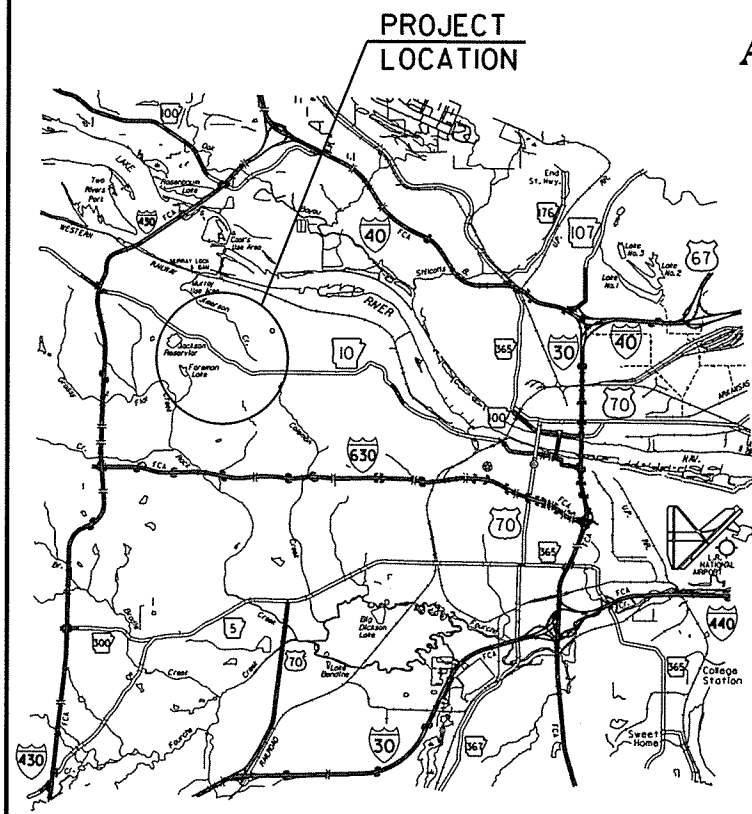


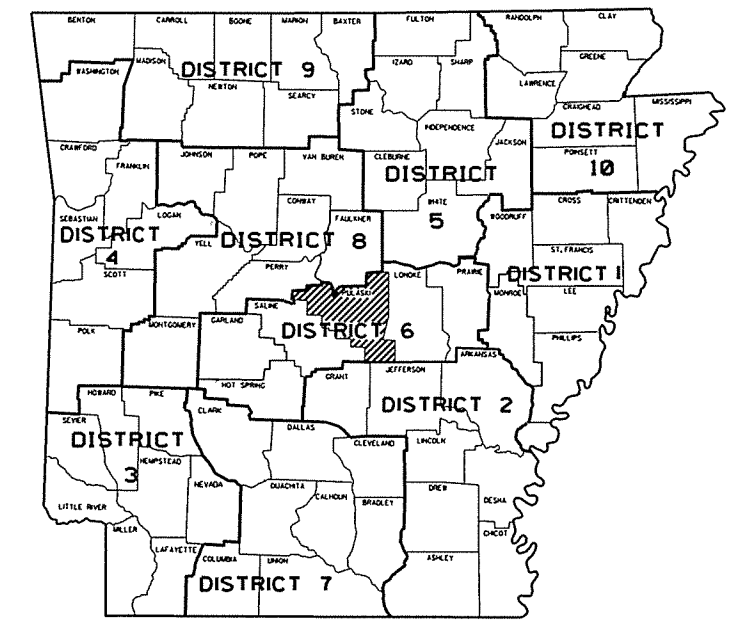
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				6	ARK.			
				JOB NO.		061194	1	141
				② MISSISSIPPI AVE. - PERRYVILLE RD. (HWY. 10) (L.R.) (S)				

**ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
CONSTRUCTION PLANS FOR STATE HIGHWAY**

**MISSISSIPPI AVE. - PERRYVILLE RD.
(HWY. 10) (L.R.) (S)
PULASKI COUNTY
ROUTE 10 SECTION 8
F.A.P. NO. PEN-9253(64)
JOB 061194**



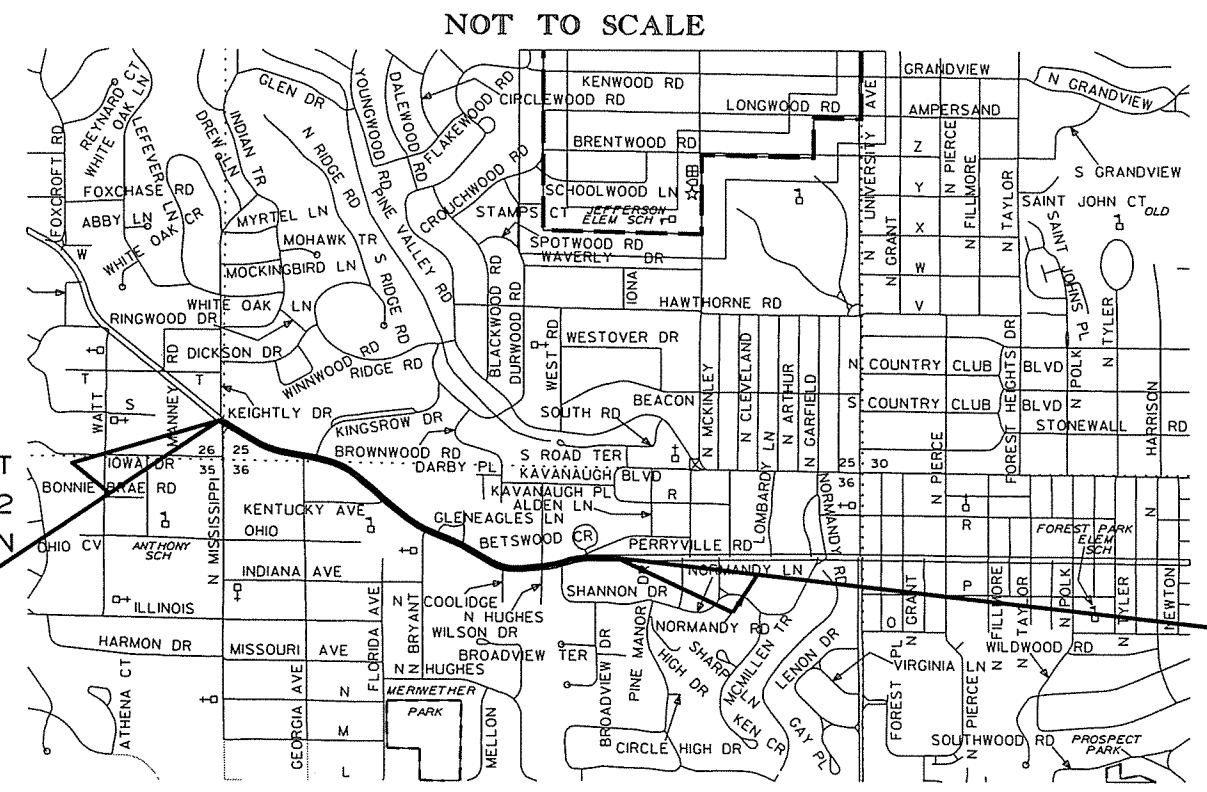
VICINITY MAP



ARKANSAS HWY. DIST. 6

• DESIGN TRAFFIC DATA •

DESIGN YEAR-----	2034
2014 ADT-----	32,500
2034 ADT-----	43,500
2034 DHV-----	4,785
DIRECTIONAL DISTRIBUTION-----	60%
TRUCKS-----	2%
DESIGN SPEED-----	40 MPH



STA. 106+00.00
BEGIN JOB 061194
LOG MILE 10.22

STA. 143+18.00
END JOB 061194



APPROVED



Ralph J. Hall
DEPUTY DIRECTOR
AND CHIEF ENGINEER

PROJECT COORDINATES:

	BEGIN	MID-POINT	END
LAT.	N34° 46' 20"	N34° 46' 11"	N34° 46' 07"
LON.	W92° 21' 31"	W92° 21' 12"	W92° 20' 51"

GROSS LENGTH OF PROJECT 3718.00 FEET OR 0.704 MILES
NET LENGTH OF ROADWAY 3718.00 FEET OR 0.704 MILES
NET LENGTH OF BRIDGES 0.00 FEET OR 0.000 MILES
NET LENGTH OF PROJECT 3718.00 FEET OR 0.704 MILES

P.E. 061194

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	061194		2	141

INDEX OF SHEETS

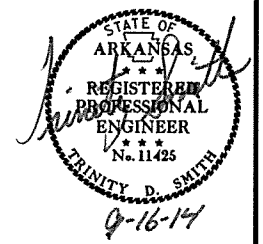
SHEET NO.	TITLE	DRWG. NO.	DATE
1	TITLE SHEET		
2	INDEX OF SHEETS, GOVERNING SPECIFICATIONS, AND GENERAL NOTES		
3 - 4	TYPICAL SECTIONS OF IMPROVEMENT		
5 - 7	SPECIAL DETAILS		
8 - 13	TEMPORARY EROSION CONTROL DETAILS		
14 - 19	MAINTENANCE OF TRAFFIC DETAILS		
20 - 22	PERMANENT PAVEMENT MARKING DETAILS		
23 - 27	QUANTITIES		
28	SUMMARY OF QUANTITIES AND REVISIONS		
29 - 31	SURVEY CONTROL DETAILS		
32 - 39	PLAN AND PROFILE SHEETS		
40	SUMMARY OF TRAFFIC SIGNAL QUANTITIES		
41	TRAFFIC SIGNAL NOTES		
42	TRAFFIC SIGNAL QUANTITIES		
43 - 46	SIGNALIZATION PLAN SHEETS		
47	EMERGENCY TRAFFIC SIGNAL QUANTITIES		
48 - 50	SIGNALIZATION PLAN SHEETS		
51	CONCRETE DITCH PAVING	CDP-1	11-17-10
52	CURBING DETAILS	CG-1	11-29-07
53	DETAILS OF DRIVEWAYS & ISLANDS	DR-1	2-27-14
54	FLARED END SECTION	FES-1	10-18-96
55	FLARED END SECTION	FES-2	10-18-96
56	DETAILS OF DROP INLETS & JUNCTION BOXES	FPC-9	11-16-01
57	DETAILS OF DROP INLETS (TYPE C)	FPC-9E	8-22-02
58	DETAILS OF DROP INLETS (TYPE MO)	FPC-9M	8-22-02
59	DETAILS OF DROP INLET & JUNCTION BOX (TYPE ST)	FPC-9S	7-26-12
60	CONCRETE PIPE CULVERT FILL HEIGHTS & BEDDING	PCC-1	2-27-14
61	METAL PIPE CULVERT FILL HEIGHTS & BEDDING	PCM-1	2-27-14
62	PAVEMENT MARKING DETAILS	PM-1	9-12-13
63	DETAILS OF PIPE UNDERDRAIN	PU-1	4-10-03
64	ANTENNA POLE	SD-1	2-27-14
65	LOOP DETECTOR INSTALLATION	SD-4	9-12-13
66	CONTROLLER CABINET UTILITY DRAWER	SD-5	9-12-13
67	HEAVY DUTY PULL BOX	SD-6	9-12-13
68	SIGNAL HEAD PLACEMENT	SD-8	9-12-13
69	SERVICE POINT	SD-9	9-12-13
70	STEEL POLE WITH MAST ARM	SD-11	2-27-14
71	TABLES AND METHOD OF SUPERELEVATION FOR TWO-WAY TRAFFIC	SE-2	10-18-96
72	DETAILS OF SPECIAL ITEMS	SI-1	9-12-13
73	REINFORCED CONCRETE RETAINING WALL (WITHOUT LIVE LOAD SURCHARGE)	SI-2	2-27-14
74	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION	TC-1	12-15-11
75	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION	TC-2	9-12-13
76	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION	TC-3	10-15-09
77	TEMPORARY EROSION CONTROL DEVICES	TEC-1	12-15-11
78	TEMPORARY EROSION CONTROL DEVICES	TEC-2	6-02-94
79	TEMPORARY EROSION CONTROL DEVICES	TEC-3	11-03-94
80	WHEELCHAIR RAMPS NEW CONSTRUCTION AND ALTERATIONS	WR-1	11-10-05
81 - 141	CROSS SECTIONS		

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

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.
- 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.
- 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.

2 INDEX OF SHEETS, GOV. SPECS., & GEN. NOTES



GOVERNING SPECIFICATIONS

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

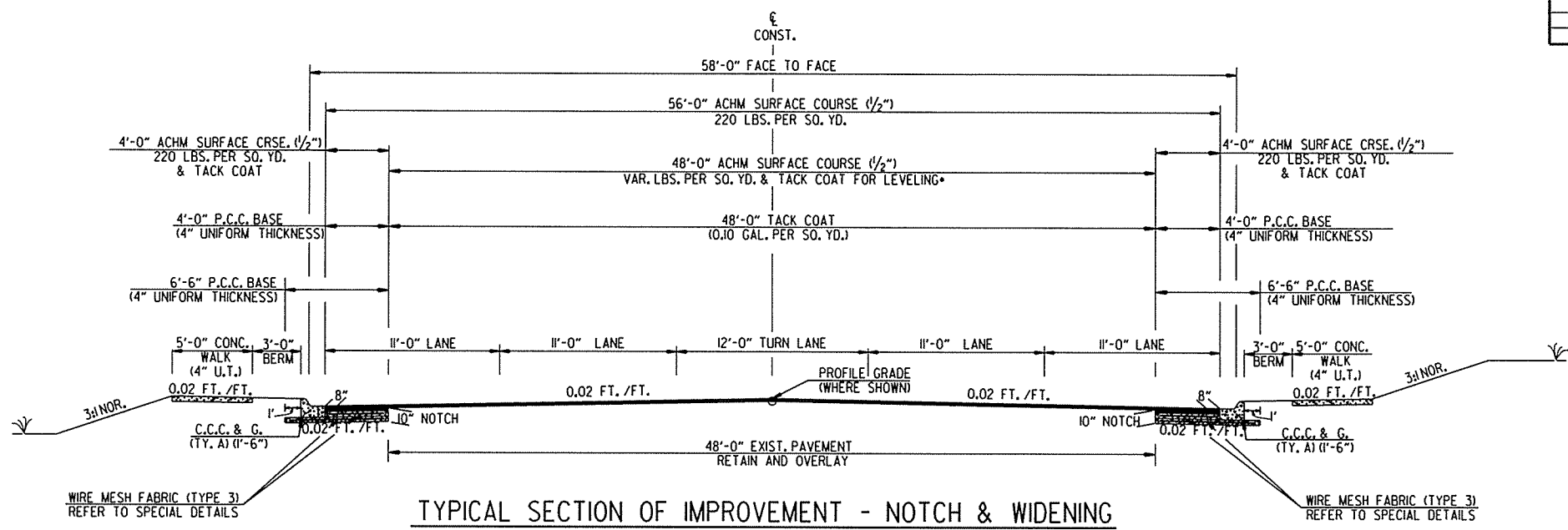
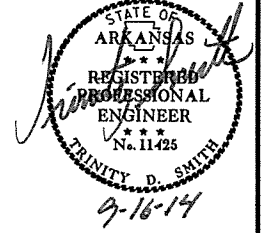
NUMBER	TITLE
ERRATA	ERRATA FOR THE BOOK OF STANDARD SPECIFICATIONS
FHWA-1273	REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS
FHWA-1273	SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - NOTICE TO CONTRACTORS
FHWA-1273	SUPPLEMENT - SPECIFIC EQUAL EMPLOYMENT OPPORTUNITY RESPONSIBILITIES (23 U.S.C. 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
108-1	LIQUIDATED DAMAGES
410-1	CONSTRUCTION REQUIREMENTS AND ACCEPTANCE OF ASPHALT CONCRETE PLANT MIX COURSES
620-1	MULCH COVER
JOB 061194	ACCESSIBLE PEDESTRIAN SIGNAL (APS)
JOB 061194	ANTENNA SUPPORT
JOB 061194	BROADBAND INTERNET SERVICE FOR ASPHALT CONCRETE PLANT
JOB 061194	BROADBAND INTERNET SERVICE FOR FIELD OFFICE
JOB 061194	CABINET DRAWER ASSEMBLY
JOB 061194	EDGE CARD VIDEO PROCESSOR
JOB 061194	ELECTRICAL CONDUCTORS FOR LUMINAIRES
JOB 061194	ELECTRICAL CONDUCTORS-IN-CONDUIT
JOB 061194	GOALS FOR DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION
JOB 061194	LED COUNTDOWN PEDESTRIAN SIGNAL HEAD
JOB 061194	LED TRAFFIC SIGNAL HEAD
JOB 061194	LUMINAIRE ASSEMBLY (CUTOFF TYPE)
JOB 061194	MAINTENANCE OF TRAFFIC
JOB 061194	MANDATORY USE OF INTERNET BIDDING
JOB 061194	PARTNERING REQUIREMENTS
JOB 061194	RELOCATION OF TRAFFIC SIGNAL EQUIPMENT
JOB 061194	REMOVAL OF TRAFFIC SIGNAL EQUIPMENT
JOB 061194	RETAINING WALL
JOB 061194	SERVICE POINT ASSEMBLY (TRAFFIC CONTROL DEVICES)
JOB 061194	SITE USE (A + C METHOD)
JOB 061194	SOIL STABILIZATION
JOB 061194	STONE MASONRY FACING
JOB 061194	STORM WATER POLLUTION PREVENTION PLAN
JOB 061194	STREET NAME SIGN (MAST ARM MOUNTED)
JOB 061194	SUBMISSION OF ASPHALT CONCRETE HOT MIX ACCEPTANCE TEST RESULTS
JOB 061194	SYSTEM LOCAL CONTROLLER
JOB 061194	UTILITY ADJUSTMENTS
JOB 061194	VALUE ENGINEERING
JOB 061194	VIDEO DETECTOR (COLOR)
JOB 061194	WARM MIX ASPHALT

8/9/2014

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2 TYPICAL SECTIONS OF IMPROVEMENT



TYPICAL SECTION OF IMPROVEMENT - NOTCH & WIDENING

STA. 106+00.00 - STA. 108+50.34
 STA. 121+61.75 - STA. 123+03.51
 STA. 131+06.97 - STA. 131+44.80
 STA. 141+24.47 - STA. 143+18.00

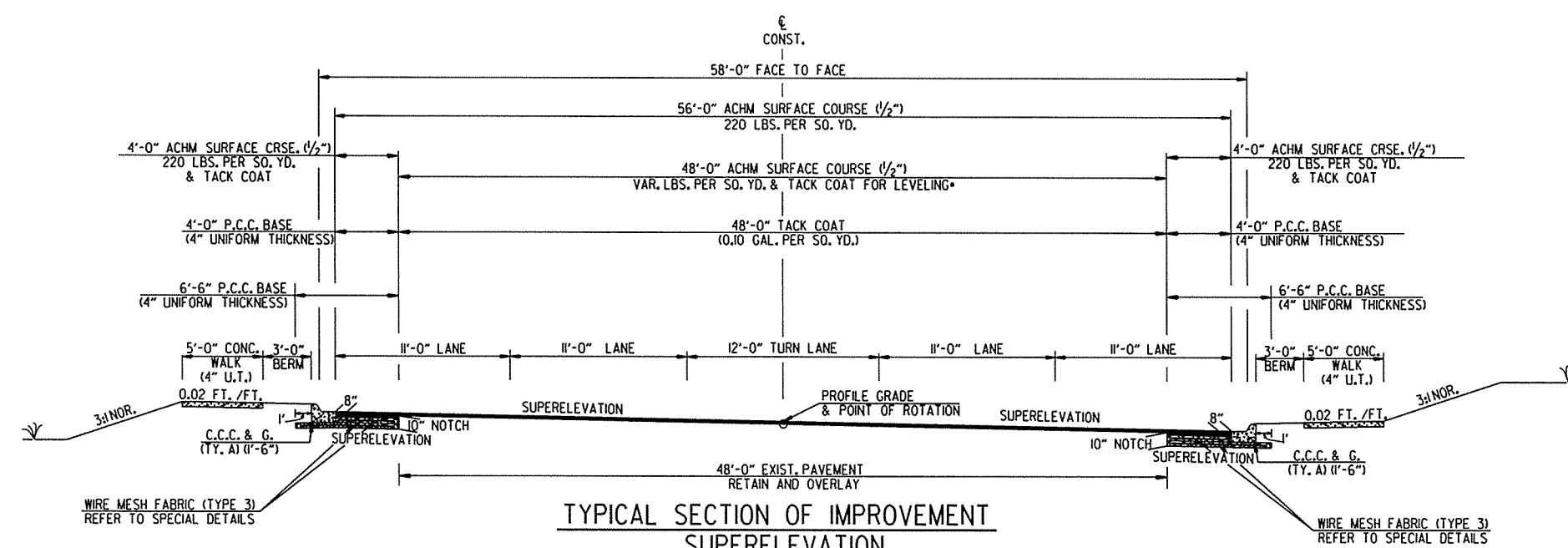
• TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER.

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

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

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

ASPHALT FOR LEVELING OF EXISTING PAVEMENT SHALL BE PLACED 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.



TYPICAL SECTION OF IMPROVEMENT SUPERELEVATION (REVERSE FOR CURVE TO LEFT)

STA. 108+50.34 - STA. 115+19.00
 STA. 115+80.00 - STA. 121+61.75
 STA. 123+03.51 - STA. 125+07.00
 STA. 127+29.00 - STA. 131+06.97
 STA. 131+44.80 - STA. 137+55.00
 STA. 138+25.00 - STA. 141+24.47

• TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER.

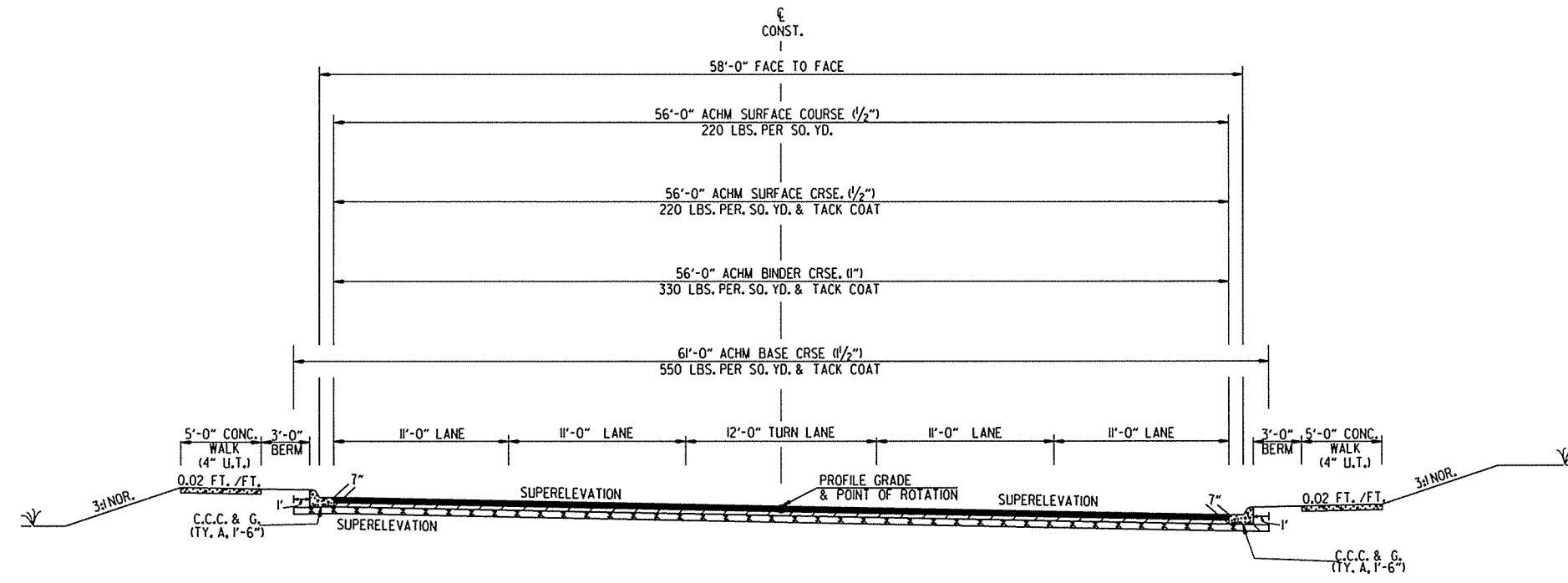
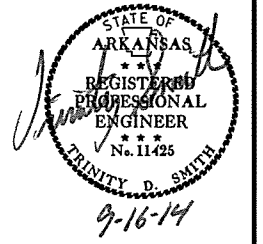
TYPICAL SECTIONS OF IMPROVEMENT

4/10/2013

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2 TYPICAL SECTIONS OF IMPROVEMENT



**TYPICAL SECTION OF IMPROVEMENT
SUPERELEVATION
(REVERSE FOR CURVE TO LEFT)**
 STA. 115+19.00 - STA. 115+80.00
 STA. 125+07.00 - STA. 127+29.00
 STA. 137+55.00 - STA. 138+25.00

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

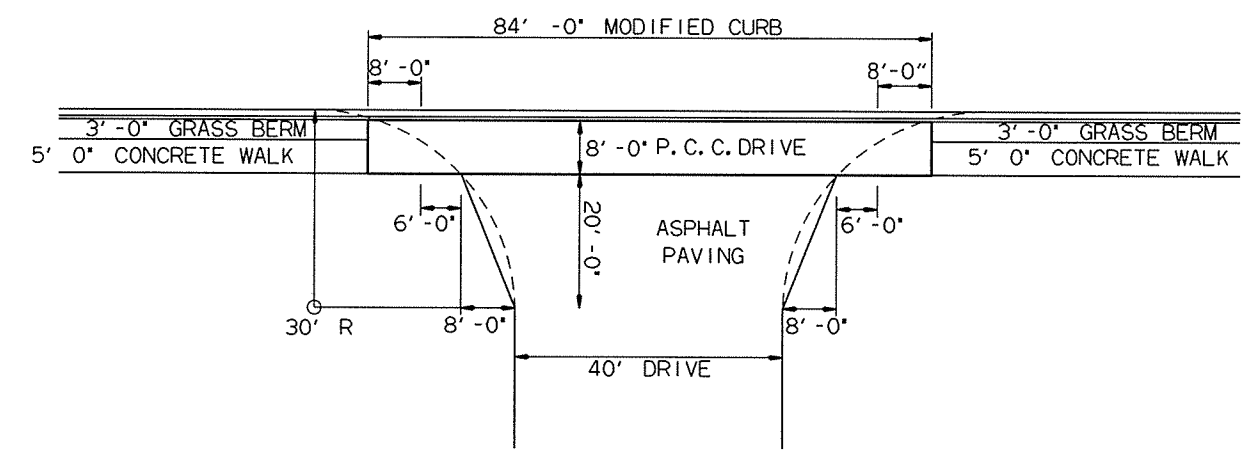
REFER TO CROSS SECTIONS FOR DEVIATIONS FROM NORMAL SLOPES. NO CHANGES SHALL BE MADE FROM THE PLANNED SLOPES WITHOUT THE APPROVAL OF THE ENGINEER.

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

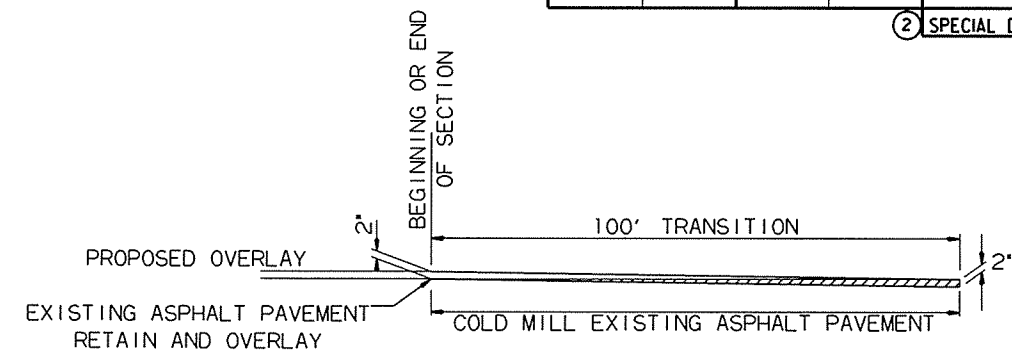
ASPHALT FOR LEVELING OF EXISTING PAVEMENT SHALL BE PLACED IF AND WHERE DIRECTED BY THE ENGINEER. CALCULATIONS FOR THE AMOUNT OF LEVELING AND/OR LEVELING OPERATIONS SHALL BE PERFORMED BEFORE CONSTRUCTING NOTCH AND WIDENING. CALCULATIONS WILL NOT BE PAID FOR DIRECTLY, BUT PAYMENT WILL BE CONSIDERED INCLUDED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

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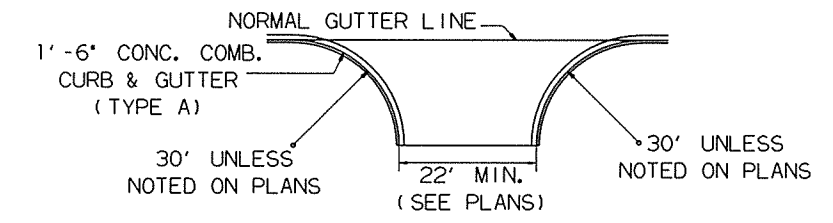
② SPECIAL DETAILS



DRIVEWAY DETAIL
STA. 124+34 RT.

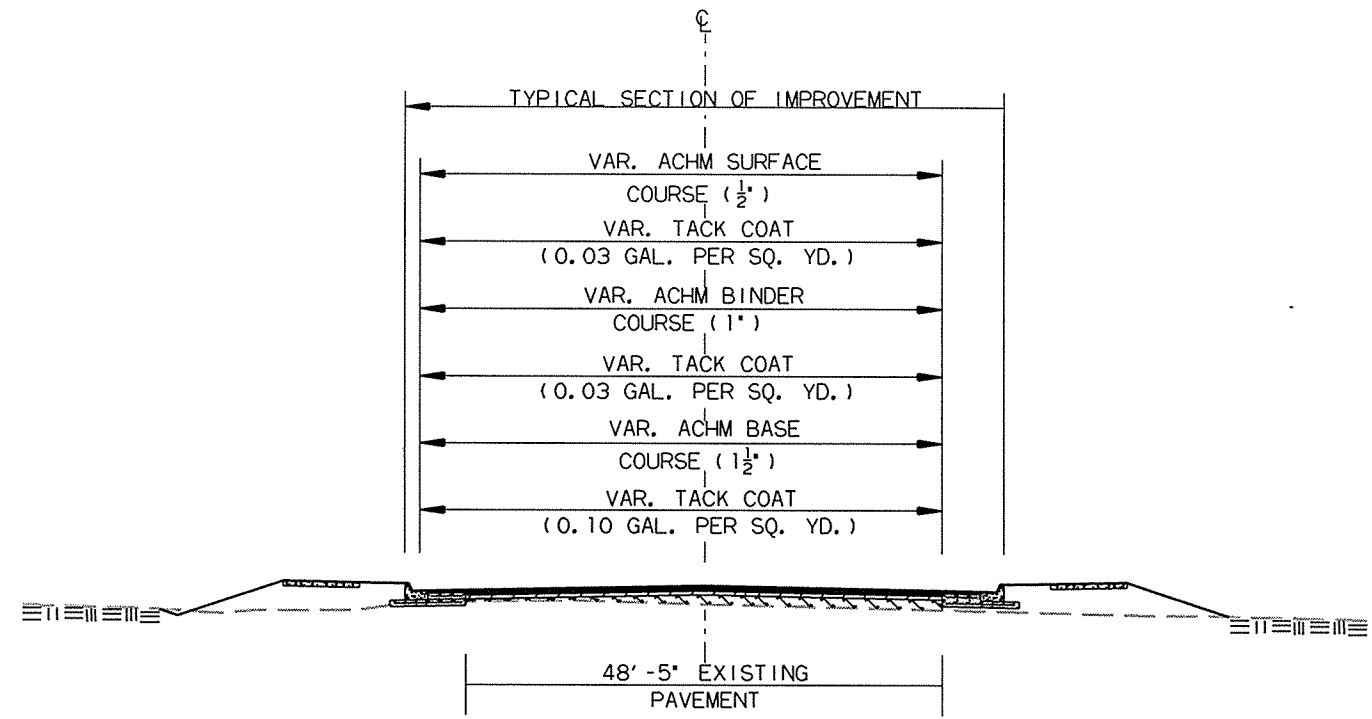


COLD MILLING DETAIL
AT EXISTING PAVEMENT TIE-INS
NOTE: 50' PER 1" OF OVERLAY FOR MAIN LANES



DETAIL OF TURNOUTS
FOR CITY STREETS

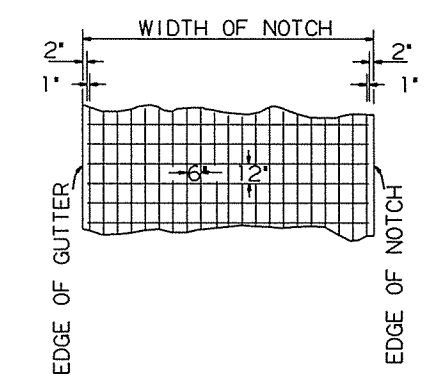
NOTE: THE TYPICAL SECTION FOR THE CITY STREET CONNECTIONS IN THE CURB & GUTTER SECTION SHALL MATCH THE PROPOSED WIDENING SECTION SHOWN FOR THE MAIN LANES. UNLESS OTHERWISE NOTED ON THE PLANS, ALL CITY STREET RADII WILL BE 30'.



METHOD OF RAISING GRADE

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, EDITION OF 2014.



DETAIL OF REINFORCING STEEL FOR P.C.C. BASE PAVEMENT
(WIRE MESH TYPE 3)

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

1. LAP MESH FABRIC MIN. 12" LONGITUDINALLY AND MIN. 6" TRANSVERSELY.
2. MESH FABRIC IS NOT REQUIRED WHEN WIDTH OF PORTLAND CEMENT CONCRETE BASE IS LESS THAN 12".
3. MESH FABRIC (TYPE 3) WILL NOT BE PAID FOR DIRECTLY, BUT FULL COMPENSATION THEREFORE WILL BE CONSIDERED INCLUDED IN THE CONTRACT PRICE BID PER SQ. YD. FOR PORTLAND CEMENT CONCRETE BASE (4' U.T.)

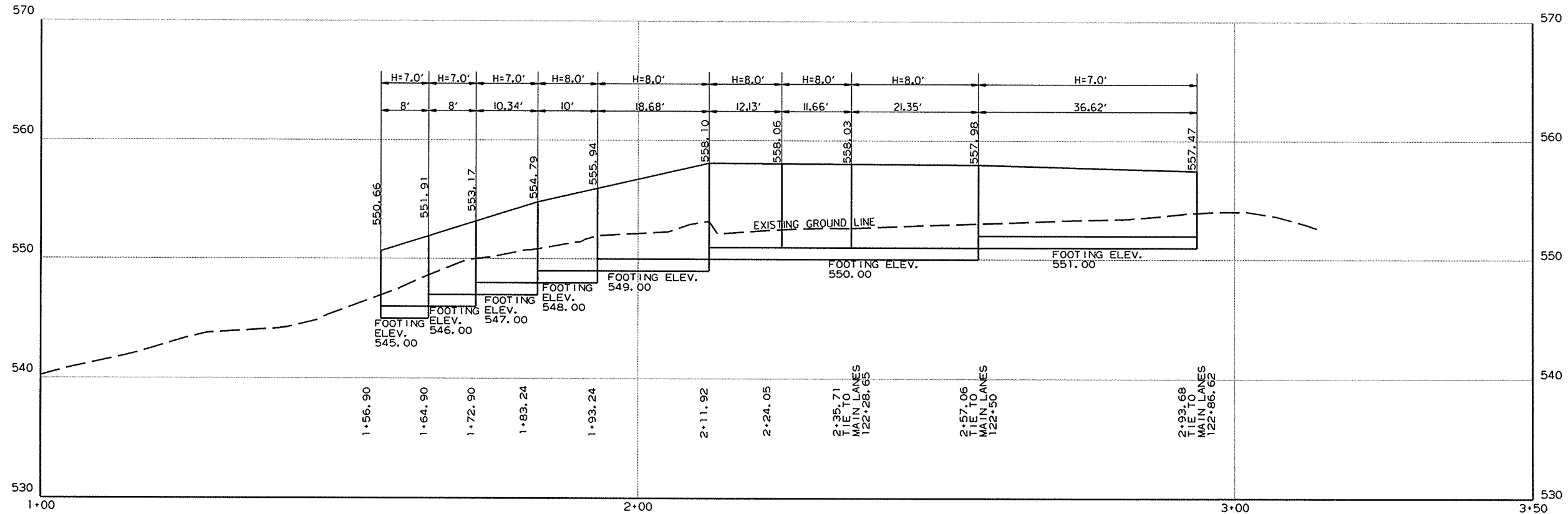
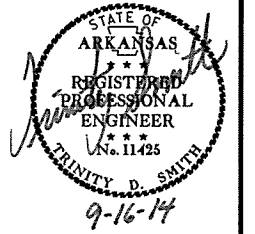
SPECIAL DETAILS

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② SPECIAL DETAILS



ELEVATION OF RETAINING WALL HWY. 10 ON LT.

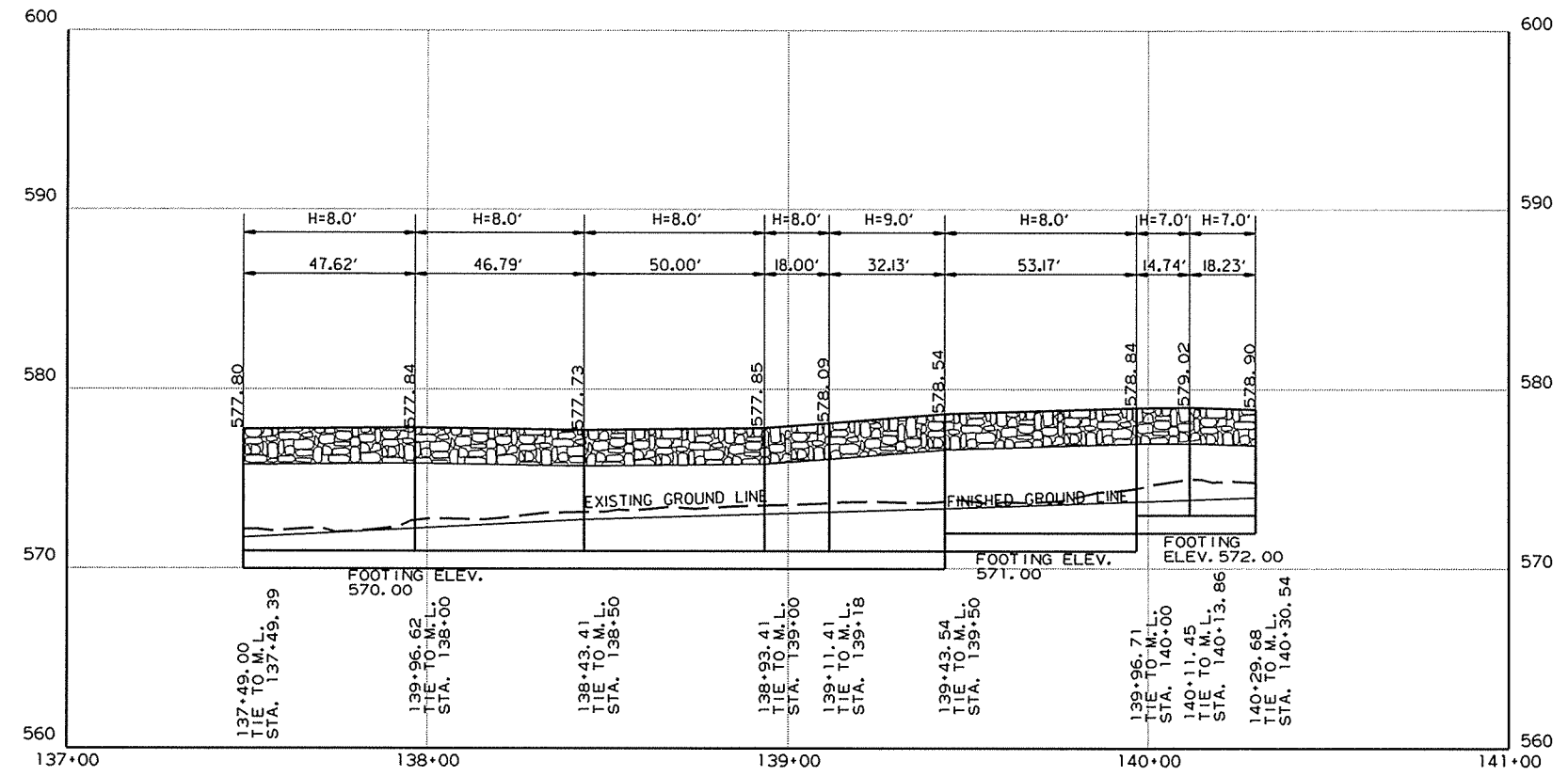
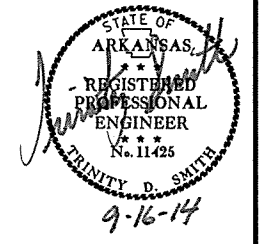
CLASS S CONCRETE - ROADWAY	REINFORCING STEEL - ROADWAY (GRADE 60)	UNCLASSIFIED EXCAVATION FOR STRUCTURES - ROADWAY
CU. YD.	POUND	CU. YD.
FOR INFORMATION ONLY		
63.97	5820	166

NOTE: REFER TO STANDARD DRAWING NO. SI-2 FOR ADDITIONAL RETAINING WALL DETAILS.

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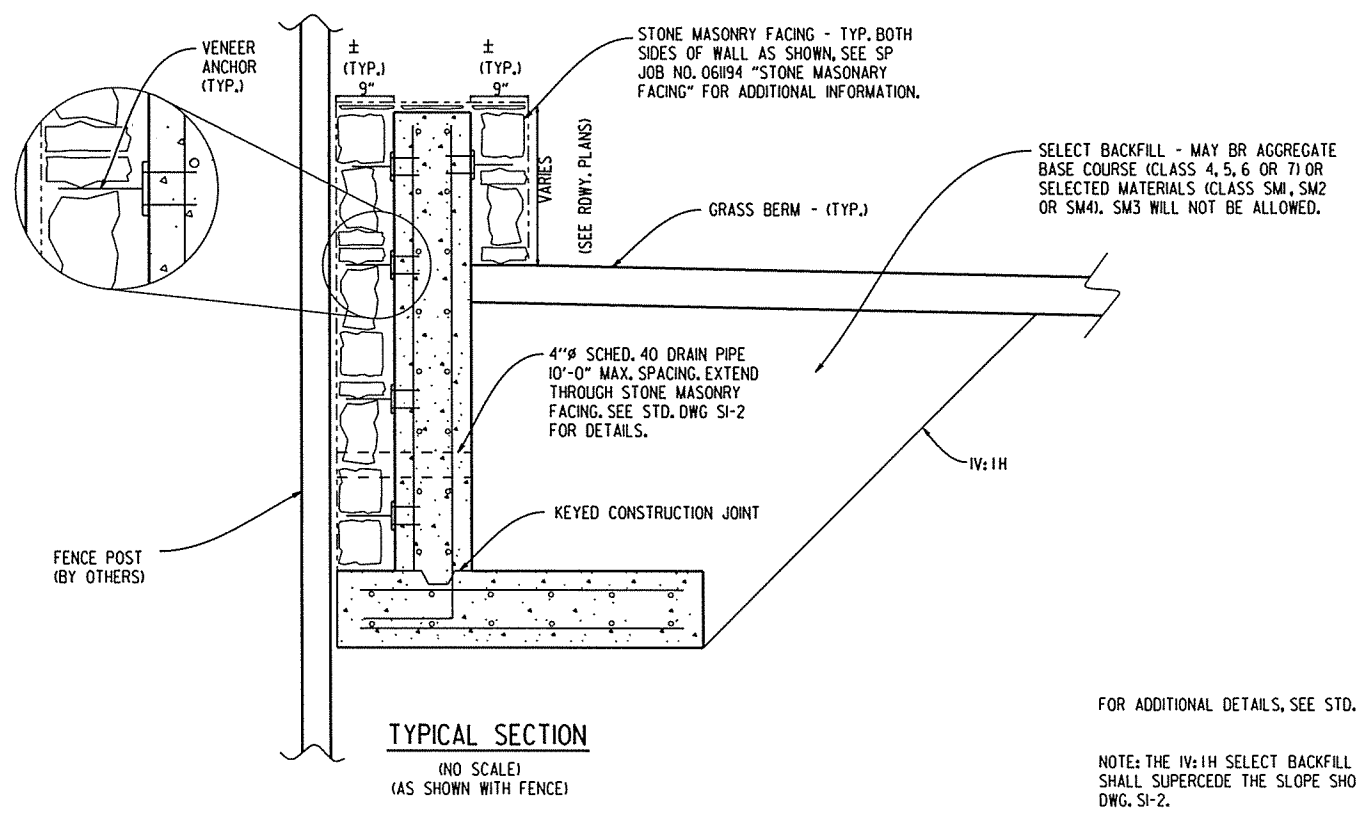
② SPECIAL DETAILS



ELEVATION OF RETAINING WALL HWY. 10 ON LT.

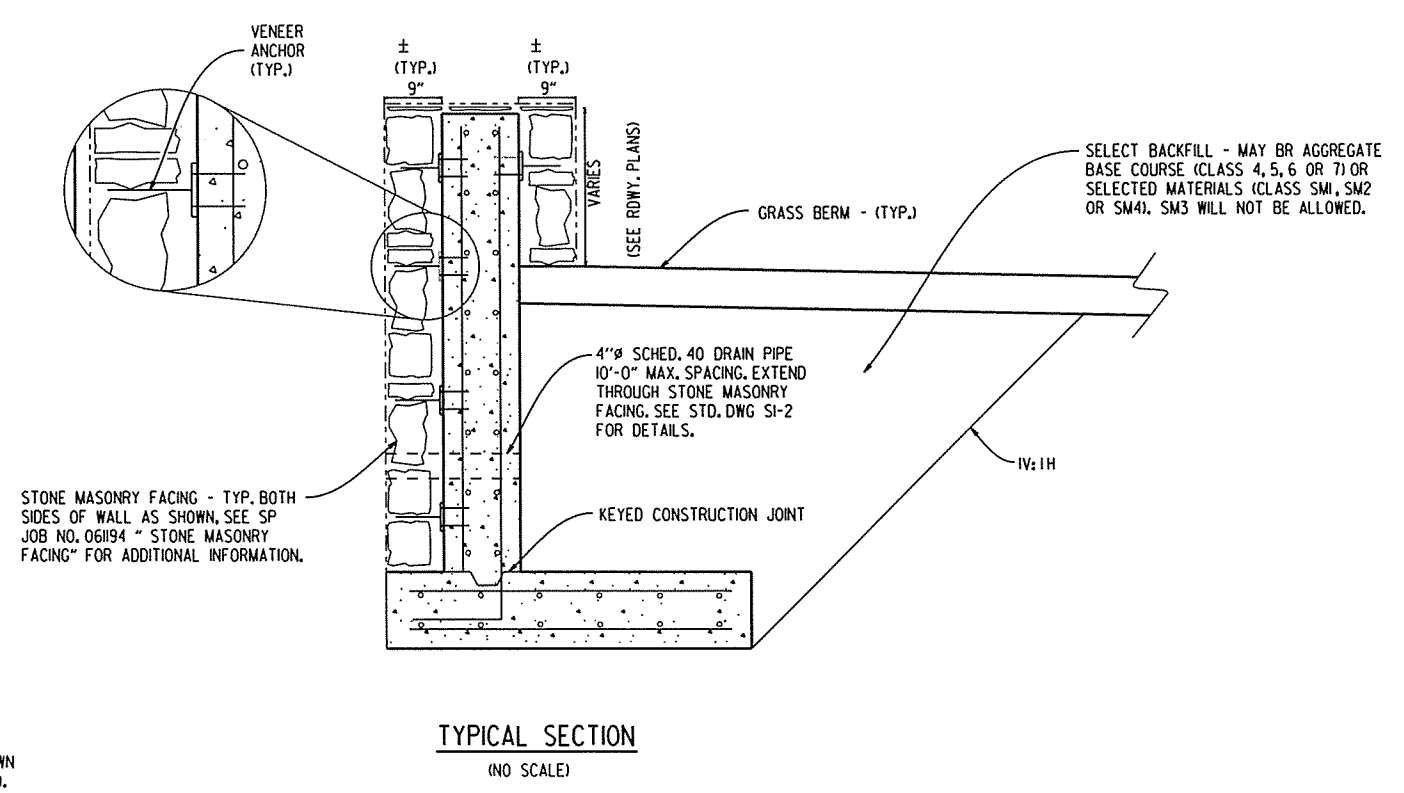
CLASS S CONCRETE - ROADWAY	REINFORCING STEEL - ROADWAY (GRADE 60)	UNCLASSIFIED EXCAVATION FOR STRUCTURES - ROADWAY	STONE MASONRY FACING
CU. YD.	POUND	CU. YD.	SQ. YD.
FOR INFORMATION ONLY			
134.54	12713	368	226

NOTE: REFER TO STANDARD DRAWING NO. SI-2 FOR ADDITIONAL RETAINING WALL DETAILS.



FOR ADDITIONAL DETAILS, SEE STD. DWG. SI-2.

NOTE: THE IV:1H SELECT BACKFILL LIMIT SHOWN SHALL SUPERCEDE THE SLOPE SHOWN ON STD. DWG. SI-2.



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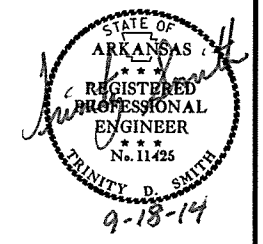
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2 TEMPORARY EROSION CONTROL DETAILS

LEGEND

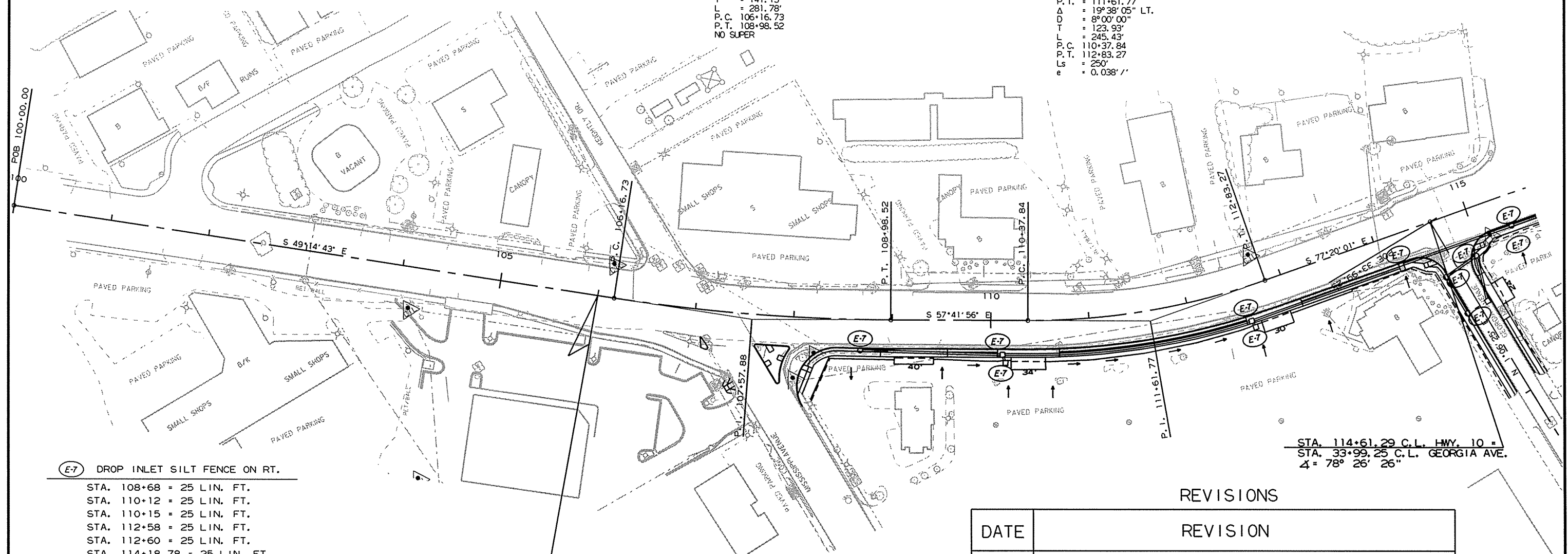
(E-7) DROP INLET SILT FENCE

(E-11) SILT FENCE



P. I. = 107+57.88
 Δ = 8°27'13" LT.
 D = 3°00'00"
 T = 141.15'
 L = 281.78'
 P. C. 106+16.73
 P. T. 108+98.52
 NO SUPER

P. I. = 111+61.77
 Δ = 19°38'05" LT.
 D = 8°00'00"
 T = 123.93'
 L = 245.43'
 P. C. 110+37.84
 P. T. 112+83.27
 Ls = 250'
 e = 0.038' /'



(E-7) DROP INLET SILT FENCE ON RT.

STA. 108+68 = 25 LIN. FT.
 STA. 110+12 = 25 LIN. FT.
 STA. 110+15 = 25 LIN. FT.
 STA. 112+58 = 25 LIN. FT.
 STA. 112+60 = 25 LIN. FT.
 STA. 114+18.78 = 25 LIN. FT.

STA. 106+00.00
 BEGIN JOB 061194
 LOG MILE 10.22

(E-7) DROP INLET SILT FENCE ON GEORGIA AVE.

STA. 33+00 = 25 LIN. FT.
 STA. 33+00 = 25 LIN. FT.
 STA. 33+42.86 = 25 LIN. FT.
 STA. 33+45.36 = 25 LIN. FT.

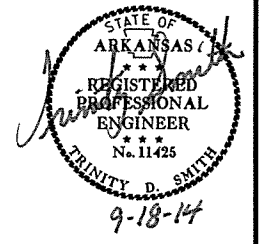
REVISIONS

DATE	REVISION

STA. 114+61.29 C.L. HWY. 10 =
 STA. 33+99.25 C.L. GEORGIA AVE.
 Δ = 78° 26' 26"

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	061194		9	141

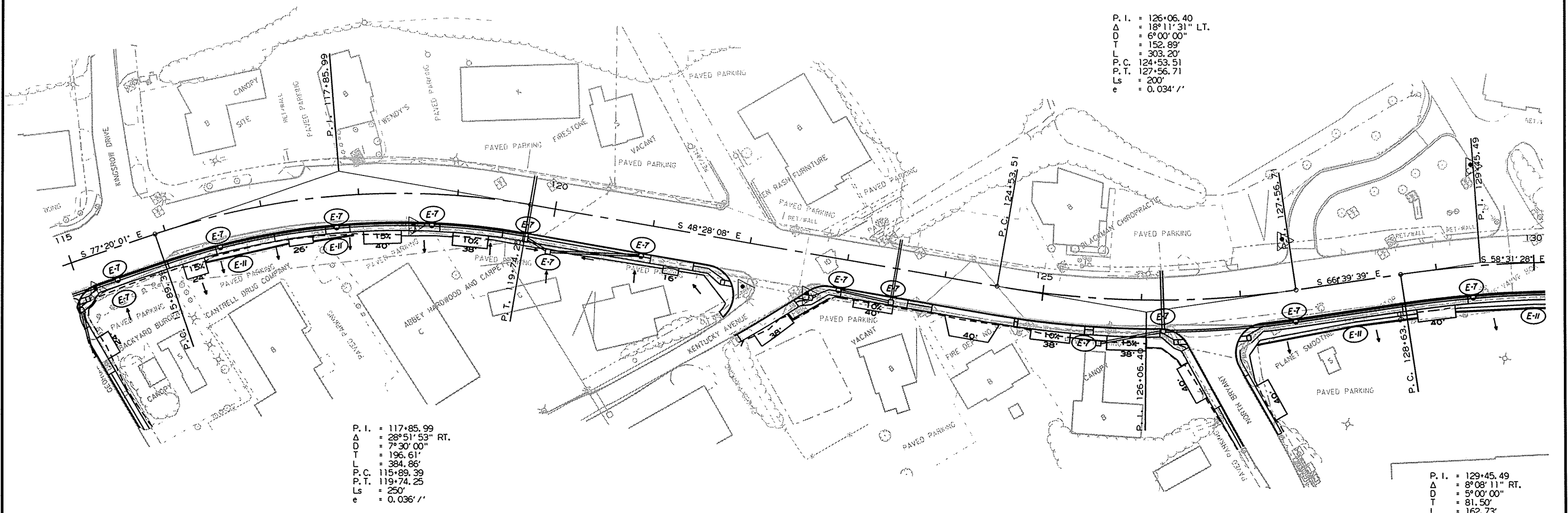
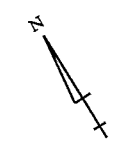
2 TEMPORARY EROSION CONTROL DETAILS



LEGEND

(E-7) DROP INLET SILT FENCE

(E-II) SILT FENCE



P. I. = 126+06.40
 Δ = 18° 11' 31" LT.
 D = 6° 00' 00"
 T = 152.89'
 L = 303.20'
 P.C. 124+53.51
 P.T. 127+56.71
 Ls = 200'
 e = 0.034' /'

P. I. = 117+85.99
 Δ = 28° 51' 53" RT.
 D = 7° 30' 00"
 T = 196.61'
 L = 384.86'
 P.C. 115+89.39
 P.T. 119+74.25
 Ls = 250'
 e = 0.036' /'

P. I. = 129+45.49
 Δ = 8° 08' 11" RT.
 D = 5° 00' 00"
 T = 81.50'
 L = 162.73'
 P.C. 128+63.99
 P.T. 130+26.72
 Ls = 116'
 e = 0.032' /'

REVISIONS

DATE	REVISION

(E-7) DROP INLET SILT FENCE ON RT.

- STA. 115+39 = 25 LIN. FT.
- STA. 116+50 = 25 LIN. FT.
- STA. 117+75 = 25 LIN. FT.
- STA. 118+75 = 25 LIN. FT.
- STA. 119+75 = 25 LIN. FT.
- STA. 120+00 = 25 LIN. FT.
- STA. 120+93 = 25 LIN. FT.
- STA. 122+96 = 25 LIN. FT.
- STA. 123+50 = 25 LIN. FT.
- STA. 125+59 = 25 LIN. FT.
- STA. 126+22 = 25 LIN. FT.
- STA. 127+52 = 25 LIN. FT.
- STA. 129+35 = 25 LIN. FT.

(E-II) SILT FENCE ON RT.

- STA. 116+30.59 - STA. 117+22.72 = 87 LIN. FT.
- STA. 117+48.72 - STA. 117+92.83 = 42 LIN. FT.
- STA. 127+11 - STA. 128+75 = 164 LIN. FT.
- STA. 129+15 - STA. 131+46 = 227 LIN. FT.

3/4/2013
R061194.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. 061194							10	141

2 TEMPORARY EROSION CONTROL DETAILS

LEGEND

(E-7) DROP INLET SILT FENCE

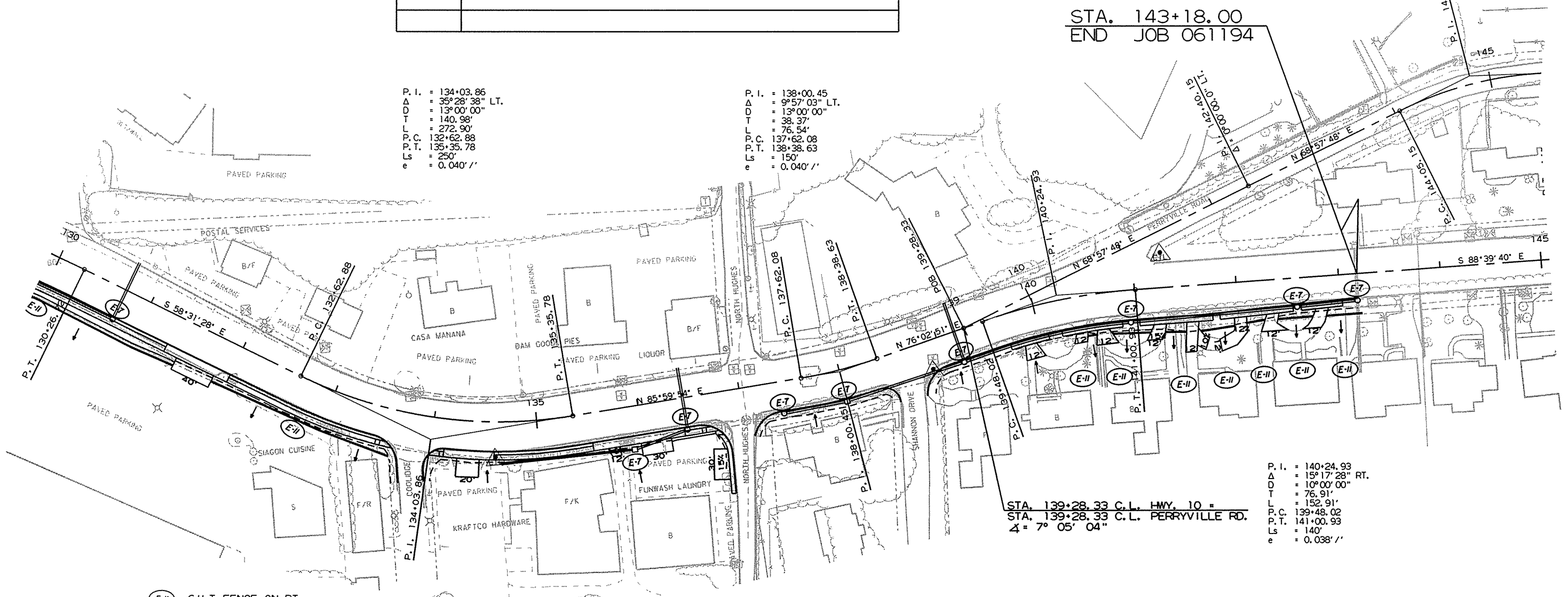
(E-II) SILT FENCE

REVISIONS

DATE	REVISION



P. I. = 144+82.05
 Δ = 24°14'27" RT.
 D = 16°00'00"
 T = 76.90'
 L = 151.51'
 P.C. 144+05.15
 P.T. 115+56.65
 NO SUPER



P. I. = 134+03.86
 Δ = 35°28'38" LT.
 D = 13°00'00"
 T = 140.98'
 L = 272.90'
 P.C. 132+62.88
 P.T. 135+35.78
 Ls = 250'
 e = 0.040'/'

P. I. = 138+00.45
 Δ = 9°57'03" LT.
 D = 13°00'00"
 T = 38.37'
 L = 76.54'
 P.C. 137+62.08
 P.T. 138+38.63
 Ls = 150'
 e = 0.040'/'

STA. 143+18.00
 END JOB 061194

STA. 139+28.33 C.L. HWY. 10 =
 STA. 139+28.33 C.L. PERRYVILLE RD.
 Δ = 7° 05' 04"

P. I. = 140+24.93
 Δ = 15°17'28" RT.
 D = 10°00'00"
 T = 76.91'
 L = 152.91'
 P.C. 139+48.02
 P.T. 141+00.93
 Ls = 140'
 e = 0.038'/'

(E-II) SILT FENCE ON RT.
 STA. 131+86 - STA. 133+64.26 = 188 LIN. FT.

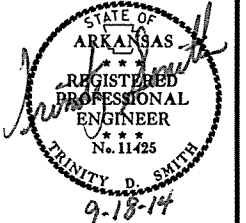
(E-7) DROP INLET SILT FENCE ON RT.
 STA. 130+73 = 25 LIN. FT.
 STA. 134+52 = 25 LIN. FT.
 STA. 135+90 = 25 LIN. FT.
 STA. 136+44 = 25 LIN. FT.
 STA. 137+40 = 25 LIN. FT.
 STA. 138+00 = 25 LIN. FT.
 STA. 139+18 = 25 LIN. FT.
 STA. 140+94 = 25 LIN. FT.
 STA. 142+58 = 25 LIN. FT.
 STA. 143+16.80 = 25 LIN. FT.

(E-II) SILT FENCE ON RT.
 STA. 140+48.09 - STA. 140+58.15 = 9 LIN. FT.
 STA. 140+74.17 - STA. 141+13.07 = 37 LIN. FT.
 STA. 141+27.24 - STA. 141+48.01 = 31 LIN. FT.
 STA. 141+62.36 - STA. 141+95.73 = 34 LIN. FT.
 STA. 142+07.35 - STA. 142+25.94 = 18 LIN. FT.
 STA. 142+38.44 - STA. 142+72.58 = 34 LIN. FT.
 STA. 142+85.48 - STA. 143+20.65 = 35 LIN. FT.

3/4/2013
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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	061194		11	141

2 TEMPORARY EROSION CONTROL DETAILS



	DROP INLET SILT FENCE
	SILT FENCE

LEGEND

E-7 DROP INLET SILT FENCE ON LT.

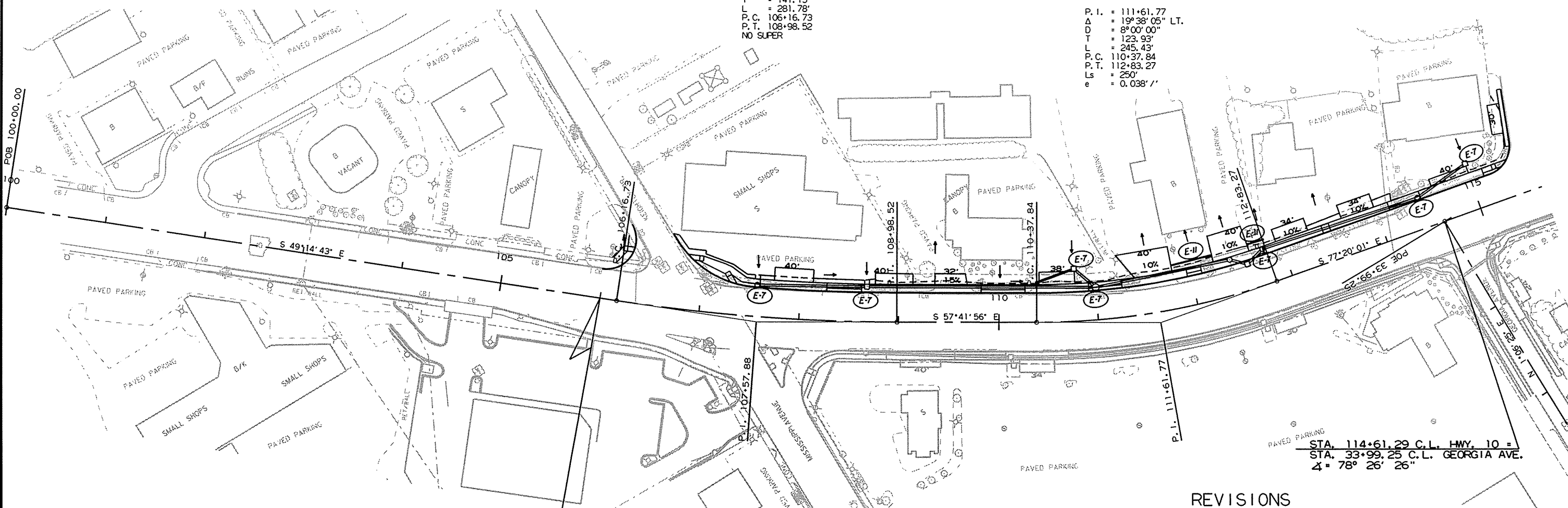
- STA. 107+56 = 25 LIN. FT.
- STA. 108+68 = 25 LIN. FT.
- STA. 110+38 = 25 LIN. FT.
- STA. 110+78 = 25 LIN. FT.
- STA. 111+00 = 25 LIN. FT.
- STA. 112+43.36 = 25 LIN. FT.
- STA. 112+60 = 25 LIN. FT.
- STA. 112+80 = 25 LIN. FT.
- STA. 114+43 = 25 LIN. FT.
- STA. 115+00 = 25 LIN. FT.

P. I. = 107+57.88
 Δ = 8°27'13" LT.
D = 3°00'00"
T = 141.15'
L = 281.78'
P.C. 106+16.73
P.T. 108+98.52
NO SUPER

E-II SILT FENCE ON LT.

- STA. 111+81.39 - STA. 112+26.14 = 42 LIN. FT.
- STA. 112+65.75 - STA. 112+84.83 = 18 LIN. FT.

P. I. = 111+61.77
 Δ = 19°38'05" LT.
D = 8°00'00"
T = 123.93'
L = 245.43'
P.C. 110+37.84
P.T. 112+83.27
Ls = 250'
e = 0.038'/'



STA. 106+00.00
BEGIN JOB 061194
LOG MILE 10.22

REVISIONS

DATE	REVISION

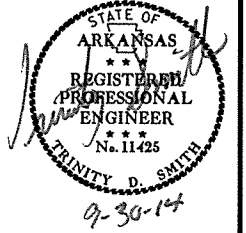
STAGE 2
TEMPORARY EROSION DETAILS

3/4/2013

R061194.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. 061194							12	141

2 TEMPORARY EROSION CONTROL DETAILS



LEGEND

(E-7) DROP INLET SILT FENCE

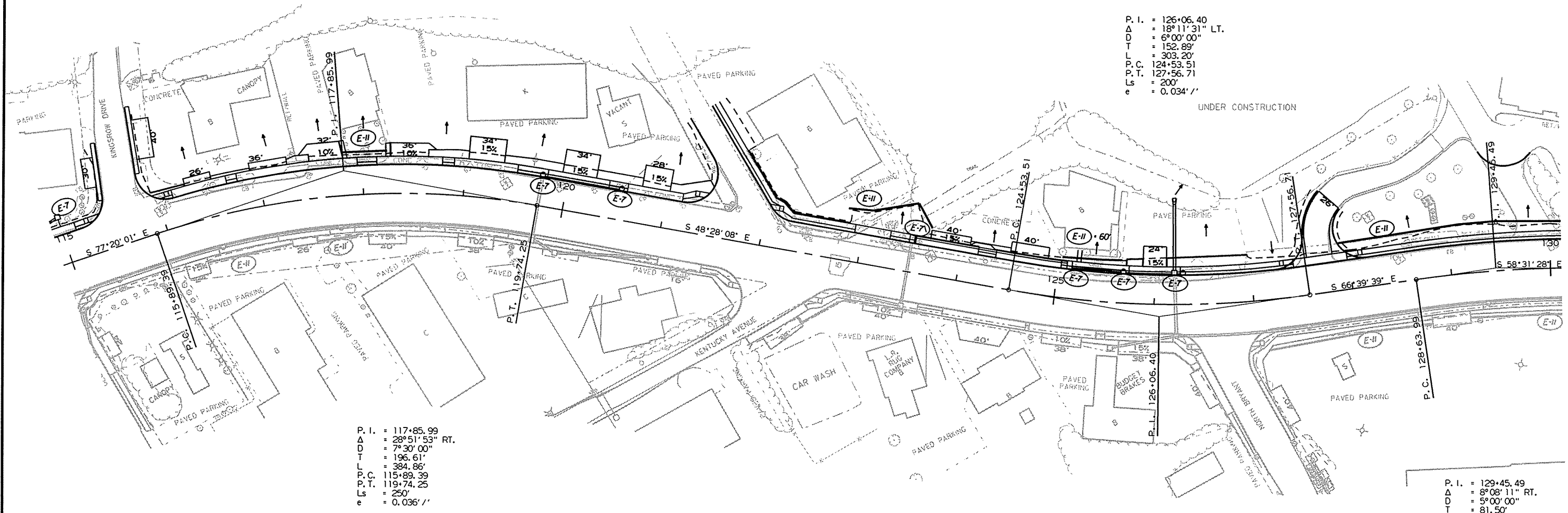
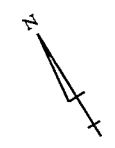
(E-II) SILT FENCE

(E-II) SILT FENCE ON LT.

