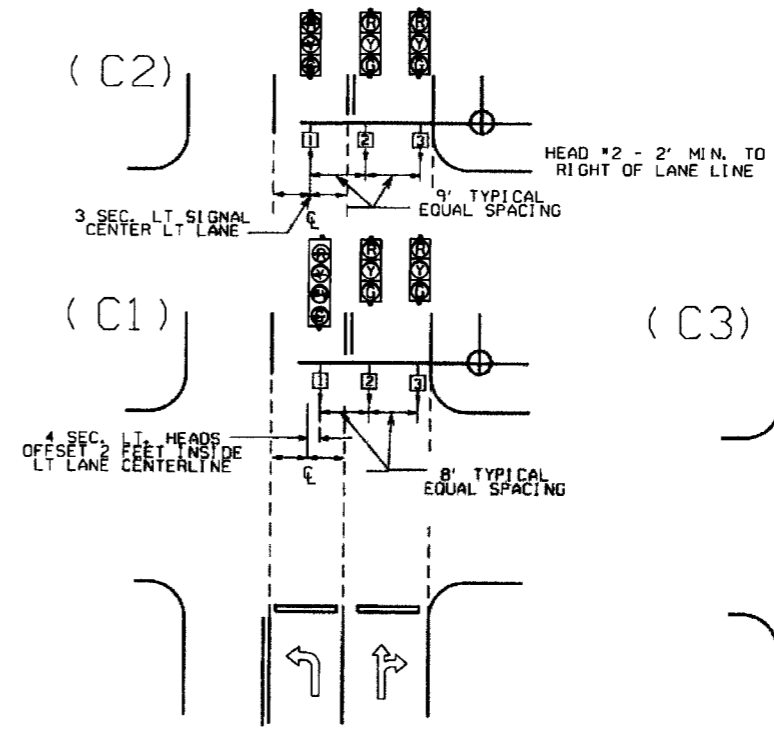
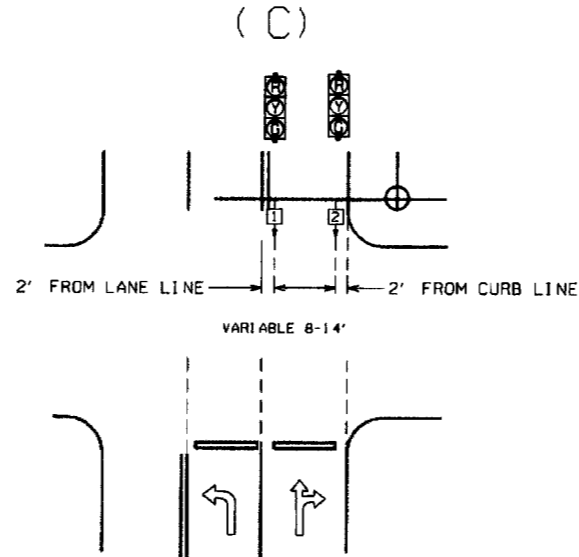
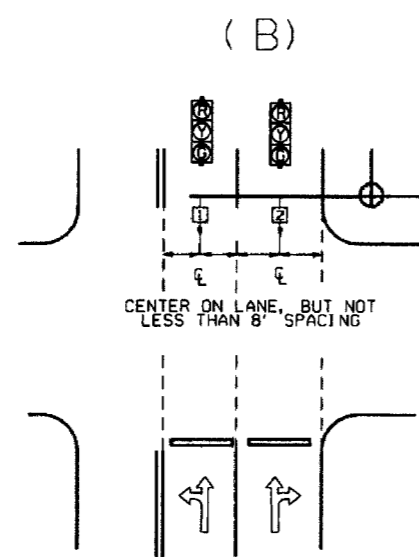
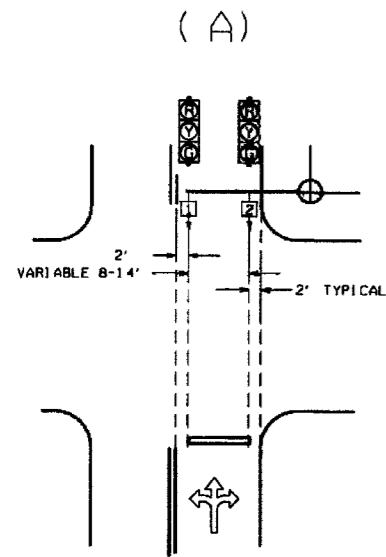
NOTE: ALL TYPE 1 AND TYPE 2 HD PULL BOXES ARE INSTALLED WITH AN APRON OF CONCRETE 12" (305 MM) WIDE AND 7" (178 MM) IN DEPTH. ALL PAYMENT SHALL BE INCLUDED IN THE PRICE OF THE TYPE HD PULL BOX. PULL BOX SHALL BE INSTALLED FLUSH TO SURROUNDING GRADE UNLESS OTHERWISE INSTRUCTED BY THE ENGINEER. THE CONCRETE SHALL BE CLASS "S." THREE #6 REINFORCING BARS IN THE APRON ON ALL SIDES OF THE PULL BOX IS REQUIRED IN CONCRETE.

9-2-15	REVISED PULL BOX DEPTH	
9-12-13	ISSUED AS STANDARD DRAWING	
5-21-09	REVISED GROUNDING	
7-31-08	ADDED & REVISED CONDUIT ENTRY	
6-23-04	REVISED CLEARANCE AT CURB ENTRY	
1-4-02	ADDED REINFORCING TO BOX APRON	
7-2-01	REVISED	
12-27-99	REVISED NOTES	
8-18-98	ISSUED	
DATE	REVISION	DATE P.L.M

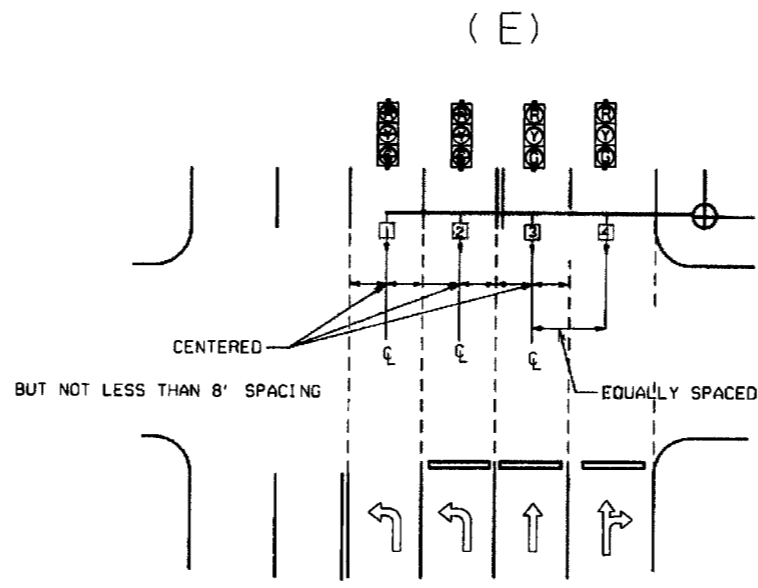
ARKANSAS STATE HIGHWAY COMMISSION

HEAVY DUTY PULL BOX

STANDARD DRAWING SD-6



NOTE: WHERE LEFT TURN HEAD (HEAD 1 ON D1 AND D2) IS NOT CALLED FOR ON PLANS, MAST ARM LENGTH MAY STILL BE ALLOWED FOR FUTURE INSTALLATION. HEADS FOR THROUGH MOVEMENTS SHALL STILL BE ALIGNED WITH THROUGH LANES AS SHOWN ON DETAILS.



℄ = CENTER OF LANE FROM APPROACH SIDE

GENERAL NOTES:

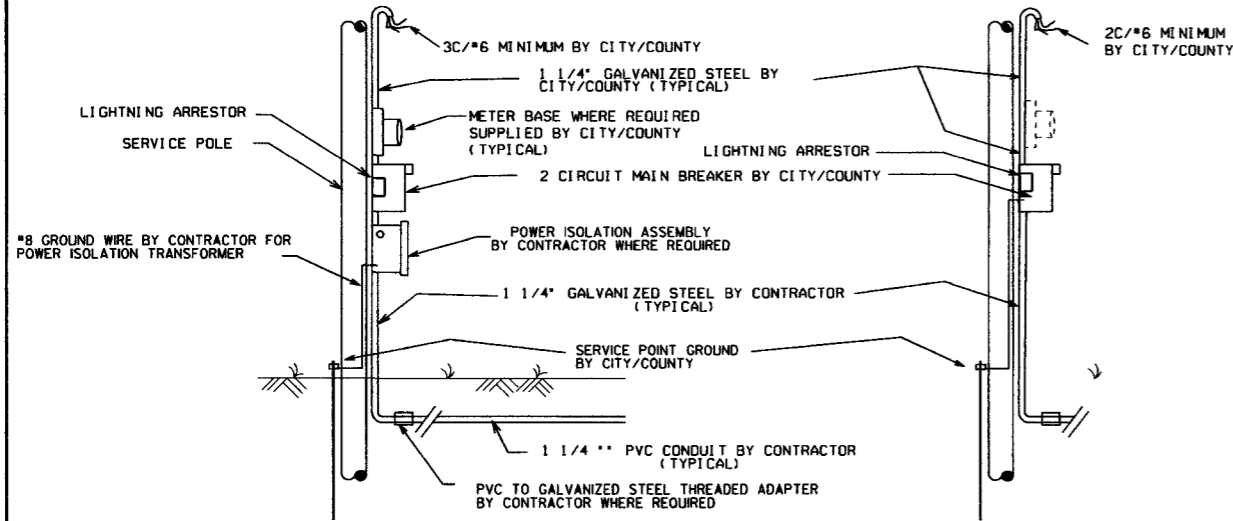
- FOUR SECTION "PROTECTED/PERMISSIVE" LEFT TURN HEADS SHOULD BE PLACED A MINIMUM OF TWO (2') FEET TO THE RIGHT OF THE CENTERLINE OF THE APPROACHING LEFT TURN LANE.
- THREE SECTION "PROTECTED" LEFT TURN HEADS SHOULD BE PLACED ON THE CENTERLINE OF THE APPROACHING LEFT TURN LANE.
- WHEN IT IS NECESSARY TO PLACE POLES OTHER THAN AS SHOWN ON PLAN SHEET(S) RESULTING IN MAST ARM EXTENDING MORE THAN TWO FEET PAST (TO THE LEFT OF) THE CENTERLINE OF THE APPROACHING LEFT TURN LANE, MAST ARM SHALL BE CUT TO APPROPRIATE LENGTH AS DETERMINED BY THE ENGINEER, AND A NEW END CAP PROVIDED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THIS PRIOR TO INSTALLING THE MAST ARM IF ADDITIONAL COMPENSATION IS REQUIRED.
- SIGNAL HEAD SPACING SHALL, IN NO CASE, BE LESS THAN EIGHT (8') FEET BETWEEN HEADS ON CENTER, MEASURED HORIZONTALLY PERPENDICULAR TO THE APPROACH.
- ALL SIGNAL HEADS SHOWN ON THIS DETAIL SHEET SHALL BE LOCATED ACCORDING TO THE DIMENSIONS SHOWN IN RELATION TO THE APPROACH SIDE OF THE INTERSECTION.
- MAXIMUM MOUNTING HEIGHT OF SIGNAL FACES LOCATED BETWEEN 40 FEET AND 53 FEET FROM STOP BAR SHALL BE IN ACCORDANCE WITH FIGURE 4D-5 OF 2009 MUTCD.

12-8-16	REVISED NOTE 6		ARKANSAS STATE HIGHWAY COMMISSION
9-12-13	ISSUED AS STANDARD DRAWING		SIGNAL HEAD PLACEMENT
3-11-10	2009 MUTCD		
12-9-99	ISSUED		
DATE	REVISION	DATE FILED	STANDARD DRAWING SD-8

MAIN BREAKER NOT NEAR CONTROLLER CABINET SECONDARY REQUIRED

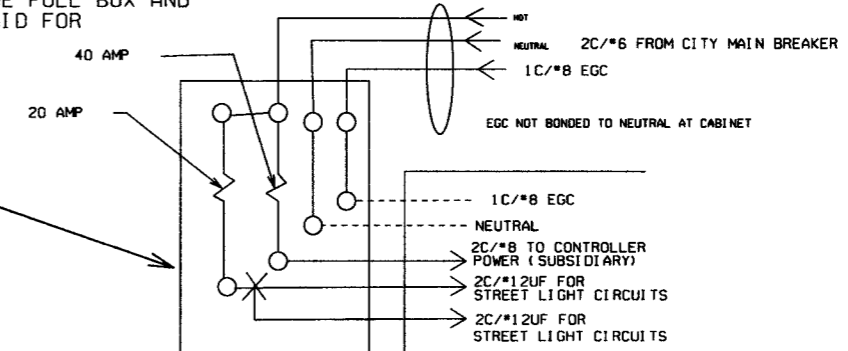
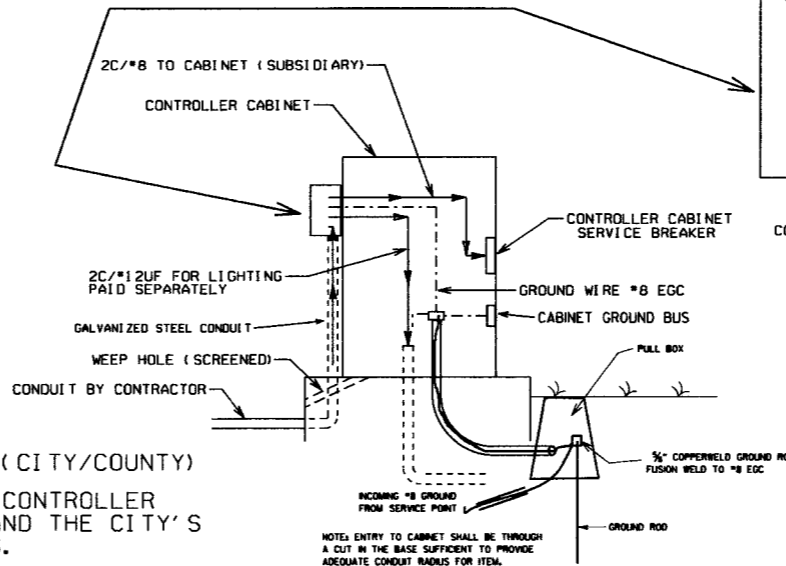
WITH POWER ISOLATION ASSEMBLY

WITHOUT POWER ISOLATION ASSEMBLY



GROUND ROD-A 10' X 3/4" GROUND ROD SHALL BE INSTALLED IN THE PULL BOX FOR EACH POLE AND THE CONTROLLER. PAYMENT FOR THE GROUND ROD AND 1/2" NMC SHALL BE INCLUDED IN ITEM 701. THE PULL BOX AND CONDUCTOR BOX SHALL BE PAID FOR SEPARATELY.

SECONDARY BREAKER BY CONTRACTOR (SUBSIDIARY)



MAIN BREAKER WIRING (TYPICAL)

SERVICE GROUND IS TYPICALLY TIED TO NEUTRAL AT THE MAIN BREAKER. AS SUCH, CONTROLLER GROUND IS NOT TIED TO NEUTRAL AT SECONDARY BREAKER OR IN CONTROLLER CABINET.

WITH POWER ISOLATION ASSEMBLY
4 CIRCUIT MAIN BREAKER

WITHOUT POWER ISOLATION ASSEMBLY
2 CIRCUIT MAIN BREAKER

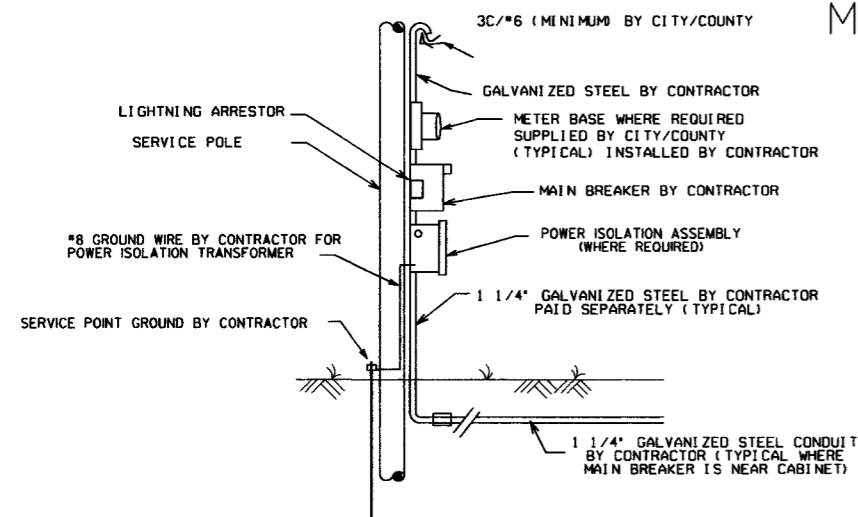
NOTES TO CONTRACTOR AND AGENCY RESPONSIBLE FOR MAINTENANCE OF THE INTERSECTION (CITY/COUNTY)

ELECTRICAL SERVICE TYPICALLY FALLS INTO TWO CATEGORIES; MAIN BREAKER NEAR CONTROLLER CABINET; AND MAIN BREAKER NOT NEAR CONTROLLER CABINET. THE CONTRACTOR'S AND THE CITY'S OR COUNTY'S RESPONSIBILITY VARIES ACCORDINGLY AS INDICATED ON THESE DETAILS.

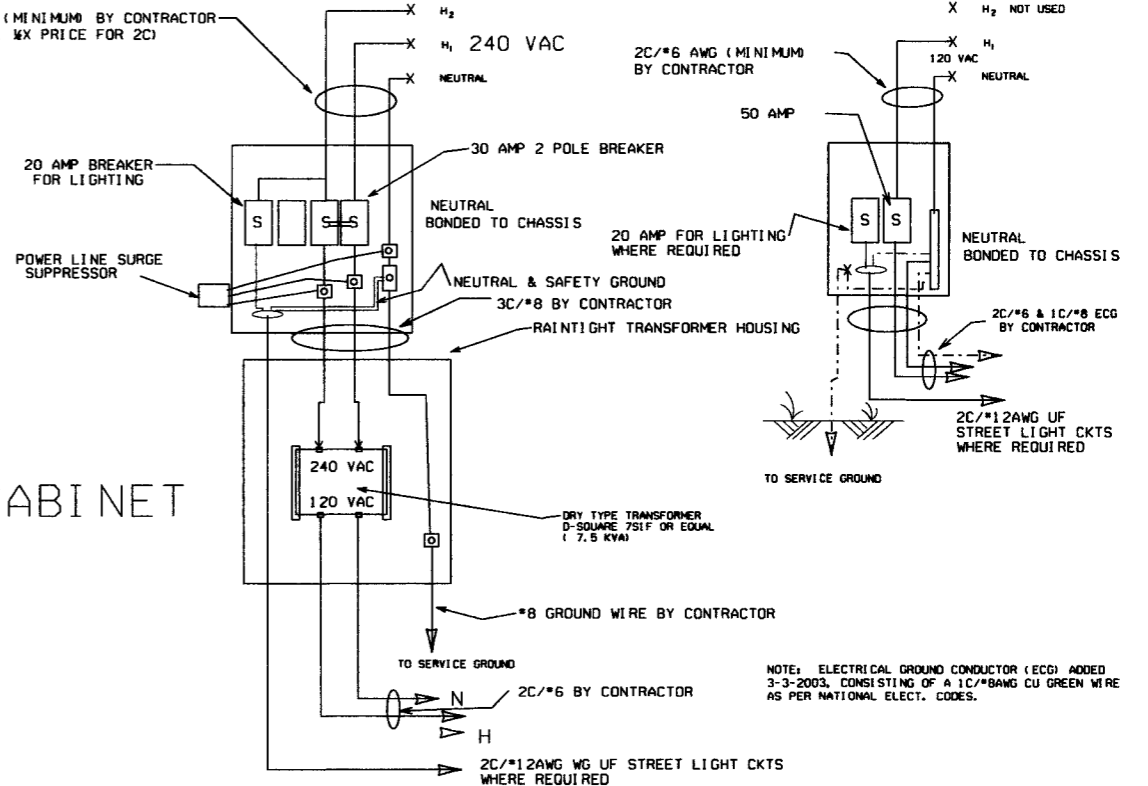
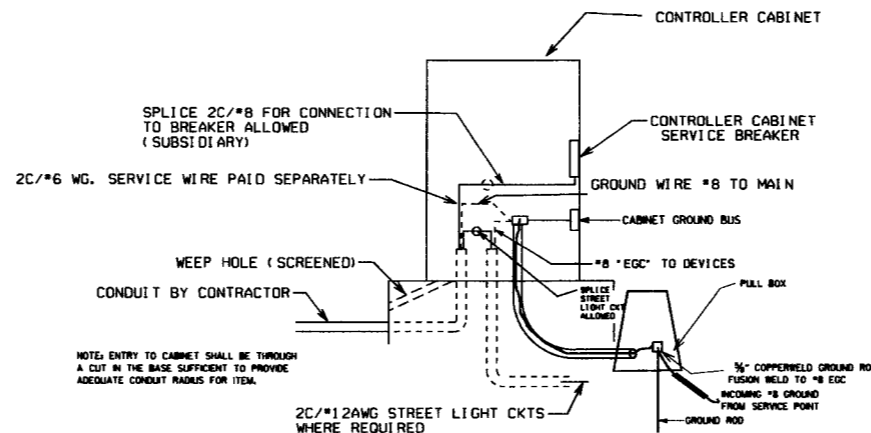
1. ALL SITUATIONS: ELECTRICAL SERVICE SHALL BE PROVIDED BY THE CITY/COUNTY TO A SERVICE POLE WITH EXTERNAL RAIN TIGHT BREAKER (MAIN BREAKER) AT A MUTUALLY ACCEPTABLE POINT WITHIN THE RIGHT-OF-WAY. SERVICE POINT INCLUDES GALVANIZED STEEL CONDUIT TO A POINT 18" BELOW GROUND LINE, TWO CIRCUIT MAIN BREAKER, LIGHTNING ARRESTOR, POWER ISOLATION ASSEMBLY WHERE REQUIRED, METER LOOP IF REQUIRED BY LOCAL UTILITY, ELECTRICAL CONDUCTORS AND WEATHERHEAD. WHERE STREET LIGHTING IS INCLUDED AS PART OF SIGNAL INSTALLATION, STREET LIGHTING CIRCUIT (2C/#12 AWG UF RATED, TYPICAL) SHALL BE KEPT SEPARATE FROM THE CIRCUIT SERVING TRAFFIC SIGNAL. SERVICE WIRE AND WIRING FROM THE CONTROLLER TO MAIN BREAKER IS PROVIDED BY THE CONTRACTOR AS A PART OF THIS CONTRACT. WIRE AND WIRING FROM MAIN BREAKER, AND CONNECTION TO THE UTILITY IS THE RESPONSIBILITY OF THE CITY/COUNTY.

