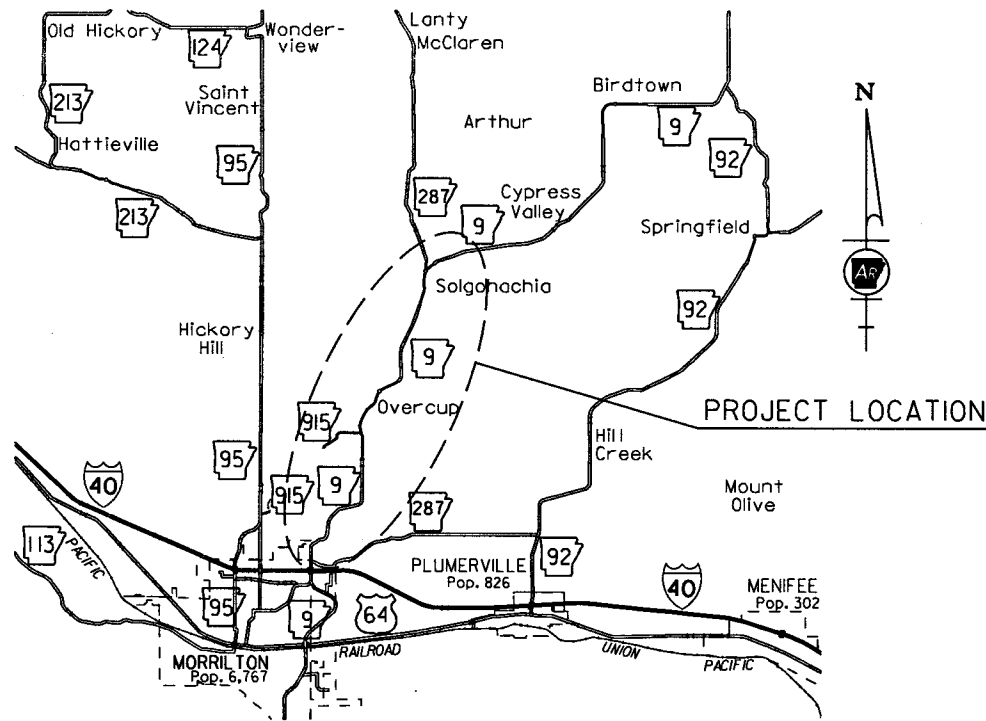




VICINITY MAP

ARKANSAS DEPARTMENT OF TRANSPORTATION
CONSTRUCTION PLANS FOR STATE HIGHWAY

**I-40 - SOLGOHACHIA
(SAFETY IMPVTS.) (S)**

CONWAY COUNTY
ROUTE 9 SECTION 8

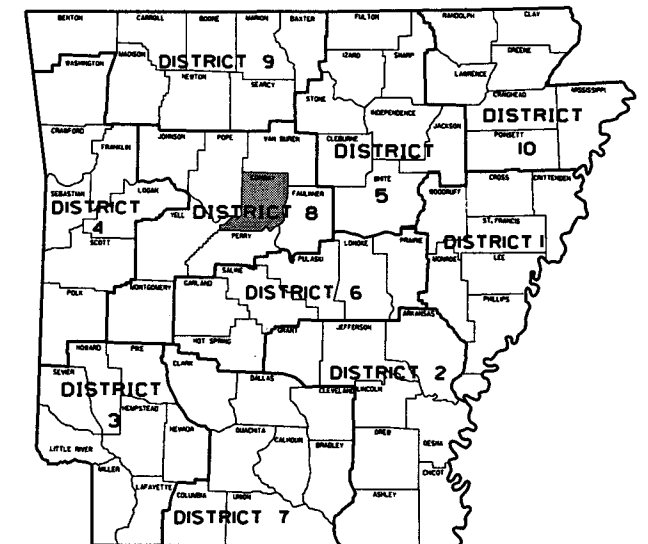
FED. AID PROJECT HSIP-0015(27)

JOB 080494

NOT TO SCALE

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
						JOB NO. 080494	1	208

(2) I-40 - SOLGOHACHIA (SAFETY IMPVTS.) (S)



ARK. HWY. DIST. NO. 8

DESIGN TRAFFIC DATA

DESIGN YEAR.....2038
2018 ADT.....5000
2038 ADT.....7000
2038 DHV.....770
DIRECTIONAL DISTRIBUTION.....0.60
TRUCKS.....12%
AVERAGE RUNNING SPEED.....55 MPH

STA. 280+87.00
END SITE 4

STA. 237+50.00
BEGIN SITE 4
L.M. 4.74

STA. 203+52.00
END SITE 3

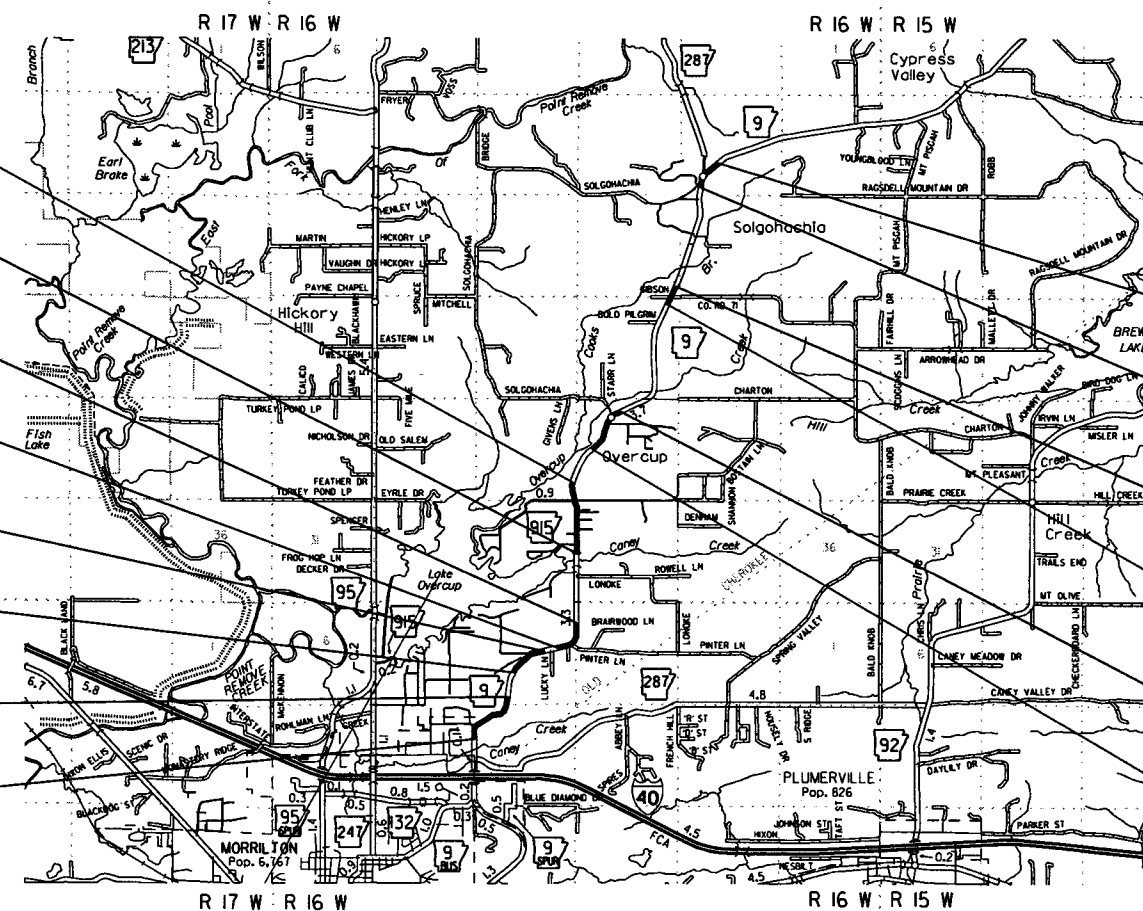
STA. 186+27.00
BEGIN SITE 3
L.M. 3.75

STA. 176+50.00
END SITE 2

STA. 158+08.00
BEGIN SITE 2
L.M. 3.22

STA. 145+64.00
END SITE 1

STA. 113+85.00
BEGIN JOB 080494
BEGIN SITE 1
L.M. 2.37



STA. 469+83.00
END SITE 7
END JOB 080494

STA. 455+07.00
BEGIN SITE 7
L.M. 8.88

STA. 400+30.00
END SITE 6

STA. 391+70.00
BEGIN SITE 6
L.M. 7.67

STA. 323+62.00
END SITE 5

STA. 299+96.00
BEGIN SITE 5
L.M. 5.94



APPROVED



9-17-18
DEPUTY DIRECTOR
AND CHIEF ENGINEER

BEGIN PROJECT	MID-POINT OF PROJECT	END PROJECT
LATITUDE 35° 10' 46" N LONGITUDE 92° 43' 04" W	LATITUDE 35° 13' 10" N LONGITUDE 92° 41' 51" W	LATITUDE 35° 15' 39" N LONGITUDE 92° 40' 24" W

GROSS LENGTH OF PROJECT	15785.00	FEET OR	2.990	MILES
NET ROADWAY	15785.00		2.990	
NET BRIDGES	0.00		0.000	
NET PROJECT	15785.00		2.990	

10/17/2018 R080494.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
09-27-18				6	ARK.			
10-18-18						JOB NO. 080494	2	208
2 INDEX OF SHEETS, STD. DRAWINGS, GOV. SPECS., & GENL. NOTES								



SHEET NO.	TITLE
1	TITLE SHEET
2	INDEX OF SHEETS, STANDARD DRAWINGS, GOVERNING SPECIFICATIONS, AND GENERAL NOTES
3 - 6	TYPICAL SECTIONS OF IMPROVEMENT
7 - 10	SPECIAL DETAILS
11 - 45	TEMPORARY EROSION CONTROL DETAILS
46 - 73	MAINTENANCE OF TRAFFIC DETAILS
74	PERMANENT PAVEMENT MARKING DETAILS
75 - 81	QUANTITIES
82	SUMMARY OF QUANTITIES AND REVISIONS
83 - 93	SURVEY CONTROL DETAILS
94 - 110	PLAN AND PROFILE SHEETS
111 - 208	CROSS SECTIONS

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

GOVERNING SPECIFICATIONS

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

NUMBER	TITLE
ERRATA	ERRATA FOR THE BOOK OF STANDARD SPECIFICATIONS
FHWA-1273	REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS
FHWA-1273	SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - NOTICE TO CONTRACTORS
FHWA-1273	SUPPLEMENT - SPECIFIC EQUAL EMPLOYMENT OPPORTUNITY RESPONSIBILITIES (23 U.S.C. 140)
FHWA-1273	SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - GOALS AND TIMETABLES
FHWA-1273	SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - FEDERAL STANDARDS
FHWA-1273	SUPPLEMENT - 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
110-1	PROTECTION OF WATER QUALITY AND WETLANDS
303-1	AGGREGATE BASE COURSE
400-1	TACK COATS
400-4	DESIGN AND QUALITY CONTROL OF ASPHALT MIXTURES
400-5	PERCENT AIR VOIDS FOR ACHM MIX DESIGNS
400-6	LIQUID ANTI-STRIP ADDITIVE
410-1	CONSTRUCTION REQUIREMENTS AND ACCEPTANCE OF ASPHALT CONCRETE PLANT MIX COURSES
604-1	RETROREFLECTIVE SHEETING FOR TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES
605-1	CONCRETE DITCH PAVING
606-1	PIPE CULVERTS FOR SIDE DRAINS
620-1	MULCH COVER
634-1	CURBING
JOB 080494	BIDDING REQUIREMENTS AND CONDITIONS
JOB 080494	BROADBAND INTERNET SERVICE FOR ASPHALT CONCRETE PLANT
JOB 080494	BROADBAND INTERNET SERVICE FOR FIELD OFFICE
JOB 080494	CARGO PREFERENCE ACT REQUIREMENTS
JOB 080494	CONSTRUCTION IN SPECIAL FLOOD HAZARD AREAS
JOB 080494	CULTURAL RESOURCES MONITORING AND RESTRAINING CONDITION
JOB 080494	DELAY IN RIGHT OF WAY OCCUPANCY
JOB 080494	DISADVANTAGED BUSINESS ENTERPRISE BIDDER'S RESPONSIBILITIES
JOB 080494	FLEXIBLE BEGINNING OF WORK - CALENDAR DAY CONTRACT
JOB 080494	GOALS FOR DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION
JOB 080494	MANDATORY ELECTRONIC CONTRACT
JOB 080494	MANDATORY ELECTRONIC DOCUMENT SUBMITTAL
JOB 080494	PARTNERING REQUIREMENTS
JOB 080494	PERCENT WITHIN LIMITS/PAVEMENT SMOOTHNESS
JOB 080494	PLASTIC PIPE
JOB 080494	PROSECUTION AND PROGRESS WITH BID SCHEDULE
JOB 080494	RUMBLE STRIPS
JOB 080494	SETTLEMENT AGREEMENTS
JOB 080494	SHORING FOR CULVERTS
JOB 080494	SITE USE (A+C METHOD) - CALENDAR DAY CONTRACT
JOB 080494	SOIL STABILIZATION
JOB 080494	STORM WATER POLLUTION PREVENTION PLAN
JOB 080494	SUBMISSION OF ASPHALT CONCRETE HOT MIX ACCEPTANCE TEST RESULTS
JOB 080494	UTILITY ADJUSTMENTS
JOB 080494	VALUE ENGINEERING
JOB 080494	WARM MIX ASPHALT

ROADWAY STANDARD DRAWINGS

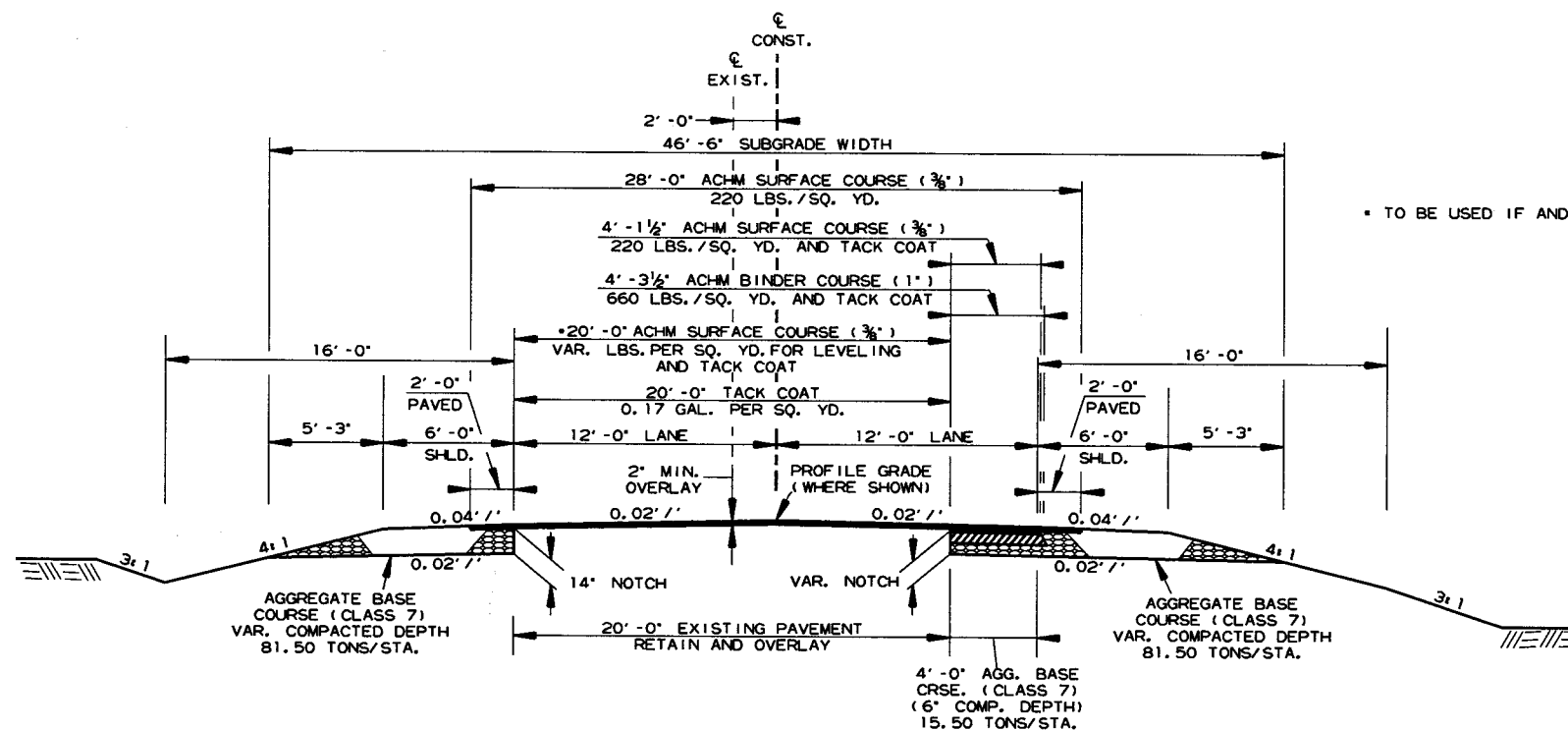
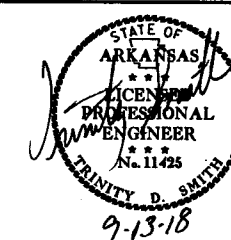
DRWG.NO.	TITLE	DATE
CDP-1	CONCRETE DITCH PAVING	12-08-16
CG-1	CURBING DETAILS	11-29-07
FES-1	FLARED END SECTION	10-18-96
FES-2	FLARED END SECTION	10-18-96
FPC-9	DETAILS OF DROP INLETS & JUNCTION BOXES	11-16-01
FPC-9S	DETAILS OF DROP INLET & JUNCTION BOX (TYPE ST)	07-26-12
MB-1	MAILBOX DETAILS	11-18-04
PCC-1	CONCRETE PIPE CULVERT FILL HEIGHTS & BEDDING	02-27-14
PCM-1	METAL PIPE CULVERT FILL HEIGHTS & BEDDING	02-27-14
PCP-1	PLASTIC PIPE CULVERT (HIGH DENSITY POLYETHYLENE)	02-27-14
PCP-2	PLASTIC PIPE CULVERT (PVC F949)	02-27-14
PM-1	PAVEMENT MARKING DETAILS	06-01-17
PU-1	DETAILS OF PIPE UNDERDRAIN	12-08-16
SE-2	TABLES AND METHOD OF SUPERELEVATION FOR TWO-WAY TRAFFIC	10-18-96
SI-1	DETAILS OF SPECIAL ITEMS	09-12-13
TC-1	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION	04-13-17
TC-2	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION	09-02-15
TC-3	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION	09-02-15
TEC-1	TEMPORARY EROSION CONTROL DEVICES	11-16-17
TEC-2	TEMPORARY EROSION CONTROL DEVICES	06-02-94
TEC-3	TEMPORARY EROSION CONTROL DEVICES	11-03-94
WF-2	WIRE FENCE WATER GAPS	04-20-79
WF-4	WIRE FENCE TYPE C AND D	08-22-02

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 23 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. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	080494		3	208

2 TYPICAL SECTIONS OF IMPROVEMENT



2 LANE NOTCH & WIDENING

STA. 113+85.00 - STA. 119+35.00	STA. 278+65.00 - STA. 280+87.00
STA. 122+11.00 - STA. 135+82.00	STA. 299+96.00 - STA. 316+60.00
STA. 140+20.00 - STA. 145+64.00	STA. 318+75.00 - STA. 323+62.00
STA. 158+08.00 - STA. 163+35.00	STA. 391+70.00 - STA. 393+35.00
STA. 173+65.00 - STA. 176+50.00	STA. 398+65.00 - STA. 400+30.00
STA. 186+27.00 - STA. 191+11.00	STA. 455+07.00 - STA. 459+05.00
STA. 198+55.00 - STA. 203+52.00	STA. 464+65.00 - STA. 465+40.00
STA. 237+50.00 - STA. 239+15.00	STA. 467+10.00 - STA. 469+83.00

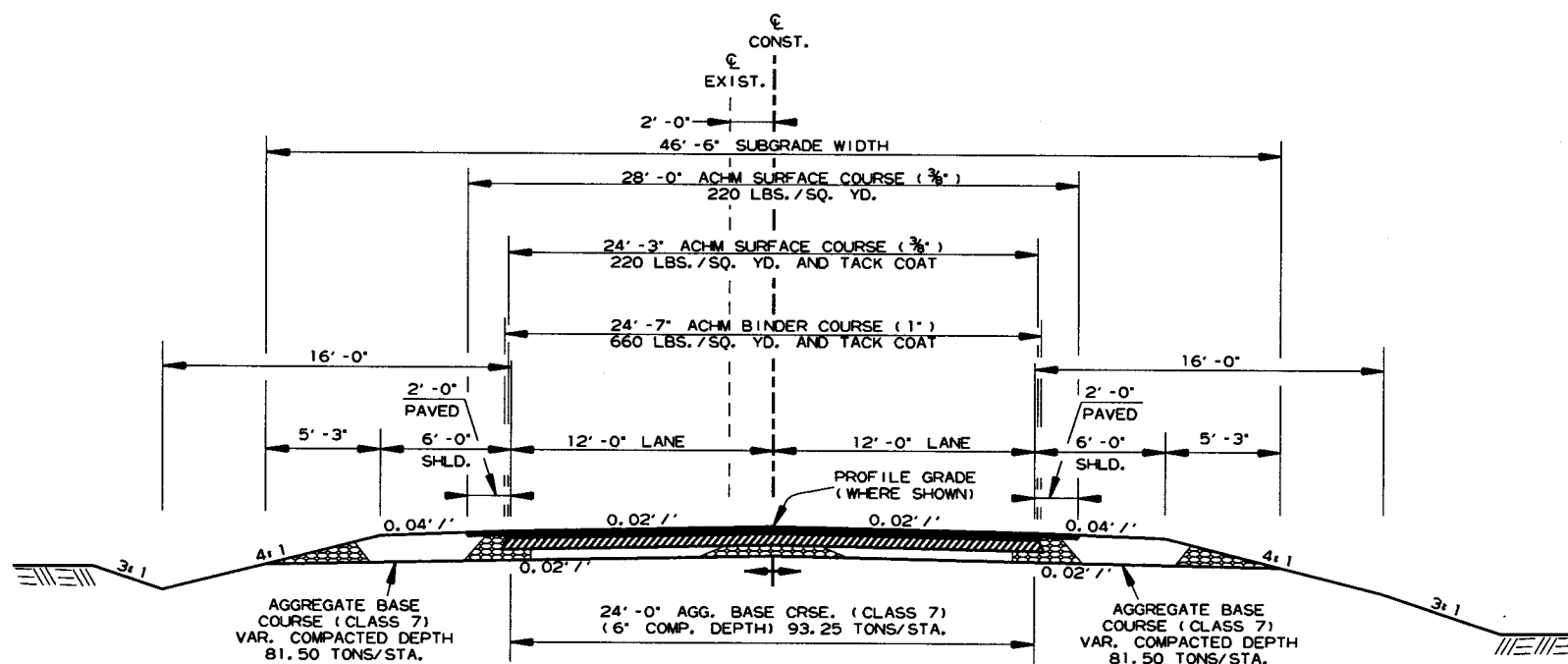
NOTES:
THE THICKNESS OF AGGREGATE BASE COURSE SHALL BE WITHIN PLUS OR MINUS ONE INCH OF THE PLAN THICKNESS SHOWN. THE CONTRACTOR WILL CORRECT ANY DEFICIENT THICKNESS THAT DOES NOT MEET TOLERANCE INDICATED. PAYMENT WILL NOT BE MADE FOR MATERIAL PLACED IN EXCESS OF THE TOLERANCE INDICATED.

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

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

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.

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



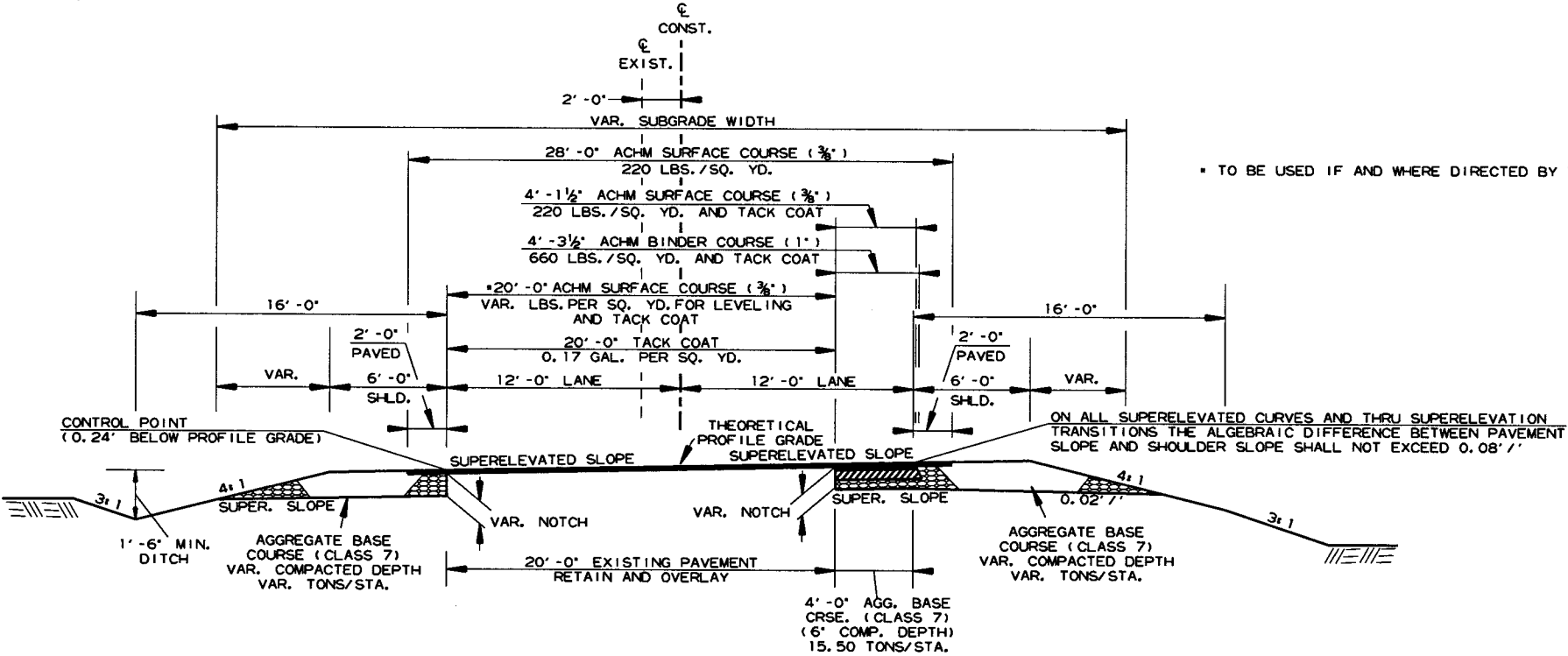
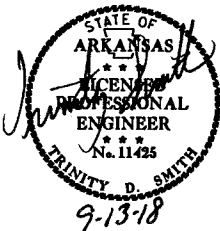
2 LANE FULL DEPTH

STA. 119+35.00 - STA. 121+11.00	STA. 135+82.00 - STA. 140+20.00
STA. 191+11.00 - STA. 198+55.00	STA. 316+60.00 - STA. 318+75.00
STA. 465+40.00 - STA. 467+10.00	

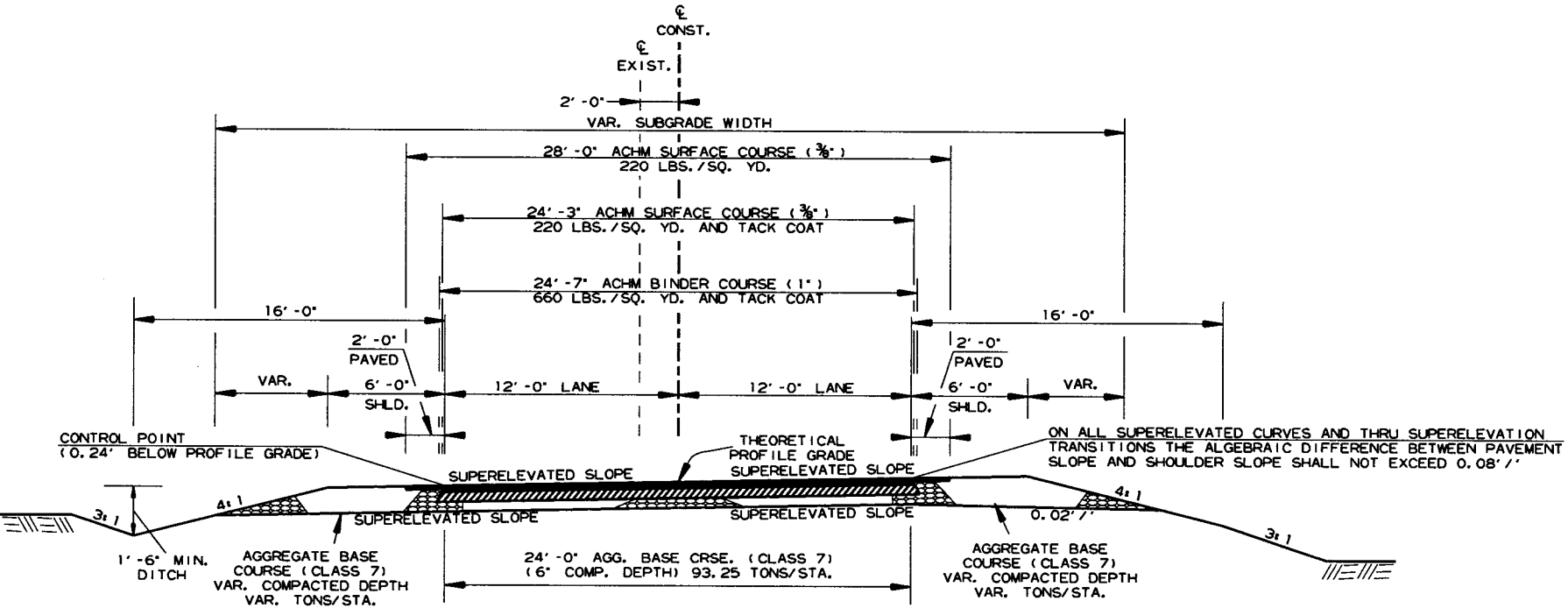
TYPICAL SECTIONS OF IMPROVEMENT

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080494	4	208

2 TYPICAL SECTIONS OF IMPROVEMENT



2 LANE NOTCH & WIDENING (SUPERELEVATED)



2 LANE FULL DEPTH (SUPERELEVATED)

• TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER

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

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

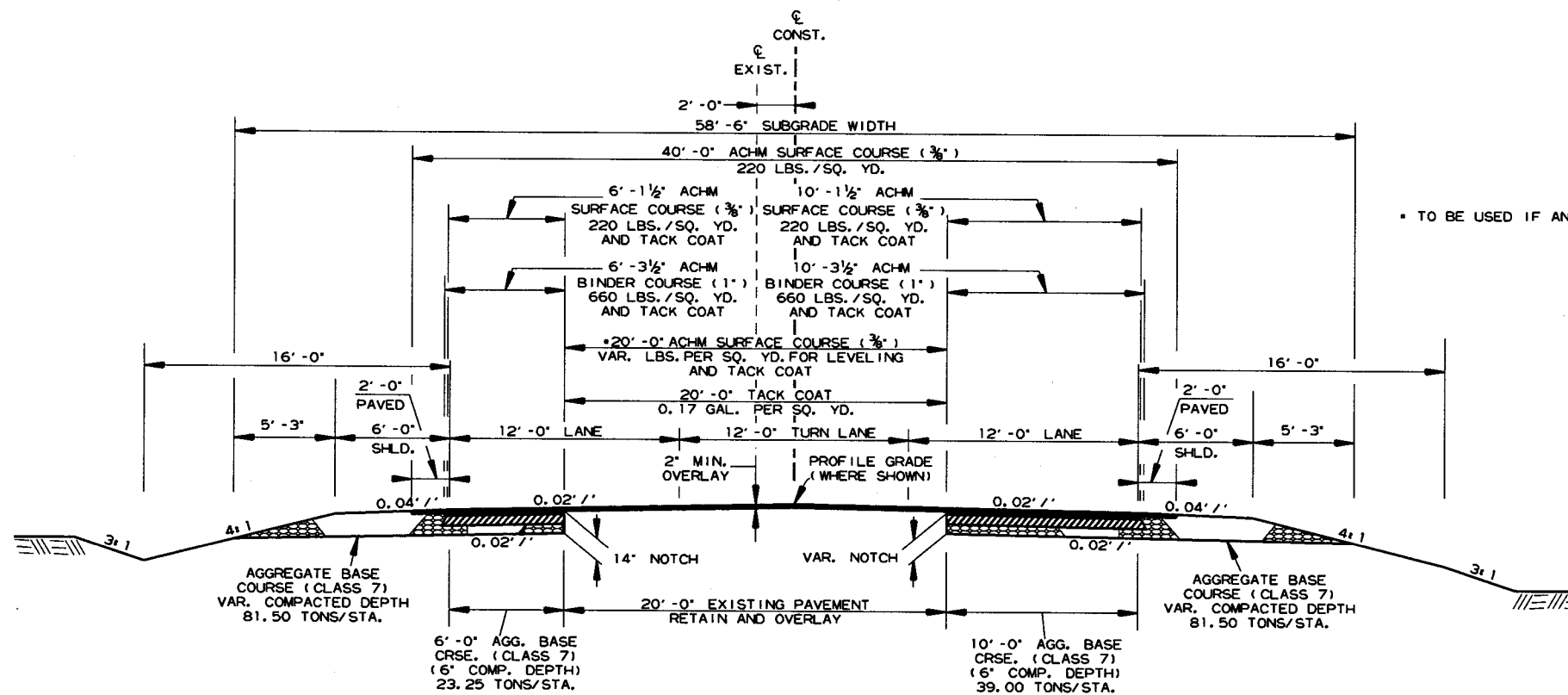
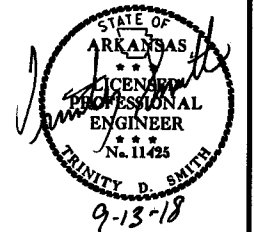
THE FINAL 2" OF SURFACE COURSE IS TO BE PLACED AFTER ALL OTHER COURSES HAVE BEEN LAID. LONGITUDINAL JOINTS SHALL BE AT LANE LINES.

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.

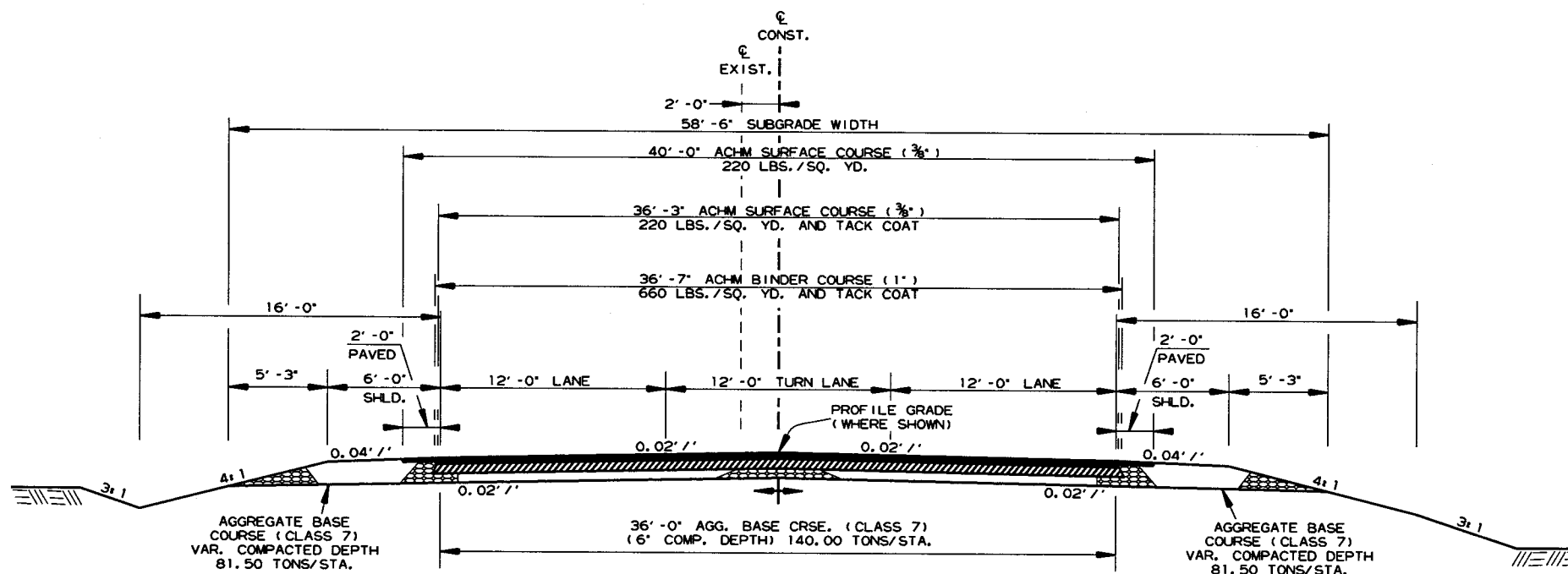
WITH THE APPROVAL OF THE ENGINEER, THE CONTRACTOR WILL BE ALLOWED TO SUBSTITUTE, AT NO ADDITIONAL COST TO THE DEPARTMENT, THE FIRST LIFT OF ACHM SURFACE COURSE (1/2") IN LIEU OF AGGREGATE BASE COURSE ON THE SHOULDERS.

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.	080494		5	208

2 TYPICAL SECTIONS OF IMPROVEMENT



3 LANE NOTCH & WIDENING
 STA. 163+35.00 - STA. 173+65.00
 STA. 239+15.00 - STA. 278+65.00
 STA. 393+35.00 - STA. 398+65.00
 STA. 459+05.00 - STA. 459+50.00
 STA. 462+40.00 - STA. 464+65.00



3 LANE FULL DEPTH
 STA. 459+50.00 - STA. 462+40.00

• TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER

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

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

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

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.

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

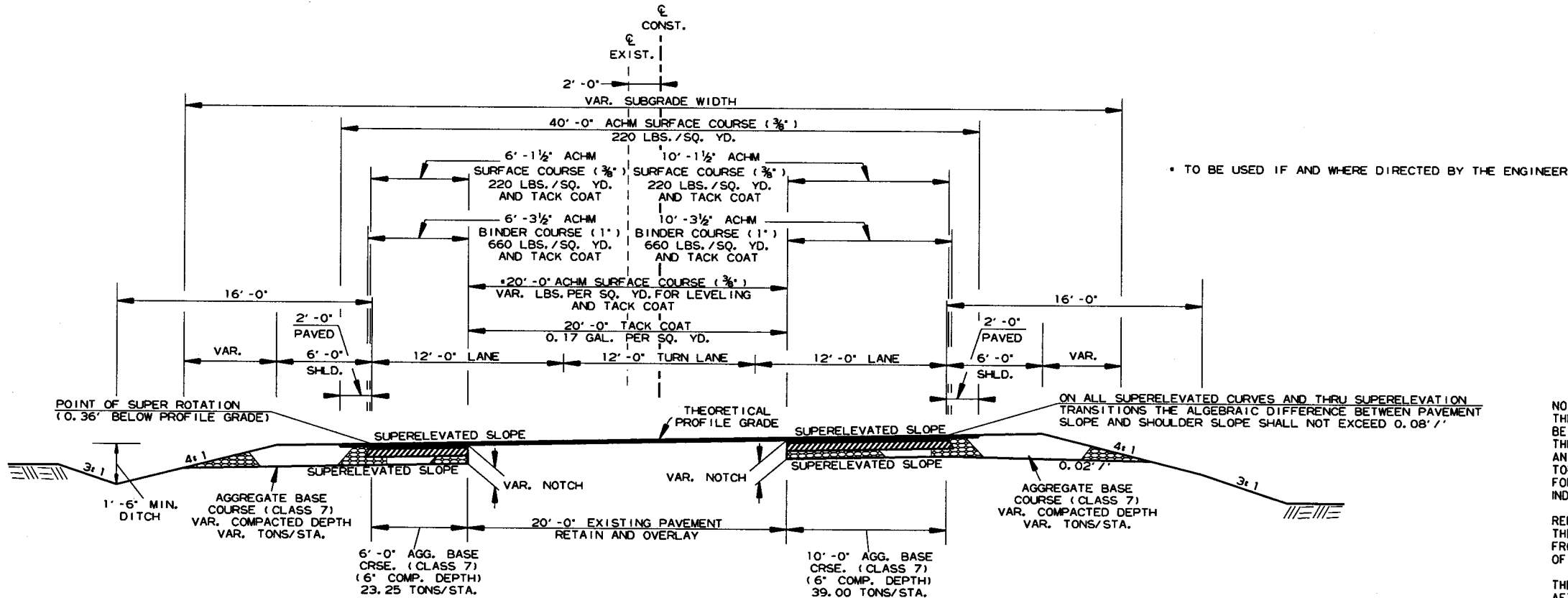
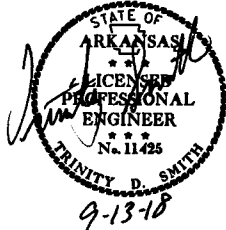
9/6/2018

R080494.DGN

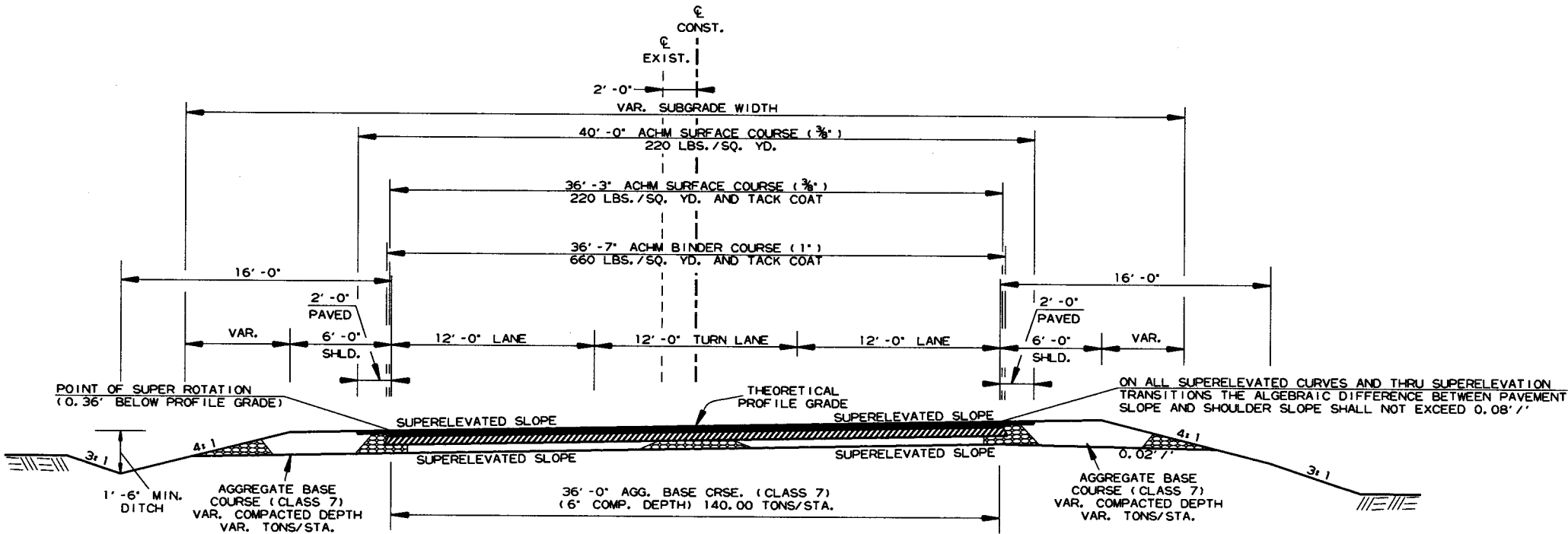
TYPICAL SECTIONS OF IMPROVEMENT

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	080494		6	208

2 TYPICAL SECTIONS OF IMPROVEMENT



3 LANE NOTCH & WIDENING (SUPERELEVATED)



3 LANE FULL DEPTH (SUPERELEVATED)

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

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

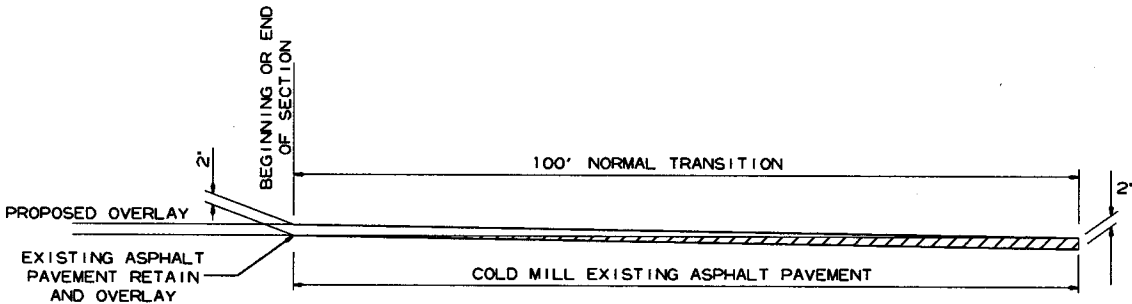
THE FINAL 2" OF SURFACE COURSE IS TO BE PLACED AFTER ALL OTHER COURSES HAVE BEEN LAID. LONGITUDINAL JOINTS SHALL BE AT LANE LINES.

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.

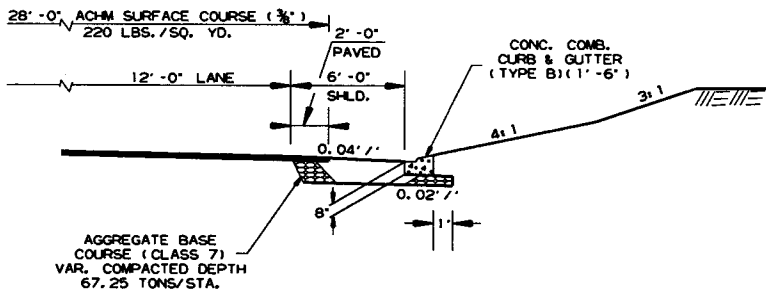
WITH THE APPROVAL OF THE ENGINEER, THE CONTRACTOR WILL BE ALLOWED TO SUBSTITUTE, AT NO ADDITIONAL COST TO THE DEPARTMENT, THE FIRST LIFT OF ACHM SURFACE COURSE (1/2") IN LIEU OF AGGREGATE BASE COURSE ON THE SHOULDERS.

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. 080494	7	208

2 SPECIAL DETAILS

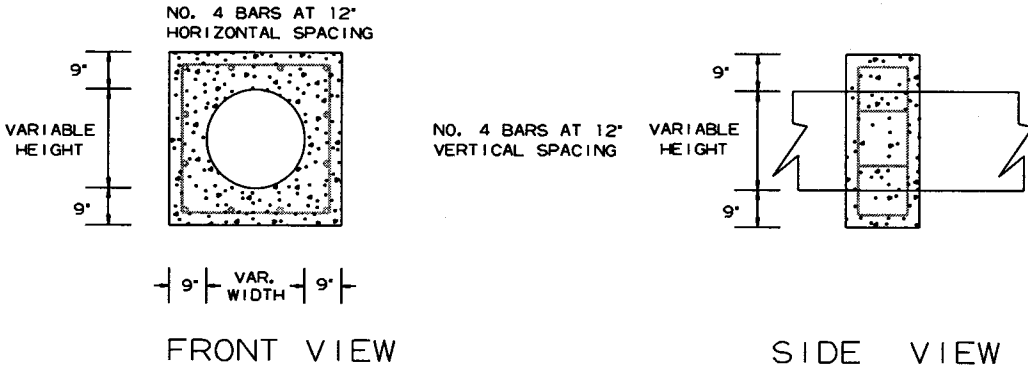
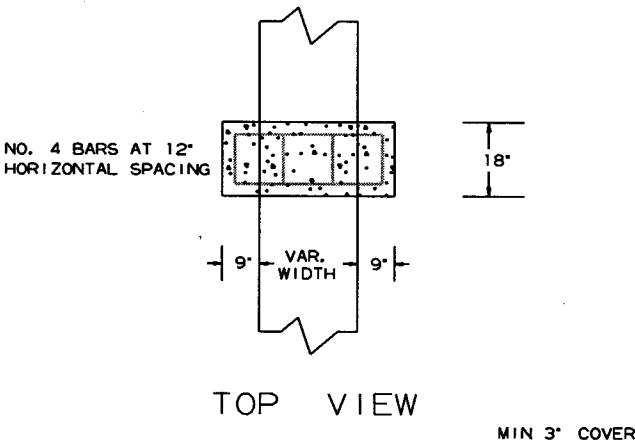


DETAIL FOR TRANSITIONS

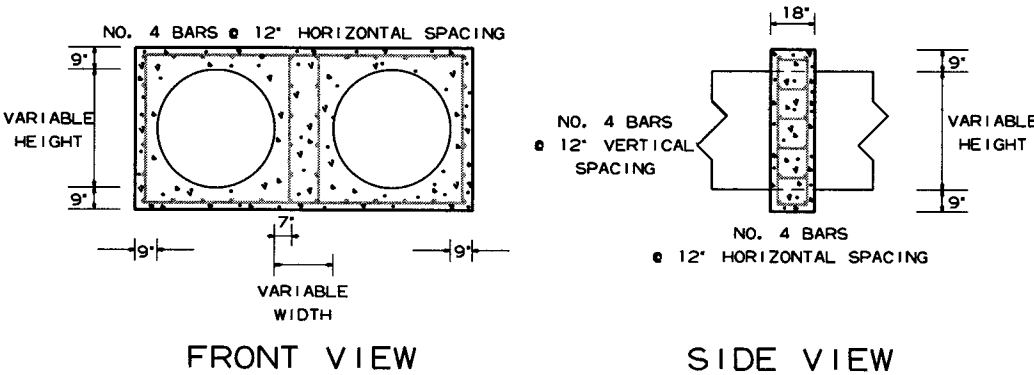
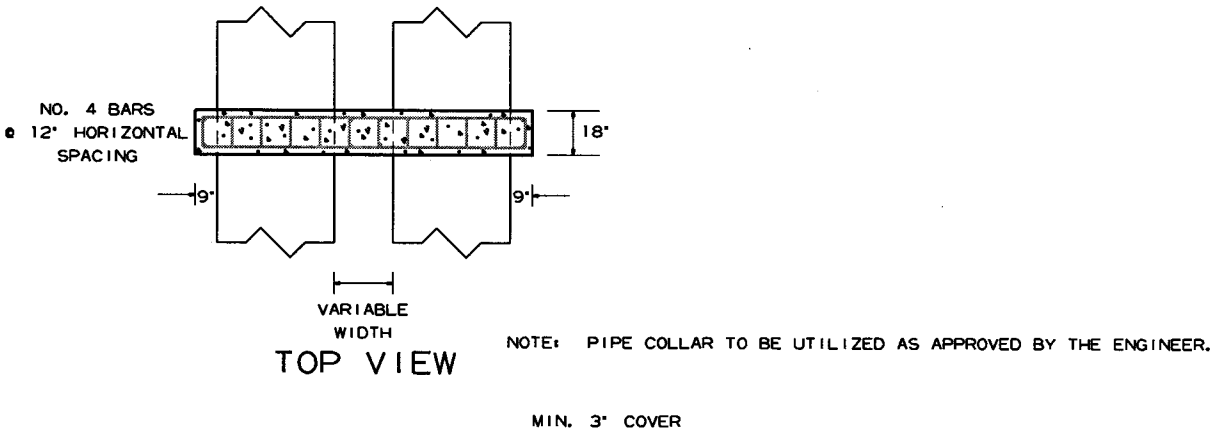


DETAIL FOR CONCRETE CURB AND GUTTER

STA. 317+50.00 TO STA. 322+15.00 RT.



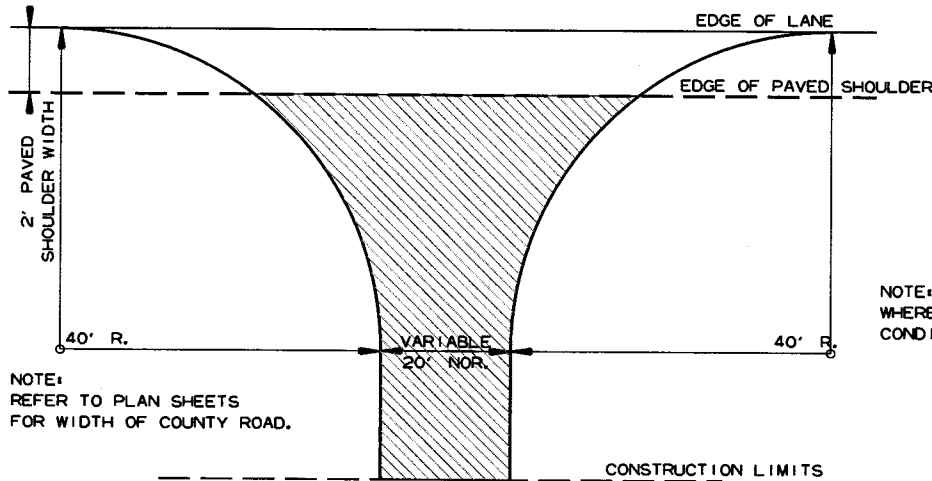
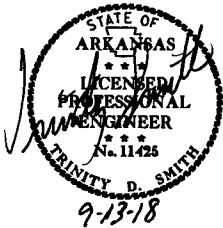
PIPE EXTENSION
REINFORCED CONCRETE COLLAR DETAIL



PIPE EXTENSION
REINFORCED CONCRETE COLLAR DETAIL

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. 080494	8	208

2 SPECIAL DETAILS

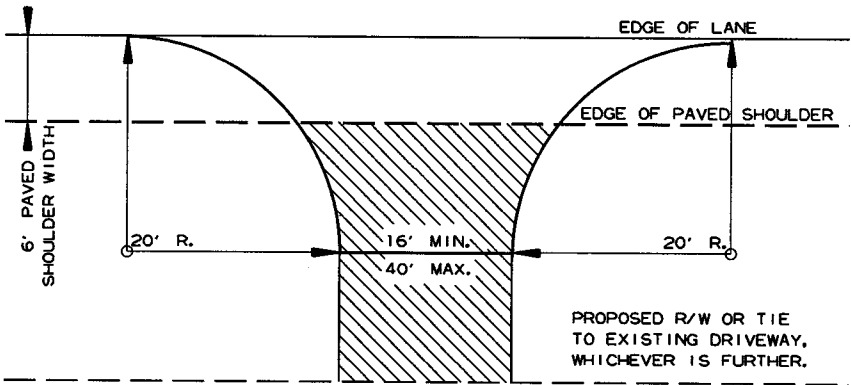


NOTE: REFER TO PLAN SHEETS FOR WIDTH OF COUNTY ROAD.

DETAIL FOR COUNTY ROAD TURNOUTS
OPEN SHOULDER SECTION

NOTE: TURNOUTS SHALL BE MODIFIED WHERE NECESSARY TO MEET LOCAL CONDITIONS AS DIRECTED BY THE ENGINEER.

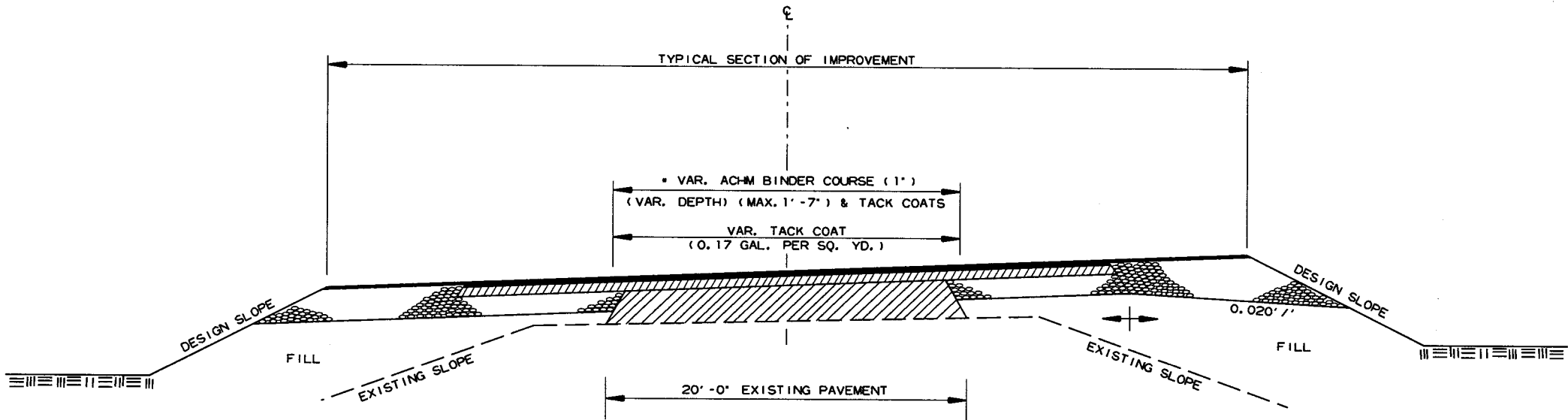
ACHM SURFACE COURSE (1/2")
(220 LBS. PER SQ. YD.) AND
AGGREGATE BASE COURSE (CLASS 7)
7" COMP. DEPTH



NOTE: TURNOUTS AND PRIVATE DRIVES SHALL BE MODIFIED WHERE NECESSARY TO MEET LOCAL CONDITIONS AS DIRECTED BY THE ENGINEER.

ACHM SURFACE COURSE (1/2")
(220 LBS. PER SQ. YD.) AND
AGGREGATE BASE COURSE (CLASS 7)
7" COMP. DEPTH IF ASPHALT OR
GRAVEL DRIVE EXISTING; OR 6"
CONCRETE IF CONCRETE DRIVE
EXISTING.

DETAIL FOR DRIVEWAY TURNOUTS
OPEN SHOULDER SECTION
(ARTERIALS)



NOTES:

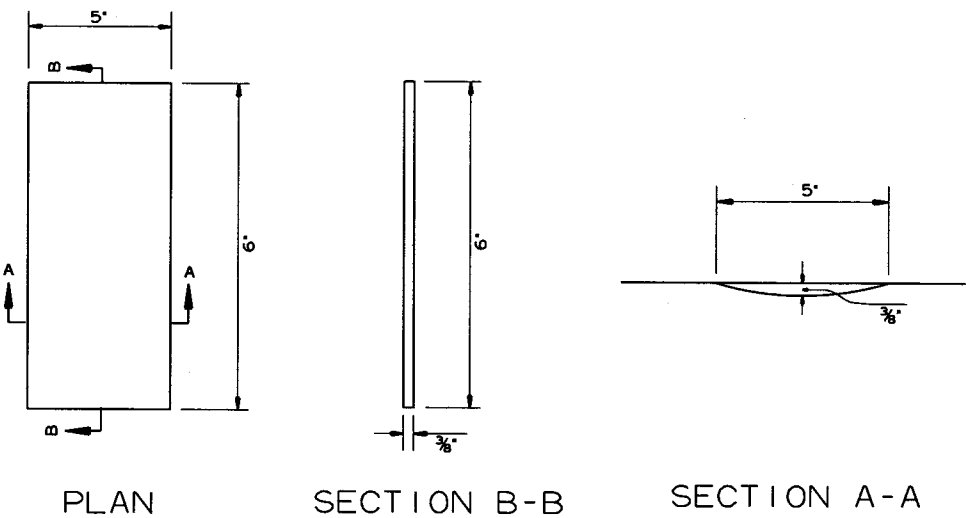
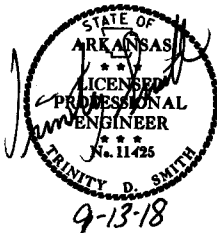
- (1) THIS DETAIL TO BE USED ONLY WHERE DIRECTED BY THE ENGINEER.
- (2) QUANTITIES FOR METHOD OF GRADE RAISE USING ASPHALT WERE CALCULATED ON THIS PROJECT AT LOCATIONS WHERE THE DISTANCE BETWEEN THE EXISTING ASPHALT ROADWAY AND THE PROPOSED SUBGRADE WAS ONE FOOT OR LESS.
- (3) IN LOCATIONS WHERE THE 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.

METHOD OF RAISING GRADE

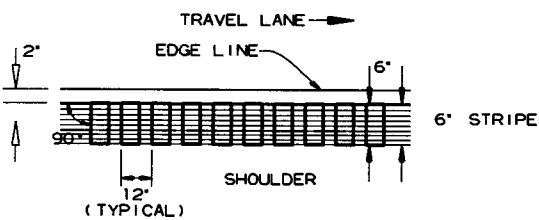
7" AGGREGATE BASE COURSE (CLASS 7)
TO BE REPLACED WITH ACHM BINDER COURSE (1")

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	080494		9	208

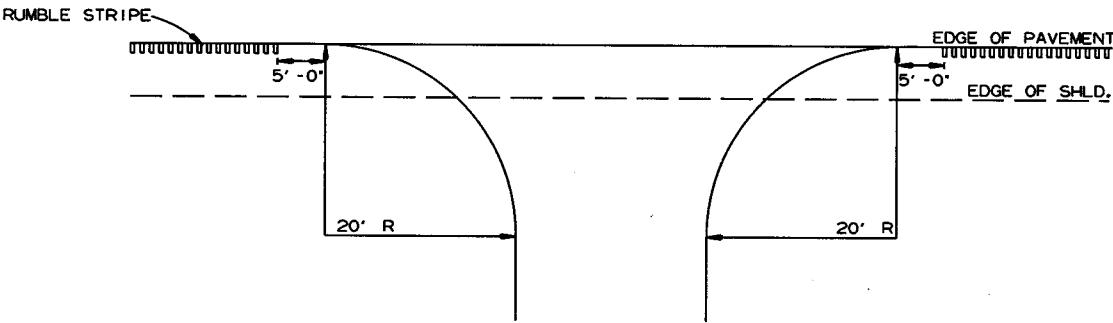
2 SPECIAL DETAILS



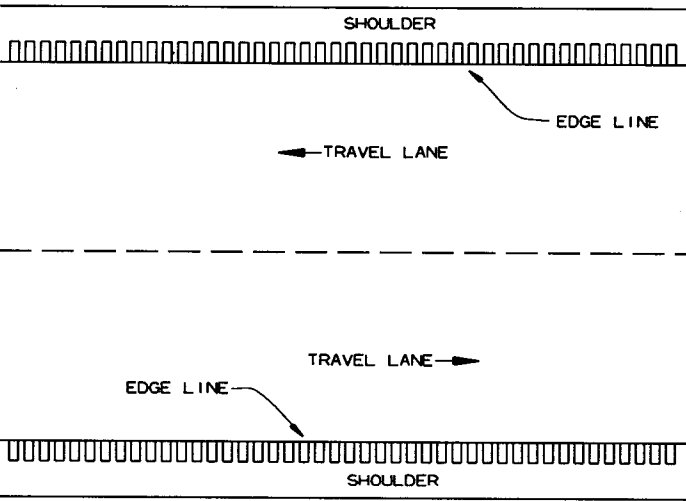
DETAILS OF RUMBLE STRIPE



LOCATION PLAN OF RUMBLE STRIPE
LEFT OR RIGHT SHOULDER



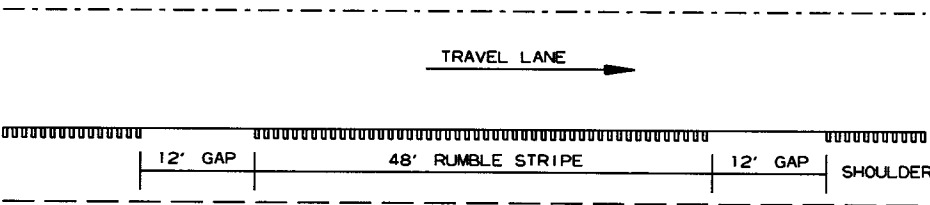
DETAIL FOR RUMBLE STRIPE GAP
AT DRIVEWAY TURNOUTS



PLAN VIEW

GENERAL NOTES

1. RUMBLE STRIPES SHALL NOT BE INSTALLED ON BRIDGE DECKS, APPROACH SLABS, INTERSECTING STREETS OR ROADWAYS, RESIDENTIAL OR COMMERCIAL DRIVEWAYS OR ACROSS TRANSVERSE JOINTS OF CONCRETE SHOULDERS.
2. RUMBLE STRIPES SHALL NOT BE INSTALLED ON A PAVED SHOULDER THAT IS USED AS A DECELERATION LANE FOR THE LENGTH DEEMED APPROPRIATE BY THE ENGINEER.
3. RUMBLE STRIPES SHALL BE MEASURED BY THE LINEAR FOOT LONGITUDINALLY ALONG THE SHOULDER. PAYMENT SHALL ONLY INCLUDE THAT PORTION OF THE SHOULDER ON WHICH RUMBLE STRIPES HAVE BEEN CONSTRUCTED. NO MEASUREMENT OR PAYMENT WILL BE MADE FOR GAPS, DRIVEWAYS, TURNOUTS, OR OTHER PUBLIC ROAD INTERSECTIONS WHERE RUMBLE STRIPES HAVE NOT BEEN CONSTRUCTED.
4. THE 3/8" DEPTH SHALL GENERALLY APPLY FOR THE ENTIRE 6" LENGTH. SOME VARIATION TO SUIT SHOULDER SLOPE BREAKS MAY BE NECESSARY.

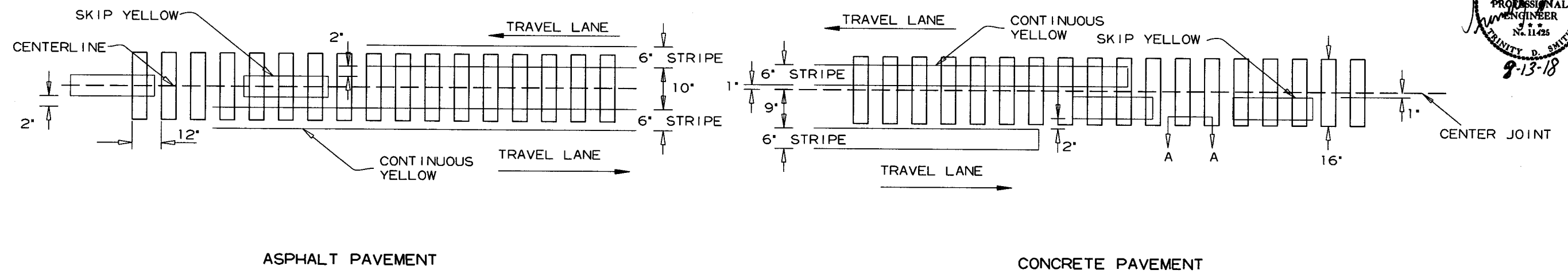


NOTE: GAP PATTERN SHALL BE ADJUSTED BY THE ENGINEER IN THE FIELD ALLOWING FOR DRIVEWAYS TO SERVE AS THE GAP.

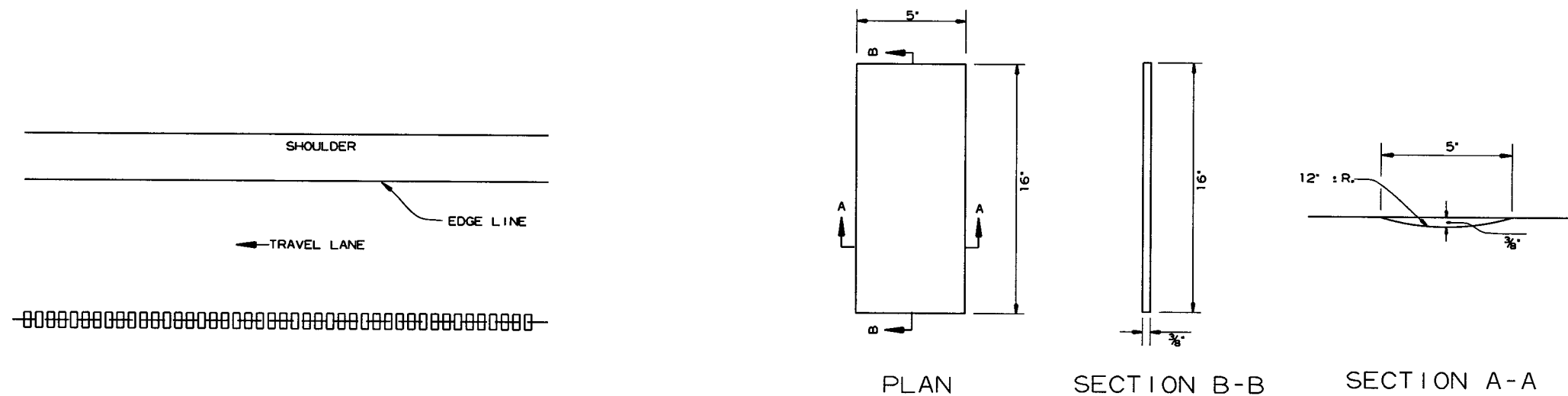
DETAIL FOR GAP PATTERN RUMBLE STRIPE

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. 080494	10	208

2 SPECIAL DETAILS



LOCATION PLAN OF CENTERLINE RUMBLE STRIPES



DETAILS OF CENTERLINE RUMBLE STRIPES

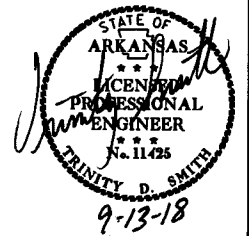
GENERAL NOTES

1. RUMBLE STRIPES SHALL NOT BE INSTALLED ON BRIDGE DECKS, APPROACH SLABS, INTERSECTING STREETS OR ROADWAYS, OR ACROSS TRANSVERSE JOINTS OF CONCRETE SHOULDERS.
2. RUMBLE STRIPES SHALL BE MEASURED BY THE LINEAR FOOT LONGITUDINALLY ALONG THE CENTERLINE.
3. THE 3/8" DEPTH SHALL GENERALLY APPLY FOR THE ENTIRE 16" LENGTH. SOME VARIATION TO SUIT SLOPE BREAKS MAY BE NECESSARY.

PLAN VIEW

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		11	208
				JOB NO.		080494		

2 TEMPORARY EROSION CONTROL DETAILS



REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-1) = WATTLE DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-11) = SILT FENCE

STA. 113+85.00
BEGIN JOB 080494
BEGIN SITE 1

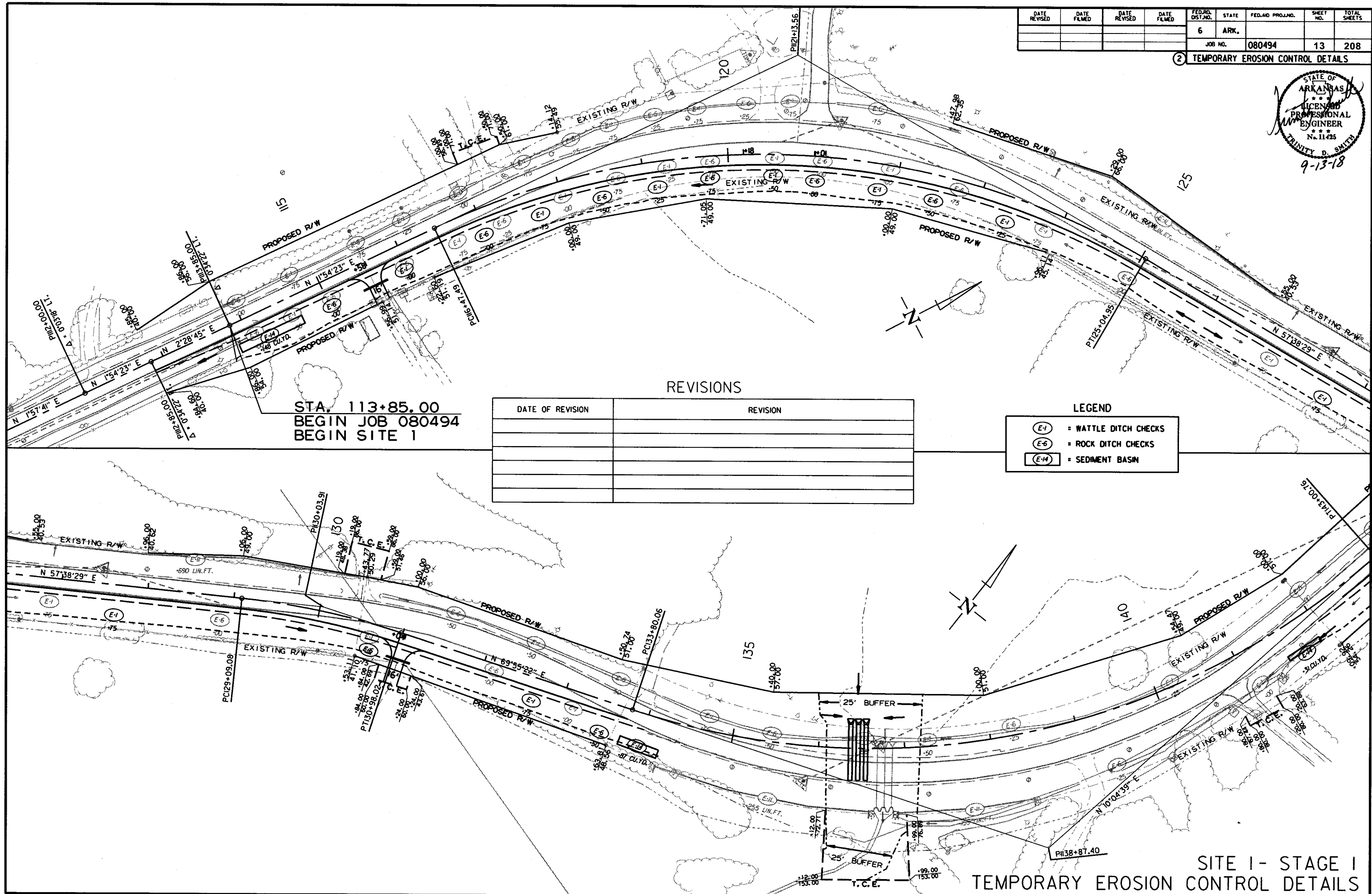
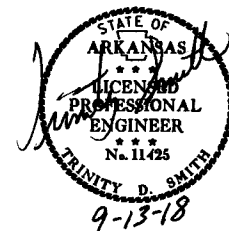
SITE I- CLEARING AND GRUBBING
TEMPORARY EROSION CONTROL DETAILS

9/6/2018

RO80494.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.		080494	13	208

2 TEMPORARY EROSION CONTROL DETAILS

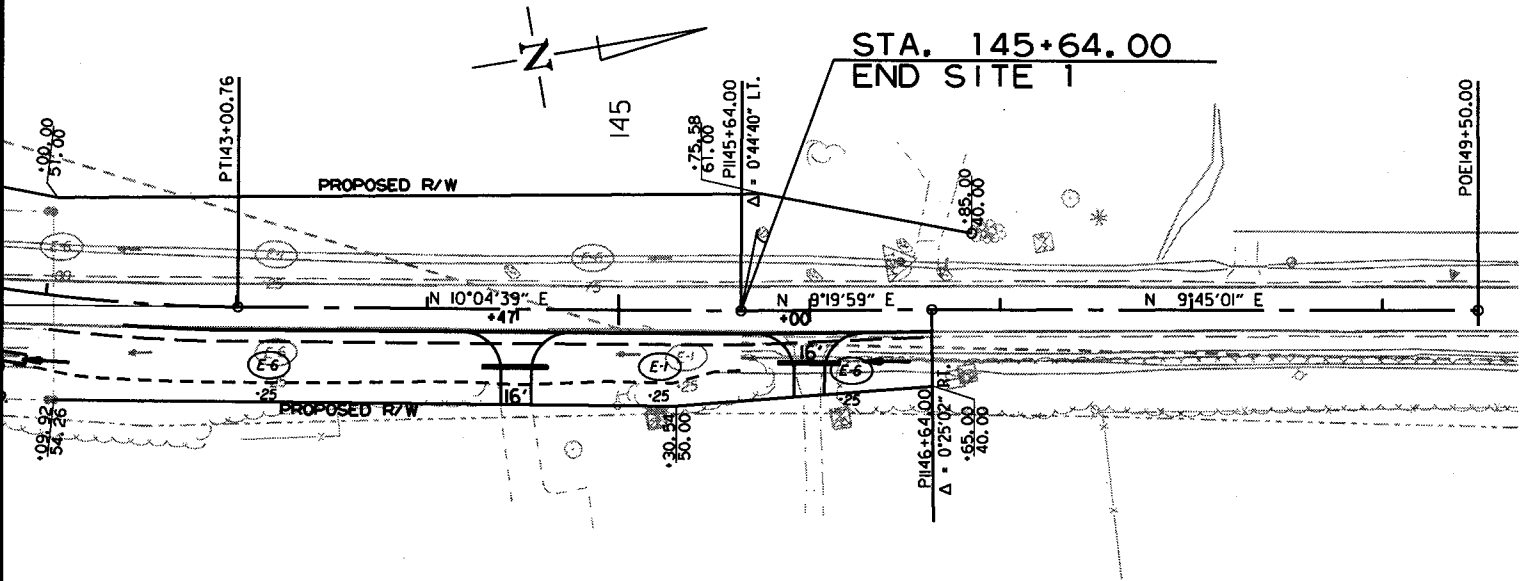


DATE OF REVISION	REVISION

LEGEND	
(E-1)	= WATTLE DITCH CHECKS
(E-6)	= ROCK DITCH CHECKS
(E-14)	= SEDIMENT BASIN

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.	080494		14	208

2 TEMPORARY EROSION CONTROL DETAILS



REVISIONS

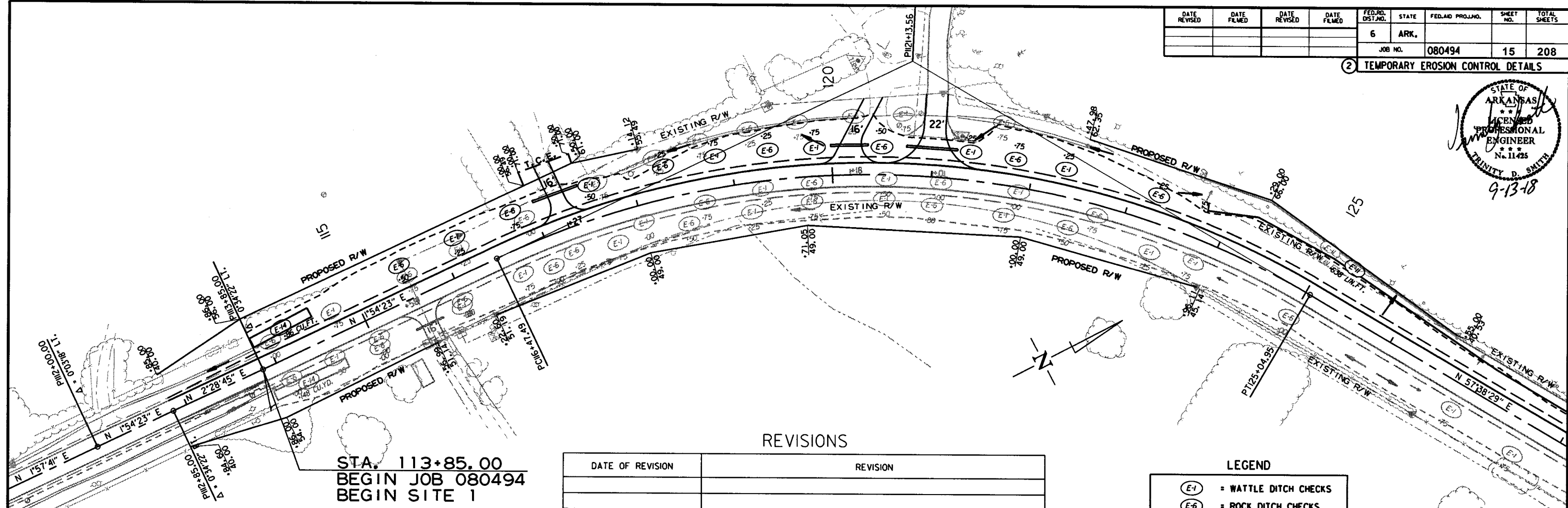
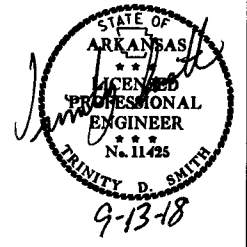
DATE OF REVISION	REVISION

LEGEND

- (E-1) = WATTLE DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-14) = SEDIMENT BASIN

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.	080494		15	208

2 TEMPORARY EROSION CONTROL DETAILS



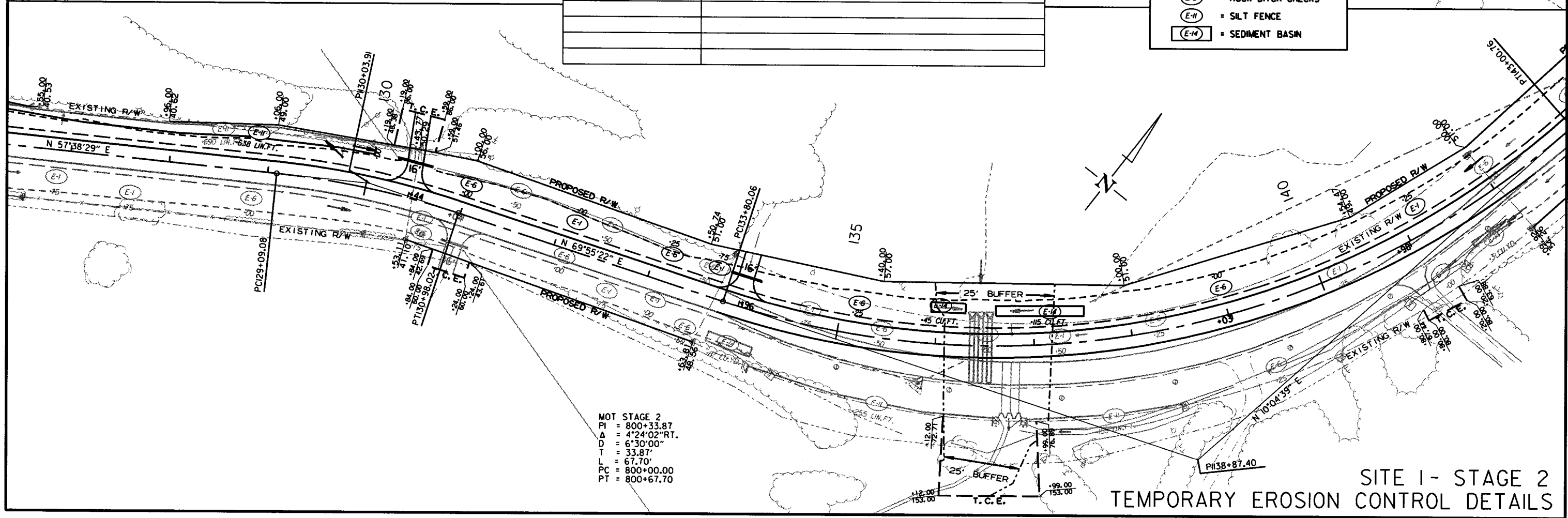
STA. 113+85.00
BEGIN JOB 080494
BEGIN SITE 1

REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-1) = WATTLE DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-11) = SILT FENCE
- (E-14) = SEDIMENT BASIN

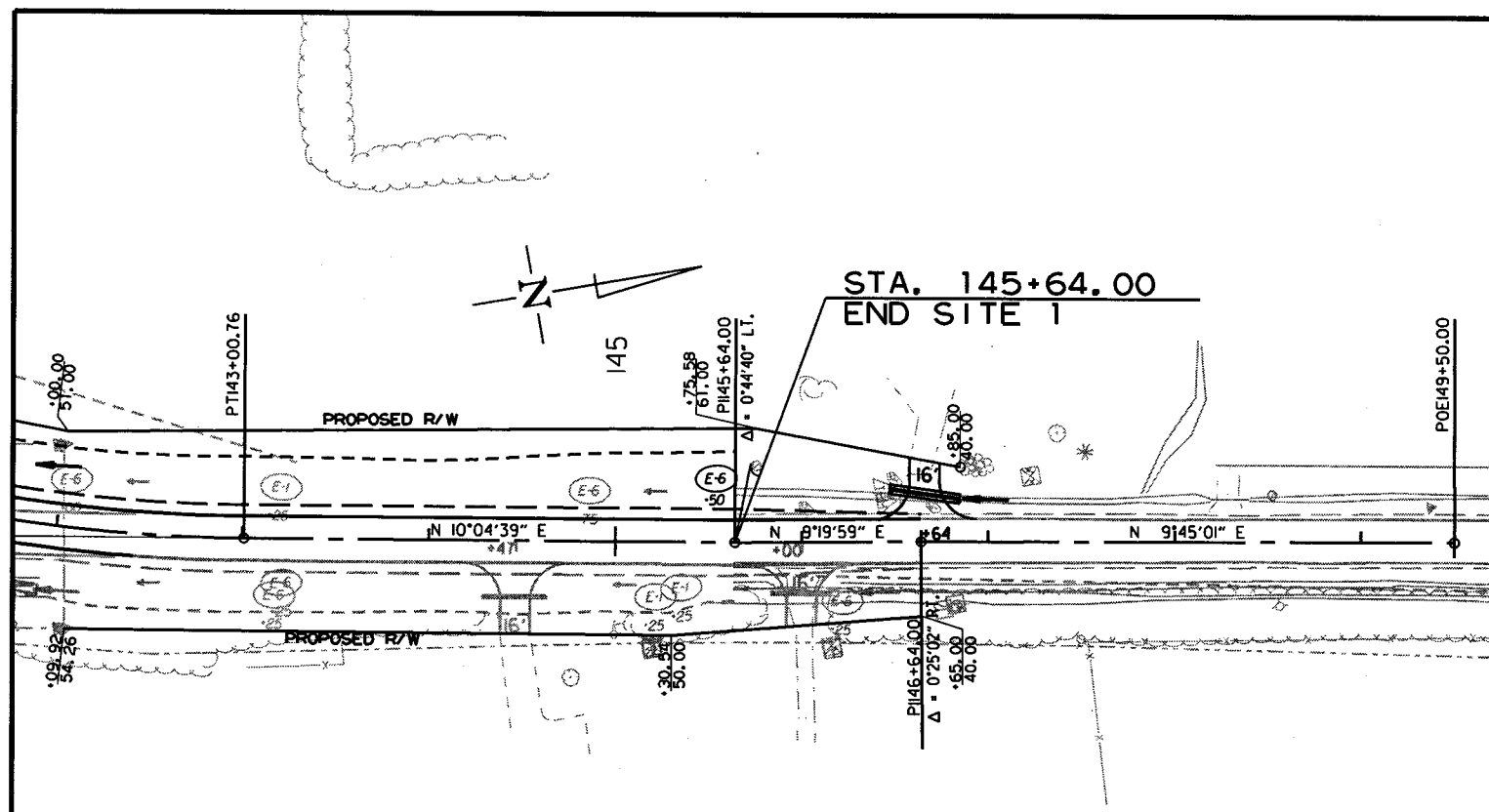
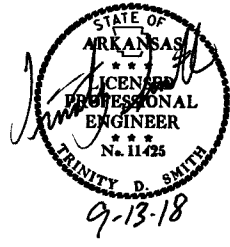


MOT STAGE 2
PI = 800+33.87
Δ = 4°24'02" RT.
D = 6°30'00"
T = 33.87'
L = 67.70'
PC = 800+00.00
PT = 800+67.70

SITE 1- STAGE 2
TEMPORARY EROSION CONTROL DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO. 080494		16	208	

2 TEMPORARY EROSION CONTROL DETAILS



REVISIONS

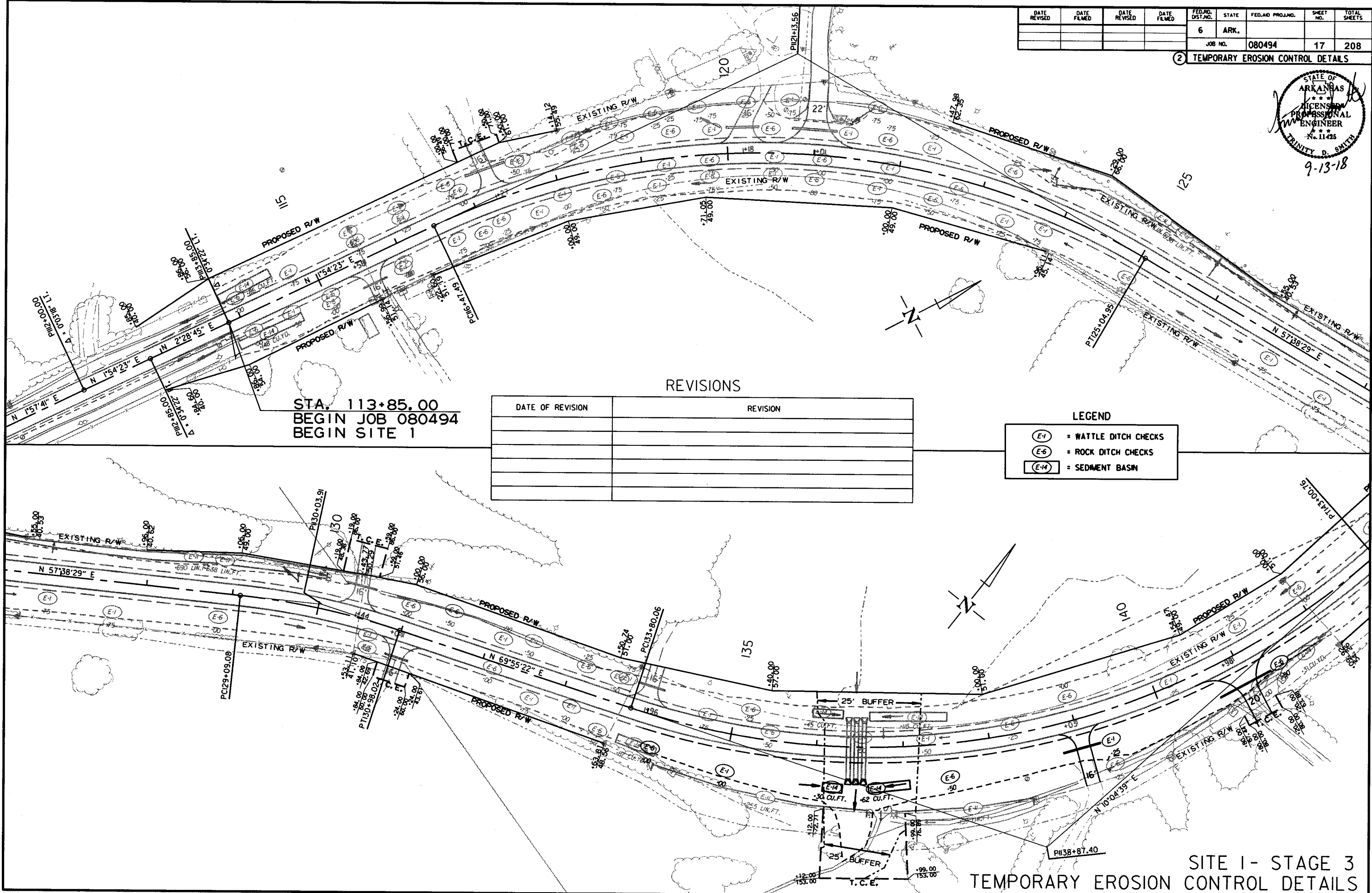
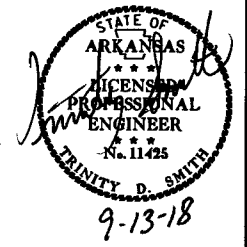
DATE OF REVISION	REVISION

LEGEND

(E-1)	= WATTLE DITCH CHECKS
(E-6)	= ROCK DITCH CHECKS
(E-11)	= SILT FENCE
(E-14)	= SEDIMENT BASIN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		17	208
				JOB NO. 080494				

2 TEMPORARY EROSION CONTROL DETAILS



STA. 113+85.00
BEGIN JOB 080494
BEGIN SITE 1

REVISIONS

DATE OF REVISION	REVISION

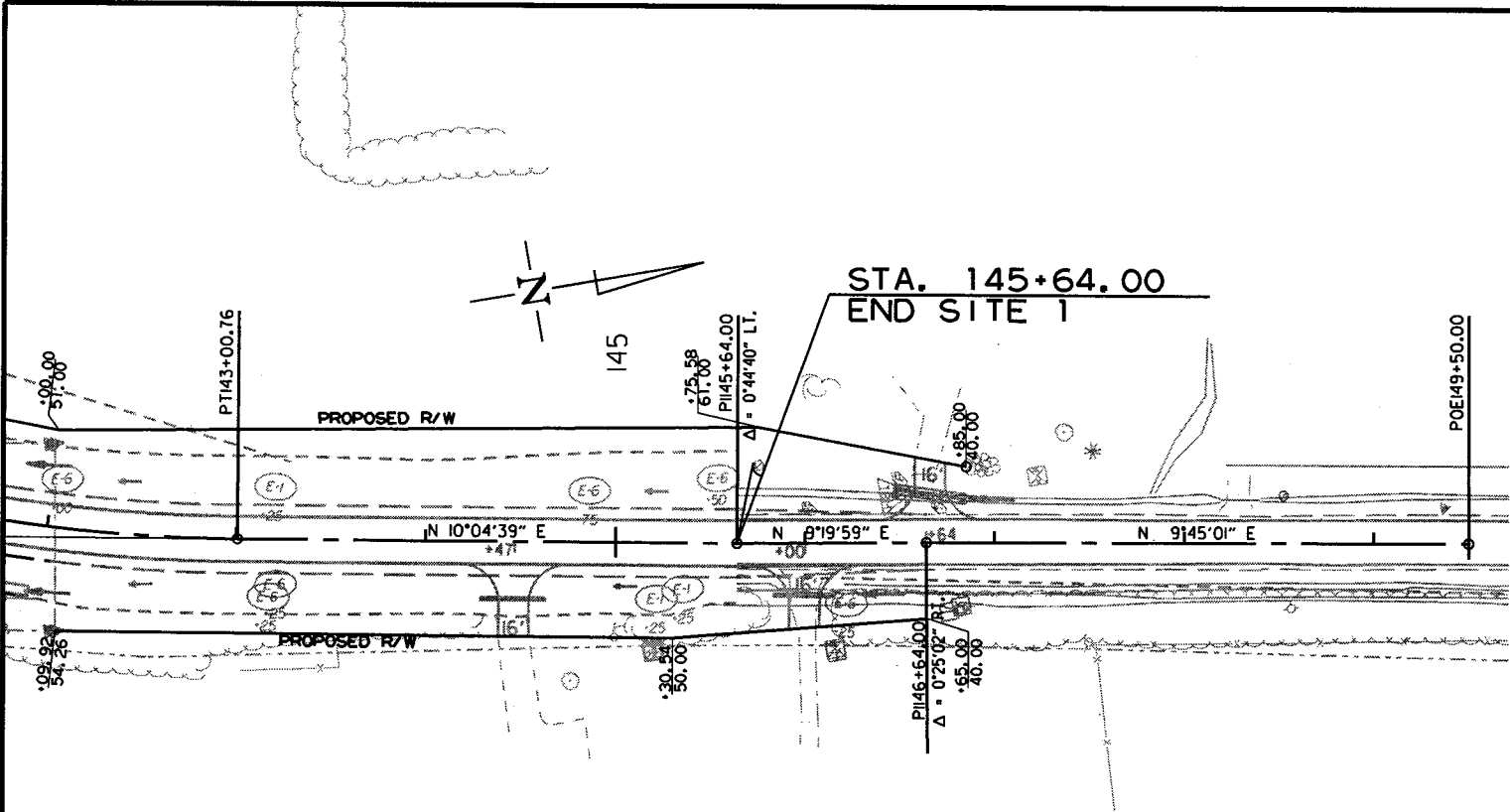
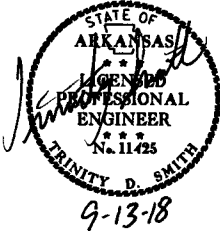
LEGEND

- (E-1) = WATTLE DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-14) = SEDIMENT BASIN

SITE 1- STAGE 3
TEMPORARY EROSION CONTROL DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080494	18	208

② TEMPORARY EROSION CONTROL DETAILS



REVISIONS

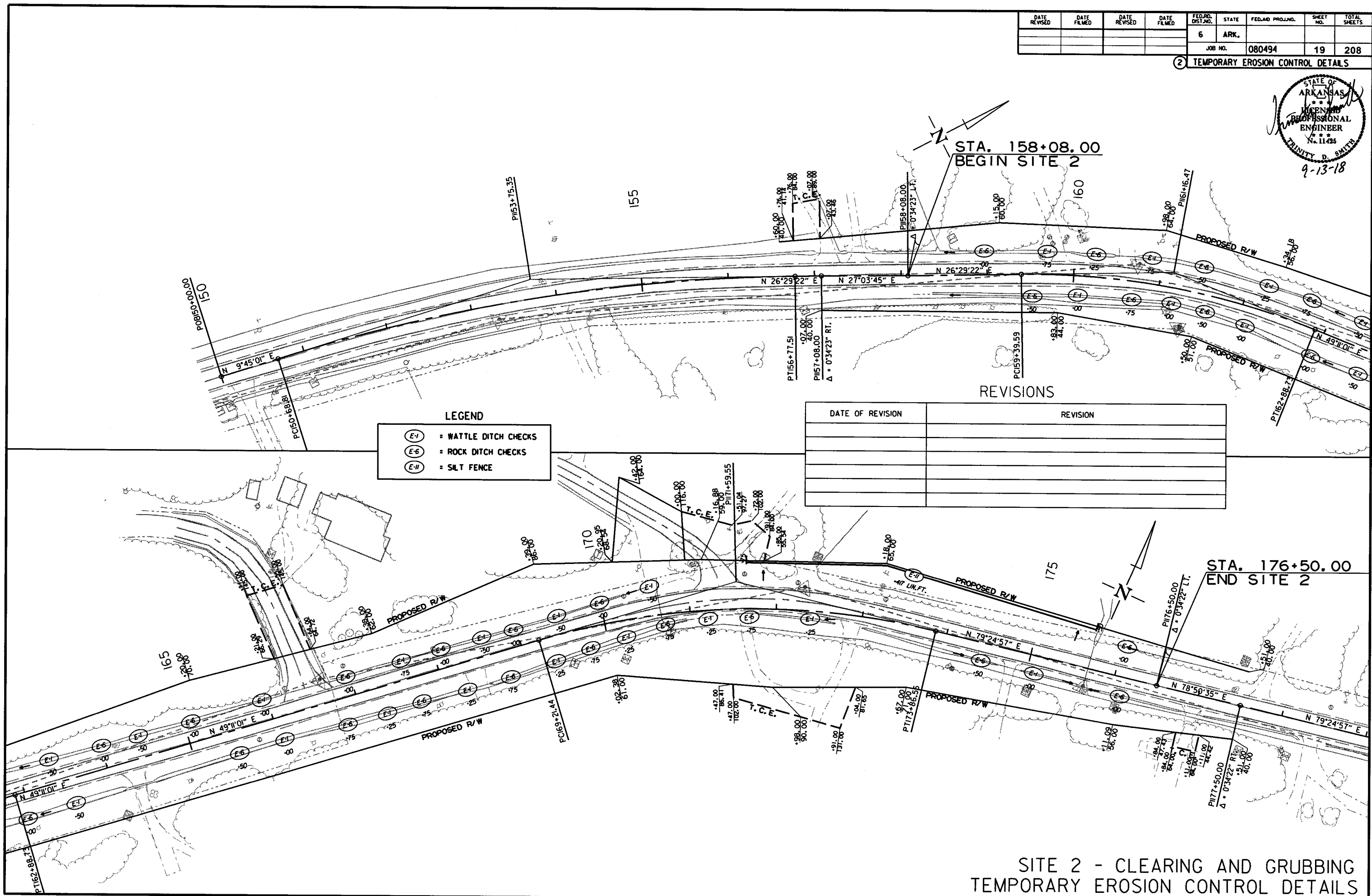
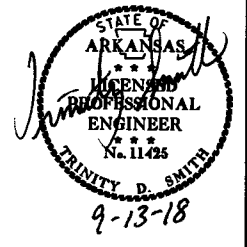
DATE OF REVISION	REVISION

LEGEND

- (E-1) = WATTLE DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-14) = SEDIMENT BASIN

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.	080494		19	208

2 TEMPORARY EROSION CONTROL DETAILS



LEGEND

- (E-1) = WATTLE DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-11) = SILT FENCE

REVISIONS

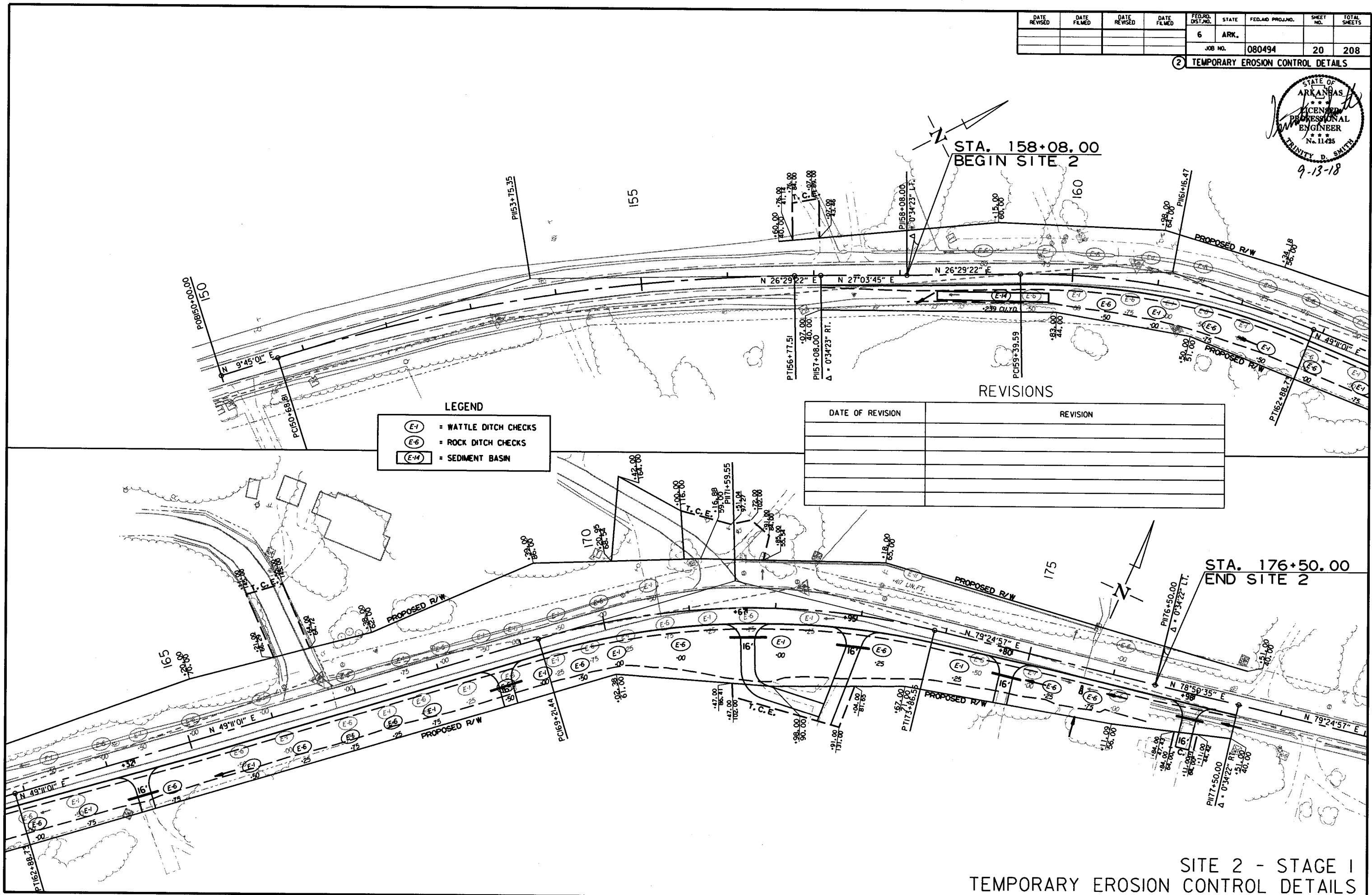
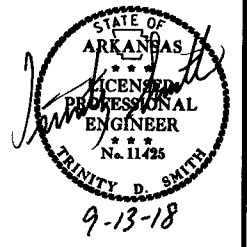
DATE OF REVISION	REVISION

SITE 2 - CLEARING AND GRUBBING
TEMPORARY EROSION CONTROL DETAILS

R080494.DGN 9/6/2018

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.	080494		20	208

2 TEMPORARY EROSION CONTROL DETAILS



LEGEND

- (E-1) = WATTLE DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-14) = SEDIMENT BASIN

REVISIONS

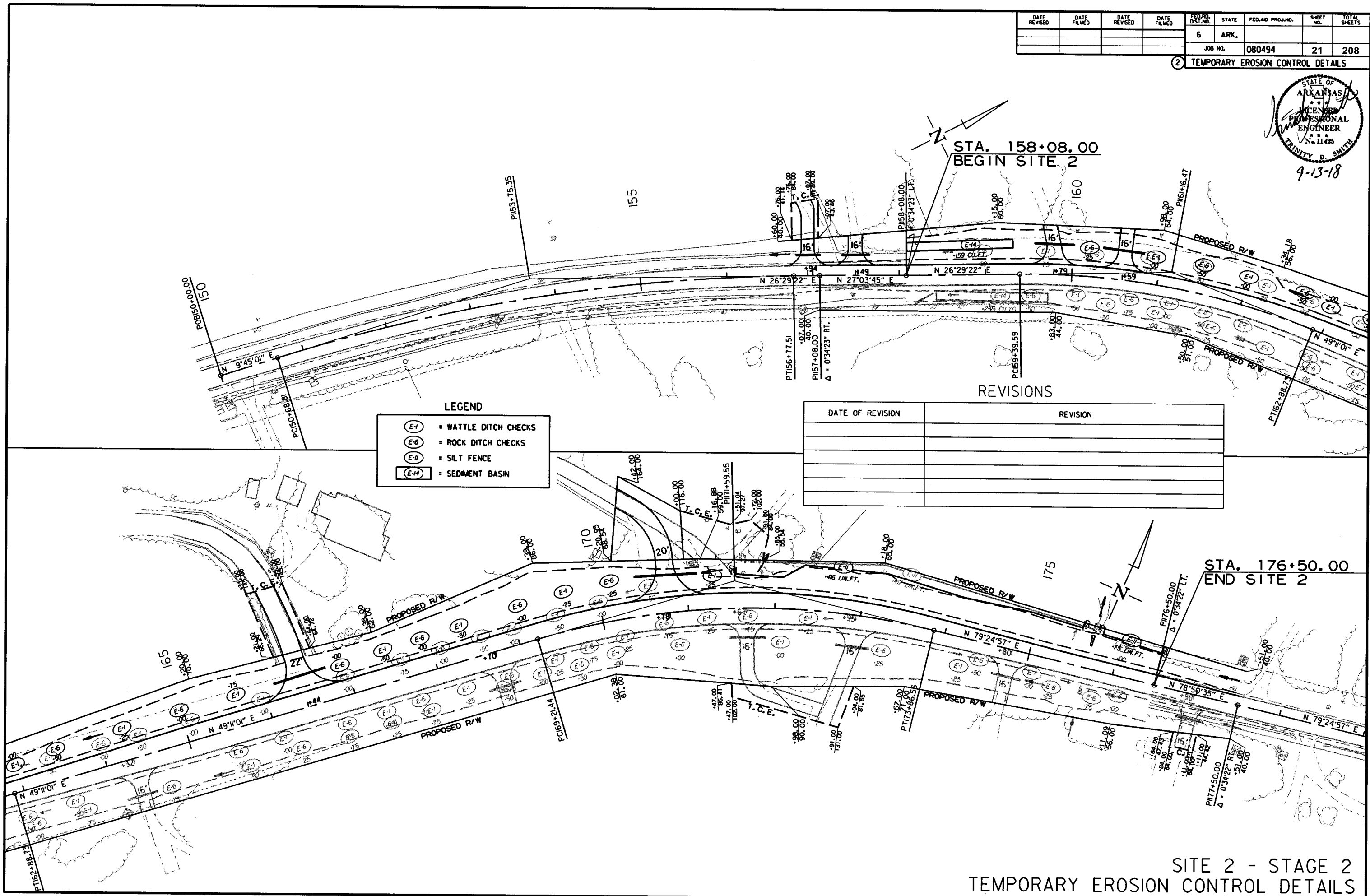
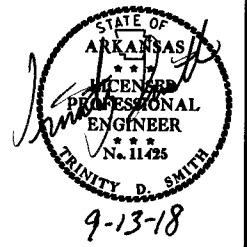
DATE OF REVISION	REVISION

R080494.DGN 9/6/2018

SITE 2 - STAGE I
TEMPORARY EROSION CONTROL DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	080494		21	208

② TEMPORARY EROSION CONTROL DETAILS



LEGEND

- (E-1) = WATTLE DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-11) = SILT FENCE
- (E-14) = SEDIMENT BASIN

REVISIONS

DATE OF REVISION	REVISION

9/6/2018
R080494.DGN

SITE 2 - STAGE 2
TEMPORARY EROSION CONTROL DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		22	208
				JOB NO.		080494		

2 TEMPORARY EROSION CONTROL DETAILS

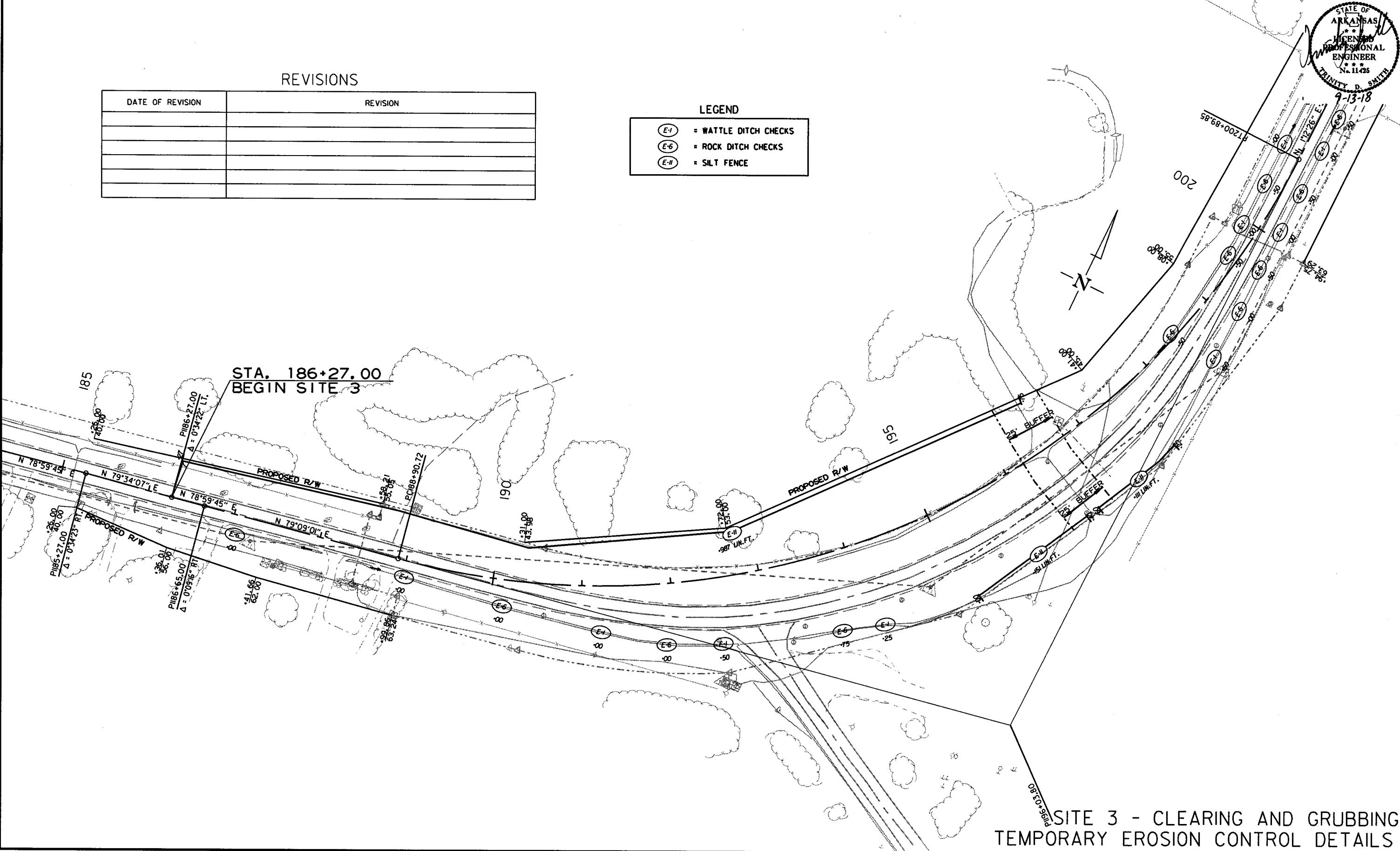


REVISIONS

DATE OF REVISION	REVISION

LEGEND

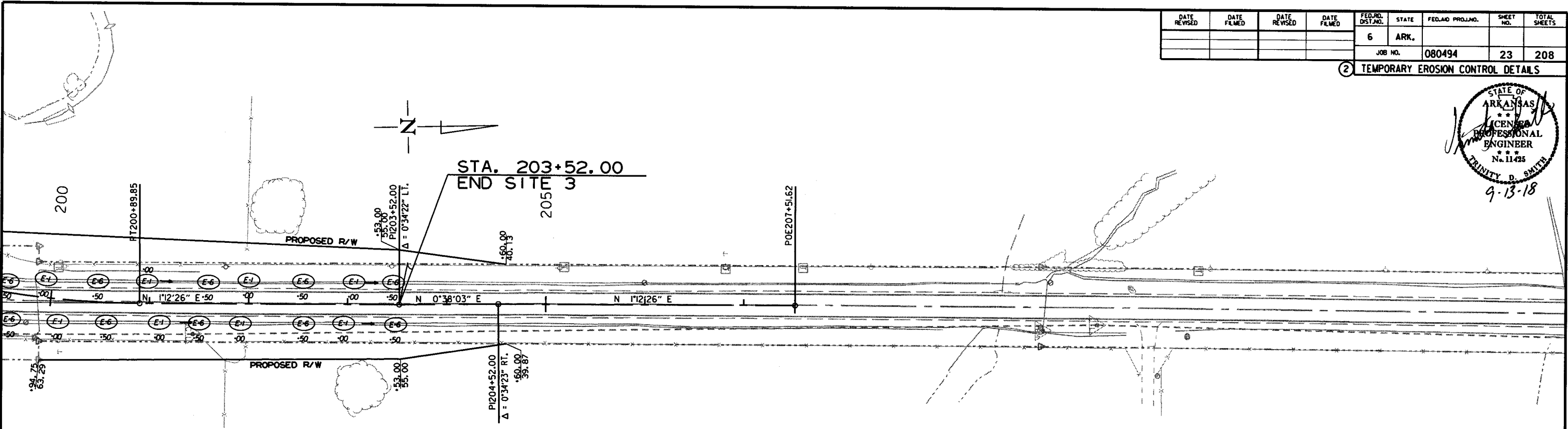
(E-1)	= WATTLE DITCH CHECKS
(E-6)	= ROCK DITCH CHECKS
(E-11)	= SILT FENCE



SITE 3 - CLEARING AND GRUBBING
TEMPORARY EROSION CONTROL DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO. 080494		23	208	

② TEMPORARY EROSION CONTROL DETAILS



REVISIONS

DATE OF REVISION	REVISION

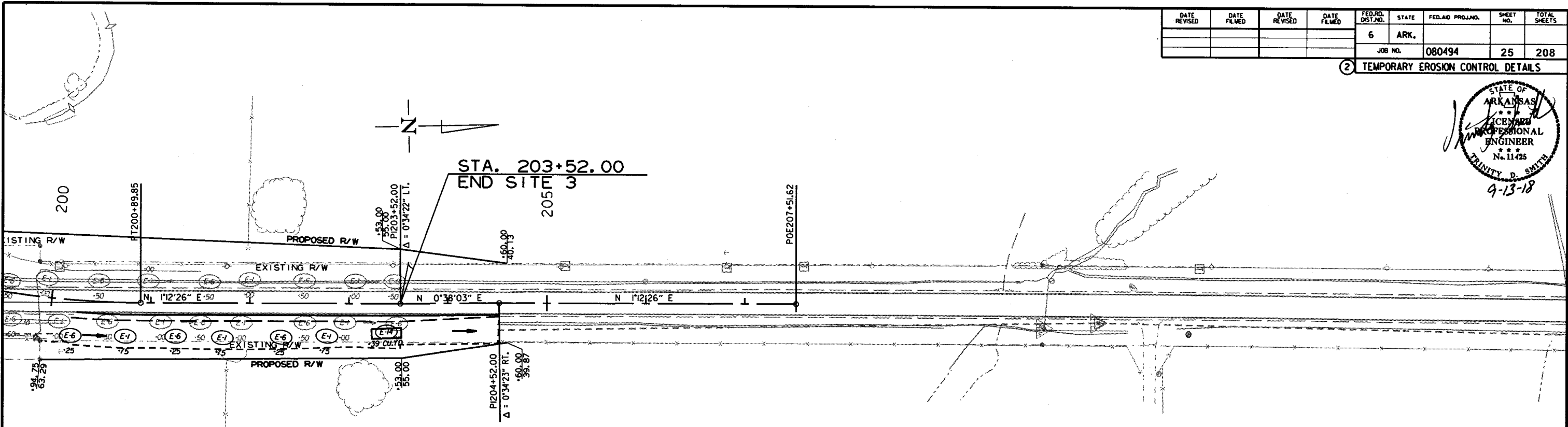
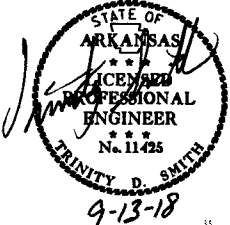
LEGEND

- E-1 = WATTLE DITCH CHECKS
- E-6 = ROCK DITCH CHECKS
- E-11 = SILT FENCE

SITE 3 - CLEARING AND GRUBBING
TEMPORARY EROSION CONTROL DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080494	25	208

2 TEMPORARY EROSION CONTROL DETAILS



REVISIONS

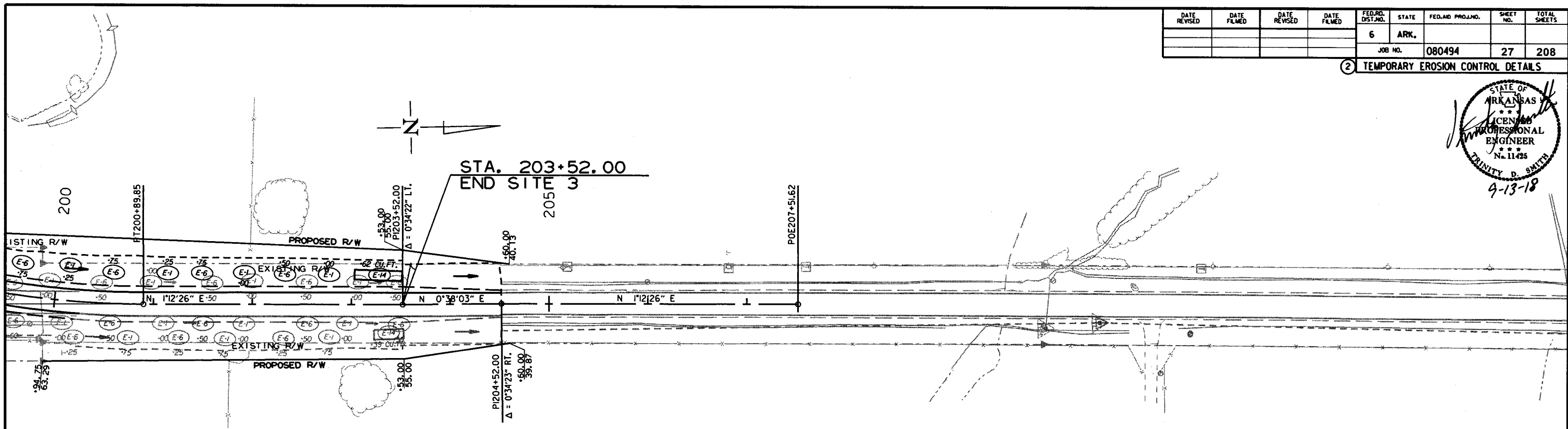
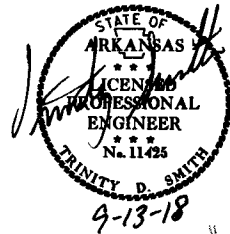
DATE OF REVISION	REVISION

LEGEND

(E-1)	= WATTLE DITCH CHECKS
(E-6)	= ROCK DITCH CHECKS
(E-14)	= SEDIMENT BASIN

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.	080494		27	208

2 TEMPORARY EROSION CONTROL DETAILS



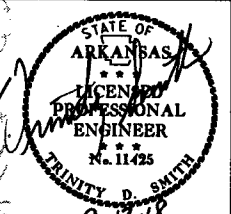
REVISIONS

DATE OF REVISION	REVISION

LEGEND	
(E-1)	= WATTLE DITCH CHECKS
(E-6)	= ROCK DITCH CHECKS
(E-11)	= SILT FENCE
(E-14)	= SEDIMENT BASIN

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. 080494		28	208	

2 TEMPORARY EROSION CONTROL DETAILS



REVISIONS

DATE OF REVISION	REVISION

LEGEND

E-1

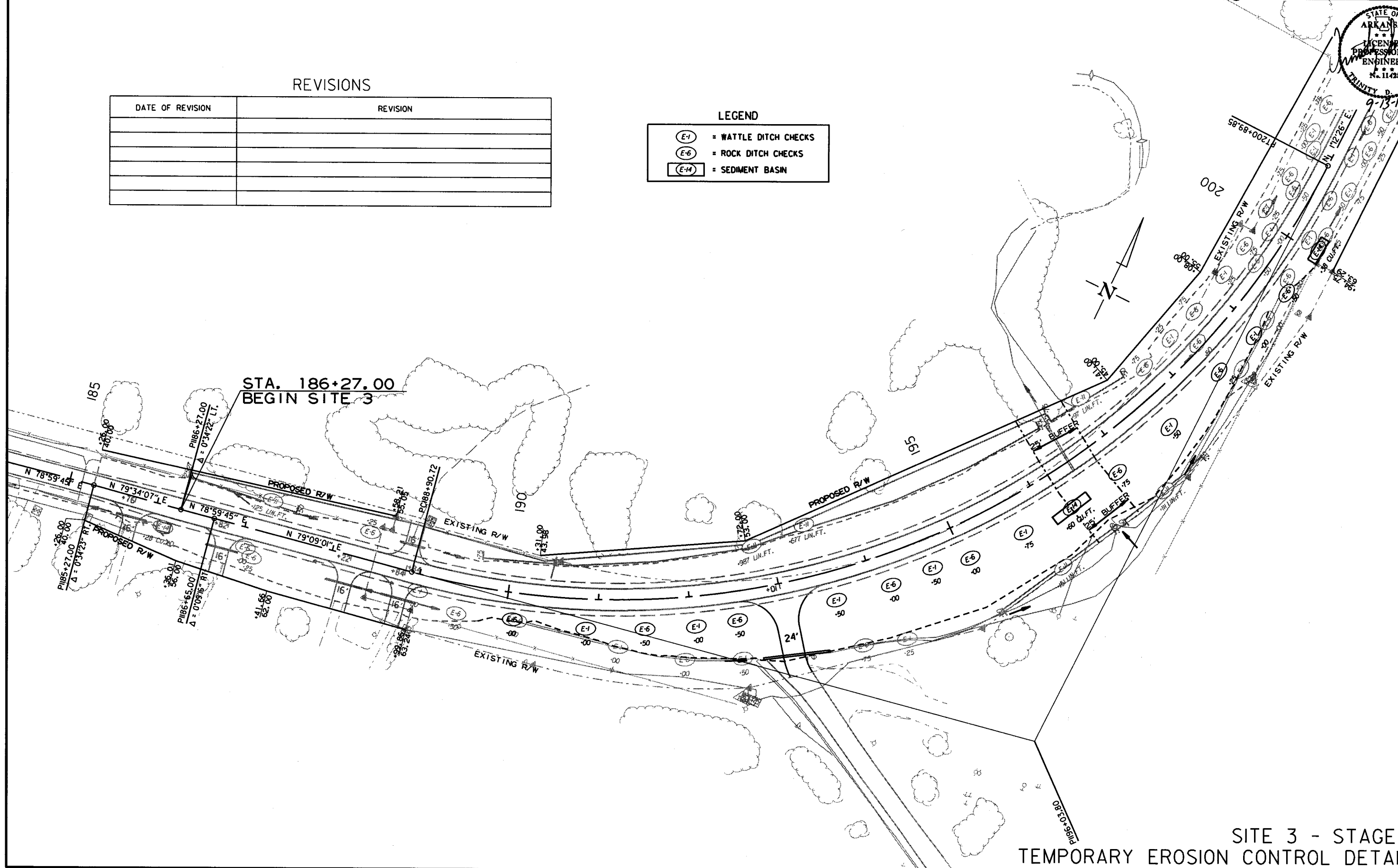
= WATTLE DITCH CHECKS

E-6

= ROCK DITCH CHECKS

E-14

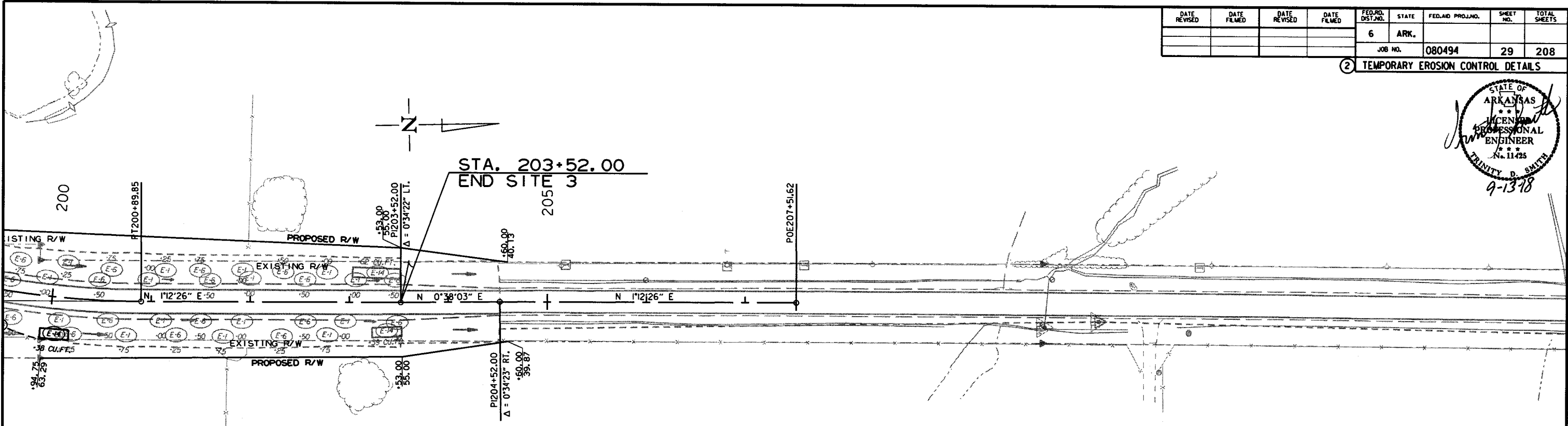
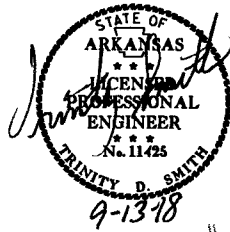
= SEDIMENT BASIN



SITE 3 - STAGE 3
TEMPORARY EROSION CONTROL DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	080494		29	208

② TEMPORARY EROSION CONTROL DETAILS



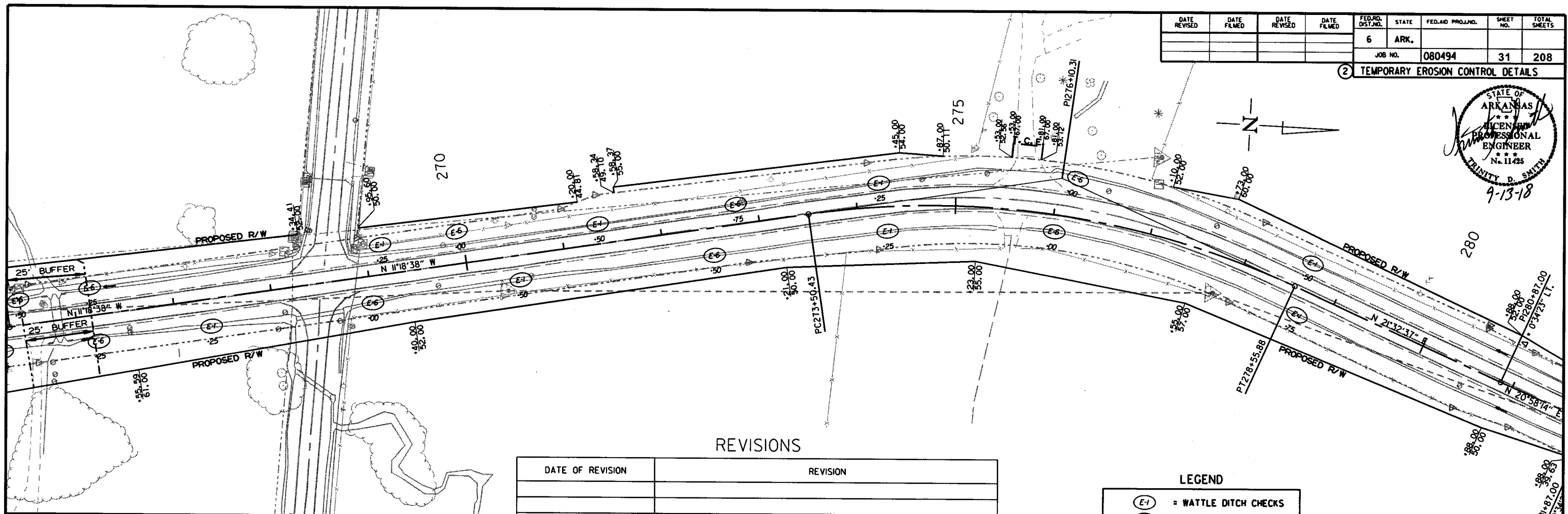
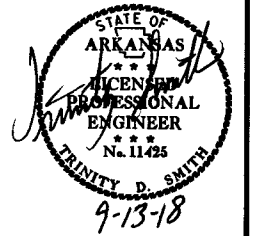
REVISIONS

DATE OF REVISION	REVISION

LEGEND

E-1	= WATTLE DITCH CHECKS
E-6	= ROCK DITCH CHECKS
E-14	= SEDIMENT BASIN

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.		080494	31	208
② TEMPORARY EROSION CONTROL DETAILS								

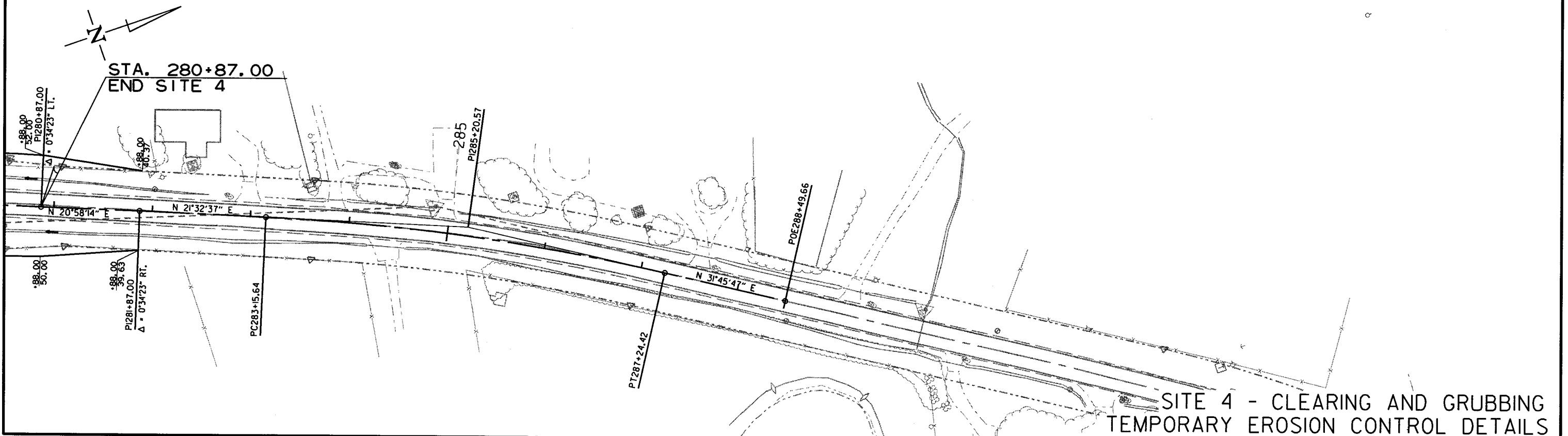


REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-1) = WATTLE DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-11) = SILT FENCE