STA. 117+80.83 - STA. 118+24.14 = 46 LIN. FT.
 STA. 122+82 - STA. 123+68.18 = 100 LIN. FT.
 STA. 125+03.46 - STA. 125+66.22 = 60 LIN. FT.
 STA. 127+91.20 - STA. 130+98.85 = 315 LIN. FT.

(E-7) DROP INLET SILT FENCE ON LT.

STA. 119+75 = 25 LIN. FT.
 STA. 120+55 = 25 LIN. FT.
 STA. 123+50 = 25 LIN. FT.
 STA. 125+12 = 25 LIN. FT.
 STA. 125+68 = 25 LIN. FT.
 STA. 126+20.23 = 25 LIN. FT.



P. I. = 126+06.40
 Δ = 18° 11' 31" LT.
 D = 6° 00' 00"
 T = 152.89'
 L = 303.20'
 P. C. = 124+53.51
 P. T. = 127+56.71
 Ls = 200'
 e = 0.034' /'

P. I. = 117+85.99
 Δ = 28° 51' 53" RT.
 D = 7° 30' 00"
 T = 196.61'
 L = 384.86'
 P. C. = 115+89.39
 P. T. = 119+74.25
 Ls = 250'
 e = 0.036' /'

P. I. = 129+45.49
 Δ = 8° 08' 11" RT.
 D = 5° 00' 00"
 T = 81.50'
 L = 162.73'
 P. C. = 128+63.99
 P. T. = 130+26.72
 Ls = 116'
 e = 0.032' /'

REVISIONS

DATE	REVISION

3/4/2013
R061194.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.	061194		13	141

2 TEMPORARY EROSION CONTROL DETAILS

LEGEND

(E-7) DROP INLET SILT FENCE

(E-11) SILT FENCE

(E-7) DROP INLET SILT FENCE ON LT.

STA. 130+73 = 25 LIN. FT.
 STA. 132+10 = 25 LIN. FT.
 STA. 133+95 = 25 LIN. FT.
 STA. 136+44 = 25 LIN. FT.
 STA. 139+18 = 25 LIN. FT.
 STA. 143+18 = 25 LIN. FT.

(E-7) DROP INLET SILT FENCE ON PERRYVILLE RD.

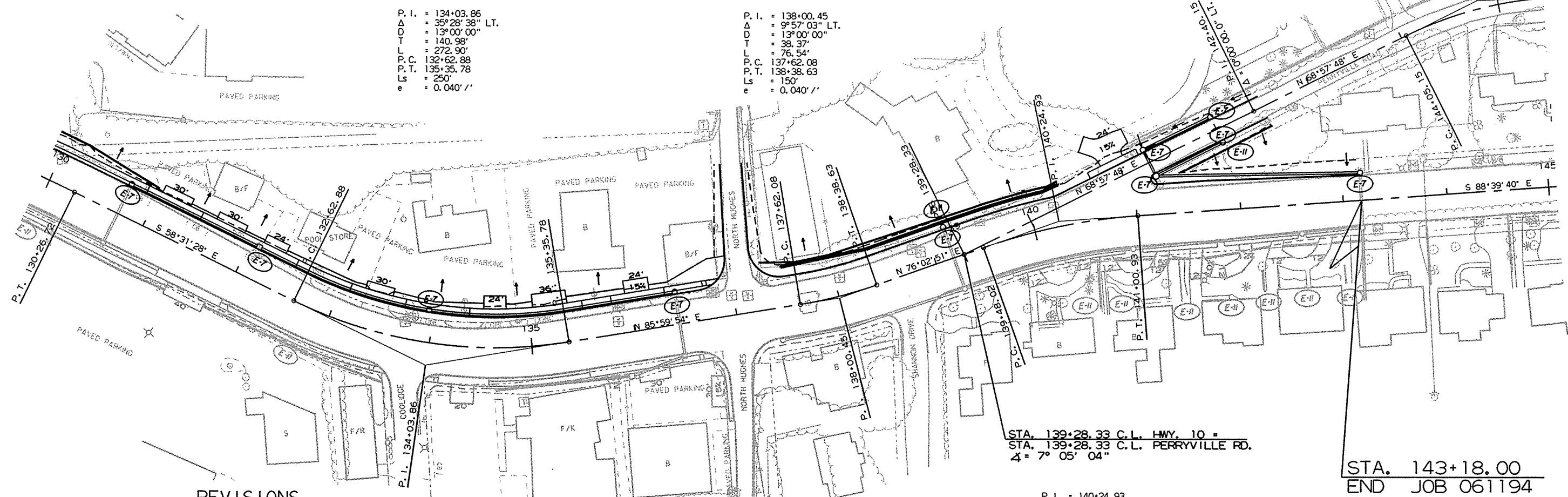
STA. 141+28 = 25 LIN. FT.
 STA. 141+28 = 25 LIN. FT.
 STA. 142+00 = 25 LIN. FT.
 STA. 142+00 = 25 LIN. FT.

(E-11) SILT FENCE ON LT.

STA. 137+28.92 - STA. 140+29.80 = 300 LIN. FT.
 STA. 141+46.48 - STA. 142+36.59 = 98 LIN. FT.

P. I. = 144+82.05
 Δ = 24° 14' 27" RT.
 D = 16° 00' 00"
 T = 76.90'
 L = 151.51'
 P.C. 144+05.15
 P.T. 115+56.65
 NO SUPER

STATE OF ARKANSAS
 REGISTERED PROFESSIONAL ENGINEER
 TRINITY D. SMITH
 No. 11425
 9-18-14



P. I. = 134+03.86
 Δ = 35° 28' 38" LT.
 D = 13° 00' 00"
 T = 140.98'
 L = 272.90'
 P.C. 132+62.88
 P.T. 135+35.78
 Ls = 250'
 e = 0.040'/'

P. I. = 138+00.45
 Δ = 9° 57' 03" LT.
 D = 13° 00' 00"
 T = 38.37'
 L = 76.54'
 P.C. 137+62.08
 P.T. 138+38.63
 Ls = 150'
 e = 0.040'/'

STA. 139+28.33 C.L. HWY. 10 =
 STA. 139+28.33 C.L. PERRYVILLE RD.
 Δ = 7° 05' 04"

P. I. = 140+24.93
 Δ = 15° 17' 28" RT.
 D = 10° 00' 00"
 T = 76.91'
 L = 152.91'
 P.C. 139+48.02
 P.T. 141+00.93
 Ls = 140'
 e = 0.038'/'

STA. 143+18.00
 END JOB 061194

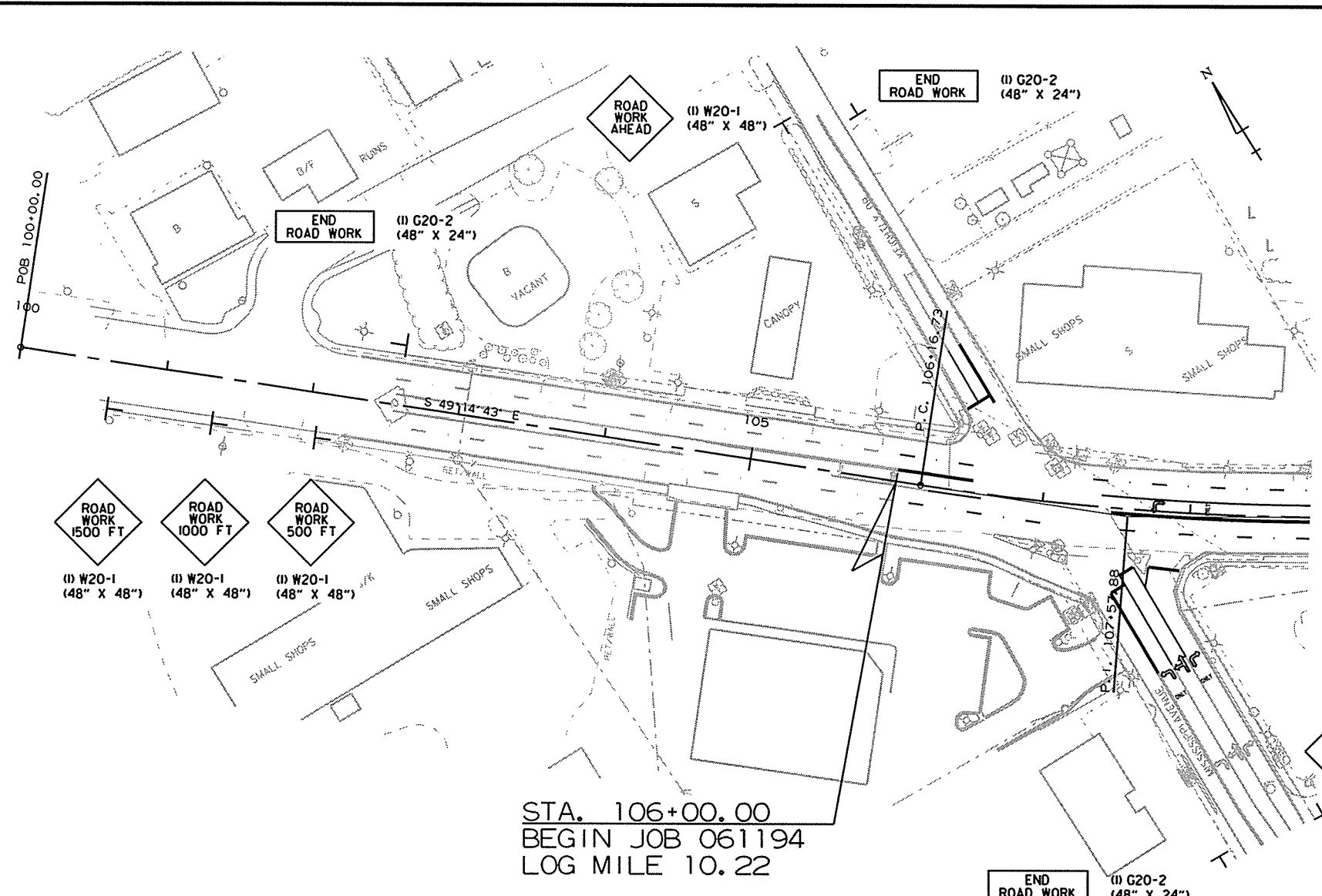
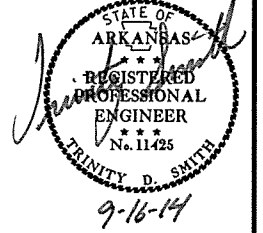
REVISIONS

DATE	REVISION

3/4/2013
 R061194.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.	061194		14	141

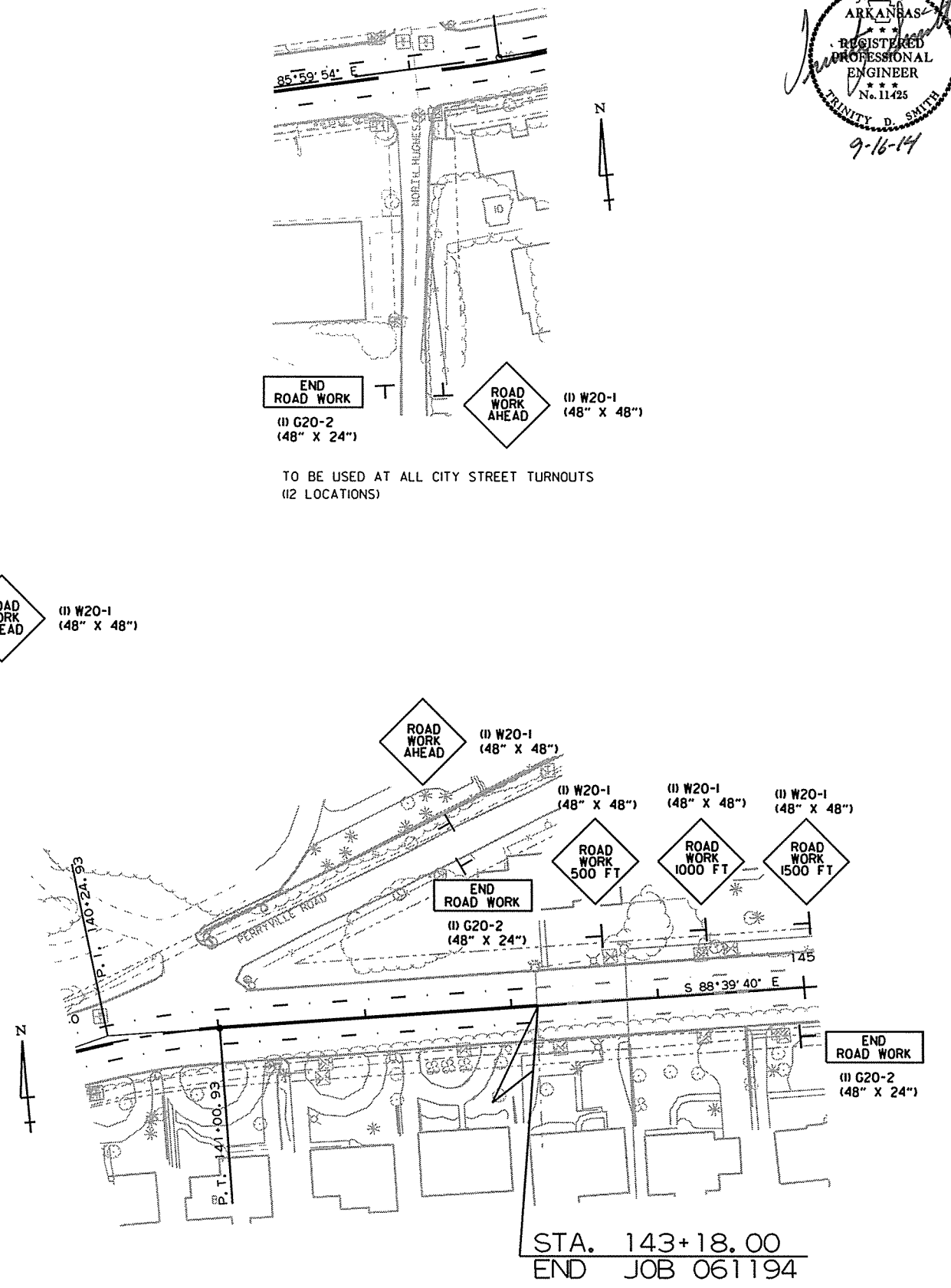
② MAINTENANCE OF TRAFFIC DETAILS



STA. 106+00.00
BEGIN JOB 061194
LOG MILE 10.22

SEQUENCE OF CONSTRUCTION
 STAGE 1:
 LEVELING
 CONSTRUCT RIGHT SIDE OF ROADWAY
 CONSTRUCT STORM DRAIN ON RIGHT
 CONSTRUCT DRIVES ON RIGHT
 STAGE 2:
 CONSTRUCT LEFT SIDE OF ROADWAY
 CONSTRUCT STORM DRAIN ON LEFT
 CONSTRUCT DRIVES ON LEFT
 CONSTRUCT RETAINING WALLS ON LEFT
 FROM STA. 121+72.69 - STA. 122+86.62
 FROM STA. 137+49.39 - STA. 140+30.54
 STAGE 3:
 PLACE FINAL 2" OF SURFACE COURSE
 INSTALL PERMANENT PAVEMENT MARKINGS

(4) R4-1 (24" X 12") DO NOT PASS
 TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER

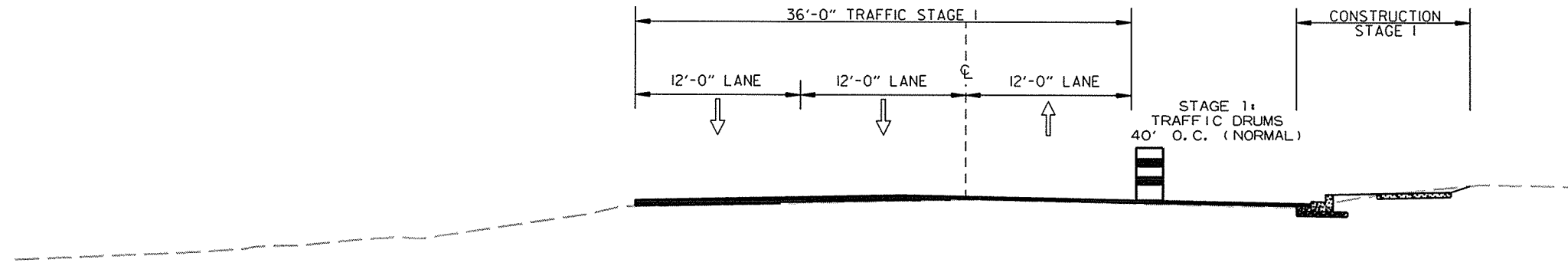
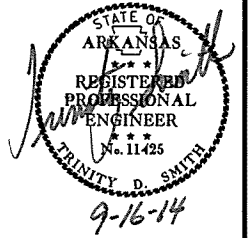


STA. 143+18.00
END JOB 061194

ALL STAGES
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.	061194		15	141

② MAINTENANCE OF TRAFFIC DETAILS

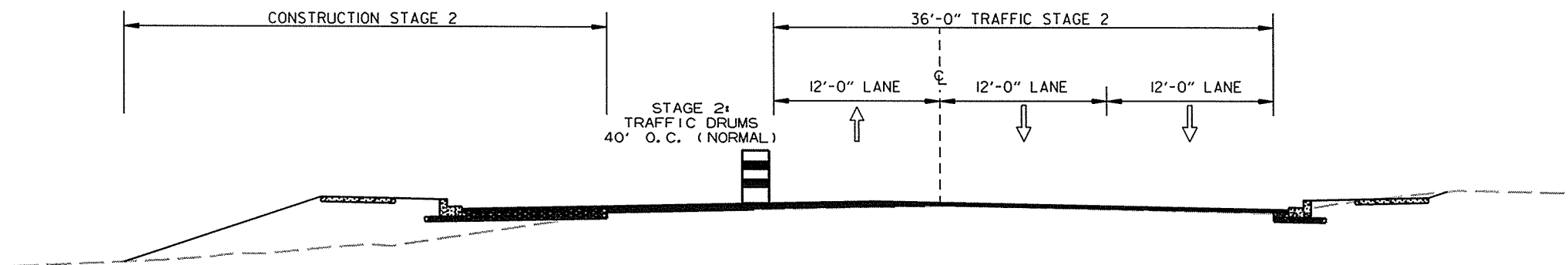


SEQUENCE OF CONSTRUCTION

STAGE 1:
LEVELING
CONSTRUCT RIGHT SIDE OF ROADWAY
CONSTRUCT STORM DRAIN ON RIGHT
CONSTRUCT DRIVES ON RIGHT

STAGE 2:
CONSTRUCT LEFT SIDE OF ROADWAY
CONSTRUCT STORM DRAIN ON LEFT
CONSTRUCT DRIVES ON LEFT
CONSTRUCT RETAINING WALLS ON LEFT
FROM STA. 121+72.69 - STA. 122+86.62
FROM STA. 137+49.39 - STA. 140+30.54

STAGE 3:
PLACE FINAL 2" OF SURFACE COURSE
INSTALL PERMANENT PAVEMENT MARKINGS



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ALL STAGES
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. 061194							16	141

CONSTRUCTION PAVEMENT MARKINGS:

4" DOUBLE YELLOW CENTERLINE:
 STA. 106+00-106+52 = 104 LIN. FT.
 STA. 107+46-110+25 = 558 LIN. FT.
 STA. 110+25-112+10 = 740 LIN. FT. (2 DBL. YELLOWS)
 STA. 112+10-114+47 = 474 LIN. FT.
 STA. 114+82-115+23 = 82 LIN. FT.
 STA. 115+83-122+00 = 1234 LIN. FT.
 STA. 122+62-125+11 = 498 LIN. FT.
 STA. 125+11-126+33 = 488 LIN. FT. (2 DBL. YELLOWS)
 STA. 126+79-127+70 = 182 LIN. FT.
 STA. 130+74-132+74 = 800 LIN. FT. (2 DBL. YELLOWS)
 STA. 132+74-133+49 = 150 LIN. FT.
 STA. 133+98-136+78 = 560 LIN. FT.
 STA. 137+22-138+26 = 208 LIN. FT.
 STA. 138+81-140+27 = 292 LIN. FT.
 STA. 140+87-143+18 = 462 LIN. FT.
 KEIGHTLY DR. = 194 LIN. FT.
 MISSISSIPPI AVE. = 256 LIN. FT.
 NORTH BRYANT = 236 LIN. FT.
 4" YELLOW CENTER TURN LANE:
 STA. 127+70-130+94 = 810 LIN. FT.

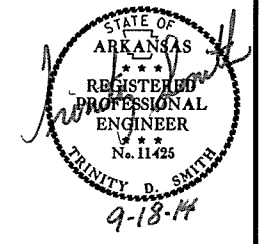
CONSTRUCTION PAVEMENT MARKINGS (CONT.):

4" WHITE SOLID FOR TURN LANE LINES:
 STA. 106+00-106+58 = 58 LIN. FT.
 STA. 107+39-110+10 = 271 LIN. FT.
 STA. 126+70-127+27 = 57 LIN. FT.
 KEIGHTLY DR. = 41 LIN. FT.
 MISSISSIPPI AVE. = 155 LIN. FT.
 NORTH BRYANT = 94 LIN. FT.
 12" WHITE STOP BARS:
 KEIGHTLY DR. = 17 LIN. FT.
 MISSISSIPPI AVE. = 44 LIN. FT.
 4" WHITE SKIP LINES (LEFT MAIN LANES):
 STA. 106+00-106+52 = 13 LIN. FT.
 STA. 107+33-143+18 = 896 LIN. FT.
 4" WHITE SKIP LINES (RIGHT MAIN LANES):
 STA. 106+00-107+00 = 25 LIN. FT.
 STA. 107+54-143+18 = 896 LIN. FT.
 ARROWS = 6 EACH
 WORDS = 5 EACH

SEQUENCE OF CONSTRUCTION

STAGE 1:
 LEVELING
 CONSTRUCT RIGHT SIDE OF ROADWAY
 CONSTRUCT STORM DRAIN ON RIGHT
 CONSTRUCT DRIVES ON RIGHT
 STAGE 2:
 CONSTRUCT LEFT SIDE OF ROADWAY
 CONSTRUCT STORM DRAIN ON LEFT
 CONSTRUCT DRIVES ON LEFT
 CONSTRUCT RETAINING WALLS ON LEFT
 FROM STA. 121+72.69 - STA. 122+86.62
 FROM STA. 137+49.39 - STA. 140+30.54
 STAGE 3:
 PLACE FINAL 2" OF SURFACE COURSE
 INSTALL PERMANENT PAVEMENT MARKINGS

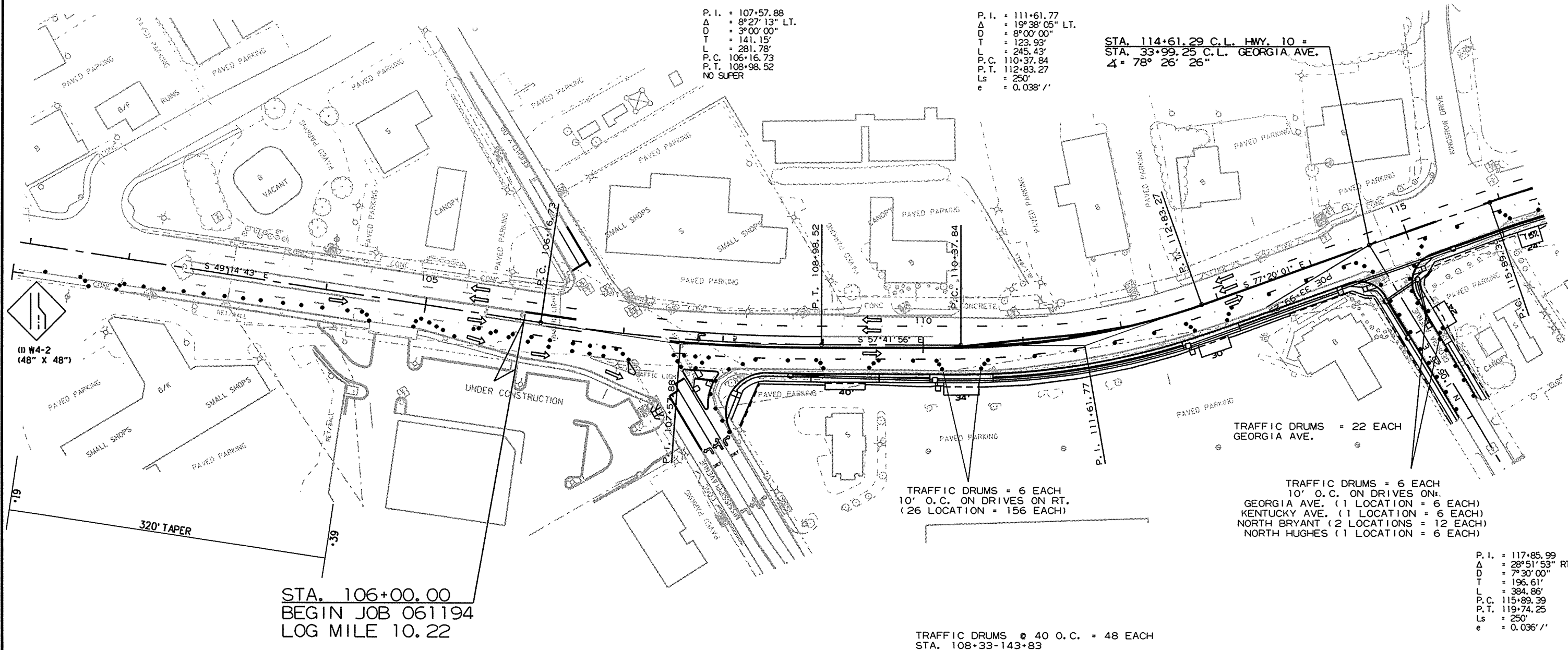
② MAINTENANCE OF TRAFFIC DETAILS



P.I. = 107+57.88
 Δ = 8°27'13" LT.
 D = 3°00'00"
 T = 141.15'
 L = 281.78'
 P.C. 106+16.73
 P.T. 108+98.52
 NO SUPER

P.I. = 111+61.77
 Δ = 19°38'05" LT.
 D = 8°00'00"
 T = 123.93'
 L = 245.43'
 P.C. 110+37.84
 P.T. 112+83.27
 Ls = 250'
 e = 0.038'/'

STA. 114+61.29 C.L. HWY. 10 =
 STA. 33+99.25 C.L. GEORGIA AVE.
 Δ = 78° 26' 26"

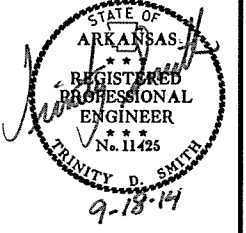


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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	061194		17	141

2 MAINTENANCE OF TRAFFIC DETAILS



P. I. = 144+82.05
 Δ = 24°14'27" RT.
 D = 16°00'00"
 T = 76.90'
 L = 151.51'
 P. C. 144+05.15
 P. T. 115+56.65
 NO SUPER

SEQUENCE OF CONSTRUCTION

STAGE 1:

- LEVELING
- CONSTRUCT RIGHT SIDE OF ROADWAY
- CONSTRUCT STORM DRAIN ON RIGHT
- CONSTRUCT DRIVES ON RIGHT

STAGE 2:

- CONSTRUCT LEFT SIDE OF ROADWAY
- CONSTRUCT STORM DRAIN ON LEFT
- CONSTRUCT DRIVES ON LEFT
- CONSTRUCT RETAINING WALLS ON LEFT
- FROM STA. 121+72.69 - STA. 122+86.62
- FROM STA. 137+49.39 - STA. 140+30.54

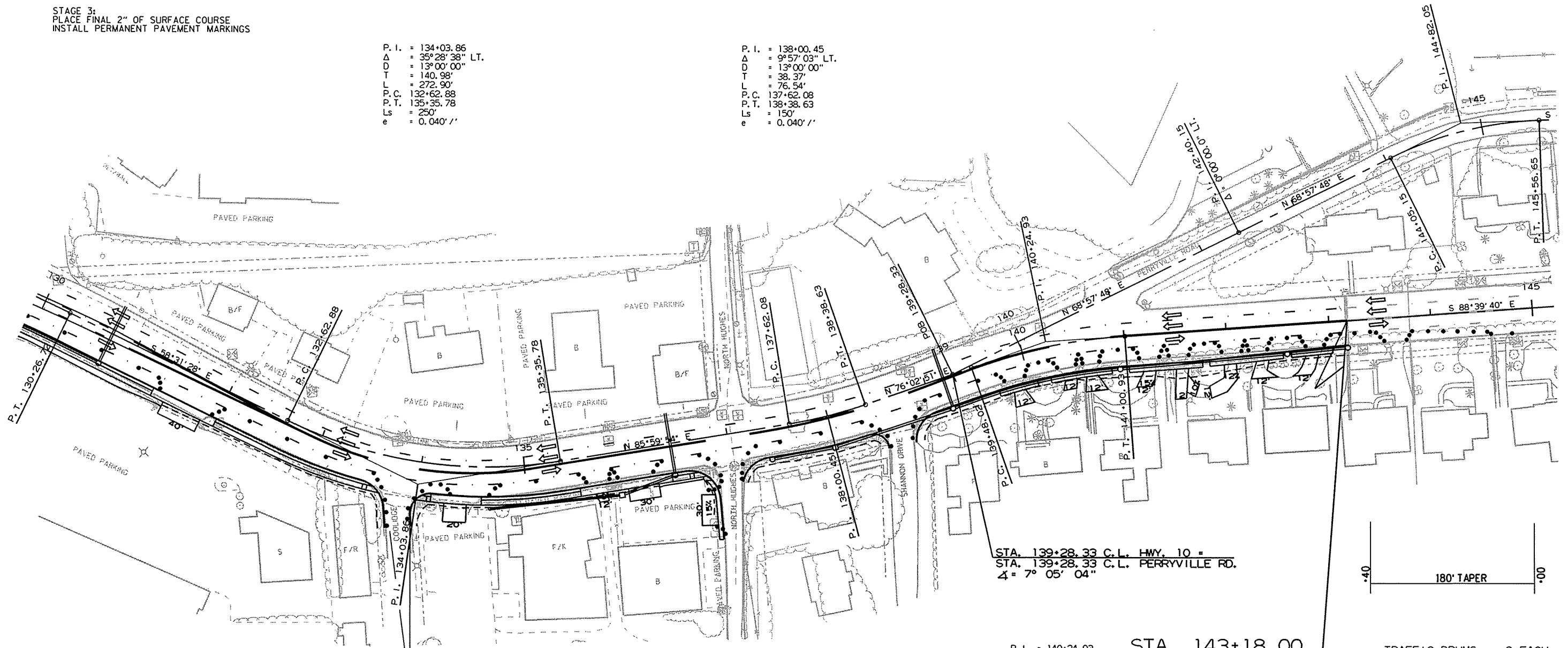
STAGE 3:

- PLACE FINAL 2" OF SURFACE COURSE
- INSTALL PERMANENT PAVEMENT MARKINGS

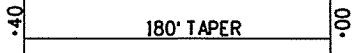


P. I. = 134+03.86
 Δ = 35°28'38" LT.
 D = 13°00'00"
 T = 140.98'
 L = 272.90'
 P. C. 132+62.88
 P. T. 135+35.78
 Ls = 250'
 e = 0.040' /'

P. I. = 138+00.45
 Δ = 9°57'03" LT.
 D = 13°00'00"
 T = 38.37'
 L = 76.54'
 P. C. 137+62.08
 P. T. 138+38.63
 Ls = 150'
 e = 0.040' /'



STA. 139+28.33 C.L. HWY. 10 =
 STA. 139+28.33 C.L. PERRYVILLE RD.
 Δ = 7° 05' 04"



P. I. = 140+24.93
 Δ = 15°17'28" RT.
 D = 10°00'00"
 T = 76.91'
 L = 152.91'
 P. C. 139+48.02
 P. T. 141+00.93
 Ls = 140'
 e = 0.038' /'

STA. 143+18.00
 END JOB 061194

TRAFFIC DRUMS = 8 EACH
 STA. 143+40-145+00

TRAFFIC DRUMS = 10 EACH
 10' O.C. ON CITY STREETS ON RT.
 KENTUCKY AVE.
 NORTH BRYANT
 COOLIDGE
 NORTH HUGHES
 SHANNON DR.
 (5 LOCATIONS = 50 EACH)

3/5/2013

R061194.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.	061194		18	141

2 MAINTENANCE OF TRAFFIC DETAILS



TRAFFIC DRUMS = 6 EACH
STA. 104+40-106+36

TRAFFIC DRUMS = 15 EACH
KEIGHTLY DR.

CONSTRUCTION PAVEMENT MARKINGS:

4" DOUBLE YELLOW CENTERLINE:
KINGSROW DR. = 160 LIN. FT.

4" WHITE SOLID FOR TURN LANE LINES:
KINGSROW = 74 LIN. FT.

ARROWS = 2 EACH
WORDS = 2 EACH

TRAFFIC DRUMS @ 40 O.C. = 36 EACH
STA. 107+26-143+18

P. I. = 107+57.88
Δ = 8°27'13" LT.
D = 3°00'00"
T = 141.15'
L = 281.78'
P.C. 106+16.73
P.T. 108+98.52
NO SUPER

TRAFFIC DRUMS = 6 EACH
10' O.C. ON DRIVES ON LT.
(29 LOCATION = 174 EACH)

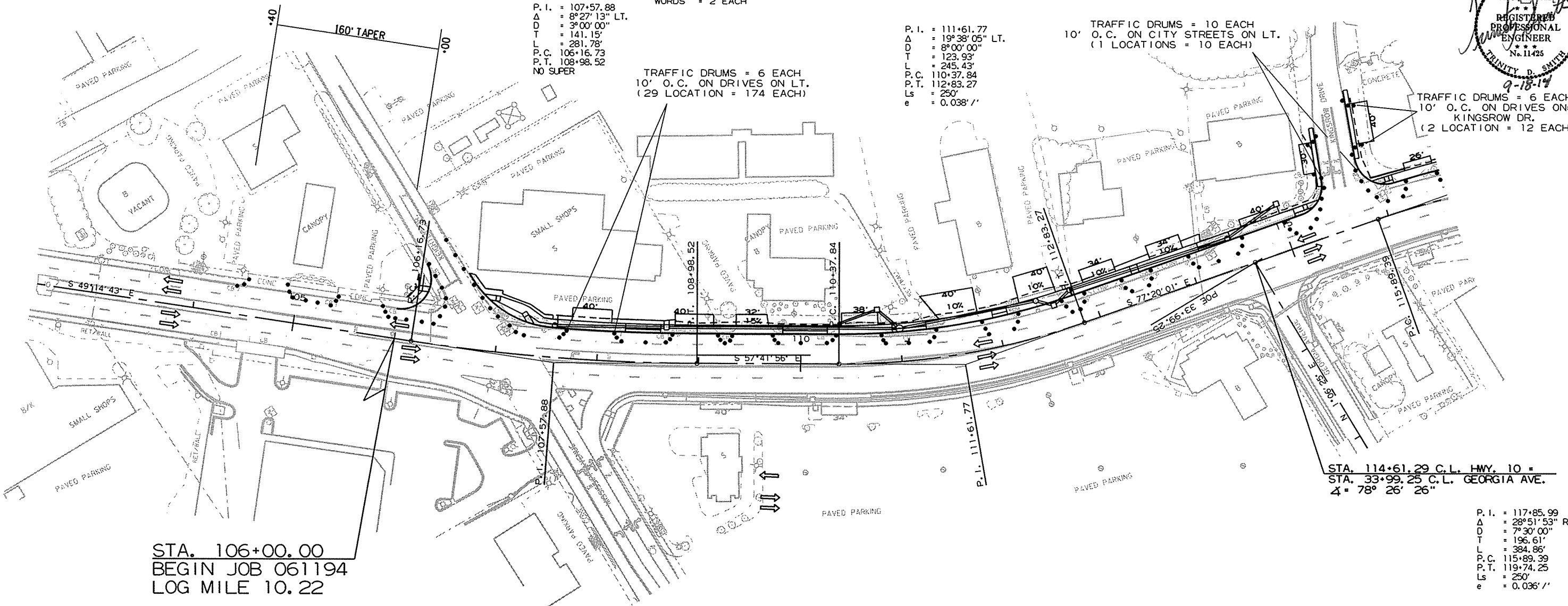
P. I. = 111+61.77
Δ = 19°38'05" LT.
D = 8°00'00"
T = 123.93'
L = 245.43'
P.C. 110+37.84
P.T. 112+83.27
Ls = 250'
e = 0.038'/'

TRAFFIC DRUMS = 10 EACH
10' O.C. ON CITY STREETS ON LT.
(1 LOCATION = 10 EACH)

TRAFFIC DRUMS = 6 EACH
10' O.C. ON DRIVES ON:
KINGSROW DR.
(2 LOCATION = 12 EACH)

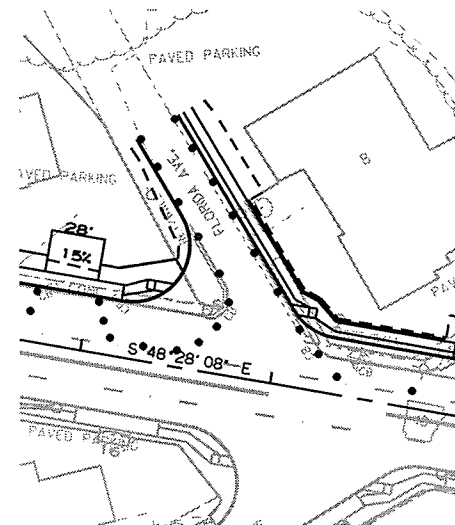
STA. 114+61.29 C.L. HWY. 10 =
STA. 33+99.25 C.L. GEORGIA AVE.
Δ = 78° 26' 26"

P. I. = 117+85.99
Δ = 28°51'53" RT.
D = 7°30'00"
T = 196.61'
L = 384.86'
P.C. 115+89.39
P.T. 119+74.25
Ls = 250'
e = 0.036'/'



STA. 106+00.00
BEGIN JOB 061194
LOG MILE 10.22

TRAFFIC DRUMS = 18 EACH
FLORIDA AVE.

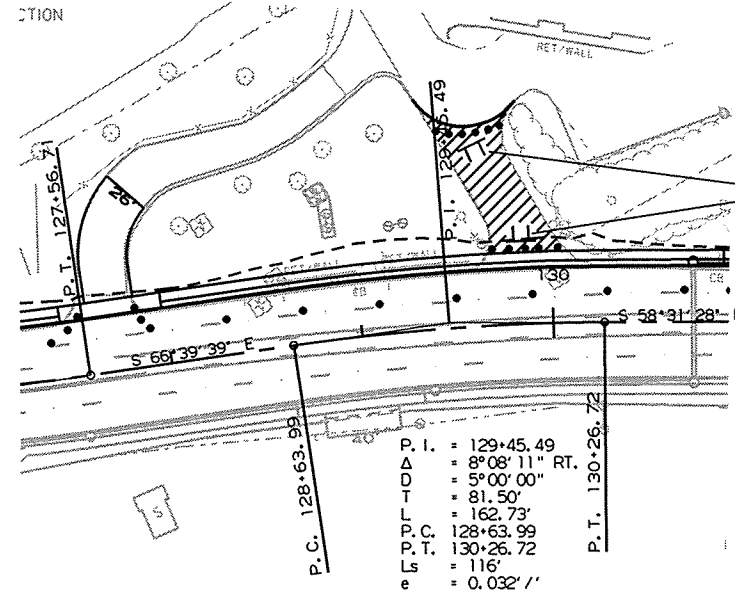


SEQUENCE OF CONSTRUCTION

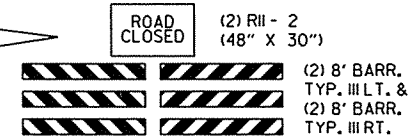
STAGE 1:
LEVELING
CONSTRUCT RIGHT SIDE OF ROADWAY
CONSTRUCT STORM DRAIN ON RIGHT
CONSTRUCT DRIVES ON RIGHT

STAGE 2:
CONSTRUCT LEFT SIDE OF ROADWAY
CONSTRUCT STORM DRAIN ON LEFT
CONSTRUCT DRIVES ON LEFT
CONSTRUCT RETAINING WALLS ON LEFT
FROM STA. 121+72.69 - STA. 122+86.62
FROM STA. 137+49.39 - STA. 140+30.54

STAGE 3:
PLACE FINAL 2" OF SURFACE COURSE
INSTALL PERMANENT PAVEMENT MARKINGS



TRAFFIC DRUMS = 11 EACH



P. I. = 129+45.49
Δ = 8°08'11" RT.
D = 5°00'00"
T = 81.50'
L = 162.73'
P.C. 128+63.99
P.T. 130+26.72
Ls = 116'
e = 0.032'/'

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.	061194		19	141

② MAINTENANCE OF TRAFFIC DETAILS

SEQUENCE OF CONSTRUCTION

STAGE 1:
LEVELING
CONSTRUCT RIGHT SIDE OF ROADWAY
CONSTRUCT STORM DRAIN ON RIGHT
CONSTRUCT DRIVES ON RIGHT

STAGE 2:
CONSTRUCT LEFT SIDE OF ROADWAY
CONSTRUCT STORM DRAIN ON LEFT
CONSTRUCT DRIVES ON LEFT
CONSTRUCT RETAINING WALLS ON LEFT
FROM STA. 121+72.69 - STA. 122+86.62
FROM STA. 137+49.39 - STA. 140+30.54

STAGE 3:
PLACE FINAL 2" OF SURFACE COURSE
INSTALL PERMANENT PAVEMENT MARKINGS



TRAFFIC DRUMS = 22 EACH
PERRYVILLE RD.

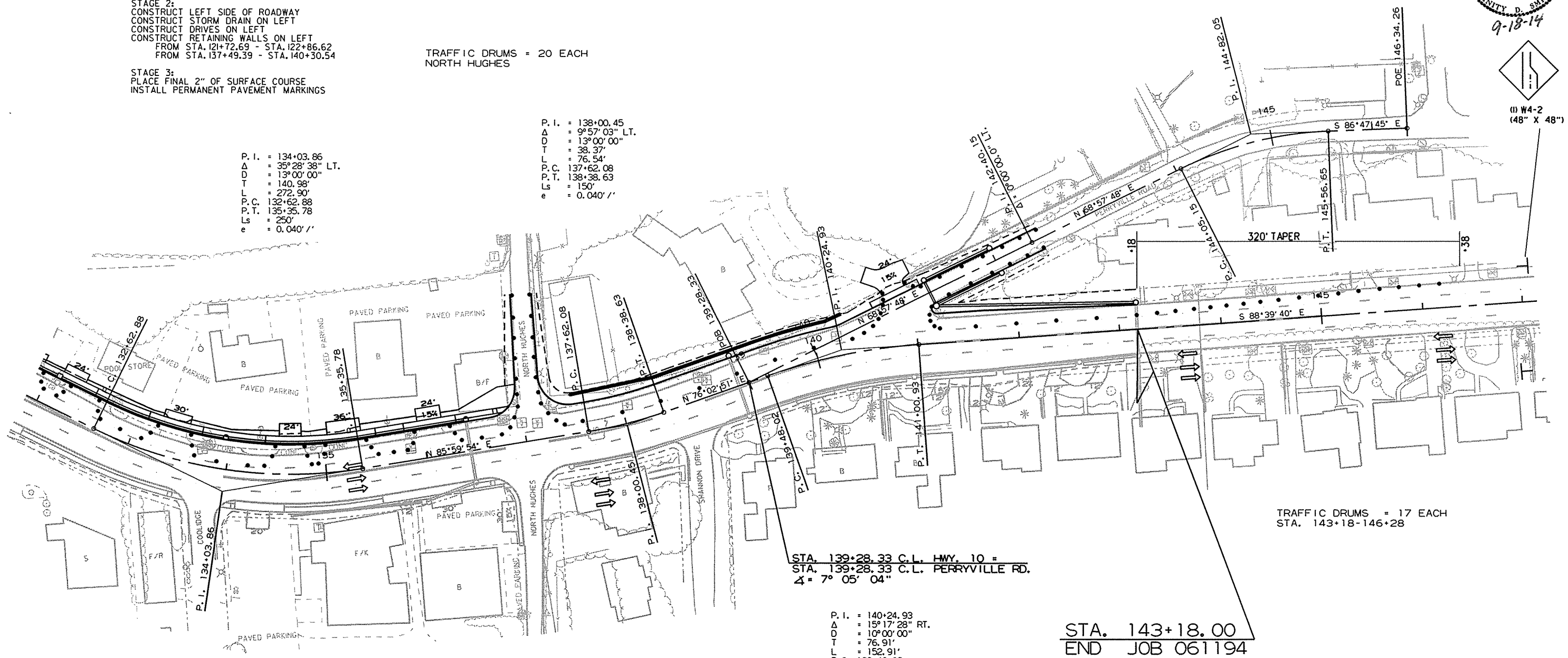
TRAFFIC DRUMS = 20 EACH
NORTH HUGHES

P. I. = 144+82.05
Δ = 24° 14' 27" RT.
D = 16° 00' 00"
T = 76.90'
L = 151.51'
P. C. 144+05.15
P. T. 115+56.65
NO SUPER



P. I. = 134+03.86
Δ = 35° 28' 38" LT.
D = 13° 00' 00"
T = 140.98'
L = 272.90'
P. C. 132+62.88
P. T. 135+35.78
Ls = 250'
e = 0.040' /'

P. I. = 138+00.45
Δ = 9° 57' 03" LT.
D = 13° 00' 00"
T = 38.37'
L = 76.54'
P. C. 137+62.08
P. T. 138+38.63
Ls = 150'
e = 0.040' /'

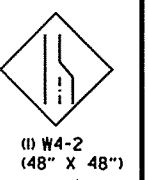


TRAFFIC DRUMS = 17 EACH
STA. 143+18-146+28

STA. 139+28.33 C.L. HWY. 10 =
STA. 139+28.33 C.L. PERRYVILLE RD.
Δ = 7° 05' 04"

P. I. = 140+24.93
Δ = 15° 17' 28" RT.
D = 10° 00' 00"
T = 76.91'
L = 152.91'
P. C. 139+48.02
P. T. 141+00.93
Ls = 140'
e = 0.038' /'

STA. 143+18.00
END JOB 061194



3/5/2013

R061194.DGN

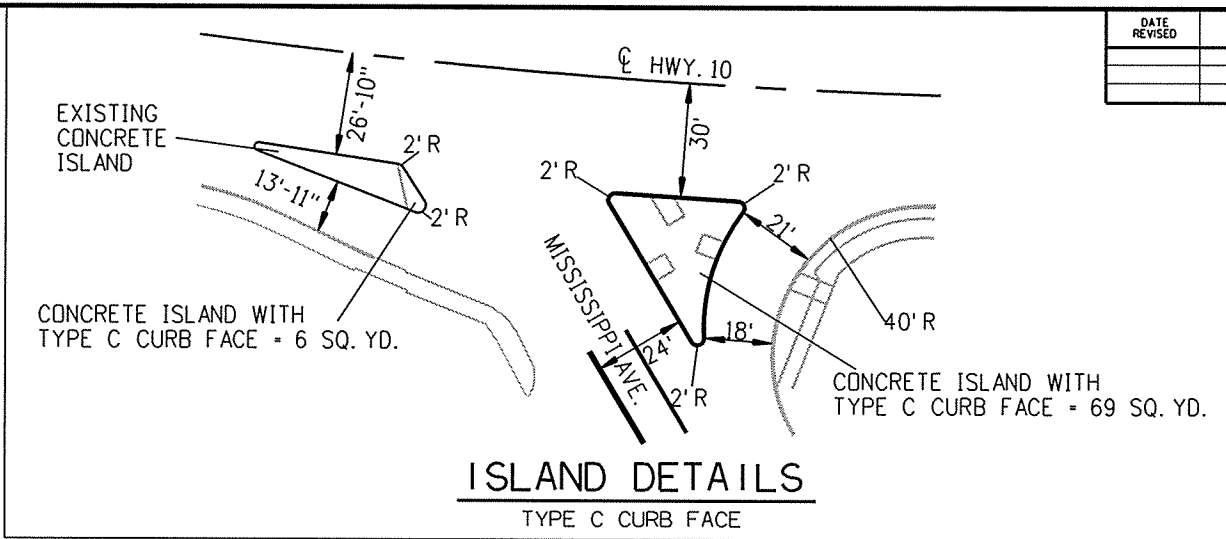
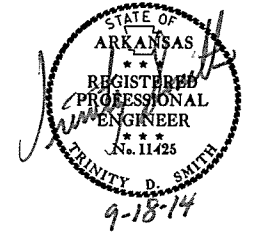
RAISED PAVEMENT MARKERS (TYPE II)(YELLOW/YELLOW) ARE TO BE PLACED ON EACH SIDE OF THE CENTER TURN LANE AT 80' INTERVALS.

RAISED PAVEMENT MARKERS (TYPE II)(WHITE/RED) ARE TO BE PLACED ON THE LANE LINES AT 80' INTERVALS.

REFER TO THE PERMANENT PAVEMENT MARKING DETAILS, STD. DRWG. PM-1, AND THE LATEST EDITION OF THE MUTCD FOR ADDITIONAL PAVEMENT MARKING DETAILS.

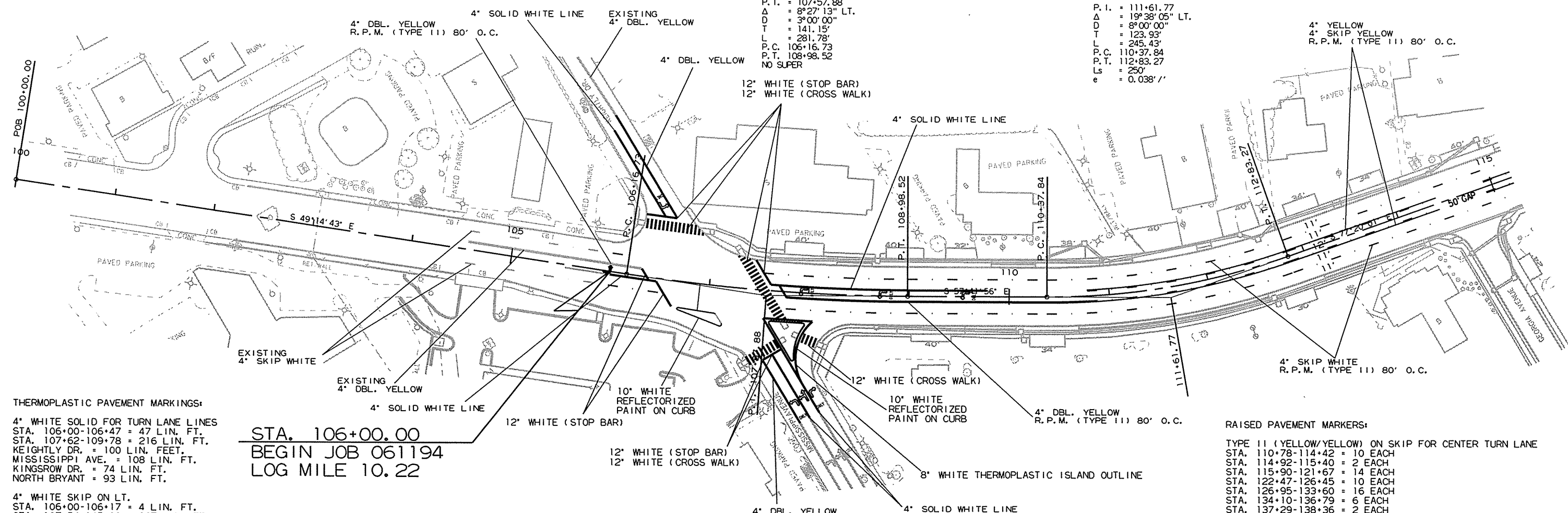
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		20	141

② PERMANENT PAVEMENT MARKING DETAILS



P. I. = 107+57.88
 Δ = 8°27'13" LT.
 D = 3°00'00"
 T = 141.15'
 L = 281.78'
 P.C. 106+16.73
 P.T. 108+98.52
 NO SUPER

P. I. = 111+61.77
 Δ = 19°38'05" LT.
 D = 8°00'00"
 T = 123.93'
 L = 245.43'
 P.C. 110+37.84
 P.T. 112+83.27
 Ls = 250'
 e = 0.038'/'



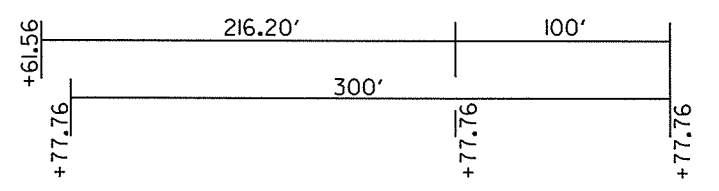
STA. 106+00.00
 BEGIN JOB 061194
 LOG MILE 10.22

THERMOPLASTIC PAVEMENT MARKINGS:
 4" WHITE SOLID FOR TURN LANE LINES
 STA. 106+00-106+47 = 47 LIN. FT.
 STA. 107+62-109+78 = 216 LIN. FT.
 KEIGHTLY DR. = 100 LIN. FEET.
 MISSISSIPPI AVE. = 108 LIN. FT.
 KINGSROW DR. = 74 LIN. FT.
 NORTH BRYANT = 93 LIN. FT.
 4" WHITE SKIP ON LT.
 STA. 106+00-106+17 = 4 LIN. FT.
 STA. 107+54-145+00 = 937 LIN. FT.
 4" WHITE SKIP ON RT.
 STA. 106+00-106+55 = 14 LIN. FT.
 STA. 107+78-145+00 = 931 LIN. FT.
 12" WHITE FOR STOP BARS
 STA. 106+31-106+64 = 33 LIN. FT.
 STA. 107+45-107+78 = 43 LIN. FT.
 KEIGHTLY DR. = 30 LIN. FT.
 MISSISSIPPI AVE. = 22 LIN. FT.
 12" WHITE FOR STOP BARS
 HWY. 10 = 180 LIN. FT.
 KEIGHTLY DR. = 140 LIN. FT.
 MISSISSIPPI AVE. = 130 LIN. FT.
 8" WHITE THERMOPLASTIC (ISLAND)
 STA. 107+62-107+97 = 194 LIN. FT.
 10" WHITE REFLECTORIZED (ISLAND)
 STA. 106+70-107+18 = 102 LIN. FT.
 STA. 107+56-108+05 = 124 LIN. FT.

THERMOPLASTIC PAVEMENT MARKINGS (CONT.):
 4" YELLOW SKIP FOR CENTER TURN LANE
 STA. 110+78-114+42 = 182 LIN. FT.
 STA. 114+92-115+40 = 24 LIN. FT.
 STA. 115+90-121+67 = 289 LIN. FT.
 STA. 122+47-126+45 = 199 LIN. FT.
 STA. 126+95-133+60 = 233 LIN. FT.
 STA. 134+10-136+79 = 135 LIN. FT.
 STA. 137+29-138+36 = 54 LIN. FT.
 STA. 138+83-141+58 = 136 LIN. FT.
 4" YELLOW SOLID FOR CENTER TURN LANE
 STA. 110+78-114+42 = 728 LIN. FT.
 STA. 114+92-115+40 = 96 LIN. FT.
 STA. 115+90-121+67 = 1154 LIN. FT.
 STA. 122+47-126+45 = 796 LIN. FT.
 STA. 126+95-133+60 = 1330 LIN. FT.
 STA. 134+10-136+79 = 538 LIN. FT.
 STA. 137+29-138+36 = 214 LIN. FT.
 STA. 138+83-141+58 = 544 LIN. FT.

THERMOPLASTIC PAVEMENT MARKINGS (CONT.):
 4" DOUBLE YELLOW
 STA. 106+00-106+31 = 62 LIN. FT.
 STA. 107+78-110+78 = 600 LIN. FT.
 STA. 141+58-143+18 = 640 LIN. FT. (2 DBL. YELLOWS)
 STA. 143+18-145+00 = 364 LIN. FT.
 KEIGHTLY DR. = 240 LIN. FT.
 MISSISSIPPI AVE. = 148 LIN. FT.
 KINGSROW DR. = 160 LIN. FT.
 NORTH BRYANT = 238 LIN. FT.
 ARROWS = 12 EACH
 WORDS = 10 EACH

RAISED PAVEMENT MARKERS:
 TYPE II (YELLOW/YELLOW) ON SKIP FOR CENTER TURN LANE
 STA. 110+78-114+42 = 10 EACH
 STA. 114+92-115+40 = 2 EACH
 STA. 115+90-121+67 = 14 EACH
 STA. 122+47-126+45 = 10 EACH
 STA. 126+95-133+60 = 16 EACH
 STA. 134+10-136+79 = 6 EACH
 STA. 137+29-138+36 = 2 EACH
 STA. 138+83-141+58 = 6 EACH
 TYPE II (YELLOW/YELLOW) ON DOUBLE YELLOW
 STA. 106+00-106+31 = 1 EACH
 STA. 107+78-110+78 = 4 EACH
 STA. 141+58-143+18 = 4 EACH (2 DBL. YELLOWS)
 STA. 143+18-145+00 = 3 EACH
 TYPE II (WHITE/RED) ON WHITE TURN LANE LINES
 STA. 106+00-106+47 = 2 EACH
 STA. 107+62-109+78 = 11 EACH
 TYPE II (WHITE/RED) ON SKIP LINES ON LT.
 STA. 106+00-106+17 = 1 EACH
 STA. 107+54-145+00 = 46 EACH
 TYPE II (WHITE/RED) ON SKIP LINES ON RT.
 STA. 106+00-106+55 = 1 EACH
 STA. 107+78-145+00 = 46 EACH

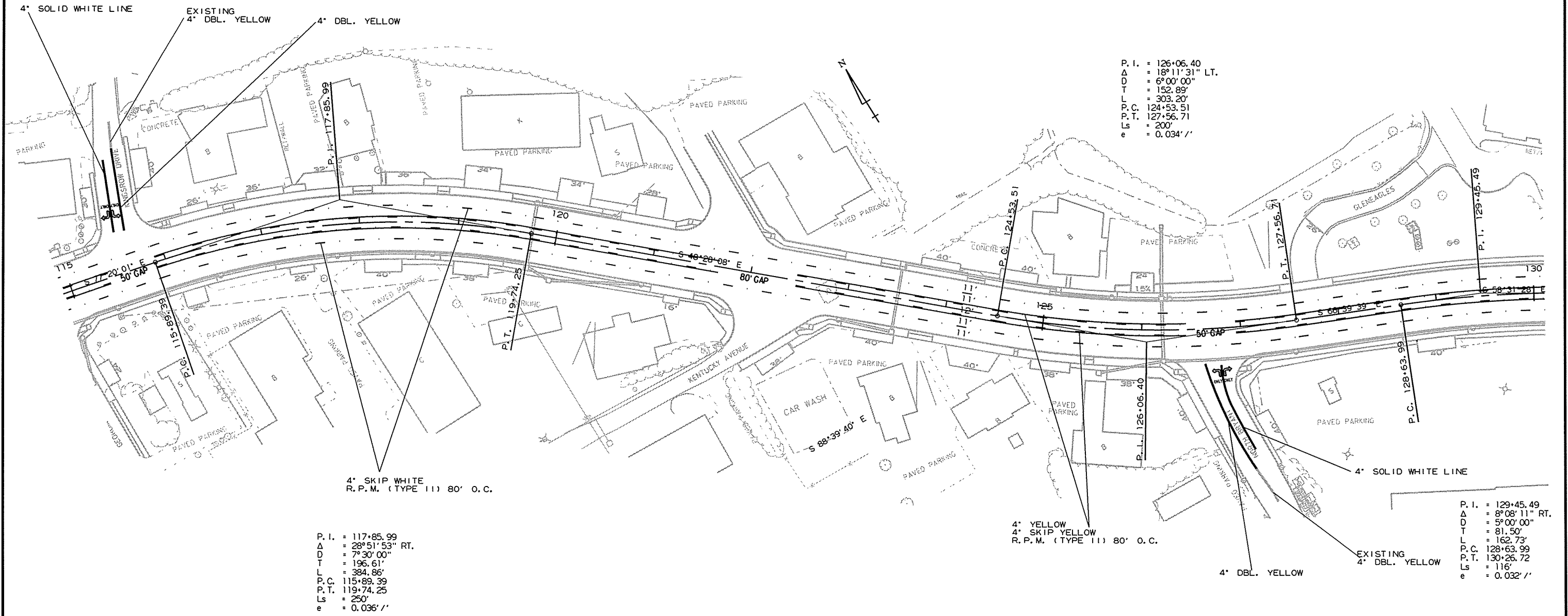


4/10/2013 R061194.DGN

PERMANENT PAVEMENT MARKING DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS	
				6	ARK.				
JOB NO.							061194	21	141

2 PERMANENT PAVEMENT MARKING DETAILS



P. I. = 126+06.40
 Δ = 18° 11' 31" LT.
D = 6° 00' 00"
T = 152.89'
L = 303.20'
P.C. = 124+53.51
P.T. = 127+56.71
Ls = 200'
e = 0.034' /'

P. I. = 117+85.99
 Δ = 28° 51' 53" RT.
D = 7° 30' 00"
T = 196.61'
L = 384.86'
P.C. = 115+89.39
P.T. = 119+74.25
Ls = 250'
e = 0.036' /'

4" YELLOW
4" SKIP YELLOW
R.P.M. (TYPE 11) 80' O.C.

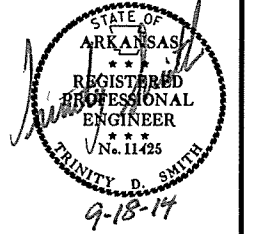
P. I. = 129+45.49
 Δ = 8° 08' 11" RT.
D = 5° 00' 00"
T = 81.50'
L = 162.73'
P.C. = 128+63.99
P.T. = 130+26.72
Ls = 116'
e = 0.032' /'

4/10/2013

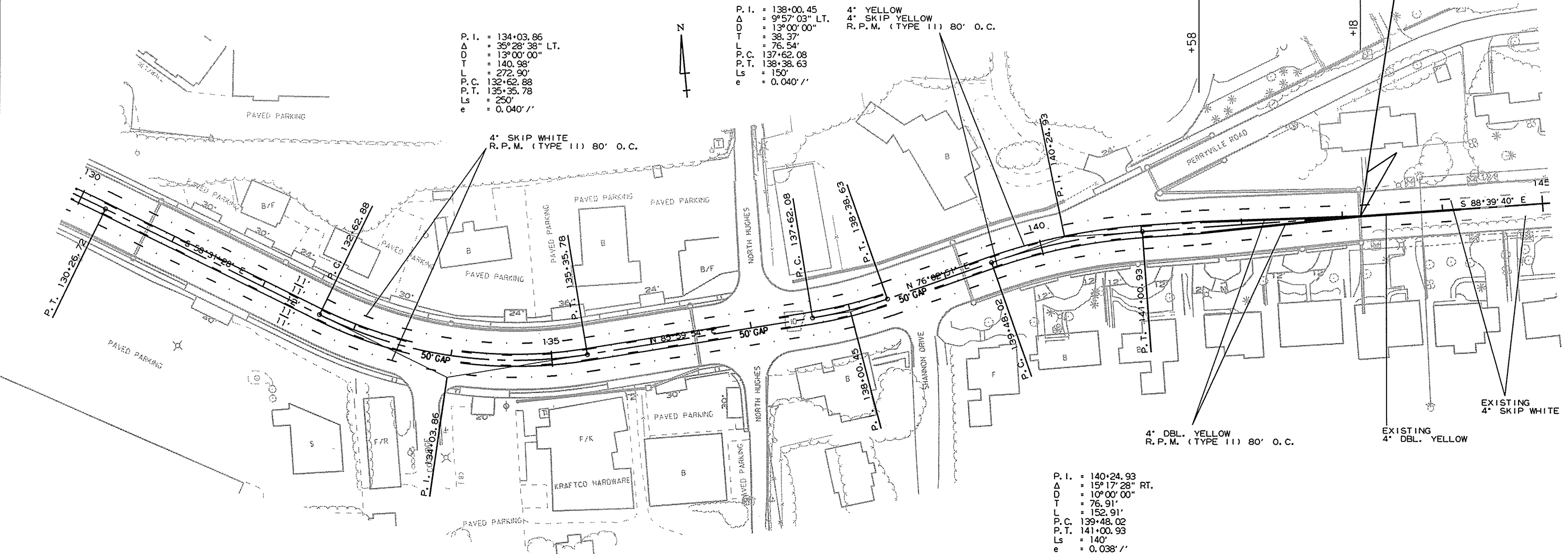
R061194.DGN

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.	061194		22	141

2 PERMANENT PAVEMENT MARKING DETAILS



STA. 143+18.00
END JOB 061194



P. I. = 134+03.86
Δ = 35°28'38" LT.
D = 13°00'00"
T = 140.98'
L = 272.90'
P.C. = 132+62.88
P.T. = 135+35.78
Ls = 250'
e = 0.040'/'

P. I. = 138+00.45
Δ = 9°57'03" LT.
D = 13°00'00"
T = 38.37'
L = 76.54'
P.C. = 137+62.08
P.T. = 138+38.63
Ls = 150'
e = 0.040'/'

4" YELLOW
4" SKIP YELLOW
R.P.M. (TYPE 11) 80' O.C.

4" SKIP WHITE
R.P.M. (TYPE 11) 80' O.C.

4" DBL. YELLOW
R.P.M. (TYPE 11) 80' O.C.

EXISTING
4" DBL. YELLOW

P. I. = 140+24.93
Δ = 15°17'28" RT.
D = 10°00'00"
T = 76.91'
L = 152.91'
P.C. = 139+48.02
P.T. = 141+00.93
Ls = 140'
e = 0.038'/'

4/10/2013

R061194.DGN

SUMMARY OF QUANTITIES (BOX 1 OF 2)

ITEM NUMBER	ITEM	QUANTITY	UNIT
201	CLEARING	20	STATION
201	GRUBBING	20	STATION
202	REMOVAL AND DISPOSAL OF CURB	497	LIN. FT.
202	REMOVAL AND DISPOSAL OF CURB AND GUTTER	7489	LIN. FT.
202	REMOVAL AND DISPOSAL OF BRICK COLUMNS	1	EACH
202	REMOVAL AND DISPOSAL OF FENCE	430	LIN. FT.
202	REMOVAL AND DISPOSAL OF RETAINING WALLS	382	LIN. FT.
202	REMOVAL AND DISPOSAL OF ROCK WALLS	282	LIN. FT.
202	REMOVAL AND DISPOSAL OF CONCRETE PAVEMENT	1349	SQ. YD.
202	REMOVAL AND DISPOSAL OF CONCRETE ISLANDS	43	SQ. YD.
202	REMOVAL AND DISPOSAL OF CONCRETE DRIVEWAYS	1787	SQ. YD.
202	REMOVAL AND DISPOSAL OF WALKS	2070	SQ. YD.
202	REMOVAL AND DISPOSAL OF SIGN FOUNDATIONS	8	EACH
202	REMOVAL AND DISPOSAL OF DROP INLETS	15	EACH
202	REMOVAL AND DISPOSAL OF PIPE CULVERTS	13	EACH
202	REMOVAL AND DISPOSAL OF SIGNS	8	EACH
210	UNCLASSIFIED EXCAVATION	1472	CU. YD.
210	COMPACTED EMBANKMENT	4309	CU. YD.
SP & 210	SOIL STABILIZATION	80	TON
303	AGGREGATE BASE COURSE (CLASS 7)	1816	TON
309	PORTLAND CEMENT CONCRETE BASE (4" UNIFORM THICKNESS)	6759	SQ. YD.
401	TACK COAT	5013	GAL.
SP & 405	MINERAL AGGREGATE IN ACHM BASE COURSE (1 1/2")	3494	TON
SP & 405	ASPHALT BINDER (PG 70-22) IN ACHM BASE COURSE (1 1/2")	146	TON
SP, SS, & 406	MINERAL AGGREGATE IN ACHM BINDER COURSE (1")	2153	TON
SP, SS, & 406	ASPHALT BINDER (PG 70-22) IN ACHM BINDER COURSE (1")	92	TON
SP, SS, & 407	MINERAL AGGREGATE IN ACHM SURFACE COURSE (1/2")	6181	TON
SP, SS, & 407	ASPHALT BINDER (PG 64-22) IN ACHM SURFACE COURSE (1/2")	12	TON
SP, SS, & 407	ASPHALT BINDER (PG 76-22) IN ACHM SURFACE COURSE (1/2")	306	TON
412	COLD MILLING ASPHALT PAVEMENT	3697	SQ. YD.
SP & 414	ASPHALT CONCRETE PATCHING FOR MAINTENANCE OF TRAFFIC	18	TON
SP & 415	ACHM PATCHING OF EXISTING ROADWAY	25	TON
505	PORTLAND CEMENT CONCRETE DRIVEWAY	3556.40	SQ. YD.
601	MOBILIZATION	1.00	LUMP SUM
SP & 602	FURNISHING FIELD OFFICE	1	EACH
SP & 603	MAINTENANCE OF TRAFFIC	1.00	LUMP SUM
604	SIGNS	446	SQ. FT.
604	BARRICADES	32	LIN. FT.
604	TRAFFIC DRUMS	365	EACH
604	CONSTRUCTION PAVEMENT MARKINGS	11129	LIN. FT.
604	CONSTRUCTION PAVEMENT MARKINGS (WORDS)	7	EACH
604	CONSTRUCTION PAVEMENT MARKINGS (ARROWS)	8	EACH
605	CONCRETE DITCH PAVING (TYPE B)	34	SQ. YD.
606	18" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)	59	LIN. FT.
606	18" REINFORCED CONCRETE PIPE CULVERTS (CLASS III) (ALTERNATE NO. 1)	4326	LIN. FT.
606	18" SMOOTH LINED POLYMER PRECOATED METALLIC COATED CORRUGATED STEEL PIPE (ALTERNATE NO. 2)	4326	LIN. FT.
606	18" REINFORCED CONCRETE PIPE CULVERTS (CLASS IV)	31	LIN. FT.
606	18" REINFORCED CONCRETE PIPE CULVERTS (CLASS V)	180	LIN. FT.
606	24" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)	126	LIN. FT.
606	24" REINFORCED CONCRETE PIPE CULVERTS (CLASS III) (ALTERNATE NO. 1)	76	LIN. FT.
606	24" SMOOTH LINED POLYMER PRECOATED METALLIC COATED CORRUGATED STEEL PIPE (ALTERNATE NO. 2)	76	LIN. FT.
606	24" REINFORCED CONCRETE PIPE CULVERTS (CLASS IV)	59	LIN. FT.
606	12" SIDE DRAIN	465	LIN. FT.
606	24" FLARED END SECTIONS FOR REINFORCED CONCRETE PIPE CULVERTS	1	EACH
606	SELECTED PIPE BEDDING	300	CU. YD.
609	DROP INLETS (TYPE C)	4	EACH
609	DROP INLETS (TYPE MO)	33	EACH
609	DROP INLETS (TYPE ST)	11	EACH
609	JUNCTION BOXES (TYPE E)	5	EACH
609	JUNCTION BOXES (TYPE ST)	5	EACH
609	DROP INLET EXTENSIONS (4')	7	EACH
609	DROP INLET EXTENSIONS (8')	8	EACH
609	YARD DRAINS	5	EACH
611	4" PIPE UNDERDRAINS	1000	LIN. FT.
615	PAVEMENT REPAIR OVER CULVERTS (CONCRETE)	124.0	CU. YD.
SP	TEMPORARY FENCE	263	LIN. FT.
SS & 620	MULCH COVER	4.59	ACRE
620	WATER	143.6	M.GAL.
621	TEMPORARY SEEDING	4.59	ACRE
621	SILT FENCE	1575	LIN. FT.
621	SAND BAG DITCH CHECKS	220	BAG
621	DROP INLET SILT FENCE	2085	LIN. FT.
621	SEDIMENT BASIN	32	CU. YD.
621	OBLITERATION OF SEDIMENT BASIN	32	CU. YD.
621	SEDIMENT REMOVAL AND DISPOSAL	177	CU. YD.
624	SOLID SODDING	3962	SQ. YD.
632	CONCRETE ISLAND	1246	SQ. YD.
633	CONCRETE WALKS	1891	SQ. YD.
633	HAND RAILING	135	LIN. FT.
634	CONCRETE CURB (TYPE D)	361	LIN. FT.
634	CONCRETE COMBINATION CURB AND GUTTER (TYPE A) (1' 6")	8216	LIN. FT.
635	ROADWAY CONSTRUCTION CONTROL	1.00	LUMP SUM
641	WHEELCHAIR RAMPS (TYPE 3)	101	SQ. YD.
SP & 701	SYSTEM LOCAL CONTROLLER TS 2-TYPE 2 (8 PHASES)	1	EACH
SP	ANTENNA SUPPORT (SHOE BASE, 30' HT.)	1	EACH
SP	LOCAL RADIO WITH ANTENNA	1	EACH
703	FLASHING BEACON CONTROLLER	1	EACH
704	FEEDER WIRE	140	LIN. FT.
SP	ANTENNA CABLE (TYPE 6)	70	LIN. FT.