2. MAIN BREAKER NOT NEAR CONTROLLER CABINET: THE MAIN BREAKER ASSEMBLY, GALVANIZED STEEL CONDUIT, WEATHERHEAD AND WIRE ABOVE MAIN BREAKER AND CONNECTION TO THE UTILITY SHALL BE PROVIDED BY CITY/COUNTY. CONTRACTOR SHALL PROVIDE AS PART OF CONTRACT SECONDARY BREAKER, CONDUIT, WIRE AND WIRING TO THE MAIN BREAKER.

3. MAIN BREAKER NEAR CONTROLLER CABINET: ALL COMPONENTS OF THE SERVICE POINT WITH THE EXCEPTION OF THE WIRE AND WIRING ABOVE THE MAIN BREAKER IS FURNISHED AND INSTALLED BY THE CONTRACTOR. WIRING FROM MAIN BREAKER INCLUDING CONNECTION TO THE UTILITY, IS THE RESPONSIBILITY OF THE CITY/COUNTY. IF METER LOOP IS REQUIRED, METER BASE AND HARDWARE IS PROVIDED BY THE CITY/COUNTY AND INSTALLED BY THE CONTRACTOR.



MAIN BREAKER NEAR CONTROLLER CABINET SECONDARY NOT REQUIRED



DATE	REVISION	DATE	FILM
9-12-13	ISSUED AS STANDARD DRAWING		
4-18-13	ADDED LIGHTNING ARRESTOR		
5-21-09	REVISED GROUNDING		
7-31-08	REVISED GROUNDING		
3-3-03	ADDED EGC NOTE		
9-26-01	REVISED		
12-27-99	REVISED		
7-28-99	REVISED		
2-5-99	ISSUED		

ARKANSAS STATE HIGHWAY COMMISSION

SERVICE POINT

STANDARD DRAWING SD-9

NOTES, PED AND TRAFFIC SIGNAL HEAD SIGNS- EACH ITEM 'TRAFFIC SIGNAL HEAD (4 SEC., 1-WAY)' SHALL INCLUDE A SPECIAL SIGN AS SHOWN, ATTACHED TO THE MAST ARM OR SPAN ASSEMBLY 12" TO THE RIGHT OF THE SIGNAL HEAD UNLESS REMOVED WITHIN THE SIGNAL PLAN NOTES.

EACH ITEM 'TRAFFIC SIGNAL HEAD (3 SEC., 1-WAY)' TO BE USED AS A LEFT TURN INDICATION ONLY SHALL INCLUDE A SIGN (R10-10) AS SHOWN, ATTACHED TO THE MAST ARM OR SPAN ASSEMBLY 12" TO THE RIGHT OF THE SIGNAL HEAD.

EACH PEDESTRIAN PUSHBUTTON SHALL HAVE ONE R10-3E SIGN ATTACHED TO THE POLE ABOVE THE BUTTON. ALL SIGNS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 723 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

ALL SIGN BLANKS SHALL BE CONSTRUCTED OF ALUMINUM ALLOY (ASTM DESIGNATION B-209, ALLOY 5052-H38) WITH THICKNESS OF 0.100 INCH.

GENERAL NOTES:

- MAST ARM POLES SHALL BE MOUNTED A MINIMUM OF 4 FT. BEHIND CURB OR SHOULDER.
- OCTAGONAL POLES AND ARMS MEETING THE REQUIREMENTS OF THE PLANS AND SPECIFICATIONS CAN BE INSTALLED IN LIEU OF ROUND. ALL POLES AND ARMS IN A JOB MUST BE THE SAME SHAPE.
- MINIMUM STRUCTURAL REQUIREMENTS: DESIGN SPECIFICATIONS: AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, 4TH EDITION (2001) WITH 2003 AND 2005 INTERIMS.

USE FATIGUE CATEGORY I FOR ALL STRUCTURES ON ROUTES WHERE THE SPEED LIMIT IS 65 MPH AND GREATER AT THE STRUCTURE LOCATION AND ON ROUTES WHERE SPEED LIMIT IS GREATER THAN 45 MPH WITH AN ARM 60' OR LONGER.

USE FATIGUE CATEGORY II FOR STRUCTURES ON ROUTES WITH A SPEED LIMIT LESS THAN 65 MPH AND GREATER THAN 45 MPH WITH ARMS LESS THAN 60' AND ROUTES WITH SPEED LIMITS OF 45 MPH AND LESS WITH AN ARM 60' OR LONGER.

USE FATIGUE CATEGORY III FOR ALL STRUCTURES WHERE SPEED LIMIT IS 45 MPH AND LESS AND ARMS LESS THAN 60'.

CONSTRUCTION SPECIFICATIONS: ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION) WITH APPLICABLE SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS.

BASE WIND SPEED: 90 MPH.

STEEL MEMBERS CONSIDERED MAIN LOAD CARRYING MEMBERS WITH A THICKNESS GREATER THAN 1/2" SHALL MEET THE LONGITUDINAL CHARTER V-NOTCH TEST SPECIFIED IN SUBSECTION 807.05 OF THE STANDARD SPECIFICATIONS.

DEAD LOAD: AS A MINIMUM, DESIGN SHALL BE BASED ON THE FIXED ATTACHMENTS SHOWN BELOW OR AS MODIFIED IN THE PLANS.

ALL SIGNAL HEADS TO BE ONE WAY, 12 INCH, AND HAVE 5 IN. BACK PLATES.

HEADS AT END OF ARM - ONE 4 SEC., 85 LB., 16.0 SQ. FT. ONE SIGN MOUNTED 3 FT. FROM SIGNAL * 2' x 0' x 2' * 6', 20 LB. REMAINING HEADS SPACED A 8 FT., * 3 SEC., 56 LB., TWO 5 SEC., 14.4 SQ. FT. DESIGN TO ACCOMMODATE (INCLUDING 2 HEADS FOR ARMS 10 TO 16 FT., 2 HEADS FOR ARMS 10 TO 16 FT., INCLUDING LB. 3 HEADS FOR 18 TO 24 FT. ARMS, 4 HEADS FOR OVER 26 FT. ARMS.

STREET NAME SIGN -- 72" x 18", MOUNTED SUCH THAT OUTSIDE EDGE IS NOT GREATER THAN 12 FT. FROM POLE. DEPENDING UPON POSITION OF SIGNAL HEAD ADJACENT TO POLE, SIGN MAY OVERLAP POLE SHAFT ROADWAY LUMINAIRES (WHERE REQUIRED ON PLAN SHEET) * VARIABLE ARM LENGTH (MAX.), 3.3 SQ. FT., 75 LB. PED SIGNALS -- TWO 2 SEC. 12 INCH MOUNTED 8 FT. FROM BASE OF POLE. POST MOUNTED 3 SEC. SIGNAL HEAD AT 10 FT. ON SIDE OF POLE.

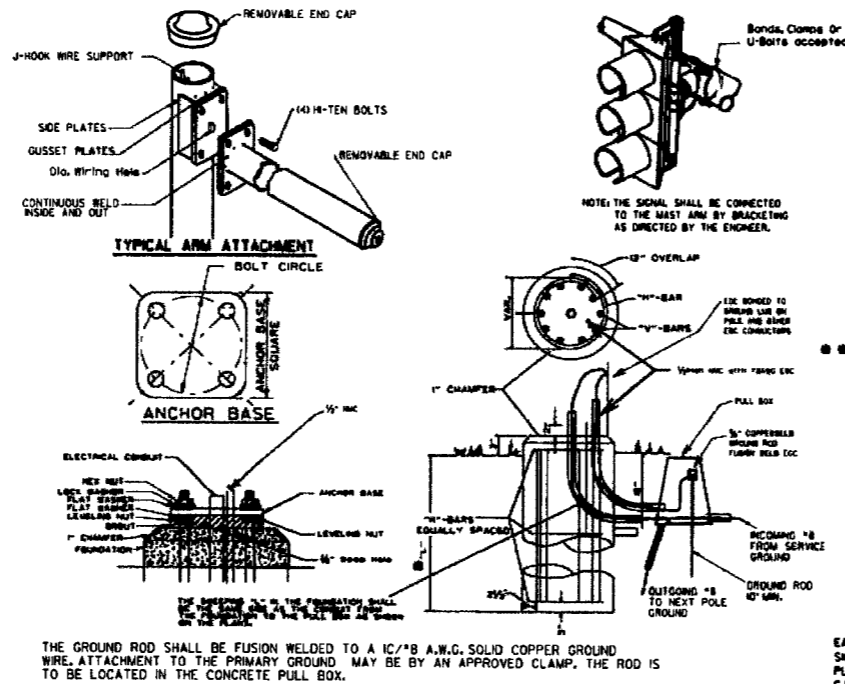
4. POLE/MAST ARM CAP -- POLE AND MAST ARMS CAPS SHALL BE PROVIDED, FABRICATED OF EITHER STEEL OR CAST ALUMINUM.

5. HAND HOLE -- HAND HOLES SHALL BE 4 X 6 INCHES FOR STANDARD, AND 3 X 5 INCHES FOR PED POLES. MINIMUM PLACED APPROXIMATELY 12 INCHES FROM BASE, AND SHALL BE FIXED WITH A BOLT DOWN COVER. A VACUUM FORMED ABS COVER IS AN ACCEPTABLE ALTERNATE TO STEEL. POLES GREATER THAN 21 FT. IN HEIGHT (FOR ROADWAY LUMINAIRE ATTACHMENT) SHALL INCLUDE A HAND HOLD WITHIN 12 INCHES OF MAST ARM(S) ATTACHMENT(S).

6. POLE/MAST ARM TAPER AND SLOPE - AVERAGE TAPER OF SIGNAL ARMS AND POLE SHALL BE 0.125 TO 0.15 INCHES PER FT.

MAST ARM CENTERLINE ANGLE AT ATTACHMENT POINT WITH POLE SHALL MAINTAIN NOT LESS THAN 0.5 DEGREES OR MORE THAN 4 DEGREES POSITIVE SLOPE WITH A LINE PERPENDICULAR TO THE POLE CENTERLINE. THE ARM SHALL MAINTAIN A POSITIVE AFTER IT IS PLACED UNDER LOAD.

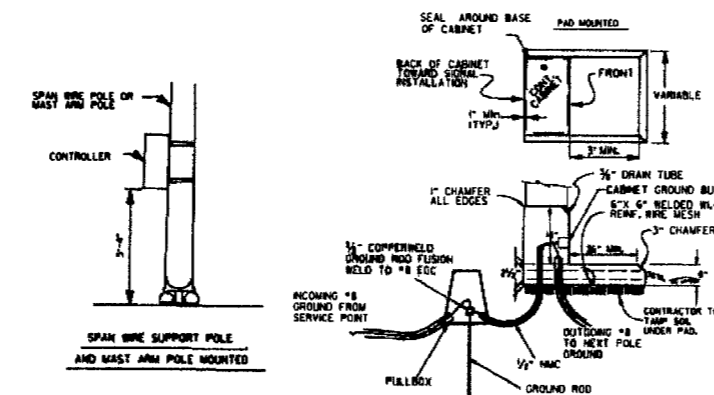
7. NUT COVERS - EACH POLE SHALL INCLUDE A BOLT DOWN NUT COVER FOR EACH ANCHOR BOLT.



TYPICAL FOUNDATION DETAILS

POLE FOUNDATION MINIMUM DIMENSIONS AND STEEL REINFORCING. ALL REINFORCING STEEL SHALL BE GRADE 40 MIN.

ARM LENGTH	FDN. DIAMETER	DEPTH 'L'	STEEL		
			VERT.	HORZ.	O/C.
PED	30"	7'-0"	12-#7 (6'-6")	10-#4	8.44'
2' to 12'	30"	10'-6"	12-#7 (10'-0")	15-#4	8.42'
over 12' to 20'	30"	11'-6"	12-#7 (11'-0")	16-#4	8.66'
over 20' to 35'	36"	12'-6"	13-#8 (12'-0")	17-#4	8.88'
over 35' to 50'	36"	13'-6"	13-#8 (13'-0")	19-#4	8.56'
over 50' to 72'	42"	14'-6"	18-#8 (14'-0")	20-#4	8.74'
Twins over 20'	30"	16'-0"	12-#6 (15'-6")	22-#4	8.76'
Twins over 20' to 44'	36"	16'-0"	13-#8 (15'-6")	22-#4	8.76'
Twins over 44' to 50'	42"	16'-0"	18-#8 (15'-6")	22-#4	8.76'
Twins over 50' to 72'	42"	16'-6"	18-#8 (16'-0")	23-#4	8.64'



CONTROLLER CABINET MOUNTING DETAILS

UNLESS OTHERWISE DIRECTED BY THE ENGINEER, CABINET ORIENTATION SHALL BE SUCH THAT THE BACK OF THE CABINET IS PARALLEL TO THE STREET AND POSITIONED TO ALLOW VISIBILITY OF THE SIGNAL DISPLAY WHILE OBSERVING THE CONTROLLER FRONT PANEL.

8. GROUND ROD - A 10' x 5/8" GROUND ROD SHALL BE INSTALLED IN THE PULL BOX FOR EACH POLE AND THE CONTROLLER. PAYMENT FOR THE GROUND ROD AND 1/2" NMC SHALL BE INCLUDED IN ITEM 714 FOR SIGNAL POLES AND ITEM 701 FOR THE CONTROLLER. THE PULL BOX AND CONDUCTOR BOX SHALL BE PAID FOR SEPARATELY.

9. POLE BASE/FOUNDATION - ANCHOR BOLTS SHALL INCLUDE AS A MINIMUM, ONE LEVELING NUT, TWO FLAT WASHERS, ONE LOCK WASHER, AND ONE HEX. NUT. PERIMETER OF ANCHOR BASE SHALL BE GROUTED WITH A 1/4" WEEP HOLE. ALL CONCRETE SHALL BE CLASS 'S' OR GREATER.

10. CONCRETE - ALL CONCRETE FOR CONTROLLER CABINET AND POLE FOUNDATIONS SHALL BE CLASS 'S' OR GREATER.

11. PEDESTRIAN PHASES - PEDESTRIAN MOVEMENTS SHALL BE PUSH BUTTON ACTUATED AND CONCURRENTLY TIMED, UNLESS OTHERWISE INDICATED ON THE PLAN SHEET(S). FURNISHING AND INSTALLING PED PUSH SWITCH SHALL BE CONSIDERED SUBSIDIARY TO THE ITEM PEDESTRIAN SIGNAL HEAD.

SIGNAL OPERATION NOTES:

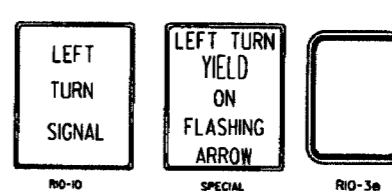
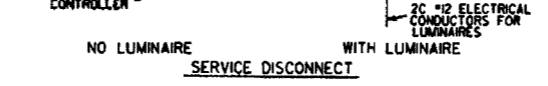
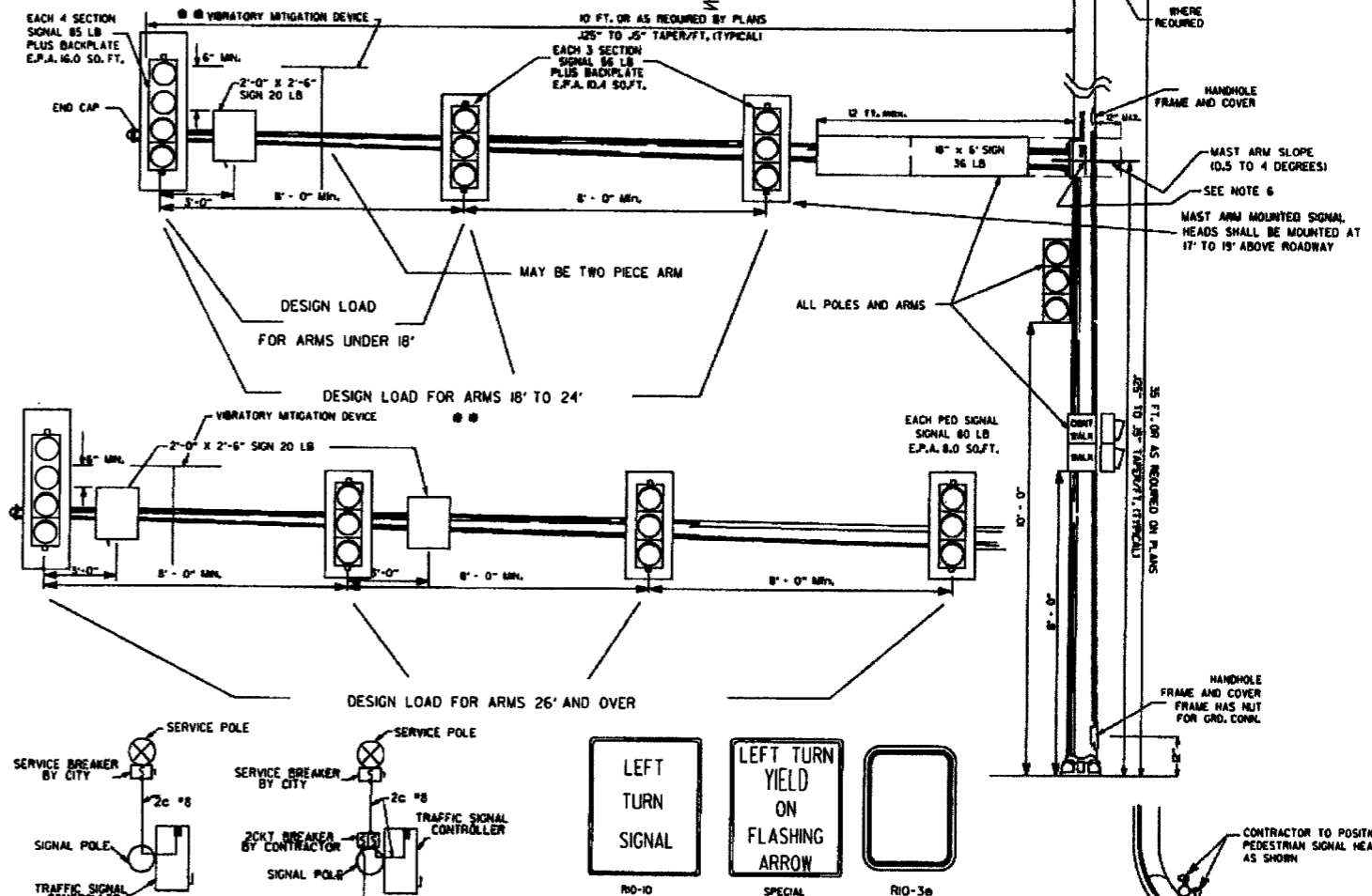
FLASHING OPERATION - PRIOR TO NORMAL OPERATION, SIGNAL SHALL BE FLASHED FOR A PERIOD OF 3 TO 5 WORK DAYS OR AS DIRECTED BY THE ENGINEER. SIGNAL SHALL BE PLACED IN OPERATION ONLY ON A REGULAR WORK DAY, EXCEPT FRIDAY.

THE CONTRACTOR MAY BE REQUIRED TO ALTER THE FLASHING DISPLAY DURING THE TEMPORARY FLASH PERIOD AT THE TIME INTERSECTION IS PLACED IN PERMANENT OPERATION. THE FLASH SEQUENCE SHALL THEN BE RETURNED TO THAT INDICATED ON THE PLAN SHEETS. NO ADDITIONAL COMPENSATION SHALL BE ALLOWED FOR THESE ALTERATIONS IN FLASH SEQUENCE.

WHEN THE GROUND ELEVATION AT THE POLE IS LOWER THAN THE ROADWAY ELEVATION, THE LENGTH OF FOUNDATION ABOVE THE GROUND MAY BE INCREASED TO PROVIDE THE REQUIRED SIGNAL HEAD CLEARANCE ABOVE THE ROADWAY. WHEN THE REQUIRED LENGTH OF FOUNDATION ABOVE THE GROUND IS 18" OR LESS, NO INCREASE IN DEPTH "L" WILL BE REQUIRED. WHEN THE REQUIRED LENGTH OF FOUNDATION ABOVE THE GROUND IS 5'-6" OR LESS, INCREASE DEPTH "L" BY 1'-0". FOR LENGTHS GREATER THAN 5'-6", DEPTH "L" SHALL BE ADJUSTED AS DIRECTED BY THE ENGINEER. LONGITUDINAL REINFORCING, AS SHOWN IN THE TABLE, SHALL BE PROVIDED FOR THE LENGTH OF THE EXTENDED SHAFT AND #4 TIES SHALL BE PROVIDED AT A SPACING NOT TO EXCEED 9" ON CENTERS. PAYMENT WILL BE IN ACCORDANCE WITH SECTION 714 OF THE STANDARD SPECIFICATIONS.

IN LIEU OF DESIGNING THE STRUCTURE TO RESIST PERIODIC GALLOPING, A VIBRATORY MITIGATION DEVICE MAY BE PROVIDED BY THE POLE MANUFACTURER. THE VIBRATORY MITIGATION DEVICE SHALL BE AN ANTI-GALLOPING PANEL CONSISTING OF A 60"x16"x0.25" SIGN BLANK MOUNTED NEAR THE END OF THE MAST ARM NOT TO EXCEED ONE QUARTER OF THE LENGTH OF THE MAST ARM FROM THE END OF THE MAST ARM WITH THE LONG AXIS OF THE PANEL COLLINER WITH THE LONG AXIS OF THE MAST ARM. THE PANEL SHOULD BE MOUNTED AT SUCH A HEIGHT AS TO PROVIDE AT LEAST 6" CLEAR FROM THE TOP OF ANY SIGNAL ASSEMBLY OR SIGN PANEL LOCATED ON THE MAST ARM WITHIN THE LENGTH OF THE ANTI-GALLOPING PANEL.