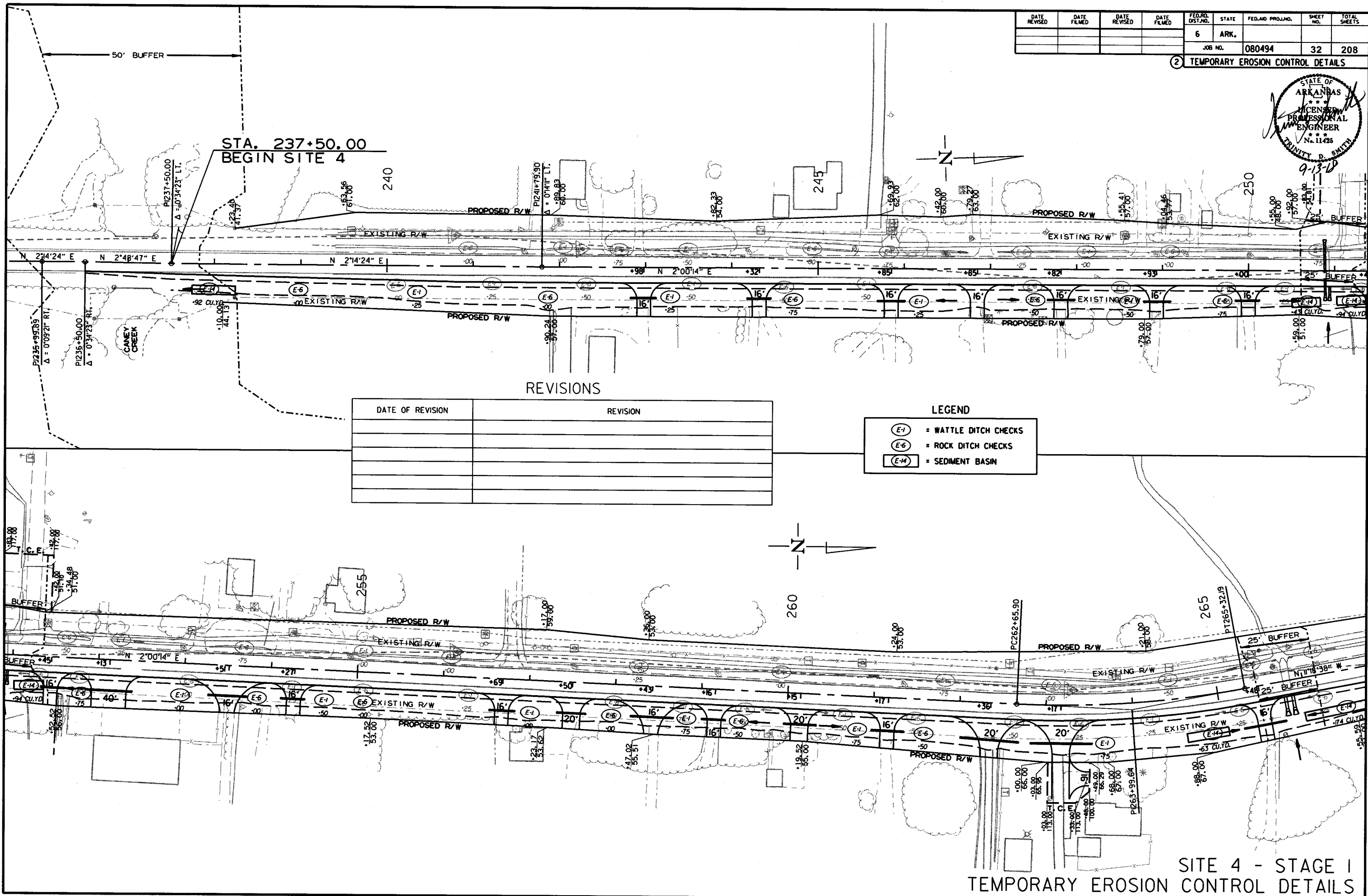
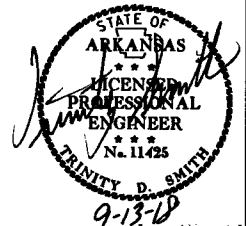
SITE 4 - CLEARING AND GRUBBING
TEMPORARY EROSION CONTROL DETAILS

9/6/2018

R080494.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		32	208
				JOB NO.	080494			

② TEMPORARY EROSION CONTROL DETAILS



REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-1) = WATTLE DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-14) = SEDIMENT BASIN

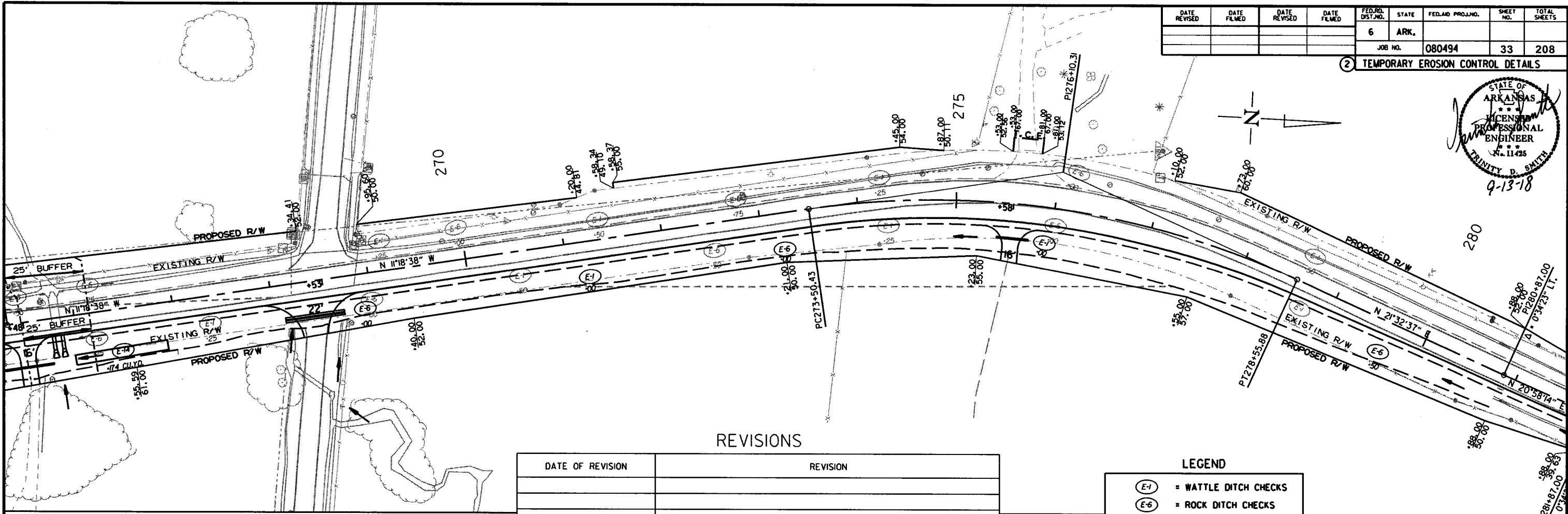
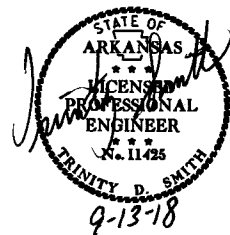
9/6/2018

R080494.DGN

SITE 4 - STAGE I
TEMPORARY EROSION CONTROL DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	080494		33	208

2 TEMPORARY EROSION CONTROL DETAILS

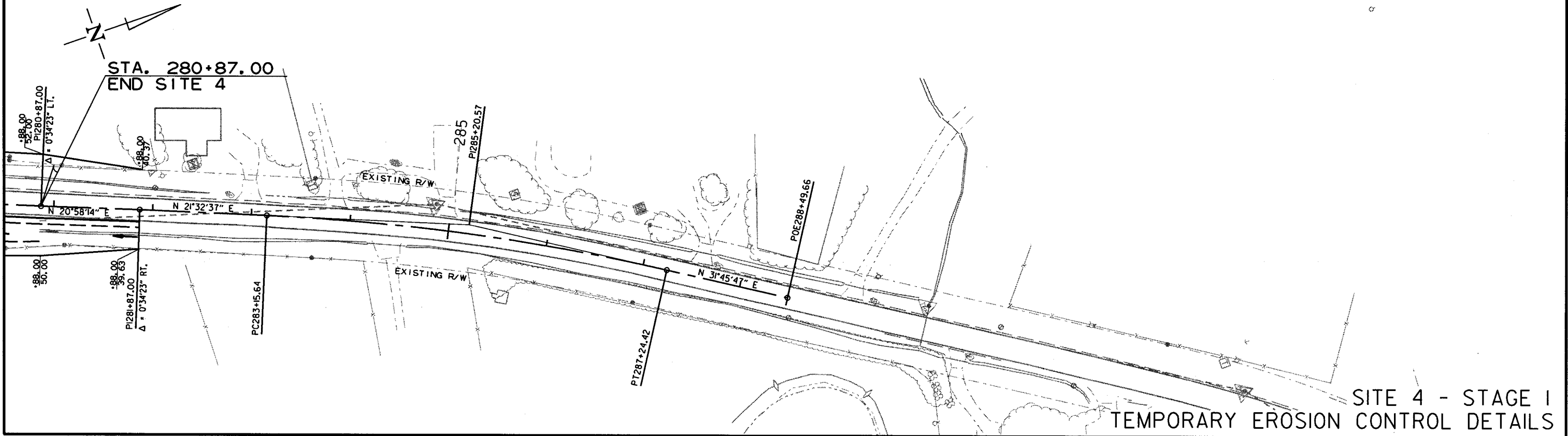


REVISIONS

DATE OF REVISION	REVISION

LEGEND

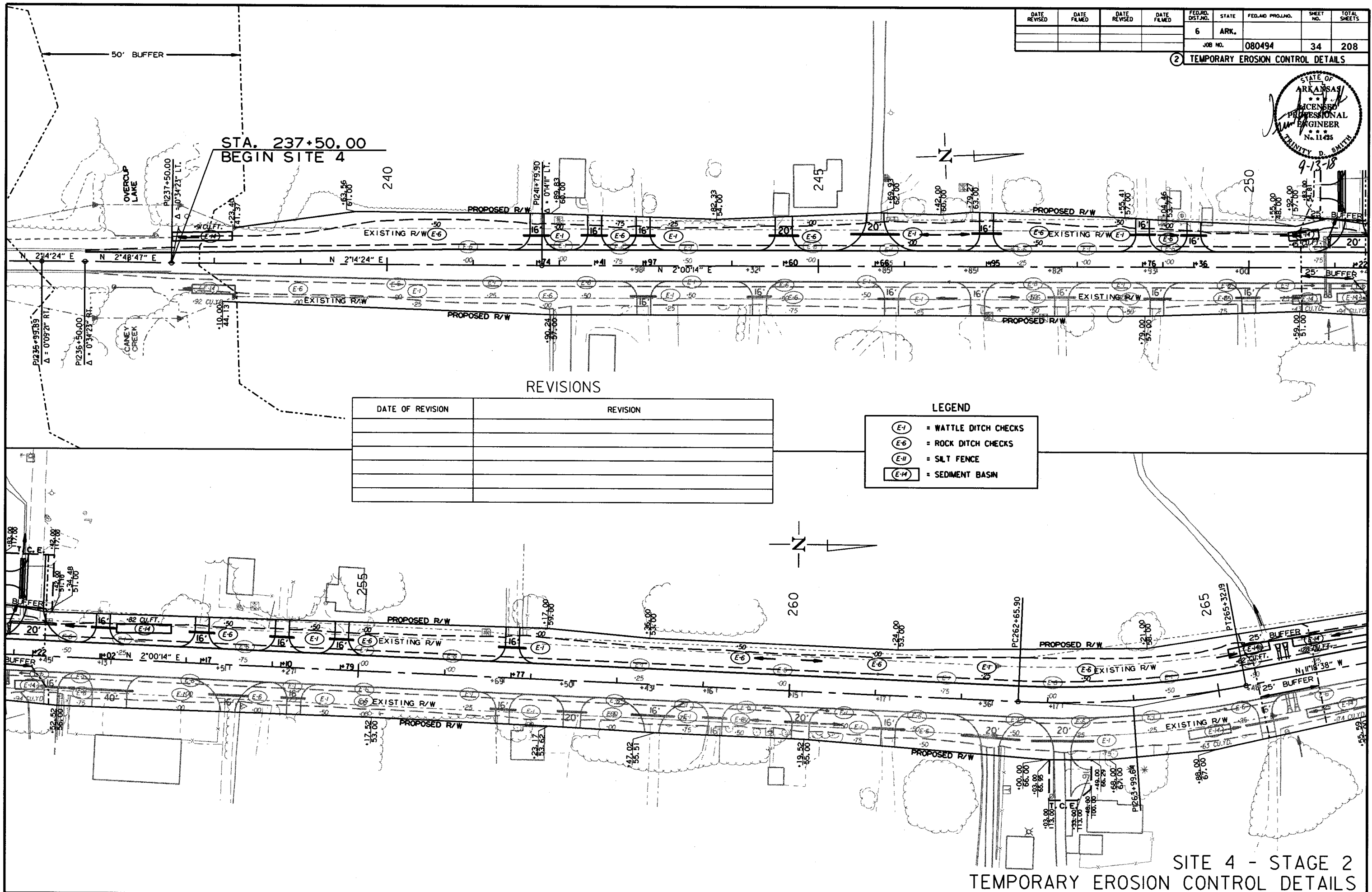
- (E-1) = WATTLE DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-14) = SEDIMENT BASIN



SITE 4 - STAGE I
TEMPORARY EROSION CONTROL DETAILS

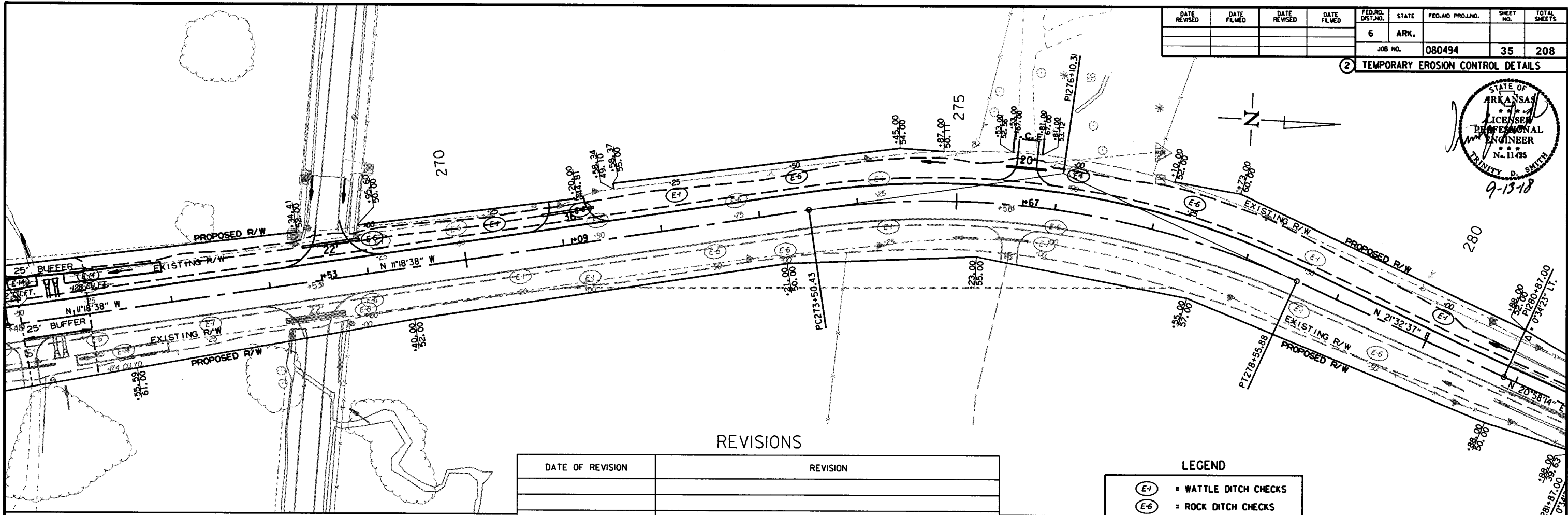
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	080494		34	208

2 TEMPORARY EROSION CONTROL DETAILS



DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	080494		35	208

2 TEMPORARY EROSION CONTROL DETAILS

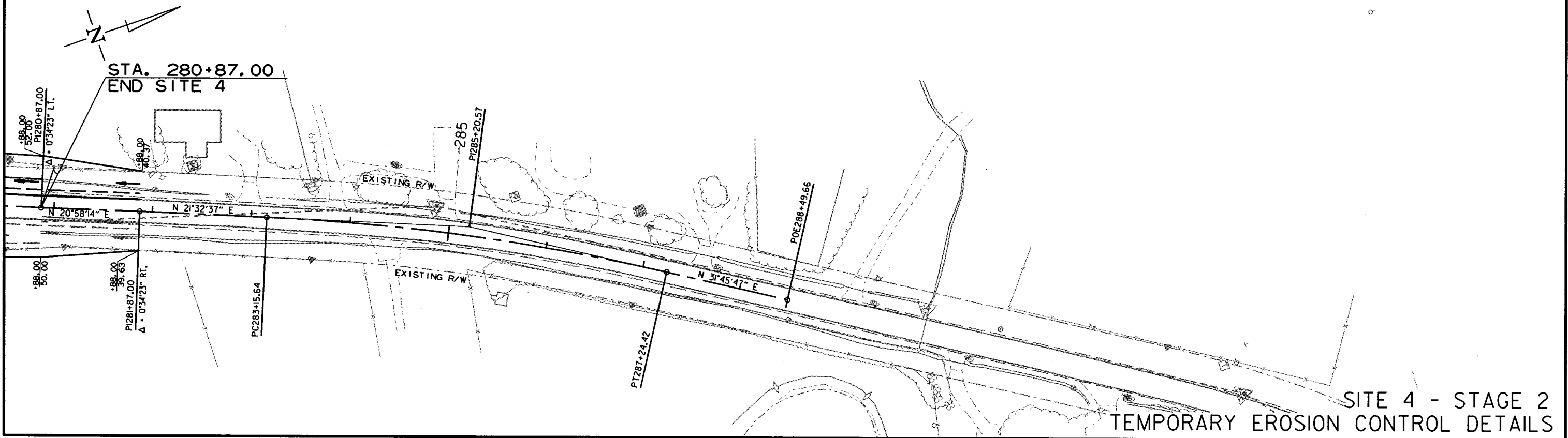


REVISIONS

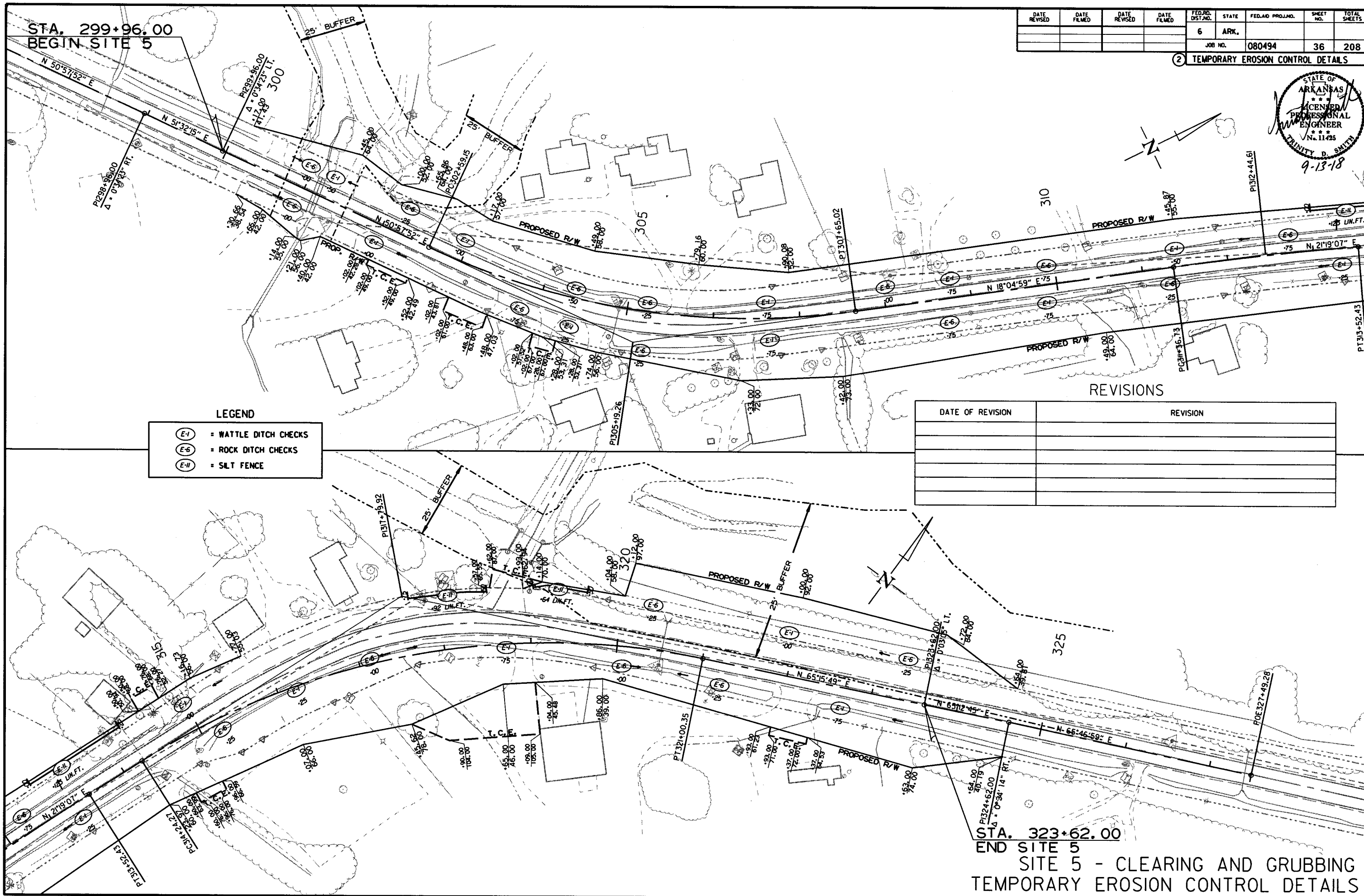
DATE OF REVISION	REVISION

LEGEND

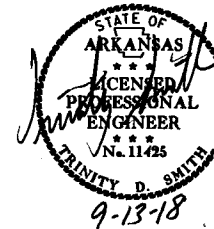
- (E-1) = WATTLE DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-11) = SILT FENCE
- (E-14) = SEDIMENT BASIN



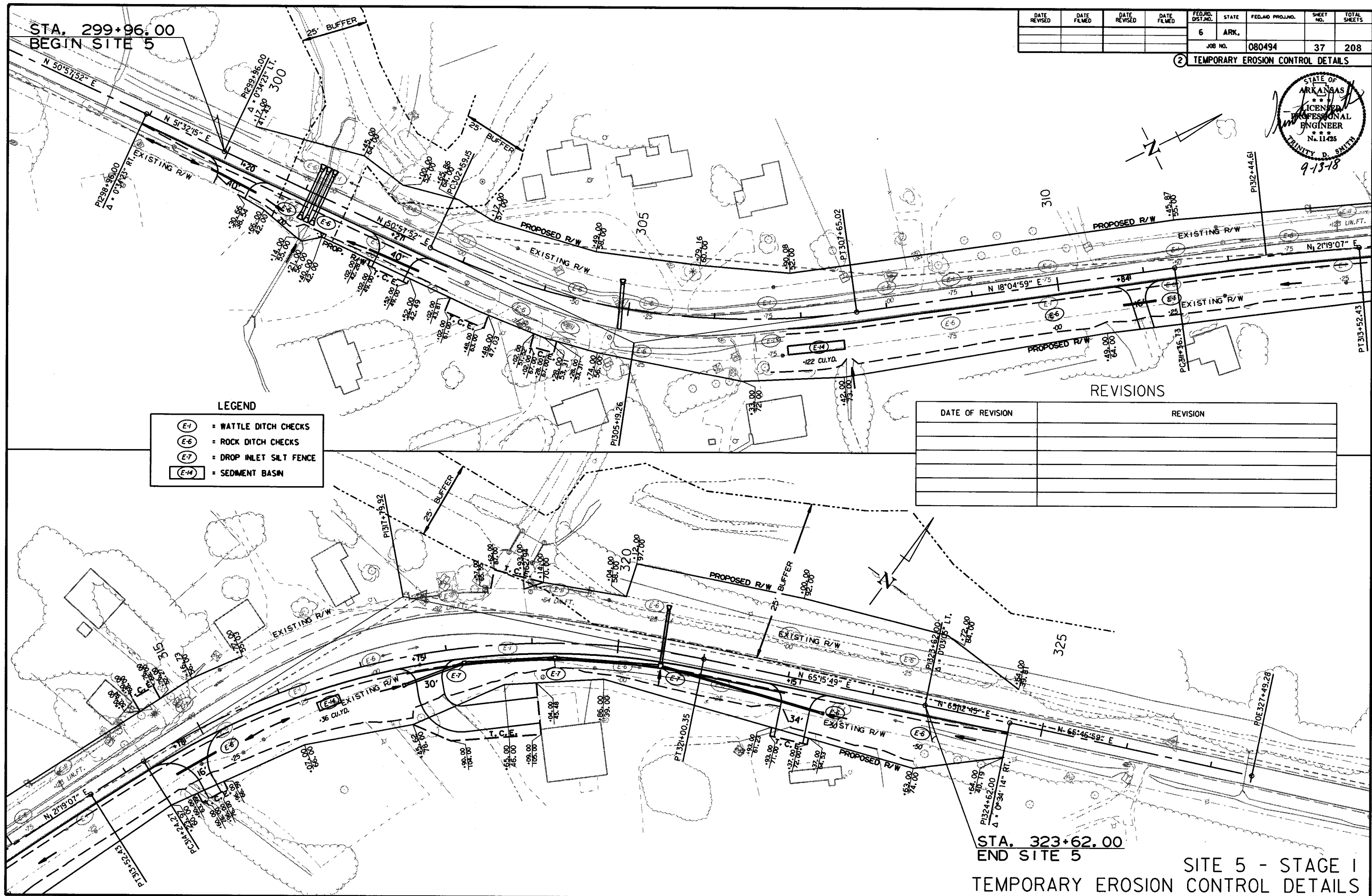
SITE 4 - STAGE 2
TEMPORARY EROSION CONTROL DETAILS



DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080494	36	208
				(2) TEMPORARY EROSION CONTROL DETAILS				

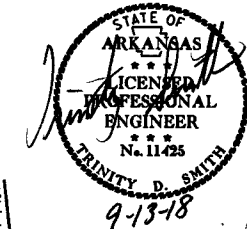


9/6/2018
R080494.DGN

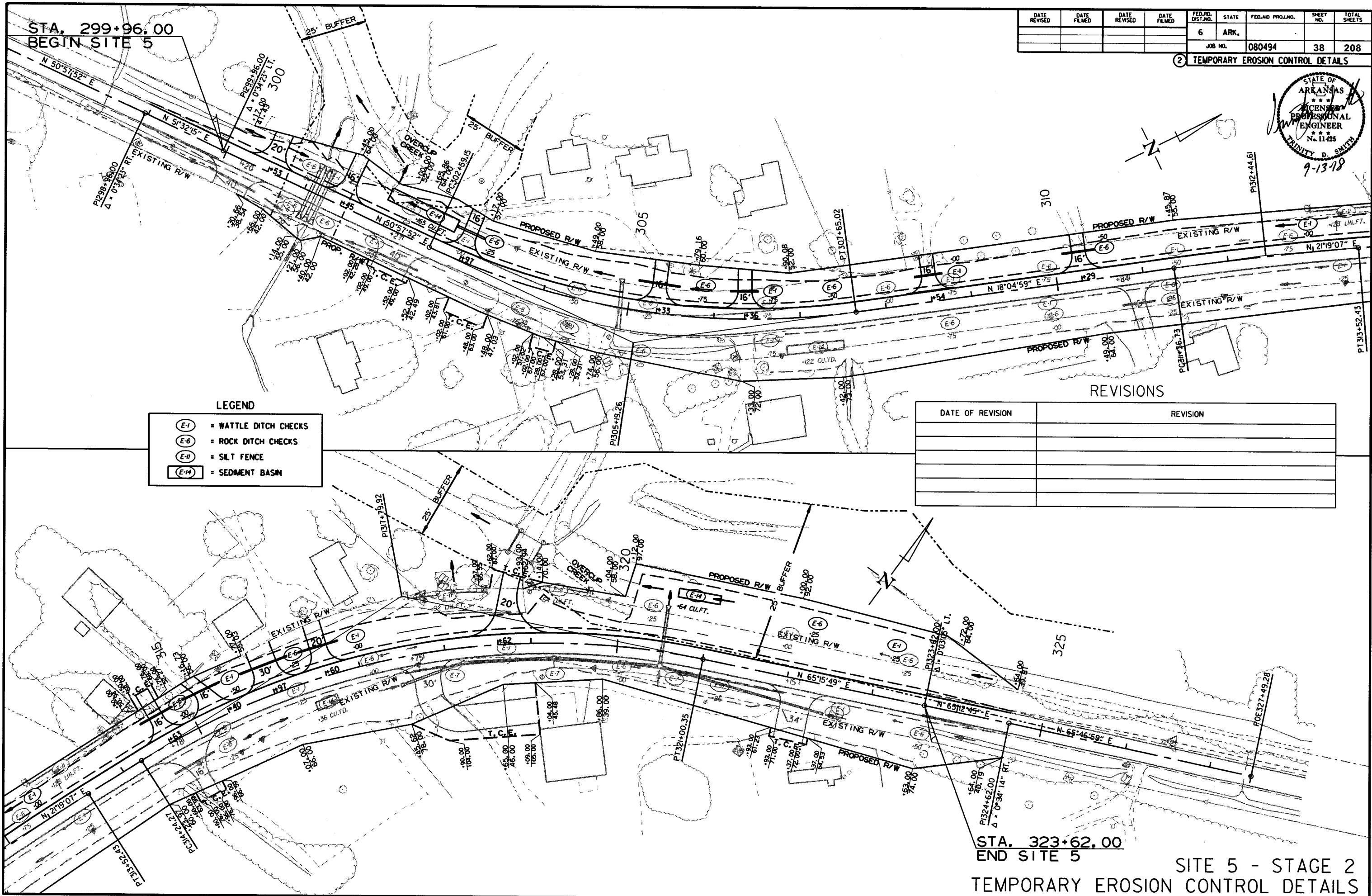


DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	080494		37	208

2 TEMPORARY EROSION CONTROL DETAILS

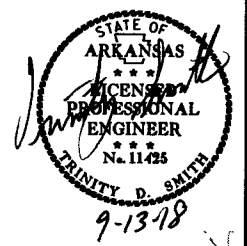


9/6/2018
R080494.DGN



DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		38	208
				JOB NO.	080494			

2 TEMPORARY EROSION CONTROL DETAILS

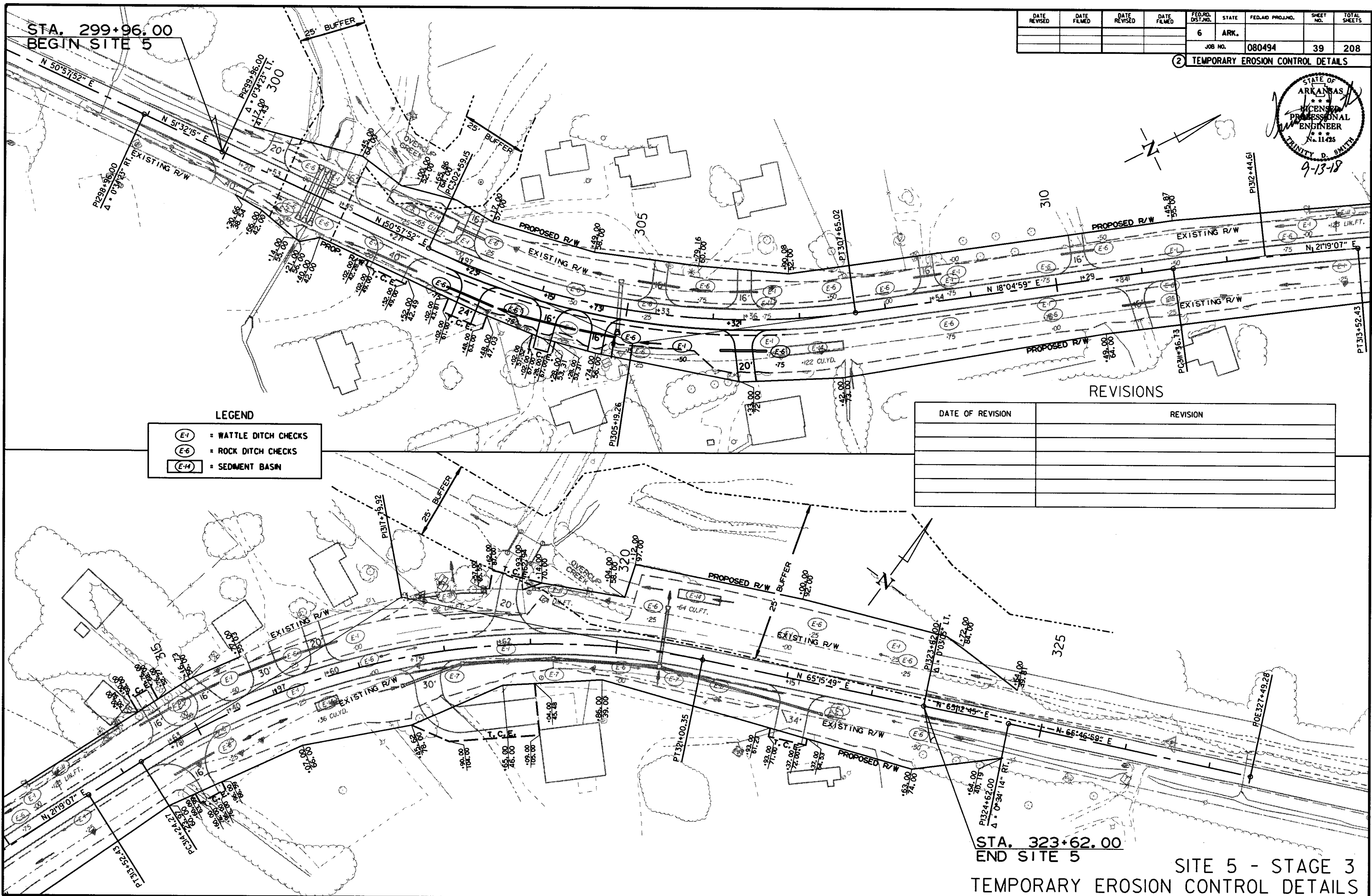


LEGEND

(E-1)	= WATTLE DITCH CHECKS
(E-6)	= ROCK DITCH CHECKS
(E-11)	= SALT FENCE
(E-14)	= SEDIMENT BASIN

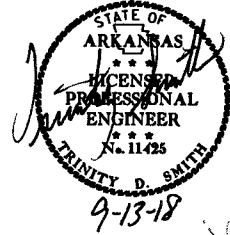
REVISIONS

DATE OF REVISION	REVISION



DATE REVISION	DATE FILMED	DATE REVISION	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	080494		39	208

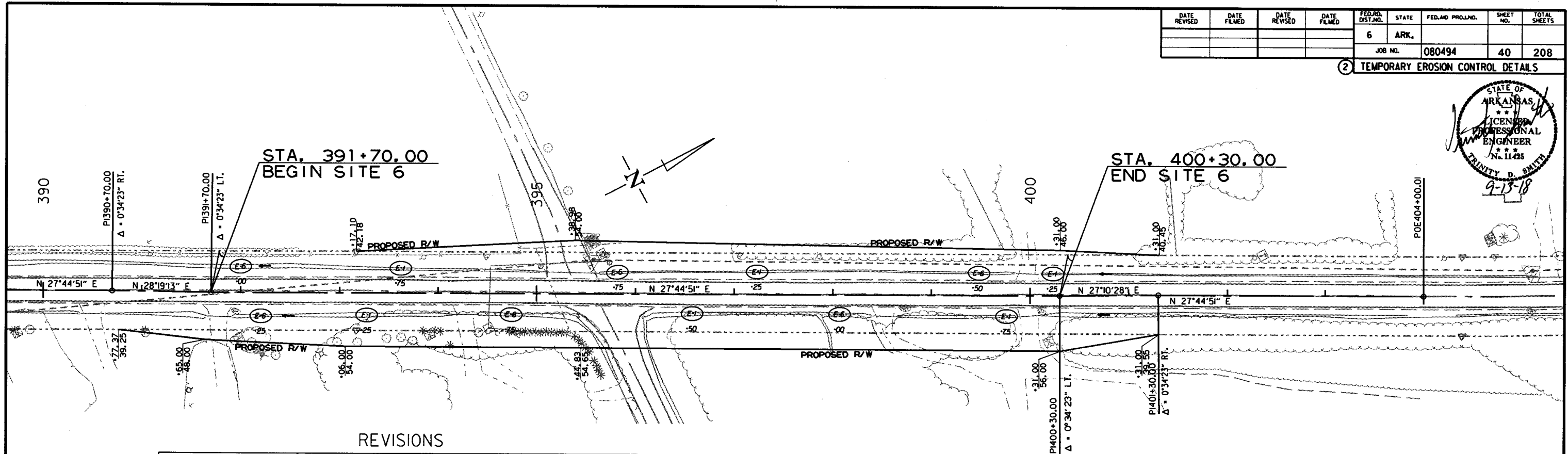
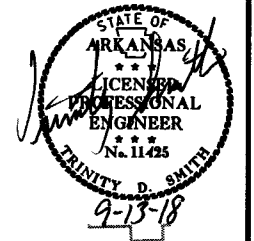
2 TEMPORARY EROSION CONTROL DETAILS



REVISIONS

DATE OF REVISION	REVISION

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	080494		40	208
② TEMPORARY EROSION CONTROL DETAILS								



REVISIONS

DATE OF REVISION	REVISION

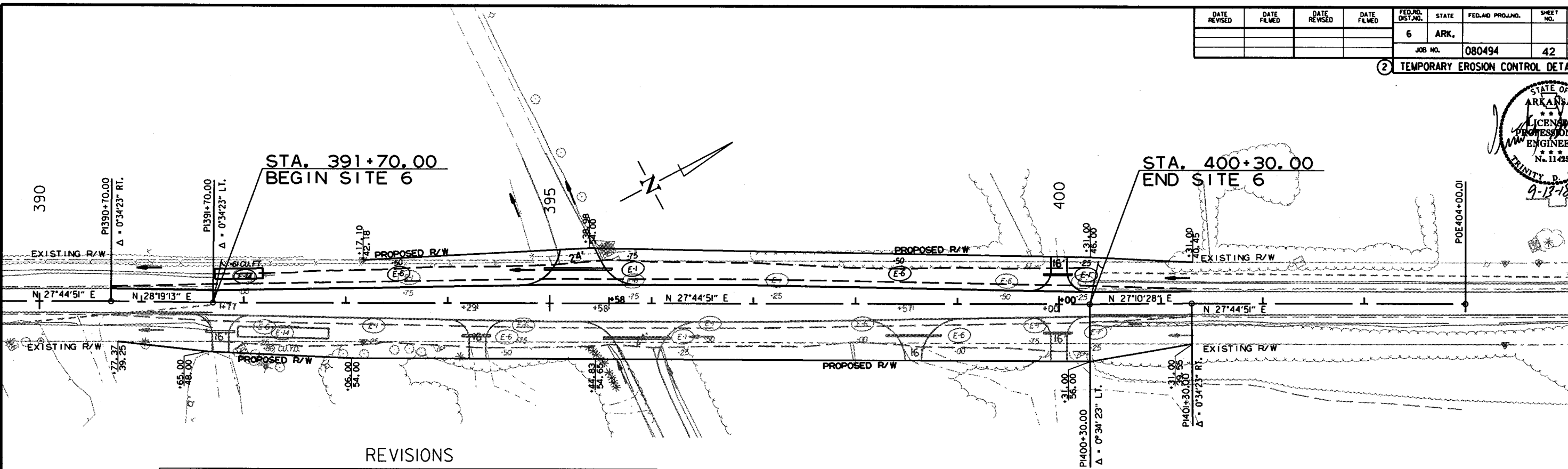
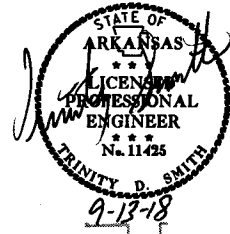
LEGEND

- (E-1) = WATTLE DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-11) = SILT FENCE

SITE 6 - CLEARING AND GRUBBING
TEMPORARY EROSION CONTROL DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	080494		42	208

2 TEMPORARY EROSION CONTROL DETAILS



REVISIONS

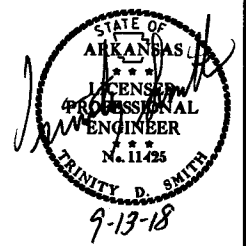
DATE OF REVISION	REVISION

LEGEND

- (E-1) = WATTLE DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-11) = SILT FENCE
- (E-14) = SEDIMENT BASIN

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.	080494		43	208

2 TEMPORARY EROSION CONTROL DETAILS



STA. 455+07.00
BEGIN SITE 7

REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-1) = WATTLE DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-11) = SALT FENCE

STA. 469+83.00
END SITE 7

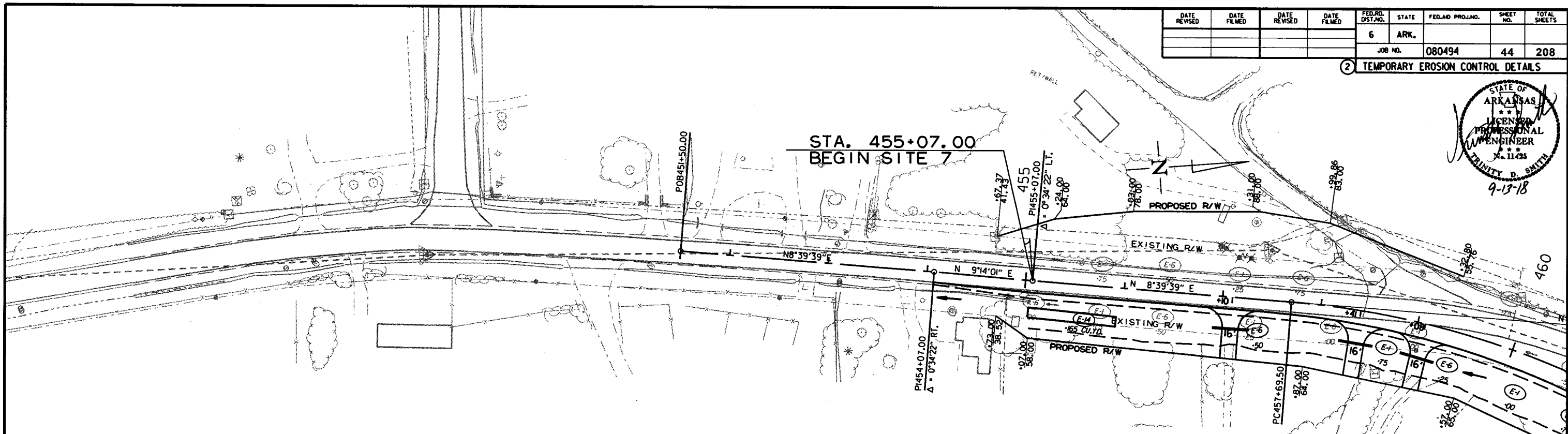
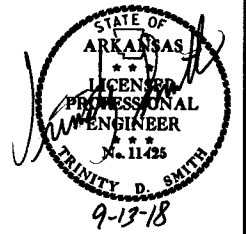
SITE 7 - CLEARING AND GRUBBING
TEMPORARY EROSION CONTROL DETAILS

9/6/2018

R080494.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.	080494		44	208

2 TEMPORARY EROSION CONTROL DETAILS

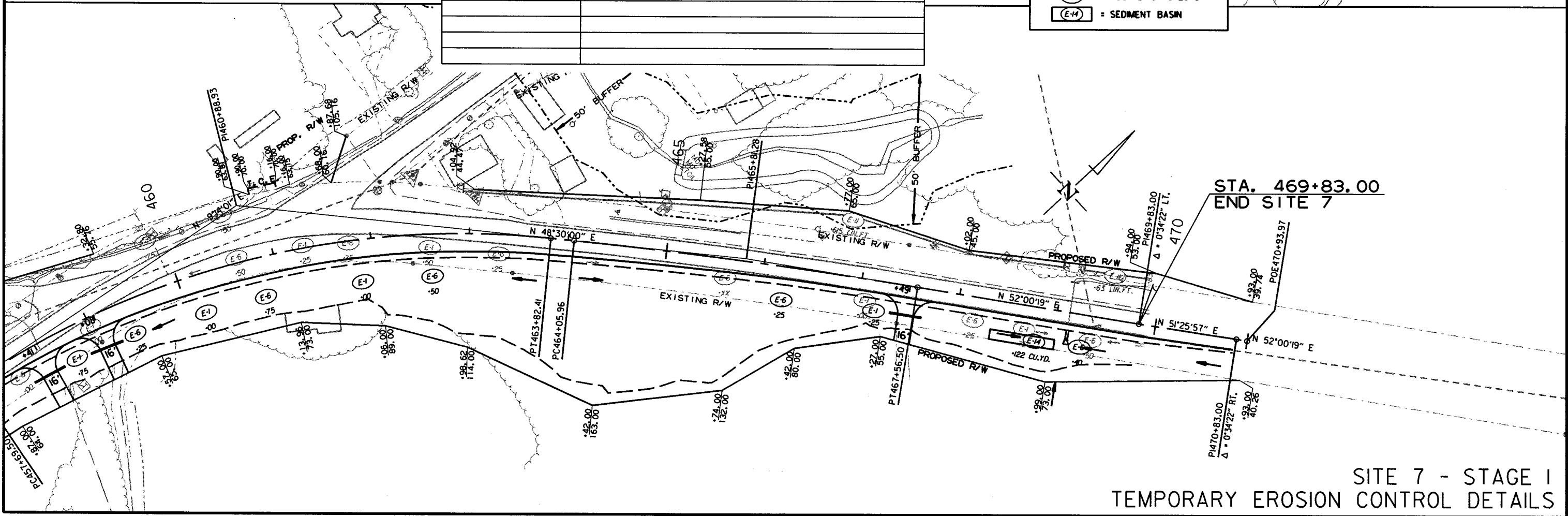


REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-1) = WATTLE DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-14) = SEDIMENT BASIN



SITE 7 - STAGE I
TEMPORARY EROSION CONTROL DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	080494		45	208

(2) TEMPORARY EROSION CONTROL DETAILS



STA. 455+07.00
BEGIN SITE 7

REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-1) = WATTLE DITCH CHECKS
- (E-6) = ROCK DITCH CHECKS
- (E-11) = SALT FENCE
- (E-14) = SEDIMENT BASIN

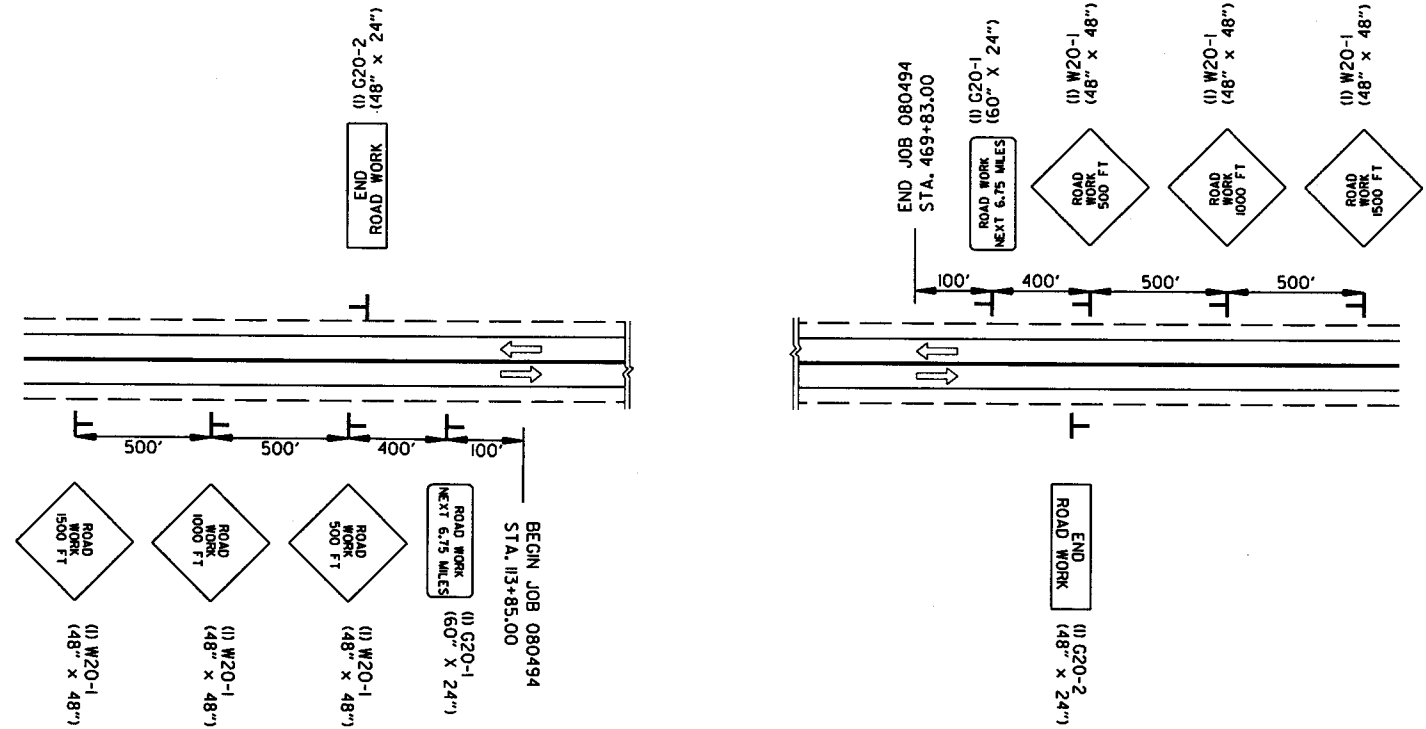
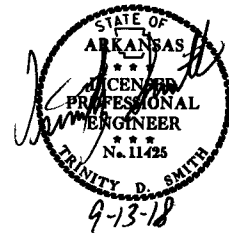
STA. 469+83.00
END SITE 7

SITE 7 - STAGE 2
TEMPORARY EROSION CONTROL DETAILS

9/6/2018

R080494.DGN

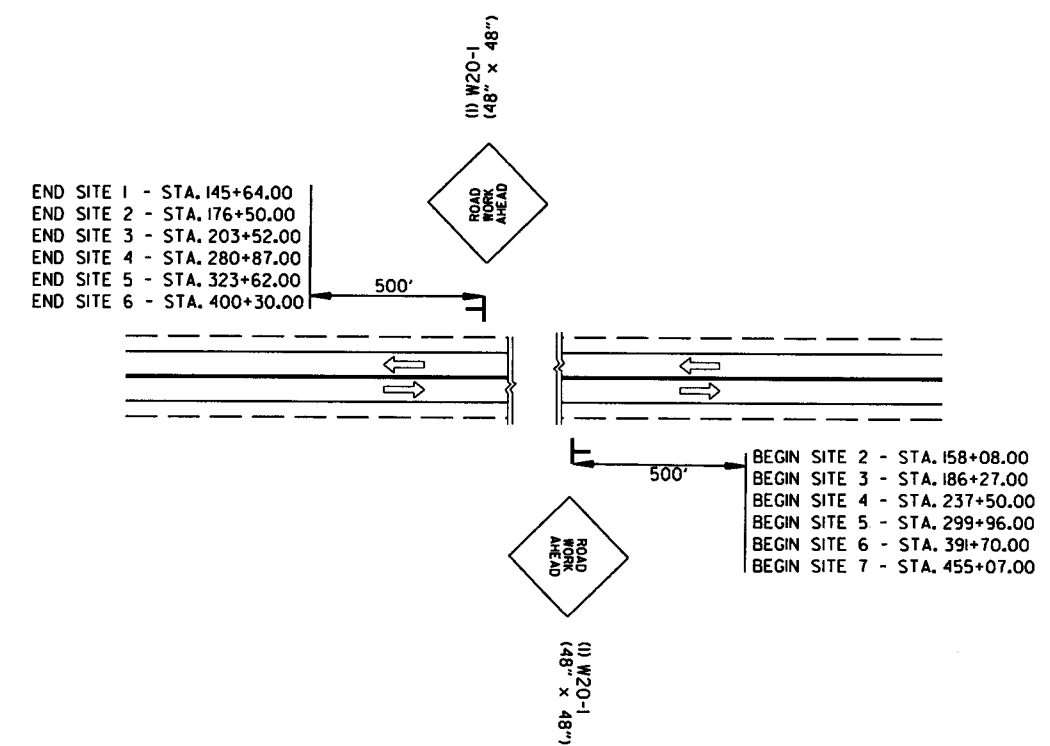
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	080494	46	208	
2 MAINTENANCE OF TRAFFIC DETAILS								



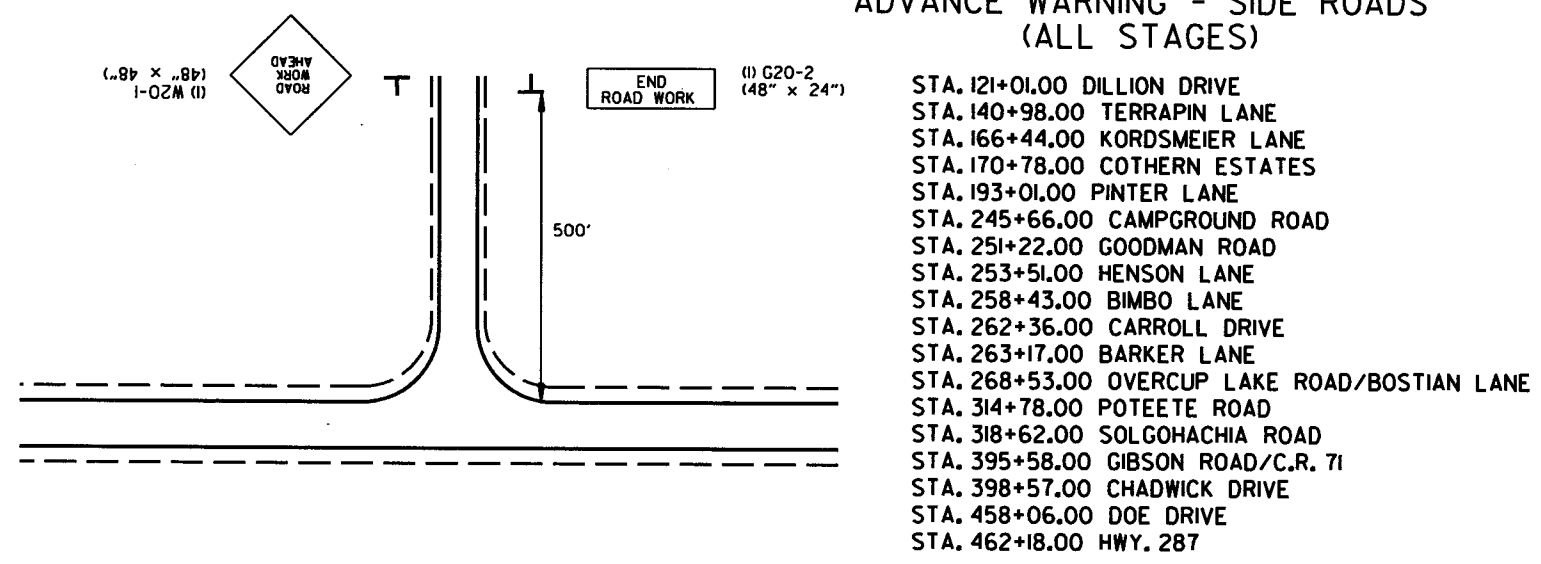
ADVANCE WARNING (ALL STAGES)

- (7) W21-5a (36" x 36")
RIGHT SHOULDER CLOSED
ALL STAGES TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER
- (14) R4-1 (24" x 30")
DO NOT PASS
ALL STAGES TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER
- (14) W8-1 (30" x 30")
BUMP
ALL STAGES TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER

ADVANCE WARNING - BETWEEN SITES (ALL STAGES)



ADVANCE WARNING - SIDE ROADS (ALL STAGES)



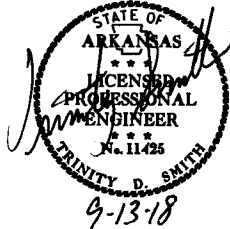
- STA. 121+01.00 DILLION DRIVE
- STA. 140+98.00 TERRAPIN LANE
- STA. 166+44.00 KORDSMEIER LANE
- STA. 170+78.00 COTHERN ESTATES
- STA. 193+01.00 PINTER LANE
- STA. 245+66.00 CAMPGROUND ROAD
- STA. 251+22.00 GOODMAN ROAD
- STA. 253+51.00 HENSON LANE
- STA. 258+43.00 BIMBO LANE
- STA. 262+36.00 CARROLL DRIVE
- STA. 263+17.00 BARKER LANE
- STA. 268+53.00 OVERCUP LAKE ROAD/BOSTIAN LANE
- STA. 314+78.00 POTEETE ROAD
- STA. 318+62.00 SOLGOHACHIA ROAD
- STA. 395+58.00 GIBSON ROAD/C.R. 71
- STA. 398+57.00 CHADWICK DRIVE
- STA. 458+06.00 DOE DRIVE
- STA. 462+18.00 HWY. 287

NOTE: ALL STATIONS BASED OFF C.L. CONST.

ADVANCE WARNING MAINTENANCE OF TRAFFIC DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080494	47	208

2 MAINTENANCE OF TRAFFIC DETAILS



STAGE 1 CONSTRUCTION SEQUENCE:

INSTALL ADVANCE WARNING SIGNS AND END ROAD WORK SIGNS AT THE BEGINNING AND END OF JOB AS SHOWN ON THE ADVANCE WARNING DETAIL.

NOTCH AND WIDEN FOR LANES ON RIGHT USING VERTICAL PANELS SPACED 50' O.C. EXCLUDING STA. 134+85 - STA. 142+25 SITE 1, STA. 189+50 - STA. 200+10 SITE 3, AND STA. 302+90 - STA. 306+90. USE TRAFFIC DRUMS TO DELINEATE DRIVEWAYS.

STAGE 2 CONSTRUCTION SEQUENCE:

MAINTAIN ADVANCE WARNING SIGNS AND END ROAD WORK SIGNS AT THE BEGINNING AND END OF JOB AS SHOWN ON THE ADVANCE WARNING DETAIL.

APPLY LEVELING COURSE TO EXISTING LANES IF AND WHERE DIRECTED BY THE ENGINEER.

APPLY CONSTRUCTION PAVEMENT MARKINGS AS SHOWN IN THE STAGE 2 MAINTENANCE OF TRAFFIC DETAILS.

NOTCH AND WIDEN FOR LANES ON LEFT USING TRAFFIC VERTICAL PANELS AT 50' O.C. LT. AND TRAFFIC DRUMS AT 100' O.C. RT. TO DELINEATE THE WORK ZONE. USE TRAFFIC DRUMS TO DELINEATE DRIVEWAYS.

CONSTRUCT TO RT. EOP FROM STA. 134+85 - STA. 142+25 SITE 1.

CONSTRUCT TO RT. SHOULDER FROM STA. 189+50 - STA. 200+10 SITE 3.

STAGE 3 CONSTRUCTION SEQUENCE

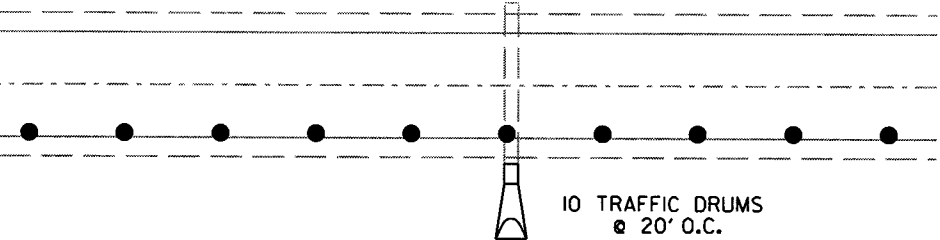
MAINTAIN ADVANCE WARNING SIGNS AND END ROAD WORK SIGNS AT THE BEGINNING AND END OF JOB AS SHOWN ON THE ADVANCE WARNING DETAIL.

APPLY CONSTRUCTION PAVEMENT MARKINGS AS SHOWN IN THE STAGE 3 MAINTENANCE OF TRAFFIC DETAILS.

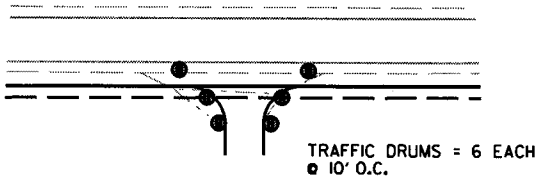
NOTCH AND WIDEN FOR LANES ON RIGHT USING VERTICAL PANELS AT 50 O.C. RT. TO CONSTRUCT SHOULDER AND SLOPES FROM STA. 134+85 - STA. 142+25 SITE 1, AND TO CONSTRUCT RT. SIDE FROM STA. 302+90 - STA. 306+90 SITE 3. USE TRAFFIC DRUMS AT 100' O.C. LT. TO DELINEATE THE WORK ZONE. USE TRAFFIC DRUMS TO DELINEATE DRIVEWAYS.

CONSTRUCT RT. SIDE SLOPES FROM STA. 189+50 - STA. 200+10 SITE 3.

APPLY FINAL 2" LIFT OF ACHM SURFACE COURSE AND INSTALL PERMANENT PAVEMENT MARKINGS AS SHOWN IN THE PERMANENT PAVEMENT MARKINGS DETAILS.



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



DRIVEWAY/TRAFFIC DRUM DETAIL

MAINTENANCE OF TRAFFIC - STAGE 1 QUANTITIES

SIGNS = 864.5 SQ. FT.
TRAFFIC DRUMS = 345 EACH
VERTICAL PANELS = 211 EACH
CONSTRUCTION PAVEMENT MARKINGS = 68740 LIN. FT.

MAINTENANCE OF TRAFFIC - STAGE 2 QUANTITIES

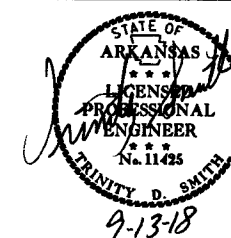
SIGNS = 864.5 SQ. FT.
TRAFFIC DRUMS = 329 EACH
VERTICAL PANELS = 211 EACH
CONSTRUCTION PAVEMENT MARKINGS = 48668 LIN. FT.

MAINTENANCE OF TRAFFIC - STAGE 3 QUANTITIES

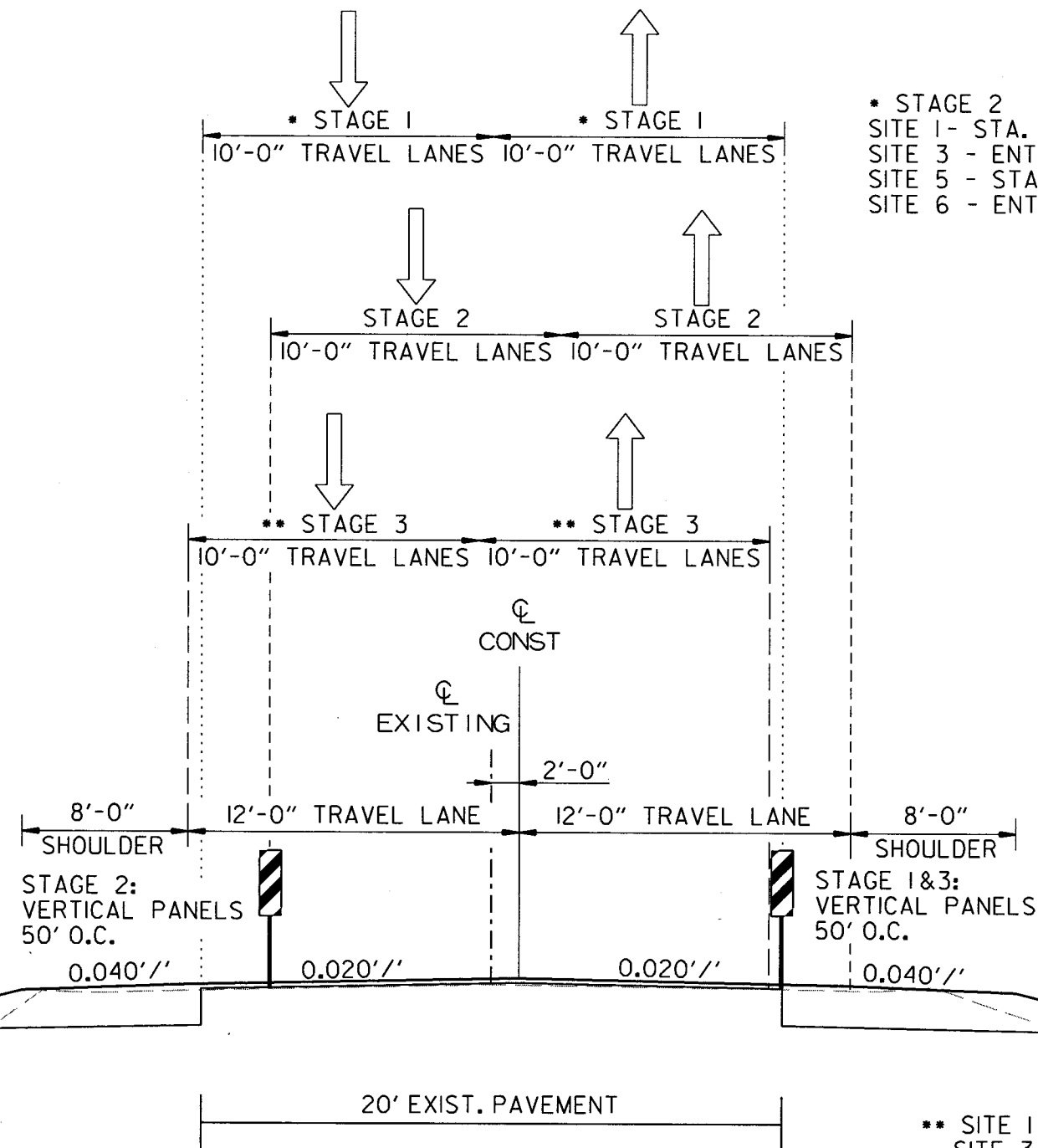
SIGNS = 864.5 SQ. FT.
TRAFFIC DRUMS = 44 EACH
VERTICAL PANELS = 41 EACH
CONSTRUCTION PAVEMENT MARKINGS = 31480 LIN. FT.

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. 080494	48	208

② MAINTENANCE OF TRAFFIC DETAILS

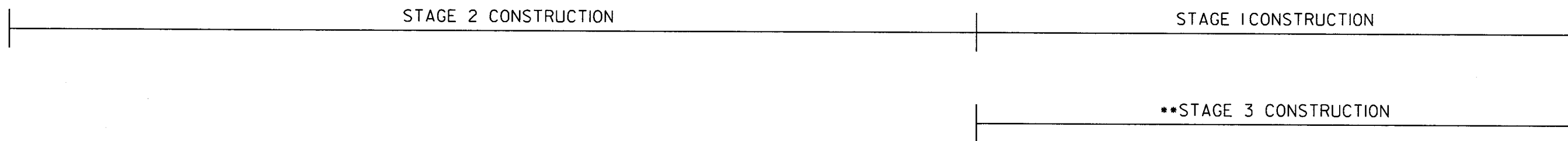


* STAGE 2
 SITE 1 - STA. 113+85.00 - STA. 133+66.47
 SITE 3 - ENTIRE LENGTH
 SITE 5 - STA. 299+96.00 - STA. 307+39.50
 SITE 6 - ENTIRE LENGTH



STAGE CONSTRUCTION

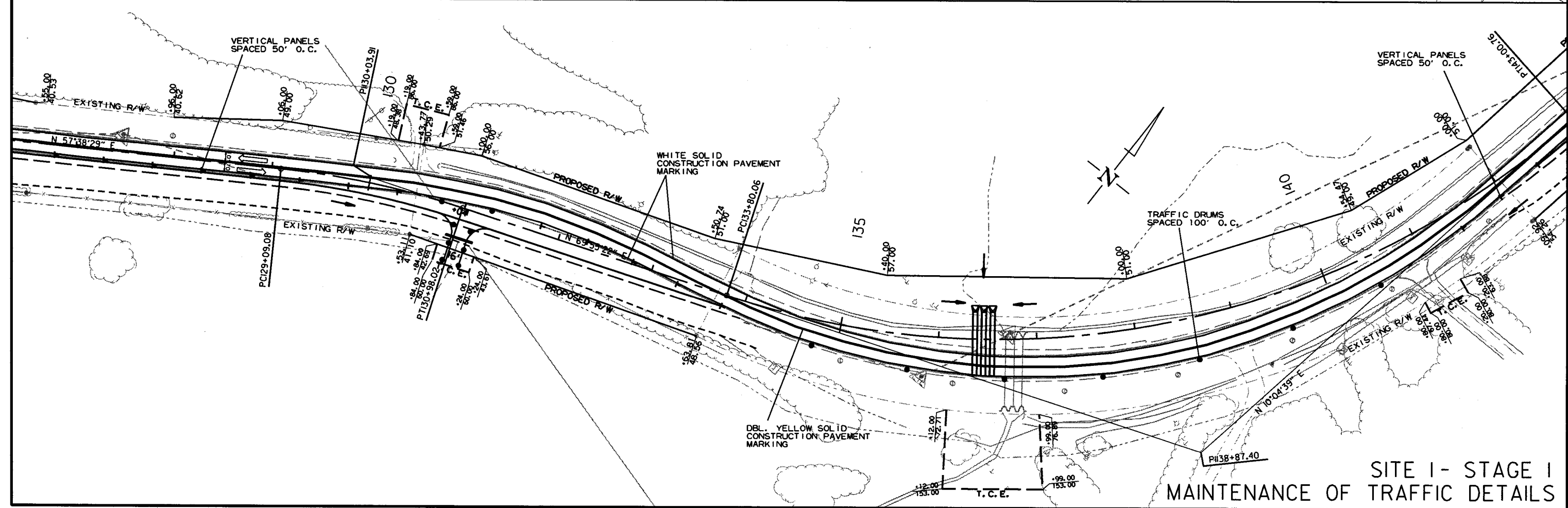
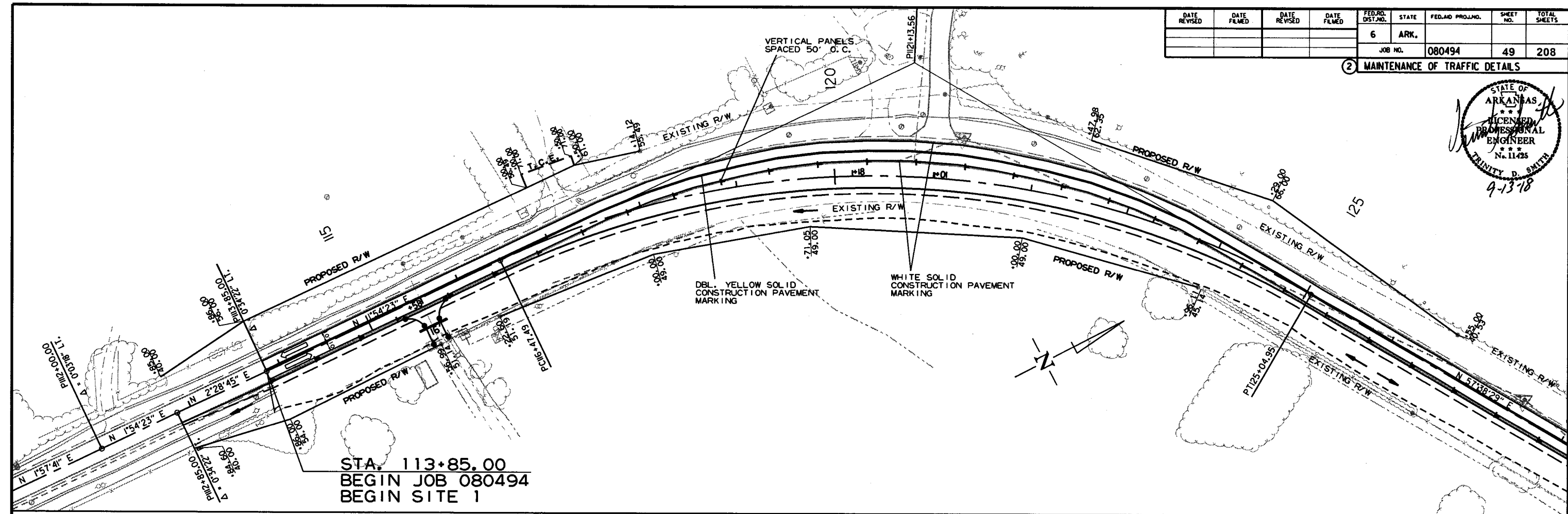
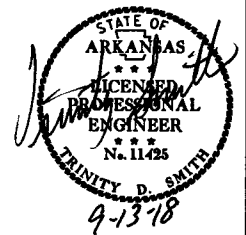
** SITE 1: STA. 134+00 - STA. 142+03
 SITE 3 : STA. 189+51 - STA. 200+01
 SITE 5 : STA. 302+87 - STA. 306+84



MAINTENANCE OF TRAFFIC DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	080494	49	208	

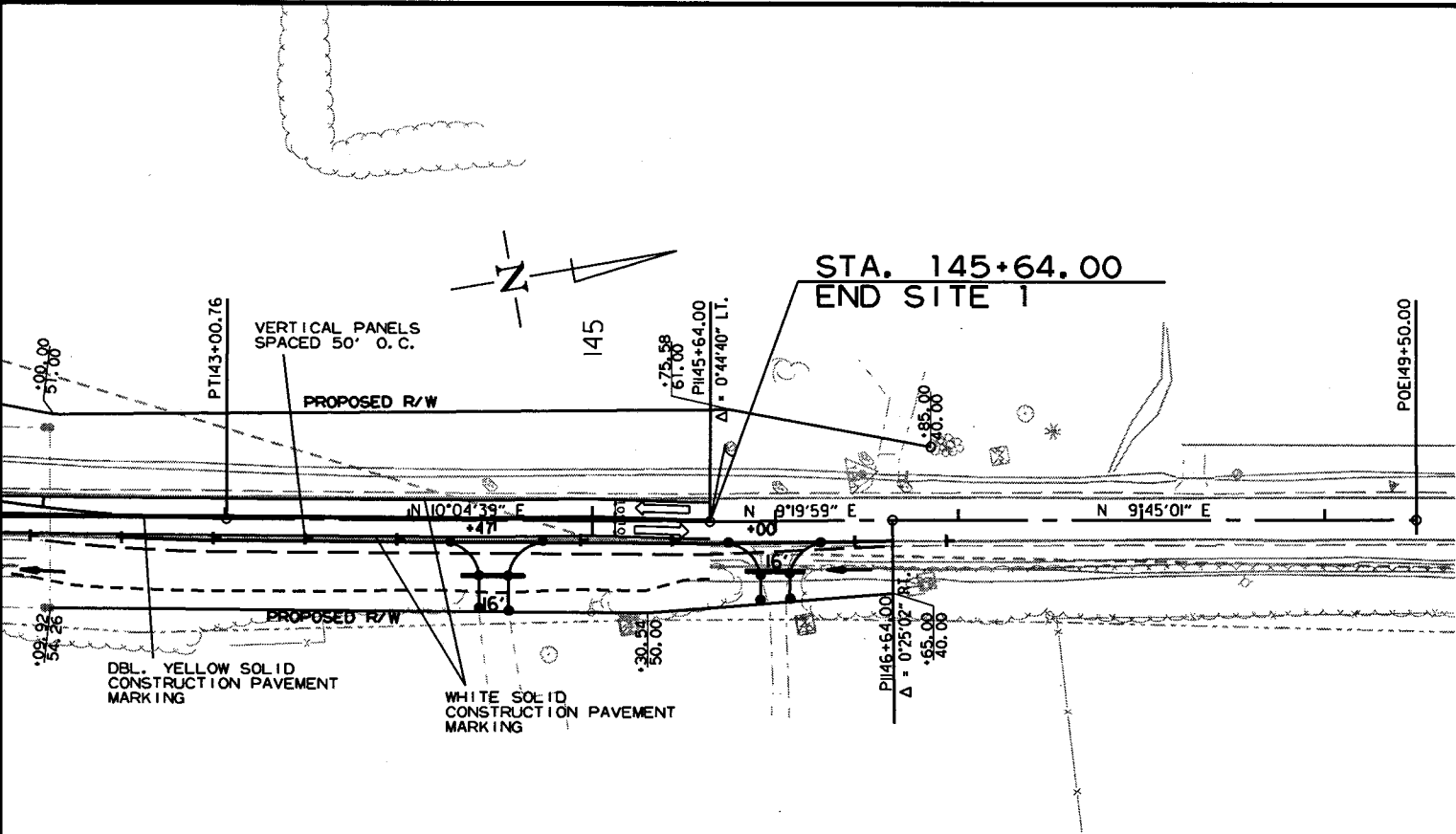
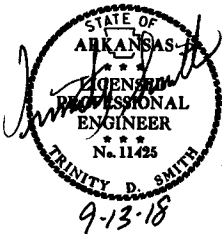
② MAINTENANCE OF TRAFFIC DETAILS



SITE I- STAGE I
MAINTENANCE OF TRAFFIC DETAILS

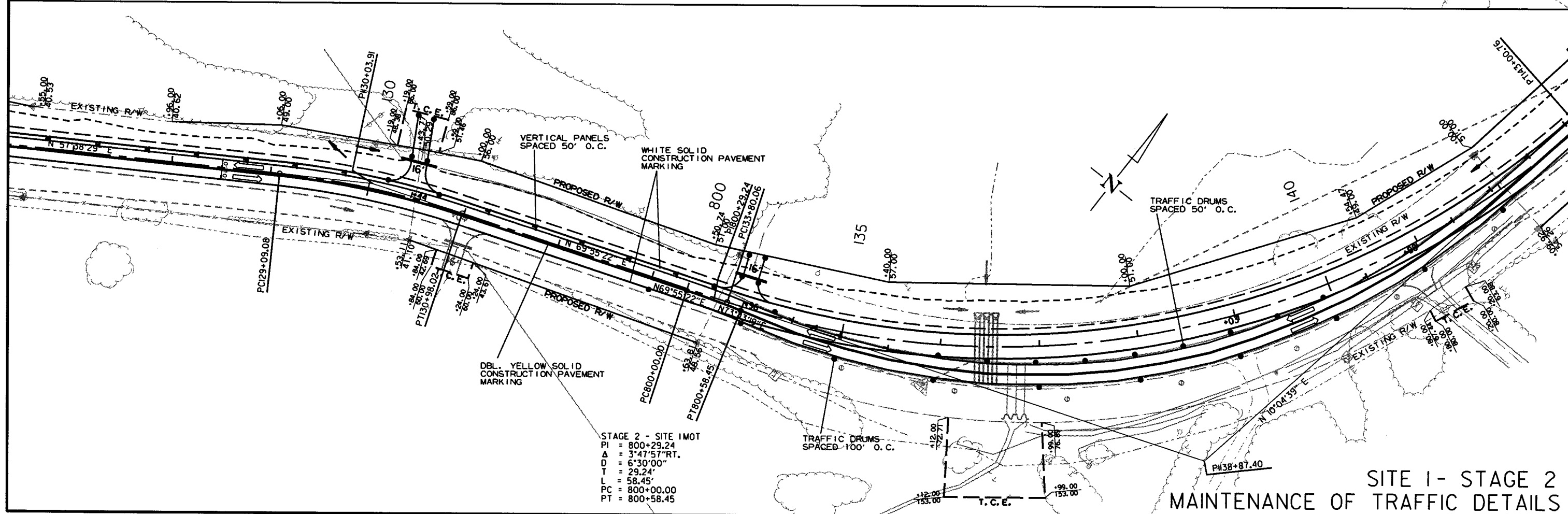
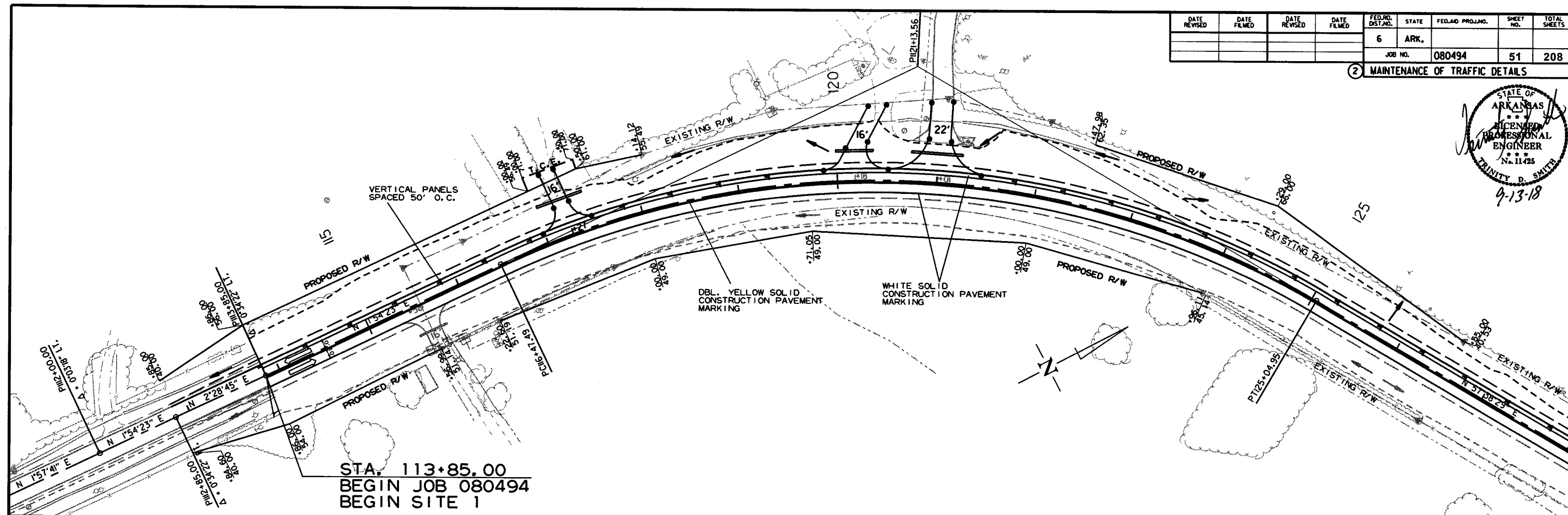
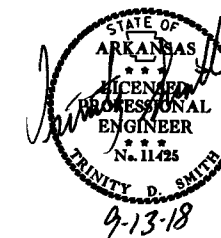
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
						JOB NO. 080494	50	208

② MAINTENANCE OF TRAFFIC DETAILS



DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	080494		51	208

② MAINTENANCE OF TRAFFIC DETAILS

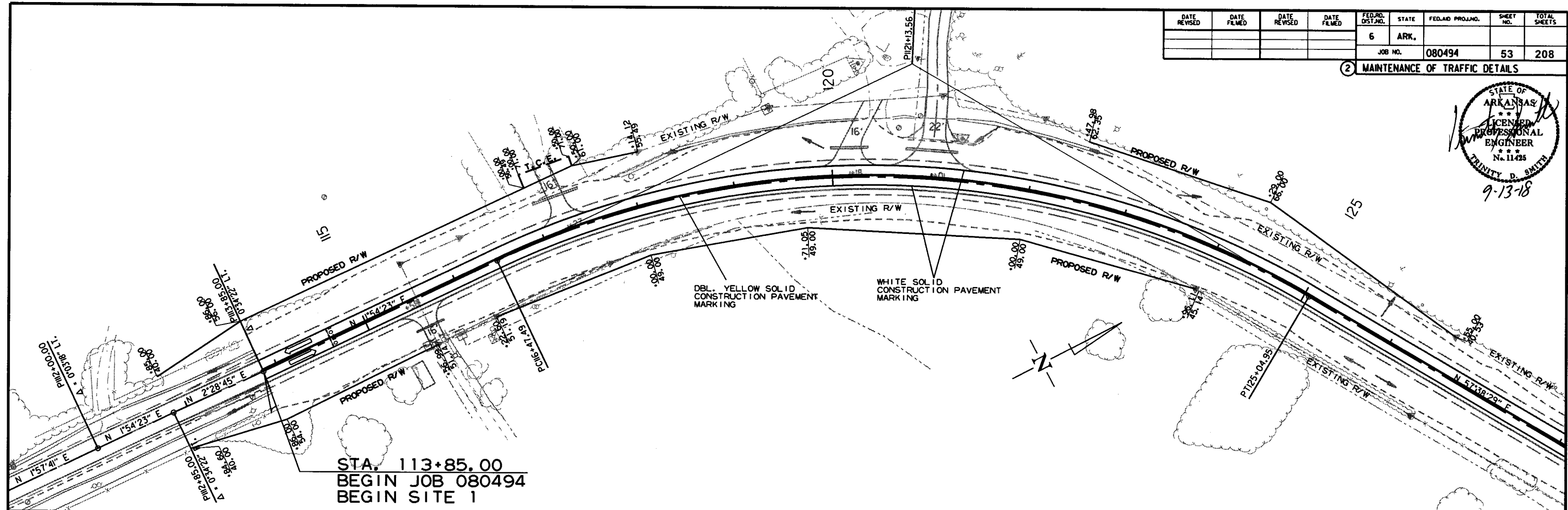
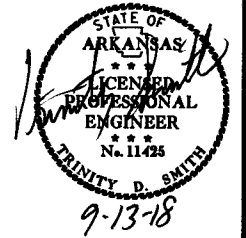


9/6/2018

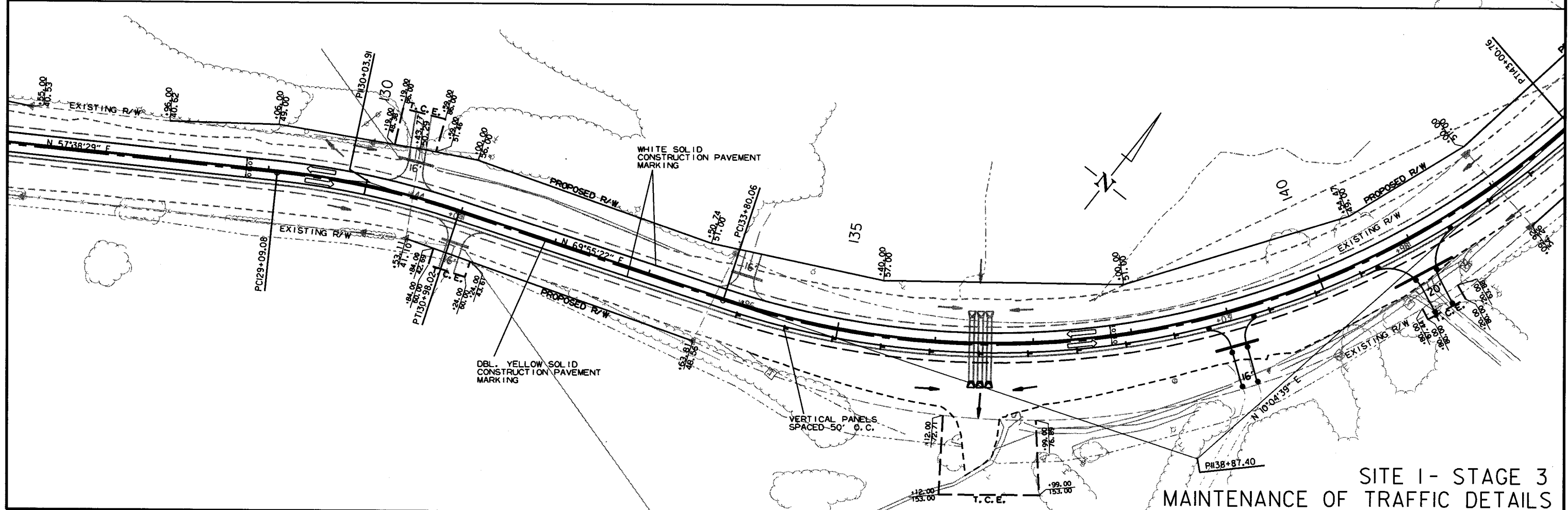
R080494.DGN

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.	080494		53	208

(2) MAINTENANCE OF TRAFFIC DETAILS



STA. 113+85.00
BEGIN JOB 080494
BEGIN SITE 1



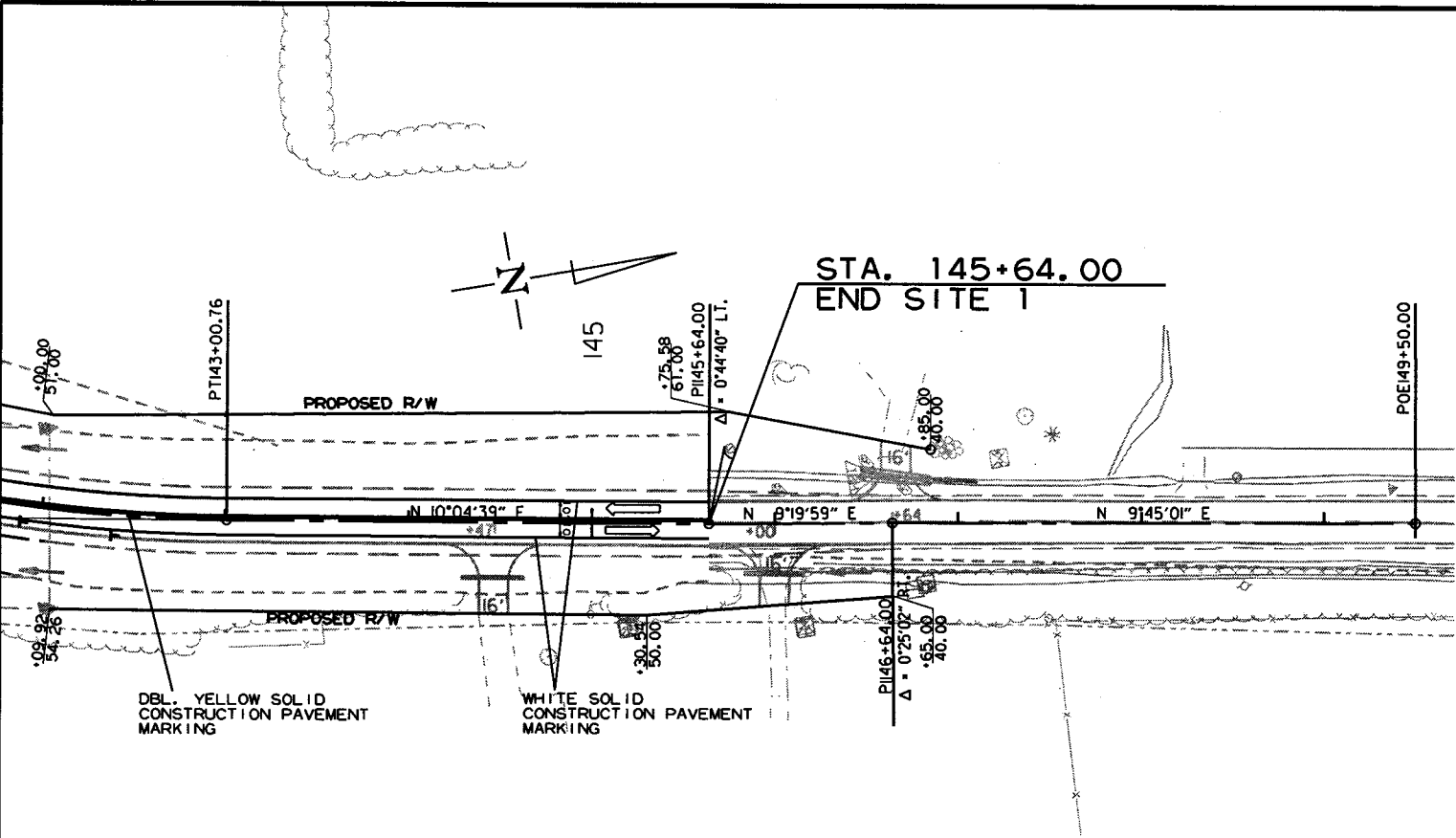
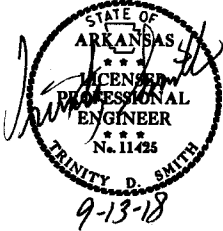
SITE 1- STAGE 3
MAINTENANCE OF TRAFFIC DETAILS

9/6/2018

R080494.DGN

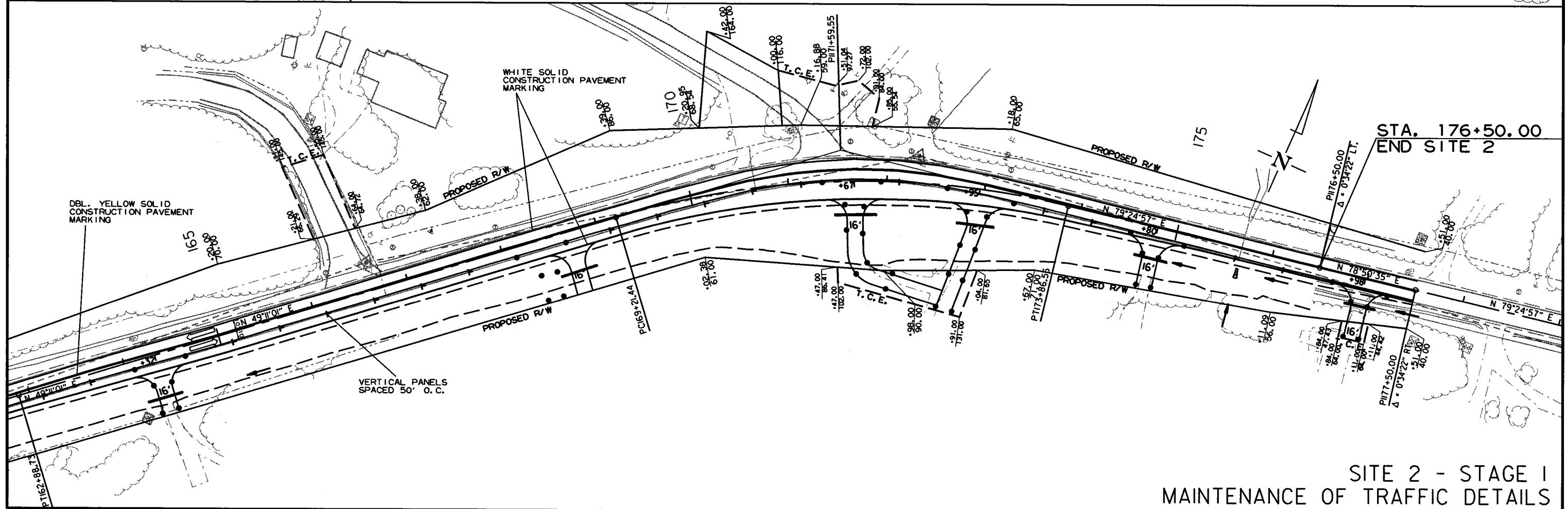
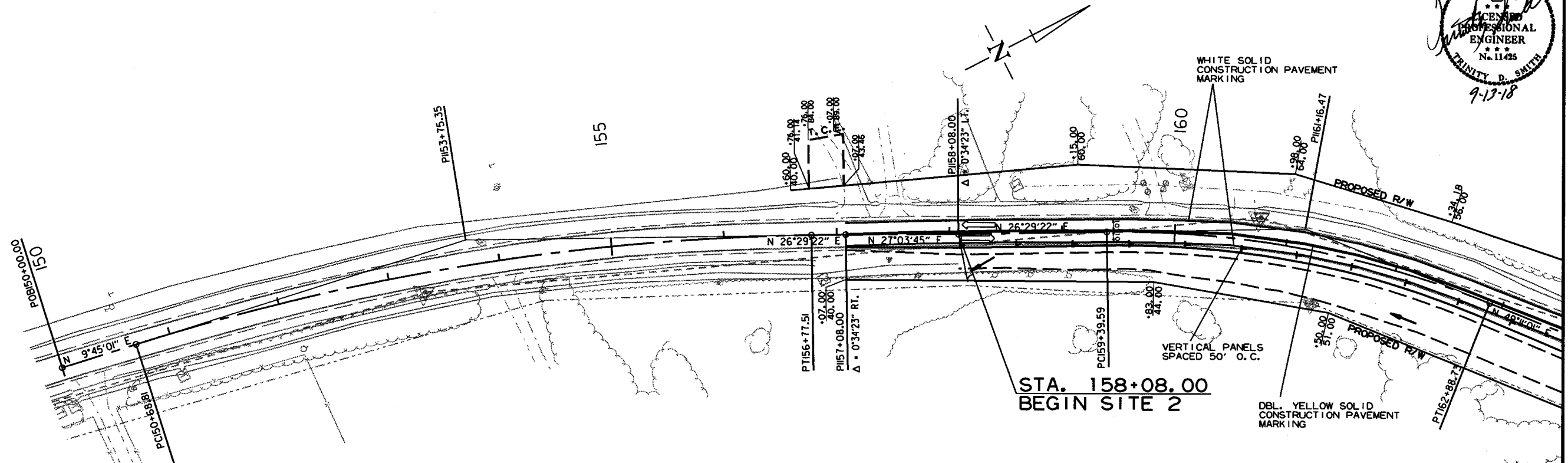
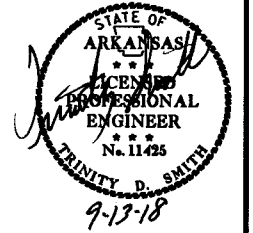
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
						JOB NO. 080494	54	208

② MAINTENANCE OF TRAFFIC DETAILS



DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	080494		55	208

2 MAINTENANCE OF TRAFFIC DETAILS



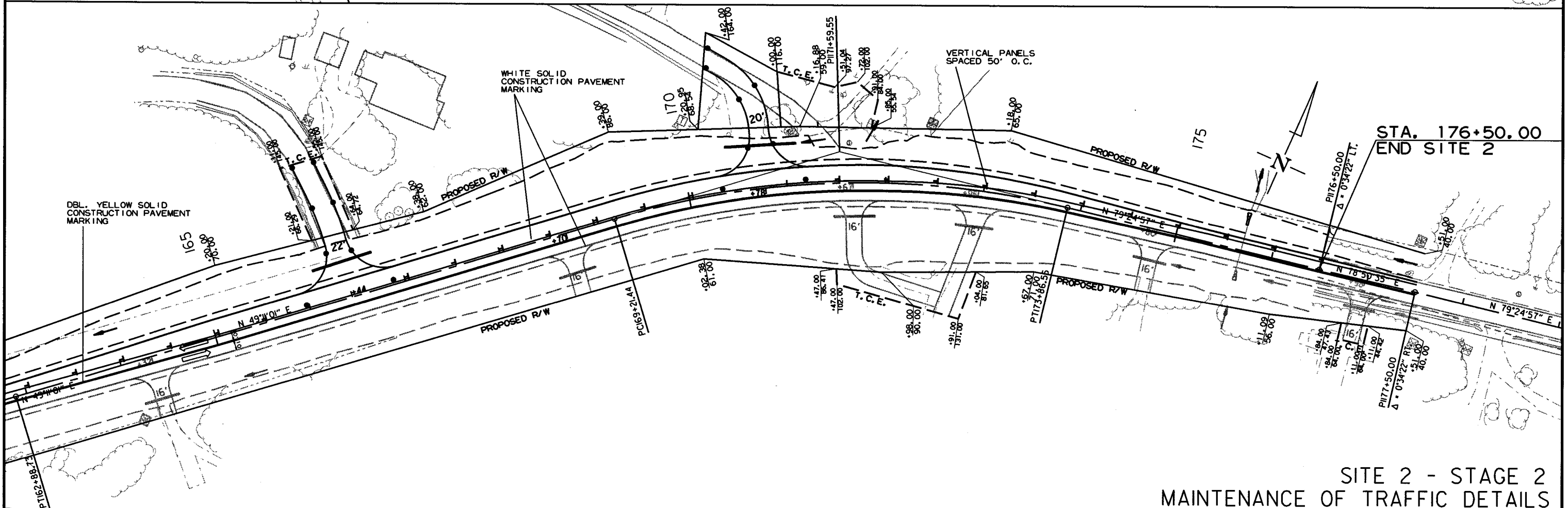
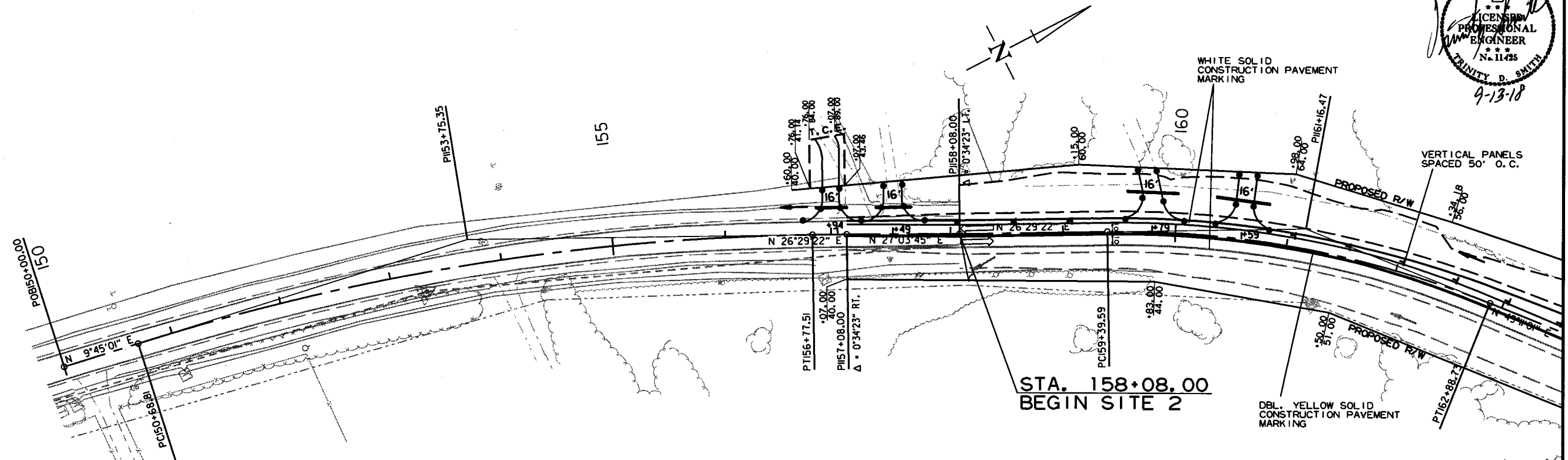
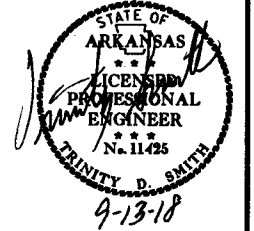
SITE 2 - STAGE 1
MAINTENANCE OF TRAFFIC DETAILS

9/6/2018

R080494.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. 080494		56	208	

2 MAINTENANCE OF TRAFFIC DETAILS



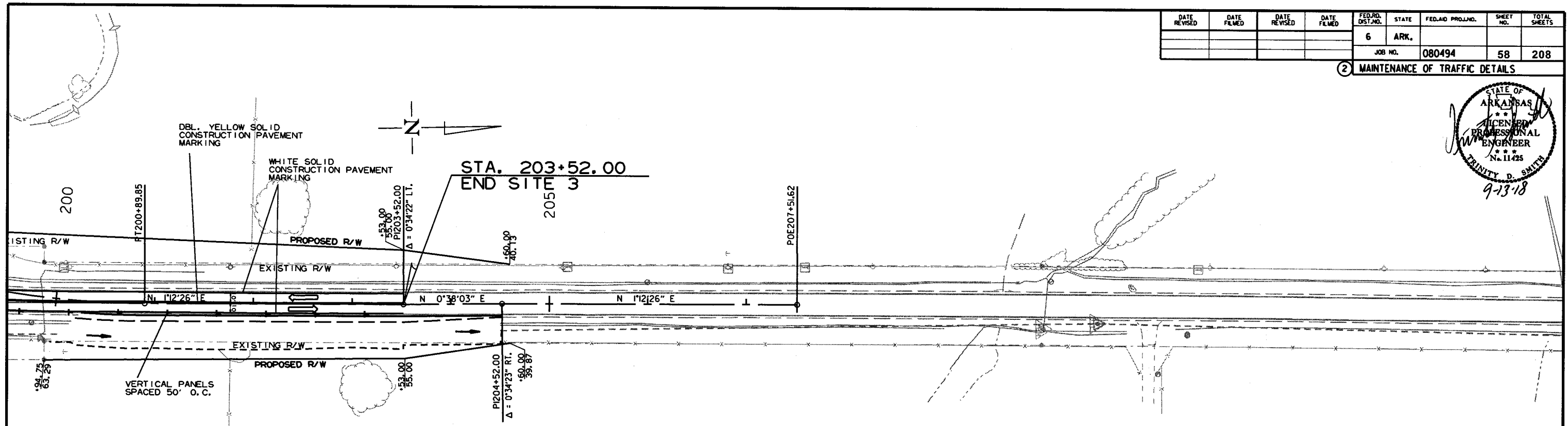
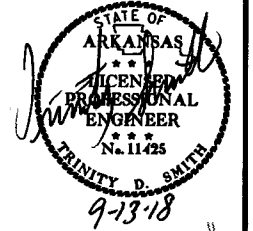
SITE 2 - STAGE 2
MAINTENANCE OF TRAFFIC DETAILS

9/6/2018

R080494.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.		080494	58	208

② MAINTENANCE OF TRAFFIC DETAILS



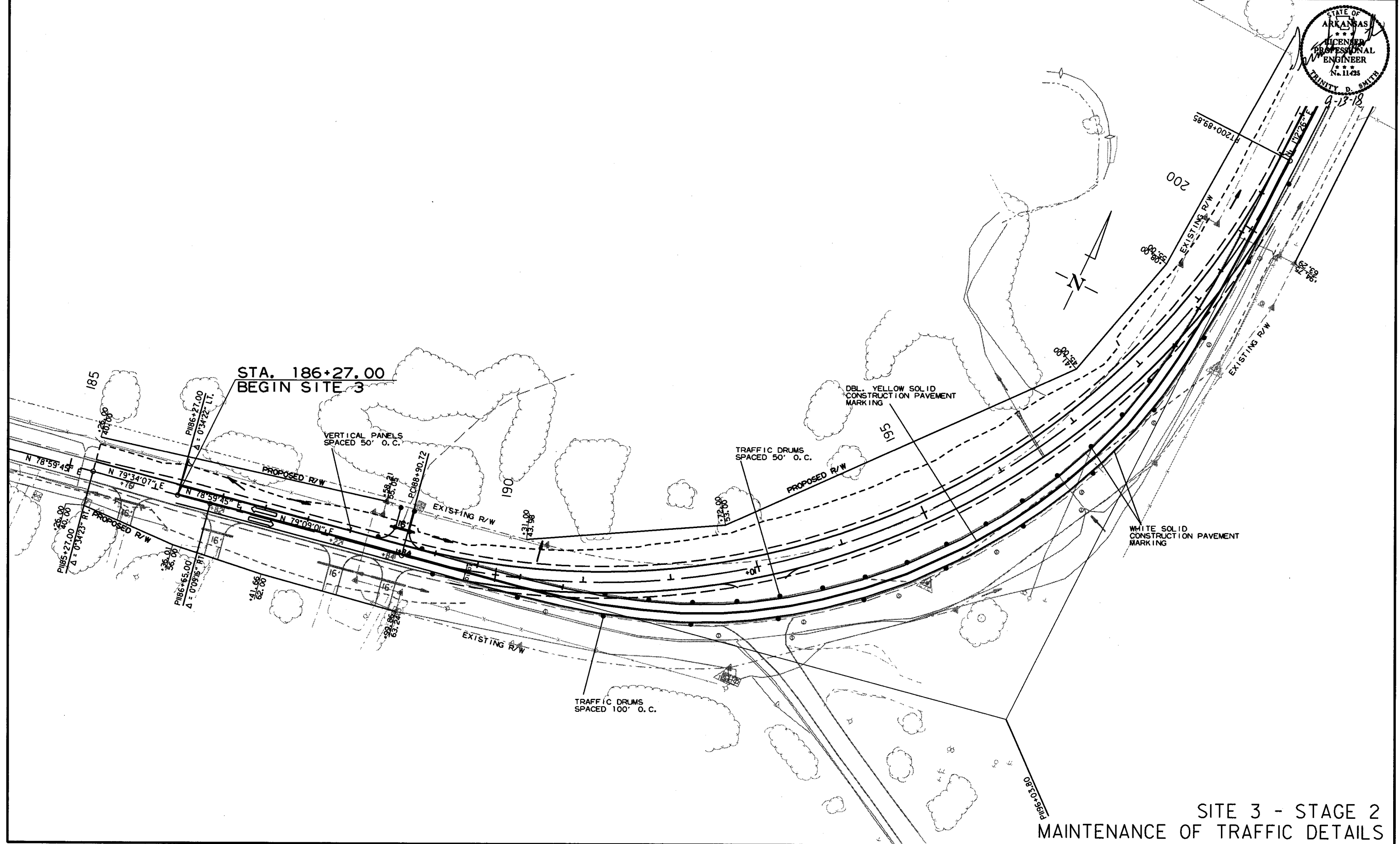
SITE 3 - STAGE I
MAINTENANCE OF TRAFFIC DETAILS

9/6/2018

R080494.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.	080494		59	208

② MAINTENANCE OF TRAFFIC DETAILS



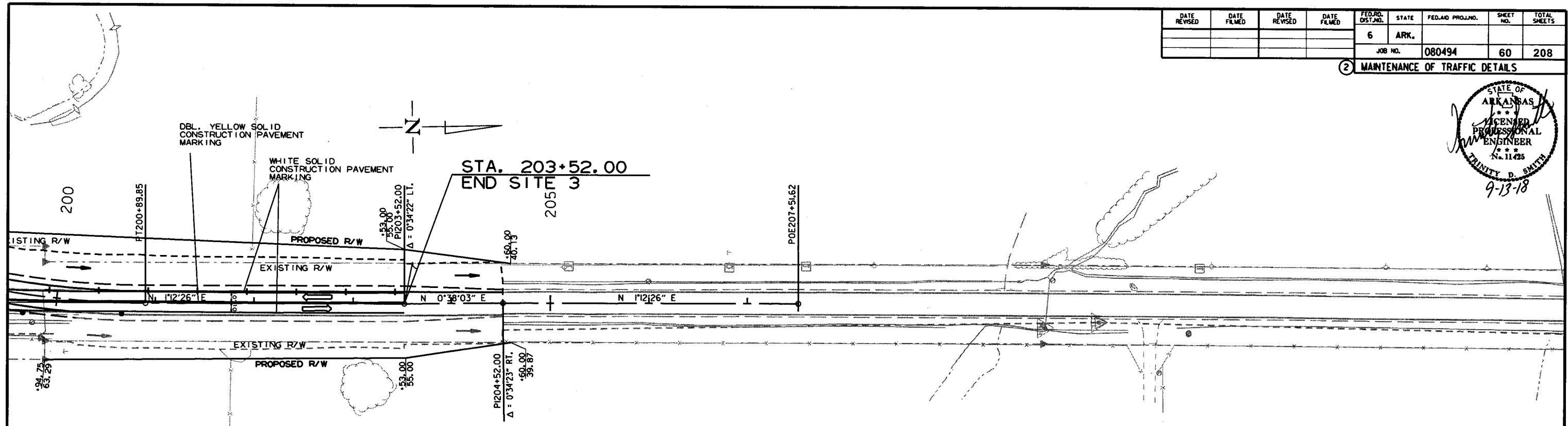
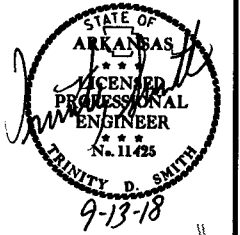
SITE 3 - STAGE 2
MAINTENANCE OF TRAFFIC DETAILS

9/6/2018

R080494.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.	080494		60	208

② MAINTENANCE OF TRAFFIC DETAILS



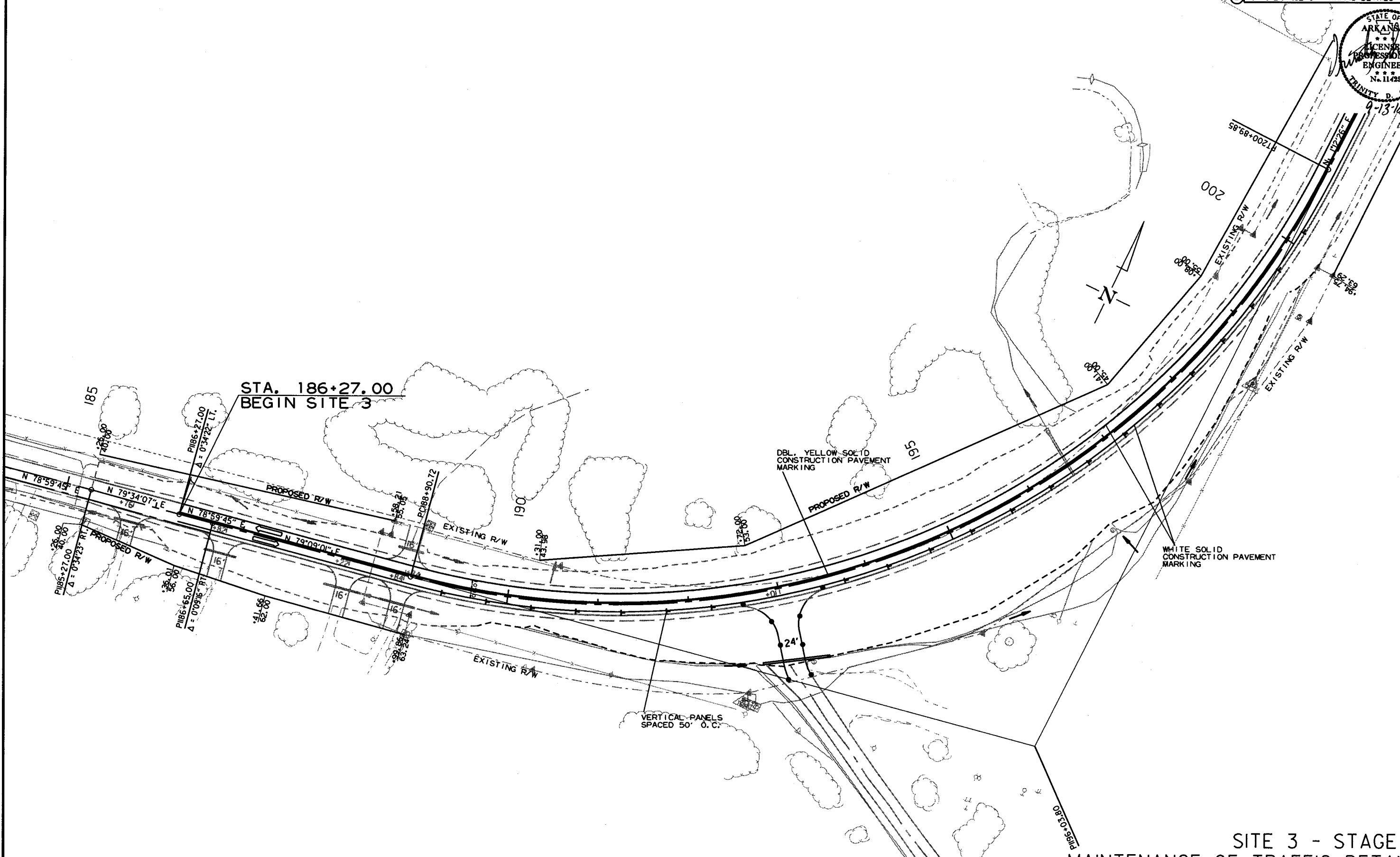
9/6/2018

R080494.DGN

SITE 3 - STAGE 2
MAINTENANCE OF TRAFFIC DETAILS

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.	080494		61	208

② MAINTENANCE OF TRAFFIC DETAILS

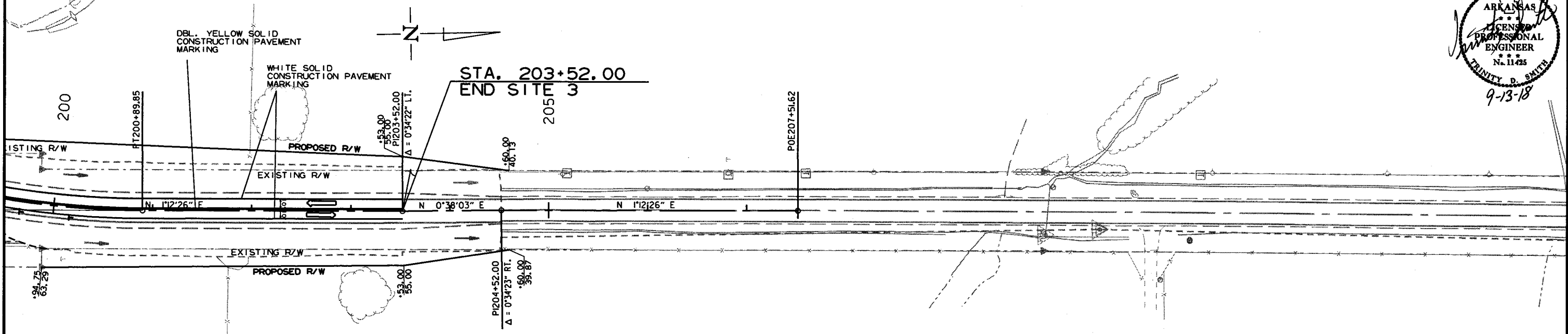
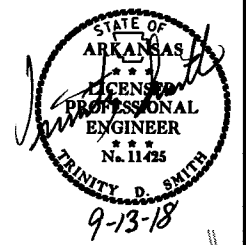


STA. 186+27.00
BEGIN SITE 3

SITE 3 - STAGE 3
MAINTENANCE OF TRAFFIC DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
						JOB NO. 080494	62	208

② MAINTENANCE OF TRAFFIC DETAILS



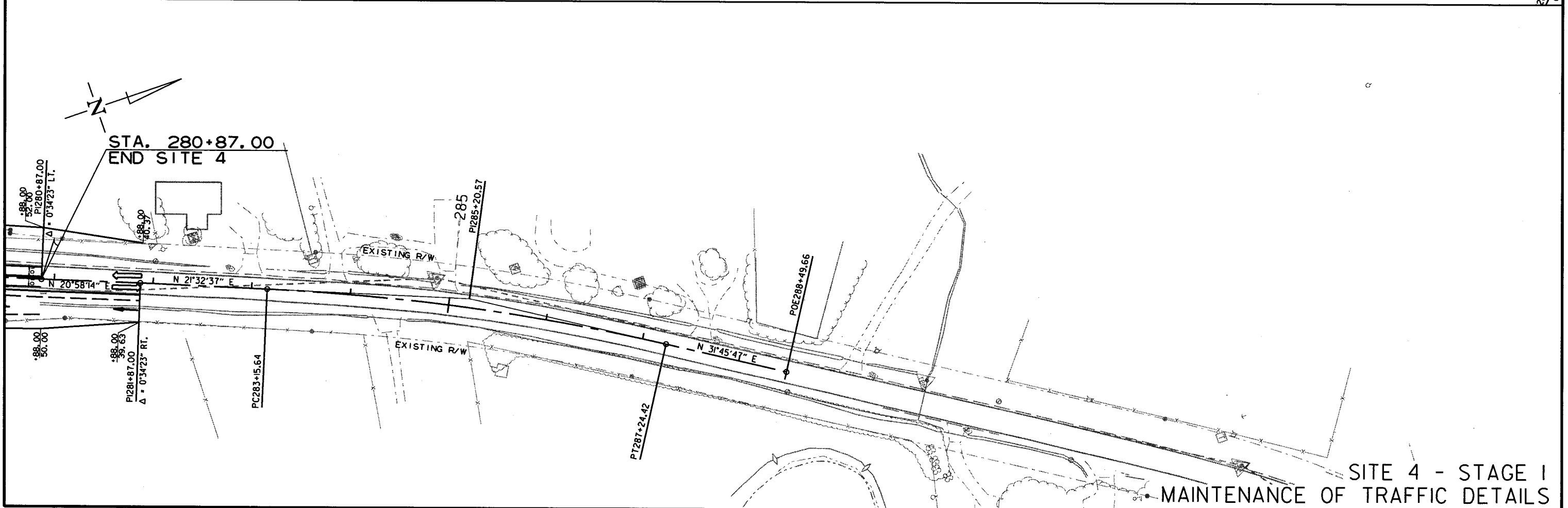
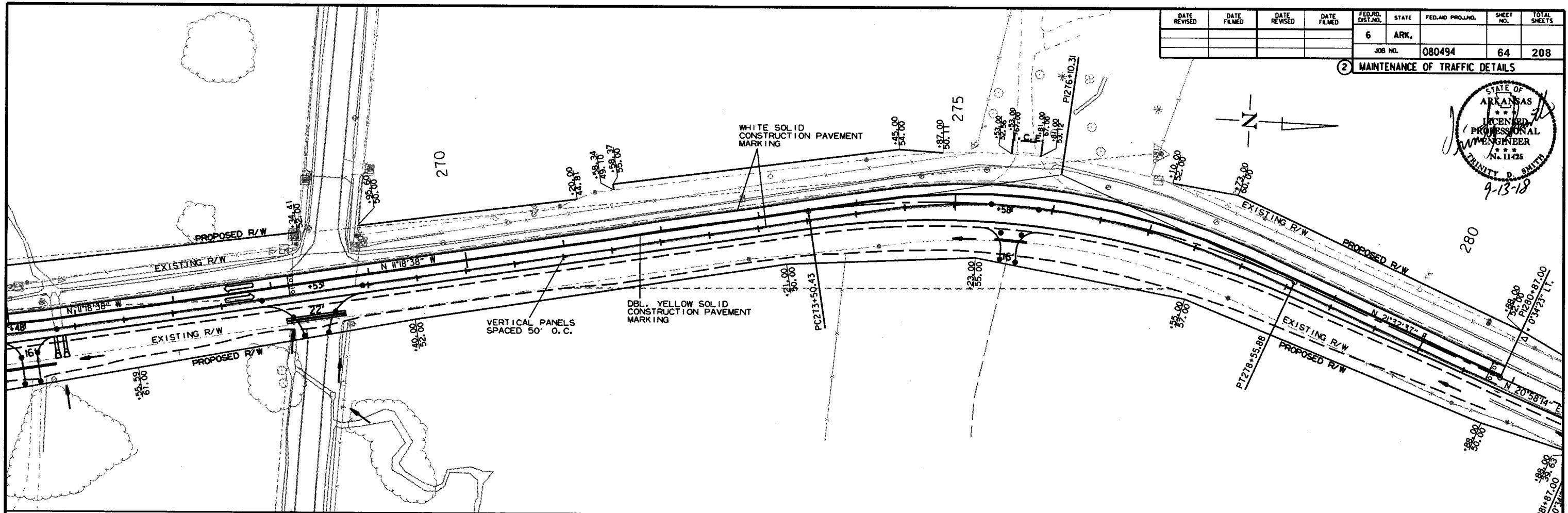
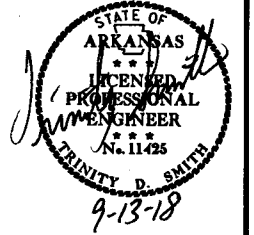
9/6/2018

R080494.DGN

SITE 3 - STAGE 3
MAINTENANCE OF TRAFFIC DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		64	208
				JOB NO.		080494		

② MAINTENANCE OF TRAFFIC DETAILS



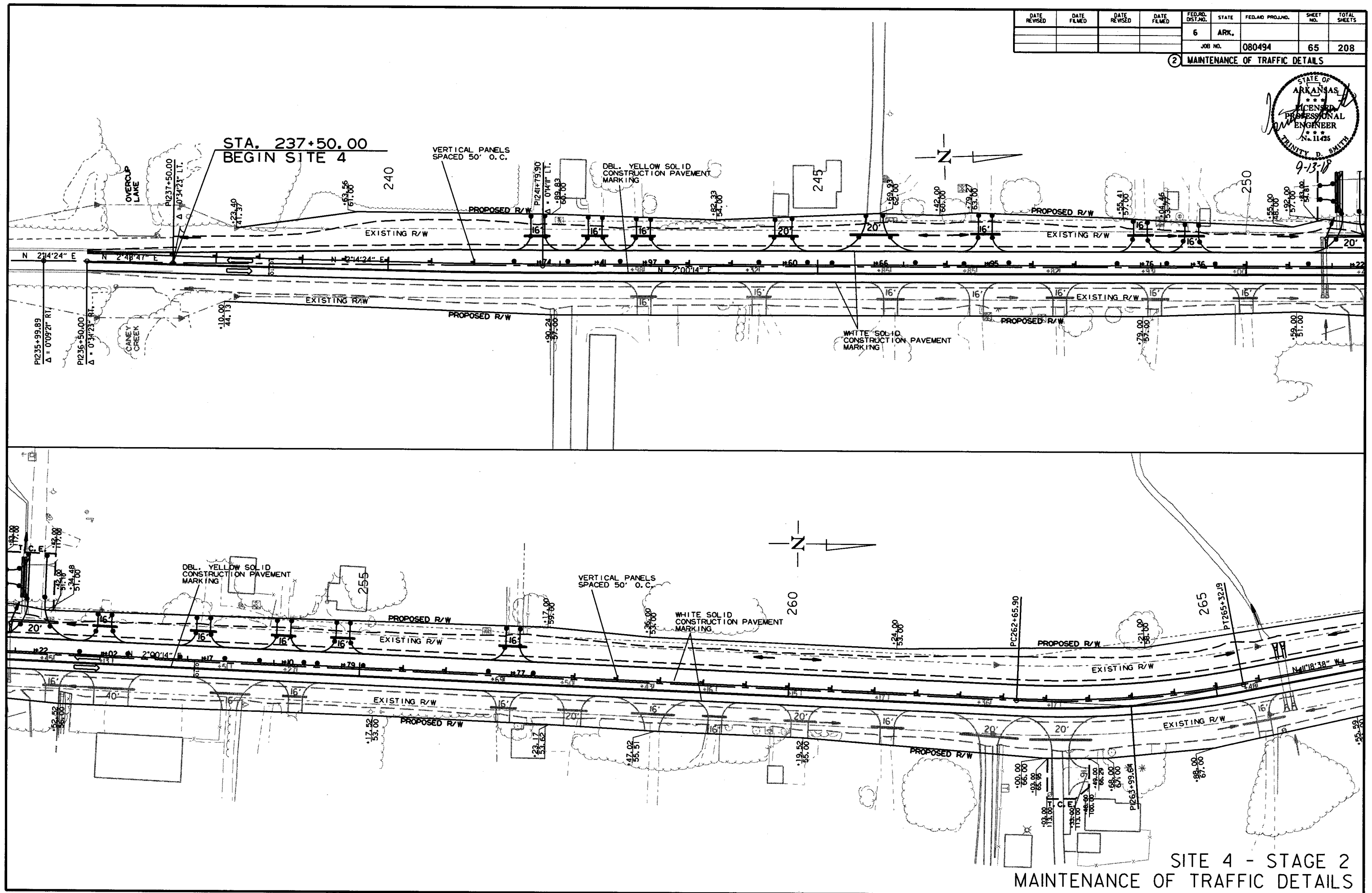
SITE 4 - STAGE I
MAINTENANCE OF TRAFFIC DETAILS

9/6/2018

R080494.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.	080494		65	208

② MAINTENANCE OF TRAFFIC DETAILS

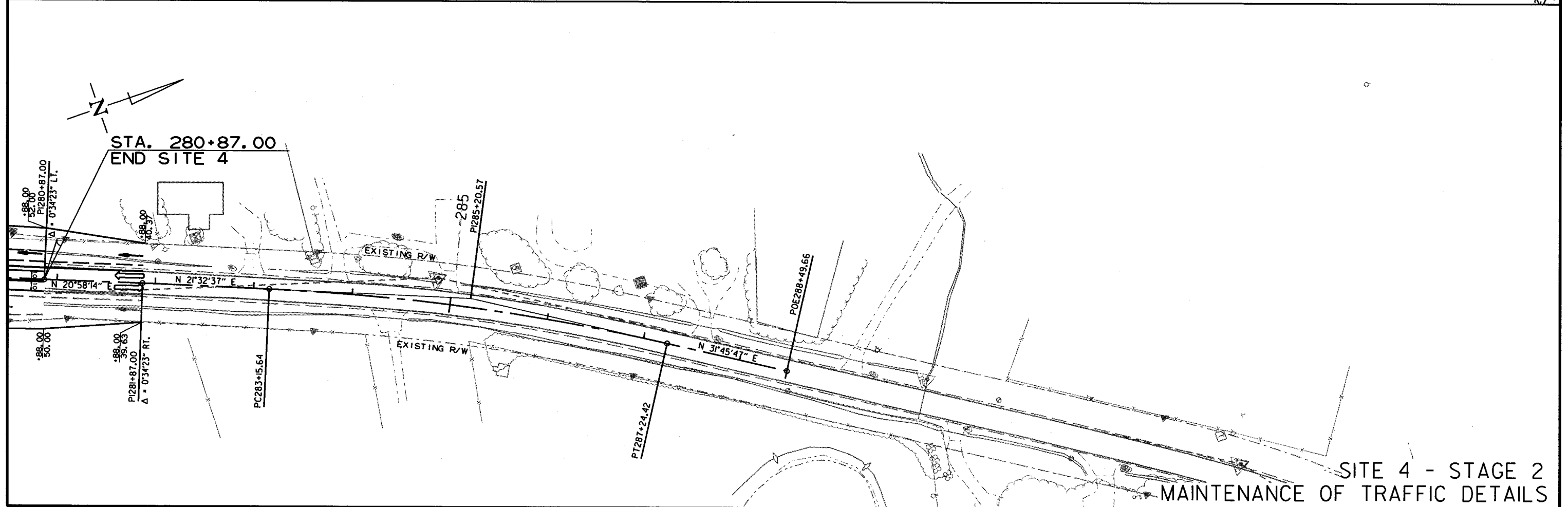
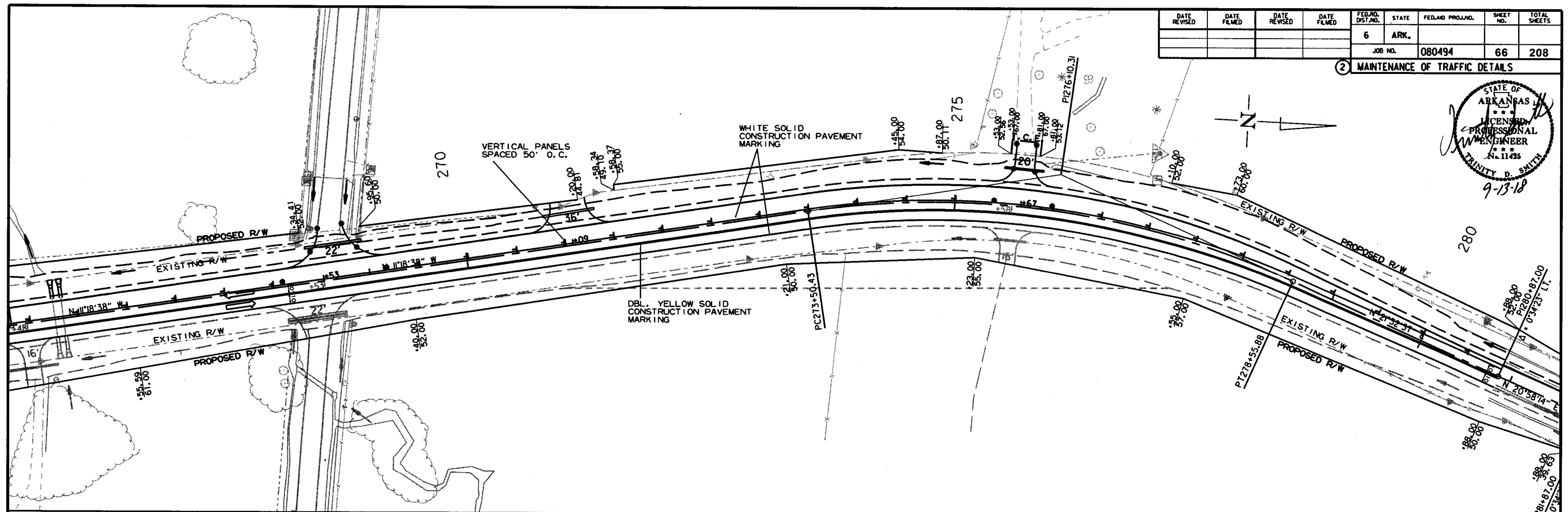
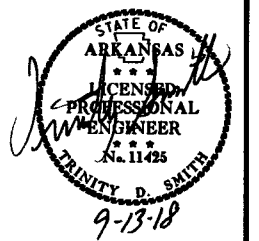


9/6/2018

R080494.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		66	208
				JOB NO. 080494				