* DENOTES ALTERNATE BID ITEMS.

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.	061194
								28
								141

2 SUMMARY OF QUANTITIES AND REVISIONS



SUMMARY OF QUANTITIES (BOX 2 OF 2)

ITEM NUMBER	ITEM	QUANTITY	UNIT
SP & 706	TRAFFIC SIGNAL HEAD, LED, (3 SECTION, 1 WAY)	11	EACH
SP & 706	TRAFFIC SIGNAL HEAD, LED, (4 SECTION, 1 WAY)	4	EACH
SP & 707	CENTRAL CONTROL UNIT	1	EACH
SP & 707	POLE MOUNTED ASSEMBLY	6	EACH
SP & 707	INFRARED PROGRAMMING DEVICE	1	EACH
SP & 707	COUNTDOWN PEDESTRIAN SIGNAL HEAD, LED	6	EACH
708	TRAFFIC SIGNAL CABLE (5C/14 A.W.G.)	1681	LIN. FT.
708	TRAFFIC SIGNAL CABLE (7C/14 A.W.G.)	260	LIN. FT.
708	TRAFFIC SIGNAL CABLE (20C/14 A.W.G.)	733	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/8 A.W.G., EGC)	567	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/12 A.W.G., EGC)	110	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (2C/6 A.W.G.)	90	LIN. FT.
SP	ELECTRICAL CONDUCTORS FOR LUMINAIRES	355	LIN. FT.
709	GALVANIZED STEEL CONDUIT (1.25")	40	LIN. FT.
710	NON-METALLIC CONDUIT (1.25")	40	LIN. FT.
710	NON-METALLIC CONDUIT (2")	140	LIN. FT.
710	NON-METALLIC CONDUIT (3")	630	LIN. FT.
711	CONCRETE PULL BOX (TYPE 2)	4	EACH
711	CONCRETE PULL BOX (TYPE 1 HD)	2	EACH
711	CONCRETE PULL BOX (TYPE 2 HD)	4	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (24')	1	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (26')	1	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (44')	1	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (56')	2	EACH
SP	LUMINAIRE ASSEMBLY	2	EACH
715	TRAFFIC SIGNAL PEDESTAL POLE WITH FOUNDATION	1	EACH
SP	SERVICE POINT ASSEMBLY (2 CIRCUITS)	2	EACH
SP	RELOCATION OF TRAFFIC SIGNAL EQUIPMENT	1.00	LUMP SUM
SP	REMOVAL OF TRAFFIC SIGNAL EQUIPMENT	1.00	LUMP SUM
726	STANDARD SIGN	33	SQ. FT.
SP	18" STREET NAME SIGN	4	EACH
718	REFLECTORIZED PAINT PAVEMENT MARKING WHITE (10")	296	LIN. FT.
719	THERMOPLASTIC PAVEMENT MARKING WHITE (4")	2524	LIN. FT.
719	THERMOPLASTIC PAVEMENT MARKING WHITE (8")	194	LIN. FT.
719	THERMOPLASTIC PAVEMENT MARKING WHITE (12")	578	LIN. FT.
719	THERMOPLASTIC PAVEMENT MARKING YELLOW (4")	9103	LIN. FT.
719	THERMOPLASTIC PAVEMENT MARKING (WORDS)	12	EACH
719	THERMOPLASTIC PAVEMENT MARKING (ARROWS)	10	EACH
721	RAISED PAVEMENT MARKERS (TYPE II)	185	EACH
SP & 733	VIDEO DETECTOR (CLR)	9	EACH
733	VIDEO CABLE	1972	LIN. FT.
733	VIDEO MONITOR (CLR)	1	EACH
SP & 733	VIDEO PROCESSOR, EDGE CARD (2 CAMERA)	5	EACH
SP & 733	VIDEO EDGE CARD EXTENDER	2	EACH
SP & 733	VEHICLE DETECTOR RACK (24 CHANNEL)	1	EACH
801	UNCLASSIFIED EXCAVATION FOR STRUCTURES-ROADWAY	534	CU. YD.
802	CLASS S CONCRETE-ROADWAY	198.51	CU. YD.
804	REINFORCING STEEL-ROADWAY (GRADE 60)	17993	POUND
SP	STONE MASONRY FACING	266	SQ. YD.

REVISIONS

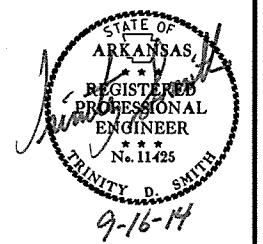
DATE	REVISION	SHEET NUMBER

4/10/2013

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	061194	29	141	

2 SURVEY CONTROL DETAILS



Coordinate System: ARKANSAS STATE PLANE - NORTH ZONE BASED ON GPS CONTROL, PROJECTED TO GROUND.
 Units: U.S. SURVEY FOOT

Point Name	Northing	Easting	Elev	Feature	Description
1	159457.1725	1205452.7717	567.115	CTL	5/8" REBAR W/2" CAP
19	159904.4748	1204682.9077	590.015	CTL	5/8" REBAR W/2" CAP
20	159571.1393	1205232.8886	569.053	CTL	5/8" REBAR W/2" CAP
22	159115.8844	1205383.4791	563.641	CTL	5/8" REBAR W/2" CAP
23	159344.5371	1205760.2519	555.721	CTL	5/8" REBAR W/2" CAP
24	159076.3529	1206062.8468	558.232	CTL	5/8" REBAR W/2" CAP
25	158870.5883	1206499.9922	554.116	CTL	5/8" REBAR W/2" CAP
26	158481.8072	1207110.8546	570.247	CTL	5/8" REBAR W/2" CAP
27	158619.6731	1207776.5831	573.660	CTL	5/8" REBAR W/2" CAP
28	158545.3658	1208229.7620	578.919	CTL	5/8" REBAR W/2" CAP
29	158604.1860	1208569.2953	575.362	CTL	5/8" REBAR W/2" CAP
100	157251.0058	1204643.4738	507.788	GPS	AHTD GPS 600054
101	159710.6682	1204774.5972	584.927	GPS	AHTD GPS 600054A
901	159720.7906	1204806.2628	585.000	TBM	CHISELED SQ. BACK OF CURB
902	159116.1184	1206011.0105	559.341	TBM	SIGN BASE
903	158527.1111	1207545.1372	575.206	TBM	CHISELED SQ. BACK OF CURB
904	158607.6481	1208607.9591	571.438	TBM	CHISELED SQ. BACK OF CURB
1501	159437.1511	1204712.4913	569.718	CTL	5/8" REBAR W/2" CAP
1502	158771.9859	1204745.7874	502.895	CTL	5/8" REBAR W/2" CAP
1503	158447.4381	1204733.5222	500.010	CTL	5/8" REBAR W/2" CAP
1504	158834.3735	1206702.0274	549.985	CTL	5/8" REBAR W/2" CAP
1505	159062.3899	1206706.1708	513.412	CTL	5/8" REBAR W/2" CAP
1506	159231.0383	1206709.2050	498.603	CTL	5/8" REBAR W/2" CAP

*Note - Rebar and Cap - Standard - 5/8" Rebar with 2" Aluminum Cap stamped *(standard markings common to all caps), or as indicated (other markings indicated in the point description of the individual point).
 ALL DISTANCES ARE GROUND.
 USE CAF = 1.0 FOR STAKEOUT FOR THIS PROJECT.
 A PROJECT CAF OF 1.00001253 HAS BEEN USED TO COMPUTE THE ABOVE GROUND COORDINATES. THIS CAF IS INTENDED FOR USE WITHIN THE PROJECT LIMITS.
 GRID DISTANCE = GROUND DISTANCE X CAF.
 GRID COORDINATES ARE STORED UNDER FILE NAME, S061194G1.CTL
 HORIZONTAL DATUM: NAD 83 (1997)
 VERTICAL DATUM: NAVD 88 POSITIONAL ACCURACY THIRD ORDER, UNLESS SPECIFIED OTHERWISE AT A SPECIFIC POINT.

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

BASIS OF BEARING:
 ARKANSAS STATE PLANE GRID BEARINGS - 0301-NORTH ZONE
 DETERMINED FROM GPS CONTROL POINTS: 600054-600054A
 CONVERGENCE ANGLE: 0 12 18.05 LEFT AT LT: 34-46-09.45 LG: 92-21-08.34
 GRID AZIMUTH = ASTRONOMICAL AZIMUTH - CONVERGENCE ANGLE.

HWY. 10

POINT NO.	TYPE	STATION	NORTHING	EASTING
8000	POB	100+00.00	160277.6748	1204197.0496
8001	PC	106+16.73	159875.0575	1204664.2329
8003	PT	108+98.52	159707.4877	1204890.4598
8004	PC	110+37.84	159633.0406	1205008.2183
8006	PT	112+83.27	159539.6397	1205233.8883
8007	PC	115+89.39	159472.5160	1205532.5555
8009	PT	119+74.25	159299.0485	1205871.5580
8010	PC	124+53.51	158981.2858	1206230.3295
8012	PT	127+56.71	158819.3481	1206485.1564
8013	PC	128+63.99	158776.8474	1206583.6562
8015	PT	130+26.72	158702.0045	1206727.9974
8016	PC	132+62.88	158578.6968	1206929.4099
8018	PT	135+35.78	158514.9225	1207190.2905
8019	PC	137+62.08	158530.7148	1207416.0415
8021	PT	138+38.63	158542.6437	1207491.5534
8022	PC	139+48.02	158569.0195	1207597.7170
8024	PT	141+00.93	158585.7674	1207749.2523
8025	PC	161+08.55	158538.8618	1209756.3308
8027	PT	162+22.31	158535.0755	1209870.0175
8028	POE	180+99.15	158453.9851	1211745.1085

GEORGIA AVE.

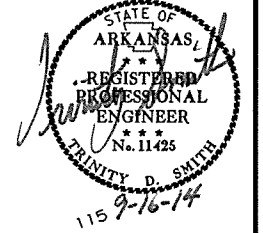
POINT NO.	TYPE	STATION	NORTHING	EASTING
8029	POB	115+41.29	159483.0620	1205485.6311
8030	POE	114+61.29	159500.6046	1205407.5755

PERRYVILLE RD.

POINT NO.	TYPE	STATION	NORTHING	EASTING
8043	POB	139+28.33	158564.2724	1207578.6097
8044	PI	142+19.18	158583.0046	1207867.4709
8045	PC	143+71.75	158579.4400	1208020.0001
8047	PT	145+19.72	158575.9827	1208167.9352
8048	POE	145+97.30	158574.1704	1208245.4856

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 061194							30	141

2 SURVEY CONTROL DETAILS



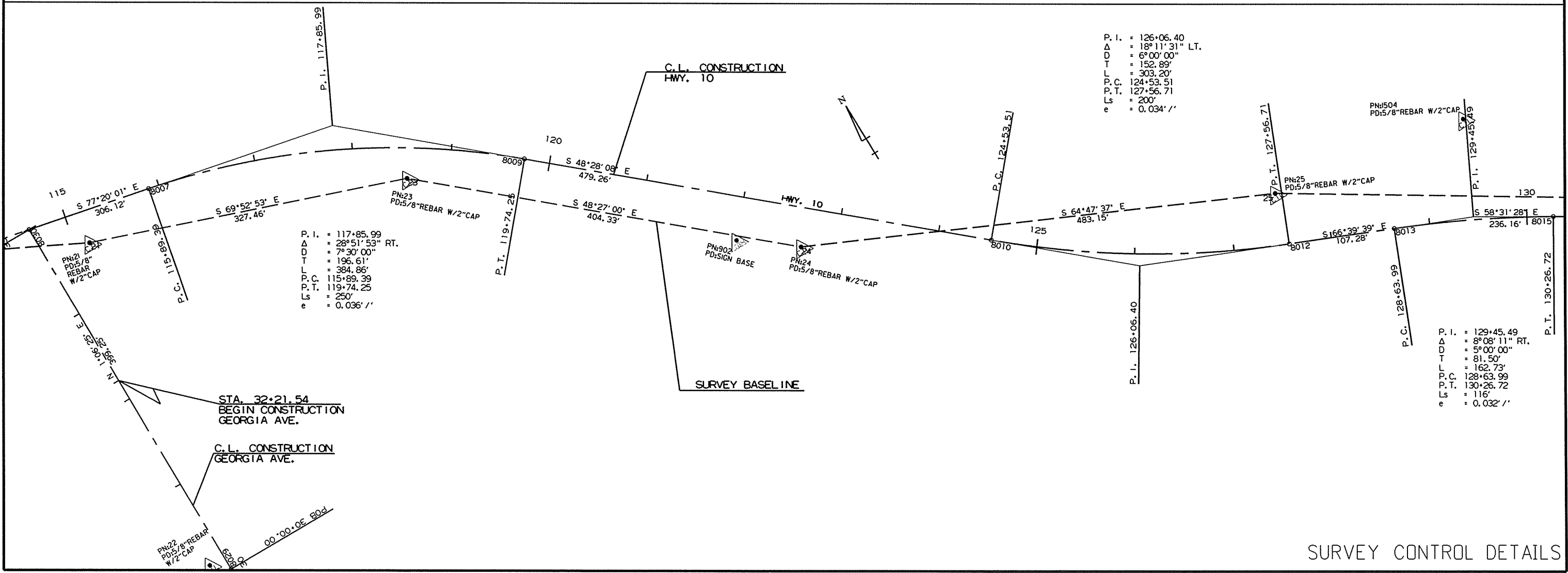
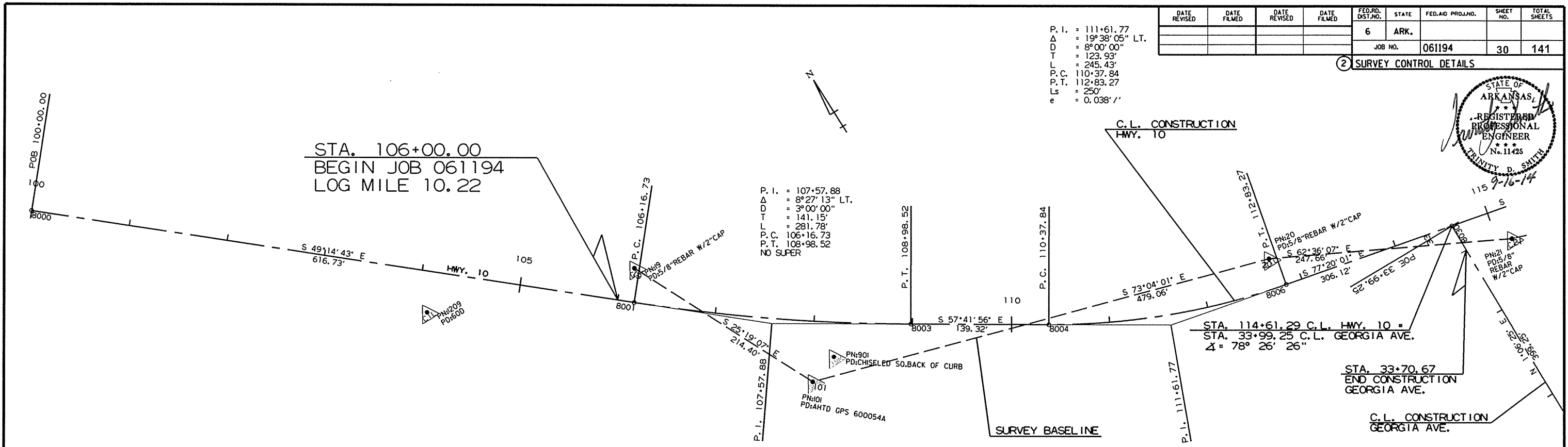
P. I. = 111+61.77
 Δ = 19° 38' 05" LT.
D = 8° 00' 00"
T = 123.93'
L = 245.43'
P.C. 110+37.84
P.T. 112+83.27
Ls = 250'
e = 0.038' /'

P. I. = 107+57.88
 Δ = 8° 27' 13" LT.
D = 3° 00' 00"
T = 141.15'
L = 281.78'
P.C. 106+16.73
P.T. 108+98.52
NO SUPER

P. I. = 126+06.40
 Δ = 18° 11' 31" LT.
D = 6° 00' 00"
T = 152.89'
L = 303.20'
P.C. 124+53.51
P.T. 127+56.71
Ls = 200'
e = 0.034' /'

P. I. = 117+85.99
 Δ = 28° 51' 53" RT.
D = 7° 30' 00"
T = 196.61'
L = 384.86'
P.C. 115+89.39
P.T. 119+74.25
Ls = 250'
e = 0.036' /'

P. I. = 129+45.49
 Δ = 8° 08' 11" RT.
D = 5° 00' 00"
T = 81.50'
L = 162.73'
P.C. 128+63.99
P.T. 130+26.72
Ls = 116'
e = 0.032' /'



SURVEY CONTROL DETAILS

4/25/2013

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				6	ARK.			
JOB NO. 061194							31	141

2 SURVEY CONTROL DETAILS

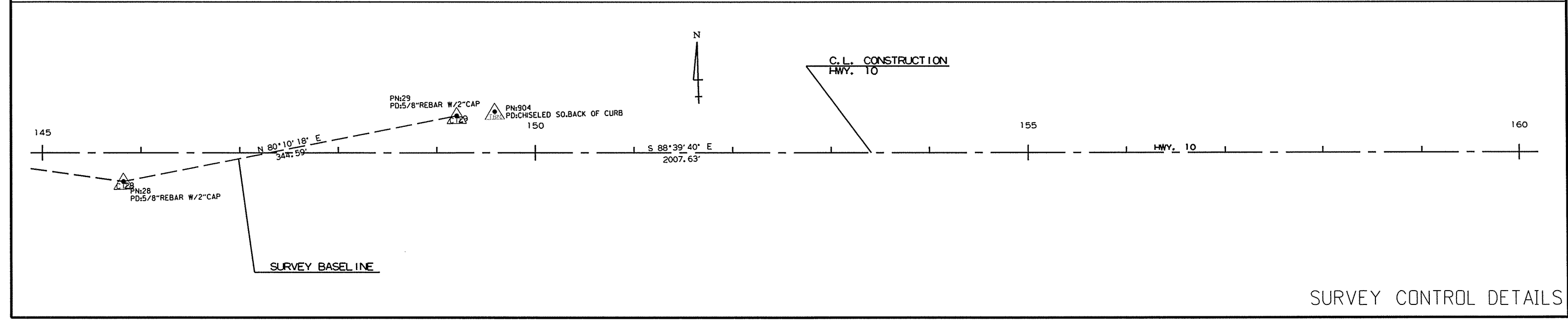
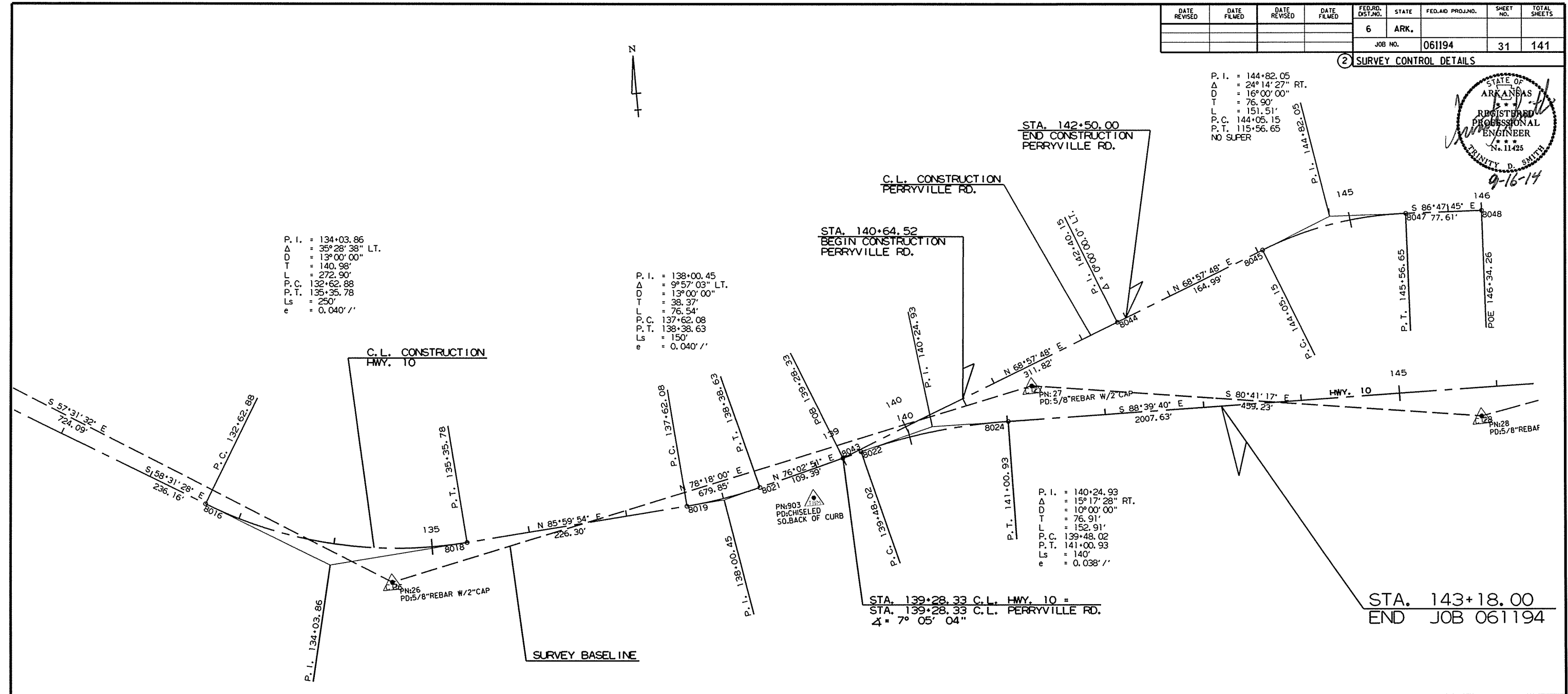
P. I. = 144+82.05
 Δ = 24° 14' 27" RT.
 D = 16° 00' 00"
 T = 76.90'
 L = 151.51'
 P. C. 144+05.15
 P. T. 115+56.65
 NO SUPER



P. I. = 134+03.86
 Δ = 35° 28' 38" LT.
 D = 13° 00' 00"
 T = 140.98'
 L = 272.90'
 P. C. 132+62.88
 P. T. 135+35.78
 Ls = 250'
 e = 0.040' /'

P. I. = 138+00.45
 Δ = 9° 57' 03" LT.
 D = 13° 00' 00"
 T = 38.37'
 L = 76.54'
 P. C. 137+62.08
 P. T. 138+38.63
 Ls = 150'
 e = 0.040' /'

P. I. = 140+24.93
 Δ = 15° 17' 28" RT.
 D = 10° 00' 00"
 T = 76.91'
 L = 152.91'
 P. C. 139+48.02
 P. T. 141+00.93
 Ls = 140'
 e = 0.038' /'



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



STA. 107+93 CONSTRUCT APPROACH ON LT. = 10 CU. YDS.
 STA. 108+96 CONSTRUCT APPROACH ON LT.
 STA. 109+51 CONSTRUCT APPROACH ON LT. = 5 CU. YDS.

STA. 107+56 - CONSTRUCT D.I. ON LT. & OPENING IN BACK & 18" x 106' PIPE OUTLET CONNECT TO J.B. @ STA. 108+68 LT. TY C = 4' x 4' TY MO = 4' H = 3'-0"

P.I. = 107+57.88
 Δ = 8°27'13" LT.
 D = 3°00'00"
 T = 141.15'
 L = 281.78'
 P.C. 106+16.73
 P.T. 108+98.52
 NO SUPER

STA. 108+68 - CONSTRUCT D.I. ON JUNCTION BOX ON LT. & OPENING IN BACK & 18" x 224' PIPE OUTLET CONNECT TO D.I. @ STA. 111+00 LT. TY ST = 4' x 4' H = 5'-0"

STA. 110+38 - CONSTRUCT YARD DRAIN ON LT. & 12" x 37' PIPE OUTLET CONNECT TO D.I. @ STA. 110+78 LT. H = 3'-0"

STA. 110+78 - CONSTRUCT D.I. ON LT. & 18" x 24' PIPE OUTLET CONNECT TO D.I. @ STA. 111+00 LT. TY ST = 4' x 4' H = 4'-0"

STA. 111+00 - CONSTRUCT D.I. ON LT. & 18" x 131' PIPE OUTLET CONNECT TO J.B. @ STA. 112+43.36 LT. TY C = 6' x 6' TY MO = 6' H = 4'-0"

STA. 110+59 CONSTRUCT APPROACH ON LT. = 5 CU. YDS.

STA. 111+61 CONSTRUCT APPROACH ON LT. = 15 CU. YDS.

STA. 112+43.36 - CONSTRUCT JUNCTION BOX ON LT. CONNECT TO EXISTING PIPE OUTLET TY ST = 4' x 4' H = 4'-5"

STA. 112+60 - CONSTRUCT D.I. ON LT. 18" x 14' R.C. PIPE OUTLET (CLASS IV) CONNECT TO J.B. @ STA. 112+43.36 LT. TY ST = 4' x 4' H = 4'-1"

STA. 112+80 - CONSTRUCT JUNCTION BOX ON LT. 18" x 17' R.C. PIPE OUTLET (CLASS IV) CONNECT TO D.I. @ STA. 112+60 LT. TY E = 4' x 4' H = 4'-6"

STA. 112+42 IN PLACE DROP INLET WITH PIPE CULVERT OUTLET ON LT. REMOVE

STA. 112+46 CONSTRUCT APPROACH ON LT. = 35 CU. YDS.

STA. 113+12 CONSTRUCT APPROACH ON LT. = 5 CU. YDS.

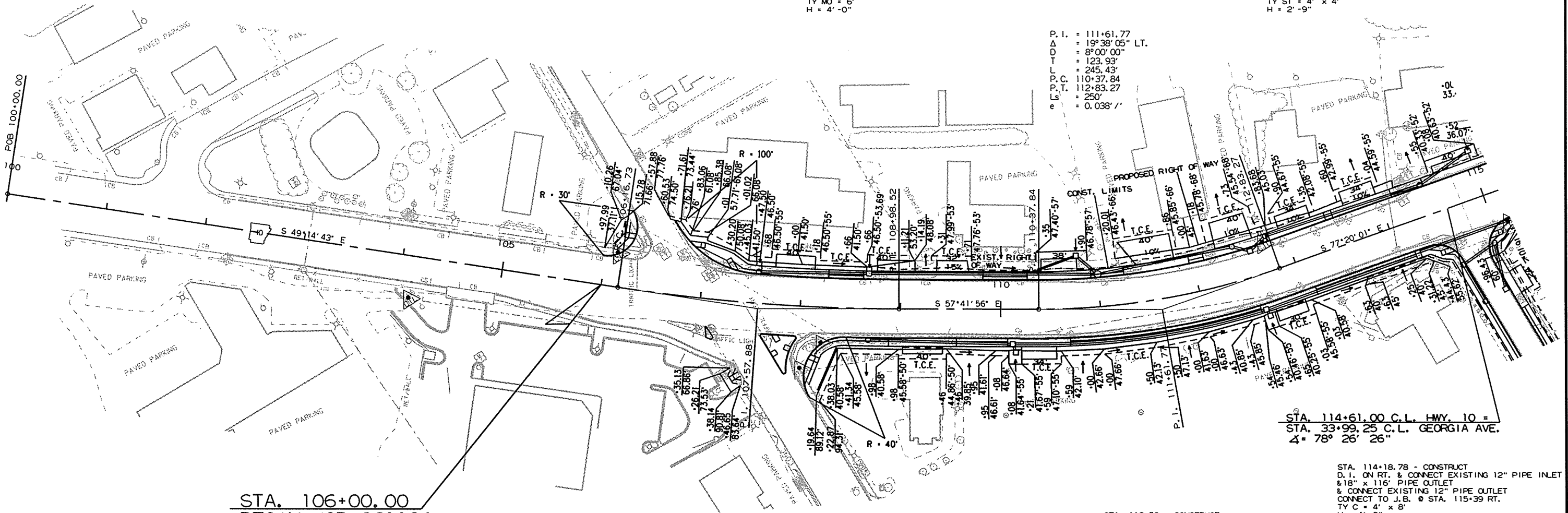
STA. 113+82 CONSTRUCT APPROACH ON LT. = 5 CU. YDS.

STA. 114+80 CONSTRUCT APPROACH ON LT.

STA. 114+43 - CONSTRUCT D.I. ON LT. & 18" x 159' PIPE OUTLET CONNECT TO J.B. @ STA. 112+80 LT. TY C = 4' x 4' MO = 4' H = 3'-9"

STA. 115+00 - CONSTRUCT D.I. ON LT. & 18" x 55' PIPE OUTLET CONNECT TO D.I. @ STA. 114+43 LT. TY ST = 4' x 4' H = 2'-9"

P.I. = 111+61.77
 Δ = 19°38'05" LT.
 D = 8°00'00"
 T = 123.93'
 L = 245.43'
 P.C. 110+37.84
 P.T. 112+83.27
 E = 250'
 e = 0.038' /'



STA. 106+00.00
 BEGIN JOB 061194
 LOG MILE 10.22

STA. 107+07+45 - STA. 107+20.25 ON RIGHT REMOVE 15 SQ. YDS. OF CONCRETE ISLAND STA. 107+07.45 - STA. 107+15.74 CONSTRUCT 6 SQ. YDS. OF CONCRETE ISLAND WITH TYPE C CURB

STA. 107+59 - STA. 107+75 ON RIGHT REMOVE 13 SQ. YDS. OF CONCRETE ISLAND STA. 107+62 - STA. 107+97 CONSTRUCT 69 SQ. YDS. OF CONCRETE ISLAND WITH TYPE C CURB

STA. 107+41 ON RT. CONSTRUCT TYPE 3 WHEELCHAIR RAMP = 3.7 SQ. YDS.

STA. 107+75 ON RT. CONSTRUCT TYPE 3 WHEELCHAIR RAMP = 3.3 SQ. YDS.

STA. 107+78 ON RT. CONSTRUCT TYPE 3 WHEELCHAIR RAMP = 4.3 SQ. YDS.

STA. 107+88 ON RT. CONSTRUCT TYPE 3 WHEELCHAIR RAMP = 3.4 SQ. YDS.

STA. 108+13 ON RT. CONSTRUCT TYPE 3 WHEELCHAIR RAMP = 3.6 SQ. YDS.

STA. 108+68 - CONSTRUCT D.I. ON RT. & 18" x 141' PIPE OUTLET CONNECT TO J.B. @ STA. 110+12 RT. TY C = 4' x 4' TY MO = 4' H = 6'-0"

STA. 108+20 - STA. 108+37 ON RIGHT IN PARKING LOT = 48 LIN. FT. TYPE D CURB

STA. 110+12 - CONSTRUCT JUNCTION BOX ON RT. & 18" x 253' PIPE OUTLET CONNECT TO J.B. @ STA. 112+58 RT. TY ST = 4' x 4' H = 5'-0"

STA. 110+15 - CONSTRUCT D.I. ON RT. & 18" x 5' PIPE OUTLET CONNECT TO J.B. @ STA. 110+12 RT. TY ST = 4' x 4' H = 3'-9"

STA. 109+22 CONSTRUCT APPROACH ON RT.

STA. 110+38 CONSTRUCT APPROACH ON RT. = 5 CU. YDS.

STA. 112+58 - CONSTRUCT JUNCTION BOX ON RT. & 18" x 158' PIPE OUTLET CONNECT TO D.I. @ STA. 114+18.78 RT. TY ST = 4' x 4' H = 5'-0"

STA. 112+60 - CONSTRUCT D.I. ON RT. & 18" x 4' PIPE OUTLET CONNECT TO J.B. @ STA. 112+58 RT. TY ST = 4' x 4' H = 4'-3"

STA. 112+82 CONSTRUCT APPROACH ON RT.

STA. 114+48 ON RT. CONSTRUCT TYPE 3 WHEELCHAIR RAMP = 4.6 SQ. YDS.

STA. 114+97 ON RT. CONSTRUCT TYPE 3 WHEELCHAIR RAMP = 4.6 SQ. YDS.

STA. 114+18 IN PLACE DROP INLET ON RT. REMOVE

STA. 114+61.00 C.L. HWY. 10 =
 STA. 33+99.25 C.L. GEORGIA AVE.
 Δ = 78°26'26"

STA. 114+18.78 - CONSTRUCT D.I. ON RT. & CONNECT EXISTING 12" PIPE INLET & 18" x 116' PIPE OUTLET & CONNECT EXISTING 12" PIPE OUTLET CONNECT TO J.B. @ STA. 115+39 RT. TY C = 4' x 8' H = 4'-9"

ALL R.C. PIPE CULVERTS SHALL BE CLASS III UNLESS OTHERWISE SPECIFIED. FOR ALL R.C. PIPE CULVERT INSTALLATIONS USE TYPE 3 BEDDING UNLESS OTHERWISE SPECIFIED. FOR ALL C.M. PIPE CULVERT INSTALLATIONS USE TYPE 2 BEDDING UNLESS OTHERWISE SPECIFIED.

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

4/10/2013

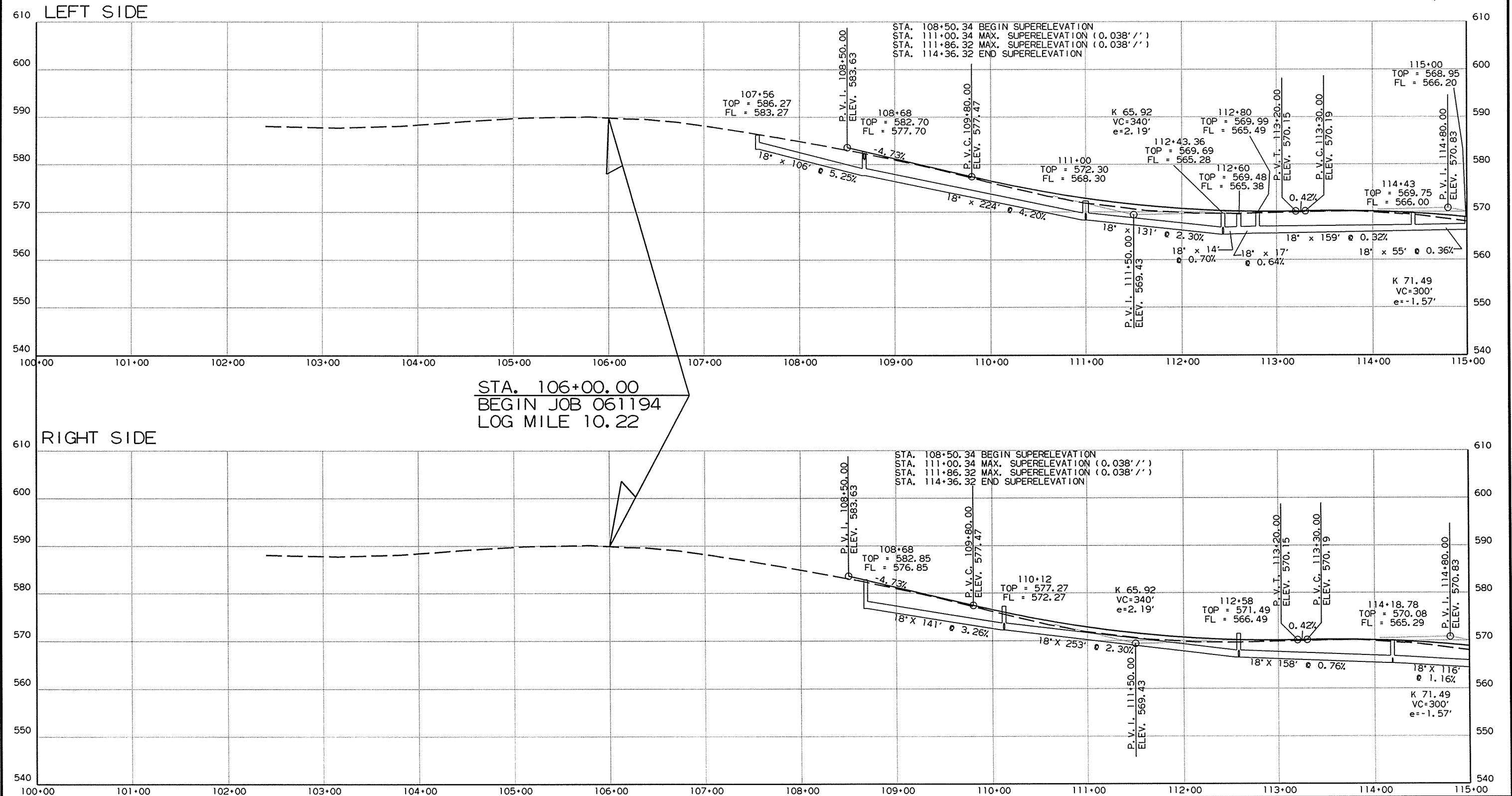
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ALL R. C. PIPE CULVERTS SHALL BE CLASS III UNLESS OTHERWISE SPECIFIED. FOR ALL R. C. PIPE CULVERT INSTALLATIONS USE TYPE 3 BEDDING UNLESS OTHERWISE SPECIFIED. FOR ALL C. M. PIPE CULVERT INSTALLATIONS USE TYPE 2 BEDDING UNLESS OTHERWISE SPECIFIED.

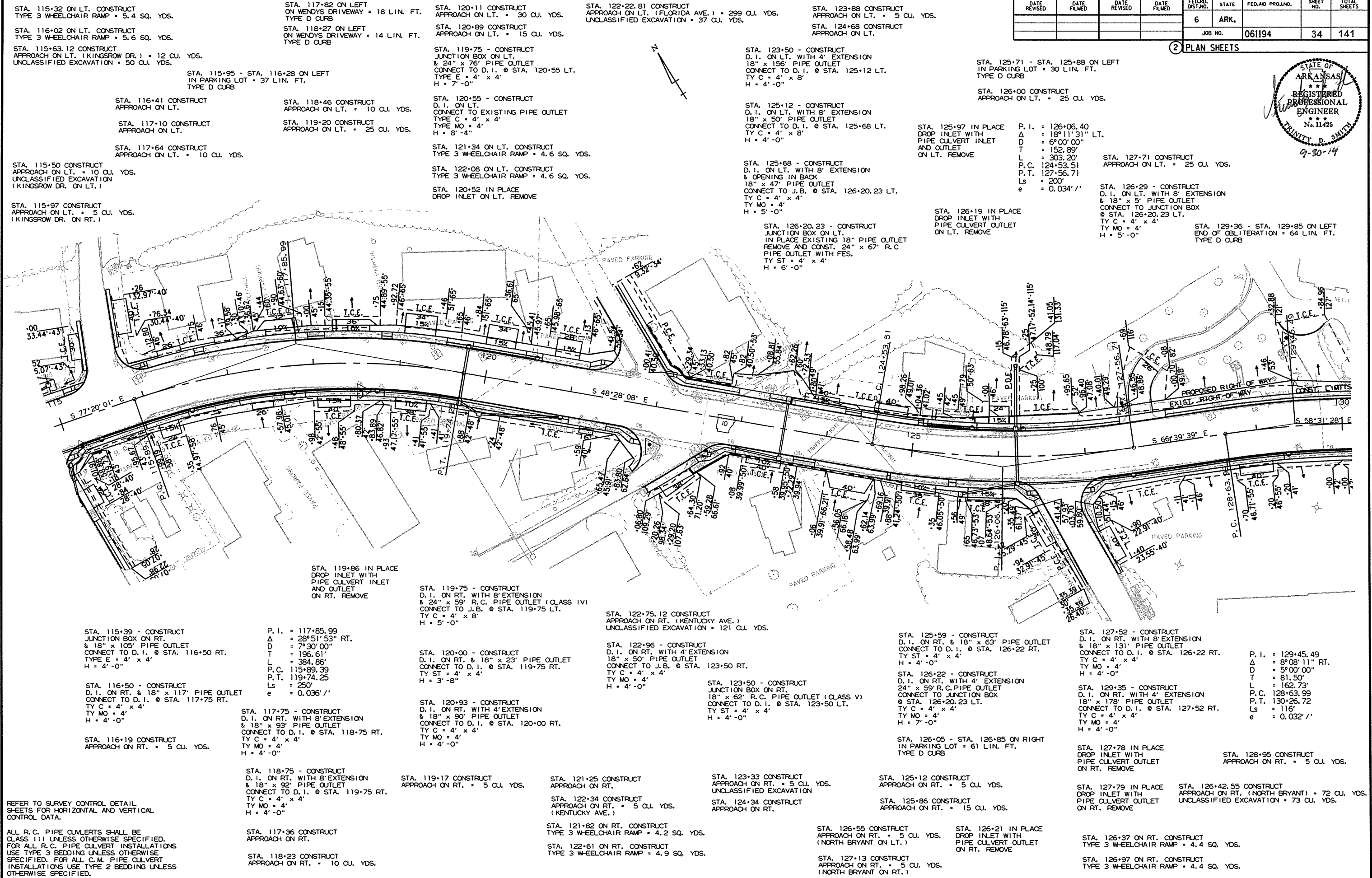
REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 061194							33	141

2 PROFILE SHEETS



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2 PLAN SHEETS



STA. 115+32 ON LT. CONSTRUCT TYPE 3 WHEEL-CHAIR RAMP = 5.4 SQ. YDS.
 STA. 116+02 ON LT. CONSTRUCT TYPE 3 WHEEL-CHAIR RAMP = 5.6 SQ. YDS.
 STA. 115+63.12 CONSTRUCT APPROACH ON LT. (KINGSROW DR.) = 12 CU. YDS. UNCLASSIFIED EXCAVATION = 50 CU. YDS.
 STA. 115+97 CONSTRUCT APPROACH ON LT. = 5 CU. YDS. (KINGSROW DR. ON RT.)
 STA. 116+41 CONSTRUCT APPROACH ON LT.
 STA. 117+10 CONSTRUCT APPROACH ON LT.
 STA. 117+64 CONSTRUCT APPROACH ON LT. = 10 CU. YDS.
 STA. 115+50 CONSTRUCT APPROACH ON LT. = 10 CU. YDS. UNCLASSIFIED EXCAVATION (KINGSROW DR. ON LT.)

STA. 117+82 ON LEFT ON WENDYS DRIVEWAY = 18 LIN. FT. TYPE D CURB
 STA. 118+27 ON LEFT ON WENDYS DRIVEWAY = 14 LIN. FT. TYPE D CURB
 STA. 115+95 - STA. 116+28 ON LEFT IN PARKING LOT = 37 LIN. FT. TYPE D CURB
 STA. 118+46 CONSTRUCT APPROACH ON LT. = 10 CU. YDS.
 STA. 119+20 CONSTRUCT APPROACH ON LT. = 25 CU. YDS.
 STA. 119+86 IN PLACE DROP INLET WITH PIPE CULVERT INLET AND OUTLET ON RT. REMOVE

STA. 120+11 CONSTRUCT APPROACH ON LT. = 30 CU. YDS.
 STA. 120+89 CONSTRUCT APPROACH ON LT. = 15 CU. YDS.
 STA. 119+75 - CONSTRUCT JUNCTION BOX ON LT. & 24" x 76" PIPE OUTLET CONNECT TO D.I. @ STA. 120+55 LT. TY C = 4' x 4' H = 7'-0"
 STA. 120+55 - CONSTRUCT D.I. ON LT. CONNECT TO EXISTING PIPE OUTLET TYPE C = 4' x 4' TY MO = 4' H = 8'-4"
 STA. 121+34 ON LT. CONSTRUCT TYPE 3 WHEEL-CHAIR RAMP = 4.6 SQ. YDS.
 STA. 122+08 ON LT. CONSTRUCT TYPE 3 WHEEL-CHAIR RAMP = 4.6 SQ. YDS.
 STA. 120+52 IN PLACE DROP INLET ON LT. REMOVE

STA. 122+22.81 CONSTRUCT APPROACH ON LT. (FLORIDA AVE.) = 299 CU. YDS. UNCLASSIFIED EXCAVATION = 37 CU. YDS.
 STA. 123+88 CONSTRUCT APPROACH ON LT. = 5 CU. YDS.
 STA. 124+68 CONSTRUCT APPROACH ON LT.
 STA. 123+50 - CONSTRUCT D.I. ON LT. WITH 4' EXTENSION 18" x 156" PIPE OUTLET CONNECT TO D.I. @ STA. 125+12 LT. TY C = 4' x 8' H = 4'-0"
 STA. 125+12 - CONSTRUCT D.I. ON LT. WITH 8' EXTENSION 18" x 50" PIPE OUTLET CONNECT TO D.I. @ STA. 125+68 LT. TY C = 4' x 8' H = 4'-0"
 STA. 125+68 - CONSTRUCT D.I. ON LT. WITH 8' EXTENSION & OPENING IN BACK 18" x 47" PIPE OUTLET CONNECT TO J.B. @ STA. 126+20.23 LT. TY C = 4' x 4' TY MO = 4' H = 5'-0"
 STA. 126+20.23 - CONSTRUCT JUNCTION BOX ON LT. IN PLACE EXISTING 18" PIPE OUTLET REMOVE AND CONST. 24" x 67" R.C. PIPE OUTLET WITH FES. TY ST = 4' x 4' H = 6'-0"

STA. 125+71 - STA. 125+88 ON LEFT IN PARKING LOT = 30 LIN. FT. TYPE D CURB
 STA. 126+00 CONSTRUCT APPROACH ON LT. = 25 CU. YDS.
 STA. 125+97 IN PLACE DROP INLET WITH PIPE CULVERT INLET AND OUTLET ON LT. REMOVE
 STA. 126+19 IN PLACE DROP INLET WITH PIPE CULVERT OUTLET ON LT. REMOVE
 STA. 127+71 CONSTRUCT APPROACH ON LT. = 25 CU. YDS.
 STA. 126+29 - CONSTRUCT D.I. ON LT. WITH 8' EXTENSION & 18" x 5" PIPE OUTLET CONNECT TO JUNCTION BOX @ STA. 126+20.23 LT. TY C = 4' x 4' TY MO = 4' H = 5'-0"
 STA. 129+36 - STA. 129+85 ON LEFT END OF OBLITERATION = 64 LIN. FT. TYPE D CURB
 P.I. = 125+06.40
 Δ = 18°11'31" LT.
 D = 6°00'00"
 T = 152.89'
 L = 303.20'
 P.C. = 124+53.51
 P.T. = 127+56.71
 Ls = 200'
 e = 0.034'/'

STA. 115+39 - CONSTRUCT JUNCTION BOX ON RT. & 18" x 105" PIPE OUTLET CONNECT TO D.I. @ STA. 116+50 RT. TYPE E = 4' x 4' H = 4'-0"
 STA. 116+50 - CONSTRUCT D.I. ON RT. & 18" x 117" PIPE OUTLET CONNECT TO D.I. @ STA. 117+75 RT. TY C = 4' x 4' TY MO = 4' H = 4'-0"
 STA. 116+19 CONSTRUCT APPROACH ON RT. = 5 CU. YDS.
 P.I. = 117+85.99
 Δ = 28°51'53" RT.
 D = 7°30'00"
 T = 196.61'
 L = 384.86'
 P.C. = 115+89.39
 P.T. = 119+74.25
 Ls = 250'
 e = 0.036'/'

STA. 117+75 - CONSTRUCT D.I. ON RT. WITH 8' EXTENSION & 18" x 93" PIPE OUTLET CONNECT TO D.I. @ STA. 118+75 RT. TY C = 4' x 4' TY MO = 4' H = 4'-0"
 STA. 118+75 - CONSTRUCT D.I. ON RT. WITH 8' EXTENSION & 18" x 92" PIPE OUTLET CONNECT TO D.I. @ STA. 119+75 RT. TY C = 4' x 4' TY MO = 4' H = 4'-0"
 STA. 119+17 CONSTRUCT APPROACH ON RT. = 5 CU. YDS.
 STA. 119+75 - CONSTRUCT D.I. ON RT. WITH 8' EXTENSION & 24" x 59" R.C. PIPE OUTLET (CLASS IV) CONNECT TO J.B. @ STA. 119+75 LT. TY C = 4' x 8' H = 5'-0"
 STA. 120+00 - CONSTRUCT D.I. ON RT. & 18" x 23" PIPE OUTLET CONNECT TO D.I. @ STA. 119+75 RT. TY ST = 4' x 4' H = 3'-8"
 STA. 120+93 - CONSTRUCT D.I. ON RT. WITH 4' EXTENSION & 18" x 90" PIPE OUTLET CONNECT TO D.I. @ STA. 120+00 RT. TY C = 4' x 4' TY MO = 4' H = 4'-0"

STA. 122+75.12 CONSTRUCT APPROACH ON RT. (KENTUCKY AVE.) UNCLASSIFIED EXCAVATION = 121 CU. YDS.
 STA. 122+96 - CONSTRUCT D.I. ON RT. WITH 4' EXTENSION 18" x 50" PIPE OUTLET CONNECT TO J.B. @ STA. 123+50 RT. TY C = 4' x 4' TY MO = 4' H = 4'-0"
 STA. 123+50 - CONSTRUCT JUNCTION BOX ON RT. 18" x 62" R.C. PIPE OUTLET (CLASS V) CONNECT TO D.I. @ STA. 123+50 LT. TY ST = 4' x 4' H = 4'-0"
 STA. 123+33 CONSTRUCT APPROACH ON RT. = 5 CU. YDS. UNCLASSIFIED EXCAVATION
 STA. 124+34 CONSTRUCT APPROACH ON RT.
 STA. 126+05 - STA. 126+85 ON RIGHT IN PARKING LOT = 61 LIN. FT. TYPE D CURB
 STA. 125+99 - CONSTRUCT D.I. ON RT. & 18" x 63" PIPE OUTLET CONNECT TO D.I. @ STA. 126+22 RT. TY ST = 4' x 4' H = 4'-0"
 STA. 126+22 - CONSTRUCT D.I. ON RT. WITH 4' EXTENSION 24" x 59" R.C. PIPE OUTLET CONNECT TO JUNCTION BOX @ STA. 126+20.23 LT. TY C = 4' x 4' TY MO = 4' H = 7'-0"

STA. 127+52 - CONSTRUCT D.I. ON RT. WITH 8' EXTENSION & 18" x 131" PIPE OUTLET CONNECT TO D.I. @ STA. 126+22 RT. TY C = 4' x 4' TY MO = 4' H = 4'-0"
 STA. 129+35 - CONSTRUCT D.I. ON RT. WITH 4' EXTENSION 18" x 178" PIPE OUTLET CONNECT TO D.I. @ STA. 127+52 RT. TY C = 4' x 4' TY MO = 4' H = 4'-0"
 STA. 127+78 IN PLACE DROP INLET WITH PIPE CULVERT OUTLET ON RT. REMOVE
 STA. 127+79 IN PLACE DROP INLET WITH PIPE CULVERT OUTLET ON RT. REMOVE
 STA. 126+42.55 CONSTRUCT APPROACH ON RT. (NORTH BRYANT) = 72 CU. YDS. UNCLASSIFIED EXCAVATION = 73 CU. YDS.
 P.I. = 129+45.49
 Δ = 8°08'11" RT.
 D = 5°00'00"
 T = 81.50'
 L = 162.73'
 P.C. = 128+63.99
 P.T. = 130+26.72
 Ls = 116'
 e = 0.032'/'

REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.
 ALL R.C. PIPE CULVERTS SHALL BE CLASS III UNLESS OTHERWISE SPECIFIED. FOR ALL R.C. PIPE CULVERT INSTALLATIONS USE TYPE 3 BEDDING UNLESS OTHERWISE SPECIFIED. FOR ALL C.M. PIPE CULVERT INSTALLATIONS USE TYPE 2 BEDDING UNLESS OTHERWISE SPECIFIED.

STA. 117+36 CONSTRUCT APPROACH ON RT.
 STA. 118+23 CONSTRUCT APPROACH ON RT. = 10 CU. YDS.

STA. 121+82 ON RT. CONSTRUCT TYPE 3 WHEEL-CHAIR RAMP = 4.2 SQ. YDS.
 STA. 122+61 ON RT. CONSTRUCT TYPE 3 WHEEL-CHAIR RAMP = 4.9 SQ. YDS.

STA. 126+55 CONSTRUCT APPROACH ON RT. = 5 CU. YDS. (NORTH BRYANT ON LT.)
 STA. 126+21 IN PLACE DROP INLET WITH PIPE CULVERT OUTLET ON RT. REMOVE
 STA. 127+13 CONSTRUCT APPROACH ON RT. = 5 CU. YDS. (NORTH BRYANT ON RT.)

STA. 126+37 ON RT. CONSTRUCT TYPE 3 WHEEL-CHAIR RAMP = 4.4 SQ. YDS.
 STA. 126+97 ON RT. CONSTRUCT TYPE 3 WHEEL-CHAIR RAMP = 4.4 SQ. YDS.

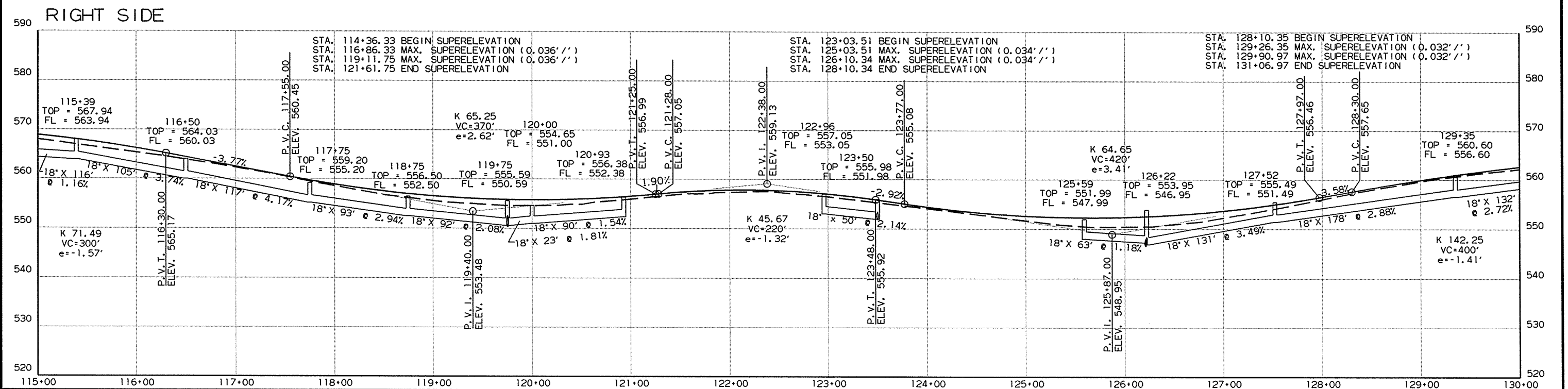
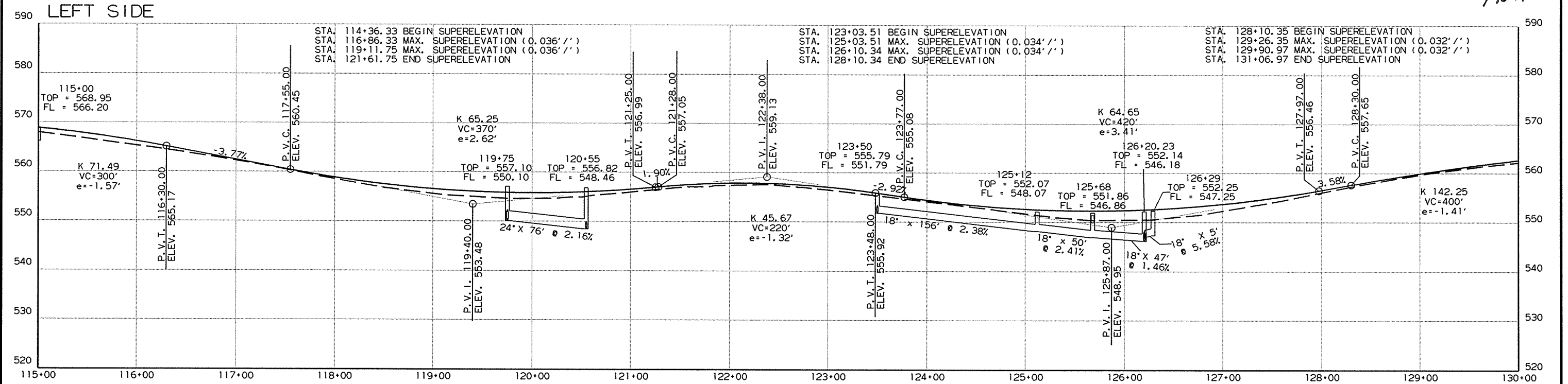
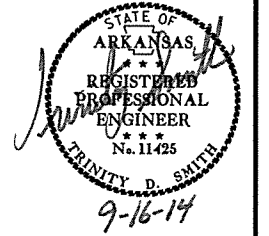
4/10/2013
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ALL R.C. PIPE CULVERTS SHALL BE CLASS III UNLESS OTHERWISE SPECIFIED. FOR ALL R.C. PIPE CULVERT INSTALLATIONS USE TYPE 3 BEDDING UNLESS OTHERWISE SPECIFIED. FOR ALL C.M. PIPE CULVERT INSTALLATIONS USE TYPE 2 BEDDING UNLESS OTHERWISE SPECIFIED.

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

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 061194							35	141

2 PROFILE SHEETS

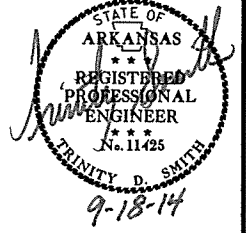


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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
							JOB NO. 061194	36 141

2 PLAN SHEETS



STA. 131+18 CONSTRUCT
APPROACH ON LT.

STA. 131+76 CONSTRUCT
APPROACH ON LT.

STA. 132+24 CONSTRUCT
APPROACH ON LT.

STA. 133+40 CONSTRUCT
APPROACH ON LT.

STA. 134+64 CONSTRUCT
APPROACH ON LT. = 5 CU. YDS.
UNCLASSIFIED EXCAVATION

STA. 135+22 CONSTRUCT
APPROACH ON LT. = 5 CU. YDS.

STA. 135+08 CONSTRUCT
APPROACH ON LT. = 5 CU. YDS.

STA. 137+03.60 CONSTRUCT
APPROACH ON LT. (NORTH HUGHES) = 98 CU. YDS.
UNCLASSIFIED EXCAVATION = 22 CU. YDS.

TEMPORARY FENCE
STA. 137+35 - STA. 139+58 263 LIN. FT.

STA. 130+73 - CONSTRUCT
D.I. ON LT. WITH 4' EXTENSION
18" x 59" R.C. PIPE OUTLET (CLASS V)
CONNECT TO D.I. @ STA. 130+73 RT.
TY C = 4' x 4'
TY MO = 4'
H = 4'-0"

STA. 133+95 - CONSTRUCT
D.I. ON LT. WITH 8' EXTENSION
18" x 172" PIPE OUTLET
CONNECT TO D.I. @ STA. 132+10 LT.
TY C = 4' x 4'
TY MO = 4'
H = 4'-0"

STA. 136+44 - CONSTRUCT
D.I. ON LT. & 18" x 236" PIPE OUTLET
CONNECT TO D.I. @ STA. 133+95 LT.
TY C = 4' x 4'
MO = 4'
H = 8'-0"

STA. 139+18 - CONSTRUCT
D.I. ON LT. & 18" x 59" R.C. PIPE OUTLET (CLASS V)
CONNECT TO D.I. @ STA. 139+18 RT.
TY C = 4' x 4'
TY MO = 4'
MO = 4'
H = 4'-0"

STA. 143+18 IN PLACE
DROP INLET WITH
PIPE CULVERT OUTLET
ON LT. REMOVE

STA. 143+18 - CONSTRUCT
D.I. ON LT. CONNECT TO EXISTING
18" R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 143+16.80 RT.
TY C = 4' x 4'
TY MO = 4'
H = 3'-7"

STA. 132+10 - CONSTRUCT
D.I. ON LT. & 18" x 133" PIPE OUTLET
CONNECT TO D.I. @ STA. 130+73 LT.
TY ST = 4' x 4'
H = 3'-9"

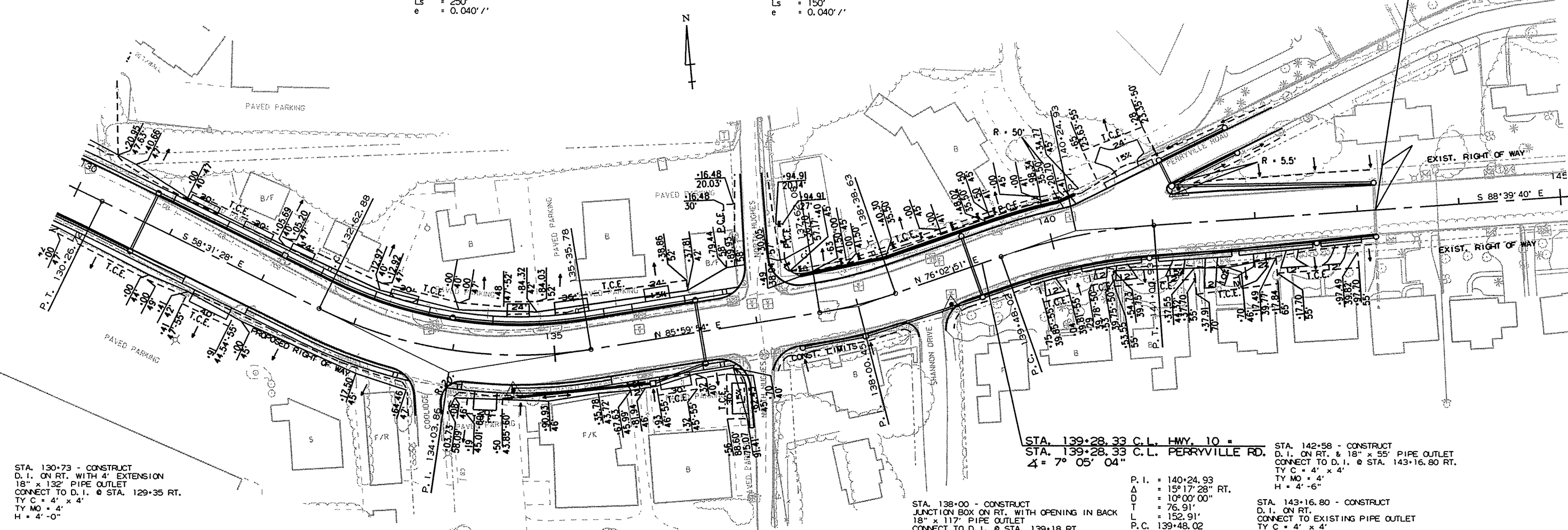
P.I. = 134+03.86
Δ = 35°28'38" LT.
D = 13°00'00"
T = 140.98'
L = 272.90'
P.C. 132+62.88
P.T. 135+35.78
Ls = 250'
e = 0.040'/'

STA. 136+80 ON LT. CONSTRUCT
TYPE 3 WHEELCHAIR RAMP = 5.4 SQ. YDS.

P.I. = 138+00.45
Δ = 9°57'03" LT.
D = 13°00'00"
T = 38.37'
L = 76.54'
P.C. 137+62.08
P.T. 138+38.63
Ls = 150'
e = 0.040'/'

STA. 132+09 IN PLACE
DROP INLET ON LT. REMOVE

STA. 143+18.00
END JOB 061194



STA. 130+73 - CONSTRUCT
D.I. ON RT. WITH 4' EXTENSION
18" x 132" PIPE OUTLET
CONNECT TO D.I. @ STA. 129+35 RT.
TY C = 4' x 4'
TY MO = 4'
H = 4'-0"

STA. 134+66 - CONSTRUCT
YARD DRAIN ON RT.
& 12" x 128" PIPE OUTLET
CONNECT TO D.I. @ STA. 135+90 RT.
H = 3'-6"

STA. 135+90 - CONSTRUCT
D.I. ON RT. & 18" x 51" PIPE OUTLET
CONNECT TO D.I. @ STA. 136+44 RT.
TY ST = 4' x 4'
H = 7'-0"

STA. 137+40 - CONSTRUCT
D.I. ON RT. WITH OPENING IN BACK
18" x 59" PIPE OUTLET
CONNECT TO JUNCTION BOX @ STA. 138+00 RT.
TY C = 4' x 4'
TY MO = 4'
H = 3'-9"

STA. 138+73.76 CONSTRUCT
APPROACH ON RT. (SHANNON DR.)
UNCLASSIFIED EXCAVATION = 27 CU. YDS.

STA. 139+18 - CONSTRUCT
D.I. ON RT. & 18" x 163" PIPE OUTLET
CONNECT TO D.I. @ STA. 140+94 RT.
TY C = 4' x 4'
TY MO = 4'
H = 4'-0"

P.I. = 140+24.93
Δ = 15°17'28" RT.
D = 10°00'00"
T = 76.91'
L = 152.91'
P.C. 139+48.02
P.T. 141+00.93
Ls = 140'
e = 0.038'/'

STA. 143+16.80 - CONSTRUCT
D.I. ON RT.
CONNECT TO EXISTING PIPE OUTLET
TY C = 4' x 4'
TY MO = 4'
H = 5'-4"

STA. 143+19 IN PLACE
DROP INLET ON RT. REMOVE

STA. 131+66 CONSTRUCT
APPROACH ON RT. = 5 CU. YDS.

STA. 133+56 ON RT. CONSTRUCT
TYPE 3 WHEELCHAIR RAMP = 4.9 SQ. YDS.

STA. 134+08 ON RT. CONSTRUCT
TYPE 3 WHEELCHAIR RAMP = 4.9 SQ. YDS.

STA. 133+72.07 CONSTRUCT
APPROACH ON RT. (COOLIDGE)
UNCLASSIFIED EXCAVATION = 50 CU. YDS.

STA. 136+44 - CONSTRUCT
D.I. ON RT. & 18" x 59" R.C. PIPE OUTLET
CONNECT TO D.I. @ STA. 135+44 LT.
TY C = 4' x 4'
TY MO = 4'
H = 8'-5"

STA. 134+35 CONSTRUCT
APPROACH ON RT.

STA. 135+72 CONSTRUCT
APPROACH ON RT.

STA. 136+12 CONSTRUCT
APPROACH ON RT.

STA. 136+66 ON RT. CONSTRUCT
TYPE 3 WHEELCHAIR RAMP = 5.4 SQ. YDS.

STA. 136+78 CONSTRUCT
APPROACH ON RT. = 10 CU. YDS.
(NORTH HUGHES)

STA. 137+03.91 CONSTRUCT
APPROACH ON RT. (NORTH HUGHES)
UNCLASSIFIED EXCAVATION = 54 CU. YDS.

STA. 139+88 CONSTRUCT
APPROACH ON RT. = 5 CU. YDS.
UNCLASSIFIED EXCAVATION

STA. 140+43 CONSTRUCT
APPROACH ON RT.

STA. 140+65 CONSTRUCT
APPROACH ON RT.

STA. 141+23 CONSTRUCT
APPROACH ON RT. = 5 CU. YDS.

STA. 141+55 CONSTRUCT
APPROACH ON RT. = 25 CU. YDS.

STA. 142+02 CONSTRUCT
APPROACH ON RT. = 15 CU. YDS.

STA. 142+34 CONSTRUCT
APPROACH ON RT. = 5 CU. YDS.

STA. 142+82 CONSTRUCT
APPROACH ON RT. = 5 CU. YDS.

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

ALL R.C. PIPE CULVERTS SHALL BE
CLASS III UNLESS OTHERWISE SPECIFIED.
FOR ALL R.C. PIPE CULVERT INSTALLATIONS
USE TYPE 3 BEDDING UNLESS OTHERWISE
SPECIFIED. FOR ALL C.M. PIPE CULVERT
INSTALLATIONS USE TYPE 2 BEDDING UNLESS
OTHERWISE SPECIFIED.