TRUCK-INDUCED GUST LOADS SHALL BE EXCLUDED FOR FATIGUE DESIGN FOR ALL STRUCTURES EXCEPT MAST ARMS MOUNTED OVER FACILITIES WITH POSTED SPEEDS OF 65 MPH OR GREATER AT THE LOCATION OF THE STRUCTURE.



DATE	REVISION	DATE	FILM
0-8-86	REVISED NOTES		
2-27-86	REVISED NOTES		
8-28-86	REVISED 4E STANDARD DRAWING		
7-2-87	REVISED VAD SIGNAL HEADS		
7-2-87	REVISED DRAWING		
7-2-87	REVISED DRAWING		
8-25-88	ADDED VIBRATORY MITIGATION DEVICE & NOTES		
1-18-89	REVISED ASHTO NOTES		
4-23-89	REVISED 18' X 24' ASHTO STANDARDS		
10-26-89	REVISED CABINET ORIENTATION		
6-23-04	REVISED		
5-8-04	REV. NOTE 3/ASHTO REQUIREMENTS		
6-4-05	REV. NOTES & POLE MAST ARM SCOPE		
4-2-05	REVISED POLE TAPER		
4-24-05	REV. NOTES & SIGNAL HEAD PLACEMENT		
1-22-06	REVISED FOUNDATION DETAILS		
8-17-06	REVISED DETAILS AND NOTES		
10-2-06	ISSUED		

SPECIAL NOTE: 90 MPH WIND ZONE DESIGN, SEE NOTE 3, MINIMUM STRUCTURAL REQUIREMENTS.

ARKANSAS STATE HIGHWAY COMMISSION
STEEL POLE WITH MAST ARM
 STANDARD DRAWING SD-11

SUPERELEVATION TABLE FOR TWO - WAY TRAFFIC

DEGREE OF CURVE	30 MPH		40 MPH		50 MPH		55 MPH		60 MPH		70 MPH	
	Ls (FT)		Ls (FT)		Ls (FT)		Ls (FT)		Ls (FT)		Ls (FT)	
	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.	
0° 30'	N.C.		N.C.		N.C.		N.C.		N.C.		N.C.	
0° 45'	N.C.		N.C.		R.C.		R.C.		R.C.		R.C.	
1° 00'	N.C.		N.C.		0.021		0.021		0.023		0.028	
1° 15'	N.C.		R.C.		0.026		0.026		0.030		0.037	
1° 30'	N.C.		R.C.		0.031		0.031		0.037		0.046	
1° 45'	N.C.		0.021		0.025		0.031		0.043		0.054	
2° 00'	N.C.		0.028		0.040		0.048		0.056		0.062	
2° 15'	N.C.		0.031		0.045		0.053		0.061		0.070	
2° 30'	N.C.		0.034		0.049		0.058		0.067		0.078	
2° 45'	N.C.		0.037		0.053		0.063		0.072		0.085	
3° 00'	N.C.		0.040		0.057		0.067		0.077		0.091	
3° 15'	N.C.		0.043		0.061		0.072		0.082		0.096	
3° 30'	N.C.		0.046		0.065		0.076		0.086		0.098	
3° 45'	N.C.		0.049		0.069		0.080		0.090		0.100	
4° 00'	N.C.		0.051		0.072		0.083		0.093		0.100	
4° 30'	N.C.		0.056		0.078		0.087		0.096		0.100	
5° 00'	N.C.		0.061		0.083		0.091		0.098		0.100	
5° 30'	N.C.		0.066		0.088		0.094		0.098		0.100	
6° 00'	N.C.		0.070		0.092		0.096		0.098		0.100	
6° 30'	N.C.		0.074		0.095		0.098		0.098		0.100	
7° 00'	N.C.		0.078		0.098		0.099		0.098		0.100	
7° 30'	N.C.		0.081		0.099		0.099		0.098		0.100	
8° 00'	N.C.		0.084		0.099		0.099		0.098		0.100	
8° 30'	N.C.		0.087		0.099		0.099		0.098		0.100	
9° 00'	N.C.		0.089		0.099		0.099		0.098		0.100	
10° 00'	N.C.		0.094		0.099		0.099		0.098		0.100	
11° 00'	N.C.		0.097		0.099		0.099		0.098		0.100	
12° 00'	N.C.		0.099		0.099		0.099		0.098		0.100	
13° 00'	N.C.		0.099		0.099		0.099		0.098		0.100	
14° 00'	N.C.		0.099		0.099		0.099		0.098		0.100	
15° 00'	N.C.		0.099		0.099		0.099		0.098		0.100	
16° 00'	N.C.		0.099		0.099		0.099		0.098		0.100	
17° 00'	N.C.		0.099		0.099		0.099		0.098		0.100	
18° 00'	N.C.		0.099		0.099		0.099		0.098		0.100	
19° 00'	N.C.		0.099		0.099		0.099		0.098		0.100	
20° 00'	N.C.		0.099		0.099		0.099		0.098		0.100	
21° 00'	N.C.		0.099		0.099		0.099		0.098		0.100	
22° 00'	N.C.		0.099		0.099		0.099		0.098		0.100	
23° 00'	N.C.		0.099		0.099		0.099		0.098		0.100	
24° 00'	N.C.		0.099		0.099		0.099		0.098		0.100	

ABBREVIATIONS

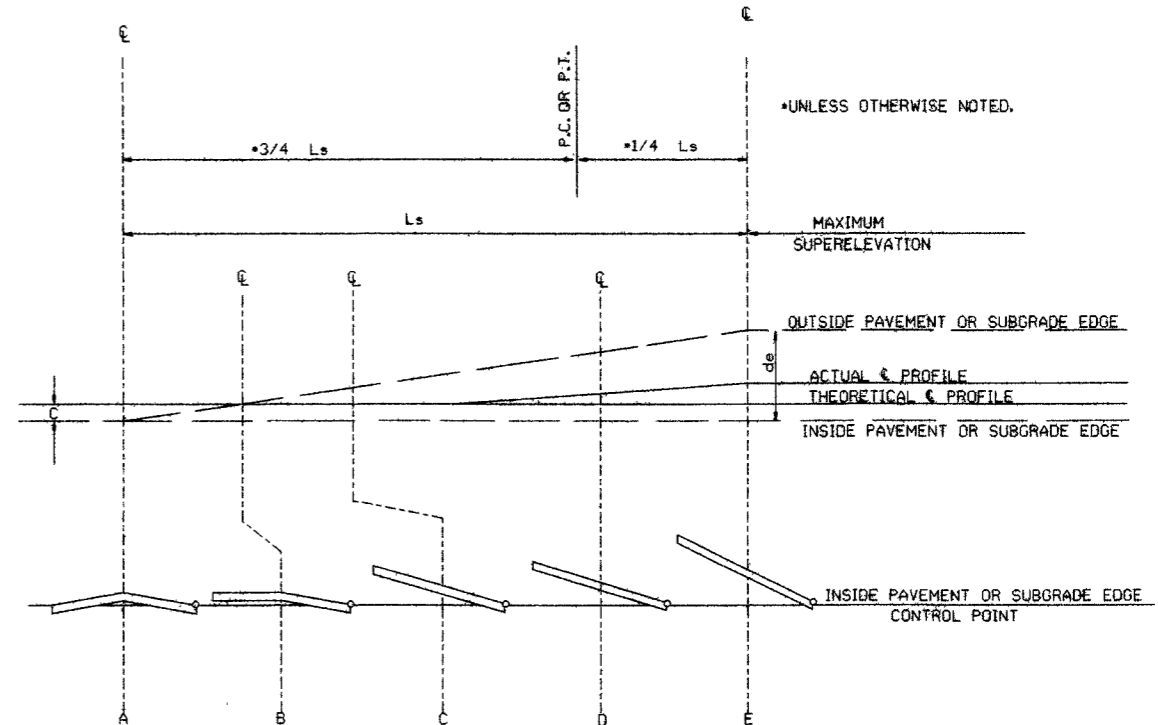
- NC - NORMAL CROWN
- RC - REVERSE CROWN, SUPERELEVATION AT NORMAL CROWN SLOPE
- e - RATE OF SUPERELEVATION (FT. PER FT.)
- Ls - LENGTH OF SUPERELEVATION TRANSITION (FT.)
- L - DISTANCE FROM BEGINNING OF SUPERELEVATION TRANSITION TO ANY POINT (FT.)
- d - WIDTH OF PAVEMENT (FT.) OR WIDTH OF SUBGRADE (FT.)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

D MAX = 24° 45'

GENERAL NOTES

1. ON PAVEMENT WITH TWO-WAY TRAFFIC, THE SUPERELEVATION SHALL BE REVOLVED ON THE INSIDE PAVEMENT EDGE UNLESS OTHERWISE NOTED ON THE PLANS
2. SUPERELEVATION VALUES SHOWN ON THE CROSS SECTIONS ARE VALUES (+) OR (-) TO BE ADDED TO OR SUBTRACTED FROM THE POINT OF CONTROL.
3. LENGTHS FOR L MAY BE ROUNDED IN MULTIPLES OF 25 FT. OR 50 FT. TO PERMIT SIMPLER CALCULATIONS.
4. PAVEMENTS WIDER THAN 2 LANES SHALL HAVE ADDITIONAL TRANSITION LENGTHS AS FOLLOWS:
 - 3 LANE UNDIVIDED - - - - - +20%
 - 4 LANE UNDIVIDED - - - - - +50%
 - 5 LANE UNDIVIDED - - - - - +80%
 - 6 LANE UNDIVIDED - - - - - +100%

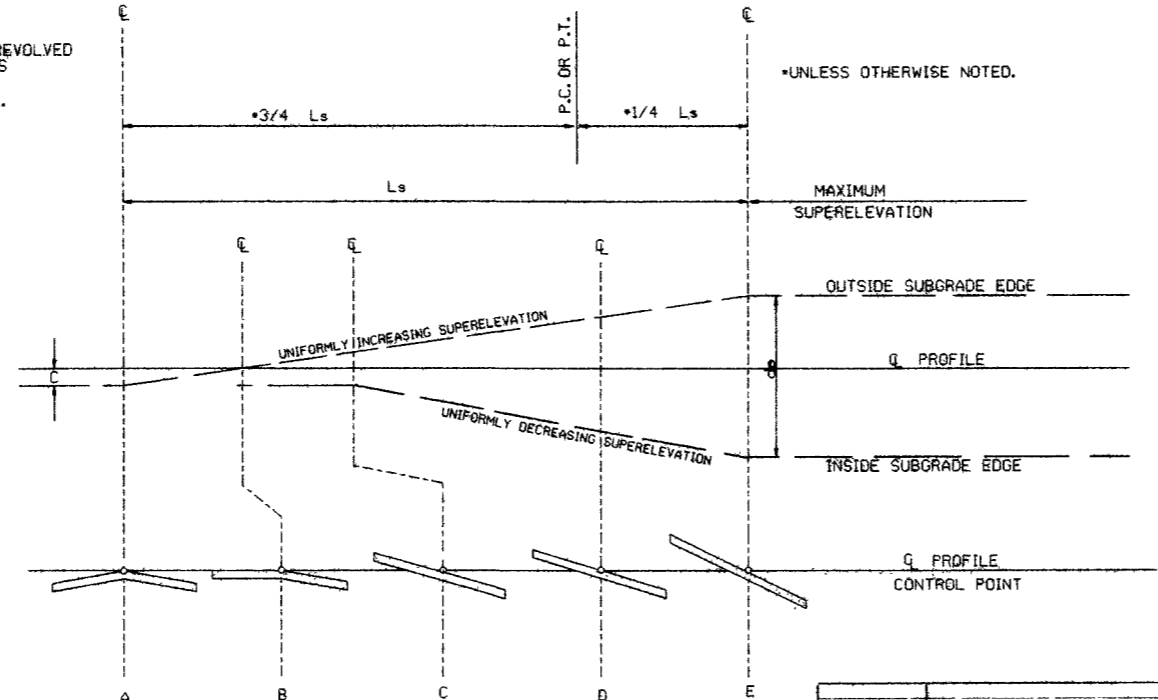
NOTE: MAINTAIN NORMAL CROWN ON INSIDE UNTIL SUPERELEVATION EXCEEDS 2C.
RATE OF SUPERELEVATION SHALL BE COMPUTED ON STRAIGHT LINE METHOD USING APPLICABLE Ls.



STANDARD METHOD WHEN SUPERELEVATION REVOLVES AROUND INNER SUBGRADE POINT OR INNER PAVEMENT EDGE

NOTE: MAINTAIN NORMAL CROWN ON INSIDE UNTIL SUPERELEVATION EXCEEDS 2C.

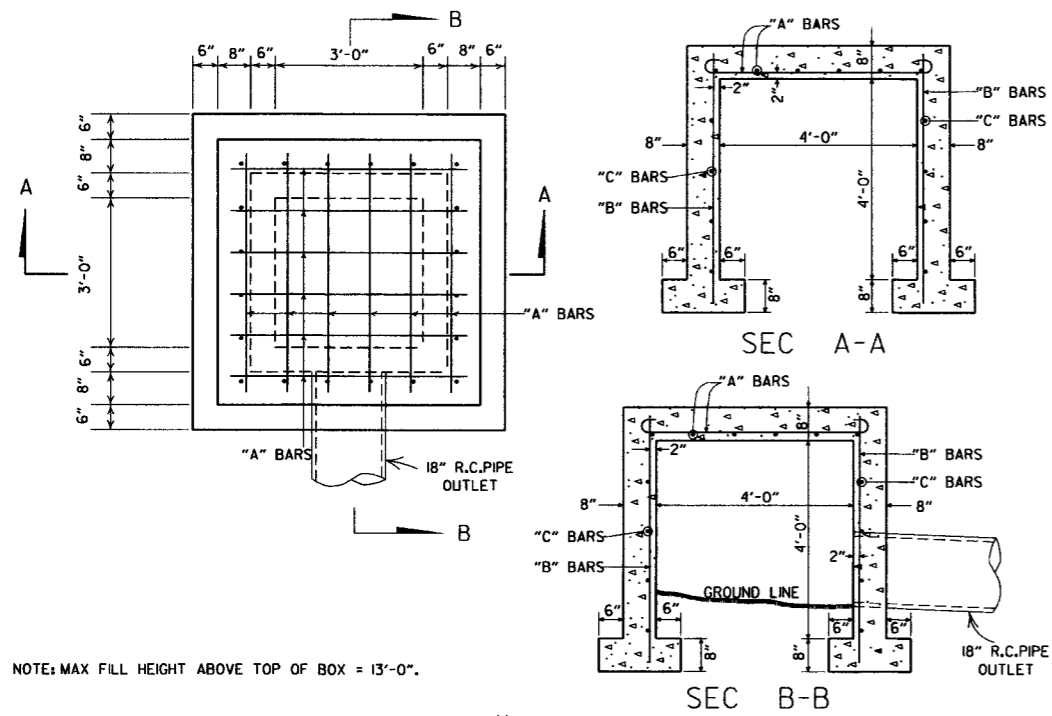
SUPERELEVATION FORMULA = $\frac{Lde}{Ls}$



STANDARD METHOD WHEN SUPERELEVATION REVOLVES AROUND CENTER LINE

ARKANSAS STATE HIGHWAY COMMISSION	
TABLES AND METHOD OF SUPERELEVATION FOR TWO-WAY TRAFFIC	
STANDARD DRAWING SE-2	

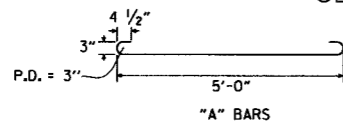
10-18-96	ADDED FORMULA	10-17-92
01-09-87	ISSUED	534-1-9-87
DATE	REVISION	DATE FILMED



NOTE: MAX FILL HEIGHT ABOVE TOP OF BOX = 13'-0".

STEEL SCHEDULE			
BAR	NUMBER	LENGTH	SPACING
"A"	12	6'-0"	10"
"B"	20	5'-0"	10 1/2"
"C"	16	5'-0"	12"

ALL STEEL TO BE #4 BARS

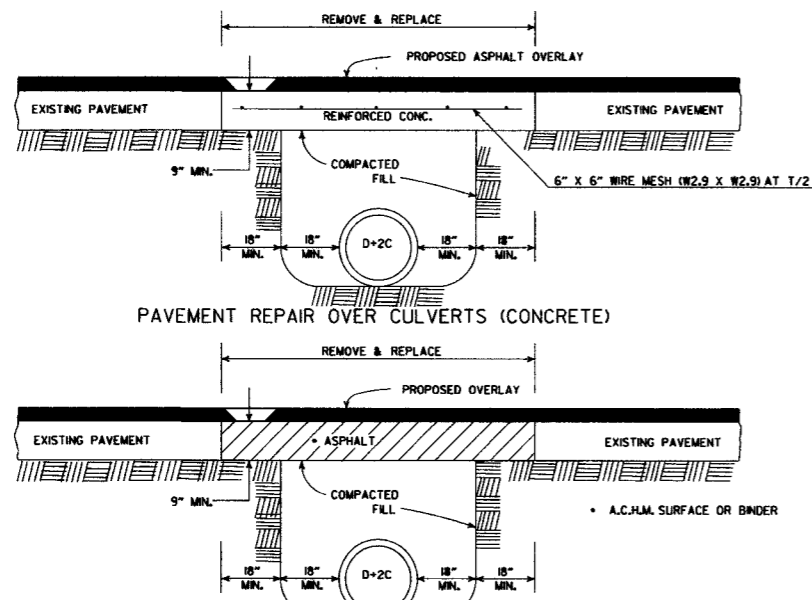


GENERAL NOTE:

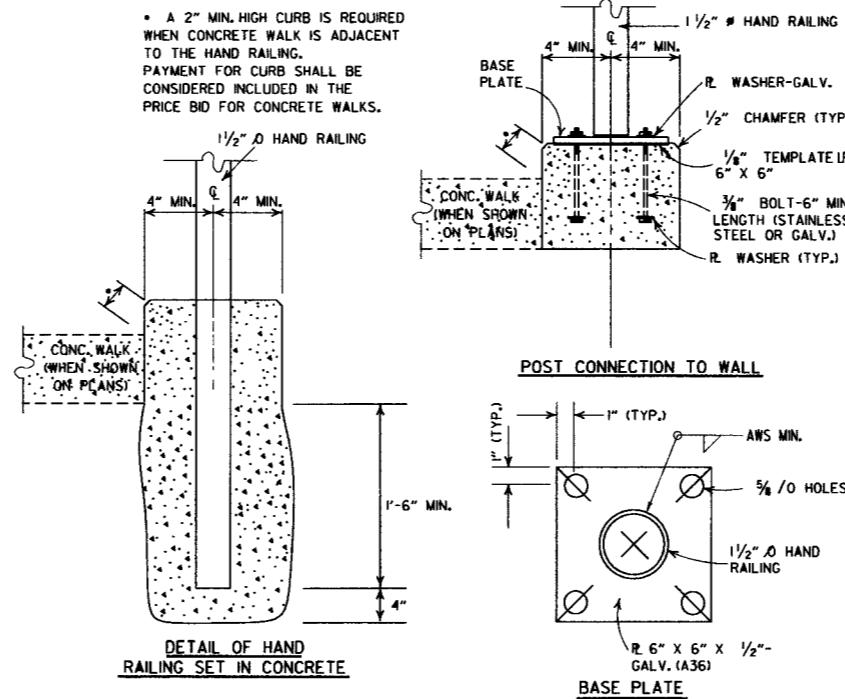
THE PAY ITEMS FOR REINFORCED CONCRETE SPRING BOXES SHALL BE FOR THE QUANTITIES OF CONCRETE OF THE CLASS SPECIFIED, REINFORCING STEEL, EXCAVATION FOR STRUCTURES AND 18" R.C. PIPE CULVERT.

QUANTITIES
CONCRETE 3.31 CU. YDS.
REINFORCING STEEL 168 LB.

REINFORCED CONCRETE SPRING BOX



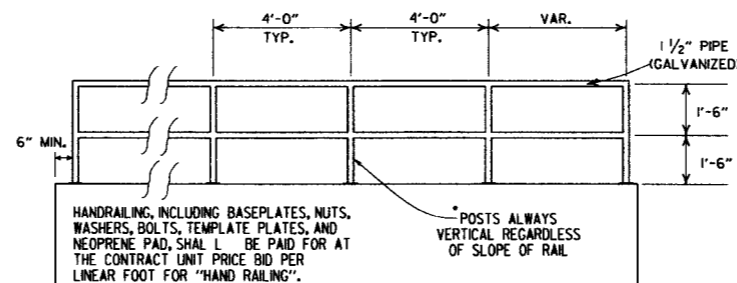
PAVEMENT REPAIR OVER CULVERTS (ASPHALT)
DETAIL SHOWING REPAIR OF EXISTING PAVEMENT AT CULVERT INSTALLATIONS



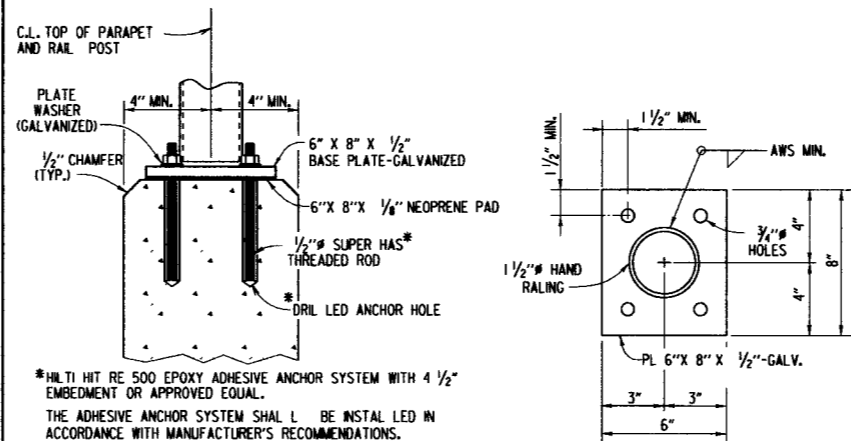
DETAIL OF HAND RAILING SET IN CONCRETE

BASE PLATE

POST CONNECTION DETAILS



HAND RAILING SHALL CONFORM TO SECTION 633.