② MAINTENANCE OF TRAFFIC DETAILS

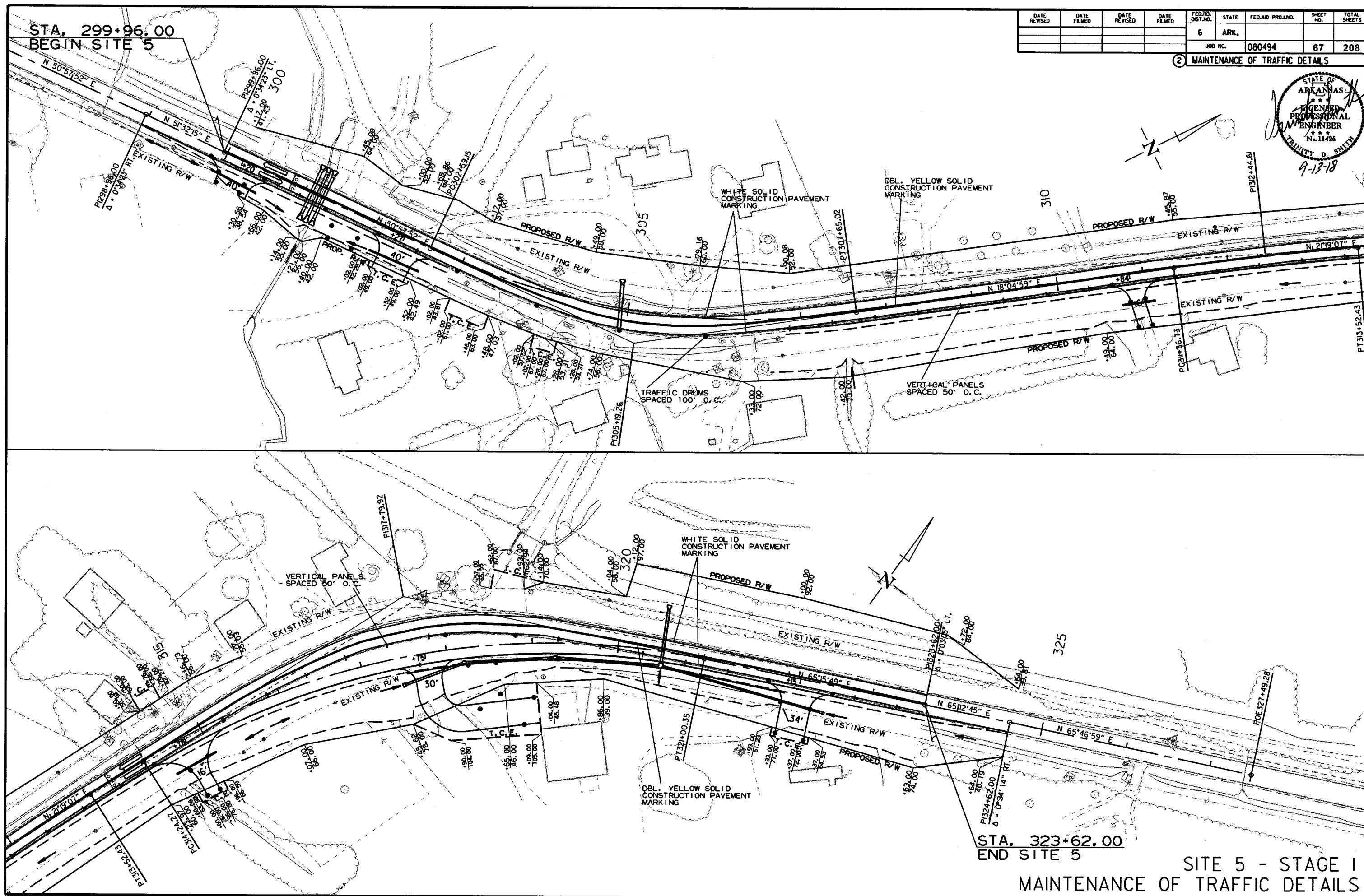


SITE 4 - STAGE 2
MAINTENANCE OF TRAFFIC DETAILS

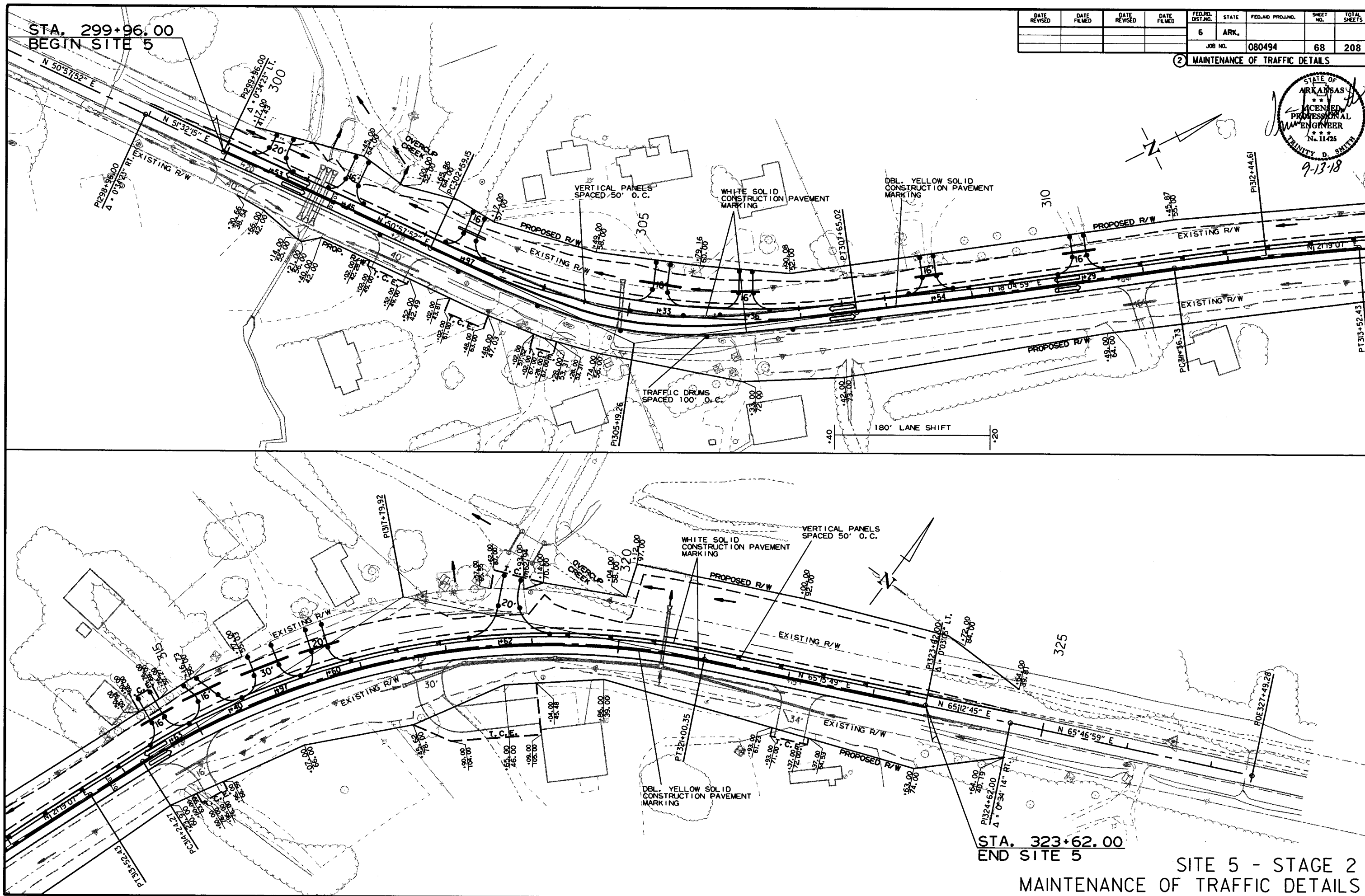
9/6/2018

R080494.DGN

9/6/2018
R080494.DGN

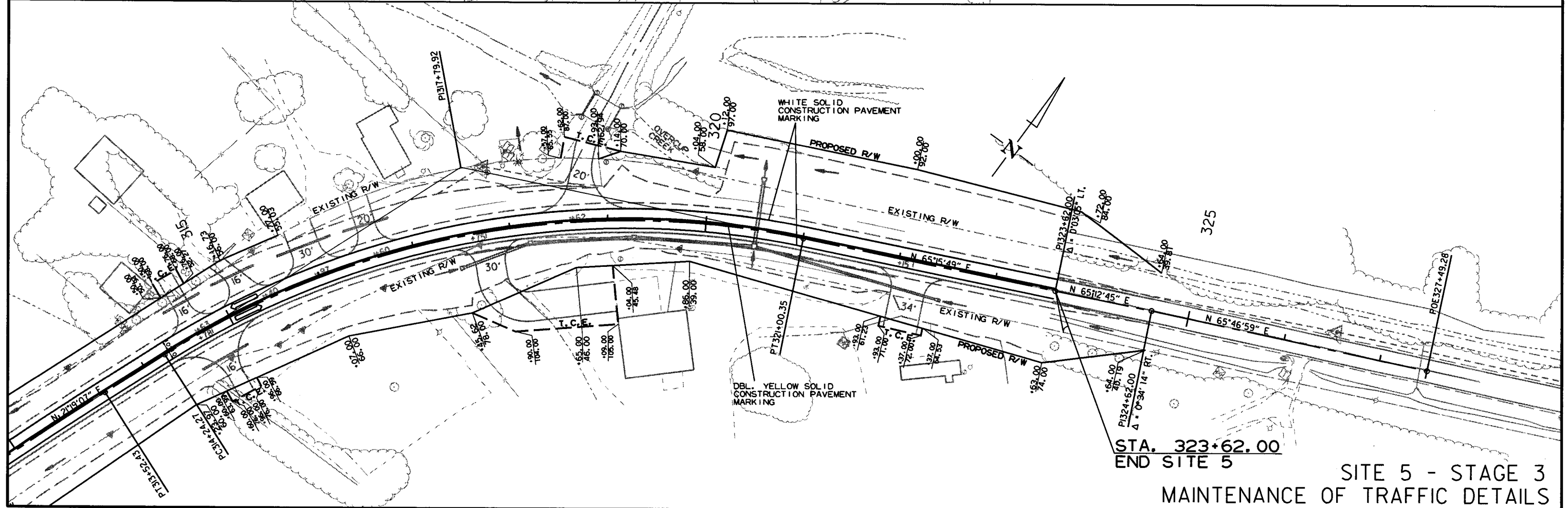
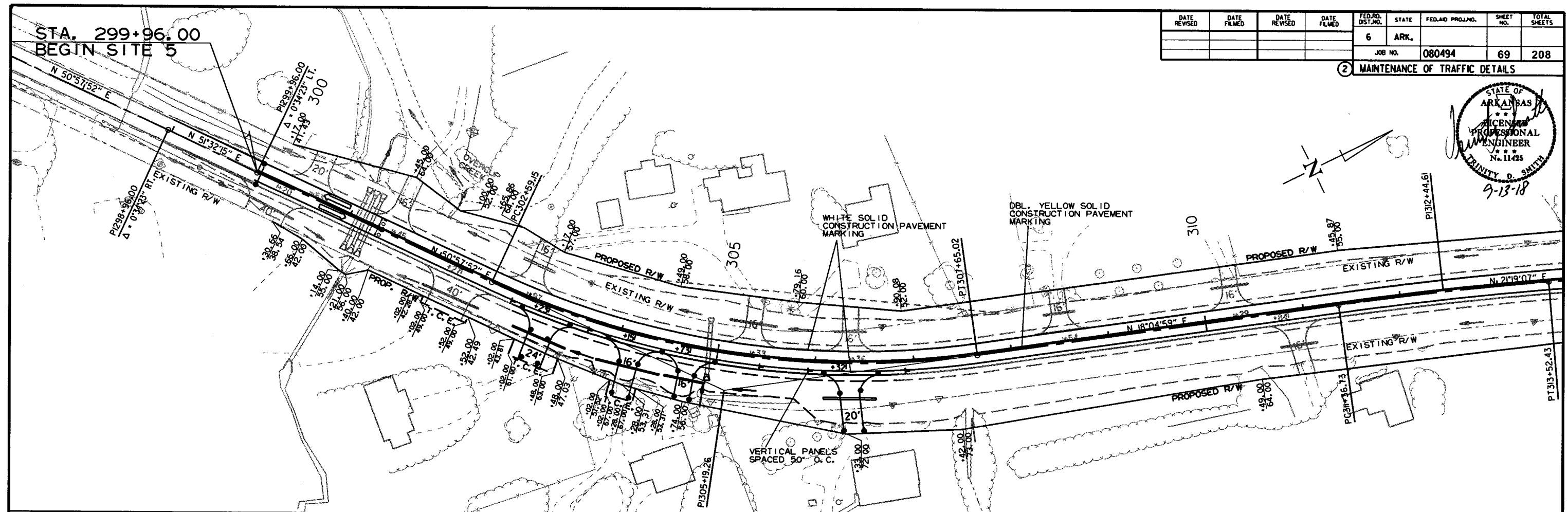
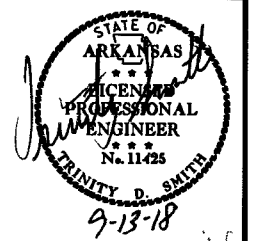


9/6/2018
R080494.DGN



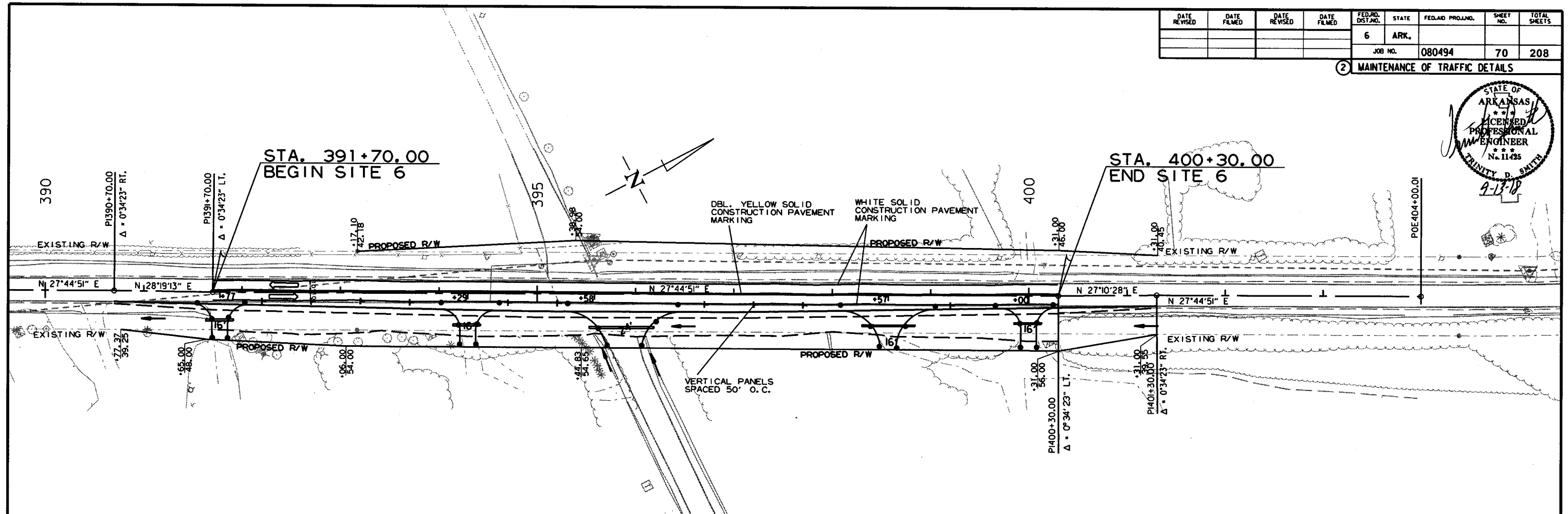
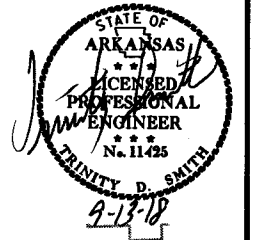
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RO. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	080494		69	208

② MAINTENANCE OF TRAFFIC DETAILS



DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO. 080494		70	208	

② MAINTENANCE OF TRAFFIC DETAILS



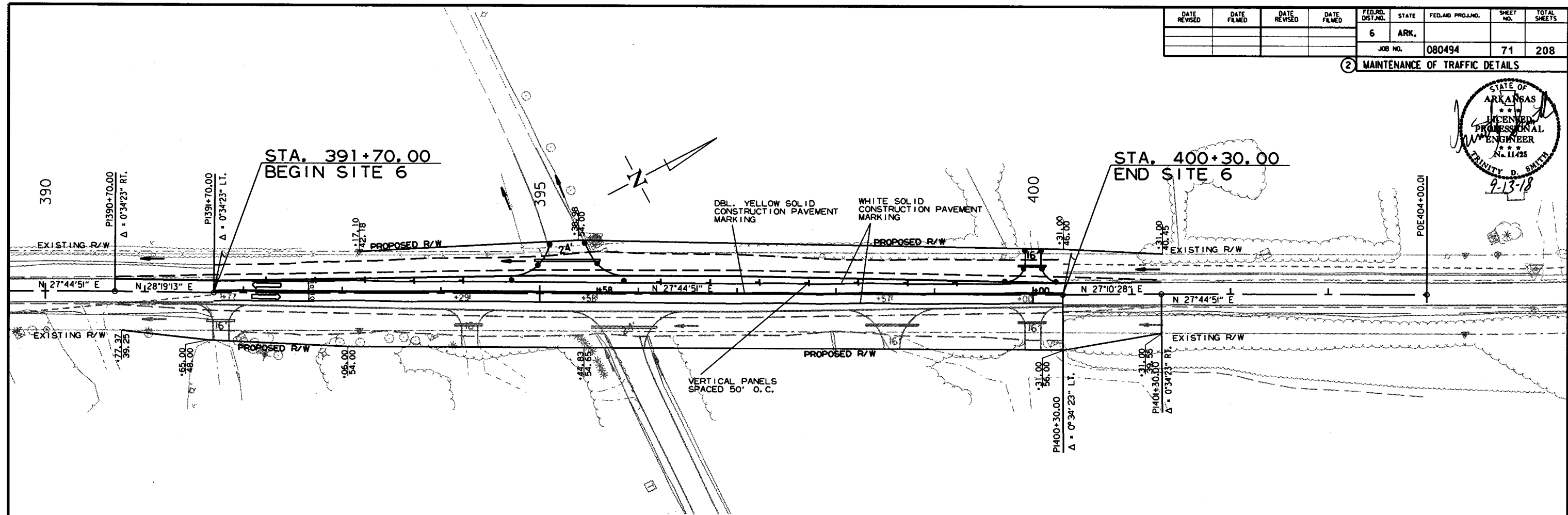
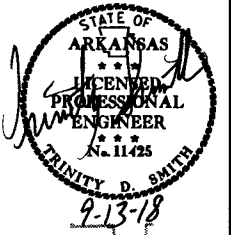
SITE 6 - STAGE I
MAINTENANCE OF TRAFFIC DETAILS

9/6/2018

R080494.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. 080494	71	208

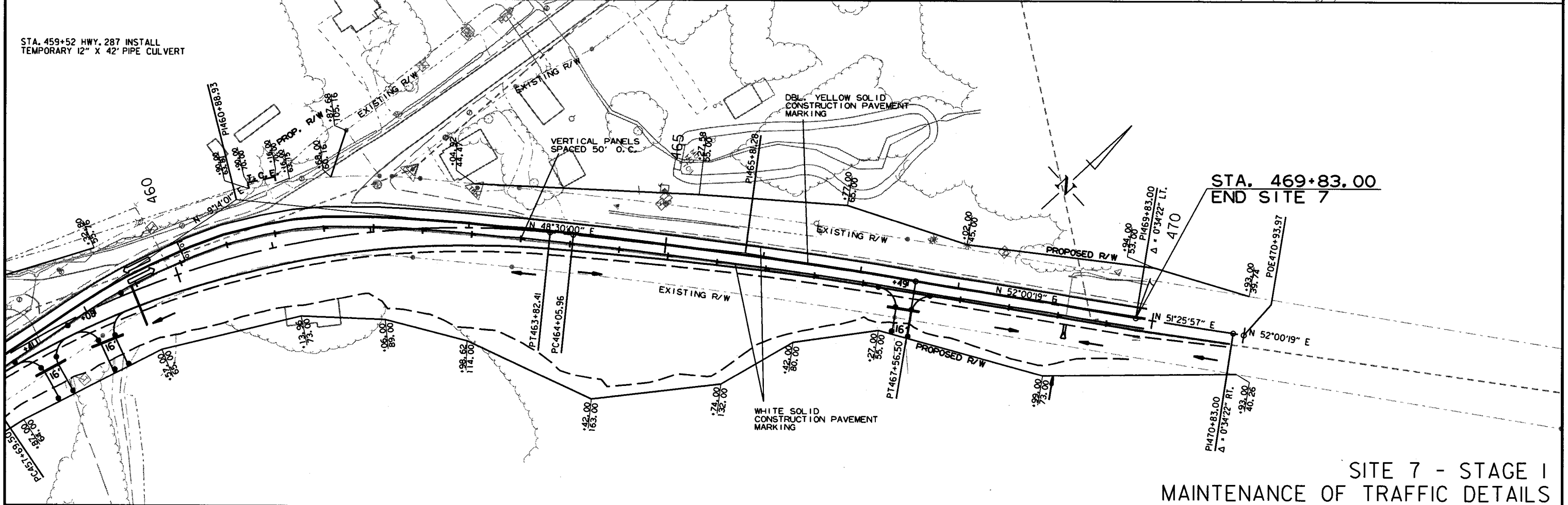
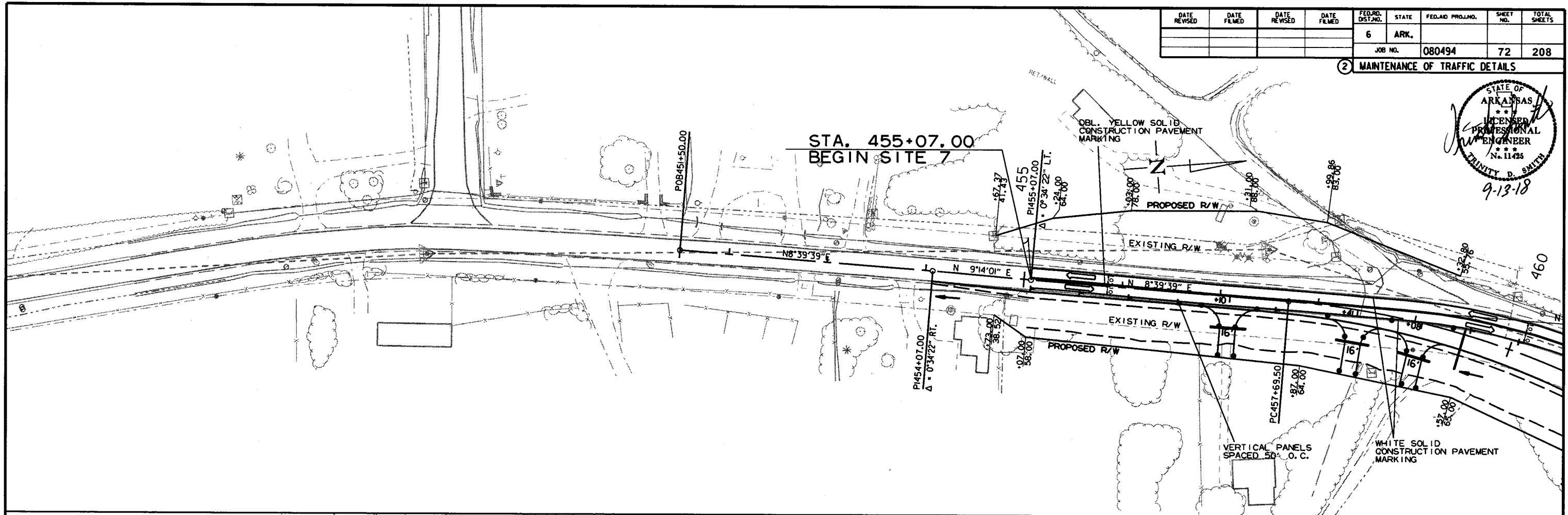
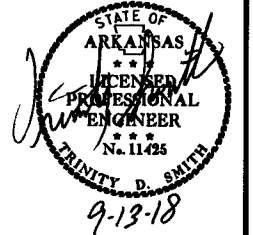
② MAINTENANCE OF TRAFFIC DETAILS



SITE 6 - STAGE 2
MAINTENANCE OF TRAFFIC DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	080494		72	208

2 MAINTENANCE OF TRAFFIC DETAILS



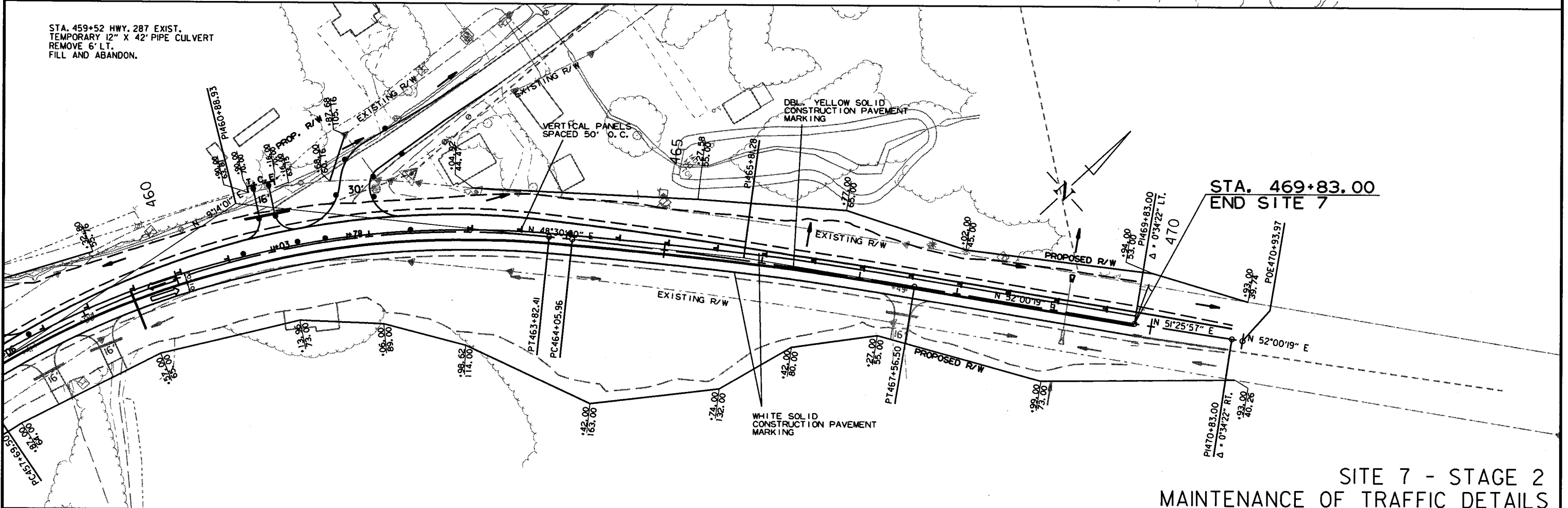
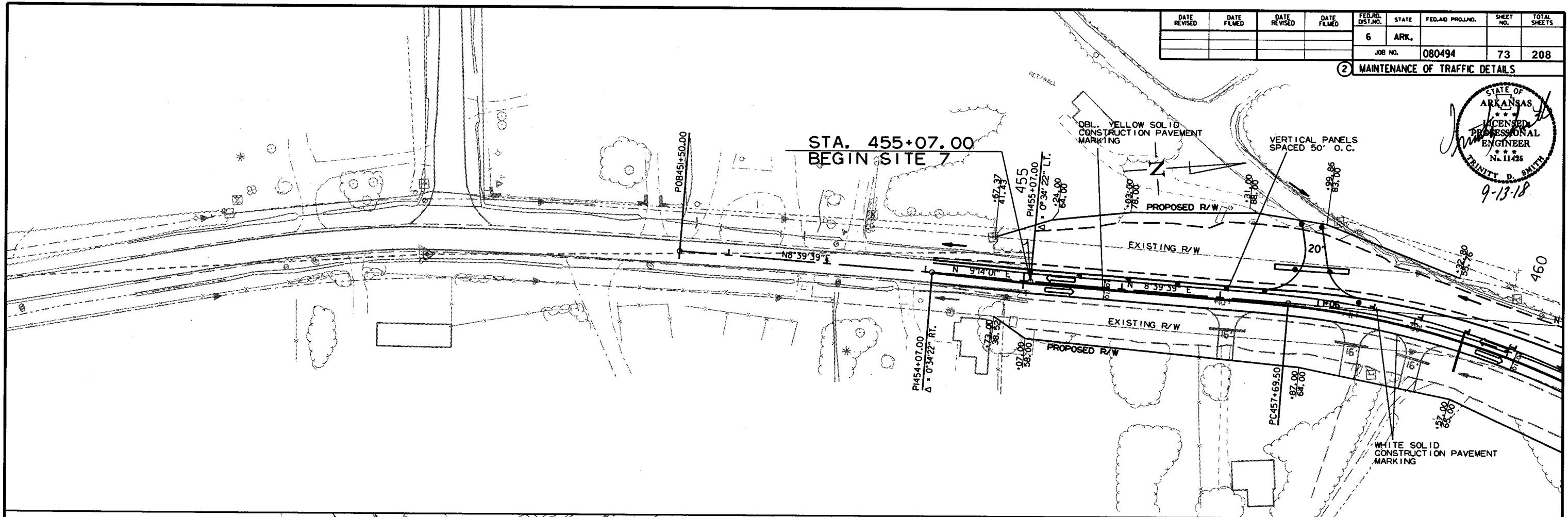
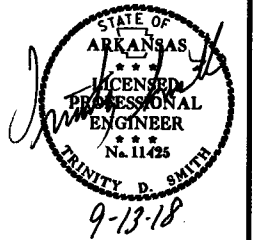
SITE 7 - STAGE 1
MAINTENANCE OF TRAFFIC DETAILS

9/6/2018

R080494.DCN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		73	208
				JOB NO.		080494	73	208

② MAINTENANCE OF TRAFFIC DETAILS



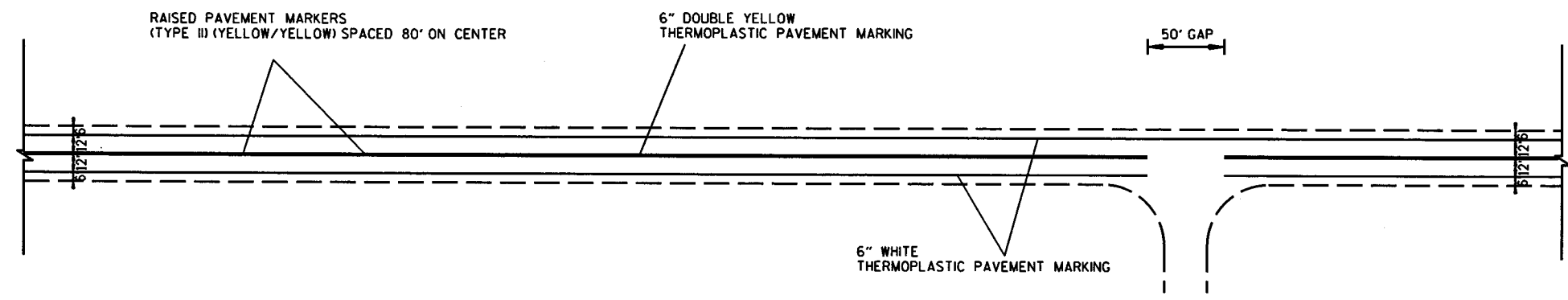
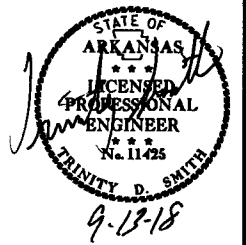
SITE 7 - STAGE 2
MAINTENANCE OF TRAFFIC DETAILS

9/6/2018

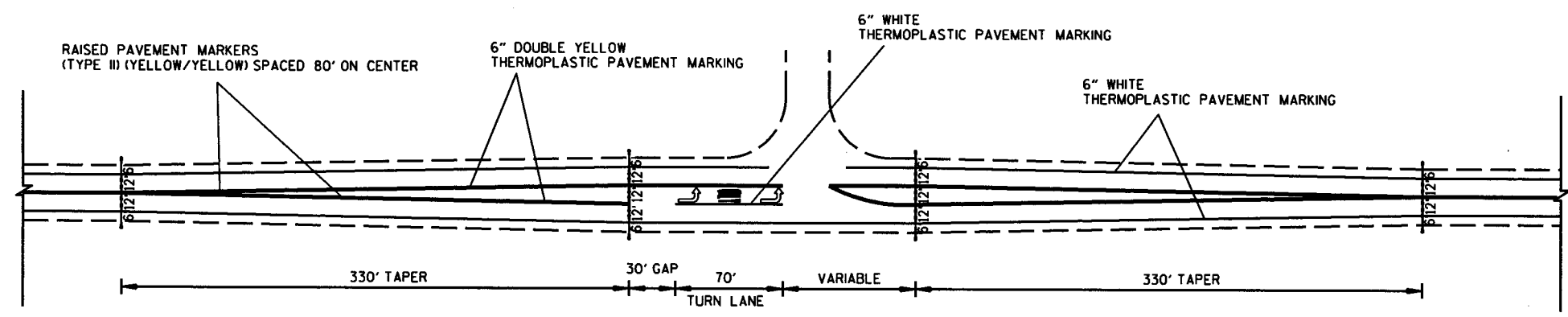
R080494.DGN

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.	080494		74	208

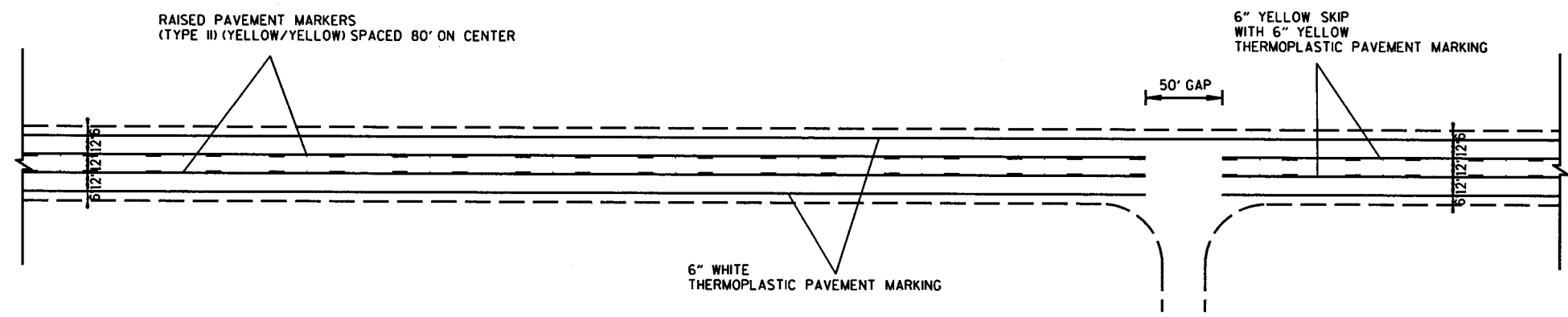
2 PERMANENT PAVEMENT MARKING DETAILS



TYPICAL 2-LANE PERMANENT PAVEMENT MARKING LAYOUT



TYPICAL LEFT TURN LANE PERMANENT PAVEMENT MARKING LAYOUT



TYPICAL 3-LANE PERMANENT PAVEMENT MARKING LAYOUT

9/6/2018

RO80494.DGN

ADVANCE WARNING SIGNS AND DEVICES										
SIGN NUMBER	DESCRIPTION	SIGN SIZE	STAGE 1	STAGE 2	STAGE 3	MAXIMUM NUMBER REQUIRED	TOTAL SIGNS REQUIRED		VERTICAL PANELS	TRAFFIC DRUMS
							NO.	SQ. FT.		
			LIN. FT. - EACH							
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"	24	24	24	24	24	384.0		
G20-2	END ROAD WORK	48"x24"	18	18	18	18	18	144.0		
G20-1	ROAD WORK NEXT xx MILES	60"x24"	2	2	2	2	2	20.0		
R4-1	DO NOT PASS	24"x30"	14	14	14	14	14	70.0		
W21-5a	RIGHT SHOULDER CLOSED	36"x36"	7	7	7	7	7	63.0		
W8-1	BUMP	30"x30"	14	14	14	14	14	87.5		
	VERTICAL PANELS		211	230	41	230			230	
	TRAFFIC DRUMS		345	329	44	345				345
TOTALS:								864.5	230	345

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

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.		080494	75	208

2 QUANTITIES



CONSTRUCTION PAVEMENT MARKINGS AND PERMANENT PAVEMENT MARKINGS																												
DESCRIPTION	STAGE 1							STAGE 2							STAGE 3			END OF JOB	CONSTRUCTION PAVEMENT MARKINGS	RAISED PAVEMENT MARKERS	THERMOPLASTIC PAVEMENT MARKING							
	SITE 1	SITE 2	SITE 3	SITE 4	SITE 5	SITE 6	SITE 7	SITE 1	SITE 2	SITE 3	SITE 4	SITE 5	SITE 6	SITE 7	SITE 1	SITE 3	SITE 5				TYPE II (YEL/YEL) EACH	6"		WORDS	ARROWS			
																						WHITE	YELLOW					
																										LIN. FT.	EACH	
CONSTRUCTION PAVEMENT MARKINGS	13516	8168	7700	18148	10264	4240	6704	8700	8168	LIN. FT. - EACH				18148	6948		6704	13516	7700	10264		LIN. FT.	148888					
RAISED PAVEMENT MARKERS TYPE II (YEL/YEL)																					536		536					
THERMOPLASTIC PAVEMENT MARKING WHITE (6")																					33050			33050				
THERMOPLASTIC PAVEMENT MARKING YELLOW (6")																					79556			79556				
THERMOPLASTIC PAVEMENT MARKING (WORDS)																					4				4			
THERMOPLASTIC PAVEMENT MARKING (ARROWS)																					4					4		
TOTALS:																						148888		536	33050	79556	4	4
NOTE: THIS IS A HIGH TRAFFIC VOLUME ROAD. AS PREVIEW, ALL STATIONING IS APPROXIMATE. BEYOND APPROXIMATE STATIONING, THE ROAD IS NOT MAINTAINED.																												

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

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

STATION	STATION	LOCATION	PERMANENT EROSION CONTROL					TEMPORARY EROSION CONTROL									
			SEEDING	LIME	MULCH COVER	WATER	SECOND SEEDING APPLICATION	TEMPORARY SEEDING	MULCH COVER	WATER	WATTLE (20") 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.	(E-1) LIN. FT.	(E-6) CU.YD.	(E-7) LIN. FT.	(E-11) LIN. FT.	(E-14) CU.YD.	CU.YD.	CU. YD.
ENTIRE	PROJECT	CLEARING AND GRUBBING - SITE 1						2.60	2.60	53.0	216	78		1104			295
ENTIRE	PROJECT	CLEARING AND GRUBBING - SITE 2						4.23	4.23	86.3	198	72		417			110
ENTIRE	PROJECT	CLEARING AND GRUBBING - SITE 3						0.29	0.29	5.9	117	48		1249			148
ENTIRE	PROJECT	CLEARING AND GRUBBING - SITE 4						9.00	9.00	183.6	270	96					25
ENTIRE	PROJECT	CLEARING AND GRUBBING - SITE 5						3.81	3.81	77.7	135	54		279			10
ENTIRE	PROJECT	CLEARING AND GRUBBING - SITE 6						1.43	1.43	29.2	54	18					
ENTIRE	PROJECT	CLEARING AND GRUBBING - SITE 7						3.60	3.60	73.4	90	36		679			25
ENTIRE	PROJECT	STAGE 1 - SITE 1	1.20	2.40	1.20	122.4	1.20	2.00	2.00	40.8	72	30			266	266	361
ENTIRE	PROJECT	STAGE 1 - SITE 2	1.30	2.60	1.30	132.6	1.30	2.00	2.00	40.8	90	36			239	239	341
ENTIRE	PROJECT	STAGE 1 - SITE 3	0.40	0.80	0.40	40.8	0.40	0.90	0.90	18.4	27	15			66	66	91
ENTIRE	PROJECT	STAGE 1 - SITE 4	10.50	21.00	10.50	1071.0	10.50	11.70	11.70	238.7	108	42			467	467	467
ENTIRE	PROJECT	STAGE 1 - SITE 5	1.40	2.80	1.40	142.8	1.40	2.20	2.20	44.9	9	18	66		157	157	159
ENTIRE	PROJECT	STAGE 1 - SITE 6	0.40	0.80	0.40	40.8	0.40	0.80	0.80	16.3	18	6			86	86	86
ENTIRE	PROJECT	STAGE 1 - SITE 7	1.70	3.40	1.70	173.4	1.70	2.20	2.20	44.9	36	18			288	288	288
ENTIRE	PROJECT	STAGE 2 - SITE 1	1.50	3.00	1.50	153.0	1.50	3.10	3.10	63.2	81	36		638	245	245	371
ENTIRE	PROJECT	STAGE 2 - SITE 2	1.20	2.40	1.20	122.4	1.20	2.20	2.20	44.9	81	27		491	159	159	202
ENTIRE	PROJECT	STAGE 2 - SITE 3	0.90	1.80	0.90	91.8	0.90	1.68	1.68	34.3	54	21		899	62	62	95
ENTIRE	PROJECT	STAGE 2 - SITE 4	2.00	4.00	2.00	204.0	2.00	3.40	3.40	69.4	99	42			408	408	408
ENTIRE	PROJECT	STAGE 2 - SITE 5	1.70	3.40	1.70	173.4	1.70	2.70	2.70	55.1	54	21			237	237	237
ENTIRE	PROJECT	STAGE 2 - SITE 6	0.30	0.60	0.30	30.6	0.30	0.70	0.70	14.3	18	6			61	61	61
ENTIRE	PROJECT	STAGE 2 - SITE 7	1.00	2.00	1.00	102.0	1.00	1.50	1.50	30.6	27	15		568	102	102	123
ENTIRE	PROJECT	STAGE 3 - SITE 1	0.60	1.20	0.60	61.2	0.60	1.20	1.20	24.5	18	9			92	92	117
ENTIRE	PROJECT	STAGE 3 - SITE 3	0.70	1.40	0.70	71.4	0.70	1.80	1.80	36.7	63	24			98	98	98
ENTIRE	PROJECT	STAGE 3 - SITE 5	0.20	0.40	0.20	20.4	0.20	0.30	0.30	6.1	9	12					
*ENTIRE PROJECT TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER.			6.75	13.50	6.75	688.5	6.75	16.34	16.34	333.3	486	195	17	1581	758	758	1030
TOTALS:			33.75	67.50	33.75	3442.5	33.75	81.68	81.68	1666.3	2430	975	83	7905	3791	3791	5148

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.

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
WATTLE DITCH CHECKS.....9 LIN. FT. / LOCATION
ROCK DITCH CHECKS.....3 CU.YD./LOCATION

QUANTITIES

REMOVAL AND DISPOSAL OF ITEMS										
STATION	STATION	LOCATION	BRICK POSTS	POST	WALLS	SIGN FOUNDATIONS	LUMINAIRE POLE AND FOUNDATION	BUILDINGS	SIGNS	PLANTERS
			EACH	EACH	LIN. FT.	EACH	EACH	EACH	EACH	EACH
159+70	159+90	HWY. 9-SITE 1 LT.		4						
172+20		HWY. 9-SITE 1 RT.				1				
185+37		HWY. 9-SITE 1 RT.			11					
185+68		HWY. 9-SITE 1 RT.			15					
188+10	188+30	HWY. 9-SITE 1 RT.	2							
241+90	242+10	HWY. 9-SITE 4 RT.						1		
242+81		HWY. 9-SITE 4 RT.				2			1	
244+20		HWY. 9-SITE 4 LT.		1						
245+09	245+00	HWY. 9-SITE 4 LT.				1			1	
248+16		HWY. 9-SITE 4 RT.								1
249+50		HWY. 9-SITE 4 LT.						1		
252+99		HWY. 9-SITE 4 RT.				1			1	
256+81	257+30	HWY. 9-SITE 4 RT.						1		
267+00		HWY. 9-SITE 4 RT.				2			1	
269+40		HWY. 9-SITE 4 LT.				2			1	
269+80		HWY. 9-SITE 4 LT.					1			
270+90		HWY. 9-SITE 4 LT.				2			1	
270+20		HWY. 9-SITE 4 LT.					1			
316+00		HWY. 9-SITE 5 RT.				1			1	
395+50		HWY. 9-SITE 6 RT.				2			1	
446+90	447+50	HWY. 9-SITE 7 LT.				5			2	
456+00		HWY. 9-SITE 7 LT.				3			2	
461+00	461+60	HWY. 9-SITE 7 RT.						1		
463+00		HWY. 9-SITE 7 LT.				1				
464+70	464+85	HWY. 9-SITE 7 LT.				2			1	
TOTALS:			2	5	26	25	2	4	13	1

CLEARING AND GRUBBING					
STATION	STATION	LOCATION	CLEARING	GRUBBING	STATION
113+85	119+00	HWY. 9-SITE 1 LT.	6	6	
123+00	126+00	HWY. 9-SITE 1 LT. & RT.	3	3	
127+00	128+00	HWY. 9-SITE 1 RT.	1	1	
128+00	133+00	HWY. 9-SITE 1 LT.	5	5	
133+00	134+00	HWY. 9-SITE 1 LT. & RT.	1	1	
134+00	136+00	HWY. 9-SITE 1 RT.	2	2	
139+00	141+00	HWY. 9-SITE 1 LT. & RT.	2	2	
141+00	146+64	HWY. 9-SITE 1 RT.	6	6	
158+08	161+00	HWY. 9-SITE 2 LT.	3	3	
161+00	177+50	HWY. 9-SITE 2 LT. & RT.	17	17	
192+00	195+00	HWY. 9-SITE 3 LT.	3	3	
237+50	239+00	HWY. 9-SITE 4 LT. & RT.	2	2	
239+00	242+00	HWY. 9-SITE 4 RT.	3	3	
242+00	255+00	HWY. 9-SITE 4 LT. & RT.	13	13	
255+00	265+00	HWY. 9-SITE 4 RT.	10	10	
273+00	274+00	HWY. 9-SITE 4 RT.	1	1	
299+96	303+00	HWY. 9-SITE 5 LT.	4	4	
305+00	311+00	HWY. 9-SITE 5 LT. & RT.	6	6	
311+00	313+00	HWY. 9-SITE 5 RT.	2	2	
313+00	319+00	HWY. 9-SITE 5 LT. & RT.	6	6	
319+00	324+62	HWY. 9-SITE 5 LT.	6	6	
391+70	397+00	HWY. 9-SITE 6 RT.	6	6	
397+00	401+30	HWY. 9-SITE 6 LT. & RT.	5	5	
455+07	464+00	HWY. 9-SITE 7 LT. & RT.	9	9	
464+00	468+00	HWY. 9-SITE 7 RT.	4	4	
468+00	470+83	HWY. 9-SITE 7 LT. & RT.	3	3	
TOTALS:			129	129	

DATE REVISED	DATE FLAWED	DATE REVISED	DATE FLAWED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	080494		76	208

QUANTITIES



CONCRETE COMBINATION CURB AND GUTTER

STATION	STATION	LOCATION	TYPE B-1 (1' 6")
			LIN. FT.
317+50	322+00	HWY. 9-SITE 5 RT.	450
TOTAL:			450

EARTHWORK

STATION	STATION	LOCATION / DESCRIPTION	UNCLASSIFIED EXCAVATION	COMPACTED EMBANKMENT	* SOIL STABILIZATION
			CU. YD.		TON
113+85	145+64	SITE 1-STAGE 1-MAIN LANES	3578	587	
113+85	145+64	SITE 1-STAGE 2-MAIN LANES	3873	967	
113+85	145+64	SITE 1-STAGE 3-MAIN LANES	3184	100	
158+08	176+50	SITE 2-STAGE 1-MAIN LANES	6744	633	
158+08	176+50	SITE 2-STAGE 2-MAIN LANES	3235	967	
186+27	203+52	SITE 3-STAGE 1-MAIN LANES	1270	101	
186+27	203+52	SITE 3-STAGE 2-MAIN LANES	1852	7750	
186+27	203+52	SITE 3-STAGE 3-MAIN LANES	2089	134	
237+50	280+87	SITE 4-STAGE 1-MAIN LANES	6665	1025	
237+50	280+87	SITE 4-STAGE 2-MAIN LANES	6008	754	
299+96	323+62	SITE 5-STAGE 1-MAIN LANES	7378	688	
299+96	323+62	SITE 5-STAGE 2-MAIN LANES	4117	1122	
299+96	323+62	SITE 5-STAGE 3-MAIN LANES	703	95	
391+70	400+30	SITE 6-STAGE 1-MAIN LANES	1343	74	
391+70	400+30	SITE 6-STAGE 2-MAIN LANES	657	105	
455+07	469+83	SITE 7-STAGE 1-MAIN LANES	11308	812	
455+07	469+83	SITE 7-STAGE 2-MAIN LANES	2283	1830	
ENTIRE	PROJECT	APPROACHES	2190	7595	
ENTIRE	PROJECT	TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER			1000
TOTALS:			68477	25339	1000

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

4" PIPE UNDERDRAIN

STATION	STATION	LOCATIONS	4" PIPE UNDERDRAINS	UNDERDRAIN OUTLET PROTECTORS
			LIN. FT.	EACH
113+85	145+64	SITE 1-TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER	1500	6
158+08	176+50	SITE 2-TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER	1000	4
186+27	203+52	SITE 3-TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER	1000	4
237+50	280+87	SITE 4-TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER	2000	8
299+96	323+62	SITE 5-TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER	1000	4
391+70	400+30	SITE 6-TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER	500	2
455+07	469+83	SITE 7-TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER	500	2
TOTALS:			7500	30

* 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.

REMOVAL AND DISPOSAL OF FENCE

STATION	STATION	LOCATION	FENCE	GATES
			LIN. FT.	EACH
112+85	115+56	HWY. 9-SITE 1 RT.	271	
112+85	113+85	HWY. 9-SITE 1 LT.	100	
116+22	123+96	HWY. 9-SITE 1 RT.	774	
117+61	117+79	HWY. 9-SITE 1 LT.	18	
130+43		HWY. 9-SITE 1 LT.		1
130+53	133+63	HWY. 9-SITE 1 RT.	310	
187+65	188+12	HWY. 9-SITE 3 RT.	47	
188+30	188+71	HWY. 9-SITE 3 RT.	41	
188+98	191+82	HWY. 9-SITE 3 RT.	284	
198+31	204+60	HWY. 9-SITE 3 RT.	629	
238+10	241+79	HWY. 9-SITE 4 LT.	369	
243+35	244+20	HWY. 9-SITE 4 RT.	85	
249+45	250+00	HWY. 9-SITE 4 LT.	55	
249+87	251+55	HWY. 9-SITE 4 RT.	168	
251+55	253+40	HWY. 9-SITE 4 RT.	185	
256+81		HWY. 9-SITE 4 RT.		1
256+93	268+34	HWY. 9-SITE 4 LT.	1141	
262+50		HWY. 9-SITE 4 RT.	25	
268+73	281+88	HWY. 9-SITE 4 RT.	1315	
268+98	275+20	HWY. 9-SITE 4 LT.	622	
277+00	281+88	HWY. 9-SITE 4 LT.	488	
302+50		HWY. 9-SITE 5 LT.	10	
305+30	305+90	HWY. 9-SITE 5 LT.	60	
307+56	308+30	HWY. 9-SITE 5 LT.	74	
310+39	314+00	HWY. 9-SITE 5 LT.	361	
312+50	314+40	HWY. 9-SITE 5 RT.	190	
317+00		HWY. 9-SITE 5 RT.	50	
320+07	324+20	HWY. 9-SITE 5 LT.	413	
393+17	394+84	HWY. 9-SITE 6 LT.	167	
395+00		HWY. 9-SITE 6 LT.	10	
397+00	400+00	HWY. 9-SITE 6 LT.	300	
455+15	456+84	HWY. 9-SITE 7 RT.	169	
TOTALS:			8731	2

MAILBOXES

LOCATION	MAILBOXES	MAILBOX SUPPORTS (SINGLE)
		EACH
SITE 1	5	5
SITE 2	4	4
SITE 3	4	4
SITE 4	16	16
SITE 5	5	5
SITE 6	3	3
SITE 7	2	2
TOTALS:		39

SELECTED PIPE BEDDING

LOCATION	SELECTED PIPE BEDDING
	CU.YD.
ENTIRE PROJECT TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER	410
TOTAL:	410

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

PAVEMENT REPAIR OVER CULVERTS (CONCRETE)

STATION	LOCATION	WIDTH	LENGTH	CU. YD.
		FEET		
250+94	HWY. 9-SITE 4	8.50	20	5.0
301+15	HWY. 9-SITE 5	25.00	20	16.6
304+91	HWY. 9-SITE 5	9.67	17	5.5
320+52	HWY. 9-SITE 5	9.08	20	5.5
TOTAL:				32.6

AVG. DEPTH = 10"

SOIL LOG

STATION	LATITUDE		LONGITUDE		LOCATION		DEPTH FEET	LIQUID LIMIT	PLASTICITY INDEX	AASHTO CLASSIFICATION	COLOR
	DEG	MIN	SEC	DEG	MIN	SEC					
104+00	35	10	35.90	92	43	3.70	22RT	0-4Z	7	A-4(1)	BRGR
104+00	35	10	35.90	92	43	3.90	05RT	0-4Z	13	A-6(1)	BROWN
104+00	35	10	35.90	92	43	3.80	12RT	0-4Z	13	A-6(7)	BROWN
112+00	35	10	43.80	92	43	3.80	05LT	0-5	33	A-6(9)	GRAY
112+00	35	10	43.80	92	43	3.90	12LT	0-5	32	A-6(9)	BRGR
112+00	35	10	43.80	92	43	4.00	22LT	0-5	29	A-6(4)	BRGR
120+00	35	10	51.60	92	43	2.90	05RT	0-5	49	A-7.8(17)	RD/BR
120+00	35	10	51.50	92	43	2.80	13RT	0-5	49	A-7.6(14)	RD/BR
120+00	35	10	51.50	92	43	2.70	23RT	0-5	66	A-7.6(55)	BROWN
120+00	35	10	51.50	92	43	2.70	23RT	0-5	31	A-7.5(29)	BROWN
128+00	35	10	56.80	92	42	56.10	06LT	0-5	8	A-4(1)	BROWN
128+00	35	10	56.90	92	42	56.10	13LT	0-5	24	A-4(0)	BROWN
128+00	35	10	56.90	92	42	56.20	22LT	0-5	27	A-4(2)	BROWN
136+00	35	10	59.80	92	42	47.30	13RT	0-5	ND	A-4(0)	BRGR
136+00	35	10	59.70	92	42	47.20	30RT	0-5	22	A-4(0)	BRGR
136+00	35	10	59.90	92	42	47.30	06RT	0-5	26	A-6(4)	BROWN
144+00	35	11	6.50	92	42	42.60	05LT	0-5	37	A-6(16)	BRGR
144+00	35	11	6.50	92	42	42.70	12LT	0-5	28	A-7.6(22)	BRGR
144+00	35	11	6.50	92	42	42.80	19LT	0-5	12	A-6(5)	BRGR
144+00	35	11	14.20	92	42	40.70	13RT	0-5	29	A-6(9)	BROWN
152+00	35	11	14.20	92	42	40.80	23RT	0-5	29	A-6(9)	BROWN
152+00	35	11	14.20	92	42	40.70	05RT	0-5Z	27	A-6(7)	BROWN
160+00	35	11	21.70	92	42	37.60	13LT	0-5	36	A-6(9)	BROWN
160+00	35	11	21.70	92	42	37.50	06LT	0-5	19	A-4(0)	BROWN
160+00	35	11	21.80	92	42	37.70	22LT	0-5	32	A-6(4)	BROWN
160+00	35	11	21.80	92	42	37.70	22LT	0-5	14	A-6(6)	BROWN
168+00	35	11	27.30	92	42	30.60	06RT	0-5	37	A-6(12)	BROWN
168+00	35	11	27.30	92	42	30.60	13RT	0-5	40	A-6(13)	BROWN
168+00	35	11	27.20	92	42	30.50	23RT	0-5	37	A-6(8)	BROWN
176+00	35	11	30.70	92	42	22.80	13LT	0-5	19	A-4(0)	RD/BR
176+00	35	11	30.70	92	42	22.80	05LT	0-5	ND	A-4(0)	BROWN
176+00	35	11	30.80	92	42	22.80	24LT	0-5	ND	A-4(0)	BROWN
184+00	35	11	32.00	92	42	13.40	13RT	0-5	6	A-4(2)	BROWN
184+00	35	11	32.00	92	42	13.40	18RT	0-5	ND	A-4(0)	BROWN
184+00	35	11	32.10	92	42	13.40	05RT	0-5	ND	A-2-4(0)	BROWN
192+00	35	11	33.90	92	42	3.70	05LT	0-5	19	A-4(0)	BROWN
192+00	35	11	33.90	92	42	3.70	13LT	0-5	3	A-4(0)	RD/BR
192+00	35	11	34.00	92	42	3.70	24LT	0-5	ND	A-4(0)	BROWN
200+00	35	11	39.60	92	41	57.90	13RT	0-5	23	A-4(2)	BROWN
200+00	35	11	39.60	92	41	57.80	24RT	0-4Z	6	A-4(1)	BROWN
200+00	35	11	39.60	92	41	58.00	05RT	0-3.5Z	22	A-4(1)	BROWN
208+00	35	11	47.90	92	41	57.90	05LT	0-3Z	5	A-4(0)	BROWN
208+00	35	11	47.90	92	41	57.90	05LT	0-5	ND	A-4(0)	BROWN
208+00	35	11	47.90	92	41	58.10	13LT	0-5	ND	A-4(0)	BROWN
216+00	35	11	55.90	92	41	57.60	05RT	0-5	23	A-4(2)	BROWN
216+00	35	11	55.90	92	41	57.50	13RT	0-5	8	A-4(5)	BROWN
216+00	35	11	55.90	92	41	57.50	20RT	0-5	27	A-6(9)	BROWN
224+00	35	12	3.60	92	41	57.60	13LT	0-5	29	A-6(7)	BROWN
224+00	35	12	3.60	92	41	57.60	22LT	0-5	11	A-6(6)	BROWN
224+00	35	12	3.60	92	41	57.60	05LT	0-5	31	A-6(8)	BROWN
232+00	35	12	11.30	92	41	57.10	05RT	0-5	41	A-7.6(18)	BRGR
232+00	35	12	11.30	92	41	57.00	14RT	0-5	21	A-7.6(17)	BRGR
232+00	35	12	11.40	92	41	57.00	22RT	0-5	16	A-6(12)	BROWN
240+00	35	12	19.60	92	41	56.90	05LT	0-5	32	A-6(6)	BRGR
240+00	35	12	19.60	92	41	57.10	20LT	0-5	7	A-4(1)	BRGR
240+00	35	12	19.60	92	41	57.10	20LT	0-5	23	A-4(1)	BRGR
240+00	35	12	19.60	92	41	57.00	13LT	0-5	15	A-6(10)	BRGR
248+00	35	12	27.40	92	41	56.40	13RT	0-5	29	A-6(6)	BROWN
248+00	35	12	27.40	92	41	56.50	05RT	0-5	33	A-6(11)	BRGR
248+00	35	12	27.40	92	41	56.40	21RT	0-5	32	A-6(9)	BROWN
256+00	35	12	35.30	92	41	56.50	13LT	0-5	27	A-4(6)	BROWN
256+00	35	12	35.30	92	41	56.50	17LT	0-5	ND	A-4(6)	BROWN
256+00	35	12	35.30	92	41	56.40	05LT	0-5	30	A-6(9)	BROWN
264+00	35	12	43.30	92	41	56.00	05RT	0-5	32	A-6(13)	BRGR
264+00	35	12	43.30	92	41	57.80	05RT	0-5	18	A-6(13)	BRGR
272+00	35	12	50.90	92	41	57.80	05LT	0-5	9	A-4(6)	BROWN
272+00	35	12	50.90	92	41	57.90	18LT	0-5	23	A-4(2)	BROWN
272+00	35	12	50.90	92	41	57.90	13LT	0-5	7	A-4(5)	BRGR
280+00	35	12	58.60	92	41	57.40	12RT	0-5	30	A-2-6(0)	BRGR
280+00	35	12	58.60	92	41	57.40	25RT	0-5	34	A-6(11)	BROWN
288+00	35	13	6.00	92	41	53.90	25RT	0-5	33	A-6(10)	BRGR
288+00	35	13	6.00	92	41	54.00	13LT	0-5	31	A-6(8)	BRGR
288+00	35	13	6.00	92	41	54.00	21LT	0-5	38	A-6(14)	GRAY
288+00	35	13	5.90	92	41	53.90	06LT	0-5	39	A-6(17)	GRAY
288+00	35	13	12.40	92	41	48.50	05RT	0-5	30	A-6(7)	BROWN
288+00	35	13	12.40	92	41	48.40	13RT	0-5	9	A-4(3)	BROWN
296+00	35	13	12.30	92	41	48.40	22RT	0-5	14	A-6(7)	BROWN
304+00	35	13	17.50	92	41	41.30	05LT	0-5	32	A-6(10)	BROWN
304+00	35	13	17.60	92	41	41.40	13LT	0-5	13	A-6(7)	BROWN
304+00	35	13	17.60	92	41	41.40	19LT	0-5	10	A-4(3)	BROWN
312+00	35	13	24.60	92	41	36.70	05RT	0-5	25	A-4(2)	BRGR
312+00	35	13	24.60	92	41	36.70	18RT	0-4Z	6	A-4(1)	BRGR
312+00	35	13	24.60	92	41	36.70	13RT	0-5	27	A-4(1)	BRGR
321+00	35	13	31.90	92	41	31.90	25LT	0-5	23	A-4(2)	BROWN
321+00	35	13	31.90	92	41	31.90	25LT	0-5	5	A-4(1)	BROWN
321+00	35	13	31.80	92	41	31.80	05LT	0-5	22	A-4(1)	BROWN
328+00	35	13	34.50	92	41	24.00	20RT	0-5	ND	A-4(0)	BROWN
328+00	35	13	34.50	92	41	24.10	13RT	0-5	23	A-4(2)	BROWN
328+00	35	13	34.60	92	41	24.10	05RT	0-5	22	A-4(2)	BRGR
336+00	35	13	38.00	92	41	15.50	06LT	0-5	ND	A-4(0)	BRGR
336+00	35	13	38.00	92	41	15.50	13LT	0-5	ND	A-4(0)	BRGR
336+00	35	13	38.10	92	41	15.60	25LT	0-5	24	A-4(0)	BRGR
345+00	35	13	43.40	92	41	6.20	13RT	0-5	23	A-4(2)	BROWN
345+00	35	13	43.30	92	41	6.10	26RT	0-5	8	A-4(0)	BROWN
345+00	35	13	43.30	92	41	6.10	26RT	0-5	27	A-4(3)	BROWN
345+00	35	13	43.40	92	41	6.30	06RT	0-5	24	A-4(3)	GRAY
352+00	35	13	50.10	92	41	5.10	12LT	0-5	22	A-4(0)	BROWN
352+00	35	13	50.10	92	41	5.00	05LT	0-5	32	A-6(8)	BROWN
352+00	35	13	50.10	92	41	5.20	20LT	0-5	26	A-4(3)	BROWN
360+00	35	13	58.10	92	41	5.10	05RT	0-5	37	A-6(14)	BROWN
360+00	35	13	58.10	92	41	5.00	12RT	0-5	25	A-4(3)	BROWN
360+00	35	13	58.10	92	41	4.90	19RT	0-5	31	A-6(9)	BROWN
368+00	35	14	5.60	92	41	5.10	13LT	0-5	34	A-6(9)	BROWN
368+00	35	14	5.60	92	41	5.00	05LT	0-5	34	A-6(9)	BROWN
368+00	35	14	5.60	92	41	5.10	19LT	0-5	29	A-4(6)	BROWN
376+00	35	14	13.50	92	41	4.30	13RT	0-5	27	A-4(7)	BROWN
376+00	35	14	13.50	92	41	4.30	05RT	0-5	ND	A-4(0)	BRGR
376+00	35	14	13.50	92	41	4.10	23RT	0-5	8	A-4(6)	BROWN
384+00	35	14	20.90	92	41	1.10	22LT	0-5	27	A-4(6)	BROWN
384+00	35	14	20.80	92	41	1.00	06LT	0-5	28	A-4(5)	BROWN
384+00	35	14	20.90	92	41	1.00	13LT	0-5	29	A-6(8)	BROWN
392+00	35	14	27.80	92	40	56.40	05RT	0-5	30	A-6(8)	BROWN
392+00	35	14	27.80	92	40	56.30	13RT	0-5	25	A-4(3)	BROWN
392+00	35	14	27.80	92	40	56.30	22RT	0-5	33	A-6(6)	BROWN
392+00	35	14	27.80	92	40	56.30	22RT	0-5	32	A-6(4)	BROWN
400+00	35	14	34.90	92	40	52.20	13LT	0-5	ND	A-4(0)	BROWN
400+00	35	14	34.90	92	40	52.30	22LT	0-5	ND	A-4(0)	BROWN
400+00	35	14	34.90	92	40	52.10	05LT	0-5	26	A-4(4)	BROWN
408+00	35	1									

10/17/2018

RO80494.DGN

CONCRETE DITCH PAVING

STATION	STATION	LOCATION	LENGTH		CONC. DITCH PAVING (TYPE B)	SOLID SODDING	WATER
			LIN. FT.	FEET	SQ. YD.	SQ. YD.	M. GAL.
116+00.00	117+00.00	HWY. 9-SITE 1 LT.	100.00	6.33	70.33	44.44	0.56
117+48.00	120+00.00	HWY. 9-SITE 1 LT.	252.00	6.33	177.24	112.00	1.41
120+00.00	122+00.00	HWY. 9-SITE 1 RT.	200.00	6.33	140.67	88.89	1.12
159+00.00	159+57.00	HWY. 9-SITE 2 LT.	57.00	6.33	40.09	25.33	0.32
160+01.00	160+34.00	HWY. 9-SITE 2 LT.	33.00	6.33	23.21	14.67	0.18
160+40.00	164+13.00	HWY. 9-SITE 2 RT.	373.00	6.33	262.34	165.78	2.09
160+80.00	162+47.00	HWY. 9-SITE 2 LT.	167.00	6.33	117.46	74.22	0.94
164+49.00	168+56.00	HWY. 9-SITE 2 RT.	407.00	6.33	286.26	180.89	2.28
168+89.00	170+16.00	HWY. 9-SITE 2 RT.	127.00	6.33	89.32	56.44	0.71
165+00.00	166+13.00	HWY. 9-SITE 2 LT.	113.00	6.33	79.48	50.22	0.63
166+75.00	170+43.00	HWY. 9-SITE 2 LT.	368.00	6.33	258.83	163.56	2.06
189+03.00	192+70.00	HWY. 9-SITE 3 RT.	367.00	6.33	258.12	163.11	2.06
198+00.00	203+52.00	HWY. 9-SITE 3 LT.	552.00	6.33	388.24	245.33	3.09
198+51.00	203+52.00	HWY. 9-SITE 3 RT.	501.00	6.33	352.37	222.67	2.81
300+63.00	301+37.00	HWY. 9-SITE 5 LT.	74.00	6.33	52.05	32.89	0.41
300+50.00	301+96.00	HWY. 9-SITE 5 RT.	146.00	6.33	102.69	64.89	0.82
301+55.00	301+85.00	HWY. 9-SITE 5 LT.	30.00	6.33	21.10	13.33	0.17
304+75.00	305+08.00	HWY. 9-SITE 5 LT.	33.00	6.33	23.21	14.67	0.18
305+58.00	306+19.00	HWY. 9-SITE 5 LT.	61.00	6.33	42.90	27.11	0.34
455+07.00	457+53.00	HWY. 9-SITE 7 LT.	246.00	6.33	173.02	109.33	1.38
455+07.00	456+92.00	HWY. 9-SITE 7 RT.	185.00	6.33	130.12	82.22	1.04
457+28.00	458+23.00	HWY. 9-SITE 7 RT.	95.00	6.33	66.82	42.22	0.53
458+27.00	460+80.00	HWY. 9-SITE 7 LT.	253.00	6.33	177.94	112.44	1.42
458+58.00	458+89.00	HWY. 9-SITE 7 RT.	31.00	6.33	21.80	13.78	0.17
459+25.00	461+00.00	HWY. 9-SITE 7 RT.	175.00	6.33	123.08	77.78	0.98
467+65.00	469+83.00	HWY. 9-SITE 7 RT.	218.00	6.33	153.33	96.89	1.22
TOTALS:					3632.02	2295.10	28.92

BASIS OF ESTIMATE:

WATER12.6 GAL. / SQ. YD. OF SOLID SODDING.

RUMBLE STRIPES IN ASPHALT SHOULDERS

STATION	STATION	LOCATION	* RUMBLE STRIPES IN ASPHALT SHOULDERS
			LIN. FT.
113+85	145+64	SITE 1 LT.	2242.40
113+85	145+64	SITE 1 RT.	2244.00
158+08	176+50	SITE 2 LT.	1190.40
158+08	176+50	SITE 2 RT.	1209.60
186+27	203+52	SITE 3 LT.	1327.20
186+27	203+52	SITE 3 RT.	1130.40
237+50	280+87	SITE 4 LT.	2511.20
237+50	280+87	SITE 4 RT.	2058.40
299+96	323+62	SITE 5 LT.	1206.40
299+96	323+62	SITE 5 RT.	1281.60
391+70	400+30	SITE 6 LT.	544.00
391+70	400+30	SITE 6 RT.	353.60
455+07	469+83	SITE 7 LT.	948.80
455+07	469+83	SITE 7 RT.	916.80
TOTAL:			19164.8

* QUANTITY ESTIMATED.

SEE SECTION 104.03 OF THE STD. SPECS.

TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER.

ACHM PATCHING OF EXISTING ROADWAY

DESCRIPTION	TON
ENTIRE PROJECT - TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER	100
TOTAL:	100

NOTE: QUANTITY ESTIMATED.

SEE SECTION 104.03 OF THE STD. SPECS.

ASPHALT CONCRETE PATCHING FOR
MAINTENANCE OF TRAFFIC

LOCATION	TON	TACK COAT
		GALLON
ENTIRE PROJECT - TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER	75	150
TOTALS:	75	150

BASIS OF ESTIMATE:

ASPHALT CONCRETE PATCHING FOR MAINTENANCE OF TRAFFIC.....25 TON/MILE

TACK COAT FOR MAINTENANCE OF TRAFFIC.....50 GAL./MILE

EROSION CONTROL MATTING

STATION	STATION	LOCATION	LENGTH		CLASS 3
			LIN. FT.	SQ. YD.	
114+00.00	116+00.00	HWY. 9-SITE 1 LT.	200.00	177.78	
113+85.00	120+00.00	HWY. 9-SITE 1 RT.	615.00	546.67	
122+00.00	125+00.00	HWY. 9-SITE 1 RT.	300.00	266.67	
136+57.50	138+00.00	HWY. 9-SITE 1 RT.	142.50	126.67	
159+00.00	160+40.00	HWY. 9-SITE 2 RT.	140.00	124.44	
162+47.00	166+04.00	HWY. 9-SITE 2 LT.	357.00	317.33	
168+27.00	169+04.00	HWY. 9-SITE 2 LT.	77.00	68.44	
170+16.00	172+40.00	HWY. 9-SITE 2 RT.	224.00	199.11	
189+76.00	191+37.00	HWY. 9-SITE 3 RT.	161.00	143.11	
196+00.00	198+51.00	HWY. 9-SITE 3 RT.	251.00	223.11	
250+50.00	250+90.00	HWY. 9-SITE 4 LT.	40.00	35.56	
250+68.00	250+90.00	HWY. 9-SITE 4 RT.	22.00	19.56	
251+00.00	251+50.00	HWY. 9-SITE 4 LT.	50.00	44.44	
269+42.00	273+11.00	HWY. 9-SITE 4 LT.	369.00	328.00	
306+00.42	308+00.00	HWY. 9-SITE 5 LT.	199.58	177.40	
455+07.00	456+20.00	HWY. 9-SITE 7 RT.	113.00	100.44	
461+00.00	464+50.00	HWY. 9-SITE 7 RT.	350.00	311.11	
468+00.00	469+05.00	HWY. 9-SITE 7 LT.	105.00	93.33	
469+20.00	469+83.00	HWY. 9-SITE 7 LT.	63.00	56.00	
469+20.00	469+83.00	HWY. 9-SITE 7 RT.	63.00	56.00	
TOTAL:				3415.17	

NOTE: AVERAGE WIDTH = 8'-0"

CENTERLINE RUMBLE STRIPES

BEGIN LOG MILE	END LOG MILE	LOCATION	* CENTERLINE RUMBLE STRIPES IN ASPHALT SHOULDERS
			LIN. FT.
2.32	3.26	HWY. 9 CENTERLINE	4963.20
3.51	4.70	HWY. 9 CENTERLINE	6283.20
5.52	7.65	HWY. 9 CENTERLINE	11246.40
7.81	8.84	HWY. 9 CENTERLINE	5438.40
TOTAL:			27931.2

* QUANTITY ESTIMATED.

SEE SECTION 104.03 OF THE STD. SPECS.

TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER.

FLOWABLE SELECT MATERIAL

STATION	LOCATION	CU. YD.
459+52	HWY. 9 LT.	2
TOTAL:		2

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. RD. PROJ. NO.	SHEET NO.	TOTAL SHEETS
10-18-18				6	ARK.			
				JOB NO.	080494		78	208

QUANTITIES

COLD MILLING ASPHALT PAVEMENT

STATION	STATION	LOCATION	AVG. WIDTH		COLD MILLING ASPHALT PAVEMENT
			FEET	SQ. YD.	
112+85.00	113+85.00	SITE 1	20.00	222.22	
145+64.00	146+64.00	SITE 1	20.00	222.22	
157+08.00	158+08.00	SITE 2	20.00	222.22	
176+50.00	177+50.00	SITE 2	20.00	222.22	
185+27.00	186+27.00	SITE 3	20.00	222.22	
203+52.00	204+52.00	SITE 3	20.00	222.22	
236+50.00	237+50.00	SITE 4	20.00	222.22	
280+87.00	281+87.00	SITE 4	20.00	222.22	
298+96.00	299+96.00	SITE 5	20.00	222.22	
323+62.00	324+62.00	SITE 5	20.00	222.22	
390+70.00	391+70.00	SITE 6	20.00	222.22	
400+30.00	401+30.00	SITE 6	20.00	222.22	
454+07.00	455+07.00	SITE 7	20.00	222.22	
469+83.00	470+83.00	SITE 7	20.00	222.22	
TOTAL:				3111.08	

NOTE: AVERAGE MILLING DEPTH 1".

FENCING

STATION	STATION	LOCATION	WIRE FENCE			* 4' CHAIN LINK FENCE	* 16'-0" GATES
			(TYPE C)	(TYPE D)	(TYPE D-1)		
			LIN. FT.				
112+85	115+56	HWY. 9-SITE 1 RT.			271		1
112+85	113+85	HWY. 9-SITE 1 LT.			100		
116+22	123+96	HWY. 9-SITE 1 RT.		774			
117+61	117+79	HWY. 9-SITE 1 LT.		18			
129+40	130+48	HWY. 9-SITE 1 LT.		108			1
130+53	133+63	HWY. 9-SITE 1 RT.			310		1
188+98	191+82	HWY. 9-SITE 3 RT.			284		
198+31	201+96	HWY. 9-SITE 3 RT.	365				1
243+35	244+20	HWY. 9-SITE 4 RT.	85				
249+02	250+00	HWY. 9-SITE 4 LT.				98	1
249+87	251+55	HWY. 9-SITE 4 RT.				168	2
256+93	268+34	HWY. 9-SITE 4 LT.			1141		
268+73	281+88	HWY. 9-SITE 4 RT.			1315		2
268+98	275+20	HWY. 9-SITE 4 LT.	622				
277+00	281+88	HWY. 9-SITE 4 LT.	488				
307+56	308+30	HWY. 9-SITE 5 LT.			74		
310+39	314+00	HWY. 9-SITE 5 LT.			361		
312+50	314+40	HWY. 9-SITE 5 RT.		190			
393+17	394+84	HWY. 9-SITE 6 LT.		167			
455+15	456+84	HWY. 9-SITE 7 RT.	169				
TOTALS:			1729	1257	3856	266	9

* DENOTES ALTERNATE BID ITEM.

STRUCTURES

STATION	DESCRIPTION	REINFORCED CONCRETE PIPE CULVERT		PIPE CULVERT ALTERNATES						FLARED END SECTIONS FOR R.C. PIPE CULVERTS				FLARED END SECTION ALTERNATES FOR PIPE CULVERT ALTERNATES		TEMPORARY CULVERTS	DROP INLETS	MODIFYING JUNCTION BOXES	SOLID SODDING	WATER	STD. DWG. NOS.
		(CLASS III)	(CLASS IV)	ALT. 1 (CLASS III)	ALT. 2 (WITH CLASS III ALT. 1)	ALT. 1 (CLASS IV)	ALT. 2 (WITH CLASS IV ALT. 1)	ALT. 1 (CLASS V)	ALT. 2 (WITH CLASS V ALT. 1)	24"	30"	36"	51"x31"	18"	24"						
		24"	30"	36"	24"	36"	51"x31"	18"	18"	24"	24"	24"	24"	18"	24"						
136+46	SITE 1-CONST. TRI. R.C. PIPE CULVERT							198													
175+69	SITE 2-EXTEND R.C. PIPE CULVERT	18											6						54	0.68	FES-1, FES-2, PCC-1
196+51	SITE 3-EXTEND R.C. PIPE CULVERT	56																	16	0.20	FES-1, FES-2, PCC-1
250+94	SITE 4-CONST. & EXTEND R.C. PIPE CULVERT			96															16	0.20	FES-1, FES-2, PCC-1
265+80	SITE 4-EXTEND R.C. PIPE CULVERT		68																16	0.20	FES-1, FES-2, PCC-1
301+15	SITE 5-CONST. TRI. R.C. PIPE CULVERT					156							4						34	0.43	FES-1, FES-2, PCC-1
304+91	SITE 5-CONST. R.C. PIPE CULVERT					52							6						38	0.48	FES-1, FES-2, PCC-1
318+19	SITE 5-CONST. R.C. PIPE CULVERTS W/D.I.												2						34	0.43	FES-1, FES-2,

DRIVEWAYS & TURNOUTS

STATION	SIDE	LOCATION	WIDTH FEET	ACHM SURFACE COURSE (3/8") 220 LBS. PER SQ. YD. (PG 64-22)			AGGREGATE BASE COURSE (CLASS 7)	SIDE DRAINS			STANDARD DRAWINGS
				SQ. YD.	TON	TON		18"	24"	60"	
115+58	RT.	DRIVEWAY	16	80.36	8.84	32.81	32.81	30			PCC-1, PCM-1, PCP-1, PCP-2
117+27	LT.	DRIVEWAY	16	117.69	12.95	48.06	48.06	48			PCC-1, PCM-1, PCP-1, PCP-2
120+18	LT.	DRIVEWAY	16	137.24	15.10	56.04	56.04	38			PCC-1, PCM-1, PCP-1, PCP-2
121+01	LT.	DILLION DRIVE	22	235.80	25.94	96.29	96.29	52			PCC-1, PCM-1, PCP-1, PCP-2
130+44	LT.	DRIVEWAY	16	137.24	15.10	56.04	56.04	36			PCC-1, PCM-1, PCP-1, PCP-2
131+04	RT.	DRIVEWAY	16	94.58	10.40	38.62	38.62	28			PCC-1, PCM-1, PCP-1, PCP-2
133+36	LT.	DRIVEWAY	16	87.47	9.62	35.72	35.72	32			PCC-1, PCM-1, PCP-1, PCP-2
139+03	RT.	DRIVEWAY	16	126.58	13.92	51.69	51.69	44			PCC-1, PCM-1, PCP-1, PCP-2
140+98	RT.	TERRAPIN LANE	20	211.13	23.22	86.21	86.21	66			PCC-1, PCM-1, PCP-1, PCP-2
144+47	RT.	DRIVEWAY	16	75.02	8.25	30.63	30.63	34			PCC-1, PCM-1, PCP-1, PCP-2
146+00	RT.	DRIVEWAY	16	71.47	7.86	29.18	29.18	32			PCC-1, PCM-1, PCP-1, PCP-2
146+64	LT.	DRIVEWAY	16	69.69	7.67	28.46	28.46	76			PCC-1, PCM-1, PCP-1, PCP-2
156+94	LT.	DRIVEWAY	16	137.24	15.10	56.04	56.04	28			PCC-1, PCM-1, PCP-1, PCP-2
157+49	LT.	DRIVEWAY	16	71.47	7.86	29.18	29.18	32			PCC-1, PCM-1, PCP-1, PCP-2
159+79	LT.	DRIVEWAY	16	108.80	11.97	44.43	44.43	46			PCC-1, PCM-1, PCP-1, PCP-2
160+59	LT.	DRIVEWAY	16	94.58	10.40	38.62	38.62	48			PCC-1, PCM-1, PCP-1, PCP-2
164+32	RT.	DRIVEWAY	16	85.69	9.43	34.99	34.99	36			PCC-1, PCM-1, PCP-1, PCP-2
166+44	LT.	KORDSMEIER LANE	22	375.13	41.26	153.18	153.18	62			PCC-1, PCM-1, PCP-1, PCP-2
168+70	RT.	DRIVEWAY	16	91.02	10.01	37.17	37.17	38			PCC-1, PCM-1, PCP-1, PCP-2
170+78	LT.	COTHERNESTATES	20	580.02	63.80	236.84	236.84	72			PCC-1, PCM-1, PCP-1, PCP-2
171+67	RT.	DRIVEWAY	16	181.69	19.99	74.19	74.19	42			PCC-1, PCM-1, PCP-1, PCP-2
172+95	RT.	DRIVEWAY	16	211.91	23.31	86.53	86.53	38			PCC-1, PCM-1, PCP-1, PCP-2
174+80	RT.	DRIVEWAY	16	98.13	10.79	40.07	40.07	34			PCC-1, PCM-1, PCP-1, PCP-2
176+98	RT.	DRIVEWAY	16	101.69	11.19	41.52	41.52	32			PCC-1, PCM-1, PCP-1, PCP-2
183+76	RT.	DRIVEWAY	16	75.02	8.25	30.63	30.63	34			PCC-1, PCM-1, PCP-1, PCP-2
185+62	RT.	DRIVEWAY	16	92.80	10.21	37.89	37.89	36			PCC-1, PCM-1, PCP-1, PCP-2
188+22	RT.	DRIVEWAY	16	89.91	10.99	40.80	40.80	42			PCC-1, PCM-1, PCP-1, PCP-2
188+84	LT.	DRIVEWAY	16	85.69	9.43	34.99	34.99	28			PCC-1, PCM-1, PCP-1, PCP-2
189+41	RT.	DRIVEWAY	16	99.91	10.99	40.80	40.80	40			PCC-1, PCM-1, PCP-1, PCP-2
193+01	RT.	PINTER LANE	24	304.91	33.54	124.50	124.50	74			PCC-1, PCM-1, PCP-1, PCP-2
241+74	LT.	DRIVEWAY	16	82.13	9.03	33.54	33.54	30			PCC-1, PCM-1, PCP-1, PCP-2
242+41	LT.	DRIVEWAY	16	78.68	8.64	32.09	32.09	30			PCC-1, PCM-1, PCP-1, PCP-2
242+97	LT.	DRIVEWAY	16	76.80	8.45	31.36	31.36	28			PCC-1, PCM-1, PCP-1, PCP-2
242+98	RT.	DRIVEWAY	16	78.58	8.64	32.09	32.09	30			PCC-1, PCM-1, PCP-1, PCP-2
244+32	RT.	DRIVEWAY	16	80.36	8.84	32.81	32.81	28			PCC-1, PCM-1, PCP-1, PCP-2
244+60	LT.	DRIVEWAY	20	95.02	10.45	38.80	38.80	34			PCC-1, PCM-1, PCP-1, PCP-2
245+66	LT.	CAMPGROUND ROAD	20	153.36	16.87	62.62	62.62	56			PCC-1, PCM-1, PCP-1, PCP-2
245+85	RT.	DRIVEWAY	16	80.36	8.84	32.81	32.81	32			PCC-1, PCM-1, PCP-1, PCP-2
248+93	RT.	DRIVEWAY	16	76.80	8.45	31.36	31.36	32			PCC-1, PCM-1, PCP-1, PCP-2
249+36	LT.	DRIVEWAY	16	62.68	6.88	25.55	25.55	30			PCC-1, PCM-1, PCP-1, PCP-2
250+00	RT.	DRIVEWAY	16	71.47	7.86	29.18	29.18	28			PCC-1, PCM-1, PCP-1, PCP-2
251+22	LT.	GOODMAN ROAD	20	277.80	30.56	113.44	113.44	52			PCC-1, PCM-1, PCP-1, PCP-2
251+45	RT.	DRIVEWAY	16	73.24	8.06	29.91	29.91	28			PCC-1, PCM-1, PCP-1, PCP-2
252+02	LT.	DRIVEWAY	16	66.13	7.27	27.00	27.00	28			PCC-1, PCM-1, PCP-1, PCP-2
253+17	RT.	DRIVEWAY	16	172.80	19.01	70.56	70.56	54			PCC-1, PCM-1, PCP-1, PCP-2
254+13	LT.	DRIVEWAY	16	71.47	7.86	29.18	29.18	30			PCC-1, PCM-1, PCP-1, PCP-2
254+51	RT.	HENSON LANE	16	129.80	14.28	53.00	53.00	46			PCC-1, PCM-1, PCP-1, PCP-2
254+10	LT.	DRIVEWAY	16	73.24	8.06	29.91	29.91	28			PCC-1, PCM-1, PCP-1, PCP-2
254+27	RT.	DRIVEWAY	16	73.24	8.06	29.91	29.91	28			PCC-1, PCM-1, PCP-1, PCP-2
254+79	LT.	DRIVEWAY	16	75.02	8.25	30.63	30.63	28			PCC-1, PCM-1, PCP-1, PCP-2
256+69	RT.	DRIVEWAY	16	76.80	8.45	31.36	31.36	30			PCC-1, PCM-1, PCP-1, PCP-2
256+77	LT.	DRIVEWAY	16	80.36	8.84	32.81	32.81	32			PCC-1, PCM-1, PCP-1, PCP-2
257+50	RT.	DRIVEWAY	20	92.80	10.21	37.89	37.89	34			PCC-1, PCM-1, PCP-1, PCP-2
258+43	RT.	BIMBO LANE	16	129.80	14.28	53.00	53.00	50			PCC-1, PCM-1, PCP-1, PCP-2
259+16	RT.	DRIVEWAY	16	76.80	8.45	31.36	31.36	28			PCC-1, PCM-1, PCP-1, PCP-2
260+15	RT.	DRIVEWAY	20	90.58	9.96	36.99	36.99	38			PCC-1, PCM-1, PCP-1, PCP-2
261+17	LT.	DRIVEWAY	16	80.36	8.84	32.81	32.81	38			PCC-1, PCM-1, PCP-1, PCP-2
262+36	RT.	CARROLL DRIVE	20	155.58	17.11	63.53	63.53	68			PCC-1, PCM-1, PCP-1, PCP-2
263+17	RT.	BARKER LANE	20	271.13	29.82	110.71	110.71	72			PCC-1, PCM-1, PCP-1, PCP-2
263+48	RT.	DRIVEWAY	16	96.36	10.60	39.35	39.35	50			PCC-1, PCM-1, PCP-1, PCP-2
268+53	LT.	OVERCUP LAKE ROAD	22	162.46	17.87	66.34	66.34	58			PCC-1, PCM-1, PCP-1, PCP-2
271+09	RT.	BOSTAN LANE	36	129.62	14.26	52.93	52.93	120			PCC-1, PCM-1, PCP-1, PCP-2
275+58	LT.	DRIVEWAY	16	87.47	9.62	35.72	35.72	32			PCC-1, PCM-1, PCP-1, PCP-2
300+20	RT.	DRIVEWAY	20	101.69	11.19	41.52	41.52	40			PCC-1, PCM-1, PCP-1, PCP-2
301+53	LT.	DRIVEWAY	40	190.58	20.96	77.82	77.82	58			PCC-1, PCM-1, PCP-1, PCP-2
301+45	LT.	DRIVEWAY	16	99.91	10.99	40.80	40.80				PCC-1, PCM-1, PCP-1, PCP-2
302+27	RT.	DRIVEWAY	40	168.36	18.52	68.75	68.75	64			PCC-1, PCM-1, PCP-1, PCP-2
302+97	LT.	DRIVEWAY	16	91.02	10.01	37.17	37.17	34			PCC-1, PCM-1, PCP-1, PCP-2
303+23	RT.	DRIVEWAY	24	140.80	15.49	57.49	57.49	58			PCC-1, PCM-1, PCP-1, PCP-2
304+15	RT.	DRIVEWAY	16	69.69	7.67	28.46	28.46	66			PCC-1, PCM-1, PCP-1, PCP-2
304+73	RT.	DRIVEWAY	16	96.36	10.60	39.35	39.35	44			PCC-1, PCM-1, PCP-1, PCP-2
305+33	LT.	DRIVEWAY	16	94.58	10.40	38.62	38.62	38			PCC-1, PCM-1, PCP-1, PCP-2
306+32	RT.	DRIVEWAY	20	135.02	14.85	55.13	55.13	54			PCC-1, PCM-1, PCP-1, PCP-2
306+36	LT.	DRIVEWAY	16	89.24	9.82	36.44	36.44	32			PCC-1, PCM-1, PCP-1, PCP-2
308+54	LT.	DRIVEWAY	16	83.91	9.23	34.26	34.26	32			PCC-1, PCM-1, PCP-1, PCP-2
310+29	LT.	DRIVEWAY	16	85.69	9.43	34.99	34.99	38			PCC-1, PCM-1, PCP-1, PCP-2
310+84	RT.	DRIVEWAY	16	110.58	12.16	45.15	45.15	38			PCC-1, PCM-1, PCP-1, PCP-2
314+63	LT.	DRIVEWAY	16	108.80	11.97	44.43	44.43	42			PCC-1, PCM-1, PCP-1, PCP-2
314+78	RT.	POTETTE ROAD	16	170.69	18.78	69.70	69.70	52			PCC-1, PCM-1, PCP-1, PCP-2
315+40	LT.	DRIVEWAY	16	89.24	9.82	36.44	36.44	48			PCC-1, PCM-1, PCP-1, PCP-2
315+97	LT.	DRIVEWAY	30	166.13	18.27	67.84	67.84	58			PCC-1, PCM-1, PCP-1, PCP-2
316+60	LT.	DRIVEWAY	20	123.91	13.63	50.60	50.60	48			PCC-1, PCM-1, PCP-1, PCP-2
317+75	RT.	DRIVEWAY	30	592.80	65.21	242.06	242.06				PCC-1, PCM-1, PCP-1, PCP-2
318+62	LT.	SOLGOHACHIA ROAD	20	213.36	23.47	87.12	87.12				PCC-1, PCM-1, PCP-1, PCP-2
322+15	RT.	DRIVEWAY	34	235.69	25.93	96.24	96.24				PCC-1, PCM-1, PCP-1, PCP-2
391+77	RT.	DRIVEWAY	16	75.02	8.25	30.63	30.63	28			PCC-1, PCM-1, PCP-1, PCP-2
394+29	RT.	DRIVEWAY	16	73.24	8.06	29.91	29.91	28			PCC-1, PCM-1, PCP-1, PCP-2
395+58	LT.	GIBSON ROAD	24	179.58	19.75	73.33	73.33	66			PCC-1, PCM-1, PCP-1, PCP-2
395+58	RT.	C.R. 71	24	184.91	20.34	75.50	75.50	66			PCC-1, PCM-1, PCP-1, PCP-2
398+57	RT.	CHADWICK DRIVE	16	129.80	14.28	53.00	53.00	54			PCC-1, PCM-1, PCP-1, PCP-2
400+00	LT.	DRIVEWAY	16	85.69	9.43	34.99	34.99	28			PCC-1, PCM-1, PCP-1, PCP-2
457+10	RT.	DRIVEWAY	16	69.69	7.67	28.46	28.46	28			PCC-1, PCM-1, PCP-1, PCP-2
458+06	LT.	DOE DRIVE	20	220.02	24.20	89.84	89.84	36			PCC-1, PCM-1, PCP-1, PCP-2
458+41	RT.	DRIVEWAY	16	103.47	11.38	42.25	42.25	34			PCC-1, PCM-1, PCP-1, PCP-2
459+08	RT.	DRIVEWAY	16	103.47	11.38	42.25	42.25	34			PCC-1, PCM-1, PCP-1, PCP-2
461+03	LT.	DRIVEWAY	16	101.69	11.19	41.52	41.52	46			PCC-1, PCM-1, PCP-1, PCP-2
462+18	LT.	HWY. 287	24	286.25	31.49	116.89	116.89				PCC-1, PCM-1, PCP-1, PCP-2
467+49	RT.	DRIVEWAY	16	89.24	9.82	36.44	36.44	32			PCC-1, PCM-1, PCP-1, PCP-2
*ENTIRE PROJECT TEMPORARY DRIVES											
TOTALS:				13450.16	1479.54	5792.15	5792.15	3188	892	76	

BASIS OF ESTIMATE:
ACHM SURFACE COURSE (3/8") 94.8% MIN. AGGR. 5.2% ASPHALT BINDER
MAXIMUM NUMBER OF GRATIONS = 115 FOR PG 64-22

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

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

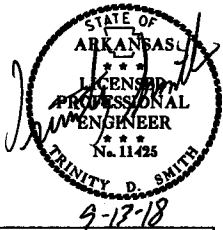
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080494	79	208

2 QUANTITIES



DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
						080494	80	208

2 QUANTITIES



BASE AND SURFACING (BOX 1 OF 2)

STATION	STATION	LOCATION	LENGTH FEET	AGGREGATE BASE COURSE (CLASS 7)		TACK COAT						ACHM BINDER COURSE (1")				ACHM SURFACE COURSE (3/8")											
				TON / STATION	TON	(0.05 GAL. PER SQ. YD.)			(0.17 GAL. PER SQ. YD.)			TOTAL GALLONS	AVG. WID. FEET	SQ.YD.	POUND / SQ.YD.	PG 64-22 TON	AVG. WID. FEET	SQ.YD.	POUND / SQ.YD.	PG 64-22 TON	AVG. WID. FEET	SQ.YD.	POUND / SQ.YD.	PG 64-22 TON	TOTAL PG 64-22 TON		
						TOTAL WID. FEET	SQ.YD.	GALLON	TOTAL WID. FEET	SQ.YD.	GALLON																
MAIN LANES																											
112+85.00	113+85.00	SITE 1-TRANSITION	100.00	134.75	134.75	4.22	46.89	2.34				2.34	2.15	23.89	660.00	7.88	2.07	23.00	220.00	2.53	24.00	266.67	220.00	29.33	31.86		
113+85.00	116+79.87	SITE 1-NOTCH AND WIDEN 2-LANE	294.87	178.50	526.34	28.42	931.13	46.56				46.56	4.29	140.55	660.00	46.38	4.13	135.31	220.00	14.88	28.00	917.37	220.00	100.91	115.79		
116+79.87	119+35.00	SITE 1-NOTCH AND WIDEN 2-LANE W/ PARTIAL SHLD.	255.13	VAR	434.96	VAR	789.96	39.50				39.50	VAR	397.31	660.00	131.11	VAR	392.65	220.00	43.19	28.00	793.74	220.00	87.31	130.50		
119+35.00	122+11.00	SITE 1-FULL DEPTH 2-LANE	276.00	256.25	707.25	48.83	1497.45	74.87				74.87	24.58	753.79	660.00	248.75	24.25	743.67	220.00	81.80	28.00	858.67	220.00	94.45	176.25		
122+11.00	124+75.18	SITE 1-NOTCH AND WIDEN 2-LANE W/ PARTIAL SHLD.	264.18	VAR	455.78	48.93	1436.26	71.81				71.81	VAR	426.95	660.00	140.89	VAR	422.13	220.00	46.43	28.00	821.89	220.00	90.41	136.84		
124+75.18	129+35.28	SITE 1-NOTCH AND WIDEN 2-LANE	460.10	178.50	821.28	28.42	1452.89	72.64				72.64	4.29	219.31	660.00	72.37	4.13	211.13	220.00	23.22	28.00	1431.42	220.00	157.46	180.68		
129+35.28	133+61.79	SITE 1-NOTCH AND WIDEN 2-LANE W/ PARTIAL SHLD.	426.51	VAR	721.14	47.46	2249.13	112.46				112.46	VAR	654.63	660.00	216.03	VAR	646.79	220.00	71.15	28.00	1326.92	220.00	145.96	217.11		
133+61.79	133+86.40	SITE 1-NOTCH AND WIDEN 2-LANE	24.61	178.50	43.93	28.42	77.71	3.89				3.89	4.29	11.73	660.00	3.87	4.13	11.29	220.00	1.24	28.00	76.56	220.00	8.42	9.66		
133+86.40	135+82.00	SITE 1-NOTCH AND WIDEN 2-LANE W/ PARTIAL SHLD.	195.60	VAR	334.92	50.37	1094.71	54.74				54.74	VAR	331.77	660.00	109.48	VAR	328.32	220.00	36.12	28.00	608.53	220.00	66.94	103.06		
135+82.00	140+20.00	SITE 1-FULL DEPTH 2-LANE	438.00	256.25	1122.38	48.83	2376.39	118.82				118.82	24.58	1196.23	660.00	394.76	24.25	1180.17	220.00	129.82	28.00	1362.67	220.00	149.89	279.71		
140+20.00	142+35.42	SITE 1-NOTCH AND WIDEN 2-LANE W/ PARTIAL SHLD.	215.42	VAR	361.78	47.07	1126.65	56.33				56.33	VAR	325.93	660.00	107.56	VAR	322.12	220.00	35.43	28.00	670.20	220.00	73.72	109.15		
142+35.42	145+64.00	SITE 1-NOTCH AND WIDEN 2-LANE	328.58	178.50	586.52	28.42	1037.58	51.88				51.88	4.29	156.62	660.00	51.68	4.13	150.78	220.00	16.59	28.00	1022.25	220.00	112.45	129.04		
145+64.00	146+64.00	SITE 1-TRANSITION	100.00	134.75	134.75	4.22	46.89	2.34				2.34	2.15	23.89	660.00	7.88	2.07	23.00	220.00	2.53	24.00	266.67	220.00	29.33	31.86		
157+08.00	158+08.00	SITE 2-TRANSITION	100.00	134.75	134.75	4.22	46.89	2.34				2.34	2.15	23.89	660.00	7.88	2.07	23.00	220.00	2.53	24.00	266.67	220.00	29.33	31.86		
158+08.00	160+02.27	SITE 2-NOTCH AND WIDEN 2-LANE	194.27	178.50	346.77	28.42	613.46	30.67				30.67	4.29	92.60	660.00	30.56	4.13	89.15	220.00	9.81	28.00	604.40	220.00	66.48	76.29		
160+02.27	161+70.00	SITE 2-NOTCH AND WIDEN 2-LANE W/ PARTIAL SHLD.	167.73	VAR	279.69	30.74	572.89	28.64				28.64	VAR	101.57	660.00	33.52	VAR	98.63	220.00	10.85	28.00	521.83	220.00	57.40	68.25		
161+70.00	162+45.17	SITE 2-NOTCH AND WIDEN 2-3 LANE TRANSITION W/ PARTIAL SHLD.	75.17	VAR	130.98	32.80	273.95	13.70				13.70	VAR	54.10	660.00	17.85	VAR	52.78	220.00	5.81	VAR	245.28	220.00	26.98	32.79		
162+45.17	165+00.00	SITE 2-NOTCH AND WIDEN 2-3 LANE TRANSITION	254.83	VAR	519.85	41.96	1188.07	59.40				59.40	VAR	315.41	660.00	104.09	VAR	306.38	220.00	33.70	VAR	1001.34	220.00	110.15	143.85		
165+00.00	170+51.36	SITE 2-NOTCH AND WIDEN 3-LANE	551.36	225.25	1241.94	52.83	3236.48	161.82				161.82	16.58	1015.73	660.00	335.19	16.25	995.51	220.00	109.51	40.00	2450.49	220.00	269.55	379.06		
170+51.36	172+00.00	SITE 2-NOTCH AND WIDEN 3-LANE W/ PARTIAL SHLD.	148.64	VAR	298.02	56.09	926.36	46.32				46.32	VAR	299.28	660.00	98.76	VAR	296.69	220.00	32.64	40.00	660.62	220.00	72.67	105.31		
172+00.00	172+90.66	SITE 2-NOTCH AND WIDEN 3-2 LANE TRANSITION W/ PARTIAL SHLD.	90.66	VAR	182.68	51.27	516.46	25.82				25.82	VAR	158.28	660.00	52.23	VAR	156.70	220.00	17.24	VAR	386.30	220.00	42.49	59.73		
172+90.66	175+30.00	SITE 2-NOTCH AND WIDEN 3-2 LANE TRANSITION	239.34	VAR	457.74	35.33	939.54	46.98				46.98	VAR	208.13	660.00	68.68	VAR	199.62	220.00	21.96	VAR	860.29	220.00	94.63	116.59		
175+30.00	176+50.00	SITE 2-NOTCH AND WIDEN 2-LANE	120.00	178.50	214.20	28.42	378.93	18.95				18.95	4.29	57.20	660.00	18.88	4.13	55.07	220.00	6.06	28.00	373.33	220.00	41.07	47.13		
176+50.00	177+50.00	SITE 2-TRANSITION	100.00	134.75	134.75	4.22	46.89	2.34				2.34	2.15	23.89	660.00	7.88	2.07	23.00	220.00	2.53	24.00	266.67	220.00	29.33	31.86		
185+27.00	186+27.00	SITE 3-TRANSITION	100.00	134.75	134.75	4.22	46.89	2.34				2.34	2.15	23.89	660.00	7.88	2.07	23.00	220.00	2.53	24.00	266.67	220.00	29.33	31.86		
186+27.00	189+57.66	SITE 3-NOTCH AND WIDEN 2-LANE	330.66	178.50	590.23	28.42	1044.15	52.21				52.21	4.29	157.61	660.00	52.01	4.13	151.74	220.00	16.69	28.00	1028.72	220.00	113.16	129.85		
189+57.66	191+11.00	SITE 3-NOTCH AND WIDEN 2-LANE W/ PARTIAL SHLD.	153.34	VAR	253.95	44.91	765.17	38.26				38.26	VAR	213.55	660.00	70.47	VAR	210.87	220.00	23.20	28.00	477.06	220.00	52.48	75.68		
191+11.00	198+55.00	SITE 3-FULL DEPTH 2-LANE	744.00	256.25	1906.50	48.83	4036.61	201.83				201.83	24.58	2031.95	660.00	670.54	24.25	2004.67	220.00	220.51	28.00	2314.67	220.00	254.61	475.12		
198+55.00	200+13.41	SITE 3-NOTCH AND WIDEN 2-LANE W/ PARTIAL SHLD.	158.41	VAR	265.47	46.14	812.12	40.61				40.61	VAR	231.47	660.00	76.39	VAR	228.69	220.00	25.16	28.00	492.83	220.00	54.21	79.37		
200+13.41	203+52.00	SITE 3-NOTCH AND WIDEN 2-LANE	338.59	178.50	604.38	28.42	1069.19	53.46				53.46	4.29	161.39	660.00	53.26	4.13	155.38	220.00	17.09	28.00	1053.39	220.00	115.87	132.96		
203+52.00	204+52.00	SITE 3-TRANSITION	100.00	134.75	134.75	4.22	46.89	2.34				2.34	2.15	23.89	660.00	7.88	2.07	23.00	220.00	2.53	24.00	266.67	220.00	29.33	31.86		
236+50.00	237+50.00	SITE 4-TRANSITION	100.00	134.75	134.75	4.22	46.89	2.34				2.34	2.15	23.89	660.00	7.88	2.07	23.00	220.00	2.53	24.00	266.67	220.00	29.33	31.86		
237+50.00	240+80.00	SITE 4-NOTCH AND WIDEN 2-3 LANE TRANSITION	330.00	VAR	660.00	39.87	1461.90	73.10				73.10	VAR	370.15	660.00	122.15	VAR	358.41	220.00	39.43	VAR	1246.58	220.00	137.12	176.55		
240+80.00	274+86.38	SITE 4-NOTCH AND WIDEN 3																									

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.		080494	81	208

2 QUANTITIES



BASE AND SURFACING (BOX 2 OF 2)

BASE AND SURFACING (BOX 2 OF 2)																										
STATION	STATION	LOCATION	LENGTH FEET	AGGREGATE BASE COURSE (CLASS 7)		TACK COAT						ACHM BINDER COURSE (1")				ACHM SURFACE COURSE (3/8")										
				TON / STATION	TON	(0.05 GAL. PER SQ. YD.)			(0.17 GAL. PER SQ. YD.)			TOTAL GALLONS	AVG. WID. FEET	SQ.YD.	POUND / SQ.YD.	PG 64-22 TON	AVG. WID. FEET	SQ.YD.	POUND / SQ.YD.	PG 64-22 TON	AVG. WID. FEET	SQ.YD.	POUND / SQ.YD.	PG 64-22 TON	TOTAL PG 64-22 TON	
						TOTAL WID. FEET	SQ.YD.	GALLON	TOTAL WID. FEET	SQ.YD.	GALLON															
ADDITIONAL FOR LEVELING																										
113+85.00	120+00.00	SITE 1-MAIN LANES	615.00						20.00	1366.67	232.33	232.33					20.00	1366.67	VAR.	615.78						615.78
122+00.00	136+00.00	SITE 1-MAIN LANES	1400.00						20.00	3111.11	528.89	528.89					20.00	3111.11	VAR.	986.04						986.04
140+00.00	145+64.00	SITE 1-MAIN LANES	564.00						20.00	1253.33	213.07	213.07					20.00	1253.33	VAR.	532.62						532.62
157+08.00	176+50.00	SITE 2-MAIN LANES	1942.00						20.00	4315.56	733.65	733.65					20.00	4315.56	VAR.	1148.40						1148.40
186+27.00	192+00.00	SITE 3-MAIN LANES	573.00						20.00	1273.33	216.47	216.47					20.00	1273.33	VAR.	471.24						471.24
198+00.00	203+52.00	SITE 3-MAIN LANES	552.00						20.00	1226.67	208.53	208.53					20.00	1226.67	VAR.	423.72						423.72
237+50.00	280+00.00	SITE 4-MAIN LANES	4250.00						20.00	9444.44	1605.55	1605.55					20.00	9444.44	VAR.	1946.34						1946.34
299+96.00	316+60.00	SITE 5-MAIN LANES	1664.00						20.00	3697.78	628.62	628.62					20.00	3697.78	VAR.	803.88						803.88
318+62.00	323+62.00	SITE 5-MAIN LANES	500.00						20.00	1111.11	188.89	188.89					20.00	1111.11	VAR.	219.78						219.78
391+70.00	400+30.00	SITE 5-MAIN LANES	860.00						20.00	1911.11	324.89	324.89					20.00	1911.11	VAR.	95.04						95.04
455+07.00	460+00.00	SITE 6-MAIN LANES	493.00						20.00	1095.56	186.25	186.25					20.00	1095.56	VAR.	215.82						215.82
461+51.00	466+00.00	SITE 7-MAIN LANES	449.00						20.00	997.78	169.62	169.62					20.00	997.78	VAR.	560.34						560.34
467+49.00	469+83.00	SITE 7-MAIN LANES	234.00						20.00	520.00	88.40	88.40					20.00	520.00	VAR.	170.28						170.28
ADDITIONAL FOR GRADE RAISE																										
462+10.00	462+40.00	SITE 7-MAIN LANES	30.00					20.00	66.67	3.33			3.33	20.00	66.67	VAR.	156.42									
465+40.00	466+00.00	SITE 7-MAIN LANES	60.00					20.00	133.33	6.67			6.67	20.00	133.33	VAR.	332.64									
466+00.00	467+10.00	SITE 7-MAIN LANES	110.00					20.00	244.44	12.22	20.00	244.44	41.55	53.77	20.00	244.44	VAR.	332.64								
ADDITIONAL FOR SUPERELEVATION																										
113+85.00	117+35.00	SITE 1-SUPERELEVATION TRANSITION	350.00	45.75	160.13																					
117+35.00	124+17.45	SITE 1-MAXIMUM SUPERELEVATION	682.45	91.50	624.44																					
124+17.45	127+67.45	SITE 1-SUPERELEVATION TRANSITION	350.00	45.75	160.13																					
127+68.06	130+03.55	SITE 1-SUPERELEVATION TRANSITION	235.49	31.88	75.07																					
130+03.55	132+39.04	SITE 1-SUPERELEVATION TRANSITION	235.49	31.88	75.07																					
132+39.04	135+89.04	SITE 1-SUPERELEVATION TRANSITION	350.00	45.75	160.13																					
135+89.04	142+14.00	SITE 1-MAXIMUM SUPERELEVATION	624.96	91.50	571.84																					
142+14.00	145+64.00	SITE 1-SUPERELEVATION TRANSITION	350.00	45.75	160.13																					
158+08.00	159+71.80	SITE 2-SUPERELEVATION TRANSITION	163.80	75.88	124.29																					
159+71.80	161+83.73	SITE 2-MAXIMUM SUPERELEVATION	211.93	91.50	193.92																					
161+83.73	166+03.73	SITE 2-SUPERELEVATION TRANSITION	420.00	45.75	192.15																					
166+06.44	170+26.44	SITE 2-SUPERELEVATION TRANSITION	420.00	45.75	192.15																					
170+26.44	172+30.00	SITE 2-MAXIMUM SUPERELEVATION	203.56	91.50	186.26																					
172+30.00	176+50.00	SITE 2-SUPERELEVATION TRANSITION	420.00	45.75	192.15																					
186+28.22	189+78.22	SITE 3-SUPERELEVATION TRANSITION	350.00	45.75	160.13																					
189+78.22	200+02.00	SITE 3-MAXIMUM SUPERELEVATION	1023.78	91.50	936.76																					
200+02.00	203+52.00	SITE 3-SUPERELEVATION TRANSITION	350.00	45.75	160.13																					
259+50.90	263+70.90	SITE 4-SUPERELEVATION TRANSITION	420.00	42.00	176.40																					
263+70.90	264+27.19	SITE 4-MAXIMUM SUPERELEVATION	56.29	84.00	47.28																					
264+27.19	268+47.19	SITE 4-SUPERELEVATION TRANSITION	420.00	42.00	176.40																					
270+35.43	274+55.43	SITE 4-SUPERELEVATION TRANSITION	420.00	45.75	192.15																					
274+55.43	276+67.00	SITE 4-MAXIMUM SUPERELEVATION	211.57	91.50	193.59																					
276+67.00	280+87.00	SITE 4-SUPERELEVATION TRANSITION	420.00	45.75	192.15																					
299+96.65	303+46.65	SITE 5-SUPERELEVATION TRANSITION	350.00	45.75	160.13																					
303+46.65	305+61.73	SITE 5-MAXIMUM SUPERELEVATION	215.08	91.50	196.80																					
305+61.73	309+11.73	SITE 5-SUPERELEVATION TRANSITION	350.00	45.75	160.13																					
309+11.73	312+11.73	SITE 5-SUPERELEVATION TRANSITION	300.00	21.88	65.64																					
312+11.73	312+91.27	SITE 5-MAXIMUM SUPERELEVATION	79.54	43.75	34.80																					
312+91.27	315+11.77	SITE 5-SUPERELEVATION TRANSITION	220.50	67.63	149.12																					
315+11.77	320+12.00	SITE 5-MAXIMUM SUPERELEVATION	500.23	91.50	457.71																					
320+12.00	323+62.00	SITE 5-SUPERELEVATION TRANSITION	350.00	45.75	160.13																					
454+55.07	458+74.50	SITE 7-SUPERELEVATION TRANSITION	419.43	58.63	245.91																					
458+74.50	461+85.16	SITE 7-MAXIMUM SUPERELEVATION	310.66	91.50	284.25																					
461+85.16	464+95.96	SITE 7-SUPERELEVATION TRANSITION	310.80	64.63	200.87																					
464+95.96	466+23.00	SITE 7-MAXIMUM SUPERELEVATION	127.04	37.75	47.96																					
466+23.00	469+83.00	SITE 7-SUPERELEVATION TRANSITION	360.00	18.88	67.97																					
SUBTOTALS (BOX 1 OF 2):					33339.68		75751.33	3787.54				3787.54			23273.02	7680.02		22834.92		2511.86		60925.10		6701.71	9213.57	
SUBTOTALS (BOX 2 OF 2):					7534.27		444.44	22.22			31568.89	5366.71	5388.93	444.44		821.70		31324.45		8189.28				6701.71	8189.28	
TOTALS:					40873.95		76195.77	3809.76			31568.89	5366.71	9176.47		23717.46	8501.72		54159.37		10701.14		60925.10		6701.71	17402.85	
PAGE 02 OF 02 (ESTIMATE)																										

BASIS OF ESTIMATE:
ACHM SURFACE COURSE (3/8").....94.8% MIN. AGGR.....5.2% ASPHALT BINDER
ACHM BINDER COURSE (1").....95.6% MIN. AGGR.....4.4% 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.

9/6/2018

RO80494.DGN

QUANTITIES

SUMMARY OF QUANTITIES

ITEM NUMBER	ITEM	QUANTITY	UNIT
201	CLEARING	129	STATION
201	GRUBBING	129	STATION
202	REMOVAL AND DISPOSAL OF FENCE	8731	LN FT.
202	REMOVAL AND DISPOSAL OF GATES	2	EACH
202	REMOVAL AND DISPOSAL OF POSTS	5	EACH
202	REMOVAL AND DISPOSAL OF BRICK POSTS	2	EACH
202	REMOVAL AND DISPOSAL OF WALLS	26	LN FT.
202	REMOVAL AND DISPOSAL OF SIGN FOUNDATIONS	25	EACH
202	REMOVAL AND DISPOSAL OF PIPE CULVERTS	94	EACH
202	REMOVAL AND DISPOSAL OF LUMINAIRE POLE AND FOUNDATION	2	EACH
202	REMOVAL AND DISPOSAL OF BUILDINGS	4	EACH
202	REMOVAL AND DISPOSAL OF SIGNS	13	EACH
202	REMOVAL AND DISPOSAL OF PLANTERS	1	EACH
206	FLOWABLE SELECT MATERIAL	2	CU YD.
210	UNCLASSIFIED EXCAVATION	68477	CU YD.
210	COMPACTED EMBANKMENT	25339	CU YD.
SP & 210	SOIL STABILIZATION	1000	TON
SS & 303	AGGREGATE BASE COURSE (CLASS 7)	46666	TON
SS & 401	TACK COAT	9326	GAL.
SP, SS, & 406	MINERAL AGGREGATE IN ACHM BINDER COURSE (1")	8128	TON
SP, SS, & 406	ASPHALT BINDER (PG 64-22) IN ACHM BINDER COURSE (1")	374	TON
SP, SS, & 407	MINERAL AGGREGATE IN ACHM SURFACE COURSE (3/8")	17900	TON
SP, SS, & 407	ASPHALT BINDER (PG 64-22) IN ACHM SURFACE COURSE (3/8")	982	TON
412	COLD MILLING ASPHALT PAVEMENT	3111	SQ YD.
SP, SS, & 414	ASPHALT CONCRETE PATCHING FOR MAINTENANCE OF TRAFFIC	75	TON
SP, SS, & 415	ACHM PATCHING OF EXISTING ROADWAY	100	TON
601	MOBILIZATION	1.00	LUMP SUM
SP & 602	FURNISHING FIELD OFFICE	1	EACH
603	MAINTENANCE OF TRAFFIC	1.00	LUMP SUM
603	12" TEMPORARY CULVERT	42	LN FT.
SS & 604	SIGNS	865	SQ FT.
SS & 604	TRAFFIC DRUMS	345	EACH
604	CONSTRUCTION PAVEMENT MARKINGS	148888	LN FT.
SS & 604	VERTICAL PANELS	230	EACH
SS & 605	CONCRETE DITCH PAVING (TYPE B)	3632	SQ YD.
606	18" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)	188	LN FT.
606	18" SMOOTH LINED POLYMER PRECOATED METALLIC COATED CORRUGATED STEEL PIPE (ALTERNATE NO. 1)	192	LN FT.
606	24" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)	74	LN FT.
606	24" REINFORCED CONCRETE PIPE CULVERTS (CLASS M)	96	LN FT.
606	24" REINFORCED CONCRETE PIPE CULVERTS (CLASS N)	118	LN FT.
606	24" SMOOTH LINED POLYMER PRECOATED METALLIC COATED CORRUGATED STEEL PIPE (ALTERNATE NO. 1)	118	LN FT.
606	24" REINFORCED CONCRETE PIPE CULVERTS (CLASS V)	170	LN FT.
606	24" SMOOTH LINED POLYMER PRECOATED METALLIC COATED CORRUGATED STEEL PIPE (ALTERNATE NO. 1)	174	LN FT.
606	30" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)	78	LN FT.
606	36" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)	68	LN FT.
606	36" REINFORCED CONCRETE PIPE CULVERTS (CLASS M)	208	LN FT.
606	51" X 31" REINFORCED CONCRETE ARCH PIPE CULVERTS (CLASS IV)	198	LN FT.
SP, SS, & 606	18" SIDE DRAIN	3188	LN FT.
SP, SS, & 606	24" SIDE DRAIN	892	LN FT.
SS & 606	60" SIDE DRAIN	76	LN FT.
606	18" FLARED END SECTIONS FOR REINFORCED CONCRETE PIPE CULVERTS (ALTERNATE NO. 1)	1	EACH
606	18" FLARED END SECTIONS FOR CORRUGATED STEEL PIPE CULVERTS (ALTERNATE NO. 2)	1	EACH
606	24" FLARED END SECTIONS FOR REINFORCED CONCRETE PIPE CULVERTS	7	EACH
606	24" FLARED END SECTIONS FOR CORRUGATED STEEL PIPE CULVERTS (ALTERNATE NO. 1)	1	EACH
606	30" FLARED END SECTIONS FOR REINFORCED CONCRETE PIPE CULVERTS (ALTERNATE NO. 2)	3	EACH
606	36" FLARED END SECTIONS FOR REINFORCED CONCRETE PIPE CULVERTS	12	EACH
606	51" X 31" FLARED END SECTIONS FOR REINFORCED CONCRETE ARCH PIPE CULVERTS	6	EACH
606	SELECTED PIPE BEDDING	410	CU YD.
609	DROP INLETS (TYPE ST)	3	EACH
611	UNDERDRAIN OUTLET PROTECTORS	30	EACH
611	4" PIPE UNDERDRAINS	7500	LN FT.
615	PAVEMENT REPAIR OVER CULVERTS (CONCRETE)	32.6	CU YD.
619	WIRE FENCE (TYPE C)	1729	LN FT.
619	WIRE FENCE (TYPE D)	1257	LN FT.
619	WIRE FENCE (TYPE D-1)	3856	LN FT.
619	4" STEEL CHAIN LINK FENCE	266	LN FT.
619	4" ALUMINUM CHAIN LINK FENCE	266	LN FT.
619	16" STEEL GATES	9	EACH
619	16" ALUMINUM GATES	9	EACH
620	LIME	68	TON
620	SEEDING	33.75	ACRE
SS & 620	MULCH COVER	115.43	ACRE
620	WATER	5141.7	M GAL
621	TEMPORARY SEEDING	81.68	ACRE
621	SILT FENCE	7905	LN FT.
621	DROP INLET SILT FENCE	85	LN FT.
621	SEDIMENT BASIN	3791	CU YD.
621	OBLITERATION OF SEDIMENT BASIN	3791	CU YD.
621	SEDIMENT REMOVAL AND DISPOSAL	5148	CU YD.
621	ROCK DITCH CHECKS	975	CU YD.
621	WATTLE (20")	2430	LN FT.
623	SECOND SEEDING APPLICATION	33.75	ACRE
624	SOLID SODDING	2607	SQ YD.
626	EROSION CONTROL MATTING (CLASS 3)	3415	SQ YD.
SS & 634	CONCRETE COMBINATION CURB AND GUTTER (TYPE B-1)(1'-6")	450	LN FT.
635	ROADWAY CONSTRUCTION CONTROL	1.00	LUMP SUM
637	MAILBOXES	39	EACH
637	MAILBOX SUPPORTS (SINGLE)	39	EACH
640	MODIFYING JUNCTION BOXES	1	EACH
SP & 642	RUMBLE STRIPES IN ASPHALT SHOULDERS	19165	LN FT.
SP & 642	CENTERLINE RUMBLE STRIPES IN ASPHALT ROADWAYS	27931	LN FT.
719	THERMOPLASTIC PAVEMENT MARKING WHITE (6")	3050	LN FT.
719	THERMOPLASTIC PAVEMENT MARKING YELLOW (6")	79556	LN FT.
719	THERMOPLASTIC PAVEMENT MARKING WORDS)	4	EACH
719	THERMOPLASTIC PAVEMENT MARKING (ARROWS)	4	EACH
721	RAISED PAVEMENT MARKERS (TYPE II)	536	EACH

* DENOTES ALTERNATE BID ITEMS.