4/10/2013

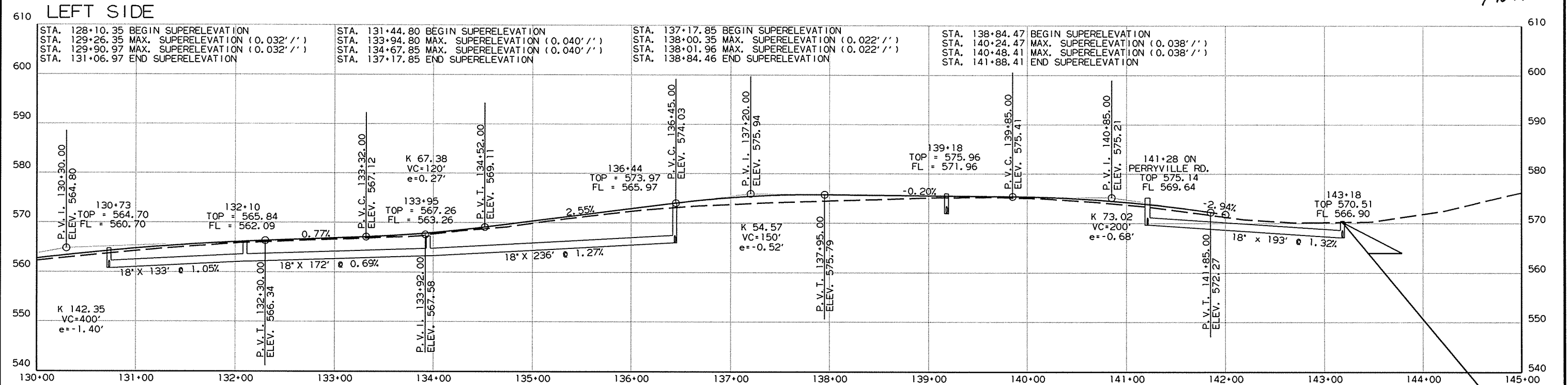
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ALL R. C. PIPE CULVERTS SHALL BE CLASS III UNLESS OTHERWISE SPECIFIED. FOR ALL R. C. PIPE CULVERT INSTALLATIONS USE TYPE 3 BEDDING UNLESS OTHERWISE SPECIFIED. FOR ALL C. M. PIPE CULVERT INSTALLATIONS USE TYPE 2 BEDDING UNLESS OTHERWISE SPECIFIED.

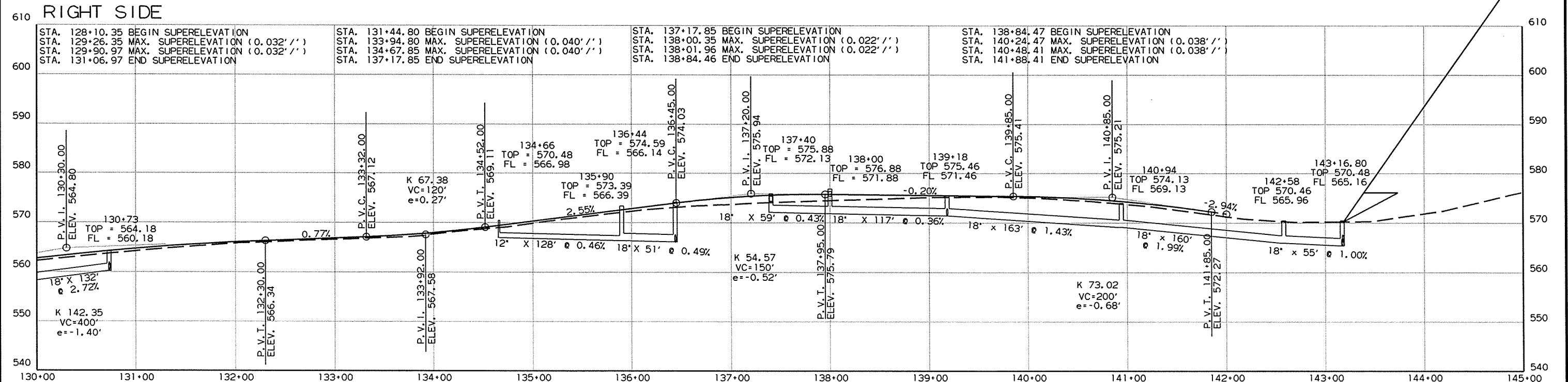
REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		37	141

2 PROFILE SHEETS



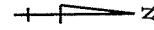
STA. 143+18.00
END JOB 061194



R061194.DGN 4/10/2013

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				6	ARK.			
				JOB NO.	061194		38	141

2 PLAN SHEETS



STA. 33+00 - CONSTRUCT
D.I. ON LT. & 18" x 39" PIPE OUTLET
CONNECT TO D.I. @ STA. 33+42.86 LT.
TY C = 4' x 4'
TY MO = 4'
H = 3'-2"

STA. 33+42.86 - CONSTRUCT
D.I. ON LT. & CONNECT EXISTING 12" R.C. PIPE INLET
& 18" x 35" PIPE OUTLET
CONNECT TO J.B. @ STA. 34+45.36 RT.
TY C = 4' x 4'
TY MO = 4'
H = 4'-0"

STA. 142+00 - CONSTRUCT
D.I. ON LT. & 18" x 68" PIPE OUTLET
CONNECT TO D.I. @ STA. 141+28 LT.
TY C = 4' x 4'
TY MO = 4'
H = 4'-0"

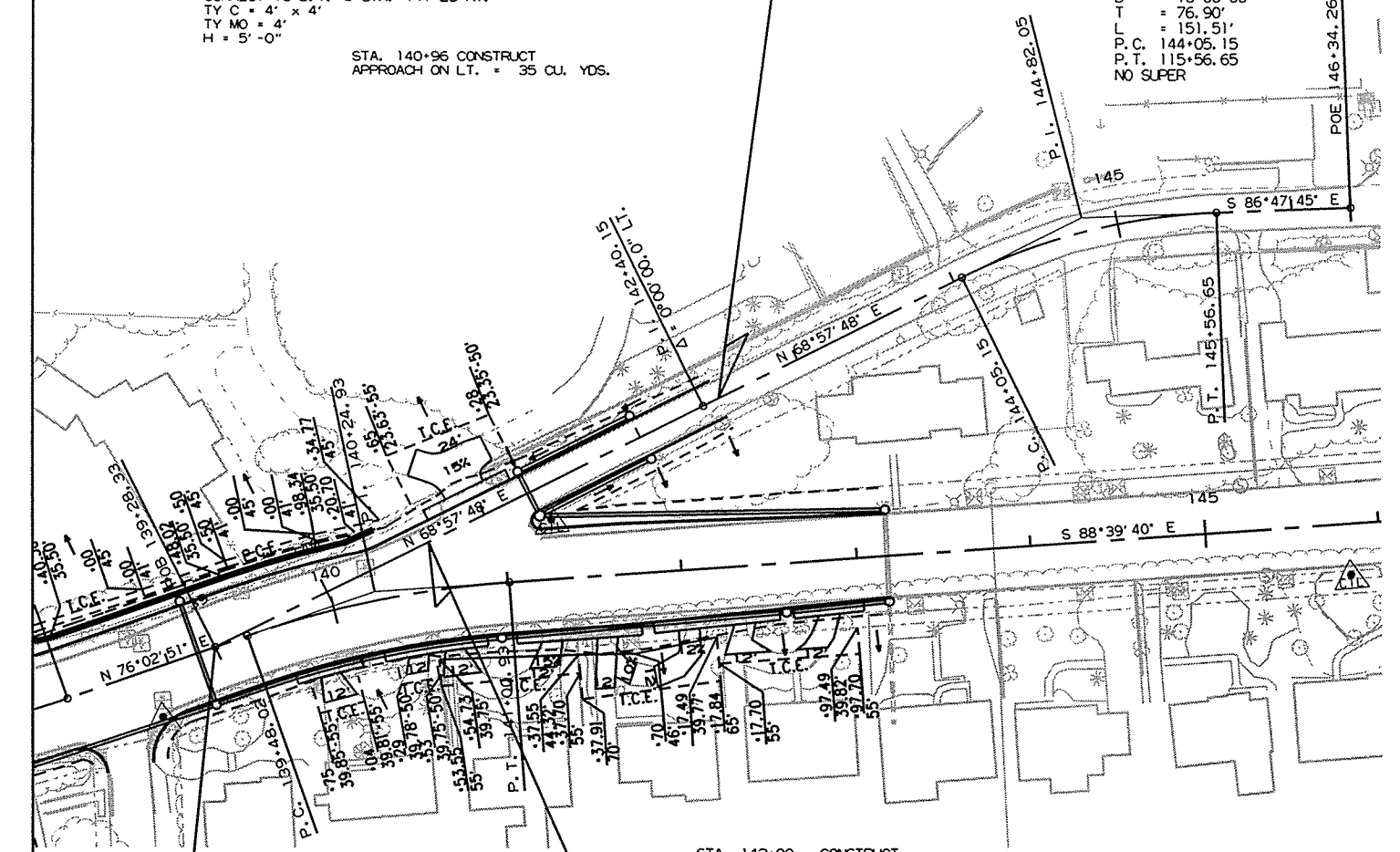
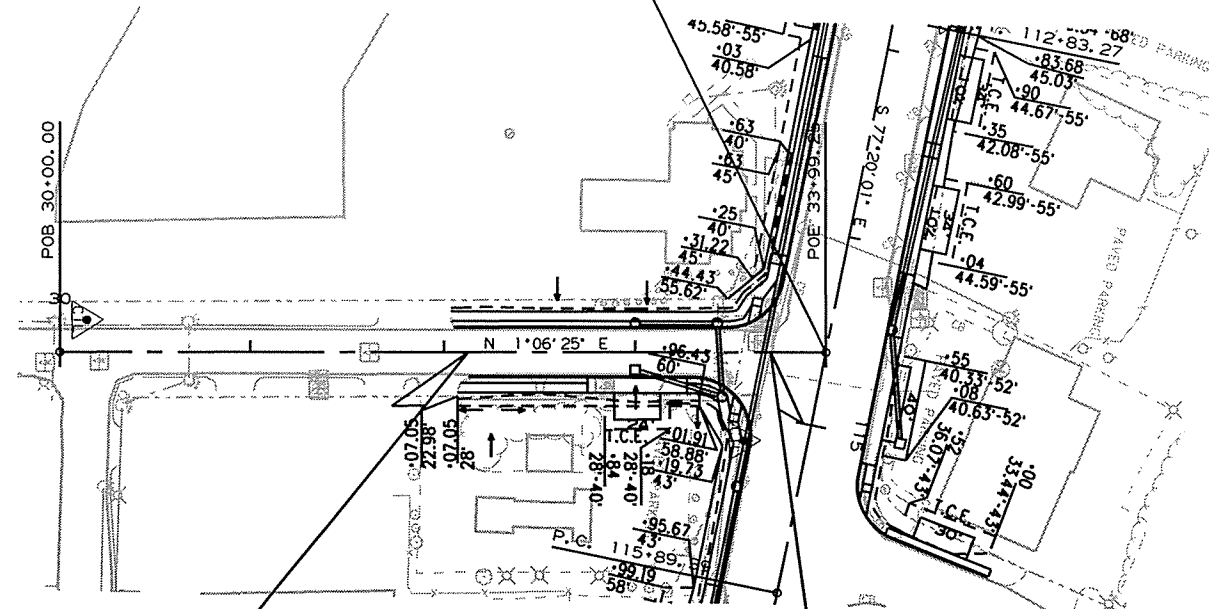
STA. 114+61.00 C.L. HWY. 10 =
STA. 33+99.25 C.L. GEORGIA AVE.
Δ = 78° 26' 26"

STA. 141+28 - CONSTRUCT
D.I. ON LT. & OPENING IN BACK
& 18" x 24" PIPE OUTLET
CONNECT TO D.I. @ STA. 141+28 RT.
TY C = 4' x 4'
TY MO = 4'
H = 5'-0"

STA. 140+96 CONSTRUCT
APPROACH ON LT. = 35 CU. YDS.

STA. 142+50.00
END CONSTRUCTION
PERRYVILLE RD.

P.I. = 144+82.05
Δ = 24° 14' 27" RT.
D = 16° 00' 00"
T = 76.90'
L = 151.51'
P.C. 144+05.15
P.T. 115+56.65
NO SUPER



STA. 33+00 - CONSTRUCT
D.I. ON RT. & 18" x 44' PIPE OUTLET
CONNECT TO J.B. @ STA. 34+45.36 RT.
TY ST = 4' x 4'
H = 3'-6"

STA. 32+21.54
BEGIN CONSTRUCTION
GEORGIA AVE.

STA. 33+70.67
END CONSTRUCTION
GEORGIA AVE.

STA. 33+45.36 - CONSTRUCT
JUNCTION BOX ON RT.
CONNECT TO EXISTING 18" R.C. PIPE OUTLET
TYPE E = 4' x 4'
H = 4'-11"

STA. 33+45 IN PLACE
DROP INLET WITH
PIPE CULVERT OUTLET
ON RT. REMOVE

STA. 33+01 CONSTRUCT
APPROACH ON RT. = 5 CU. YDS.

STA. 32+99 IN PLACE
DROP INLET WITH
PIPE CULVERT OUTLET
ON RT. REMOVE

STA. 141+28 - CONSTRUCT
D.I. ON RT.
18" x 193' PIPE OUTLET
CONNECT TO D.I. @ STA. 143+18 LT. (HWY. 10)
TY C = 4' x 4'
TY MO = 4' x 4'
H = 5'-6"

STA. 142+00 - CONSTRUCT
D.I. ON RT. & 18" x 68' PIPE OUTLET
CONNECT TO D.I. @ STA. 141+28 RT.
TY C = 4' x 4'
TY MO = 4'
H = 4'-0"

STA. 140+64.52
BEGIN CONSTRUCTION
PERRYVILLE RD.

STA. 139+28.33 C.L. HWY. 10 =
STA. 139+28.33 C.L. PERRYVILLE RD.
Δ = 7° 05' 04"

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

4/10/2013

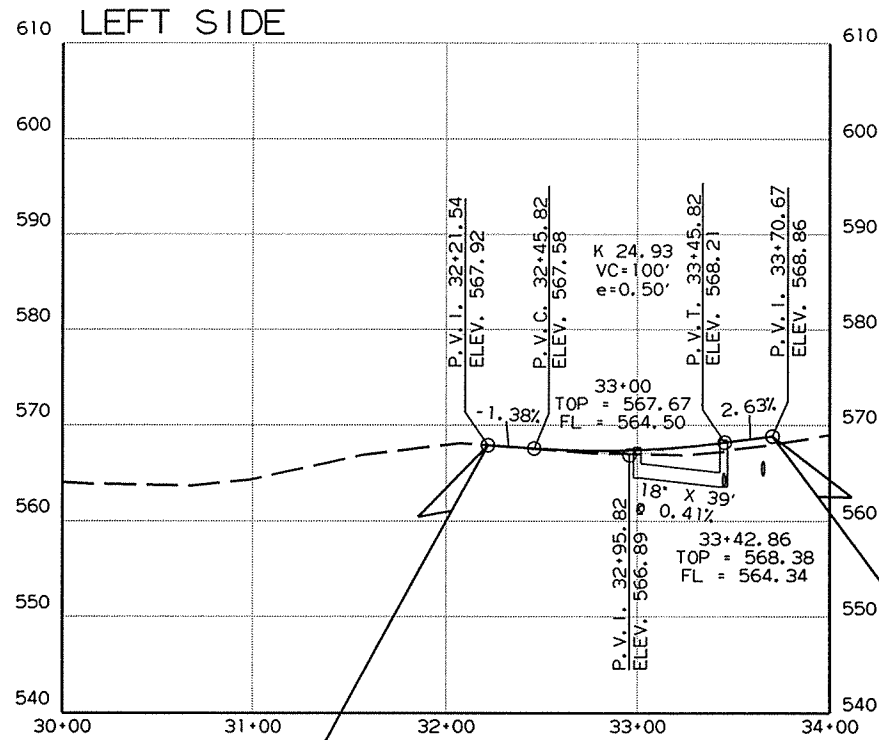
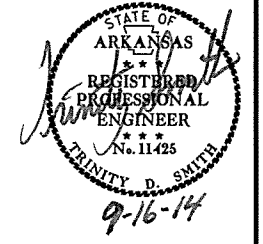
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ALL R. C. PIPE CULVERTS SHALL BE CLASS III UNLESS OTHERWISE SPECIFIED. FOR ALL R. C. PIPE CULVERT INSTALLATIONS USE TYPE 3 BEDDING UNLESS OTHERWISE SPECIFIED. FOR ALL C.M. PIPE CULVERT INSTALLATIONS USE TYPE 2 BEDDING UNLESS OTHERWISE SPECIFIED.

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

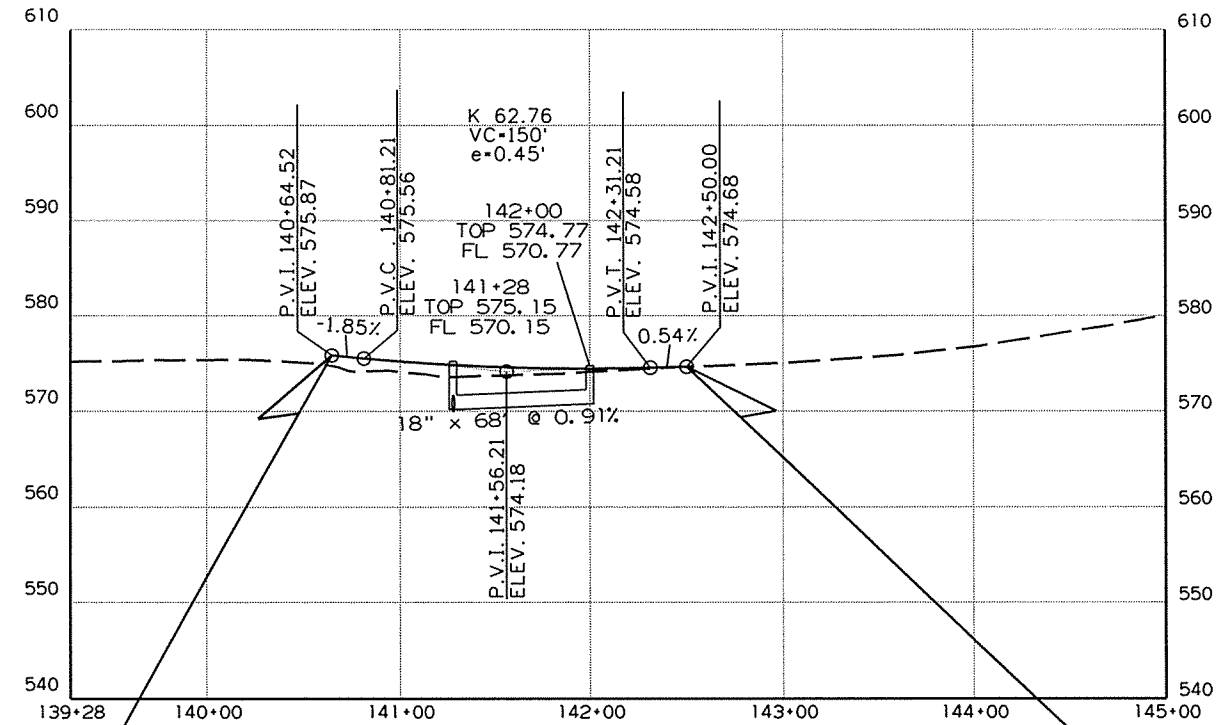
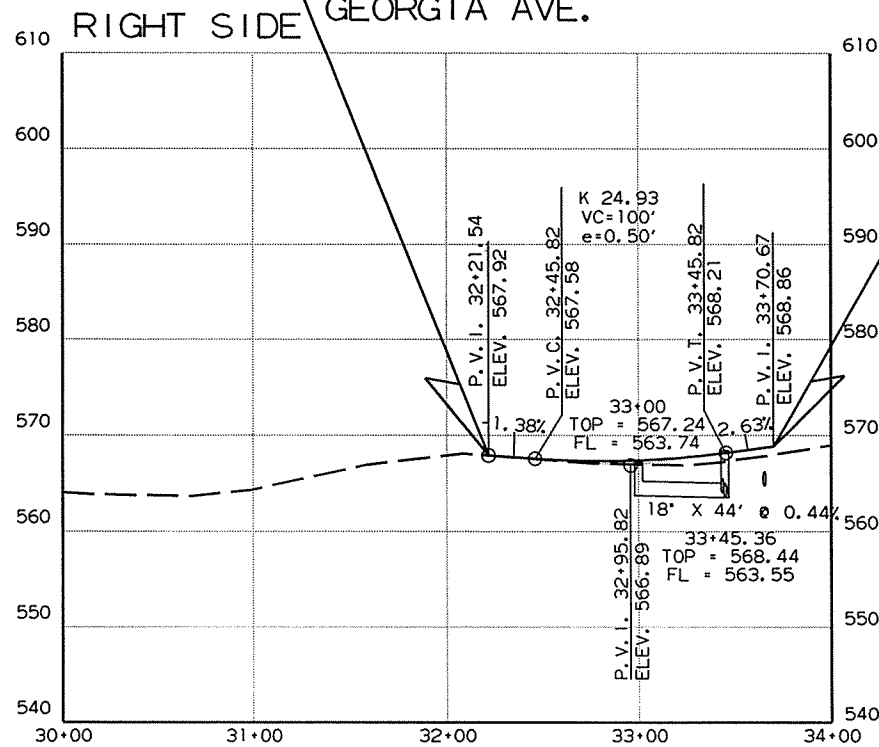
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
						JOB NO. 061194	39	141

2 PROFILE SHEETS



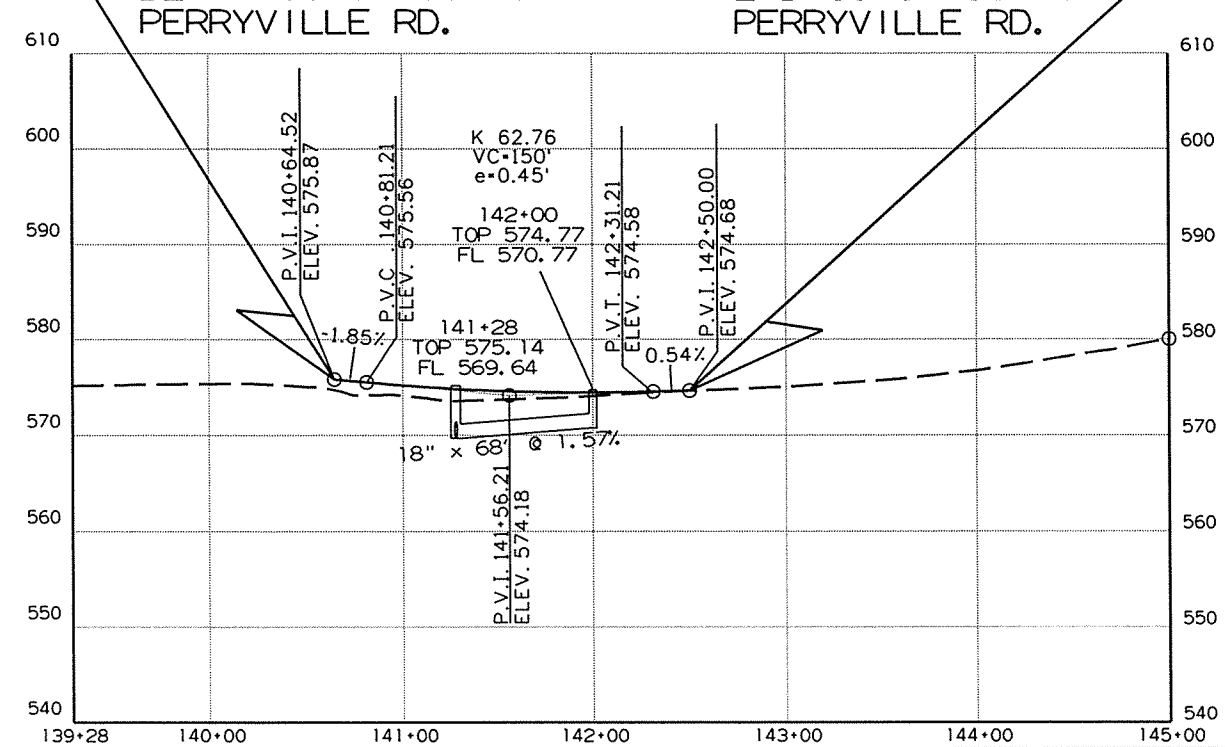
STA. 32+21.54
BEGIN CONSTRUCTION
GEORGIA AVE.

STA. 33+70.67
END CONSTRUCTION
GEORGIA AVE.



STA. 140+64.52
BEGIN CONSTRUCTION
PERRYVILLE RD.

STA. 142+50.00
END CONSTRUCTION
PERRYVILLE RD.

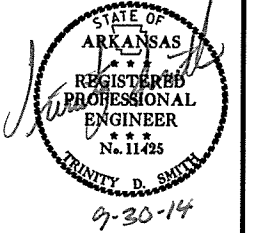


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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
						JOB NO.	061194	40 141

② SUMMARY OF TRAFFIC SIGNAL QUANTITIES



SUMMARY OF TRAFFIC SIGNAL QUANTITIES

ITEM NO.	ITEM	HWY. 10 AT N. MISS. AVE.	HWY. 10 AT EMERGENCY SIGNAL	TOTAL QUANTITY	UNIT
SP&701	SYSTEM LOCAL CONTROLLER TS 2-TYPE 2 (8 PHASES)	1		1	EACH
703	FLASHING BEACON CONTROLLER		1	1	EACH
704	FEEDER WIRE		140	140	LIN. FT.
SP&706	TRAFFIC SIGNAL HEAD, LED, (3 SECTION, 1 WAY)	6	5	11	EACH
SP&706	TRAFFIC SIGNAL HEAD, LED, (4 SECTION, 1 WAY)	4		4	EACH
SP&707	COUNTDOWN PEDESTRIAN SIGNAL HEAD, LED	6		6	EACH
SP&707	CENTRAL CONTROL UNIT	1		1	EACH
SP&707	POLE MOUNTED ASSEMBLY	6		6	EACH
SP&707	INFRARED PROGRAMMING DEVICE	1		1	EACH
708	TRAFFIC SIGNAL CABLE (5C/14 A.W.G.)	1445	236	1681	LIN. FT.
708	TRAFFIC SIGNAL CABLE (7C/14 A.W.G.)	260		260	LIN. FT.
708	TRAFFIC SIGNAL CABLE (20C/14 A.W.G.)	733		733	LIN. FT.
709	GALVANIZED STEEL CONDUIT (1.25")	20	20	40	LIN. FT.
710	NON-METALLIC CONDUIT (1.25")	20	20	40	LIN. FT.
710	NON-METALLIC CONDUIT (2")	20	120	140	LIN. FT.
710	NON-METALLIC CONDUIT (3")	630		630	LIN. FT.
711	CONCRETE PULL BOX (TYPE 1 HD)		2	2	EACH
711	CONCRETE PULL BOX (TYPE 2 HD)	4		4	EACH
711	CONCRETE PULL BOX (TYPE 2)	4		4	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (24')	1		1	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (26')	1		1	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (44')	1		1	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (56')	1	1	2	EACH
715	TRAFFIC SIGNAL PEDESTAL POLE WITH FOUNDATION	1		1	EACH
726	STANDARD SIGN		33	33	SQ. FT.
733	VIDEO CABLE	1972		1972	LIN. FT.
SP&733	VIDEO DETECTOR (CLR)	9		9	EACH
733	VIDEO MONITOR (CLR)	1		1	EACH
SP&733	VIDEO PROCESSOR, EDGE CARD (2 CAMERA)	5		5	EACH
SP&733	VIDEO EDGE CARD EXTENDER	2		2	EACH
SP&733	VEHICLE DETECTOR RACK (24 CHANNEL)	1		1	EACH
SP	ANTENNA CABLE (TYPE 6)	70		70	LIN. FT.
SP	ANTENNA SUPPORT (SHOE BASE, 30' HT.)	1		1	EACH
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/8 A.W.G., EGC)	529	38	567	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/12 A.W.G., EGC)	110		110	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (2C/6 A.W.G.)	70	20	90	LIN. FT.
SP	ELECTRICAL CONDUCTORS FOR LUMINAIRES	355		355	LIN. FT.
SP	LOCAL RADIO WITH ANTENNA	1		1	EACH
SP	LUMINAIRE ASSEMBLY	2		2	EACH
SP	RELOCATION OF TRAFFIC SIGNAL EQUIPMENT	1.00		1.00	LUMP SUM
SP	REMOVAL OF TRAFFIC SIGNAL EQUIPMENT	0.50	0.50	1.00	LUMP SUM
SP	SERVICE POINT ASSEMBLY (2 CIRCUITS)	1	1	2	EACH
SP	18" STREET NAME SIGN	4		4	EACH

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

LOCATION: MISSISSIPPI AVE. -PERRYVILLE RD. (HWY. 10)
 CITY: LITTLE ROCK
 COUNTY: PULASKI
 DISTRICT: 6 SCALE: N/A DRAWN BY: GWE

TRAFFIC SIGNAL NOTES:

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

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. 061194	41	141

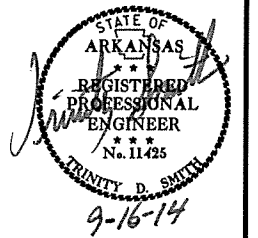
② TRAFFIC SIGNAL NOTES



LOCATION: MISSISSIPPI AVE. -PERRYVILLE RD. (HWY. 10)
CITY: LITTLE ROCK
COUNTY: PULASKI
DISTRICT: 6 SCALE: N/A DRAWN BY: GWE

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. 061194	42	141

② TRAFFIC SIGNAL QUANTITIES

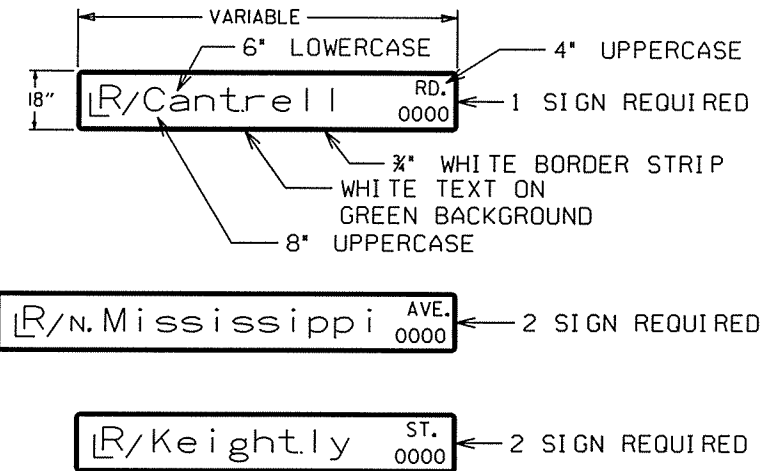


TRAFFIC SIGNAL QUANTITIES

ITEM NO.	ITEM	QUANTITY	UNIT
SP&701	SYSTEM LOCAL CONTROLLER TS 2-TYPE 2 (8 PHASES)	1	EACH
SP&706	TRAFFIC SIGNAL HEAD, LED, (3 SECTION, 1WAY)	6	EACH
SP&706	TRAFFIC SIGNAL HEAD, LED, (4 SECTION, 1WAY)	4	EACH
SP&707	COUNTDOWN PEDESTRIAN SIGNAL HEAD, LED	6	EACH
SP&707	CENTRAL CONTROL UNIT	1	EACH
SP&707	POLE MOUNTED ASSEMBLY	6	EACH
SP&707	INFRARED PROGRAMMING DEVICE	1	EACH
708	TRAFFIC SIGNAL CABLE (5C/14 A.W.G.)	1445	LIN. FT.
708	TRAFFIC SIGNAL CABLE (7C/14 A.W.G.)	260	LIN. FT.
708	TRAFFIC SIGNAL CABLE (20C/14 A.W.G.)	733	LIN. FT.
709	GALVANIZED STEEL CONDUIT (1.25")	20	LIN. FT.
710	NON-METALLIC CONDUIT (1.25")	20	LIN. FT.
710	NON-METALLIC CONDUIT (2")	20	LIN. FT.
710	NON-METALLIC CONDUIT (3")	630	LIN. FT.
711	CONCRETE PULL BOX (TYPE 2 HD)	4	EACH
711	CONCRETE PULL BOX (TYPE 2)	4	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (24')	1	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (26')	1	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (44')	1	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (56')	1	EACH
715	TRAFFIC SIGNAL PEDESTAL POLE WITH FOUNDATION	1	EACH
733	VIDEO CABLE	1972	LIN. FT.
SP&733	VIDEO DETECTOR (CLR)	9	EACH
733	VIDEO MONITOR (CLR)	1	EACH
SP&733	VIDEO PROCESSOR, EDGE CARD (2 CAMERA)	5	EACH
SP&733	VIDEO EDGE CARD EXTENDER	2	EACH
SP&733	VEHICLE DETECTOR RACK (24 CHANNEL)	1	EACH
SP	ANTENNA CABLE (TYPE 6)	70	LIN. FT.
SP	ANTENNA SUPPORT (SHOE BASE, 30' HT.)	1	EACH
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/8 A.W.G., EGC)	529	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/12 A.W.G., EGC)	110	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (2C/6 A.W.G.)	70	LIN. FT.
SP	ELECTRICAL CONDUCTORS FOR LUMINAIRES	355	LIN. FT.
SP	LOCAL RADIO WITH ANTENNA	1	EACH
SP	LUMINAIRE ASSEMBLY	2	EACH
SP	RELOCATION OF TRAFFIC SIGNAL EQUIPMENT	1.00	LUMP SUM
SP	REMOVAL OF TRAFFIC SIGNAL EQUIPMENT	0.50	LUMP SUM
SP	SERVICE POINT ASSEMBLY (2 CIRCUITS)	1	EACH
SP	18" STREET NAME SIGN	4	EACH

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

TYPICAL OVERHEAD STREET NAME MARKER MAST ARM MOUNTED



NOTES:
1. REFLECTIVE SHEETING SHALL COMPLY WITH ASTM 4956 TYPE 8 OR 9 REFLECTIVE SHEETING. SHEETING AND LEGEND SHALL BE APPLIED IN SUCH A MANNER TO PROVIDE WRINKLE AND BUBBLE FREE SURFACES. APPLICATION OF SHEETING IS CAUSE FOR REJECTION OF MATERIALS DUE TO WORKMANSHIP.

2. ALUMINUM SIGN BLANK SHALL BE ALLOY 6061-T6 OR 5052-H38. THE ALUMINUM SIGN SHALL ALSO BE ANODIZED. THE ALUMINUM SHEETING SHALL BE 0.100 INCH NOMINAL THICKNESS AND OF THE SIZE SHOWN WITH 1.5" CORNER RADII. PRIOR TO FABRICATION OF THE SIGNS, THE LAYOUT SHALL FIRST BE APPROVED BY AN AGENT OF THE CITY.

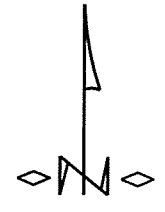
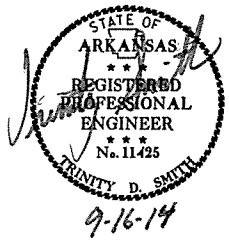
3. WHEN CROSSROAD HAS TWO NAMES, THE SIGN FOR THE CROSSROAD TO THE LEFT MAY BE INSTALLED ON THE BACKSIDE OF THE MAST ARM OF THE NEAR SIDE LEFT POLE. SEE STD. DETAIL SHEET FOR MORE INFORMATION FOR MOUNTING ON MAST ARM ASSEMBLY.

4. THE CLEARVIEW 5-W-R FONT SHALL BE USED FOR ALL LETTERS.

LOCATION: HWY. 10 (CANTRELL RD.) / N. MISSISSIPPI AVE.
CITY: LITTLE ROCK
COUNTY: PULASKI
DISTRICT: 6 SCALE: N/A DRAWN BY: GWE

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. PROJ. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	061194		43	141

2 SIGNALIZATION PLAN SHEET



HWY. 10/N. MISSISSIPPI AVE.
POLE DIMENSIONS

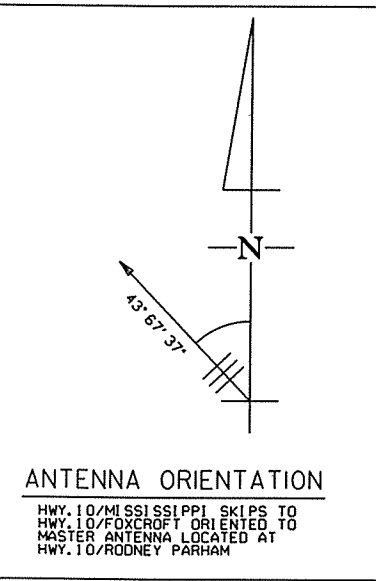
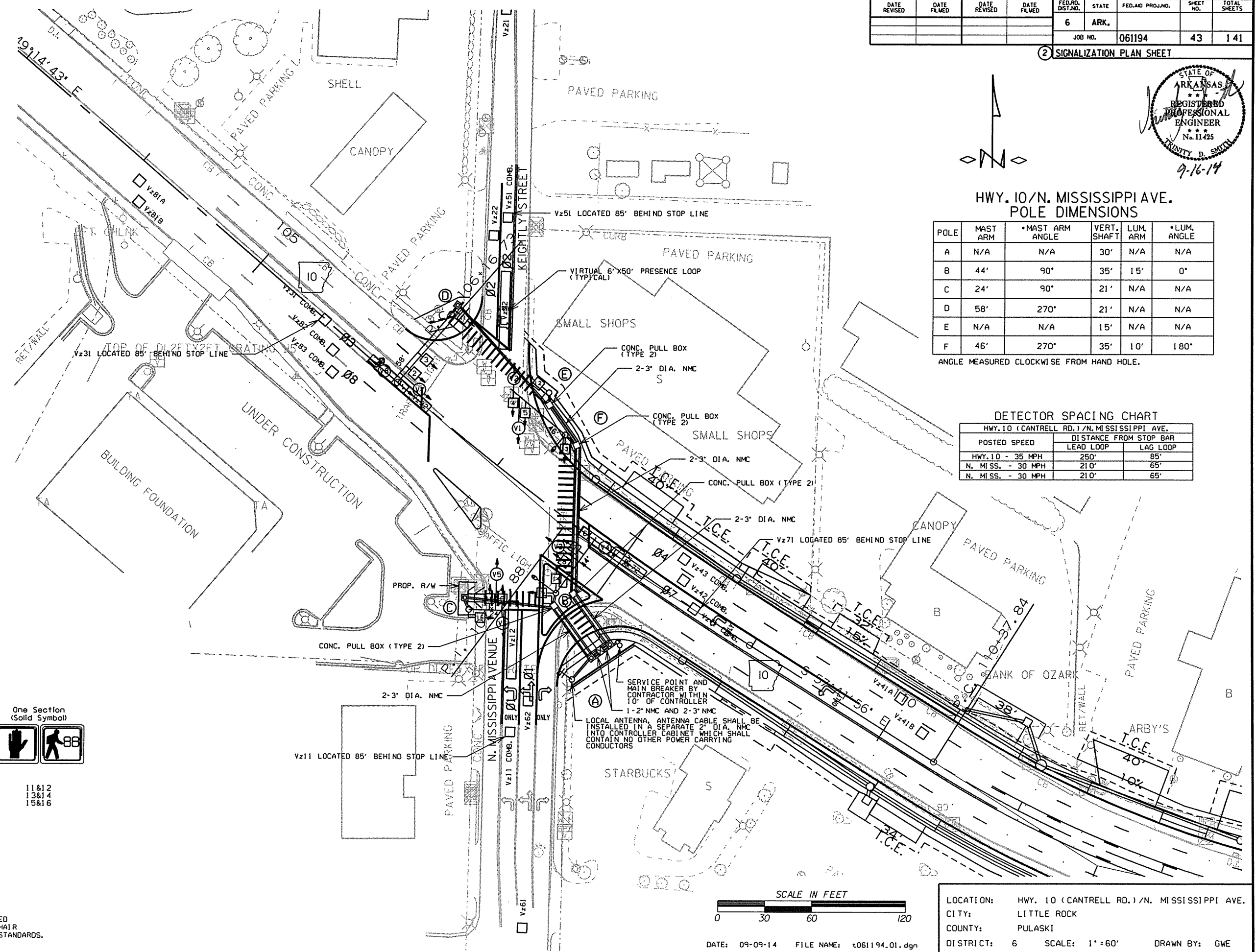
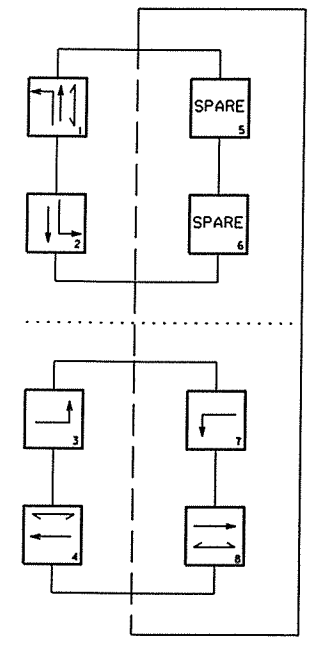
POLE	MAST ARM	MAST ARM ANGLE	VERT. SHAFT	LUM. ARM	LUM. ANGLE
A	N/A	N/A	30'	N/A	N/A
B	44'	90°	35'	15'	0°
C	24'	90°	21'	N/A	N/A
D	58'	270°	21'	N/A	N/A
E	N/A	N/A	15'	N/A	N/A
F	46'	270°	35'	10'	180°

ANGLE MEASURED CLOCKWISE FROM HAND HOLE.

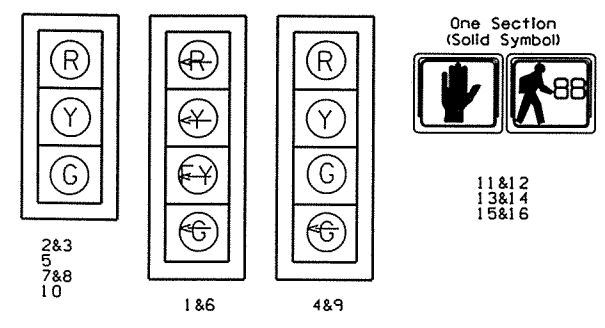
DETECTOR SPACING CHART

POSTED SPEED	DISTANCE FROM STOP BAR	
	LEAD LOOP	LAG LOOP
HWY. 10 - 35 MPH	250'	85'
N. MISS. - 30 MPH	210'	65'
N. MISS. - 30 MPH	210'	65'

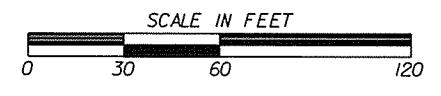
PHASING DIAGRAM



SIGNAL FACES
12" LENSES



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

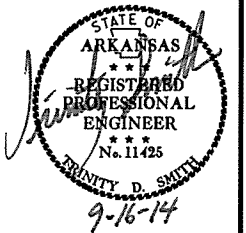


DATE: 09-09-14 FILE NAME: t061194.01.dgn

LOCATION: HWY. 10 (CANTRELL RD.) / N. MISSISSIPPI AVE.
CITY: LITTLE ROCK
COUNTY: PULASKI
DISTRICT: 6 SCALE: 1" = 60' DRAWN BY: GWE

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
							JOB NO.	061194
							SHEET NO.	44
							TOTAL SHEETS	141

2 SIGNALIZATION PLAN SHEET



HWY. 10/N. MISSISSIPPI AVE. POLE LOCATIONS

POLE	LOCATION & STATION	OFFSET	X, Y COORDINATES
A	HWY. 10 - STA. 108+17.86	81' RT.	1204776.94, 159685.23
B	HWY. 10 - STA. 107+78.51	42' RT.	1204766.41, 159740.66
C	HWY. 10 - STA. 107+41.21	84' RT.	1204710.63, 159730.00
D	HWY. 10 - STA. 106+13.84	56' LT.	1204698.44, 159919.18
E	HWY. 10 - STA. 106+96.77	57' LT.	1204761.35, 159868.85
F	HWY. 10 - STA. 107+22.33	42' LT.	1204771.93, 159841.94

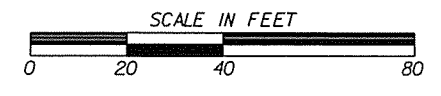
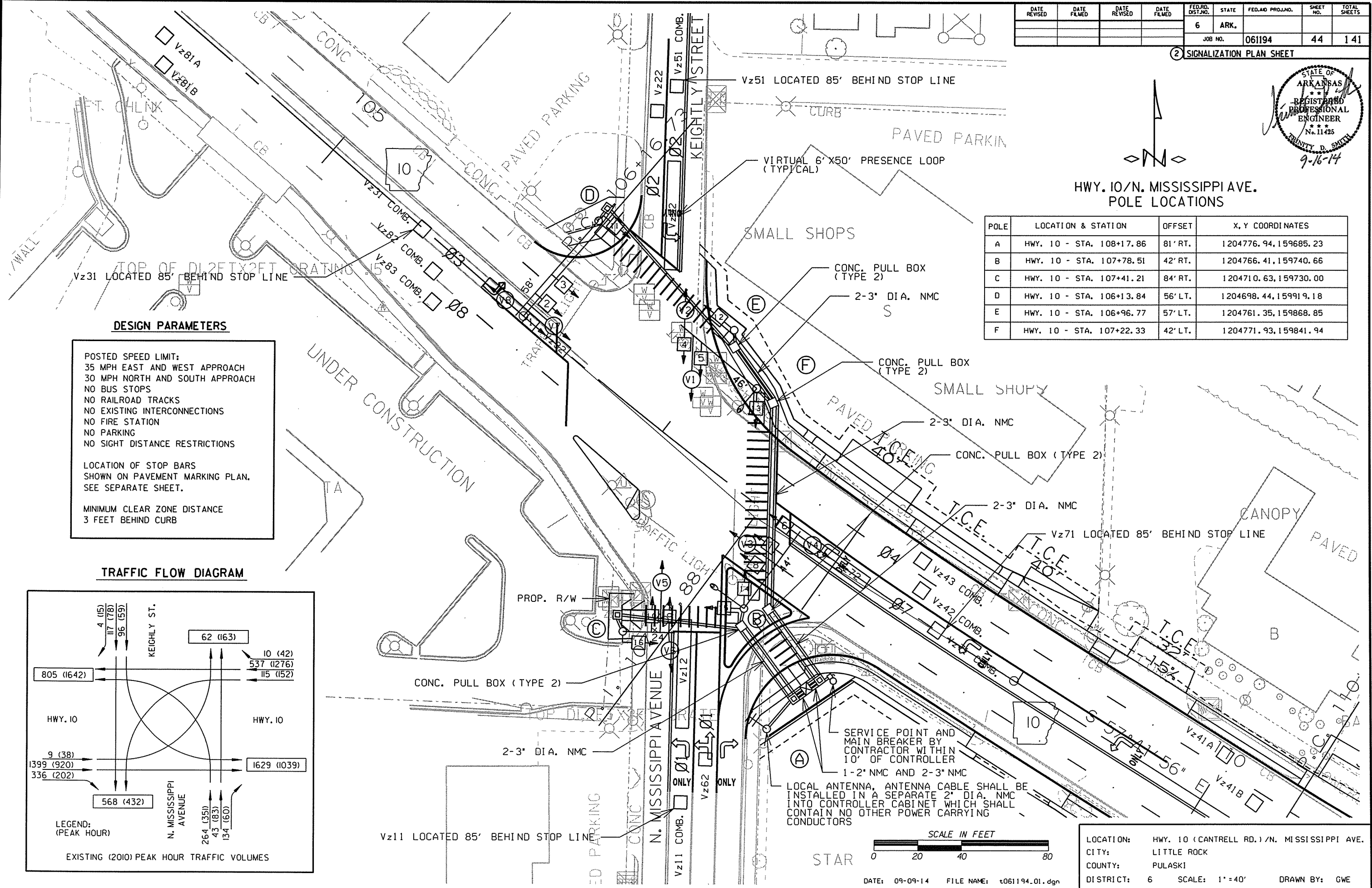
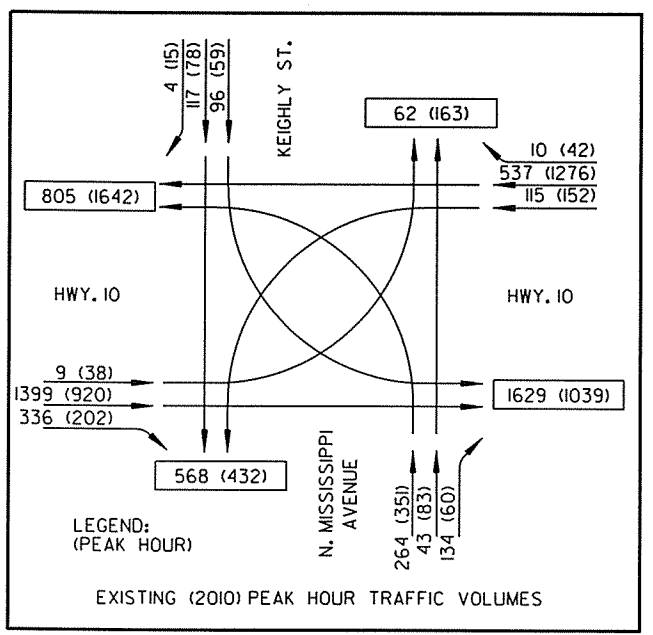
DESIGN PARAMETERS

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

LOCATION OF STOP BARS
 SHOWN ON PAVEMENT MARKING PLAN.
 SEE SEPARATE SHEET.

MINIMUM CLEAR ZONE DISTANCE
 3 FEET BEHIND CURB

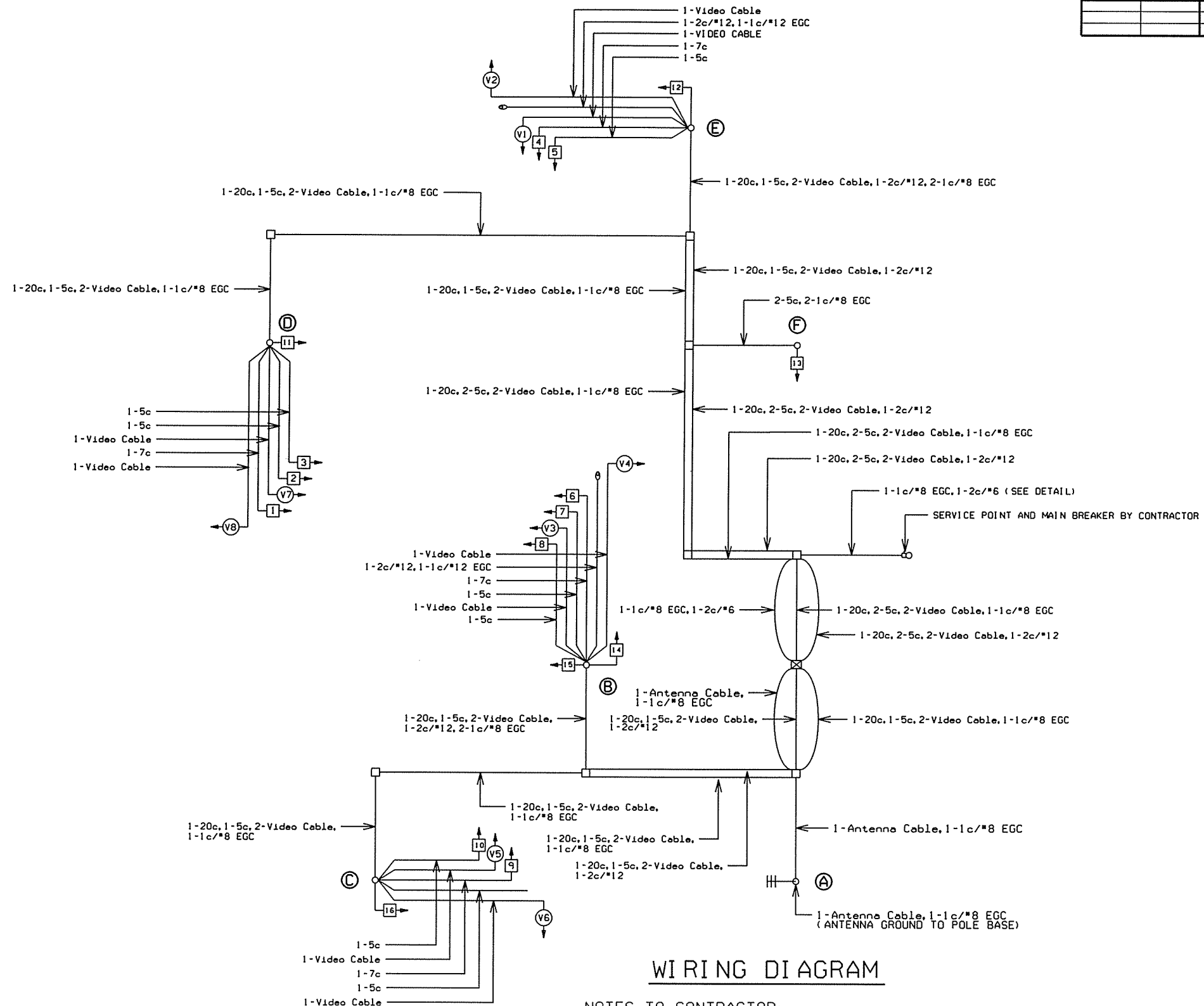
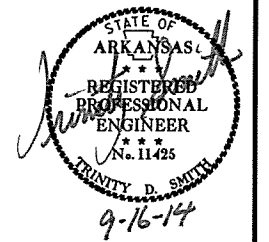
TRAFFIC FLOW DIAGRAM



LOCATION: HWY. 10 (CANTRELL RD.)/N. MISSISSIPPI AVE.
 CITY: LITTLE ROCK
 COUNTY: PULASKI
 DISTRICT: 6 SCALE: 1" = 40' DRAWN BY: GWE

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS	
				6	ARK.				
							JOB NO. 061194	45	141

2 SIGNALIZATION PLAN SHEET



WIRING DIAGRAM

NOTES TO CONTRACTOR:

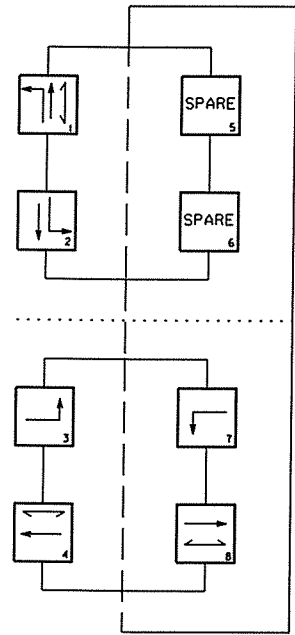
1. ONE SEPARATE 1-5c IS RUN TO EACH POLE FOR THE PEDESTRIAN PUSH BUTTON.
2. ALL DETECTOR RACK CHANNELS, INCLUDING UNUSED, SHALL BE BROUGHT TO TERMINAL STRIP IN DETECTOR AREA OF CABINET.
3. THE LOCAL GOVERNMENT SHALL BE RESPONSIBLE FOR PROVIDING POWER TO THE SERVICE POINT.

LOCATION: HWY. 10 (CANTRELL RD.)/N. MISSISSIPPI AVE.
 CITY: LITTLE ROCK
 COUNTY: PULASKI
 DISTRICT: 6 SCALE: N/A DRAWN BY: GWE

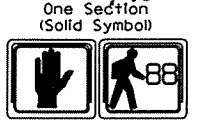
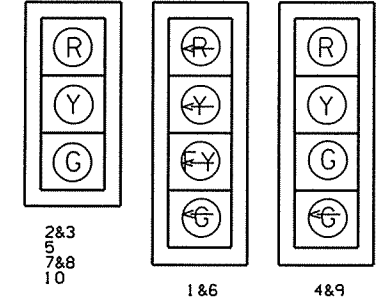
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS	
				6	ARK.				
JOB NO.							061194	46	141

② SIGNALIZATION PLAN SHEET

PHASING DIAGRAM



SIGNAL FACES
12" LENSES



11&12
13&14
15&16

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

DETECTOR SYSTEM DESCRIPTION: JOB 061194											
LITTLE ROCK - HWY. 10/N. MISSISSIPPI AVE. DETECTOR ASSIGNMENTS				HARDWARE INPUTS BY SUPPLIER			PROGRAM ASSIGNMENTS			COMMENTS	TUBE LENGTHS
DET. ID#	LOCATION DIRECTION	TYPE	DET. #	CAB. TRM #	AMP CHN. #	CON. INP. #	PHS	LOCAL SYSTEM DET. #	MASTER SYSTEM DETECTOR NUMBERS		
Vz11	NB LEFT TURN FAR	COMB.			1	V9	1	1		CAMERA V1	74'
Vz12	NB LEFT TURN	LOCAL			2	V1	1			CAMERA V1	74'
Vz21	SB ADVANCE	LOCAL			5	V2	2			CAMERA V2	74'
Vz22	SB NEAR	LOCAL			6	P1	2			CAMERA V5	74'
Vz31	EB LEFT TURN FAR	COMB.			9	V11	3	3		CAMERA V3	74'
Vz32	EB LEFT TURN	LOCAL			10	V3	3			CAMERA V3	74'
Vz41A&B	WB ADVANCE	LOCAL			17	V4	4			CAMERA V4	74'
Vz42	WB INSIDE NEAR	COMB.			18	V12	4	4		CAMERA V7	74'
Vz43	WB OUTSIDE NEAR	COMB.			19	V10	4	2		CAMERA V7	74'
Vz51	SB LEFT TURN FAR	COMB.			7	V13	5	5		CAMERA V5	74'
Vz52	SB LEFT TURN	LOCAL			8	V5	5			CAMERA V5	74'
Vz61	NB ADVANCE	LOCAL			3	V6	6			CAMERA V6	74'
Vz62	NB NEAR	LOCAL			4	P3	6			CAMERA V1	74'
Vz71	WB LEFT TURN FAR	COMB.			21	V15	1	7		CAMERA V7	74'
Vz72	WB LEFT TURN	LOCAL			22	V7	1			CAMERA V7	74'
Vz81A&B	EB ADVANCE	LOCAL			11	V8	8			CAMERA V8	74'
Vz82	EB INSIDE NEAR	COMB.			12	V14	8	6		CAMERA V3	74'
Vz83	EB OUTSIDE NEAR	COMB.			13	V16	8	8		CAMERA V3	74'
PB2A&B	N. MISS. S. LEG	PED.				P2	2				
PB6A&B	KEIGHLY N. LEG	PED.				P6	6				
PB8A&B	HWY. 10 E. LEG	PED.				P8	8				
SPARE 14, 15, 16, 20, 23 & 24											

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

INTERVAL CHART

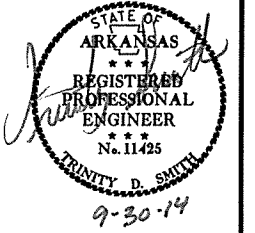
SIGNAL FACES	HWY. 10 (CANTRELL RD.)/N. MISSISSIPPI AVE.										FLASH SEQ.		
	1	CLR.	2	CLR.	3+7	CLR.	3+8	CLR.	4+7	CLR.		4+8	CLR.
1	←R	←R	←R	←R	←G	*	←G	*	←FY	***	←FY	***	←R
2&3	R	R	R	R	R	R	R	G	**	R	R	R	R
4	G	**	R	R	R	R	R	R	R	R	R	R	R
5	G	**	R	R	R	R	R	R	R	R	R	R	R
6	←R	←R	←R	←R	←G	*	←FY	***	←G	*	←FY	***	←R
7&8	R	R	R	R	R	R	R	R	G	**	G	**	R
9	R	R	G	**	R	R	R	R	R	R	R	R	R
10	R	R	G	**	R	R	R	R	R	R	R	R	R
11&12	DW	DW	DW	DW	DW	DW	W	FDW	DW	DW	W	FDW	BLK
13&14	W	FDW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	BLK
15&16	DW	DW	DW	DW	DW	DW	DW	DW	W	FDW	W	FDW	BLK

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

LOCATION: HWY. 10 (CANTRELL RD.)/N. MISSISSIPPI AVE.
CITY: LITTLE ROCK
COUNTY: PULASKI
DISTRICT: 6 SCALE: N/A DRAWN BY: GWE

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
						JOB NO. 061194	47	141

② EMERGENCY TRAFFIC SIGNAL QUANTITIES



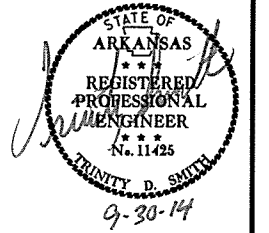
EMERGENCY TRAFFIC SIGNAL QUANTITIES

ITEM NO.	ITEM	QUANTITY	UNIT
703	FLASHING BEACON CONTROLLER	1	EACH
704	FEEDER WIRE	140	LIN. FT.
SP&706	TRAFFIC SIGNAL HEAD, LED, (3 SECTION, 1WAY)	5	EACH
708	TRAFFIC SIGNAL CABLE (5C/14 A.W.G.)	236	LIN. FT.
709	GALVANIZED STEEL CONDUIT (1.25")	20	LIN. FT.
710	NON-METALLIC CONDUIT (1.25")	20	LIN. FT.
710	NON-METALLIC CONDUIT (2")	120	LIN. FT.
711	CONCRETE PULL BOX (TYPE 1 HD)	2	EACH
714	TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION (56')	1	EACH
726	STANDARD SIGN	33	SQ. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (1C/8 A.W.G., EGC)	38	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (2C/6 A.W.G.)	20	LIN. FT.
SP	REMOVAL OF TRAFFIC SIGNAL EQUIPMENT	0.50	LUMP SUM
SP	SERVICE POINT ASSEMBLY (2 CIRCUITS)	1	EACH

LOCATION: HWY. 10 (CANTRELL RD.) / N. MISSISSIPPI AVE.
CITY: LITTLE ROCK
COUNTY: PULASKI
DISTRICT: 6 SCALE: N/A DRAWN BY: GWE

DATE REVISED	DATE FILED	DATE REVISED	DATE FILED	FED. AID DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO. 061194		48		141

2 SIGNALIZATION PLAN SHEET

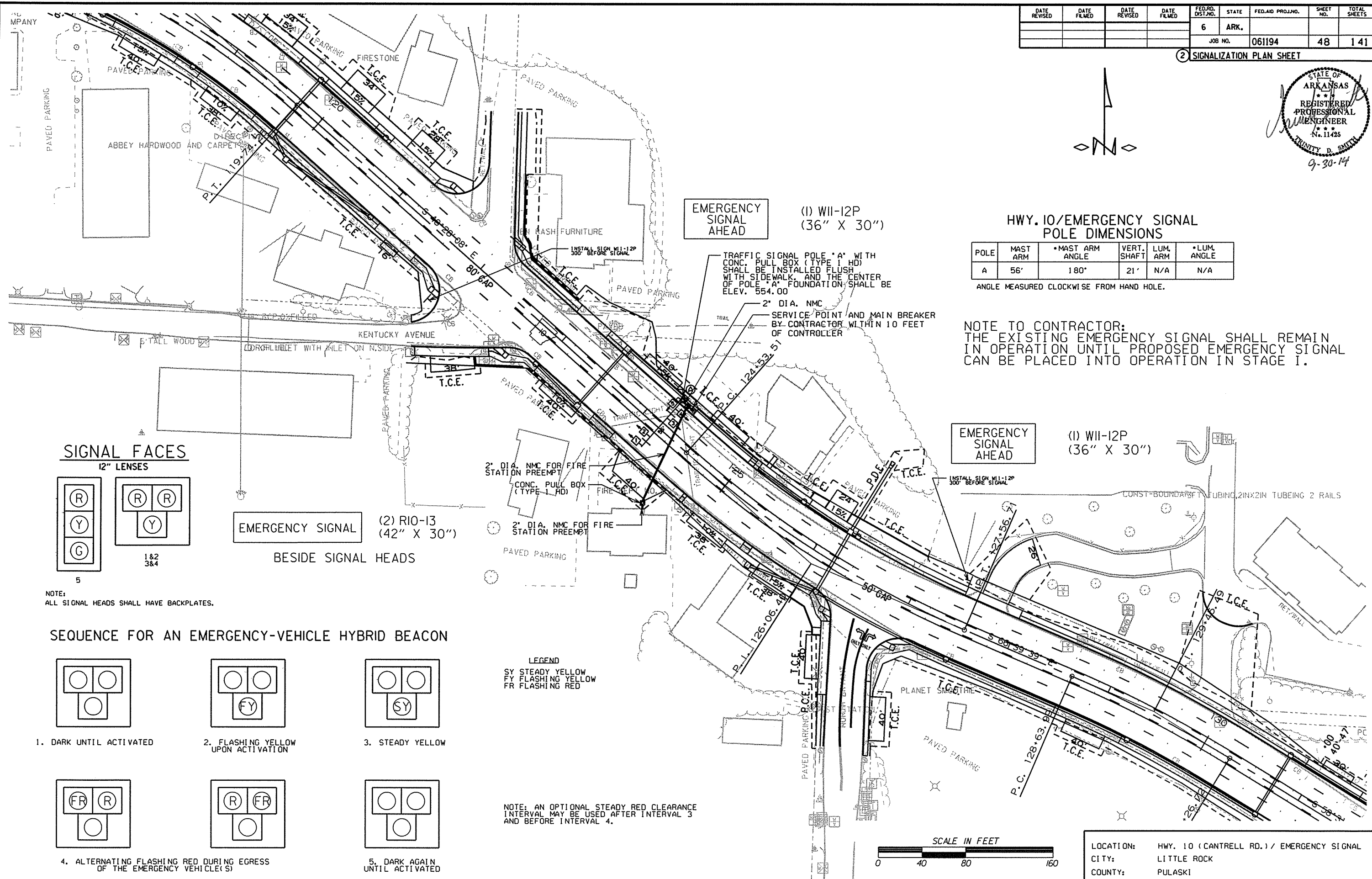


HWY. 10/EMERGENCY SIGNAL POLE DIMENSIONS

POLE	MAST ARM	MAST ARM ANGLE	VERT. SHAFT	LUM. ARM	LUM. ANGLE
A	56'	180°	21'	N/A	N/A

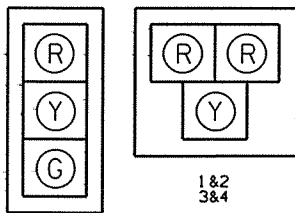
ANGLE MEASURED CLOCKWISE FROM HAND HOLE.

NOTE TO CONTRACTOR:
THE EXISTING EMERGENCY SIGNAL SHALL REMAIN IN OPERATION UNTIL PROPOSED EMERGENCY SIGNAL CAN BE PLACED INTO OPERATION IN STAGE I.



SIGNAL FACES

12" LENSES

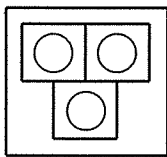


5

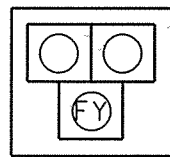
NOTE: ALL SIGNAL HEADS SHALL HAVE BACKPLATES.

EMERGENCY SIGNAL (2) R10-13 (42" X 30")
BESIDE SIGNAL HEADS

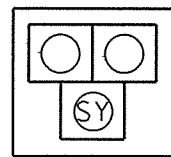
SEQUENCE FOR AN EMERGENCY-VEHICLE HYBRID BEACON



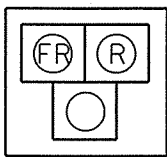
1. DARK UNTIL ACTIVATED



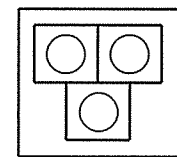
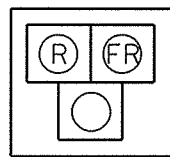
2. FLASHING YELLOW UPON ACTIVATION



3. STEADY YELLOW



4. ALTERNATING FLASHING RED DURING EGRESS OF THE EMERGENCY VEHICLE(S)



5. DARK AGAIN UNTIL ACTIVATED

LEGEND
SY STEADY YELLOW
FY FLASHING YELLOW
FR FLASHING RED

NOTE: AN OPTIONAL STEADY RED CLEARANCE INTERVAL MAY BE USED AFTER INTERVAL 3 AND BEFORE INTERVAL 4.