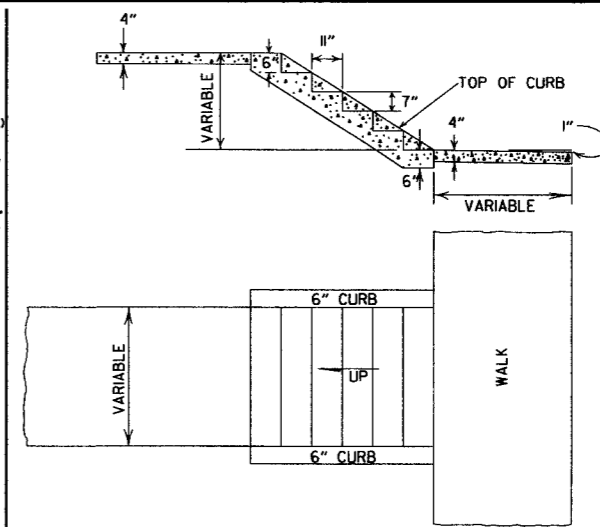


POST CONNECTION TO WALL

BASE PLATE

DETAILS OF ALTERNATE POST ANCHOR SYSTEM (EPOXY ADHESIVE ANCHORS)

HAND RAILING DETAILS



DETAILS OF CONCRETE STEPS & WALKS


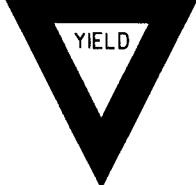
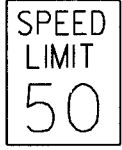


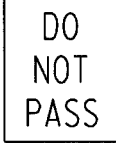



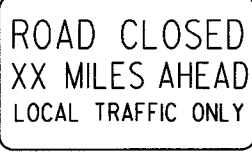
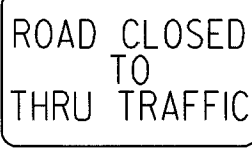

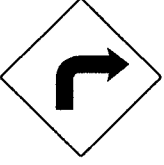





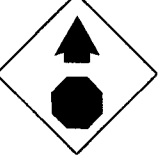
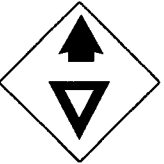
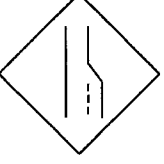



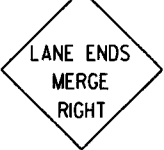









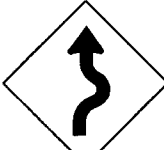



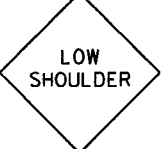
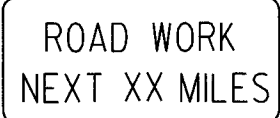
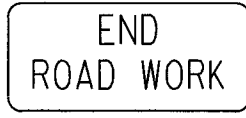
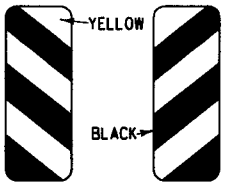


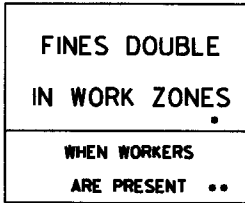
GENERAL NOTES
1. RISE AND TREAD DIMENSIONS OF STEPS MAY BE VARIED AS DIRECTED BY THE ENGINEER, HOWEVER, TREAD WIDTHS SHALL BE 11" MIN. ALL STEPS IN A FLIGHT SHALL HAVE CONSISTENT TREAD & RISER DIMENSIONS.
2. 1" TRANSVERSE EXPANSION JOINTS SHALL BE PLACED IN CONCRETE WALKS AT 45' INTERVALS.

DATE	REVISION	DATE FILMED
9-12-13	REVISED REINFORCED CONCRETE SPRING BOX	
7-26-12	REMOVED RETAINING WALL DETAILS & REVISED HAND RAILING DETAILS	
4-17-08	REV. JOINT & FOOTING STEP DETAILS	
11-29-07	REVISED RETAINING WALL DRAINAGE	
5-25-06	REVISED PVMT REPAIR OVER CULVERTS (CONC); REVISED REINFORCED CONC SPRING BOX	
10-9-03	REVISED PIPE RAILING DETAILS TO HAND RAILING DETAILS	
4-10-03	REVISED RETAINING WALL DRAWING	
8-22-02	ADDED HAND RAILING DETAIL	
11-16-01	REVISED PVMT REPAIR OVER CULVERTS (CONC); CORRECTED SPELLING IN GENERAL NOTES	
11-18-98	ADDED GENERAL NOTES TO CONCRETE STEPS & WALKS	
7-02-98	ENLARGED PIPE	
4-03-97	ADDED NOTE TO STEEL BAR SCHED.	
10-18-96	CORRECTED SPELLING	
4-26-96	ADD WEEP HOLE; REV. JOINT SPACING IN RET. WALL	
6-2-94	CHANGED CONST. TO CONTRACTION JOINT	10-1-92
10-1-92	CHANGED MESH FABRIC TO WIRE MESH	8-15-91
8-15-91	DELETED HDWL MODIFICATION DETAIL	11-8-90
11-8-90	DELETED COLD MIX FROM CULV'T. REPAIR	11-30-89
11-30-89	REV. RETAINING WALL STEEL SCHEDULE	11-30-89
11-17-88	V. BARS BEHIND ARROW	665-11-17-88
7-15-88	REV. PAVEMENT REPAIR	649-7-15-88
11-1-84	ADDED HDWL, MODS, DEL. PIPE UNDERDRAINS	
1-4-83	REV. TRENCH FOR PIPE UNDERDRAIN	510-11-1-84
3-2-81	ELIMINATED CONC. CLASS & ADDED CHAMFER NOTE	682-1-4-83
4-20-79	SPELLING OF "UNDERDRAIN"	721-3-2-81
2-2-76	REV. UNDERDRAIN DET. & PAVEMENT REPAIR	674-4-20-79
4-10-75	12" MIN. GRAN. MAT'L. OVER PIPE	919-2-2-76
5-22-74	REM. SPECS. FOR GRAN. MAT'L.	568-4-10-75-853
10-2-72	GRANULAR MAT'L. TO BE SB-3	567-5-22-74-740
	REVISED AND REDRAWN	564-10-16-72

ARKANSAS STATE HIGHWAY COMMISSION

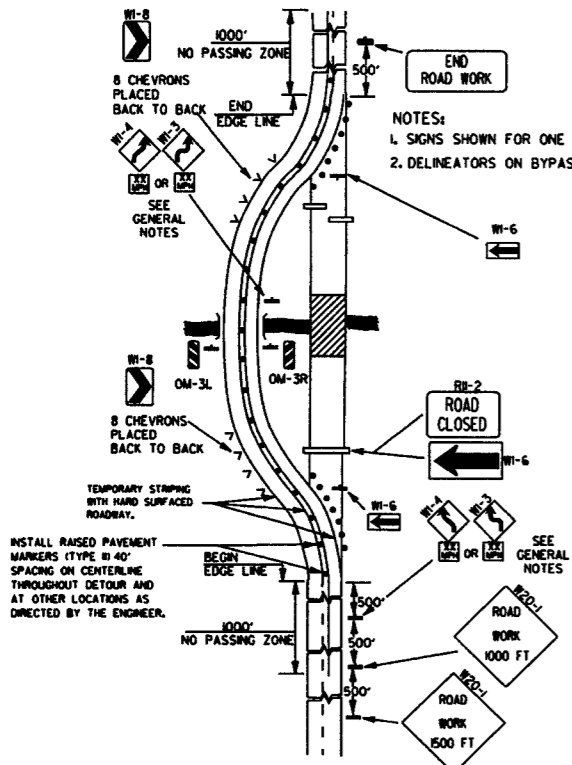
DETAILS OF SPECIAL ITEMS

STANDARD DRAWING SI-1

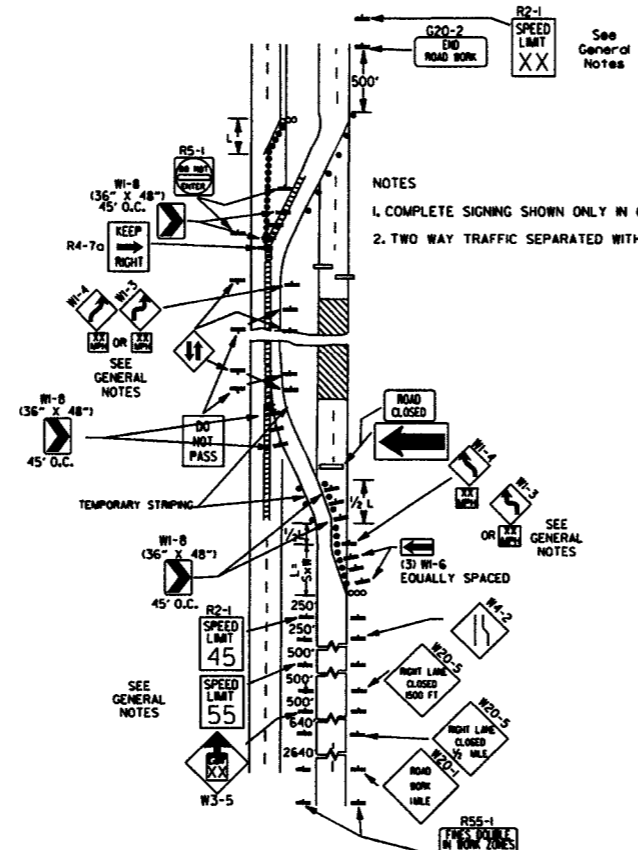
							ADVANCE DISTANCES (XXXX)	
<p>RI-1</p>  <p>STANDARD 30"x30" EXPRESSWAY 36"x36" SPECIAL 48"x48"</p>	<p>RI-2</p>  <p>STD. 36"x36"x36" EXPWY. 48"x48"x48" FWY. 60"x60"x60"</p>	<p>R2-1</p>  <p>STD. 24"x30" EXPWY. 36"x48" FWY. 48"x60"</p>	<p>W3-5</p>  <p>STD. 36"x36" EXPWY. 48"x48" FWY. 48"x48"</p>	<p>W3-5a</p>  <p>STD. 36"x36" EXPWY. 48"x48" FWY. 48"x48"</p>	<p>R4-1</p>  <p>STD. 24"x30" EXPWY. 36"x48" FWY. 48"x60"</p>	<p>R4-2</p>  <p>STD. 24"x30" EXPWY. 36"x48" FWY. 48"x60"</p>	<p>500 FT 1/2 MILE 1000 FT 3/4 MILE 1500 FT 1 MILE AHEAD</p>	
<p>R5-1</p>  <p>STD. 30"x30" EXPWY. 36"x36" SPECIAL 48"x48"</p>	<p>R11-2</p>  <p>48"x30"</p>	<p>R11-3A</p>  <p>60"x30"</p>	<p>R11-4</p>  <p>60"x30"</p>	<p>W21-5a</p>  <p>STD. 36"x36" FWY. 48"x48"</p>	<p>W1-1</p>  <p>STD. 36"x36" FWY. 48"x48"</p>	<p>W1-2</p>  <p>STD. 36"x36" FWY. 48"x48"</p>	<p>GENERAL NOTES:</p> <ol style="list-style-type: none"> 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. 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. 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. SIGNS ARE USUALLY MOUNTED ON A SINGLE POST, ALTHOUGH THOSE WIDER THAN 36" OR LARGER THAN 10 SO. FT. SHALL BE MOUNTED ON TWO POSTS OR ABOVE A TYPE III BARRICADE. 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. 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. 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. FLAGGERS SHALL USE REFLECTORIZED STOP-SLOW PADDLES. FLAGS MAY BE USED ONLY FOR EMERGENCY SITUATIONS. 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. 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. <p>* 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.</p>	
<p>W1-3</p>  <p>STD. 48"x48"</p>	<p>W1-4</p>  <p>STD. 48"x48"</p>	<p>W1-6</p>  <p>STD. 48"x24" SPECIAL 60"x30"</p>	<p>W1-8</p>  <p>STD. 18"x24" SPECIAL 24"x30" EXPWY. 30"x36" FWY. 36"x48"</p>	<p>W3-1</p>  <p>STD. 36"x36" SPECIAL 48"x48"</p>	<p>W3-2</p>  <p>STD. 36"x36" SPECIAL 48"x48"</p>	<p>W4-2</p>  <p>STD. 36"x36" FWY. 48"x48"</p>		
<p>W5-1</p>  <p>STD. 36"x36" SPECIAL 48"x48"</p>	<p>W6-3</p>  <p>EXPWY. 36"x36" SPECIAL 48"x48"</p>	<p>W8-7</p>  <p>EXPWY. 36"x36" FWY. 48"x48"</p>	<p>W9-2</p>  <p>STD. 36"x36" FWY. 48"x48"</p>	<p>W13-1</p>  <p>STD. 24"x24"</p>	<p>W20-1</p>  <p>STD. 48"x48"</p>	<p>W20-2</p>  <p>STD. 48"x48"</p>		<p>W20-3</p>  <p>STD. 48"x48"</p>
<p>W20-4</p>  <p>STD. 48"x48"</p>	<p>W20-5</p>  <p>STD. 48"x48"</p>	<p>W20-7a</p>  <p>STD. 36"x36" FWY. 48"x48"</p>	<p>W21-2</p>  <p>STD. 30"x30" SPECIAL 36"x36"</p>	<p>W21-5</p>  <p>STD. 30"x30" SPECIAL 36"x36"</p>	<p>W24-1</p>  <p>STD. 36"x36"</p>	<p>W1-4b</p>  <p>STD. 48"x48"</p>		<p>R56-1</p>  <p>STD. 18"x18"</p>
<p>W8-11</p>  <p>STD. 36"x36" FWY. 48"x48"</p>	<p>W8-9</p>  <p>STD. 36"x36" FWY. 48"x48"</p>	<p>G20-1</p>  <p>60"x24"</p>	<p>G20-2</p>  <p>48"x24"</p>	<p>OM-3L OM-3R</p>  <p>12"x36"</p>	<p>M4-9</p>  <p>STD. 30"x24" SPECIAL 48"x36" SPECIAL 60"x48"</p>	<p>M4-10</p>  <p>48"x18"</p>		<p>R55-1</p>  <p>36"x60" • USE 6" C LETTERS •• USE 4" D LETTERS</p>

4-13-17	DELETED RSP-1 & ADDED W21-5a	
9-2-15	REVISED REDUCED SPEED LIMIT AHEAD SIGNS REVISED ROAD WORK NEXT XX MILES	
12-15-11	REVISED W24-1	
1-17-10	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	
1-18-98	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	
DATE	REVISION	FILMED

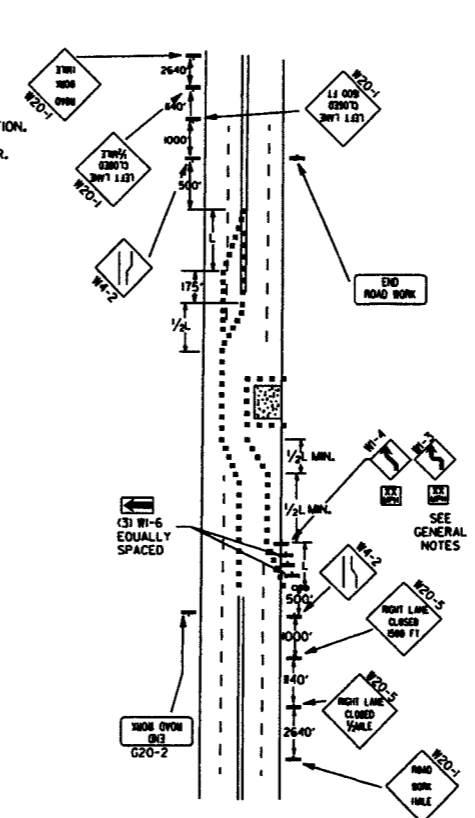
ARKANSAS STATE HIGHWAY COMMISSION
STANDARD TRAFFIC CONTROLS
FOR HIGHWAY CONSTRUCTION
STANDARD DRAWING TC-1



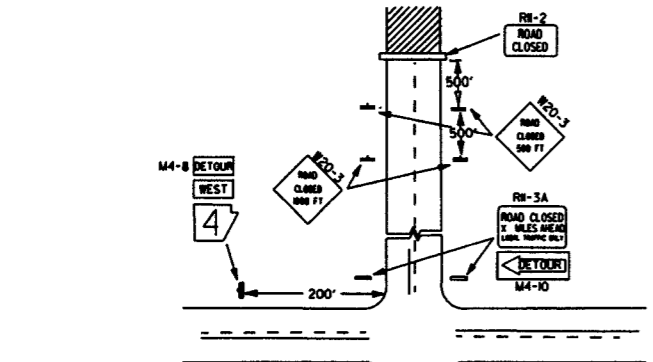
(A) TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES ON A 2-LANE HIGHWAY WHERE THE ENTIRE ROADWAY IS CLOSED AND A BYPASS DETOUR IS PROVIDED.



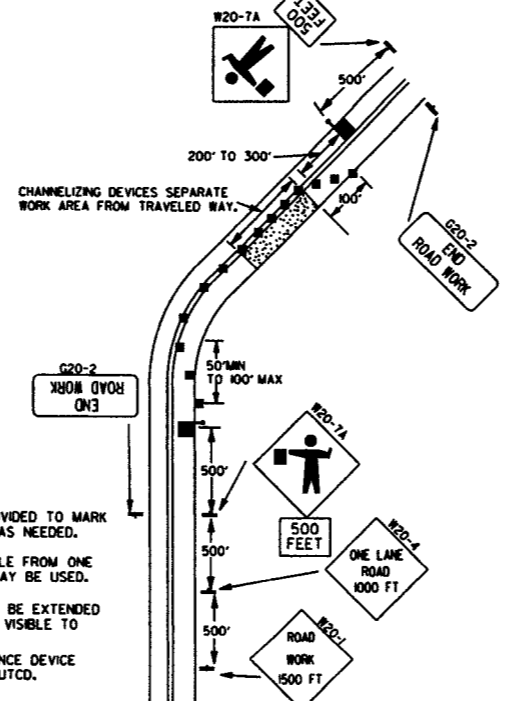
(B) TYPICAL APPLICATION - 4-LANE DIVIDED ROADWAY WHERE ONE ROADWAY IS CLOSED.



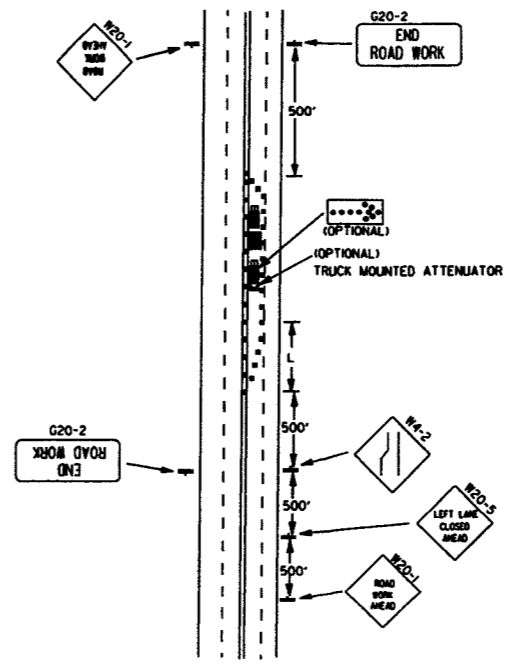
(C) TYPICAL APPLICATION - 4-LANE UNDIVIDED ROADWAY WHERE HALF OF THE ROADWAY IS CLOSED.



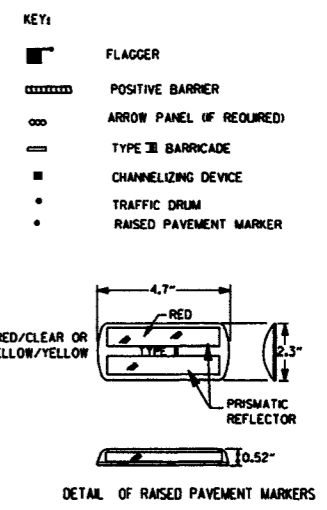
(D) TYPICAL APPLICATION - ROADWAY CLOSED BEYOND DETOUR POINT.



(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.