REVISIONS

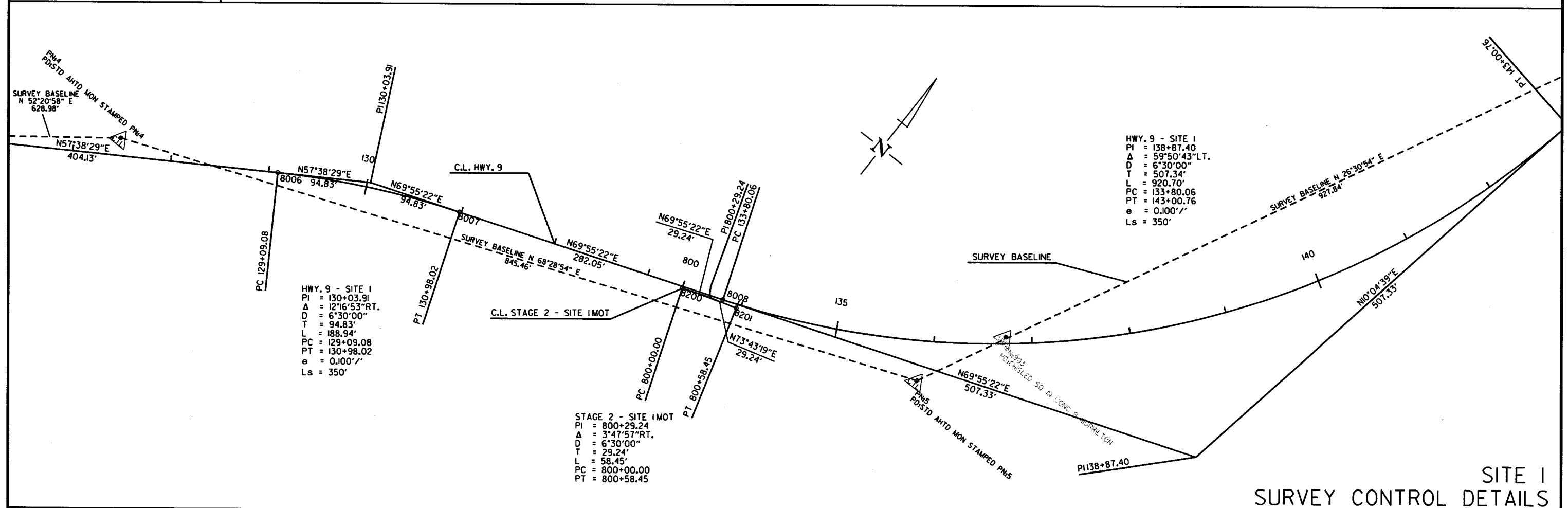
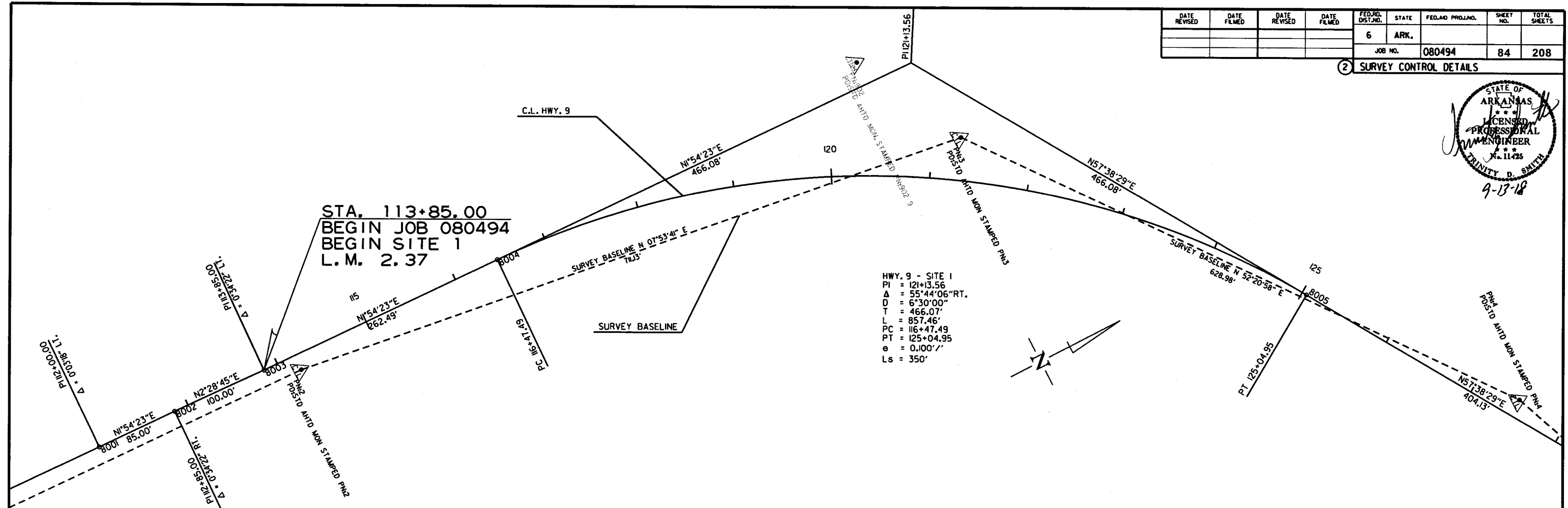
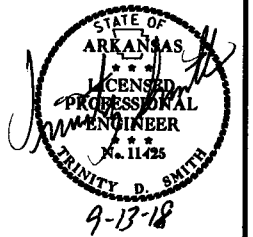
DATE	REVISION	SHEET NUMBER
09-27-18	ADDED FLEXIBLE BEGINNING OF WORK - CALENDAR DAY CONTRACT SPECIAL PROVISION	2, 82
10-18-18	REMOVED WATER GATE SP. REMOVED WATER GATE QUANTITY.	2, 78, 82, 102, 103

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. PROJ. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
09-27-18	10-18-18			6	ARK.			
				JOB NO.	080494		82	208
2 SUMMARY OF QUANTITIES AND REVISIONS								



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. 080494		84	208	

2 SURVEY CONTROL DETAILS



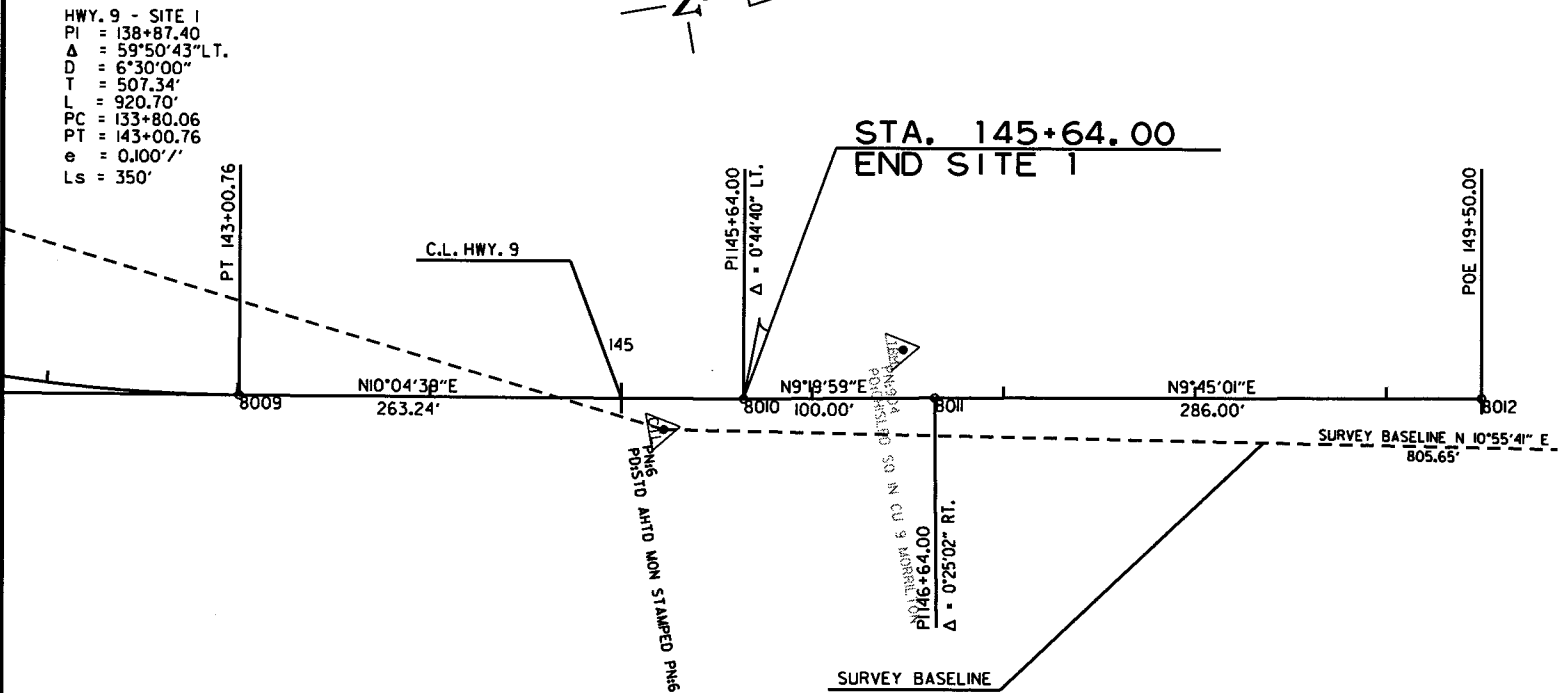
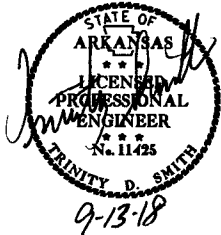
SITE 1
SURVEY CONTROL DETAILS

9/4/2018

R080494.DGN

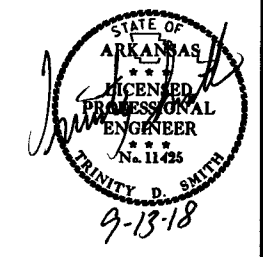
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO. 080494			85	208

2 SURVEY CONTROL DETAILS

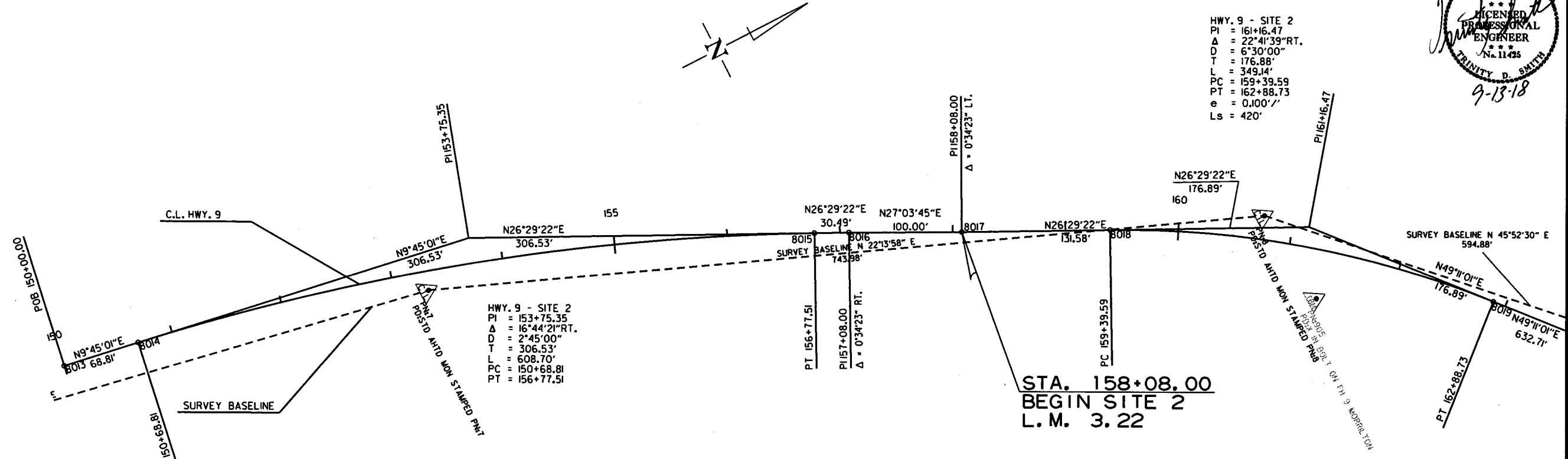


DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080494	86	208

2 SURVEY CONTROL DETAILS



HWY. 9 - SITE 2
 PI = 161+16.47
 Δ = 22°41'39" RT.
 D = 6°30'00"
 T = 176.88'
 L = 349.14'
 PC = 159+39.59
 PT = 162+88.73
 e = 0.100' / '
 Ls = 420'

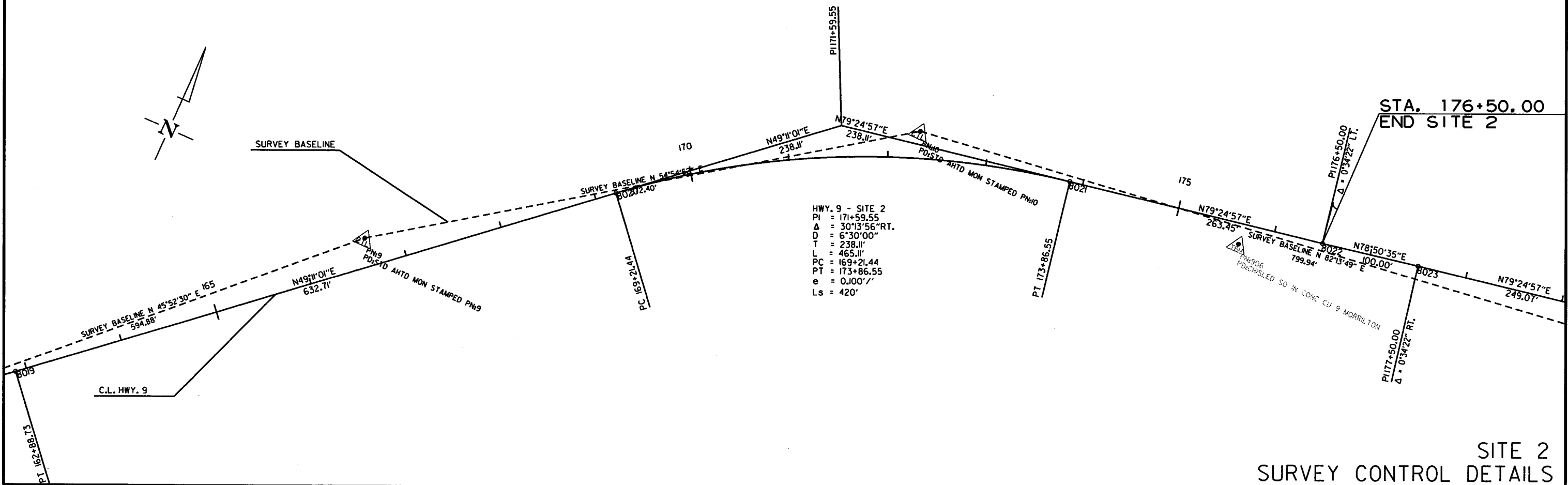


HWY. 9 - SITE 2
 PI = 153+75.35
 Δ = 16°44'21" RT.
 D = 2°45'00"
 T = 306.53'
 L = 608.70'
 PC = 150+68.81
 PT = 156+77.51

STA. 158+08.00
 BEGIN SITE 2
 L.M. 3.22

STA. 176+50.00
 END SITE 2

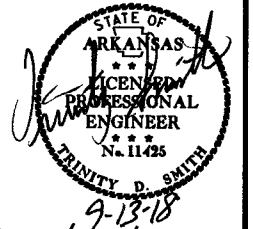
HWY. 9 - SITE 2
 PI = 171+59.55
 Δ = 30°13'56" RT.
 D = 6°30'00"
 T = 238.11'
 L = 465.11'
 PC = 169+21.44
 PT = 173+86.55
 e = 0.100' / '
 Ls = 420'



SITE 2
 SURVEY CONTROL DETAILS

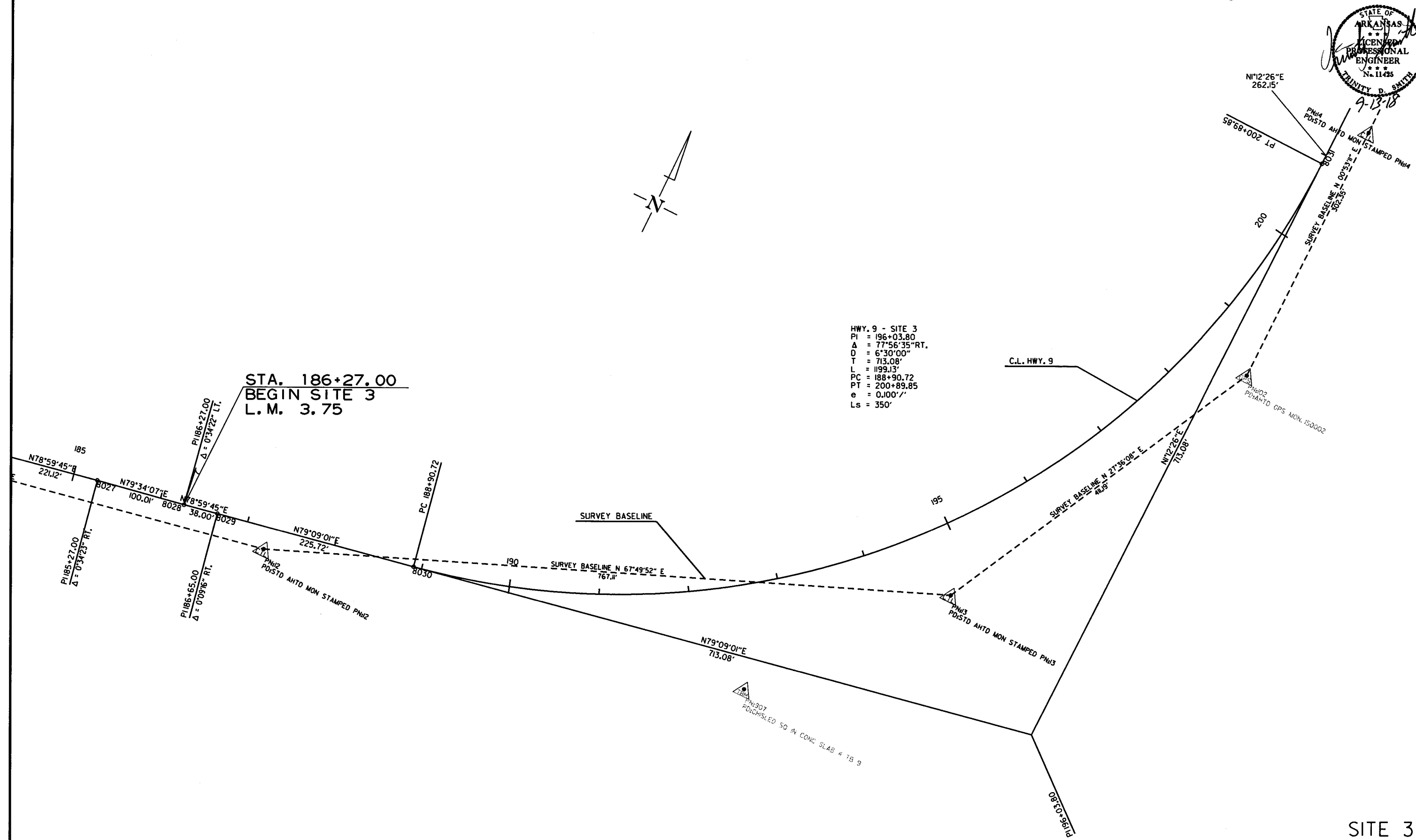
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	080494		87	208

2 SURVEY CONTROL DETAILS



HWY. 9 - SITE 3
 PI = 196+03.80
 Δ = 77°56'35" RT.
 D = 6°30'00"
 T = 713.08'
 L = 1199.13'
 PC = 188+90.72
 PT = 200+89.85
 e = 0.100' /'
 Ls = 350'

STA. 186+27.00
 BEGIN SITE 3
 L.M. 3.75



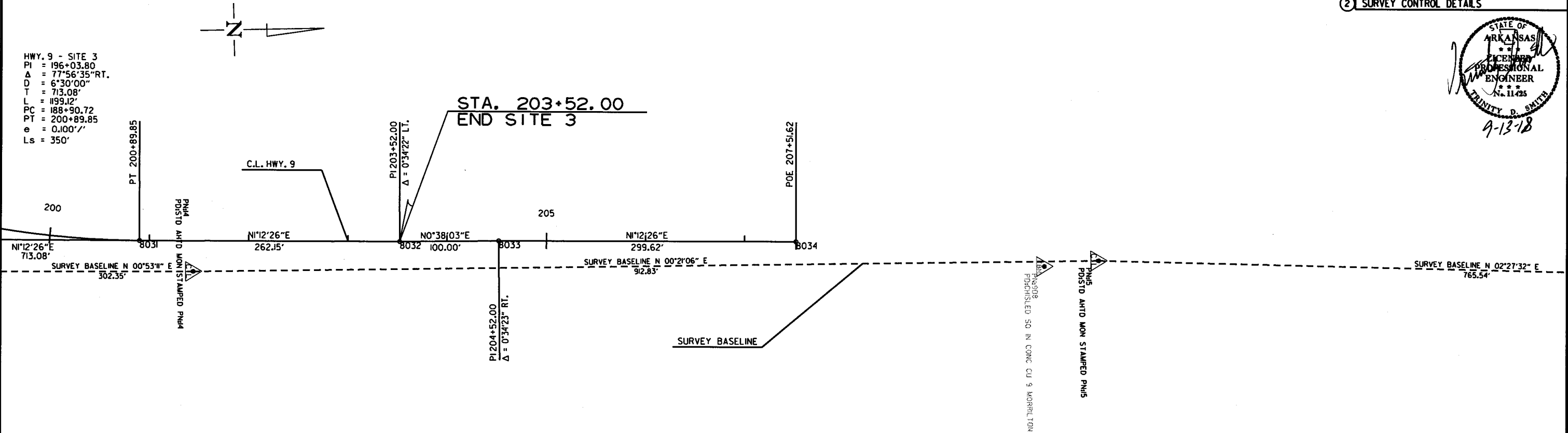
SITE 3
 SURVEY CONTROL DETAILS

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. 080494	88	208

2 SURVEY CONTROL DETAILS

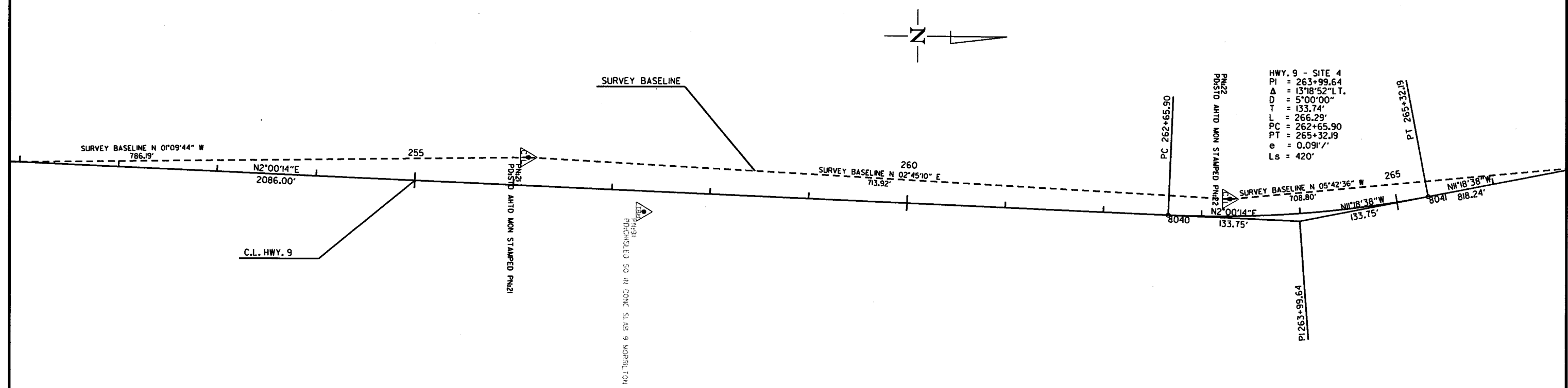
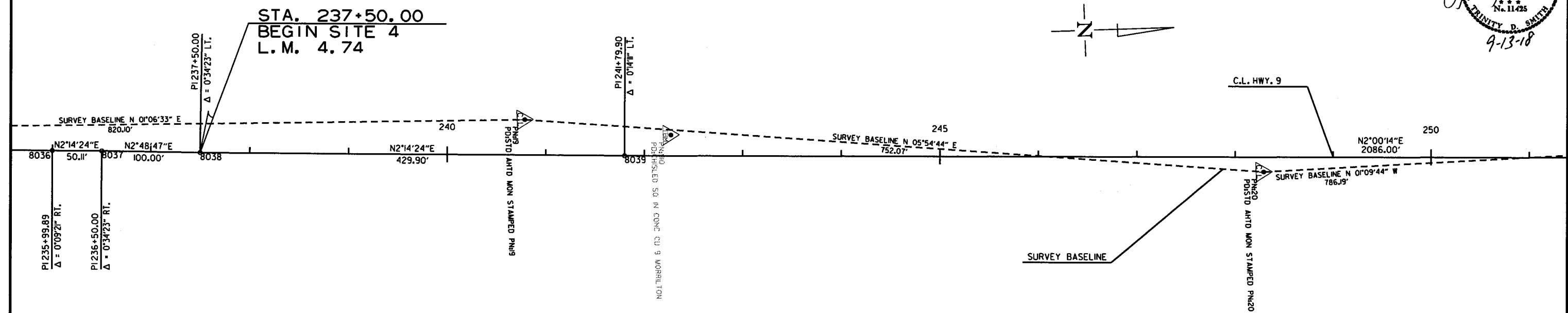
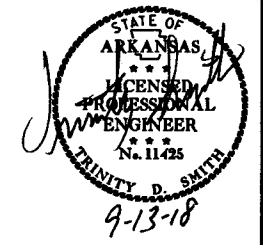


HWY. 9 - SITE 3
 PI = 196+03.80
 Δ = 77°56'35" RT.
 D = 6'30'00"
 T = 713.08'
 L = 1199.12'
 PC = 188+90.72
 PT = 200+89.85
 e = 0.100'/'
 Ls = 350'



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.		080494	89	208

2 SURVEY CONTROL DETAILS

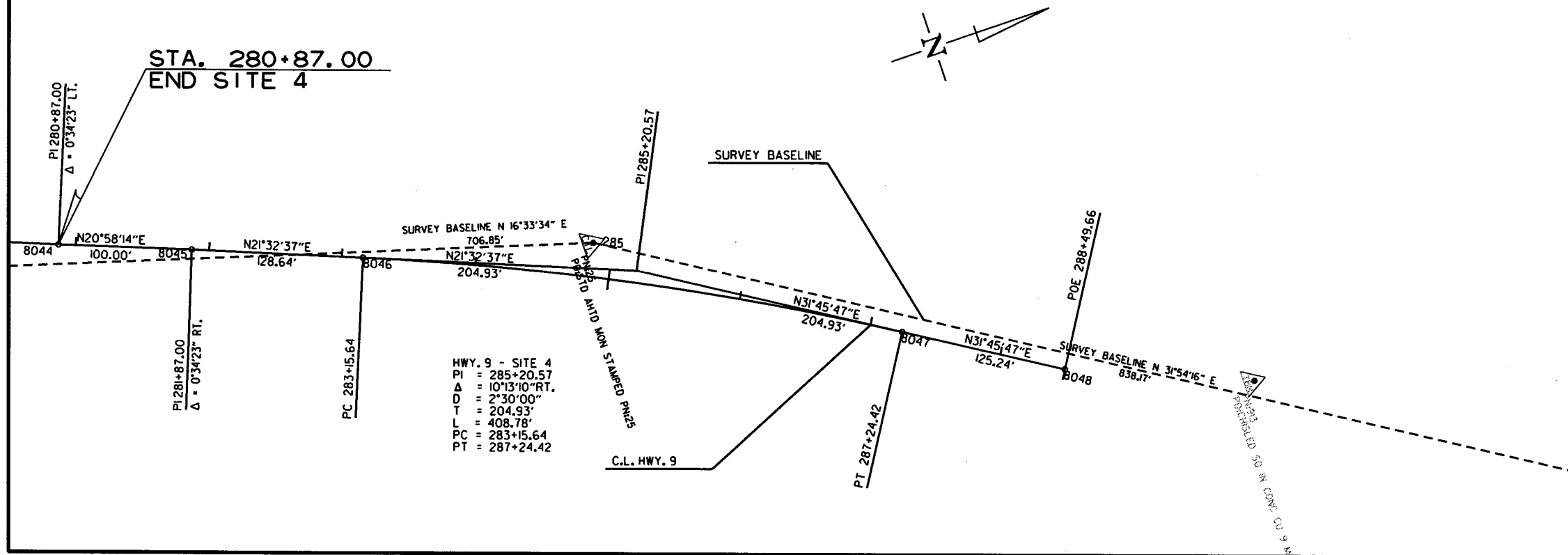
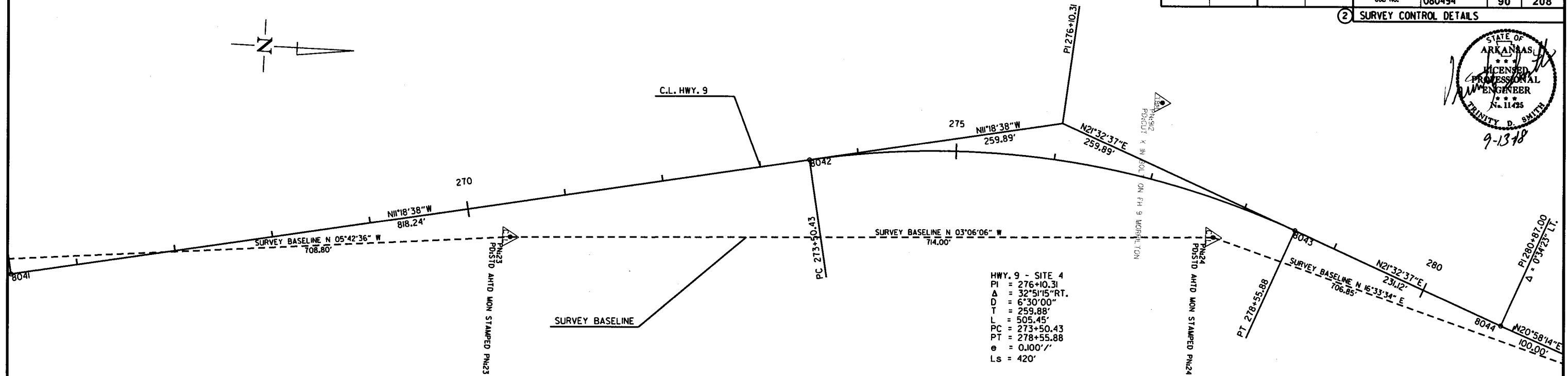
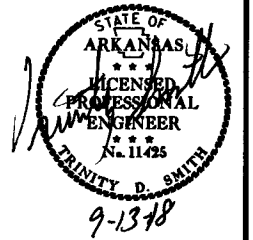


HWY. 9 - SITE 4
 PI = 263+99.64
 Δ = 13°18'52" LT.
 DO = 5°00'00"
 L = 133.74'
 PC = 262+65.90
 PT = 265+32.19
 e = 0.0911'
 Ls = 420'

SITE 4
 SURVEY CONTROL DETAILS

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.		080494	90	208

② SURVEY CONTROL DETAILS



SITE 4
SURVEY CONTROL DETAILS

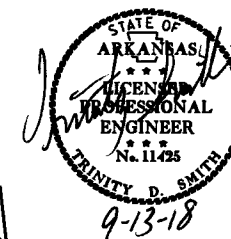
9/4/2018

R080494.DGN

STA. 299+96.00
BEGIN SITE 5
L.M. 5.94

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.	080494		91	208

② SURVEY CONTROL DETAILS



HWY. 9 - SITE 5
PI = 305+19.26
Δ = 32°52'53"LT.
D = 6°30'00"
T = 260.11'
L = 505.87'
PC = 302+59.15
PT = 307+65.02
e = 0.100'/'
Ls = 350'

HWY. 9 - SITE 5
PI = 312+44.61
Δ = 3°14'08"RT.
D = 1°30'00"
T = 107.88'
L = 215.70'
PC = 311+36.73
PT = 313+52.43
e = 0.037'/'
Ls = 300'

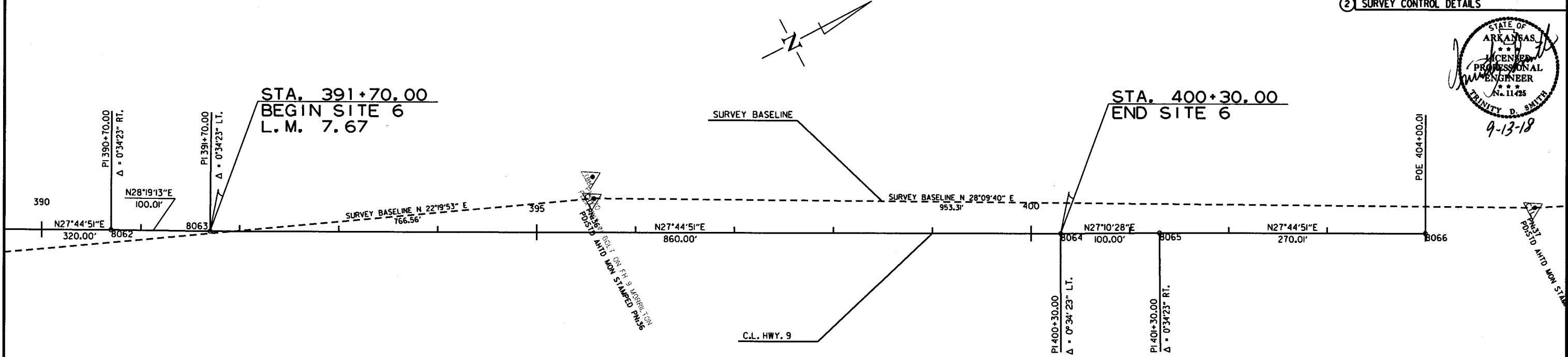
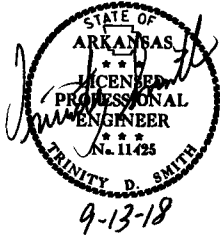
HWY. 9 - SITE 5
PI = 317+79.92
Δ = 43°56'42"RT.
D = 6°30'00"
T = 355.65'
L = 676.08'
PC = 314+24.27
PT = 321+00.35
e = 0.100'/'
Ls = 350'

STA. 323+62.00
END SITE 5

SITE 5
SURVEY CONTROL DETAILS

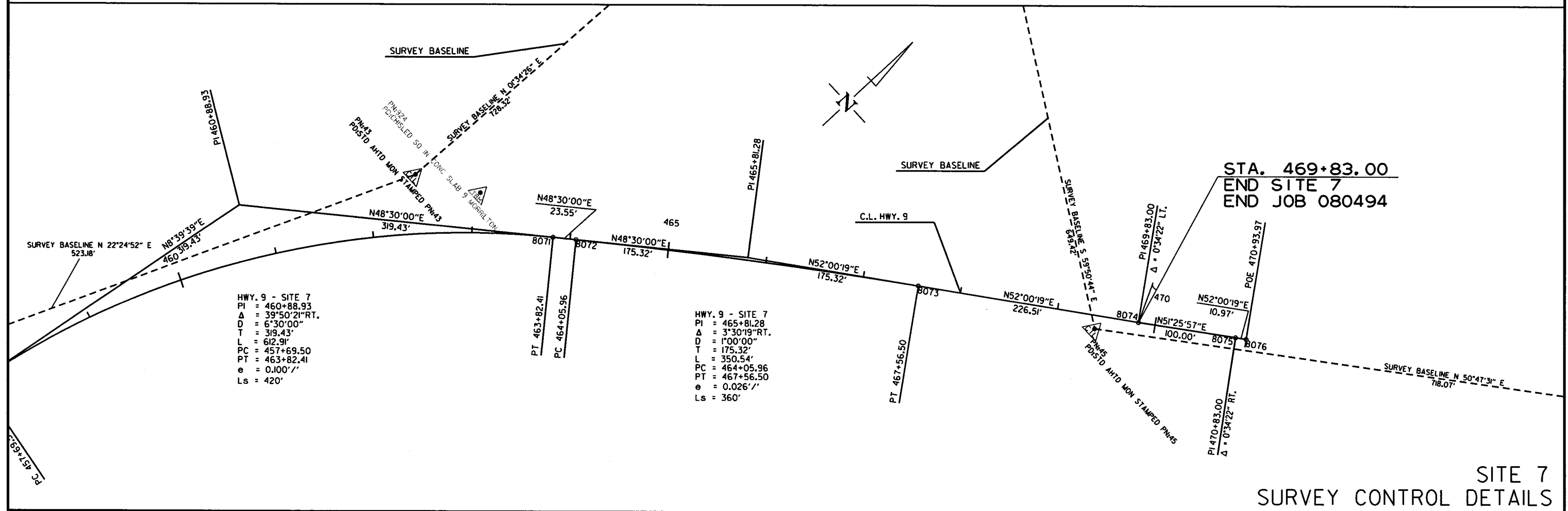
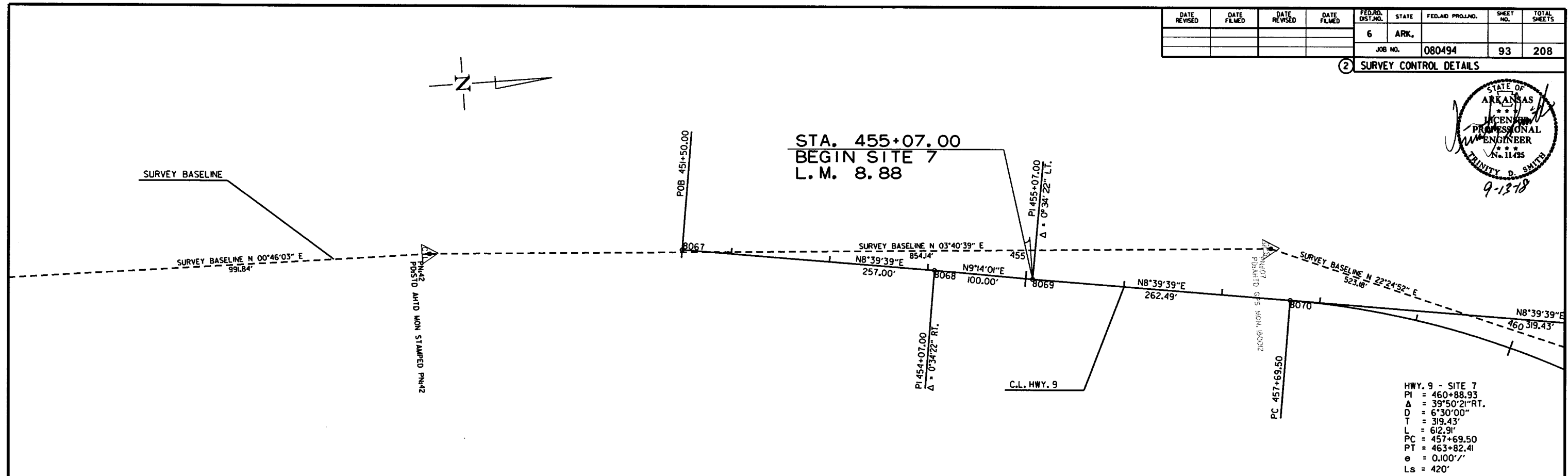
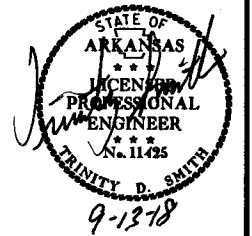
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080494	92	208

2 SURVEY CONTROL DETAILS



DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
						JOB NO. 080494	93	208

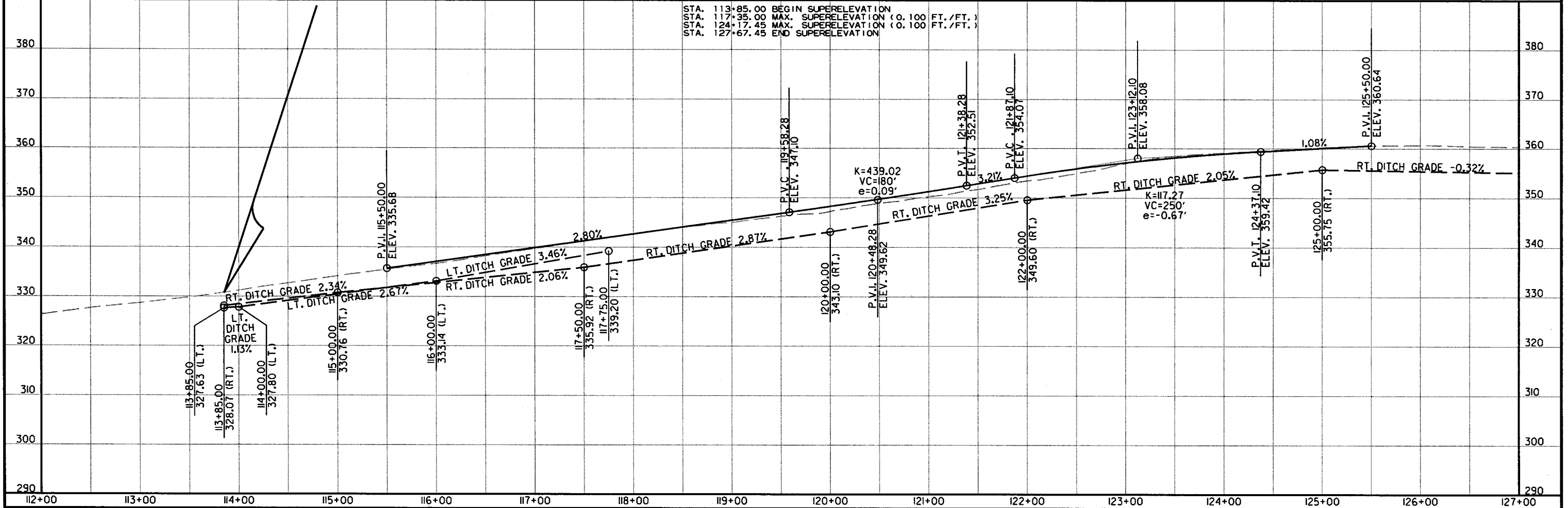
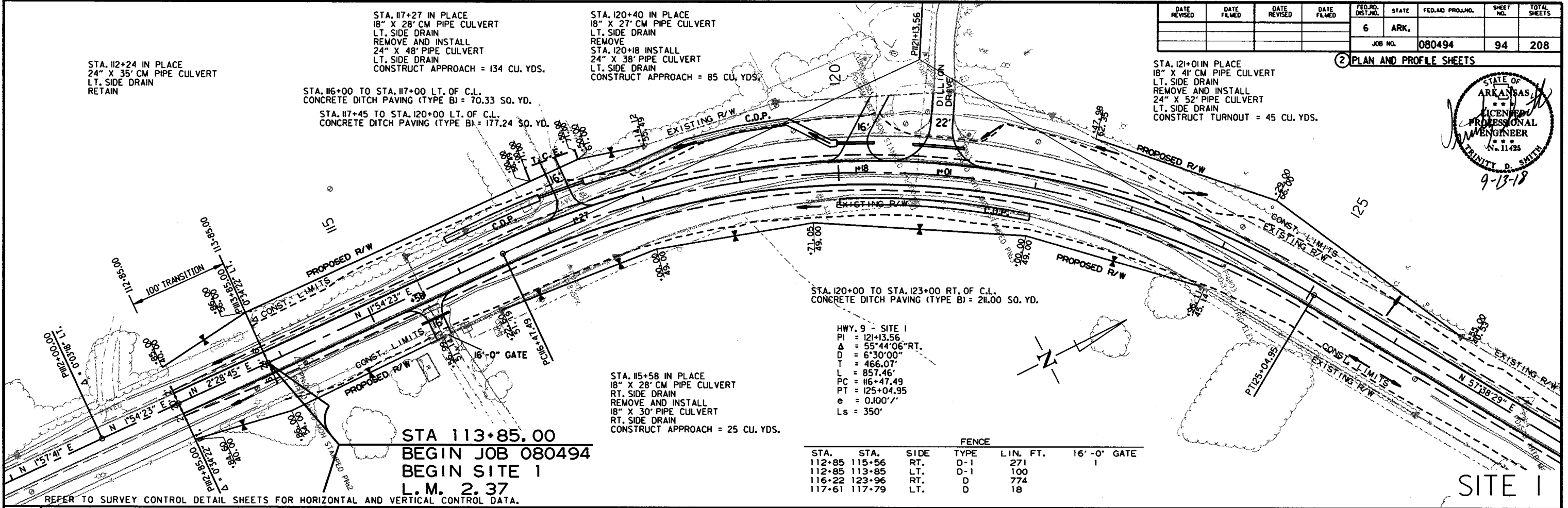
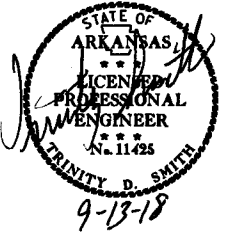
② SURVEY CONTROL DETAILS



SITE 7
SURVEY CONTROL DETAILS

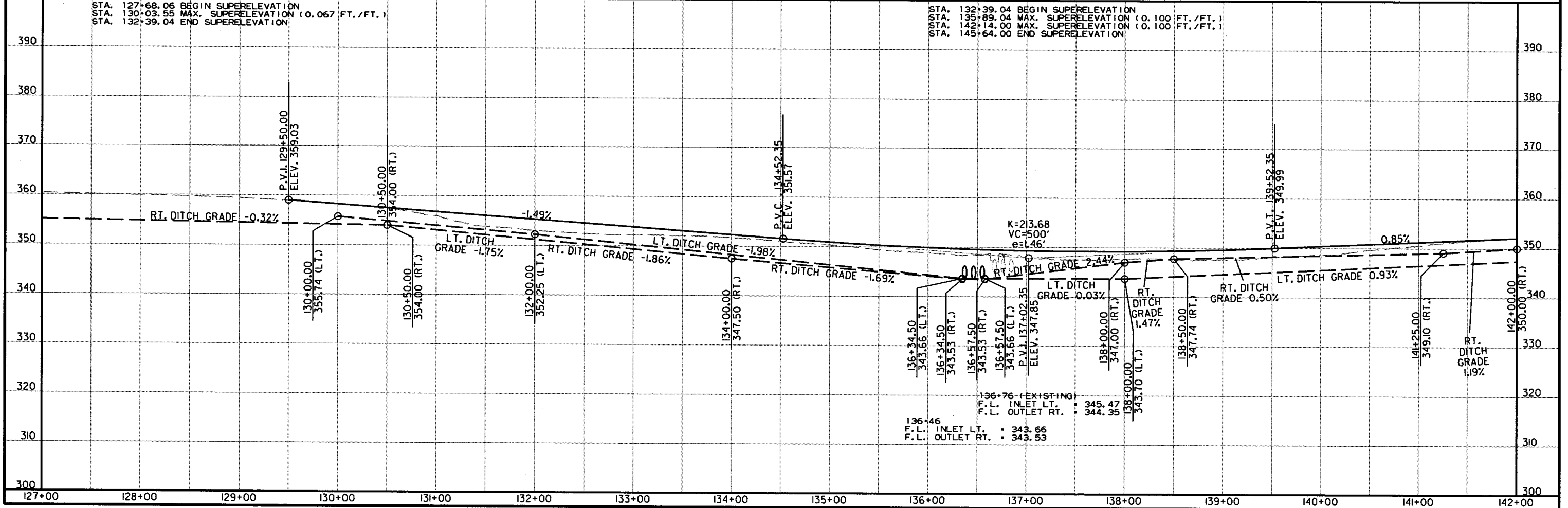
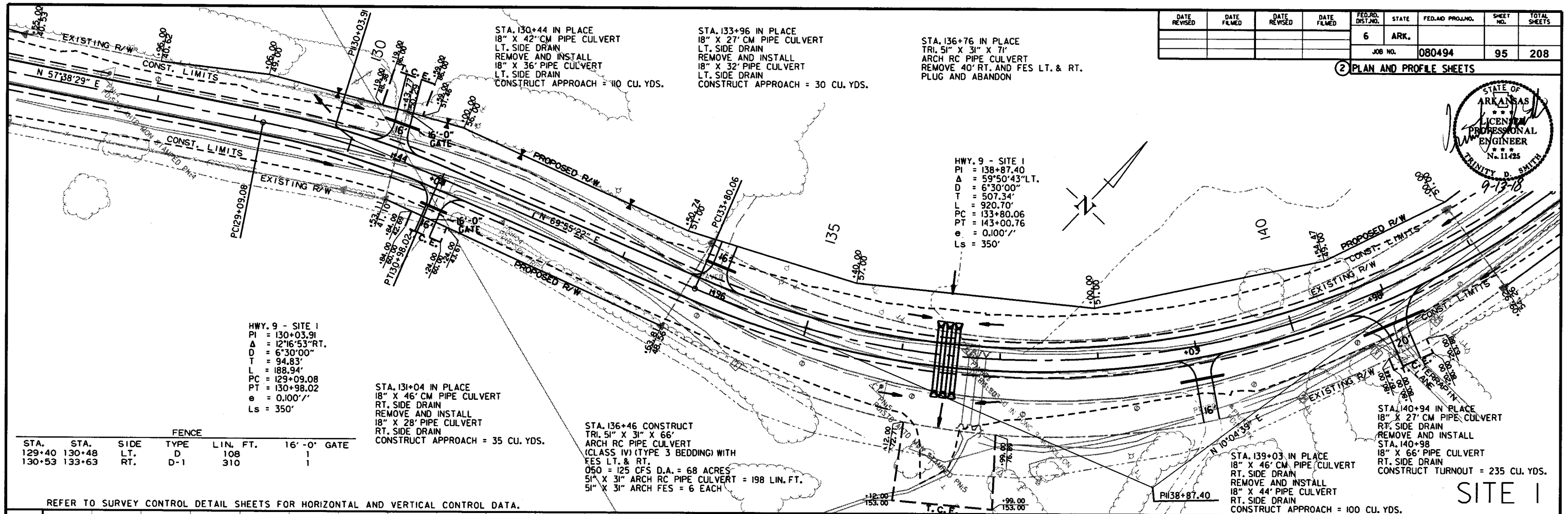
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	080494		94	208

2 PLAN AND PROFILE SHEETS



DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080494	95	208

2 PLAN AND PROFILE SHEETS

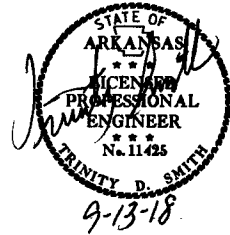


4/12/2016

R080494.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. 080494	96	208

2 PLAN AND PROFILE SHEETS



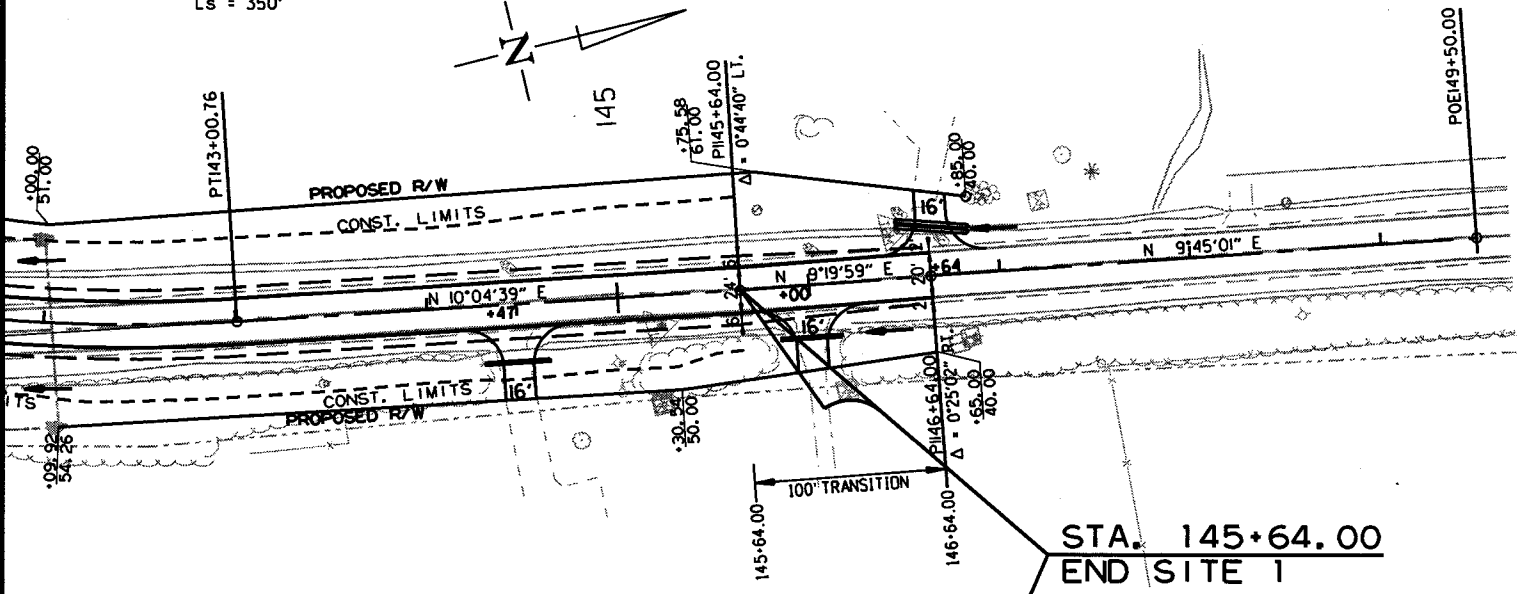
HWY. 9 - SITE 1
PI = 138+87.40
Δ = 59°50'43" LT.
D = 6°30'00"
T = 507.33'
L = 920.70'
PC = 133+80.06
PT = 143+00.76
e = 0.100'/'
Ls = 350'

STA. 146+66 IN PLACE
DOUBLE 24" X 25' RC PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL
DBL. 24" X 38' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 55 CU. YDS.

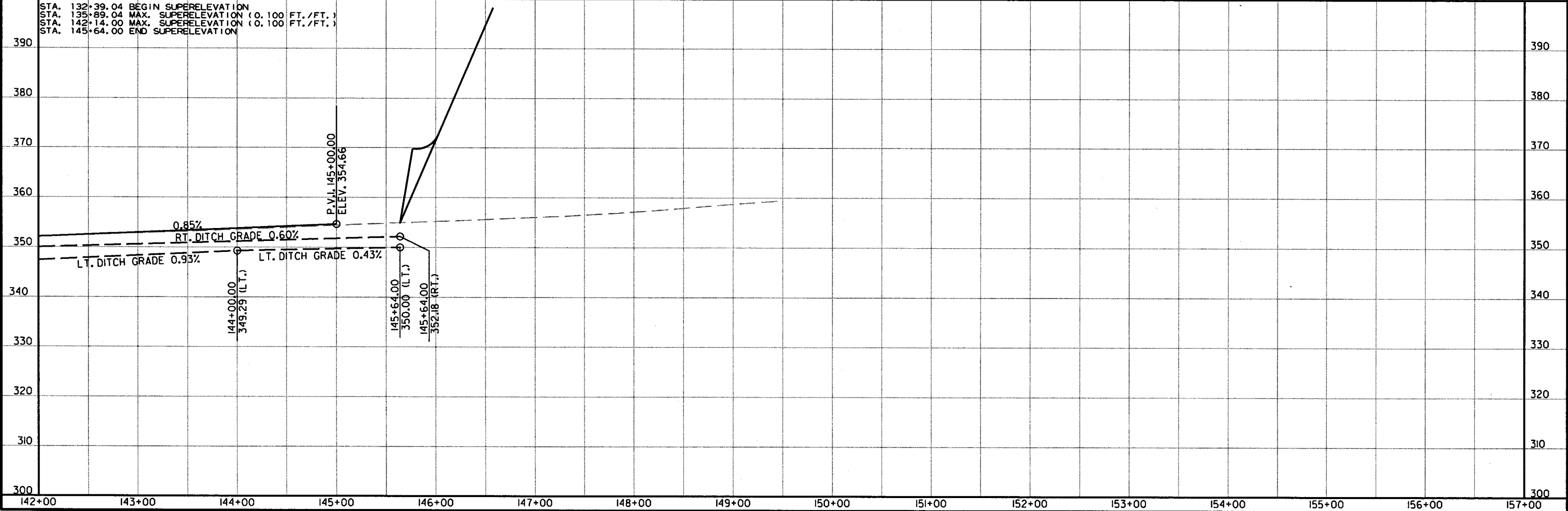
STA. 144+47 IN PLACE
18" X 25' CM PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL
18" X 34' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPROACH = 45 CU. YDS.

STA. 146+00 IN PLACE
18" X 25' CM PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND INSTALL
18" X 32' PIPE CULVERT
RT. SIDE DRAIN
CONSTRUCT APPROACH = 35 CU. YDS.

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

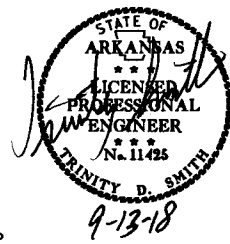


SITE 1



DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	080494		97	208

2 PLAN AND PROFILE SHEETS



STA. 156+94 IN PLACE
18" X 28" RC PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL
18" X 28" PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 20 CU. YDS.

STA. 157+49 IN PLACE
18" X 28" RC PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL
18" X 32" PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 30 CU. YDS.

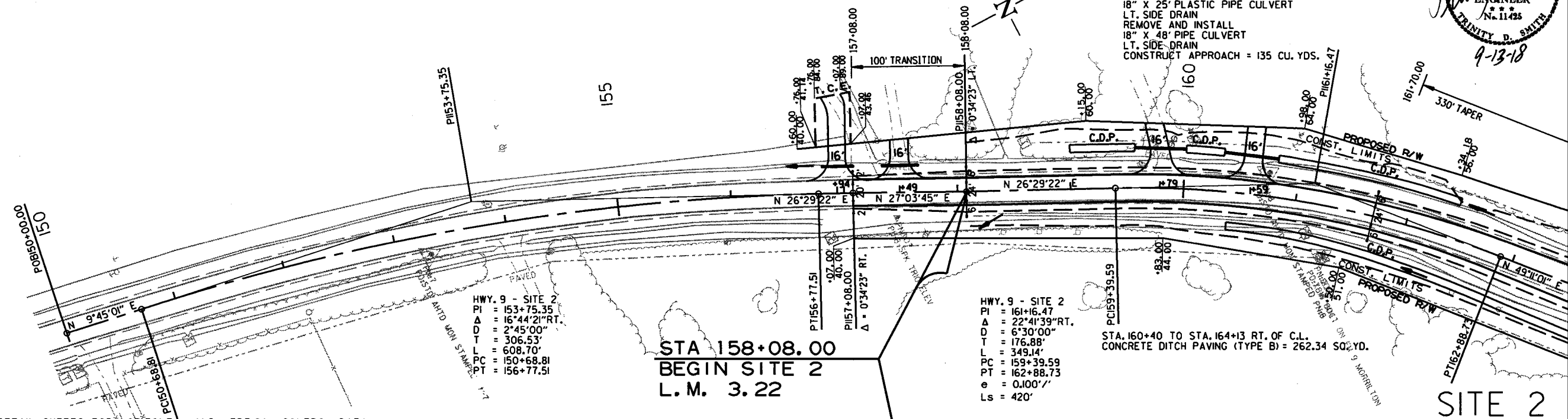
STA. 159+79 IN PLACE
18" X 25" CM PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL
18" X 46" PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 115 CU. YDS.

STA. 160+59 IN PLACE
18" X 25" PLASTIC PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL
18" X 48" PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 135 CU. YDS.

STA. 159+00 TO STA. 159+57 LT. OF C.L.
CONCRETE DITCH PAVING (TYPE B) = 40.09 SQ. YD.

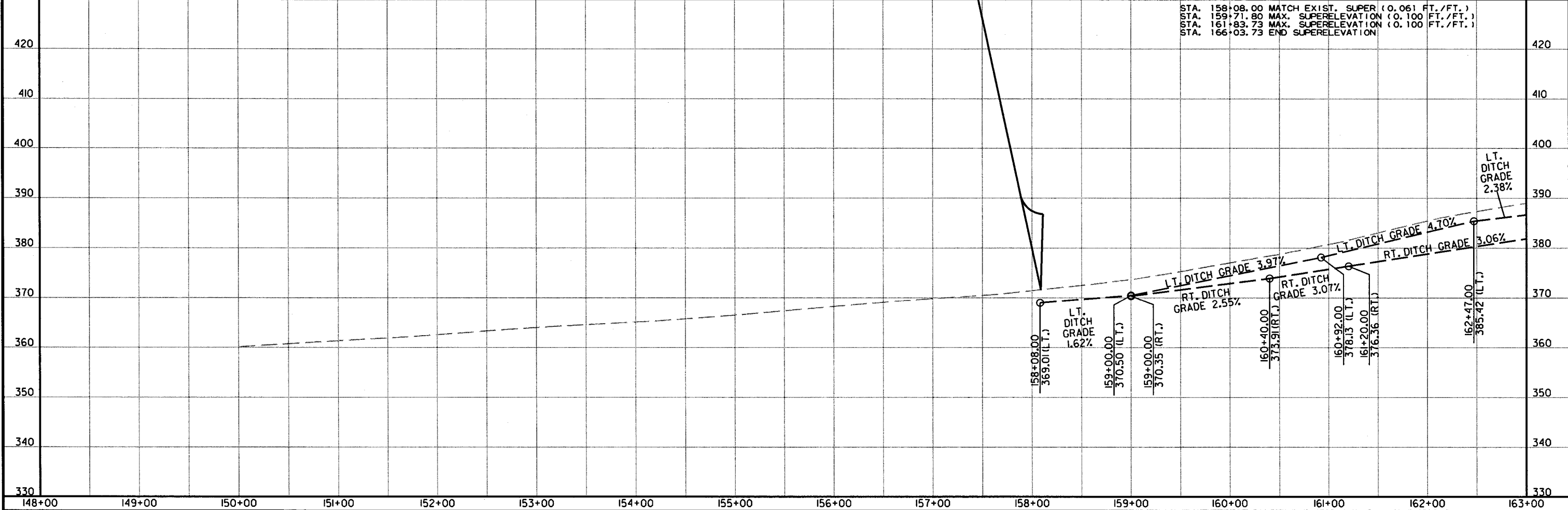
STA. 160+01 TO STA. 160+34 LT. OF C.L.
CONCRETE DITCH PAVING (TYPE B) = 23.21 SQ. YD.

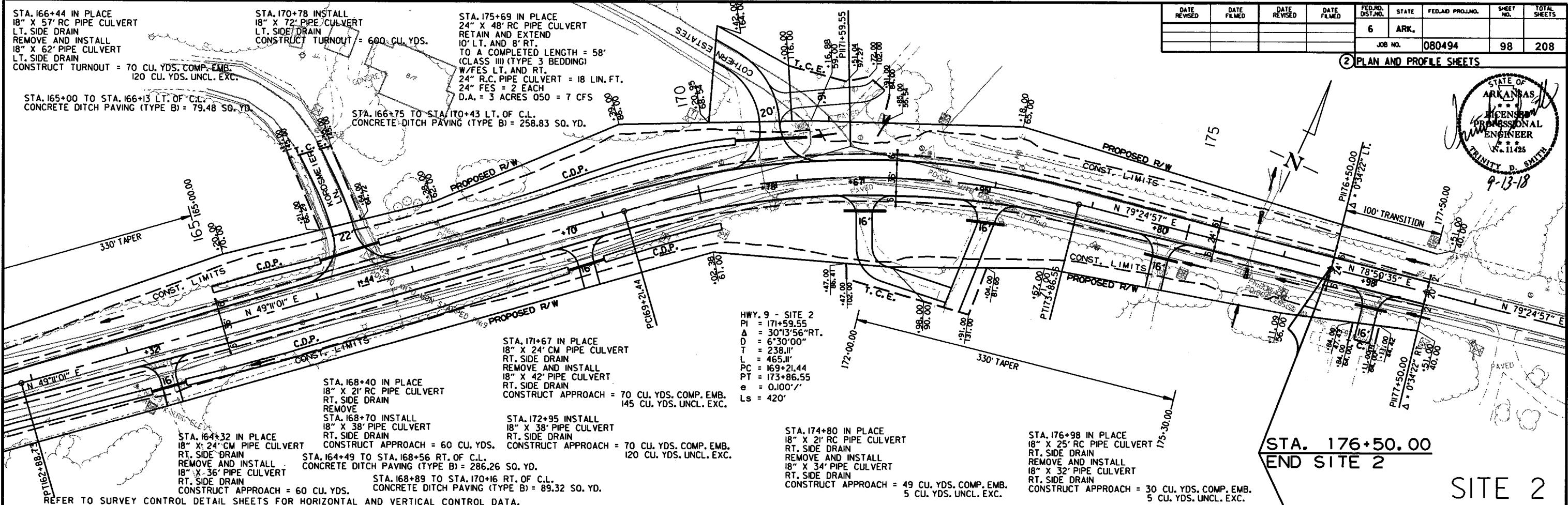
STA. 160+80 TO STA. 162+47 LT. OF C.L.
CONCRETE DITCH PAVING (TYPE B) = 117.46 SQ. YD.



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

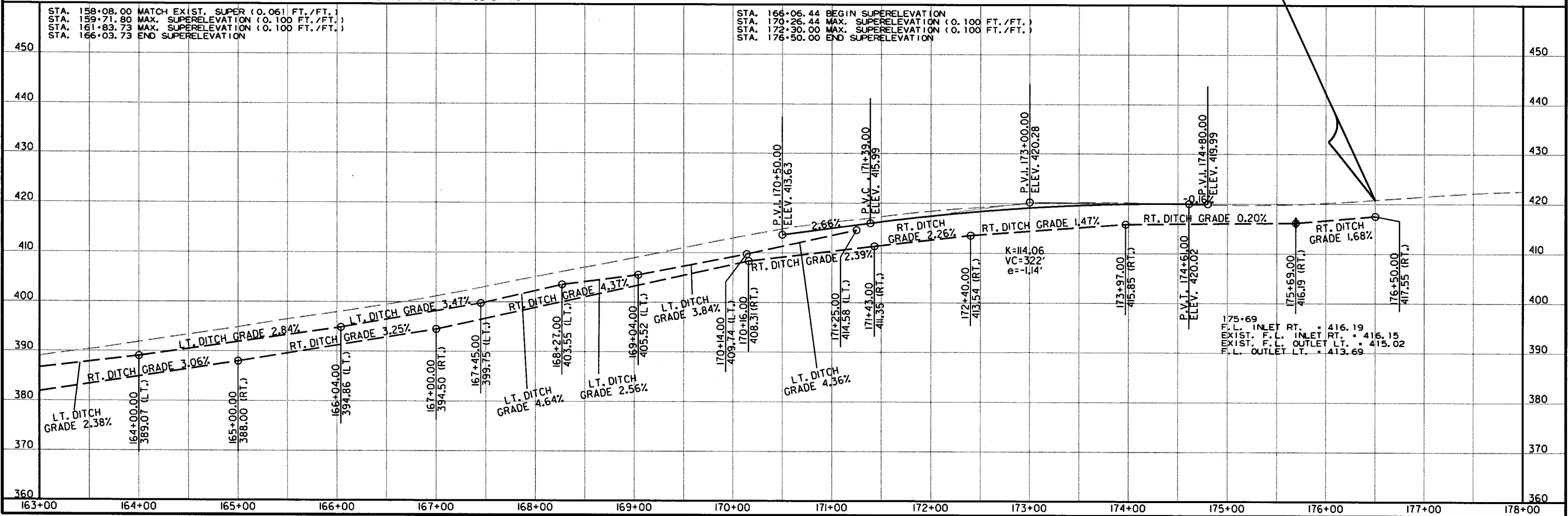
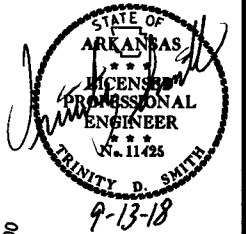
STA. 158+08.00 MATCH EXIST. SUPER (0.061 FT./FT.)
STA. 159+71.80 MAX. SUPERELEVATION (0.100 FT./FT.)
STA. 161+83.73 MAX. SUPERELEVATION (0.100 FT./FT.)
STA. 166+03.73 END SUPERELEVATION





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.	080494		98	208

2 PLAN AND PROFILE SHEETS



DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	080494		99	208

2 PLAN AND PROFILE SHEETS



HWY. 9 - SITE 3
 PI = 196+03.80
 Δ = 77°56'35" RT.
 D = 6°30'00"
 T = 713.08'
 L = 1199.13'
 PC = 188+90.72
 PT = 200+89.85
 e = 0.100' /'
 Ls = 350'

STA. 198+00 TO STA. 203+52 LT. OF C.L.
 CONCRETE DITCH PAVING (TYPE B1) = 388.24 SO. YD.

STA. 186+27.00
 BEGIN SITE 3
 L.M. 3.75

STA. 188+84 INSTALL
 18" X 28" PIPE CULVERT
 LT. SIDE DRAIN
 CONSTRUCT APPROACH = 20 CU. YDS.

STA. 198+51 TO STA. 203+52 RT. OF C.L.
 CONCRETE DITCH PAVING (TYPE B1) = 352.37 SO. YD.

STA. 196+51 IN PLACE
 24" X 72" RC PIPE CULVERT
 RETAIN AND EXTEND 56' LT.
 TO A COMPLETED LENGTH = 124'
 (CLASS III) (TYPE 3 BEDDING)
 W/FES LT.
 24" RC PIPE CULVERT = 56 LIN. FT.
 24" FES = 1 EACH
 D.A. = 11 ACRES 050 = 16 CFS

STA. 185+14 IN PLACE
 24" X 39" RC PIPE CULVERT
 D.A. = 5 ACRES, 050 = 11 CFS
 RETAIN

STA. 185+76 IN PLACE
 18" X 31" CM PIPE CULVERT
 RT. SIDE DRAIN
 REMOVE AND INSTALL
 18" X 34" PIPE CULVERT
 RT. SIDE DRAIN
 CONSTRUCT APPROACH = 25 CU. YDS.

STA. 189+03 TO STA. 192+70 RT. OF C.L.
 CONCRETE DITCH PAVING (TYPE B1) = 258.12 SO. YD.

STA. 188+22 INSTALL
 18" X 42" PIPE CULVERT
 RT. SIDE DRAIN
 CONSTRUCT APPROACH = 95 CU. YDS.

STA. 186+82 IN PLACE
 12" X 30" CM PIPE CULVERT
 RT. SIDE DRAIN
 REMOVE AND INSTALL
 18" X 36" PIPE CULVERT
 RT. SIDE DRAIN
 CONSTRUCT APPROACH = 50 CU. YDS.

STA. 188+84 IN PLACE
 18" X 30" CM PIPE CULVERT
 RT. SIDE DRAIN
 REMOVE AND INSTALL
 18" X 40" PIPE CULVERT
 RT. SIDE DRAIN
 CONSTRUCT APPROACH = 85 CU. YDS.

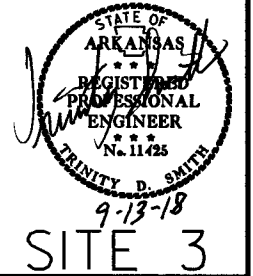
STA. 193+01 IN PLACE
 24" X 60" CM PIPE CULVERT
 RT. SIDE DRAIN
 REMOVE AND INSTALL
 24" X 74" PIPE CULVERT
 RT. SIDE DRAIN
 CONSTRUCT TURNOUT = 285 CU. YDS.

STA.		SIDE	FENCE		LIN. FT.	16'-0" GATE
188+98	191+82		TYPE	D-1		
198+31	201+96	RT.	C	365		1

SITE 3

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. 080494	100	208

2 PROFILE SHEET



STA. 186+27.00
BEGIN SITE 3
L.M. 3.75

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

STA. 186+28.22 BEGIN SUPERELEVATION
STA. 189+78.22 MAX. SUPERELEVATION (0.100 FT./FT.)
STA. 200+02.00 MAX. SUPERELEVATION (0.100 FT./FT.)
STA. 203+52.00 END SUPERELEVATION

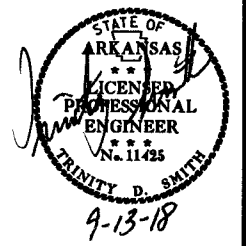


4/12/2016

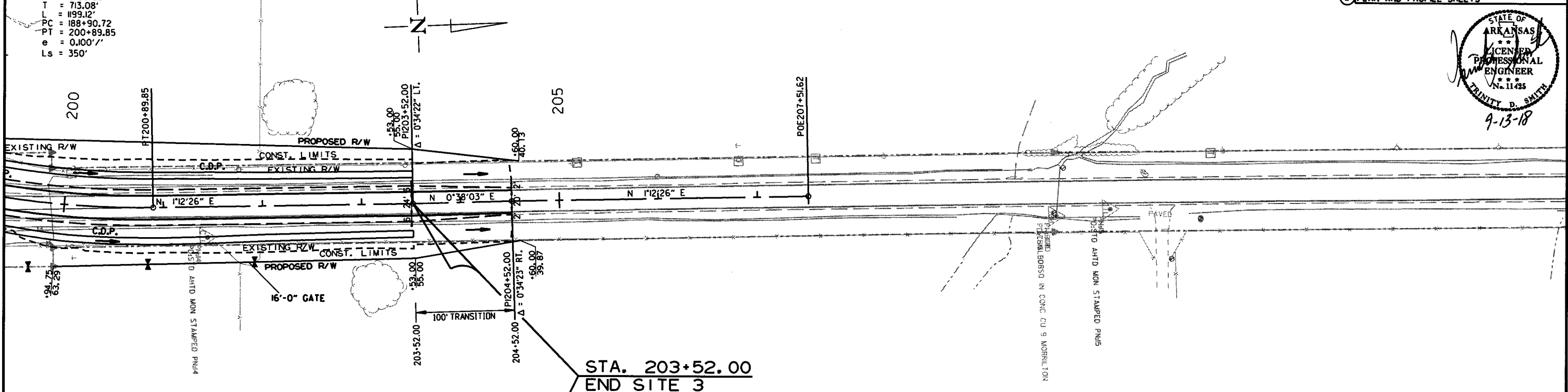
R080494.DGN

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. 080494	101	208

② PLAN AND PROFILE SHEETS

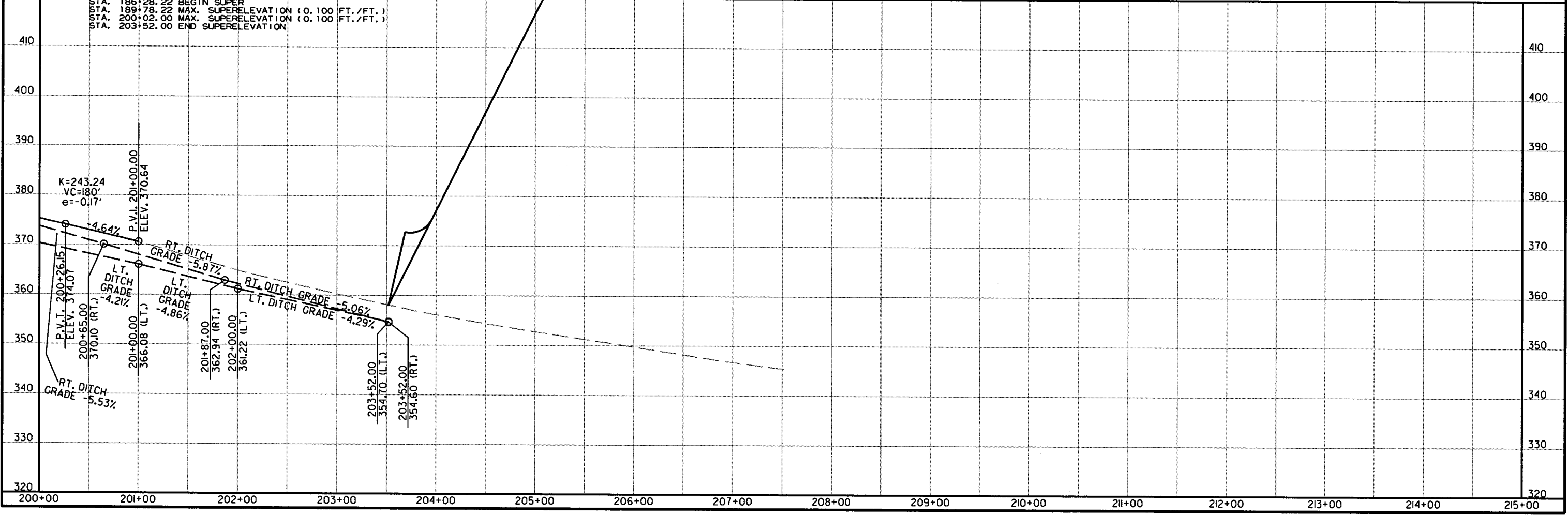


HWY. 9 - SITE 3
 PI = 196+03.80
 Δ = 77°56'35" RT.
 D = 6°30'00"
 L = 713.08'
 PC = 188+90.72
 PT = 200+89.85
 e = 0.100' /'
 Ls = 350'



STA. 203+52.00
 END SITE 3

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



STA. 241+74 IN PLACE
18" X 24" CM PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL
18" X 30" PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 25 CU. YDS. COMP. EMB.
5 CU. YDS. UNCL. EXC.

STA. 242+41 IN PLACE
18" X 29" RC PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL
18" X 30" PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 30 CU. YDS. COMP. EMB.
5 CU. YDS. UNCL. EXC.

STA. 244+60 IN PLACE
18" X 43" RC PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL
18" X 34" PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 35 CU. YDS.

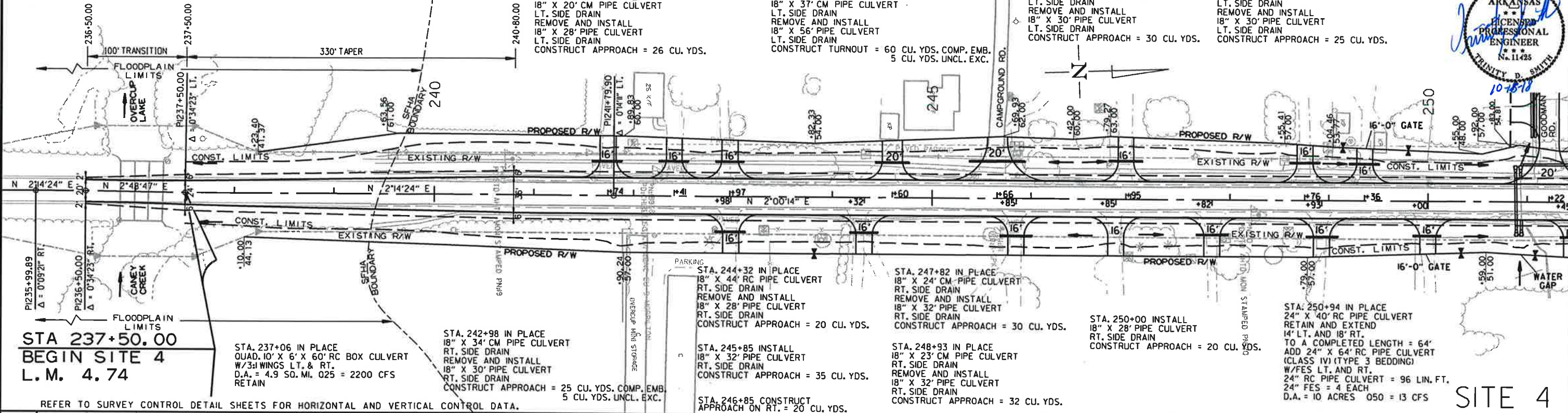
STA. 246+95 INSTALL
18" X 34" PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 45 CU. YDS. COMP. EMB.
5 CU. YDS. UNCL. EXC.

STA. 248+76 IN PLACE
18" X 25" RC PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL
18" X 30" PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 30 CU. YDS.

STA. 249+36 IN PLACE
18" X 24" RC PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL
18" X 30" PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 25 CU. YDS.

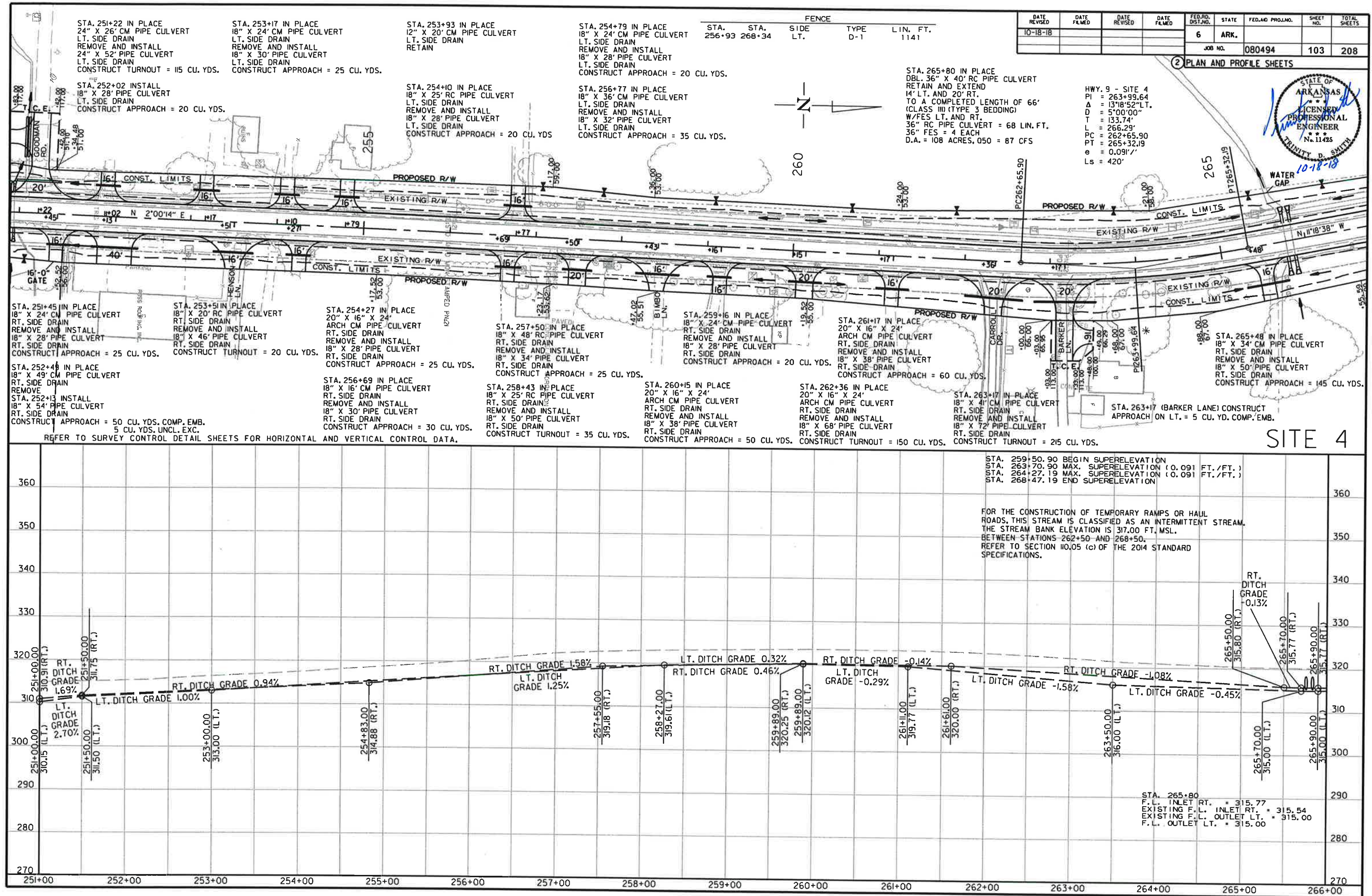
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. PROJ. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
10-18-18				6	ARK.			
				JOB NO.	080494		102	208

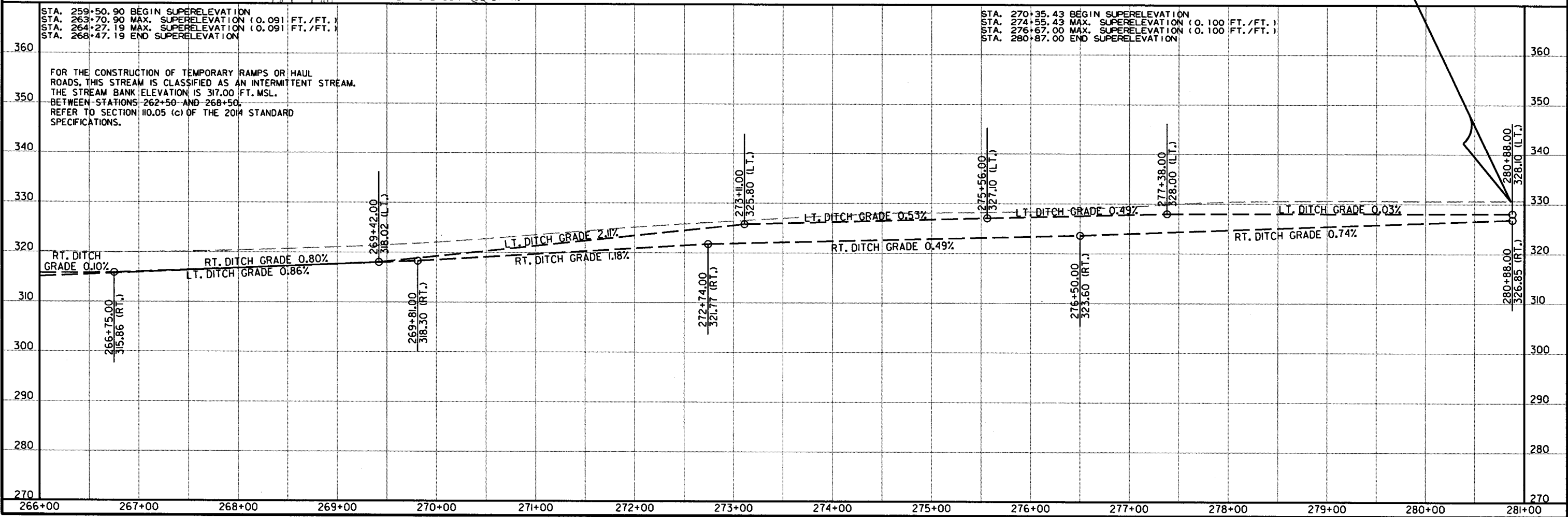
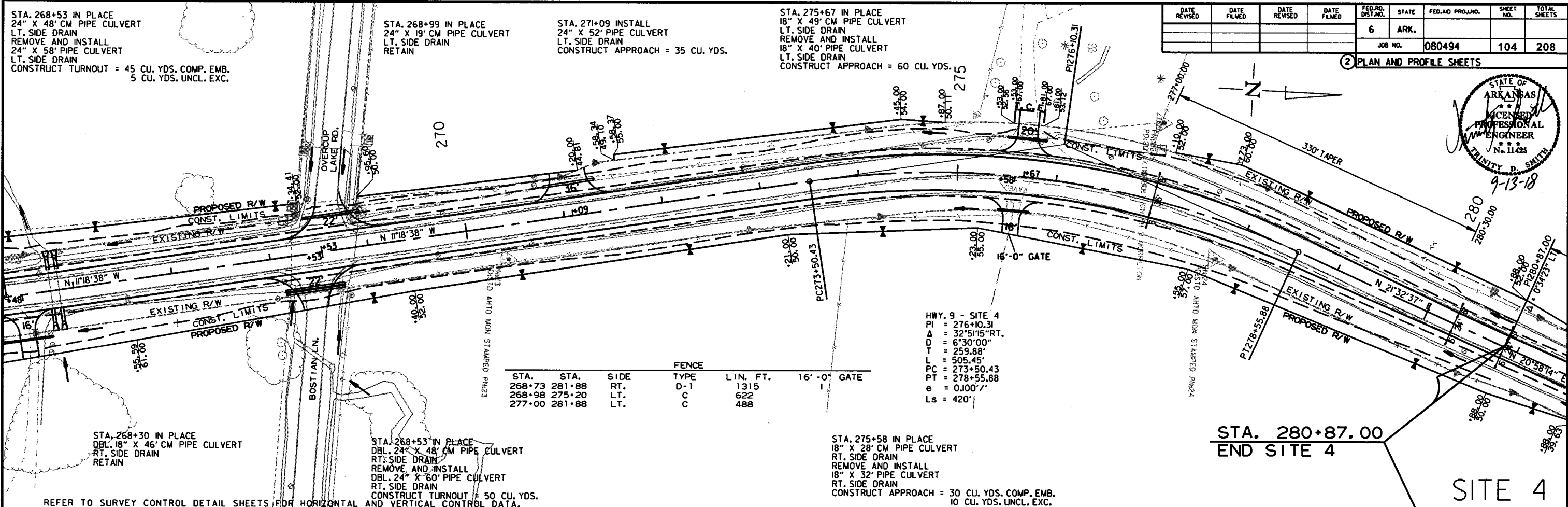
2 PLAN AND PROFILE SHEETS



4/12/2016

RO80494.DGN



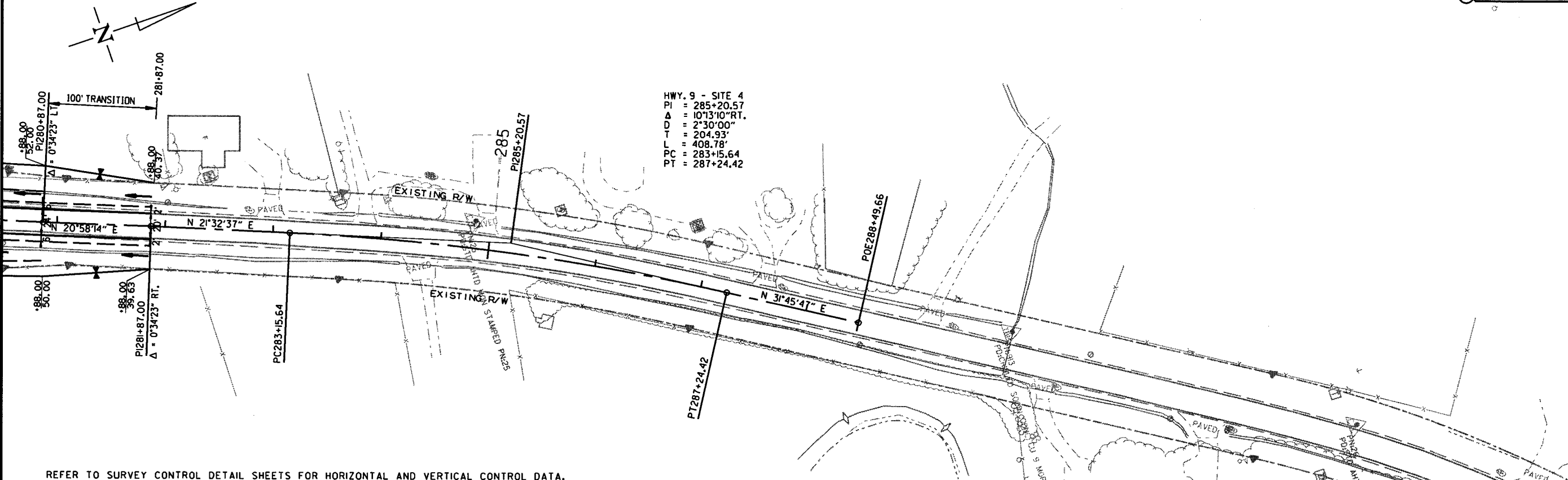


DATE REVISED	DATE FILED	DATE REVISED	DATE FILED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	080494		105	208

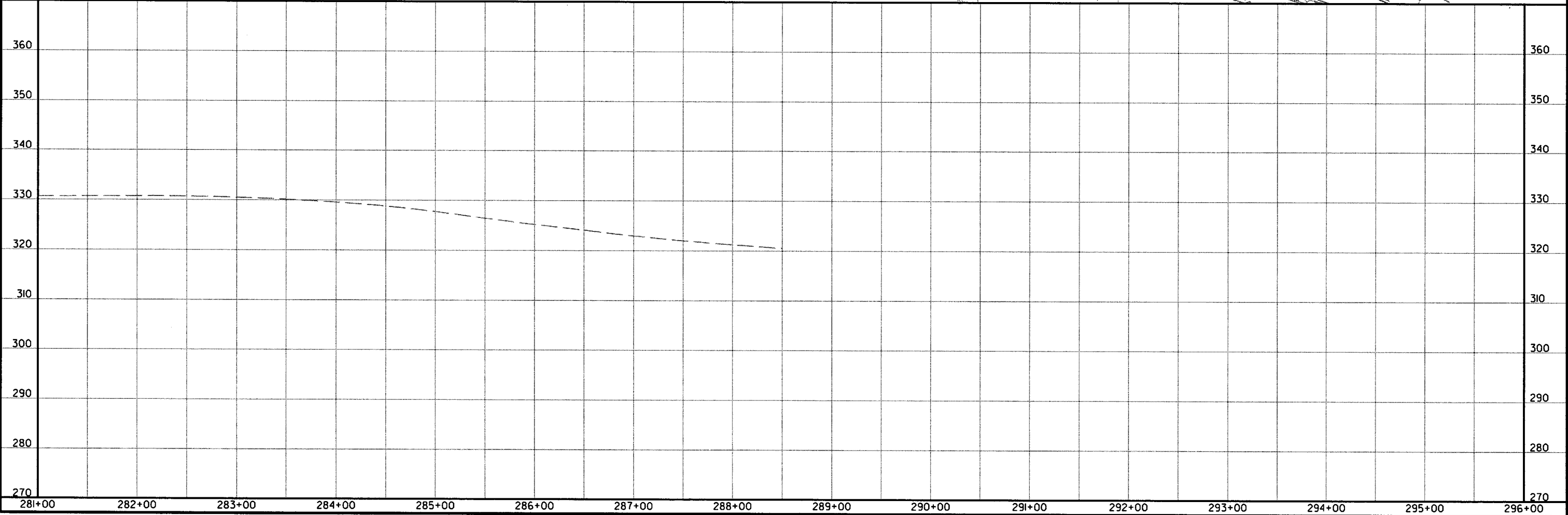
2 PLAN AND PROFILE SHEETS



HWY. 9 - SITE 4
PI = 285+20.57
Δ = 10°13'10" RT.
D = 2°30'00"
T = 204.93'
L = 408.78'
PC = 283+15.64
PT = 287+24.42

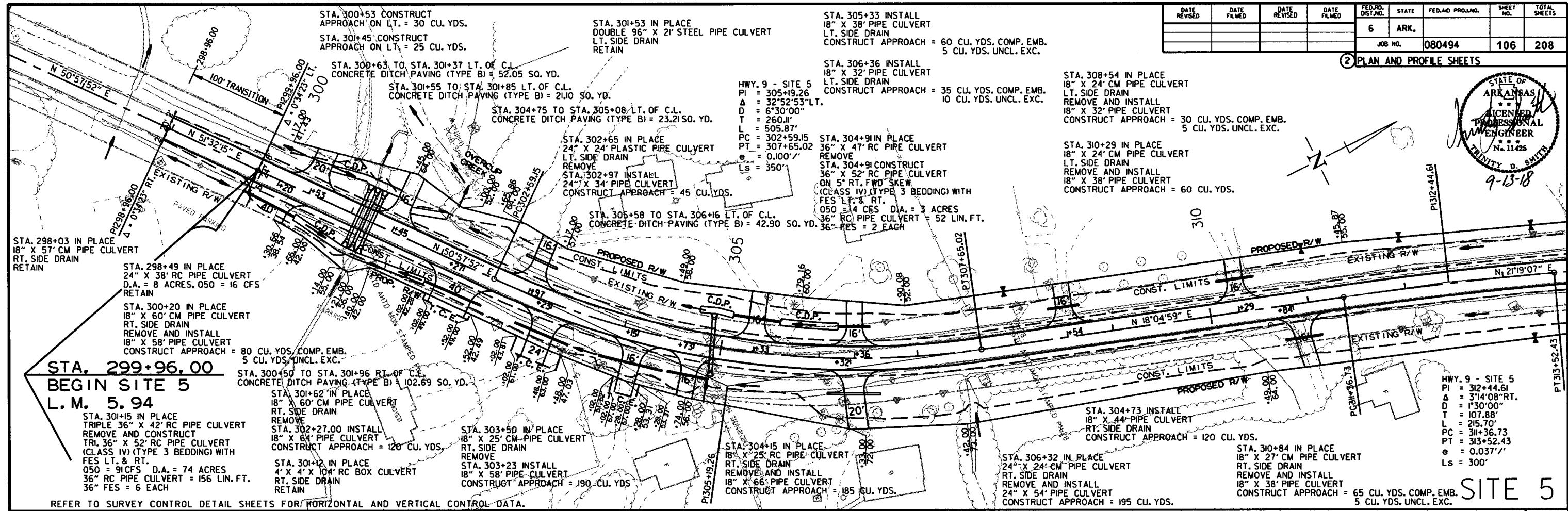
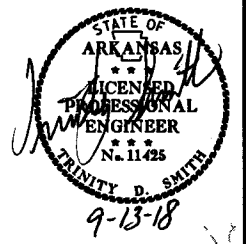


REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.



DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. PROJ. NO.	STATE	FED. PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	080494		106	208

2 PLAN AND PROFILE SHEETS



**STA. 299+96.00
BEGIN SITE 5
L.M. 5.94**

SITE 5

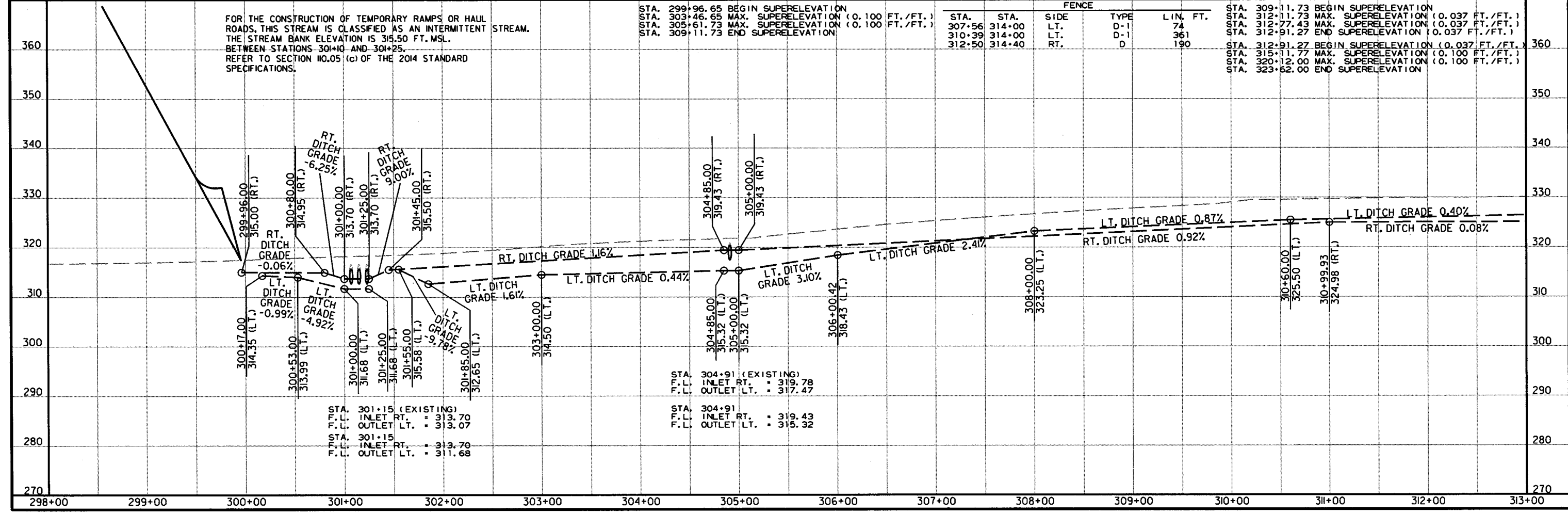
REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

FOR THE CONSTRUCTION OF TEMPORARY RAMPS OR HAUL ROADS, THIS STREAM IS CLASSIFIED AS AN INTERMITTENT STREAM. THE STREAM BANK ELEVATION IS 315.50 FT. MSL. BETWEEN STATIONS 301+10 AND 301+25. REFER TO SECTION 110.05 (c) OF THE 2014 STANDARD SPECIFICATIONS.

STA. 299+96.65 BEGIN SUPERELEVATION
STA. 303+46.65 MAX. SUPERELEVATION (0.100 FT./FT.)
STA. 305+61.73 MAX. SUPERELEVATION (0.100 FT./FT.)
STA. 309+11.73 END SUPERELEVATION

STA.	STA.	SIDE	TYPE	LINE FT.
307+56	314+00	LT.	D-1	74
310+39	314+00	LT.	D-1	361
312+50	314+40	RT.	D	190

STA. 309+11.73 BEGIN SUPERELEVATION
STA. 312+11.73 MAX. SUPERELEVATION (0.037 FT./FT.)
STA. 312+77.43 MAX. SUPERELEVATION (0.037 FT./FT.)
STA. 312+91.27 END SUPERELEVATION (0.037 FT./FT.)
STA. 312+91.27 BEGIN SUPERELEVATION (0.037 FT./FT.)
STA. 315+11.77 MAX. SUPERELEVATION (0.100 FT./FT.)
STA. 320+12.00 MAX. SUPERELEVATION (0.100 FT./FT.)
STA. 323+62.00 END SUPERELEVATION



STA. 304+91 (EXISTING)
F.L. INLET RT. = 319.78
F.L. OUTLET LT. = 317.47

STA. 304+91
F.L. INLET RT. = 319.43
F.L. OUTLET LT. = 315.32

STA. 301+15 (EXISTING)
F.L. INLET RT. = 313.70
F.L. OUTLET LT. = 313.07
STA. 301+15
F.L. INLET RT. = 313.70
F.L. OUTLET LT. = 311.68

3/24/2015

RO80494.DGN

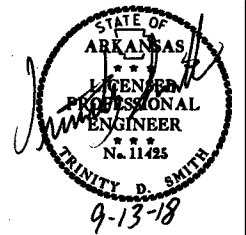
STA. 314+63 INSTALL
18" X 42' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 115 CU. YDS.
STA. 315+40 INSTALL
18" X 48' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 110 CU. YDS.
STA. 315+97 INSTALL
18" X 58' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 140 CU. YDS.
STA. 316+60 INSTALL
18" X 48' PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 120 CU. YDS.

STA. 318+62 CONSTRUCT
TURNOUT ON LT. = 80 CU. YDS.

STA. 318+96 IN PLACE
TRIPLE 8' X 4' X 32'
RC BOX CULVERT
LT. SIDE DRAIN
RETAIN

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.	080494		107	208

2 PLAN AND PROFILE SHEETS



HWY. 9 - SITE 5
PI = 312+44.61
Δ = 3'14"08" RT.
D = 1'30"00"
T = 107.88'
L = 215.70'
PC = 311+36.73
PT = 313+52.43
e = 0.037'/'
Ls = 300'

STA. 318+94 IN PLACE
18" X 41' CM PIPE CULVERT
RT. SIDE DRAIN
REMOVE
STA. 317+75 CONSTRUCT
APPROACH ON RT. = 1605 CU. YDS. UNCL. EXC.

HWY. 9 - SITE 5
PI = 317+79.92
Δ = 43'56"42" RT.
D = 6'30"00"
T = 355.65'
L = 676.08'
PC = 314+24.27
PT = 321+00.35
e = 0.100'/'
Ls = 350'

STA. 318+19 CONSTRUCT
TYPE ST DROP INLET 17.0' RT. OF C.L.
WITH 24" X 58" PIPE INLET WITH F.E.S.
AND 24" X 102" PIPE OUTLET
CONNECT TO DROP INLET ON RT. STA. 319+27
DROP INLET 4'-0" X 4'-0" H=3'8"
TYPE ST DROP INLET = IEACH
24" R.C. PIPE (CLASS VIXTYPE 3 BEDDING) = 170 LIN. FT.
24" SLPCCSP (TYPE 2) = 174 LIN. FT.
24" F.E.S. = IEACH

STA. 319+27 CONSTRUCT
TYPE ST DROP INLET 17.0' RT. OF C.L.
WITH 24" X 118" PIPE OUTLET
CONNECT TO DROP INLET ON RT. STA. 320+52
DROP INLET 4'-0" X 4'-0" H=4'6"
TYPE ST DROP INLET = IEACH
24" R.C. PIPE (CLASS VIXTYPE 3 BEDDING) = 118 LIN. FT.
24" SLPCCSP (TYPE 2) = 118 LIN. FT.

STA. 319+65 IN PLACE
4" PVC PIPE CULVERT
RT. DRAIN FROM FIRE STATION
RETAIN-TRIM TO R.O.W.

STA. 320+52 IN PLACE
24" X 47' RC PIPE CULVERT
REMOVE
STA. 322+00 IN PLACE
14" X 89' PLASTIC PIPE CULVERT
RT. SIDE DRAIN
RETAIN

STA. 322+15 IN PLACE
18" X 52' CM PIPE CULVERT
RT. SIDE DRAIN
REMOVE AND CONSTRUCT
APPROACH ON RT. = 120 CU. YDS. COMP. EMB.
20 CU. YDS. UNCL. EXC.

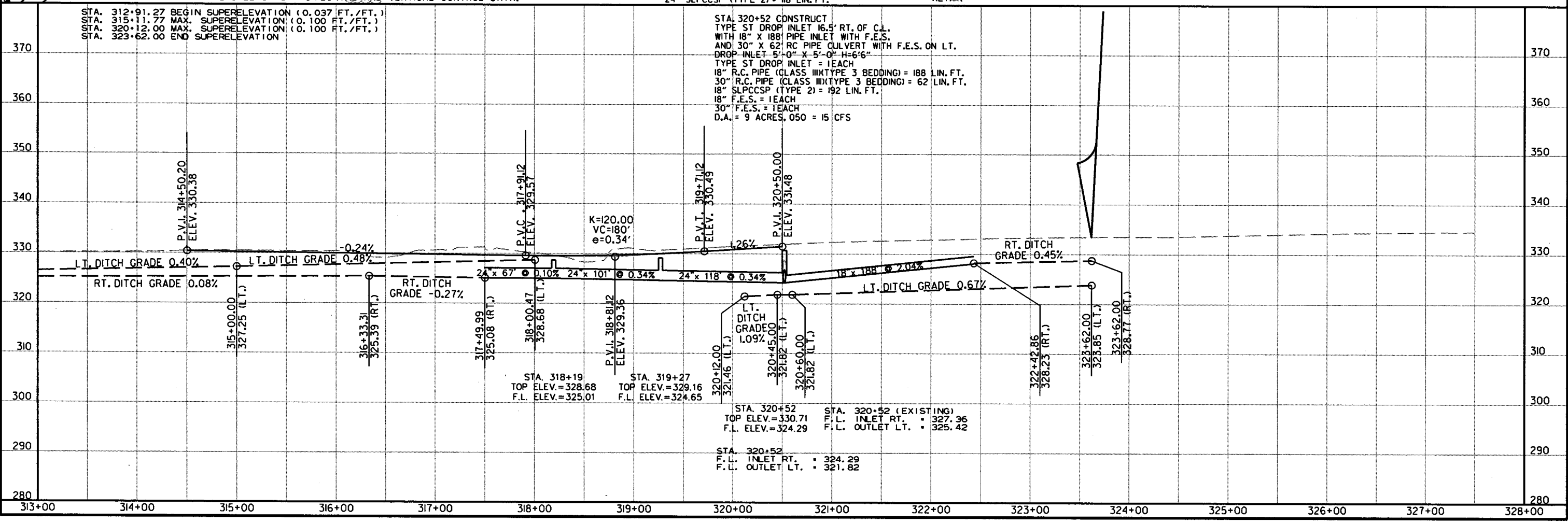
STA. 323+62.00
END SITE 5

SITE 5

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

STA. 312+91.27 BEGIN SUPERELEVATION (0.037 FT./FT.)
STA. 315+11.77 MAX. SUPERELEVATION (0.100 FT./FT.)
STA. 320+12.00 MAX. SUPERELEVATION (0.100 FT./FT.)
STA. 323+62.00 END SUPERELEVATION

STA. 320+52 CONSTRUCT
TYPE ST DROP INLET 16.5' RT. OF C.L.
WITH 18" X 188" PIPE INLET WITH F.E.S.
AND 30" X 62" RC PIPE CULVERT WITH F.E.S. ON LT.
DROP INLET 5'-0" X 5'-0" H=6'6"
TYPE ST DROP INLET = IEACH
18" R.C. PIPE (CLASS IIIIXTYPE 3 BEDDING) = 188 LIN. FT.
30" R.C. PIPE (CLASS IIIIXTYPE 3 BEDDING) = 62 LIN. FT.
18" SLPCCSP (TYPE 2) = 192 LIN. FT.
18" F.E.S. = IEACH
30" F.E.S. = IEACH
D.A. = 9 ACRES, 050 = 15 CFS



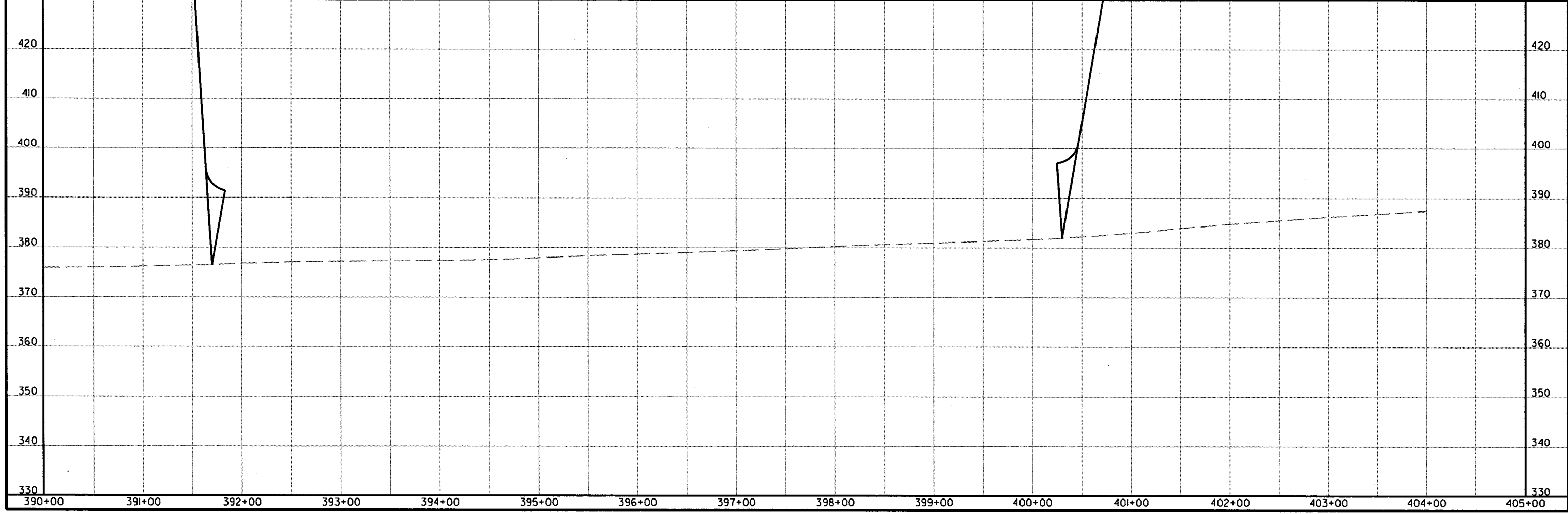
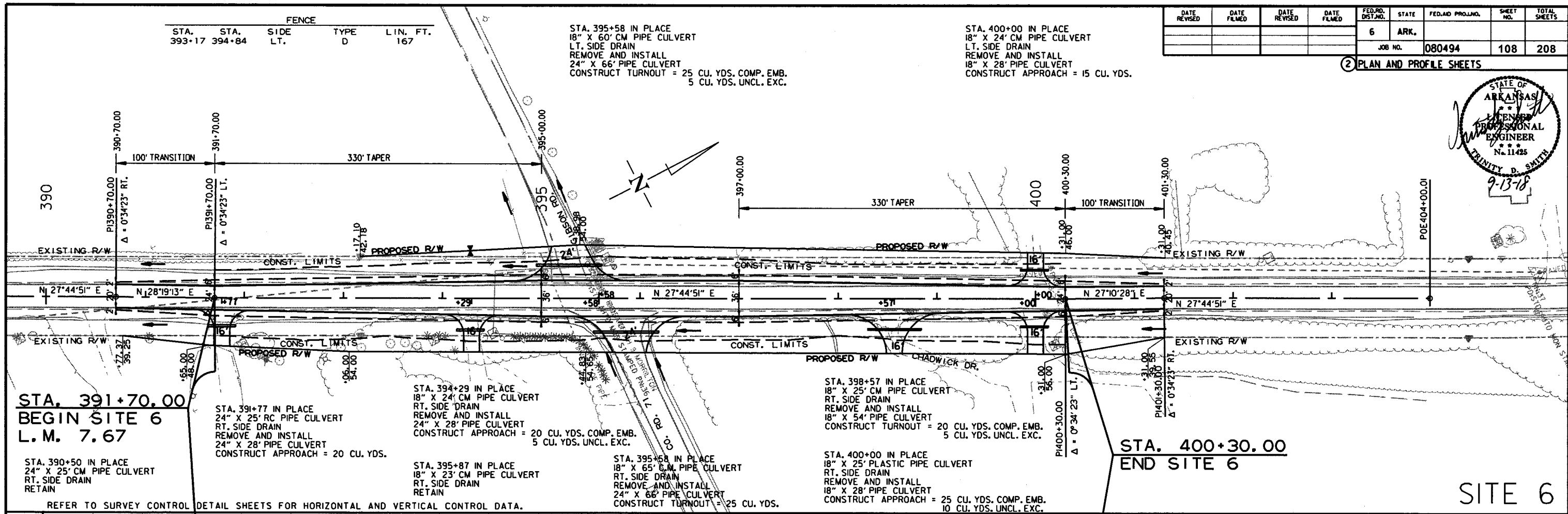
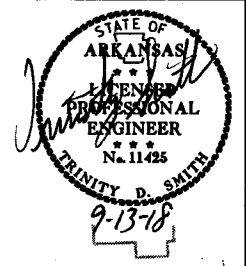
FENCE			
STA.	STA.	SIDE	TYPE
393+17	394+84	LT.	D
LIN. FT. 167			

STA. 395+58 IN PLACE
18" X 60' CM PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL
24" X 66' PIPE CULVERT
CONSTRUCT TURNOUT = 25 CU. YDS. COMP. EMB.
5 CU. YDS. UNCL. EXC.

STA. 400+00 IN PLACE
18" X 24' CM PIPE CULVERT
LT. SIDE DRAIN
REMOVE AND INSTALL
18" X 28' PIPE CULVERT
CONSTRUCT APPROACH = 15 CU. YDS.

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.	080494		108	208

2 PLAN AND PROFILE SHEETS

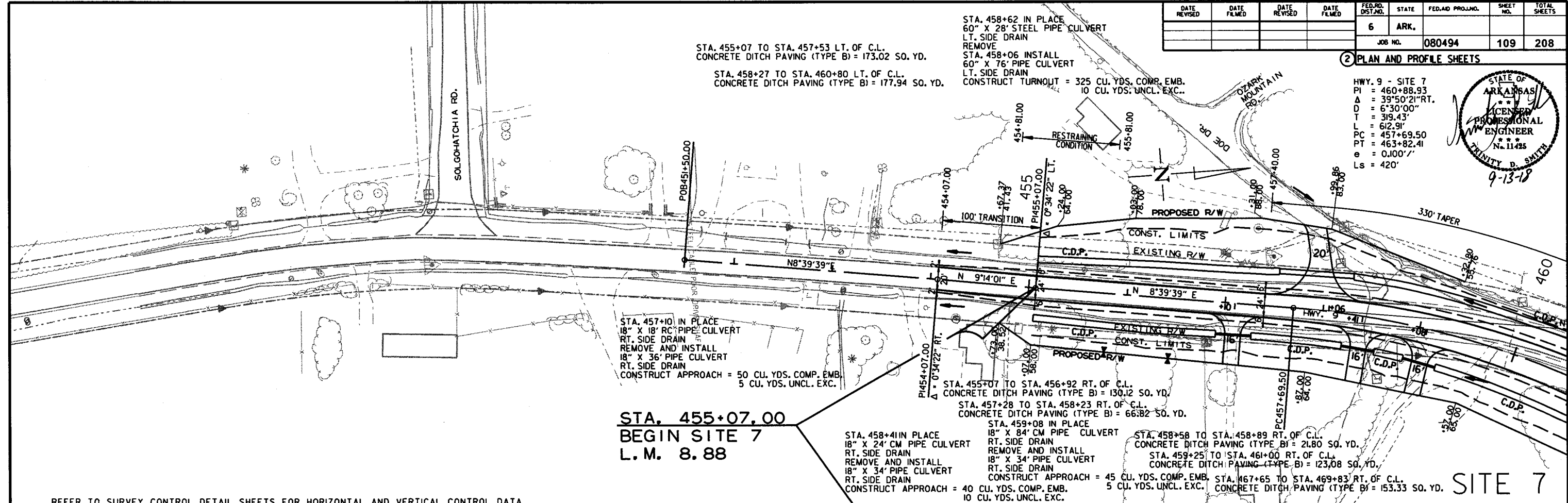
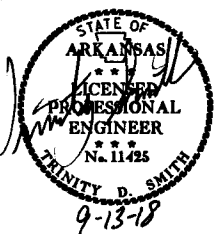


3/24/2015
R080494.DGN

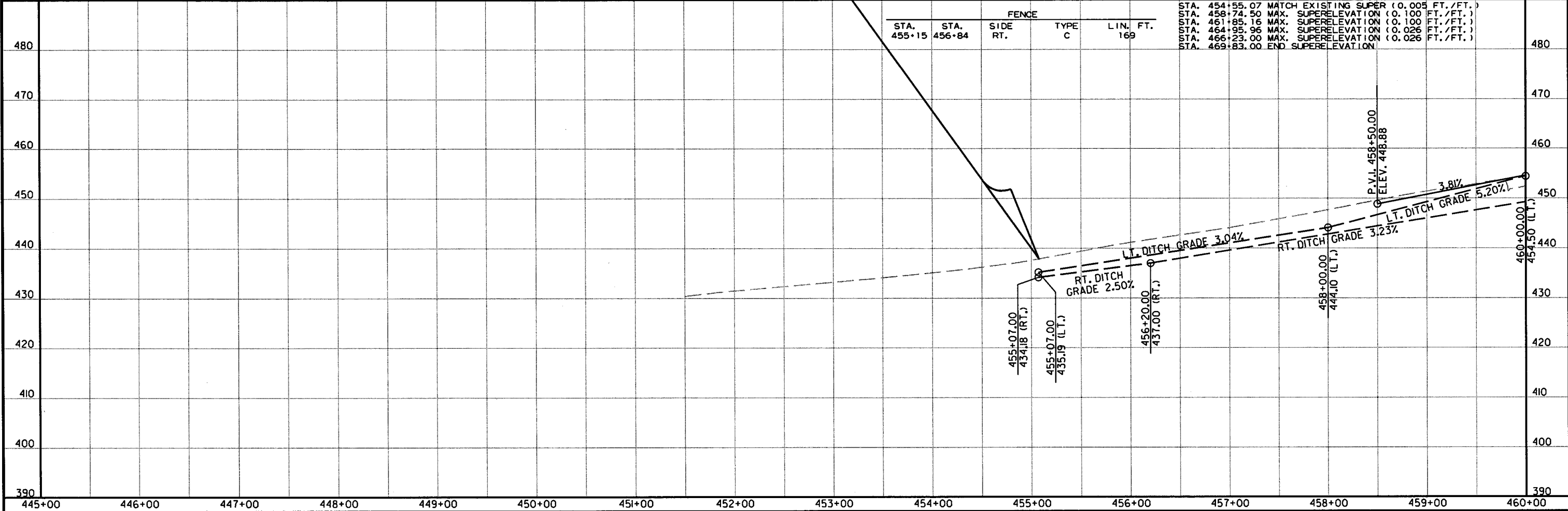
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	080494		109	208

2 PLAN AND PROFILE SHEETS

HWY. 9 - SITE 7
 PI = 460+88.93
 Δ = 39°50'21" RT.
 D = 6°30'00"
 T = 319.43'
 L = 612.91'
 PC = 457+69.50
 PT = 463+82.41
 e = 0.100' /'
 Ls = 420'



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



STA. 461+03 IN PLACE
18" X 24" CM PIPE CULVERT
LT. SIDE DRAIN
RETAIN AND INSTALL
24" X 46" PIPE CULVERT
LT. SIDE DRAIN
CONSTRUCT APPROACH = 175 CU. YDS.

STA. 461+78 CONSTRUCT
HWY. 287 ON LT. = 205 CU. YDS.

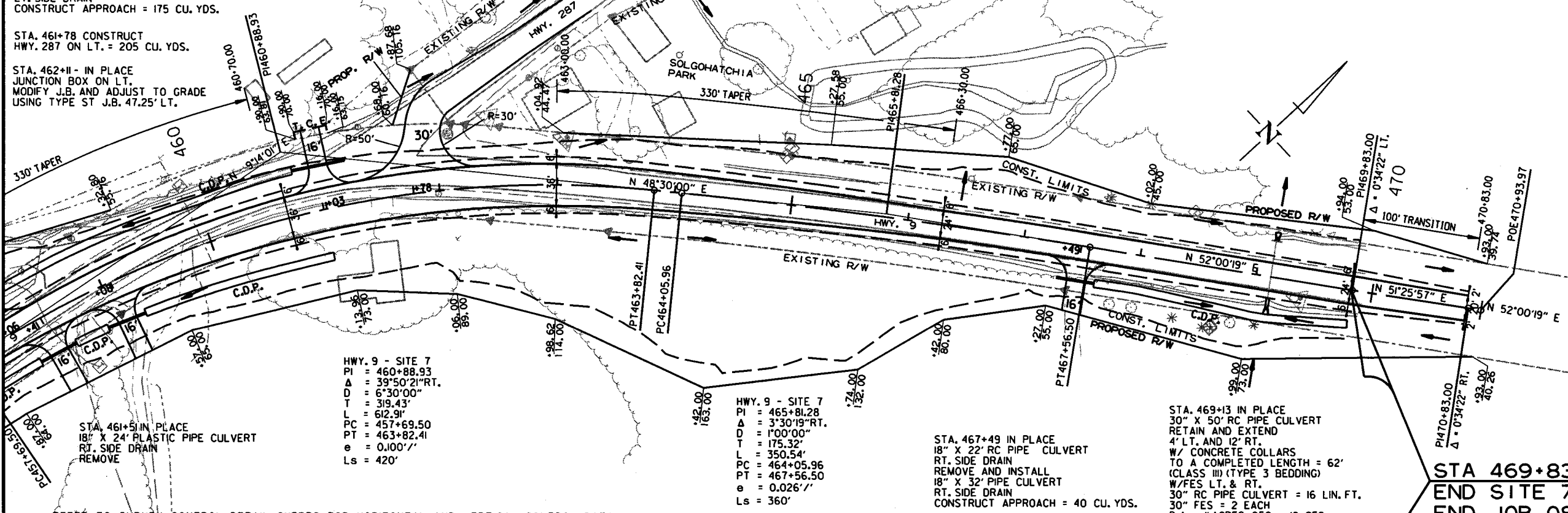
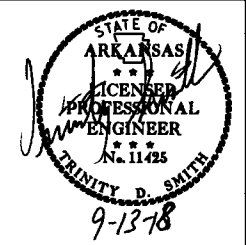
STA. 462+11 IN PLACE
JUNCTION BOX ON LT.
MODIFY J.B. AND ADJUST TO GRADE
USING TYPE ST J.B. 47.25' LT.

STA. 463+20 IN PLACE-HWY. 287
18" X 28" CM PIPE CULVERT
LT. SIDE DRAIN
RETAIN

STA. 463+71 IN PLACE-HWY. 287
48" X 42" CMP PIPE CULVERT
RETAIN

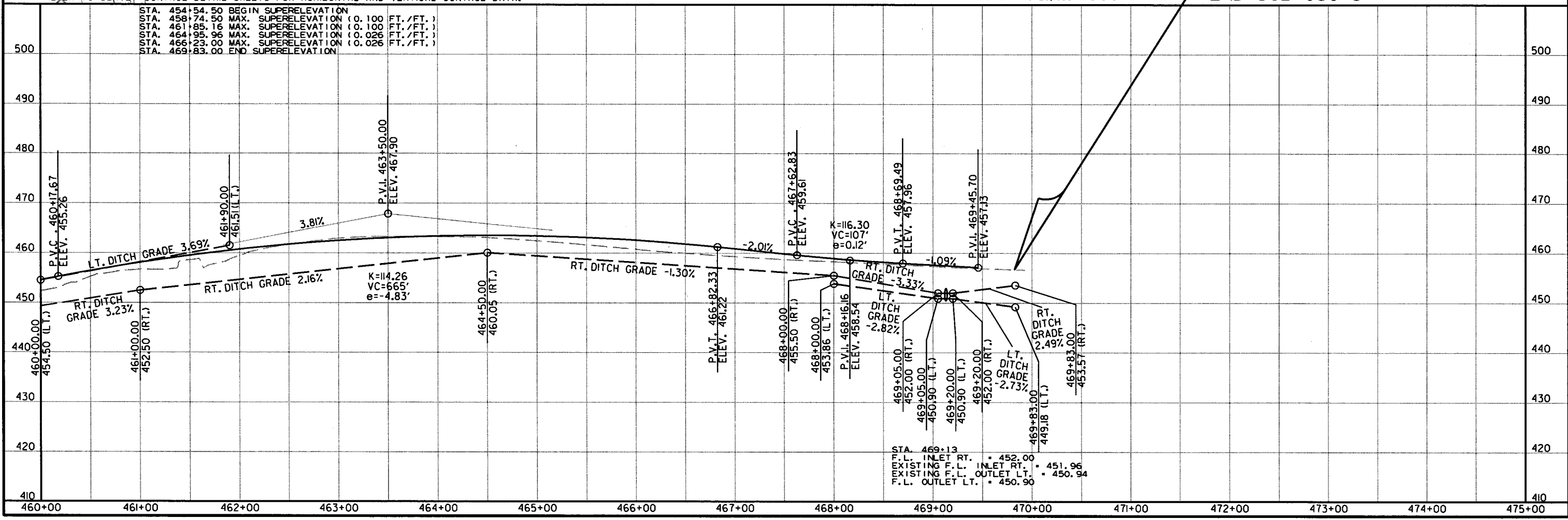
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080494	110	208

2 PLAN AND PROFILE SHEETS



STA 469+83.00
END SITE 7
END JOB 080494

SITE 7

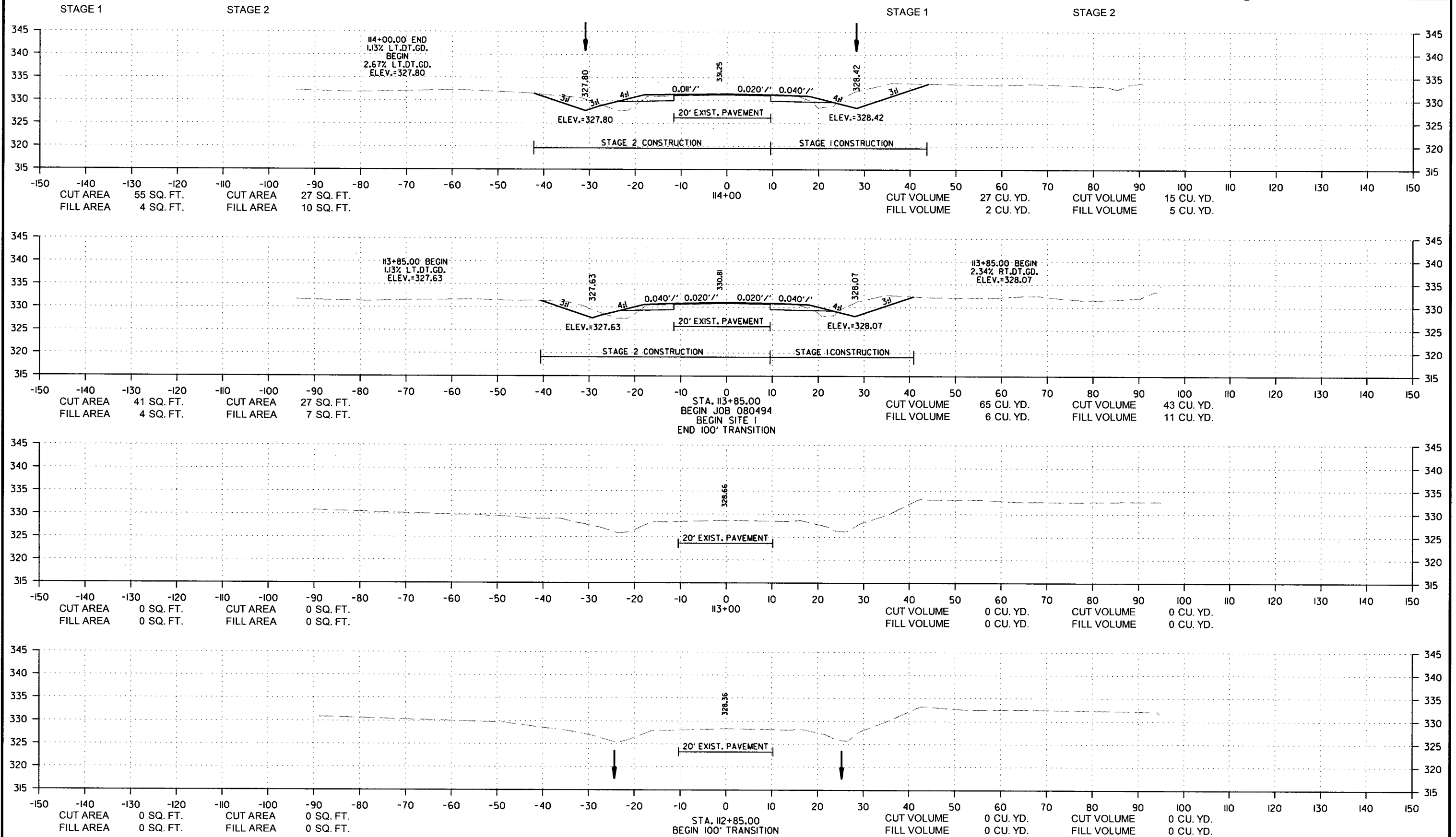


3/24/2015

RO80494.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. RD. PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	080494		111	208

2 CROSS SECTIONS



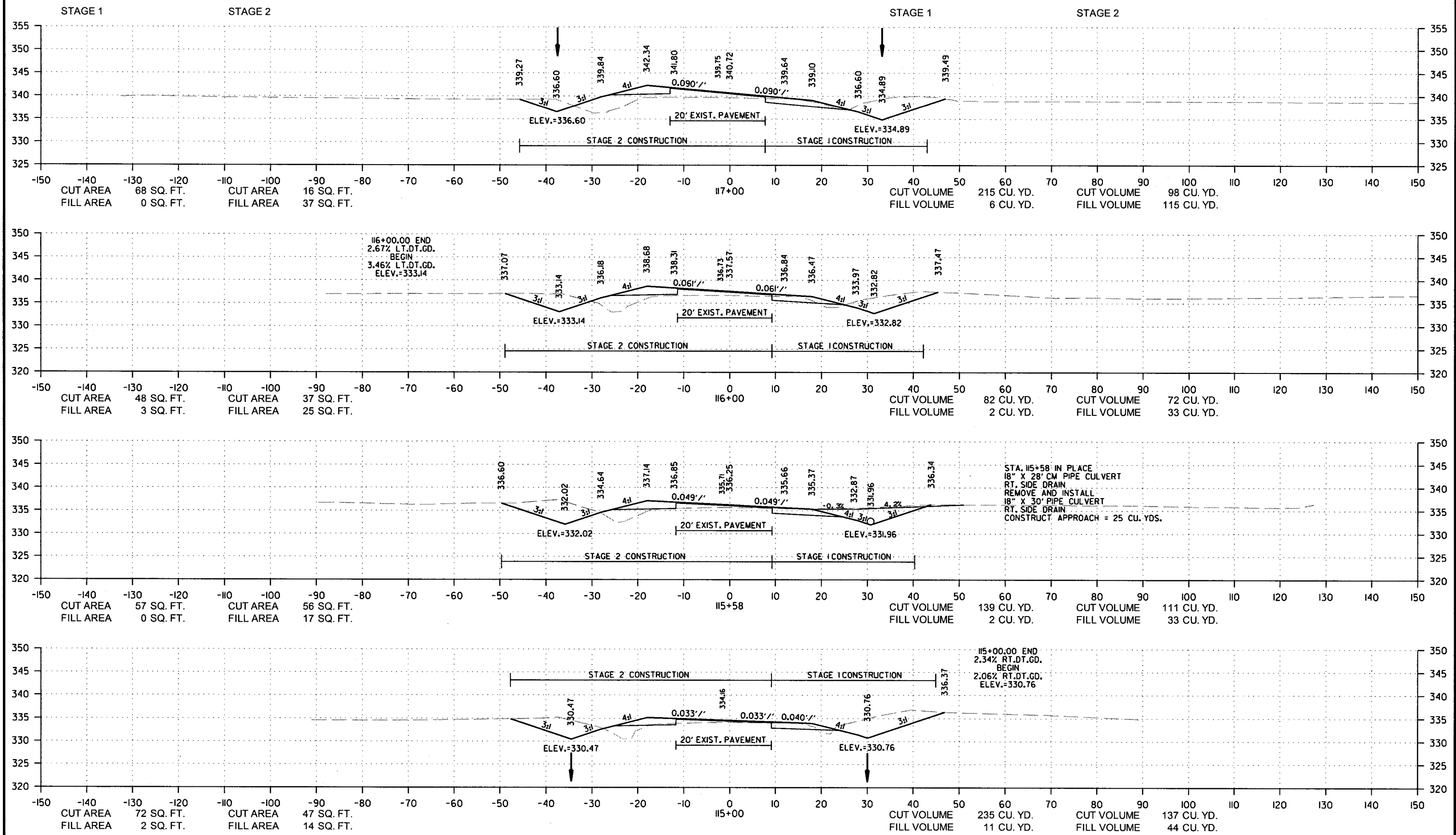
R080494.DGN 9/6/2018

SITE I

CROSS SECTION STA. 112+85 TO STA. 114+00

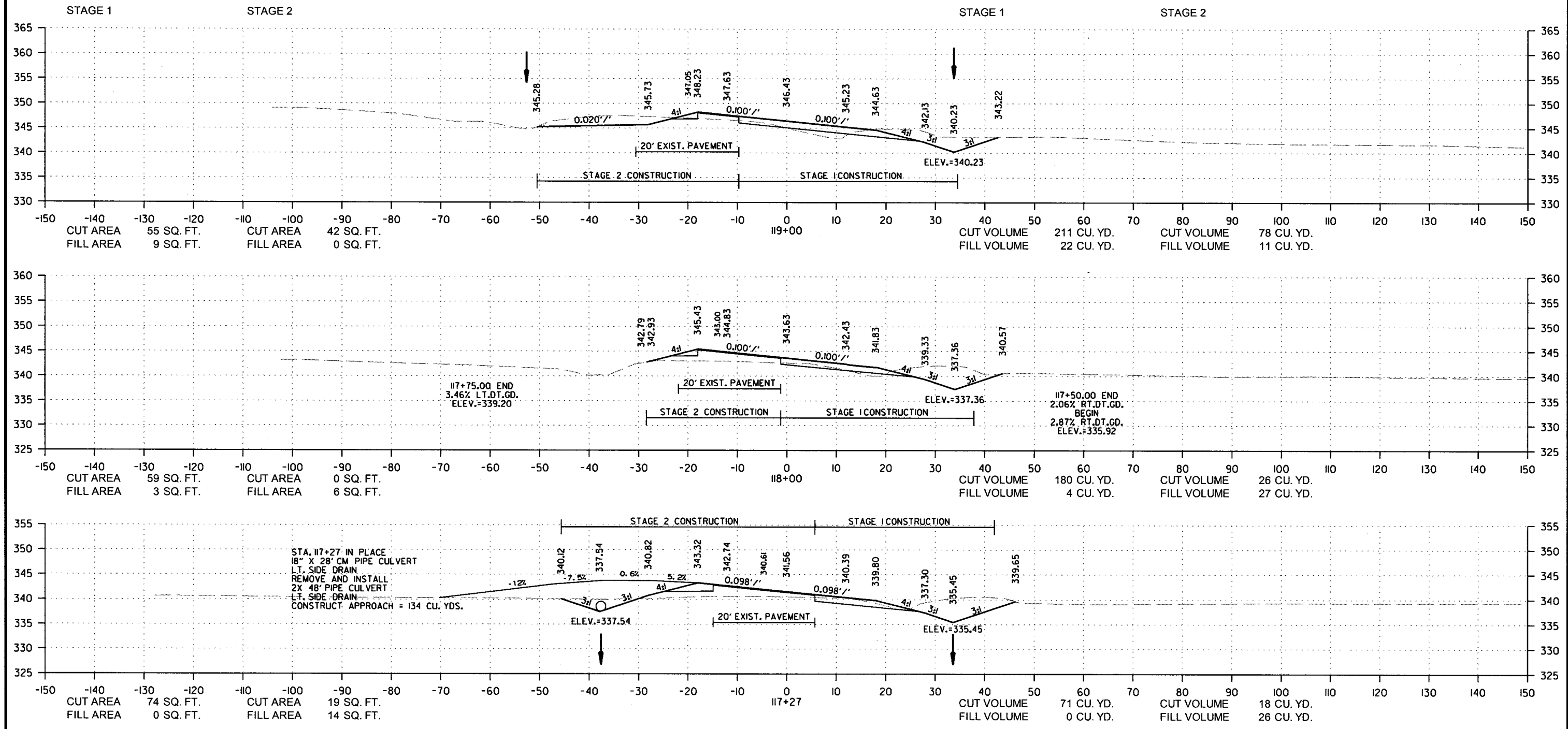
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
						JOB NO. 080494	112	208

2 CROSS SECTIONS



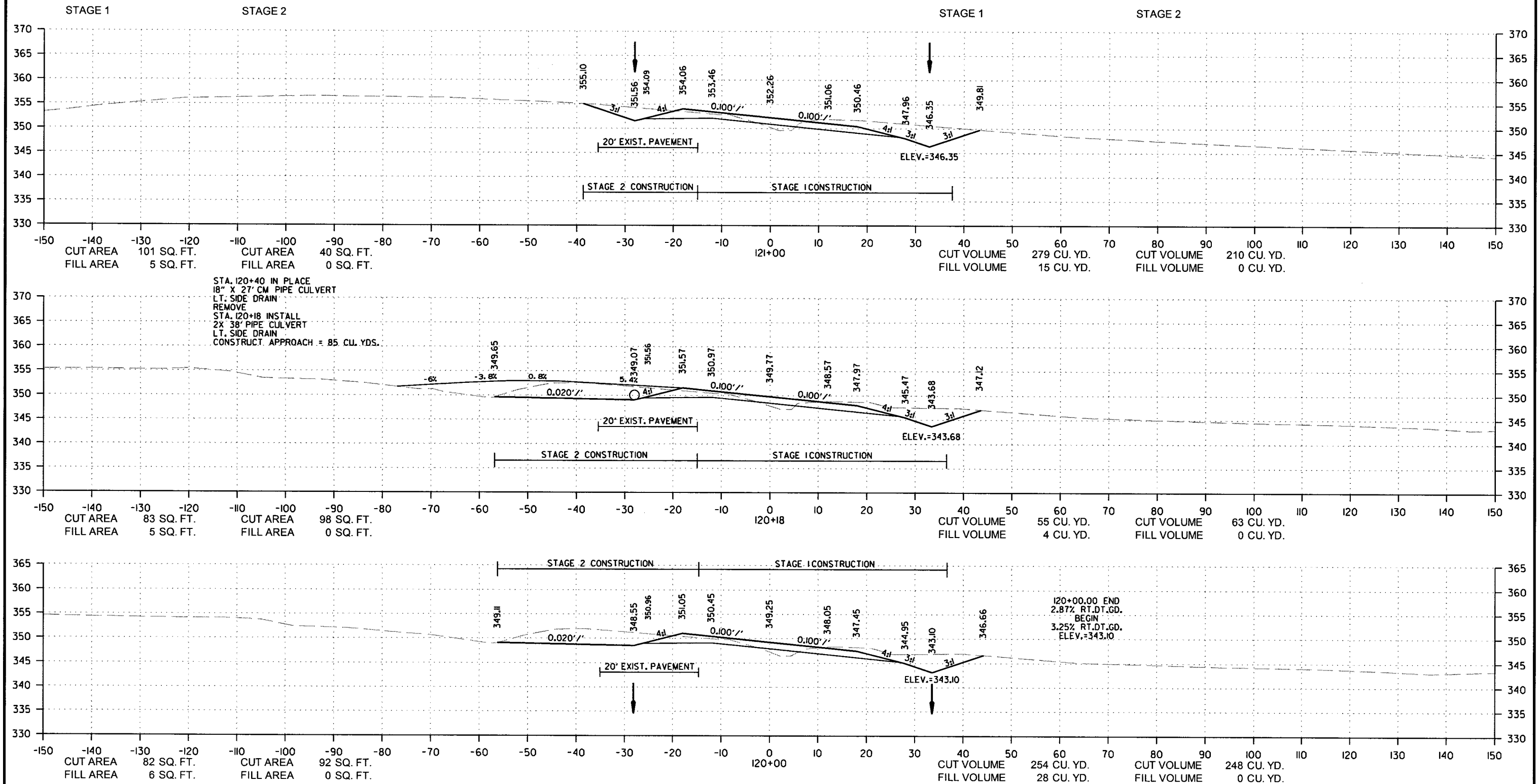
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
						JOB NO. 080494	113	208

2 CROSS SECTIONS



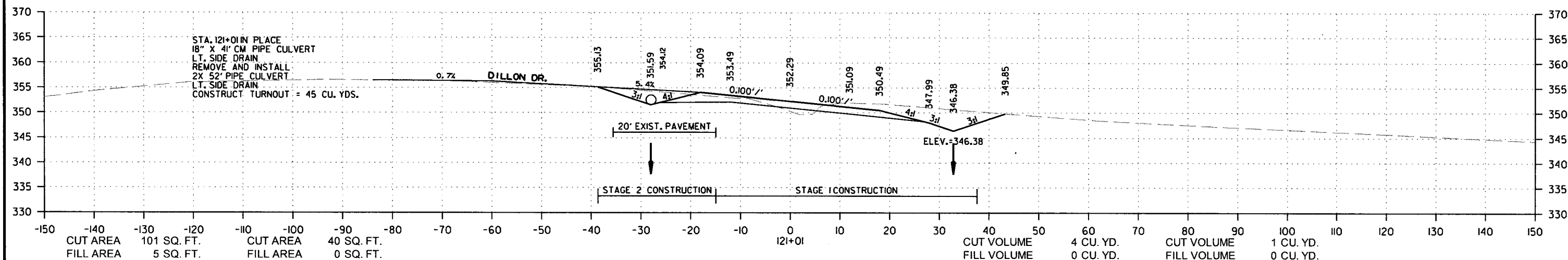
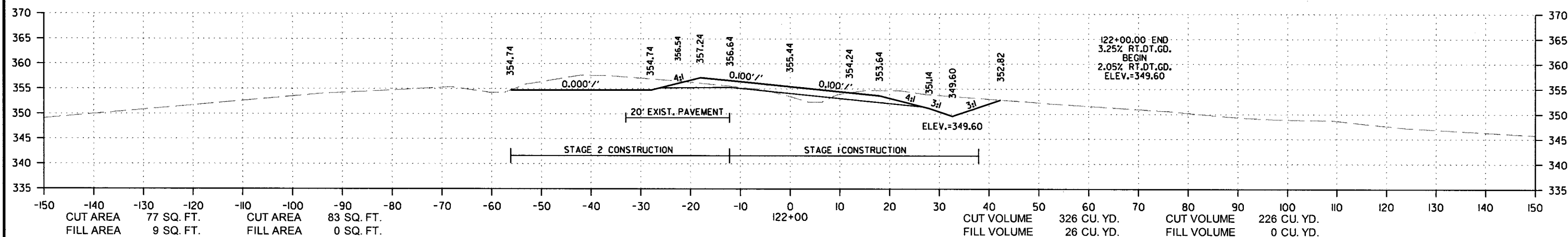
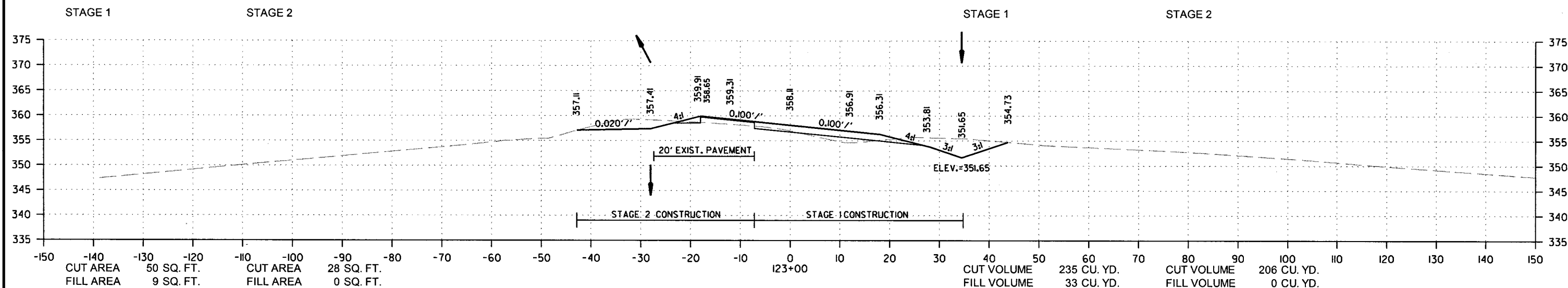
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080494	114	208

2 CROSS SECTIONS



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. 080494	115	208

② CROSS SECTIONS



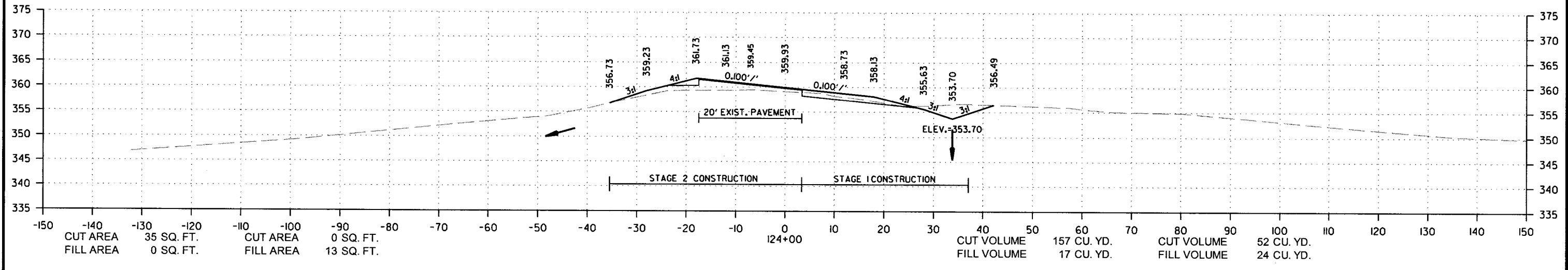
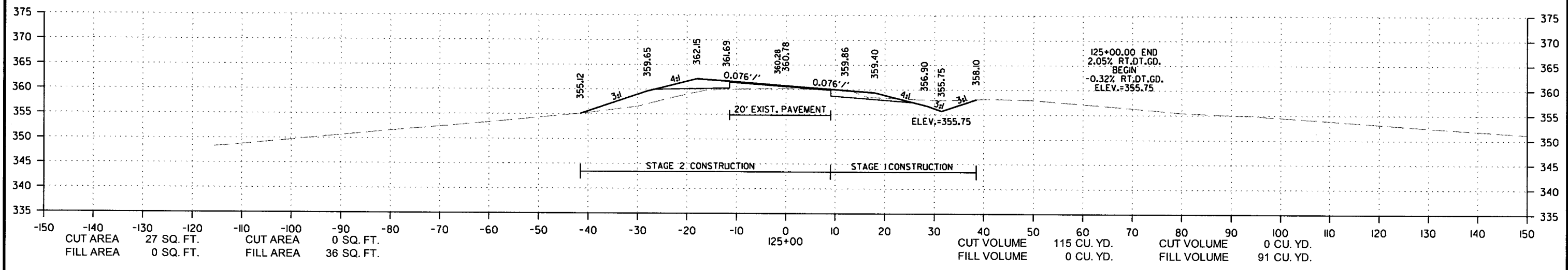
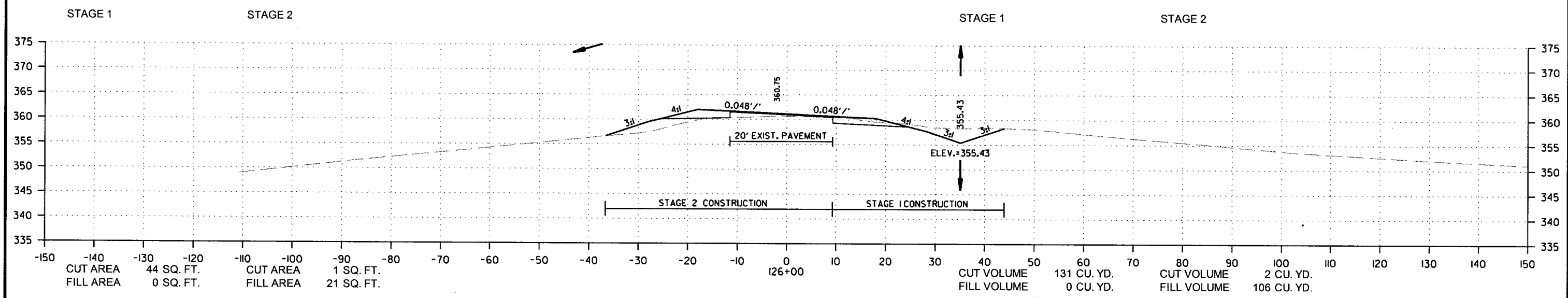
SITE 1
CROSS SECTION STA. 121+01 TO STA. 123+00