SCALE IN FEET

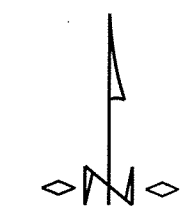
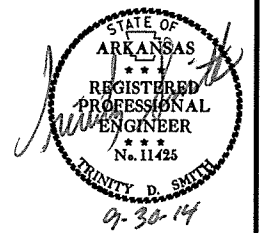


DATE: 09-30-14 FILE NAME: t061194_01.dgn

LOCATION: HWY. 10 (CANTRELL RD.) / EMERGENCY SIGNAL
CITY: LITTLE ROCK
COUNTY: PULASKI
DISTRICT: 6 SCALE: 1" = 80' DRAWN BY: GWE

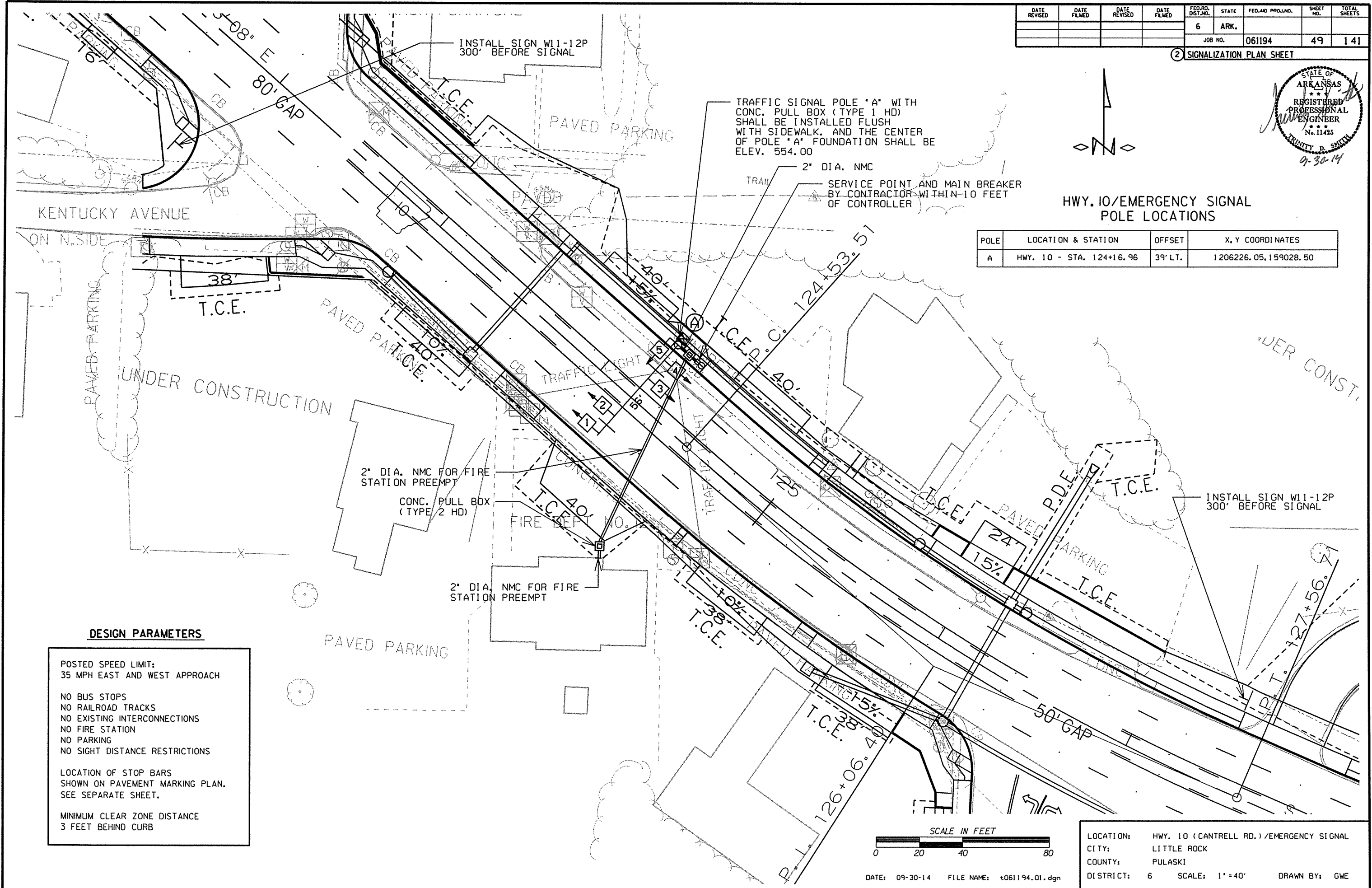
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. AID DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 061194							49	141

2 SIGNALIZATION PLAN SHEET



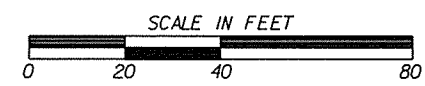
HWY. 10/EMERGENCY SIGNAL POLE LOCATIONS

POLE	LOCATION & STATION	OFFSET	X, Y COORDINATES
A	HWY. 10 - STA. 124+16.96	39' LT.	1206226.05, 159028.50



DESIGN PARAMETERS

- POSTED SPEED LIMIT:
35 MPH EAST AND WEST APPROACH
- NO BUS STOPS
- NO RAILROAD TRACKS
- NO EXISTING INTERCONNECTIONS
- NO FIRE STATION
- NO PARKING
- NO SIGHT DISTANCE RESTRICTIONS
- LOCATION OF STOP BARS
SHOWN ON PAVEMENT MARKING PLAN.
SEE SEPARATE SHEET.
- MINIMUM CLEAR ZONE DISTANCE
3 FEET BEHIND CURB

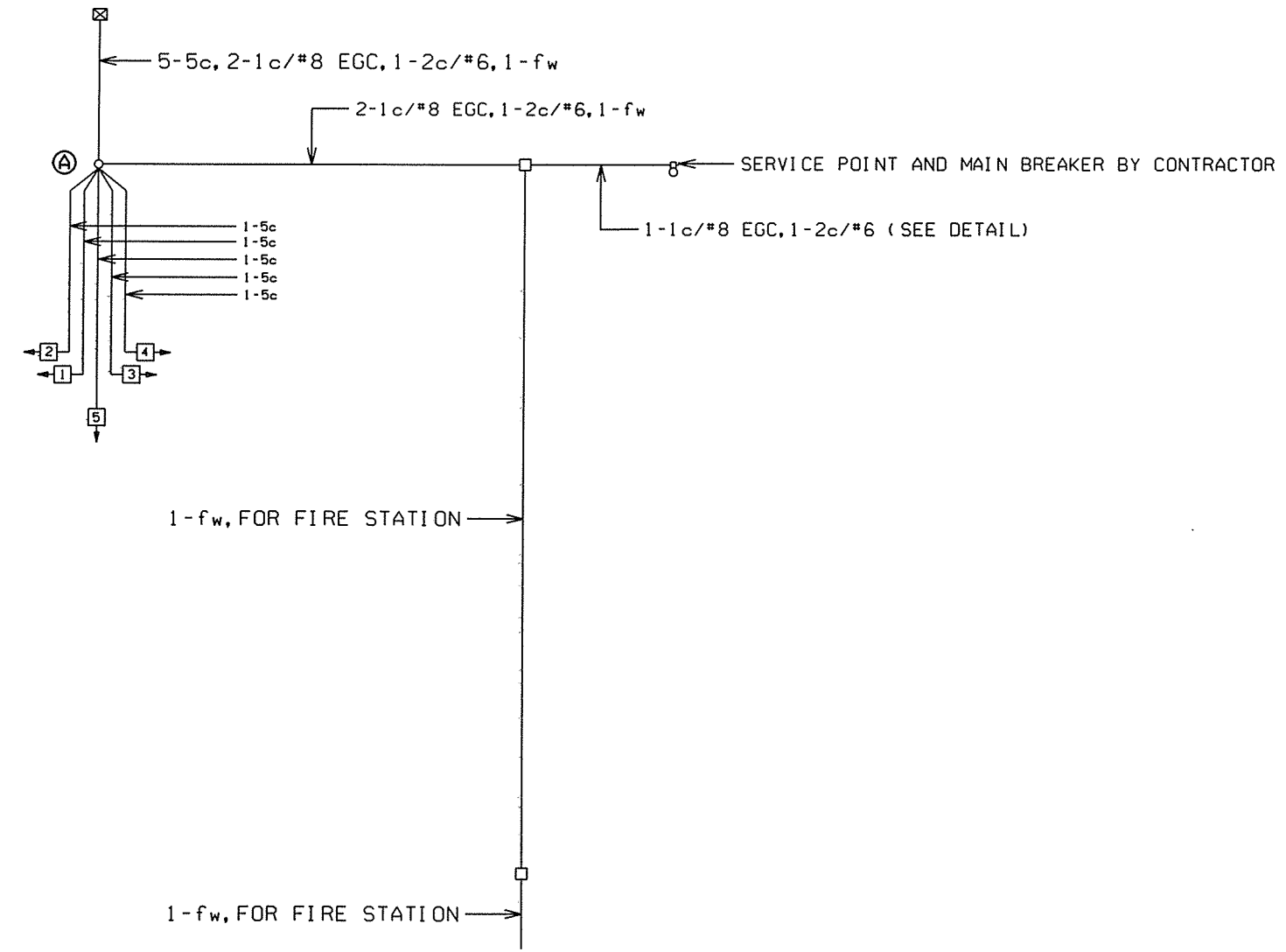


DATE: 09-30-14 FILE NAME: t061194.01.dgn

LOCATION: HWY. 10 (CANTRELL RD.)/EMERGENCY SIGNAL
 CITY: LITTLE ROCK
 COUNTY: PULASKI
 DISTRICT: 6 SCALE: 1"=40' DRAWN BY: GWE

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS	
				6	ARK.				
JOB NO.							061194	50	141

② SIGNALIZATION PLAN SHEET

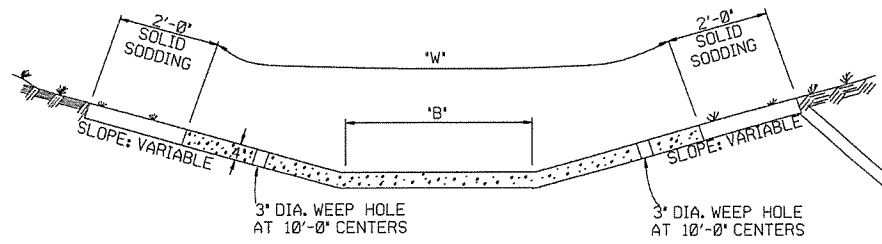


HWY. 10 EMERGENCY SIGNAL
WIRING DIAGRAM

NOTE TO CONTRACTOR:
THE LOCAL GOVERNMENT SHALL BE RESPONSIBLE FOR PROVIDING POWER TO THE SERVICE POINT.

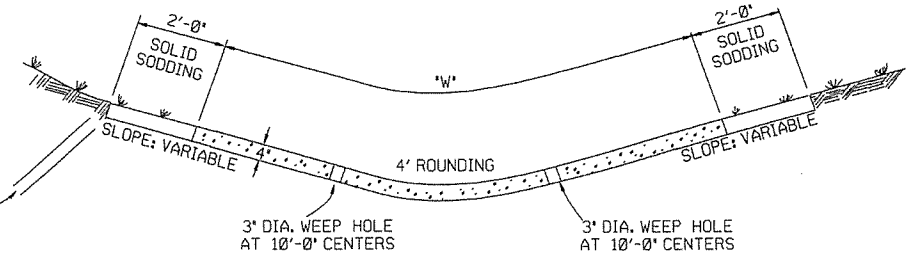
LOCATION:	HWY. 10 (CANTRELL RD.) / EMERGENCY SIGNAL		
CITY:	LITTLE ROCK		
COUNTY:	PULASKI		
DISTRICT:	6	SCALE:	N/A
		DRAWN BY:	GWE

REFER TO TABULATION OF QUANTITIES FOR 'W' & 'B' DIMENSIONS



TYPE A

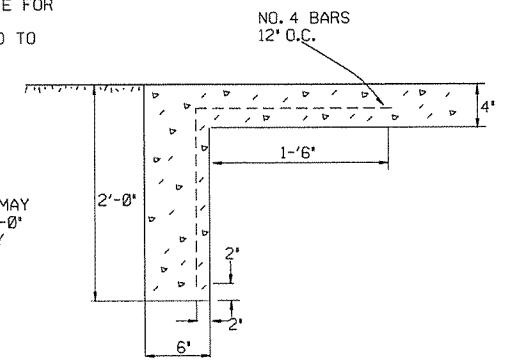
REFER TO TABULATION OF QUANTITIES FOR 'W' DIMENSIONS



TYPE B

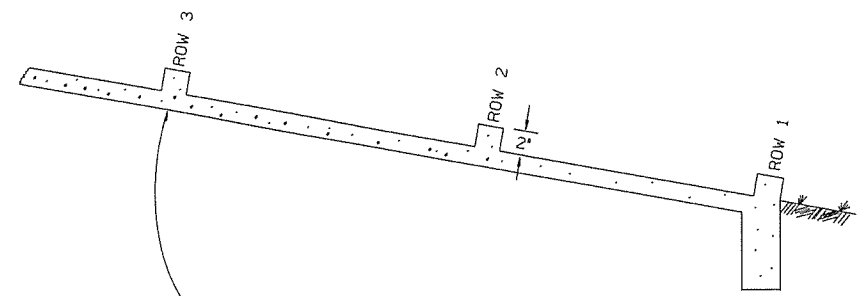
EXCAVATE TO NEAT LINES TO CONSTRUCT DITCH PAVING AND SOLID SODDING.

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.'



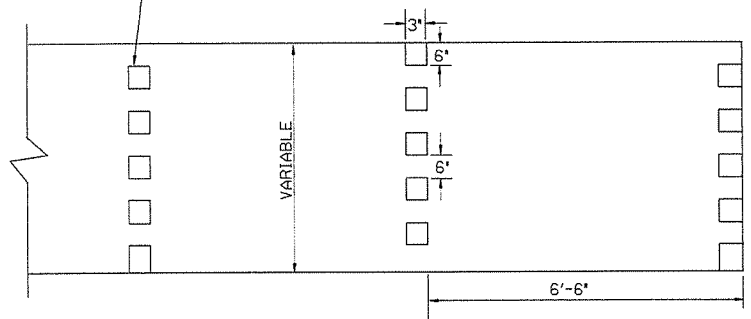
TOE WALL DEPTH MAY BE ALTERED TO 1'-0" WHEN DIRECTED BY THE ENGINEER IN ROCK EXCAVATION

TOE WALL DETAIL FOR CONCRETE DITCH PAVING



NUMBER OF ELEMENTS PER ROW VARIES WITH WIDTH OF PAVING SPECIFIED

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



ENERGY DISSIPATORS (NO SCALE)

GENERAL NOTES:

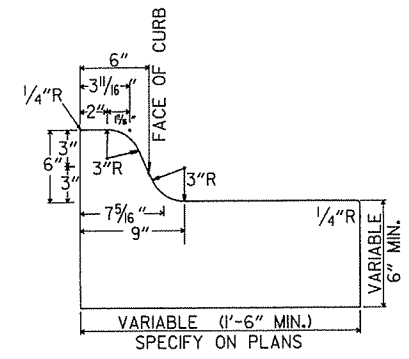
- THE FULL WIDTH OF EACH SECTION SHALL BE POURED MONOLITHICALLY.
- TOE WALLS TO BE CONSTRUCTED FULL WIDTH AT EACH END OF DITCH PAVING, AND POURED MONOLITHICALLY.
- SOLID SOD ALONG DITCH PAVING TO BE PLACED WITHIN 14 DAYS OF DITCH PAVING CONSTRUCTION.
- 1' WIDE TRANSVERSE EXPANSION JOINTS SHALL BE PLACED IN CONCRETE DITCH PAVING AT 45' INTERVALS. THE SPACE SHALL BE FILLED WITH APPROVED JOINT FILLER COMPLYING WITH AASHTO M213.

DATE	REVISION	DATE FILM'D
11-17-10	ADDED GENERAL NOTE	
6-2-94	ADDED GENERAL NOTE ABOUT SOLID SODDING	
11-30-88	ELIMINATED MIN. ROWS OF ELEMENTS	111-30-89
7-15-88	REVISED DISSIPATOR NOTE	653-7-15-88
4-3-87	REVISED ENERGY DISSIPATOR	671-4-3-87
1-9-87	MODIFIED NOTE ON ENERGY DISS.	532-1-9-87
11-3-86	ADDED NOTE TO ENERGY DISS.	599-12-1-86
11-1-84	ENERGY DISSIPATOR DETAILS ADDED	508-11-1-84
11-1-84	EXCAVATION DETAILS ADDED	
10-2-72	REVISED AND REDRAWN	508-10-2-72

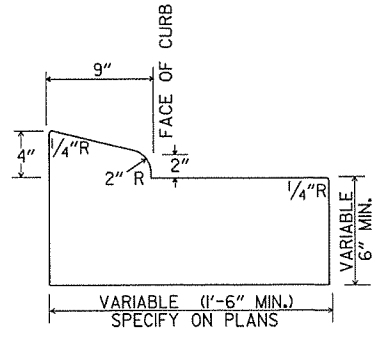
ARKANSAS STATE HIGHWAY COMMISSION

CONCRETE DITCH PAVING

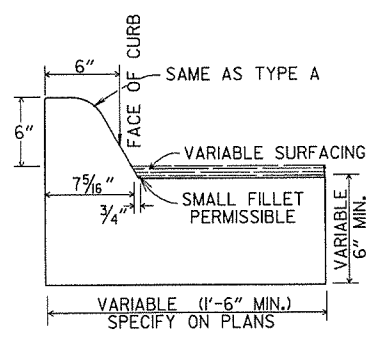
STANDARD DRAWING CDP-1



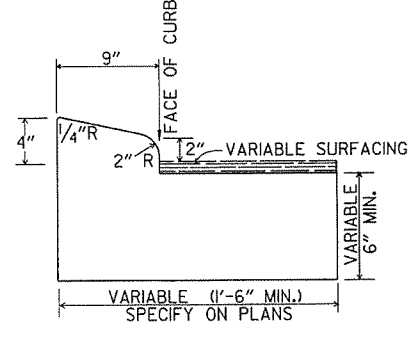
TYPE A



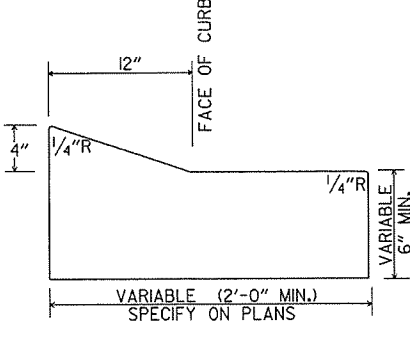
TYPE B-1



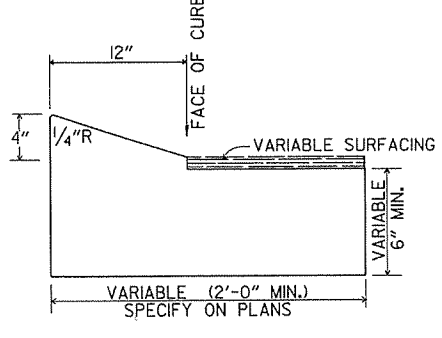
TYPE C



TYPE B-2

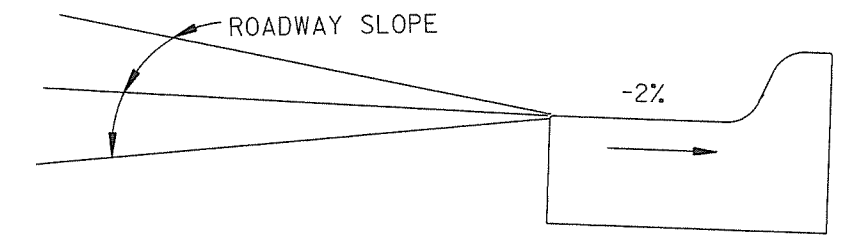


TYPE E-1

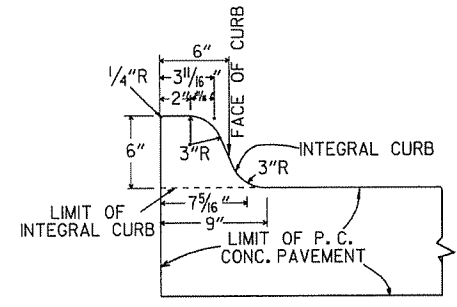


TYPE E-2

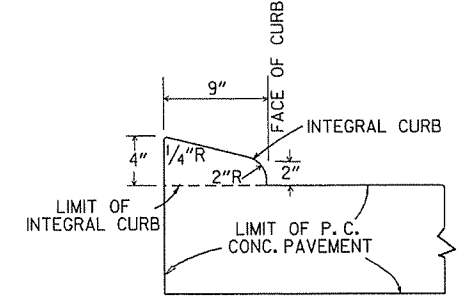
CONCRETE COMBINATION CURB AND GUTTER



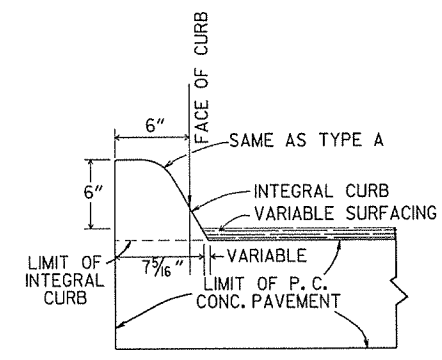
DETAIL OF GUTTER SLOPE
GUTTER SHALL BE CONSTRUCTED ON 2% SLOPE AWAY FROM ROADWAY, REGARDLESS OF ROADWAY SLOPE.



TYPE A

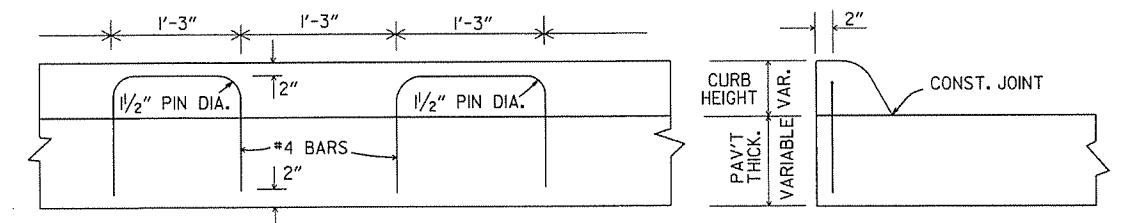


TYPE B



TYPE C

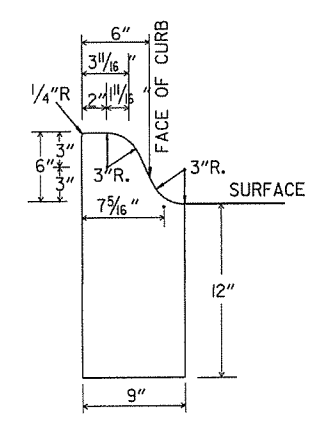
INTEGRAL CURB



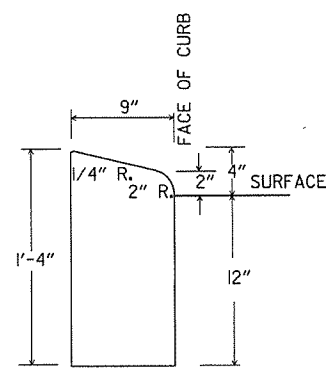
LONGITUDINAL SECTION

ELEVATION

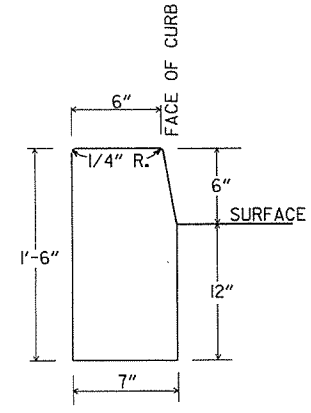
ALTERNATE CONSTRUCTION METHOD FOR INTEGRAL CURB



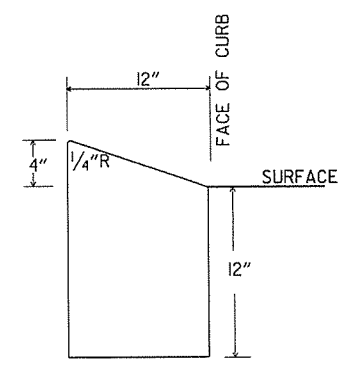
TYPE A



TYPE B

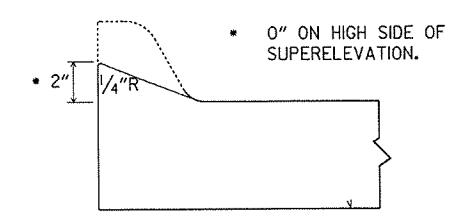


TYPE D



TYPE E

CONCRETE CURB



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

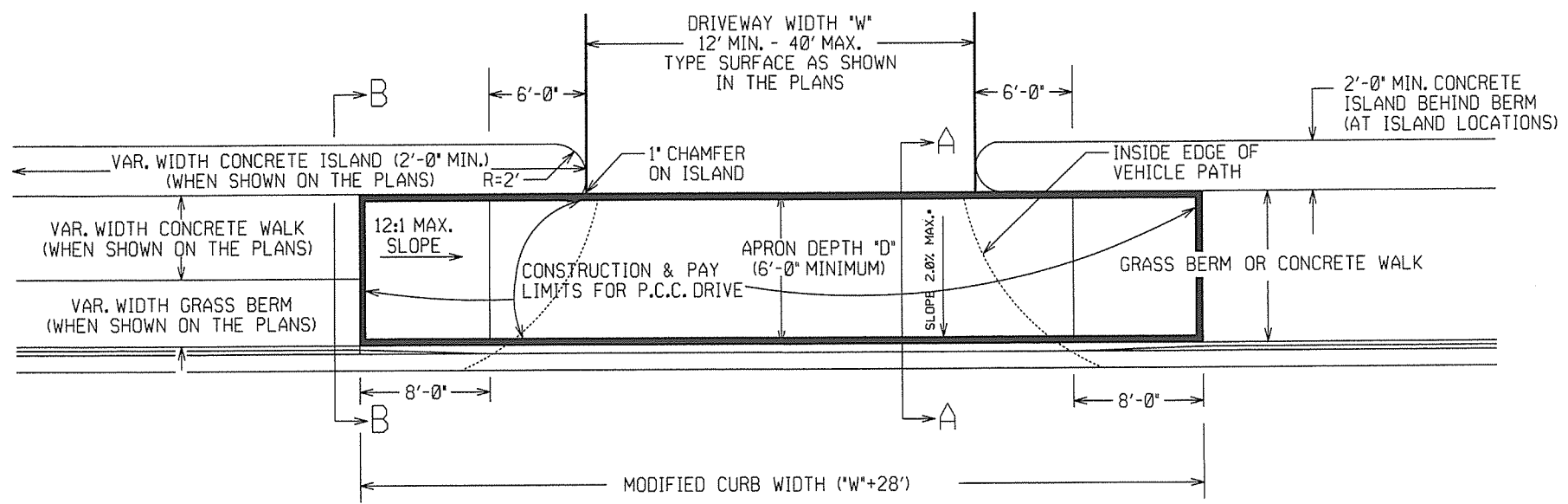
DETAILS OF MODIFIED CURB

DATE	REVISION	DATE FILMED
11-29-07	REVISED GUTTER SLOPE & MODIFIED CURB DETAILS	
11-10-05	ADDED DETAILS OF TYPE E CURBS	
11-16-01	REVISED CONCRETE CURB TYPE B	
11-18-98	REVISED MODIFIED CURB	
6-2-94	ADDED NOTE TO SPECIAL MODIFIED CURB	
8-5-93	CORRECTED GUTTER SLOPE	8-5-93
10-1-92	ADDED DETAILS OF GUTTER SLOPE	10-1-92
5-24-90	ADDED DETAILS OF MODIFIED CURB	5-24-90
11-30-89	VARIABLE DEPTH TYPE A & B 1	11-30-89
7-15-88	REVISED MODIFIED CURB	630-7-15-88
11-1-73	REVISED MODIFIED CURB	500-11-1-73
10-2-72	REVISED AND REDRAWN	512-10-2-72

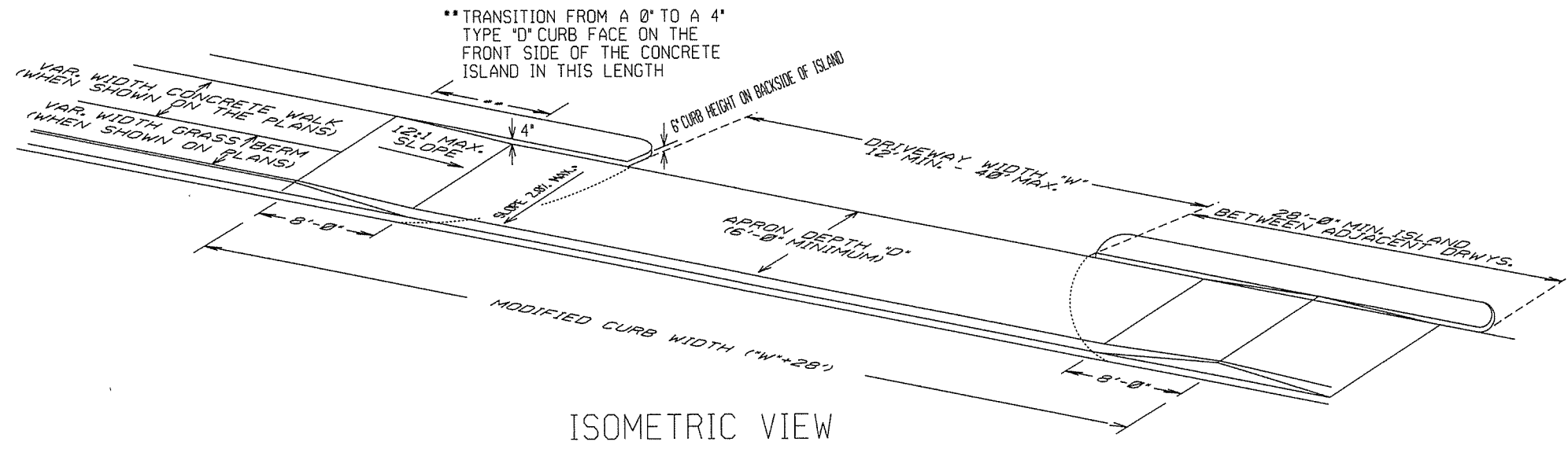
ARKANSAS STATE HIGHWAY COMMISSION

CURBING DETAILS

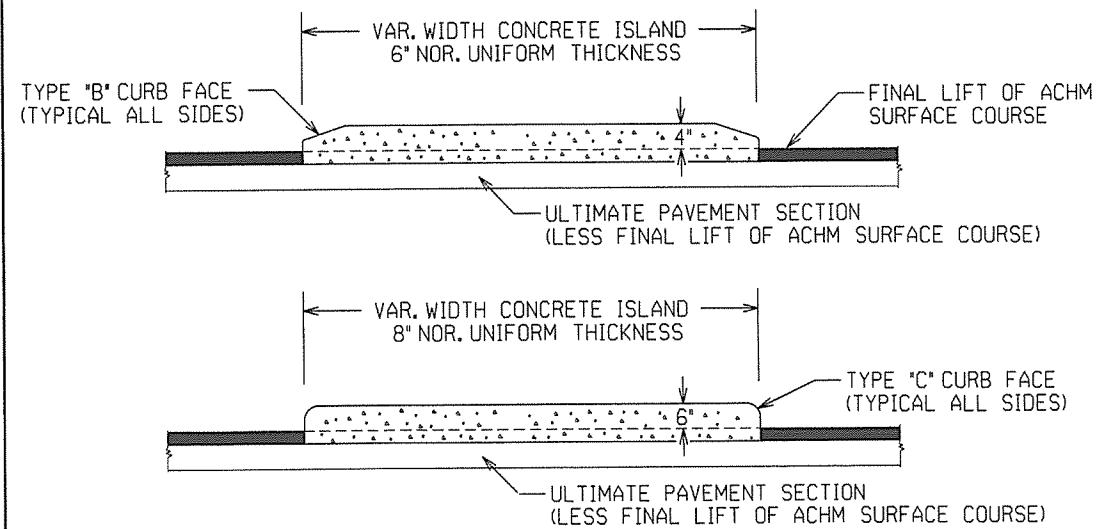
STANDARD DRAWING CG-1



PLAN VIEW

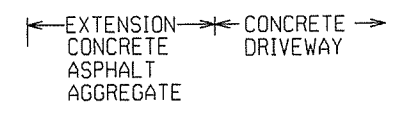


ISOMETRIC VIEW



CURBED ISLANDS FOR CHANNELIZATION

REFER TO PLANS FOR TYPE OF CURB FACE TO BE USED. NO DIRECT PAYMENT WILL BE MADE FOR THE CURB FACES SHOWN ON THE ISLAND DETAILS. PAYMENT FOR THE CURB FACE WILL BE INCLUDED IN THE UNIT PRICE BID FOR THE ITEM "CONCRETE ISLAND".

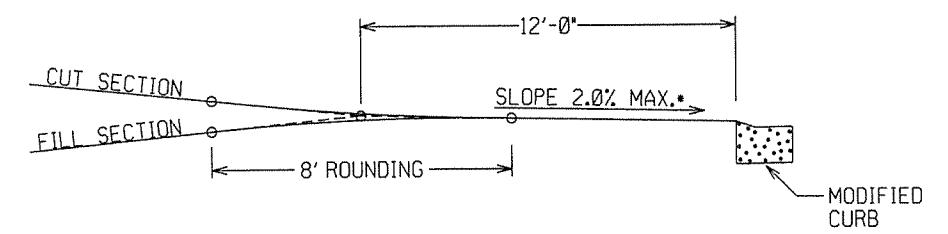


EXTENSION TYPICAL SECTIONS

- 1: CONCRETE - 6" P.C. CONCRETE DRIVEWAY
- 2: ASPHALT - 2" ACHM SURFACE COURSE (1/2")
4" ACHM BINDER COURSE (1/2")
4" ACHM BASE COURSE (1-1/2")
- 3: ASPHALT - 2" ACHM SURFACE COURSE (1/2")
7" AGGREGATE BASE COURSE
- 4: AGGREGATE - 6" AGGREGATE BASE COURSE

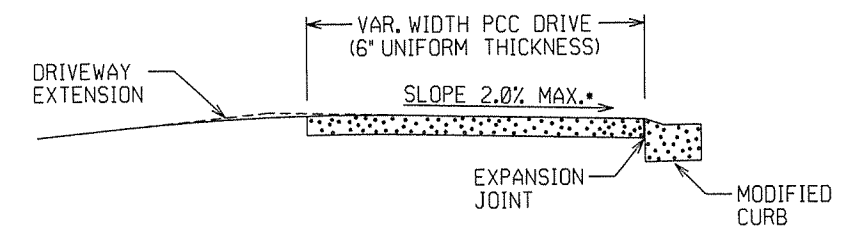
THE TYPE OF EXTENSION SHALL BE AS SHOWN IN THE PLANS. THE CONTRACTOR MAY, WITH THE APPROVAL OF THE ENGINEER, SUBSTITUTE A LOWER NUMBERED TYPE OF EXTENSION IN LIEU OF THE TYPE SPECIFIED IN THE PLANS, BUT AT NO ADDITIONAL COST TO THE DEPARTMENT.

DRIVEWAY EXTENSION DETAILS

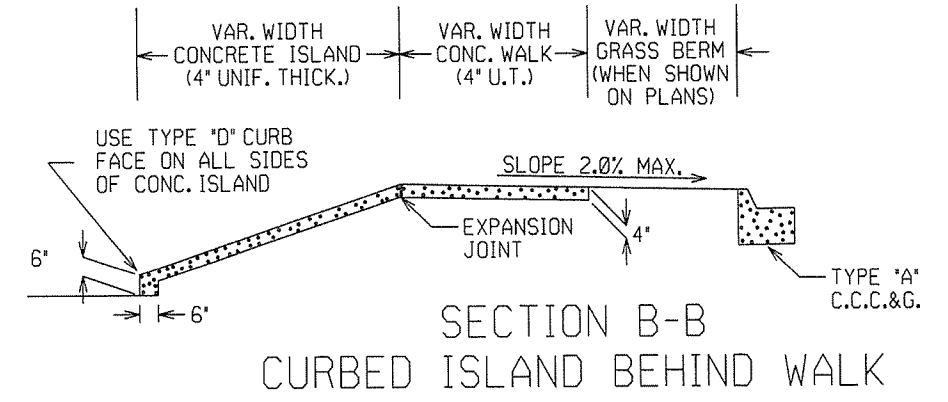


DRIVEWAY VERTICAL ALIGNMENT DETAILS

NOTE: DRIVEWAYS MAY NOT BE SLOPED AWAY FROM THE ROADWAY UNLESS APPROVED BY THE ENGINEER.

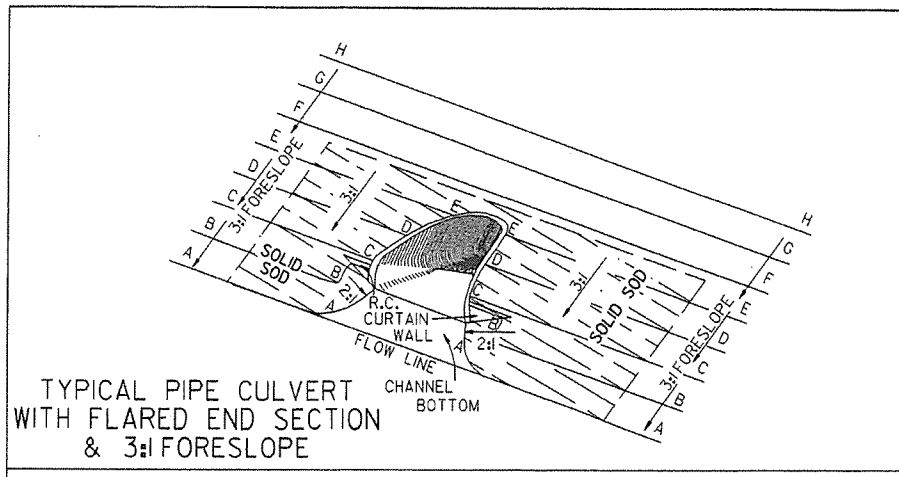


SECTION A-A

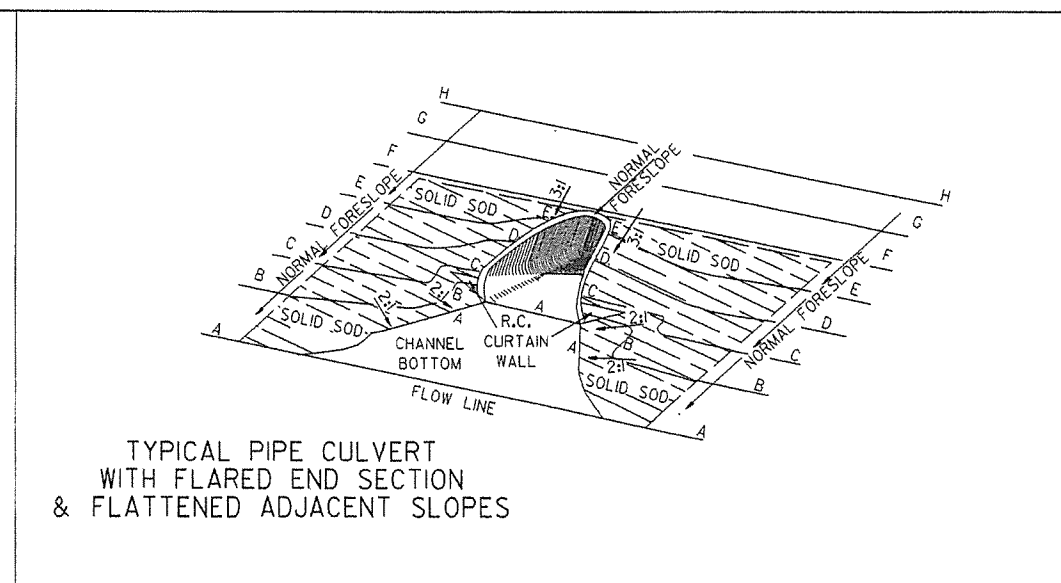


SECTION B-B
CURBED ISLAND BEHIND WALK

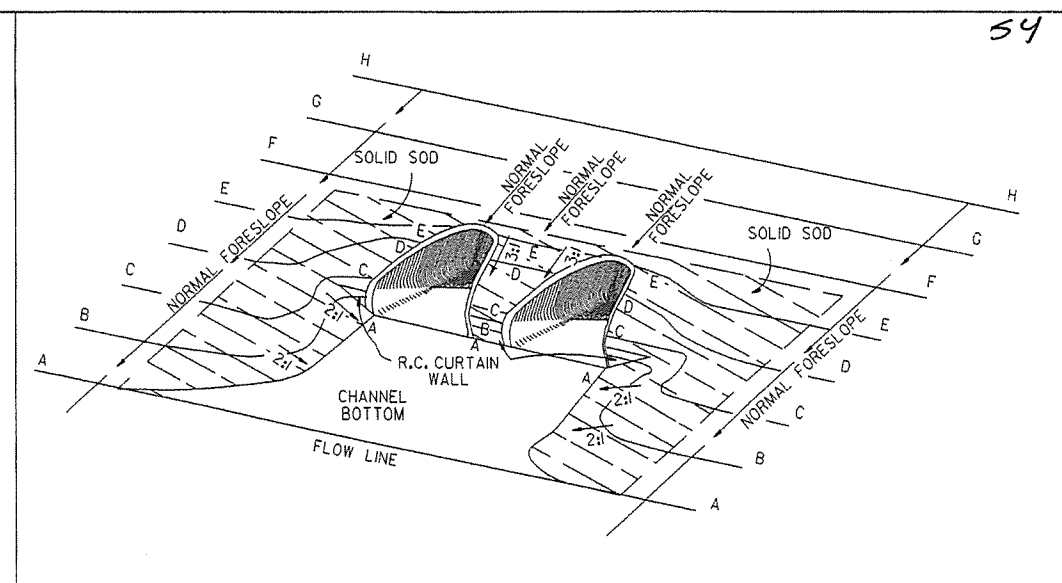
DATE	REVISED	DESCRIPTION
2-27-14		REVISED PLAN & ISOMETRIC VIEW
11-29-07		ADDED CHANNELIZATION ISLAND WITH TYPE C CURB FACE & REVISED DRIVEWAY SLOPE NOTE & VERTICAL ALIGNMENT DETAIL
11-10-05		REV. APRON SLOPE & DEPTH OF AGG. BASE.
8-22-02		ADDED ISLAND DETAILS & NOTES
3-30-00		REV. MOD. CURB WIDTH & TRANS. NOTE
11-19-98		REVISED NOTES
11-18-98		REDRAWN AND REISSUED
DATE	REVISED	DESCRIPTION



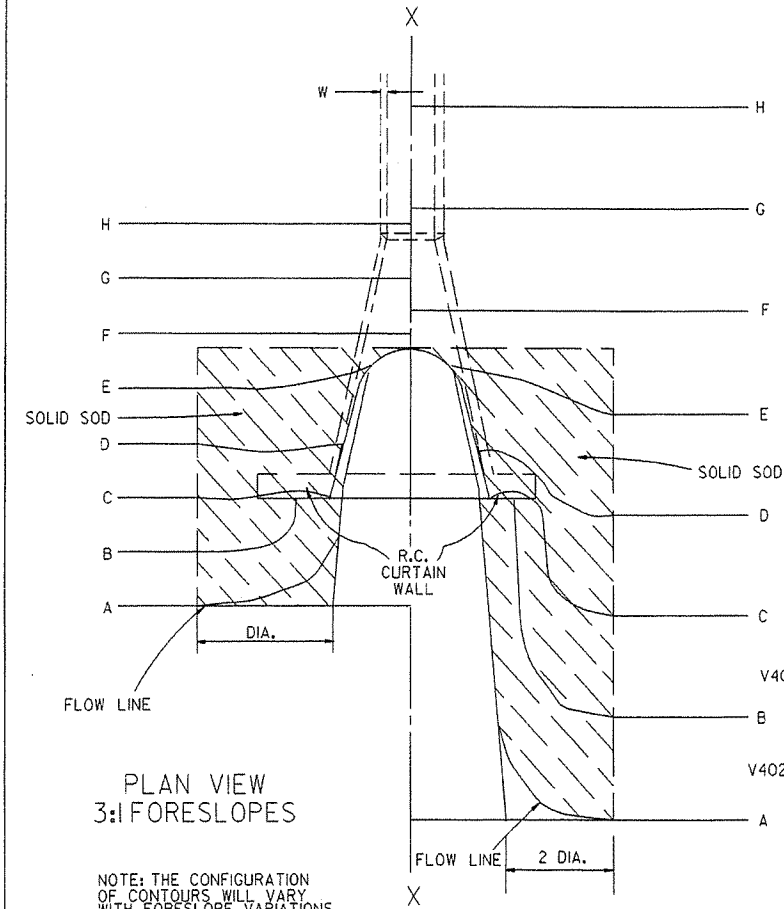
TYPICAL PIPE CULVERT WITH FLARED END SECTION & 3:1 FORESLOPE



TYPICAL PIPE CULVERT WITH FLARED END SECTION & FLATTENED ADJACENT SLOPES



TYPICAL MULTIPLE PIPE CULVERT WITH FLARED END SECTIONS & FLATTENED ADJACENT SLOPES



PLAN VIEW 3:1 FORESLOPES

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

PLAN VIEW FLATTENED FORESLOPES

R.C. CURTAIN WALL DIMENSIONS & QUANTITIES

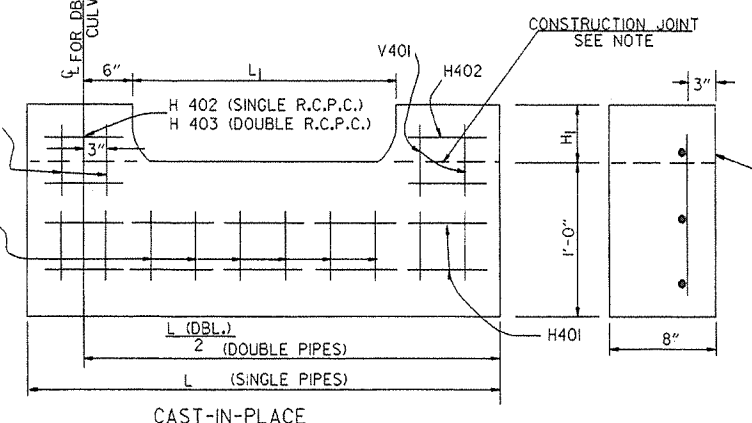
PIPE DIA.	H ₁	L ₁	L	L (DBL.) 2	SINGLE R.C.P.C.		DOUBLE R.C.P.C.	
					CONC.	REINF. STEEL	CONC.	REINF. STEEL
					CU. YDS.	LBS.	CU. YDS.	LBS.
18"	11/2"	3'-5"	8'-0"	6'-3"	0.31	27.7	0.45	39.5
24"	1'-0 1/2"	4'-6"	9'-6"	7'-6"	0.37	33.4	0.53	48.0
30"	1'-3 1/2"	5'-7"	11'-0"	9'-0"	0.45	39.0	0.67	59.0
36"	1'-7"	6'-8"	13'-0"	10'-6"	0.58	52.6	0.83	73.9
42"	2'-1 1/2"	7'-3"	15'-6"	12'-0"	0.82	77.1	1.10	100.7
48"	2'-5"	7'-10"	17'-0"	13'-0"	0.98	94.9	1.27	120.4
54"	2'-9 1/2"	8'-5"	18'-6"	14'-0"	1.16	115.8	1.47	143.7
60"	3'-4"	9'-0"	20'-6"	15'-6"	1.47	149.7	1.84	180.3
72"	4'-5"	10'-2"	25'-6"	18'-6"	2.31	232.6	2.73	271.0

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

REINFORCING STEEL SCHEDULE

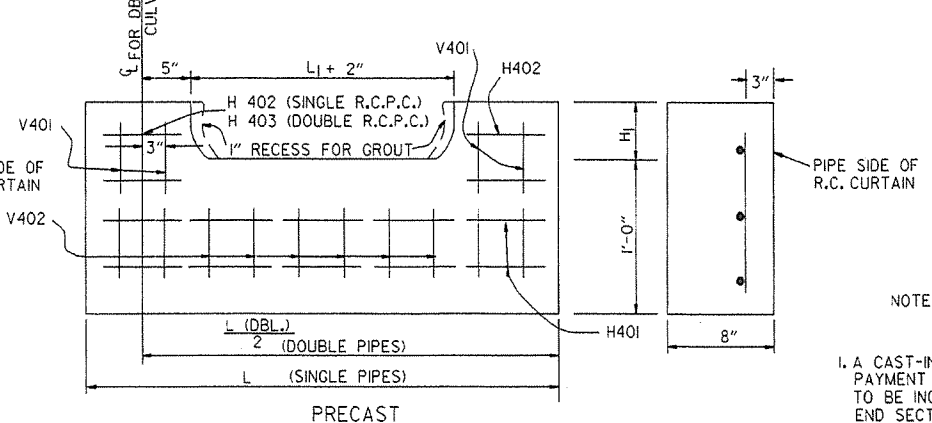
PIPE DIA.	SINGLE R.C. PIPE CULVERT								DOUBLE R.C. PIPE CULVERT									
	H401		H402		V401		V402		H401		H402		H403		V401		V402	
	L	NO.	L	NO.	L	NO.	L	NO.	L	NO.	L	NO.	L	NO.	L	NO.	L	NO.
18"	7'-8"	2	1'-11 1/2"	4	1'-7 1/2"	8	8"	8	12'-2"	2	1'-11 1/2"	4	8"	2	1'-7 1/2"	10	8"	14
24"	9'-2"	2	2'-2"	4	1'-8 1/2"	10	8"	9	14'-8"	2	2'-2"	4	8"	2	1'-8 1/2"	12	8"	18
30"	10'-8"	2	2'-4 1/2"	4	1'-11 1/2"	10	8"	12	17'-8"	2	2'-4 1/2"	4	8"	2	1'-11 1/2"	14	8"	22
36"	12'-8"	2	2'-10"	6	2'-3"	12	8"	14	20'-8"	2	2'-10"	6	8"	3	2'-3"	14	8"	28
42"	15'-2"	2	3'-9 1/2"	8	2'-9 1/2"	16	8"	15	23'-8"	2	3'-9 1/2"	8	8"	4	2'-9 1/2"	18	8"	30
48"	16'-8"	2	4'-3"	10	3'-1"	18	8"	16	25'-8"	2	4'-3"	10	8"	5	3'-1"	20	8"	32
54"	18'-2"	2	4'-8 1/2"	12	3'-5 1/2"	20	8"	17	27'-8"	2	4'-9"	12	8"	6	3'-5 1/2"	22	8"	34
60"	20'-2"	2	5'-5"	14	4'-0"	24	8"	18	30'-8"	2	5'-5"	14	8"	7	4'-0"	26	8"	36
72"	25'-2"	2	7'-4"	18	5'-1"	30	8"	20	36'-8"	2	7'-4"	18	8"	9	5'-1"	33	8"	40

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



R.C. CURTAIN WALL DETAILS

NOTE: THE PORTION OF THE R.C. CURTAIN WALL BENEATH THE FLARED END SECTION (LOWER 1'-0") SHALL BE PLACED MONOLITHICALLY. THE FLARED END SECTION SHALL THEN BE SET IN PLACE & THE REMAINING PORTIONS OF THE R.C. CURTAIN WALL PLACED.



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.

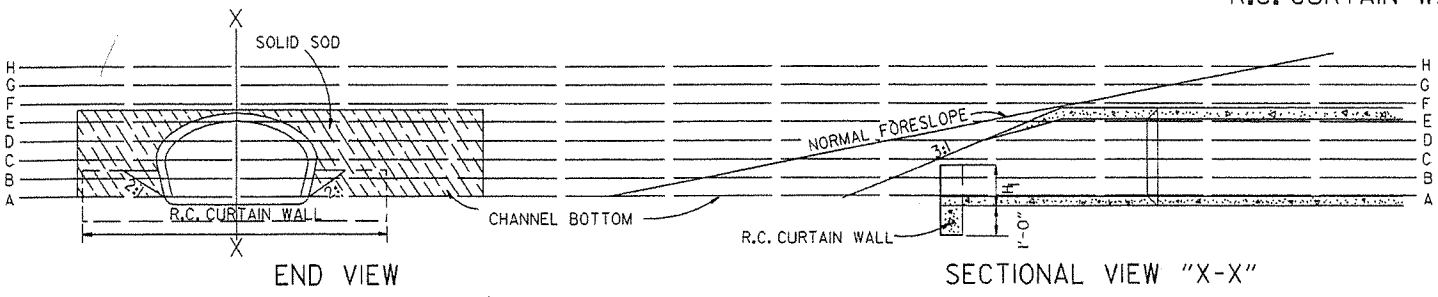
SOLID SODDING

PIPE DIA.	SINGLE R.C.P.C.			DOUBLE R.C.P.C.		
	3:1	4:1	6:1	3:1	4:1	6:1
	SQ. YDS.					
18"	5	7	12	6	8	13
24"	8	12	19	9	13	20
30"	13	18	29	14	19	30
36"	17	26	41	18	28	43
42"	23	35	55	25	37	57
48"	29	46	68	31	48	70
54"	35	57	85	37	59	87
60"	45	62	104	48	65	107
72"	64	92	156	67	95	159

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

GENERAL NOTES

1. A CAST-IN-PLACE OR PRECAST CURTAIN WALL MAY BE USED. PAYMENT FOR THE CURTAIN WALL SHALL BE CONSIDERED TO BE INCLUDED IN THE UNIT PRICE BID EACH FOR FLARED END SECTIONS OF THE SEVERAL SIZES, WHICH PRICE SHALL BE FULL COMPENSATION FOR FURNISHING ALL MATERIALS INCLUDING REINFORCING STEEL AND CONCRETE; FOR FORMS, MIXING AND PLACING; FOR EXCAVATION AND BACKFILL, AND FOR ALL LABOR, TOOLS, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE WORK.
2. ALL EXPOSED EDGES SHALL BE CHAMFERED 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 x 3 W/10 x W10 MAY BE USED IN LIEU OF REINFORCING BARS.



END VIEW

SECTIONAL VIEW "X-X"

10-18-96	ADDED NOTE TO SOLID SODDING		ARKANSAS STATE HIGHWAY COMMISSION
10-12-96	CORRECTED SPELLING	10-18-96	
11-3-96	ADDED GENERAL NOTE NO. 4		
8-15-91	REV. CURTAIN WALL QUANT. STEEL SCH. & SOLID SOD QUANT.		FLARED END SECTION
3-2-81	ALLOW PRECAST IN 2 OR MORE PIECES CHAMFER EDGES		
5-15-80	ADDED PRECAST WALL & GENERAL NOTES		
10-2-72	REVISED AND REDRAWN		STANDARD DRAWING FES-1
DATE	REVISION	FILMED	

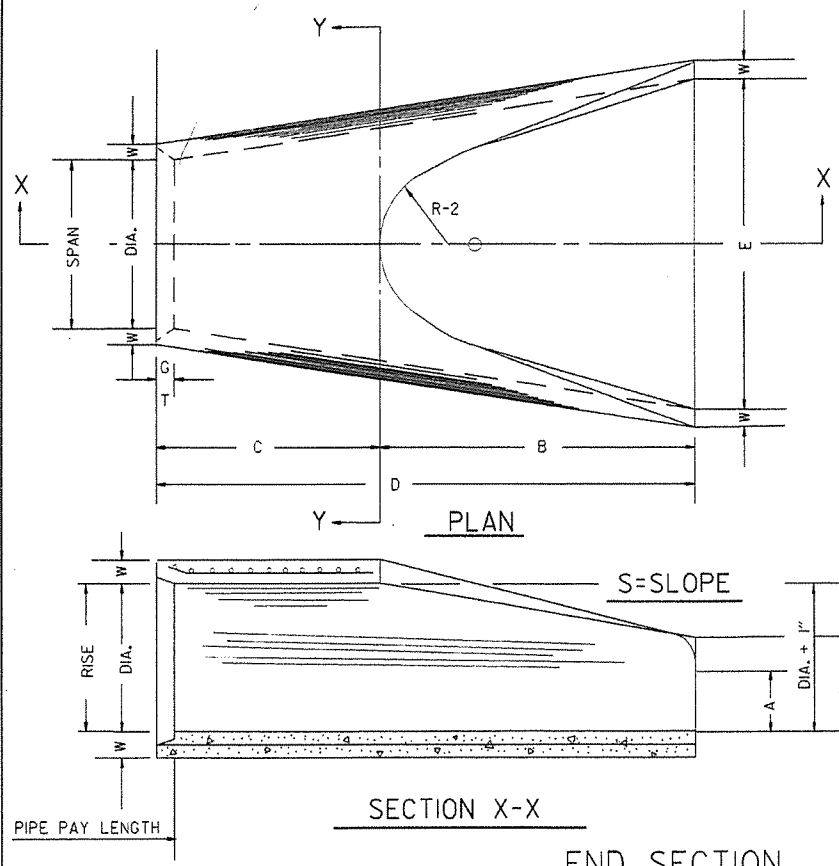
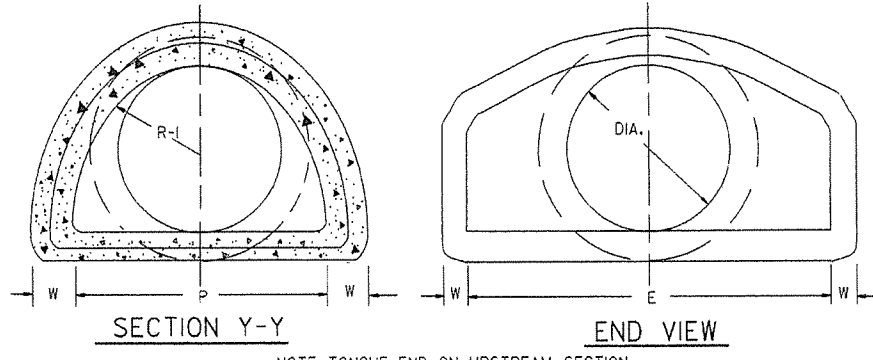


TABLE OF DIMENSIONS

DIA.	WALL	A	B	C	D	E	S	DIA. + 1"	P	R-1	R-2	G-T	WT.	h
18"	2 1/2"	9"	2'-3"	3'-10"	6'-1"	3'-0"	3:1	19"	29"	15 1/2"	12"	2"	1000	1'-0 1/2"
24"	3"	9 1/2"	3'-7 1/2"	2'-6"	6'-1 1/2"	4'-0"	3:1	25"	33 3/8"	16 1/8"	14"	2 1/2"	1600	1'-11 1/2"
30"	3 1/2"	1'-0"	4'-6"	1'-7 3/4"	6'-1 3/4"	5'-0"	3:1	31"	37"	18 1/2"	15"	3 1/4"	1940	1'-4 5/8"
36"	4"	1'-3"	5'-3"	2'-10 3/4"	8'-1 3/4"	6'-0"	3:1	37"	47 1/8"	24 3/8"	20"	3 1/2"	4100	1'-8"
42"	4 1/2"	1'-9"	5'-3"	2'-11"	8'-2"	6'-6"	3:1	43"	53 3/8"	27 1/2"	22"	3 1/2"	5380	2'-2 1/2"
48"	5"	2'-0"	6'-0"	2'-2"	8'-2"	7'-0"	3:1	49"	56 1/2"	28 1/2"	22"	3 1/2"	6550	2'-6"
54"	5 1/2"	2'-4"	6'-6"	1'-10"	8'-4"	7'-6"	3:1	55"	65 1/2"	33 3/8"	24"	4"	8750	2'-10 1/2"
60"	6"	2'-10"	6'-6"	1'-10"	8'-4"	8'-0"	3:1	61"	72 1/2"	36 1/8"	24"	4"	9270	3'-5"
72"	7"	3'-10"	6'-6"	1'-10"	8'-4"	9'-0"	3:1	73"	77 1/8"	38 3/8"	24"	5"	13250	4'-6"



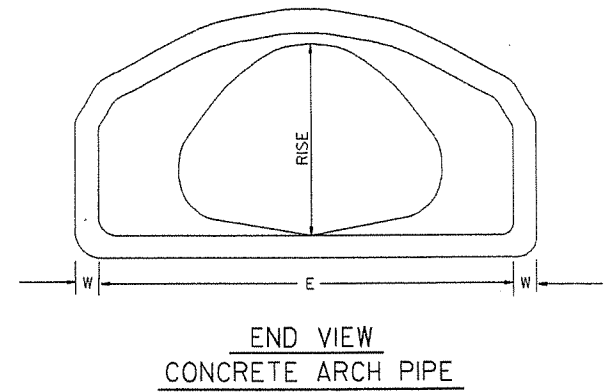
NOTE: TONGUE END ON UPSTREAM SECTION
GROOVE END ON DOWNSTREAM SECTION

END SECTION FOR REINFORCED CONCRETE PIPE CULVERTS

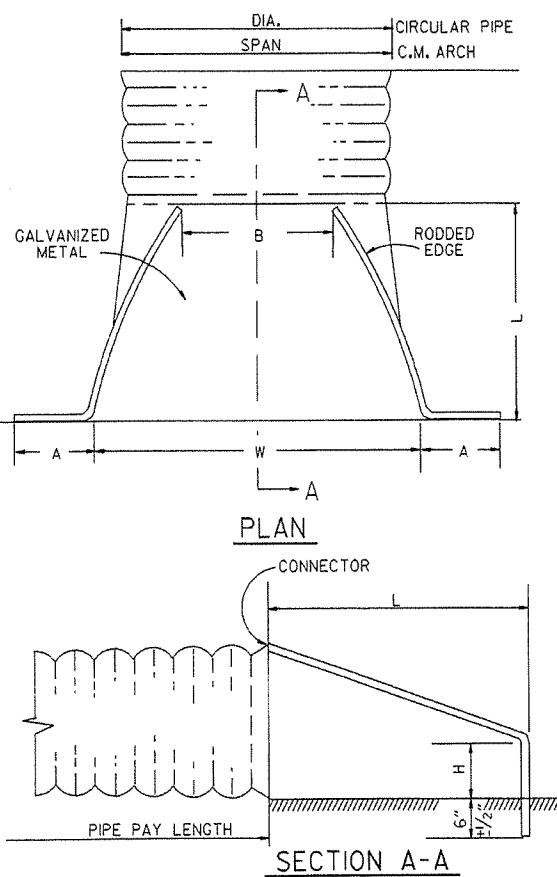
ARCH PIPE

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 1/2:1
18	22	22	13 1/2	14	2 1/2"	5"	2'-0"	4'-1"	6'-1"	3'-6"	32 1/8"	13"	2 1/2"	2 1/2:1
21	26	26	15 1/2	16	2 3/4"	7"	2'-3"	3'-10"	6'-1"	4'-0"	34 1/8"	14"	2 1/2"	2 1/2:1
24	28 1/2	29	18	18	3"	9"	2'-3"	3'-10"	6'-1"	5'-0"	36 3/8"	15"	2 1/2"	2 1/2:1
30	36 1/4	36	22 1/2	23	3 1/2"	10"	3'-1"	3'-0 1/2"	6'-1 1/2"	6'-0"	47 1/8"	20"	3"	2 1/2:1
36	43 3/4	44	26 3/8	27	4"	10 1/2"	4'-0"	2'-1 1/2"	6'-1 1/2"	6'-6"	54 3/8"	22"	3 1/2"	2 1/2:1
42	51 1/8	51	31 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 1/2:1
48	58 1/2	59	36	36	5"	1'-3"	5'-3"	2'-10 3/4"	8'-1 3/4"	7'-10"	70 3/8"	24"	4 1/4"	2 1/2:1
54	65	65	40	40	5 1/2"	1'-7"	5'-3"	2'-11"	8'-2"	8'-6"	72 1/8"	24"	4 3/4"	2 1/2:1
60	73	73	45	45	6"	1'-10"	5'-6"	2'-8"	8'-2"	9'-0"	77 1/8"	24"	5"	2 1/4:1

* THE MEASURED SPAN AND RISE SHALL NOT VARY MORE THAN ± 2 PER CENT FROM THE VALUES SPECIFIED BY AASHTO M 206.



END VIEW CONCRETE ARCH PIPE

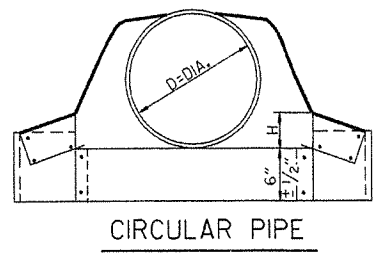


NOTE: ALTERNATE CONNECTIONS TO THE PIPE CULVERTS, IN ACCORDANCE WITH MANUFACTURER'S STANDARD PRACTICES, MAY BE MADE SUBJECT TO THE APPROVAL OF THE ENGINEER.

END SECTIONS FOR CORRUGATED METAL PIPE CULVERTS

CIRCULAR PIPE

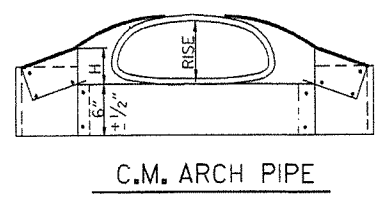
D. DIA.	GAUGE	INCHES									
		A	B. MAX.	H	1/2" ±	L	W	S			
12	16	6	6	6	21	24	2 1/2:1				
15	16	7	8	6	26	30	2 1/2:1				
18	16	8	10	6	31	36	2 1/2:1				
21	16	9	12	6	36	42	2 1/2:1				
24	16	10	13	6	41	48	2 1/2:1				
30	14	12	16	8	51	60	2 1/2:1				
36	14	14	19	9	60	72	2 1/2:1				
42	12	16	22	11	69	84	2 1/2:1				
48	12	18	27	12	78	90	2 1/2:1				
54	12	18	30	12	84	102	2:1				
60	12	18	33	12	87	114	1 3/4:1				
66	12	18	36	12	87	120	1 1/2:1				
72	12	18	39	12	87	126	1 1/3:1				



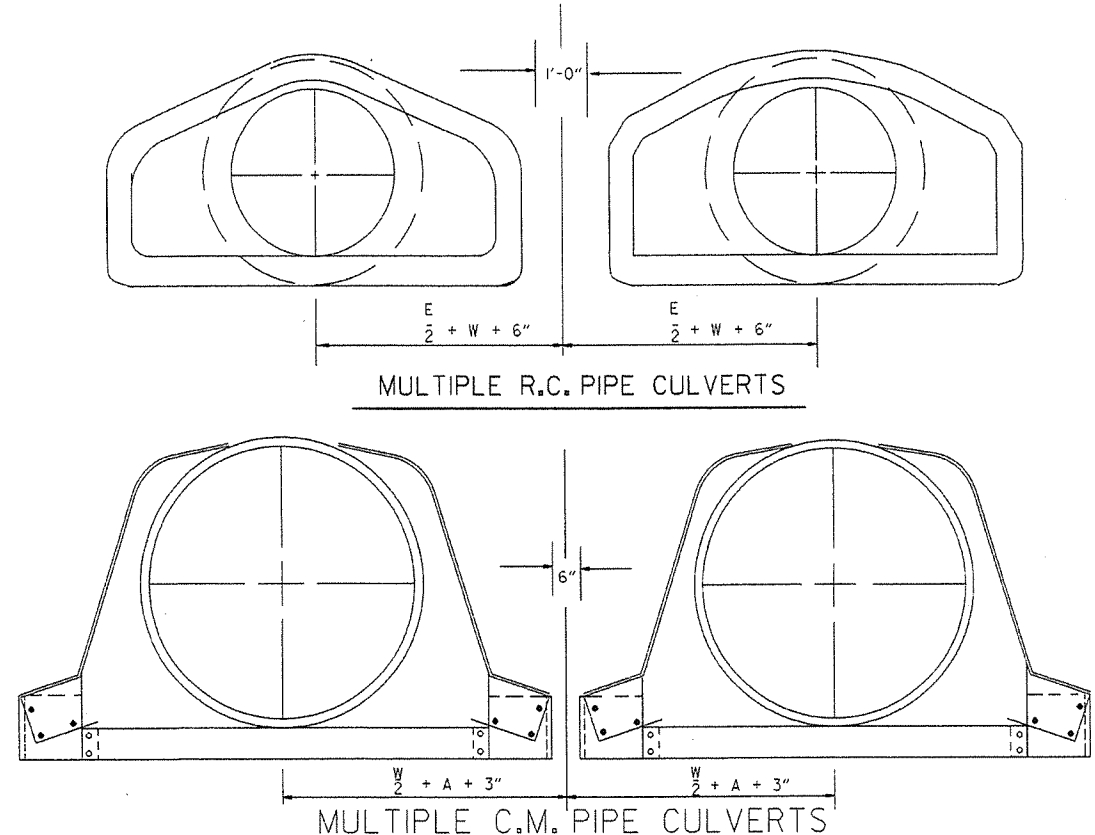
CIRCULAR PIPE

C.M. ARCH PIPE

EQUIV. DIA.	SPAN	RISE	INCHES										S	GAUGE
			A	B. MAX.	H	1/2" ±	L	W						
15"	17	13	7	9	6	19	30	2 1/2:1	16					
18"	21	15	7	10	6	23	36	2 1/2:1	16					
21"	24	18	8	12	6	28	42	2 1/2:1	16					
24"	28	20	9	14	6	32	48	2 1/2:1	16					
30"	35	24	10	16	6	39	60	2 1/2:1	14					
36"	42	29	12	18	8	46	75	2 1/2:1	14					
42"	49	33	13	21	9	53	85	2 1/2:1	12					
48"	57	38	18	26	12	63	90	2 1/2:1	12					
54"	64	43	18	30	12	70	102	2 1/4:1	12					
60"	71	47	18	33	12	77	114	2 1/4:1	12					



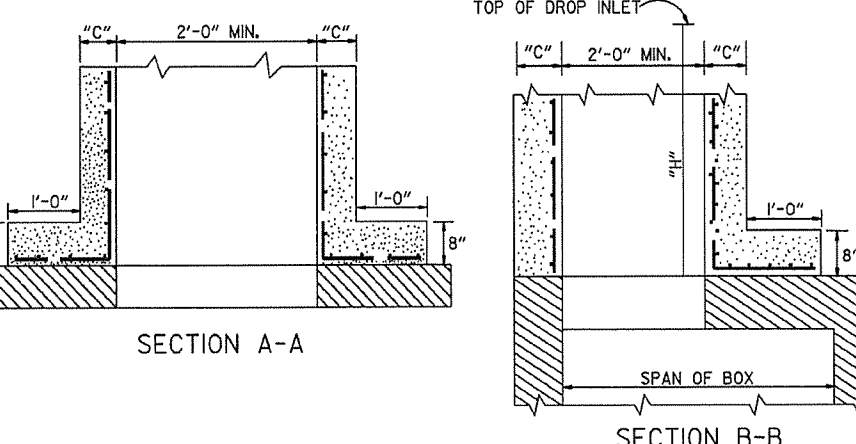
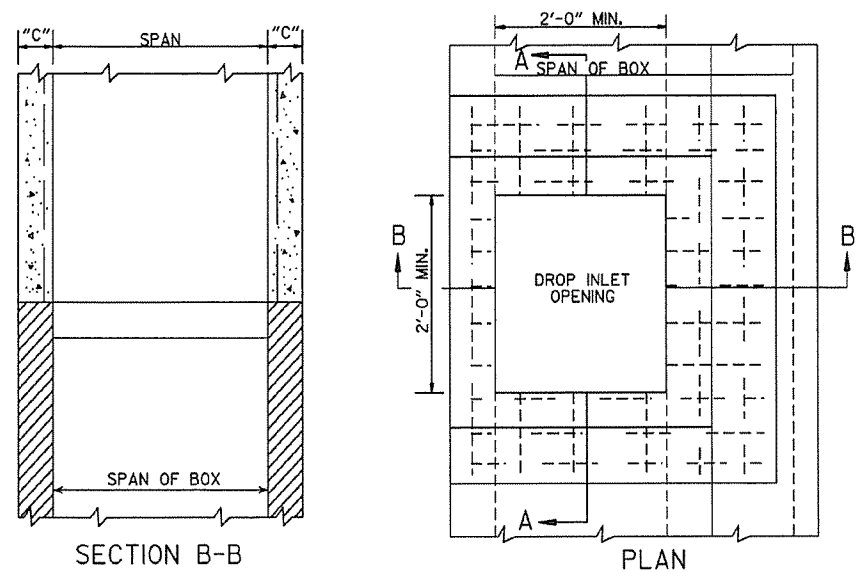
C.M. ARCH PIPE



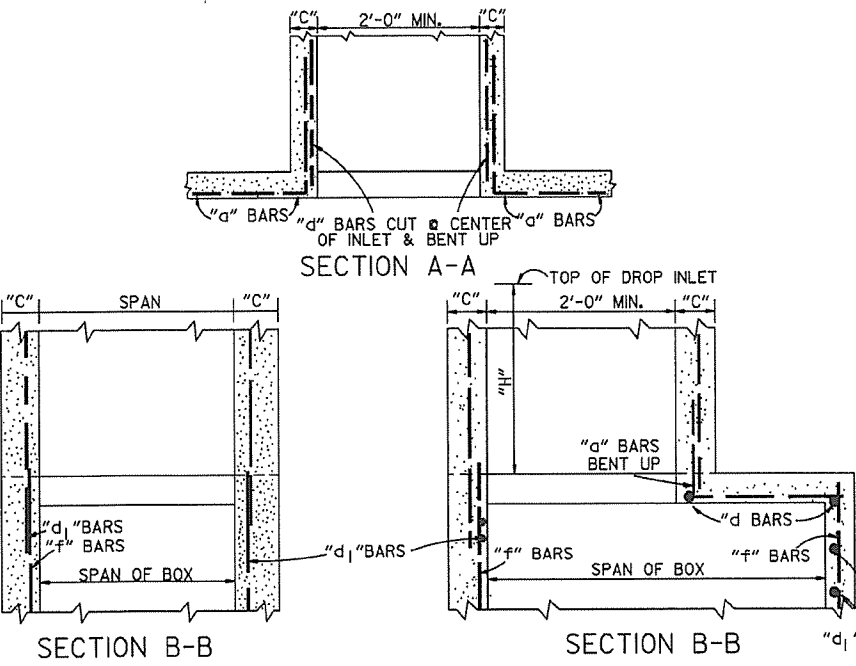
MULTIPLE R.C. PIPE CULVERTS

MULTIPLE C.M. PIPE CULVERTS

10-18-96	REVISED ASTM REF. TO AASHTO	10-18-96	ARKANSAS STATE HIGHWAY COMMISSION
5-15-80	REVISED DISTANCE BETWEEN MULTIPLE R.C.P. F.E.S.	664-5-15-80	
7-14-78	C.M. ARCH SIZES TO CONFORM WITH AASHTO SIZES	752-7-14-78	
8-22-75	ADDED MULTIPLE PIPE CULVERTS	517-8-22-75	
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	
DATE	REVISION	FIL. NO.	