TYPICAL ADVANCE WARNING SIGN PLACEMENT

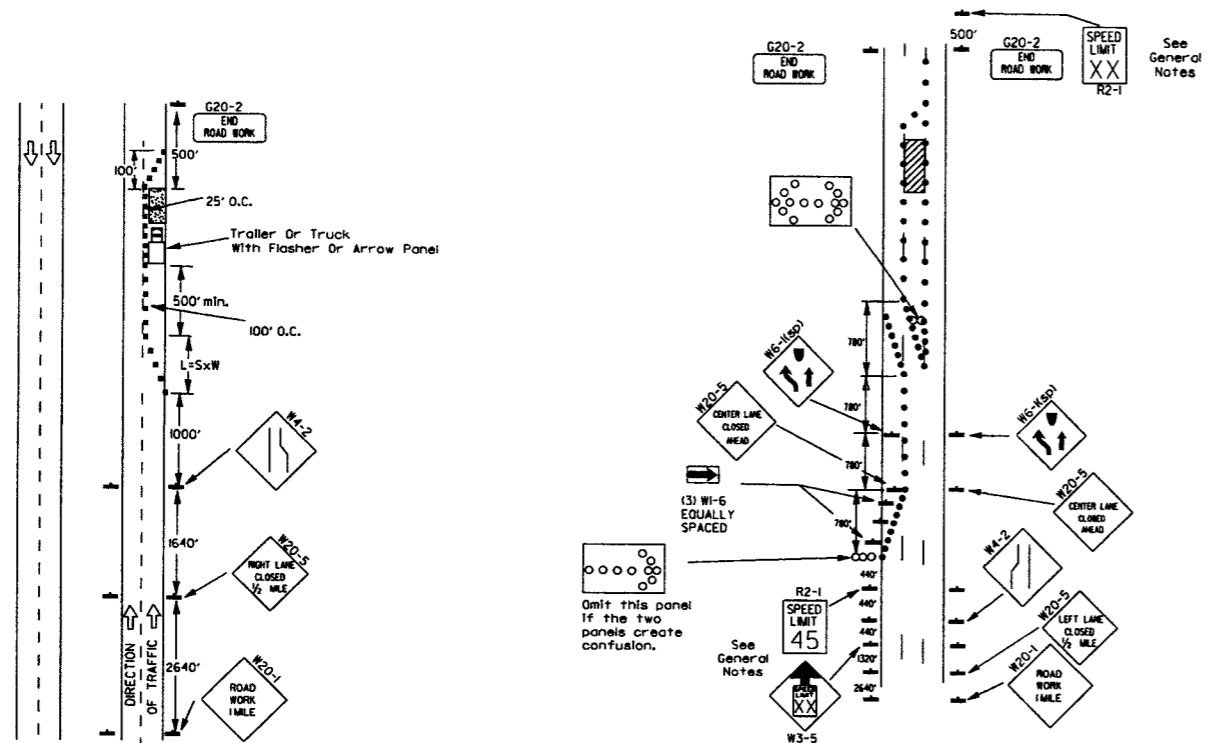
TAPER FORMULAE:
 $L = SKW$ FOR SPEEDS OF 45MPH OR MORE.
 $L = \frac{WS^2}{60}$ FOR SPEEDS OF 40MPH OR LESS.
 WHERE:
 L= MINIMUM LENGTH OF TAPER.
 S= NUMERICAL VALUE OF POSTED SPEED LIMIT PRIOR TO WORK OR 85TH PERCENTILE SPEED.
 W= WIDTH OF OFFSET.

- GENERAL NOTES:
- ADVISORY SPEED POSTED ON W1-3 OR W1-4 CURVE WARNING SIGNS TO BE DETERMINED AT SITE. USE W1-4 WHEN SPEED IS GREATER THAN 30MPH AND W1-3 WHEN 30MPH OR LESS.
 - WHEN THE EXISTING SPEED LIMIT IS 55MPH AND THE PLANS REQUIRE A SPEED LIMIT OF 45MPH, THE R2-K55 SHALL BE OMITTED AND THE W3-5 SHALL BE INSTALLED AT THAT LOCATION. ADDITIONAL R2-145MPH SPEED LIMIT SIGNS SHALL BE INSTALLED AT A MAXIMUM OF 1MILE INTERVALS. AT THE END OF THE WORK AREA A R2-KXXI SHALL BE INSTALLED TO MATCH ORIGINAL SPEED LIMIT.
 - WHEN THE EXISTING SPEED LIMIT IS 65MPH AND THE PLANS REQUIRE A SPEED LIMIT OF 55MPH, THE R2-K65 SHALL BE OMITTED. ADDITIONAL R2-155MPH SPEED LIMIT SIGNS SHALL BE INSTALLED AT A MAXIMUM OF 1MILE INTERVALS. AT THE END OF THE WORK AREA A R2-KXXI SHALL BE INSTALLED TO MATCH ORIGINAL SPEED LIMIT.
 - 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.
 - WARNING LIGHTS AND/OR FLAGS MAY BE MOUNTED TO SIGNS OR CHANNELIZING DEVICES AT NIGHT AS NEEDED.
 - PAVEMENT MARKINGS NO LONGER APPLICABLE WHICH MIGHT CREATE CONFUSION IN THE MINDS OF VEHICLE OPERATORS SHALL BE REMOVED OR OBLITERATED AS SOON AS PRACTICABLE.
 - 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.
 - 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.

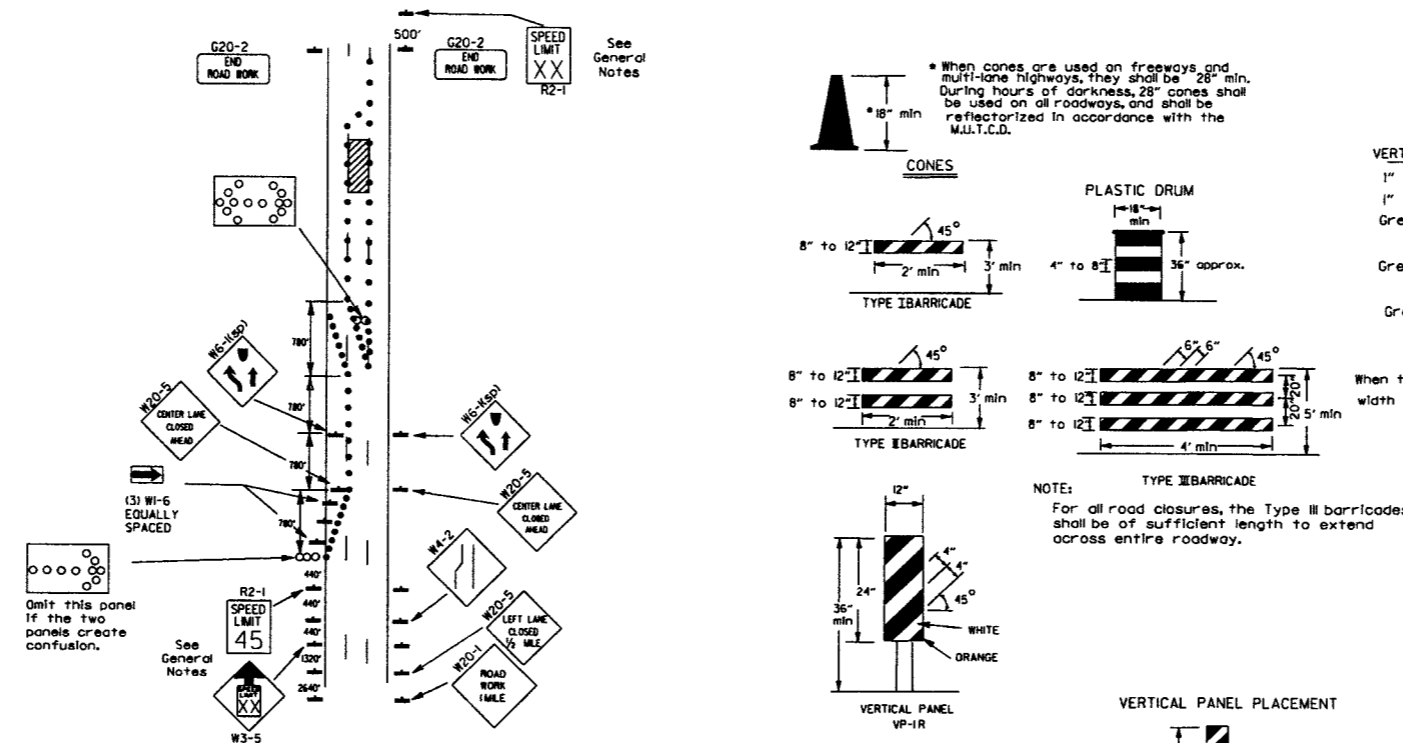
9-2-15	REVISED NOTE 2, ADDED NOTE 8, REVISED DRAWING (A) & REPLACED R2-5A WITH W3-5	
9-12-13	REVISED DETAIL OF RAISED PAVEMENT MARKERS	
3-8-10	ADDED (AFAD)	
8-20-08	REVISED SIGN DESIGNATIONS	
8-18-04	ADDED GENERAL NOTE	
10-18-96	ADDED R55-1	
4-26-96	CORRECTED (a) BEHIND G20-2	
6-8-95	CORRECTED SIGN IDENT. ON W1-4A	6-8-95
2-2-95	REVISED PER PART VI, MUTCD, SEPT. 3, 1993	
8-15-91	DRAWN AND PLACED IN USE	
DATE	REVISION	FILED

ARKANSAS STATE HIGHWAY COMMISSION
 STANDARD TRAFFIC CONTROLS
 FOR HIGHWAY CONSTRUCTION
 STANDARD DRAWING TC-2

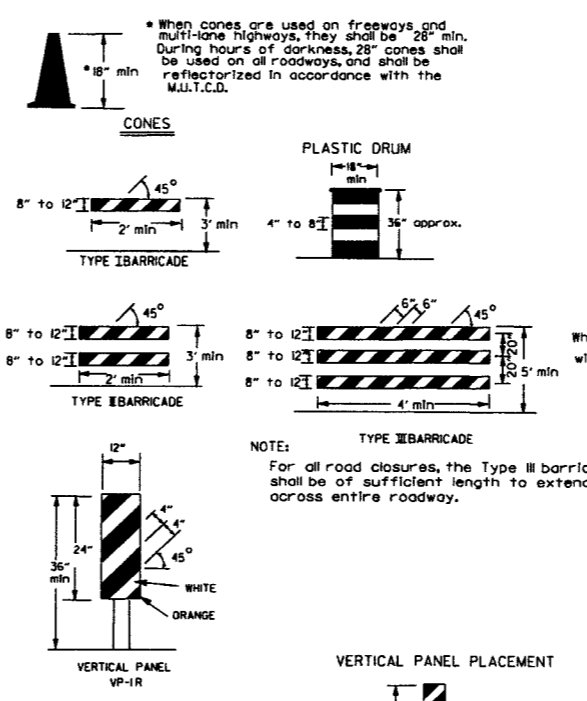
Channelizing devices



(A) Typical application - daytime maintenance operations of short duration on a 4-lane divided roadway where half of the roadway is closed.



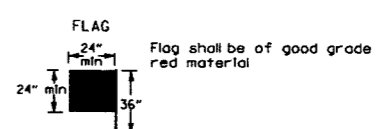
(B) Typical application - 3-lane oneway roadway where center lane is closed.



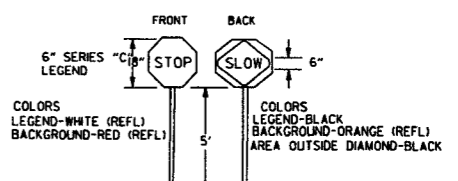
TRAFFIC CONTROL DEVICES FOR VERTICAL PAVEMENT DIFFERENTIALS

VERTICAL DIFFERENTIAL	LOCATIONS	TRAFFIC CONTROL
1" to 3"	Centerline, lane lines	WB-11
1" to 3"	Edge of shoulder	WB-9
Greater than 3"	Lane lines	Standard lane closure required
Greater than 3"	Edge of traveled lane	*RSP-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.

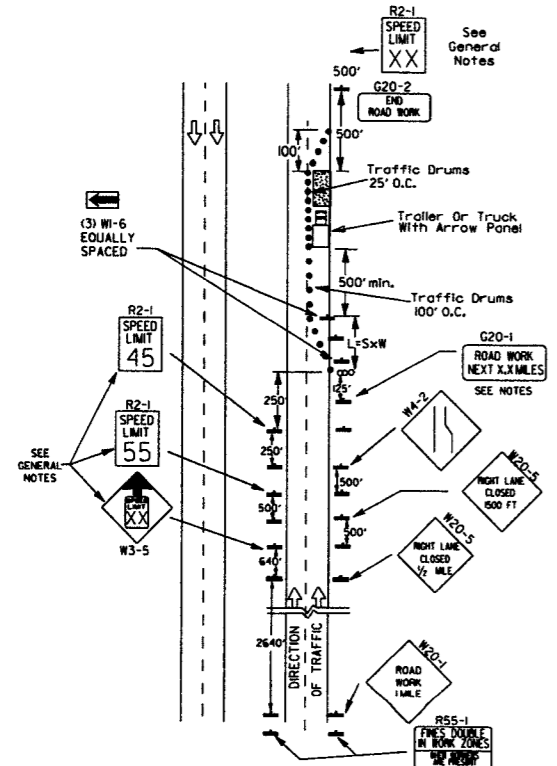


STOP SLOW PADDLE

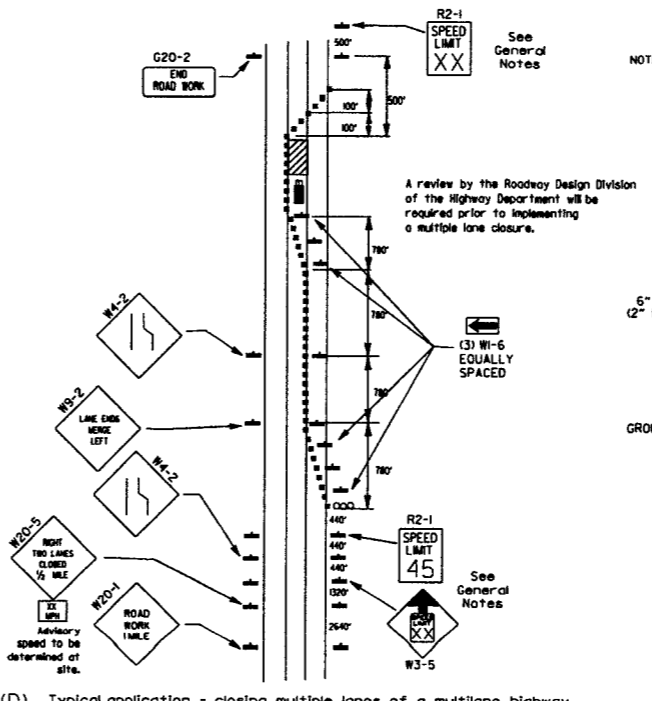


- KEY:
- Arrow Panel (if Required)
 - Channelizing Device
 - Traffic drum

- GENERAL NOTES:
- A speed limit reduction may be implemented ONLY when designated in the plan or when recommended by the Roadway Design Division.
 - When the existing speed limit is 55mph and the plans require a speed limit of 45mph, the R2-1(55) shall be omitted and the W3-5 shall be installed at that location. Additional R2-1(45) 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.
 - 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(55) 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.
 - 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.
 - Warning lights and/or flags may be mounted to signs or channelizing devices at night as needed.
 - Pavement markings no longer applicable which might create confusion in the minds of vehicle operators shall be removed or obliterated as soon as practicable.
 - 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.
 - Flaggers shall use STOP/SLOW paddles for controlling traffic through work zones. Flags may be used only for emergency situations.
 - All plastic drums and cones shall meet the requirements of NCHRP-350 or Manual for Assessing Safety Hardware (MASH).
 - Trailer mounted devices such as arrow panels and portable changeable message signs shall be delineated by affixing consistency 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.

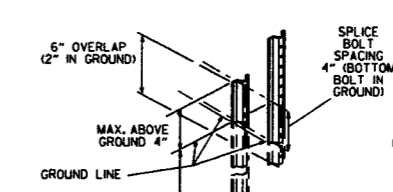


(C) Typical application - construction operations of intermediate to long term duration on a 4-lane divided roadway where half of the roadway is closed.



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

- NOTES:
- USE SPLICES ONLY WHEN NECESSARY FOR INSTALLATION. TYPICAL INSTALLATION SHOULD HAVE NO SPLICES (SEE STD. DRAWING NO. SHS-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 CARBIDE BOLTS.
 - SIGN POSTS SHALL BE PAINTED GREEN; SIGNS SHALL NOT BE PAINTED.
 - AND ALL SIGN POSTS SHALL BE PLUMB.

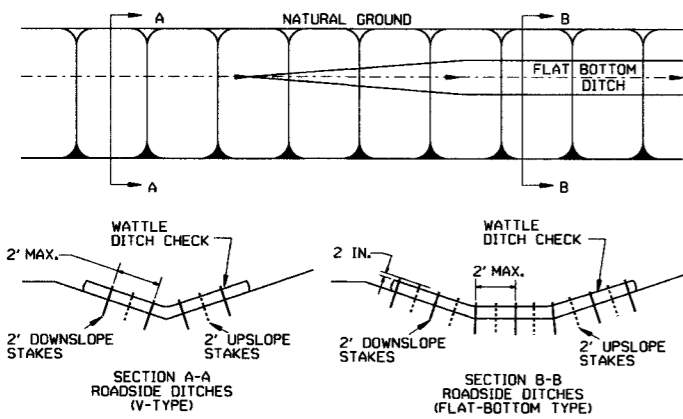


DATE	REVISION	FILED
9-2-95	REVISED NOTE 2 & REPLACED R2-5A WITH W3-5	
10-15-09	ADDED REFERENCE TO MASH	
8-20-08	REVISED SIGN DESIGNATIONS	
8-18-04	ADDED NOTE	
10-1-98	ADDED NOTE	
4-03-97	ADDED (SP) TO W6-1 & REVISED TRAFFIC CONTROL DEVICES NOTE	
10-18-96	ADDED R55-1	
10-12-95	MOVED UPPER SPLICE	
6-8-95	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

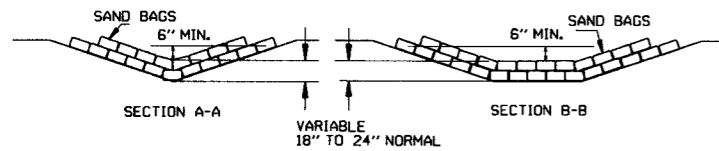
GENERAL NOTES

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

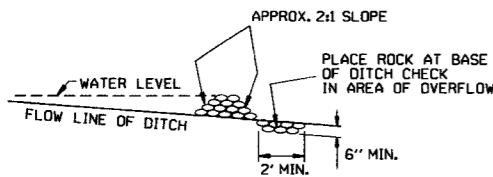


WATTLE DITCH CHECK (E-1)

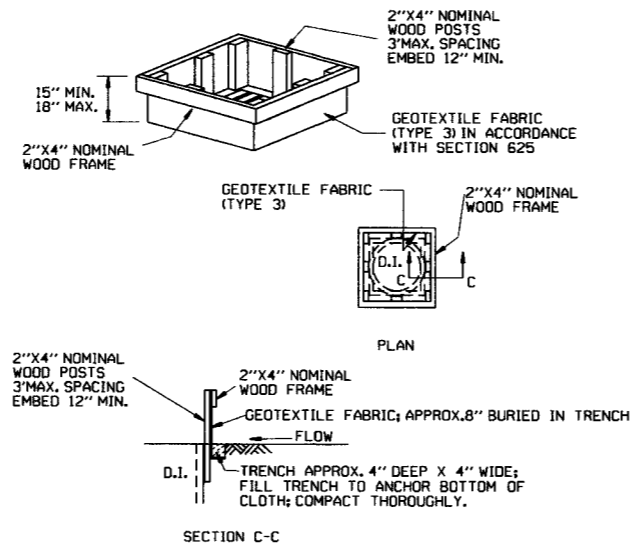
NUMBER OF SAND BAGS AND ARRANGEMENT VARIABLE WITH ON-SITE CONDITIONS. PLACE SAND BAGS AT BASE OF DITCH CHECK IN AREA OF OVERFLOW.



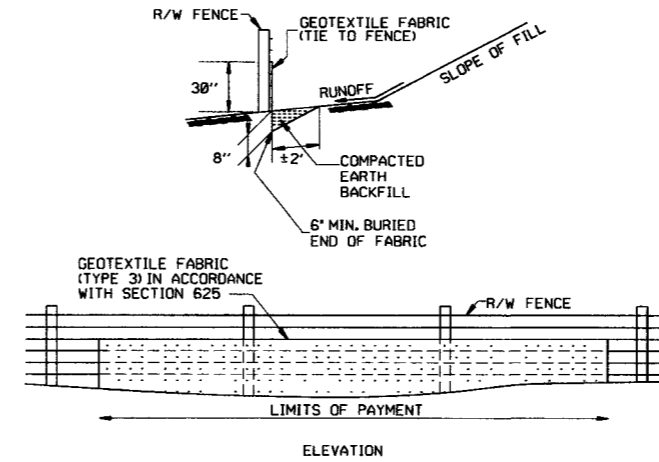
SAND BAG DITCH CHECK (E-5)



ROCK DITCH CHECK (E-6)

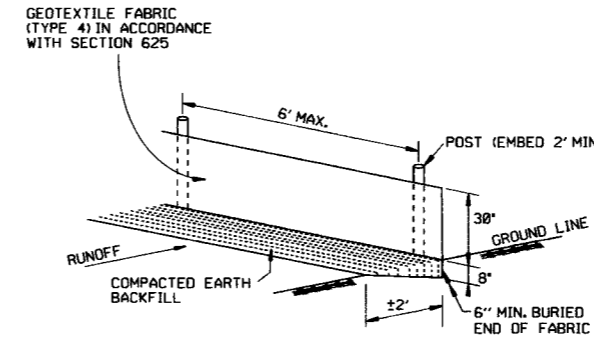


DROP INLET SILT FENCE (E-7)



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

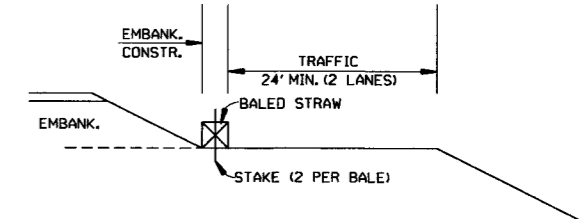
GENERAL NOTES
GEOTEXTILE FABRIC SHALL BE SPLICED TOGETHER WITH A SEWN SEAM ONLY AT A SUPPORT POST, OR TWO SECTIONS OF FENCE MAY BE OVERLAPPED INSTEAD. PAYMENT OF ADDITIONAL MATERIAL FOR OVERLAP WILL NOT BE MADE.



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.