9/6/2018

R080494.DCN

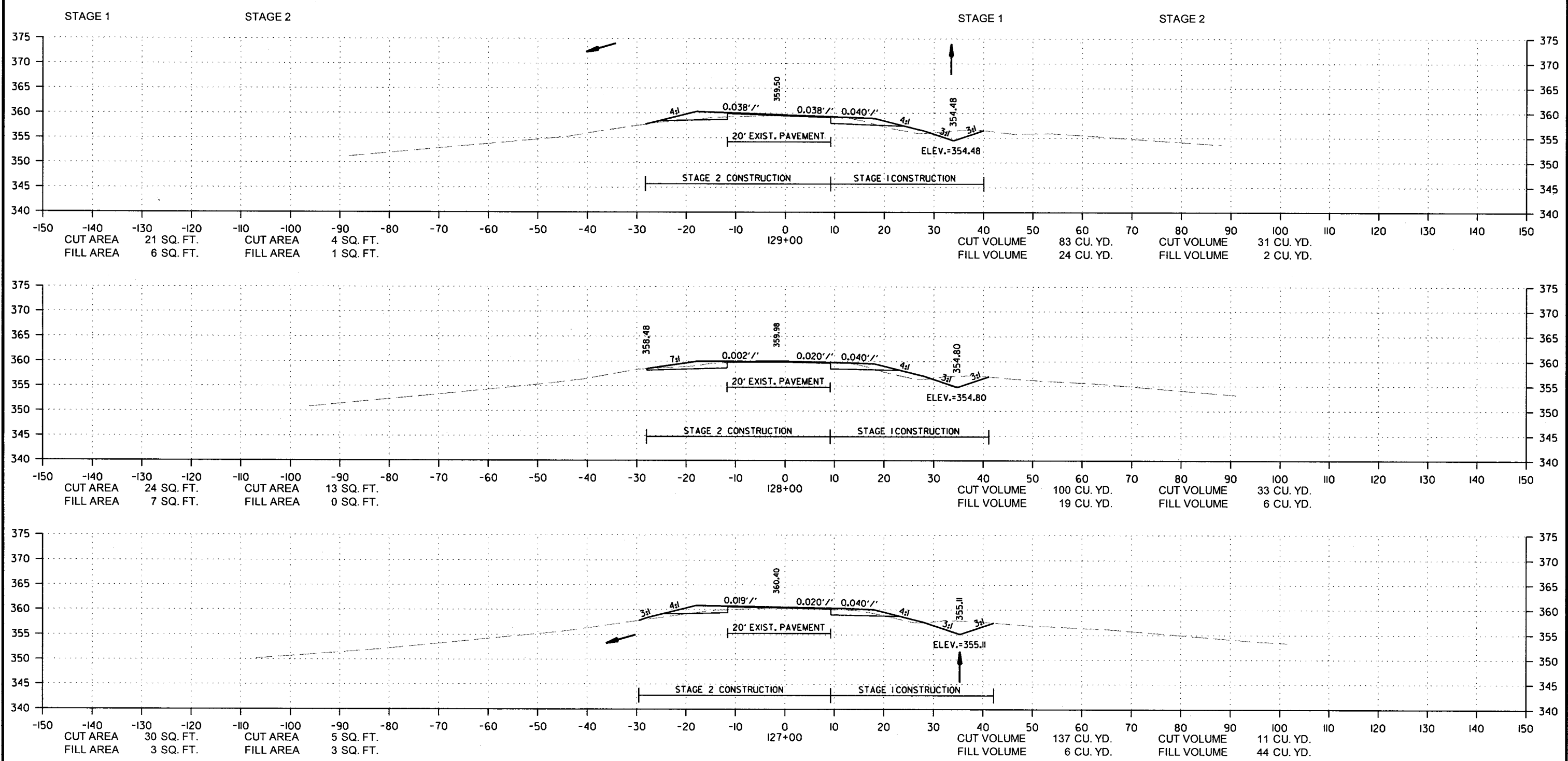
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	080494		116	208

2 CROSS SECTIONS



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.		080494	117	208

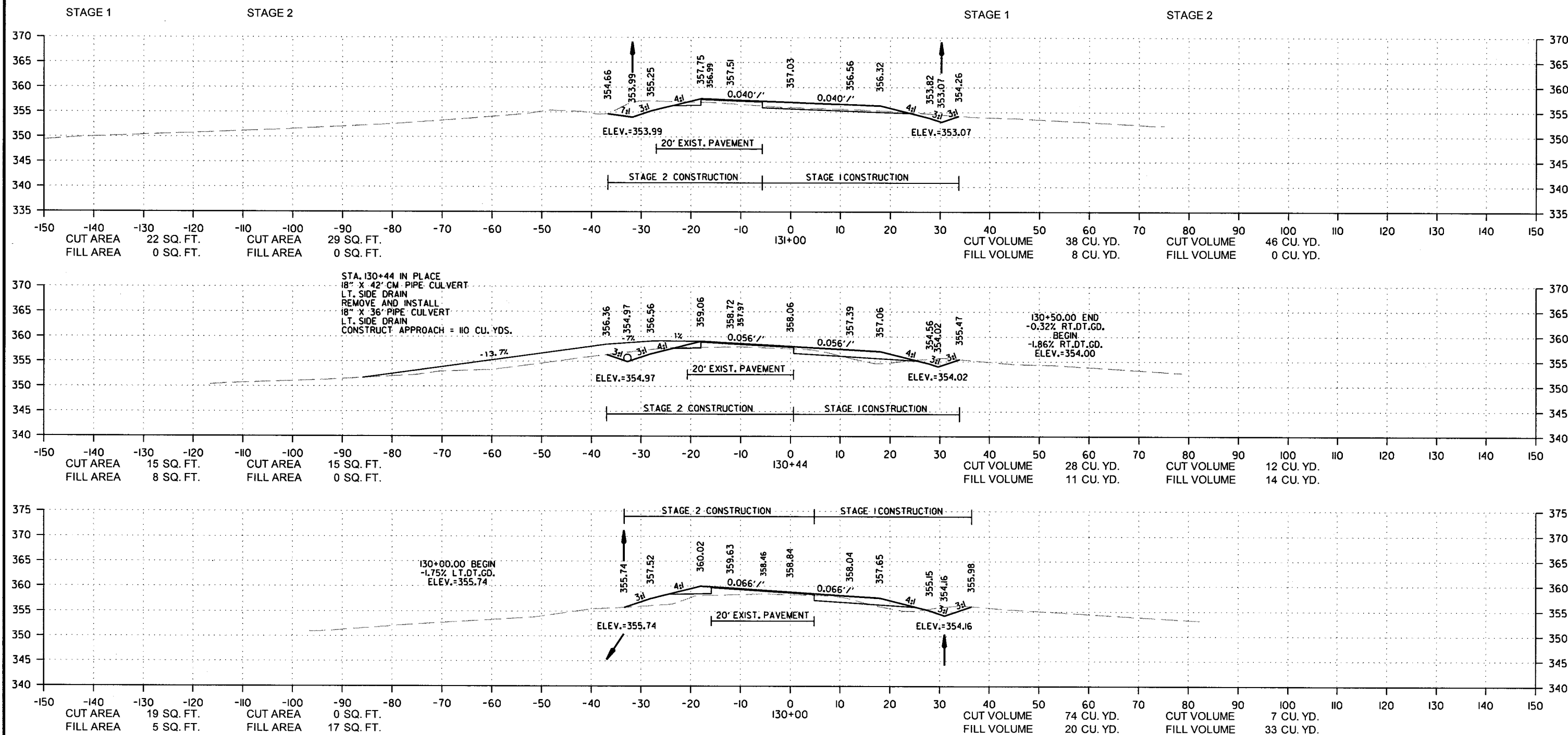
2 CROSS SECTIONS



9/6/2018 R080494.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.		080494	118	208

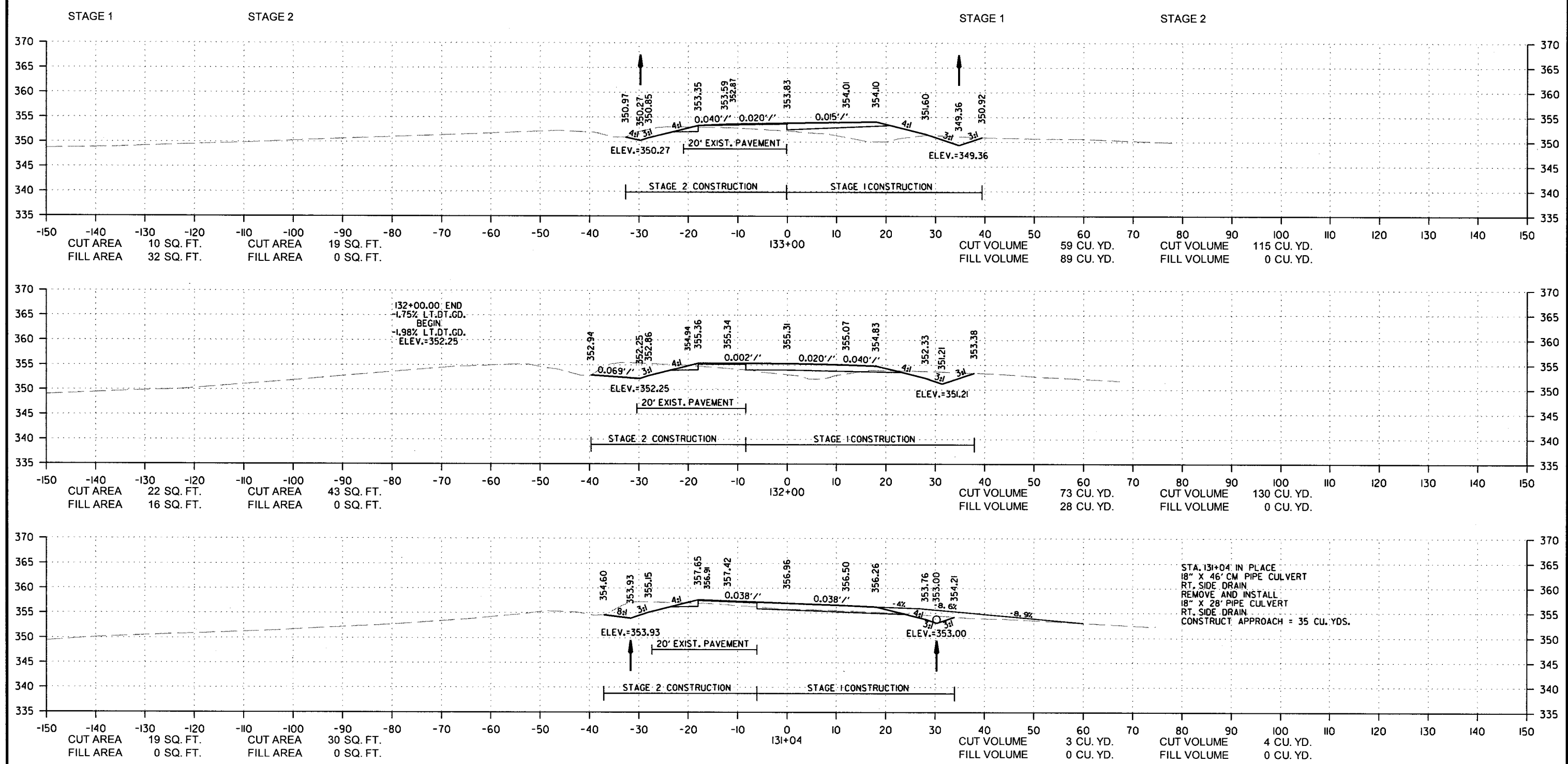
② CROSS SECTIONS



SITE 1
CROSS SECTION STA. 130+00 TO STA. 131+00

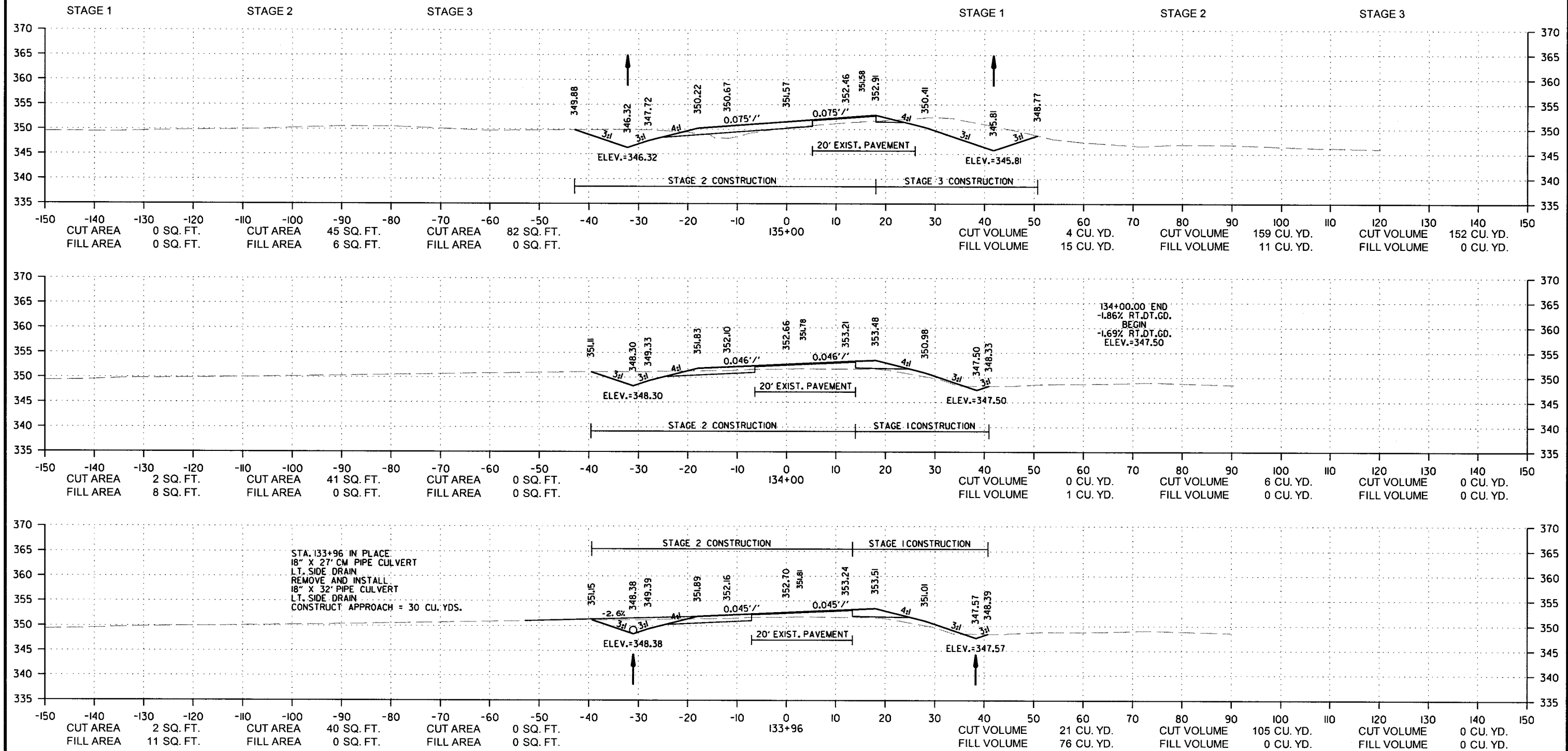
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080494	119	208

② CROSS SECTIONS



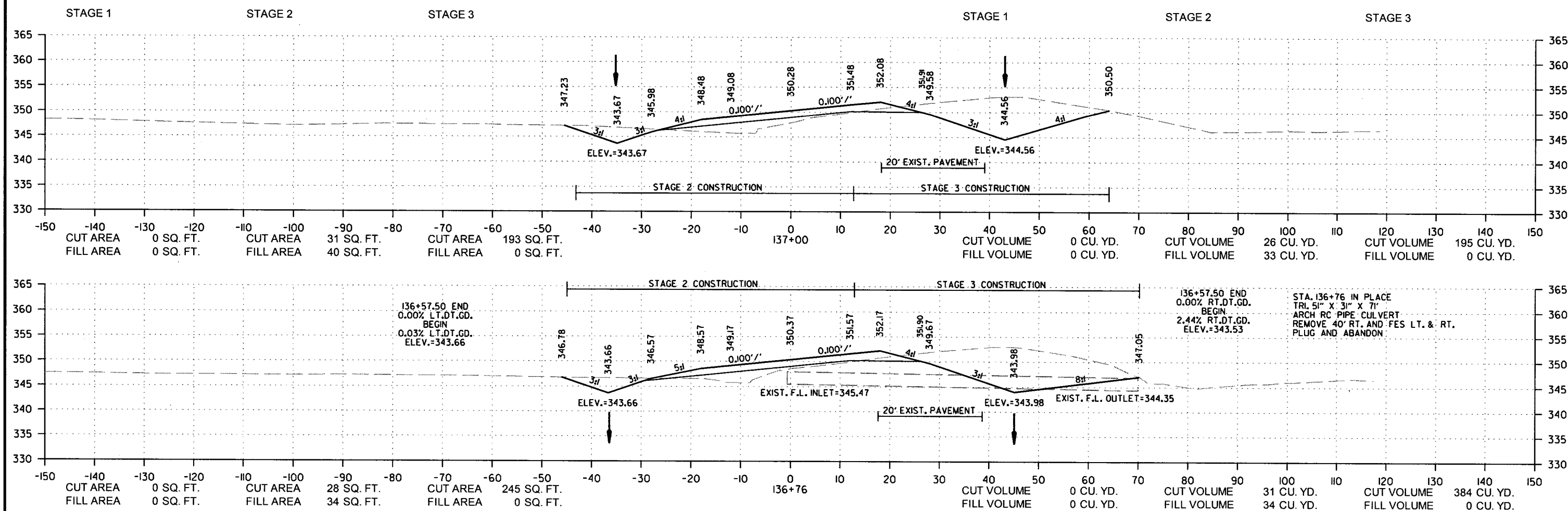
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
						JOB NO. 080494	120	208

2 CROSS SECTIONS



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.	080494		122	208

② CROSS SECTIONS



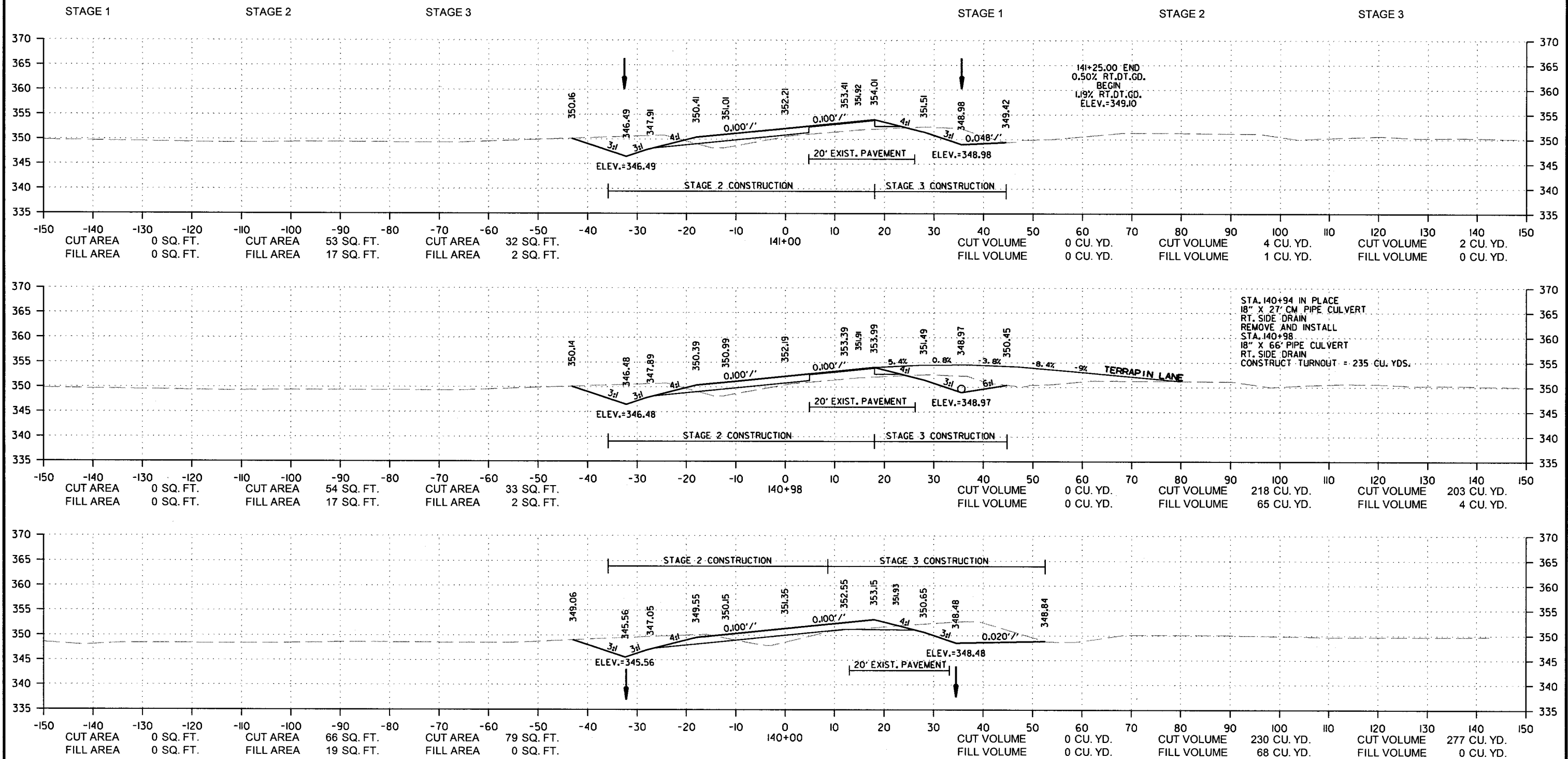
SITE 1
CROSS SECTION STA. 136+76 TO STA. 137+00

9/6/2018

R080494.DGN

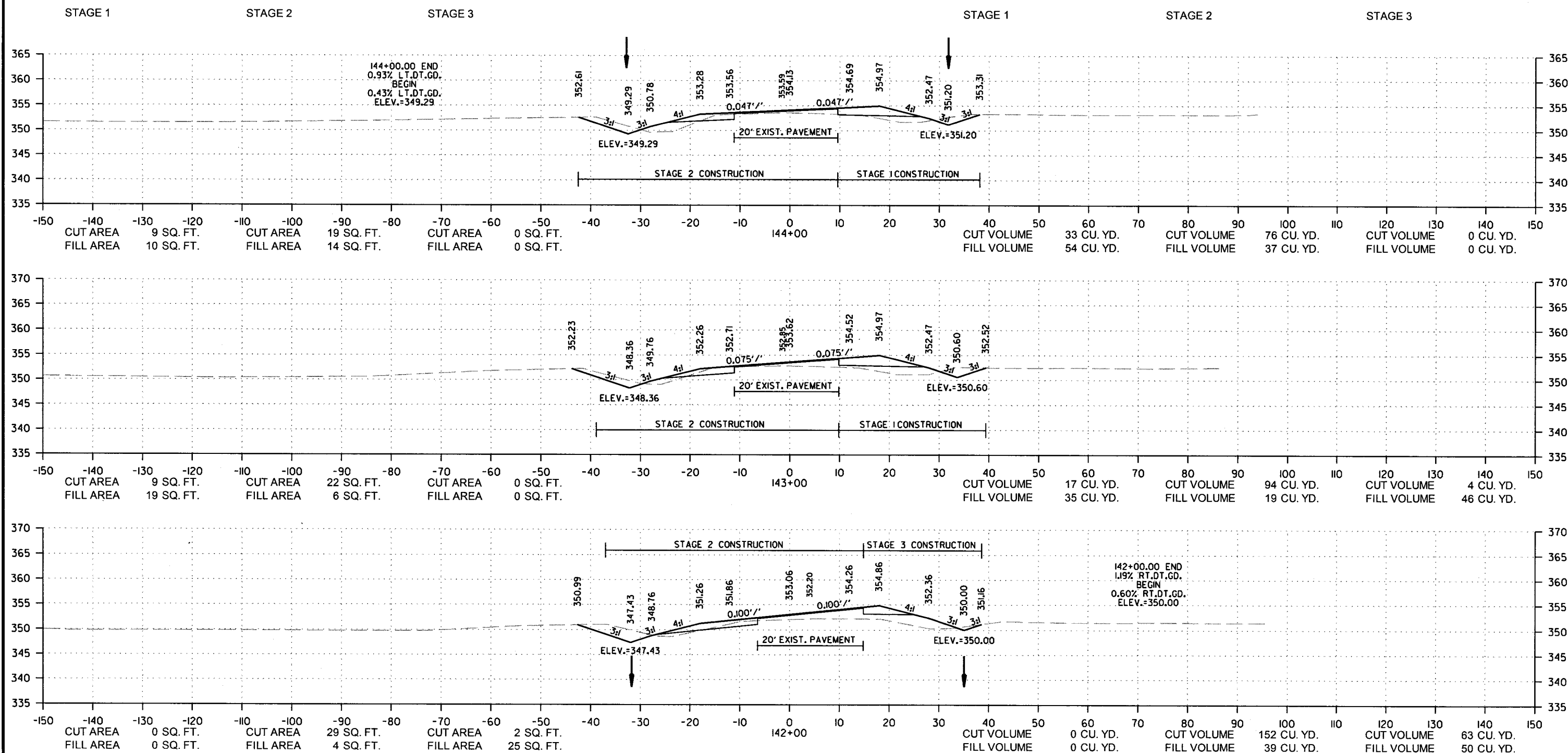
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080494	124	208

② CROSS SECTIONS



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. 080494		125	208	

2 CROSS SECTIONS



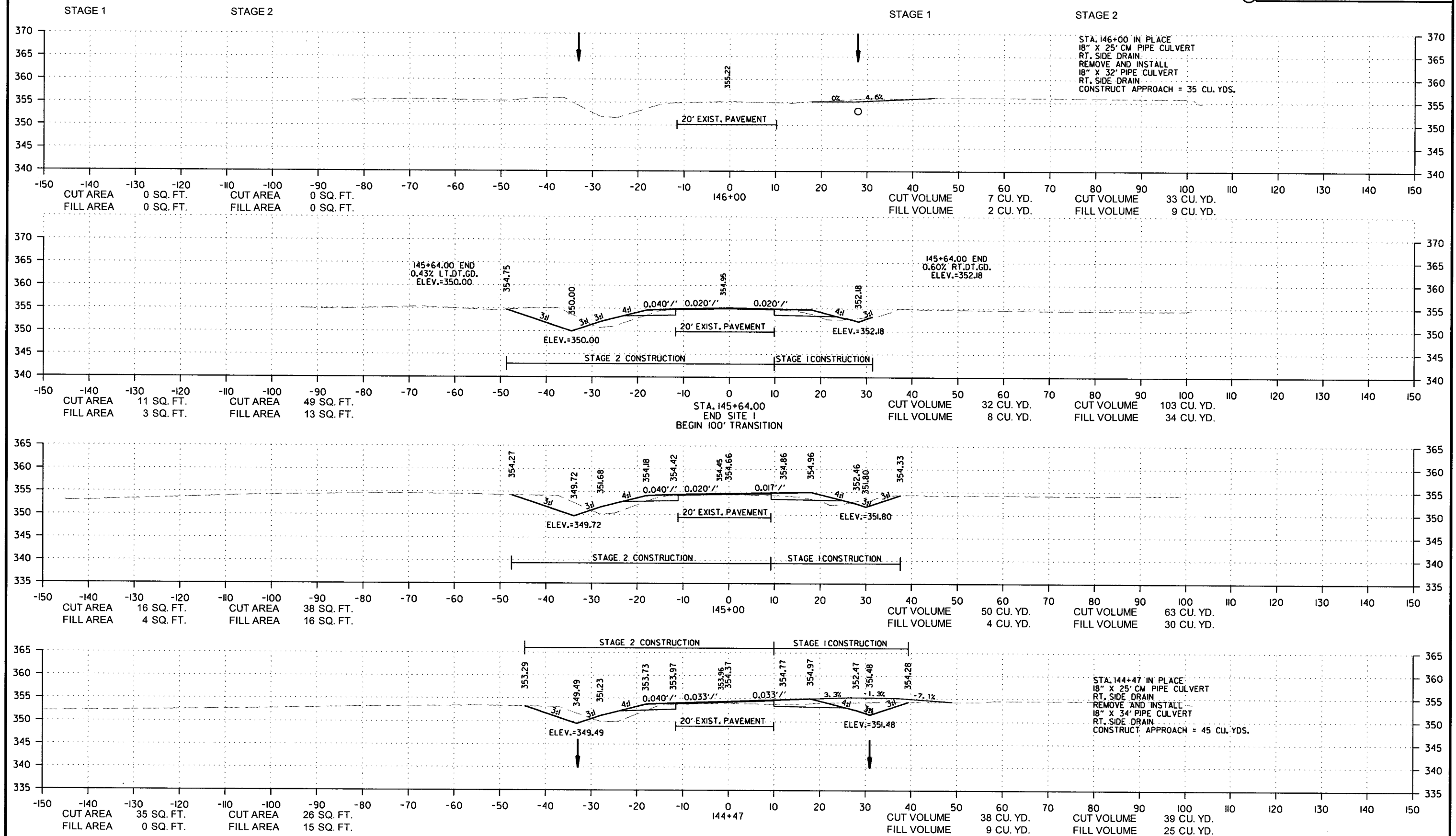
SITE I
CROSS SECTION STA. 142+00 TO STA. 144+00

9/6/2018

R080494.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.	080494		126	208

2 CROSS SECTIONS



SITE I
CROSS SECTION STA. 144+47 TO STA. 146+00

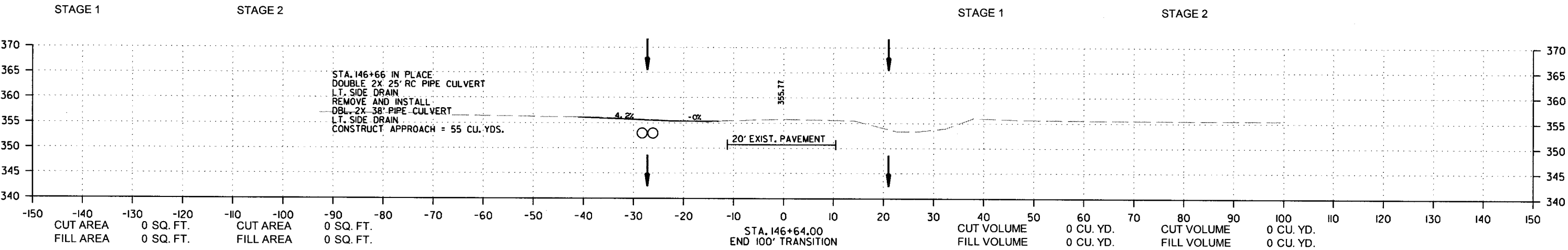
9/6/2018

R080494.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.		080494	127	208

2 CROSS SECTIONS

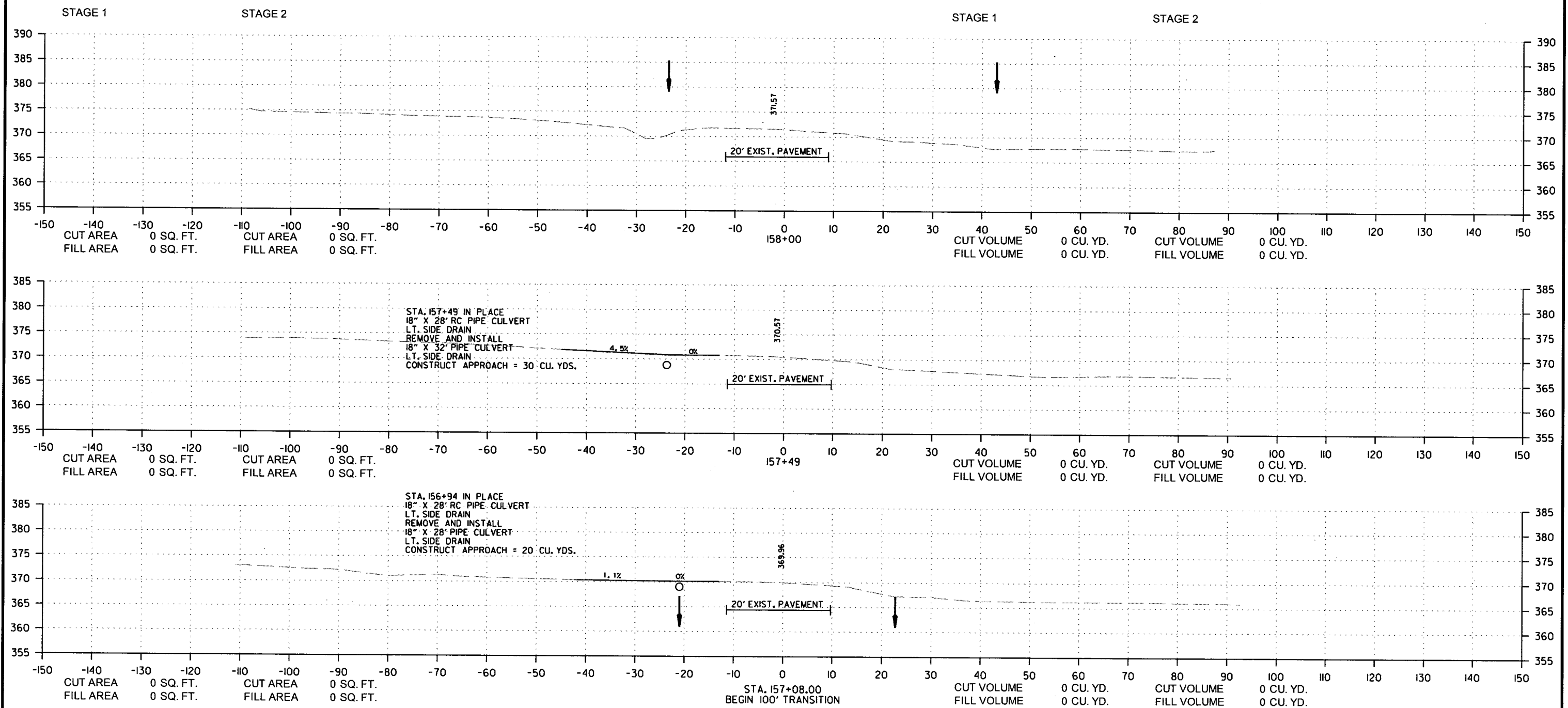
9/6/2018
R080494.DGN



SITE 1
CROSS SECTION STA. 146+64 TO STA. 146+64

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.		080494	128	208

2 CROSS SECTIONS



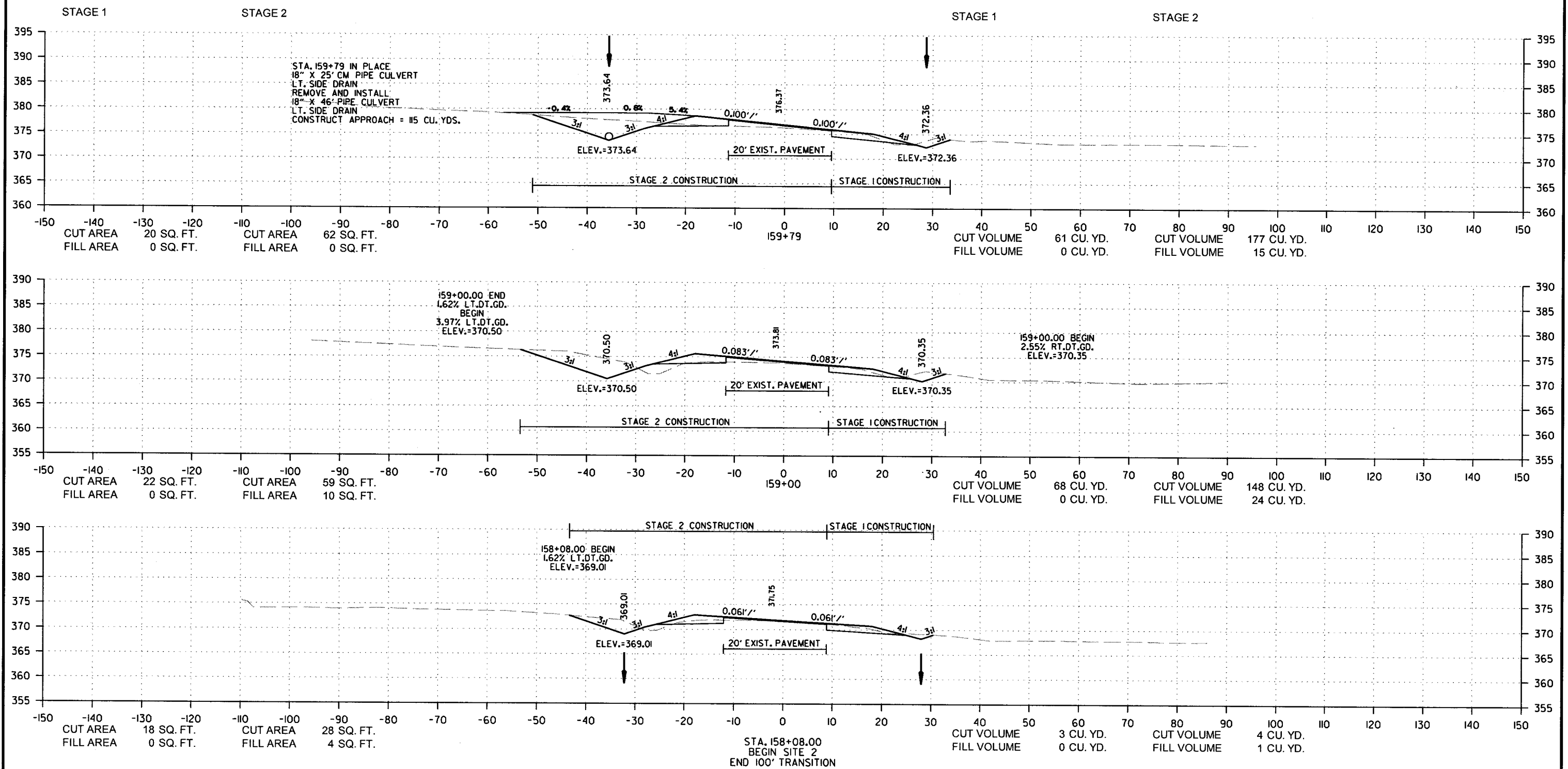
SITE 2
CROSS SECTION STA. 157+08 TO STA. 158+00

9/6/2018

R080494.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. 080494	129	208

2 CROSS SECTIONS

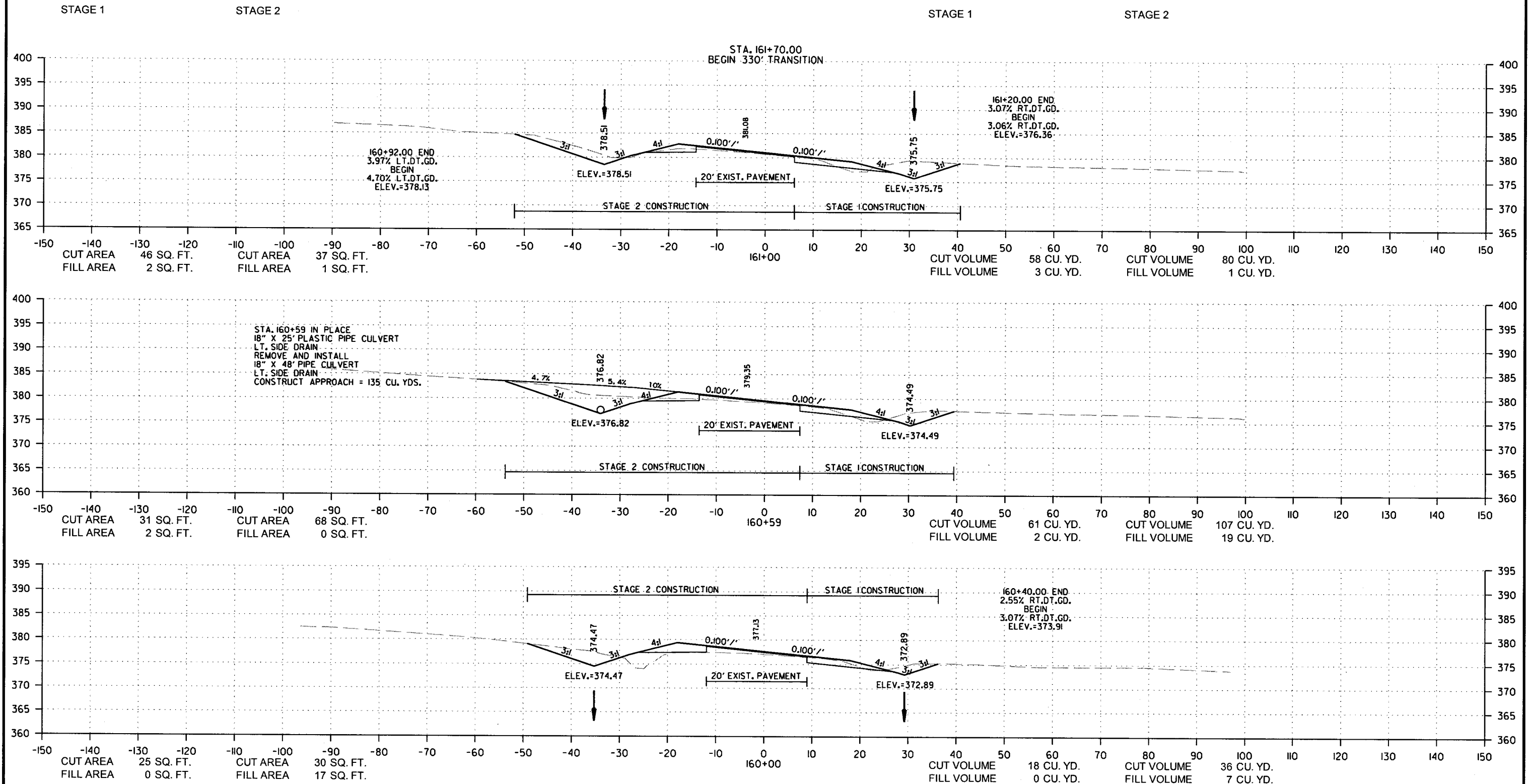


SITE 2
CROSS SECTION STA. 158+08 TO STA. 159+79

9/6/2018
R080494.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.		080494	130	208

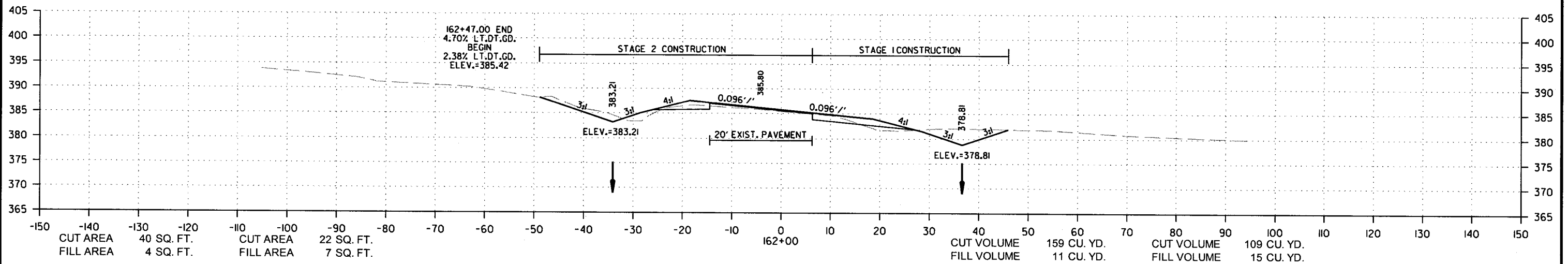
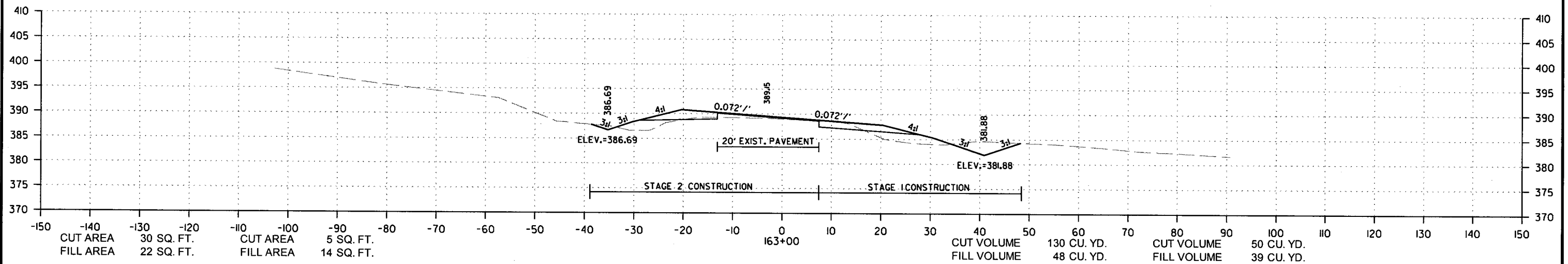
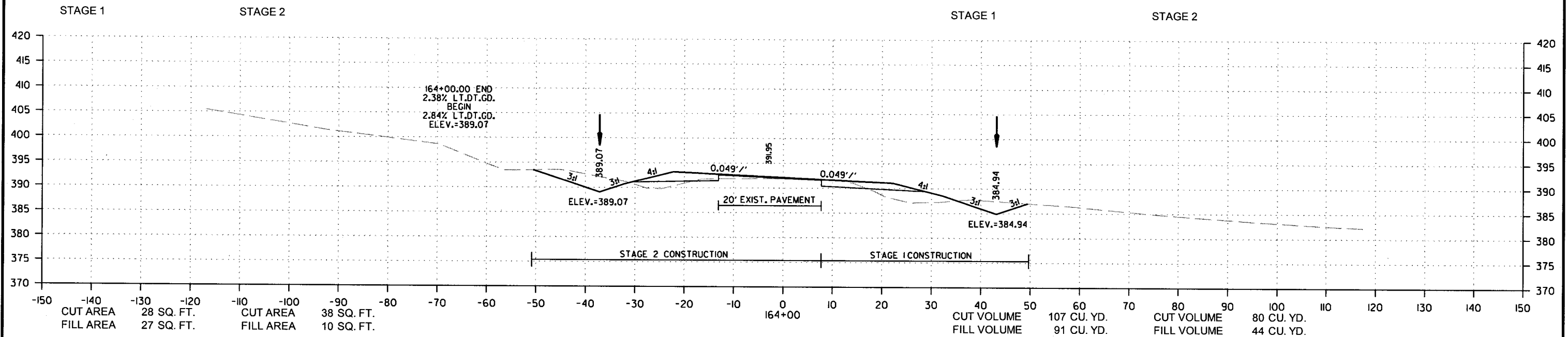
② CROSS SECTIONS



9/6/2018
R080494.DGN

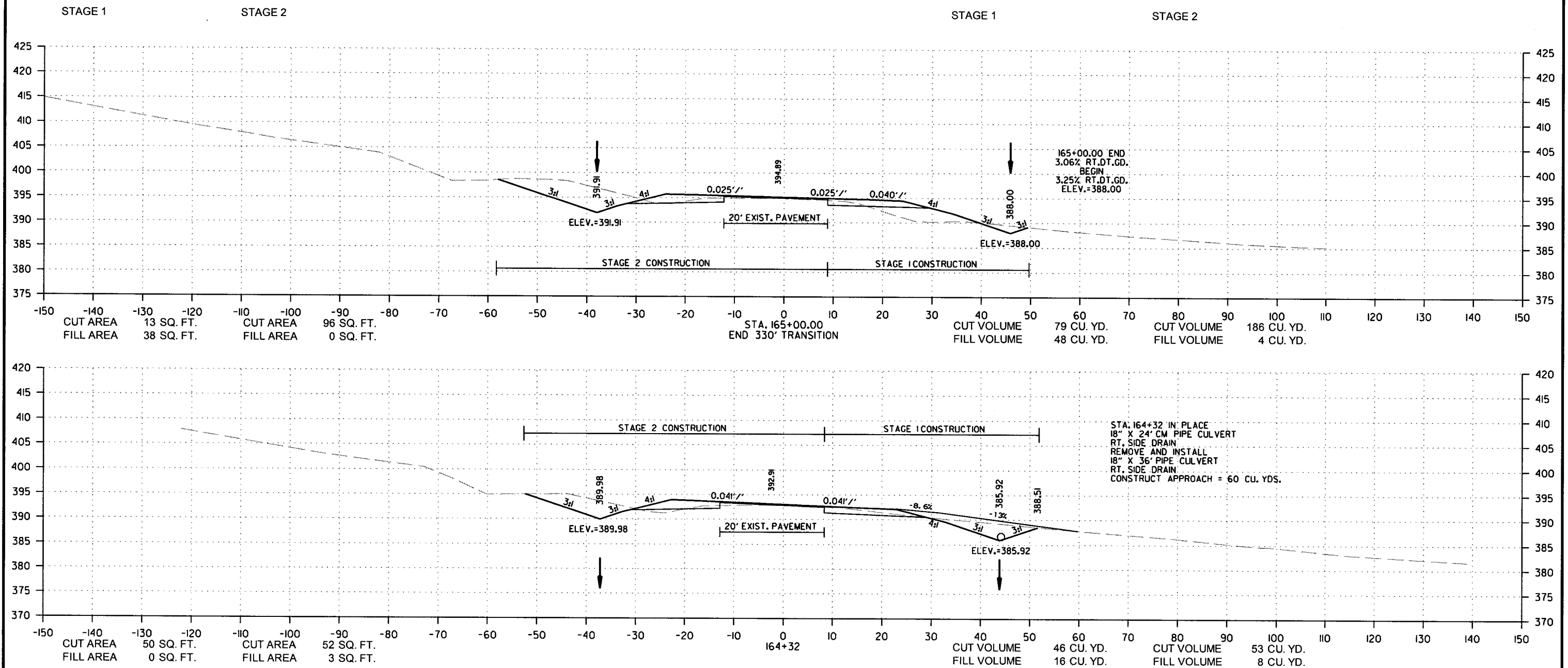
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080494	131	208

2 CROSS SECTIONS



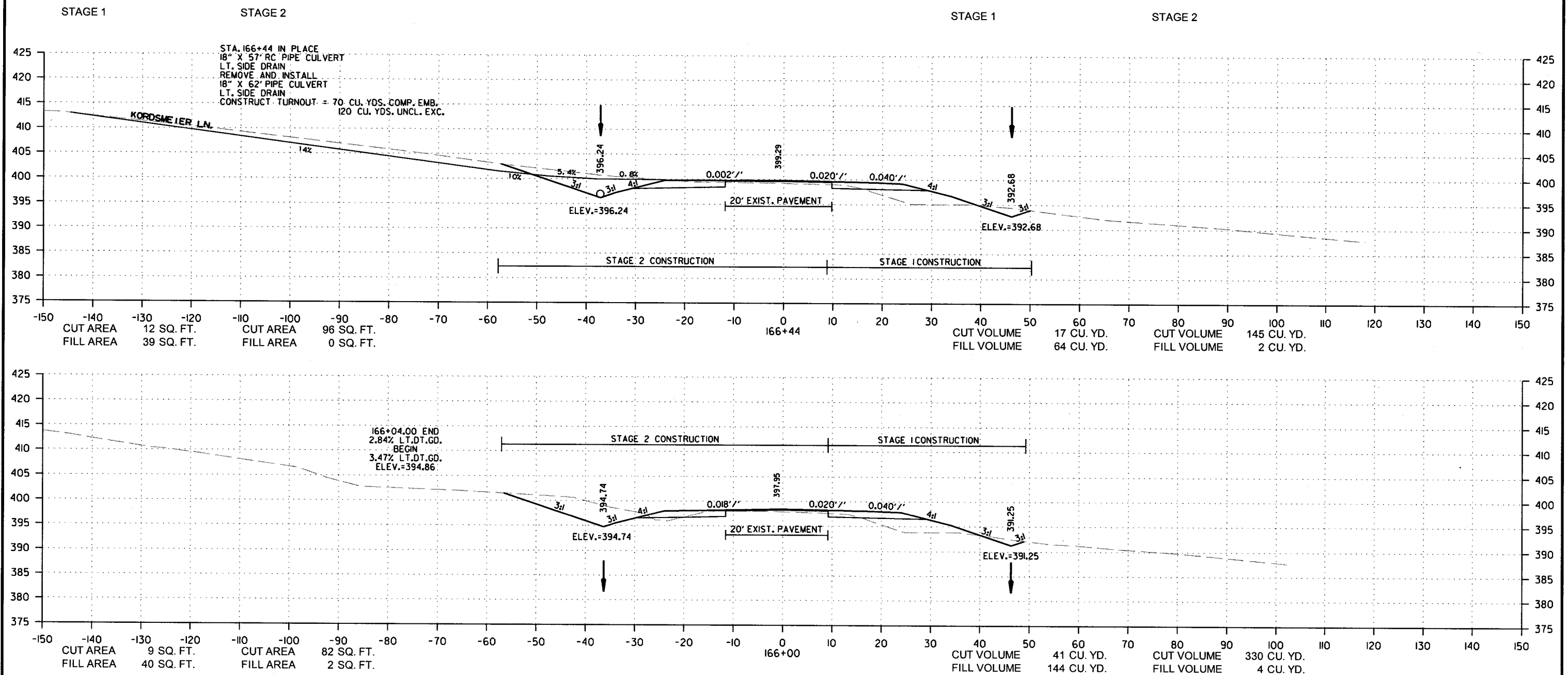
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
						JOB NO. 080494	132	208

② CROSS SECTIONS



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. 080494	133	208

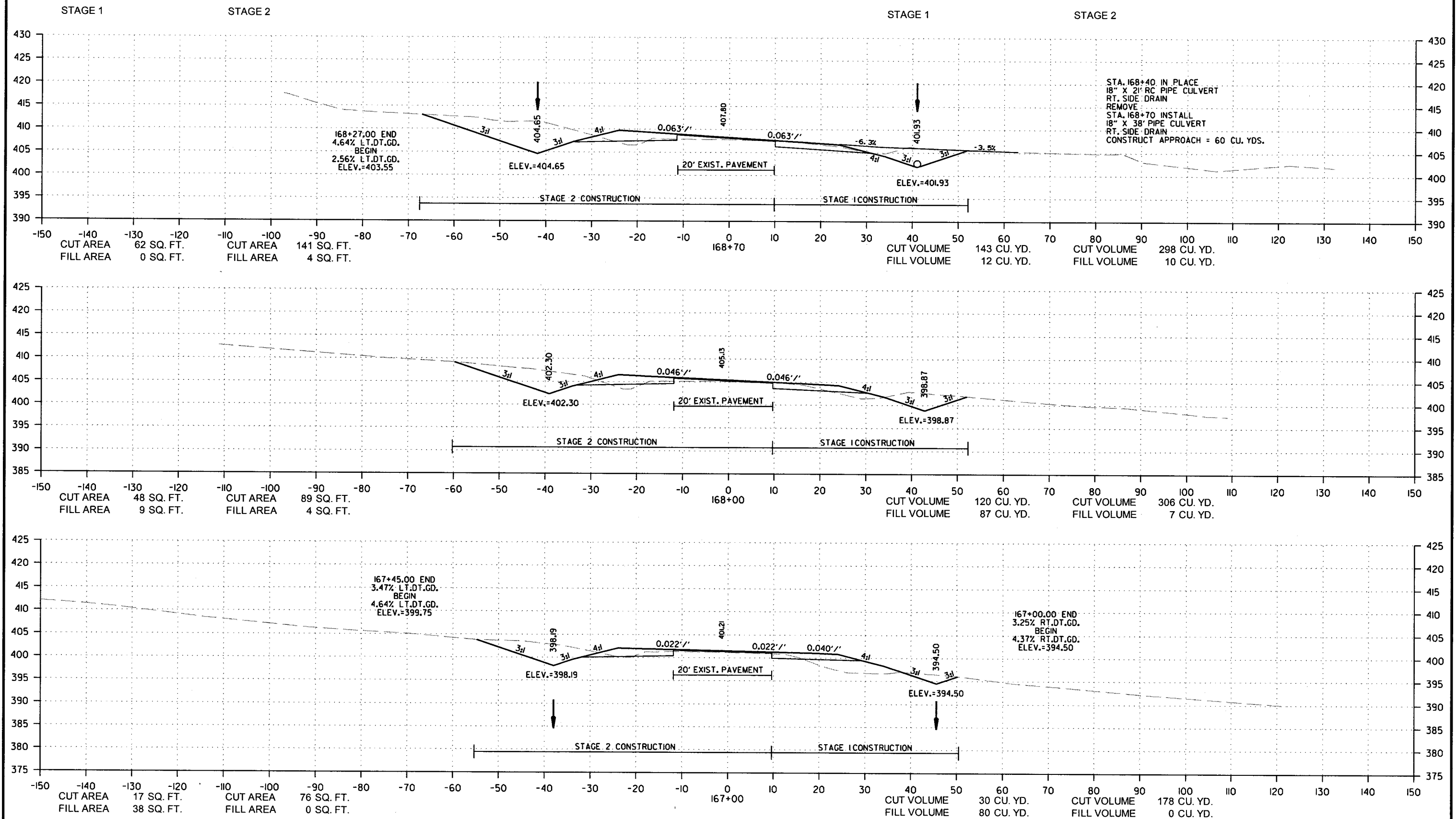
② CROSS SECTIONS



SITE 2
CROSS SECTION STA. 166+00 TO STA. 166+44

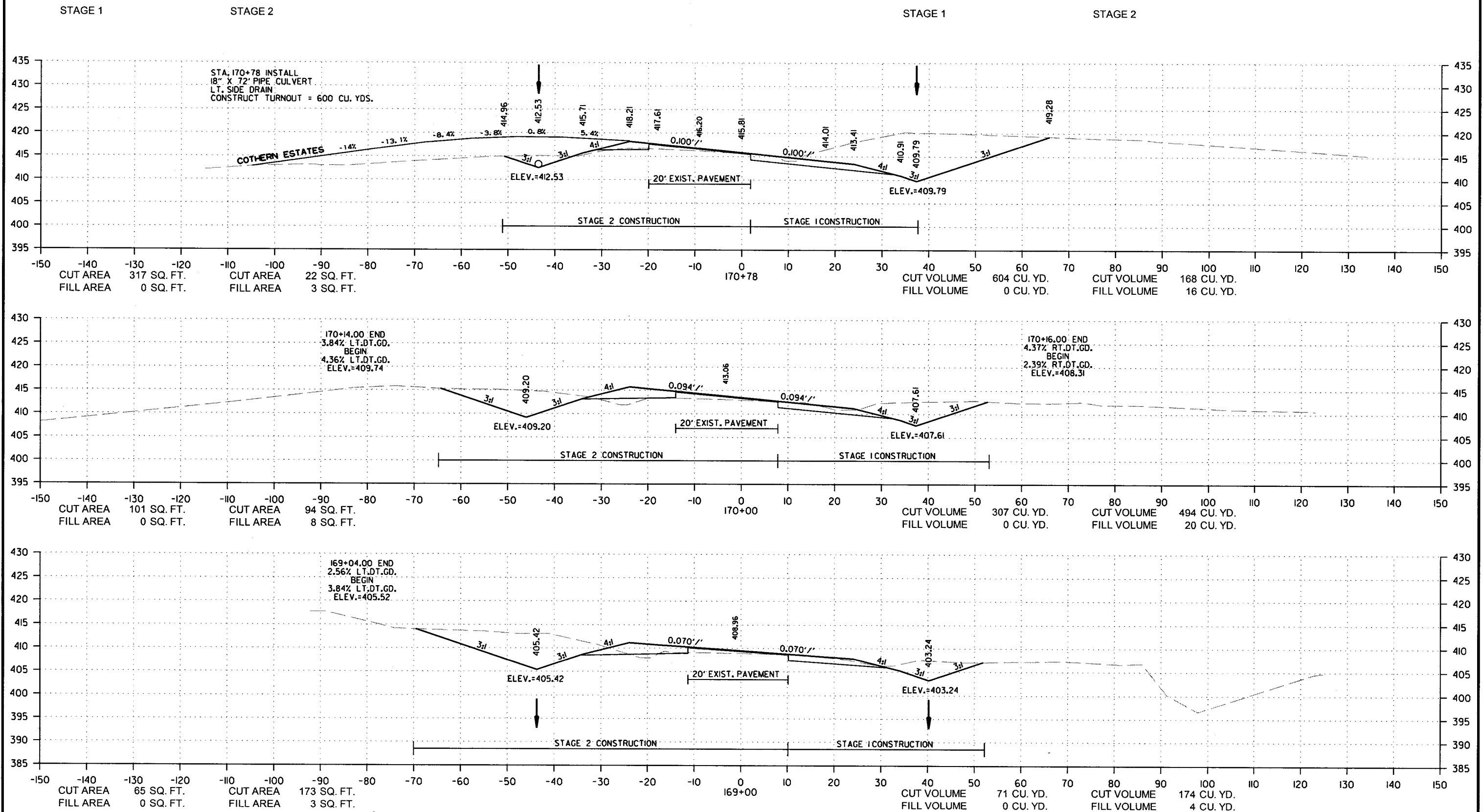
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
						JOB NO. 080494	134	208

2 CROSS SECTIONS



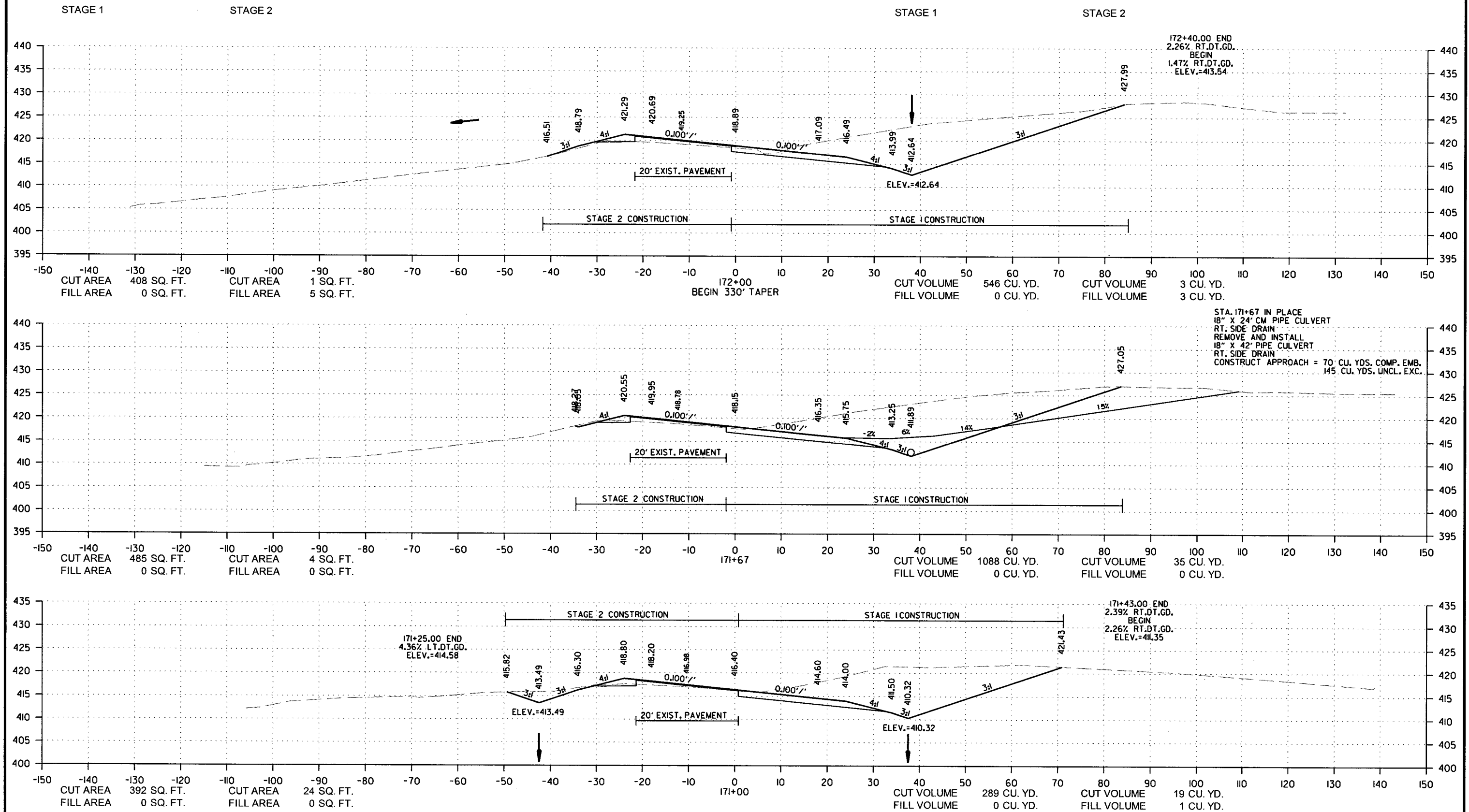
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080494	135	208

② CROSS SECTIONS



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.		080494	136	208

② CROSS SECTIONS

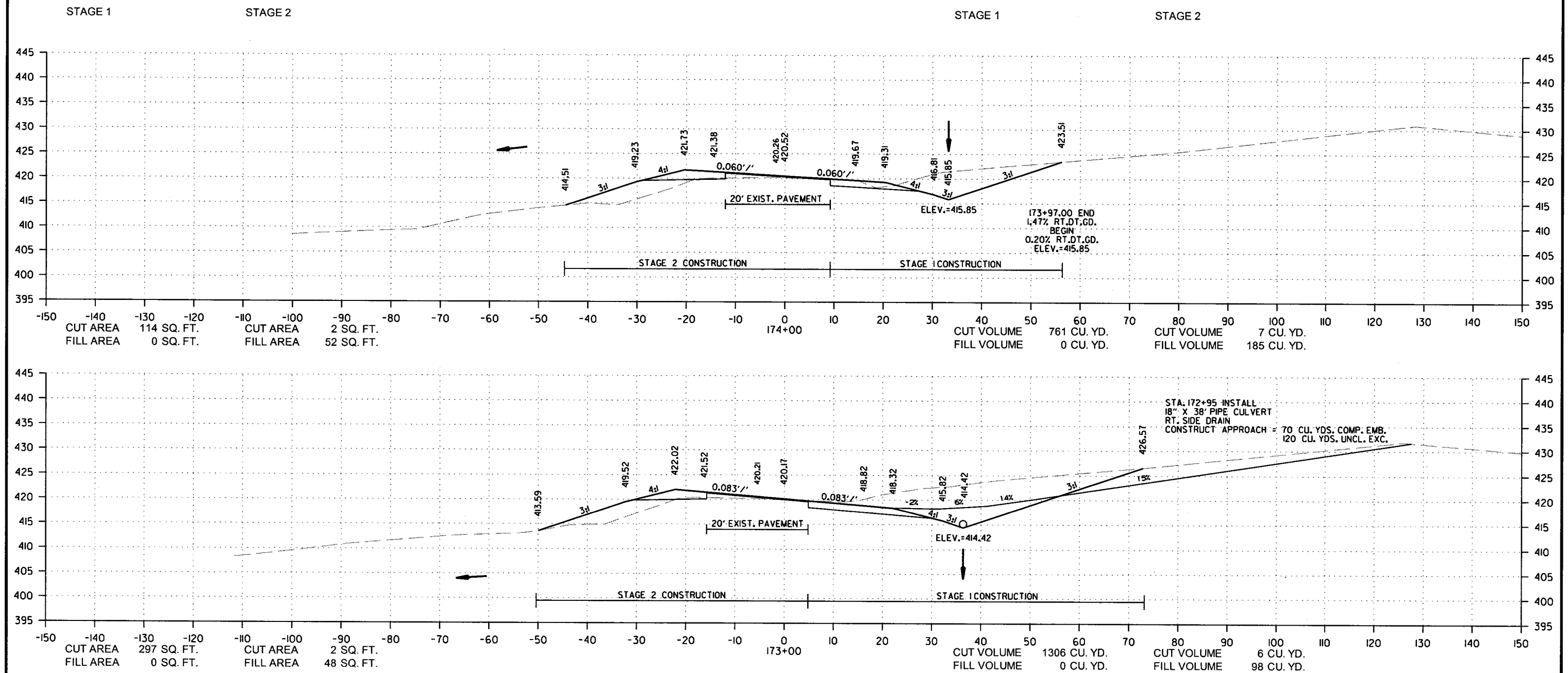


9/6/2018
R080494.DGN

SITE 2
CROSS SECTION STA. 171+00 TO STA. 172+00

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
						JOB NO. 080494	137	208

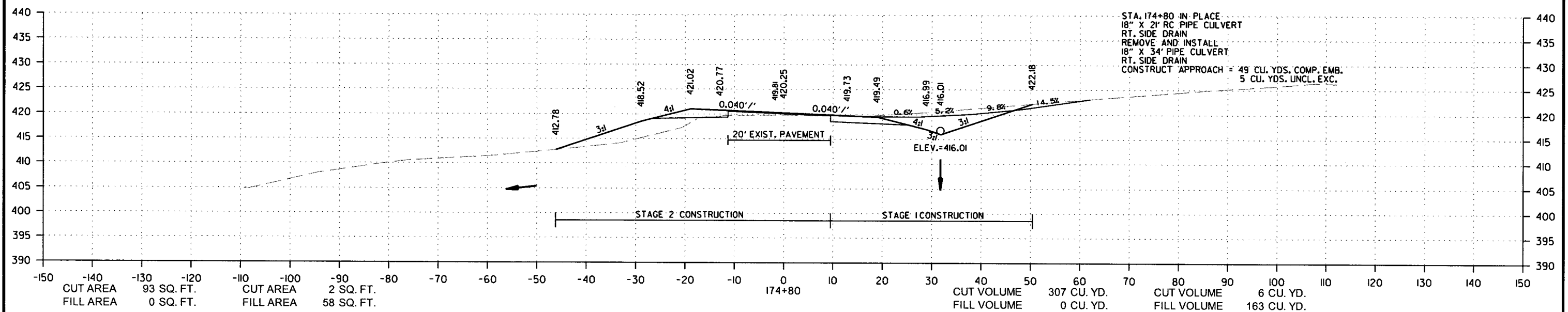
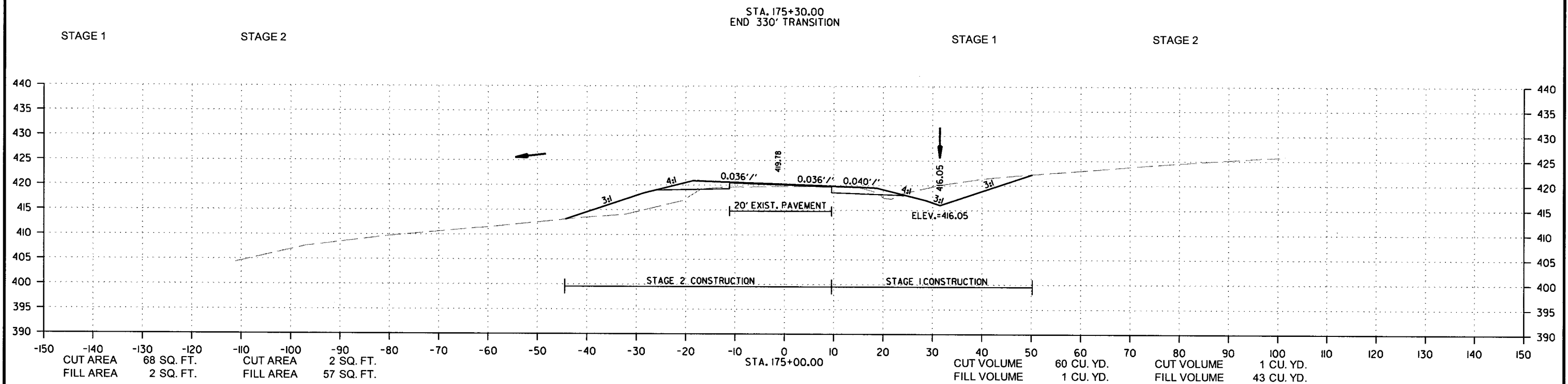
2 CROSS SECTIONS



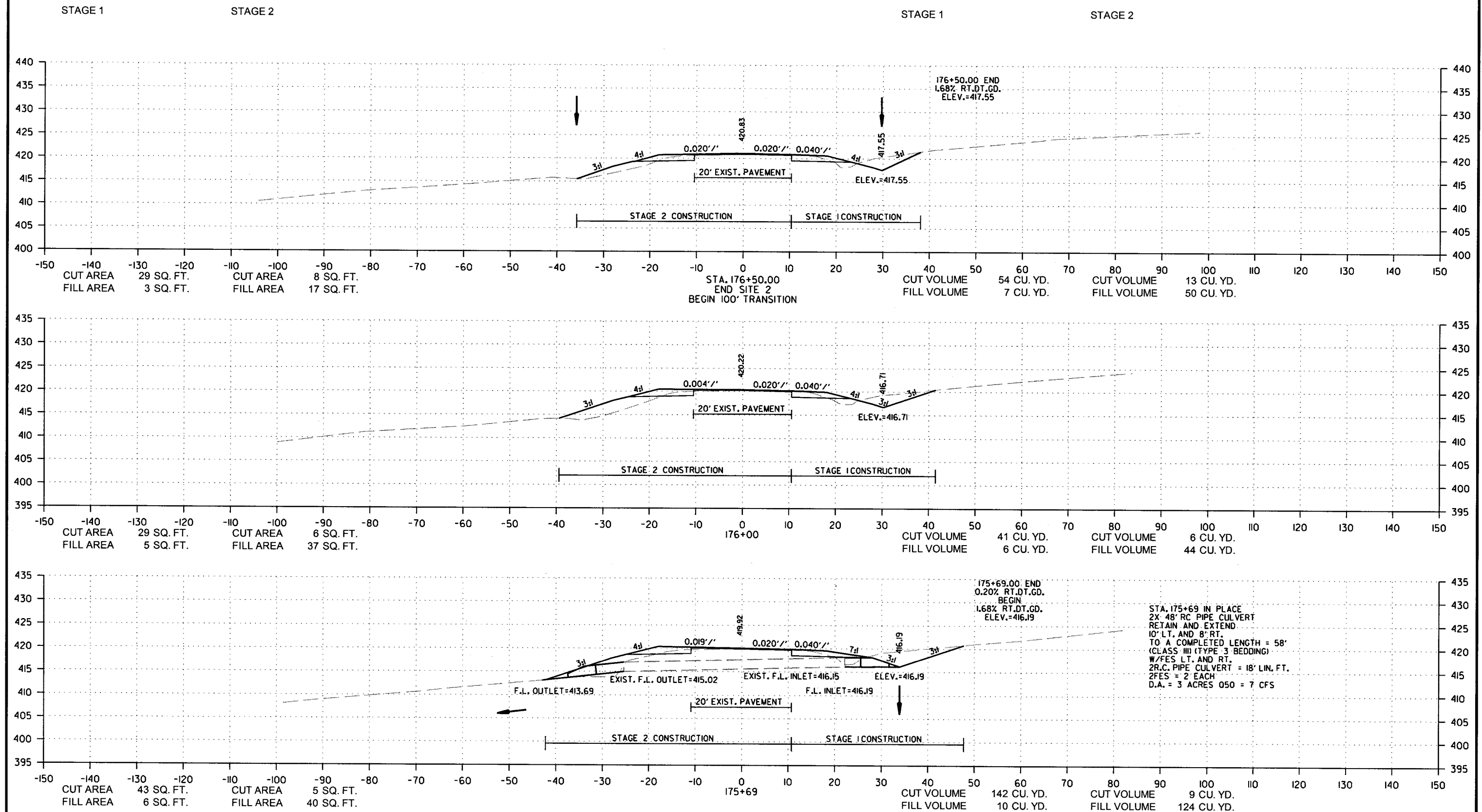
SITE 2
CROSS SECTION STA. 173+00 TO STA. 174+00

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO. 080494			138	208

② CROSS SECTIONS

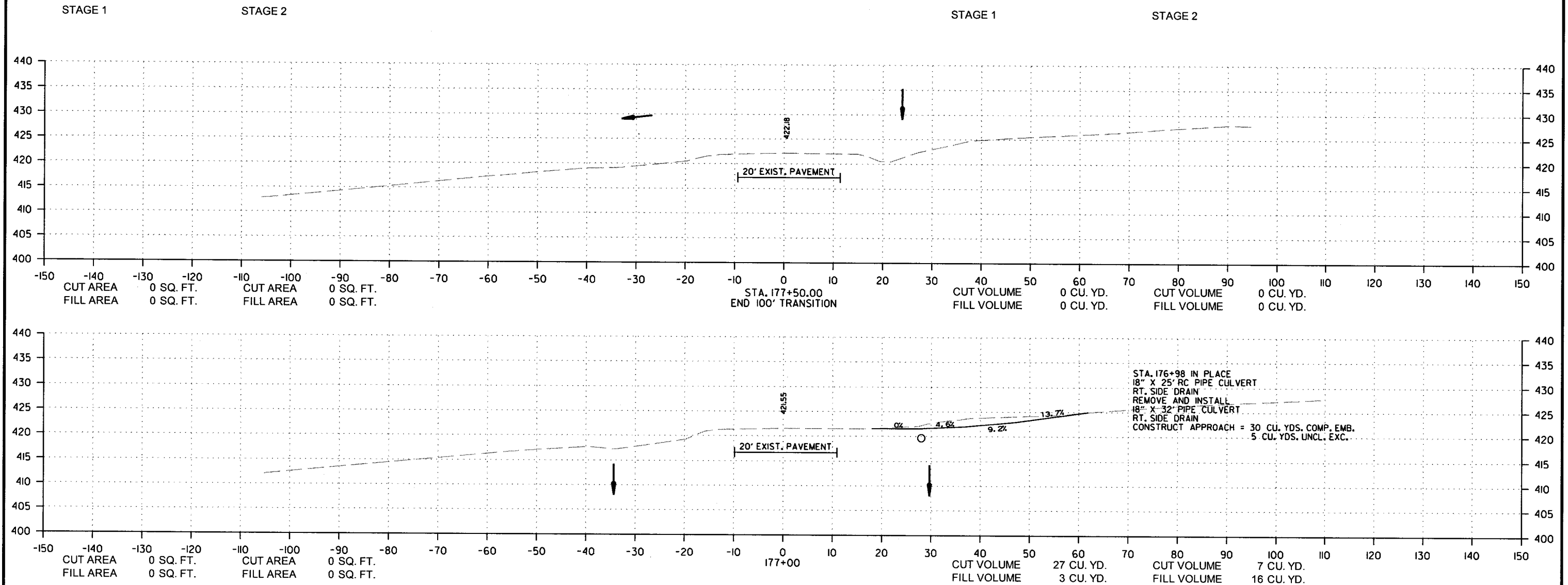


DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080494	139	208
② CROSS SECTIONS								



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. 080494			140	208

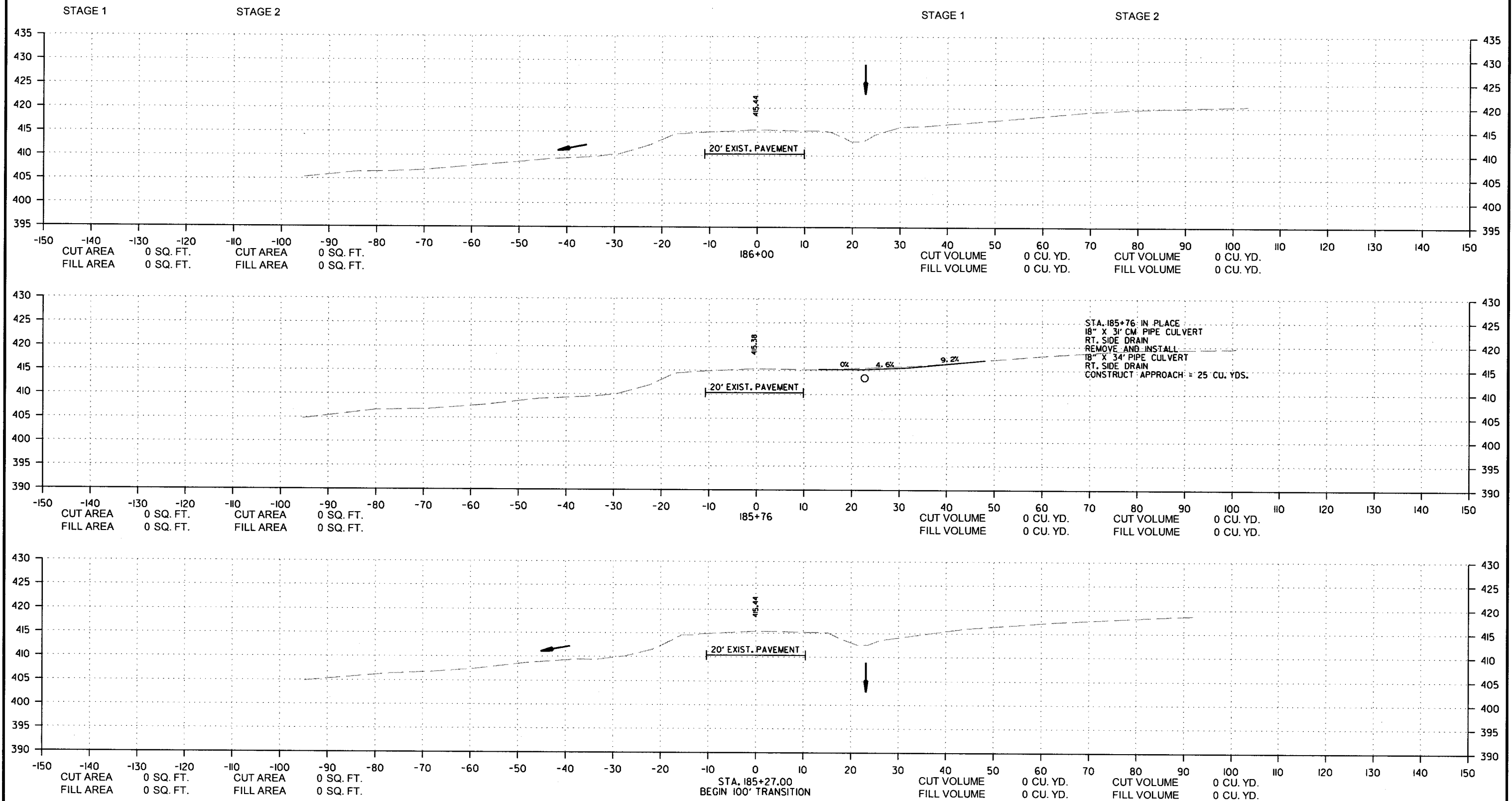
2 CROSS SECTIONS



9/6/2018
R080494.DGN

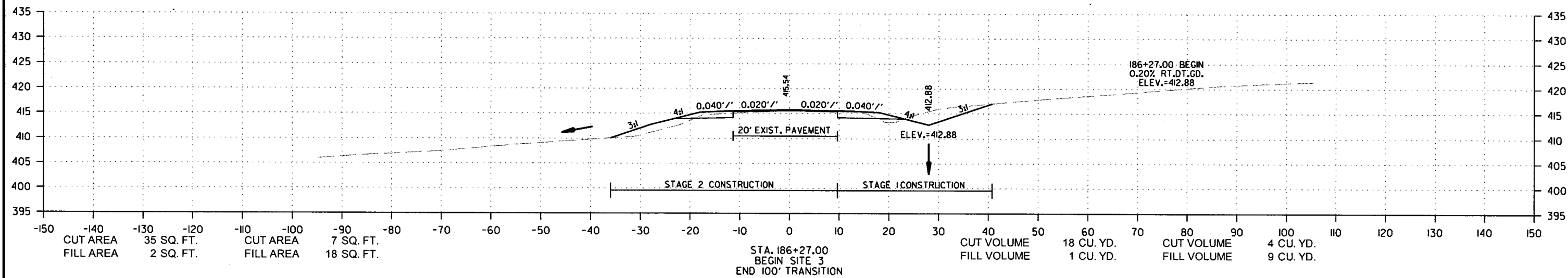
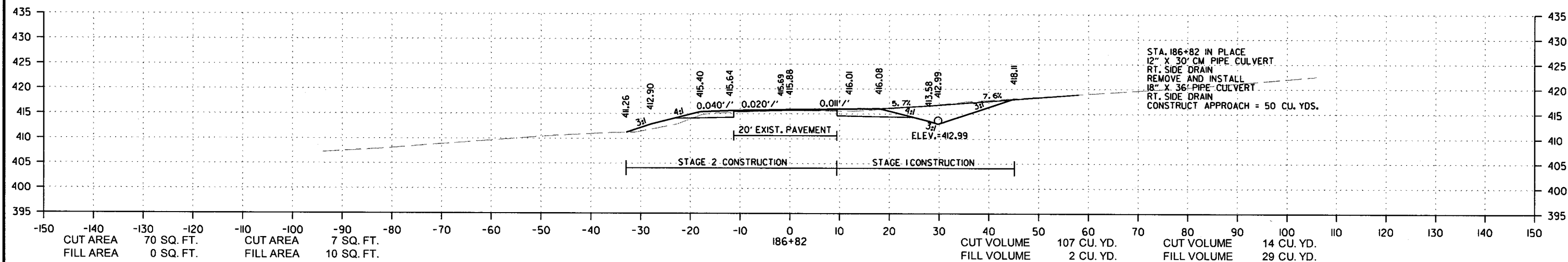
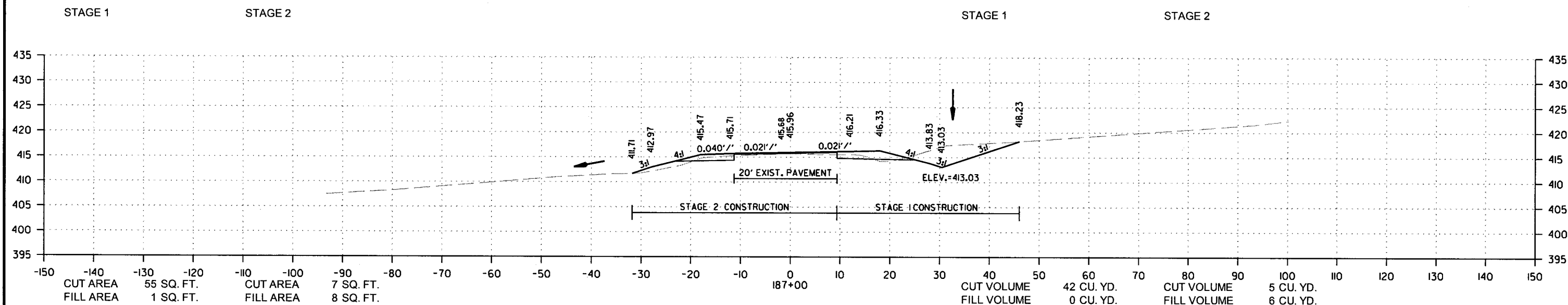
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080494	141	208

2 CROSS SECTIONS



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. 080494	142	208

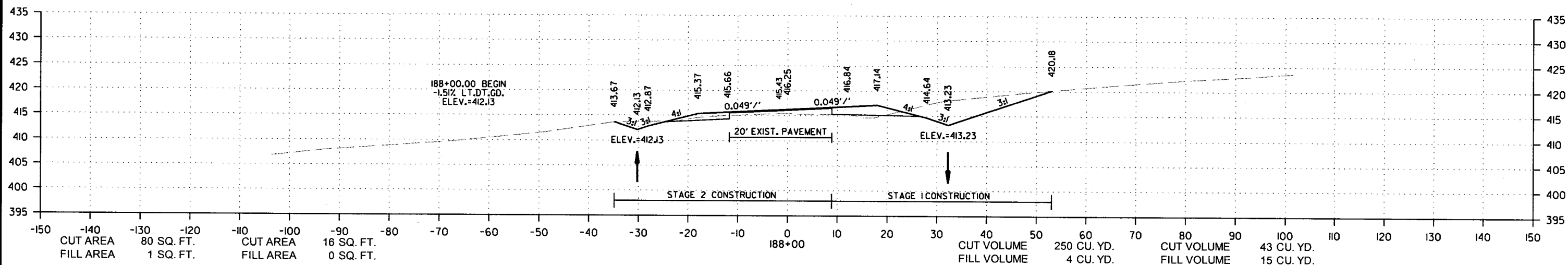
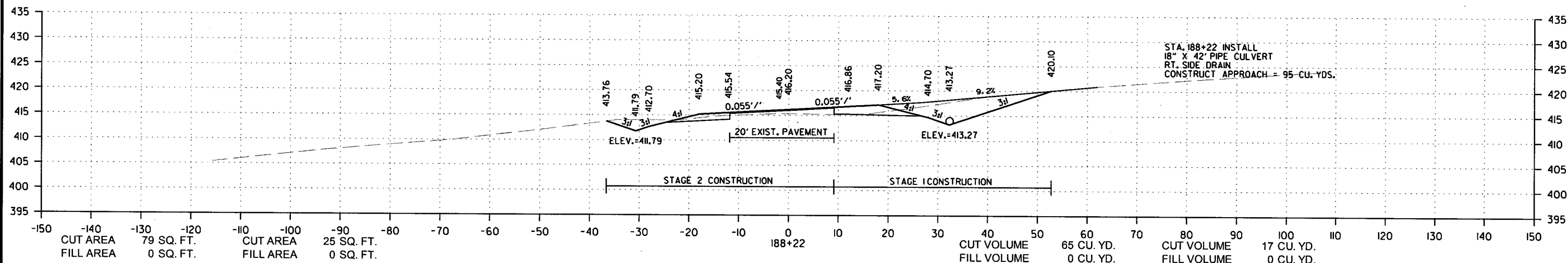
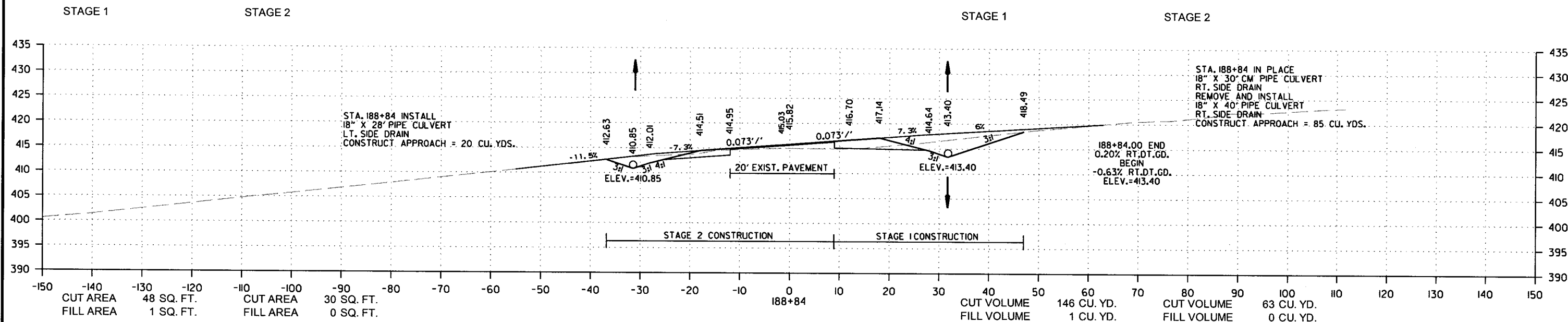
② CROSS SECTIONS



SITE 3
CROSS SECTION STA. 186+27 TO STA. 187+00

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO. 080494			143	208

② CROSS SECTIONS

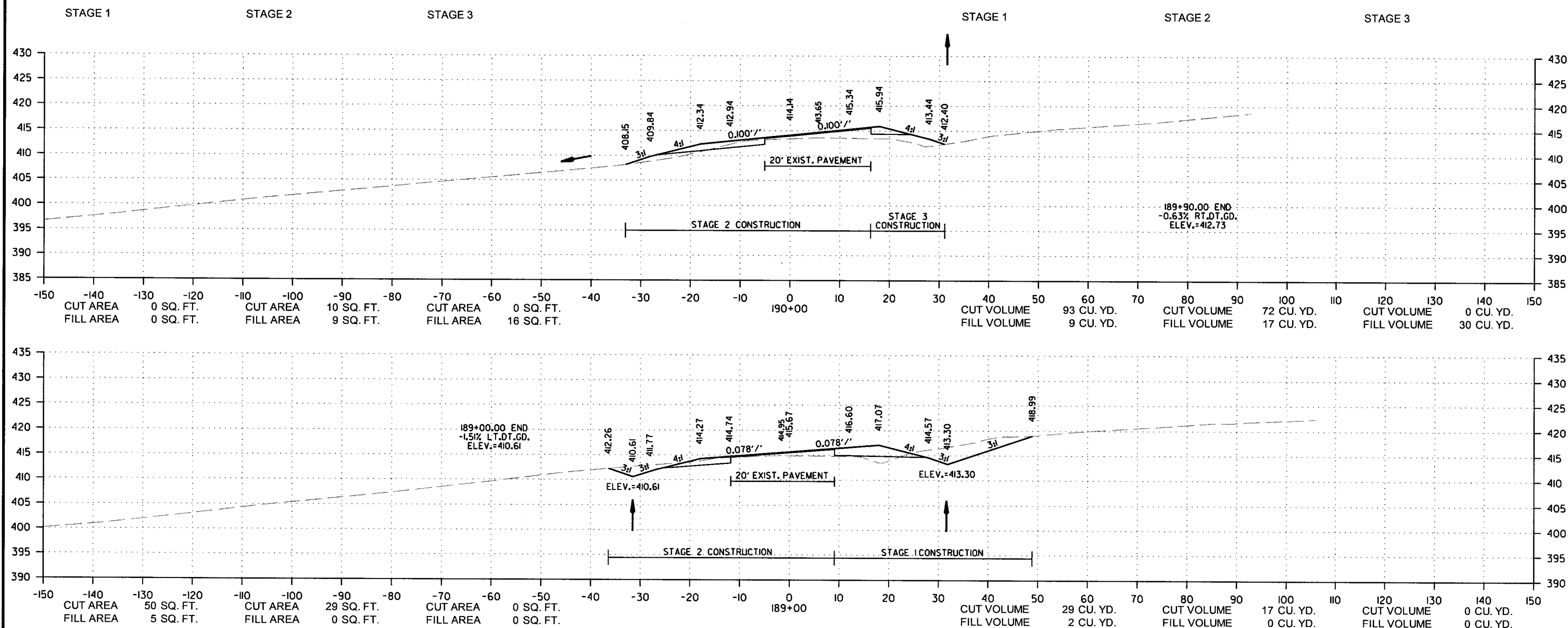


9/6/2018

R080494.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.	080494		144	208

2 CROSS SECTIONS

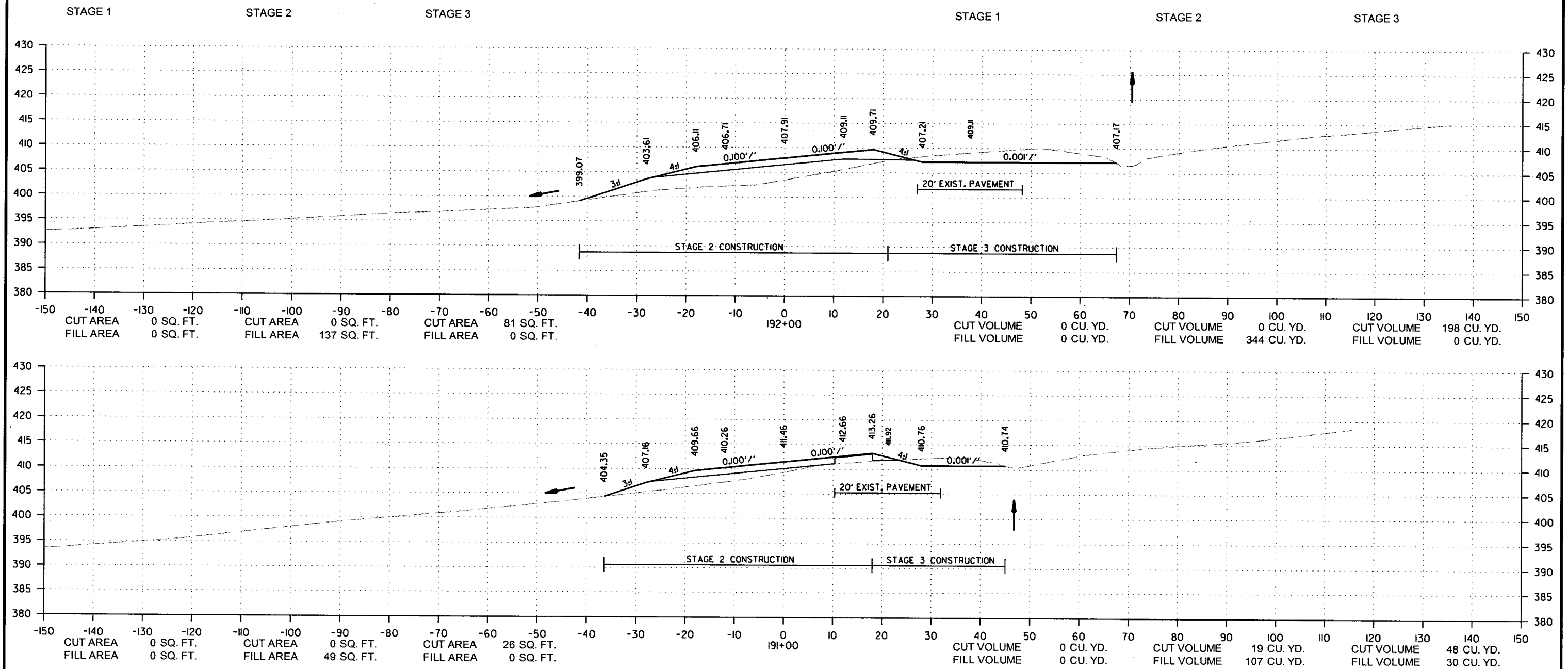


SITE 3
CROSS SECTION STA. 189+00 TO STA. 190+00

9/6/2018
R080494.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.	080494		145	208

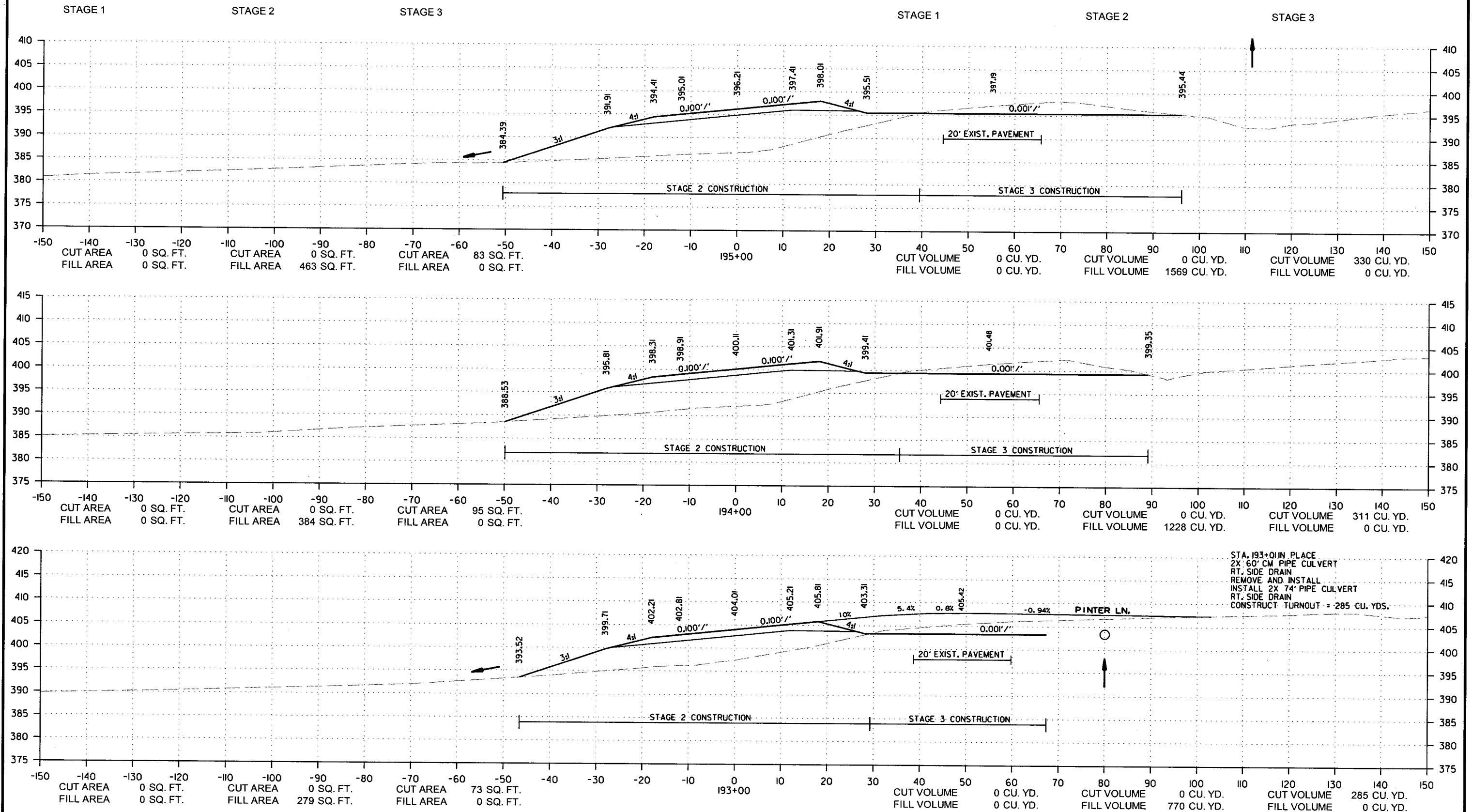
② CROSS SECTIONS



SITE 3
CROSS SECTION STA. 191+00 TO STA. 192+00

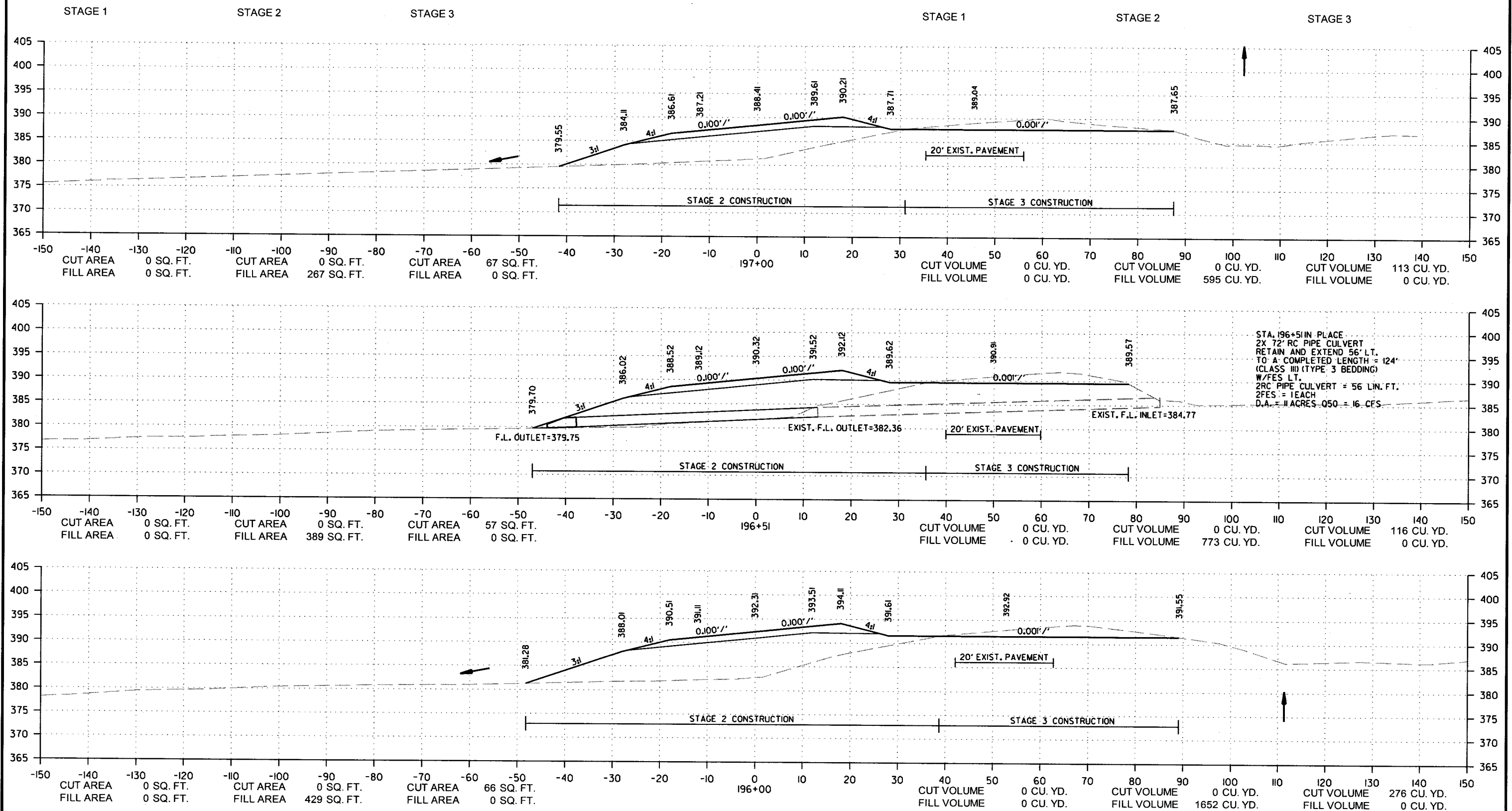
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	080494		146	208

② CROSS SECTIONS



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.	080494		147	208

2 CROSS SECTIONS



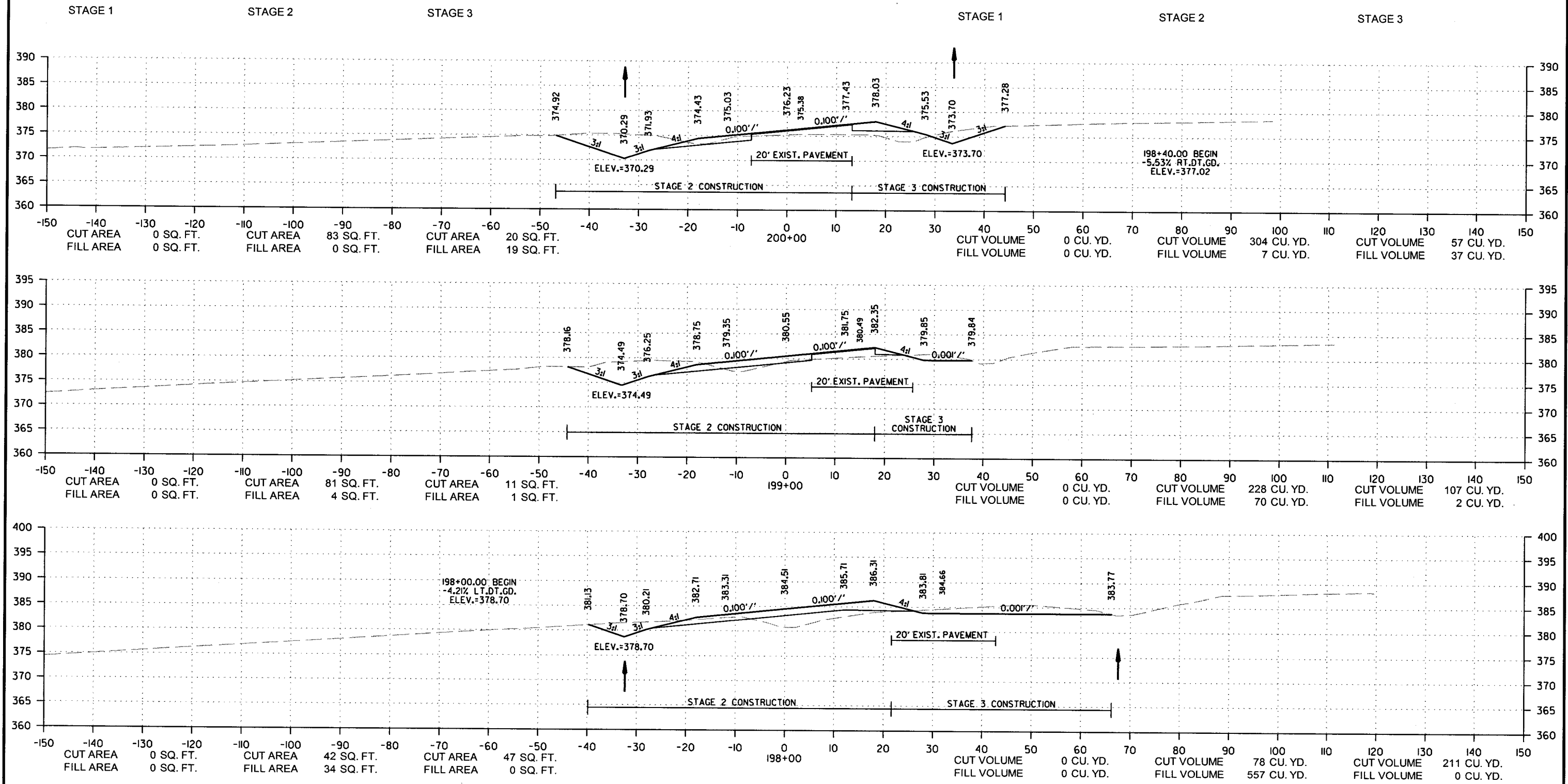
STA. 196+51 IN PLACE
2X 72" RC PIPE CULVERT
RETAIN AND EXTEND 56' LT.
TO A COMPLETED LENGTH = 124'
(CLASS III) (TYPE 3 BEDDING)
W/FES LT.
2RC PIPE CULVERT = 56 LIN. FT.
2FES = 1 EACH
D.A. = 11 ACRES Q50 = 16 CFS

9/6/2018

R080494.DGN

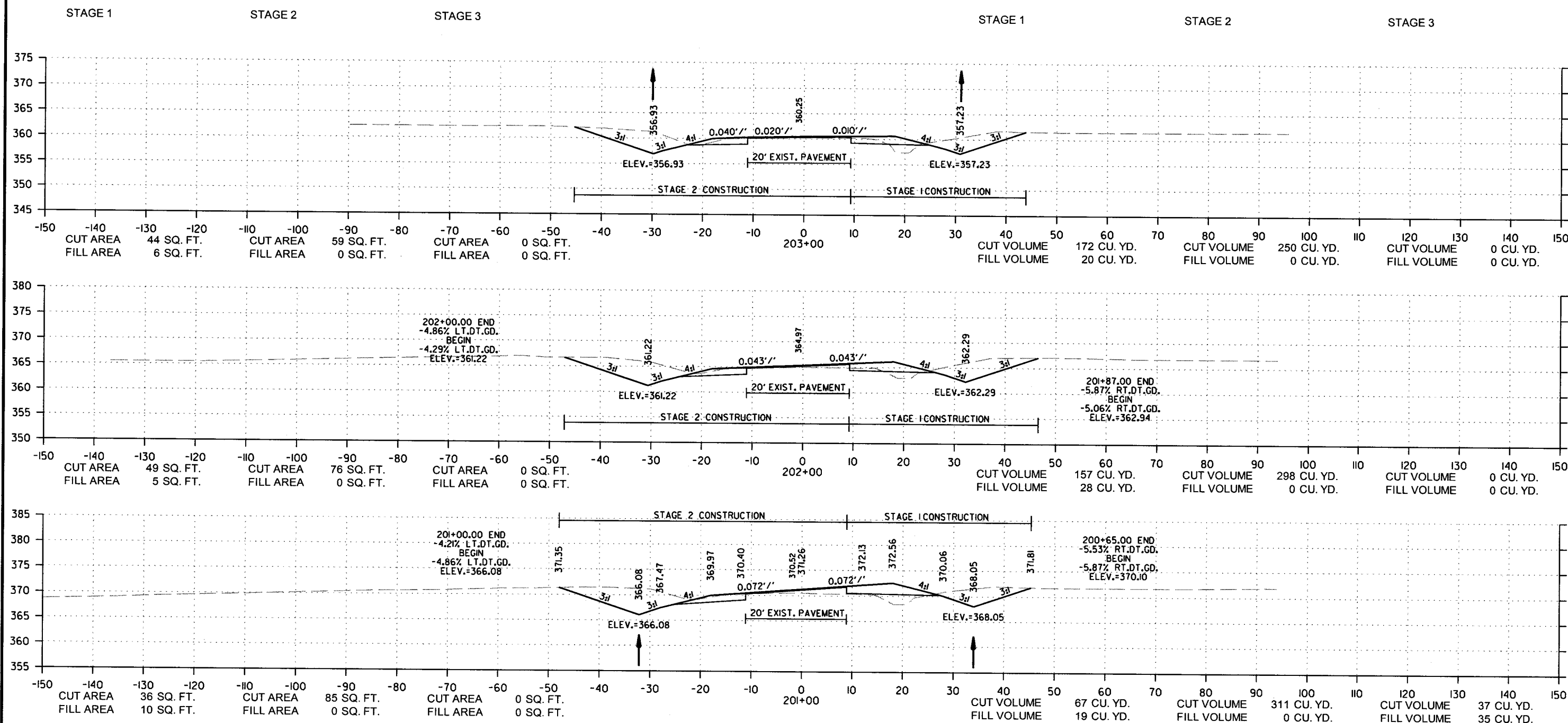
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	080494		148	208

② CROSS SECTIONS



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. 080494			149	208

② CROSS SECTIONS



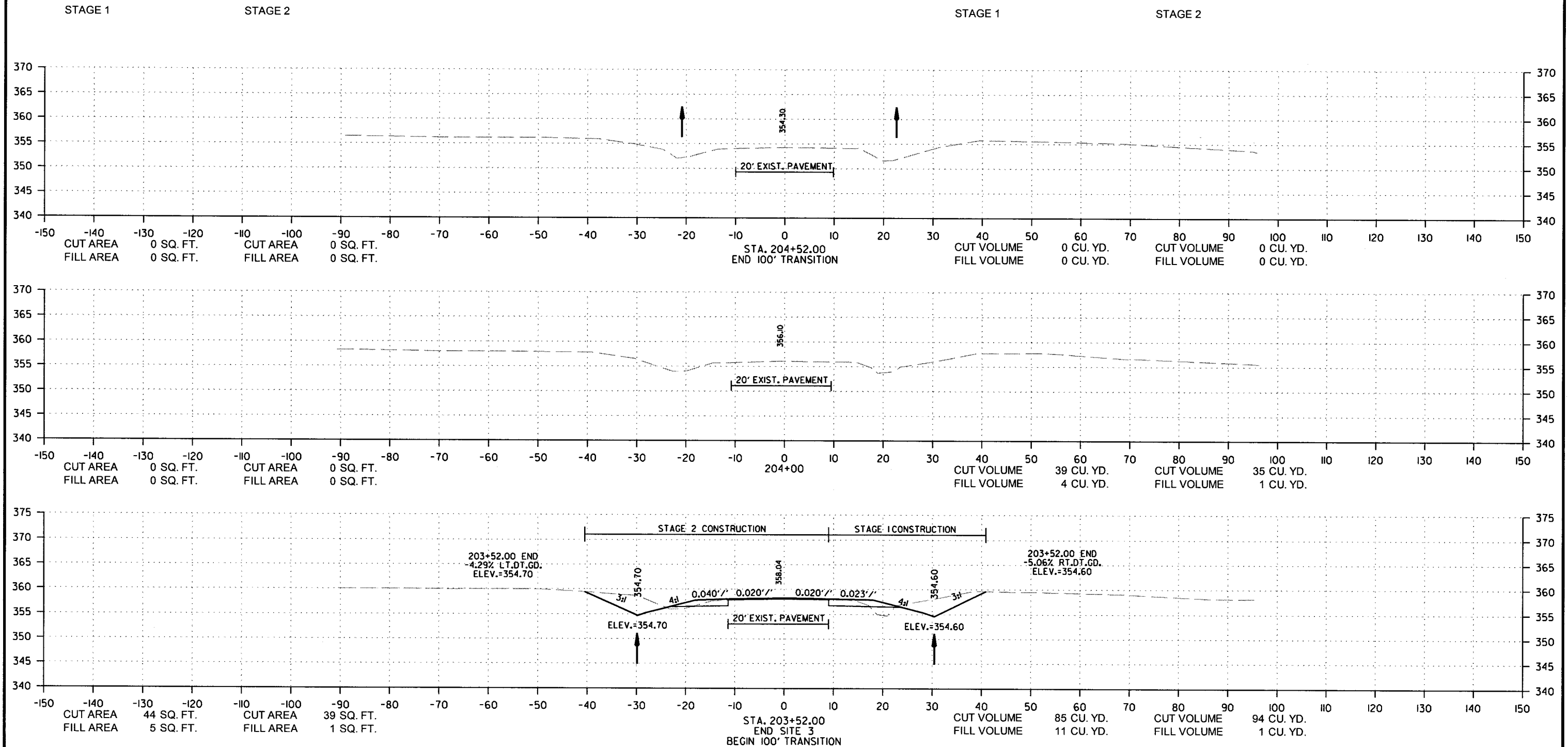
SITE 3
CROSS SECTION STA. 201+00 TO STA. 203+00

9/6/2018

R080494.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.						080494	150	208

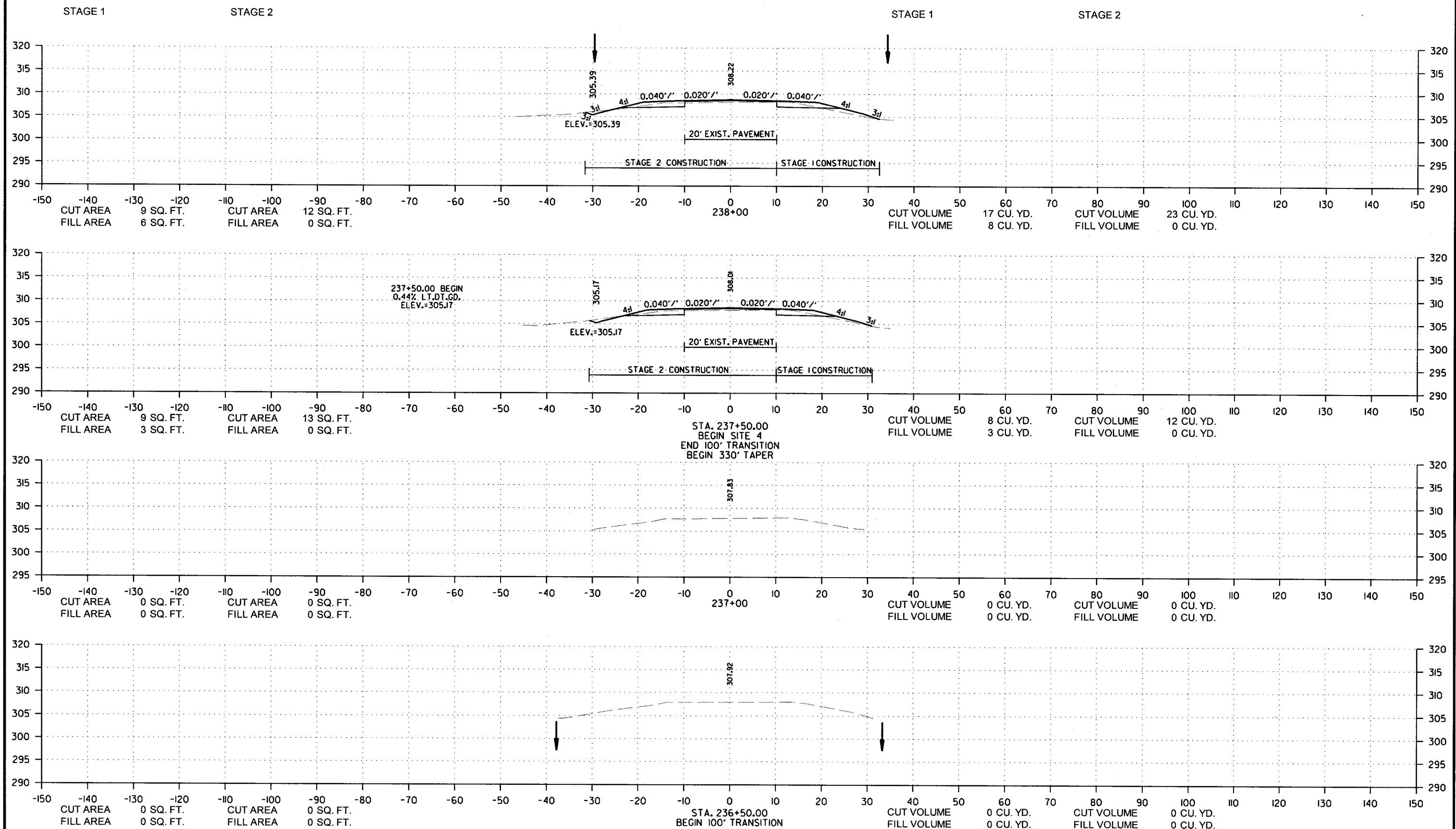
2 CROSS SECTIONS



SITE 3
CROSS SECTION STA. 203+52 TO STA. 204+52

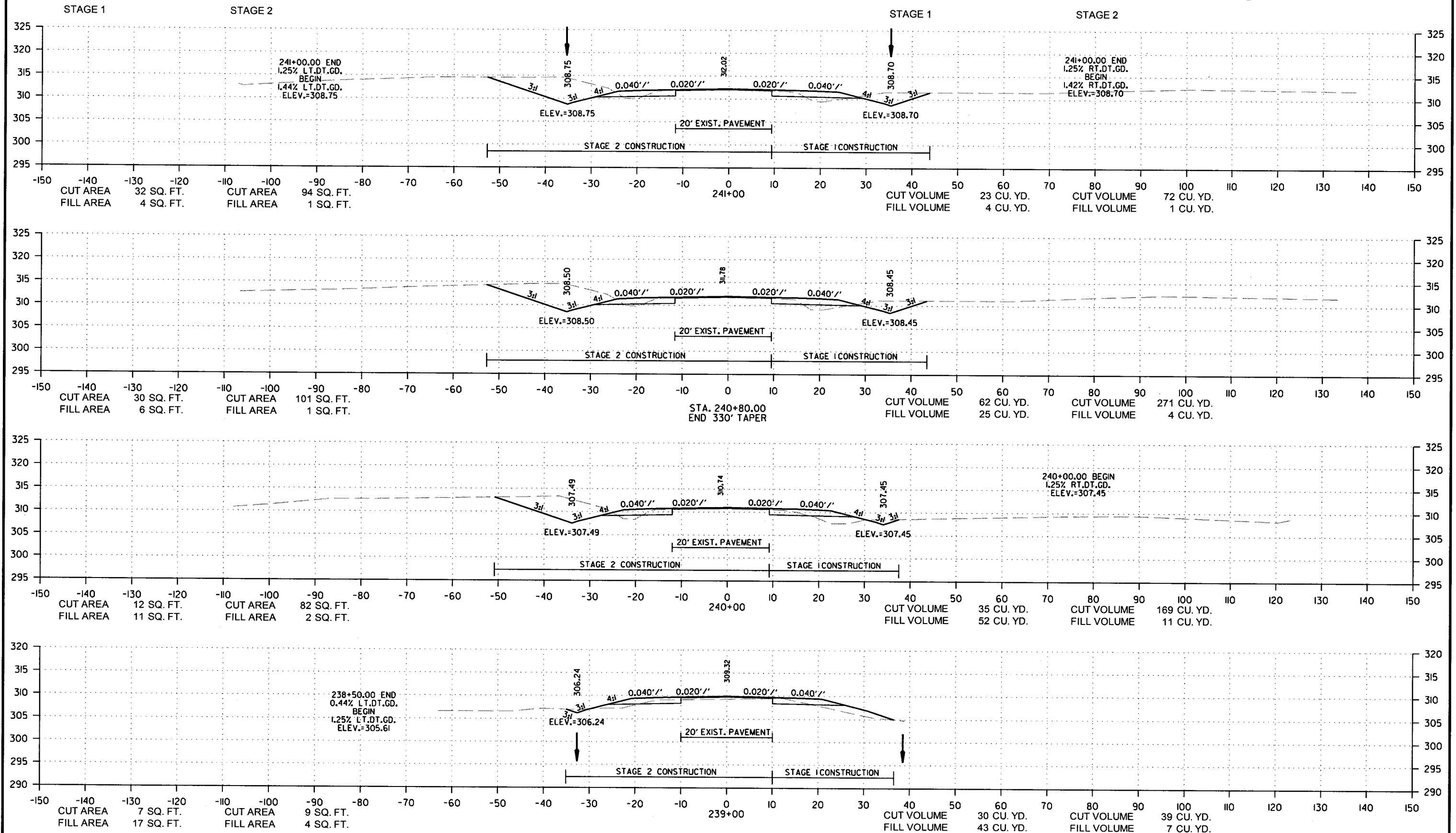
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080494	151	208

2 CROSS SECTIONS



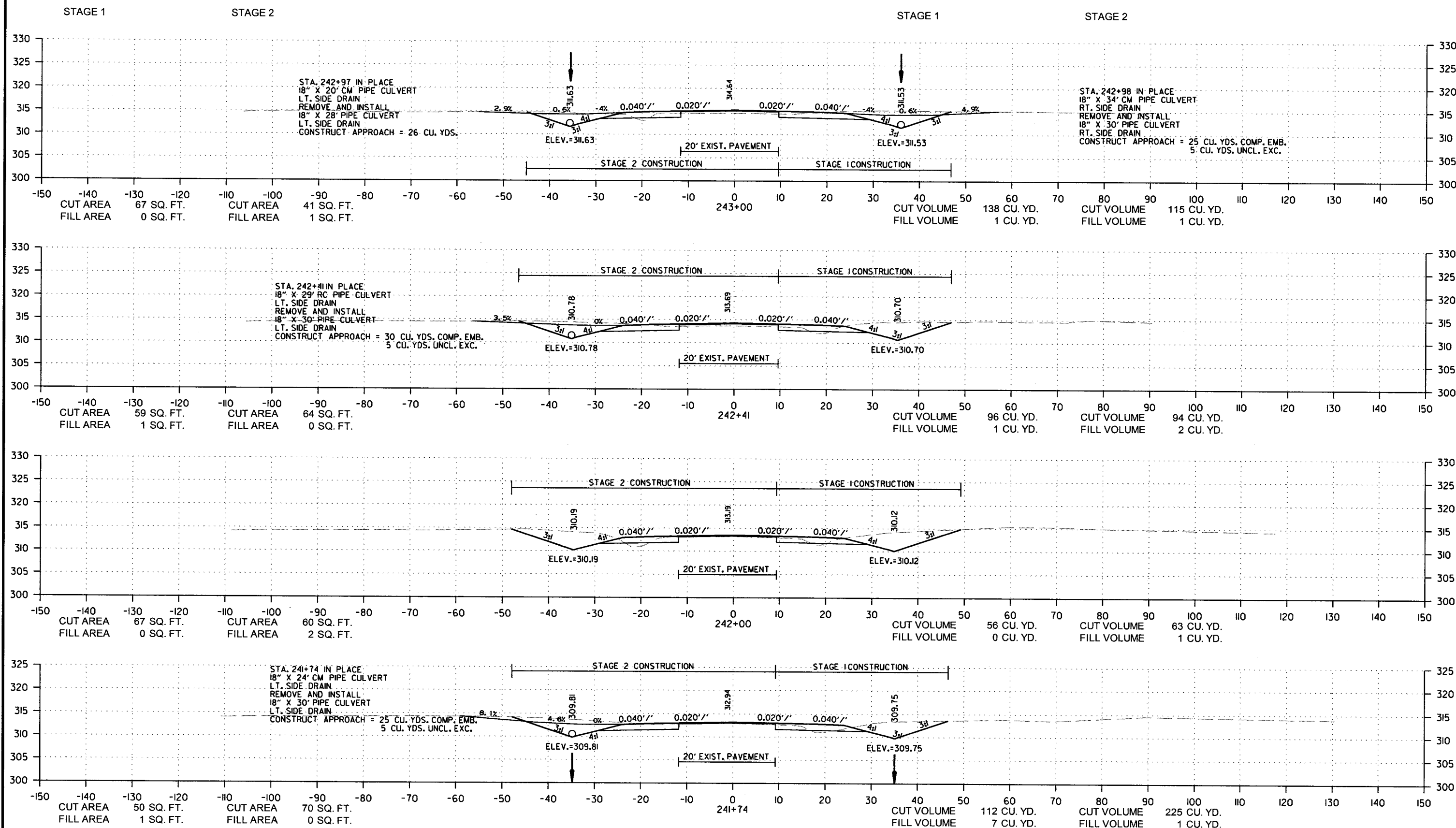
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	080494		152	208

② CROSS SECTIONS



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.		080494	153	208

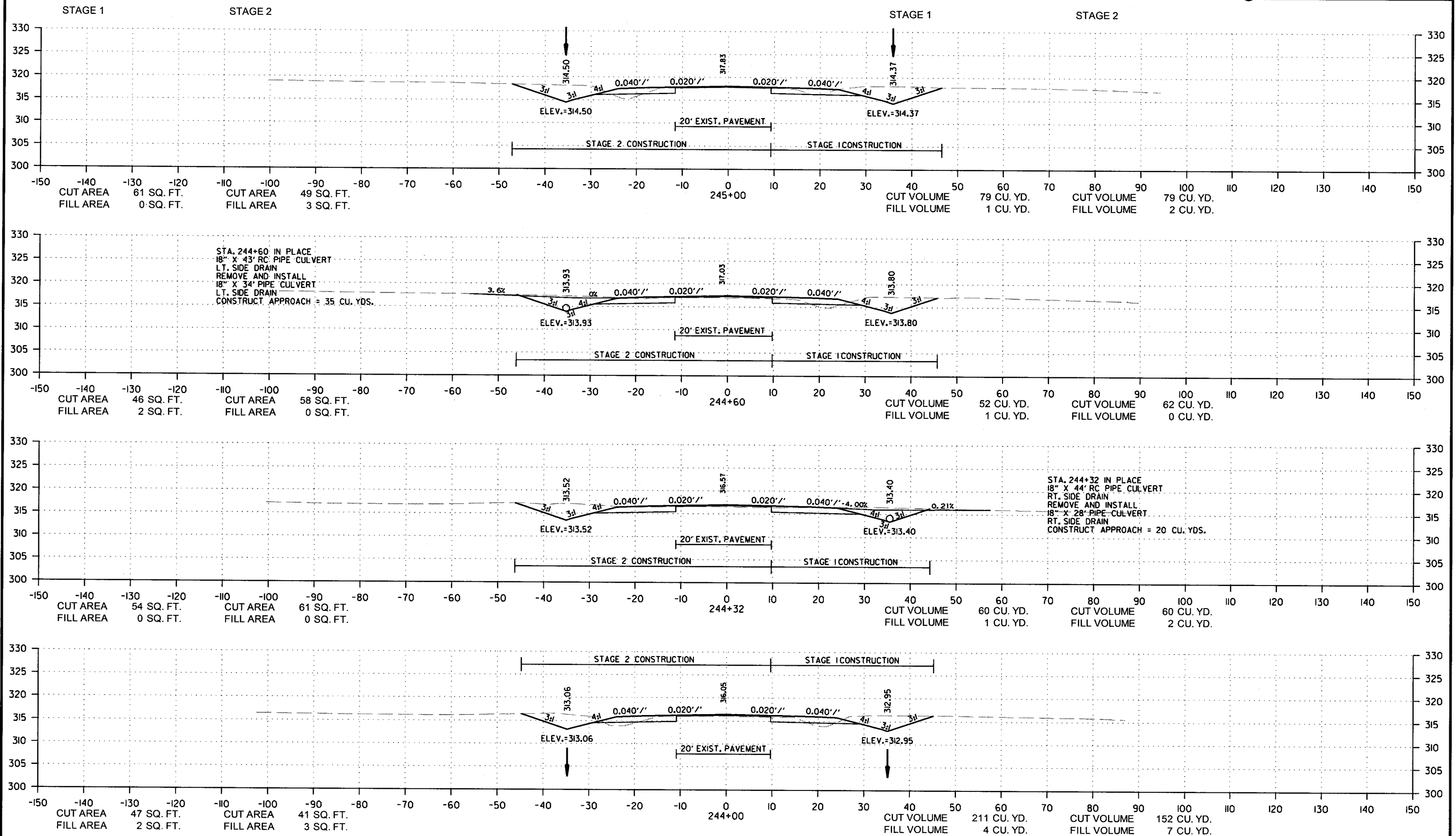
2 CROSS SECTIONS



SITE 4
CROSS SECTION STA. 241+74 TO STA. 243+00

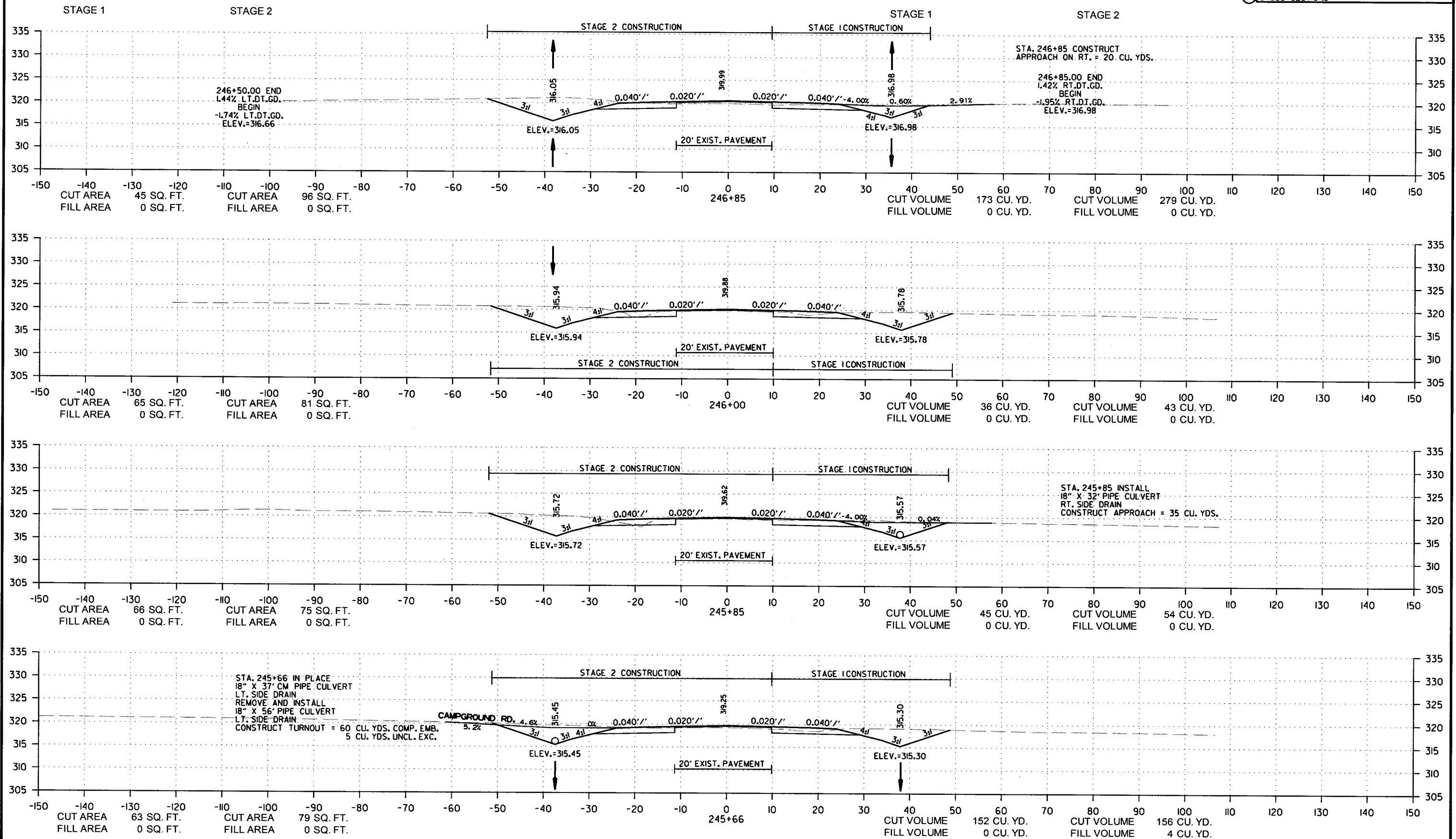
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	080494		154	208