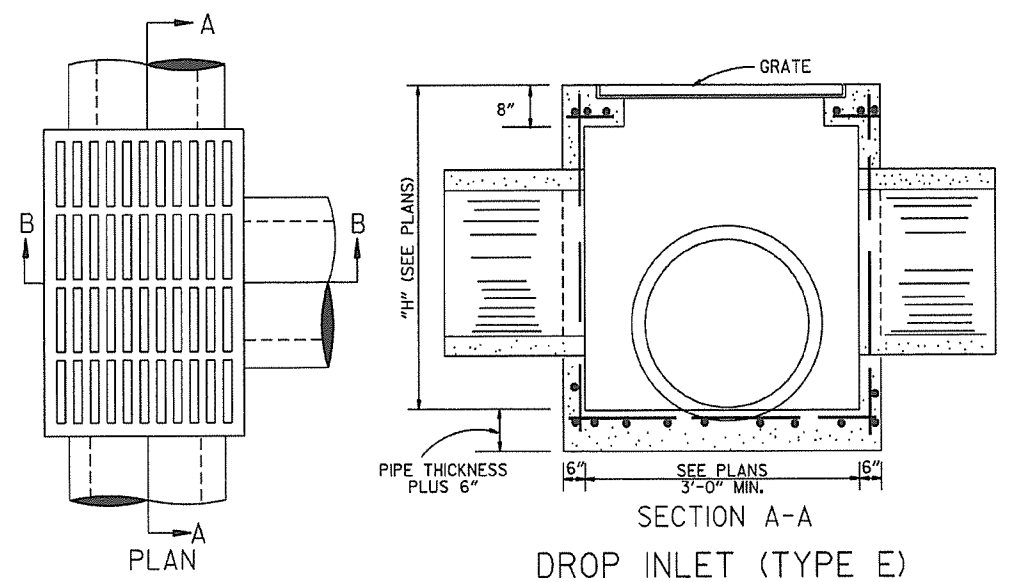


METHOD OF CONSTRUCTING DROP INLET ON EXISTING R.C. BOX CULVERT



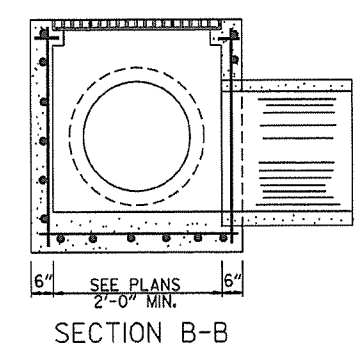
METHOD OF CONSTRUCTING DROP INLET ON NEW R.C. BOX CULVERT

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

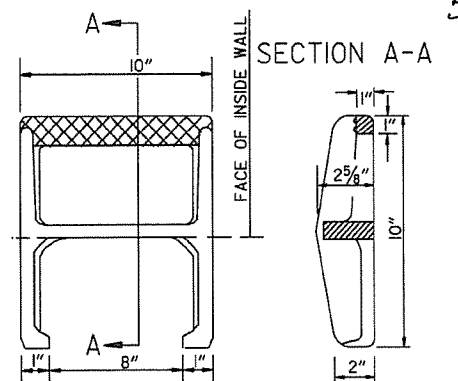


DROP INLET (TYPE E)

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.

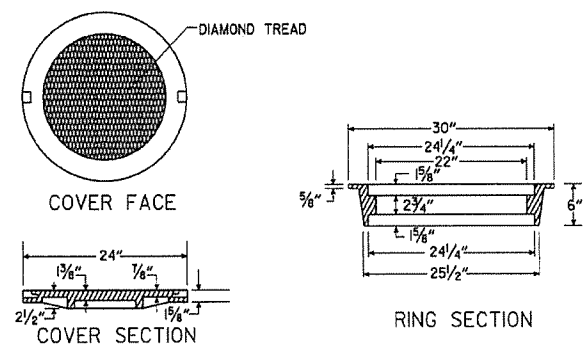


SECTION B-B



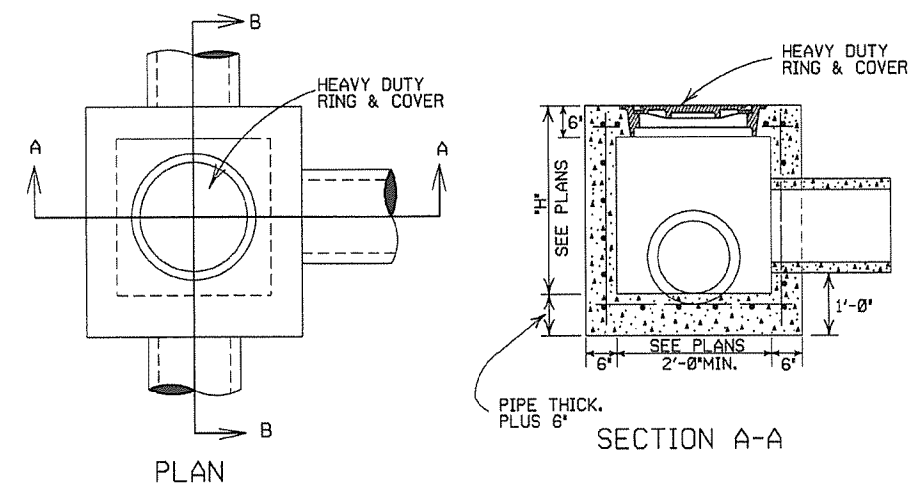
DETAIL OF STEP FOR DROP INLET

APPROX. WEIGHT = 11 LBS. (CAST IRON)
NOTE: THIS DETAIL IS TYPICAL. OTHERS MAY BE USED WITH PRIOR APPROVAL OF THE ENGINEER.



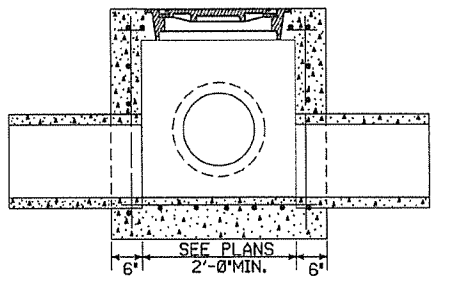
HEAVY DUTY RING & COVER

APPROXIMATE TOTAL WEIGHT = 333 LBS.

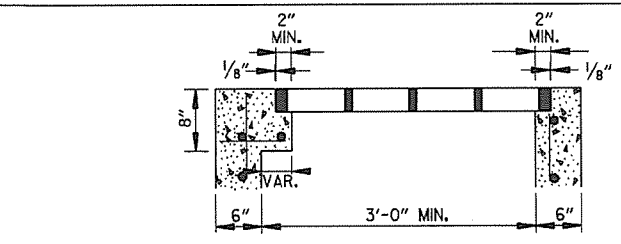


JUNCTION BOX (TYPE E)

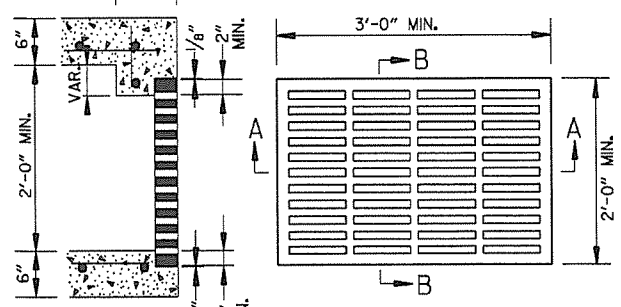
NOTE: REINF. BARS TO BE #4 BARS ON 6" CTRS. WITH 1/2" MIN. COVER. THIS TYPE JUNCTION BOX TO BE USED WHERE NOT SUBJECTED TO TRAFFIC.



SECTION B-B



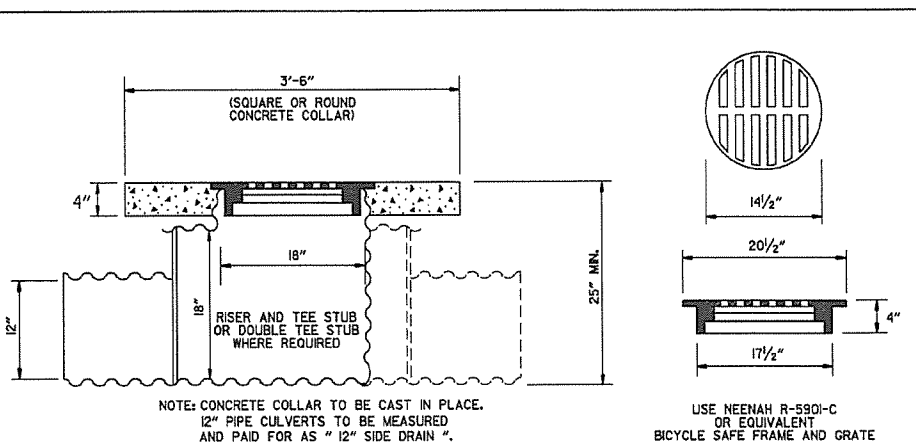
SECTION A-A



SECTION B-B

APPROXIMATE MINIMUM WATERWAY OPENING = 260 SQ. IN.

GRATE FOR TYPE E DROP INLET



DETAIL OF YARD DRAIN

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

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

- GENERAL NOTES:
1. ALL EXPOSED CORNERS SHALL BE 3/4" CHAMFERED.
 2. STEPS SHALL BE INSTALLED ON 16" CENTERS ON ALL INLETS 4'-0" HIGH OR OVER, OR AS APPROVED BY THE ENGINEER.
 3. EXPANSION JOINT MATERIAL SHALL BE 3/4" PREFORMED FIBER.
 4. GRATE OR GRATE AND FRAME SHALL BE CONSTRUCTED OF CAST IRON AND SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR GRAY IRON CASTINGS AASHTO M 105 CLASS 35B. GRATE MAY BE USED WITHOUT FRAME.
 5. GRATE AND FRAME SHALL NOT BE PAINTED.
 6. GRATE SHALL BE BICYCLE SAFE.
 7. HEAVY DUTY RING SHALL ALWAYS BE INSTALLED WITH FLANGE ON TOP.
 8. HEAVY DUTY RING AND COVER SHALL BE CONSTRUCTED OF CAST IRON AND SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR GRAY IRON CASTINGS AASHTO 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.

DATE	REV.	REVISION	DATE FILMED
11-16-01		ADDED NOTE 10	
1-12-00		REVISED HEAVY DUTY RING & COVER	
7-02-98		CHANGED GRATE DETAIL, DELETED DI (TYPE D), REPLACED RING & COVER W/HEAVY DUTY RING & COVER, ADDED JUNCTION BOX (TYPE E)	
6-26-97		ADDED DIMENSION TO TYPE IV-A	
10-18-96		ADDED DETAIL OF YARD DRAIN	
8-15-91		DELETE TYPE IV GRATE	
7-15-88		REVISED STEP DETAIL	
5-20-83		REVISED DETAILS OF GRATES (TYPE IV & IV-A)	
2-4-83		ADDED GENERAL NOTE NO. 4	
3-2-81		ADDED TYPE IV-A GRATE	
5-22-74		DELETED INLET (TYPE F) & GRATE (TYPE III)	
10-2-72		REVISED AND REDRAWN	

ARKANSAS STATE HIGHWAY COMMISSION
DETAILS OF DROP INLETS & JUNCTION BOXES
STANDARD DRAWING FPC-9

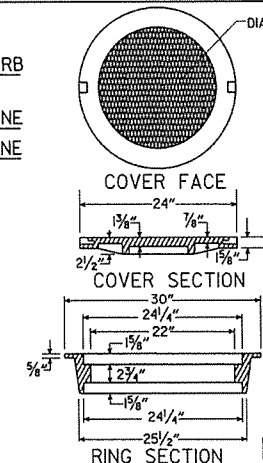
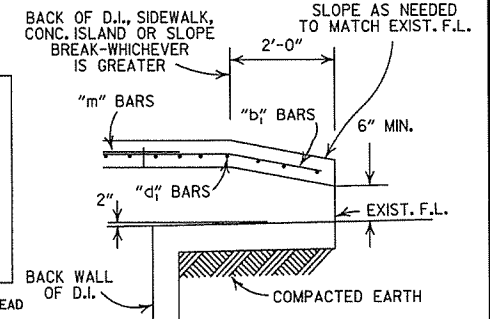
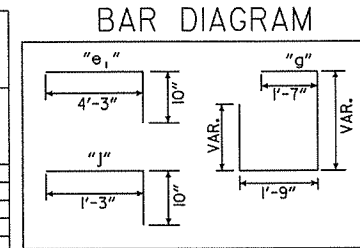
4'-0" LENGTH DROP INLET DROP INLET EXTENSION 57

PIPE SIZE	MIN. WIDTH	HEIGHT 5'-0"		PLUS OR MINUS PER LIN. FT. OF HEIGHT		4'-0"		8'-0"	
		CLASS A CONC.	REINF. STEEL	CLASS A CONC.	REINF. STEEL	CLASS A CONC.	REINF. STEEL	CLASS A CONC.	REINF. STEEL
		CU. YDS.	POUNDS	CU. YDS.	POUNDS	CU. YDS.	POUNDS	CU. YDS.	POUNDS
18"	2'-6"	1.77	156	0.28	22	0.58	38	0.87	72
24"	2'-6"	1.79	156	0.28	22				
30"	3'-2"	2.39	205	0.30	26				
36"	3'-8"	2.63	236	0.32	28				
42"	4'-4"	2.95	250	0.34	30				
48"	4'-10"	3.21	265	0.36	32				
						DEDUCT FROM QUANTITY COMPUTED FOR EACH EXTENSION ADDED.			
						0.04	3		

NOTE: QUANTITIES ARE APPROXIMATE AND ARE SHOWN FOR BIDDER INFORMATION ONLY.

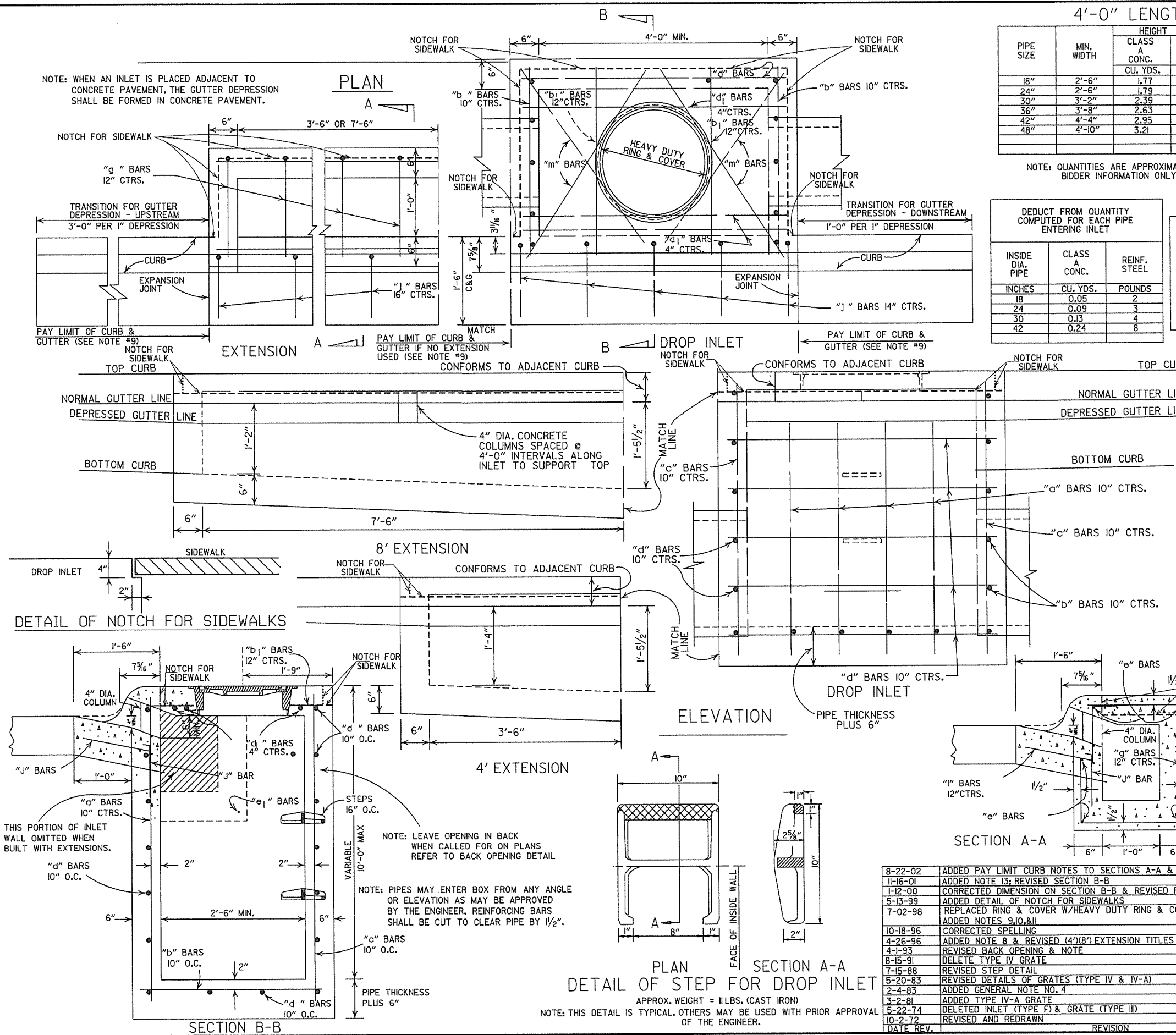
DEDUCT FROM QUANTITY COMPUTED FOR EACH PIPE ENTERING INLET

INSIDE DIA. PIPE	CLASS CONC.	REINF. STEEL
INCHES	CU. YDS.	POUNDS
18	0.05	2
24	0.09	3
30	0.13	4
42	0.24	8



- GENERAL NOTES:
- ALL EXPOSED CORNERS TO HAVE 3/4" CHAMFER.
 - STEPS SHALL BE INSTALLED IN ALL INLETS 4'-0" HIGH AND OVER AS APPROVED BY THE ENGINEER.
 - ALL REINF. BARS SHALL BE #4 AND HAVE 1/2" COVER.
 - DROP INLETS AND EXTENSION ON CURVED SECTIONS SHALL CONFORM TO THE CURVATURE OF THE CURB.
 - THIS DROP INLET MAY BE CONSTRUCTED ON NEW OR EXISTING R.C. BOX CULVERT AS SHOWN ON F.P.C.-9.
 - WHEN PLANS CALL FOR DROP INLET OVER 10'-0" HIGH, FLOOR AND WALLS SHALL BE CONSTRUCTED AS SHOWN FOR TYPE "RM" DROP INLET (F.P.C.-9D).
 - HEAVY DUTY RING SHALL ALWAYS BE INSTALLED WITH FLANGE ON TOP.
 - DURING CONSTRUCTION OF THE ROADWAY THE CONTRACTOR SHALL MAINTAIN DRAINAGE INTO OR AROUND THE DROP INLET AS APPROVED BY THE ENGINEER.
 - PAYMENT FOR CURB AND/OR CURB AND GUTTER WITHIN THE LIMITS OF DROP INLETS AND DROP INLET EXTENSIONS SHALL BE CONSIDERED INCLUDED IN PAYMENT MADE FOR DROP INLETS AND/OR DROP INLET EXTENSIONS.
 - HEAVY DUTY RING AND COVER SHALL BE CONSTRUCTED OF CAST IRON AND SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR GRAY IRON CASTINGS AASHTO M105 CLASS 35B & AASHTO M306.
 - HEAVY DUTY RING AND COVER SHALL NOT BE PAINTED.
 - 4"x2" NOTCH SHALL BE FORMED IN ALL DROP INLETS TO SUPPORT SIDEWALK CONSTRUCTION. REFER TO DETAIL OF NOTCH FOR SIDEWALKS.
 - DIMENSIONS SHOWN FOR RING AND COVER ARE TYPICAL. THE CONTRACTOR MAY SUBSTITUTE SIMILAR CASTINGS WITH THE APPROVAL OF THE ENGINEER. REQUESTING APPROVAL FOR CASTING DESIGNS MAY BE MADE BY REFERRING TO PREVIOUSLY APPROVED DRAWINGS.

NOTE: WHEN AN INLET IS PLACED ADJACENT TO CONCRETE PAVEMENT, THE GUTTER DEPRESSION SHALL BE FORMED IN CONCRETE PAVEMENT.

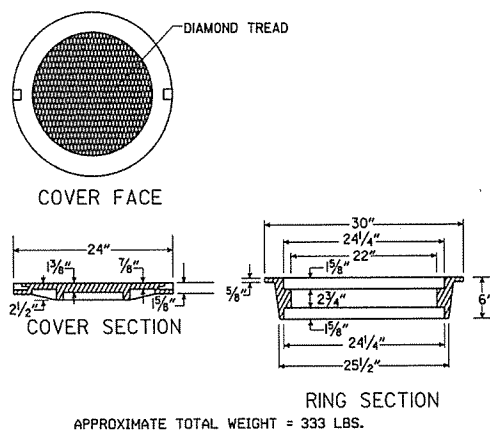
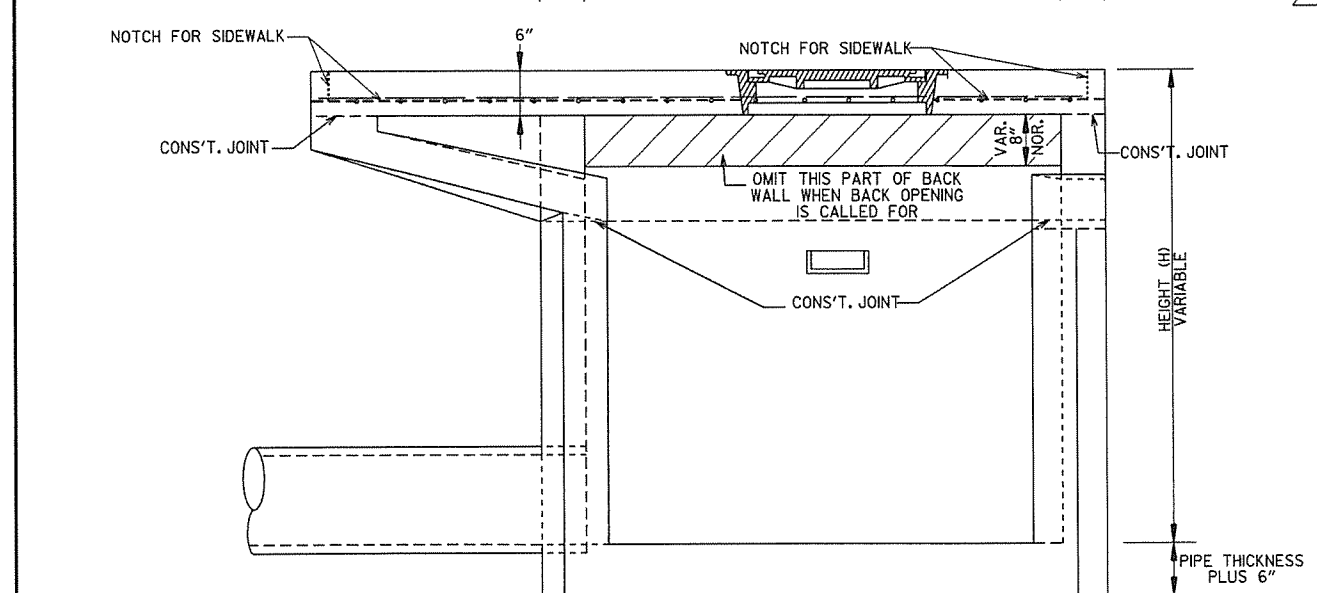
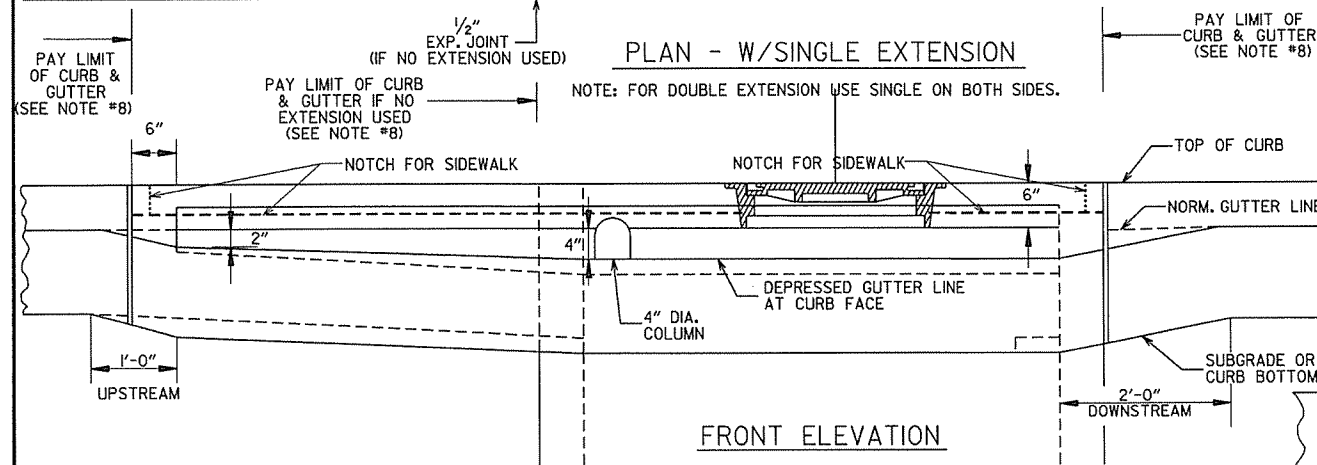
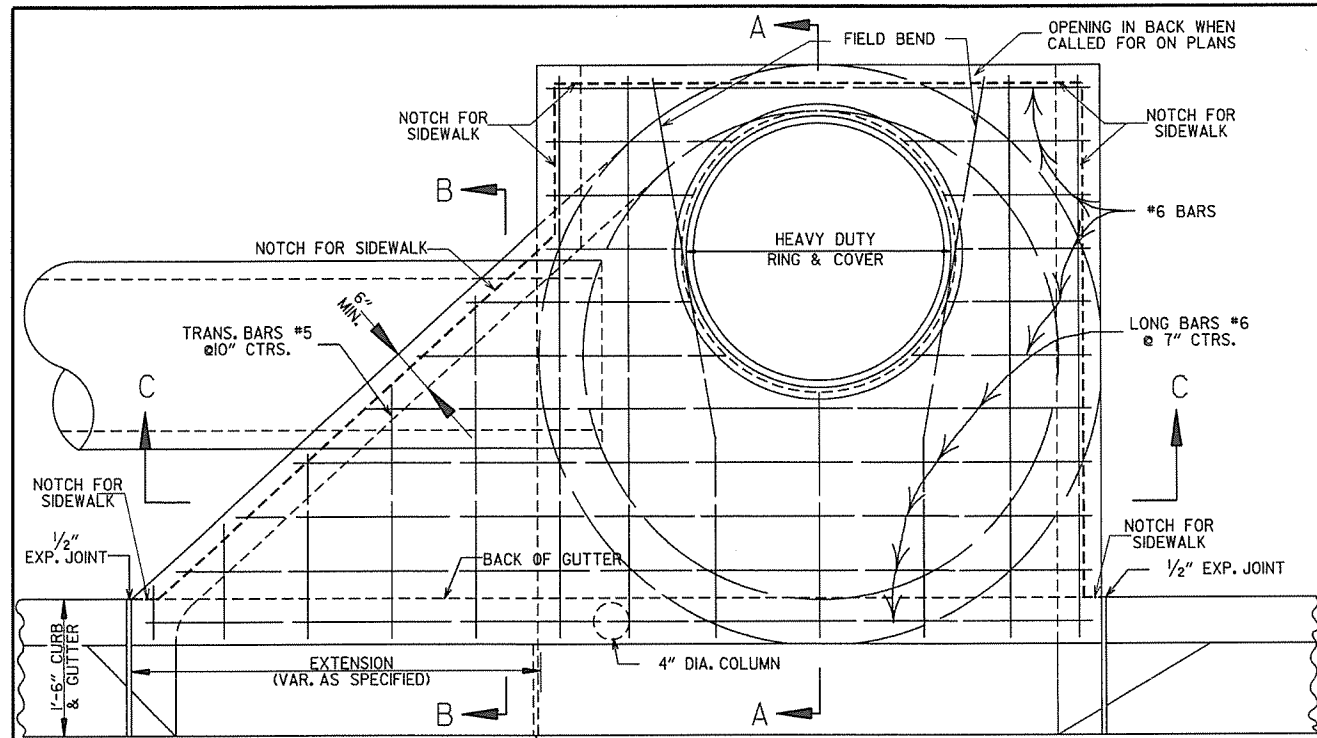


DATE REV.	REVISION	DATE FILED
8-22-02	ADDED PAY LIMIT CURB NOTES TO SECTIONS A-A & B-B	
11-16-01	ADDED NOTE 13; REVISED SECTION B-B	
1-12-00	CORRECTED DIMENSION ON SECTION B-B & REVISED RING & COVER	
5-13-99	ADDED DETAIL OF NOTCH FOR SIDEWALKS	
7-02-98	REPLACED RING & COVER W/HEAVY DUTY RING & COVER ADDED NOTES 9,10,&11	
10-18-96	CORRECTED SPELLING	
4-26-96	ADDED NOTE 8 & REVISED (4')(8') EXTENSION TITLES	10-18-96
4-1-93	REVISED BACK OPENING & NOTE	
8-15-91	DELETE TYPE IV GRATE	
7-15-88	REVISED STEP DETAIL	
5-20-83	REVISED DETAILS OF GRATES (TYPE IV & IV-A)	
2-4-83	ADDED GENERAL NOTE NO. 4	
3-2-81	ADDED TYPE IV-A GRATE	
5-22-74	DELETED INLET (TYPE F) & GRATE (TYPE III)	
10-2-72	REVISED AND REDRAWN	

ARKANSAS STATE HIGHWAY COMMISSION

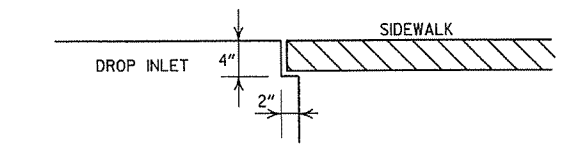
DETAILS OF DROP INLETS (TYPE C)

STANDARD DRAWING FPC-9E

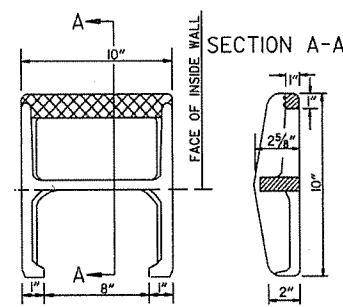


HEAVY DUTY RING & COVER

1. HEAVY DUTY RING AND COVER SHALL BE CONSTRUCTED OF CAST IRON AND SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR GRAY IRON CASTINGS AASHTO M105 CLASS 35B & AASHTO M306.
2. HEAVY DUTY RING AND COVER SHALL NOT BE PAINTED.
3. HEAVY DUTY RING SHALL ALWAYS BE INSTALLED WITH FLANGE ON TOP.

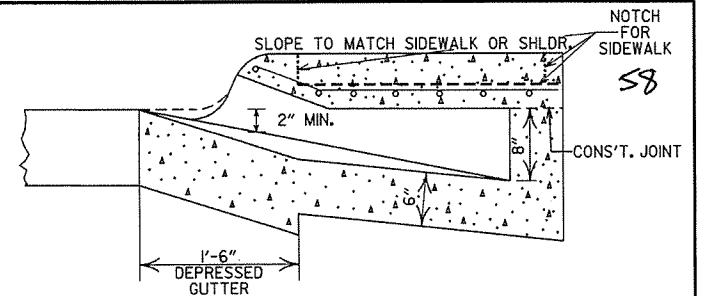


DETAIL OF NOTCH FOR SIDEWALKS

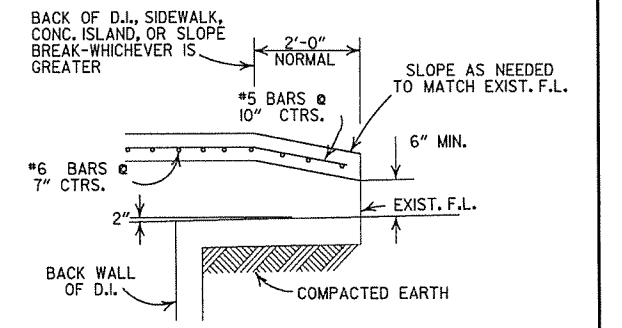


DETAIL OF STEP FOR DROP INLET

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



SECTION B-B



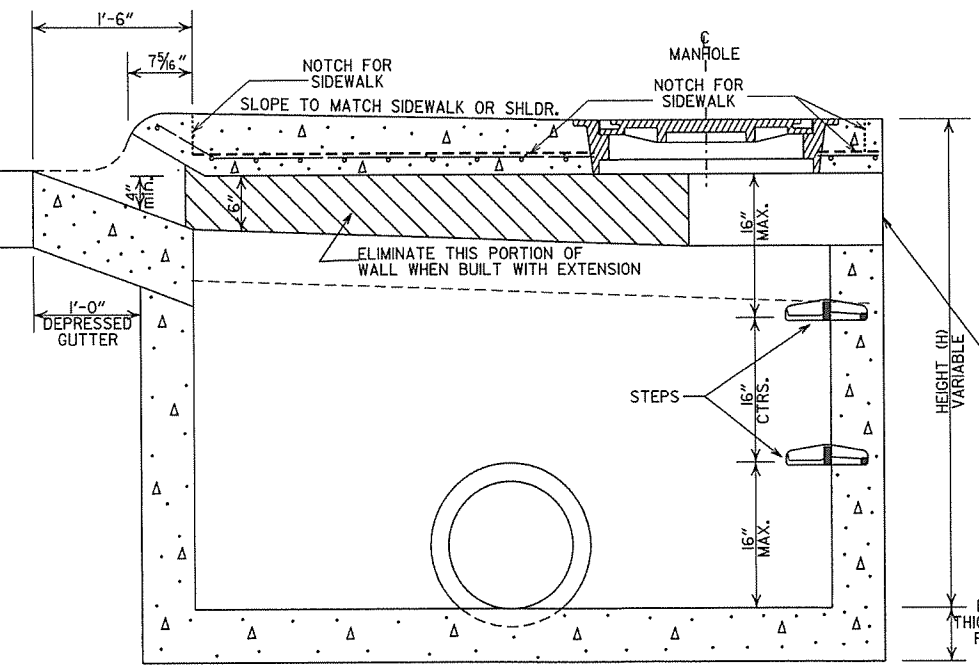
BACK OPENING

WHEN OPENING IN BACK IS CALLED FOR ON PLANS EXTEND OPENING AS SHOWN IN DETAIL. PAYMENT TO BE INCLUDED IN PRICE BID FOR DROP INLET (TYPE MO).

- GENERAL NOTES:
1. ALL EXPOSED CORNERS TO HAVE 3/4" CHAMFER.
 2. STEPS SHALL BE INSTALLED IN ALL INLETS 4'-0" HIGH AND OVER OR AS DIRECTED BY THE ENGINEER.
 3. ALL REINFORCING BARS SHALL BE GRADE 60 AND HAVE MIN. 1/2" COVER.
 4. DROP INLETS AND EXTENSION ON CURVED SECTIONS SHALL CONFORM TO THE CURVATURE OF THE CURB.
 5. 4" DIA. COLUMNS SPACED AT MAX. 4'-0" INTERVALS SHALL BE INSTALLED ALONG INLET AND EXTENSION TO SUPPORT TOP.
 6. BASE AND INLET WALLS SHALL BE CAST MONOLITHICALLY.
 7. THE THROAT SHALL BE CAST INTEGRALLY WITH THE GUTTER.
 8. PAYMENT FOR CURB AND/OR CURB AND GUTTER WITHIN THE LIMITS OF DROP INLETS AND DROP INLET EXTENSIONS SHALL BE CONSIDERED INCLUDED IN PAYMENT MADE FOR DROP INLETS AND/OR DROP INLET EXTENSIONS.
 9. PIPES MAY ENTER DROP INLET FROM ANY ANGLE OR ELEVATION AS MAY BE APPROVED BY THE ENGINEER.
 10. APPROPRIATE SIZE TYPE C DROP INLETS MAY BE SUBSTITUTED FOR TYPE MO DROP INLETS AS APPROVED BY THE ENGINEER. PAYMENT TO BE AS DROP INLET (TYPE MO).
 11. DURING CONSTRUCTION OF THE ROADWAY THE CONTRACTOR SHALL MAINTAIN DRAINAGE INTO OR AROUND THE DROP INLET AS APPROVED BY THE ENGINEER.
 12. 4"x2" NOTCH SHALL BE FORMED IN ALL DROP INLETS TO SUPPORT SIDEWALK CONSTRUCTION. REFER TO DETAIL OF NOTCH FOR SIDEWALKS.
 13. DIMENSIONS SHOWN FOR RING AND COVER ARE TYPICAL. THE CONTRACTOR MAY SUBSTITUTE SIMILAR CASTINGS WITH THE APPROVAL OF THE ENGINEER. REQUESTING APPROVAL FOR CASTING DESIGNS MAY BE MADE BY REFERRING TO PREVIOUSLY APPROVED DRAWINGS.

LEAVE OPENING IN BACK WHEN CALLED FOR ON PLANS REFER TO BACK OPENING DETAIL

MINIMUM WALL THICKNESS			
DIA. OF D.I.	DIA. OF OUTLET PIPE	CAST IN PLACE	PRECAST
4" I.D.	12" THRU 27"	6"	5"
5" I.D.	30" THRU 42"	8"	6"
6" I.D.	48" THRU 54"	8"	7"



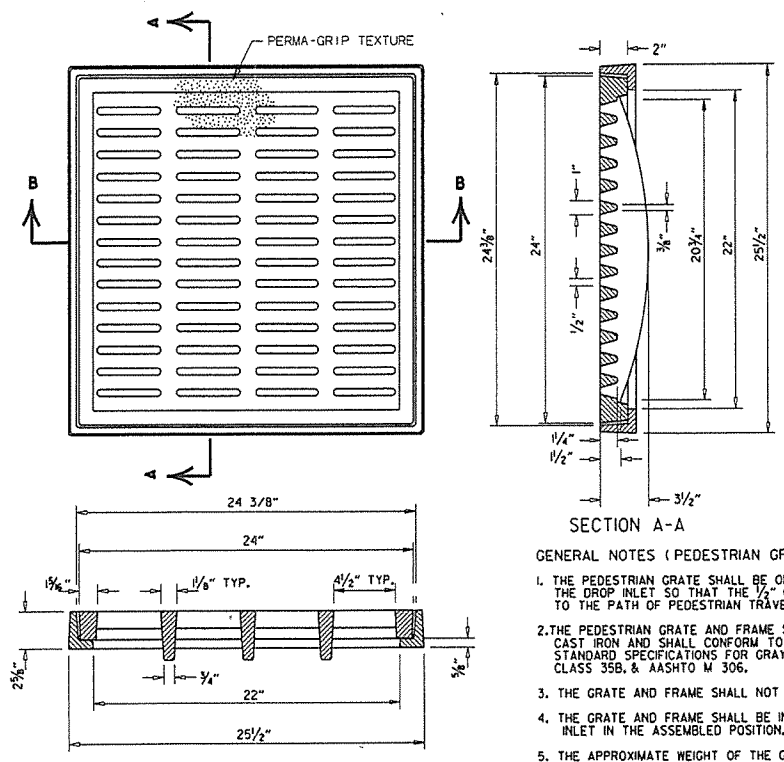
SECTION A-A

8-22-02	ADDED PAY LIMIT CURB NOTES TO SECTIONS A-A & B-B	
11-16-01	ADDED NOTE 13	
11-12-00	REVISED HEAVY DUTY RING & COVER	
5-13-99	ADDED NOTCH DETAIL FOR SIDEWALKS	
7-02-98	REV. NOTE B, REM. PLAN DET., REV. PICTURE FOR NEW RING & COVER, ADDED HEAVY DUTY RING & COVER AND DETAIL OF STEP FOR DROP INLET	
4-26-96	ADDED NOTE IN ADJ. OPENING DIMENSION	
1-20-95	CORRECTED #6 BAR SPACING	
1-20-95	CORRECTED DIAMETER OF D.I. IN BOX	
1-2-95	TYPE C TO MO (OPEN BACK DETAIL)	
11-3-94	REVISED GENERAL NOTES	11-3-94
11-3-94	REV. BACK OPEN DETAIL & NOTE	11-3-94
8-15-91	REVISED NOTES 11, 12 & ADDED BK. OPEN DETAIL	8-15-91
11-30-89	ADDED NOTE NO. 12	11-30-89
1-23-89	ADDED NOTE & MINIMUM WALL THICKNESS	1-23-89
1-18-88	ADDED EXTEND NOTE TO SECTION A-A	1-18-88
1-14-87	MODIFIED WALL THICKNESS	1-14-87
1-12-87	ISSUED	1-12-87

ARKANSAS STATE HIGHWAY COMMISSION

DETAILS OF DROP INLET (TYPE MO)

STANDARD DRAWING FPC-9M

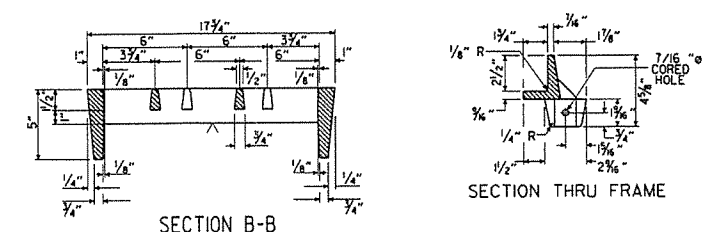


SECTION A-A

GENERAL NOTES (PEDESTRIAN GRATE & FRAME)

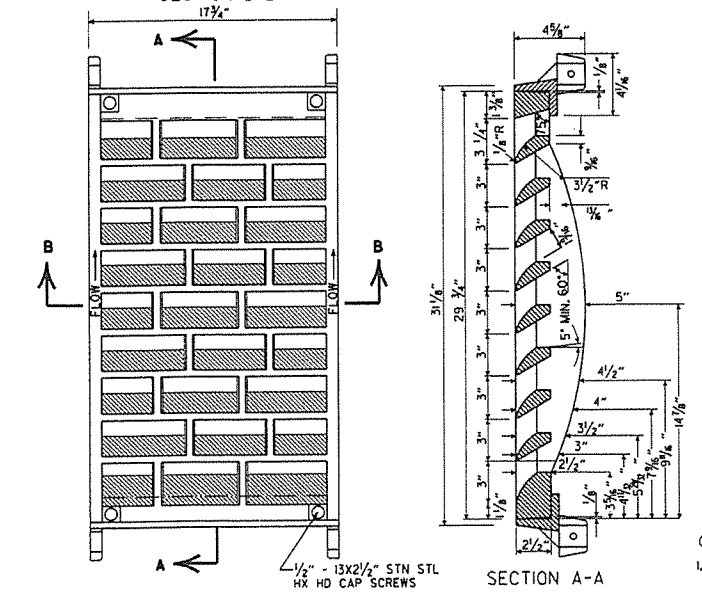
1. THE PEDESTRIAN GRATE SHALL BE ORIENTED IN THE TOP OF THE DROP INLET SO THAT THE 1/2" OPENINGS ARE PERPENDICULAR TO THE PATH OF PEDESTRIAN TRAVEL.
2. THE PEDESTRIAN GRATE AND FRAME SHALL BE CONSTRUCTED OF CAST IRON AND SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR GRAY IRON CASTINGS 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 211 LBS.
6. THE MINIMUM WATERWAY OPENING SHALL BE 122 SQ. IN.

SECTION B-B
DETAILS OF PEDESTRIAN GRATE AND FRAME



SECTION THRU FRAME

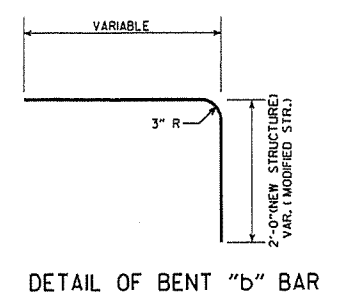
SECTION B-B



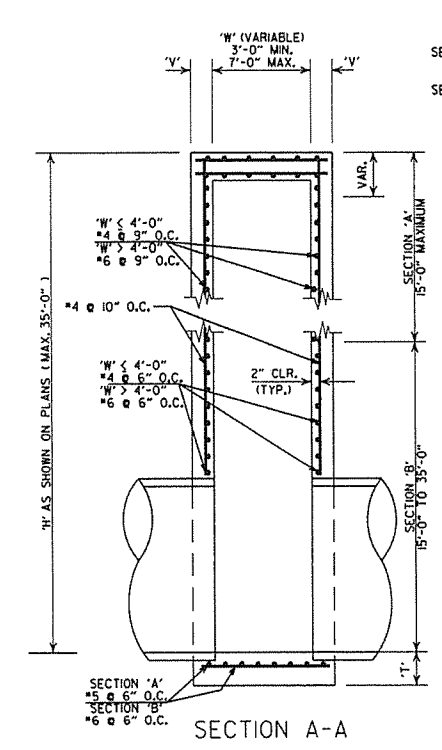
SECTION A-A
DETAILS OF RIBBED VANE GRATE AND FRAME

GENERAL NOTES (RIBBED VANE GRATE & FRAME)

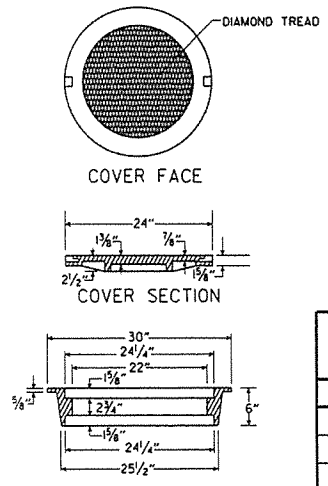
1. RIBBED VANE GRATE AND FRAME SHALL BE CONSTRUCTED OF CAST IRON AND SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR GRAY IRON CASTINGS AASHTO M 105, CLASS 35B, & AASHTO M 306.
2. GRATE AND FRAME SHALL NOT BE PAINTED.
3. GRATE AND FRAME SHALL BE INSTALLED IN DROP INLET IN ASSEMBLED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



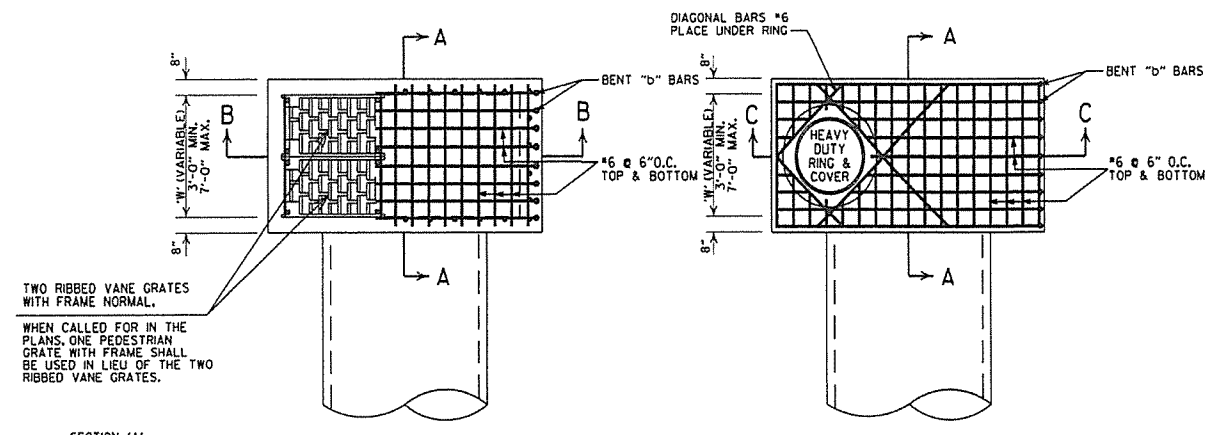
DETAIL OF BENT "b" BAR



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



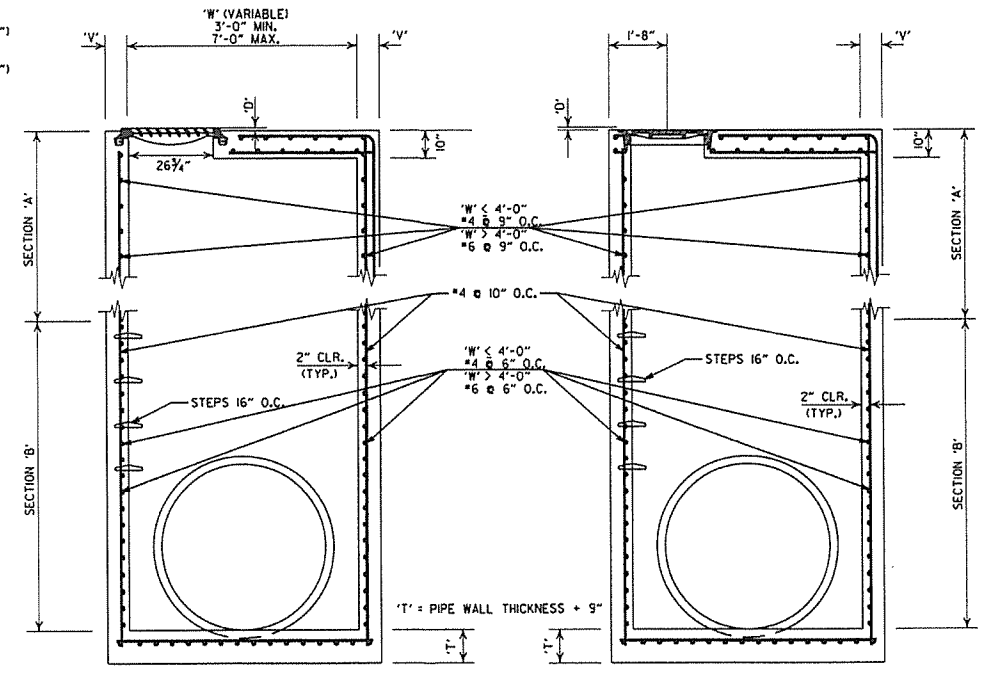
RING SECTION
HEAVY DUTY RING & COVER
 APPROXIMATE TOTAL WEIGHT = 333 LBS.



TWO RIBBED VANE GRATES WITH FRAME NORMAL.

WHEN CALLED FOR IN THE PLANS, ONE PEDESTRIAN GRATE WITH FRAME SHALL BE USED IN LIEU OF THE TWO RIBBED VANE GRATES.

SECTION 'A'
 'W' = 8"
SECTION 'B' (W < 4'-0")
 'V' = 8"
SECTION 'B' (W > 4'-0")
 'V' = 10"



SECTION B-B

SECTION C-C

DETAILS OF JUNCTION BOX (TYPE ST)

GENERAL NOTES (TYPE ST DROP INLET & JUNCTION BOX)

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

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

ARKANSAS STATE HIGHWAY COMMISSION
DETAILS OF DROP INLET & JUNCTION BOX (TYPE ST)
 STANDARD DRAWING FPC-9S

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	13 1/2	14
21	26	26	15 1/2	16
24	28 1/2	29	18	18
30	36 1/4	36	22 1/2	23
36	43 3/8	44	26 3/8	27
42	51 1/8	51	31 7/16	31
48	58 1/2	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	77 1/2	77
108	138	138	87 1/8	87
120	154	154	96 3/8	97
132	168 3/4	169	106 1/2	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)(II).

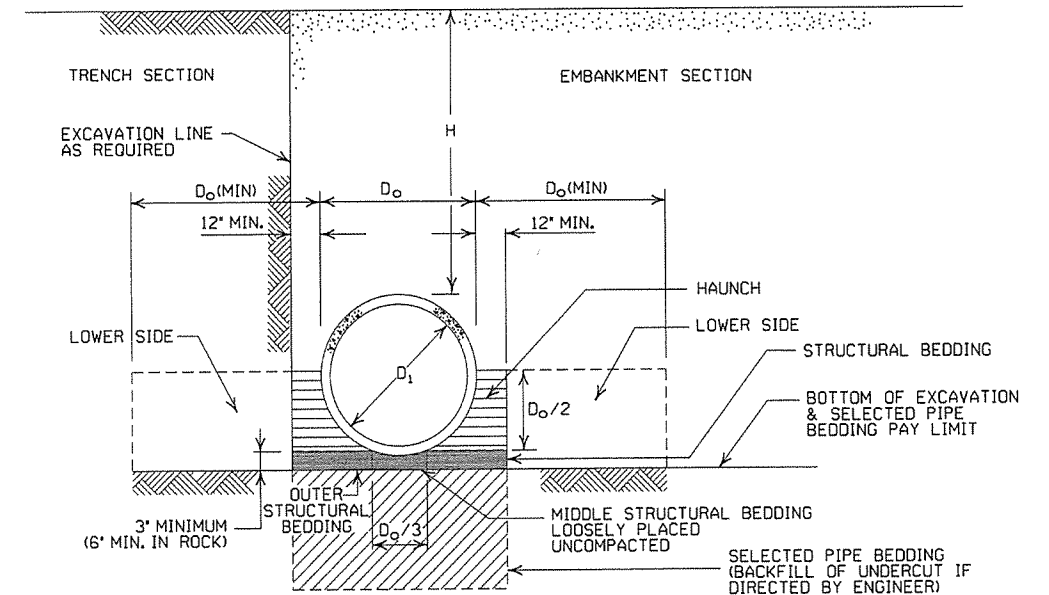
NOTE: HAUNCH AND STRUCTURAL BEDDING MATERIAL WILL NOT BE PAID FOR SEPARATELY, BUT COMPENSATION WILL BE CONSIDERED TO BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF CONCRETE PIPE.

- LEGEND -

- D₁ = 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			
	TYPE 1 OR 2	TYPE 3	ALL	ALL
PIPE ID (IN.)	FEET			
12-15	2	2.5	2	1
18-24	2.5	3	2	1
27-33	3	4	2	1
36-42	3.5	5	2	1
48	4.5	5.5	2	1
54-60	5	7	2	1
66-78	6	8	2	1
84-108	7.5	8	2	1

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

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

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

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

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

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

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

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

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

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

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

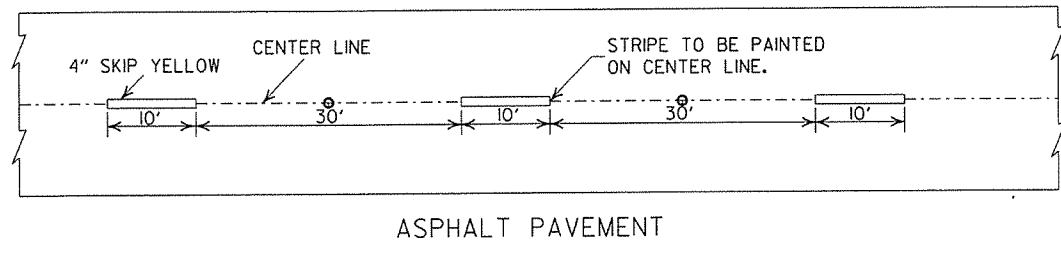
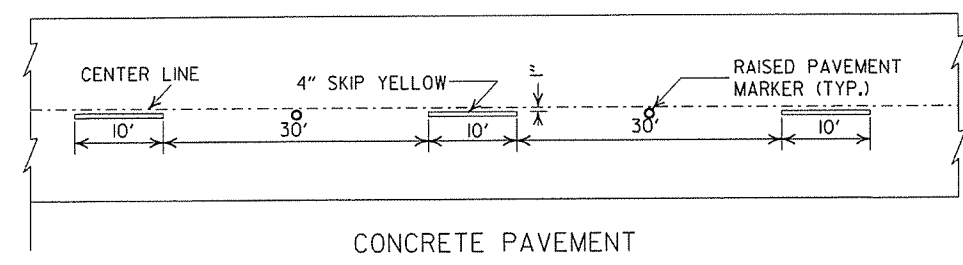
DATE	REVISION	DATE FILMED
2-27-14	REVISED GENERAL NOTE 1	
12-15-11	REVISED FOR LRFD DESIGN SPECIFICATIONS	
5-18-00	REVISED TYPE 3 BEDDING & ADDED NOTE	
3-30-00	REVISED INSTALLATIONS	
11-06-97	ISSUED	

ARKANSAS STATE HIGHWAY COMMISSION

CONCRETE PIPE CULVERT
FILL HEIGHTS & BEDDING

STANDARD DRAWING PCC-1

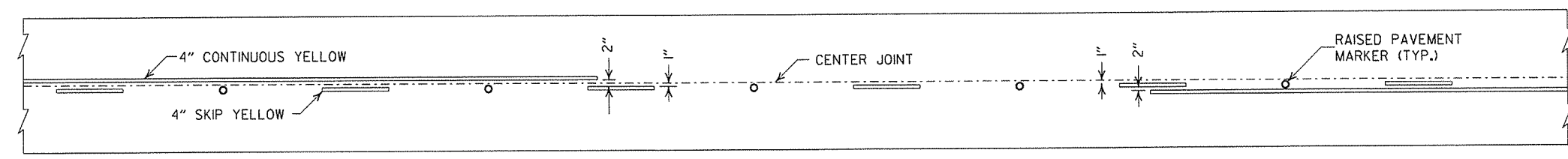
- NOTES:
1. ALL LINES SHALL HAVE A WIDTH OF 4 INCHES.
 2. THE THICKNESS AND RATE OF PAINT APPLICATION SHALL BE AS SPECIFIED IN SECTION 718 OF THE STANDARD SPECIFICATIONS.
 3. THIS DRAWING SHALL BE USED IN CONJUNCTION WITH THE LATEST REVISED ADDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES."
 4. RAISED PAVEMENT MARKERS SHALL BE CENTERED BETWEEN SKIP LINES ON 40 FEET SPACING UNLESS OTHERWISE SHOWN ON THE PLANS.



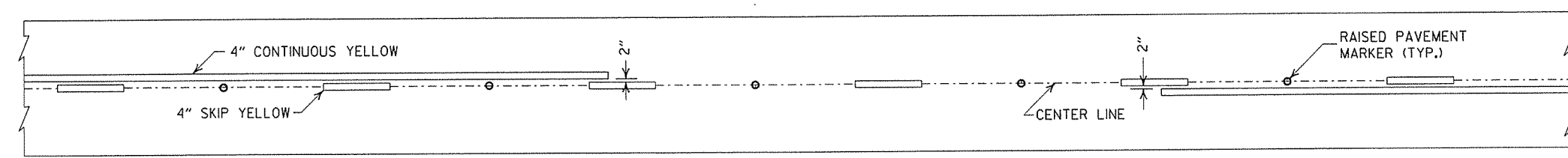
CONCRETE PAVEMENT

ASPHALT PAVEMENT

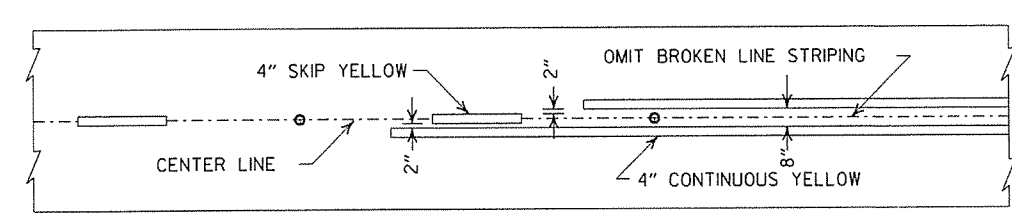
BROKEN LINE STRIPING



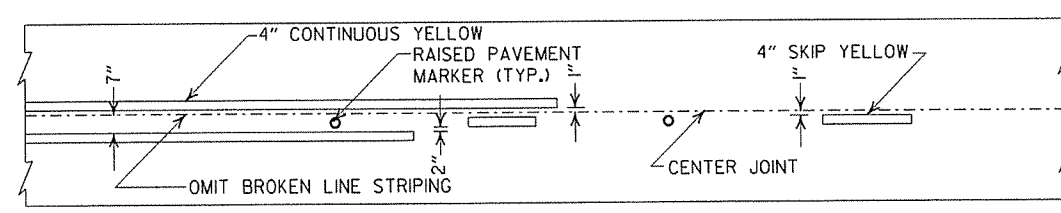
SOLID LINE STRIPING ON CONCRETE PAVEMENT



SOLID LINE STRIPING ON ASPHALT PAVEMENT

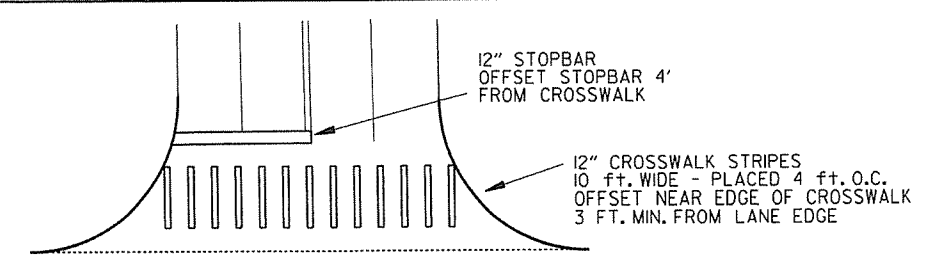


ASPHALT PAVEMENT



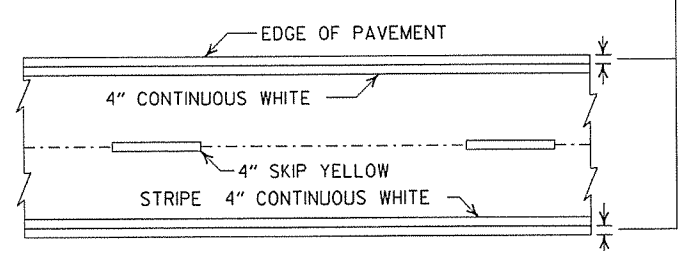
CONCRETE PAVEMENT

STRIPING AT ADJACENT NO PASSING LANES

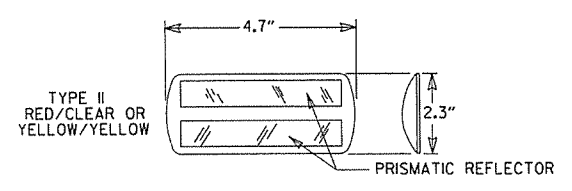


CROSSWALK AND STOPBAR DETAILS

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



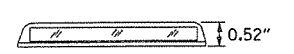
PAVEMENT EDGE LINE MARKING



TYPE II RED/CLEAR OR YELLOW/YELLOW

PRISMATIC REFLECTOR

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



DETAIL OF STANDARD RAISED PAVEMENT MARKERS

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

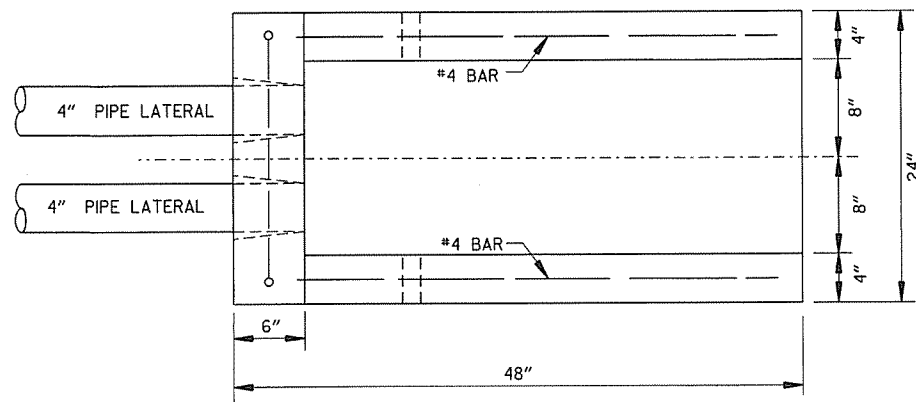
THIS DRAWING SHOULD BE USED IN CONJUNCTION WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", LATEST REVISION.

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

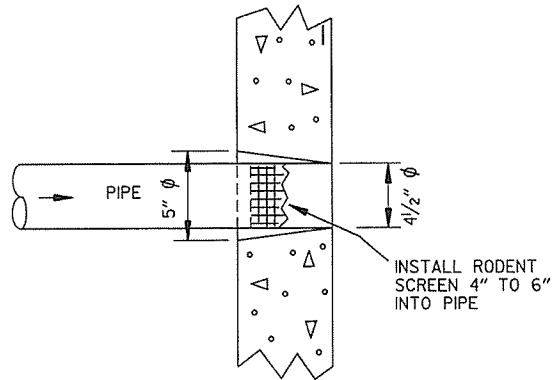
DATE	REVISION	FILMED
9-12-13	REVISED DETAIL OF STANDARD RAISED PAVEMENT MARKERS	
11-17-10	REVISED GENERAL NOTES & REMOVED PLOWABLE PVMT MRKRS	
11-18-04	REVISED NOTE 2 & GENERAL NOTES	
8-22-02	ADDED CROSSWALK & STOPBAR DTLS.	
7-02-98	ADDED DETAILS OF STD. RAISED PAV'T. MARKERS	
4-26-96	REV. NOTES 3&4; ADDED R.P.M.	
9-30-80	DRAWN	1-9-30-80

ARKANSAS STATE HIGHWAY COMMISSION	
PAVEMENT MARKING DETAILS	
STANDARD DRAWING PM-1	

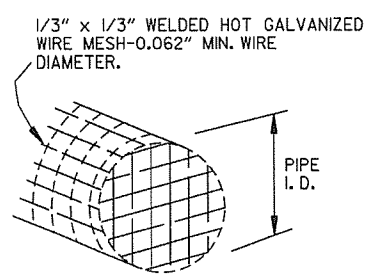
NOTE:
 1. GRANULAR BACKFILL TO BE SUBSIDIARY TO PIPE UNDERDRAIN.
 2. UNLESS OTHERWISE SPECIFIED ON THE PLANS, THE UNDERDRAIN COVER SHALL BE THOROUGHLY COMPACTED EARTH AND SHALL BE SUBSIDIARY TO PIPE UNDERDRAIN.
 3. GRANULAR MATERIAL SHALL BE WRAPPED WITH GEOTEXTILE FABRIC, LAP FABRIC 12" OR THE WIDTH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



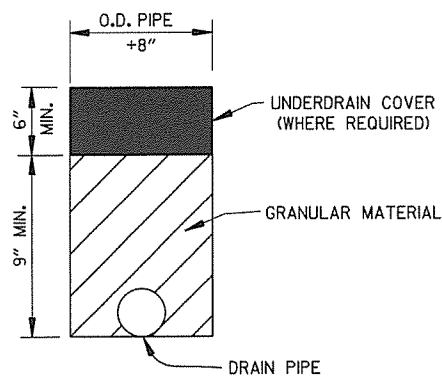
PLAN VIEW



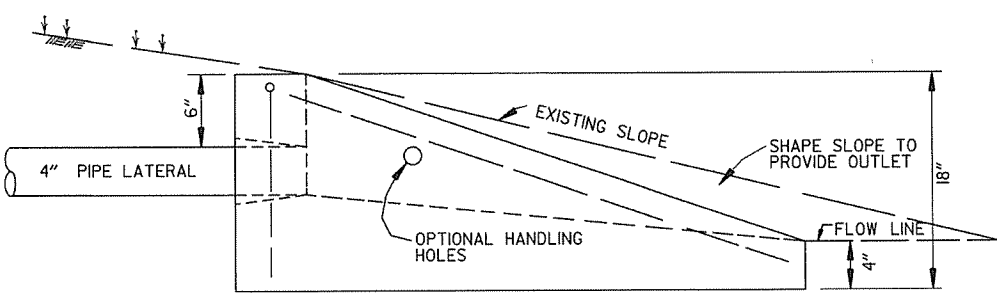
DETAIL OF HOLE FOR 4" PIPE



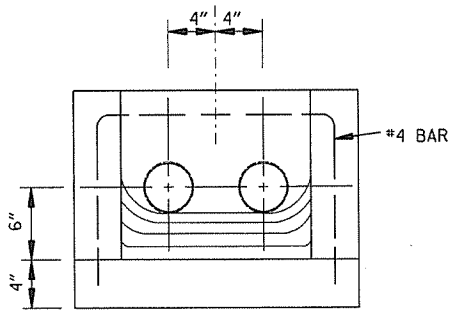
DETAIL OF RODENT SCREEN



DETAILS OF PIPE UNDERDRAIN



SIDE VIEW

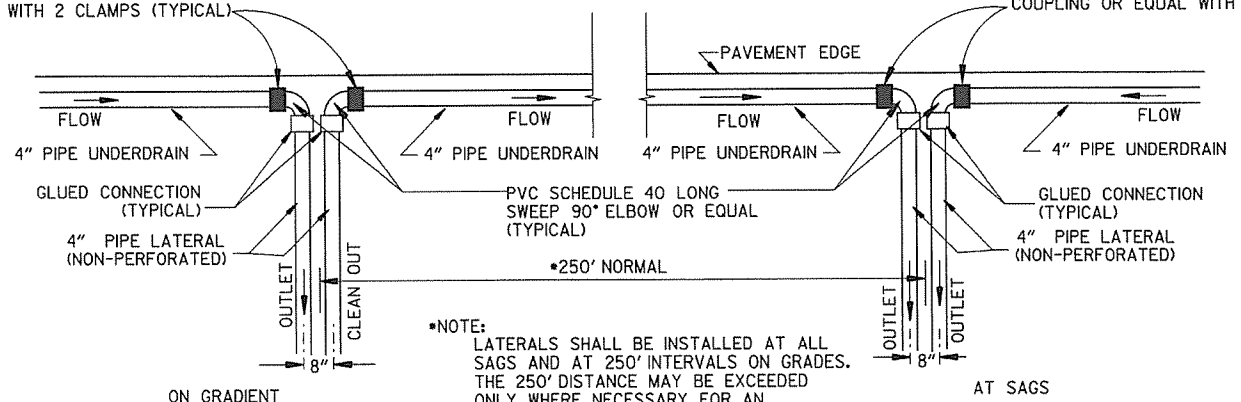


FRONT VIEW

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

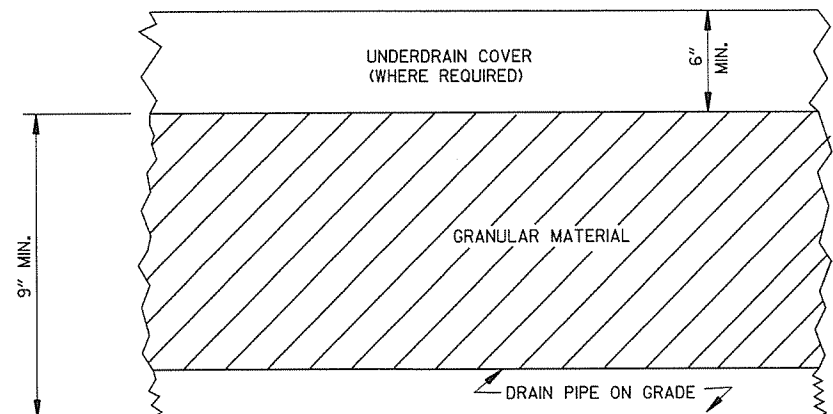
FERNCO 1056-44 (4" CI/PLASTIC) OR FERNCO 1051-44 (4" AC/DIOR 4" CI/PLASTIC) COUPLING OR EQUAL WITH 2 CLAMPS (TYPICAL)



*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.