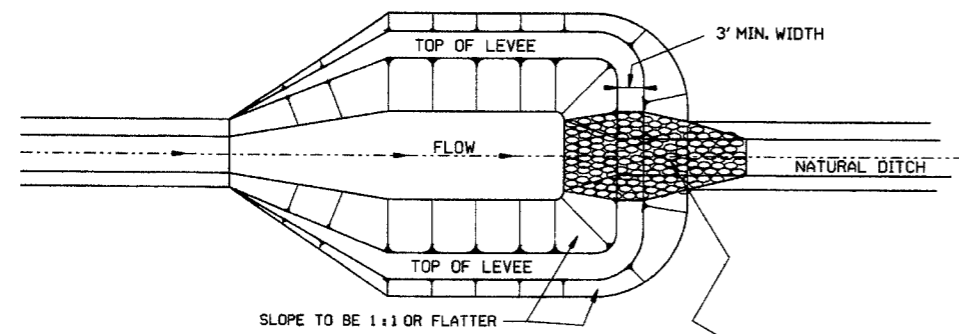


BALED STRAW FILTER BARRIER (E-2)

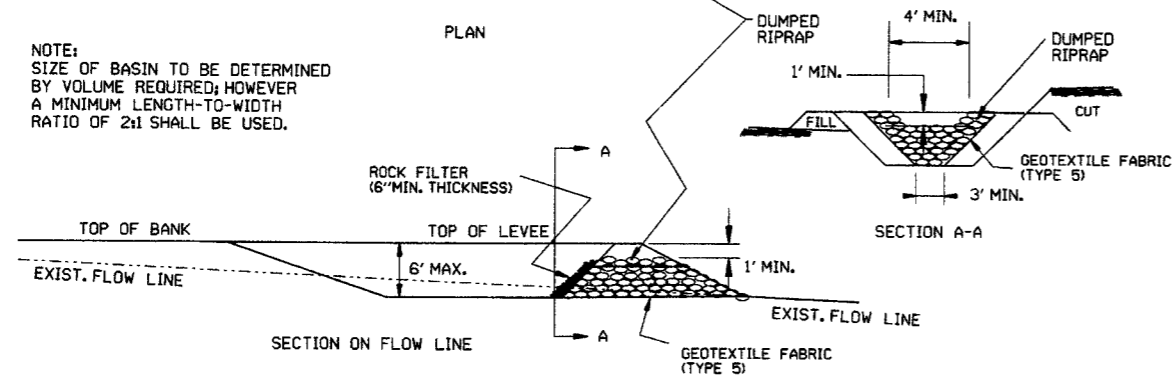
12-15-11	DELETED BALED STRAW DITCH CHECK & ADDED WATTLE DITCH CHECK		ARKANSAS STATE HIGHWAY COMMISSION
11-18-98	ADDED NOTES		
7-02-98	ADDED BALED STRAW FILTER BARRIER (E-2)		
7-20-95	REVISED SILT FENCE E-4 AND E-11	7-20-95	
7-15-94	REV. E-4 & E-11 MIN. 13" BURIED END OF FABRIC		
6-2-94	REVISED E-1, 4, 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	
DATE	REVISION	FILMED	

TEMPORARY EROSION CONTROL DEVICES

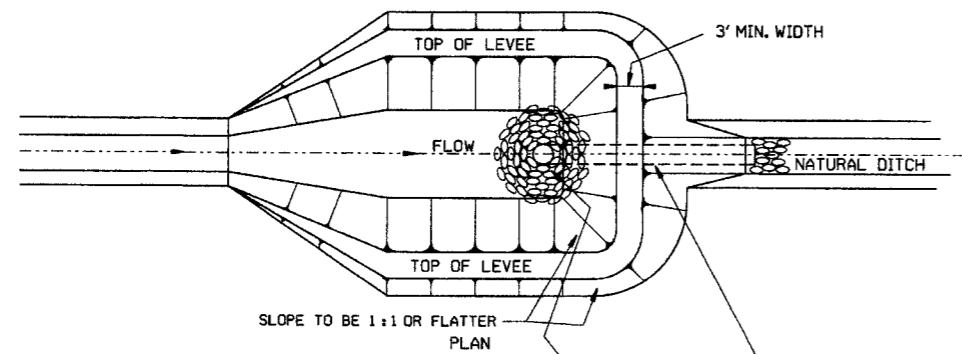
STANDARD DRAWING TEC-1



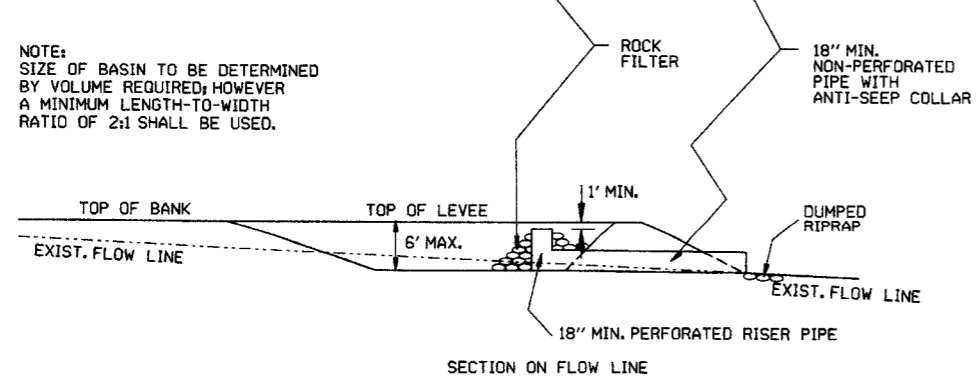
NOTE:
SIZE OF BASIN TO BE DETERMINED
BY VOLUME REQUIRED; HOWEVER
A MINIMUM LENGTH-TO-WIDTH
RATIO OF 2:1 SHALL BE USED.



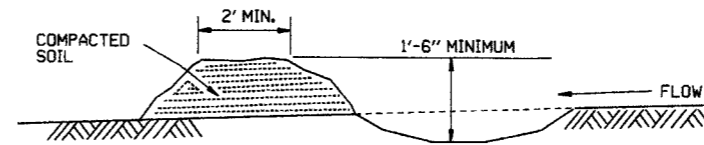
SEDIMENT BASIN WITH RIPRAP OUTLET (E-9)



NOTE:
SIZE OF BASIN TO BE DETERMINED
BY VOLUME REQUIRED; HOWEVER
A MINIMUM LENGTH-TO-WIDTH
RATIO OF 2:1 SHALL BE USED.

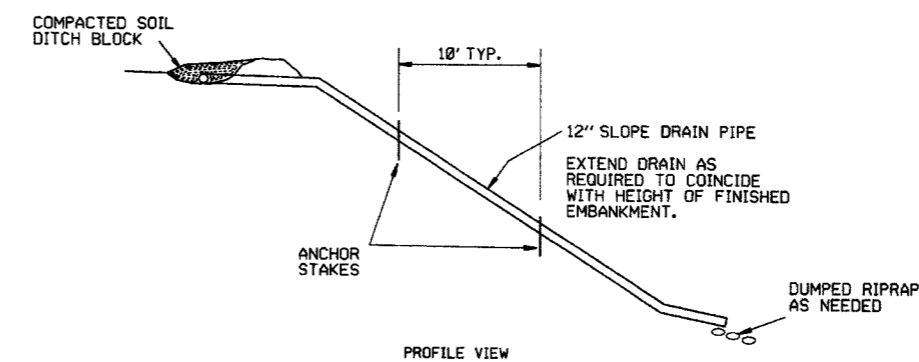
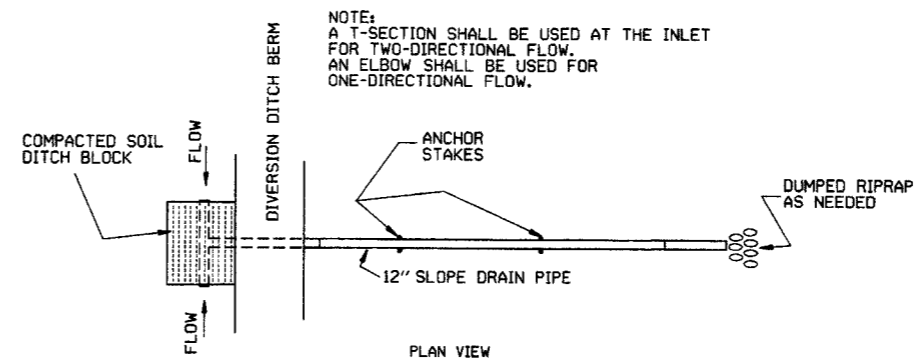


SEDIMENT BASIN WITH PIPE OUTLET (E-10)

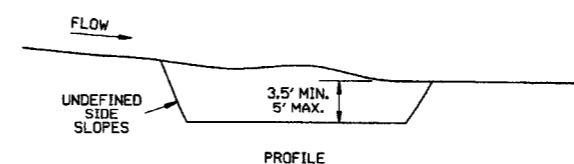
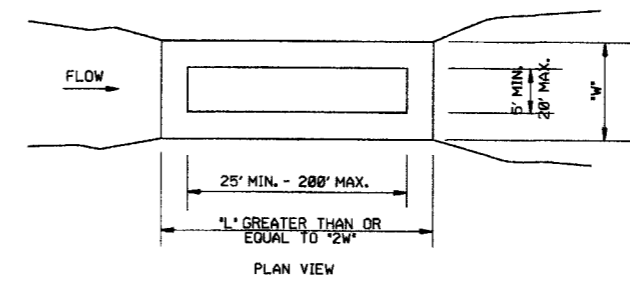


DIVERSION DITCH (E-8)

NOTE:
A T-SECTION SHALL BE USED AT THE INLET
FOR TWO-DIRECTIONAL FLOW.
AN ELBOW SHALL BE USED FOR
ONE-DIRECTIONAL FLOW.



SLOPE DRAIN (E-12)



SEDIMENT BASIN (E-14)

6-2-94	Revised E-8 & E-12; Added E-14 & Deleted E-13		
4-1-93	ISSUED		
DATE	REVISION		FILMED

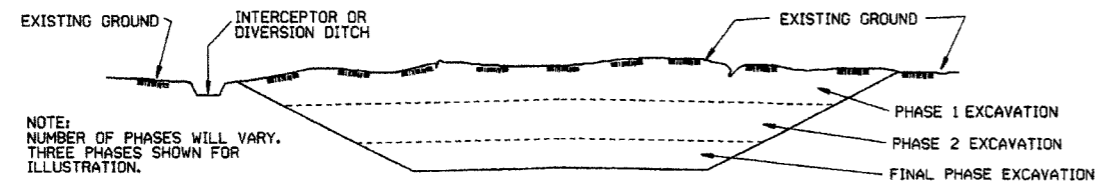
ARKANSAS STATE HIGHWAY COMMISSION
TEMPORARY EROSION
CONTROL DEVICES
STANDARD DRAWING TEC-2

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



NOTE:
NUMBER OF PHASES WILL VARY.
THREE PHASES SHOWN FOR
ILLUSTRATION.

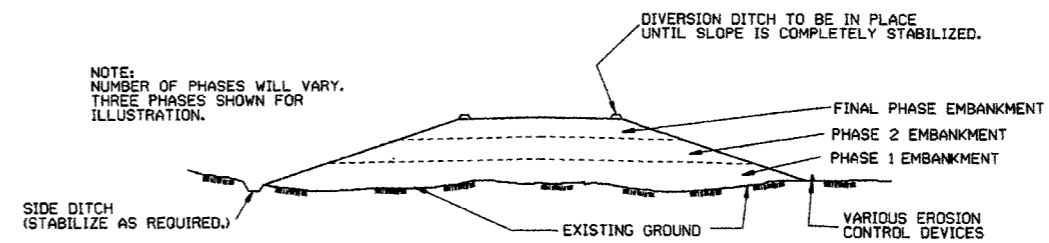
GENERAL NOTE

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



NOTE:
NUMBER OF PHASES WILL VARY.
THREE PHASES SHOWN FOR
ILLUSTRATION.

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.

ARKANSAS STATE HIGHWAY COMMISSION			
TEMPORARY EROSION CONTROL DEVICES			
STANDARD DRAWING TEC-3			
11-03-94	CORRECTED SPELLING		
6-2-94	Drawn & Issued		6-2-94
DATE	REVISION		FILMED

GENERAL NOTES:

STEEL LINE POSTS SHALL BE GALVANIZED, 7 FT. IN LENGTH.

TUBULAR END, CORNER, PULL, OR DIAGONAL BRACES MUST CONFORM TO THE DIMENSIONS AND WEIGHTS SPECIFIED ON STANDARD DRAWING WF-3 (CHAIN LINK).

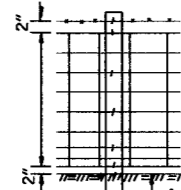
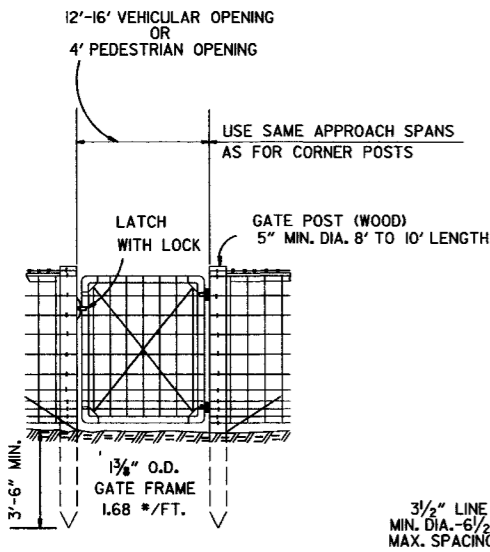
THE CONTRACTOR SHALL FURNISH AT LEAST 25% OF WOOD LINE POSTS OF 7' LENGTHS IN ORDER TO PROVIDE SUFFICIENT SET IN SOFT GROUND OR SMALL DEPRESSIONS.

GATE HINGES AND LATCHES WITH LOCKS TO BE OF A TYPE APPROVED BY THE ENGINEER. DRIVEWAY GATES, EITHER SINGLE 12' OR 16' OR DOUBLE 6' TO 8' OPENINGS OF THE SAME TYPE AS THE PEDESTRIAN GATE, SHALL BE INSTALLED ON THE RIGHT SIDE OF EACH THROUGH LANE ROAD AT LARGE CULVERTS OR BRIDGE CROSS FENCE FOR USE BY MAINTENANCE EQUIPMENT. LOCATION OF GATES TO BE SHOWN ON THE PLANS OR AS DESIGNATED BY THE ENGINEER.

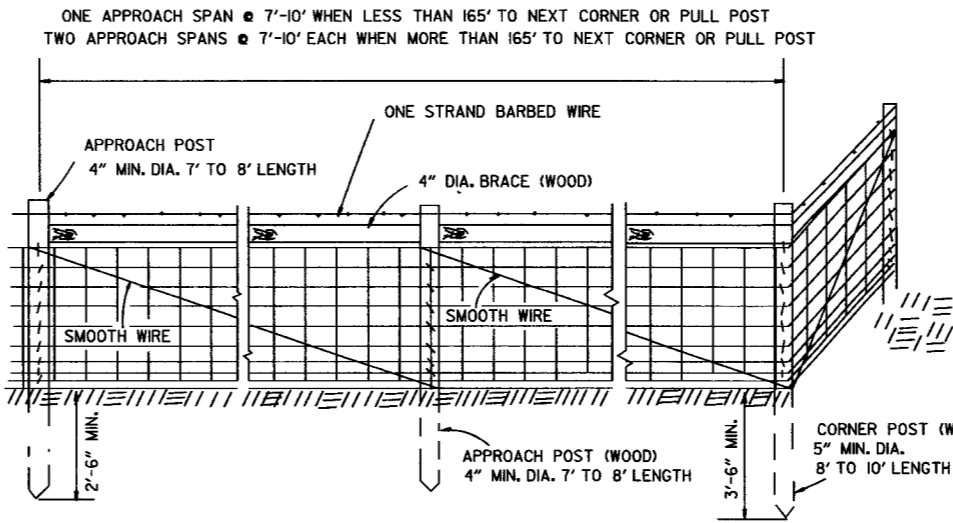
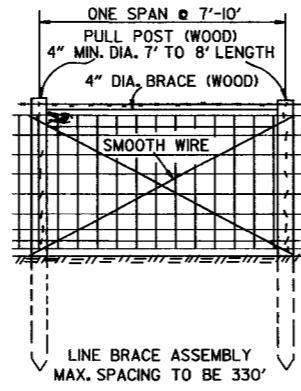
AT STREAM CROSSINGS THE FENCE SHALL NOT BE CONSTRUCTED ACROSS LARGE STREAMS. WHERE CLEARANCE IS SUFFICIENT FROM THE TOP OF BANK TO THE BRIDGE STRUCTURE, A CROSS CONNECTION SHALL BE CONSTRUCTED BETWEEN THE FENCE ON EACH SIDE OF THE ROAD, WHERE THE CLEARANCE IS NOT SUFFICIENT, THE FENCE SHALL BE TERMINATED WITH CROSS CONNECTIONS AND END POSTS ADJACENT TO THE BRIDGE ABUTMENTS OR CULVERT WINGWALLS.

SPLICE FOR WOVEN WIRE BETWEEN PULL POST SHALL BE BY THE "WESTERN UNION METHOD" AS DESCRIBED AS FOLLOWS: THE VERTICAL WIRES FOR EACH END OF THE FENCE FABRIC SHALL BE PLACED SIDE BY SIDE AND THE PROJECTING HORIZONTAL WIRES SHALL BE WRAPPED A MINIMUM OF 4 TIMES AROUND THE HORIZONTAL WIRES OF THE FIRST WEB.

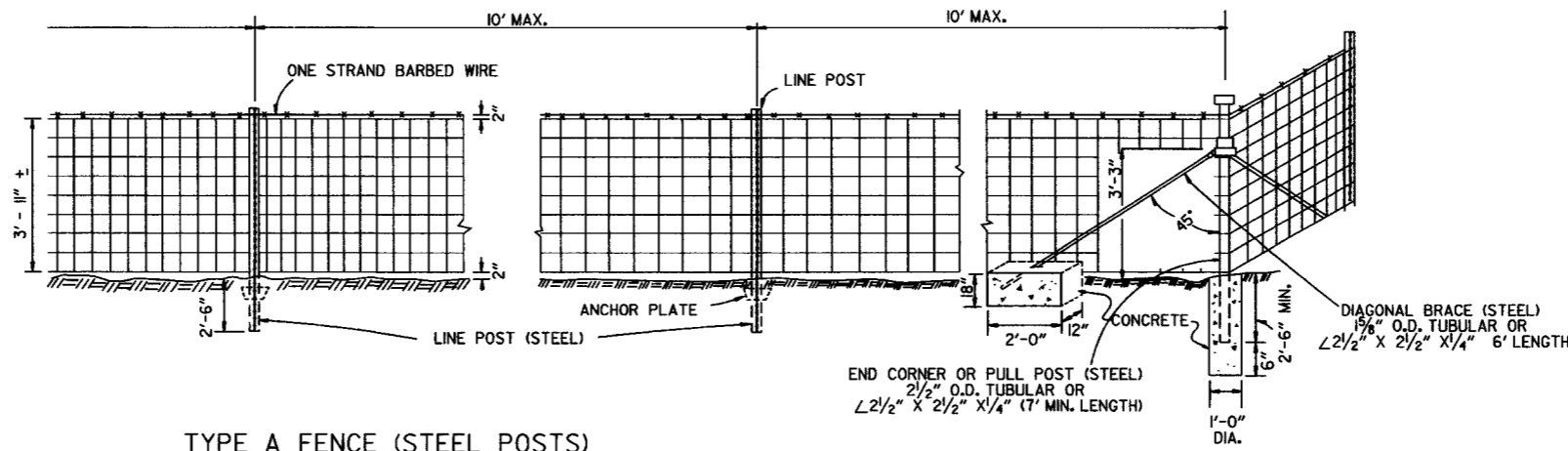
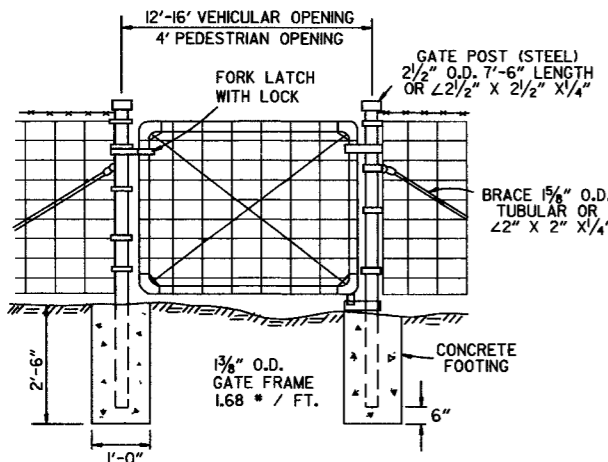
SPLICE FOR BARBED WIRE BETWEEN PULL POST ASSEMBLY SHALL BE BY THE "EYE METHOD": AS DESCRIBED AS FOLLOWS: THE ENDS OF THE BARBED WIRE SHALL BE BENT TO FORM A LOOP. THE LOOPS SHALL BE CONNECTED. AFTER THE LOOPS ARE CONNECTED THE ENDS OF THE WIRE SHALL BE WRAPPED AROUND THE PROJECTING WIRE A MINIMUM OF 4 TIMES FOR EACH WIRE LOOP.



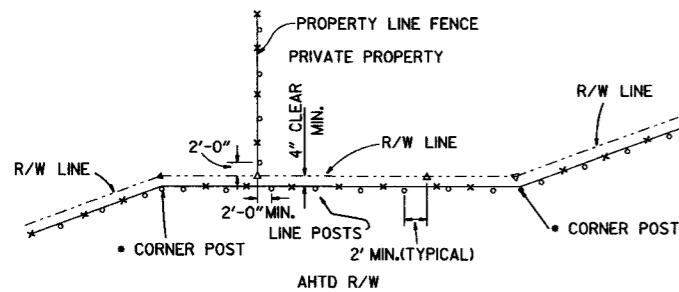
NOTE: STAPLE AT LEAST TOP, BOTTOM AND ALTERNATE WIRES OF WOVEN FABRIC FOR WOOD LINE POSTS.