2 CROSS SECTIONS



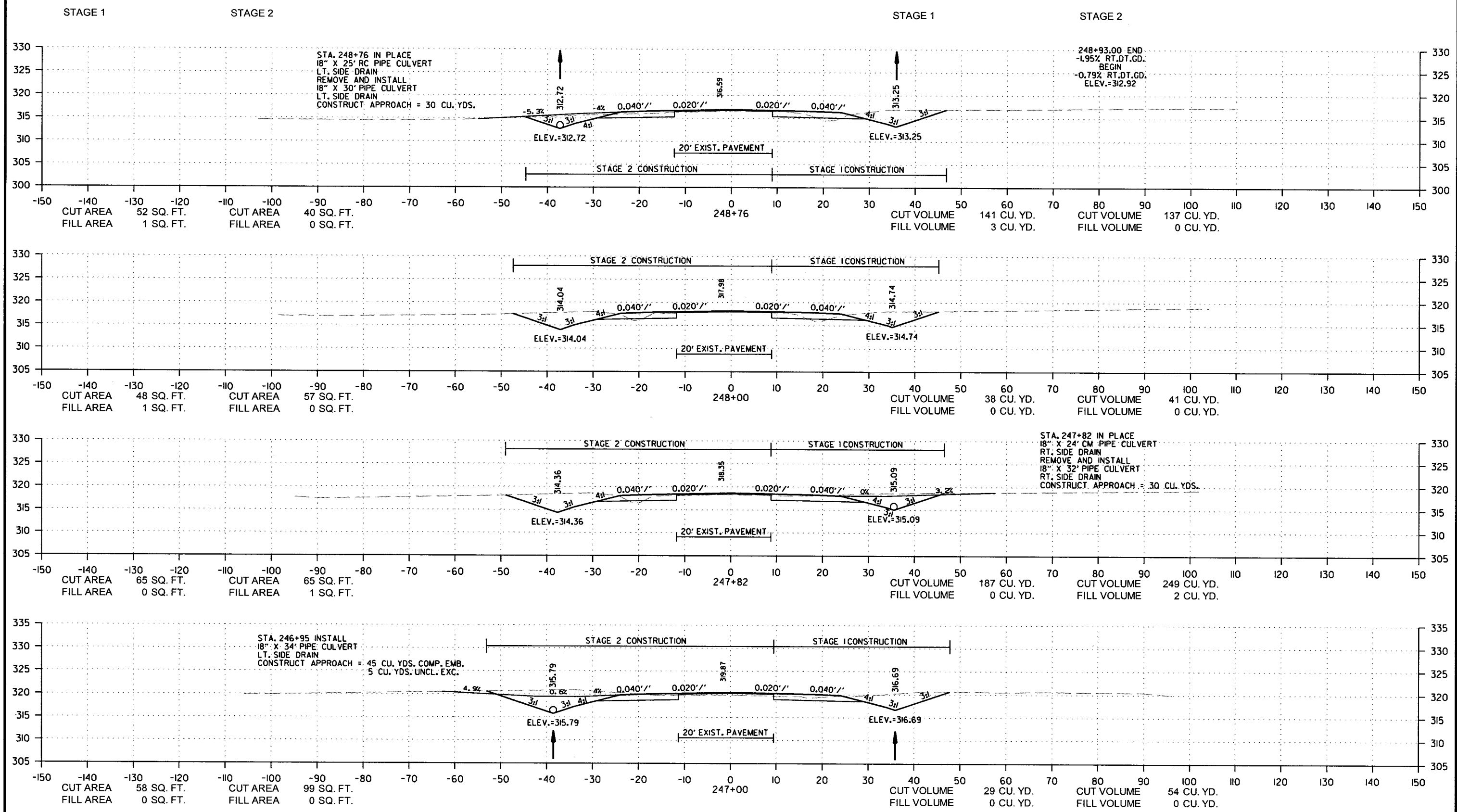
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. AID DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	080494		155	208

2 CROSS SECTIONS



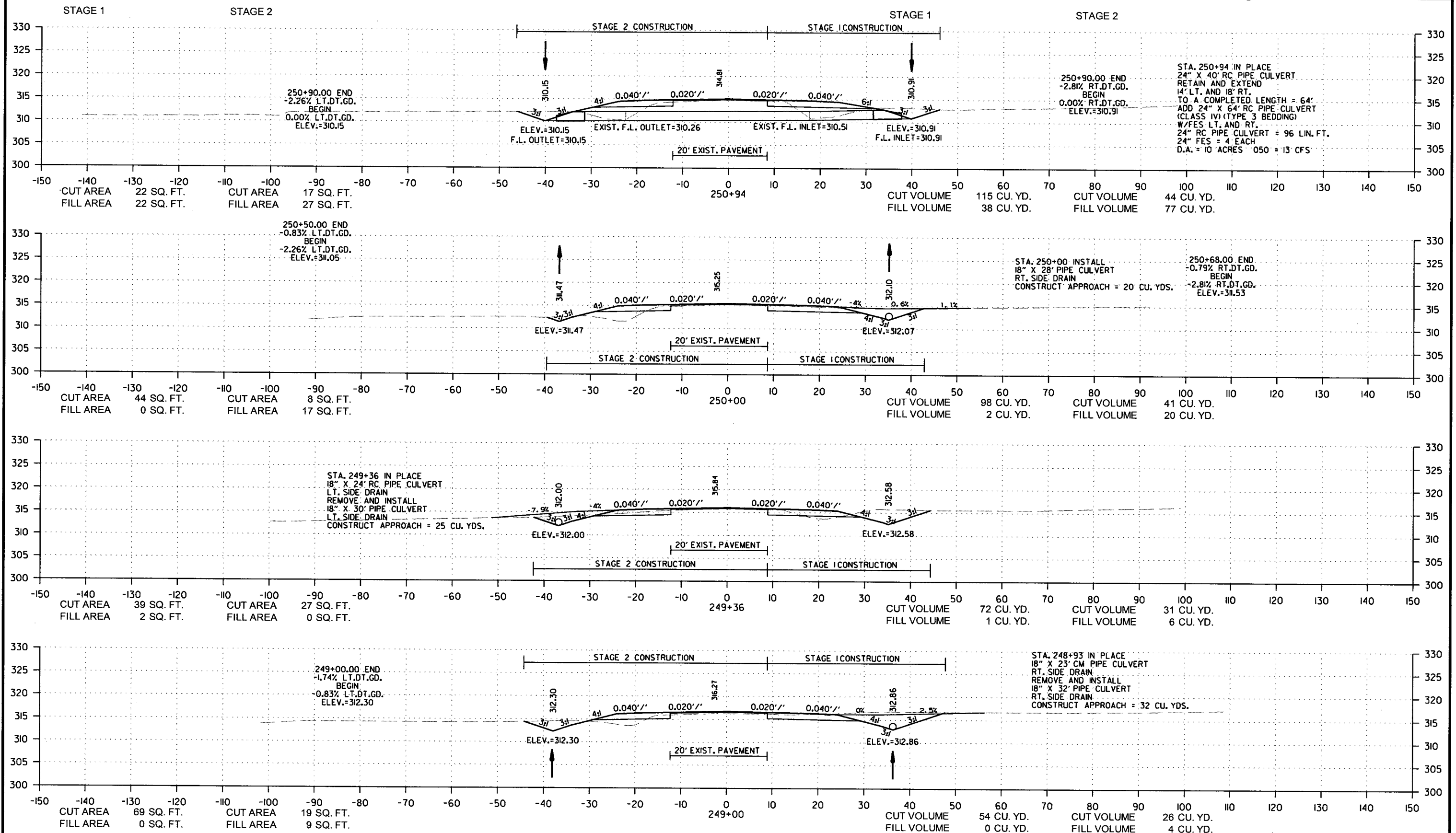
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080494	156	208

2 CROSS SECTIONS



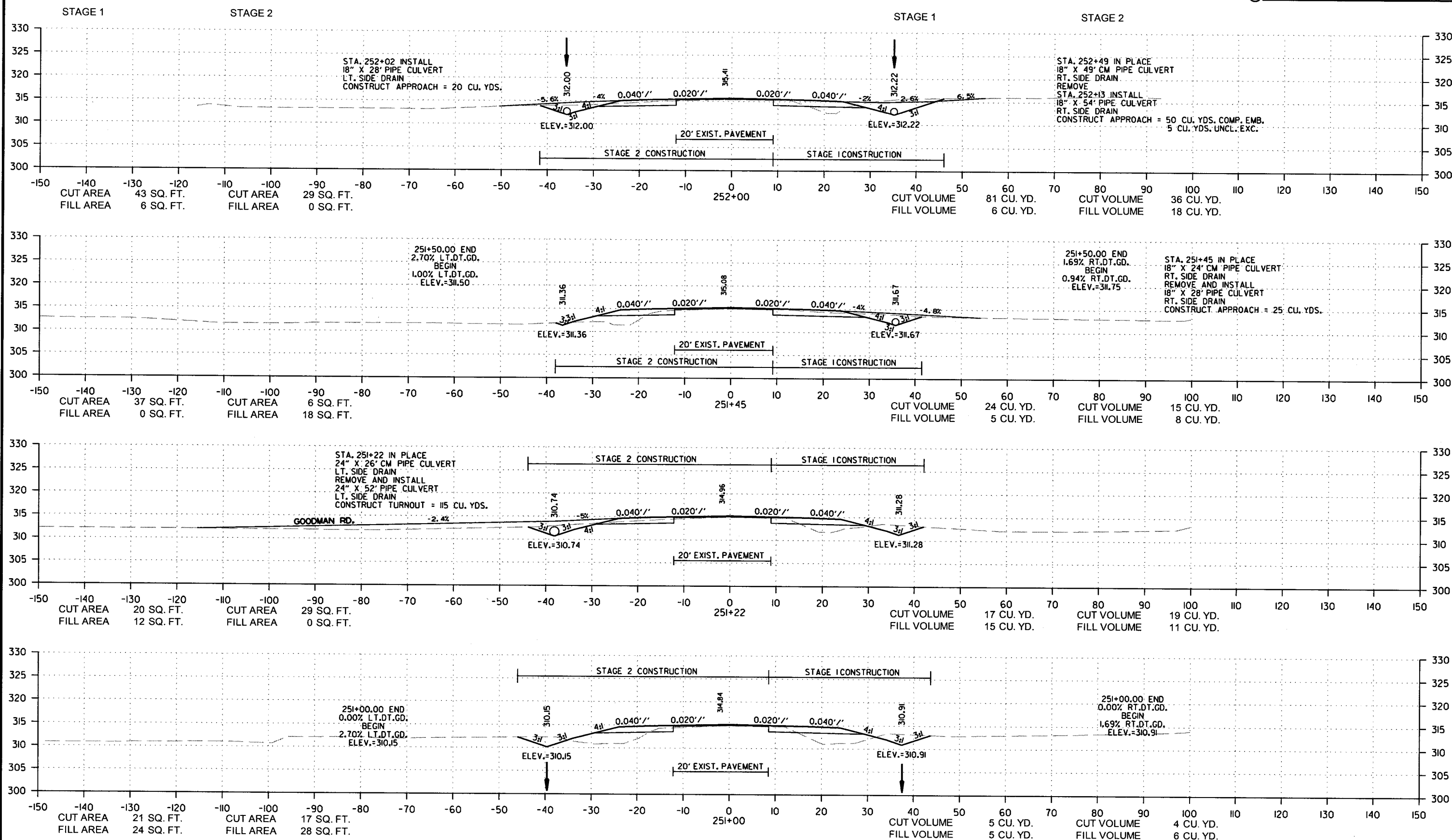
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	080494		157	208

2 CROSS SECTIONS



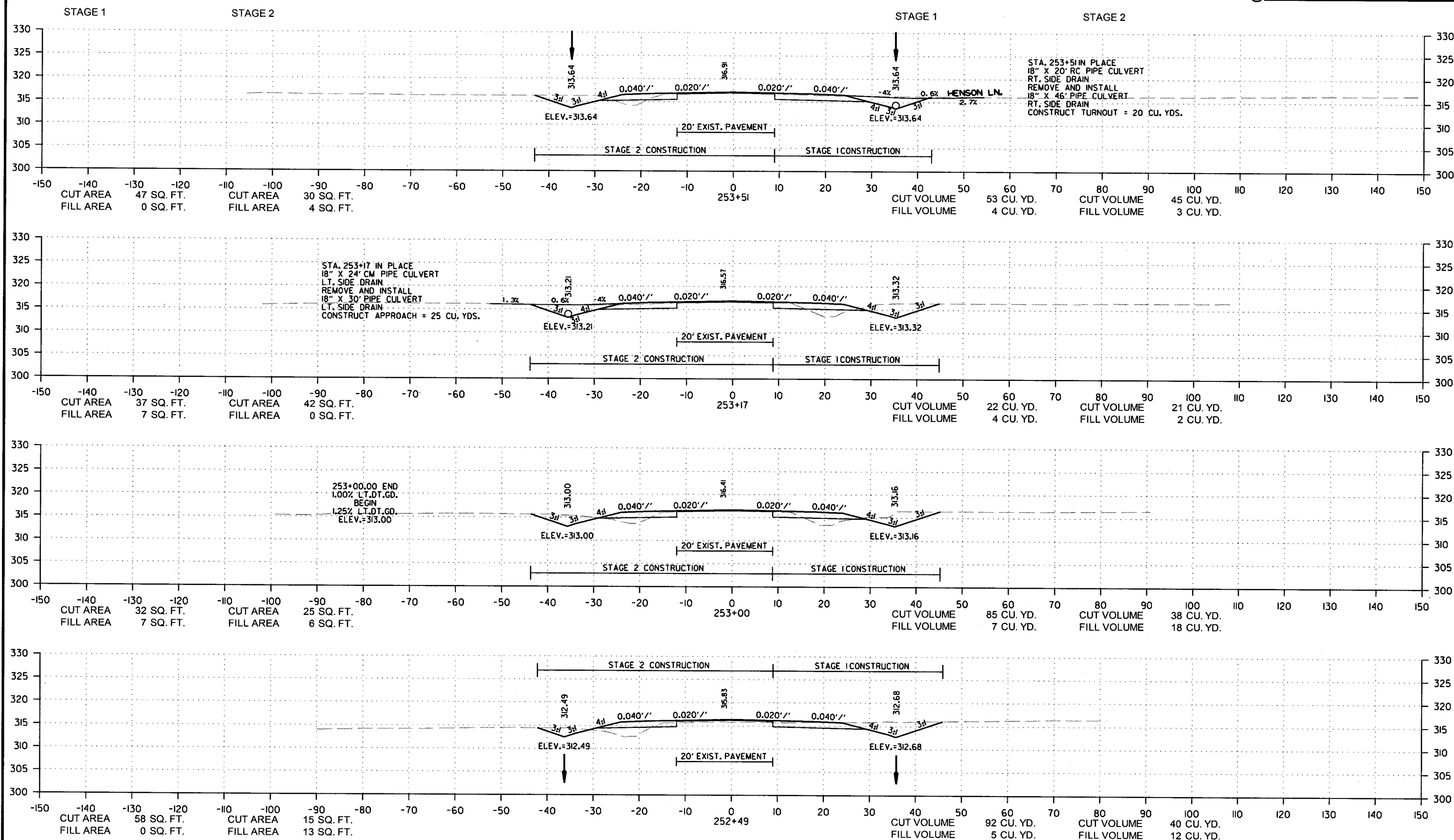
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	080494		158	208

② CROSS SECTIONS



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.		080494	159	208

2 CROSS SECTIONS

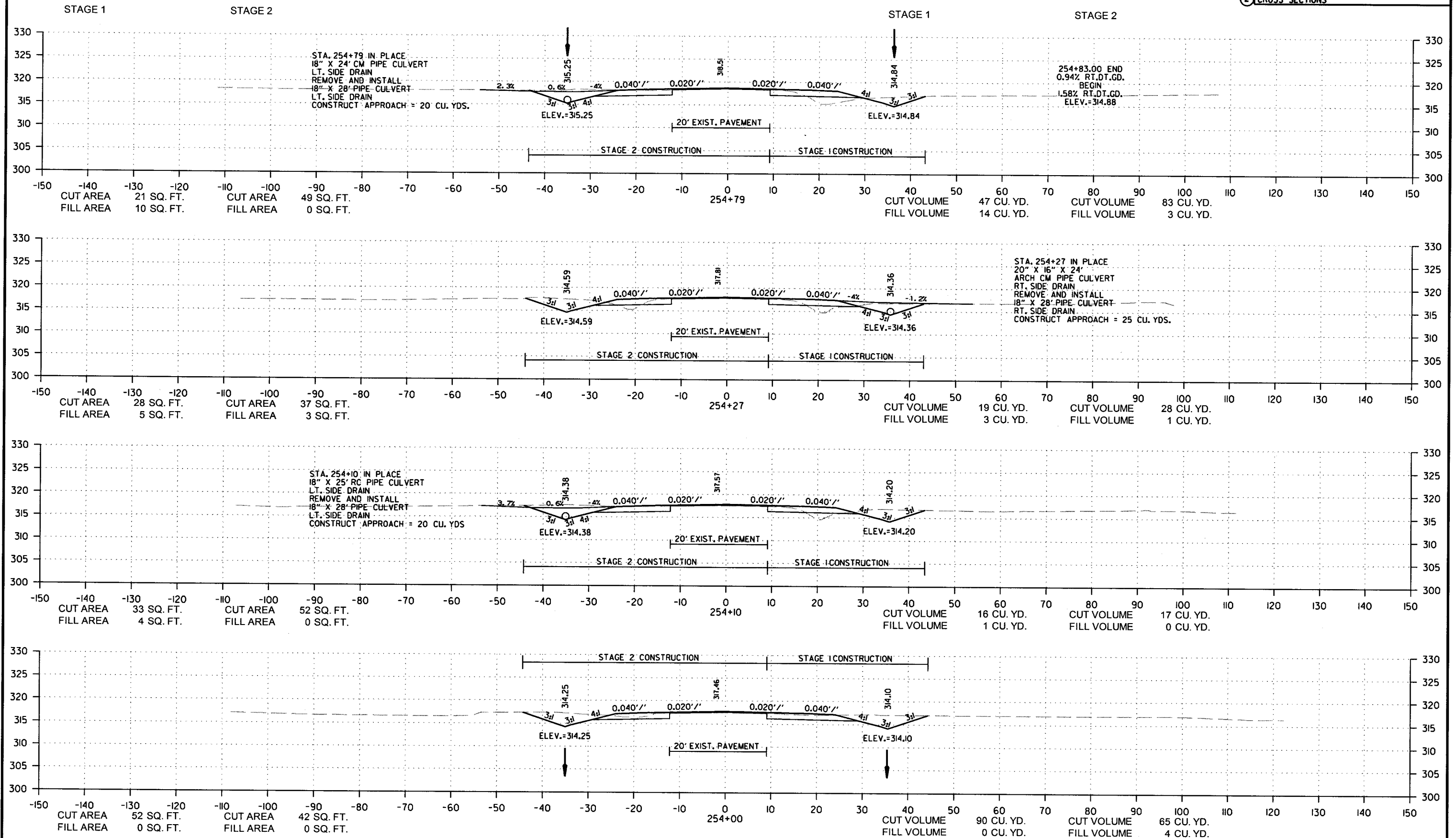


9/6/2018

RO80494.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.	080494		160	208

② CROSS SECTIONS

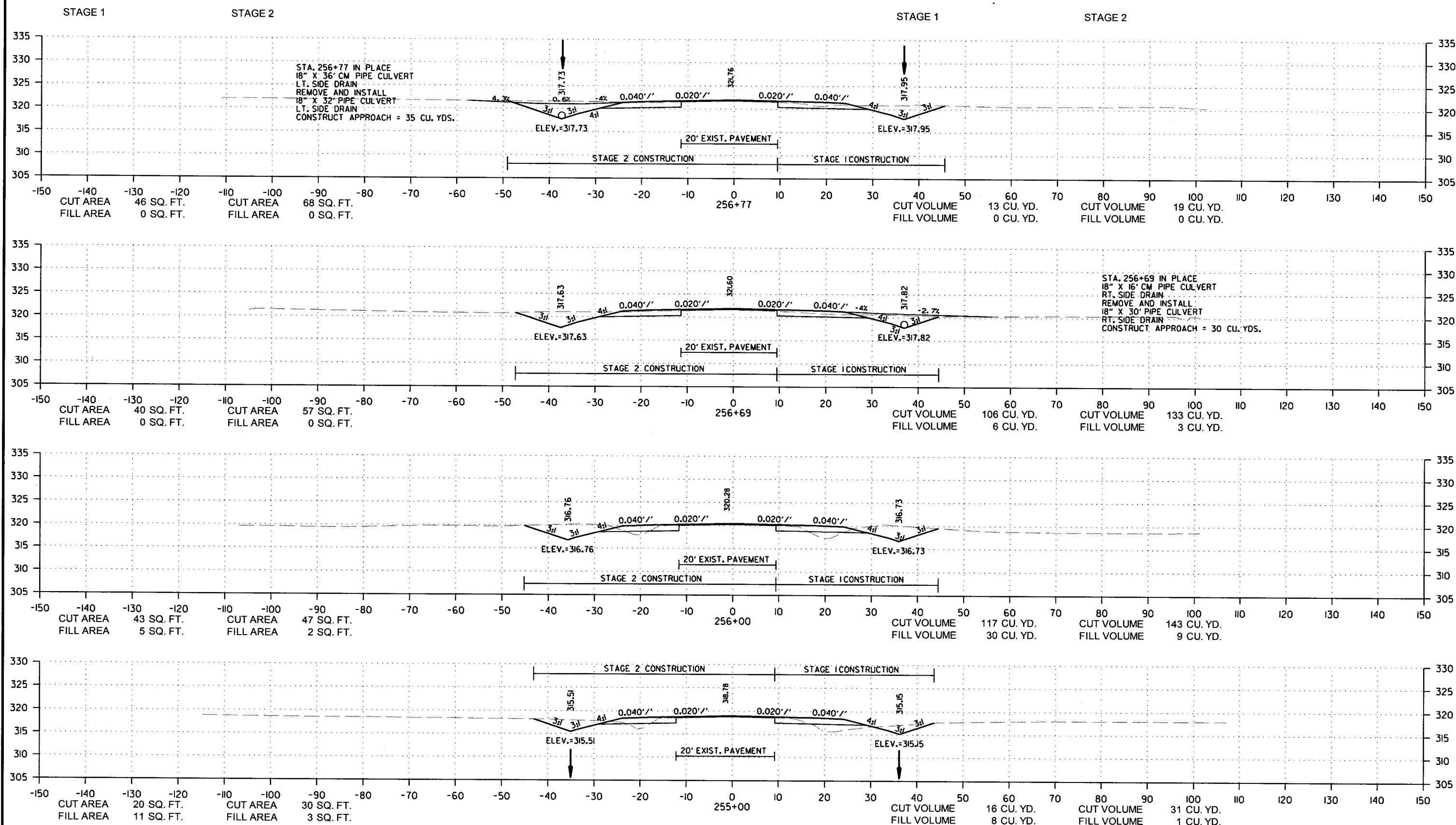


9/6/2018

R080494.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.	080494		161	208

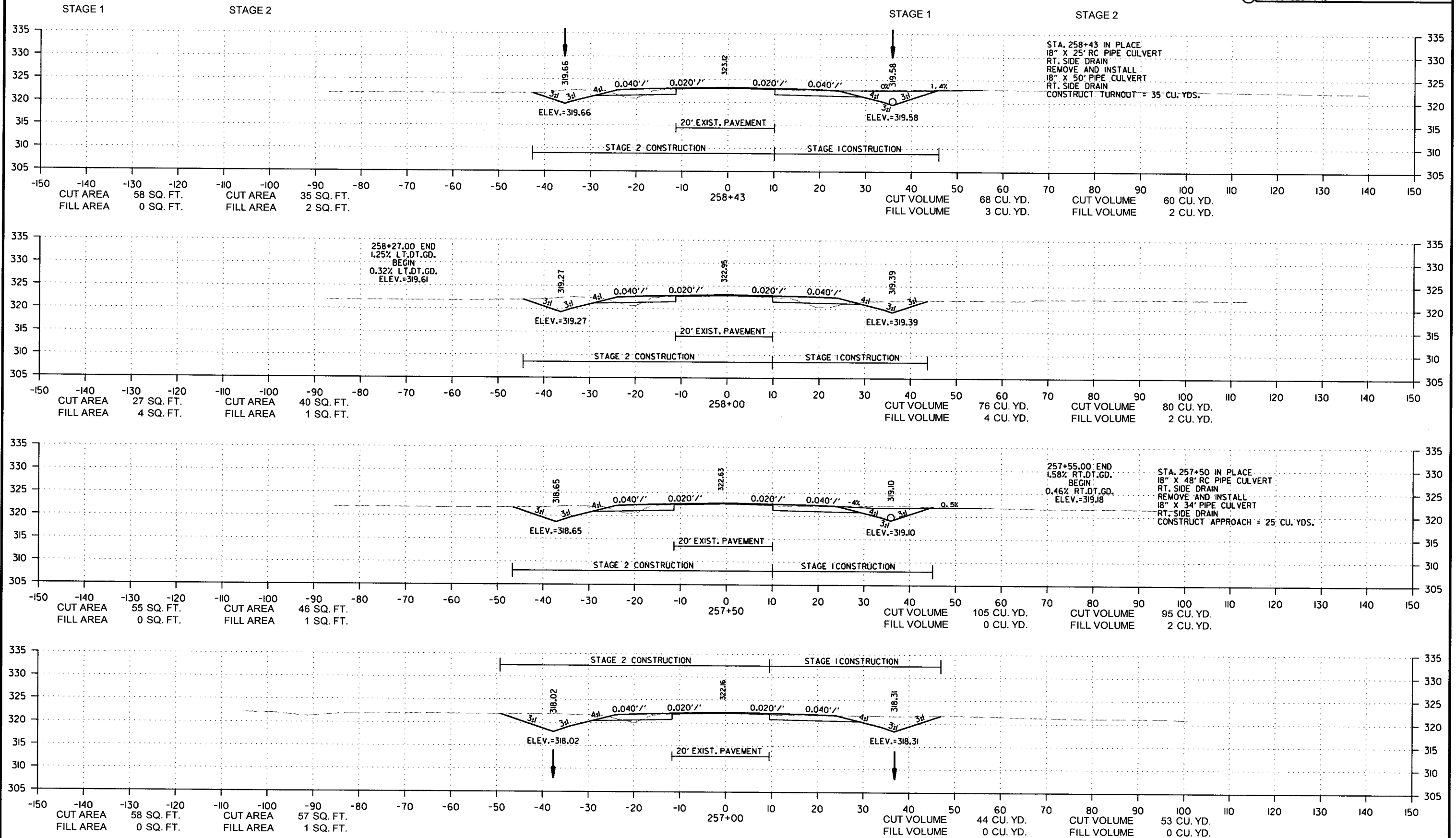
2 CROSS SECTIONS



9/6/2018
R080494.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.		080494	162	208

2 CROSS SECTIONS

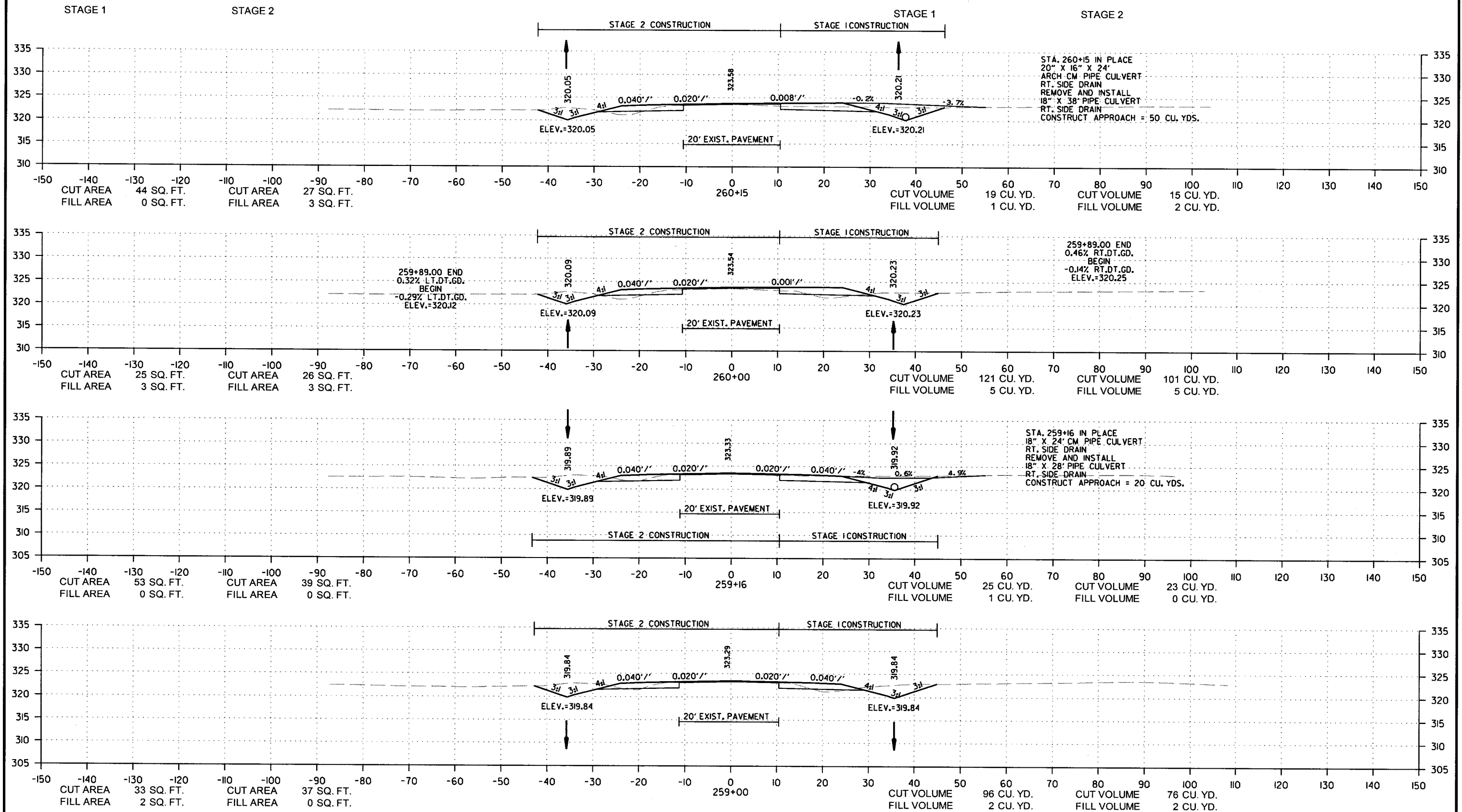


9/6/2018

R080494.DGN

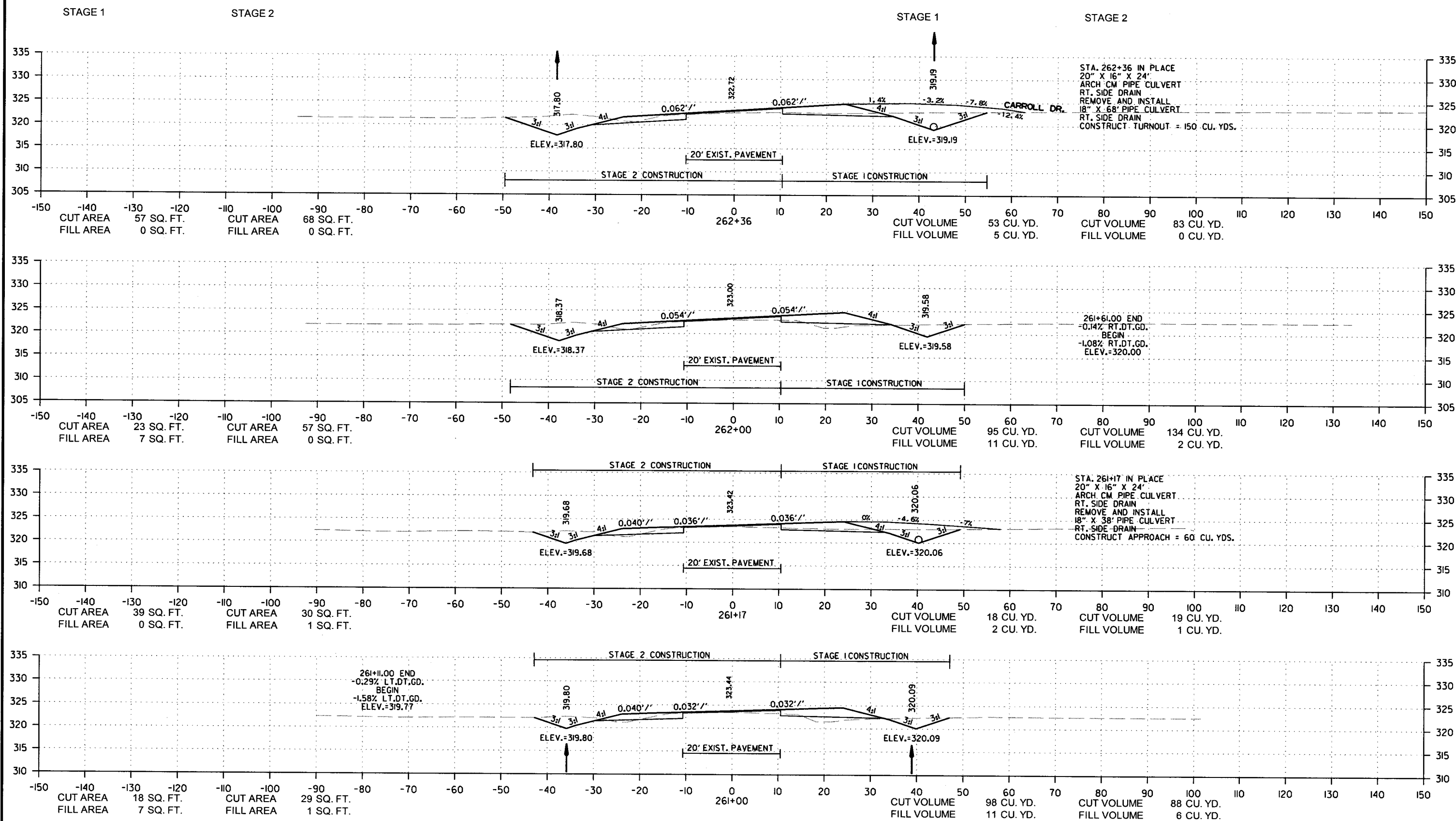
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	080494		163	208

2 CROSS SECTIONS



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.		080494	164	208

2 CROSS SECTIONS



9/6/2018

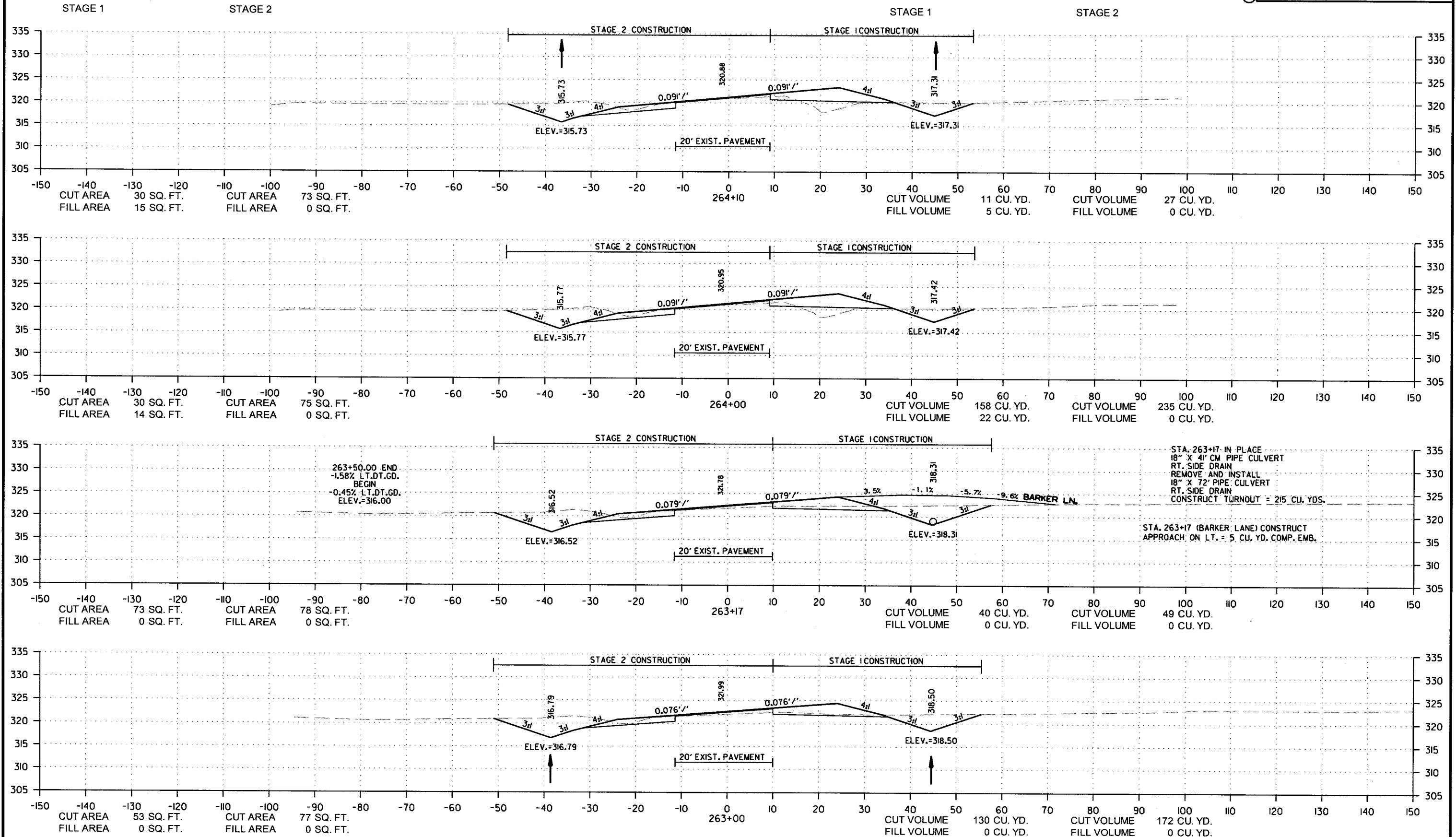
R080494.DCN

SITE 4

CROSS SECTION STA. 261+00 TO STA. 262+36

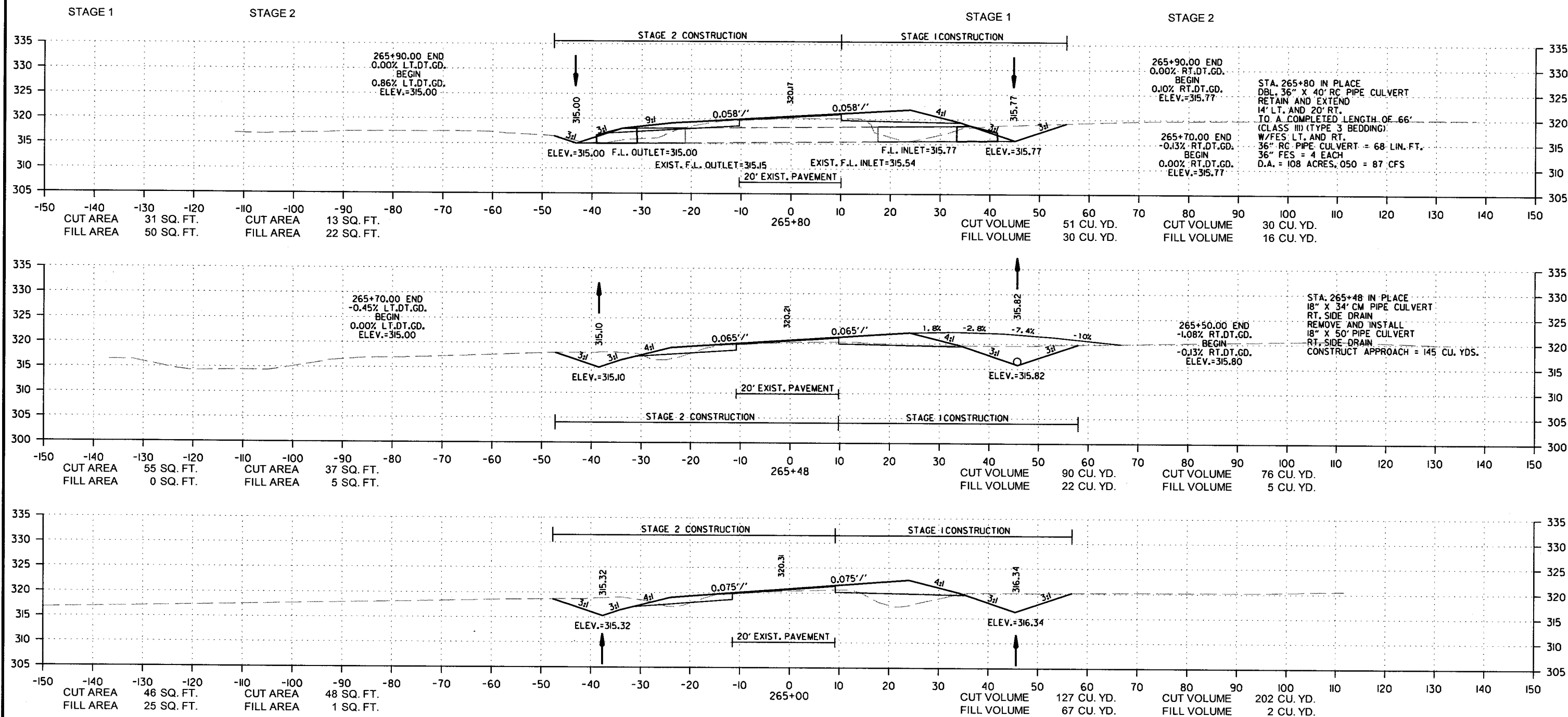
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080494	165	208

2 CROSS SECTIONS



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.		080494	166	208

② CROSS SECTIONS



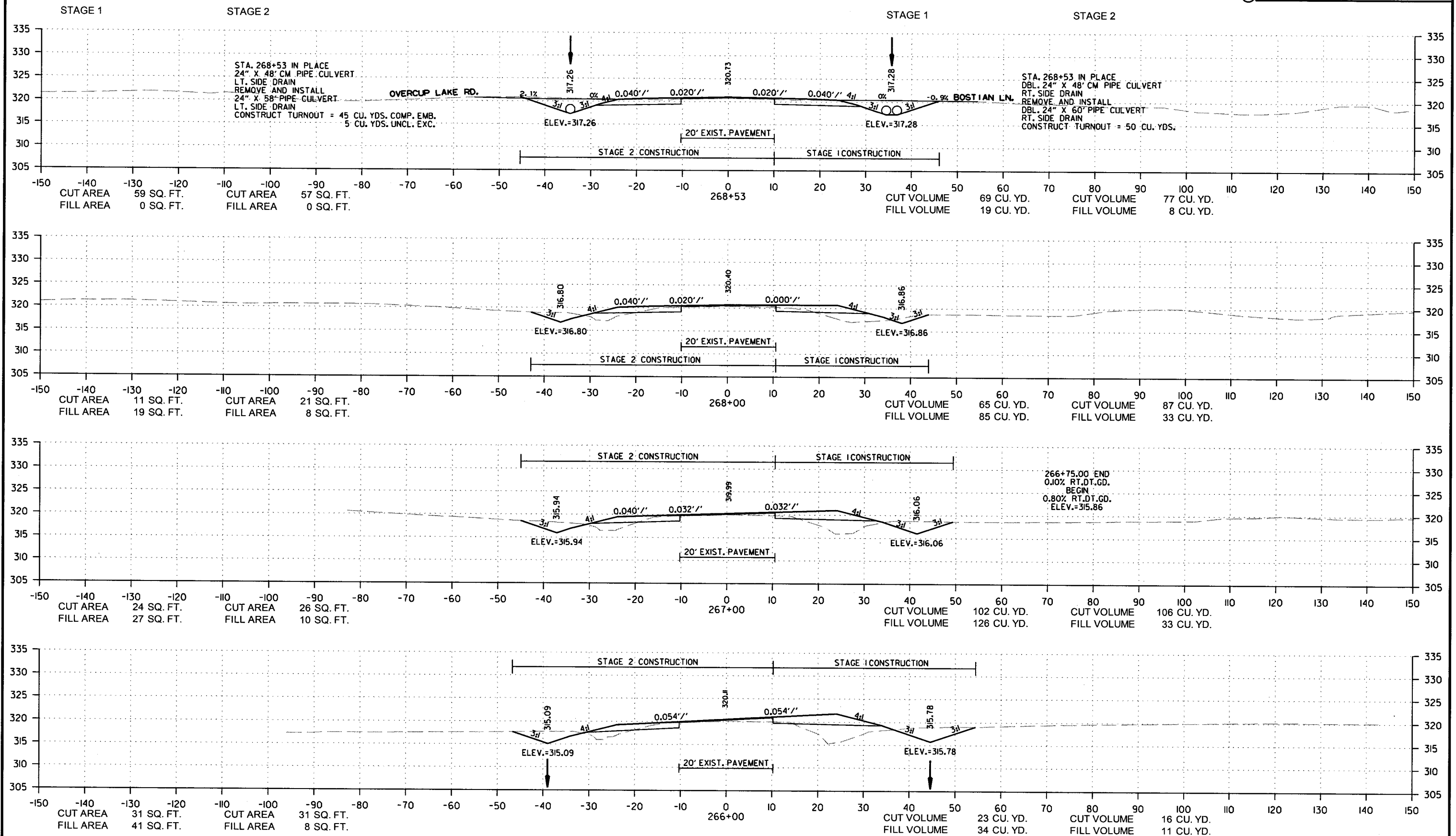
9/6/2018

R080494.DGN

SITE 4
CROSS SECTION STA. 265+00 TO STA. 265+80

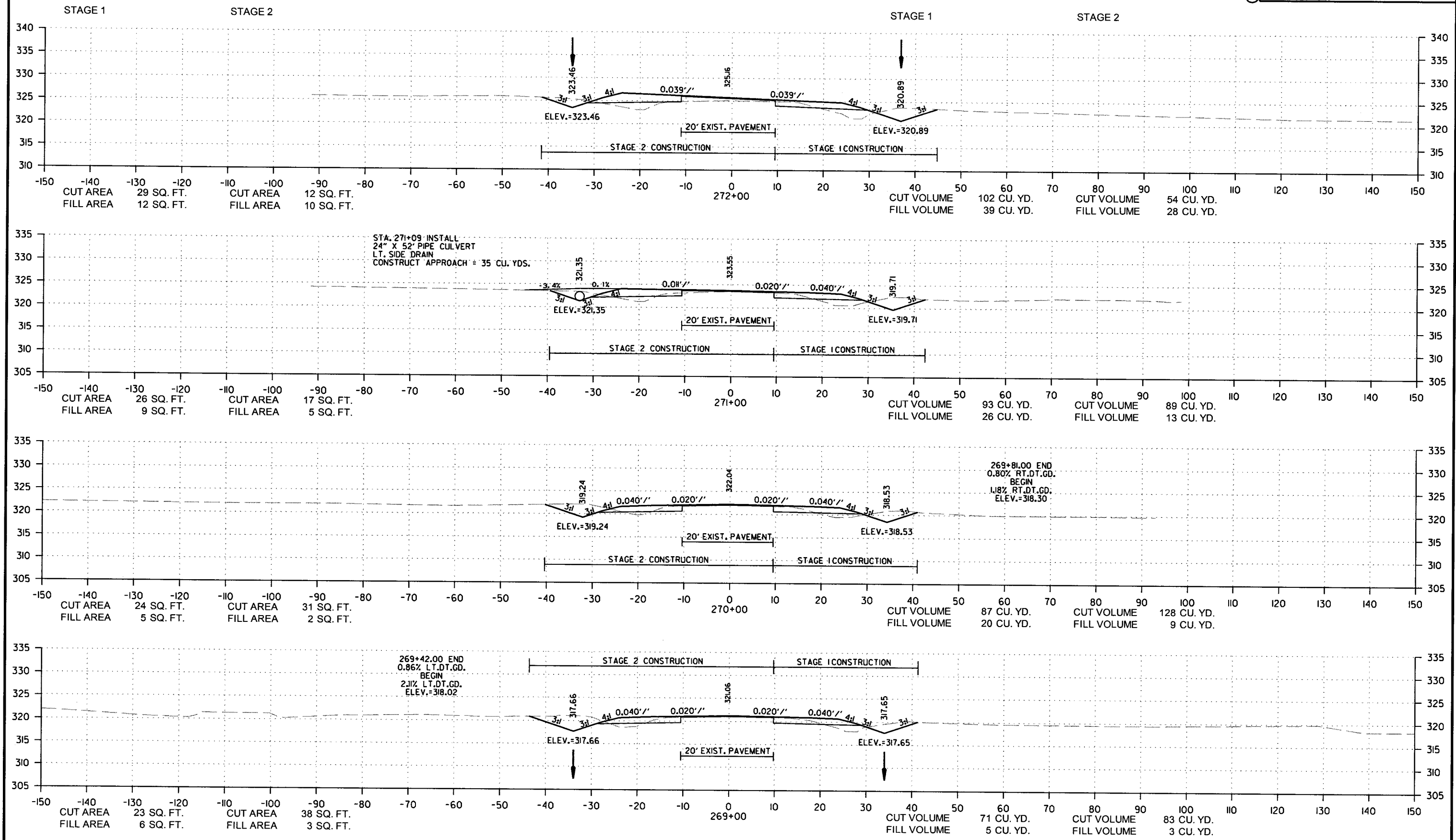
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	080494		167	208

② CROSS SECTIONS



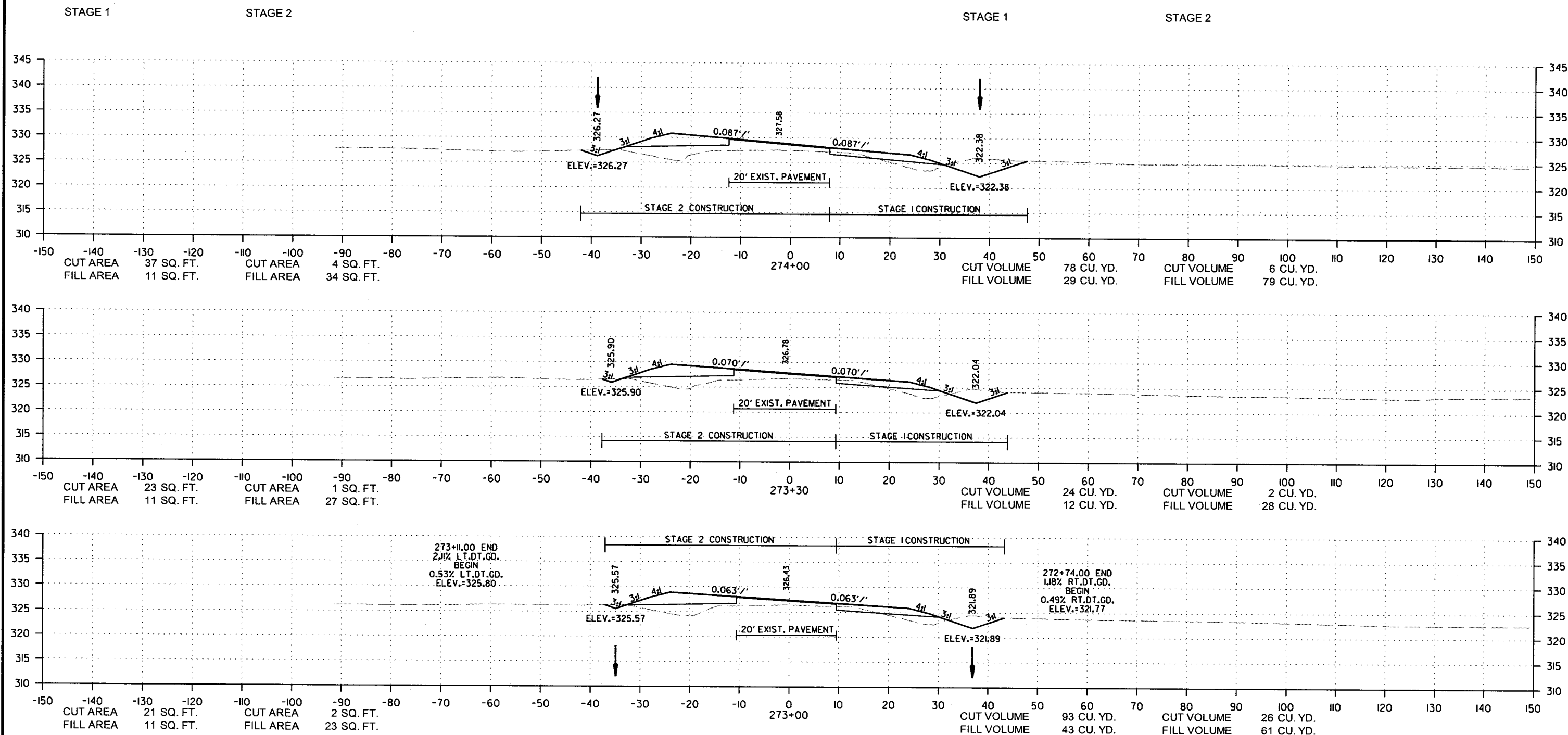
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	080494		168	208

2 CROSS SECTIONS



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.		080494	169	208

2 CROSS SECTIONS

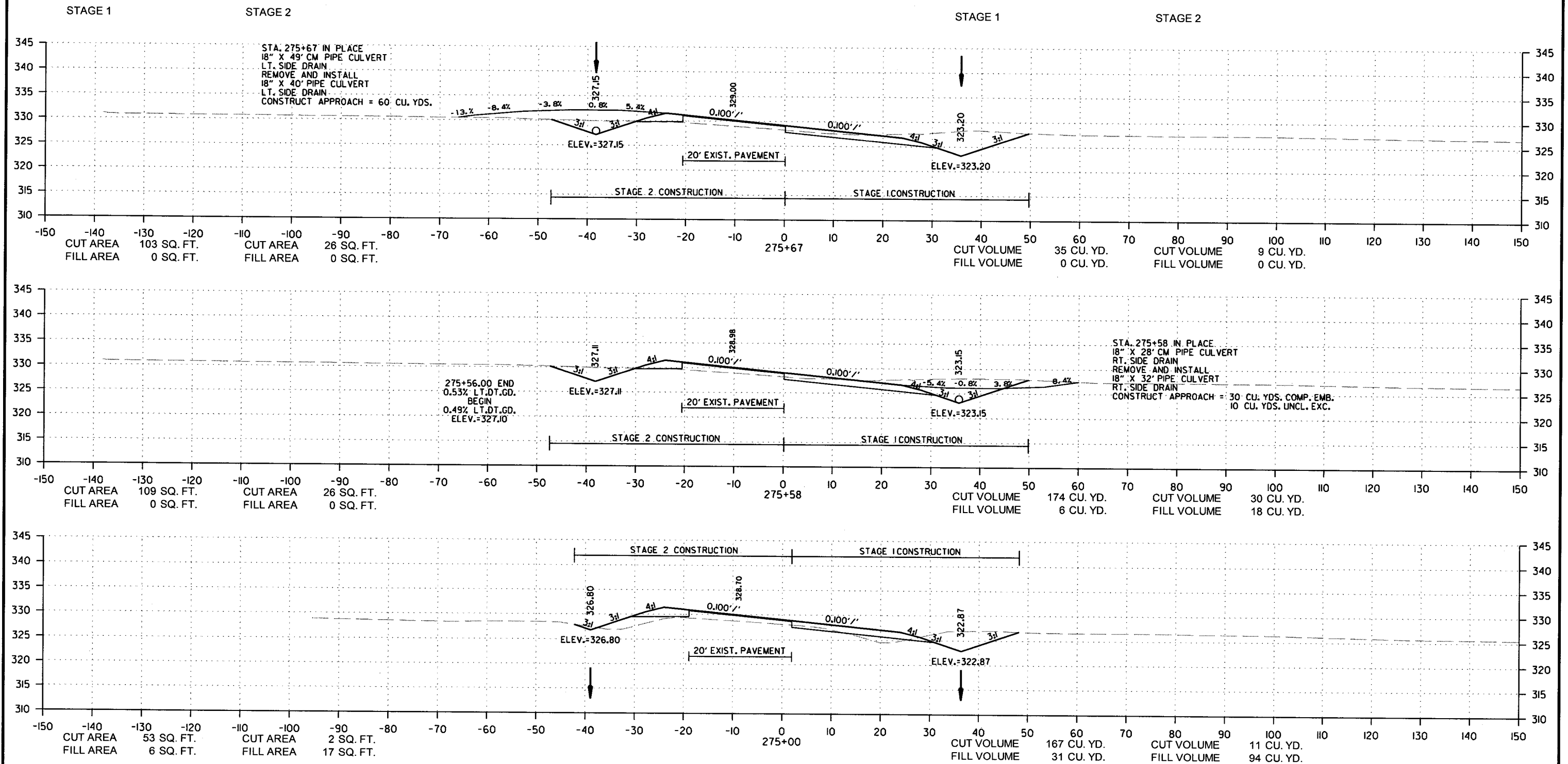


9/6/2018

R080494.DGN

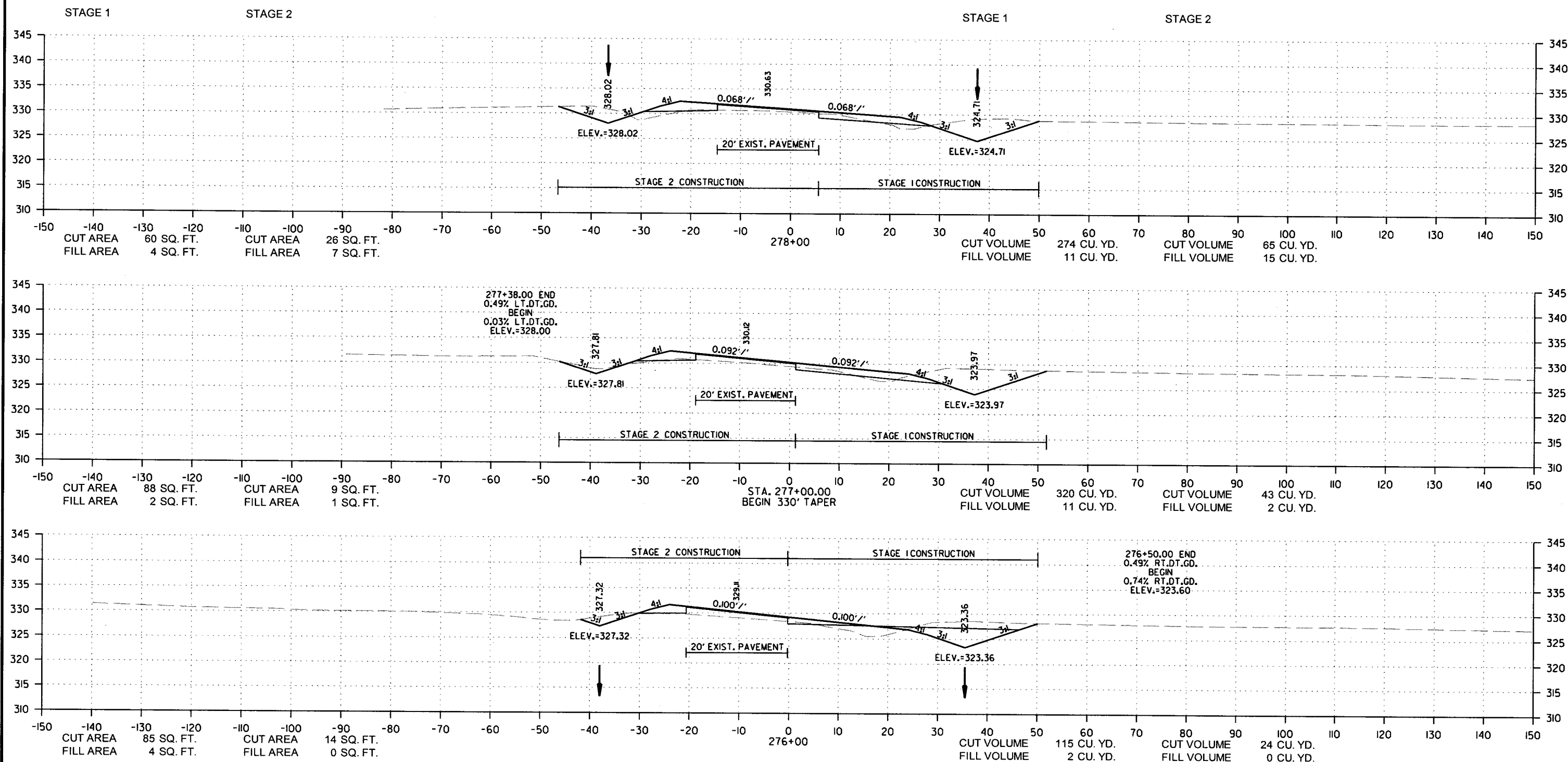
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	080494		170	208

② CROSS SECTIONS



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. 080494	171	208

② CROSS SECTIONS



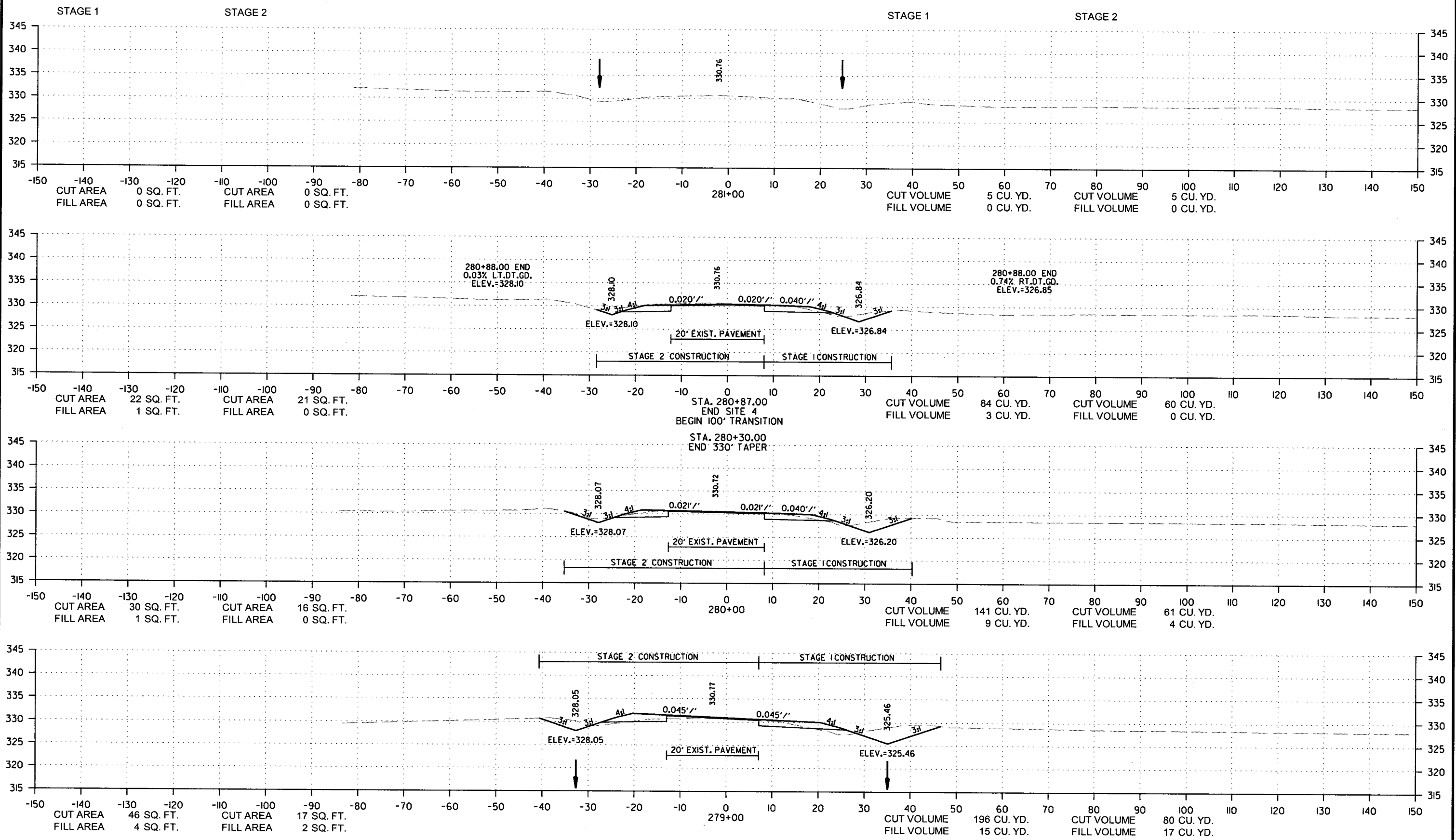
SITE 4
CROSS SECTION STA. 276+00 TO STA. 278+00

9/6/2018

R080494.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.	080494		172	208

② CROSS SECTIONS

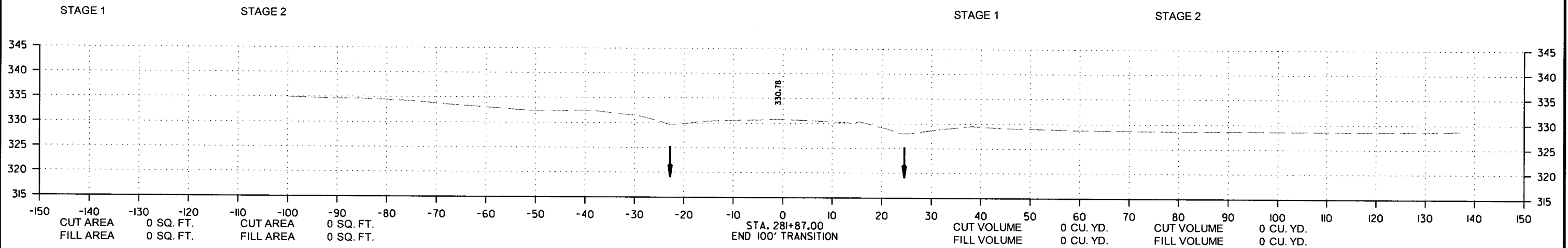


9/6/2018
R080494.DGN

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.		080494	173	208

2 CROSS SECTIONS

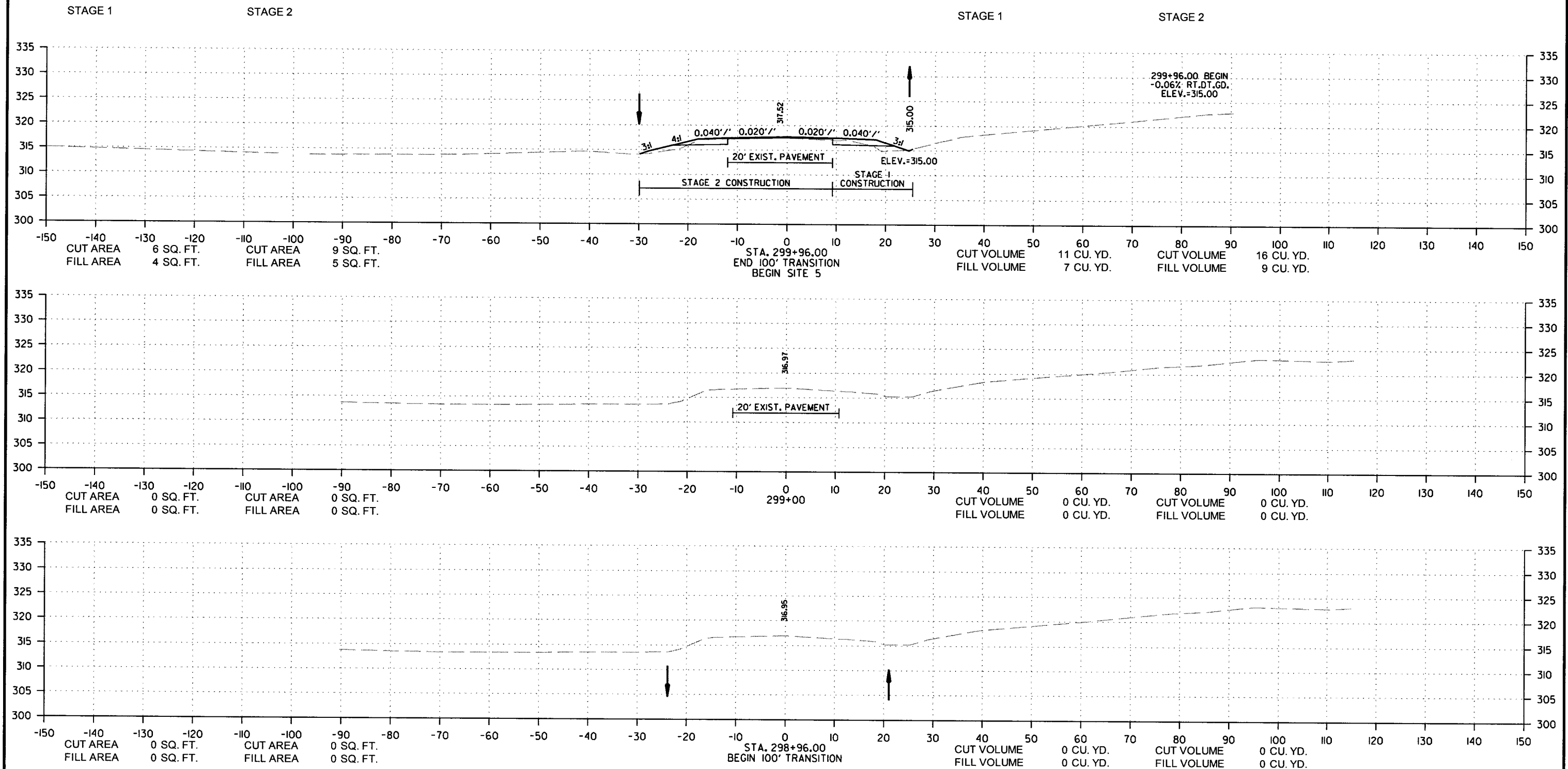
9/6/2018
R080494.DGN



SITE 4
CROSS SECTION STA. 281+87 TO STA. 281+87

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.		080494	174	208

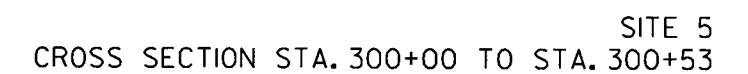
② CROSS SECTIONS



9/6/2018
R080494.DGN

SITE 5
CROSS SECTION STA. 298+96 TO STA. 299+96

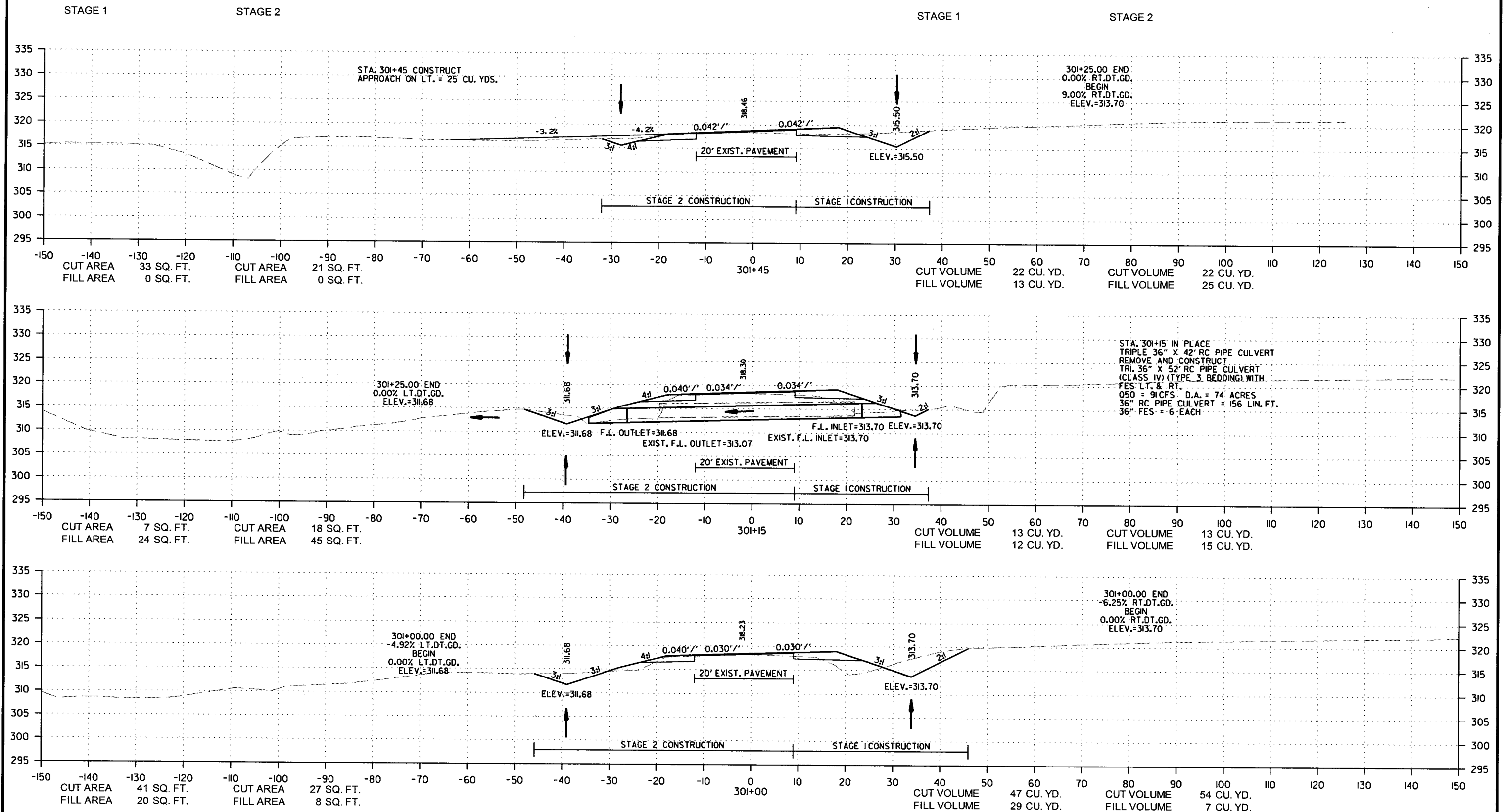
2 CROSS SECTIONS



R080494.DGN 9/6/2018

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. 080494	176	208

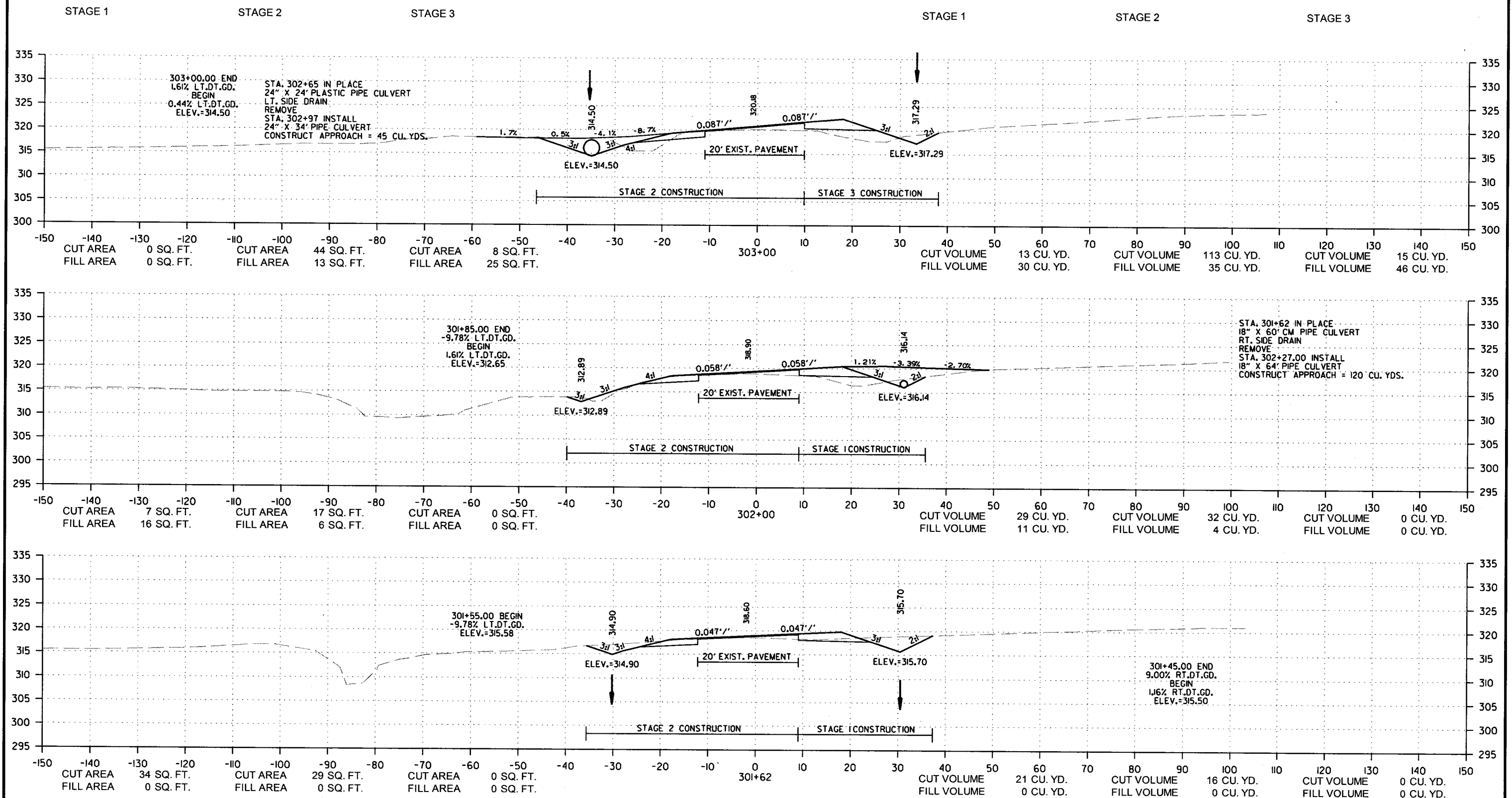
② CROSS SECTIONS



9/6/2018
R080494.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.	080494		177	208

② CROSS SECTIONS



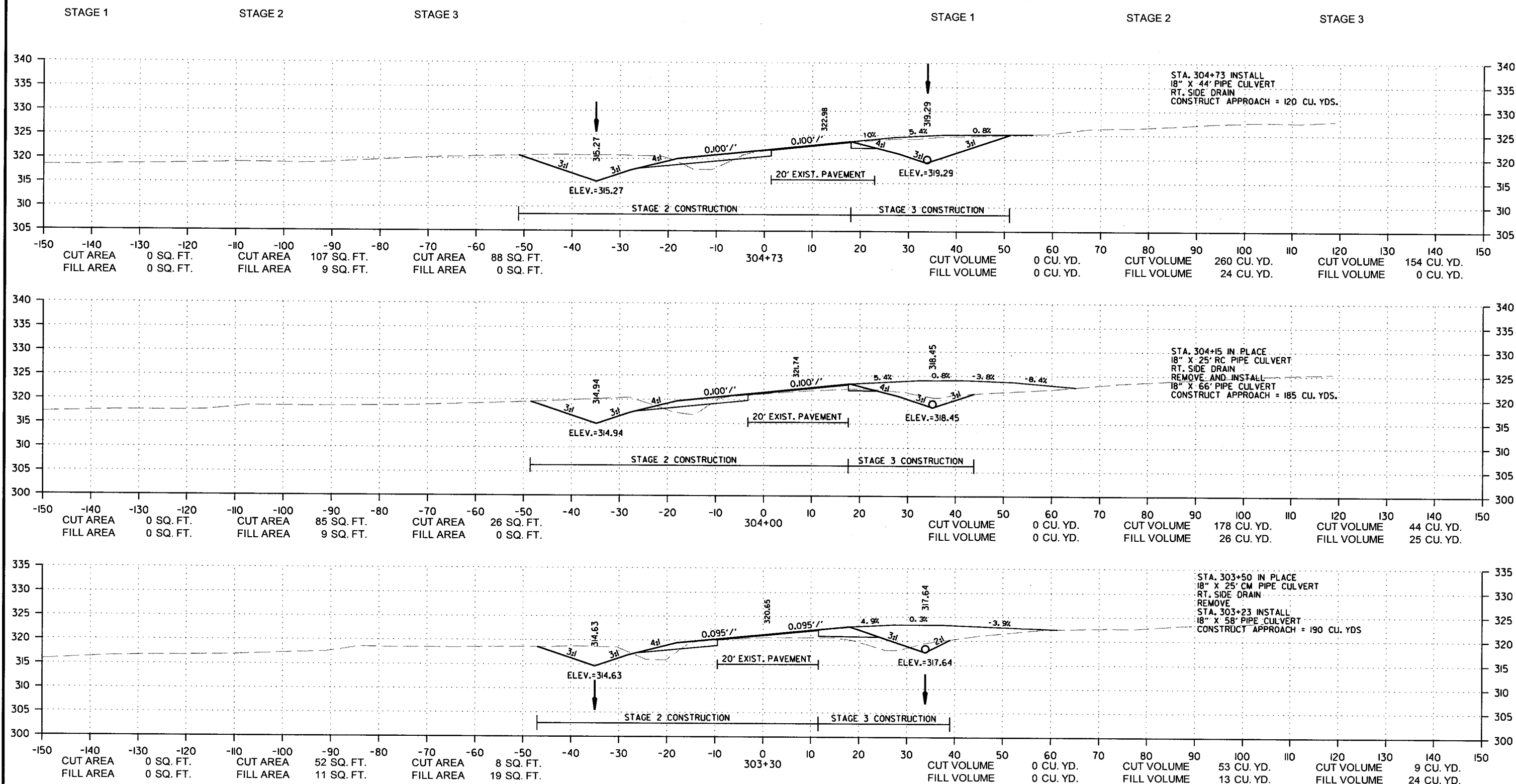
SITE 5
CROSS SECTION STA. 301+62 TO STA. 303+00

9/6/2018

R080494.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. 080494	178	208

② CROSS SECTIONS



2 CROSS SECTIONS

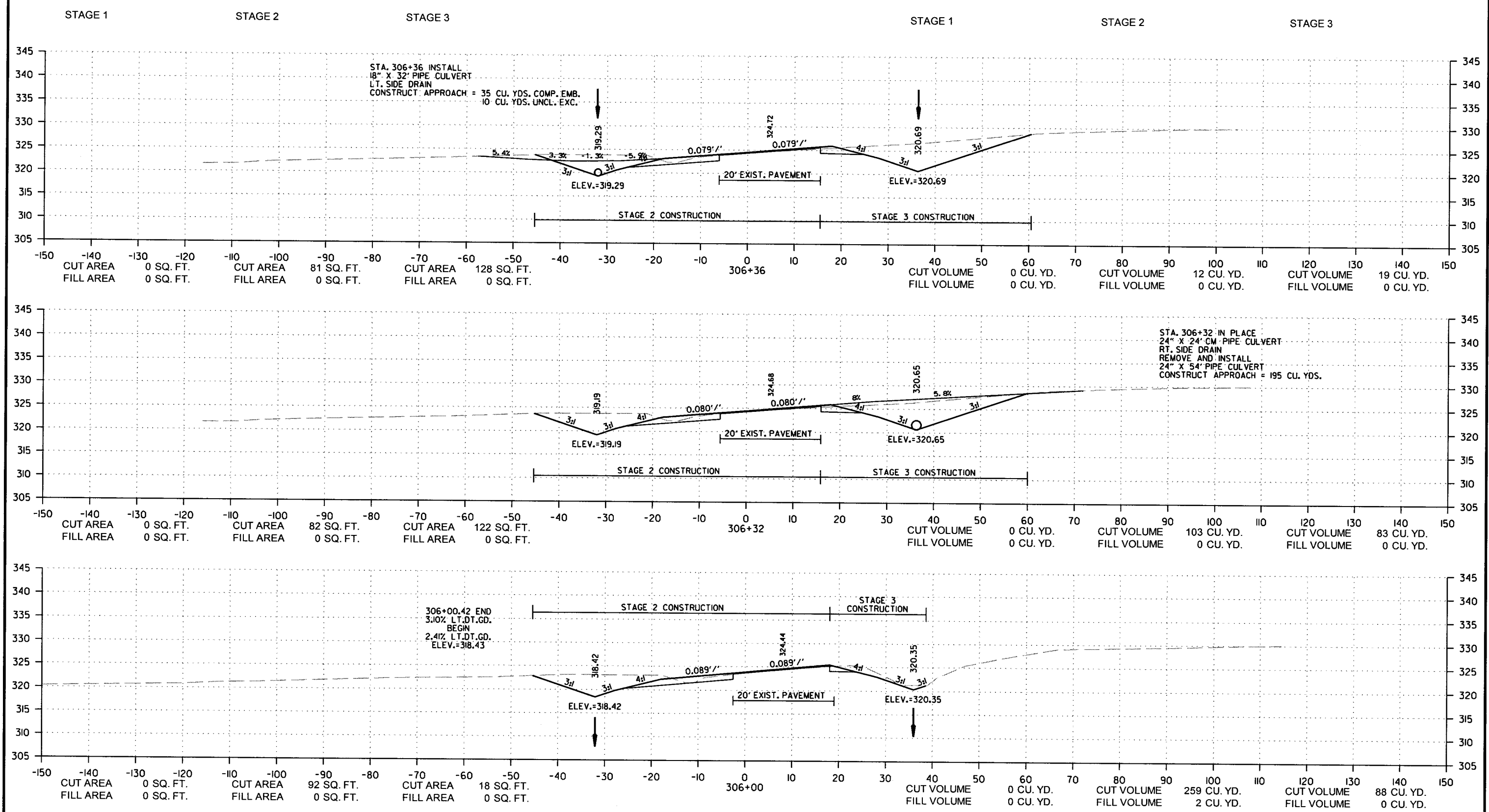


SITE 5

CROSS SECTION STA. 304+91 TO STA. 305+33

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.		080494	180	208

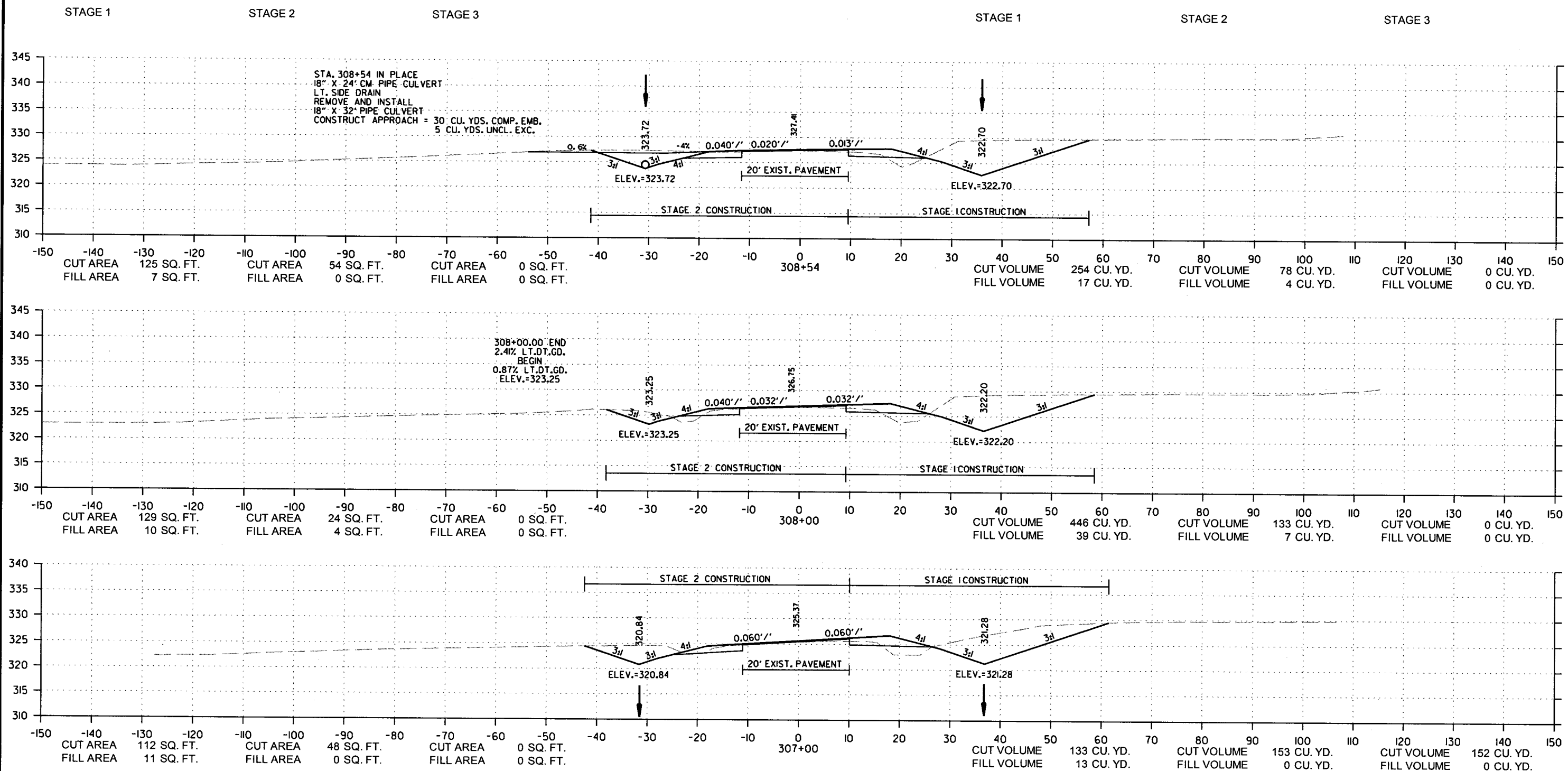
2 CROSS SECTIONS



9/6/2018
R080494.DCN

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.	080494		181	208

2 CROSS SECTIONS



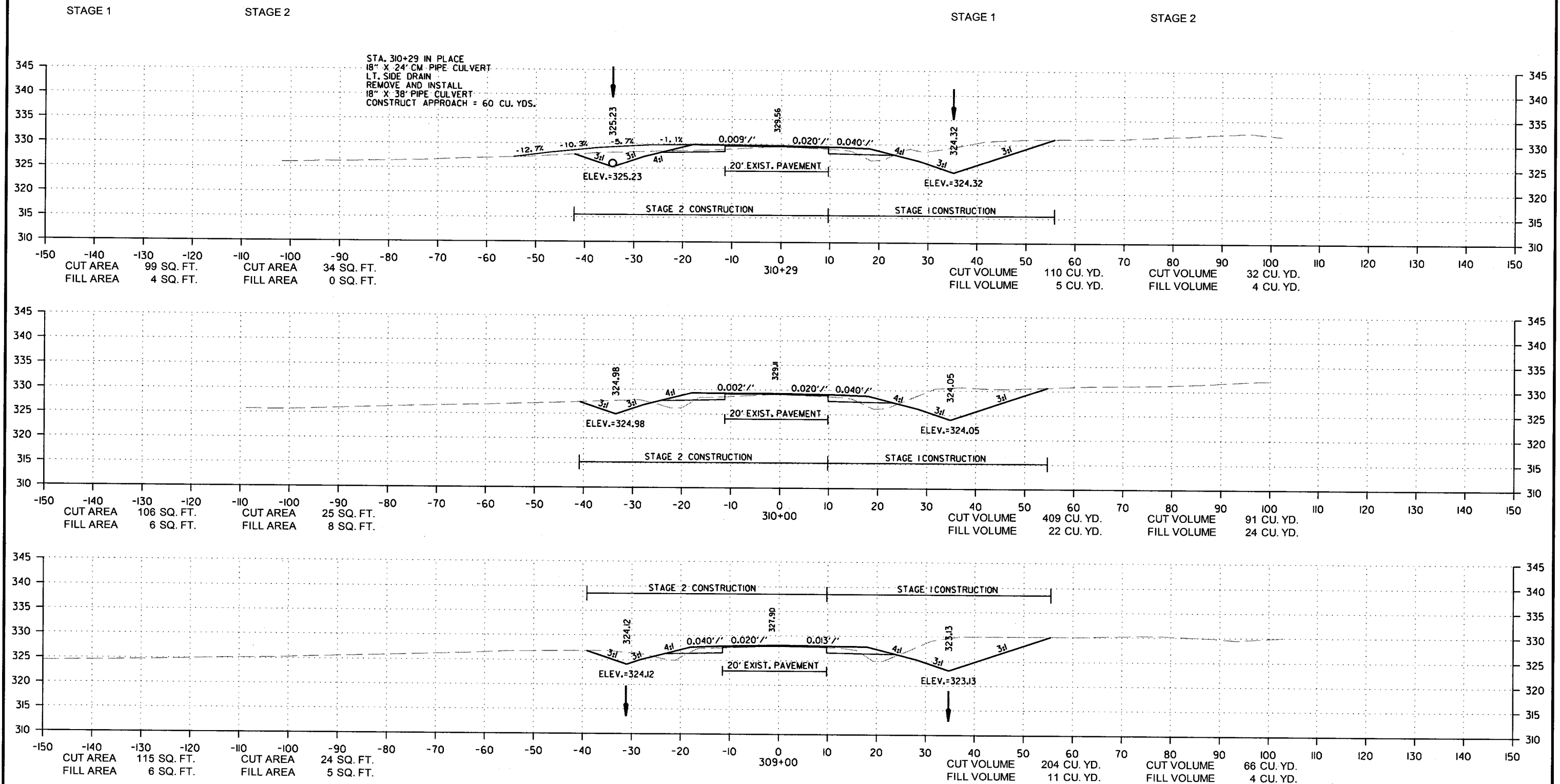
SITE 5
CROSS SECTION STA. 307+00 TO STA. 308+54

9/6/2018

R080494.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. 080494			182	208

② CROSS SECTIONS



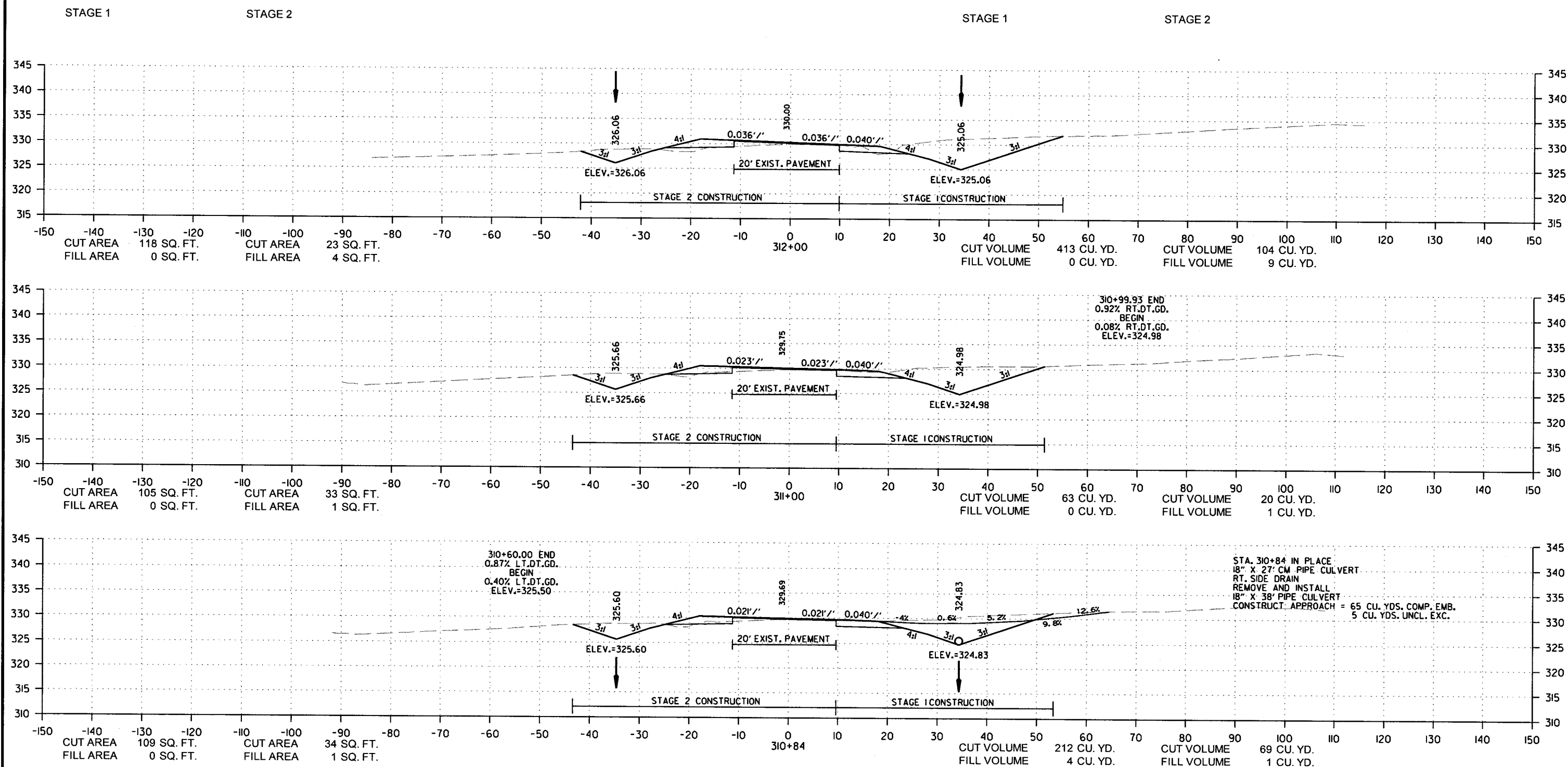
SITE 5
CROSS SECTION STA. 309+00 TO STA. 310+29

9/6/2018

R080494.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.		080494	183	208

② CROSS SECTIONS



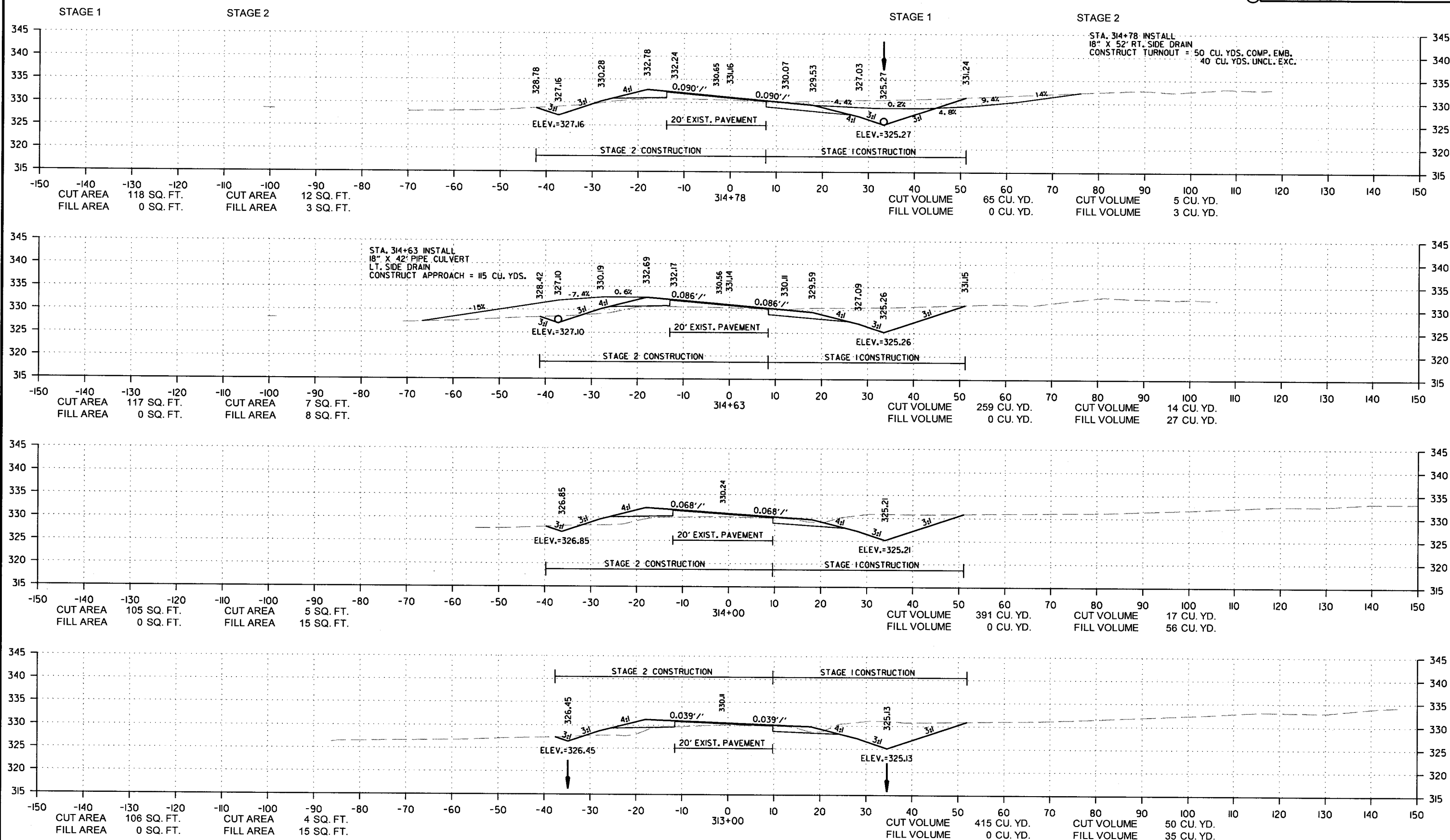
SITE 5
CROSS SECTION STA. 310+84 TO STA. 312+00

9/6/2018

R080494.DGN

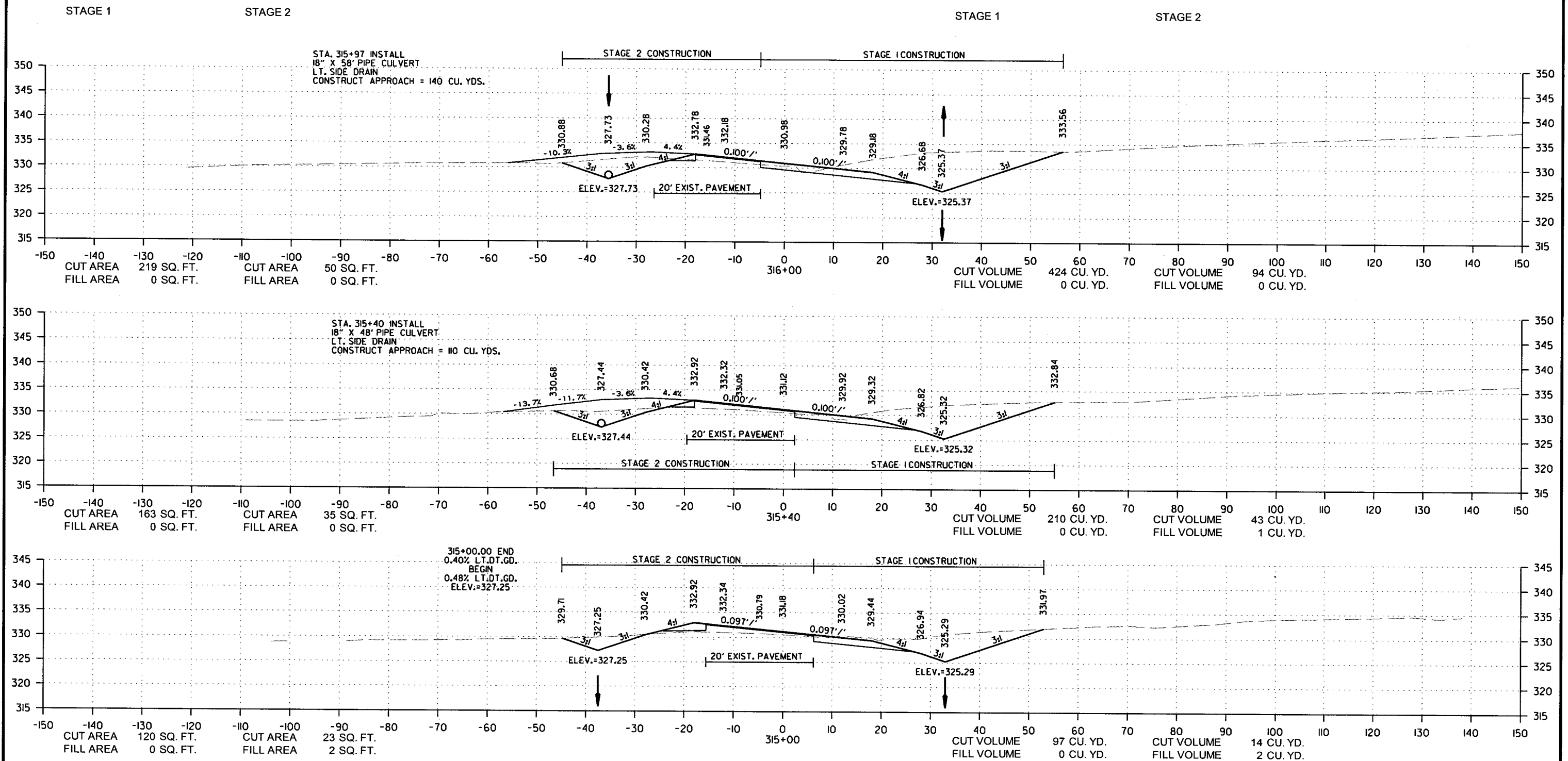
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080494	184	208

② CROSS SECTIONS



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.	080494		185	208

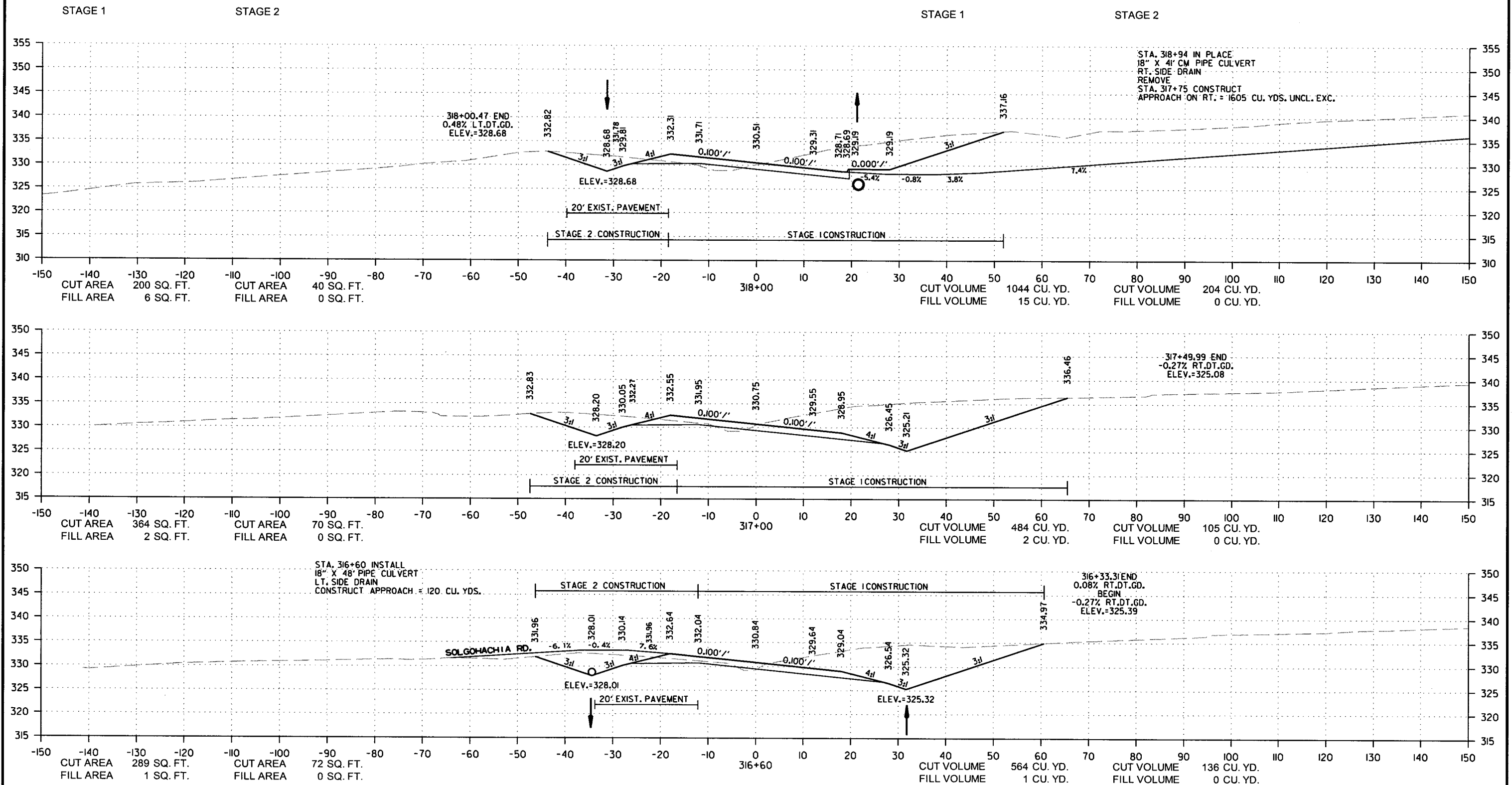
② CROSS SECTIONS



SITE 5
CROSS SECTION STA. 315+00 TO STA. 316+00

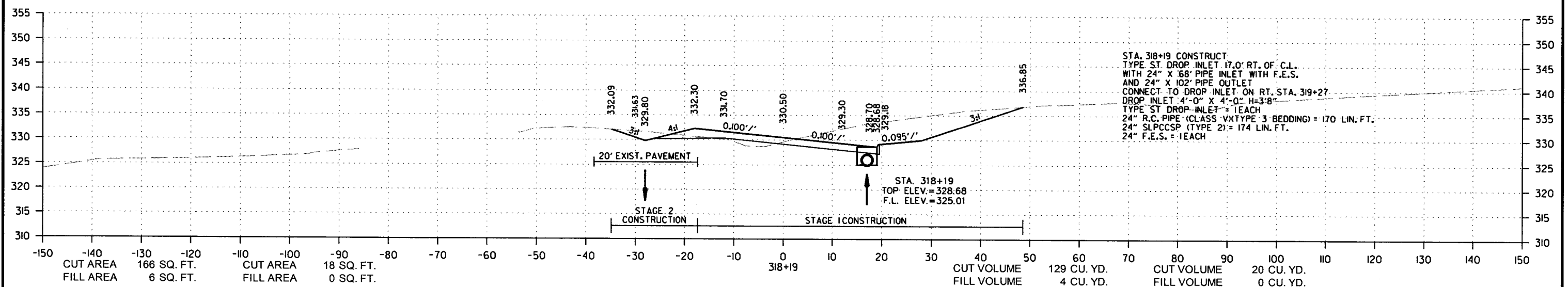
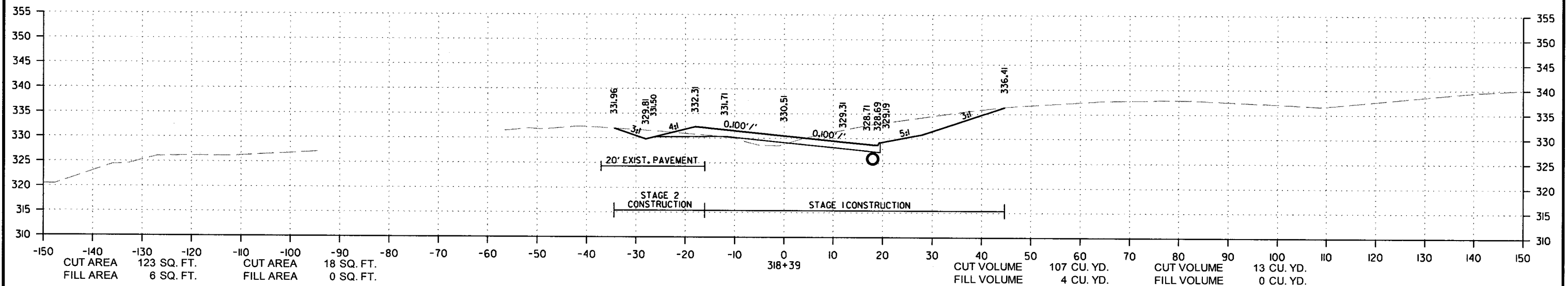
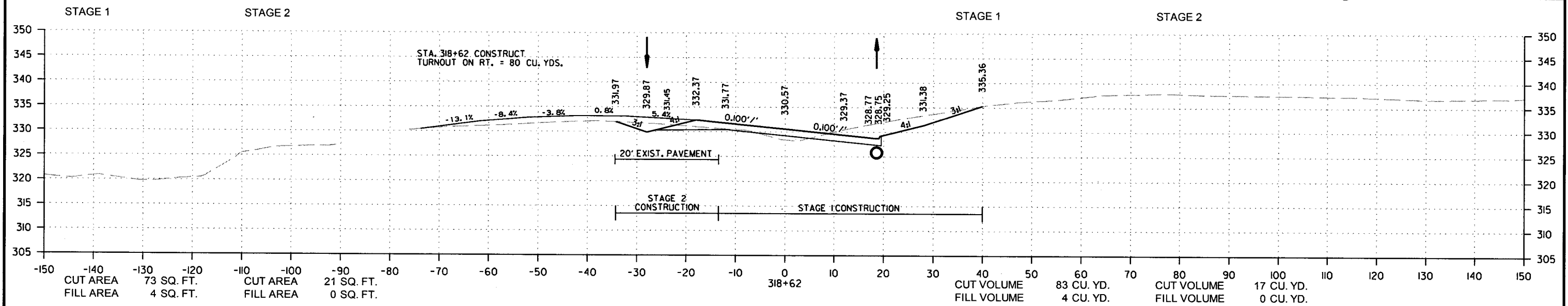
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	080494		186	208

2 CROSS SECTIONS



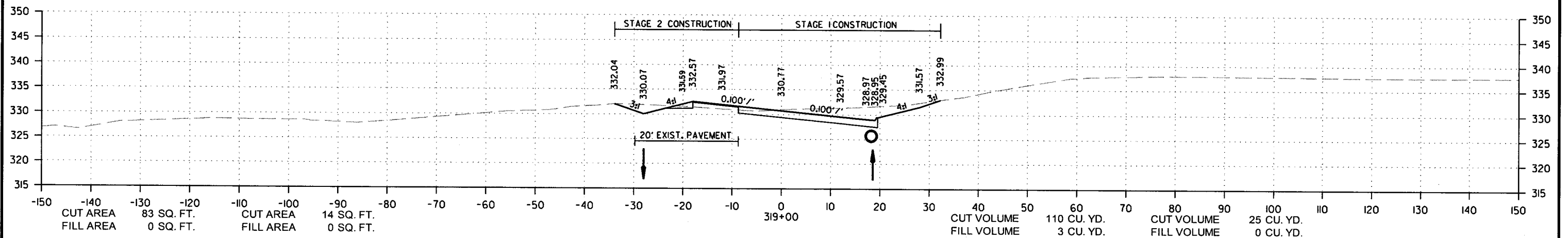
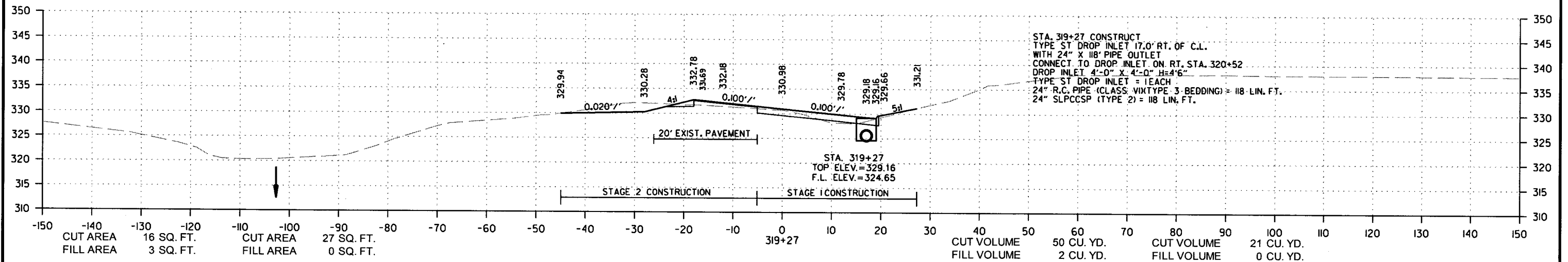
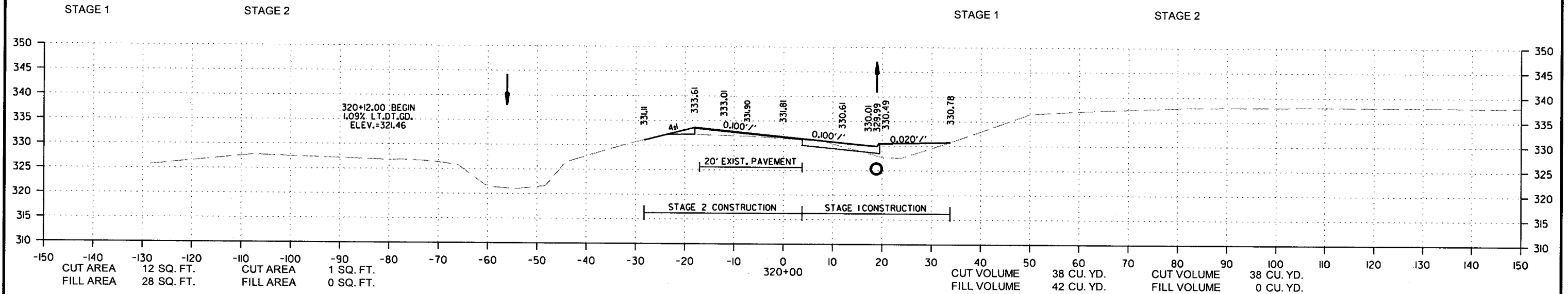
DATE REVISED	DATE FILLED	DATE REVISED	DATE FILLED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
						JOB NO. 080494	187	208

② CROSS SECTIONS



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.	080494		188	208

② CROSS SECTIONS



SITE 5
CROSS SECTION STA. 319+00 TO STA. 320+00

9/6/2018

R080494.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. 080494	189	208

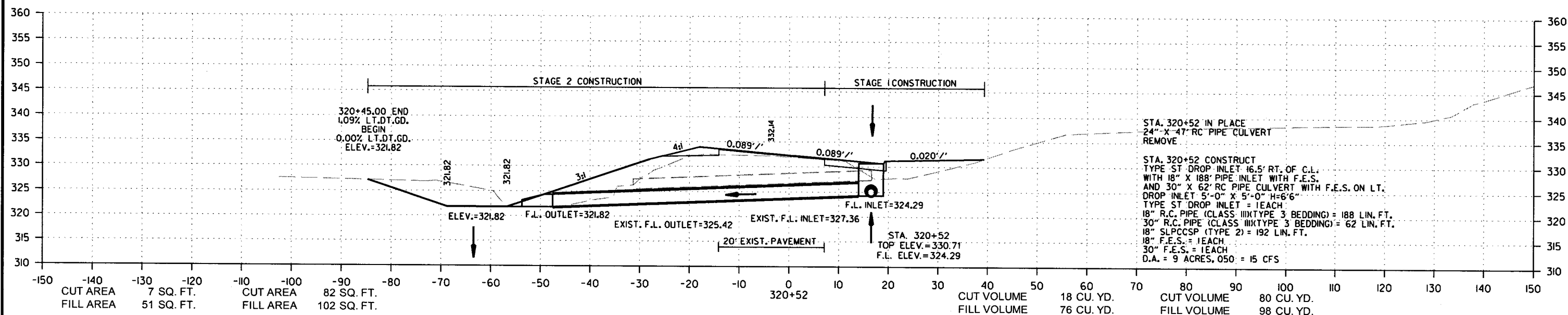
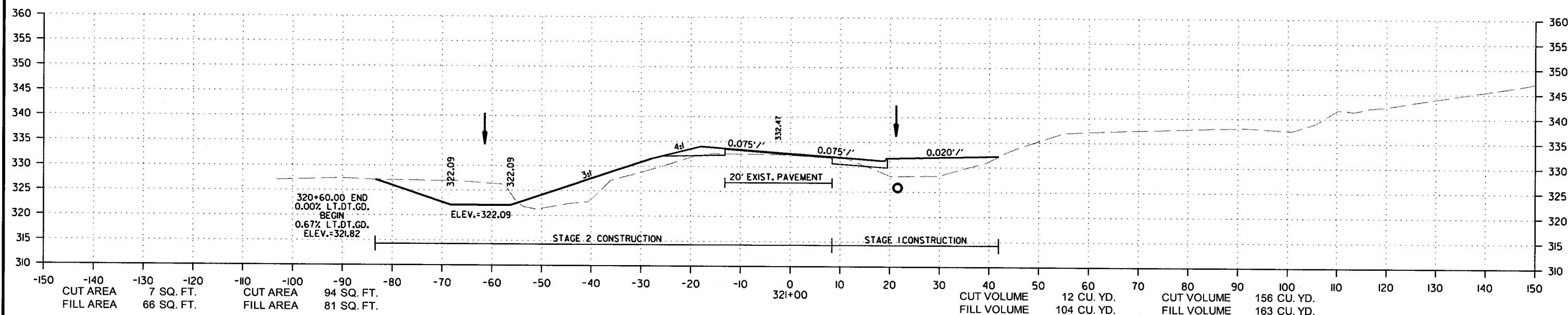
2 CROSS SECTIONS

STAGE 1

STAGE 2

STAGE 1

STAGE 2



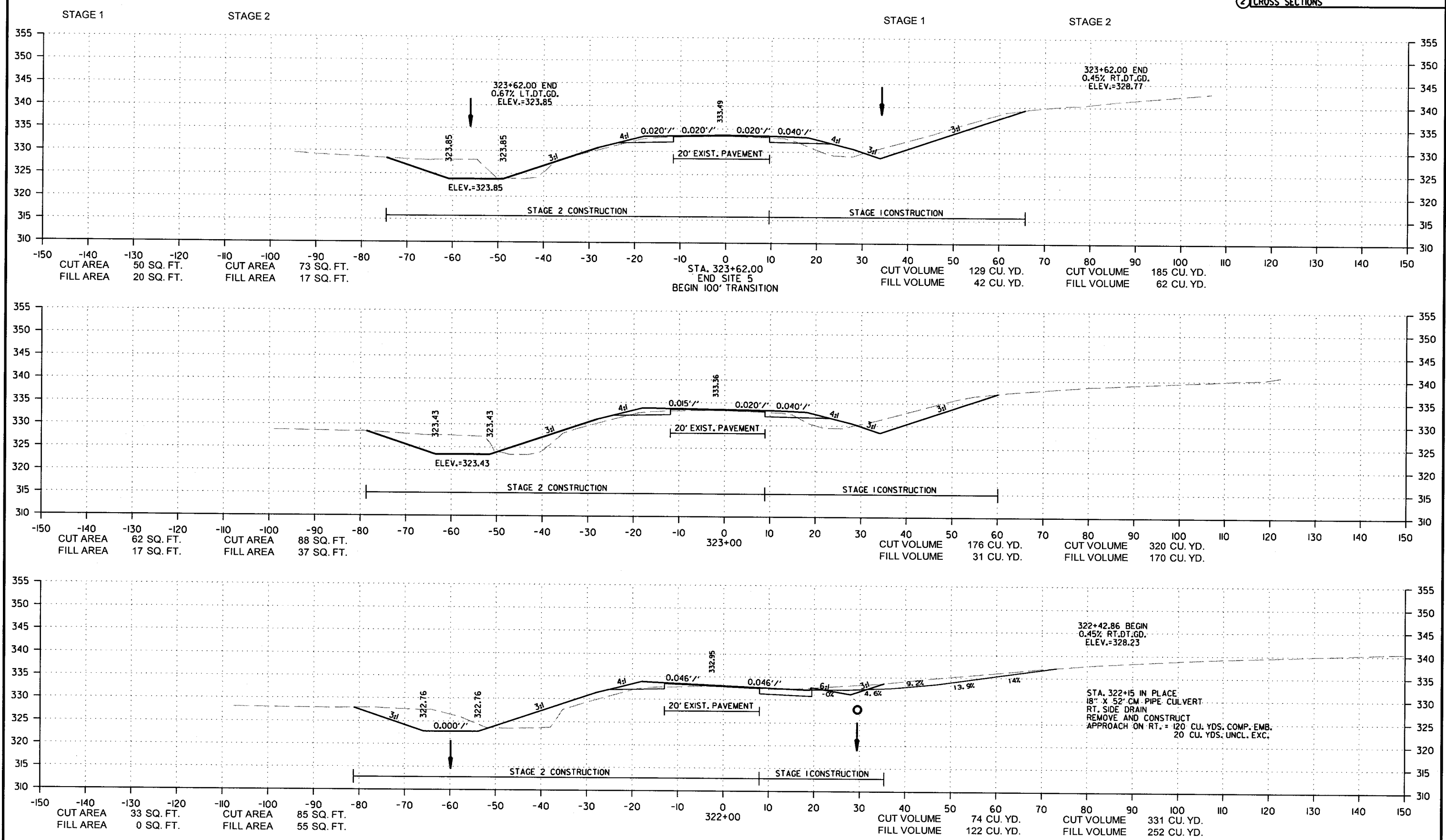
SITE 5
CROSS SECTION STA. 320+52 TO STA. 321+00

9/6/2018

R080494.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. 080494		190	208	

② CROSS SECTIONS

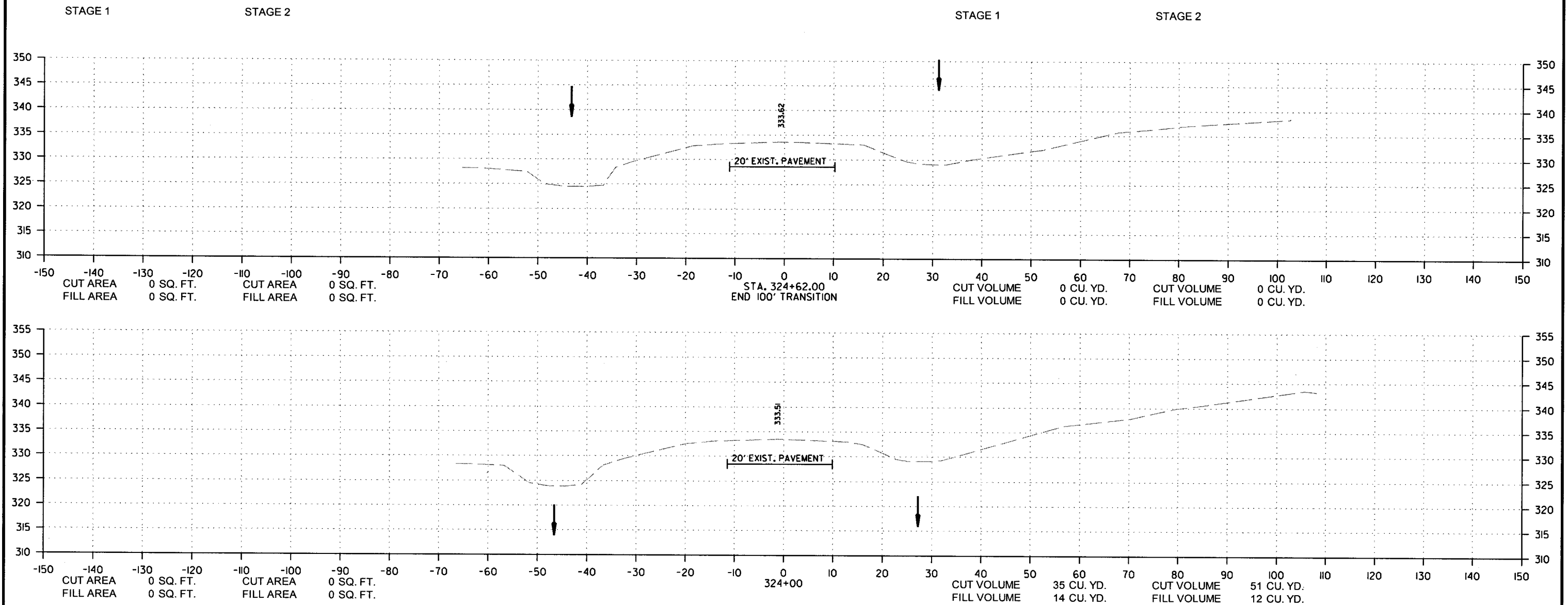


SITE 5
CROSS SECTION STA. 322+00 TO STA. 323+62

9/6/2018
R080494.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. 080494			191	208