DATE	REVISION	DATE FILMED
4-10-03	REVISED NOTE 3	
1-12-00	REVISED DETAIL OF UNDERDRAIN LATERALS	
11-18-98	REVISED NOTE	
10-18-96	REVISED MIN. DEPTH & GEOTEXTILE FABRIC	
4-26-96	ADDED LATERAL NOTE; 5 1/2" TO 5"	
11-22-95	REVISED LATERALS	
7-20-95	REVISED LATERALS & ADDED NOTE	
11-3-94	REVISED FOR DUAL LATERALS	11-3-94
10-1-92	SUBSTITUTED GEOTEXTILE	10-1-92
8-15-91	ADDED POLYETHYLENE PIPE	8-15-91
11-8-90	DELETED ALTERNATE NOTE	11-8-90
1-25-90	ADDED 4" SNAP ADAPTER	1-25-90
11-30-89	DEL. (SUBGRADE); ADDED (WHERE REQUIRED)	11-30-89
7-15-88	ISSUED P.L.M.	647-7-15-88

ARKANSAS STATE HIGHWAY COMMISSION

DETAILS OF PIPE UNDERDRAIN

STANDARD DRAWING PU-1

DESIGN SPECIFICATIONS: AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, 4TH EDITION (2001) WITH 2003 AND 2006 INTERIMS.

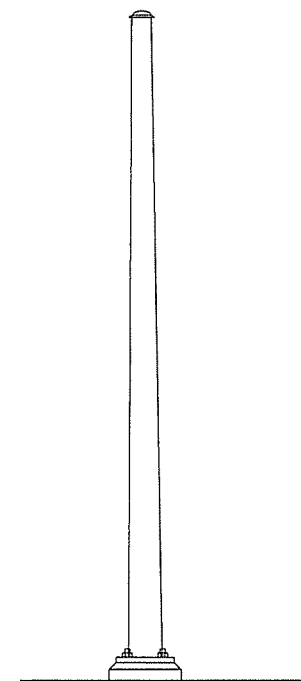
USE FATIGUE CATEGORY II.

CONSTRUCTION SPECIFICATIONS: ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION) WITH APPLICABLE SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS.

BASE WIND SPEED: 90 MPH

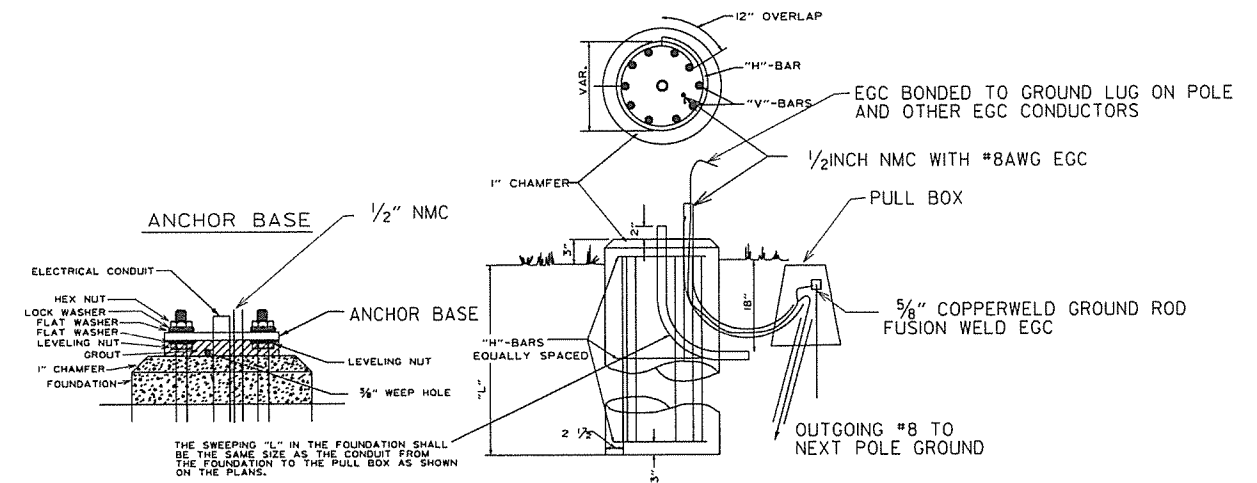
STEEL MEMBERS CONSIDERED MAIN LOAD CARRYING MEMBERS WITH A THICKNESS GREATER THAN 1/2" SHALL MEET THE LONGITUDINAL CHARPY V-NOTCH TEST SPECIFIED IN SUBSECTION 807.05 OF THE STANDARD SPECIFICATIONS.

THE GROUND ROD SHALL BE FUSION WELDED TO A 1C/#8 A.W.G. SOLID COPPER GROUND WIRE. ATTACHMENT TO THE PRIMARY GROUND MAY BE BY AN APPROVED CLAMP. THE ROD IS TO BE LOCATED IN THE CONCRETE PULL BOX PAID FOR SEPARATELY AS SHOWN ON THE PLANS.



ANTENNA POLE

NOTE: COMMUNICATION CABLE SHIELD SHALL BE TIED TO GROUND AT ONLY ONE POINT (MASTER CABINET). THE SHIELD SHALL BE MAINTAINED CONTINUOUS (THROUGH ALL SPLICES). PLEASE REFER TO TESTING PROCEDURES IN SPECIAL PROVISIONS.



TYPICAL FOUNDATION DETAILS

POLE FOUNDATION MINIMUM DIMENSIONS AND STEEL REINFORCING.

POLE HEIGHT	FOUNDATION DIAMETER	DEPTH 'L'	VERTICAL	HORIZONTAL	TIE SPACING
20.0'	30'	5'-6"	12-#7	#4	5 SP @ 12'
25.0'	30'	6'-0"	12-#7	#4	6 SP @ 11'
30.0'	30'	6'-6"	12-#7	#4	6 SP @ 12'
35.0'	30'	7'-0"	12-#7	#4	7 SP @ 11'
40.0'	30'	7'-6"	12-#7	#4	7 SP @ 12'
45.0'	36'	8'-6"	13-#8	#4	8 SP @ 12'
50.0'	36'	9'-6"	13-#8	#4	9 SP @ 12'
55.0'	36'	10'-0"	13-#8	#4	10 SP @ 11'
60.0'	36'	10'-6"	13-#8	#4	10 SP @ 12'
65.0'	36'	11'-0"	13-#8	#4	12 SP @ 10 1/2'
70.0'	36'	11'-6"	13-#8	#4	11 SP @ 12'
75.0'	42'	13'-0"	18-#8	#4	14 SP @ 10 1/2'
80.0'	42'	13'-6"	18-#8	#4	13 SP @ 12'
85.0'	42'	14'-6"	18-#8	#4	14 SP @ 12'
90.0'	42'	15'-0"	18-#8	#4	18 SP @ 9 1/2'

ALL CONCRETE SHALL BE CLASS "S" WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH F'C=3500 PSI. CONCRETE SHALL BE POURED IN THE DRY AND ALL EXPOSED CORNERS CHAMFERED 3/4" UNLESS NOTED OTHERWISE.

ALL REINFORCING STEEL SHALL CONFORM TO AASHTO M31 OR M53, GRADE 40 (YIELD STRENGTH=40,000 PSI).

PROVIDE 3" CLEAR TIES. DETAIL 3" TO FIRST TIE AT TOP OF SHAFT.

2-27-14	REVISED NOTES.	
9-12-13	ISSUED AS STANDARD DRAWING	
5-21-09	REVISED GROUNDING	ARKANSAS STATE HIGHWAY COMMISSION
7-31-08	REVISED GROUNDING	
4-18-08	REVISED AASHTO NOTES	ANTENNA POLE
4-17-08	REVISED TO 2001 AASHTO STANDARDS	
9-6-00	ISSUED	STANDARD DRAWING SD-1
DATE	REVISION	DATE FILM

LOOP DETECTOR INSTALLATION AND TESTING

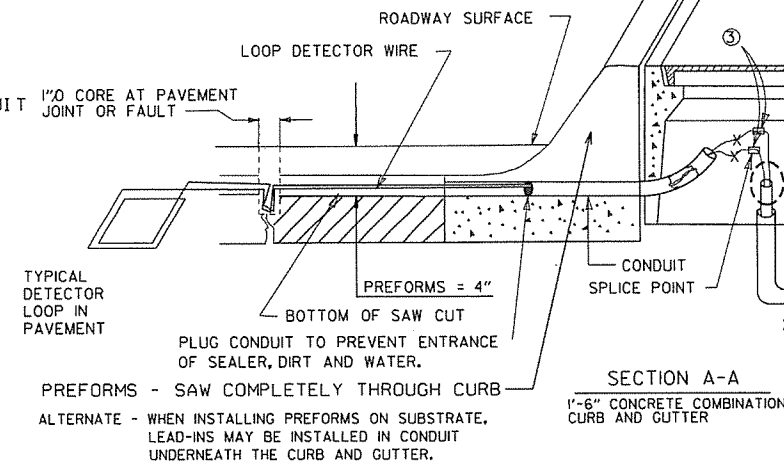
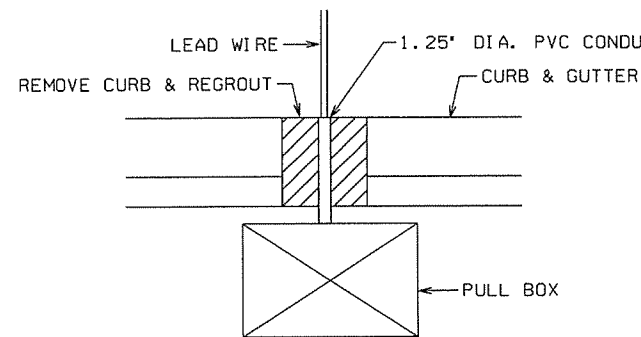
NOTES:

- LOOPS WITH A PERIMETER GREATER THAN 40' SHALL HAVE TWO TURNS. LOOPS WITH A PERIMETER LESS THAN OR EQUAL TO 40' SHALL HAVE THREE TURNS, UNLESS OTHERWISE NOTED ON THE PLANS. QUADRUPOLE LOOPS SHALL BE TWO TURNS (2-4-2 CONFIGURATION) UNLESS OTHERWISE NOTED.
- LOOP AND FEEDER WIRE SHALL BE CONTINUOUS WITHOUT SPLICES EXCEPT AT THE LOOP/FEEDER WIRE SPLICE AS SHOWN. SPLICE SHALL BE ROSIN SOLDERED AND WATERPROOFED WITH AN ACCEPTED SPLICE KIT. DRAIN WIRE SHALL BE GROUNDED IN CABINET AND INSULATED AT LOOP TO FEEDER SPLICE.
- THE LOOP TO FEEDER SPLICE, FEEDER JACKET AND JACKET OF LOOP WIRE IN DUCT SHALL BE COMPLETELY SEALED AND WATERPROOFED.
- CONTRACTOR MAY MAKE CONNECTIONS TO SIGNAL CABLE AND LOOP TO FEEDER CONNECTION AT TERMINAL STRIPS MOUNTED TO POLE INSIDE HAND HOLD COVER AS SHOWN IN DETAIL. TERMINALS MUST BE EASILY ACCESSIBLE, BUT PROTECTED AGAINST ACCIDENTAL CONTACT. CONNECTION OF POWER CARRYING CIRCUITS MUST BE SEPARATED FROM LOOP OR LOGIC CIRCUITS. ALL CONNECTIONS TO TERMINAL STRIPS SHALL UTILIZE SPADE LUGS OR AS APPROVED BY THE ENGINEER.
- EACH LOOP SHALL HAVE A SEPARATE "FEEDER WIRE" UNLESS OTHERWISE NOTED. ALL FEEDER WIRES SHALL BE LABELED AS TO LOOP NUMBER AS DESIGNATED ON THE PLANS.
- ALL LOOP WIRE ENTERING PULL BOXES SHALL BE ENCLOSED IN CONDUIT. EACH LOOP WIRE SHALL ENTER PULL BOX OR POLE BASE THROUGH A SEPARATE PIECE OF ONE INCH (1") CONDUIT.
- LOOP WIRE FROM LOOP TO CONDUIT IS NOT TWISTED. LOOP WIRE IN THE CONDUIT MUST BE TWISTED TWO TO FIVE TURNS PER FOOT.
- WARRANTY PERIOD FOR LOOPS SHALL NOT COMMENCE UNTIL TESTED BY THE CONTRACTOR AND ACCEPTED BY THE ENGINEER. CONTRACTOR SHALL PERFORM TEST AND PROVIDE A RECORD TO THE ENGINEER AS LISTED IN THE DETECTOR LOOP TESTING PROCEDURE.
- UNLESS OTHERWISE APPROVED BY THE ENGINEER, BACKER ROD SHALL BE INSTALLED IN SHORT SECTIONS SPACED NOT MORE THAN 18" APART AND WEDGED INTO SLOT TO HOLD CABLE IN PLACE. CABLE SHALL BE TOTALLY ENCAPSULATED IN SEALER.
- "HOT POUR" SEALER SHALL NOT BE ALLOWED WITH 705-LOOP WIRING IN DUCT.
- WHERE UNDERGROUND SPLICES OF SIGNAL CABLE ARE REQUIRED, CONNECTIONS SHALL BE SOLDERED AND COMPLETELY WATERPROOFED TO THE SATISFACTION OF THE ENGINEER. WATERPROOFING SHALL EXTEND A MINIMUM OF TWO INCHES PAST THE SIGNAL CABLE JACKET AND SHALL COMPLETELY COVER ALL INDIVIDUAL CONDUCTORS OF THE SIGNAL CABLE. WATERPROOFING DOES NOT APPLY TO CONNECTIONS MADE IN POLE BASES.
- CONTRACTOR SHALL CONNECT A SEPARATE NEUTRAL FOR EACH LOAD SWITCH REPRESENTED ON EACH SIGNAL POLE. ONLY ONE NEUTRAL IS REQUIRED FOR PEDESTRIAN SIGNALS. A SEPARATE 5C (TYPICAL) IS PROVIDED FOR PEDESTRIAN PUSH BUTTONS.
- TRAFFIC CONTROLLER CABINET AND LAYOUT SHALL BE SUCH THAT IT IS NOT NECESSARY TO SHUT DOWN POWER OR REMOVE LOAD SWITCHES IN ORDER TO EASILY TEST OR MODIFY DETECTOR INPUTS TO CONTROLLER. CONTROLLER CABINET SHALL BE WIRED SUCH POWER TO LOAD SWITCHES CANNOT BACKFEED TO LOAD SWITCH POWER BUSS DURING FLASH OPERATION.

TYPICAL PROCEDURE FOR DETECTOR LOOP TESTING

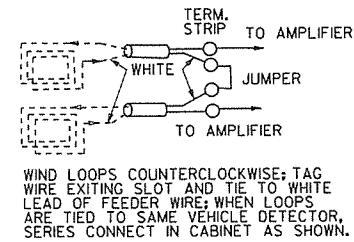
- DISCONNECT AND TEST CONTINUITY (< 10 OHMS) IF CONTINUITY IS BAD, GO TO TEST 3
- TEST INSULATION (@ 500 VOLT TEST > 10 MEG-OHM) IF TESTS 1 & 2 ARE GOOD, NO FURTHER TESTING IS NECESSARY. RECORDED RESULTS CONSIST OF TESTS 1 & 2 FROM CONTROL CABINET WITH FEEDER WIRE CONNECTED TO LOOP.
- OPEN SPLICE (DO NOT BREAK CONNECTION) REPEAT TEST 1 & 2 IF TEST 3 IS BAD, GO TO TEST 4
- BREAK SPLICE, INSTALL JUMPER IN CABINET, REPEAT TESTS 1 & 2 SEPARATELY FOR FEEDER AND FOR LOOP

FAILURES TYPICALLY RESULT FROM BROKEN WIRE IN PAVEMENT, FAULTY INSULATION OF LOOP OR FEEDER WIRE, OR POORLY INSULATED SPLICE CONNECTION.

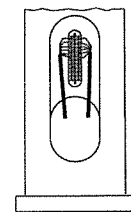


SPECIAL NOTE
IF FEEDER WIRE JACKET IS LEFT UNSEALED AND WATER IS ALLOWED TO ENTER JACKET, CONTRACTOR WILL BE REQUIRED TO REPLACE FEEDER AT NO COST TO THE DEPARTMENT.

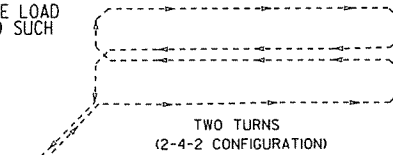
SERIES CONNECTED LOOPS



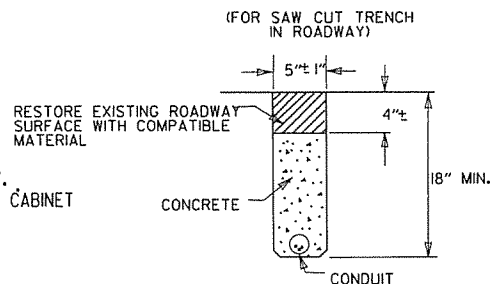
HANDHOLE TERMINAL



QUADRUPOLE LOOP

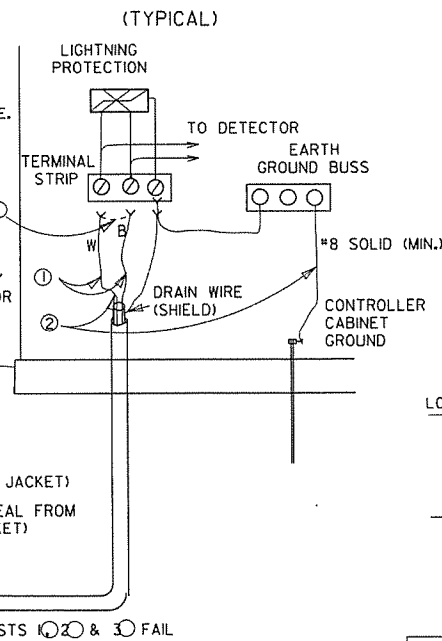


TRENCHING DETAIL

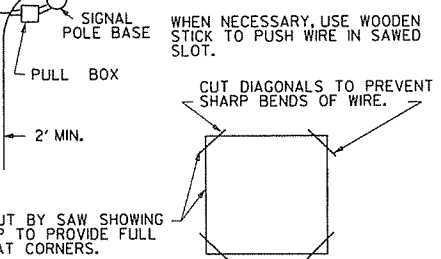
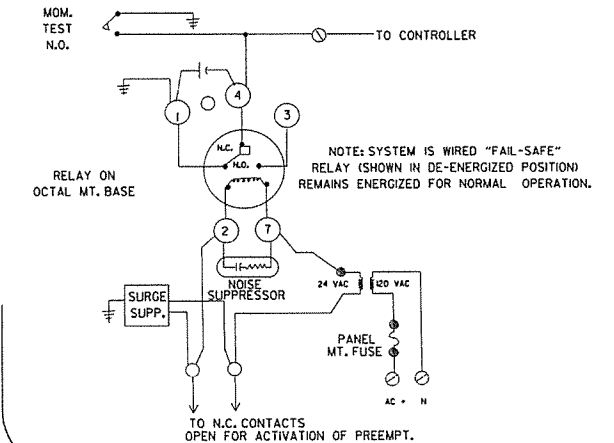


NOTE: CONDUIT SHALL BE INSTALLED IN CURB AS SHOWN OR AS DIRECTED BY THE ENGINEER. END OF CONDUIT SHALL BE WATER-TIGHT.

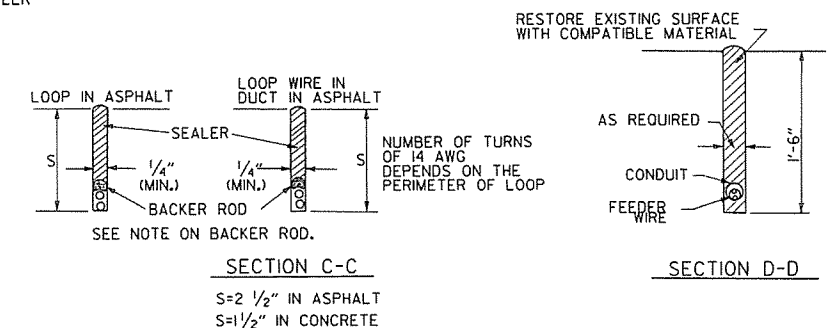
TYPICAL INTERSECTION



TRAFFIC SIGNAL PRE-EMPTION INTERFACE WIRING DIAGRAM



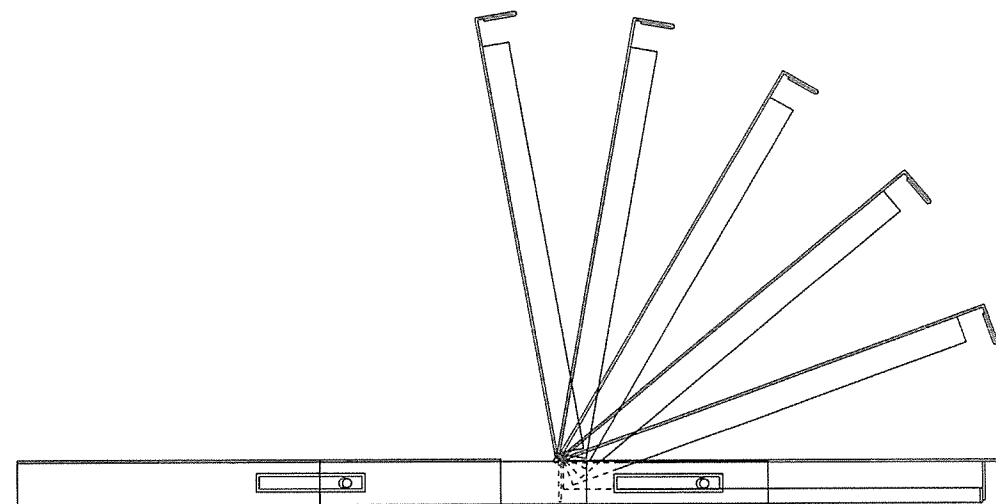
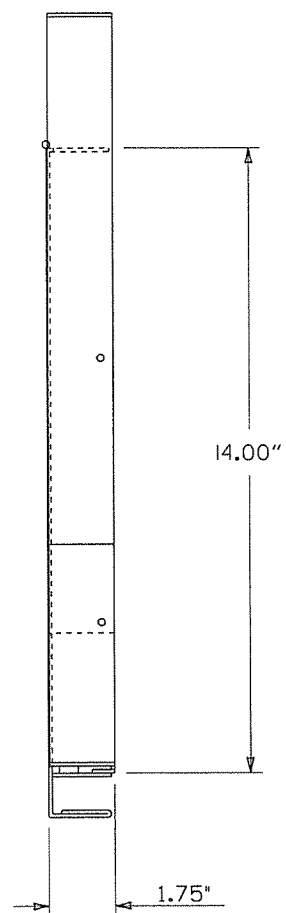
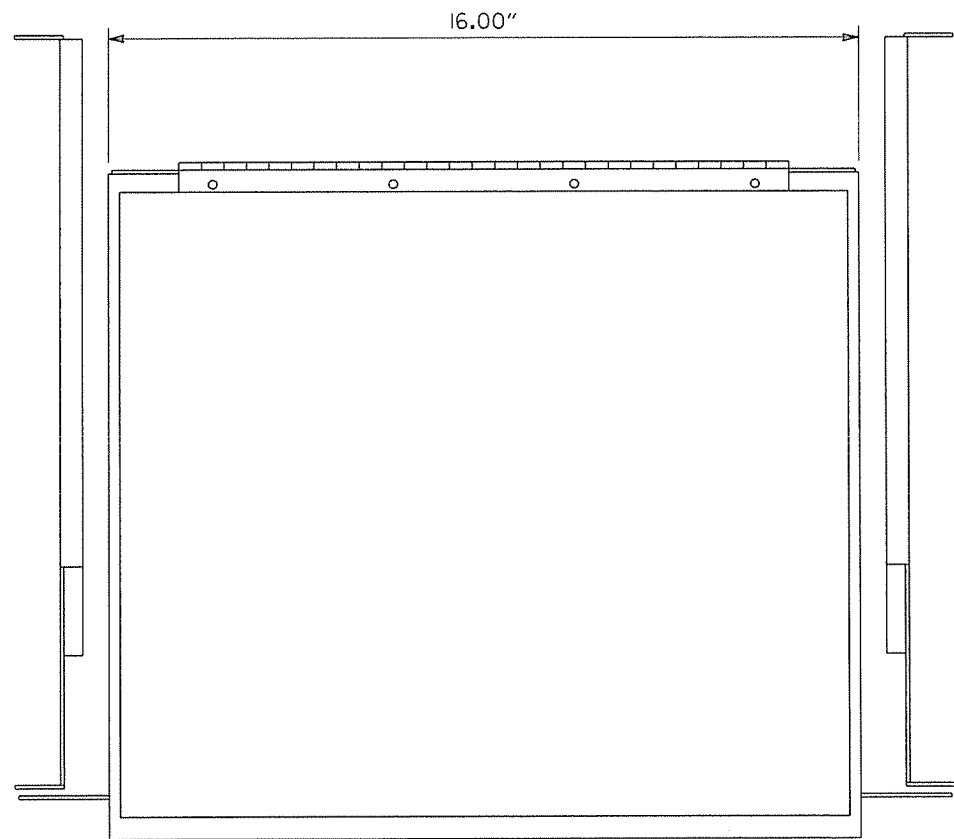
TYPICAL SECTIONS FOR PULSE AND PRESENCE LOOP DETECTORS



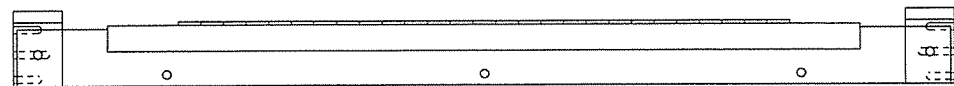
DATE	REVISION	DATE FILM
9-12-13	ISSUED AS STANDARD DRAWING	
5-17-01	REVISED	
4-11-01	REVISED	
2-4-00	REVISED PRE-EMPTION TEST SWITCH	
11-18-98	REVISED NOTES	
11-21-95	ISSUED	

ARKANSAS STATE HIGHWAY COMMISSION
LOOP DETECTOR INSTALLATION
STANDARD DRAWING SD-4

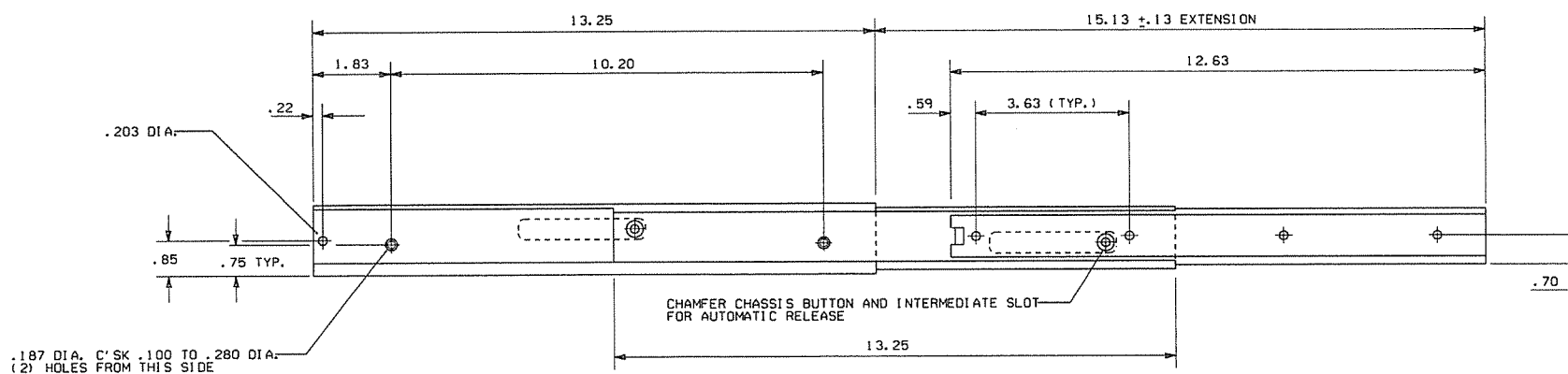
DRAWER PLAN VIEW



- NOTES:
 1. RIGHT HAND SLIDE SHOWN, LEFT SLIDE OPPOSITE.
 2. GENERAL DEVICES (CC3002-99-0102) OR EQUAL AND CONTAINS (1) RIGHT HAND SLIDE ASSEMBLY, (1) LEFT HAND SLIDE ASSEMBLY.
 3. ALL HARDWARE NECESSARY TO FASTEN SLIDE ASSEMBLY TO UNDERSIDE OF CONTROLLER SHELF SHALL BE INCLUDED.



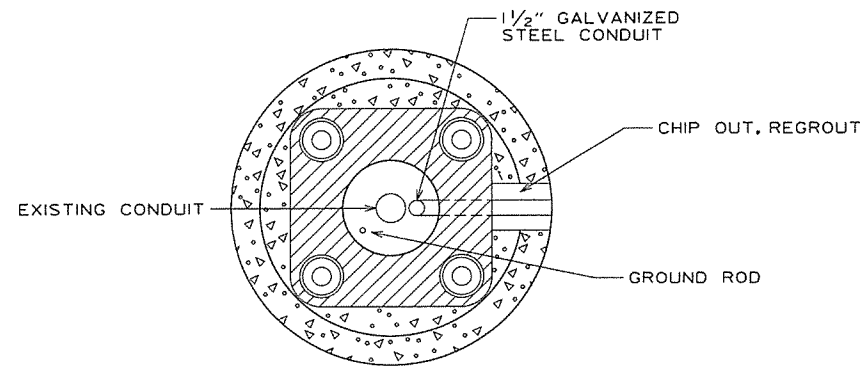
FRONT VIEW



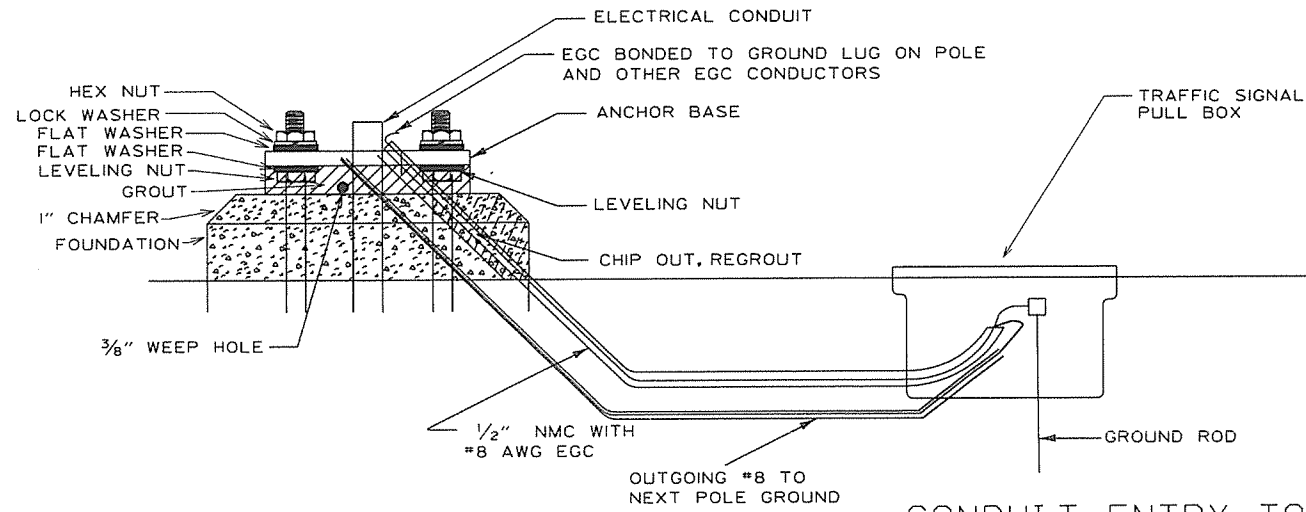
RIGHT SIDE ASSEMBLY

			ARKANSAS STATE HIGHWAY COMMISSION
			CONTROLLER CABINET UTILITY DRAWER
9-12-13	ISSUED AS STANDARD DRAWING		
6-15-05	ISSUED		
DATE	REVISION	DATE FILM	STANDARD DRAWING SD-5

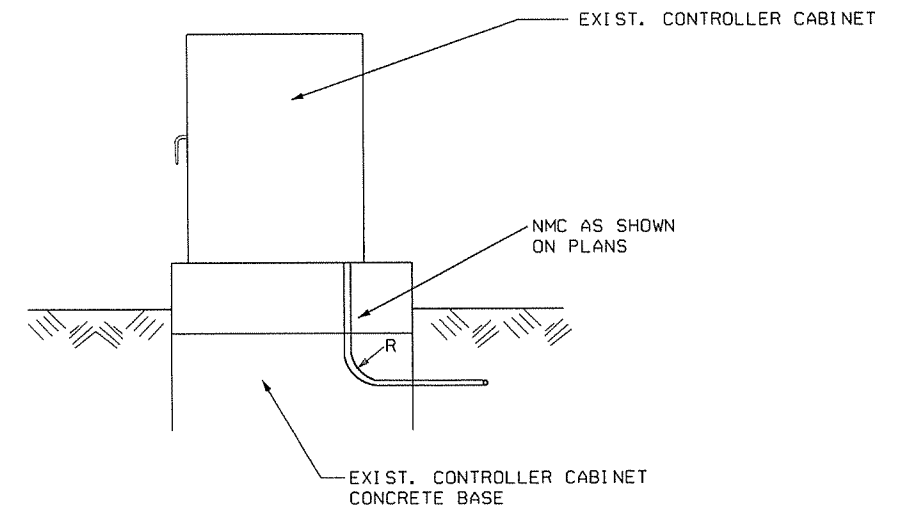
CONDUIT ENTRY TO EXISTING POLE BASE



ANCHOR BASE

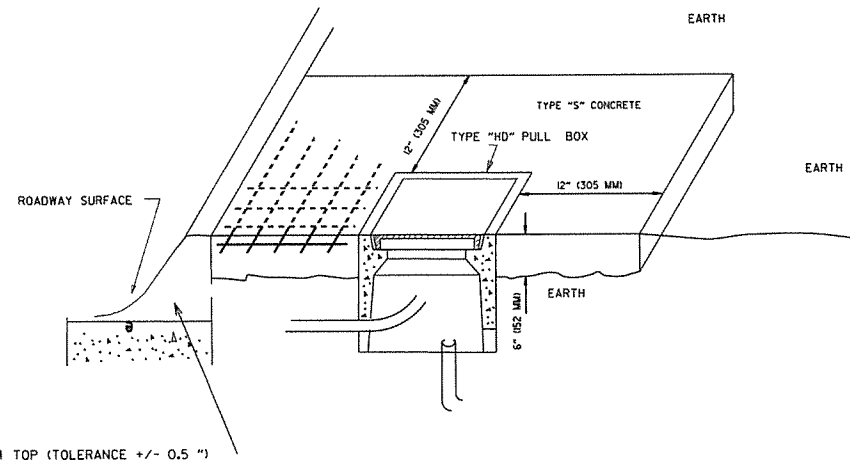


CONDUIT ENTRY TO EXISTING CONTROLLER CABINET



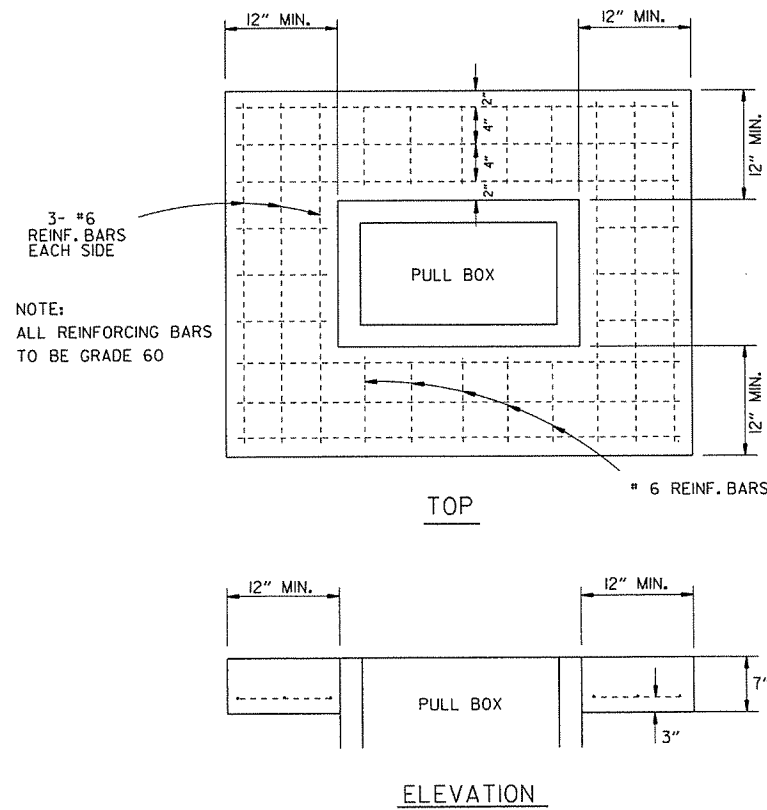
NOTE: ENTRY TO CABINET SHALL BE THROUGH A CUT IN THE BASE SUFFICIENT TO PROVIDE ADEQUATE CONDUIT RADIUS FOR ITEM.

TYPE "HD" CONCRETE PULL BOX DETAIL



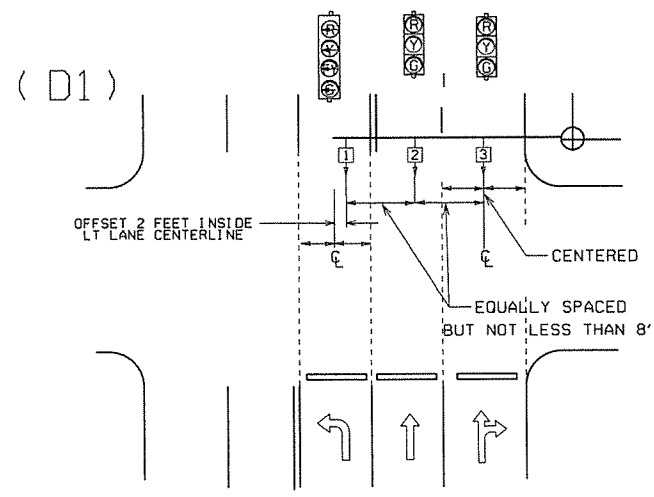
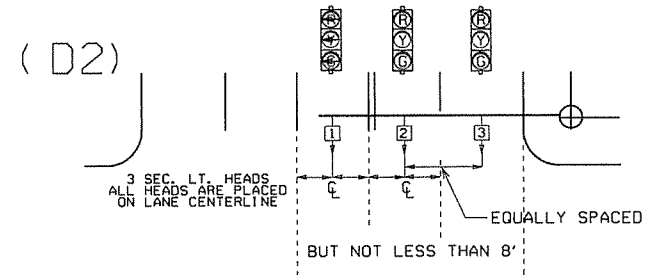
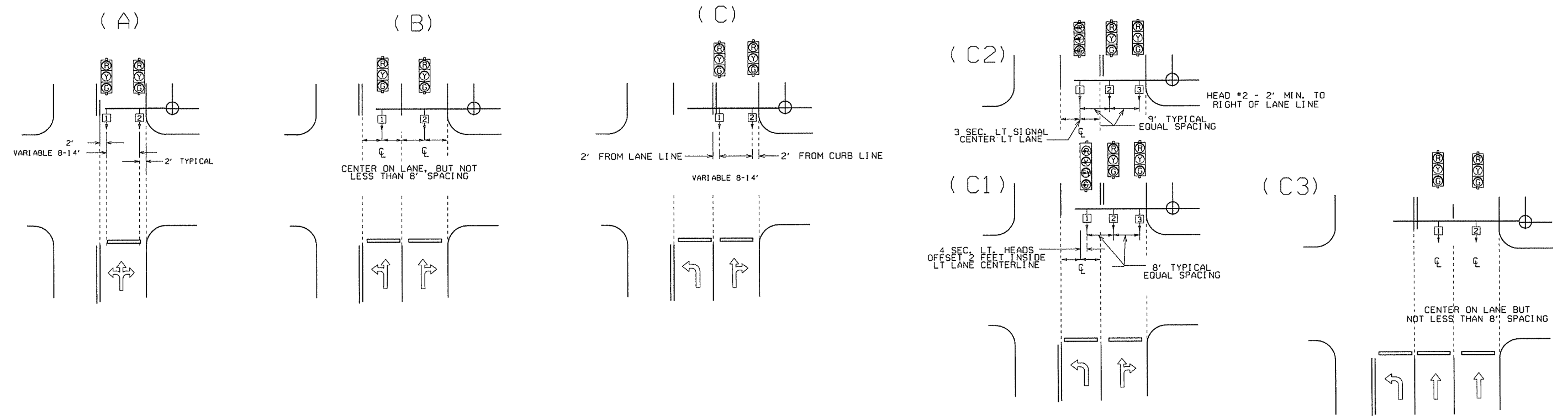
2" CLEAR FROM TOP (TOLERANCE +/- 0.5 ")

NOTE: ALL TYPE 1 AND TYPE 2 HD PULL BOXES ARE INSTALLED WITH AN APRON OF CONCRETE 12" (305 MM) WIDE AND 6" (152 MM) IN DEPTH. ALL PAYMENT SHALL BE INCLUDED IN THE PRICE OF THE TYPE HD PULL BOX. PULL BOX SHALL BE INSTALLED FLUSH TO SURROUNDING GRADE UNLESS OTHERWISE INSTRUCTED BY THE ENGINEER. THE CONCRETE SHALL BE CLASS "S." THREE #6 REINFORCING BARS IN THE APRON ON ALL SIDES OF THE PULL BOX IS REQUIRED IN CONCRETE.

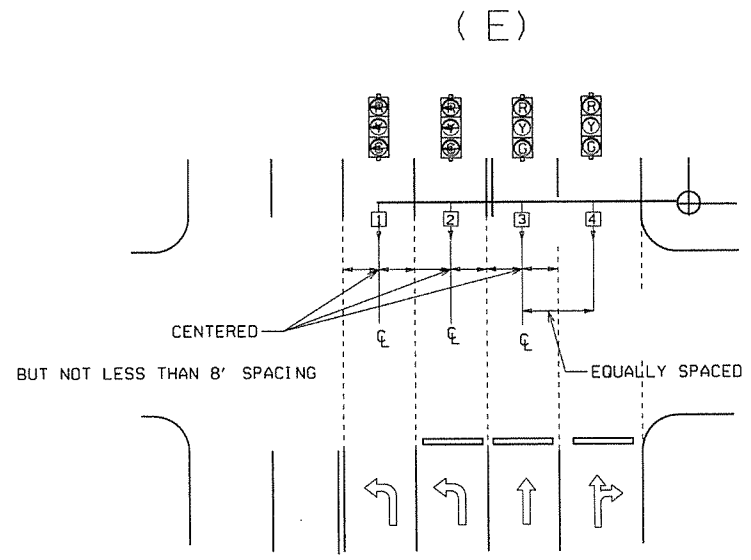


9-12-13	ISSUED AS STANDARD DRAWING	
5-21-09	REVISED GROUNDING	
7-31-08	ADDED & REVISED CONDUIT ENTRY	
6-23-04	REVISED CLEARANCE AT CURB ENTRY	
1-4-02	ADDED REINFORCING TO BOX APRON	
7-2-01	REVISED	
12-27-99	REVISED NOTES	
11-18-98	ISSUED	
DATE	REVISION	DATE FILM

ARKANSAS STATE HIGHWAY COMMISSION
HEAVY DUTY PULL BOX
STANDARD DRAWING SD-6



NOTE: WHERE LEFT TURN HEAD (HEAD 1 ON D1 AND D2) IS NOT CALLED FOR ON PLANS, MAST ARM LENGTH MAY STILL BE ALLOWED FOR FUTURE INSTALLATION. HEADS FOR THROUGH MOVEMENTS SHALL STILL BE ALIGNED WITH THROUGH LANES AS SHOWN ON DETAILS.



GENERAL NOTES:

1. FOUR SECTION 'PROTECTED/PERMISSIVE' LEFT TURN HEADS SHOULD BE PLACED A MINIMUM OF TWO (2') FEET TO THE RIGHT OF THE CENTERLINE OF THE APPROACHING LEFT TURN LANE.
2. THREE SECTION 'PROTECTED' LEFT TURN HEADS SHOULD BE PLACED ON THE CENTERLINE OF THE APPROACHING LEFT TURN LANE.
3. WHEN IT IS NECESSARY TO PLACE POLES OTHER THAN AS SHOWN ON PLAN SHEET(S) RESULTING IN MAST ARM EXTENDING MORE THAN TWO FEET PAST (TO THE LEFT OF) THE CENTERLINE OF THE APPROACHING LEFT TURN LANE, MAST ARM SHALL BE CUT TO APPROPRIATE LENGTH AS DETERMINED BY THE ENGINEER, AND A NEW END CAP PROVIDED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THIS PRIOR TO INSTALLING THE MAST ARM IF ADDITIONAL COMPENSATION IS REQUIRED.
4. SIGNAL HEAD SPACING SHALL, IN NO CASE, BE LESS THAN EIGHT (8') FEET BETWEEN HEADS ON CENTER, MEASURED HORIZONTALLY PERPENDICULAR TO THE APPROACH.
5. ALL SIGNAL HEADS SHOWN ON THIS DETAIL SHEET SHALL BE LOCATED ACCORDING TO THE DIMENSIONS SHOWN IN RELATION TO THE APPROACH SIDE OF THE INTERSECTION.
6. MAXIMUM MOUNTING HEIGHT OF SIGNAL FACES LOCATED BETWEEN 40 FEET AND 53 FEET FROM STOP BAR SHALL BE IN ACCORDANCE WITH FIGURE 40-1 OF 2009 MUTCD.

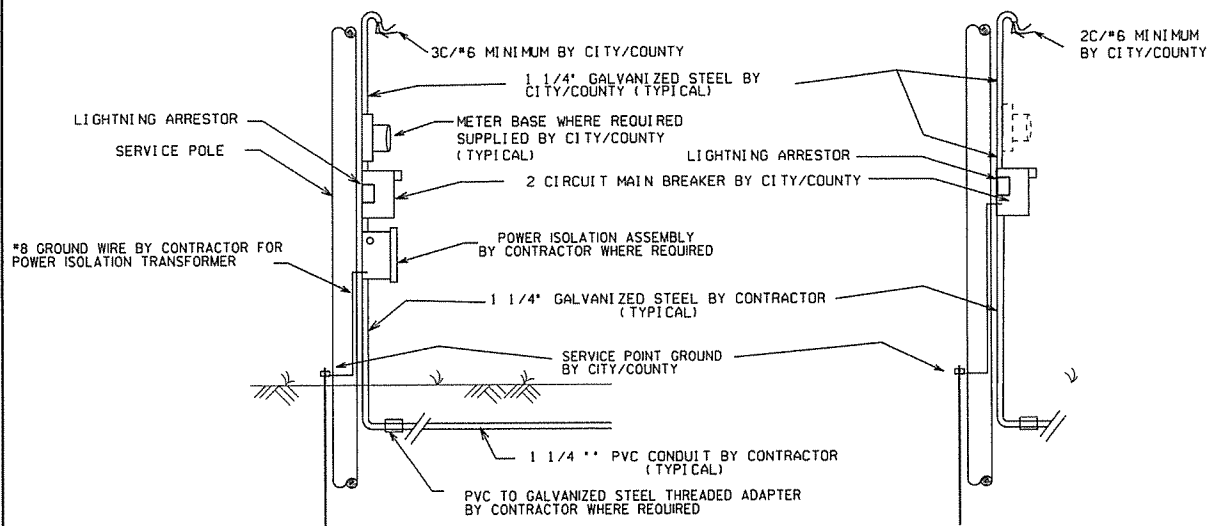
℄ = CENTER OF LANE FROM APPROACH SIDE

			ARKANSAS STATE HIGHWAY COMMISSION
9-12-13	ISSUED AS STANDARD DRAWING		SIGNAL HEAD PLACEMENT
3-11-10	2009 MUTCD		
12-9-99	ISSUED		STANDARD DRAWING SD-8
DATE	REVISION	DATE	FILM

MAIN BREAKER NOT NEAR CONTROLLER CABINET SECONDARY REQUIRED

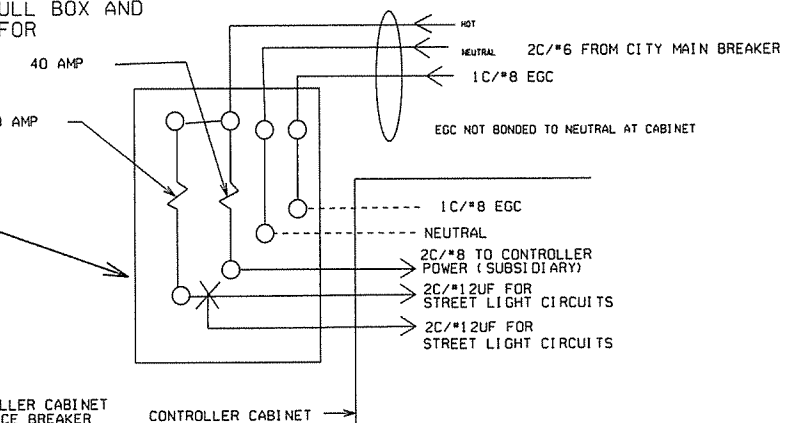
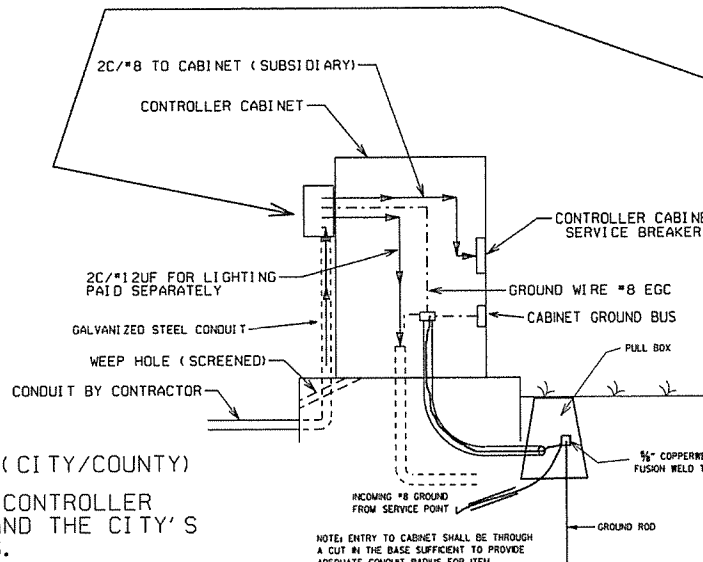
WITH POWER ISOLATION ASSEMBLY

WITHOUT POWER ISOLATION ASSEMBLY



GROUND ROD-A 10' X 5/8\"/>

SECONDARY BREAKER BY CONTRACTOR (SUBSIDIARY)



MAIN BREAKER WIRING (TYPICAL)

NOTES TO CONTRACTOR AND AGENCY RESPONSIBLE FOR MAINTENANCE OF THE INTERSECTION (CITY/COUNTY)

ELECTRICAL SERVICE TYPICALLY FALLS INTO TWO CATEGORIES: MAIN BREAKER NEAR CONTROLLER CABINET; AND MAIN BREAKER NOT NEAR CONTROLLER CABINET. THE CONTRACTOR'S AND THE CITY'S OR COUNTY'S RESPONSIBILITY VARIES ACCORDINGLY AS INDICATED ON THESE DETAILS.

1. ALL SITUATIONS: ELECTRICAL SERVICE SHALL BE PROVIDED BY THE CITY/COUNTY TO A SERVICE POLE WITH EXTERNAL RAIN-TIGHT BREAKER (MAIN BREAKER) AT A MUTUALLY ACCEPTABLE POINT WITHIN THE RIGHT-OF-WAY. SERVICE POINT INCLUDES GALVANIZED STEEL CONDUIT TO A POINT 18\"/>

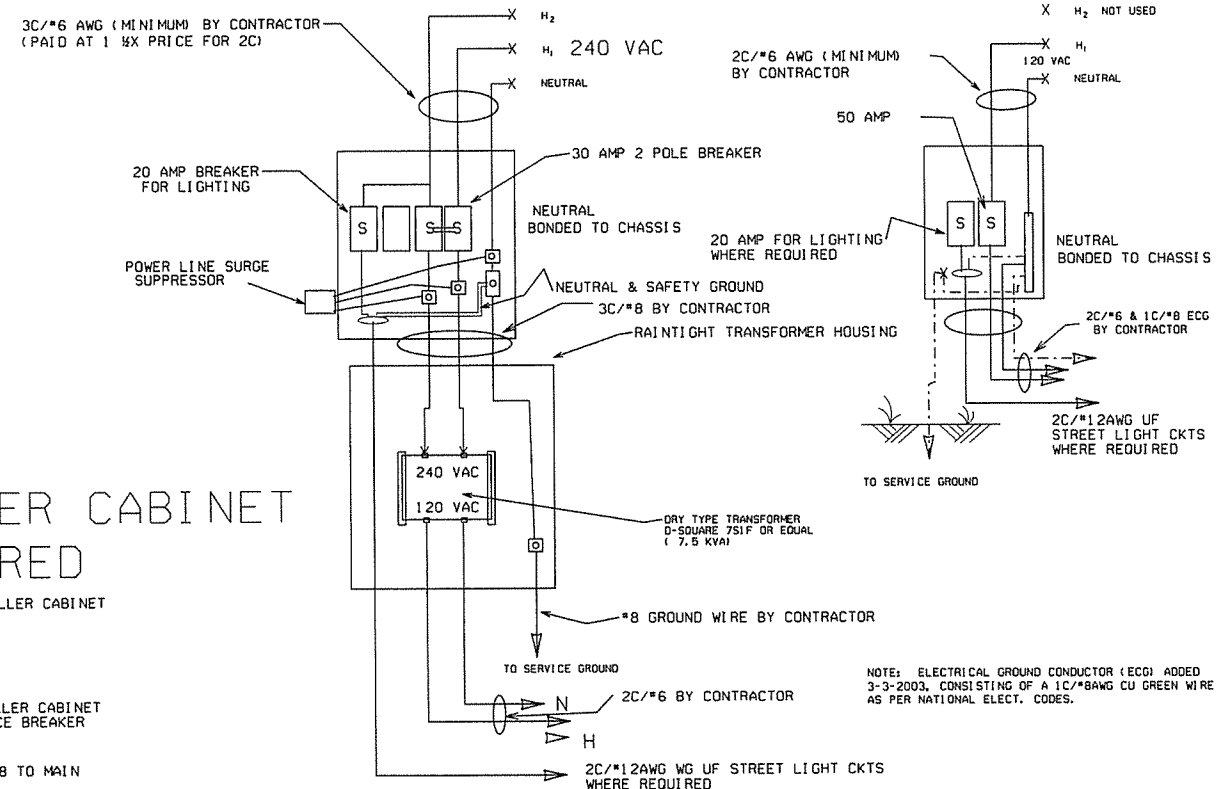
2. MAIN BREAKER NOT NEAR CONTROLLER CABINET: THE MAIN BREAKER ASSEMBLY, GALVANIZED STEEL CONDUIT, WEATHERHEAD AND WIRE ABOVE MAIN BREAKER AND CONNECTION TO THE UTILITY SHALL BE PROVIDED BY CITY/COUNTY. CONTRACTOR SHALL PROVIDE AS PART OF CONTRACT SECONDARY BREAKER, CONDUIT, WIRE AND WIRING TO THE MAIN BREAKER.

3. MAIN BREAKER NEAR CONTROLLER CABINET: ALL COMPONENTS OF THE SERVICE POINT WITH THE EXCEPTION OF THE WIRE AND WIRING ABOVE THE MAIN BREAKER IS FURNISHED AND INSTALLED BY THE CONTRACTOR. WIRING FROM MAIN BREAKER INCLUDING CONNECTION TO THE UTILITY, IS THE RESPONSIBILITY OF THE CITY/COUNTY. IF METER LOOP IS REQUIRED, METER BASE AND HARDWARE IS PROVIDED BY THE CITY/COUNTY AND INSTALLED BY THE CONTRACTOR.

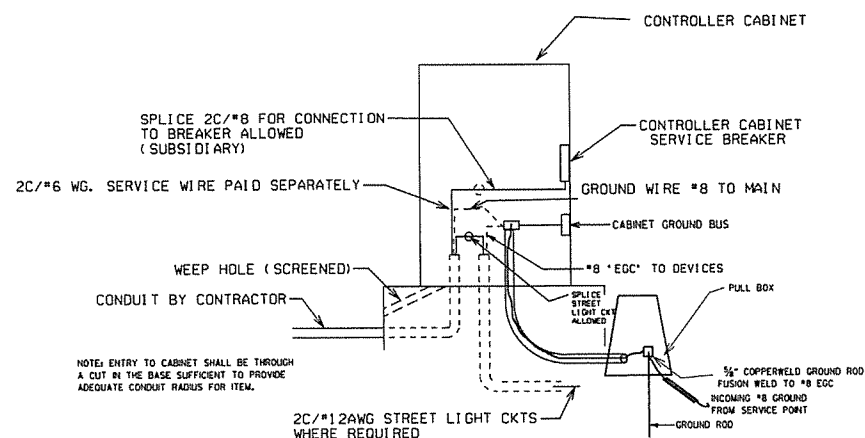
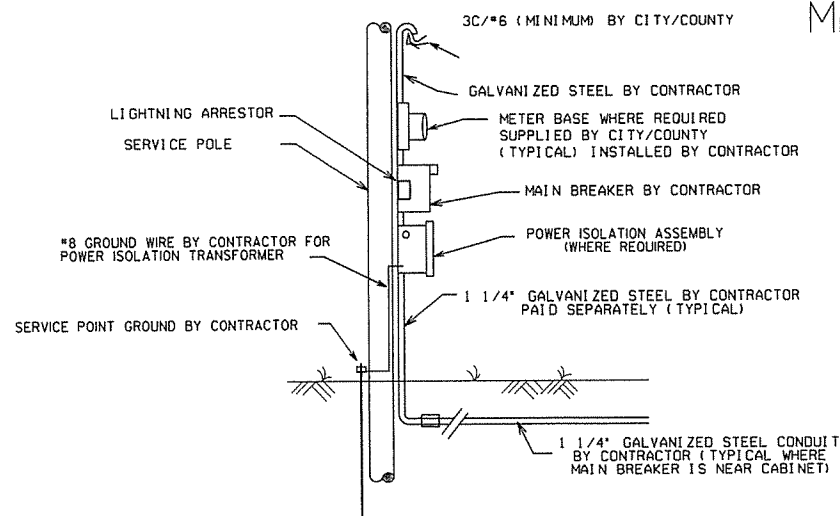
SERVICE GROUND IS TYPICALLY TIED TO NEUTRAL AT THE MAIN BREAKER. AS SUCH, CONTROLLER GROUND IS NOT TIED TO NEUTRAL AT SECONDARY BREAKER OR IN CONTROLLER CABINET.

WITH POWER ISOLATION ASSEMBLY
4 CIRCUIT MAIN BREAKER

WITHOUT POWER ISOLATION ASSEMBLY
2 CIRCUIT MAIN BREAKER



MAIN BREAKER NEAR CONTROLLER CABINET SECONDARY NOT REQUIRED



DATE	REVISION	DATE FILM
9-12-13	ISSUED AS STANDARD DRAWING	
4-18-13	ADDED LIGHTNING ARRESTOR	
5-21-09	REVISED GROUNDING	
7-31-08	REVISED GROUNDING	
3-3-03	ADDED EGC NOTE	
9-26-01	REVISED	
12-27-99	REVISED	
7-28-99	REVISED	
2-5-99	ISSUED	

NOTE: ELECTRICAL GROUND CONDUCTOR (EGC) ADDED 3-3-2003, CONSISTING OF A 1C/#8AWG CU GREEN WIRE AS PER NATIONAL ELECT. CODES.

NOTES, PED AND TRAFFIC SIGNAL HEAD SIGNS: EACH ITEM TRAFFIC SIGNAL HEAD (4 SEC., 1-WAY) SHALL INCLUDE A SPECIAL SIGN AS SHOWN, ATTACHED TO THE MAST ARM OR SPAN ASSEMBLY 12" TO THE RIGHT OF THE SIGNAL HEAD UNLESS REMOVED WITHIN THE SIGNAL PLAN NOTES.

EACH ITEM TRAFFIC SIGNAL HEAD (3 SEC., 1-WAY) TO BE USED AS A LEFT TURN INDICATION ONLY SHALL INCLUDE A SIGN (R10-10) AS SHOWN, ATTACHED TO THE MAST ARM OR SPAN ASSEMBLY 12" TO THE RIGHT OF THE SIGNAL HEAD.

EACH PEDESTRIAN PUSHBUTTON SHALL HAVE ONE R10-3E SIGN ATTACHED TO THE POLE ABOVE THE BUTTON. ALL SIGN FACES SHALL BE CONSTRUCTED OF HIGH INTENSITY SHEETING (TYPE 111) WITH SILKSCREEN LEGEND AND BORDER.

ALL SIGN BLANKS SHALL BE CONSTRUCTED OF ALUMINUM ALLOY (ASTM DESIGNATION B-209, ALLOY 5052-H38) WITH THICKNESS OF 0.100 INCH.

GENERAL NOTES: 1. MAST ARM POLES SHALL BE MOUNTED A MINIMUM OF 4 FT. ABOVE CURB OR SHOULDER.

2. OCTAGONAL POLES AND ARMS MEETING THE REQUIREMENTS OF THE PLANS AND SPECIFICATIONS CAN BE INSTALLED IN LIEU OF ROUND. ALL POLES AND ARMS IN A JOB MUST BE THE SAME SHAPE.

3. MINIMUM STRUCTURAL REQUIREMENTS: DESIGN SPECIFICATIONS: AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, 4TH EDITION (2001) WITH 2003 AND 2006 INTERIMS.

USE FATIGUE CATEGORY I FOR ALL STRUCTURES ON ROUTES WHERE THE SPEED LIMIT IS 65 MPH AND GREATER AT THE STRUCTURE LOCATION AND ON ROUTES WHERE SPEED LIMIT IS GREATER THAN 45 MPH WITH AN ARM 60' OR LONGER.

USE FATIGUE CATEGORY II FOR STRUCTURES ON ROUTES WITH A SPEED LIMIT LESS THAN 65 MPH AND GREATER THAN 45 MPH WITH ARMS LESS THAN 60' AND ROUTES WITH SPEED LIMITS OF 45 MPH AND LESS WITH AN ARM 60' OR LONGER.

USE FATIGUE CATEGORY III FOR ALL STRUCTURES WHERE SPEED LIMIT IS 45 MPH AND LESS AND ARMS LESS THAN 60'.

CONSTRUCTION SPECIFICATIONS: ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION) WITH APPLICABLE SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS.

BASE WIND SPEED: 90 MPH.

STEEL MEMBERS CONSIDERED MAIN LOAD CARRYING MEMBERS WITH A THICKNESS GREATER THAN 1/2" SHALL MEET THE LONGITUDINAL CHAPPY V-NOTCH TEST SPECIFIED IN SUBSECTION 807.05 OF THE STANDARD SPECIFICATIONS.

DEAD LOAD: AS A MINIMUM, DESIGN SHALL BE BASED ON THE FIXED ATTACHMENTS SHOWN BELOW OR AS MODIFIED IN THE PLANS.

ALL SIGNAL HEADS TO BE ONE WAY, 12 INCH, AND HAVE 5 IN. BACK PLATES.

HEADS AT END OF ARM - ONE 4 SEC., 85 LB., 16.0 SQ. FT. ONE SIGN MOUNTED 3 FT. FROM SIGNAL * 2' X 0' X 2' * 6", 20 LB. REMAINING HEADS SPACED A 8 FT. * 3 SEC., 56 LB., TWO 5 SEC.)

14.4 SQ. FT. DESIGN TO ACCOMMODATE (INCLUDING 2 HEADS FOR ARMS 10 TO 16 FT., 2 HEADS FOR ARMS 10 TO 16 FT., INCLUDING LB., 3 HEADS FOR 18 TO 24 FT. ARMS, 4 HEADS FOR OVER 26 FT. ARMS.

STREET NAME SIGN -- 72" X 18", 36 LB., MOUNTED SUCH THAT OUTSIDE EDGE IS NOT GREATER THAN 12 FT. FROM POLE. DEPENDING UPON POSITION OF SIGNAL HEAD ADJACENT TO POLE, SIGN MAY OVERLAP POLE SHAFT ROADWAY LUMINAIRES (WHERE REQUIRED ON PLAN SHEET) * VARIABLE ARM LENGTH (MAX.), 3.3 SQ. FT., 75 LB. PED SIGNALS -- TWO 2 SEC. 12 INCH MOUNTED 8 FT. FROM BASE OF POLE. POST MOUNTED 3 SEC. SIGNAL HEAD AT 10 FT. ON SIDE OF POLE.

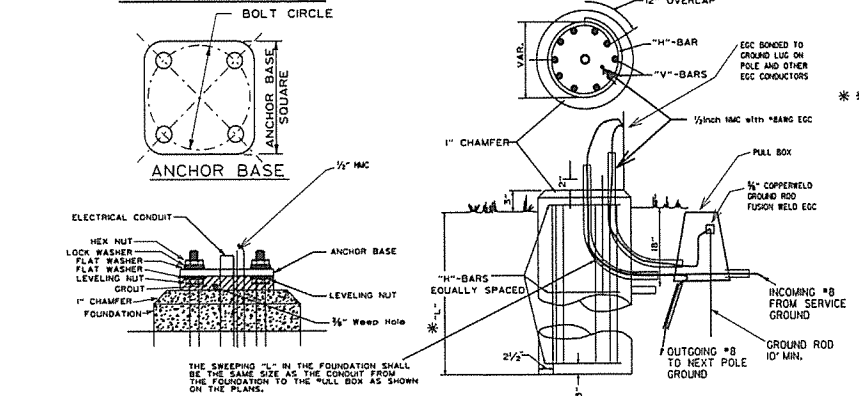
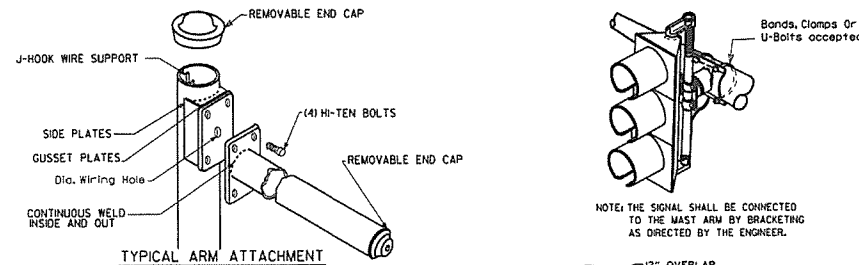
4. POLE/MAST ARM CAP -- POLE AND MAST ARMS CAPS SHALL BE PROVIDED, FABRICATED OF EITHER STEEL OR CAST ALUMINUM.

5. HAND HOLE -- HAND HOLES SHALL BE 4 X 6 INCHES FOR STANDARD, AND 3 X 5 INCHES FOR PED POLES, MINIMUM PLACED APPROXIMATELY 12 INCHES FROM BASE, AND SHALL BE FIXED WITH A BOLT DOWN COVER. A VACUUM FORMED ABS COVER IS AN ACCEPTABLE ALTERNATE TO STEEL. POLES GREATER THAN 21 FT. IN HEIGHT (FOR ROADWAY LUMINAIRE ATTACHMENT) SHALL INCLUDE A HAND HOLD WITHIN 12 INCHES OF MAST ARM(S) ATTACHMENT(S).

6. POLE/MAST ARM TAPER AND SLOPE - AVERAGE TAPER OF SIGNAL ARMS AND POLE SHALL BE 0.125 TO 0.15 INCHES PER FT.

MAST ARM CENTERLINE ANGLE AT ATTACHMENT POINT WITH POLE SHALL MAINTAIN NOT LESS THAN 0.5 DEGREES OR MORE THAN 4 DEGREES POSITIVE SLOPE WITH A LINE PERPENDICULAR TO THE POLE CENTERLINE. THE ARM SHALL MAINTAIN A POSITIVE AFTER IT IS PLACED UNDER LOAD.

7. NUT COVERS - EACH POLE SHALL INCLUDE A BOLT DOWN NUT COVER FOR EACH ANCHOR BOLT.

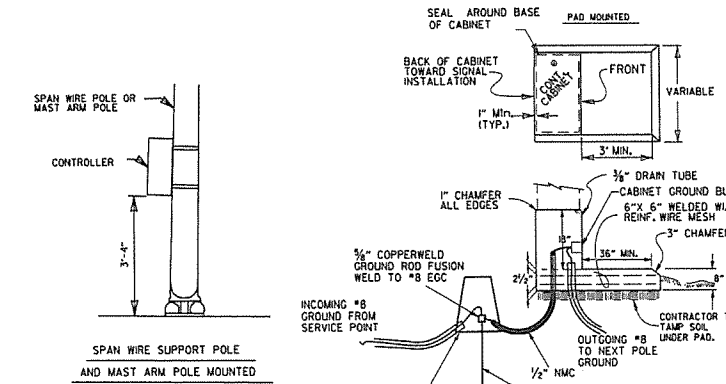


THE GROUND ROD SHALL BE FUSION WELDED TO A 1/2" A.W.G. SOLID COPPER GROUND WIRE. ATTACHMENT TO THE PRIMARY GROUND MAY BE BY AN APPROVED CLAMP. THE ROD IS TO BE LOCATED IN THE CONCRETE PULL BOX.

TYPICAL FOUNDATION DETAILS

POLE FOUNDATION MINIMUM DIMENSIONS AND STEEL REINFORCING. ALL REINFORCING STEEL SHALL BE GRADE 40 MIN.

Table with columns: ARM LENGTH, FDN. DIAMETER, DEPTH, STEEL (VERT., HORZ., O/C). Rows include PED, 2' to 12', over 12' to 20', over 20' to 35', over 35' to 50', Twins to 20', Twins over 20' to 44', Twins over 44' to 50', Twins over 50' to 72'.