TYPE A FENCE (WOOD POSTS)



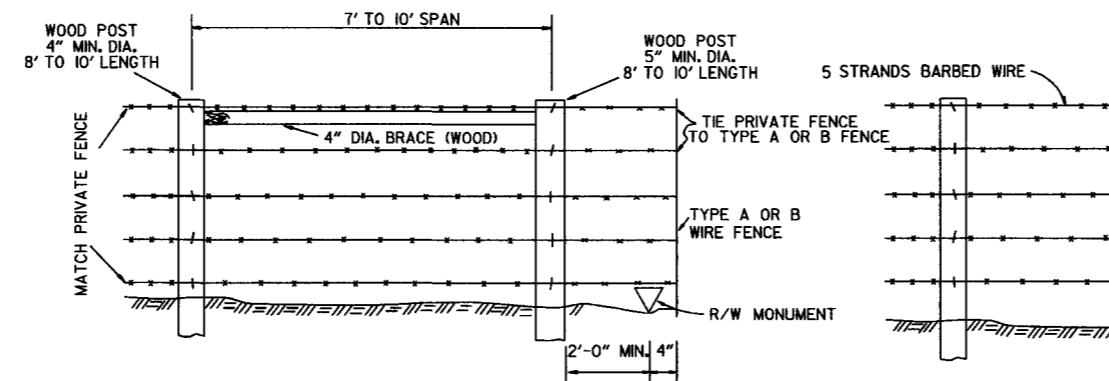
TYPE A FENCE (STEEL POSTS)



NOTE: RIGHT-OF-WAY MONUMENTS SHALL NOT BE DISTURBED BY FENCE CONSTRUCTION. CORNER POSTS SHALL BE CONSTRUCTED 2' FROM THE RIGHT-OF-WAY MONUMENT OR AS DIRECTED BY THE ENGINEER.

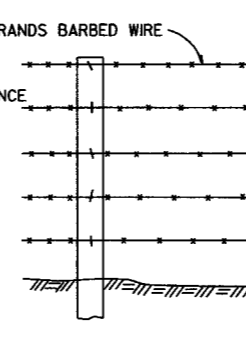
△ - R/W MONUMENTS
○ - FENCE POSTS

RIGHT-OF-WAY FENCE LOCATION



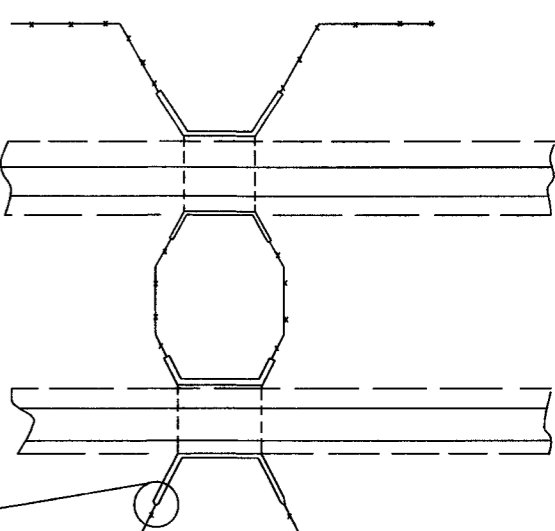
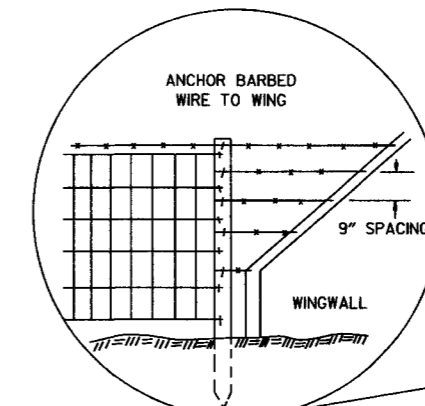
WHERE EXISTING PRIVATE FENCE CONSISTS OF STEEL POSTS, USE END POST ASSEMBLY AS SHOWN WITH TYPE A FENCE OR OTHER END POST ASSEMBLY AS APPROVED BY THE ENGINEER.

PRIVATE FENCE TERMINAL INSTALLATION



SPACING AND SIZE OF POSTS FOR TYPE B FENCE SHALL BE THE SAME AS TYPE A FENCE.

TYPE B FENCE



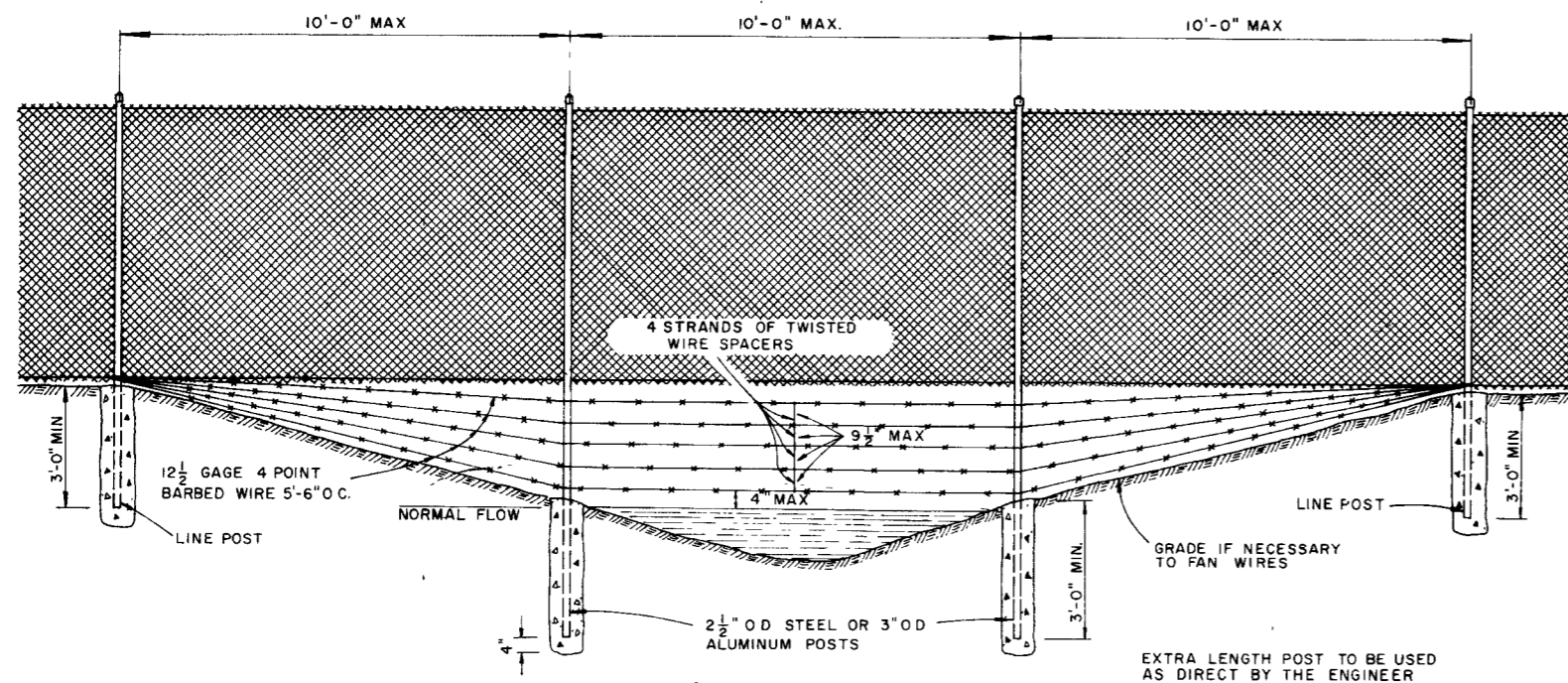
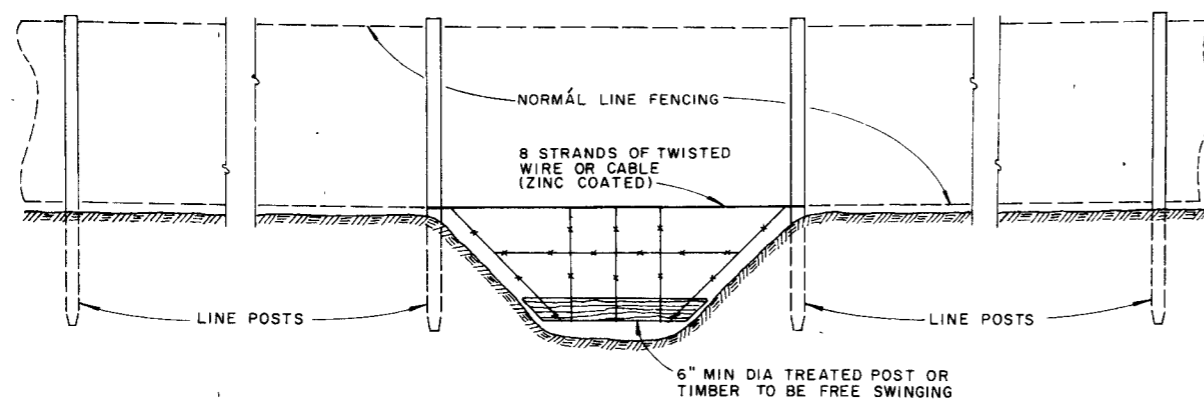
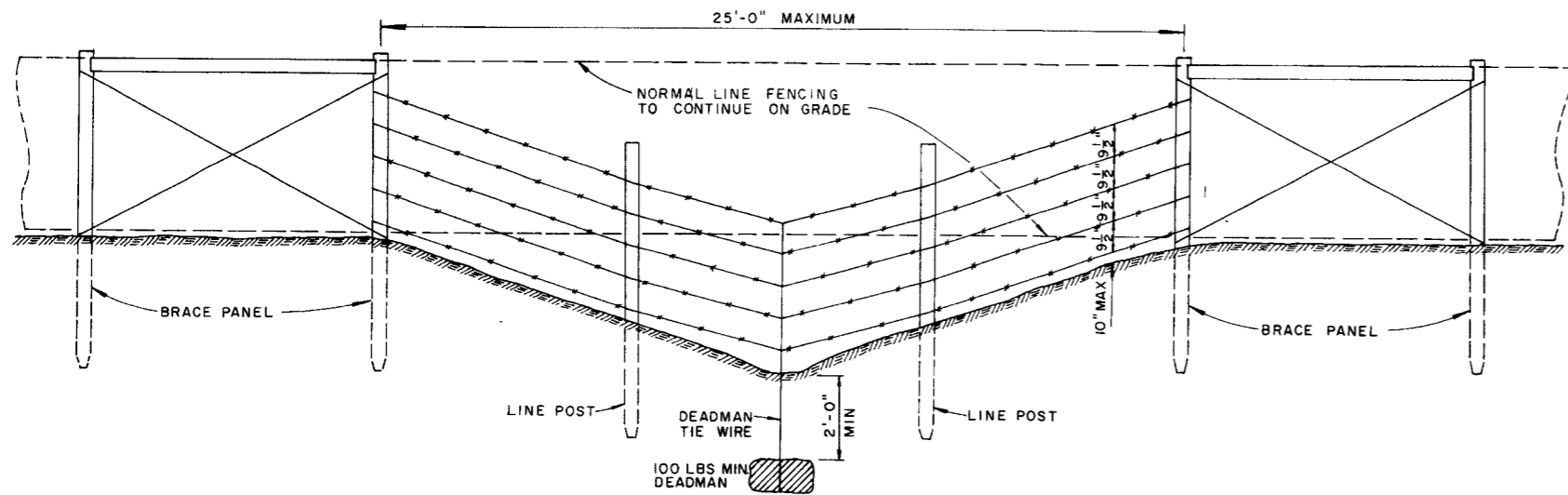
DETAIL OF FENCE CONSTRUCTION AT LARGE CULVERTS (5' IN HEIGHT AND OVER)

DATE	REVISION	DATE FILMED
8-22-02	REVISED GENERAL NOTES	
10-18-96	REVISED ASTM REF. TO AASHTO	
11-22-95	REVISED R-O-W LOCATION DETAIL	
6-2-94	ADDED CORNER POST NOTE	6-2-94
8-5-93	REVISED R-O-W LOCATION DETAIL	8-5-93
10-1-92	ADDED STAPLE NOTE	
8-2-90	REV'D PULL POST LENGTH	
11-30-89	DELETED CLASS CONC.	
7-15-88	ADDED SPLICE NOTES	
7-15-88	ADDED HEIGHT DIMENSION	
4-3-87	REVISED VARIOUS NOTES	
	AND GENERAL NOTES	
11-1-84	MAX. POST SPACING	
1-4-83	MIN. DIA. LINE POST	
10-2-72	REVISED & REDRAWN	

ARKANSAS STATE HIGHWAY COMMISSION

WIRE FENCE
TYPE A AND B

STANDARD DRAWING WF-1



GENERAL NOTES

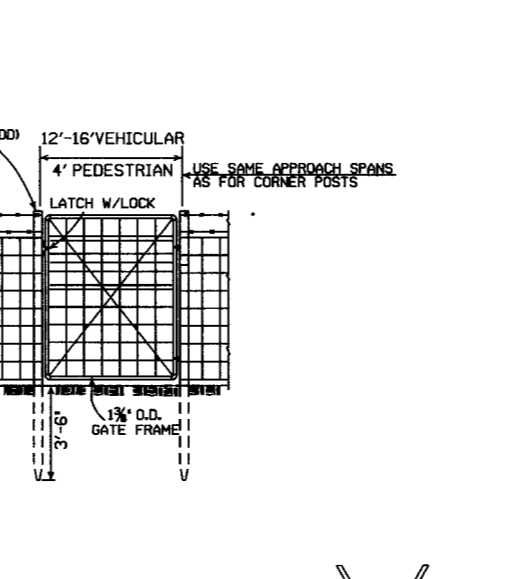
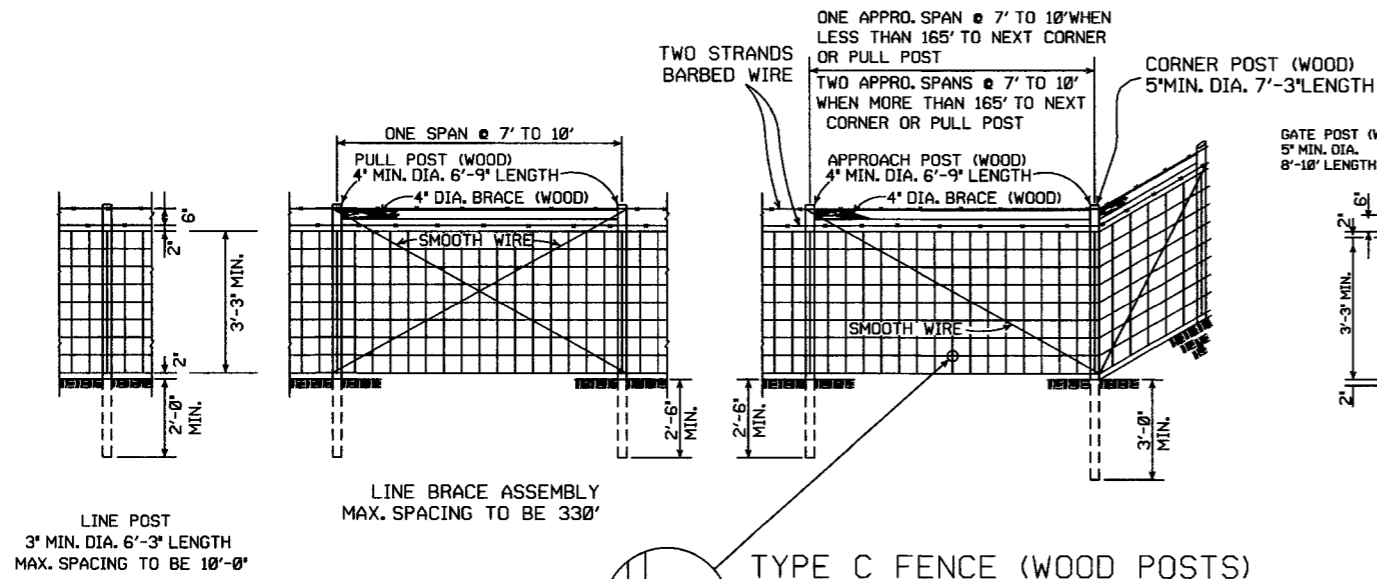
THESE INSTALLATIONS TO BE USED WHERE NORMAL FENCING INSTALLATION WOULD CAUSE THE COLLECTING OF DRIFT IN THE CHANNEL OR THE DEPRESSION WILL NOT PERMIT NORMAL INSTALLATION. INSTALLATIONS WILL BE MADE ONLY WHERE DIRECTED BY THE ENGINEER

WHEN A FENCE LINE APPROACHES A DITCH, GULLY OR DEPRESSION, THE LAST POST ON LEVEL GROUND SHALL BE PLACED CLOSE ENOUGH TO THE EDGE OF THE DROP OFF THAT THE FENCE MAY BE STRUNG TO THE POST IN THE DEPRESSION WITHOUT TOUCHING THE GROUND.

IN TERRAIN OF SUCH EXTREME IRREGULARITY THAT MINOR GRADING WILL NOT BE FEASIBLE, THE NORMAL FENCE SHALL CONTINUE ON GRADE AND THE GULLIES OR DEPRESSIONS TREATED BY AUXILIARY FENCES AS SHOWN.

PAYMENT FOR THE TYPE INSTALLATION USED WILL NOT BE MADE DIRECTLY BUT WILL BE INCLUDED IN THE CONTRACT UNIT PRICE BID FOR WIRE FENCE OR CHAIN LINK FENCE

			ARKANSAS STATE HIGHWAY COMMISSION
			WIRE FENCE WATER GAPS
			STANDARD DRAWING
			WF-2
4-20-79	REVISED TOP RAIL & TENSION WIRE	676-4-20-79	
10-2-72	REVISED & REDRAWN	529 10-2-72	
DATE	REVISION	DATE FILMD	

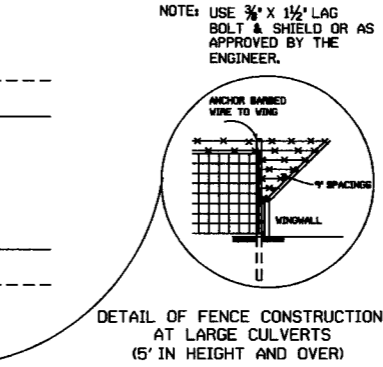
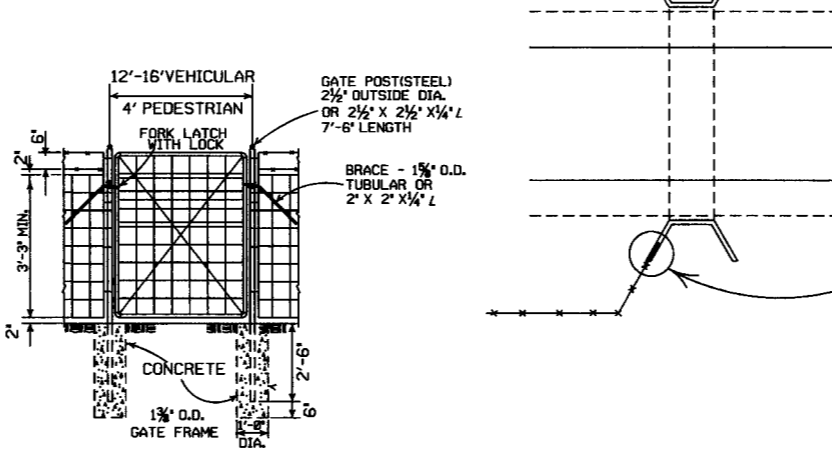
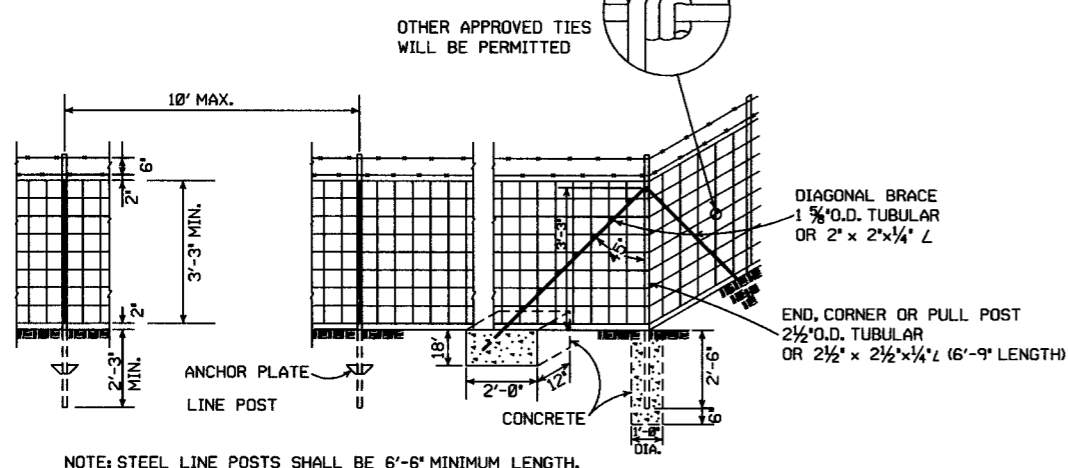


GENERAL NOTES:
 STEEL LINE POSTS SHALL BE PAINTED OR GALVANIZED. TUBULAR END, CORNER, PULL, OR DIAGONAL BRACES MUST CONFORM TO THE DIMENSIONS AND WEIGHTS SPECIFIED ON STANDARD DRAWING WF-3 (CHAIN LINK). APPROVED ALTERNATES ARE ACCEPTABLE.
 AN ACCEPTABLE TOLERANCE IN LENGTH OF TUBULAR OR WOODEN POSTS SHALL BE - 1\"/>

THE CONTRACTOR SHALL FURNISH AT LEAST 25% OF TIMBER LINE POSTS OF 7 FOOT LENGTHS IN ORDER TO PROVIDE SUFFICIENT SET IN SOFT GROUND OR SMALL DEPRESSIONS.

DRIVEWAY GATES, EITHER SINGLE 12' TO 16' OR DOUBLE 6' TO 8' OPENING OF THE SAME TYPE AS THE PEDESTRIAN GATE, SHALL BE INSTALLED ON THE RIGHT SIDE OF EACH THROUGH LANE ROAD AT LARGE CULVERTS OR BRIDGE CROSS FENCE, FOR USE OF MAINTENANCE EQUIPMENT. LOCATION OF GATES TO BE SHOWN ON PLANS OR AS DESIGNATED BY THE ENGINEER.