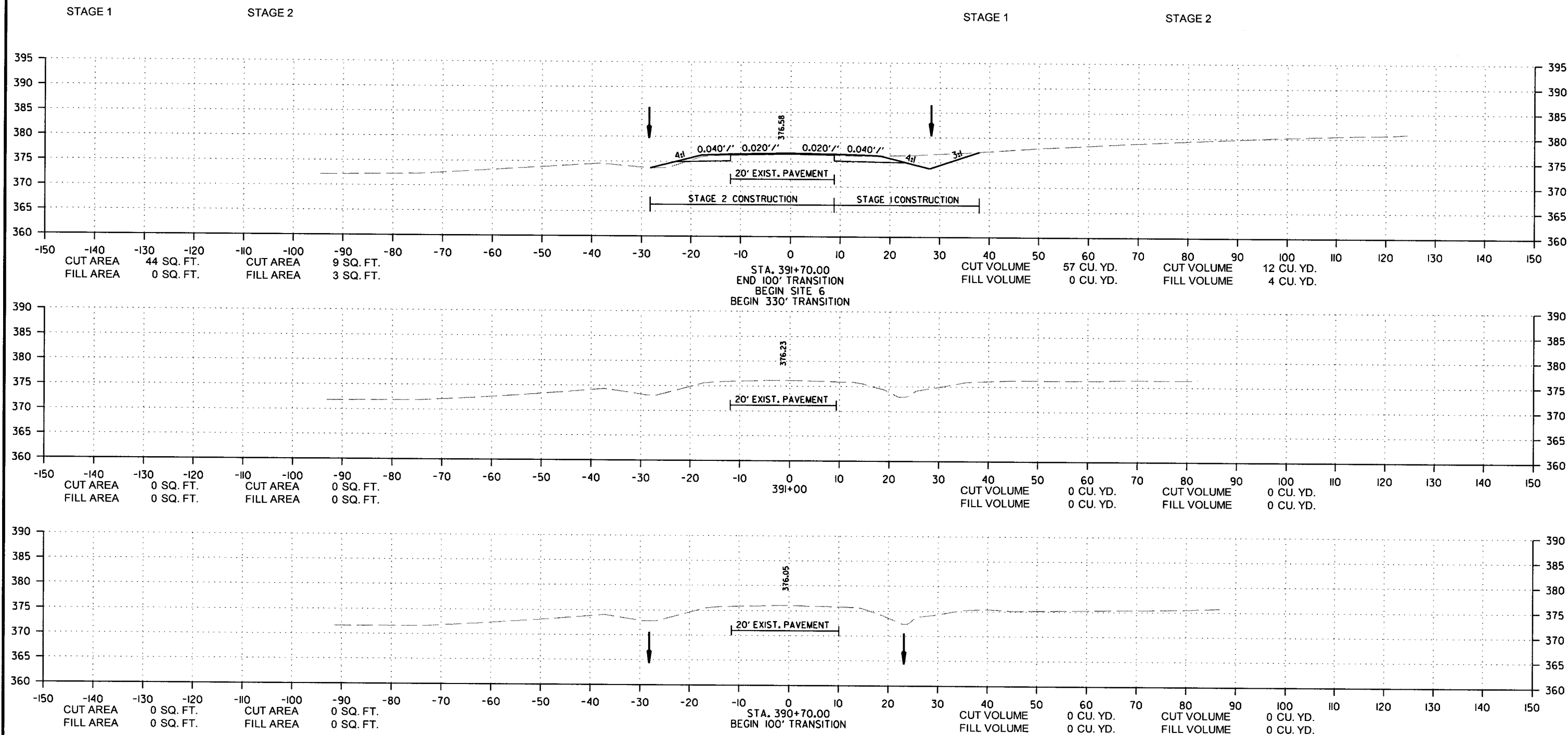
2 CROSS SECTIONS



SITE 5
CROSS SECTION STA. 324+00 TO STA. 324+62

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. 080494			192	208

② CROSS SECTIONS



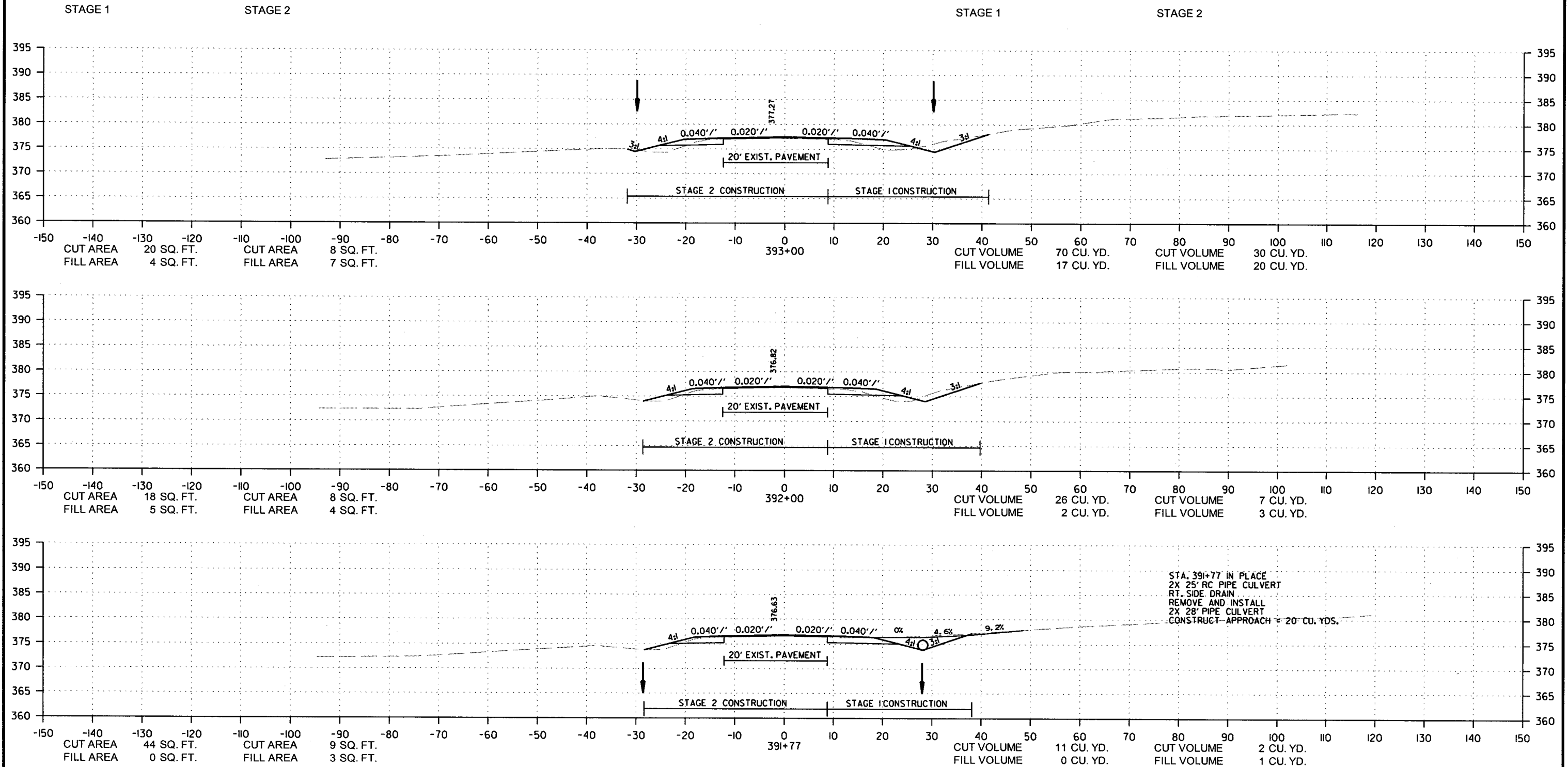
SITE 6
CROSS SECTION STA. 390+70 TO STA. 391+70

9/6/2018

RO80494.DGN

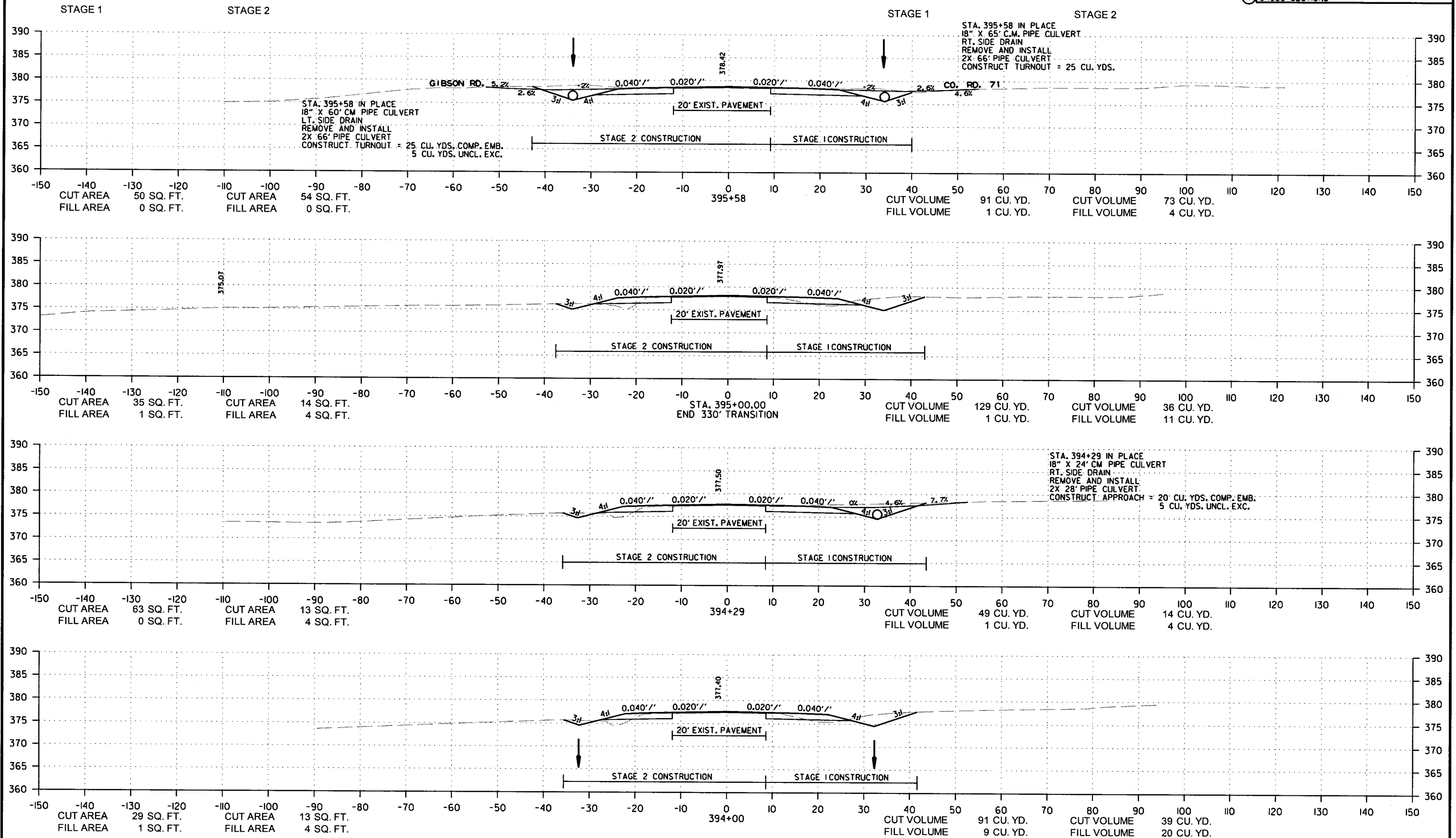
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
						JOB NO. 080494	193	208

② CROSS SECTIONS



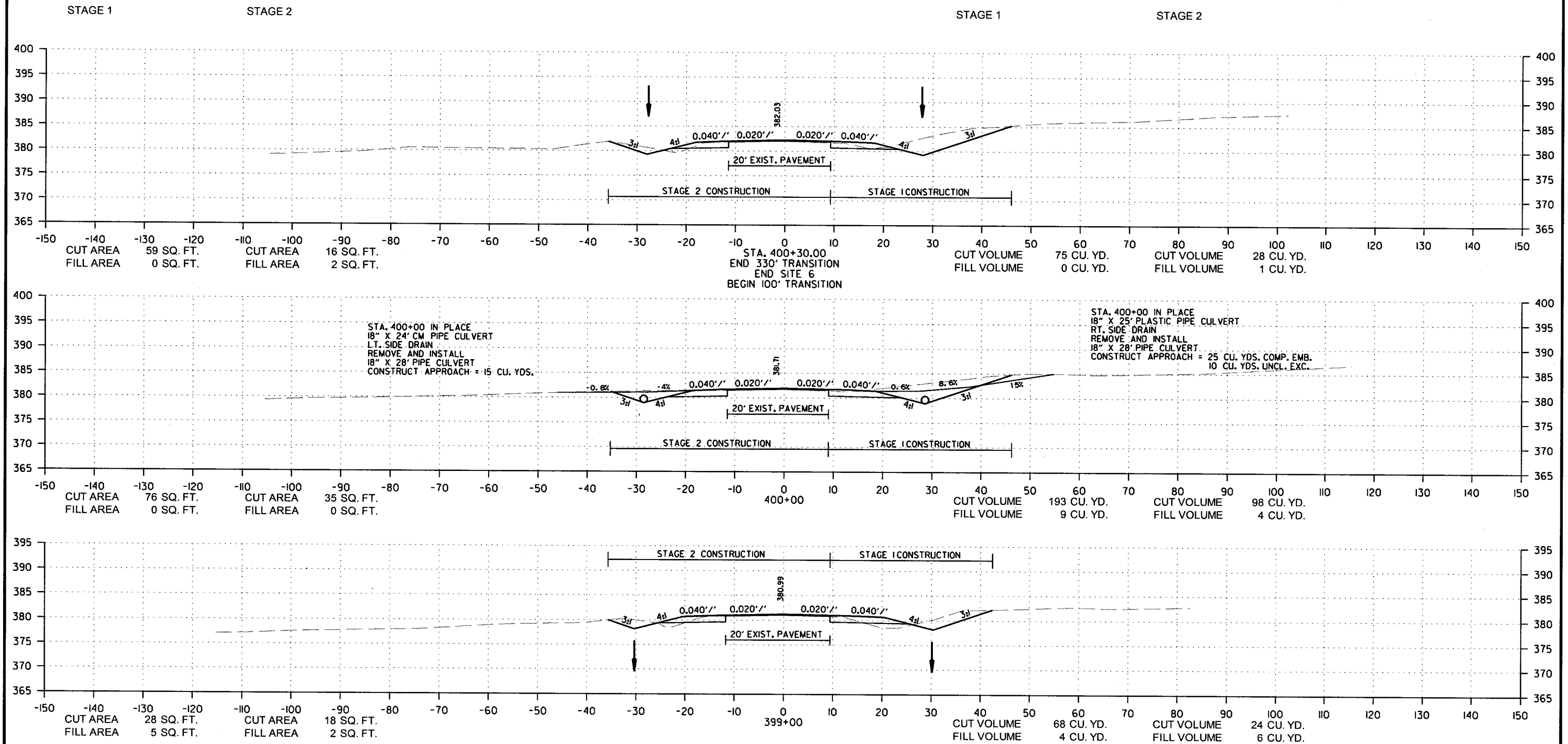
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	080494		194	208

2 CROSS SECTIONS



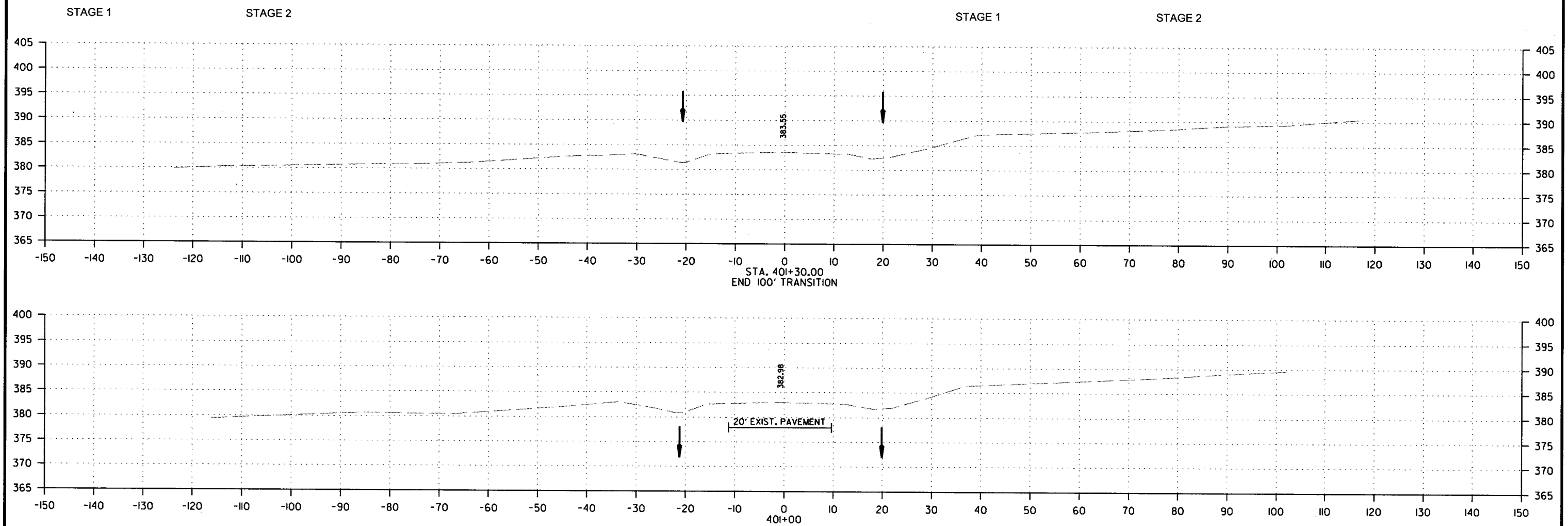
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	080494		196	208

② CROSS SECTIONS



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.		080494	197	208

② CROSS SECTIONS

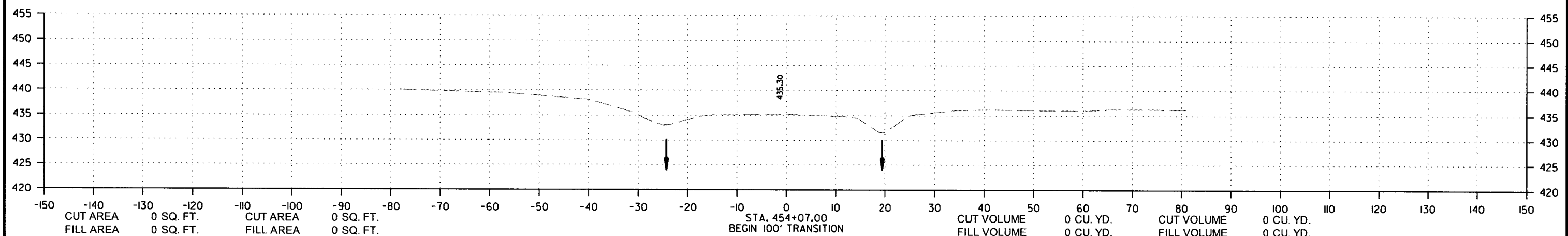
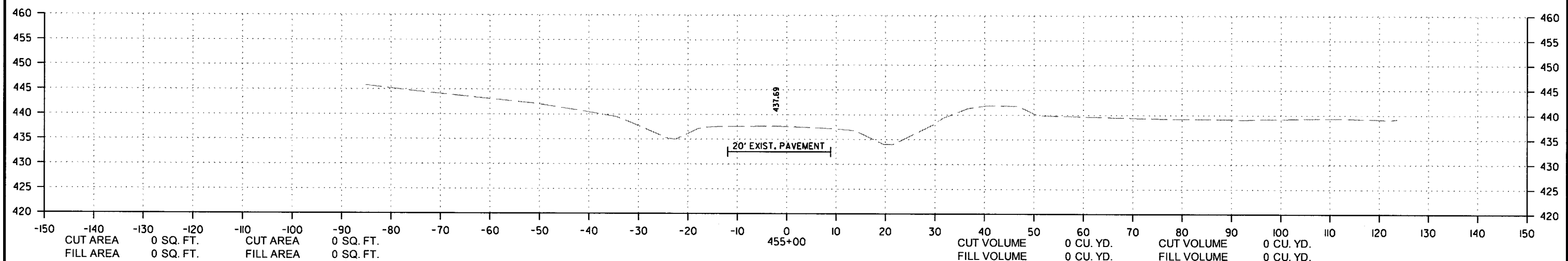
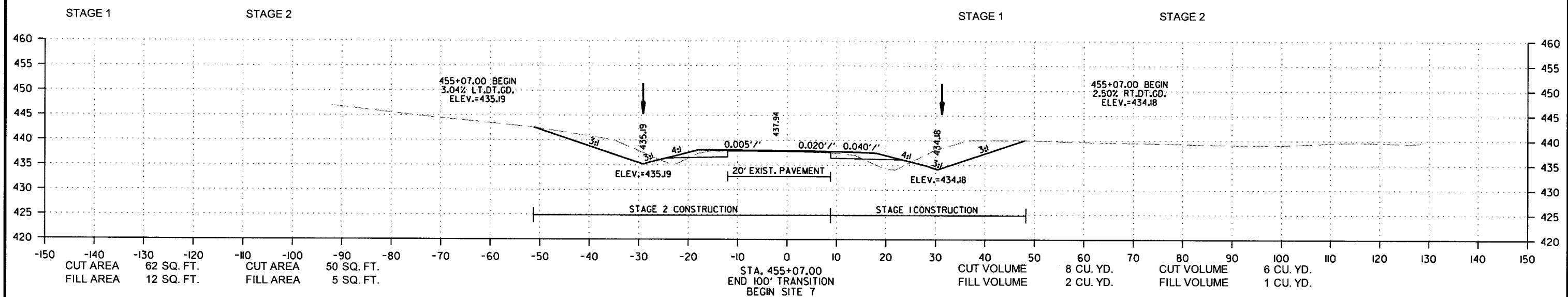


9/6/2018
R080494.DGN

SITE 6
CROSS SECTION STA. 401+00 TO STA. 401+30

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. 080494			198	208

2 CROSS SECTIONS

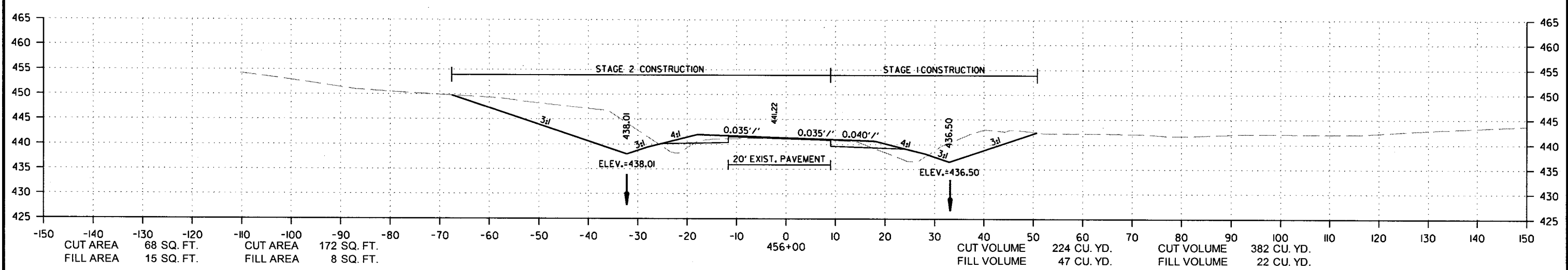
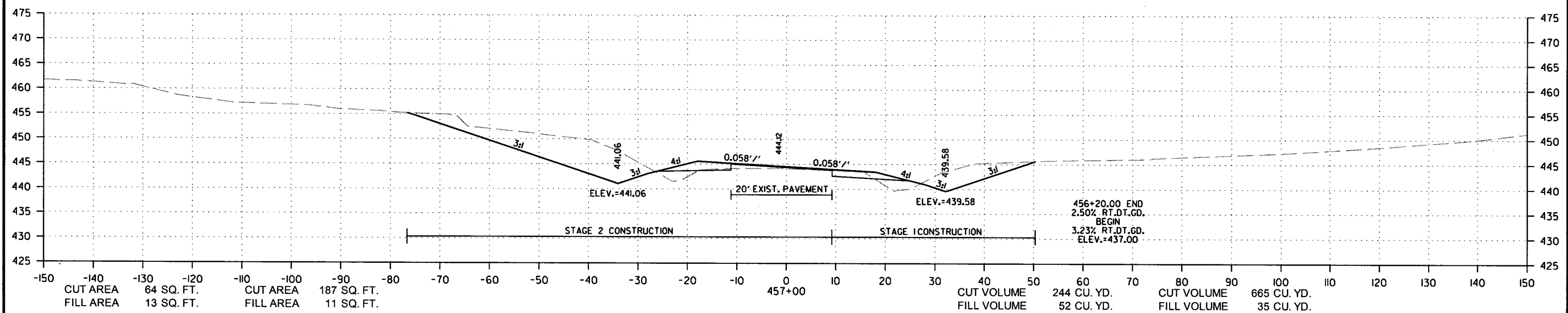
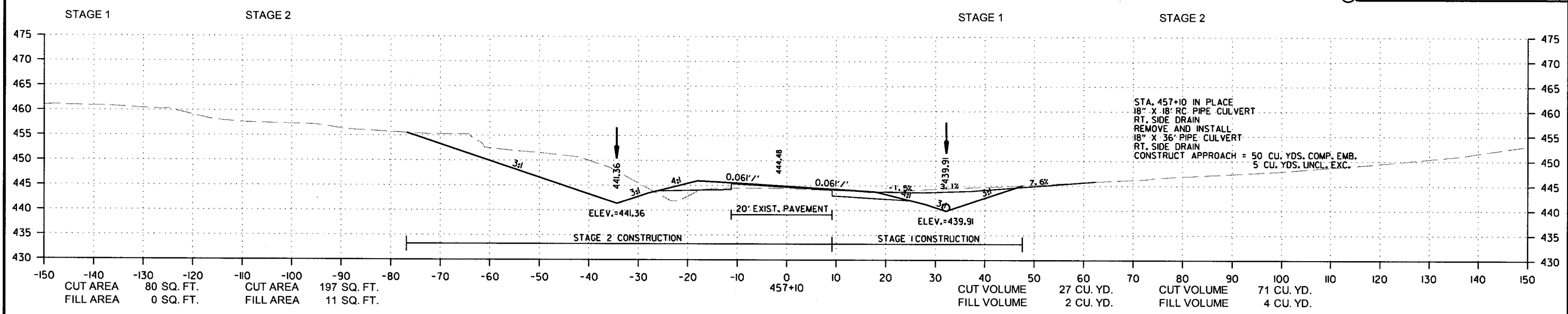


9/6/2018 R080494.DGN

SITE 7
CROSS SECTION STA. 454+07 TO STA. 455+07

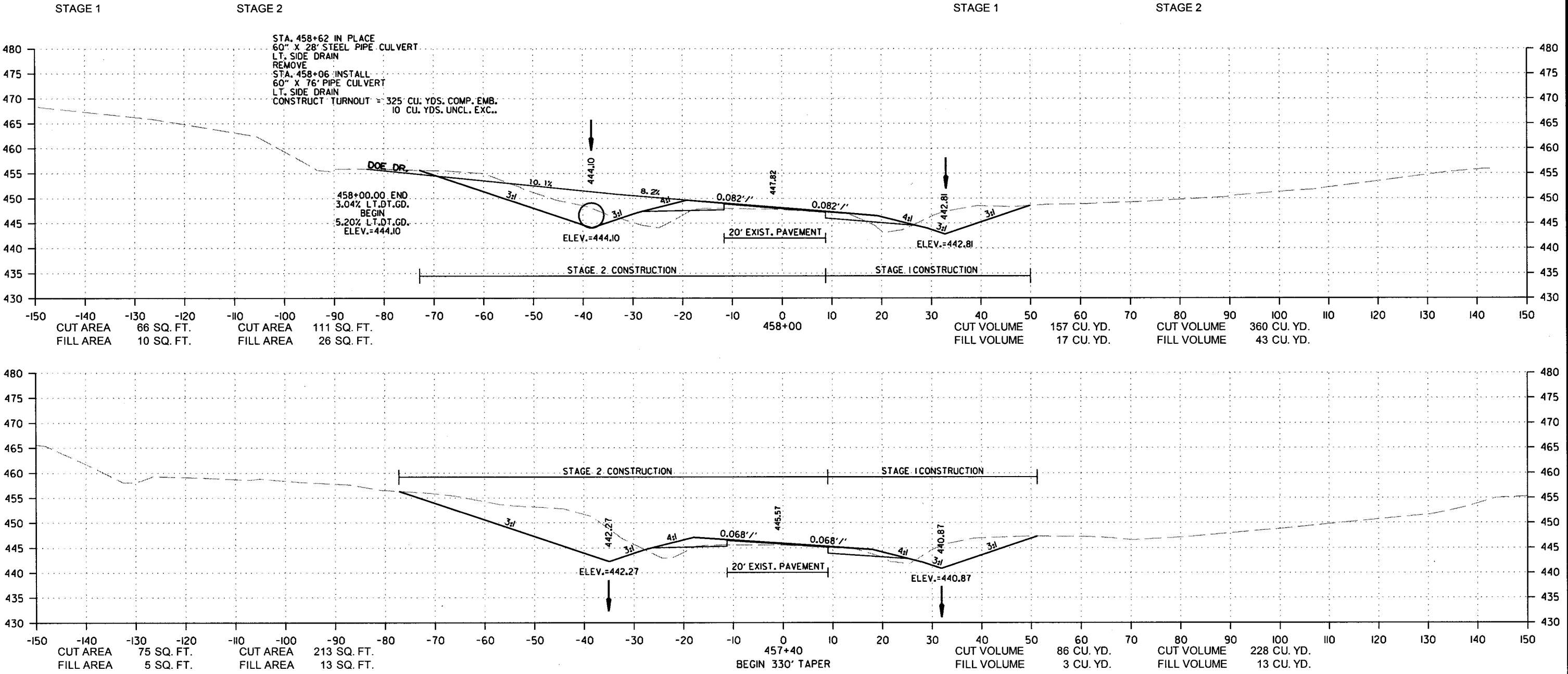
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
						JOB NO. 080494	199	208

2 CROSS SECTIONS



DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. RD. PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
						JOB NO. 080494	200	208

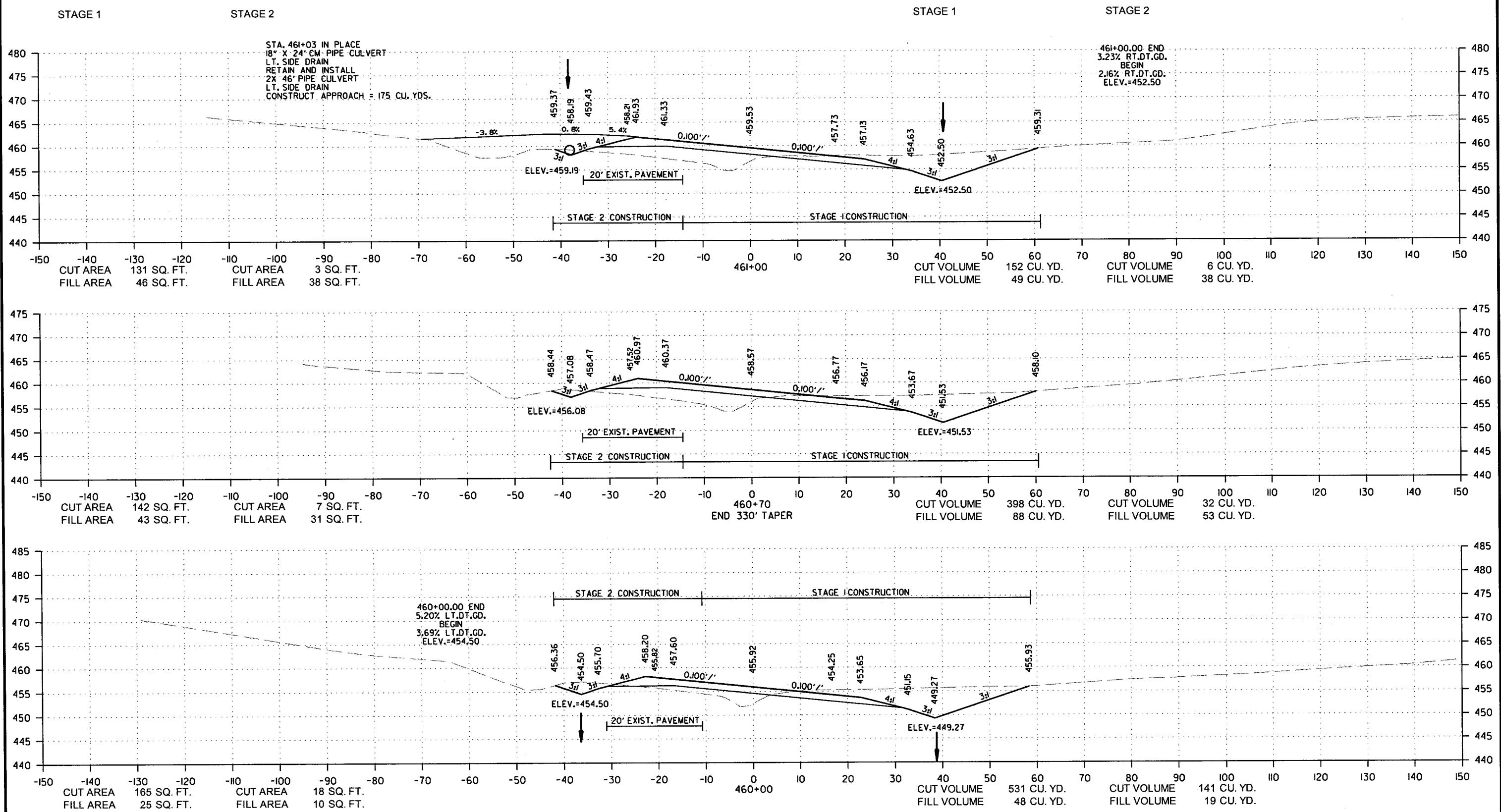
2 CROSS SECTIONS



9/6/2018
R080494.DGN

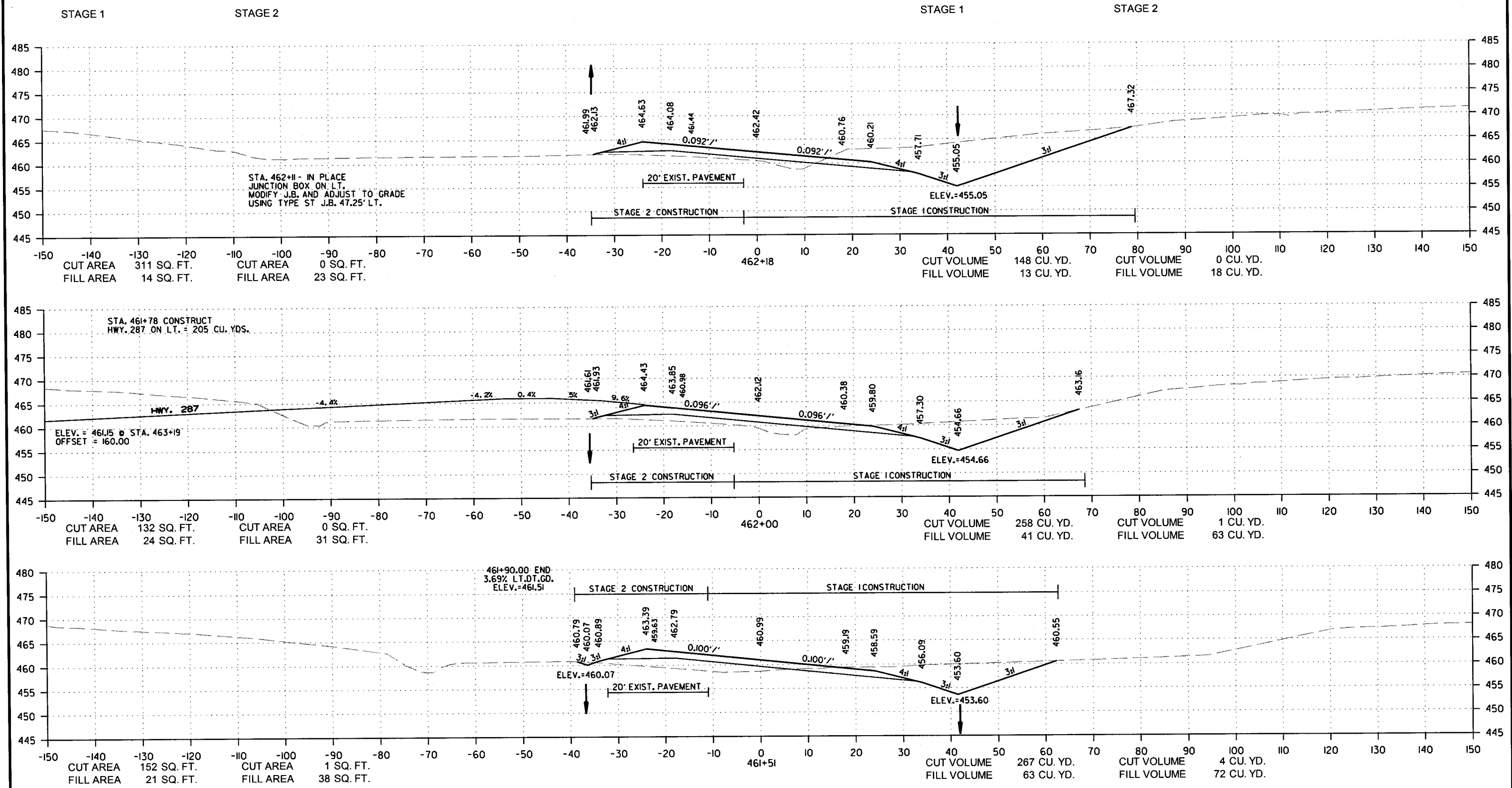
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		080494	202	208

2 CROSS SECTIONS



9/6/2018
R080494.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. 080494	203	208
② CROSS SECTIONS								



SITE 7
CROSS SECTION STA. 461+51 TO STA. 462+18

9/6/2018

R080494.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.	080494		204	208

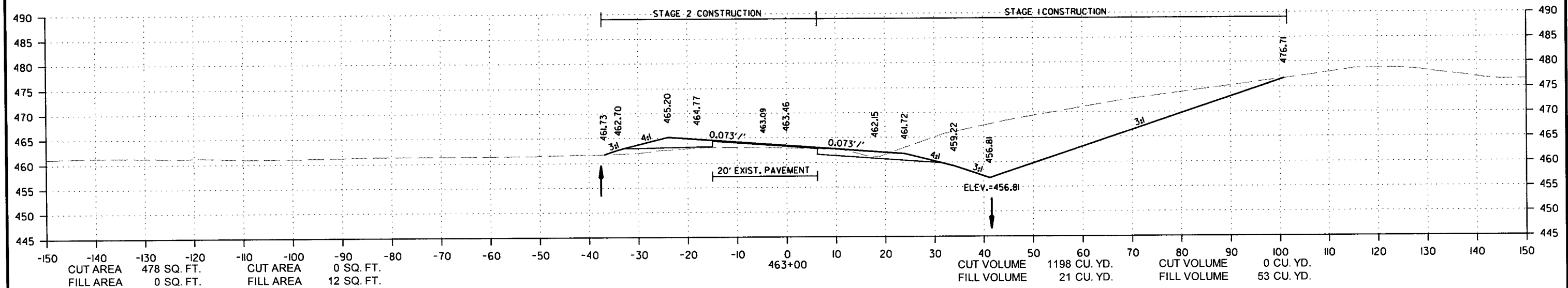
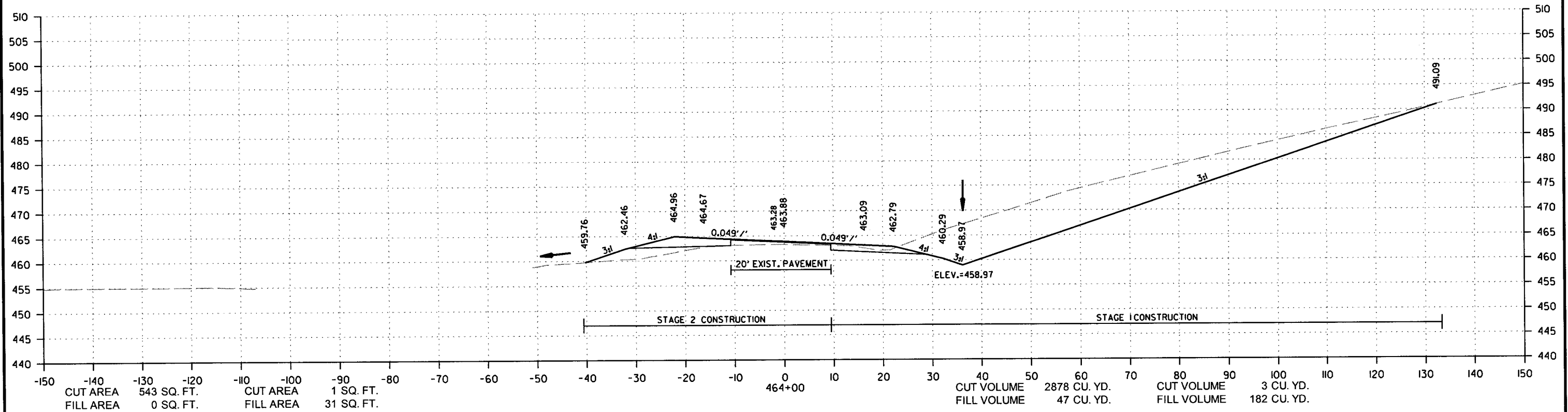
② CROSS SECTIONS

STAGE 1

STAGE 2

STAGE 1

STAGE 2



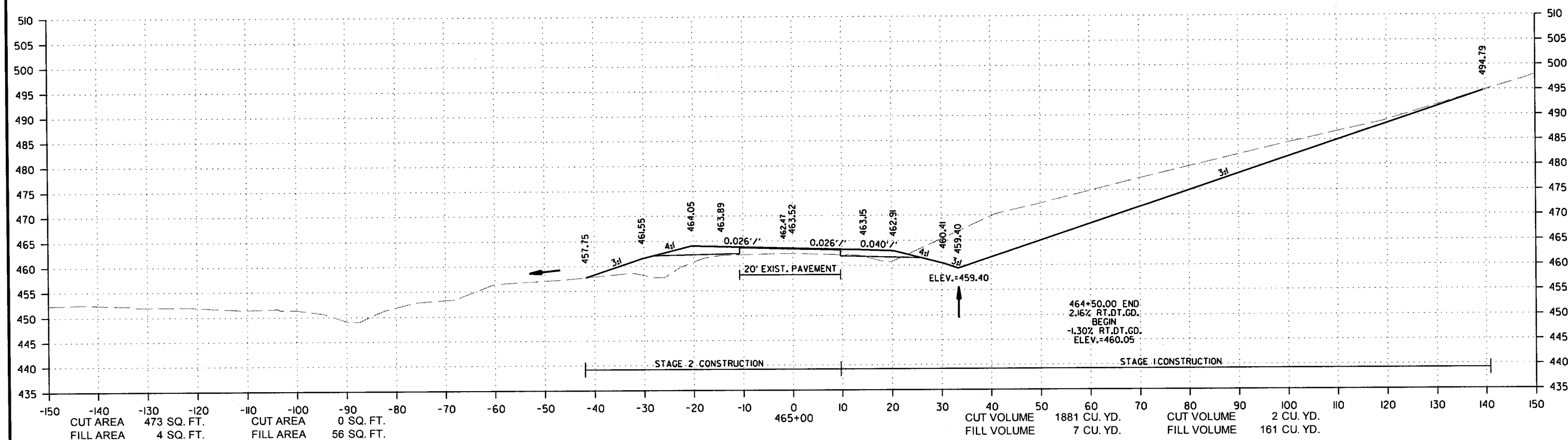
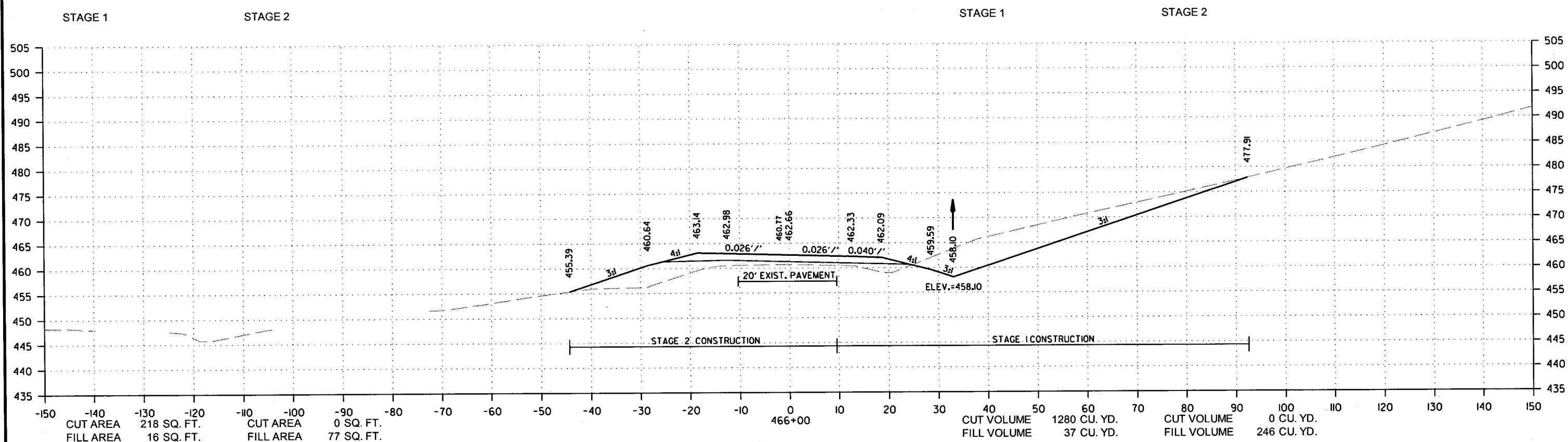
SITE 7
CROSS SECTION STA. 463+00 TO STA. 464+00

9/6/2018

R080494.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.		080494	205	208

② CROSS SECTIONS



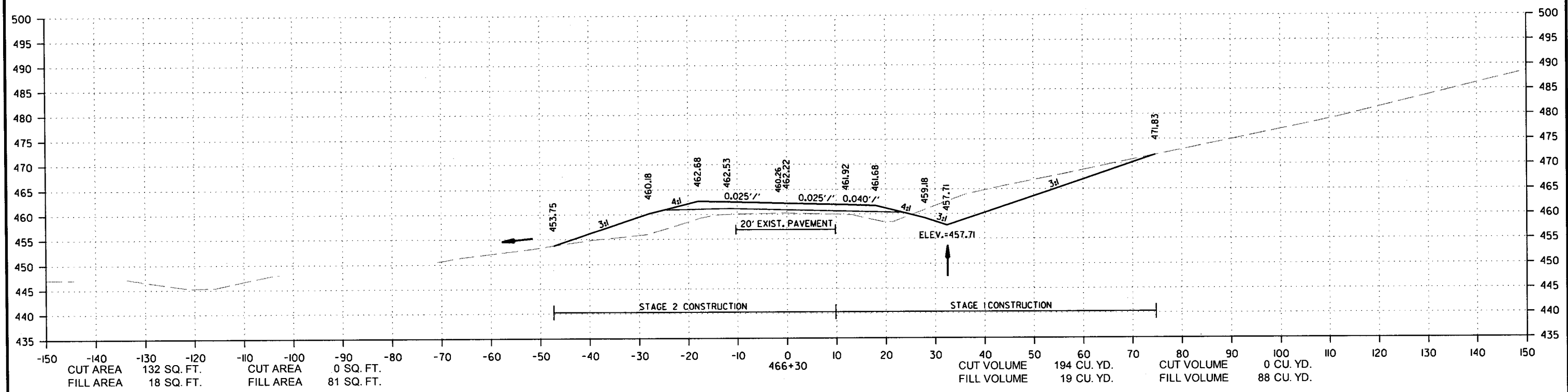
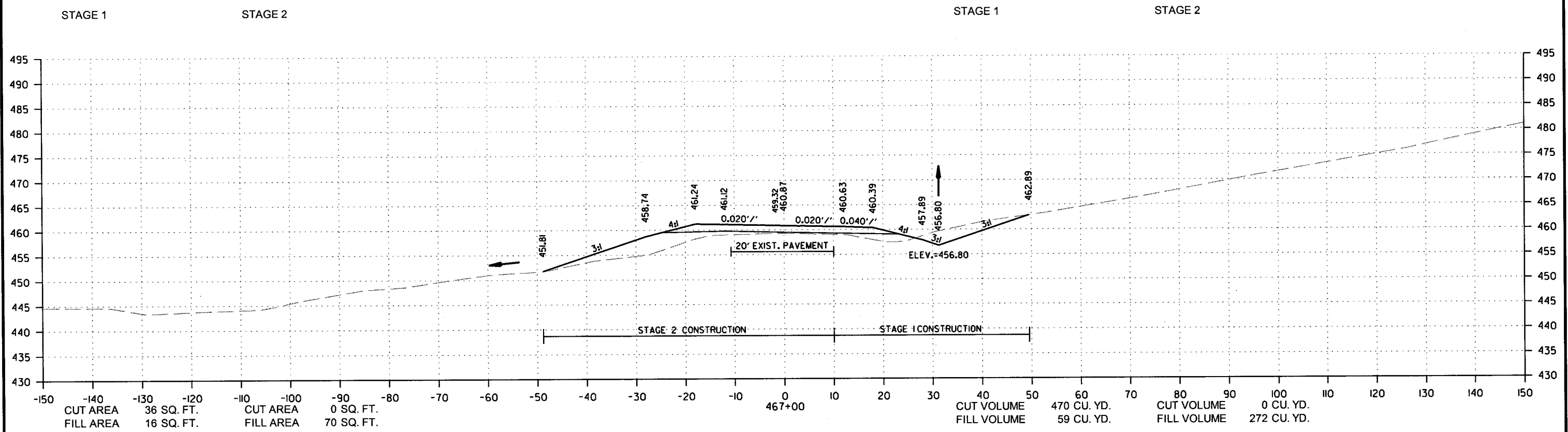
SITE 7
CROSS SECTION STA. 465+00 TO STA. 466+00

9/6/2018

R080494.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.		080494	206	208

② CROSS SECTIONS

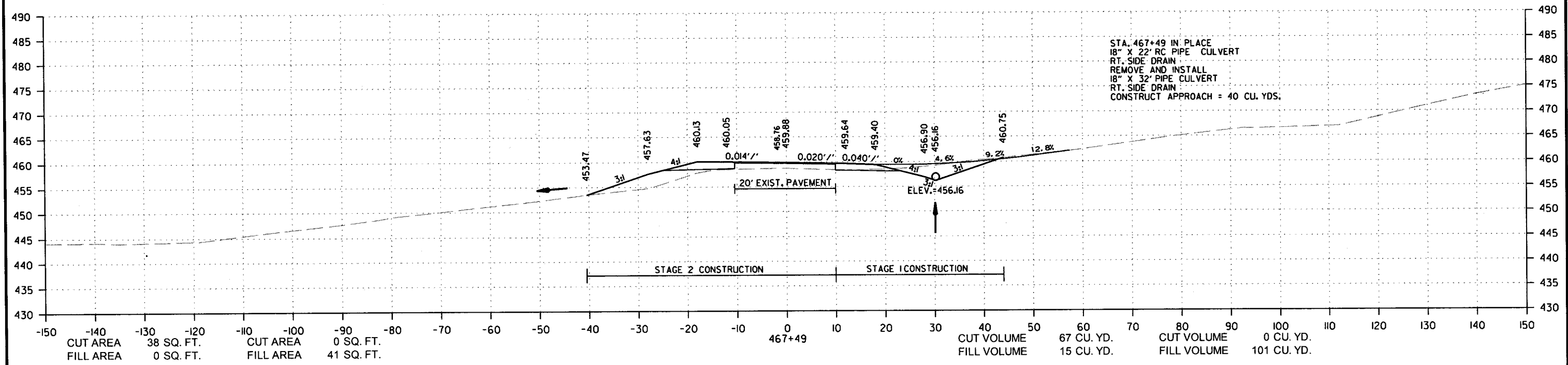
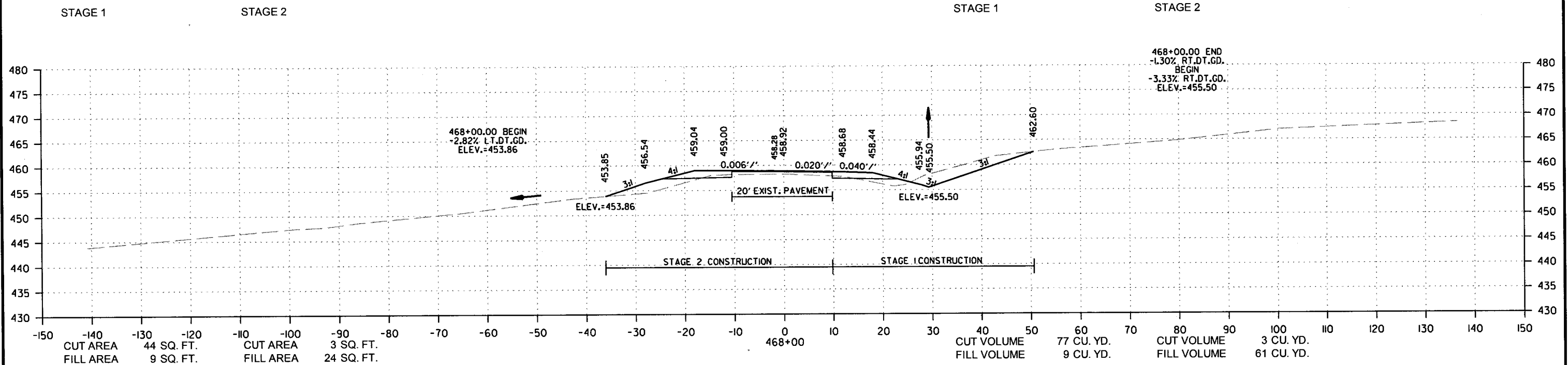


SITE 7
CROSS SECTION STA. 466+30 TO STA. 467+00

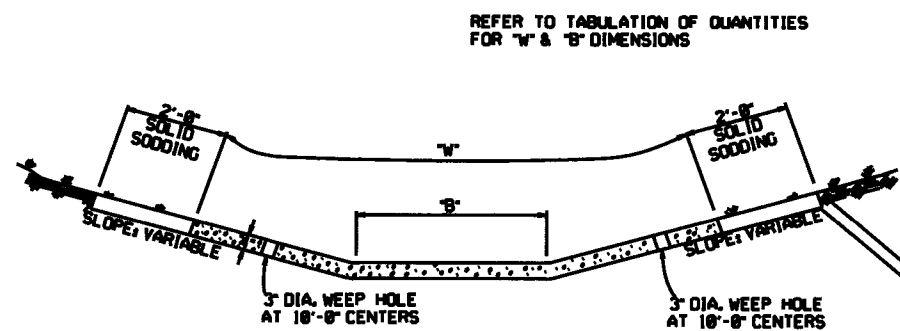
9/6/2018
R080494.DCN

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.		080494	207	208

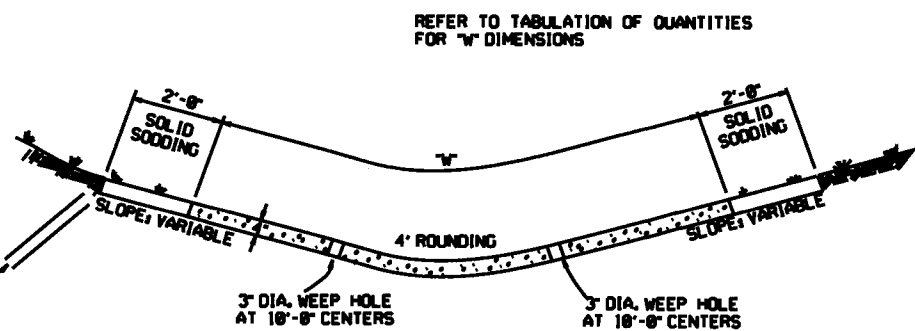
② CROSS SECTIONS



9/6/2018
R080494.DCN



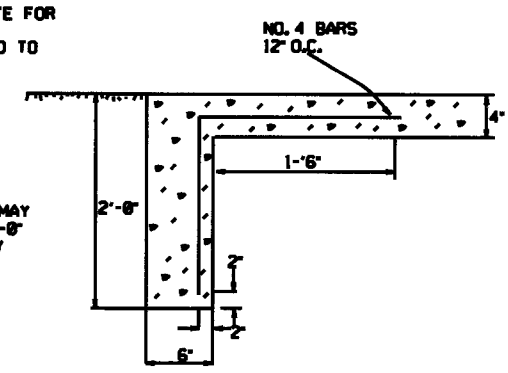
TYPE A



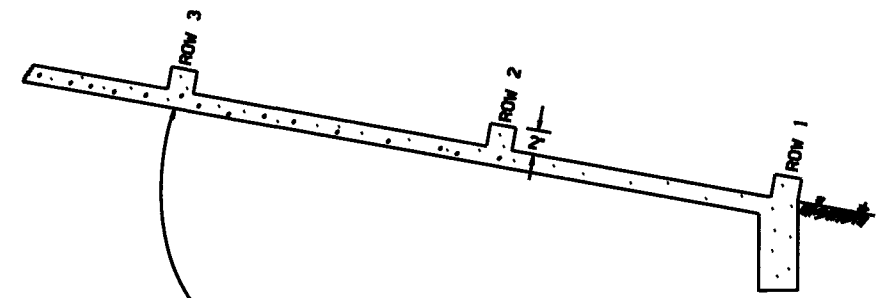
TYPE B

EXCAVATE TO NEAT LINES TO CONSTRUCT DITCH PAVING AND SOLID SODDING.

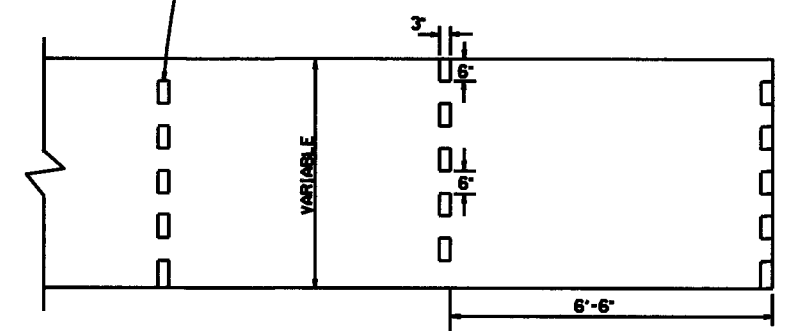
THE STEEL AND ADDITIONAL CONCRETE FOR THE WALLS SHALL NOT BE PAID FOR DIRECTLY, BUT SHALL BE CONSIDERED TO BE INCLUDED IN THE PRICE BID FOR "CONCRETE DITCH PAVING."



TOE WALL DETAIL FOR CONCRETE DITCH PAVING



ENERGY DISSIPATORS TO BE USED FOR THE ENTIRE LENGTH OF DITCH WHEN SLOPE OF DITCH PAVING EXCEEDS 7%. THE DISSIPATORS WILL NOT BE PAID FOR DIRECTLY, BUT SHALL BE CONSIDERED TO BE INCLUDED IN THE PRICE BID FOR CONCRETE DITCH PAVING.



ENERGY DISSIPATORS
(NO SCALE)

GENERAL NOTES:

THE FULL WIDTH OF EACH SECTION SHALL BE POURED MONOLITHICALLY.
TOE WALLS TO BE CONSTRUCTED FULL WIDTH AT EACH END OF DITCH PAVING, AND POURED MONOLITHICALLY.

SOLID SOD ALONG DITCH PAVING TO BE PLACED WITHIN 14 DAYS OF DITCH PAVING CONSTRUCTION.

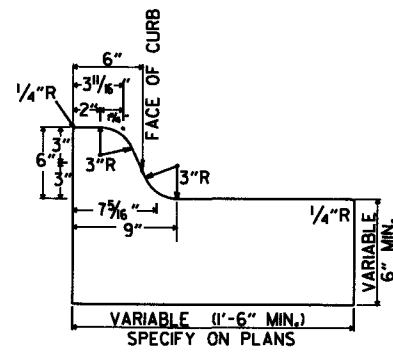
1' WIDE TRANSVERSE EXPANSION JOINTS SHALL BE PLACED IN CONCRETE DITCH PAVING AT 45' INTERVALS. THE SPACE SHALL BE FILLED WITH APPROVED JOINT FILLER COMPLYING WITH AASHTO M213.

DATE	REVISION	DATE FILM'D
12-8-15	CORRECTED ENERGY DISSIPATOR DRAWING AND NOTE	
10-7-70	ADDED GENERAL NOTE	
6-2-94	ADDED GENERAL NOTE ABOUT SOLID SODDING	
10-30-83	ELIMINATED MIN. ROWS OF ELEMENTS	111-30-83
7-16-89	REVISED DISSIPATOR NOTE	169-7-16-89
4-6-87	REVISED ENERGY DISSIPATOR	167-4-6-87
10-8-87	REVISED NOTE ON ENERGY DISS.	162-1-9-87
10-8-86	ADDED NOTE TO ENERGY DISS.	162-1-9-86
11-1-84	ENERGY DISSIPATOR DETAILS ADDED	168-11-1-84
11-1-84	EXCAVATION DETAILS ADDED	
10-2-72	TYPED A & B	
	REVISED AND REDRAWN	108-10-2-72
	DATE	REVISION

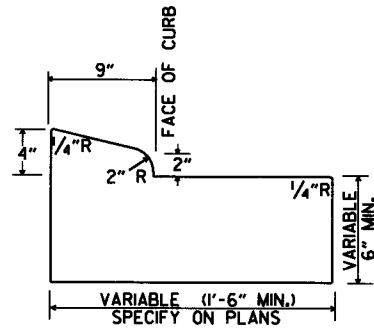
ARKANSAS STATE HIGHWAY COMMISSION

CONCRETE DITCH PAVING

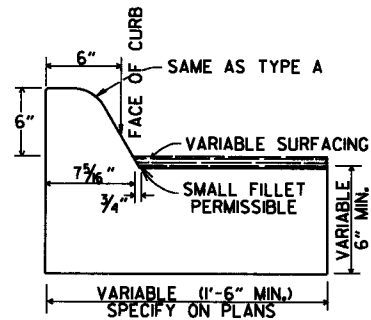
STANDARD DRAWING CDP-1



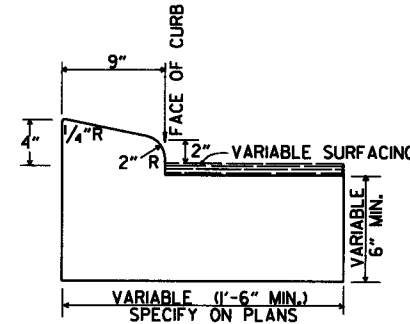
TYPE A



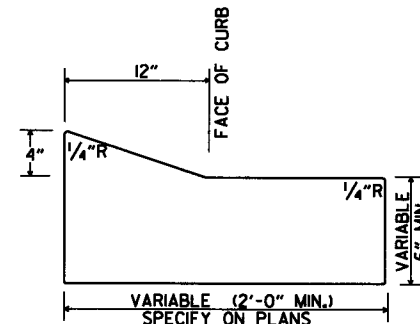
TYPE B-1



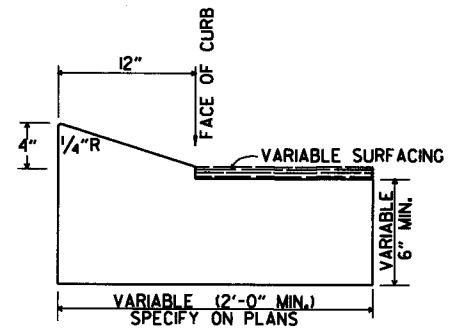
TYPE C



TYPE B-2

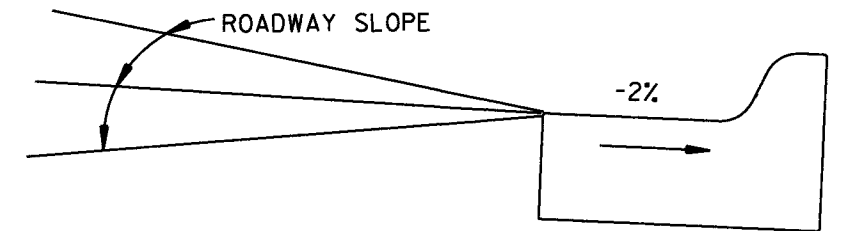


TYPE E-1

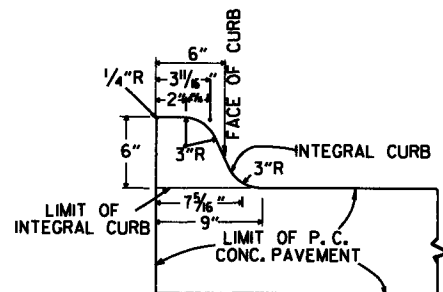


TYPE E-2

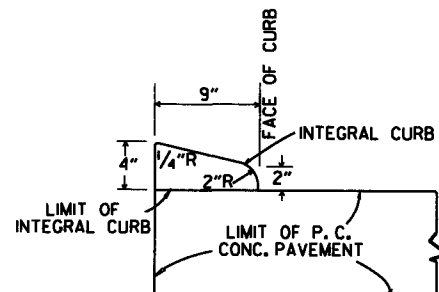
CONCRETE COMBINATION CURB AND GUTTER



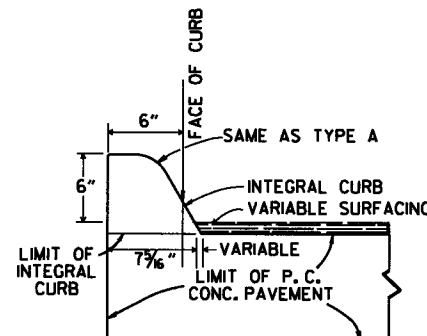
DETAIL OF GUTTER SLOPE
GUTTER SHALL BE CONSTRUCTED ON 2% SLOPE AWAY FROM ROADWAY, REGARDLESS OF ROADWAY SLOPE.



TYPE A

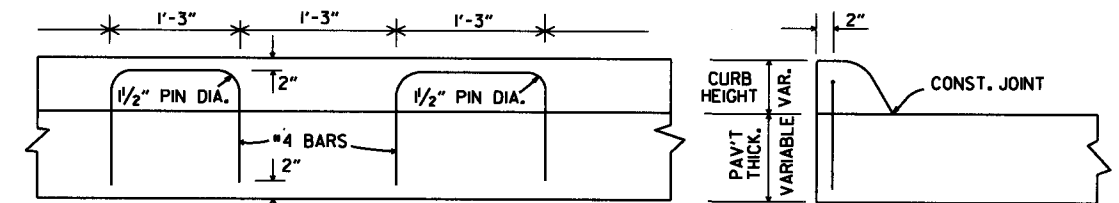


TYPE B



TYPE C

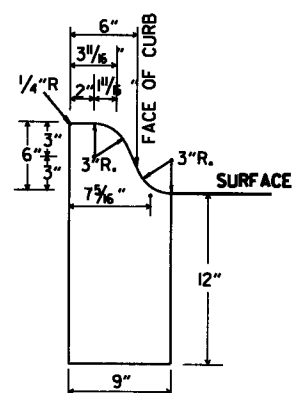
INTEGRAL CURB



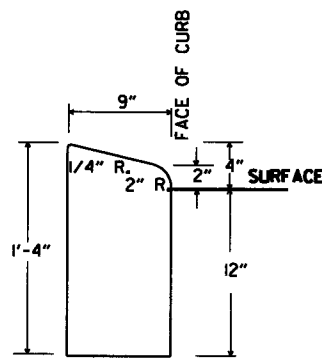
LONGITUDINAL SECTION

ELEVATION

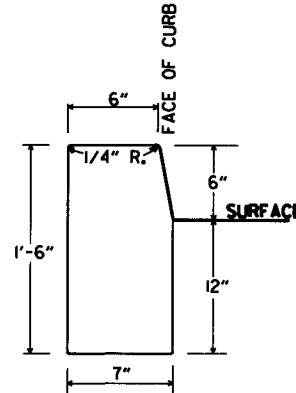
ALTERNATE CONSTRUCTION METHOD FOR INTEGRAL CURB



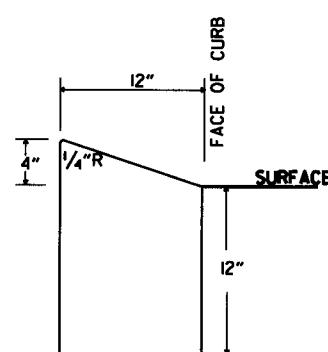
TYPE A



TYPE B

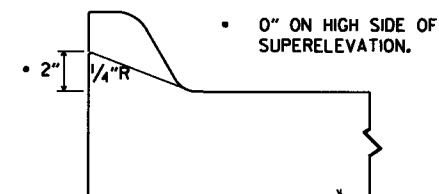


TYPE D



TYPE E

CONCRETE CURB



NOTE: USE MODIFIED CURB AS SPECIFIED ON STD. DR-1.
COMPENSATION FOR MODIFIED CURB WILL BE CONSIDERED INCLUDED IN THE PRICE BID FOR THE TYPE OF CURB OR CURB AND GUTTER SPECIFIED.

DETAILS OF MODIFIED CURB

DATE	REVISION	DATE FILMED
8-29-07	REVISED GUTTER SLOPE & MODIFIED CURB DETAILS	
8-10-05	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 1	11-30-89
7-15-88	REVISED MODIFIED CURB	630-7-15-88
1-1-73	REVISED MODIFIED CURB	500-1-1-73
10-2-72	REVISED AND REDRAWN	502-10-2-72

ARKANSAS STATE HIGHWAY COMMISSION

CURBING DETAILS

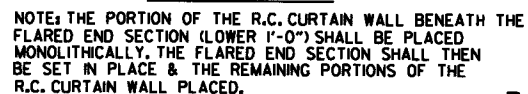
STANDARD DRAWING CG-1



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



NOTE: QUANTITIES SHOWN ARE FOR ONE (1) CURTAIN WALL.



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.

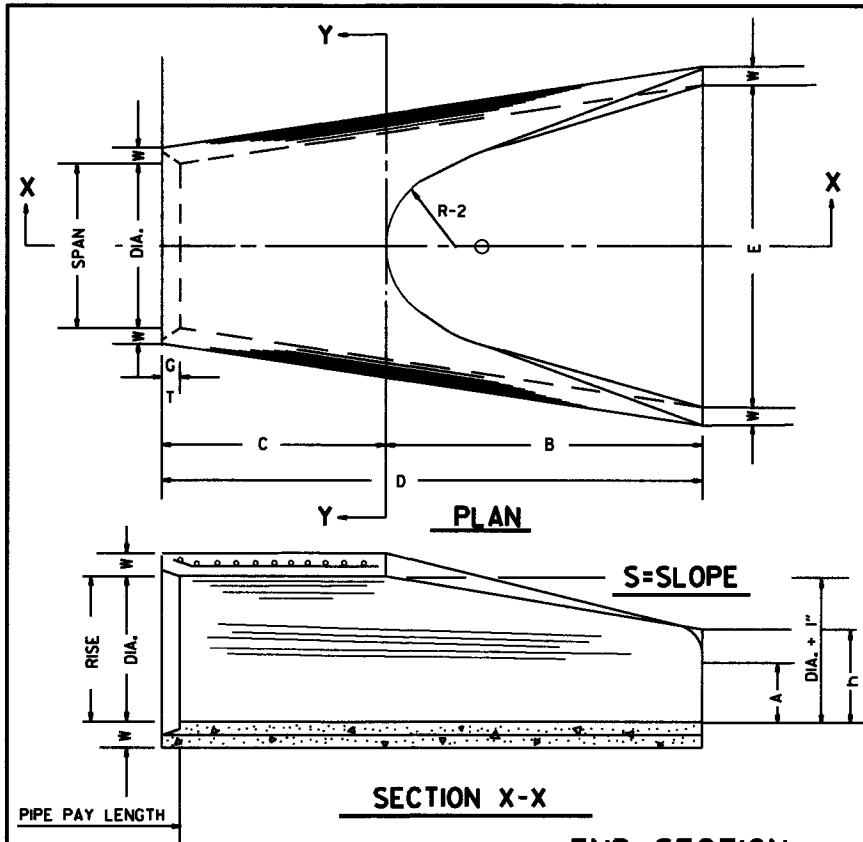
ALL REINFORCING STEEL #4 BARS @ 6" O.C.

NOTE: QUANTITIES SHOWN ABOVE ARE FOR ONE (1) END OF F.E.S.

GENERAL NOTES

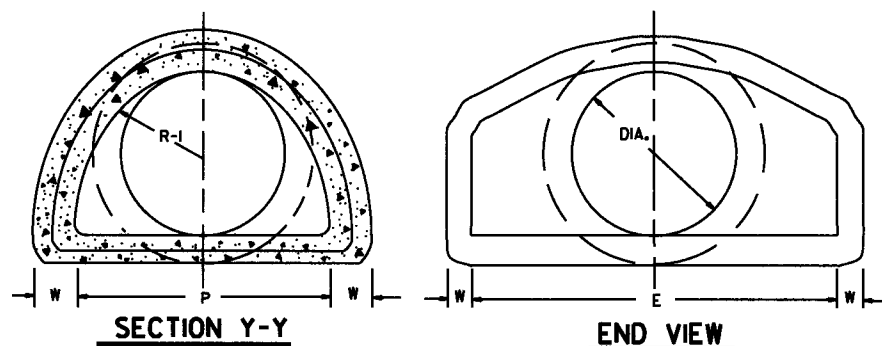
- GENERAL NOTES**
1. A CAST-IN-PLACE OR PRECAST CURTAIN WALL MAY BE USED. PAYMENT FOR THE CURTAIN WALL SHALL BE CONSIDERED TO BE INCLUDED IN THE UNIT PRICE BID EACH FOR FLARED END SECTIONS OF THE SEVERAL SIZES, WHICH PRICE SHALL BE FULL COMPENSATION FOR FURNISHING ALL MATERIALS INCLUDING REINFORCING STEEL AND CONCRETE; FOR FORMS, MIXING AND PLACING; FOR EXCAVATION AND BACKFILL, AND FOR ALL LABOR, TOOLS, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE WORK.
 2. ALL EXPOSED EDGES SHALL BE CHAMFERED $\frac{3}{4}"$.
 3. CONCRETE FOR CURTAIN WALL SHALL MEET THE REQUIREMENTS FOR CLASS A OR S CONCRETE AS PROVIDED IN SECTION 802 OF THE STANDARD SPECIFICATIONS OR FOR PAVING CONCRETE AS PROVIDED IN SECTION 501 OF THE STANDARD SPECIFICATIONS.
 4. WELDED WIRE MESH 3×3 W/10 $\times$ W/10 MAY BE USED IN LIEU OF REINFORCING BARS.

10-18-98	ADDED NOTE TO SOLID SODDING	ARKANSAS STATE HIGHWAY COMMISSION FLARED END SECTION STANDARD DRAWING FES-1
10-12-98	CORRECTED SPELLING	
11-4-98	ADDED GENERAL NOTE NO. 4	
8-15-97	REV. CURTAIN WALL QUANT. STEEL SCH. & SOLID SOD QUANT.	
5-15-90	ALLOW PRECAST IN 2 OR MORE PIECES CHAMFER EDGES	
5-15-90	ADDP. PRECAST WALL & GENERAL NOTES	
10-2-72	REVISED AND REDRAWN	
DATE	REVISION	FILED



END SECTION
FOR REINFORCED CONCRETE PIPE CULVERTS

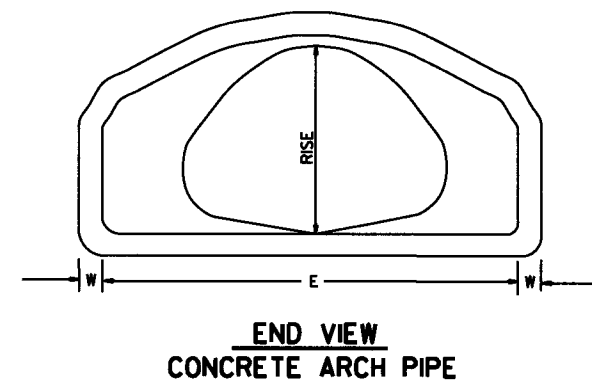
TABLE OF DIMENSIONS														
DIA.	WALL	A	B	C	D	E	S	DIA. + 1"	P	R-1	R-2	G-T	WT.	h
18"	2 1/2"	9"	2'-3"	3'-10"	6'-1"	3'-0"	3 1/4"	19"	29"	15 1/2"	12"	2"	1000	1'-0 1/2"
24"	3"	9 1/2"	3'-7 1/2"	2'-6"	6'-1 1/2"	4'-0"	3 1/4"	25"	33 3/4"	16 3/4"	14"	2 1/2"	1600	1'-1 1/2"
30"	3 1/2"	1'-0"	4'-6"	1'-7 1/4"	6'-1 3/4"	5'-0"	3 1/4"	31"	37"	18 1/2"	15"	3 1/4"	1940	1'-4 3/4"
36"	4"	1'-3"	5'-3"	2'-10 1/4"	8'-1 1/4"	6'-0"	3 1/4"	37"	47 1/4"	24 1/4"	20"	3 1/2"	4100	1'-8"
42"	4 1/2"	1'-9"	5'-9"	2'-11"	8'-2"	6'-6"	3 1/4"	43"	53 1/4"	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 1/4"	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 1/4"	55"	65 1/2"	33 1/4"	24"	4"	8750	2'-10 1/2"
60"	6"	2'-10"	6'-6"	1'-10"	8'-4"	8'-0"	3 1/4"	61"	72 1/2"	36 1/4"	24"	4"	9270	3'-5"
72"	7"	3'-10"	6'-6"	1'-10"	8'-4"	9'-0"	3 1/4"	73"	77 3/4"	38 3/4"	24"	5"	13250	4'-6"



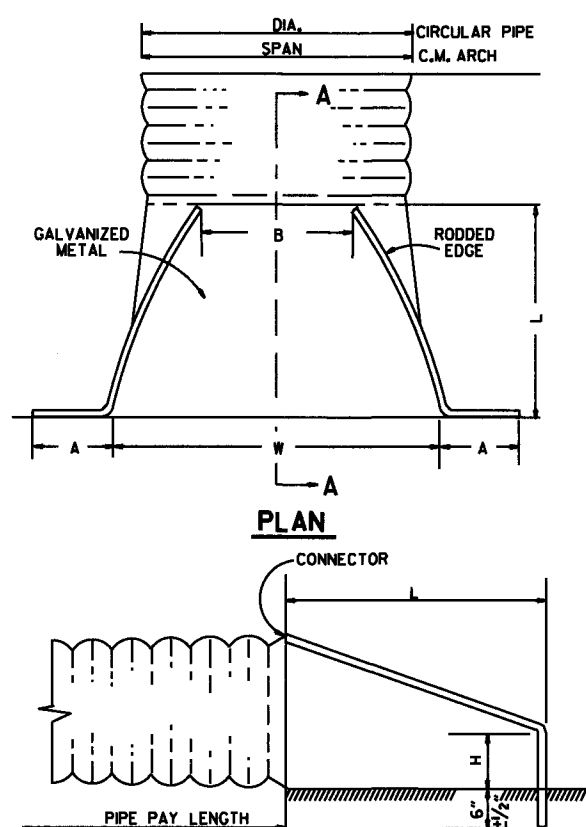
NOTE: TONGUE END ON UPSTREAM SECTION
GROOVE END ON DOWNSTREAM SECTION

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										
INCHES														
15	18	18	11	11	2"	4"	2'-0"	4'-0"	6'-0"	3'-0"	29"	12"	1 1/2"	2 1/2"
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"
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"
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"
30	36 1/4	36	22 1/2	23	3 1/2"	10"	3'-1"	3'-0 1/4"	6'-1 1/2"	6'-0"	47 1/8"	20"	3"	2 1/2"
36	43 3/4	44	26 3/8	27	4"	10 1/2"	4'-0"	2'-1 1/2"	6'-1 1/2"	6'-6"	54 1/8"	22"	3 1/2"	2 1/2"
42	51 1/8	51	31 3/8	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"
48	58 1/2	59	36	36	5"	1'-3"	5'-3"	2'-10 1/4"	8'-1 1/4"	7'-10"	70 3/8"	24"	4 1/4"	2 1/2"
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"
60	73	73	45	45	6"	1'-10"	5'-6"	2'-8"	8'-2"	9'-0"	77 1/8"	24"	5"	2 1/2"

* 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

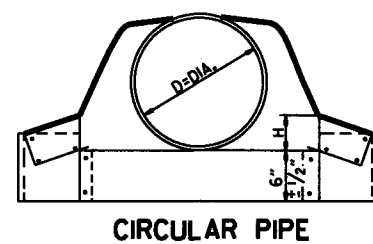


END SECTIONS FOR CORRUGATED METAL PIPE CULVERTS

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

CIRCULAR PIPE

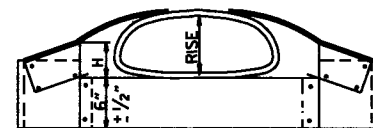
D. DIA.	GAUGE	A 1" $\pm$	B. MAX. 1" $\pm$	H 1" $\pm$	L 1 1/2" $\pm$	W 2" $\pm$	S
INCHES							
12	16	6	6	6	21	24	2 1/2"
15	16	7	8	6	26	30	2 1/2"
18	16	8	10	6	31	36	2 1/2"
21	16	9	12	6	36	42	2 1/2"
24	16	10	13	6	41	48	2 1/2"
30	14	12	16	8	51	60	2 1/2"
36	14	14	19	9	60	72	2 1/2"
42	12	16	22	11	69	84	2 1/2"
48	12	18	27	12	78	90	2 1/2"
54	12	18	30	12	84	102	2 1/2"
60	12	18	33	12	87	114	1 1/2"
66	12	18	36	12	87	120	1 1/2"
72	12	18	39	12	87	126	1 1/3"



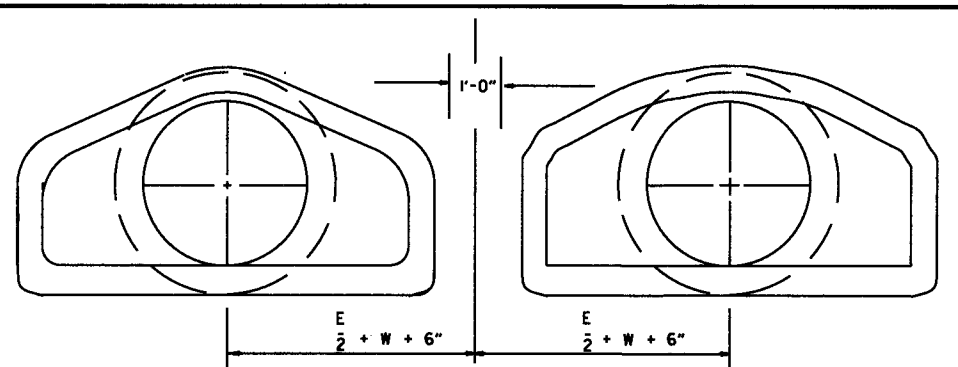
CIRCULAR PIPE

C.M. ARCH PIPE

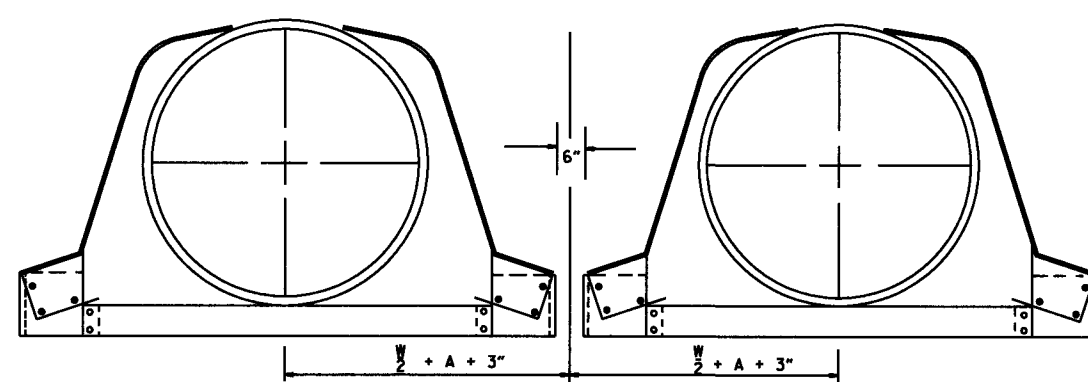
EQUIV. DIA.	SPAN	RISE	A 1" $\pm$	B MAX. 1" $\pm$	H 1" $\pm$	L 1 1/2" $\pm$	W 2" $\pm$	S	GAUGE
INCHES									
15"	17	13	7	9	6	19	30	2 1/2"	16
18"	21	15	7	10	6	23	36	2 1/2"	16
21"	24	18	8	12	6	28	42	2 1/2"	16
24"	28	20	9	14	6	32	48	2 1/2"	16
30"	35	24	10	16	6	39	60	2 1/2"	14
36"	42	29	12	18	8	46	75	2 1/2"	14
42"	49	33	13	21	9	53	85	2 1/2"	12
48"	57	38	18	26	12	63	90	2 1/2"	12
54"	64	43	18	30	12	70	102	2 1/2"	12
60"	71	47	18	33	12	77	114	2 1/2"	12



C.M. ARCH PIPE

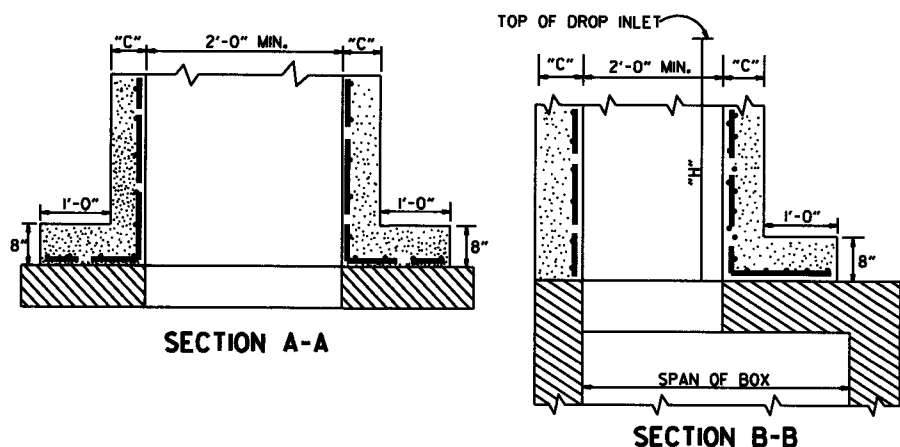
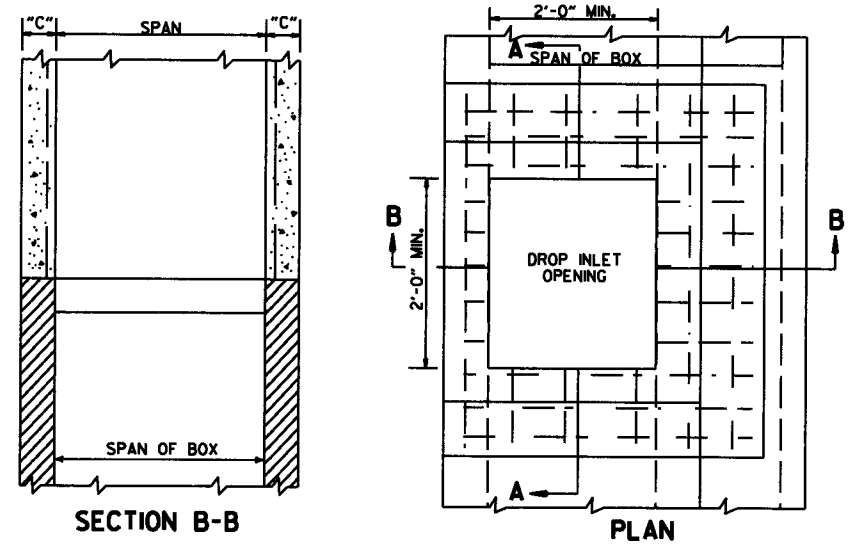


MULTIPLE R.C. PIPE CULVERTS

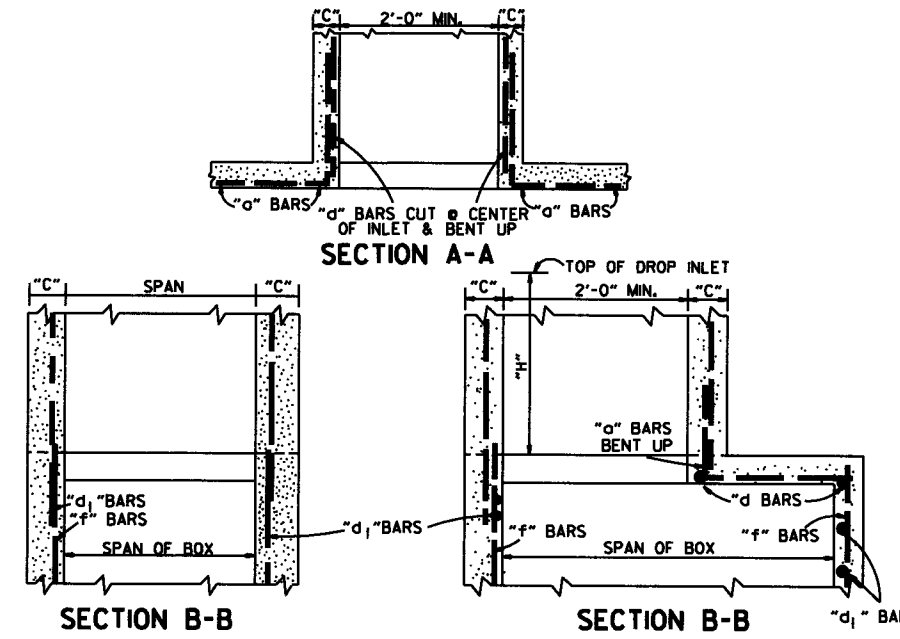


MULTIPLE C.M. PIPE CULVERTS

10-18-96	REVISED ASTM REF. TO AASHTO				
5-15-80	REVISED DISTANCE BETWEEN MULTIPLE R.C.P.F.E.S.	664-5-15-80			ARKANSAS STATE HIGHWAY COMMISSION
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	FILE NO.			

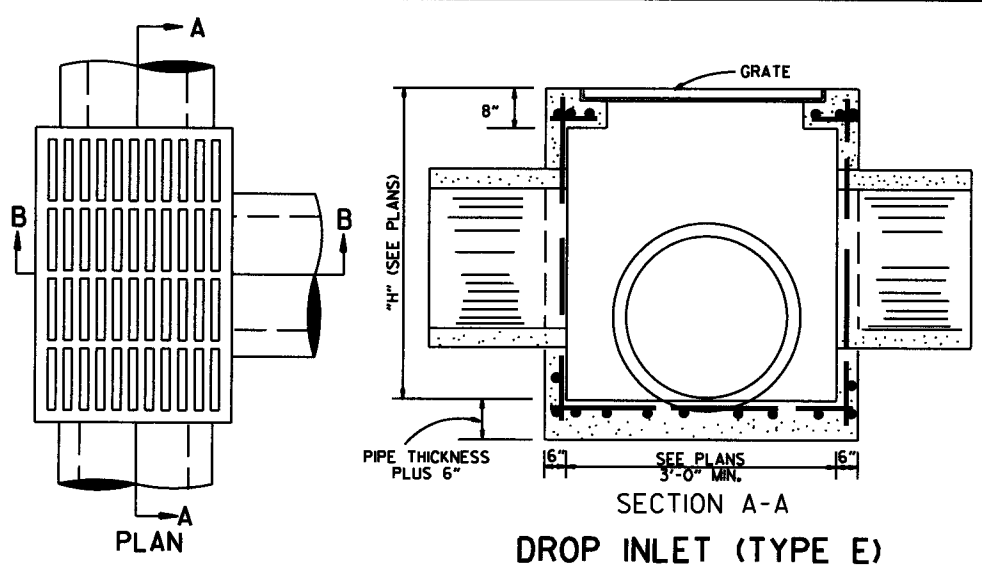


METHOD OF CONSTRUCTING DROP INLET ON EXISTING R.C. BOX CULVERT

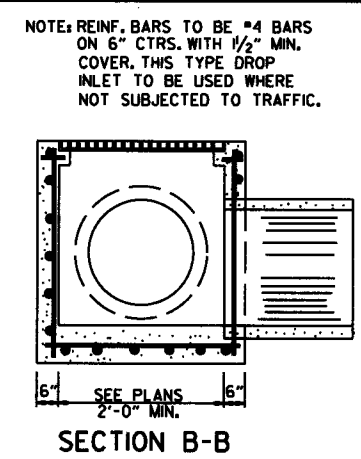


METHOD OF CONSTRUCTING DROP INLET ON NEW R.C. BOX CULVERT

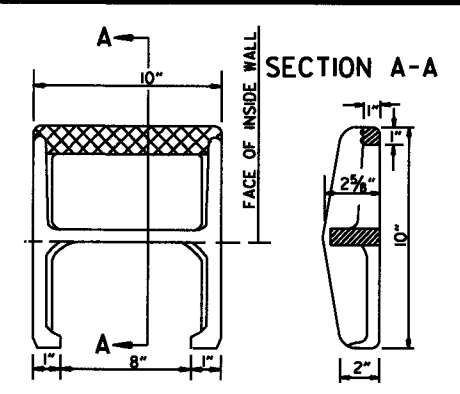
NOTE: "C" DIMENSIONS AND REINFORCING BAR SIZES, SHALL CONFORM TO THOSE SHOWN ON STANDARD DRAWING FOR DROP INLET.



DROP INLET (TYPE E)



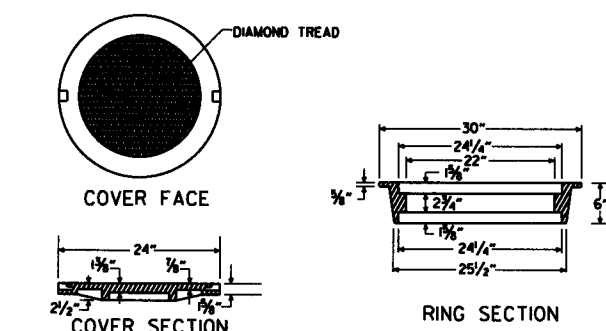
NOTE: REINF. BARS TO BE #4 BARS ON 6" CTRS. WITH 1/2" MIN. COVER. THIS TYPE DROP INLET TO BE USED WHERE NOT SUBJECTED TO TRAFFIC.



APPROX. WEIGHT = 11 LBS. (CAST IRON)

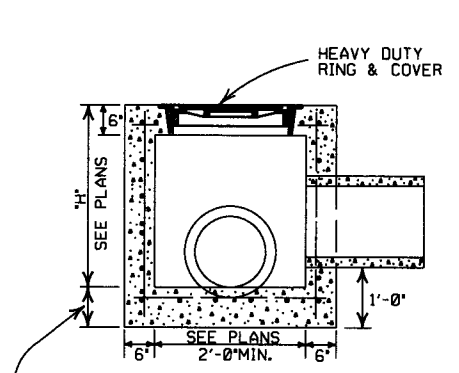
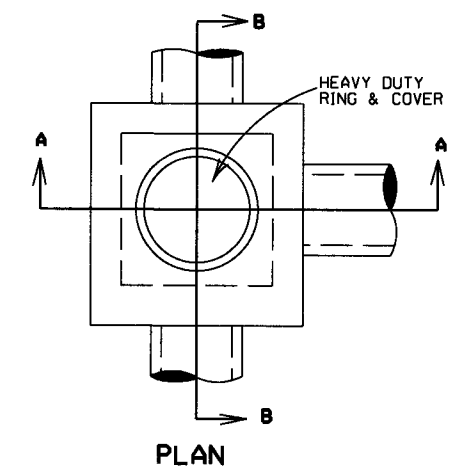
NOTE: THIS DETAIL IS TYPICAL. OTHERS MAY BE USED WITH PRIOR APPROVAL OF THE ENGINEER.

DETAIL OF STEP FOR DROP INLET

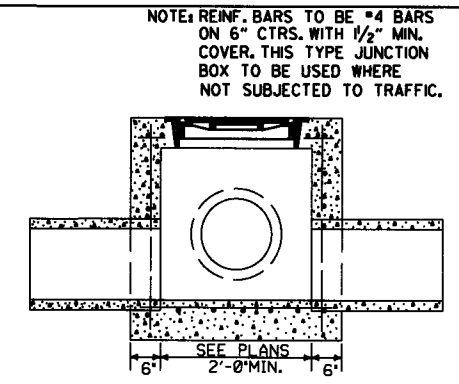


APPROXIMATE TOTAL WEIGHT = 333 LBS.

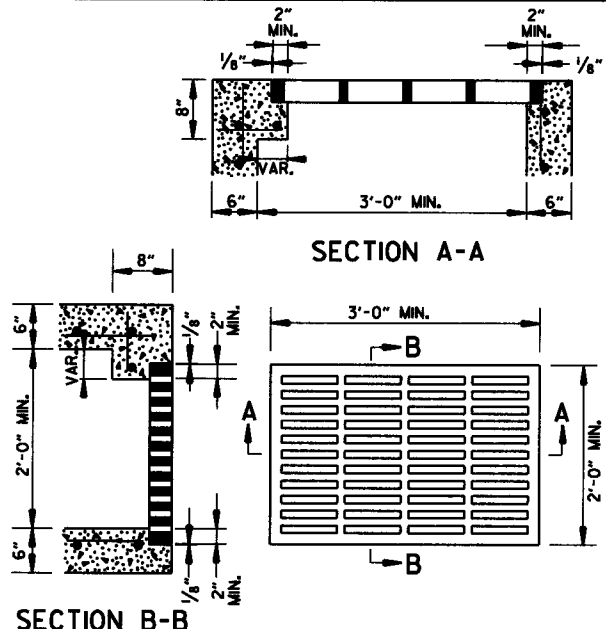
HEAVY DUTY RING & COVER



JUNCTION BOX (TYPE E)

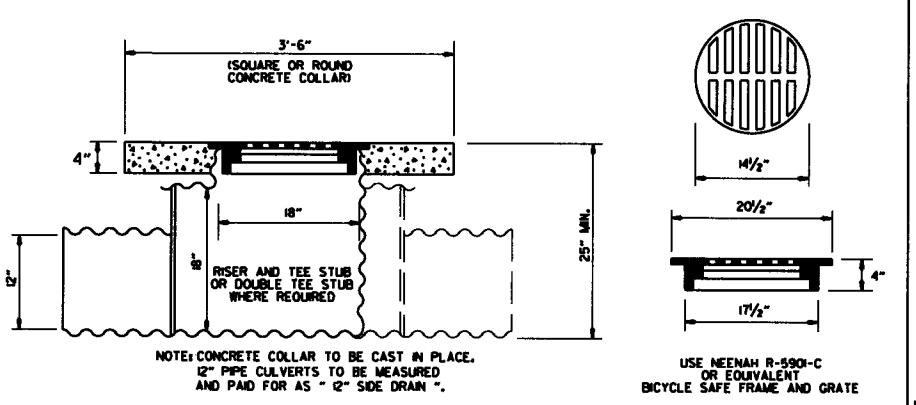


NOTE: REINF. BARS TO BE #4 BARS ON 6" CTRS. WITH 1/2" MIN. COVER. THIS TYPE JUNCTION BOX TO BE USED WHERE NOT SUBJECTED TO TRAFFIC.



APPROXIMATE MINIMUM WATERWAY OPENING = 260 SQ. IN.

GRATE FOR TYPE E DROP INLET



NOTE: CONCRETE COLLAR TO BE CAST IN PLACE. 12" PIPE CULVERTS TO BE MEASURED AND PAID FOR AS "12" SIDE DRAIN".

USE NEENAH R-590-C OR EQUIVALENT BICYCLE SAFE FRAME AND GRATE

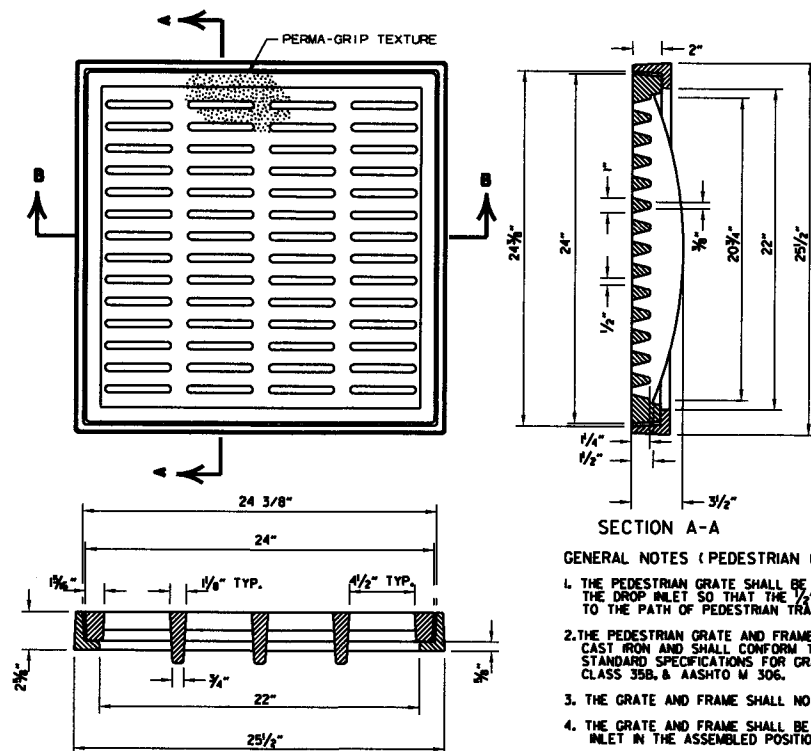
- GENERAL NOTES:**
1. ALL EXPOSED CORNERS SHALL BE 3/4" CHAMFERED.
 2. STEPS SHALL BE INSTALLED ON 16" CENTERS ON ALL INLETS 4'-0" HIGH OR OVER, OR AS APPROVED BY THE ENGINEER.
 3. EXPANSION JOINT MATERIAL SHALL BE 3/4" PREFORMED FIBER.
 4. GRATE OR GRATE AND FRAME SHALL BE CONSTRUCTED OF CAST IRON AND 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 M 105 CLASS 35B & AASHTO M 306.
 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.

11-16-01	ADDED NOTE 10		
1-12-00	REVISED HEAVY DUTY RING & COVER		
7-02-98	CHANGED GRATE DETAIL, DELETED D (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		
DATE REV.	REVISION	DATE FILMED	

ARKANSAS STATE HIGHWAY COMMISSION

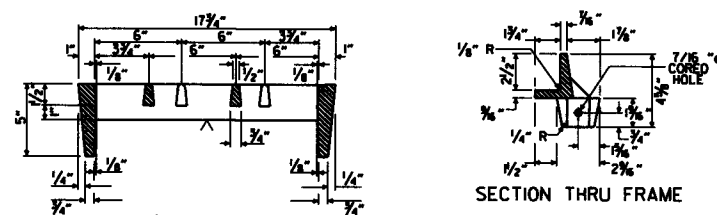
DETAILS OF DROP INLETS & JUNCTION BOXES

STANDARD DRAWING FPC-9



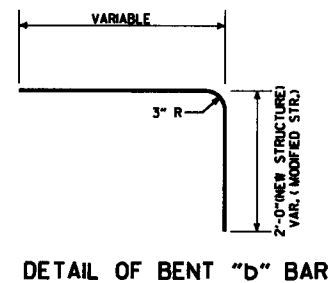
SECTION B-B
DETAILS OF PEDESTRIAN GRATE AND FRAME

- GENERAL NOTES (PEDESTRIAN GRATE & FRAME)
1. THE PEDESTRIAN GRATE SHALL BE ORIENTED IN THE TOP OF THE DROP INLET SO THAT THE 1/2" OPENINGS ARE PERPENDICULAR TO THE PATH OF PEDESTRIAN TRAVEL.
 2. THE PEDESTRIAN GRATE AND FRAME SHALL BE CONSTRUCTED OF CAST IRON AND SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR GRAY IRON CASTINGS AASHTO M 105, CLASS 35B, & AASHTO M 306.
 3. THE GRATE AND FRAME SHALL NOT BE PAINTED.
 4. THE GRATE AND FRAME SHALL BE INSTALLED IN THE DROP INLET IN THE ASSEMBLED POSITION.
 5. THE APPROXIMATE WEIGHT OF THE GRATE AND FRAME SHALL BE 20 LBS.
 6. THE MINIMUM WATERWAY OPENING SHALL BE 122 SQ. IN.

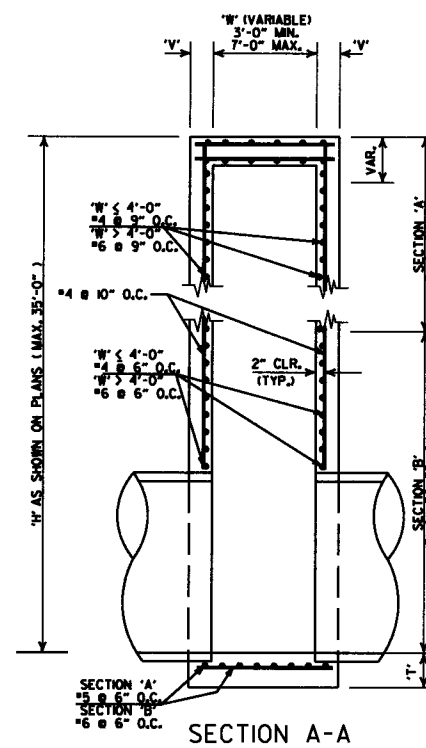


SECTION B-B
SECTION A-A
DETAILS OF RIBBED VANE GRATE AND FRAME

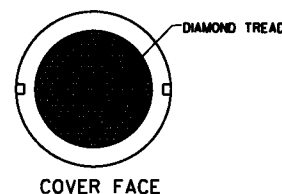
- GENERAL NOTES (RIBBED VANE GRATE & FRAME)
1. RIBBED VANE GRATE AND FRAME SHALL BE CONSTRUCTED OF CAST IRON AND SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR GRAY IRON CASTINGS AASHTO M 105, CLASS 35B, & AASHTO M 306.
 2. GRATE AND FRAME SHALL NOT BE PAINTED.
 3. GRATE AND FRAME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



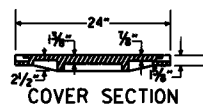
DETAIL OF BENT "b" BAR



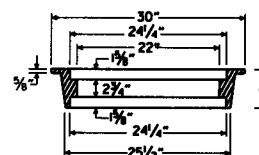
SECTION A-A
SECTION B-B
SECTION C-C
DETAILS OF DROP INLET (TYPE ST)



COVER FACE

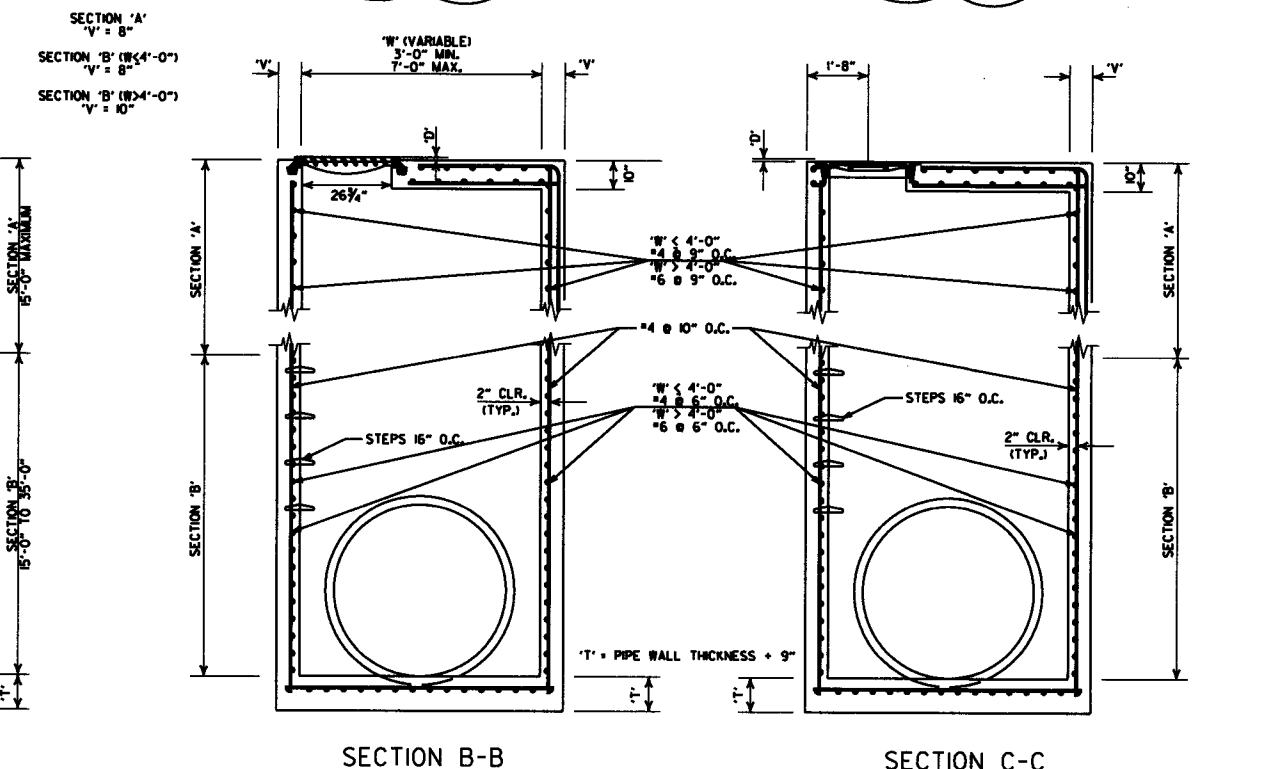
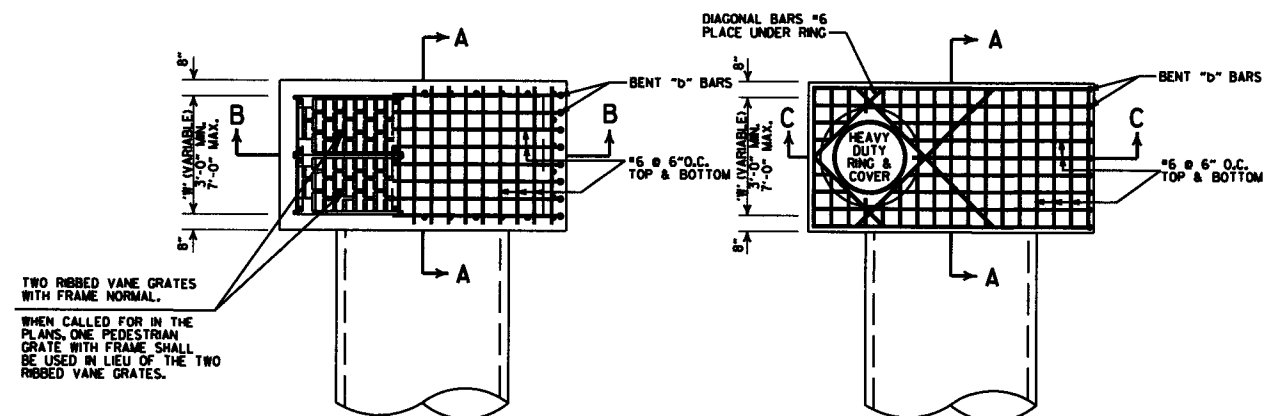


COVER SECTION



RING SECTION
HEAVY DUTY RING & COVER

APPROXIMATE TOTAL WEIGHT = 333 LBS.

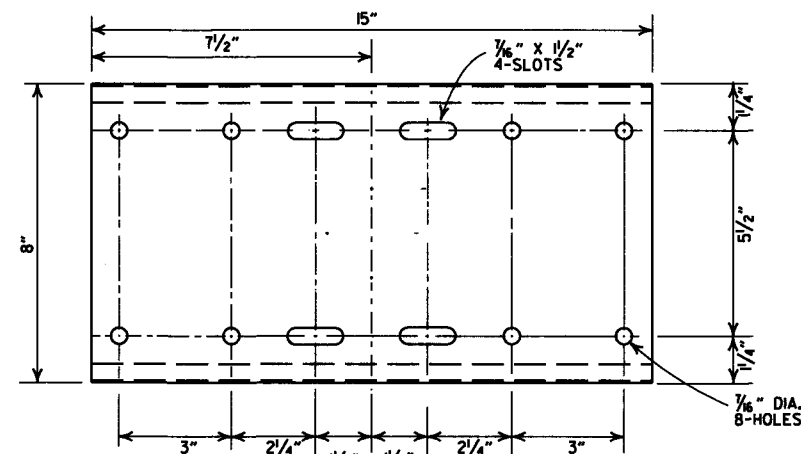


SECTION A-A
SECTION B-B
SECTION C-C
DETAILS OF JUNCTION BOX (TYPE ST)

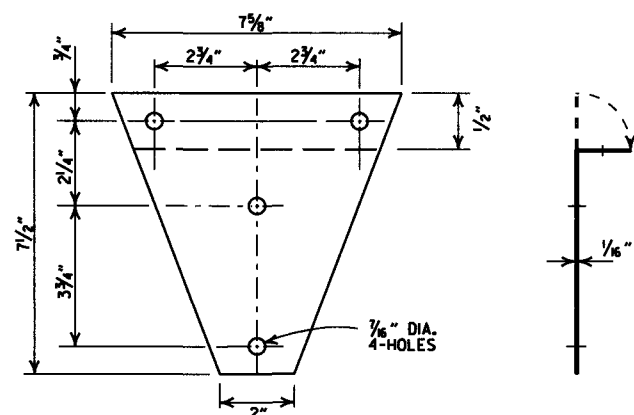
- GENERAL NOTES (TYPE ST DROP INLET & JUNCTION BOX)
1. THE 'D' DIMENSION SHALL MATCH THE FINAL LIFT OF ADJACENT SURFACE COURSE SHOWN IN THE PLANS WHEN ASPHALT PAVING SURROUNDS THE GRATE OR RING COVER, AND SHALL BE 0" AT OTHER INSTALLATIONS.
 2. THE STEPS SHALL BE OMITTED WHERE 'H' IS LESS THAN 4'-0".
 3. ALL EXPOSED CORNERS ARE TO HAVE A 3/4" CHAMFER.

- GENERAL NOTES (HEAVY DUTY RING & COVER)
1. HEAVY DUTY RING AND COVER SHALL BE CONSTRUCTED OF CAST IRON AND SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR GRAY IRON CASTINGS AASHTO M 105, CLASS 35B, & AASHTO M 306.
 2. HEAVY DUTY RING AND COVER SHALL NOT BE PAINTED.
 3. HEAVY DUTY RING SHALL ALWAYS BE INSTALLED WITH FLANGE ON TOP.
 4. DIMENSIONS SHOWN FOR RING AND COVER ARE TYPICAL. THE CONTRACTOR MAY SUBSTITUTE SIMILAR CASTINGS WITH THE APPROVAL OF THE ENGINEER. REQUESTING APPROVAL FOR CASTING DESIGNS MAY BE MADE BY REFERRING TO PREVIOUSLY APPROVED DRAWINGS.

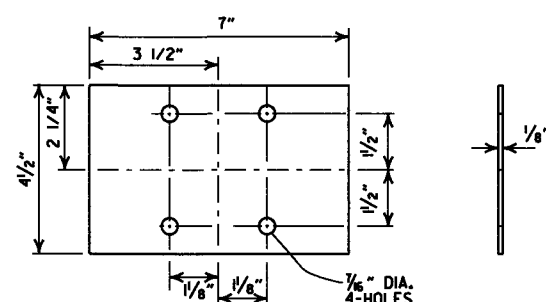
7-26-12		REMOVED NOTE 4, REVISED 'T', REVISED BOTTOM SLAB REBAR FOR SECTION 'A', SHOWED REBAR CLEARANCE IN SECTIONS
11-16-01		ADDED NOTE 4
1-12-00		REVISED HEAVY DUTY RING & COVER
5-13-99		ADDED PEDESTRIAN FRAME & GRATE
7-02-98		REMOVED NOTE 5, REV. DIMENSIONS, ADDED HEAVY DUTY RING & COVER, ADDED AASHTO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



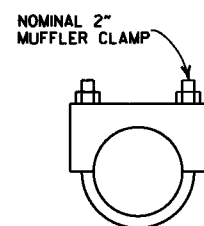
SHELF



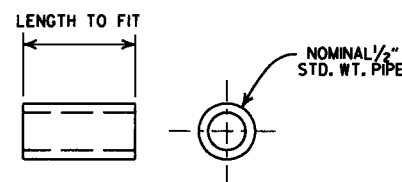
BRACKET



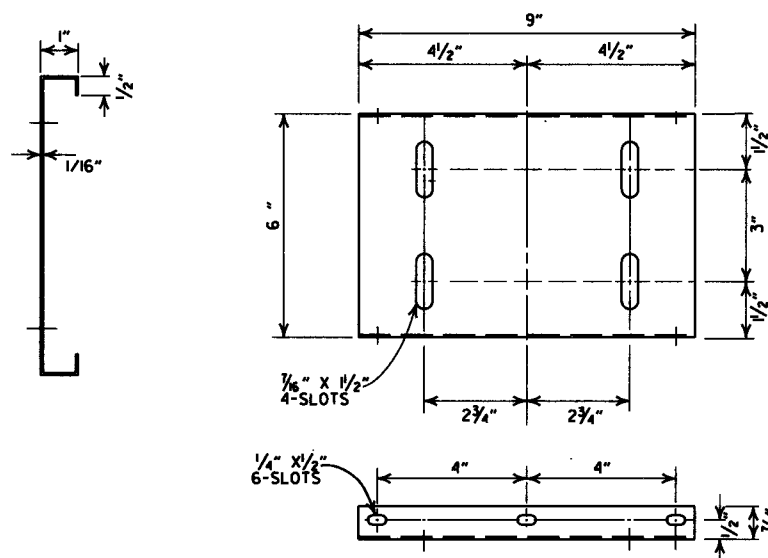
ANTI-TWIST PLATE



CLAMP



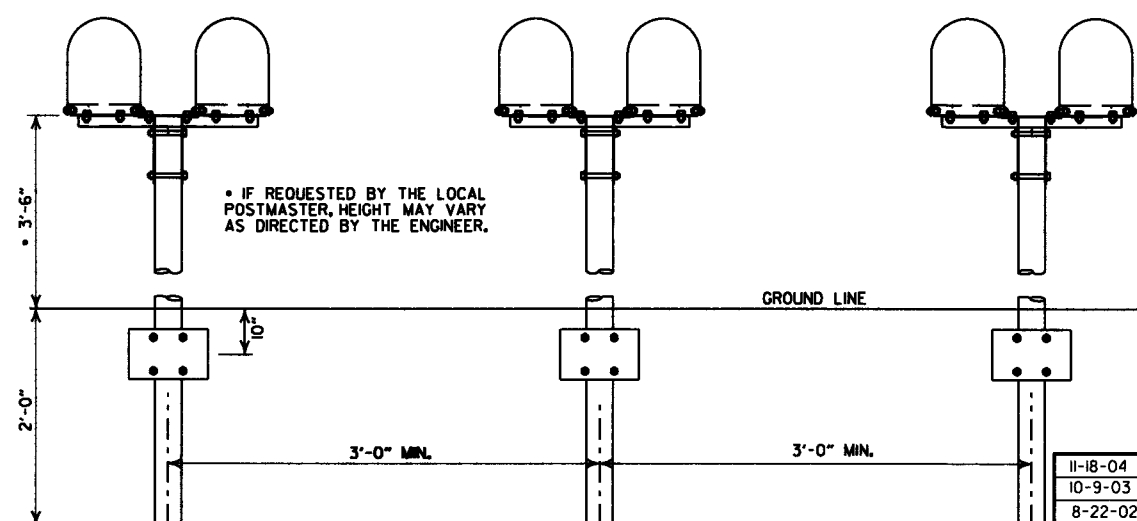
SPACER



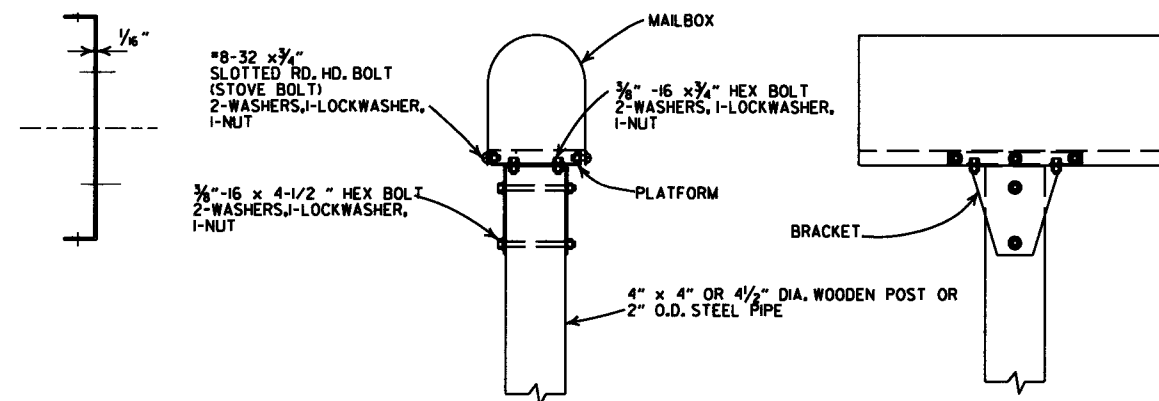
PLATFORM

GENERAL NOTES

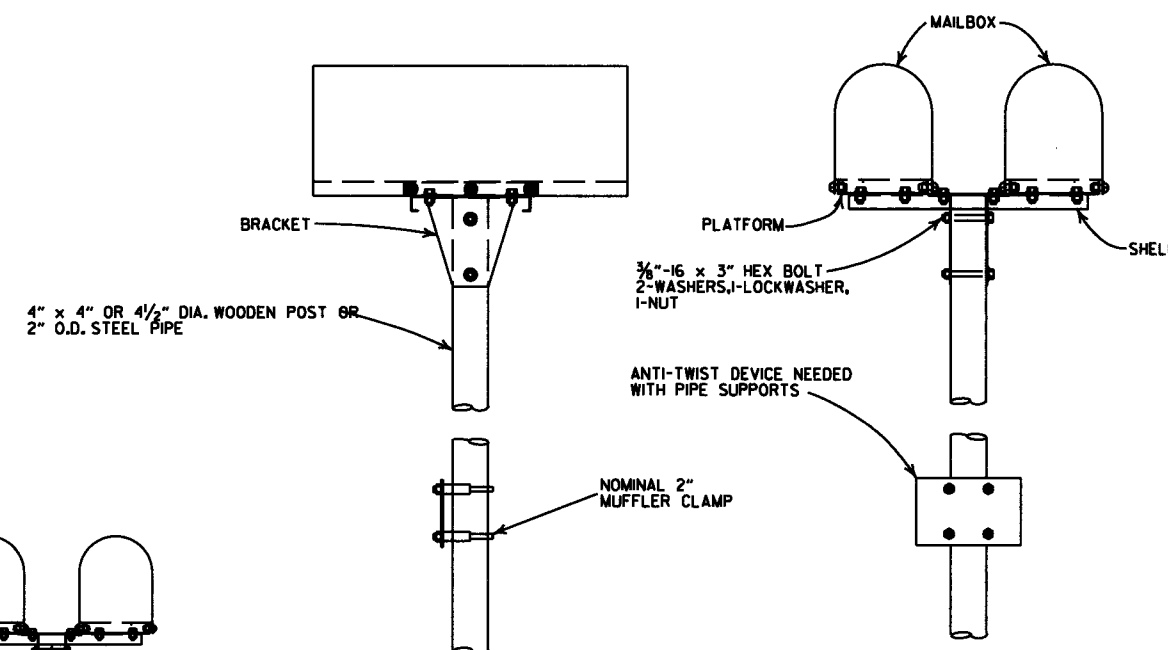
1. MAILBOX POSTS MAY BE WOOD OR METAL. WOOD POSTS SHALL BE PRESSURE TREATED FOR GROUND CONTACT IN ACCORDANCE WITH SECTION 637.02 OF THE STANDARD SPECIFICATIONS.
2. ANTI-TWIST PLATES SHALL BE USED ONLY ON METAL POSTS.
3. MAILBOX SHELF, BRACKET & PLATFORM SHALL BE GALVANIZED OR PAINTED STEEL, HOWEVER TREATED WOOD MAY BE USED WITH WOODEN POSTS. THE WOODEN SHELF, BRACKET & PLATFORM SHALL BE A MINIMUM OF 3/4" THICK AND SHALL BE ASSEMBLED WITH BOLTS OF THE APPROPRIATE LENGTH WITH SIX 8 x 3/4" FLATHEAD WOOD SCREWS USED TO ATTACH THE MAILBOX TO THE PLATFORM.
4. THE MAILBOX SHELF AND PLATFORM THAT IS SHOWN IS FOR STANDARD SIZE MAILBOXES. THE SHELF AND PLATFORM SIZE SHALL BE MODIFIED TO FIT MAILBOXES OF A DIFFERENT SIZE.
5. METAL PIPE FOR MAILBOX SUPPORT SHALL BE 2" OUTSIDE DIAMETER STEEL WITH A WALL THICKNESS OF 0.145" AND A WEIGHT OF 2.72 LBS PER FT. OUTSIDE DIAMETER AND WEIGHT SHALL HAVE A TOLERANCE OF +/- 5% ACCORDING TO AASHTO M 181.
6. MAILBOX SUPPORT SYSTEM DIFFERING FROM THOSE SHOWN MAY BE USED, PROVIDED THEY ARE ON THE AHTD QUALIFIED PRODUCTS LIST FOR MAILBOX SUPPORTS.



SPACING FOR MULTIPLE POST INSTALLATION



SINGLE INSTALLATION



DOUBLE INSTALLATION

DATE	FILMED	REVISION
11-18-04		REVISED NOTES
10-9-03		REVISED NOTE 6
8-22-02		REVISED NOTE 6
10-18-96		CORRECTED AASHTO
10-1-92		CORRECTED SPELLING
9-26-91		NEW PHONE NUMBER
8-15-91		ADDED NOTE
11-30-89		ADJUSTED HEIGHT & ADDED NOTE
2-16-89		DELETED SLOTS FROM SHELF & PLTF
11-17-88	10-1-92	ADJUSTED DIMENSIONS OF STEEL POSTS
7-15-88	120-7-15-88	ISSUED

ARKANSAS STATE HIGHWAY COMMISSION

MAILBOX DETAILS

STANDARD DRAWING MB-1

REINFORCED CONCRETE
ARCH PIPE DIMENSIONS

EQUIV. DIA.	SPAN		RISE	
	AASHTO M 206	AHTD NOMINAL	AASHTO M 206	AHTD NOMINAL
INCHES	INCHES			
15	18	18	11	11
18	22	22	13½	14
21	26	26	15½	16
24	28½	29	18	18
30	36¼	36	22½	23
36	43¾	44	26¾	27
42	51½	51	31½	31
48	58½	59	36	36
54	65	65	40	40
60	73	73	45	45
72	88	88	54	54
84	102	102	62	62
90	115	115	72	72
96	122	122	77½	77
108	138	138	87½	87
120	154	154	96¾	97
132	168¾	169	106½	107

THE MEASURED SPAN AND RISE SHALL NOT VARY MORE THAN ± 2 PERCENT FROM THE VALUES SPECIFIED BY AASHTO M206.

REINFORCED CONCRETE
HORIZONTAL ELLIPTICAL
PIPE DIMENSIONS

EQUIV. DIA.	AASHTO M 207	
	SPAN	RISE
INCHES	INCHES	
18	23	14
24	30	19
27	34	22
30	38	24
33	42	27
36	45	29
39	49	32
42	53	34
48	60	38
54	68	43
60	76	48
66	83	53
72	91	58
78	98	63
84	106	68

THE MEASURED SPAN AND RISE SHALL NOT VARY MORE THAN ± 2 PERCENT FROM THE VALUES SPECIFIED BY AASHTO M207.

CONSTRUCTION SEQUENCE

1. PLACE STRUCTURAL BEDDING MATERIAL TO GRADE. DO NOT COMPACT.
2. INSTALL PIPE TO GRADE.
3. COMPACT STRUCTURAL BEDDING OUTSIDE THE MIDDLE THIRD OF THE PIPE.
4. PLACE AND COMPACT THE HAUNCH AREA UP TO THE MIDDLE OF THE PIPE.
5. COMPLETE BACKFILL ACCORDING TO SUBSECTION 606.03.(f)(1).

NOTE: HAUNCH AND STRUCTURAL BEDDING MATERIAL WILL NOT BE PAID FOR SEPARATELY, BUT COMPENSATION WILL BE CONSIDERED TO BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF CONCRETE PIPE.

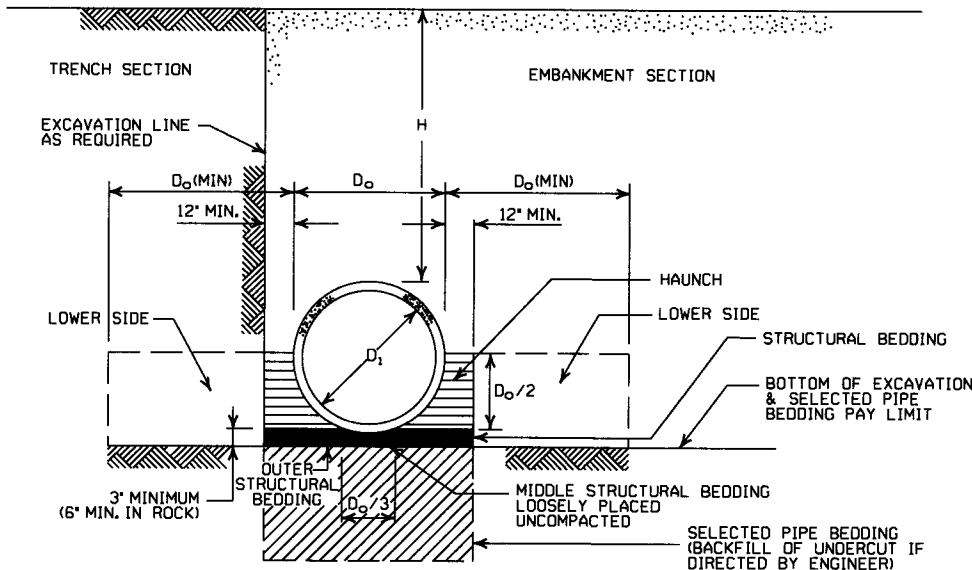
- LEGEND -

D_1 = NORMAL INSIDE DIAMETER OF PIPE
 D_o = OUTSIDE DIAMETER OF PIPE
 H = FILL COVER HEIGHT OVER PIPE (FEET)
MIN. = MINIMUM
= UNDISTURBED SOIL

INSTALLATION TYPE	MATERIAL REQUIREMENTS FOR HAUNCH AND STRUCTURAL BEDDING
TYPE 1	AGGREGATE BASE COURSE (CLASS 5 OR CLASS 7)
TYPE 2	SELECTED MATERIALS (CLASS SM-1, SM-2, OR SM-4) OR TYPE 1 INSTALLATION MATERIAL*
TYPE 3**	AASHTO CLASSIFICATION A-1 THRU A-6 SOIL OR TYPE 1 OR 2 INSTALLATION MATERIAL

* SM-3 WILL NOT BE ALLOWED.

** MATERIALS SHALL NOT INCLUDE ORGANIC MATERIALS OR STONES LARGER THAN 3 INCHES.



EMBANKMENT AND TRENCH INSTALLATIONS

1. MATERIAL IN THE HAUNCH AND OUTER STRUCTURAL BEDDING SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OR CLASS OF MATERIAL USED.
2. FOR TRENCHES WITH WALLS OF NATURAL SOIL, THE DENSITY OF THE SOIL IN THE LOWER SIDE ZONE SHALL BE AS FIRM AS THE 95% DENSITY REQUIRED FOR THE HAUNCH, IF THE EXISTING SOIL DOES NOT MEET THIS CRITERIA, IT SHALL BE REMOVED AND RECOMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OF MATERIAL USED.
3. FOR EMBANKMENTS, THE MATERIAL IN THE LOWER SIDE ZONE SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OR CLASS OF MATERIAL USED.

GENERAL NOTES

1. CONCRETE PIPE CULVERT CONSTRUCTION SHALL CONFORM TO ARKANSAS 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. CONCRETE PIPE CULVERT DESIGN SHALL CONFORM TO AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, FIFTH EDITION (2010) WITH 2010 INTERIMS.
3. ALL PIPE SHALL CONFORM TO SECTION 606. CIRCULAR R.C. PIPE CULVERTS SHALL CONFORM TO AASHTO M10, R.C. ARCH PIPE CULVERTS SHALL CONFORM TO AASHTO M206 AND HORIZONTAL ELLIPTICAL PIPE CULVERTS SHALL CONFORM TO AASHTO M207.
4. ALL PIPE SHALL BE PROTECTED DURING CONSTRUCTION BY A COVER SUFFICIENT TO PREVENT DAMAGE FROM PASSAGE OF EQUIPMENT.
5. THE MINIMUM TRENCH WIDTH SHALL BE THE OUTSIDE DIAMETER OF THE PIPE PLUS 24 INCHES. THE MAXIMUM ALLOWABLE TRENCH WIDTH SHALL BE THE MINIMUM WIDTH PRACTICABLE FOR WORKING CONDITIONS.
6. MULTIPLE PIPE CULVERTS SHALL BE INSTALLED WITH A MINIMUM CLEARANCE OF 24 INCHES BETWEEN STRINGS OF PIPE. REFER TO STD. DWG. FES-2 FOR MINIMUM CLEARANCE WHERE FLARED END SECTIONS ARE USED.
7. IMPERVIOUS MATERIAL SHOULD BE PLACED AS DIRECTED BY THE ENGINEER AT THE ENDS OF THE CULVERT TO PREVENT LOSS OF STRUCTURAL BEDDING WHEN PERVIOUS MATERIAL IS USED FOR STRUCTURAL BEDDING AND/OR BACKFILL.
8. NOT MORE THAN ONE LIFTING HOLE MAY BE PROVIDED IN CONCRETE PIPE TO FACILITATE HANDLING. HOLE MAY BE CAST IN PLACE, CUT INTO THE FRESH CONCRETE AFTER FORMS ARE REMOVED, OR DRILLED. THE HOLE SHALL NOT BE MORE THAN TWO INCHES IN DIAMETER OR TWO INCHES SQUARE. CUTTING OR DISPLACEMENT OF REINFORCEMENT WILL NOT BE PERMITTED. SPALLED AREAS AROUND THE HOLE SHALL BE REPAIRED IN A WORKMANLIKE MANNER. LIFTING HOLE SHALL BE FILLED WITH MORTAR, CONCRETE, OR OTHER METHOD AS APPROVED BY THE ENGINEER.
9. WHEN DIRECTED BY THE ENGINEER, UNSUITABLE MATERIAL THAT IS ENCOUNTERED AT THE BOTTOM OF THE EXCAVATED TRENCH (BELOW THE AREA IDENTIFIED AS "STRUCTURAL BEDDING" ABOVE) WILL BE EXCAVATED AND REPLACED WITH SELECTED PIPE BEDDING. THE QUANTITY OF MATERIAL REQUIRED TO BACKFILL THE UNDERCUT AREA UP TO THE SELECTED PIPE BEDDING PAY LIMIT DESIGNATED ABOVE WILL BE MEASURED AND PAID FOR AS "SELECTED PIPE BEDDING."
10. WHEN THE EXISTING MATERIAL EXCAVATED FOR THE PIPE TRENCH IS DETERMINED BY THE ENGINEER TO BE UNSUITABLE FOR BACKFILLING THE PIPE (ABOVE THE AREA IDENTIFIED ABOVE AS THE HAUNCH), BORROW MATERIAL OR MATERIAL FROM THE ROADWAY EXCAVATION WILL BE USED TO BACKFILL THE PIPE, IF SUITABLE MATERIAL IS NOT AVAILABLE, THE ENGINEER MAY AUTHORIZE THE USE OF "SELECTED PIPE BACKFILL."

MINIMUM HEIGHT OF FILL "H"
OVER CIRCULAR R.C. PIPE CULVERTS

INSTALLATION TYPE	CLASS OF PIPE			
	CLASS III	CLASS IV	CLASS V	
PIPE ID (IN.)	TYPE 1 OR 2	TYPE 3	ALL	ALL
12-15	2	2.5	2	1
18-24	2.5	3	2	1
27-33	3	4	2	1
36-42	3.5	5	2	1
48	4.5	5.5	2	1
54-60	5	7	2	1
66-78	6	8	2	1
84-108	7.5	8	2	1

NOTE: FOR MINIMUM COVER VALUES, "H" SHALL INCLUDE A MINIMUM OF 12" OF PAVEMENT AND/OR BASE.

MINIMUM HEIGHT OF FILL "H"
OVER R.C. ARCH & HORIZONTAL
ELLIPTICAL PIPE CULVERTS

INSTALLATION TYPE	CLASS OF PIPE	
	CLASS III	CLASS IV
	FEET	
TYPE 2 OR TYPE 3	2.5	1.5

NOTE: TYPE 1 INSTALLATION WILL NOT BE ALLOWED FOR ARCH & HORIZONTAL ELLIPTICAL PIPE CULVERTS.

NOTE: FOR MINIMUM COVER VALUES, "H" SHALL INCLUDE A MINIMUM OF 12" OF PAVEMENT AND/OR BASE.

MAXIMUM HEIGHT OF
FILL "H" OVER CIRCULAR
R.C. PIPE CULVERTS

INSTALLATION TYPE	CLASS OF PIPE		
	CLASS III	CLASS IV	CLASS V
	FEET		
TYPE 1	21	32	50
TYPE 2	16	25	39
TYPE 3	12	20	30

NOTE: IF FILL HEIGHT EXCEEDS 50 FEET, A SPECIAL DESIGN CONCRETE PIPE WILL BE REQUIRED USING TYPE 1 INSTALLATION.

MAXIMUM HEIGHT OF FILL "H"
OVER R.C. ARCH & HORIZONTAL
ELLIPTICAL PIPE CULVERTS

INSTALLATION TYPE	CLASS OF PIPE	
	CLASS III	CLASS IV
	FEET	
TYPE 2	13	21
TYPE 3	10	16

NOTE: TYPE 1 INSTALLATION WILL NOT BE ALLOWED FOR ARCH & HORIZONTAL ELLIPTICAL PIPE CULVERTS.

DATE	ISSUED	REVISION	DATE FILMED
2-27-14	REVISED GENERAL NOTE 1.		
12-15-11	REVISED FOR LRFD DESIGN SPECIFICATIONS		
5-18-00	REVISED TYPE 3 BEDDING & ADDED NOTE		
3-30-00	REVISED INSTALLATIONS		
11-06-97	ISSUED		

ARKANSAS STATE HIGHWAY COMMISSION

CONCRETE PIPE CULVERT
FILL HEIGHTS & BEDDING

STANDARD DRAWING PCC-1



CORRUGATED STEEL PIPE (ROUND)

PIPE DIAMETER (INCHES)	① 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 3/8 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.

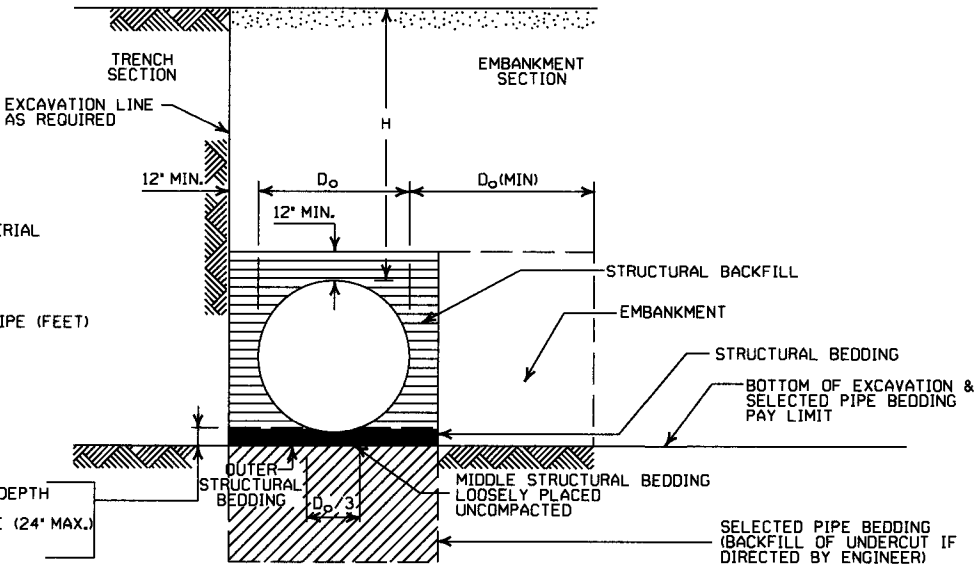
INSTALLATION TYPE	MATERIAL REQUIREMENTS FOR STRUCTURAL BACKFILL AND STRUCTURAL BEDDING
TYPE 1	AGGREGATE BASE COURSE (CLASS 4, 5, 6, OR 7)
TYPE 2	SELECTED MATERIALS (CLASS SM-1, SM-2, OR SM-4) OR TYPE 1 INSTALLATION MATERIAL ③

③ SM-3 WILL NOT BE ALLOWED.

- LEGEND -

- D_o = OUTSIDE DIAMETER OF PIPE
MAX. = MAXIMUM
MIN. = MINIMUM
= STRUCTURAL BACKFILL MATERIAL
= UNDISTURBED SOIL
EQUIV. DIA. = EQUIVALENT DIAMETER
H = FILL COVER HEIGHT OVER PIPE (FEET)

IN SOIL-MIN. EQUALS TWICE CORRUGATION DEPTH
IN ROCK-MIN. EQUALS GREATER OF
1/2" PER FOOT OF FILL OVER PIPE (24" MAX.)
TWICE CORRUGATION DEPTH



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 3/8" 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 3/8 INCH BY 1/2 INCH CORRUGATION RIVETED OR HELICAL LOCK-SEAM				
12	1	45	45			
18	2	30	30			
24	2	22	22	52	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.)	MAX. HEIGHT OF FILL, "H" (FT.)	MIN. THICKNESS REQUIRED INCHES	① MIN. HEIGHT OF FILL, "H" (FT.)	MAX. HEIGHT OF FILL, "H" (FT.)									
				INSTALLATION	INSTALLATION		INSTALLATION	INSTALLATION									
				TYPE 1	TYPE 1		TYPE 1	TYPE 1									
2 3/8 INCH BY 1/2 INCH CORRUGATION RIVETED, WELDED, OR HELICAL LOCK-SEAM									2 3/8 INCH BY 1/2 INCH CORRUGATION RIVETED OR HELICAL LOCK-SEAM								
15	17x13	3	0.064	2	15	0.060	2	15									
18	21x15	3	0.064	2	15	0.060	2	15									
21	24x18	3	0.064	2.25	15	0.060	2.25	15									
24	28x20	3	0.064	2.5	15	0.075	2.5	15									
30	35x24	3	0.079	3	12	0.075	3	12									
36	42x29	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	0.164	3	15									
66	77x52	8	0.168	3	15												
72	83x57	9	0.168	3	15												
② 3 INCH BY 1 INCH OR 5 INCH BY 1 INCH CORRUGATION RIVETED, WELDED, OR HELICAL LOCK-SEAM									① FOR MINIMUM COVER VALUES, "H" SHALL								
			INSTALLATION			INSTALLATION						② WHERE THE STANDARD 2 2/3" x 1/2" CORR WITH A 3" x 1" OR 5" x 1" CORRUGATION OR GREATER THAN THE MAXIMUM FILL					
			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 2/3" 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



INSTALLATION TYPE	** MATERIAL REQUIREMENTS FOR STRUCTURAL BACKFILL AND STRUCTURAL BEDDING
TYPE 2	*SELECTED MATERIALS (CLASS SM-1, SM-2 OR SM-4)

- AGGREGATE BASE COURSE (CLASS 4, 5, 6, OR 7) MAY BE USED IN LIEU OF SELECTED MATERIAL.
SM3 WILL NOT BE ALLOWED.
 - STRUCTURAL BEDDING MATERIAL SHALL HAVE A MAXIMUM PARTICLE SIZE OF 1/4 INCH. STRUCTURAL BACKFILL MATERIAL SHALL BE FREE OF ORGANIC MATERIAL, STONES LARGER THAN 1.50 INCH IN GREATEST DIMENSION, OR FROZEN LUMPS.
- STRUCTURAL BACKFILL AND STRUCTURAL BEDDING MATERIAL WILL NOT BE PAID FOR SEPARATELY, BUT COMPENSATION WILL BE CONSIDERED TO BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF HDPE PIPE.

MULTIPLE INSTALLATION OF
HIGH DENSITY POLYETHYLENE PIPES

PIPE DIAMETER	CLEAR DISTANCE BETWEEN PIPES
18"	1'-6"
24"	2'-0"
30"	2'-6"
36"	3'-0"
42"	3'-6"
48"	4'-0"

MINIMUM TRENCH WIDTH
BASED ON FILL HEIGHT "H"

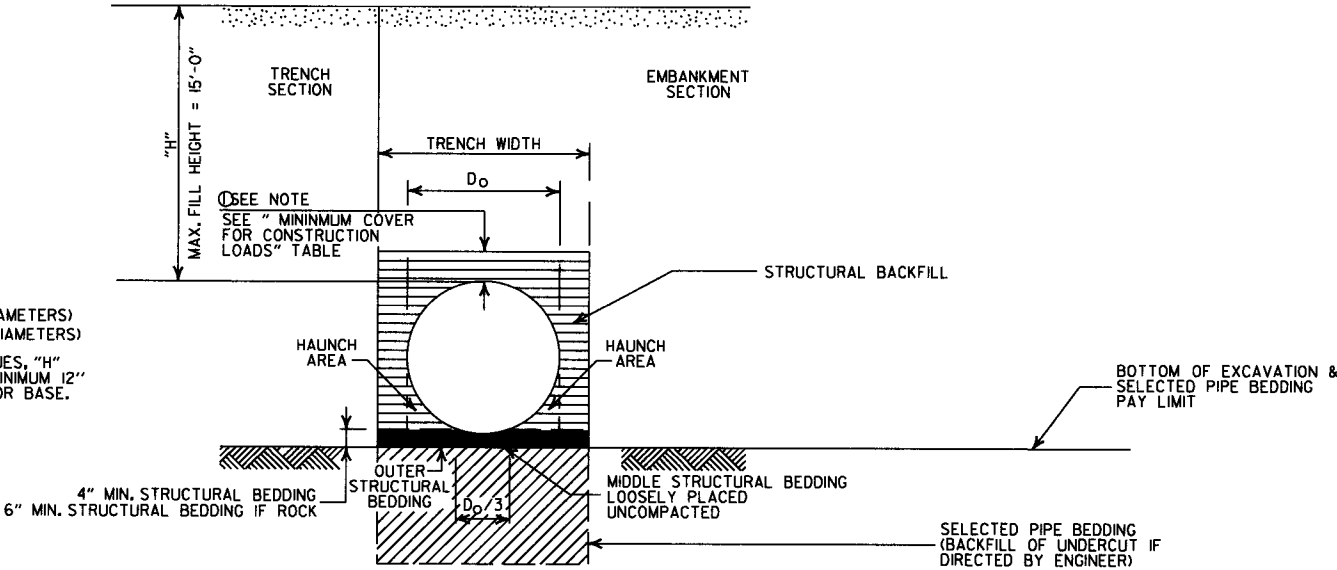
PIPE DIAMETER	TRENCH WIDTH (FEET)	
	"H" < 10'-0"	"H" ≥ 10'-0"
18"	4'-6"	4'-6"
24"	5'-0"	6'-0"
30"	5'-6"	7'-6"
36"	6'-0"	9'-0"
42"	7'-0"	10'-6"
48"	8'-0"	12'-0"

NOTE:
18" MIN. (18" - 30" DIAMETERS)
24" MIN. (36" - 48" DIAMETERS)
MINIMUM COVER VALUES, "H"
SHALL INCLUDE A MINIMUM 12"
OF PAVEMENT AND/OR BASE.

MINIMUM COVER FOR
CONSTRUCTION LOADS

PIPE DIAMETER	MIN. COVER (FEET) FOR INDICATED CONSTRUCTION LOADS			
	18.0-50.0 (KIPS)	50.0-75.0 (KIPS)	75.0-110.0 (KIPS)	110.0-175.0 (KIPS)
36" OR LESS	2'-0"	2'-6"	3'-0"	3'-0"
42" OR GREATER	3'-0"	3'-0"	3'-6"	4'-0"

MINIMUM COVER SHALL BE MEASURED FROM TOP OF PIPE TO TOP OF THE MAINTAINED CONSTRUCTION ROADWAY SURFACE. THE SURFACE SHALL BE MAINTAINED.



TYPE 2 EMBANKMENT AND TRENCH INSTALLATIONS

1. STRUCTURAL BACKFILL, EMBANKMENT, AND OUTER STRUCTURAL BEDDING MATERIAL SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OR CLASS OF MATERIAL USED.

CONSTRUCTION SEQUENCE

1. PLACE STRUCTURAL BEDDING MATERIAL TO GRADE. DO NOT COMPACT.
2. INSTALL PIPE TO GRADE.
3. COMPACT STRUCTURAL BEDDING OUTSIDE THE MIDDLE THIRD OF THE PIPE.
4. THE STRUCTURAL BACKFILL SHALL BE PLACED AND COMPACTED IN LAYERS NOT EXCEEDING 8". THE LAYERS SHALL BE BROUGHT UP EVENLY AND SIMULTANEOUSLY TO THE ELEVATION OF THE MINIMUM COVER.
5. PIPE INSTALLATION MAY REQUIRE THE USE OF RESTRAINTS, WEIGHTING OR OTHER APPROVED METHODS IN ORDER TO HELP MAINTAIN GRADE AND ALIGNMENT.

- LEGEND -

H = FILL HEIGHT (FT.)
D_o = OUTSIDE DIAMETER OF PIPE
MAX. = MAXIMUM
MIN. = MINIMUM

===== = STRUCTURAL BACKFILL MATERIAL
===== = UNDISTURBED SOIL

GENERAL NOTES

1. PIPE SHALL CONFORM TO AASHTO M294, TYPE S. INSTALLATION SHALL CONFORM TO JOB SPECIAL PROVISION "PLASTIC PIPE" AND SECTION 606 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION).
2. PLASTIC PIPE CULVERT DESIGN SHALL CONFORM TO AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, FIFTH EDITION (2010) WITH 2010 INTERIMS.
3. THE MAXIMUM ALLOWABLE TRENCH WIDTH SHALL BE THE MINIMUM WIDTH PLUS A SUFFICIENT WIDTH TO ENSURE WORKING ROOM TO PROPERLY AND SAFELY PLACE AND COMPACT HAUNCHING AND OTHER BACKFILL MATERIAL.
4. IMPERVIOUS MATERIAL SHOULD BE PLACED AS DIRECTED BY THE ENGINEER AT THE ENDS OF THE CULVERT TO PREVENT LOSS OF STRUCTURAL BEDDING WHEN PERVIOUS MATERIAL IS USED FOR STRUCTURAL BEDDING AND/OR BACKFILL.
5. WHEN DIRECTED BY THE ENGINEER, UNSUITABLE MATERIAL THAT IS ENCOUNTERED AT THE BOTTOM OF THE EXCAVATED TRENCH (BELOW THE AREA IDENTIFIED AS "STRUCTURAL BEDDING" ABOVE) WILL BE EXCAVATED AND REPLACED WITH SELECTED PIPE BEDDING. THE QUANTITY OF MATERIAL REQUIRED TO BACKFILL THE UNDERCUT AREA UP TO THE SELECTED PIPE BEDDING PAY LIMIT DESIGNATED ABOVE WILL BE MEASURED AND PAID FOR AS "SELECTED PIPE BEDDING."
6. WHEN THE EXISTING MATERIAL EXCAVATED FOR THE PIPE TRENCH IS DETERMINED BY THE ENGINEER TO BE UNSUITABLE FOR BACKFILLING THE PIPE (ABOVE THE AREA IDENTIFIED ABOVE AS STRUCTURAL BACKFILL), BORROW MATERIAL OR MATERIAL FROM THE ROADWAY EXCAVATION WILL BE USED TO BACKFILL THE PIPE. IF SUITABLE MATERIAL IS NOT AVAILABLE, THE ENGINEER MAY AUTHORIZE THE USE OF "SELECTED PIPE BACKFILL."
7. FOR PIPE TYPES THAT ARE NOT SMOOTH ON THE OUTSIDE (CORRUGATED OR PROFILE WALLS), BACKFILL GRADATIONS SHOULD BE SELECTED THAT WILL PERMIT THE FILLING OF THE CORRUGATION OR PROFILE VALLEY.
8. HIGH DENSITY POLYETHYLENE PIPES OF DIAMETERS OTHER THAN SHOWN WILL NOT BE ALLOWED.
9. JOINTS FOR HDPE PIPE SHALL MEET THE REQUIREMENTS FOR SOIL TIGHTNESS AS SPECIFIED IN AASHTO SECTION 26.4.2.4 AND 30.4.2 "AASHTO LRFD BRIDGE CONSTRUCTION SPECIFICATIONS." JOINTS SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.

DATE	REVISION	DATE FILMED
2-27-14	REVISED GENERAL NOTE 1.	
12-15-11	REVISED GENERAL NOTES & MINIMUM COVER NOTE	
11-17-10	ISSUED	

ARKANSAS STATE HIGHWAY COMMISSION

PLASTIC PIPE CULVERT
(HIGH DENSITY POLYETHYLENE)

STANDARD DRAWING PCP-1



INSTALLATION TYPE	•• MATERIAL REQUIREMENTS FOR STRUCTURAL BACKFILL AND STRUCTURAL BEDDING
TYPE 2	•SELECTED MATERIALS (CLASS SM-1, SM-2, OR SM-4)

- AGGREGATE BASE COURSE (CLASS 4, 5, 6, OR 7) MAY BE USED IN LIEU OF SELECTED MATERIAL.
 - SM3 WILL NOT BE ALLOWED.
 - STRUCTURAL BEDDING MATERIAL SHALL HAVE A MAXIMUM PARTICLE SIZE OF 1 INCH. STRUCTURAL BACKFILL MATERIAL SHALL BE FREE OF ORGANIC MATERIAL, STONES LARGER THAN 1.50 INCH IN GREATEST DIMENSION, OR FROZEN LUMPS.
- STRUCTURAL BACKFILL AND STRUCTURAL BEDDING MATERIAL WILL NOT BE PAID FOR SEPARATELY, BUT COMPENSATION WILL BE CONSIDERED TO BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF PVC PIPE.

MINIMUM TRENCH WIDTH
BASED ON FILL HEIGHT "H"

PIPE DIAMETER	TRENCH WIDTH (FEET)	
	"H" < 10'-0"	"H" >OR= 10'-0"
18"	4'-6"	4'-6"
24"	5'-0"	6'-0"
30"	5'-6"	7'-6"
36"	6'-0"	9'-0"

MULTIPLE INSTALLATION OF
PVC PIPES

PIPE DIAMETER	CLEAR DISTANCE BETWEEN PIPES
18"	1'-6"
24"	2'-0"
30"	2'-6"
36"	3'-0"

MAXIMUM FILL HEIGHT
BASED ON STRUCTURAL BACKFILL

PIPE DIAMETER	"H"
18"	45'-0"
24"	45'-0"
30"	40'-0"
36"	40'-0"

- ① NOTE:
12" MIN. (18" - 36" DIAMETERS)
MINIMUM COVER VALUE, "H"
SHALL INCLUDE A MINIMUM 12"
OF PAVEMENT AND/OR BASE.

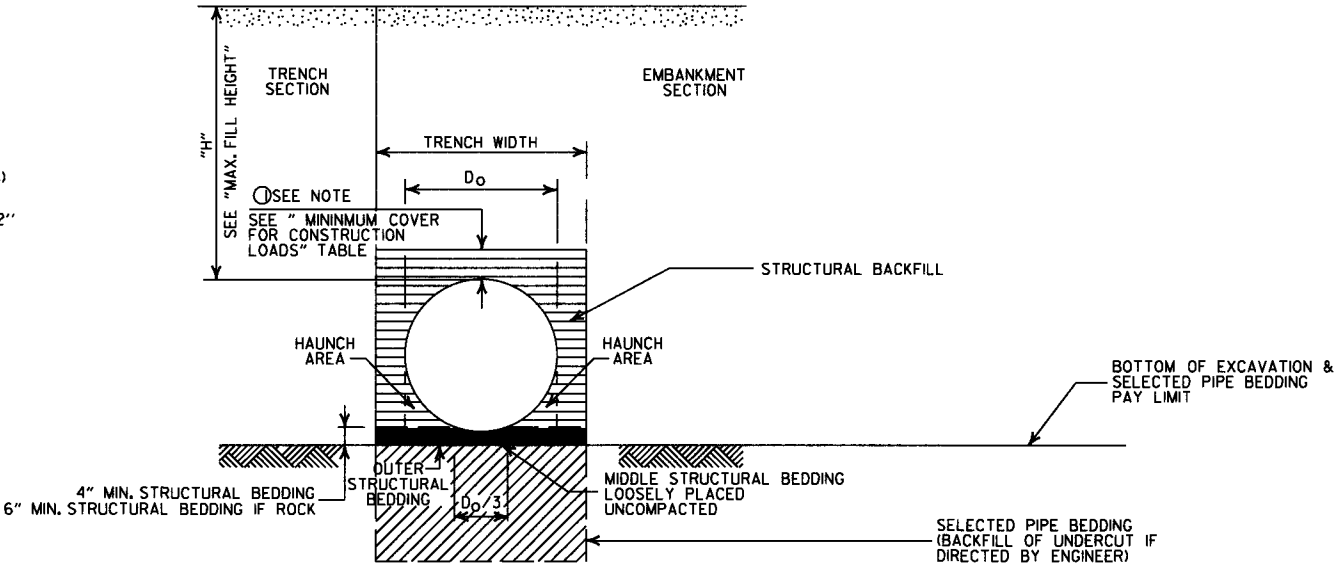
MINIMUM COVER FOR
CONSTRUCTION LOADS

PIPE DIAMETER	② MIN. COVER (FEET) FOR INDICATED CONSTRUCTION LOADS			
	18.0-50.0 (KIPS)	50.0-75.0 (KIPS)	75.0-110.0 (KIPS)	110.0-175.0 (KIPS)
18" THRU 36"	2'-0"	2'-6"	3'-0"	3'-0"

- ② MINIMUM COVER SHALL BE MEASURED FROM TOP OF PIPE TO TOP OF THE MAINTAINED CONSTRUCTION ROADWAY SURFACE. THE SURFACE SHALL BE MAINTAINED.

GENERAL NOTES

1. PIPE SHALL CONFORM TO ASTM F949, CELL CLASS 12454. INSTALLATION SHALL CONFORM TO JOB SPECIAL PROVISION "PLASTIC PIPE" AND SECTION 606 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION).
2. PLASTIC PIPE CULVERT DESIGN SHALL CONFORM TO AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, FIFTH EDITION (2010) WITH 2010 INTERIMS.
3. THE MAXIMUM ALLOWABLE TRENCH WIDTH SHALL BE THE MINIMUM WIDTH PLUS A SUFFICIENT WIDTH TO ENSURE WORKING ROOM TO PROPERLY PLACE AND COMPACT HAUNCHING AND OTHER BACKFILL MATERIAL.
4. IMPERVIOUS MATERIAL SHOULD BE PLACED AS DIRECTED BY THE ENGINEER AT THE ENDS OF THE CULVERT TO PREVENT LOSS OF STRUCTURAL BEDDING WHEN PERVIOUS MATERIAL IS USED FOR STRUCTURAL BEDDING AND/OR BACKFILL.
5. WHEN DIRECTED BY THE ENGINEER, UNSUITABLE MATERIAL THAT IS ENCOUNTERED AT THE BOTTOM OF THE EXCAVATED TRENCH (BELOW THE AREA IDENTIFIED AS "STRUCTURAL BEDDING" ABOVE) WILL BE EXCAVATED AND REPLACED WITH SELECTED PIPE BEDDING. THE QUANTITY OF MATERIAL REQUIRED TO BACKFILL THE UNDERCUT AREA UP TO THE SELECTED PIPE BEDDING PAY LIMIT DESIGNATED ABOVE WILL BE MEASURED AND PAID FOR AS "SELECTED PIPE BEDDING."
6. WHEN THE EXISTING MATERIAL EXCAVATED FOR THE PIPE TRENCH IS DETERMINED BY THE ENGINEER TO BE UNSUITABLE FOR BACKFILLING THE PIPE (ABOVE THE AREA IDENTIFIED ABOVE AS STRUCTURAL BACKFILL), BORROW MATERIAL OR MATERIAL FROM THE ROADWAY EXCAVATION WILL BE USED TO BACKFILL THE PIPE, IF SUITABLE MATERIAL IS NOT AVAILABLE, THE ENGINEER MAY AUTHORIZE THE USE OF "SELECTED PIPE BACKFILL."
7. FOR PIPE TYPES THAT ARE NOT SMOOTH ON THE OUTSIDE (CORRUGATED OR PROFILE WALLS), BACKFILL GRADATIONS SHOULD BE SELECTED THAT WILL PERMIT THE FILLING OF THE CORRUGATION OR PROFILE VALLEY.
8. PVC PIPES OF DIAMETERS OTHER THAN SHOWN WILL NOT BE ALLOWED.
9. JOINTS FOR PVC PIPE SHALL MEET THE REQUIREMENTS FOR SOIL TIGHTNESS AS SPECIFIED IN AASHTO SECTION 26.4.2.4 AND 30.4.2 "AASHTO LRFD BRIDGE CONSTRUCTION SPECIFICATIONS." JOINTS SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.



TYPE 2 EMBANKMENT AND TRENCH INSTALLATIONS

1. STRUCTURAL BACKFILL, EMBANKMENT, AND OUTER STRUCTURAL BEDDING MATERIAL SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OR CLASS OF MATERIAL USED.

CONSTRUCTION SEQUENCE

1. PLACE STRUCTURAL BEDDING MATERIAL TO GRADE. DO NOT COMPACT.
2. INSTALL PIPE TO GRADE.
3. COMPACT STRUCTURAL BEDDING OUTSIDE THE MIDDLE THIRD OF THE PIPE.
4. THE STRUCTURAL BACKFILL SHALL BE PLACED AND COMPACTED IN LAYERS NOT EXCEEDING 8". THE LAYERS SHALL BE BROUGHT UP EVENLY AND SIMULTANEOUSLY TO THE ELEVATION OF THE MINIMUM COVER.
5. PIPE INSTALLATION MAY REQUIRE THE USE OF RESTRAINTS, WEIGHTING OR OTHER APPROVED METHODS IN ORDER TO HELP MAINTAIN GRADE AND ALIGNMENT.

- LEGEND -

- H = FILL HEIGHT (FT.)
D_o = OUTSIDE DIAMETER OF PIPE
MAX. = MAXIMUM
MIN. = MINIMUM
- ===== = STRUCTURAL BACKFILL MATERIAL
===== = UNDISTURBED SOIL

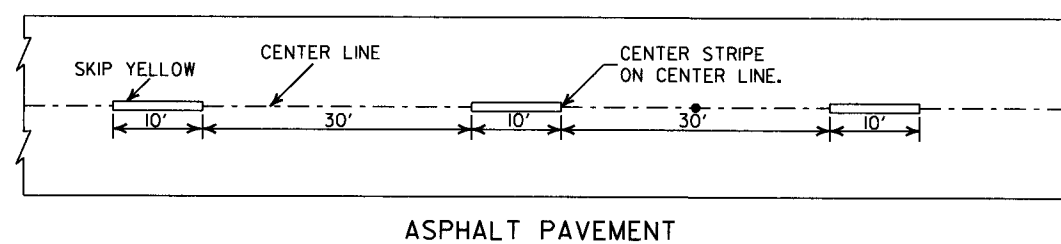
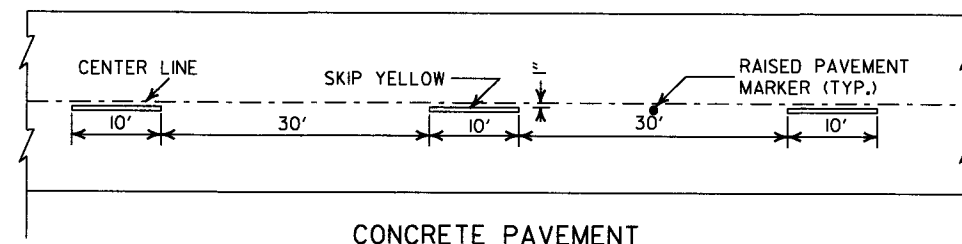
DATE	REVISION	DATE FILMED
2-27-14	REVISED GENERAL NOTE 1.	
12-15-11	REV GENERAL NOTES & MINIMUM COVER NOTE; DELETED SM3 MATERIAL	
11-17-10	ISSUED	

ARKANSAS STATE HIGHWAY COMMISSION

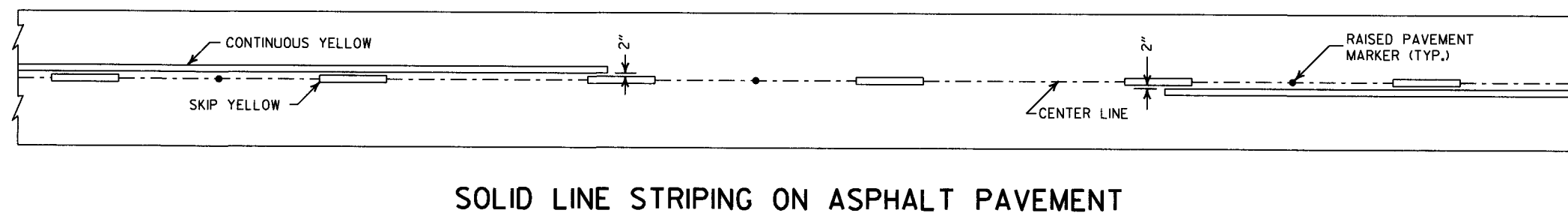
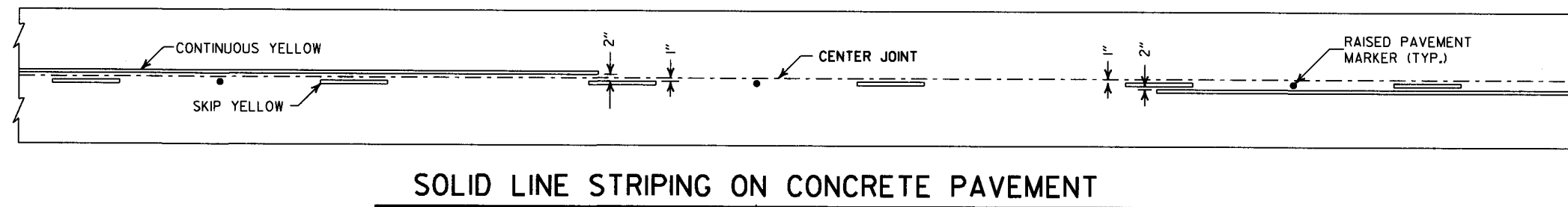
PLASTIC PIPE CULVERT
(PVC F949)

STANDARD DRAWING PCP-2

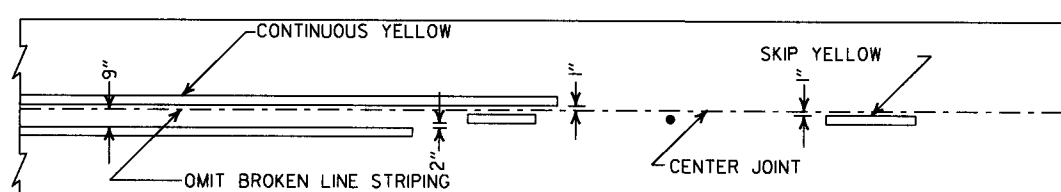
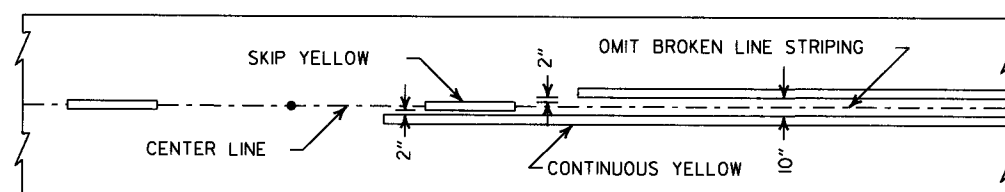




BROKEN LINE STRIPING



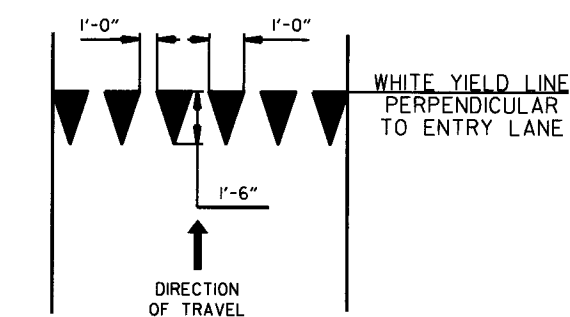
SOLID LINE STRIPING ON ASPHALT PAVEMENT



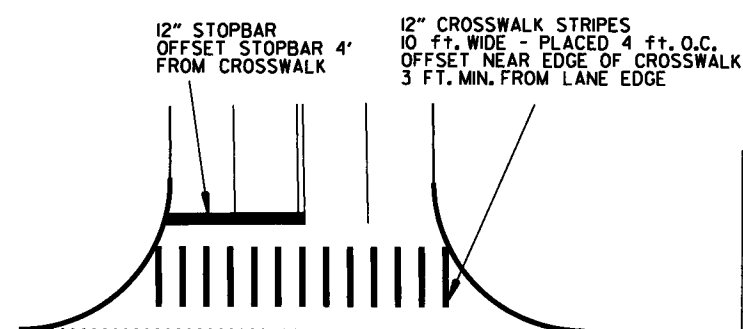
ASPHALT PAVEMENT

CONCRETE PAVEMENT

STRIPING AT ADJACENT NO PASSING LANES



YIELD LINE DETAIL

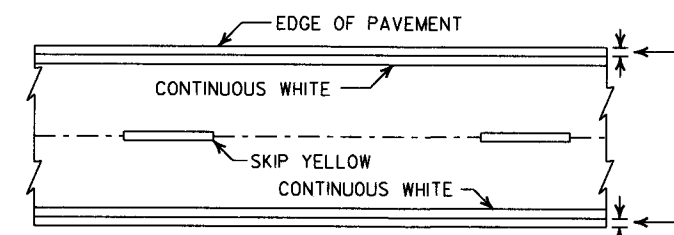


CROSSWALK AND STOPBAR DETAILS

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.

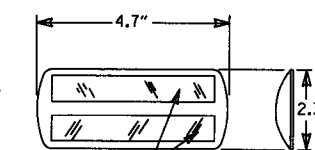
2" FOR ASPHALT OR CONCRETE PAVEMENT
6" FOR BITUMINOUS SURFACE TREATMENT



PAVEMENT EDGE LINE MARKING

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

TYPE II
RED/CLEAR OR
YELLOW/YELLOW



PRISMATIC REFLECTOR

NOTE:
DIMENSIONS SHOWN FOR RAISED PAVEMENT
MARKERS ARE TYPICAL. THE CONTRACTOR
MAY SUBSTITUTE SIMILAR MARKERS WITH
THE APPROVAL OF THE ENGINEER. REQUESTING
APPROVAL FOR SIMILAR MARKERS MAY BE
MADE BY REFERRING TO THE AHTD QUALIFIED
PRODUCTS LIST.

0.52"

DETAIL OF STANDARD RAISED PAVEMENT MARKERS

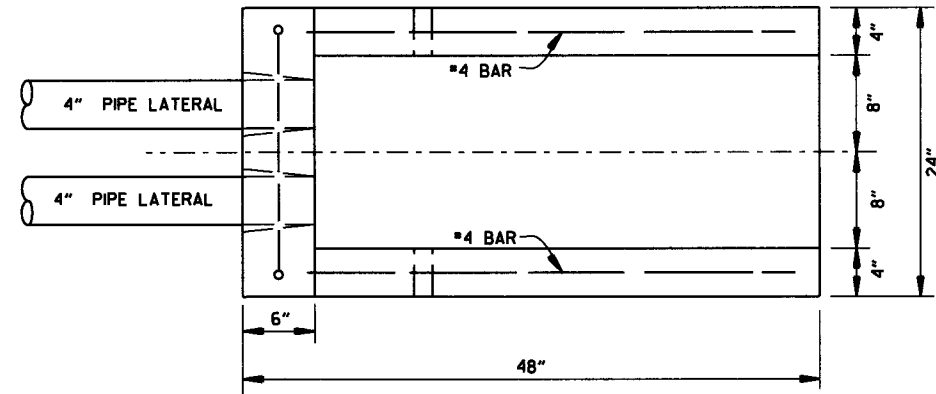
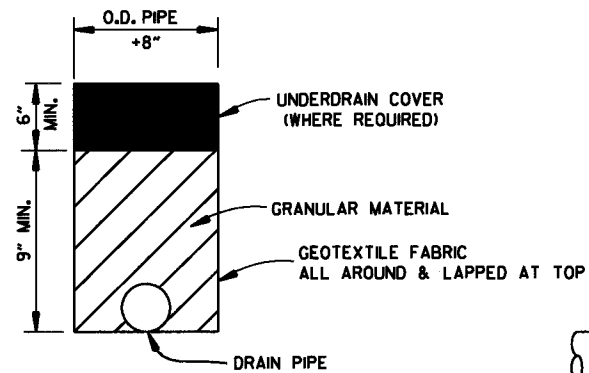
6-1-17	ADDED YIELD LINE DETAIL	
5-12-16	REVISED LINE WIDTHS, SPACING, & NOTES	
9-12-13	REVISED DETAIL OF STANDARD RAISED PAVEMENT MARKERS	
11-17-10	REVISED GENERAL NOTES & REMOVED PLOWABLE PAVT. MKRS	
11-18-04	REVISED NOTE 2 & GENERAL NOTES	
8-22-02	ADDED CROSSWALK & STOPBAR DTLS.	
7-02-98	ADDED DETAILS OF STD. RAISED PAVT. MARKERS	
4-26-96	REV. NOTES 3&4; ADDED R.P.M.	
9-30-80	DRAWN	1-9-30-80
DATE	REVISION	FILMED

ARKANSAS STATE HIGHWAY COMMISSION

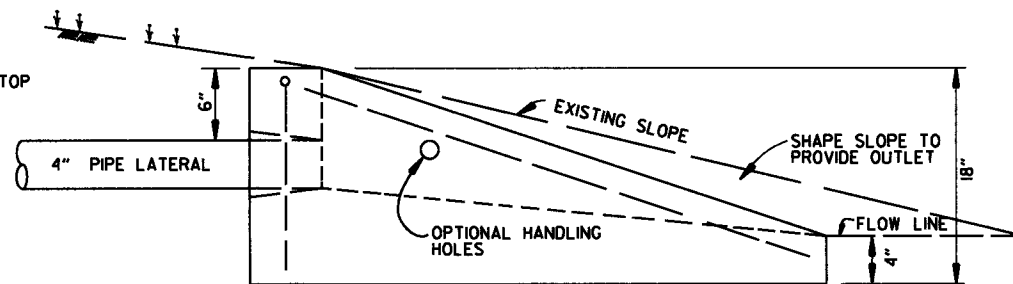
PAVEMENT MARKING DETAILS

STANDARD DRAWING PM-1

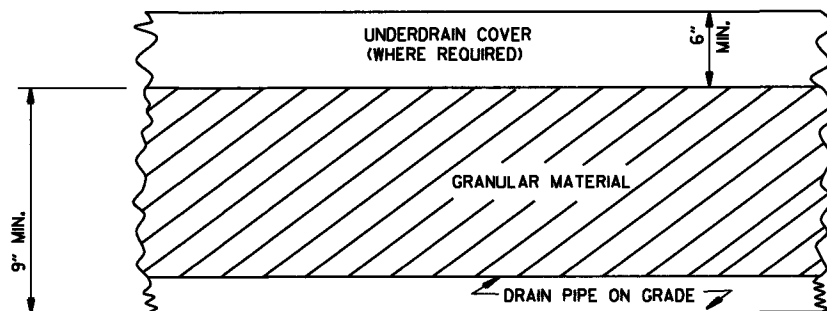
NOTE:
1. UNLESS OTHERWISE SPECIFIED ON THE PLANS, THE UNDERDRAIN COVER SHALL BE THOROUGHLY COMPACTED EARTH AND SHALL BE SUBSIDIARY TO PIPE UNDERDRAIN.
2. GRANULAR MATERIAL SHALL BE WRAPPED WITH GEOTEXTILE FABRIC, LAP FABRIC 12" OR THE WIDTH OF THE TRENCH AT THE TOP.



PLAN VIEW



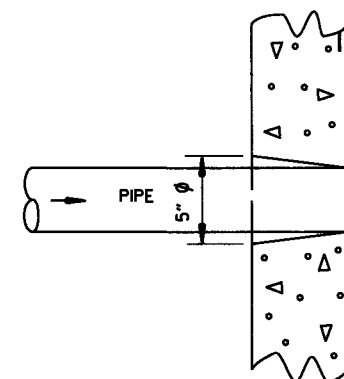
SIDE VIEW



DETAILS OF PIPE UNDERDRAIN

NOTES FOR PIPE UNDERDRAINS

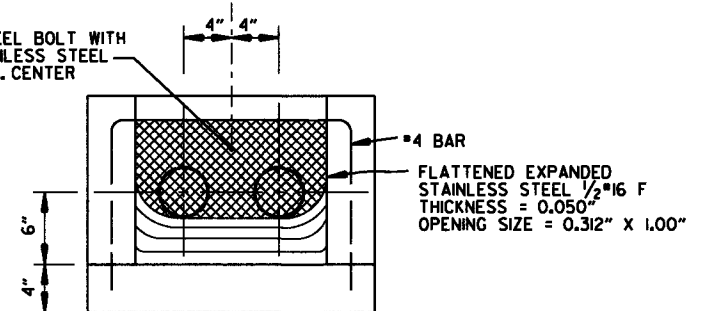
1. GEOTEXTILE FABRIC SHALL MEET THE REQUIREMENTS OF SECTION 625 FOR TYPE I. PAYMENT FOR GEOTEXTILE FABRIC AND GRANULAR FILTER MATERIAL SHALL BE INCLUDED IN THE PRICE BID PER LIN. FT. FOR "4" PIPE UNDERDRAINS" IN ACCORDANCE WITH SECTION 610 OF THE STANDARD SPECIFICATIONS.
2. 4" NON-PERFORATED SCHEDULE 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.



DETAIL OF HOLE FOR 4" PIPE

1/4" STAINLESS STEEL BOLT WITH ANCHOR & 1" STAINLESS STEEL WASHER IN APPROX. CENTER OF SCREEN

BOLT ON RODENT SCREEN

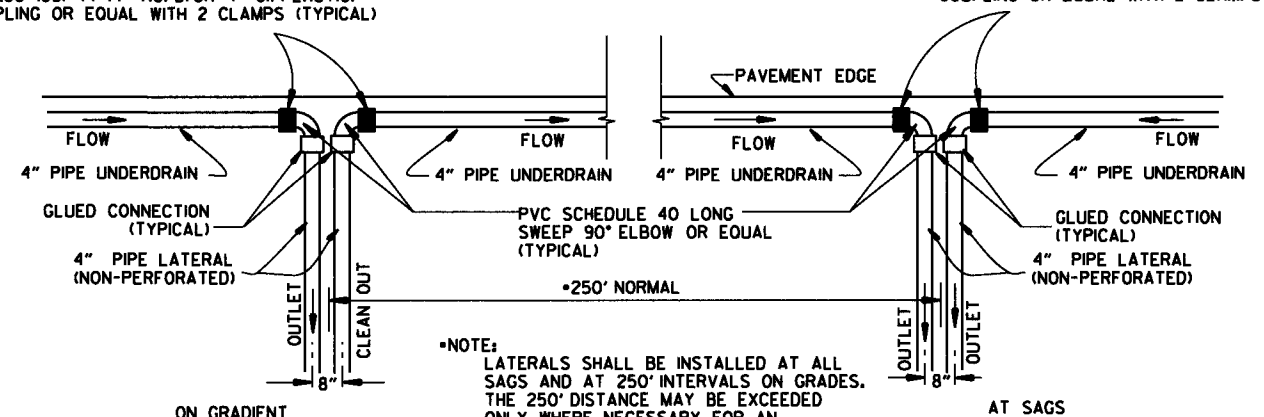


FRONT VIEW (DETAIL OF RODENT SCREEN)

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.

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
DATE	REVISION	DATE FILMED

ARKANSAS STATE HIGHWAY COMMISSION

DETAILS OF PIPE UNDERDRAIN

STANDARD DRAWING PU-1

SUPERELEVATION TABLE FOR TWO - WAY TRAFFIC

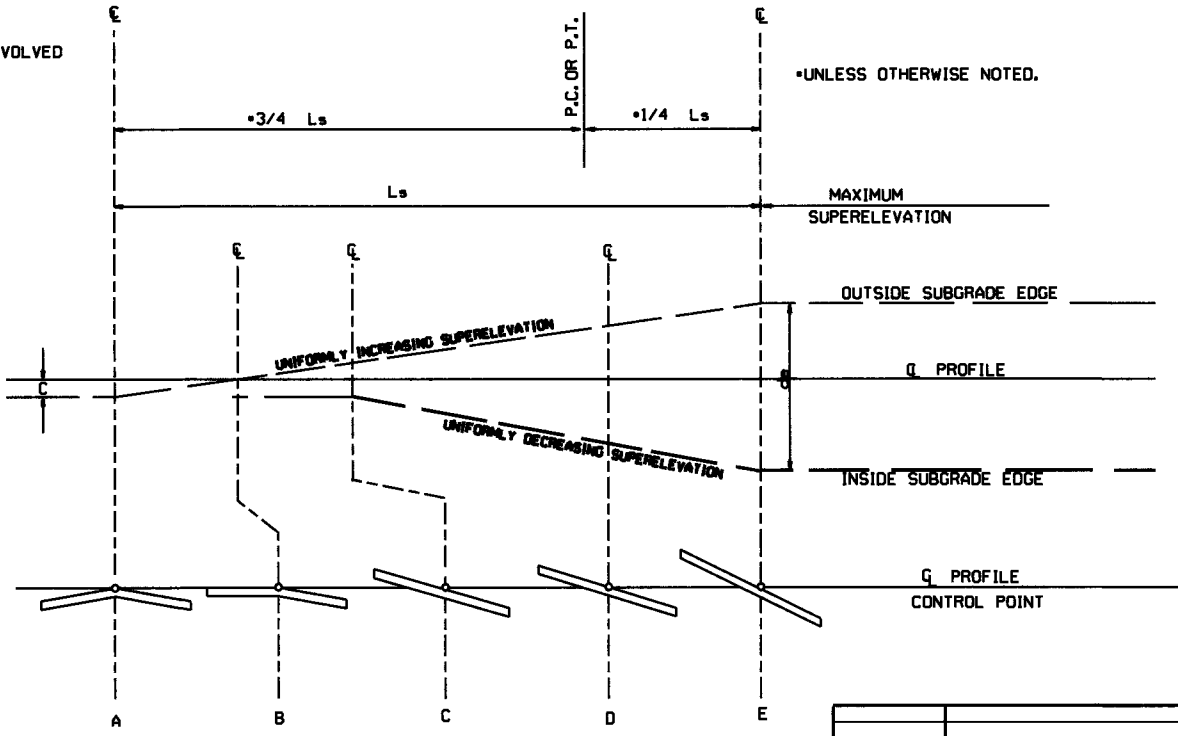
DEGREE OF CURVE	30 MPH			40 MPH			50 MPH			55 MPH			60 MPH			70 MPH		
	e	Ls (FT)		e	Ls (FT)		e	Ls (FT)		e	Ls (FT)		e	Ls (FT)		e	Ls (FT)	
		MINIMUM	DESIRABLE		MINIMUM	DESIRABLE		MINIMUM	DESIRABLE		MINIMUM	DESIRABLE		MINIMUM	DESIRABLE		MINIMUM	DESIRABLE
0° 15'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
0° 30'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
0° 45'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
1° 00'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
1° 15'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
1° 30'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
1° 45'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
2° 00'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
2° 15'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
2° 30'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
2° 45'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
3° 00'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
3° 15'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
3° 30'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
3° 45'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
4° 00'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
4° 15'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
4° 30'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
4° 45'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
5° 00'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
5° 15'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
5° 30'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
5° 45'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
6° 00'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
6° 15'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
6° 30'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
6° 45'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
7° 00'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
7° 15'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
7° 30'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
7° 45'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
8° 00'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
8° 15'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
8° 30'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
8° 45'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
9° 00'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
9° 15'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
9° 30'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
9° 45'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
10° 00'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
10° 15'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
10° 30'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
10° 45'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
11° 00'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
11° 15'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
11° 30'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
11° 45'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
12° 00'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
12° 15'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
12° 30'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
12° 45'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
13° 00'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
13° 15'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
13° 30'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
13° 45'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
14° 00'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
14° 15'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
14° 30'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
14° 45'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
15° 00'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
15° 15'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
15° 30'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
15° 45'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
16° 00'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
16° 15'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
16° 30'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
16° 45'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
17° 00'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
17° 15'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
17° 30'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
17° 45'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
18° 00'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
18° 15'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
18° 30'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
18° 45'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
19° 00'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
19° 15'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
19° 30'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
19° 45'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
20° 00'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
20° 15'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
20° 30'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
20° 45'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
21° 00'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
21° 15'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
21° 30'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
21° 45'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
22° 00'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
22° 15'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
22° 30'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
22° 45'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
23° 00'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
23° 15'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
23° 30'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
23° 45'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		
24° 00'	N.C.			N.C.			N.C.			N.C.			N.C.			N.C.		

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.)

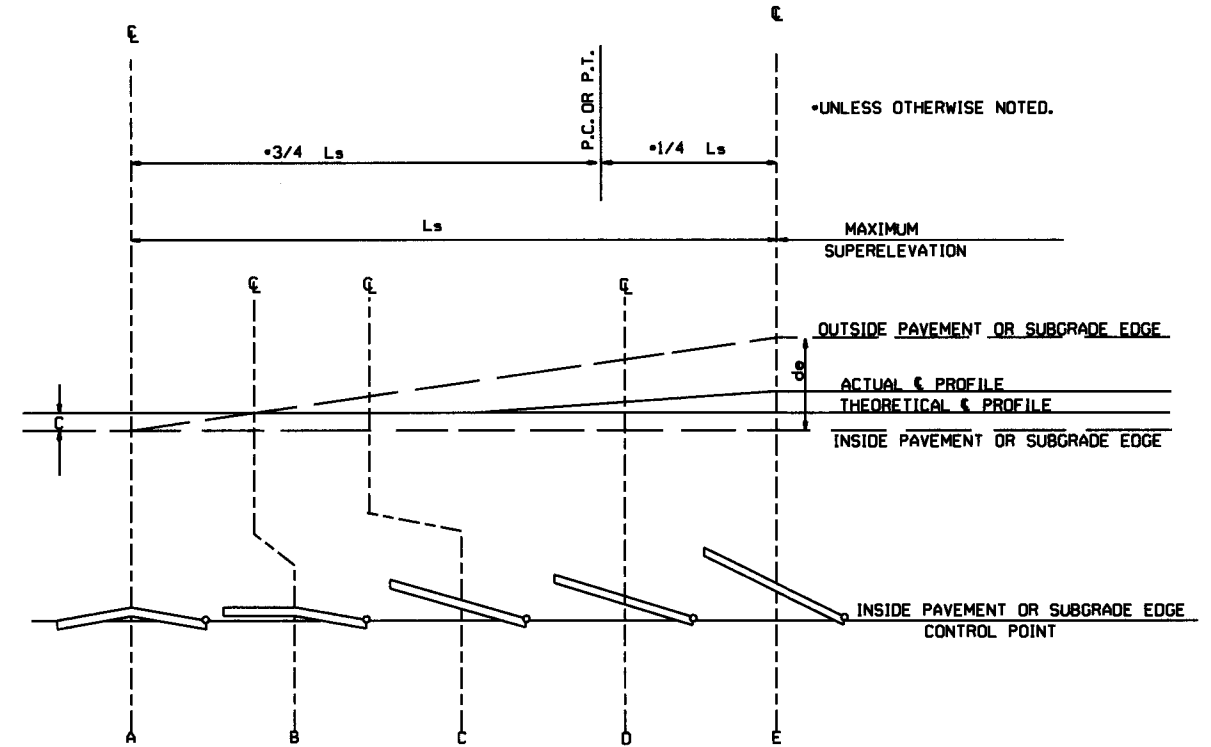
GENERAL NOTES

- ON PAVEMENT WITH TWO-WAY TRAFFIC, THE SUPERELEVATION SHALL BE REVOLVED ON THE INSIDE PAVEMENT EDGE UNLESS OTHERWISE NOTED ON THE PLANS
- SUPERELEVATION VALUES SHOWN ON THE CROSS SECTIONS ARE VALUES (+) OR (-) TO BE ADDED TO OR SUBTRACTED FROM THE POINT OF CONTROL.
- LENGTHS FOR L MAY BE ROUNDED IN MULTIPLES OF 25 FT. OR 50 FT. TO PERMIT SIMPLER CALCULATIONS.
- PAVEMENTS WIDER THAN 2 LANES SHALL HAVE ADDITIONAL TRANSITION LENGTHS AS FOLLOWS:
3 LANE UNDIVIDED - - - - +20%
4 LANE UNDIVIDED - - - - +50%
5 LANE UNDIVIDED - - - - +80%
6 LANE UNDIVIDED - - - - +100%

NOTE: MAINTAIN NORMAL CROWN ON INSIDE UNTIL SUPERELEVATION EXCEEDS 2C.
RATE OF SUPERELEVATION SHALL BE COMPUTED ON STRAIGHT LINE METHOD USING APPLICABLE Ls.



STANDARD METHOD WHEN SUPERELEVATION REVOLVES AROUND CENTER LINE

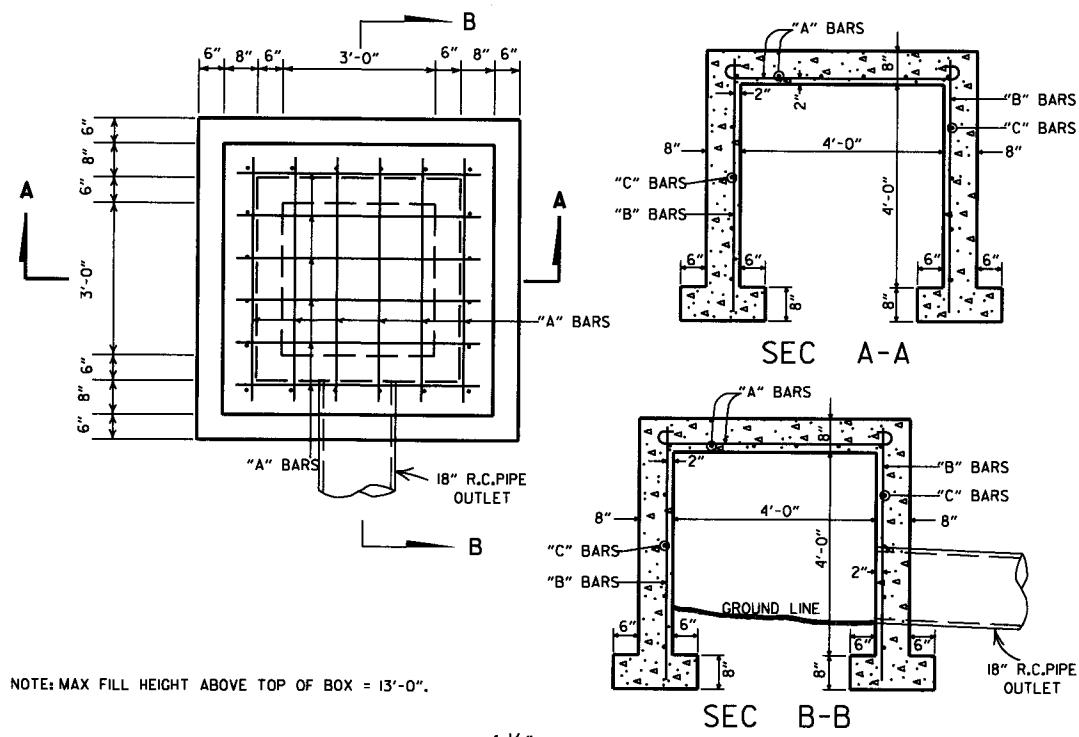


STANDARD METHOD WHEN SUPERELEVATION REVOLVES AROUND INNER SUBGRADE POINT OR INNER PAVEMENT EDGE

NOTE: MAINTAIN NORMAL CROWN ON INSIDE UNTIL SUPERELEVATION EXCEEDS 2C.

SUPERELEVATION FORMULA = $\frac{Lde}{Ls}$

10-18-96	ADDED FORMULA	534-1-9-87
01-09-87	ISSUED	DATE FILLED
DATE	REVISION	



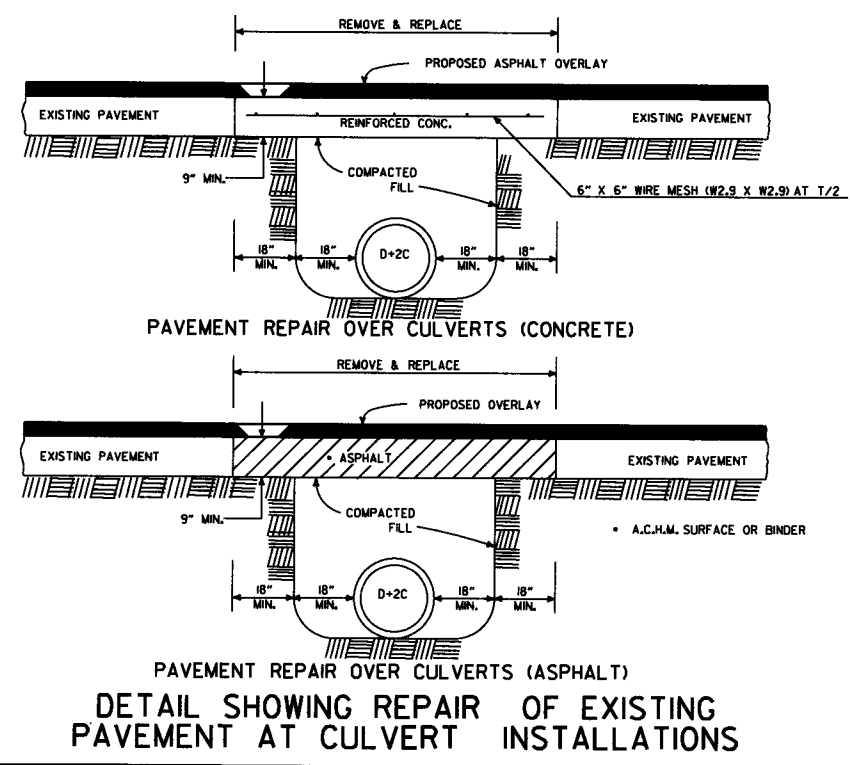
STEEL SCHEDULE

BAR	NUMBER	LENGTH	SPACING
"A"	12	6'-0"	10"
"B"	20	5'-0"	10 1/2"
"C"	16	5'-0"	12"

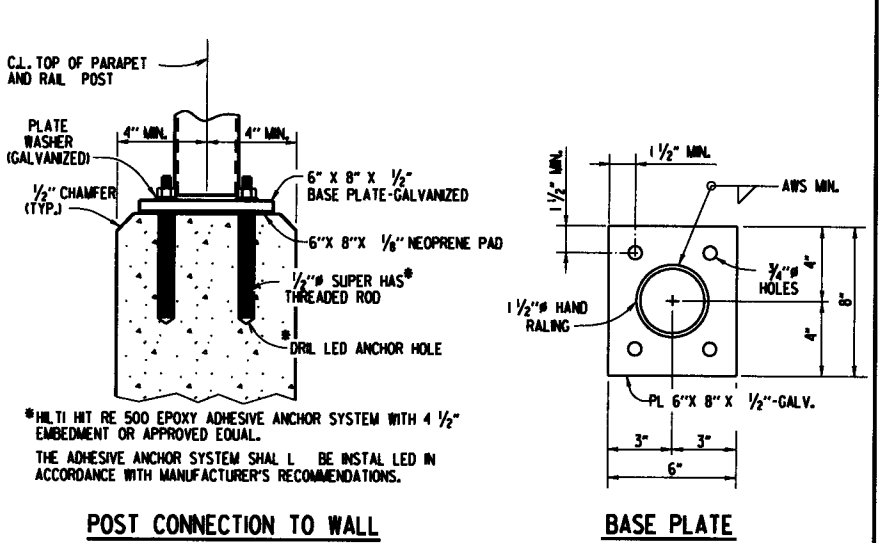
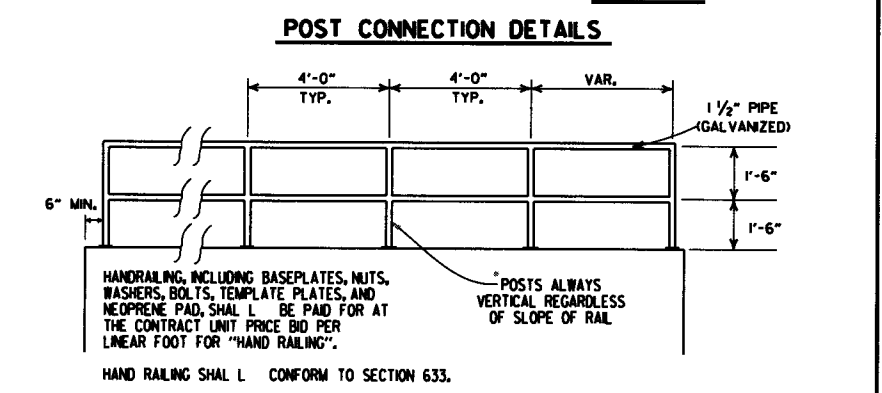
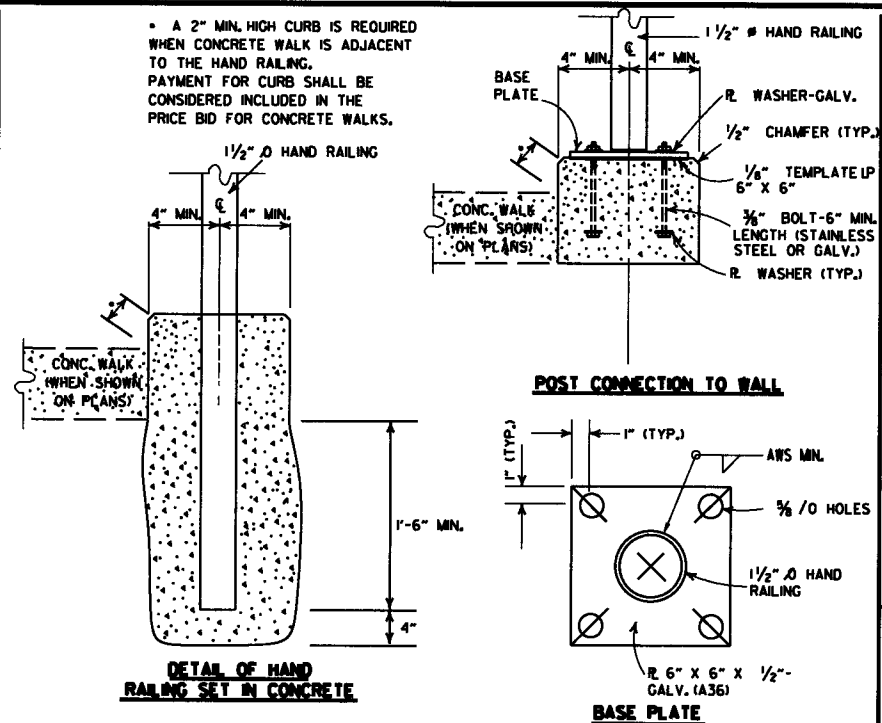
QUANTITIES
CONCRETE 3.31 CU. YDS.
REINFORCING STEEL 168 LB.

GENERAL NOTE:
THE PAY ITEMS FOR REINFORCED CONCRETE SPRING BOXES SHALL BE FOR THE QUANTITIES OF CONCRETE OF THE CLASS SPECIFIED, REINFORCING STEEL, EXCAVATION FOR STRUCTURES AND 18" R.C. PIPE CULVERT.

REINFORCED CONCRETE SPRING BOX

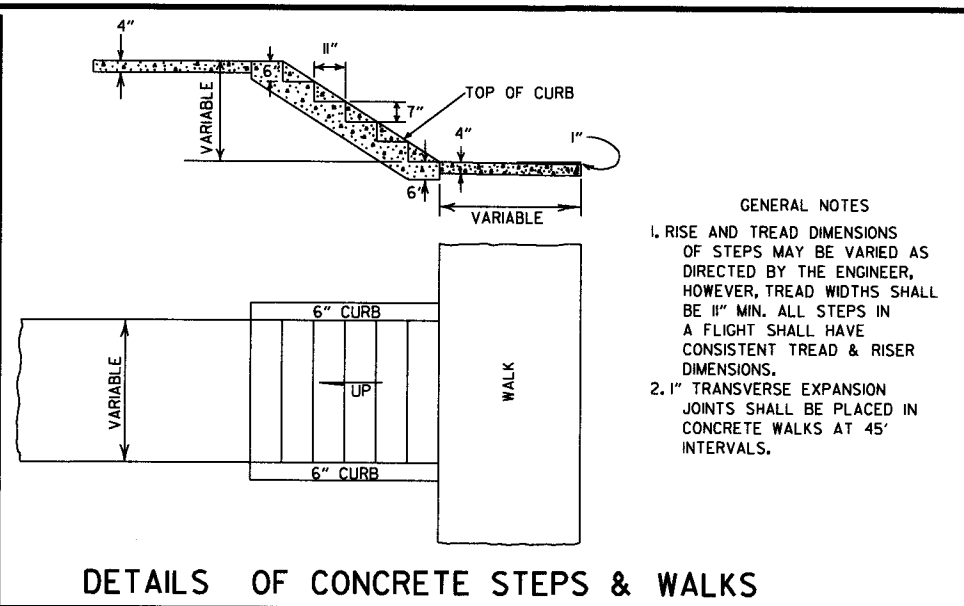


DETAIL SHOWING REPAIR OF EXISTING PAVEMENT AT CULVERT INSTALLATIONS



DETAILS OF ALTERNATE POST ANCHOR SYSTEM (EPOXY ADHESIVE ANCHORS)

HAND RAILING DETAILS



GENERAL NOTES

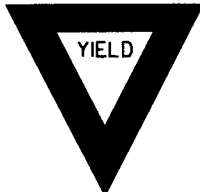
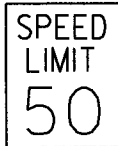
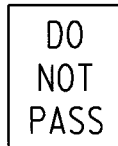
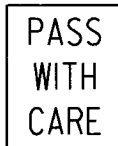
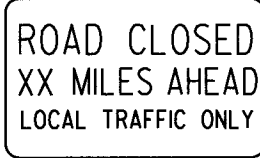
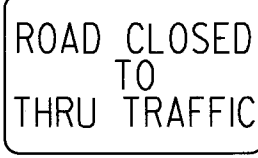
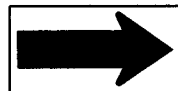
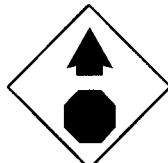
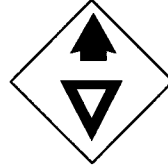
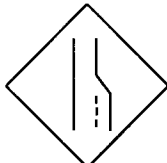
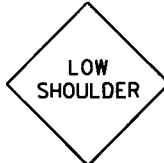
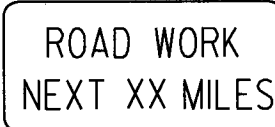
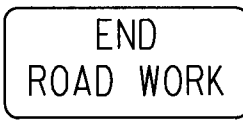
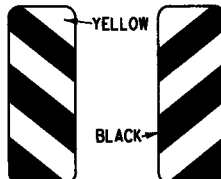
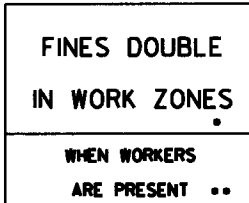
1. RISE AND TREAD DIMENSIONS OF STEPS MAY BE VARIED AS DIRECTED BY THE ENGINEER, HOWEVER, TREAD WIDTHS SHALL BE 11" MIN. ALL STEPS IN A FLIGHT SHALL HAVE CONSISTENT TREAD & RISER DIMENSIONS.
2. 1" TRANSVERSE EXPANSION JOINTS SHALL BE PLACED IN CONCRETE WALKS AT 45' INTERVALS.

DETAILS OF CONCRETE STEPS & WALKS

DATE	REVISION	DATE FILMED
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	CHANGED MESH FABRIC TO WIRE MESH	10-1-92
8-15-91	DELETED HDWL MODIFICATION DETAIL	8-15-91
11-8-90	DELETED COLD MIX FROM CULV'T. REPAIR	11-8-90
11-30-89	REV. RETAINING WALL STEEL SCHEDULE	11-30-89
11-17-88	V. BARS BEHIND ARROW	665-11-17-88
7-15-88	REV. PAVEMENT REPAIR	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
	ELIMINATED CONC. CLASS & ADDED CHAMFER NOTE	682-1-4-83
3-2-81	SPELLING OF "UNDERDRAIN"	721-3-2-81
4-20-79	REV. UNDERDRAIN DET. & PAVEMENT REPAIR	674-4-20-79
2-2-76	12" MIN. GRAN. MAT'L. OVER PIPE	919-2-2-76
4-10-75	REM. SPECS. FOR GRAN. MAT'L.	568-4-10-75-853
5-22-74	GRANULAR MAT'L. TO BE SB-3	567-5-22-74-740
10-2-72	REVISED AND REDRAWN	564-10-16-72

ARKANSAS STATE HIGHWAY COMMISSION

DETAILS OF SPECIAL ITEMS

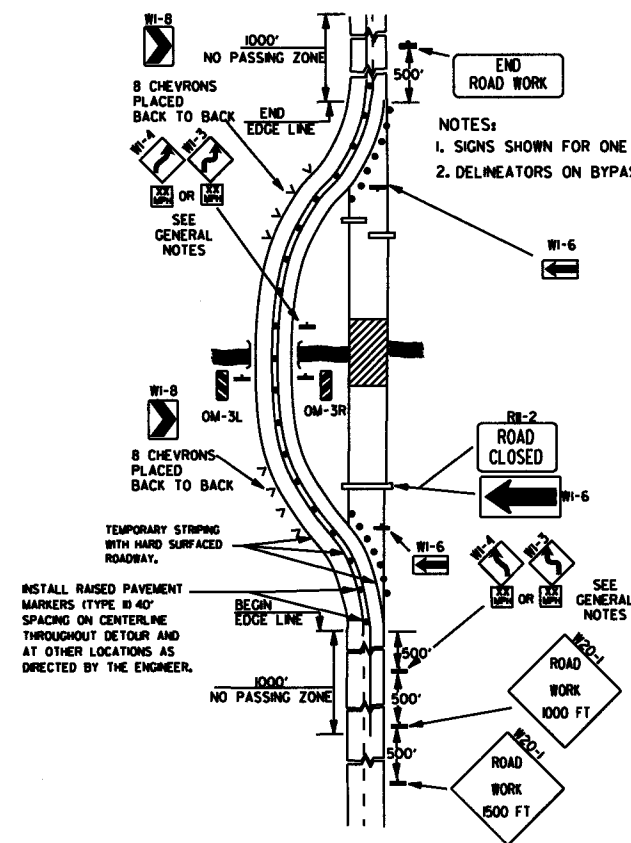
RI-1  STANDARD 30"x30" EXPRESSWAY 36"x36" SPECIAL 48"x48"	RI-2  STD. 36"x36"x36" EXPWY. 48"x48"x48" FWY. 60"x60"x60"	R2-1  STD. 24"x30" EXPWY. 36"x48" FWY. 48"x60"	W3-5  STD. 36"x36" EXPWY. 48"x48" FWY. 48"x48"	W3-5a  STD. 36"x36" EXPWY. 48"x48" FWY. 48"x48"	R4-1  STD. 24"x30" EXPWY. 36"x48" FWY. 48"x60"	R4-2  STD. 24"x30" EXPWY. 36"x48" FWY. 48"x60"	ADVANCE DISTANCES (XXXX) 500 FT 1/2 MILE 1000 FT 3/4 MILE 1500 FT 1 MILE AHEAD GENERAL NOTES: 1. ALL TRAFFIC CONTROL DEVICES USED ON ROAD CONSTRUCTION SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION, AND TO THE STANDARD HIGHWAY SIGNS, LATEST EDITION, OR AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION. 2. TRAFFIC CONTROL DEVICES SHALL BE SET UP JUST BEFORE THE START OF CONSTRUCTION OPERATIONS AND SHALL BE PROPERLY MAINTAINED DURING THE TIME SUCH CONDITIONS EXIST. THEY SHALL REMAIN IN PLACE ONLY AS LONG AS NEEDED AND REMOVED THEREAFTER. 3. EXISTING SIGNS AND CONSTRUCTION SIGNS SHALL BE KEPT IN PROPER POSITION, AND BE CLEAN AND LEGIBLE AT ALL TIMES. SIGNS THAT DO NOT APPLY TO EXISTING CONDITIONS SHALL BE REMOVED. SIGNS THAT ARE DAMAGED, DEFACED, OR THAT ACCUMULATE DIRT DURING CONSTRUCTION SHALL BE CLEANED, REPAIRED, OR REPLACED. 4. SIGNS ARE USUALLY MOUNTED ON A SINGLE POST, ALTHOUGH THOSE WIDER THAN 36" OR LARGER THAN 10 SQ. FT. SHALL BE MOUNTED ON TWO POSTS OR ABOVE A TYPE III BARRICADE. 5. SIGN POSTS DIRECT BURIED IN SOIL SHALL BE 2 LB. MINIMUM CHANNEL POST OR 4"x4" WOOD POSTS. CHANNEL POSTS SHALL BE PAINTED GREEN. WOOD POSTS SHALL BE PAINTED WHITE. ALL POSTS SHALL BE NEATLY CONSTRUCTED, AND SHALL BE REPLUMBED, CLEANED, OR REPAIRED AS NEEDED FOR THE DURATION OF THE JOB. THERE SHALL NOT BE MORE THAN 2 POSTS IN A 7' PATH FOR WOOD OR CHANNEL POSTS. ANY CHANNEL POST SPLICE SHALL BE IN ACCORDANCE WITH STANDARD DRAWING TC-3. 6. POST MOUNTED SIGNS IN RURAL AREAS SHALL BE CONSTRUCTED WITH THE NEAR EDGE OF THE SIGN FROM 6 TO 12 FEET FROM THE PAVEMENT EDGE. SIGNS IN URBAN AREAS AND BARRICADE MOUNTED SIGNS SHALL BE MOUNTED A MINIMUM OF 2 FEET FROM THE PAVEMENT EDGE. 7. ALL POST AND BARRICADE MOUNTED SIGNS MOUNTED IN URBAN AREAS SHALL BE MOUNTED A MINIMUM DISTANCE OF 7' FROM THE BOTTOM OF THE SIGN TO THE ROADWAY SURFACE. ALL POST AND BARRICADE MOUNTED SIGNS MOUNTED IN RURAL AREAS SHALL BE MOUNTED A MINIMUM DISTANCE OF 7' FROM THE BOTTOM OF THE SIGN TO THE ROADWAY SURFACE, EXCEPT A MINIMUM OF 6' SHALL BE USED WHEN MOUNTING AN ADVISORY SIGN BELOW A WARNING SIGN. TEMPORARY SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS FOR INTERMEDIATE TERM STATIONARY WORK CONDITIONS. THE SIGNS MINIMUM MOUNTING HEIGHT SHALL BE 5'. RETROREFLECTIVE DEVICES SHALL BE USED. TEMPORARY SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS FOR SHORT-TERM, SHORT DURATION, AND MOBILE CONDITIONS. THEY SHALL BE NO LESS THAN ONE (1) FOOT ABOVE THE TRAVELED WAY. LONG-TERM STATIONARY SIGNS SHALL BE DIRECT BURIED IN SOIL, UNLESS CONDITIONS NECESSITATE THE USE OF PORTABLE SIGNS, OR AS APPROVED BY THE ENGINEER. CONCRETE PADS, CONCRETE OR ROCK BALLAST, OR OTHER SOLID MATERIALS SHALL NOT BE UTILIZED WITH PORTABLE SIGN SUPPORTS. 8. FLAGGERS SHALL USE REFLECTORIZED STOP-SLOW PADDLES. FLAGS MAY BE USED ONLY FOR EMERGENCY SITUATIONS. 9. MOST OF THE SIGNS SHOWN ARE ORIENTED TO THE RIGHT. HOWEVER, THIS DOES NOT PRECLUDE THE USE OF MIRROR IMAGES OF THESE SIGNS WHERE THE REVERSE ORIENTATION MIGHT BETTER CONVEY TO MOTORISTS THE PROPER DIRECTION OF MOVEMENT. 10. R55-1 SIGNS SHALL BE PLACED AT LEAST 1500' BUT NOT MORE THAN 1 MILE IN ADVANCE OF THE WORK ZONE. IF A SPEED LIMIT REDUCTION IS IN EFFECT, THE SIGN SHALL BE PLACED A MINIMUM OF 500' IN ADVANCE OF THE "REDUCED SPEED AHEAD" SIGN. • NOTE: SUPPORTS FOR SIGNS, BARRICADES, AND VERTICAL PANELS THAT ARE DIFFERENT FROM THE REQUIREMENTS SHOWN IN NOTES 4 & 5, BUT MEET THE REQUIREMENTS OF NCHRP-350 OR MANUAL FOR ASSESSING SAFETY HARDWARE (MASH), WILL BE ACCEPTED. COMPLIANCE WITH THE REQUIREMENTS OF NCHRP-350 OR MANUAL FOR ASSESSING SAFETY HARDWARE (MASH) IS REQUIRED FOR ALL PROJECTS.
R5-1  STD. 30"x30" EXPWY. 36"x36" SPECIAL 48"x48"	R11-2  48"x30"	R11-3A  60"x30"	R11-4  60"x30"	W21-5a  STD. 36"x36" FWY. 48"x48"	W1-1  STD. 36"x36" FWY. 48"x48"	W1-2  STD. 36"x36" FWY. 48"x48"	
W1-3  STD. 48"x48"	W1-4  STD. 48"x48"	W1-6  STD. 48"x24" SPECIAL 60"x30"	W1-8  STD. 18"x24" SPECIAL 24"x30" EXPWY. 30"x36" FWY. 36"x48"	W3-1  STD. 36"x36" SPECIAL 48"x48"	W3-2  STD. 36"x36" SPECIAL 48"x48"	W4-2  STD. 36"x36" FWY. 48"x48"	
W5-1  STD. 36"x36" SPECIAL 48"x48"	W6-3  EXPWY. 36"x36" SPECIAL 48"x48"	W8-7  EXPWY. 36"x36" FWY. 48"x48"	W9-2  STD. 36"x36" FWY. 48"x48"	W13-1  STD. 24"x24"	W20-1  STD. 48"x48"	W20-2  STD. 48"x48"	
W20-3  STD. 48"x48"	W20-4  STD. 48"x48"	W20-5  STD. 48"x48"	W20-7a  500 FEET 24" W6-2 STD. 36"x36" FWY. 48"x48"	W21-2  STD. 30"x30" SPECIAL 36"x36"	W21-5  STD. 30"x30" SPECIAL 36"x36"	W24-1  STD. 36"x36"	
W1-4b  STD. 48"x48"	R56-1  STD. 18"x18"	W8-11  STD. 36"x36" FWY. 48"x48"	W8-9  STD. 36"x36" FWY. 48"x48"	G20-1  60"x24"	G20-2  48"x24"	OM-3L OM-3R  YELLOW BLACK 12"x36"	
M4-9  STD. 30"x24" SPECIAL 48"x36" SPECIAL 60"x48"	M4-10  48"x18"	R55-1  36"x60" • USE 6" C LETTERS •• USE 4" D LETTERS					

4-13-17	DELETED RSP-1 & ADDED W21-5a	
9-2-5	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	
1-18-04	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

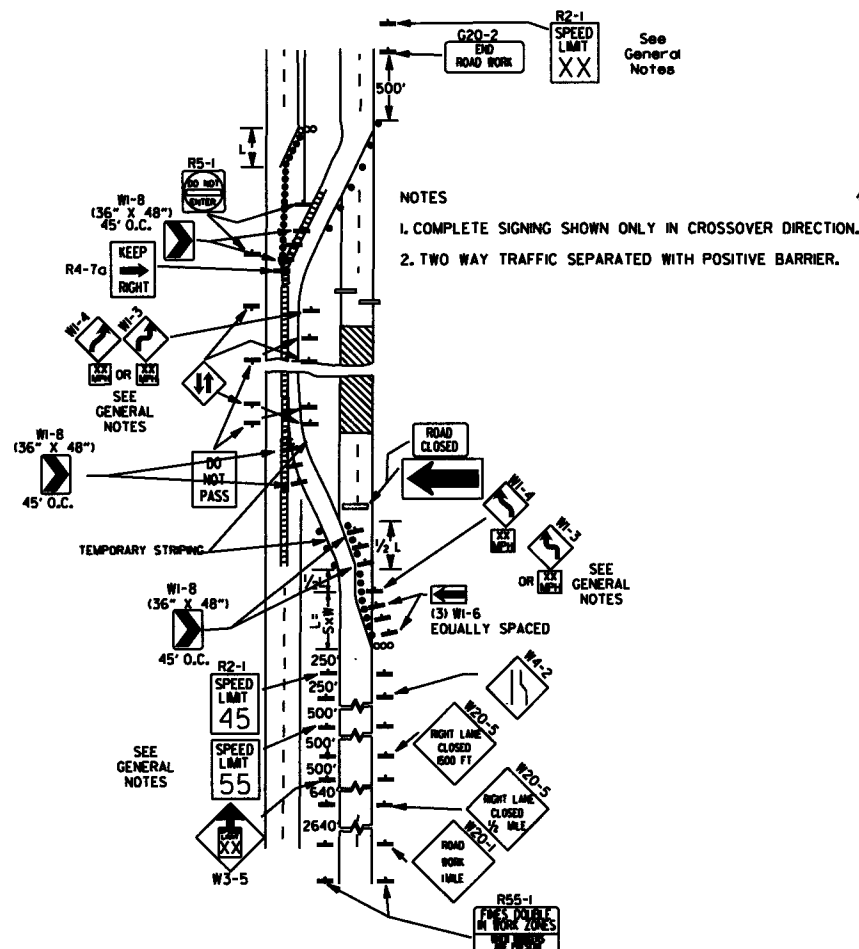
ARKANSAS STATE HIGHWAY COMMISSION
STANDARD TRAFFIC CONTROLS
FOR HIGHWAY CONSTRUCTION
STANDARD DRAWING TC-1

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	
4-17-10	DELETED W8-9a & ADDED W8-9	
10-15-09	ADDED REFERENCE TO MASH & ADDED SIGN W24-1	
4-17-08	REVISED SIGN DESIGNATIONS	
11-18-04	REVISED NOTES	
10-9-03	REVISED NOTE 1	
11-16-01	REVISED NOTE 7	
9-28-00	REVISED NOTE	
11-18-98	ADDED NOTE	
6-26-97	REVISED NOTE 5	
4-03-97	REVISED NOTE 5	
10-18-96	ADDED CONTROLLED ACCESS HWY. SIGN & TO NOTE 7	
10-12-95	ADDED R55-1	
6-8-95	REVISED TO CORRECT SIGN ILLUSTRATIONS	6-8-95
2-2-95	REVISED PER PART VI, MUTCD SEPT. 3, 1993	
8-15-91	DRAWN AND PLACED IN USE	
DATE	REVISION	FILMED

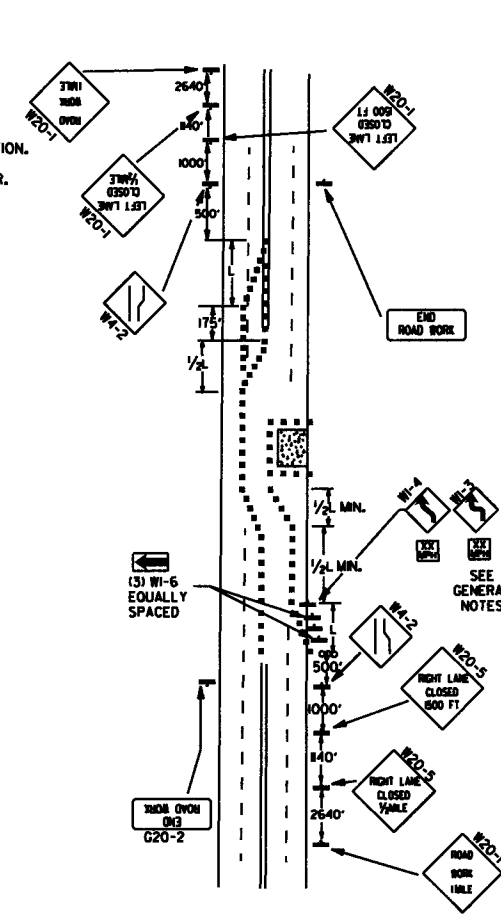
ARKANSAS STATE HIGHWAY COMMISSION
STANDARD TRAFFIC CONTROLS
FOR HIGHWAY CONSTRUCTION
STANDARD DRAWING TC-1



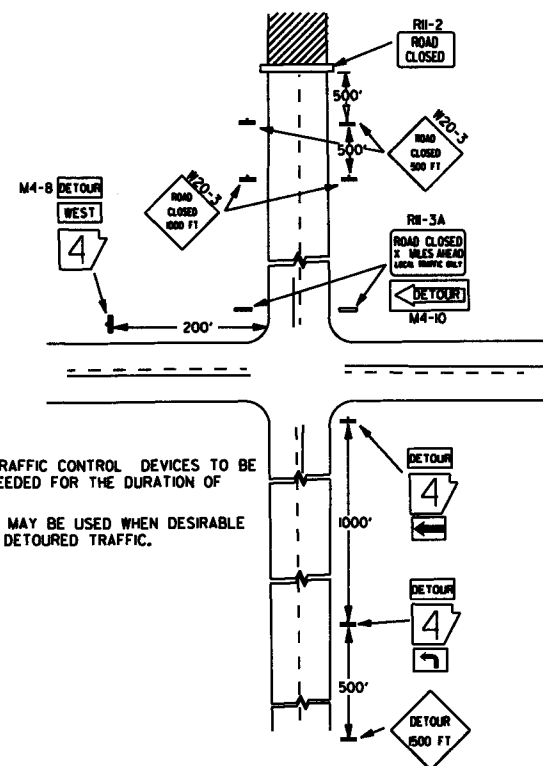
(A) TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES ON A 2-LANE HIGHWAY WHERE THE ENTIRE ROADWAY IS CLOSED AND A BYPASS DETOUR IS PROVIDED.



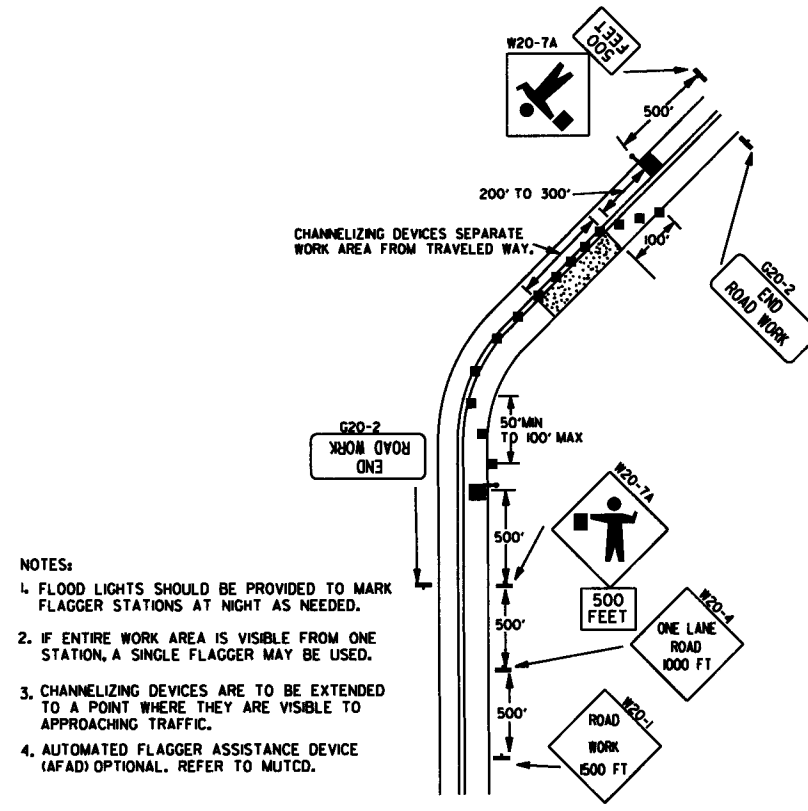
(B) TYPICAL APPLICATION - 4-LANE DIVIDED ROADWAY WHERE ONE ROADWAY IS CLOSED.



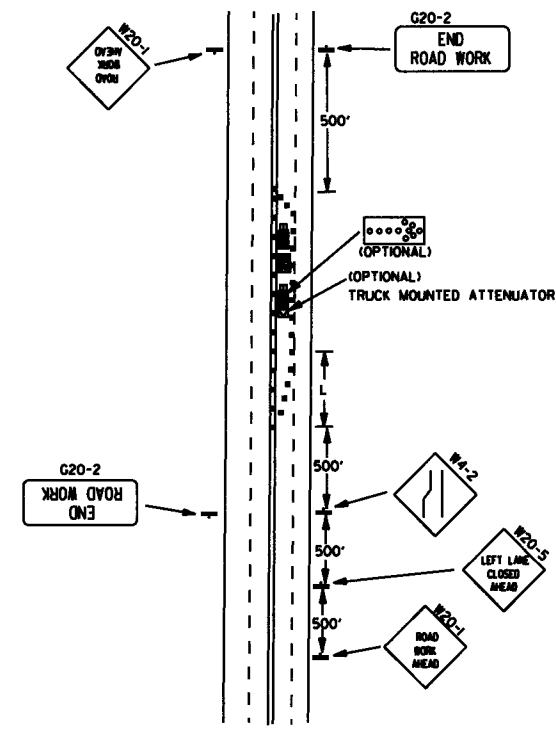
(C) TYPICAL APPLICATION - 4-LANE UNDIVIDED ROADWAY WHERE HALF OF THE ROADWAY IS CLOSED.



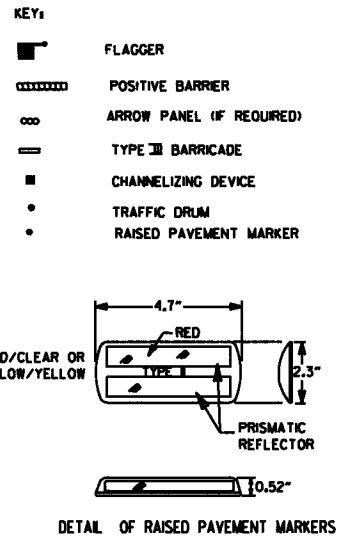
(D) TYPICAL APPLICATION - ROADWAY CLOSED BEYOND DETOUR POINT.



(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:

$L = SXW$ FOR SPEEDS OF 45MPH OR MORE.

$L = \frac{WS}{60}$ 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.

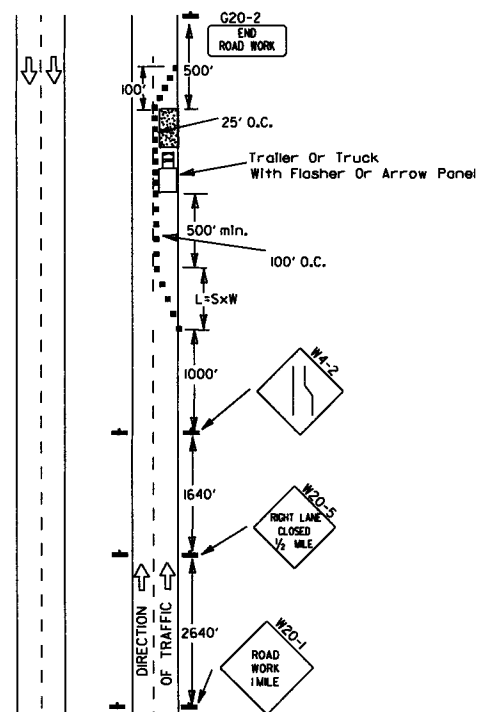
GENERAL NOTES:

- 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 R2-1(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 1/2 MILE 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 R2-1(K65) SHALL BE OMITTED. ADDITIONAL R2-155MPH SPEED LIMIT SIGNS SHALL BE INSTALLED AT A MAXIMUM OF 1/2 MILE 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.

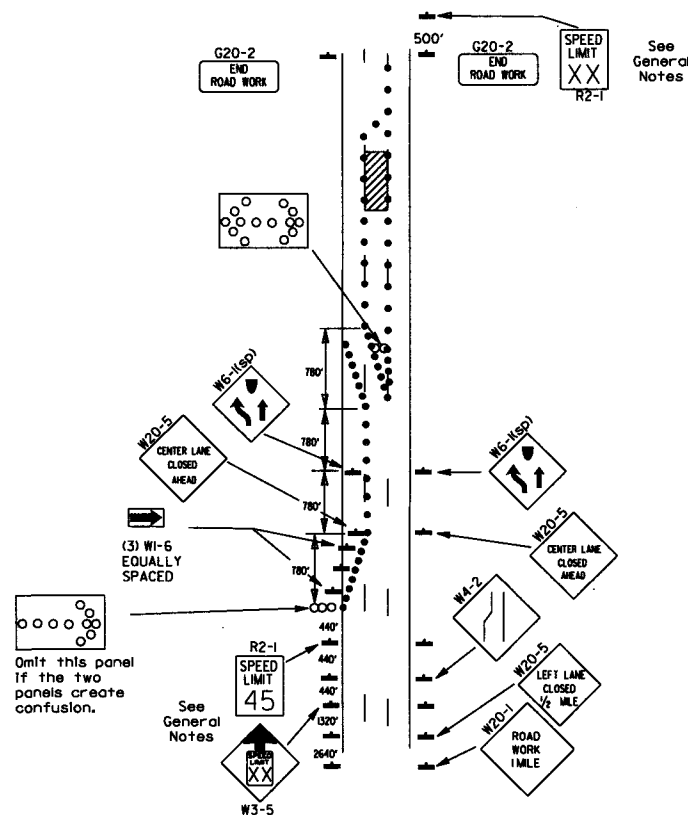
9-2-95	REVISED NOTE 2, ADDED NOTE 8, REVISED DRAWING (A) & REPLACED R2-5A WITH W3-5	
9-12-13	REVISED DETAIL OF RAISED PAVEMENT MARKERS	
3-11-10	ADDED (AFAD)	
1-20-08	REVISED SIGN DESIGNATIONS	
1-18-04	ADDED GENERAL NOTE	
10-18-96	ADDED R55-1	
4-26-96	CORRECTED (a) BEHIND G20-2	
6-8-95	CORRECTED SIGN 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



(A) Typical application - daytime maintenance operations of short duration on a 4-lane divided roadway where half of the roadway is closed.



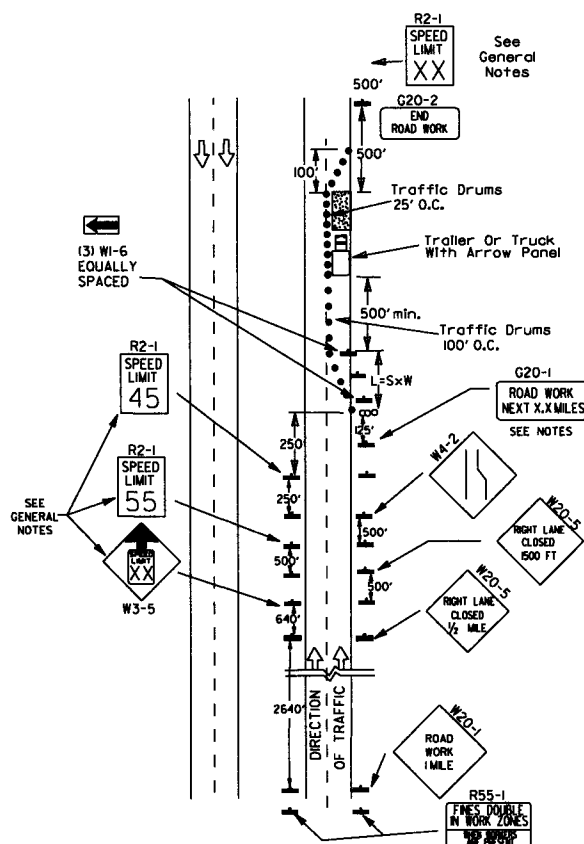
(B) Typical application - 3-lane oneway roadway where center lane is closed.

KEY:

- Arrow Panel (If Required)
- Channelizing Device
- Traffic drum

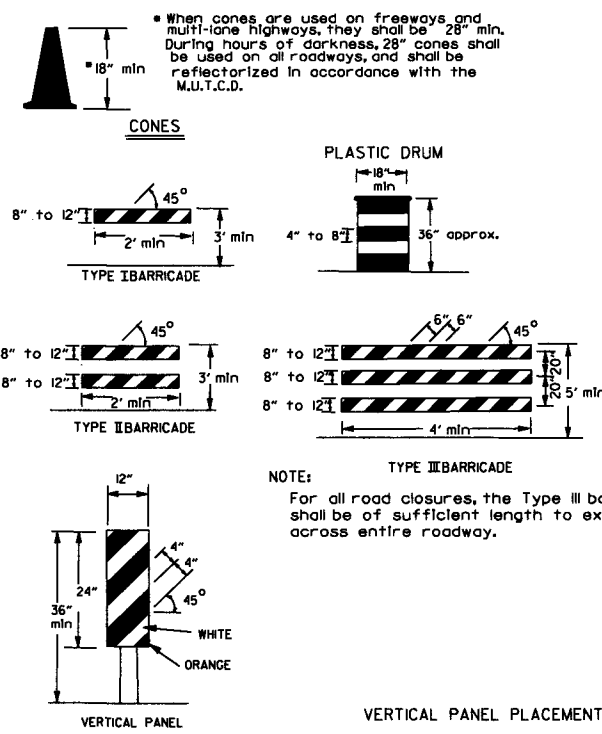
GENERAL NOTES:

- 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 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.



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

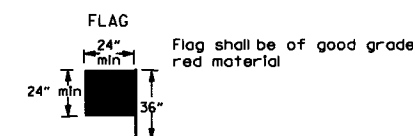
Channelizing devices



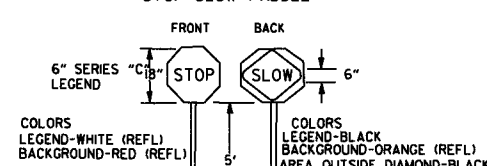
TRAFFIC CONTROL DEVICES FOR VERTICAL PAVEMENT DIFFERENTIALS

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

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

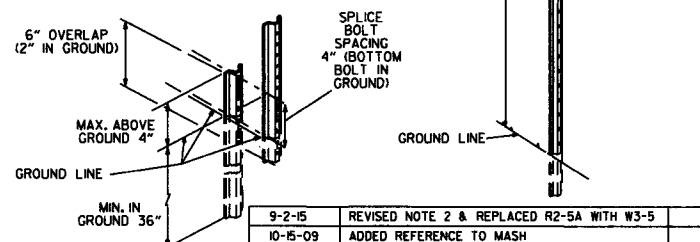


STOP SLOW PADDLE



DETAIL OF SPLICES

NOTES: USE SPLICES ONLY WHEN NECESSARY FOR INSTALLATION. TYPICAL INSTALLATION SHOULD HAVE NO SPLICES (SEE STD. DRAWING NO. SHS-2).
NORMAL INSTALLATIONS WILL REQUIRE 1/4" DIA. BOLTS TO MOUNT SIGNS TO POST AND 5/16" DIA. BOLTS TO ASSEMBLE THE VARIOUS POST SUPPORTS. EACH OF THESE BOLTS SHALL BE CARTRIDGE BOLTS.
SIGN POSTS SHALL BE PAINTED GREEN; SIGNS SHALL NOT BE PAINTED, AND ALL SIGN POSTS SHALL BE PLUMB.

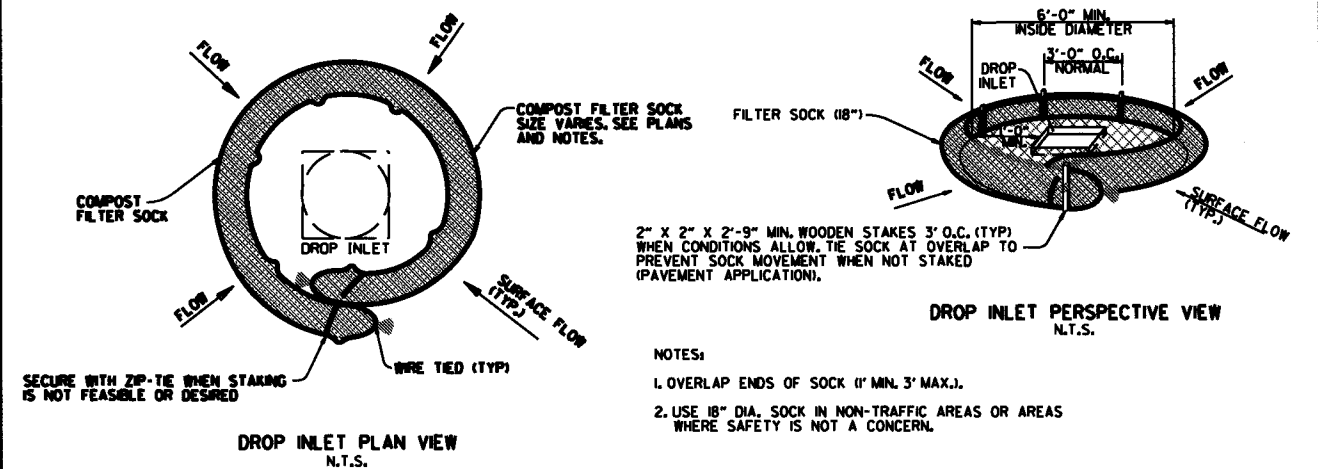
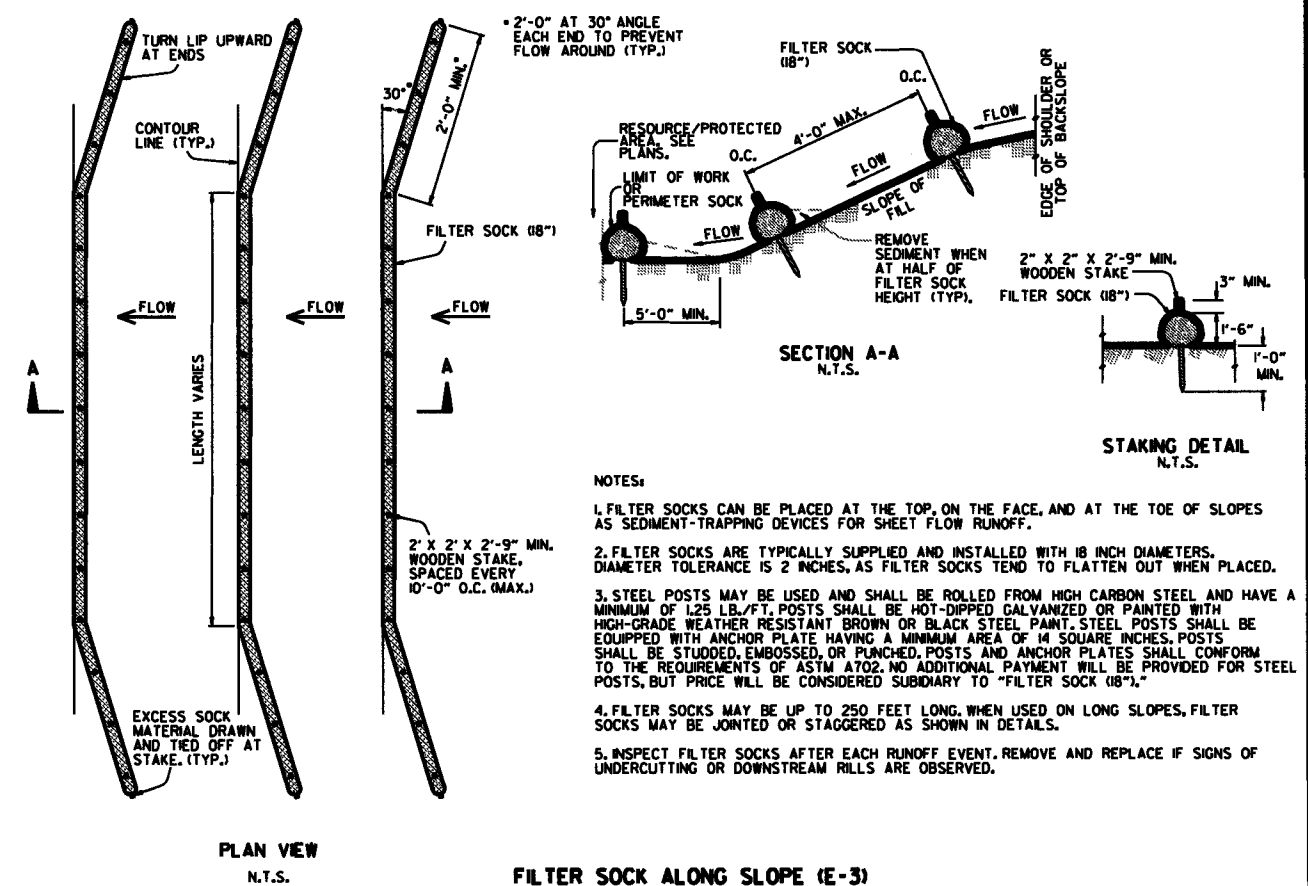
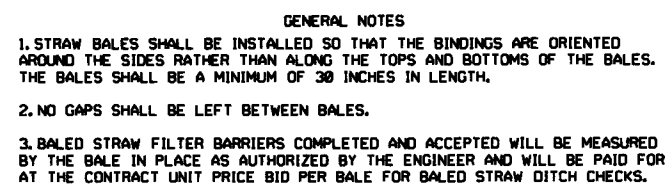
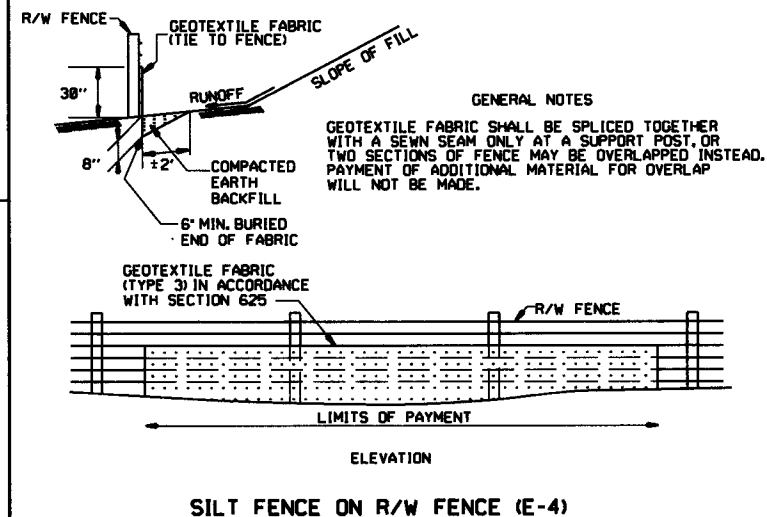
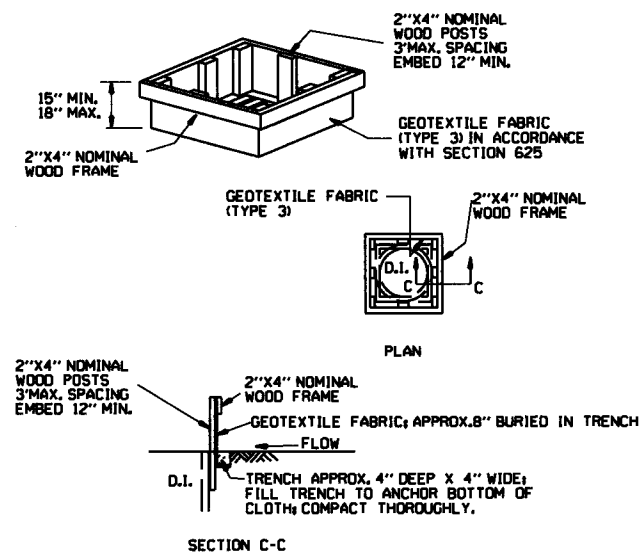
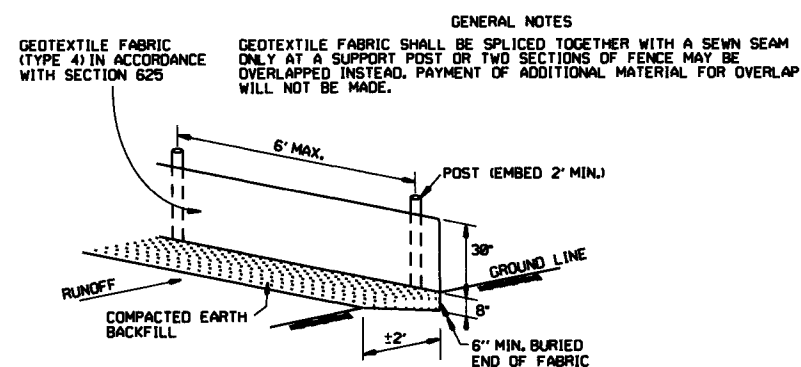
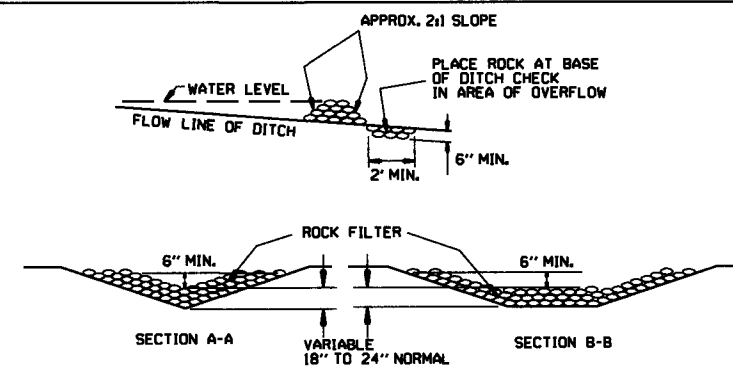
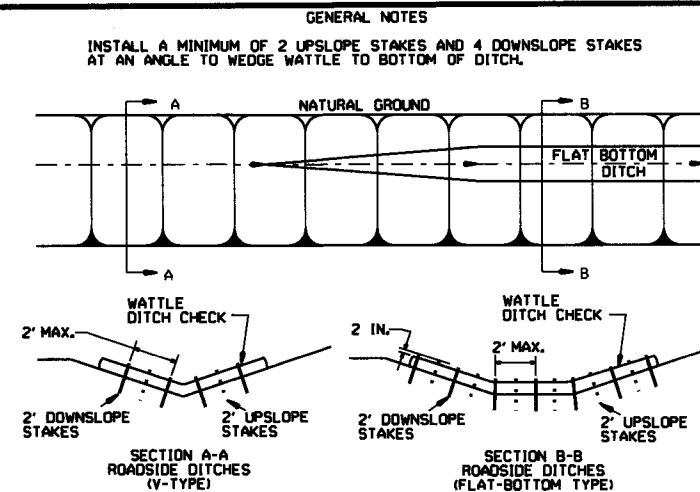


DATE	REVISION	FILED
9-2-15	REVISED NOTE 2 & REPLACED R2-5A WITH W3-5	
10-15-09	ADDED REFERENCE TO MASH	
11-20-08	REVISED SIGN DESIGNATIONS	
11-18-04	ADDED NOTE	
10-1-98	ADDED NOTE	
4-03-97	ADDED (SP) TO W6-1 & REVISED TRAFFIC CONTROL DEVICES NOTE	
10-18-96	ADDED R55-1	
10-12-95	MOVED UPPER SPLICE	
6-8-95	REVISED SPLICE DETAIL, TEXT	6-8-95
2-2-95	REVISED PER PART VI, MUTCD, SEPT. 3, 1993	
8-15-91	DRAWN AND PLACED IN USE	

ARKANSAS STATE HIGHWAY COMMISSION
STANDARD TRAFFIC CONTROLS
FOR HIGHWAY CONSTRUCTION

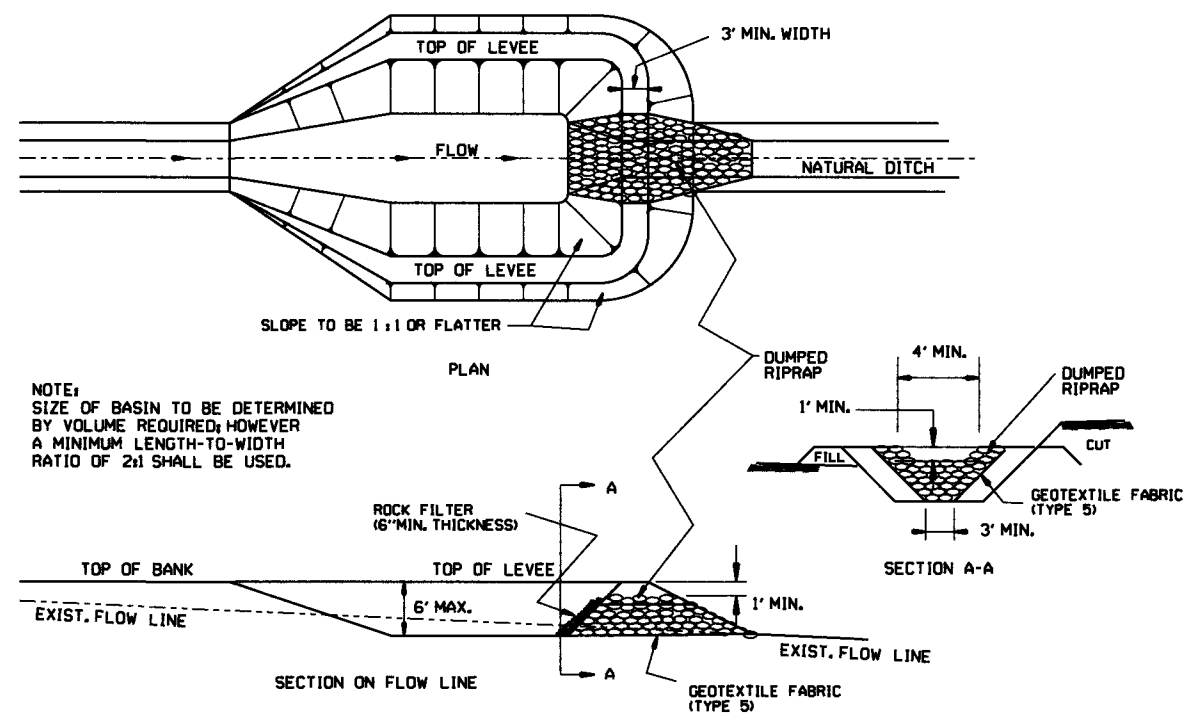
STANDARD DRAWING TC-3

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

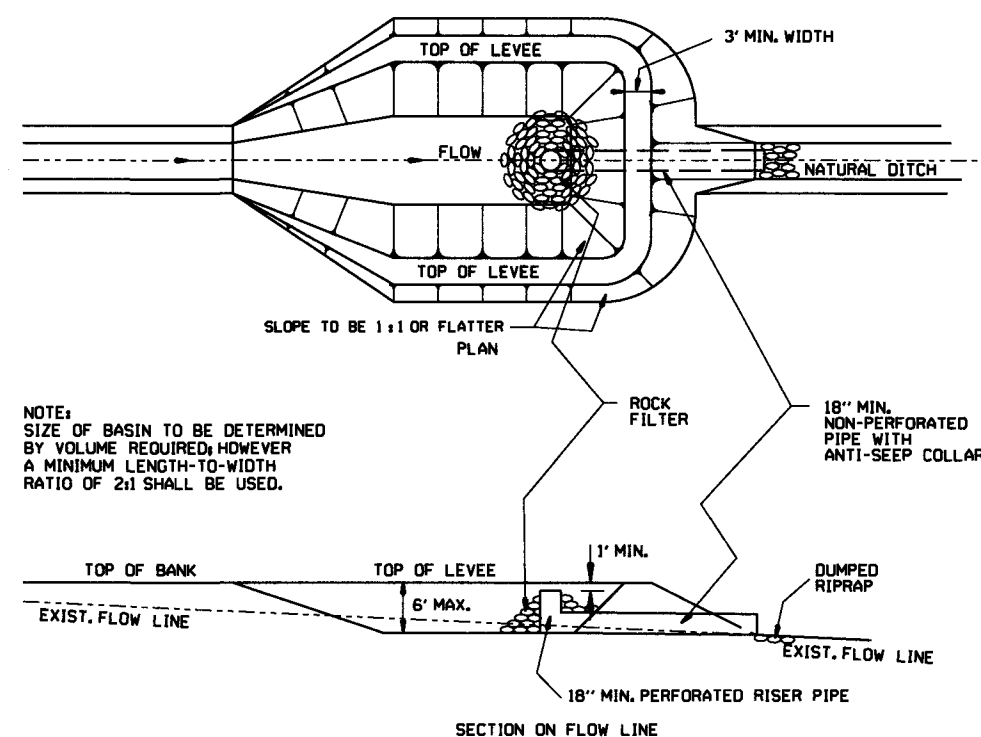


11-16-17	ADDED FILTER SOCK E-4 AND E-13	
12-16-11	DELETED BALED STRAW DITCH CHECK & ADDED WATTLE DITCH CHECK	
11-18-98	ADDED NOTES	
07-02-98	ADDED BALED STRAW FILTER BARRIER (E-2)	
07-20-95	REVISED SLY FENCE E-4 AND E-11	7-20-95
07-15-94	REV. E-4 & E-11 MIN. 13" BURIED END OF FABRIC	
06-02-94	REVISED E-1,4,7 & 11 DELETED E-2 & 3	6-2-94
04-04-93	REDRAWN	
10-10-92	REDRAWN	
08-02-76	ISSUED R.D.M.	298-7-28-76
DATE	REVISION	FILED

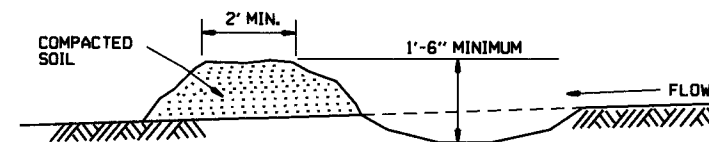
ARKANSAS STATE HIGHWAY COMMISSION
TEMPORARY EROSION CONTROL DEVICES
STANDARD DRAWING TEC-1



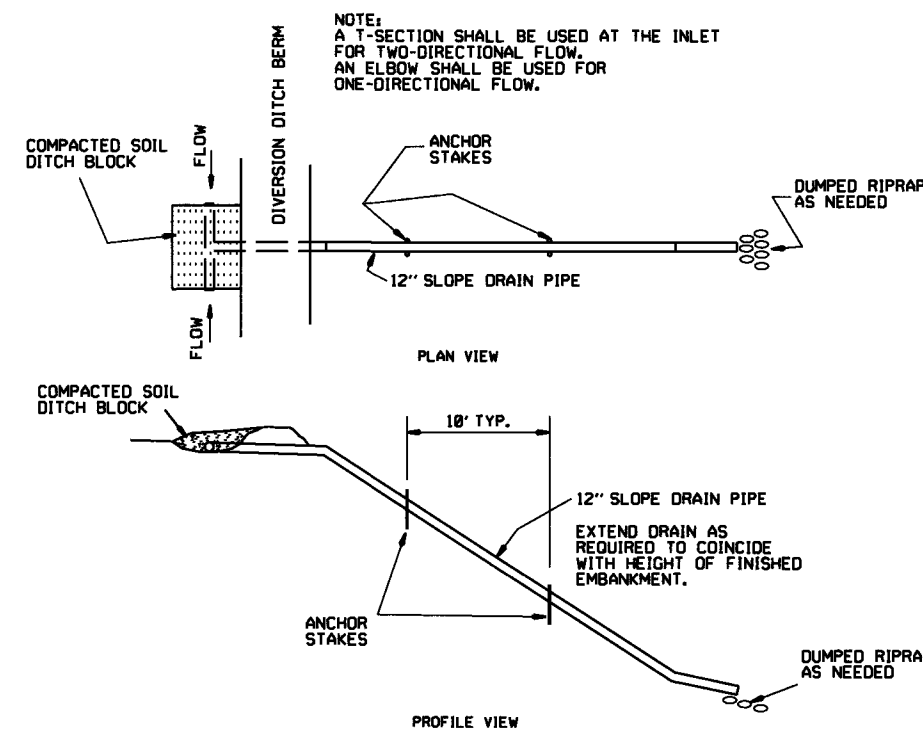
SEDIMENT BASIN WITH RIPRAP OUTLET (E-9)



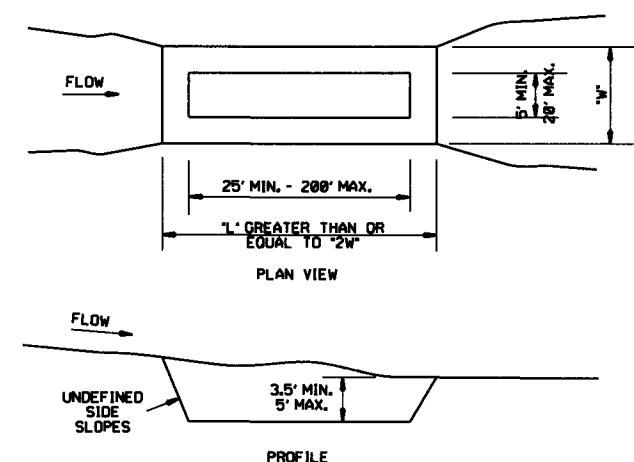
SEDIMENT BASIN WITH PIPE OUTLET (E-10)



DIVERSION DITCH (E-8)



SLOPE DRAIN (E-12)



SEDIMENT BASIN (E-14)

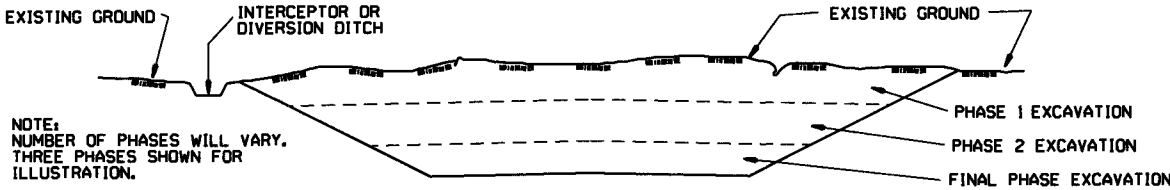
6-2-94	Revised E-8 & E-12; Added E-14 & Deleted E-13		
4-1-93	ISSUED		
DATE	REVISION		FILMED

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

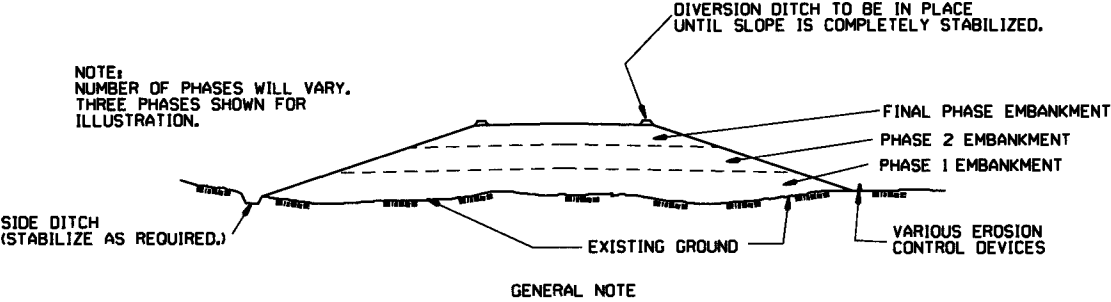


GENERAL NOTE

ALL CUT SLOPES SHALL BE DRESSED, PREPARED, SEEDED, AND MULCHED AS THE WORK PROGRESSES. SLOPES SHALL BE EXCAVATED AND STABILIZED IN EQUAL INCREMENTS NOT TO EXCEED 25 FEET, MEASURED VERTICALLY.

- CONSTRUCTION SEQUENCE
- 1. EXCAVATE AND STABILIZE INTERCEPTOR AND/OR DIVERSION DITCHES.
 - 2. PERFORM PHASE 1 EXCAVATION. PLACE PERMANENT OR TEMPORARY SEEDING.
 - 3. PERFORM PHASE 2 EXCAVATION. PLACE PERMANENT OR TEMPORARY SEEDING.
 - 4. PERFORM FINAL PHASE OF EXCAVATION. PLACE PERMANENT OR TEMPORARY SEEDING. STABILIZE DITCHES, CONSTRUCT DITCH CHECKS, DIVERSION DITCHES, SEDIMENT BASINS, OR OTHER EROSION CONTROL DEVICES AS REQUIRED.

EMBANKMENT

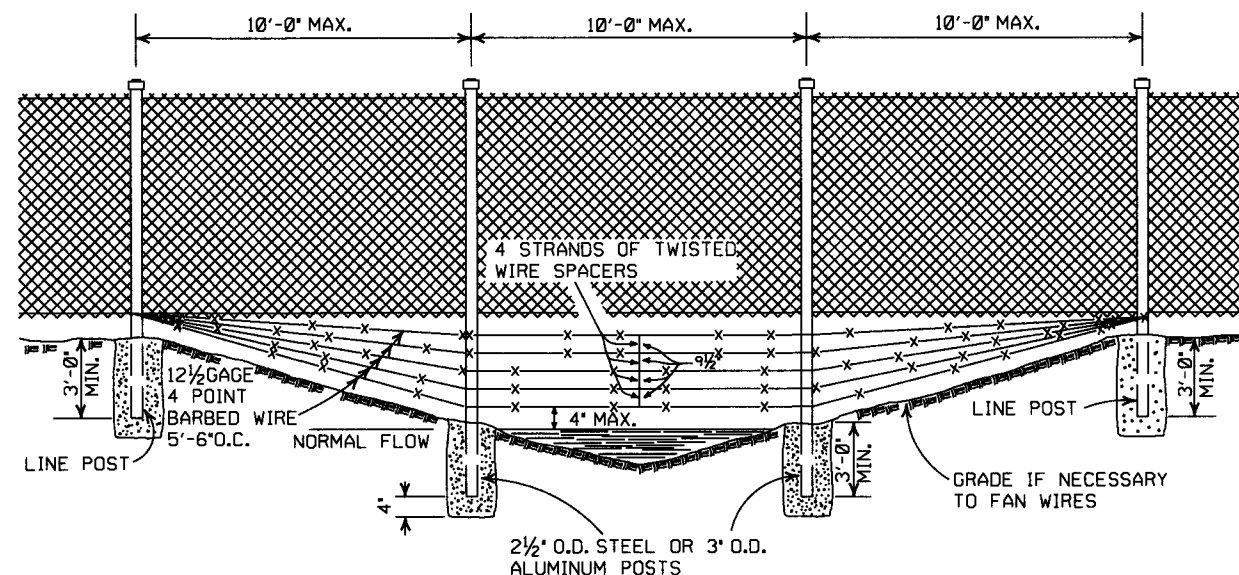
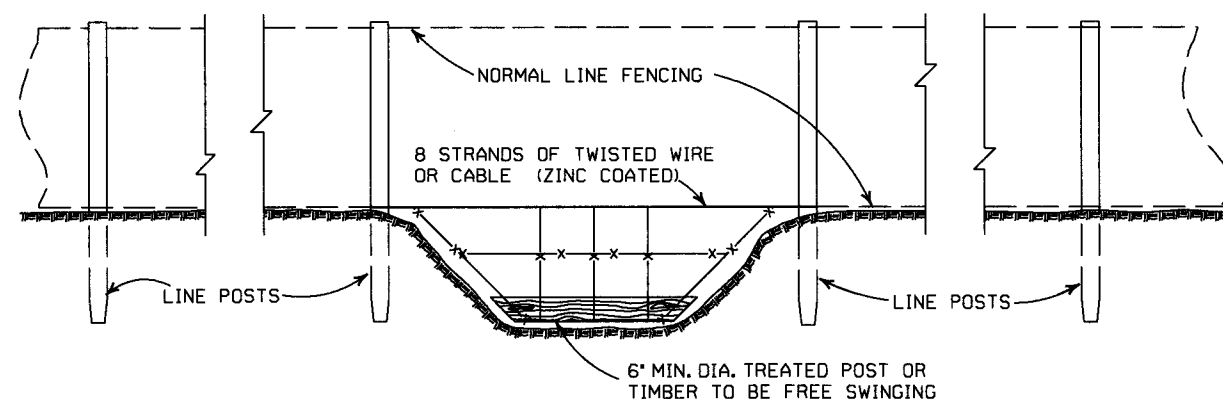
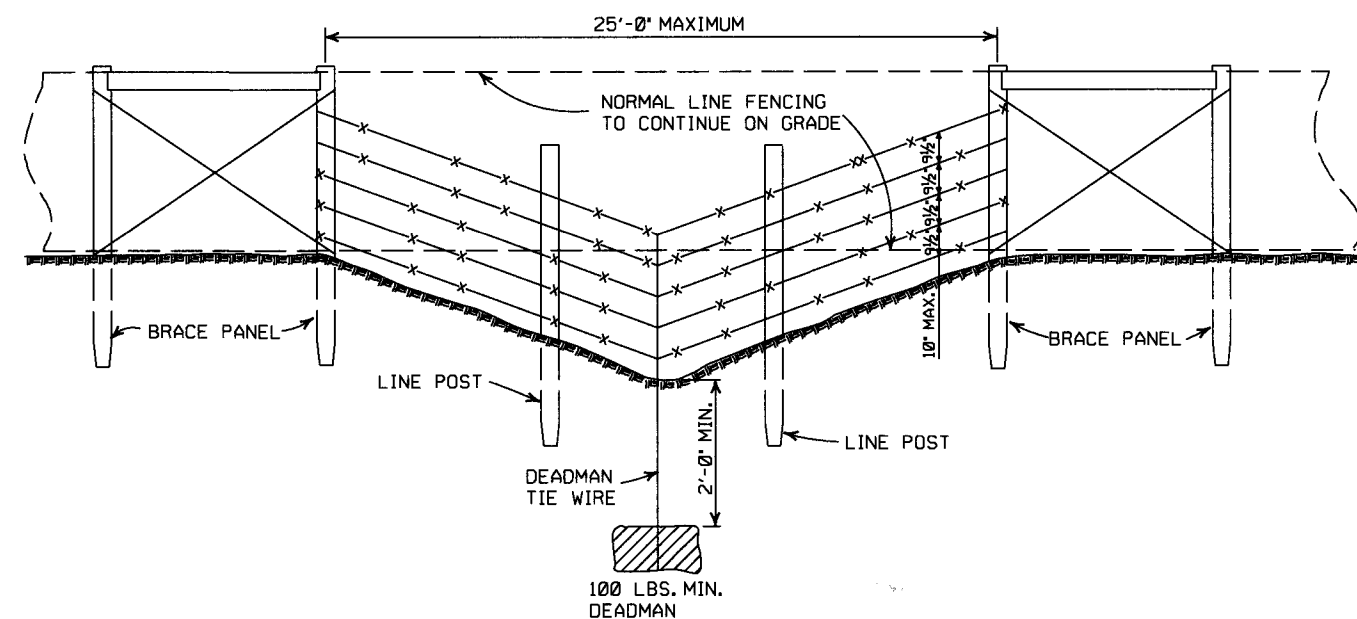


GENERAL NOTE

ALL EMBANKMENT SLOPES SHALL BE DRESSED, PREPARED, SEEDED, AND MULCHED AS THE WORK PROGRESSES. SLOPES SHALL BE CONSTRUCTED AND STABILIZED IN EQUAL INCREMENTS NOT TO EXCEED 25 FEET, MEASURED VERTICALLY.

- CONSTRUCTION SEQUENCE
- 1. CONSTRUCT DIVERSION DITCHES, DITCH CHECKS, SEDIMENT BASINS, SILT FENCES, OR OTHER EROSION CONTROL DEVICES AS SPECIFIED.
 - 2. PLACE PHASE 1 EMBANKMENT WITH PERMANENT OR TEMPORARY SEEDING. PROVIDE DIVERSION DITCHES AND SLOPE DRAINS IF EMBANKMENT CONSTRUCTION IS TO BE TEMPORARILY ABANDONED FOR A PERIOD OF GREATER THAN 21 DAYS.
 - 3. PLACE PHASE 2 EMBANKMENT WITH PERMANENT OR TEMPORARY SEEDING. PROVIDE DIVERSION DITCHES AND SLOPE DRAINS IF EMBANKMENT CONSTRUCTION IS TO BE TEMPORARILY ABANDONED FOR A PERIOD OF GREATER THAN 21 DAYS.
 - 4. PLACE FINAL PHASE OF EMBANKMENT WITH PERMANENT OR TEMPORARY SEEDING. PLACE DIVERSION DITCHES AND SLOPE DRAINS AND MAINTAIN UNTIL ENTIRE SLOPE IS STABILIZED.

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	FILED



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.

4-20-79	REVISED TOP RAIL & TENSION WIRE	696-4-20-79
10-2-72	REVISED AND REDRAWN	529-10-2-72
DATE	REVISION	FILMED

ARKANSAS STATE HIGHWAY COMMISSION

WIRE FENCE WATER GAPS

STANDARD DRAWING WF-2