AT STREAM CROSSINGS, THE FENCE SHALL NOT BE CONSTRUCTED ACROSS LARGE STREAMS. WHERE CLEARANCE IS SUFFICIENT FROM THE TOP OF THE BANK TO THE BRIDGE STRUCTURE A CROSS CONNECTION SHALL BE CONSTRUCTED BETWEEN THE FENCE ON EACH SIDE OF THE ROAD. WHERE THE CLEARANCE IS NOT SUFFICIENT, THE FENCE SHALL BE TERMINATED WITH CROSS CONNECTIONS AND END POSTS ADJACENT TO BRIDGE ABUTMENTS OR CULVERT WINGWALLS.

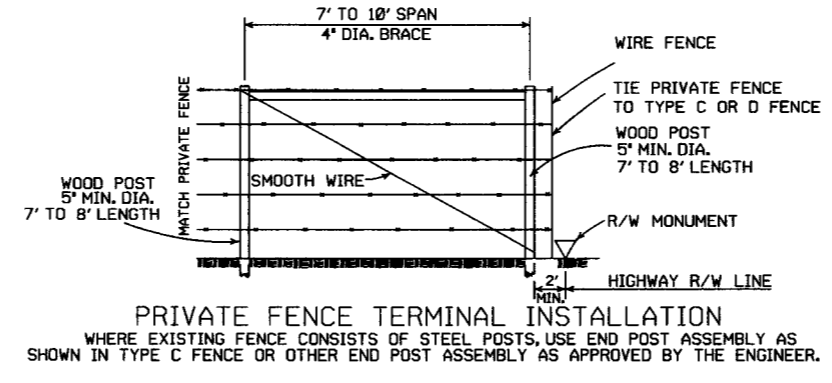
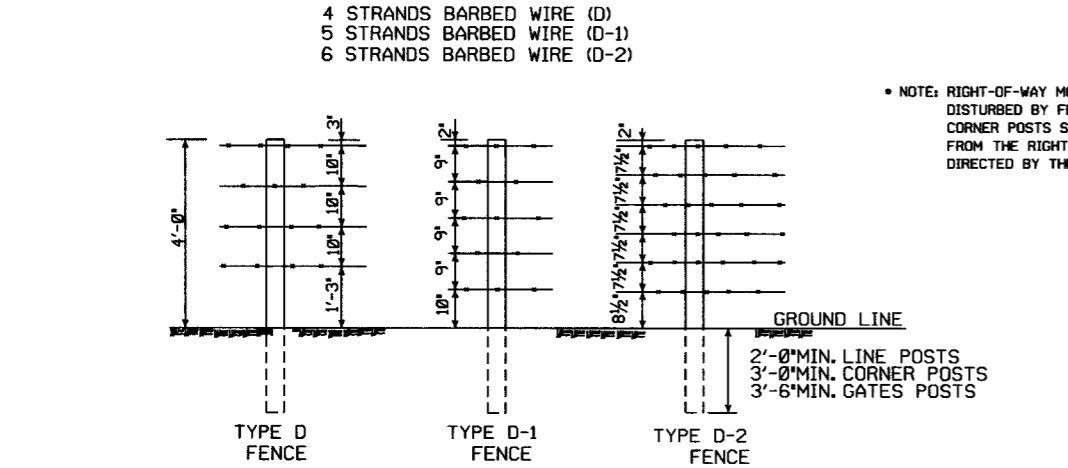
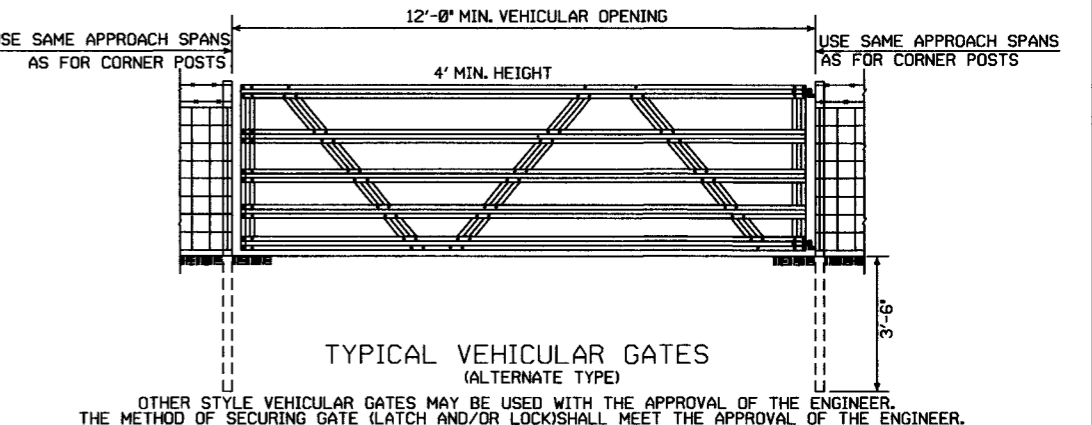
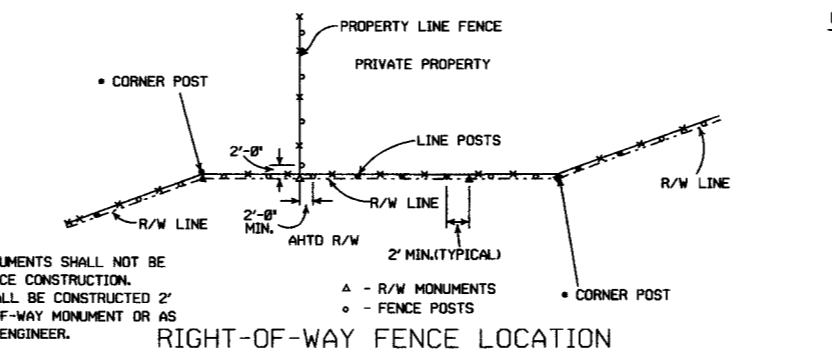


SPLICE FOR BARBED WIRE BETWEEN PULL POST ASSEMBLY SHALL BE BY THE "EYE METHOD" AS DESCRIBED AS FOLLOWS: THE ENDS OF THE BARBED WIRE SHALL BE BENT TO FORM A LOOP. THE LOOPS SHALL BE CONNECTED. AFTER THE LOOPS ARE CONNECTED THE ENDS OF THE WIRE SHALL BE WRAPPED AROUND THE PROJECTING WIRES A MINIMUM OF 4 TIMES FOR EACH WIRE LOOP.

SPLICE FOR WOVEN WIRE BETWEEN PULL POST SHALL BE BY THE "WESTERN UNION METHOD" AS DESCRIBED AS FOLLOWS: THE VERTICAL WIRES FOR EACH END OF THE FENCE FABRIC SHALL BE PLACED SIDE BY SIDE AND THE PROJECTING HORIZONTAL WIRES SHALL BE WRAPPED A MINIMUM OF 4 TIMES AROUND THE HORIZONTAL WIRES OF THE FIRST WEB.

STAPLE AT LEAST TOP, BOTTOM AND ALTERNATE WIRES OF WOVEN FABRIC FOR WOOD LINE POSTS.

TYPE C FENCE (STEEL POSTS)

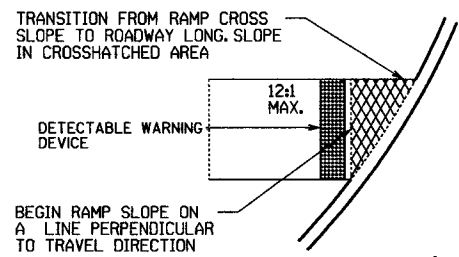
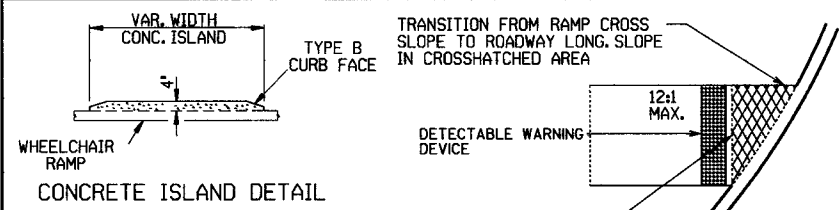


8-22-82	REVISED GENERAL NOTES	
10-18-96	REVISED AASHTO	
11-22-96	REVISED R-O-W LOCATION DETAIL	
6-2-94	REVISED BARB WIRE AND ADDED CORNER POST NOTES	6-2-94
8-5-93	REVISED R/W INSTALLATION FENCE	8-5-93
10-1-92	ADDED STAPLE NOTE	10-1-92
8-15-91	ADDED TYPE D-2 FENCE	8-15-91
11-30-89	DELETED CLASS CONCRETE	11-30-89
7-15-88	ADDED SPLICE NOTE	700-7-15-88
10-30-87	GENERAL REVISIONS	549-10-30-87
11-1-84	MAX. POST SPACING MIN. WIRE GAUGE	507-11-1-84
1-4-83	MIN. DIA. LINE POST	648-1-4-83
3-2-81	TOLERANCE FOR POST LENGTH	722-3-2-81
12-1-72	ADDED D-1 & FENCE INSTALLATION	564-12-1-72
10-2-72	REVISED AND REDRAWN	540-10-2-72
DATE	REVISION	FILMED

ARKANSAS STATE HIGHWAY COMMISSION
**WIRE FENCE
 TYPE C AND D**
 STANDARD DRAWING WF-4

NOTE: SPACING AND SIZE (EXCEPT LENGTH) OF POSTS, APPROACH SPANS, PULL POST ASSEMBLIES, AND CORNER BRACING FOR TYPE D FENCE SHALL CONFORM TO TYPE C FENCE. USE GALVANIZED STAPLES ON WOOD POSTS AND APPROVED FASTENERS ON STEEL POSTS.

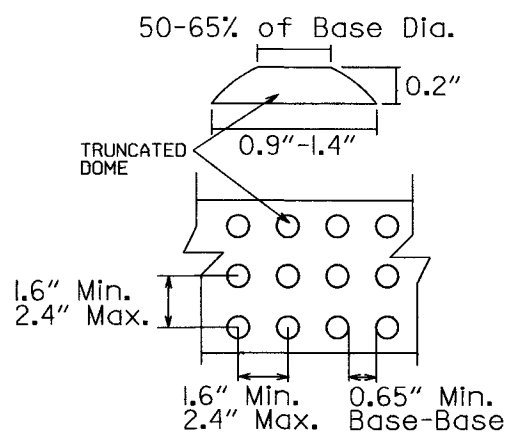
WHERE EXISTING FENCE CONSISTS OF STEEL POSTS, USE END POST ASSEMBLY AS SHOWN IN TYPE C FENCE OR OTHER END POST ASSEMBLY AS APPROVED BY THE ENGINEER.



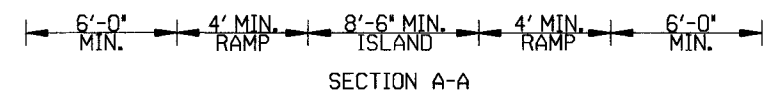
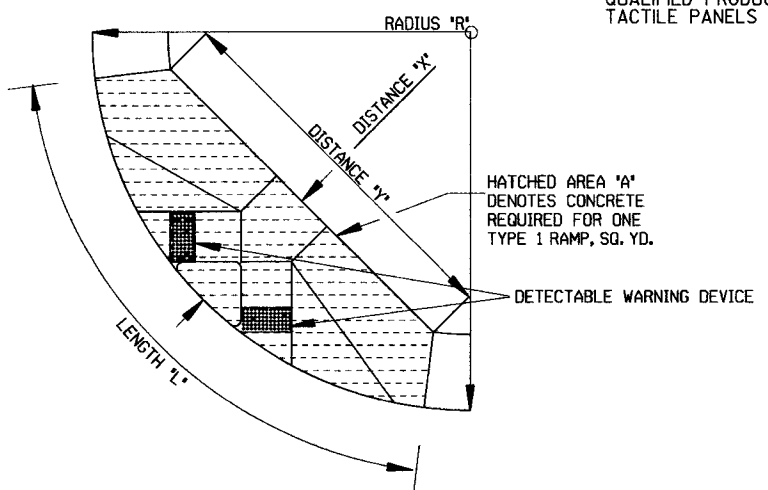
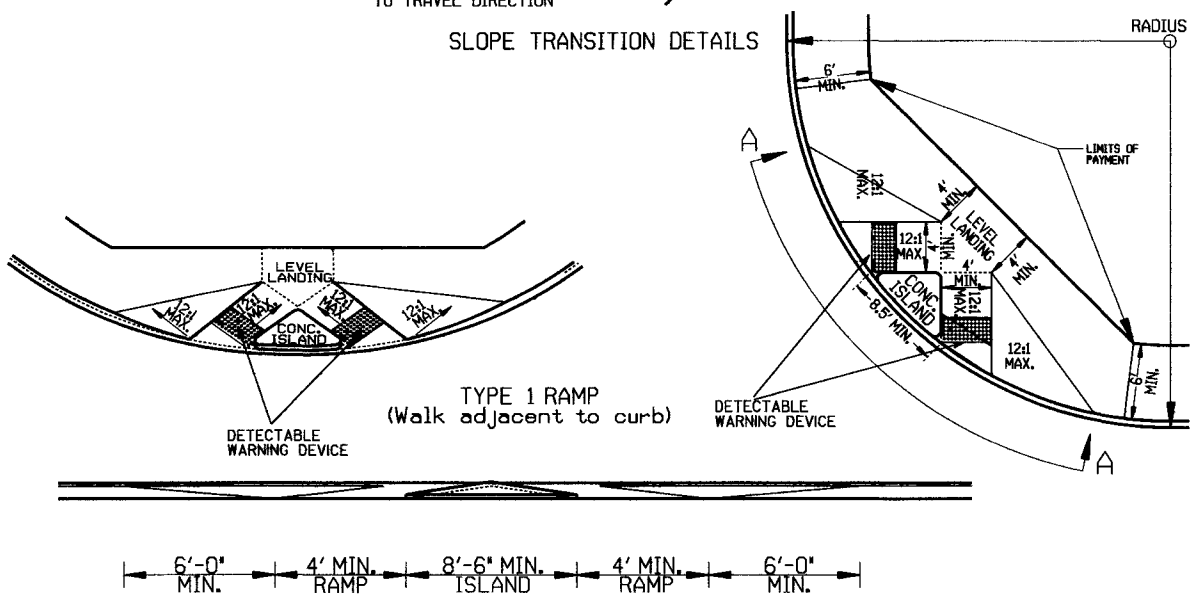
TYPE 1 RAMP DIMENSIONS AND QUANTITIES

RADIUS 'R'	DISTANCE 'X'	DISTANCE 'Y'	LENGTH 'L'	RAMP AREA 'A'
FEET	FEET	FEET	FEET	SQ. YD.
15	11.67	18.82	32.18	26.21
20	11.52	22.28	35.46	30.07
25	11.43	26.60	38.77	33.80
30	11.37	30.26	40.93	36.90
35	11.33	33.51	43.11	39.77
40	11.30	36.45	45.26	42.45
45	11.27	39.16	47.34	44.97
50	11.25	41.69	49.36	47.35
55	11.24	44.07	51.31	49.63
60	11.22	46.33	53.21	51.80

GENERAL NOTES FOR DETECTABLE WARNING DEVICES
THE DETECTABLE WARNING DEVICE SHALL BE LOCATED SO THAT THE NEAREST EDGE OF THE DEVICE IS 6 TO 8 INCHES FROM THE FACE OF THE CURB. TRUNCATED DOMES IN THE DETECTABLE WARNING SURFACE SHALL MEET THE REQUIREMENTS OF THE GEOMETRIC CONFIGURATION SHOWN. DOMES SHALL BE ALIGNED ON A SQUARE GRID IN THE PREDOMINANT DIRECTION OF TRAVEL TO PERMIT WHEELS TO ROLL BETWEEN DOMES. DETECTABLE WARNING DEVICE SHALL BE 24 INCHES IN THE DIRECTION OF TRAVEL AND EXTEND THE FULL WIDTH OF THE CURB RAMP OR FLUSH SURFACE. DETECTABLE WARNING DEVICE SHALL BE ON THE AHTD QUALIFIED PRODUCTS LIST FOR CAST-IN-PLACE TACTILE PANELS (ADA DETECTABLE WARNING).



DETECTABLE WARNING DEVICE DETAIL



NOTE: THE CROSS SLOPE OF THE RAMPS, LEVEL LANDINGS, AND SIDEWALKS SHALL NOT EXCEED 2.0% UNLESS REQUIRED TO MATCH STREET LONGITUDINAL GRADE.

GENERAL NOTES:

IN NEW CONSTRUCTION, UNLESS OTHERWISE INDICATED ON THE PLANS, WHEELCHAIR RAMPS ARE TO BE PROVIDED AT ALL CORNERS OF CURBED STREET INTERSECTIONS AND MID-BLOCK CROSSWALK LOCATIONS. IN ALTERATIONS WHEELCHAIR RAMPS ARE TO BE PROVIDED AT CURBED STREET INTERSECTIONS WITH PEDESTRIAN TRAFFIC AND MID-BLOCK CROSSWALK LOCATIONS. THE LENGTH OF THE RAMP SHALL BE SUCH THAT THE SLOPE DOES NOT EXCEED 12:1. THE SURFACE TEXTURE OF THE RAMP SHALL CONFORM TO A CLASS 6 FINISH ACCORDING TO SECTION 802.19. THE NORMAL GUTTER GRADE SHALL BE MAINTAINED THROUGH THE AREA OF THE RAMP. ALL PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION. THE MINIMUM THICKNESS OF THE RAMP, WALK, & LANDING SHALL BE 4". THE MINIMUM WIDTH OF THE RAMPS SHALL BE THE WALK WIDTH OR 36", WHICHEVER IS GREATER. RAMPS SHALL BE MODIFIED AS NECESSARY TO INSURE THAT THEY ARE PARALLEL TO A LINE DRAWN FROM THE CENTER OF ONE RAMP TO THE CENTER OF THE RAMP ON THE OPPOSITE SIDE OF THE INTERSECTION. THE DIMENSIONS AND QUANTITIES SHOWN ON THIS DRAWING ARE FOR A 90° INTERSECTION ONLY. DIMENSIONS AND QUANTITIES FOR SKEWED INTERSECTIONS WILL VARY, AND ARE TO BE DETERMINED BY THE ENGINEER.

RAMP SELECTION CRITERIA

CHOICE	TYPE	DESCRIPTION
FIRST CHOICE	TYPE 1	CORNER LOCATIONS WITH THE WALK ADJACENT TO THE CURB (BOTH NEW CONSTRUCTION AND ALTERATIONS).
	TYPE 2	CORNER LOCATIONS WITH THE WALK OFFSET FROM THE CURB A DISTANCE INSUFFICIENT TO ALLOW THE REQUIRED RAMP SLOPE (BOTH NEW CONSTRUCTION AND ALTERATIONS).
	TYPE 3	CORNER LOCATIONS WITH THE WALK OFFSET FROM THE CURB A DISTANCE SUFFICIENT TO ALLOW THE REQUIRED RAMP SLOPE (BOTH NEW CONSTRUCTION AND ALTERATIONS).
	TYPE 4	TANGENT LOCATIONS (BOTH NEW CONSTRUCTION AND ALTERATIONS).
SECOND CHOICE	TYPE 5	TANGENT LOCATIONS (ALTERATIONS ONLY).
THIRD CHOICE	TYPE 6	CORNER LOCATIONS (ALTERATIONS ONLY). THIS RAMP MAY BE USED ONLY IF THE TYPE 5 RAMPS CANNOT BE PLACED AT THE ENDS OF THE RADIUS.
FOURTH CHOICE		IF SITE CONSTRAINTS PREVENT THE CONSTRUCTION OF ANY OF THE TYPES LISTED, THEN AND ONLY THEN CAN THE 12:1 MAX. SLOPE ON THE RAMP BE EXCEEDED TO PROVIDE ACCESS TO THE STREET LEVEL (ALTERATIONS ONLY). THE SLOPE CAN BE STEEPENED TO A 10:1 MAX. FOR A MAX. LENGTH OF 5' OR A 8:1 MAX. FOR A MAX. LENGTH OF 2'. SLOPES STEEPER THAN 8:1 ARE NOT ALLOWED UNDER ANY CIRCUMSTANCES.

NOTE: IN ALTERATIONS, THE SELECTION OF THE TYPE OF WHEELCHAIR RAMP TO BE CONSTRUCTED SHALL BE BASED ON THE AMOUNT OF RIGHT-OF-WAY AVAILABLE, AND ON THE PRESENCE OF OTHER SITE CONSTRAINTS (UTILITIES, BUILDINGS, ETC.). THE TABLE ABOVE LISTS THE ORDER IN WHICH THE RAMPS ARE TO BE CONSIDERED. AN ALTERATION IS DEFINED AS A PROJECT THAT CHANGES OR AFFECTS THE USE OF A PEDESTRIAN PATHWAY (OVERLAYS, SIGNALIZATION PROJECTS, ETC.) BUT DOES NOT REQUIRE THE PURCHASE OF ADDITIONAL RIGHT-OF-WAY. ALL PROJECTS THAT REQUIRE THE PURCHASE OF ADDITIONAL RIGHT-OF-WAY WILL USUALLY BE CONSIDERED NEW CONSTRUCTION FOR THE PURPOSES OF THE CHART ABOVE.

DATE	REVISION	DATE FILM
11-10-05	REVISED TO NEW SIDEWALK POLICY	
10-9-03	REVISED GEN. NOTES & ADDED NOTE	
4-10-03	REV. DETECTABLE WARNING DEVICES	
8-22-02	ADD DETECTABLE WARNING DEVICES	
3-30-00	ADD SLOPE TRANS. & REV. ISL. DIMS.	
1-18-98	REVISED NOTES	
8-12-98	REVISED TEXTURE	
7-02-98	REDRAWN & REISSUED	
10-18-96	CORRECTED DIMENSIONS	10-18-96
5-24-90	FROM 10:1 MAX. SLOPE	5-24-90
7-15-88	ADJUSTED MAX. SLOPE	652-7-15-88
7-14-86	INCL. "CONC. ISLD." IN PAY ITEM	
6-02-76	ISSUED 2-1/2	299-7-28-76
	DATE	REVISION

ARKANSAS STATE HIGHWAY COMMISSION

WHEELCHAIR RAMPS
NEW CONSTRUCTION
AND ALTERATIONS

STANDARD DRAWING WR-1