CONTROLLER CABINET MOUNTING DETAILS

UNLESS OTHERWISE DIRECTED BY THE ENGINEER, CABINET ORIENTATION SHALL BE SUCH THAT THE BACK OF THE CABINET IS PARALLEL TO THE STREET AND POSITIONED TO ALLOW VISIBILITY OF THE SIGNAL DISPLAY WHILE OBSERVING THE CONTROLLER FRONT PANEL.

8. GROUND ROD - A 10' X 5/8" GROUND ROD SHALL BE INSTALLED IN THE PULL BOX FOR EACH POLE AND THE CONTROLLER. PAYMENT FOR THE GROUND ROD AND 1/2" NMC SHALL BE INCLUDED IN ITEM 714 FOR SIGNAL POLES AND ITEM 701 FOR THE CONTROLLER. THE PULL BOX AND CONDUCTOR BOX SHALL BE PAID FOR SEPARATELY.

9. POLE BASE/FOUNDATION - ANCHOR BOLTS SHALL INCLUDE AS A MINIMUM, ONE LEVELING NUT, TWO FLAT WASHERS, ONE LOCK WASHER, AND ONE HEX. NUT. PERIMETER OF ANCHOR BASE SHALL BE GROUTED WITH A 1/4" WEEP HOLE. ALL CONCRETE SHALL BE CLASS 'S' OR GREATER.

10. CONCRETE - ALL CONCRETE FOR CONTROLLER CABINET AND POLE FOUNDATIONS SHALL BE CLASS 'S' OR GREATER.

11. PEDESTRIAN PHASES - PEDESTRIAN MOVEMENTS SHALL BE PUSH BUTTON ACTUATED AND CONCURRENTLY TIMED, UNLESS OTHERWISE INDICATED ON THE PLAN SHEET(S). FURNISHING AND INSTALLING PED PUSH SWITCH SHALL BE CONSIDERED SUBSIDIARY TO THE ITEM PEDESTRIAN SIGNAL HEAD.

SIGNAL OPERATION NOTES:

FLASHING OPERATION - PRIOR TO NORMAL OPERATION, SIGNAL SHALL BE FLASHED FOR A PERIOD OF 3 TO 5 WORK DAYS OR AS DIRECTED BY THE ENGINEER. SIGNAL SHALL BE PLACED IN OPERATION ONLY ON A REGULAR WORK DAY, EXCEPT FRIDAY. THE CONTRACTOR MAY BE REQUIRED TO ALTER THE FLASHING DISPLAY DURING THE TEMPORARY FLASH PERIOD. AT THE TIME INTERSECTION IS PLACED IN PERMANENT OPERATION, THE FLASH SEQUENCE SHALL THEN BE RETURNED TO THAT INDICATED ON THE PLAN SHEETS. NO ADDITIONAL COMPENSATION SHALL BE ALLOWED FOR THESE ALTERATIONS IN FLASH SEQUENCE.

* WHEN THE GROUND ELEVATION AT THE POLE IS LOWER THAN THE ROADWAY ELEVATION, THE LENGTH OF FOUNDATION ABOVE THE GROUND MAY BE INCREASED TO PROVIDE THE REQUIRED SIGNAL HEAD CLEARANCE ABOVE THE ROADWAY. WHEN THE REQUIRED LENGTH OF FOUNDATION ABOVE THE GROUND IS 5'-6" OR LESS, INCREASE DEPTH "L" BY 1'-0". FOR LENGTHS GREATER THAN 5'-6", DEPTH "L" SHALL BE ADJUSTED AS DIRECTED BY THE ENGINEER. LONGITUDINAL REINFORCING, AS SHOWN IN THE TABLE, SHALL BE PROVIDED FOR THE LENGTH OF THE EXTENDED SHAFT AND *4 TIES SHALL BE PROVIDED AT A SPACING NOT TO EXCEED 9" ON CENTERS. PAYMENT WILL BE IN ACCORDANCE WITH SECTION 714 OF THE STANDARD SPECIFICATIONS.

* IN LIEU OF DESIGNING THE STRUCTURE TO RESIST PERIODIC GALLOPING, A VIBRATORY MITIGATION DEVICE MAY BE PROVIDED BY THE POLE MANUFACTURER. THE VIBRATORY MITIGATION DEVICE SHALL BE AN ANTI-GALLOPING PANEL CONSISTING OF A 60"x16"x0.125" SIGN BLANK MOUNTED NEAR THE END OF THE MAST ARM NOT TO EXCEED ONE QUARTER OF THE LONG AXIS OF THE PANEL COLLINEAR WITH THE LONG AXIS OF THE MAST ARM. THE PANEL SHOULD BE MOUNTED AT SUCH A HEIGHT AS TO PROVIDE AT LEAST 6" CLEAR FROM THE TOP OF ANY SIGNAL ASSEMBLY OR SIGN PANEL LOCATED ON THE MAST ARM WITHIN THE LENGTH OF THE ANTI-GALLOPING PANEL.

TRUCK-INDUCED GUST LOADS SHALL BE EXCLUDED FOR FATIGUE DESIGN FOR ALL STRUCTURES EXCEPT MAST ARMS MOUNTED OVER FACILITIES WITH POSTED SPEEDS OF 65 MPH OR GREATER AT THE LOCATION OF THE STRUCTURE.

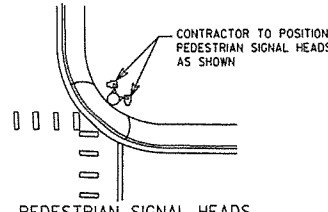
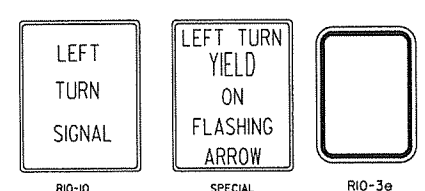
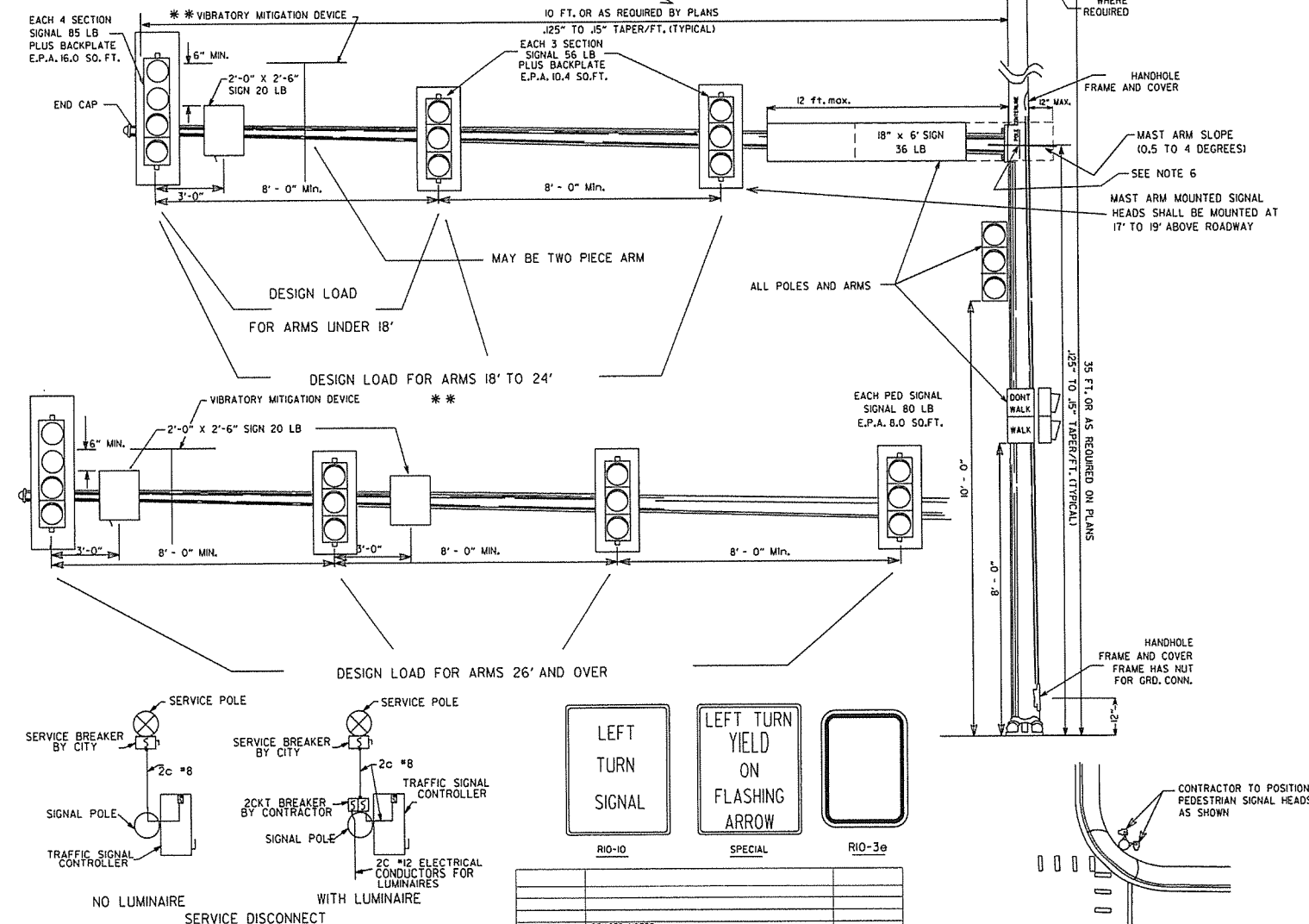


Table with columns: DATE, REVISION, DATE FILM. Rows include dates from 2-27-14 to 11-21-95 and corresponding revision descriptions.

ARKANSAS STATE HIGHWAY COMMISSION
STEEL POLE WITH MAST ARM
STANDARD DRAWING SD-II

SUPERELEVATION TABLE FOR TWO - WAY TRAFFIC

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

D MAX = 24' 45'

ABBREVIATIONS

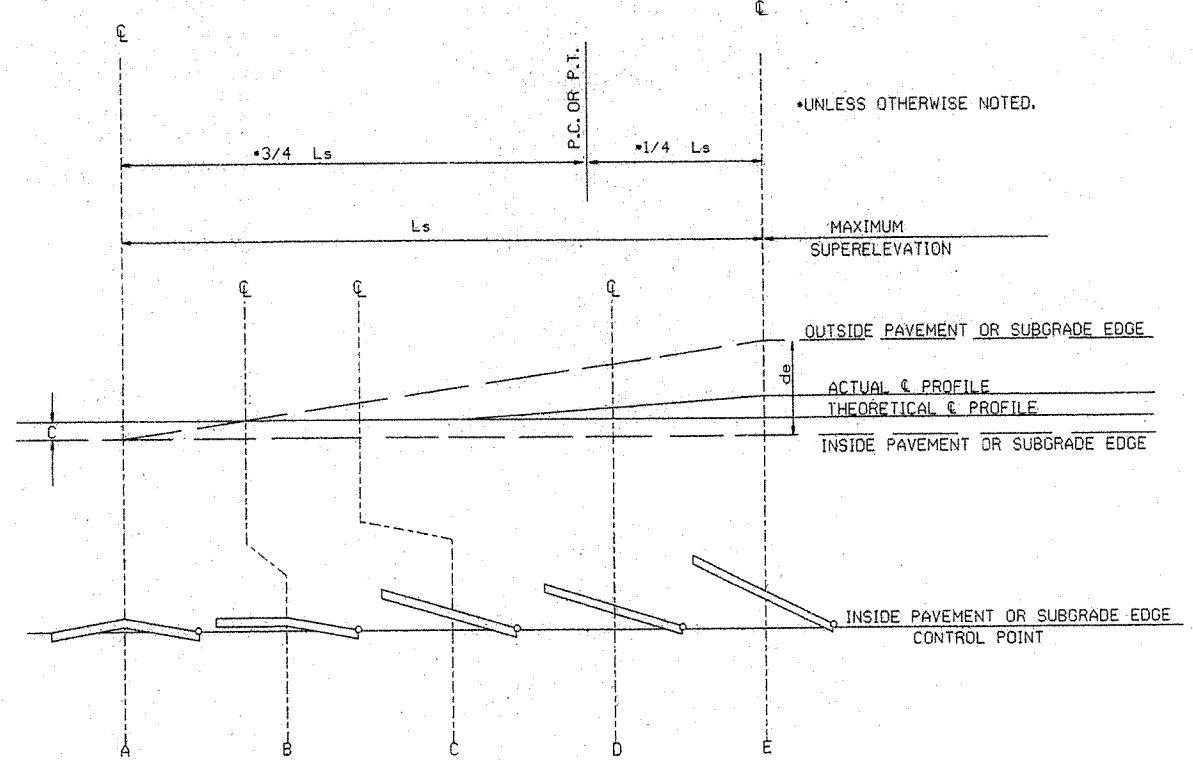
- NC - NORMAL CROWN
- RC - REVERSE CROWN, SUPERELEVATION AT NORMAL CROWN SLOPE
- e - RATE OF SUPERELEVATION (FT. PER FT.)
- Ls - LENGTH OF SUPERELEVATION TRANSITION (FT.)
- L - DISTANCE FROM BEGINNING OF SUPERELEVATION TRANSITION TO ANY POINT (FT.)
- d - WIDTH OF PAVEMENT (FT.) OR WIDTH OF SUBGRADE (FT.)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

GENERAL NOTES

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

- 3 LANE UNDIVIDED - - - - - +20%
- 4 LANE UNDIVIDED - - - - - +50%
- 5 LANE UNDIVIDED - - - - - +80%
- 6 LANE UNDIVIDED - - - - - +100%

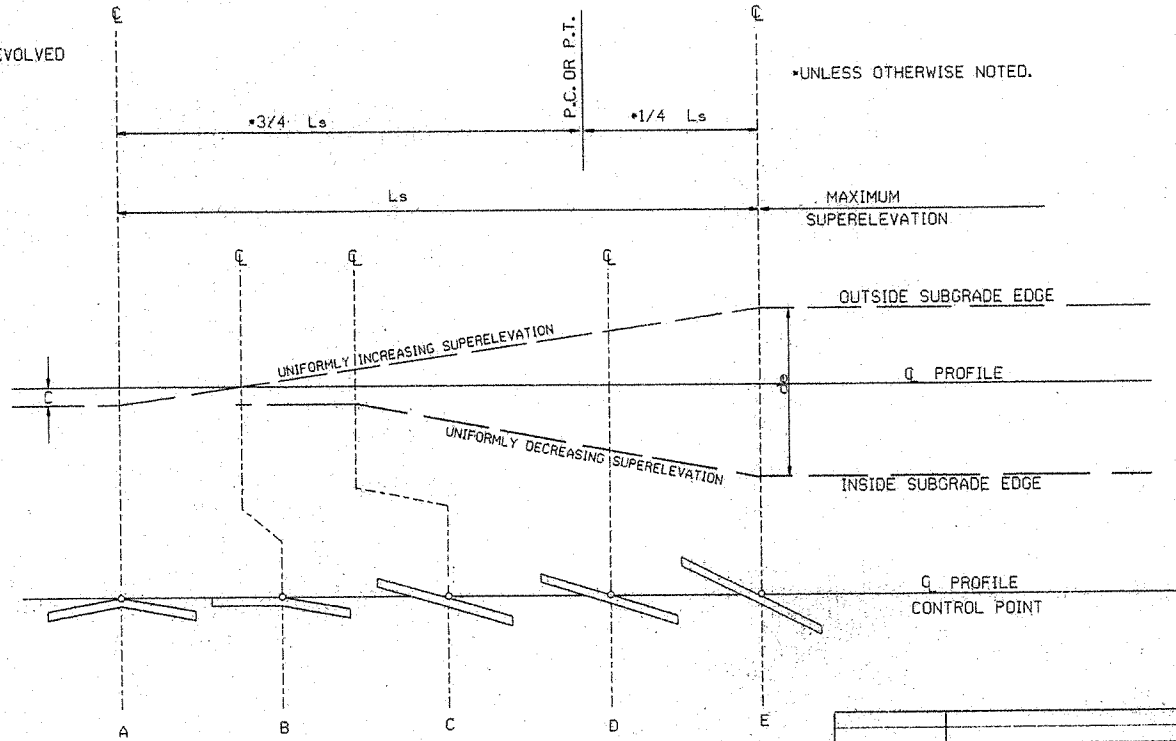
NOTE: MAINTAIN NORMAL CROWN ON INSIDE UNTIL SUPERELEVATION EXCEEDS 2C.
RATE OF SUPERELEVATION SHALL BE COMPUTED ON STRAIGHT LINE METHOD USING APPLICABLE Ls.



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

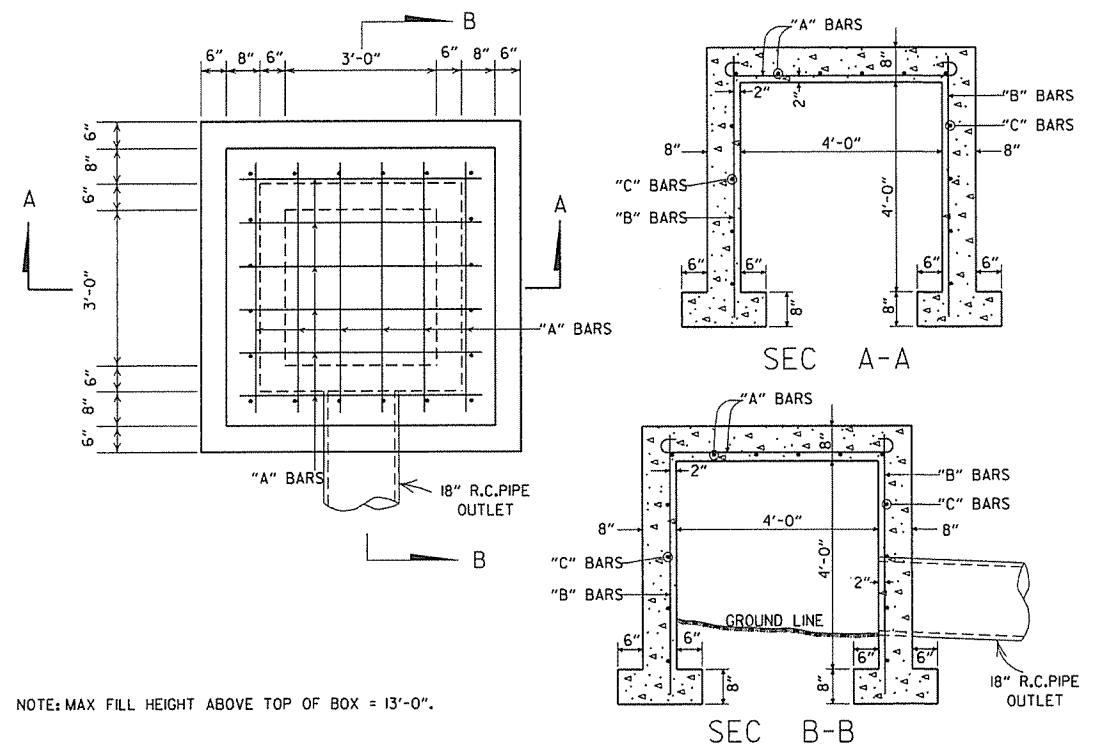
NOTE: MAINTAIN NORMAL CROWN ON INSIDE UNTIL SUPERELEVATION EXCEEDS 2C.

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



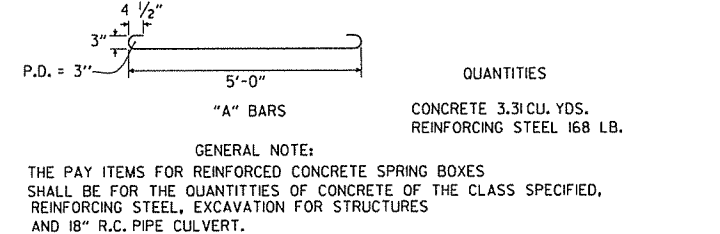
STANDARD METHOD WHEN SUPERELEVATION REVOLVES AROUND CENTER LINE

ARKANSAS STATE HIGHWAY COMMISSION	
TABLES AND METHOD OF SUPERELEVATION FOR TWO-WAY TRAFFIC	
STANDARD DRAWING SE-2	
10-18-96 DI-09-87 DATE	ADDED FORMULA ISSUED REVISION
10-18-96 534-1-9-87 DATE FILLED	

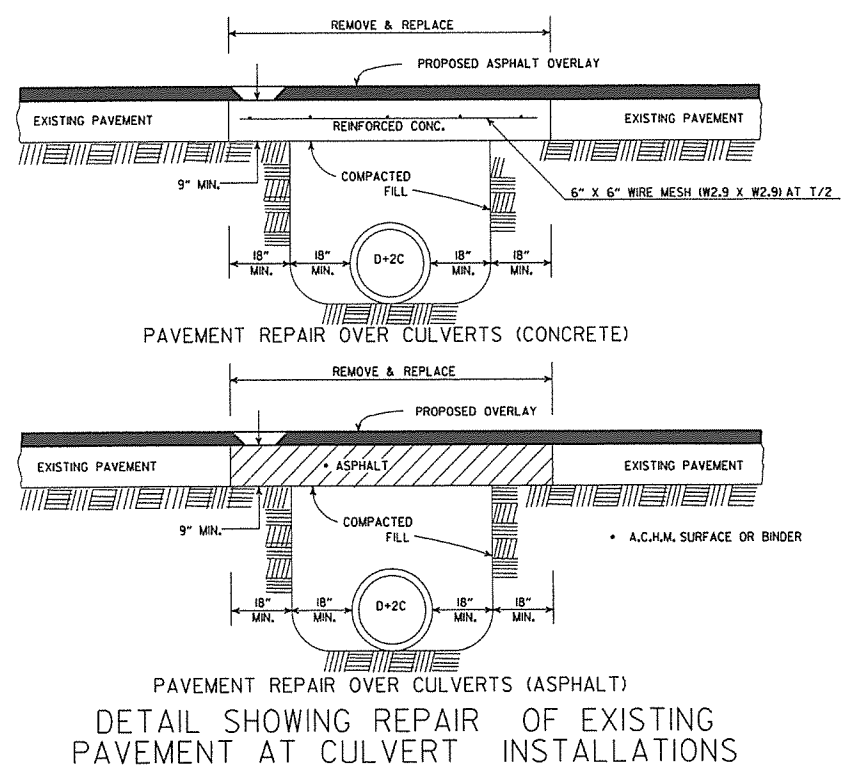


STEEL SCHEDULE

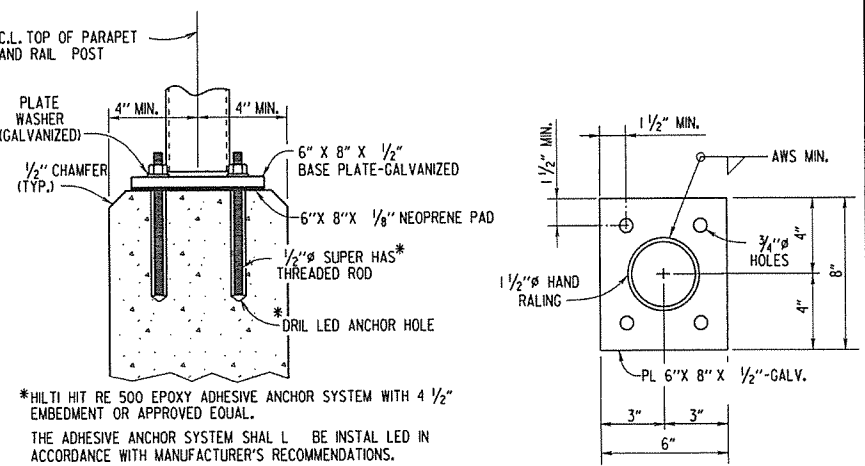
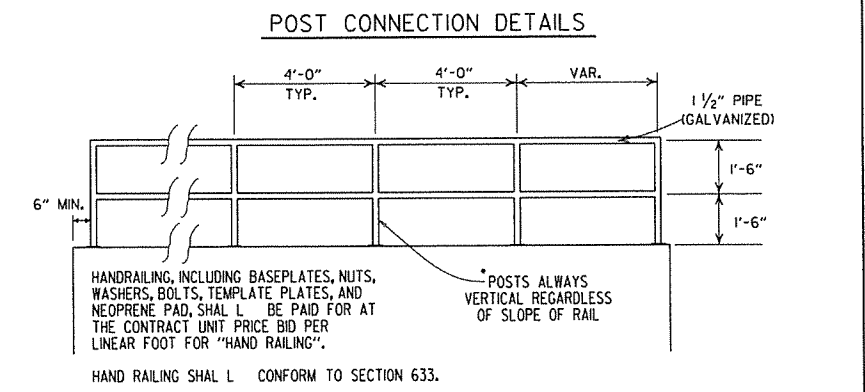
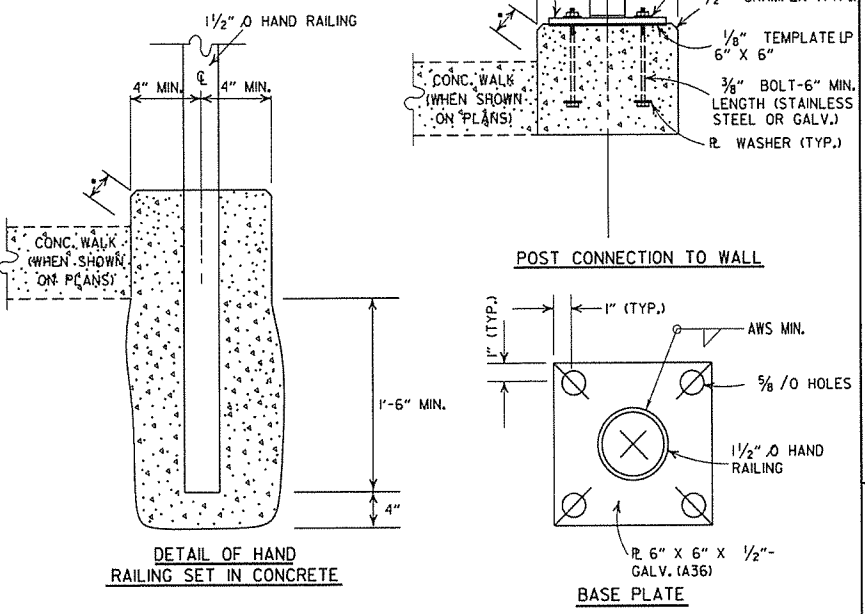
BARS	NUMBER	LENGTH	SPACING
"A"	12	6'-0"	10"
"B"	20	5'-0"	10 1/2"
"C"	16	5'-0"	12"



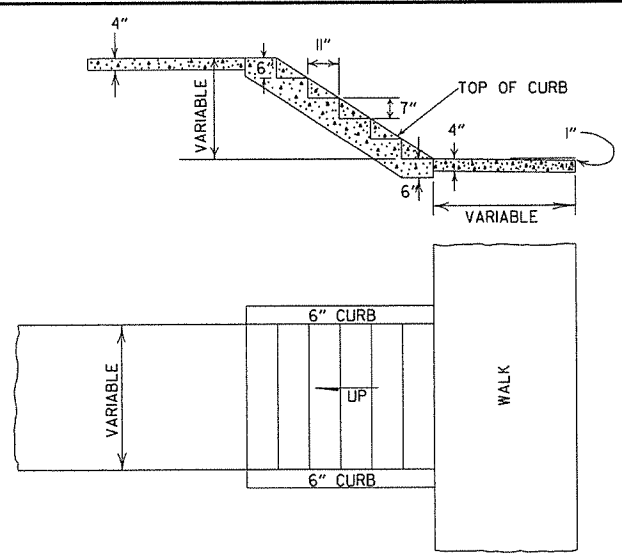
REINFORCED CONCRETE SPRING BOX



A 2" MIN. HIGH CURB IS REQUIRED WHEN CONCRETE WALK IS ADJACENT TO THE HAND RAILING. PAYMENT FOR CURB SHALL BE CONSIDERED INCLUDED IN THE PRICE BID FOR CONCRETE WALKS.



HAND RAILING DETAILS



GENERAL NOTES

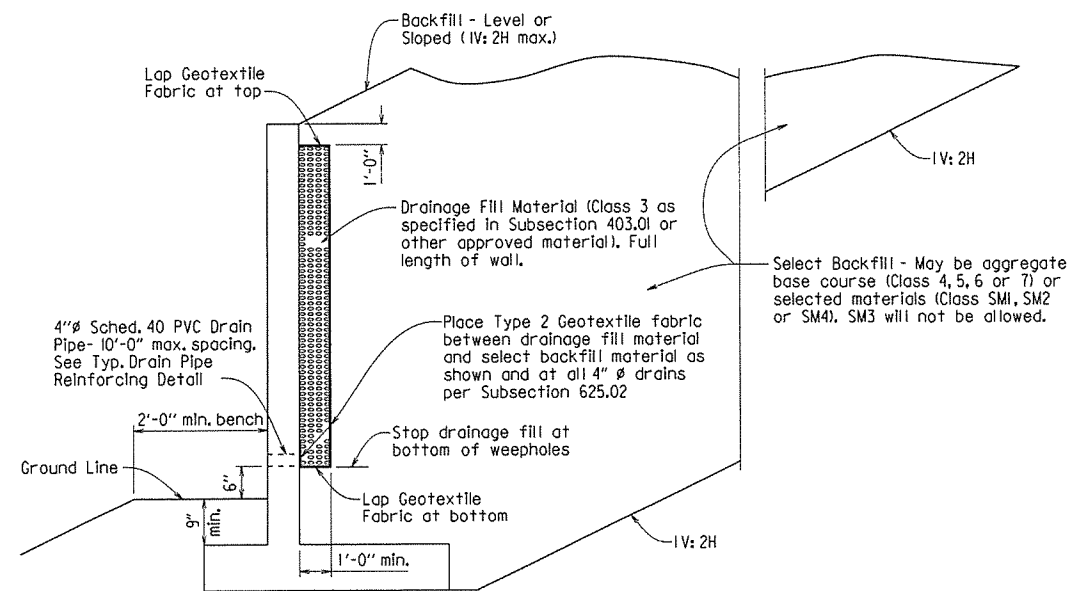
- RISE AND TREAD DIMENSIONS OF STEPS MAY BE VARIED AS DIRECTED BY THE ENGINEER, HOWEVER, TREAD WIDTHS SHALL BE 11" MIN. ALL STEPS IN A FLIGHT SHALL HAVE CONSISTENT TREAD & RISER DIMENSIONS.
- 1" TRANSVERSE EXPANSION JOINTS SHALL BE PLACED IN CONCRETE WALKS AT 45' INTERVALS.

DATE	REVISION	DATE FILMED
9-12-13	REVISED REINFORCED CONCRETE SPRING BOX	
7-26-12	REMOVED RETAINING WALL DETAILS & REVISED HAND RAILING DETAILS	
4-17-08	REV. JOINT & FOOTING STEP DETAILS	
11-29-07	REVISED RETAINING WALL DRAINAGE	
5-25-06	REVISED PVMT REPAIR OVER CULVERTS (CONC); REVISED REINFORCED CONC SPRING BOX	
10-9-03	REVISED PIPE RAILING DETAILS TO HAND RAILING DETAILS	
4-10-03	REVISED RETAINING WALL DRAWING	
8-22-02	ADDED HAND RAILING DETAIL	
11-16-01	REVISED PVMT REPAIR OVER CULVERTS (CONC); CORRECTED SPELLING IN GENERAL NOTES	
11-18-98	ADDED GENERAL NOTES TO CONCRETE STEPS & WALKS	
7-02-98	ENLARGED PIPE	
4-03-97	ADDED NOTE TO STEEL BAR SCHED.	
10-18-96	CORRECTED SPELLING	
4-26-96	ADD WEEP HOLE, REV. JOINT SPACING IN RET. WALL	
6-2-94	CHANGED CONST. TO CONTRACTION JOINT	
10-1-92	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

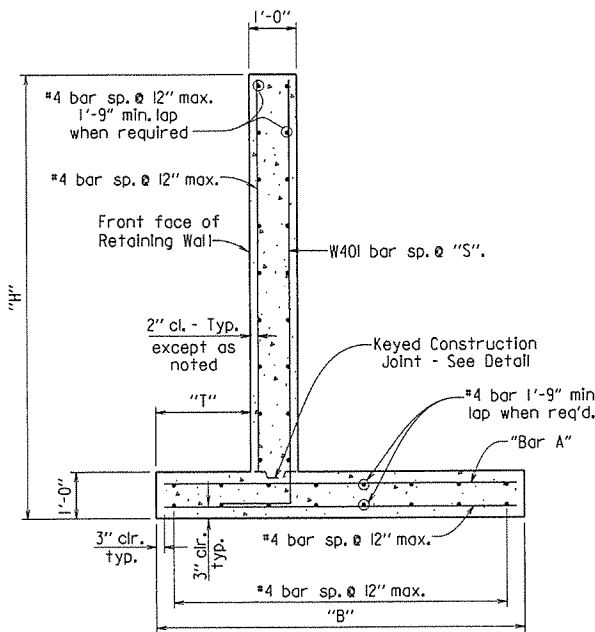
DETAILS OF SPECIAL ITEMS

STANDARD DRAWING SI - 1



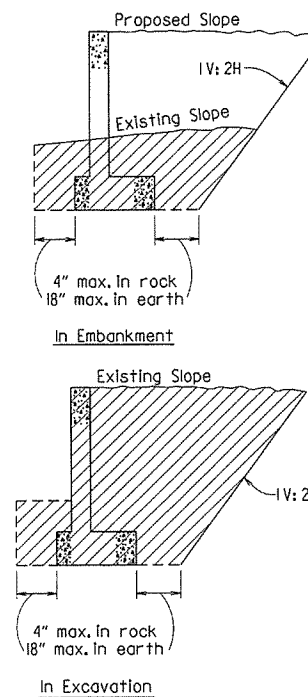
TYPICAL DRAINAGE & BACKFILL DETAILS

N.T.S.



TYPICAL SECTION

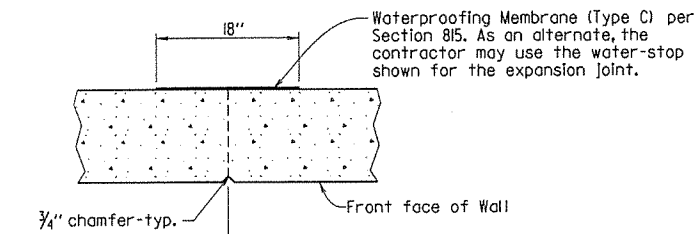
N.T.S.



NOTE: Hatched area denotes maximum limits of pay excavation.

DETAILS OF EXCAVATION

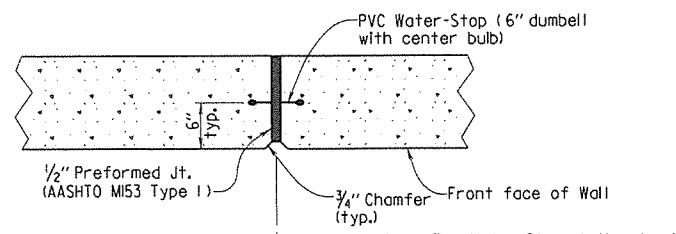
N.T.S.



TYPICAL CONTRACTION JOINT DETAIL

N.T.S.

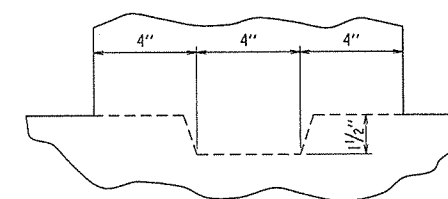
Note: 20'-0" Max. Spacing between Contraction Joints. Horizontal reinforcement shall be continuous through Contraction Joints.



TYPICAL EXPANSION JOINT DETAIL

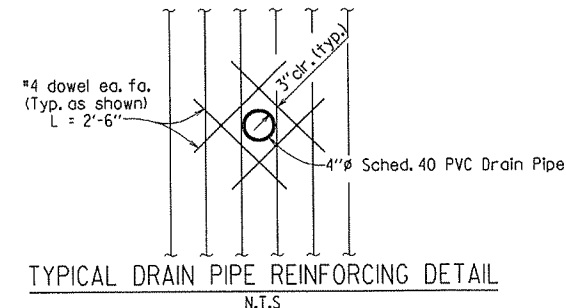
N.T.S.

Note: 60'-0" Max. Spacing between Expansion Joints. Horizontal reinforcing shall stop 2" from Expansion Joint.



KEYED CONSTRUCTION JOINT DETAIL

N.T.S.



TYPICAL DRAIN PIPE REINFORCING DETAIL

N.T.S.

SEISMIC ZONE: These walls have been designed for the following site adjusted peak ground accelerations (A_g):
 Level Backfill - $A_g \leq .40g$
 Sloped Backfill (1V:2H max.) - $A_g \leq .30g$

TABLE OF RETAINING WALL VARIABLES (LEVEL BACKFILL)

"H"	"T"	"B"	"S"	"Bar A" Size & Spacing
3'-0"	9"	2'-6"	12"	#4 @ 12"
4'-0"	9"	3'-6"	12"	#4 @ 12"
5'-0"	9"	4'-0"	12"	#4 @ 12"
6'-0"	9"	4'-6"	12"	#4 @ 12"
7'-0"	9"	5'-6"	12"	#4 @ 10"
8'-0"	9"	6'-0"	12"	#5 @ 10"
9'-0"	1'-0"	7'-0"	12"	#5 @ 6 1/2"

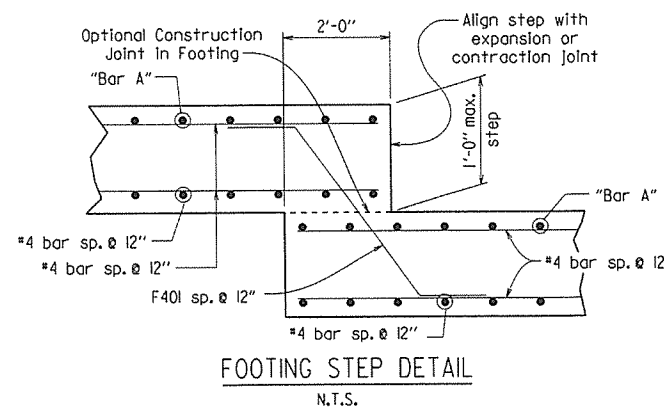
TABLE OF RETAINING WALL VARIABLES (SLOPED BACKFILL) (1V:2H MAX.)

"H"	"T"	"B"	"S"	"Bar A" Size & Spacing
3'-0"	9"	2'-6"	12"	#4 @ 12"
4'-0"	9"	3'-6"	12"	#4 @ 12"
5'-0"	9"	4'-6"	12"	#4 @ 12"
6'-0"	9"	5'-6"	12"	#4 @ 6"
7'-0"	9"	6'-6"	12"	#5 @ 6 1/2"
8'-0"	1'-6"	8'-0"	7 1/2"	#6 @ 6"
9'-0"	1'-11"	9'-6"	5"	#8 @ 6"

BENDING DIAGRAMS

MARK	A	B	P.D.
W40I	8"	"H" - 6"	3"
F40I	1'-6"	1'-10"	2 1/2"

Dimensions are out to out of bars.



FOOTING STEP DETAIL

N.T.S.


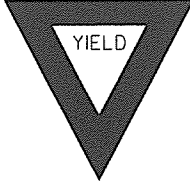



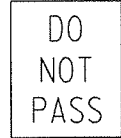
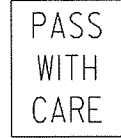
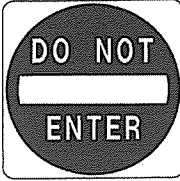

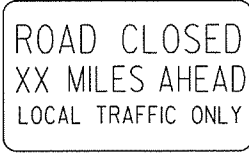
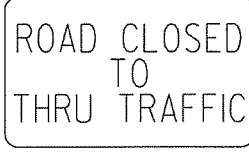
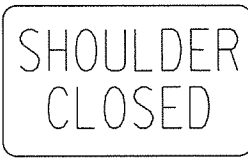
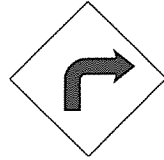
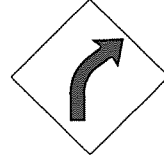
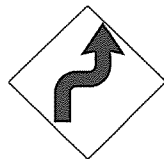

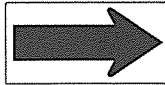
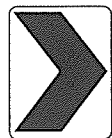
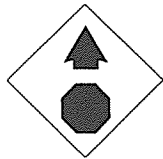
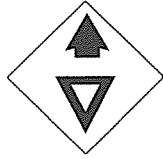
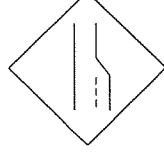



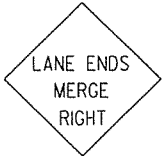


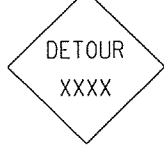






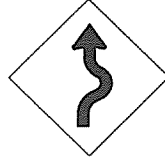



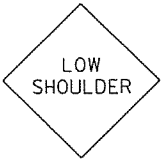
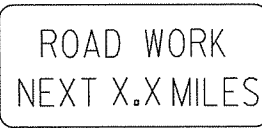
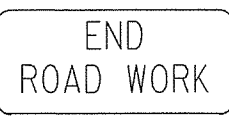
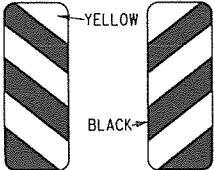
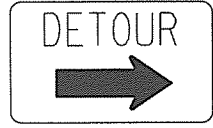

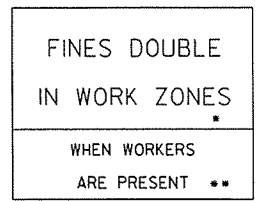
DATE	REVISION	DATE FILMED
2-27-14	REVISED GENERAL NOTES.	
7-26-12	DRAWING ISSUED	

ARKANSAS STATE HIGHWAY COMMISSION

REINFORCED CONCRETE RETAINING WALL (WITHOUT LIVE LOAD SURCHARGE)

STANDARD DRAWING SI - 2



<p>RI-1</p>  <p>STANDARD 30"x30" EXPRESSWAY 36"x36" SPECIAL 48"x48"</p>	<p>RI-2</p>  <p>STD. 36"x36"x36" EXPWY. 48"x48"x48" FWY. 60"x60"x60"</p>	<p>R2-1</p>  <p>STD. 24"x30" EXPWY. 36"x48" FWY. 48"x60"</p>	<p>R2-5A</p>  <p>STD. 24"x30" EXPWY. 36"x48" FWY. 48"x60"</p>	<p>R2-5C</p>  <p>STD. 24"x30" EXPWY. 36"x48" FWY. 48"x60"</p>	<p>R4-1</p>  <p>STD. 24"x30" EXPWY. 36"x48" FWY. 48"x60"</p>	<p>R4-2</p>  <p>STD. 24"x30" EXPWY. 36"x48" FWY. 48"x60"</p>	
<p>R5-1</p>  <p>STD. 30"x30" EXPWY. 36"x36" SPECIAL 48"x48"</p>	<p>R11-2</p>  <p>48"x30"</p>	<p>R11-3A</p>  <p>60"x30"</p>	<p>R11-4</p>  <p>60"x30"</p>	<p>RSP-1</p>  <p>48"x30"</p>	<p>WI-1</p>  <p>STD. 36"x36" FWY. 48"x48"</p>	<p>WI-2</p>  <p>STD. 36"x36" FWY. 48"x48"</p>	
<p>WI-3</p>  <p>STD. 48"x48"</p>	<p>WI-4</p>  <p>STD. 48"x48"</p>	<p>WI-6</p>  <p>STD. 48"x24" SPECIAL 60"x30"</p>	<p>WI-8</p>  <p>STD. 18"x24" SPECIAL 24"x30" EXPWY. 30"x36" FWY. 36"x48"</p>	<p>W3-1</p>  <p>STD. 36"x36" SPECIAL 48"x48"</p>	<p>W3-2</p>  <p>STD. 36"x36" SPECIAL 48"x48"</p>	<p>W4-2</p>  <p>STD. 36"x36" FWY. 48"x48"</p>	
<p>W5-1</p>  <p>STD. 36"x36" SPECIAL 48"x48"</p>	<p>W6-3</p>  <p>EXPWY. 36"x36" SPECIAL 48"x48"</p>	<p>W8-7</p>  <p>EXPWY. 36"x36" FWY. 48"x48"</p>	<p>W9-2</p>  <p>STD. 36"x36" FWY. 48"x48"</p>	<p>W13-1</p>  <p>STD. 24"x24"</p>	<p>W20-1</p>  <p>STD. 48"x48"</p>	<p>W20-2</p>  <p>STD. 48"x48"</p>	<p>W20-3</p>  <p>STD. 48"x48"</p>
<p>W20-4</p>  <p>STD. 48"x48"</p>	<p>W20-5</p>  <p>STD. 48"x48"</p>	<p>W20-7a</p>  <p>500 FEET 18" 24" W16-2</p> <p>STD. 36"x36" FWY. 48"x48"</p>	<p>W21-2</p>  <p>STD. 30"x30" SPECIAL 36"x36"</p>	<p>W21-5</p>  <p>STD. 30"x30" SPECIAL 36"x36"</p>	<p>W24-1</p>  <p>STD. 36"x36"</p>	<p>WI-4b</p>  <p>STD. 48"x48"</p>	<p>R56-1</p>  <p>STD. 18"x18"</p>
<p>W8-11</p>  <p>STD. 36"x36" FWY. 48"x48"</p>	<p>W8-9</p>  <p>STD. 36"x36" FWY. 48"x48"</p>	<p>G20-1</p>  <p>60"x24"</p>	<p>G20-2</p>  <p>48"x24"</p>	<p>OM-3L OM-3R</p>  <p>12"x36"</p>	<p>M4-9</p>  <p>STD. 30"x24" SPECIAL 48"x36" SPECIAL 60"x48"</p>	<p>M4-10</p>  <p>48"x18"</p>	<p>R55-1</p>  <p>36"x60" • USE 6" C LETTERS •• USE 4" D LETTERS</p>

ADVANCE DISTANCES (XXXX)

500 FT	1/2 MILE
1000 FT	3/4 MILE
1500 FT	1 MILE AHEAD

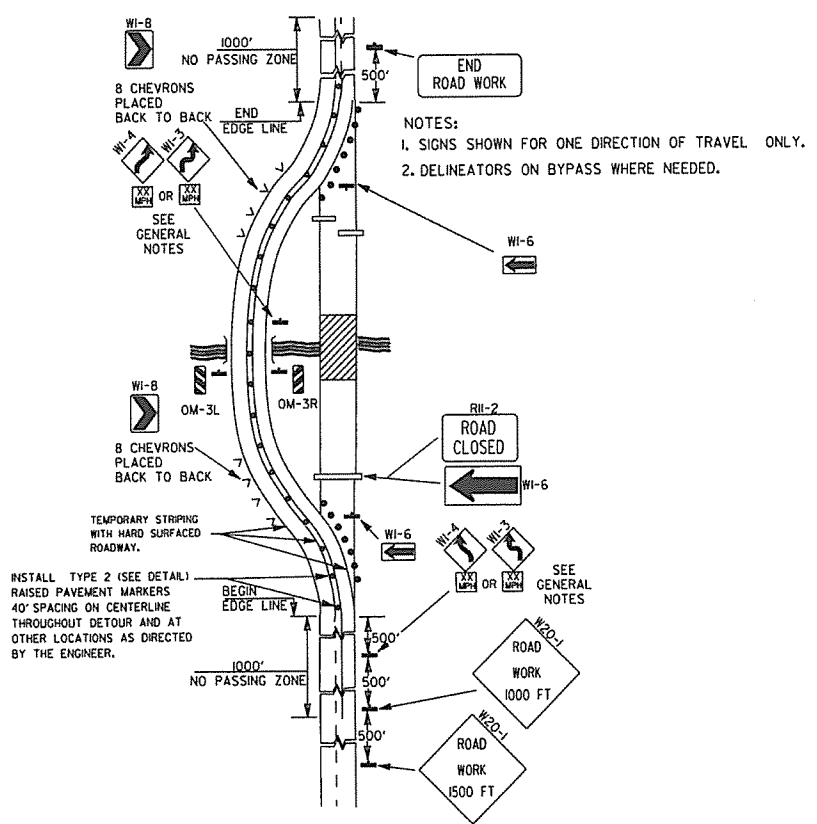
GENERAL NOTES:

- ALL TRAFFIC CONTROL DEVICES USED ON ROAD CONSTRUCTION SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION, AND TO THE STANDARD HIGHWAY SIGNS, LATEST EDITION, OR AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION.
- TRAFFIC CONTROL DEVICES SHALL BE SET UP JUST BEFORE THE START OF CONSTRUCTION OPERATIONS AND SHALL BE PROPERLY MAINTAINED DURING THE TIME SUCH CONDITIONS EXIST. THEY SHALL REMAIN IN PLACE ONLY AS LONG AS NEEDED AND REMOVED THEREAFTER.
- EXISTING SIGNS AND CONSTRUCTION SIGNS SHALL BE KEPT IN PROPER POSITION, AND BE CLEAN AND LEGIBLE AT ALL TIMES. SIGNS THAT DO NOT APPLY TO EXISTING CONDITIONS SHALL BE REMOVED. SIGNS THAT ARE DAMAGED, DEFACED, OR THAT ACCUMULATE DIRT DURING CONSTRUCTION SHALL BE CLEANED, REPAIRED, OR REPLACED.
- SIGNS ARE USUALLY MOUNTED ON A SINGLE POST, ALTHOUGH THOSE WIDER THAN 36" OR LARGER THAN 10 SQ. FT. SHALL BE MOUNTED ON TWO POSTS OR ABOVE A TYPE III BARRICADE.
- SIGN POSTS DIRECT BURIED IN SOIL SHALL BE 2 LB. MINIMUM CHANNEL POST OR 4"x4" WOOD POSTS. CHANNEL POSTS SHALL BE PAINTED GREEN. WOOD POSTS SHALL BE PAINTED WHITE. ALL POSTS SHALL BE NEATLY CONSTRUCTED, AND SHALL BE REPLUMBED, CLEANED, OR REPAIRED AS NEEDED FOR THE DURATION OF THE JOB. THERE SHALL NOT BE MORE THAN 2 POSTS IN A 7' PATH FOR WOOD OR CHANNEL POSTS. ANY CHANNEL POST SPLICE SHALL BE IN ACCORDANCE WITH STANDARD DRAWING TC-3.
- POST MOUNTED SIGNS IN RURAL AREAS SHALL BE CONSTRUCTED WITH THE NEAR EDGE OF THE SIGN FROM 6 TO 12 FEET FROM THE PAVEMENT EDGE. SIGNS IN URBAN AREAS AND BARRICADE MOUNTED SIGNS SHALL BE MOUNTED A MINIMUM OF 2 FEET FROM THE PAVEMENT EDGE.
- ALL POST AND BARRICADE MOUNTED SIGNS MOUNTED IN URBAN AREAS SHALL BE MOUNTED A MINIMUM DISTANCE OF 7' FROM THE BOTTOM OF THE SIGN TO THE ROADWAY SURFACE. ALL POST AND BARRICADE MOUNTED SIGNS MOUNTED IN RURAL AREAS SHALL BE MOUNTED A MINIMUM DISTANCE OF 7' FROM THE BOTTOM OF THE SIGN TO THE ROADWAY SURFACE, EXCEPT A MINIMUM OF 6' SHALL BE USED WHEN MOUNTING AN ADVISORY SIGN BELOW A WARNING SIGN. TEMPORARY SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS FOR INTERMEDIATE TERM STATIONARY WORK CONDITIONS. THE SIGNS MINIMUM MOUNTING HEIGHT SHALL BE 5'. RETROREFLECTIVE DEVICES SHALL BE USED. TEMPORARY SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS FOR SHORT-TERM, SHORT DURATION, AND MOBILE CONDITIONS. THEY SHALL BE NO LESS THAN ONE (1) FOOT ABOVE THE TRAVELED WAY. LONG-TERM STATIONARY SIGNS SHALL BE DIRECT BURIED IN SOIL, UNLESS CONDITIONS NECESSITATE THE USE OF PORTABLE SIGNS, OR AS APPROVED BY THE ENGINEER. CONCRETE PADS, CONCRETE OR ROCK BALLAST, OR OTHER SOLID MATERIALS SHALL NOT BE UTILIZED WITH PORTABLE SIGN SUPPORTS.
- FLAGGERS SHALL USE REFLECTORIZED STOP-SLOW PADDLES. FLAGS MAY BE USED ONLY FOR EMERGENCY SITUATIONS.
- MOST OF THE SIGNS SHOWN ARE ORIENTED TO THE RIGHT. HOWEVER, THIS DOES NOT PRECLUDE THE USE OF MIRROR IMAGES OF THESE SIGNS WHERE THE REVERSE ORIENTATION MIGHT BETTER CONVEY TO MOTORISTS THE PROPER DIRECTION OF MOVEMENT.
- R55-1 SIGNS SHALL BE PLACED AT LEAST 1500' BUT NOT MORE THAN 1 MILE IN ADVANCE OF THE WORK ZONE. IF A SPEED LIMIT REDUCTION IS IN EFFECT, THE SIGN SHALL BE PLACED A MINIMUM OF 500' IN ADVANCE OF THE "REDUCED SPEED AHEAD" SIGN.

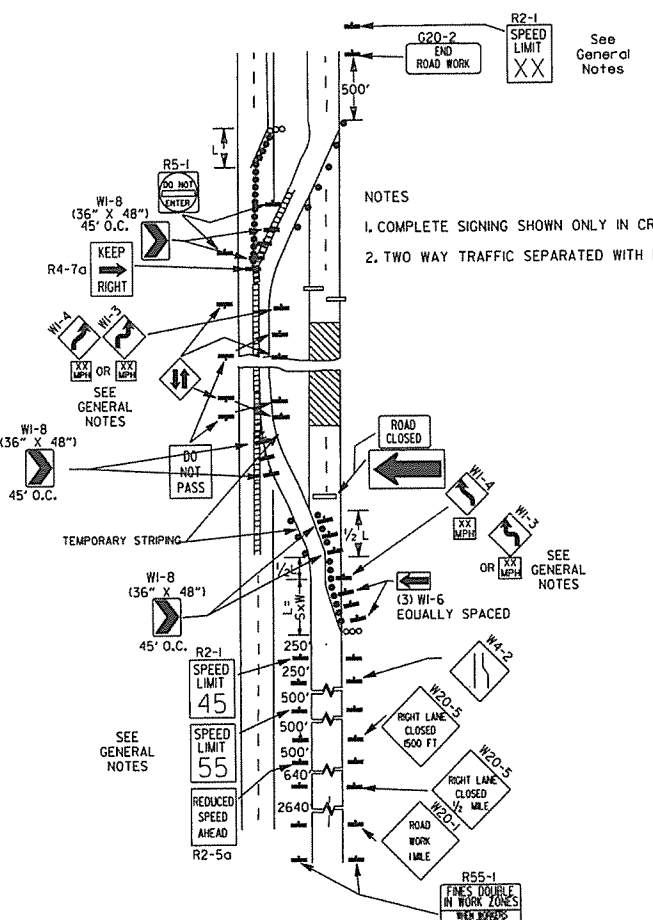
NOTE: SUPPORTS FOR SIGNS, BARRICADES, AND VERTICAL PANELS THAT ARE DIFFERENT FROM THE REQUIREMENTS SHOWN IN NOTES 4 & 5, BUT MEET THE REQUIREMENTS OF NCHRP-350 OR MANUAL FOR ASSESSING SAFETY HARDWARE (MASH), WILL BE ACCEPTED. COMPLIANCE WITH THE REQUIREMENTS OF NCHRP-350 OR MANUAL FOR ASSESSING SAFETY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

DATE	REVISION	FILMED
12-15-81	REVISED W24-1	
11-17-10	DELETED W8-9a & ADDED W8-9	
10-15-09	ADDED REFERENCE TO MASH & ADDED SIGN W24-1	
4-17-08	REVISED SIGN DESIGNATIONS	
11-18-04	REVISED NOTES	
10-9-03	REVISED NOTE 1	
11-16-01	REVISED NOTE 7	
5-28-00	REVISED NOTE	
11-18-98	ADDED NOTE	
6-26-97	REVISED NOTE 5	
4-03-97	REVISED NOTE 5	
10-18-96	ADDED CONTROLLED ACCESS HWY. SIGN & TO NOTE 7	
10-12-95	ADDED R55-1	
6-8-95	REVISED TO CORRECT SIGN ILLUSTRATIONS	6-8-95
2-2-95	REVISED PER PART VI, MUTCD SEPT. 3, 1993	
8-15-91	DRAWN AND PLACED IN USE	

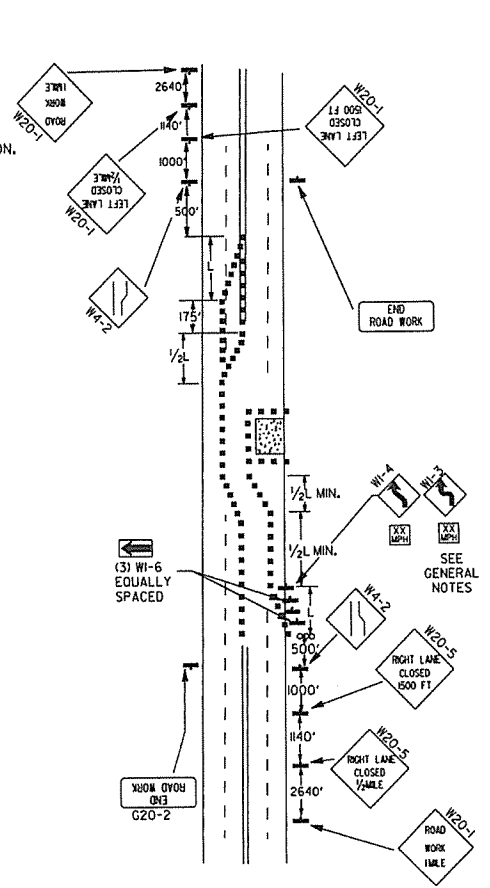
ARKANSAS STATE HIGHWAY COMMISSION
STANDARD TRAFFIC CONTROLS
FOR HIGHWAY CONSTRUCTION
STANDARD DRAWING TC-1



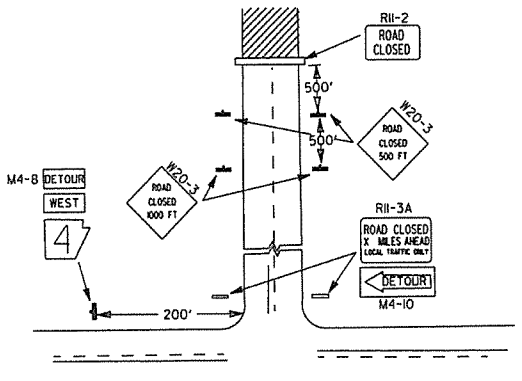
(A) TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES ON A 2-LANE HIGHWAY WHERE THE ENTIRE ROADWAY IS CLOSED AND A BYPASS DETOUR IS PROVIDED.



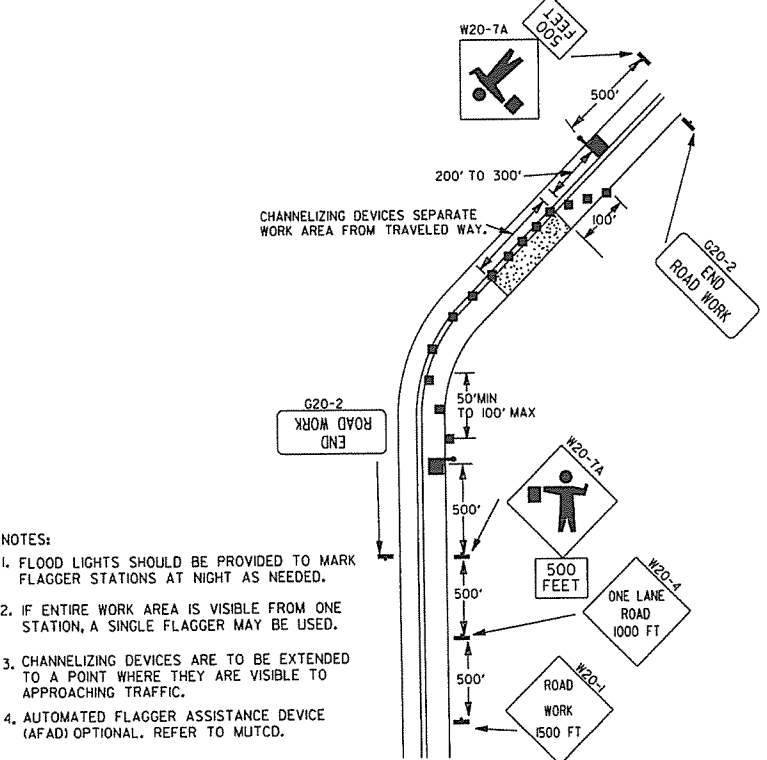
(B) TYPICAL APPLICATION - 4-LANE DIVIDED ROADWAY WHERE ONE ROADWAY IS CLOSED.



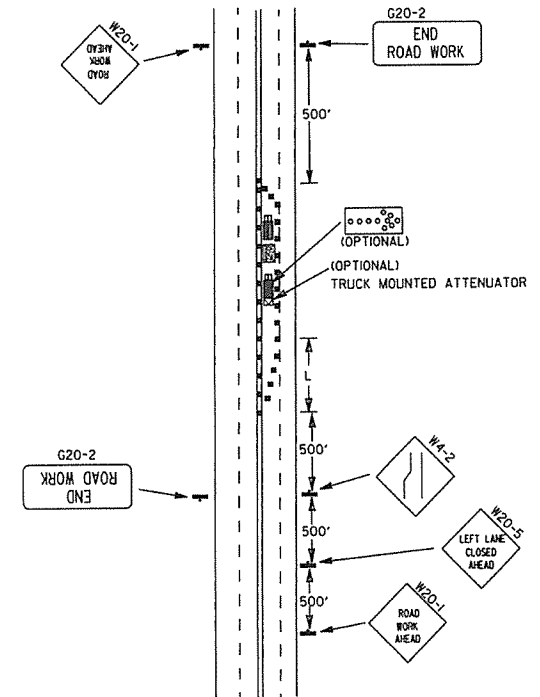
(C) TYPICAL APPLICATION - 4-LANE UNDIVIDED ROADWAY WHERE HALF OF THE ROADWAY IS CLOSED.



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

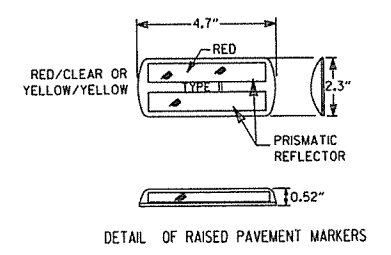


(E) TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES ON 2-LANE HIGHWAY WHERE ONE LANE IS CLOSED AND FLAGGING IS PROVIDED.



(F) TYPICAL APPLICATION - 4-LANE UNDIVIDED ROADWAY WITH INSIDE LANE CLOSED.

- KEY:
- FLAGGER
 - POSITIVE BARRIER
 - ARROW PANEL (IF REQUIRED)
 - CHANNELIZING DEVICE
 - TRAFFIC DRUM
 - RAISED PAVEMENT MARKER



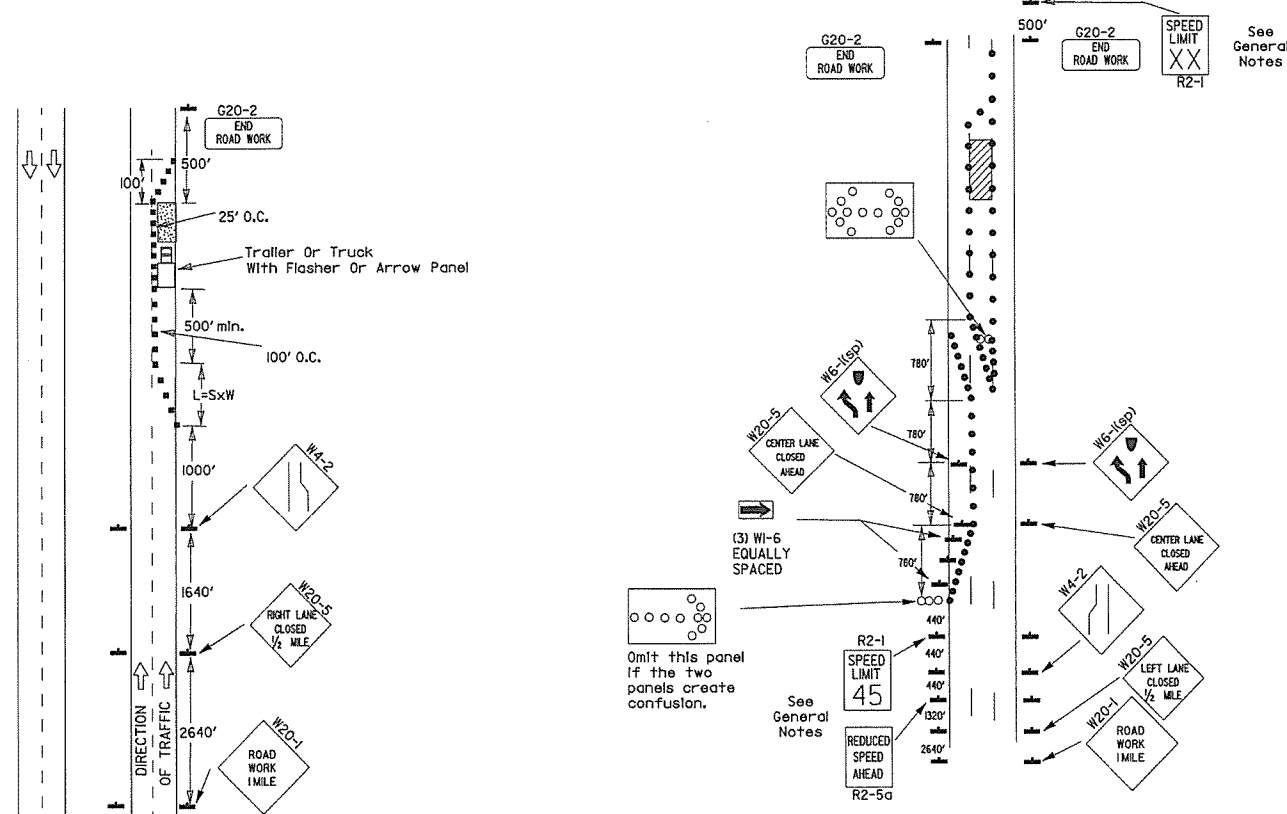
TYPICAL ADVANCE WARNING SIGN PLACEMENT

TAPER FORMULAE:
 $L = SXW$ FOR SPEEDS OF 45MPH OR MORE.
 $L = \frac{WS^2}{60}$ FOR SPEEDS OF 40MPH OR LESS.
 WHERE:
 L = MINIMUM LENGTH OF TAPER.
 S = NUMERICAL VALUE OF POSTED SPEED LIMIT PRIOR TO WORK OR 85TH PERCENTILE SPEED.
 W = WIDTH OF OFFSET.

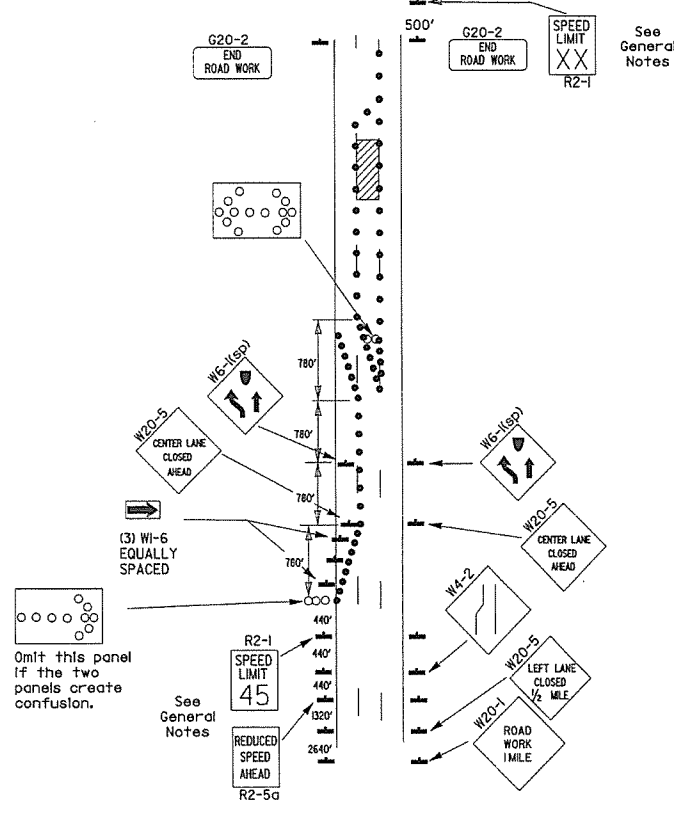
- GENERAL NOTES:
- ADVISORY SPEED POSTED ON W1-3 OR W1-4 CURVE WARNING SIGNS TO BE DETERMINED AT SITE. USE W1-4 WHEN SPEED IS GREATER THAN 30MPH AND W1-3 WHEN 30MPH OR LESS.
 - WHEN THE EXISTING SPEED LIMIT IS 55MPH AND THE PLANS REQUIRE A SPEED LIMIT OF 45MPH, THE R2-1(55) SHALL BE OMITTED AND THE R2-5A SHALL BE INSTALLED AT THAT LOCATION. ADDITIONAL R2-1(45)MPH SPEED LIMIT SIGNS SHALL BE INSTALLED AT A MAXIMUM OF 1MILE INTERVALS. AT THE END OF THE WORK AREA A R2-1(XX) SHALL BE INSTALLED TO MATCH ORIGINAL SPEED LIMIT.
 - 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)MPH SPEED LIMIT SIGNS SHALL BE INSTALLED AT A MAXIMUM OF 1MILE INTERVALS. AT THE END OF THE WORK AREA A R2-1(XX) SHALL BE INSTALLED TO MATCH ORIGINAL SPEED LIMIT.
 - 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.

DATE	REVISION	FILED
9-12-13	REVISED DETAIL OF RAISED PAVEMENT MARKERS	
3-11-10	ADDED (AFAD)	
11-20-08	REVISED SIGN DESIGNATIONS	
11-18-04	ADDED GENERAL NOTE	
10-18-96	ADDED R55-1	
4-26-95	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	

Channelizing devices



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



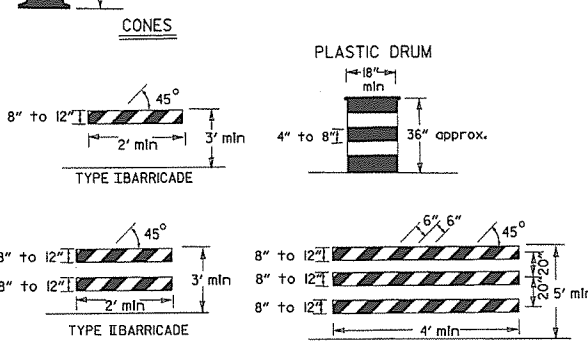
(B) Typical application - 3-lane oneway roadway where center lane is closed.

- KEY:
- Arrow Panel (if Required)
 - Channelizing Device
 - Traffic drum

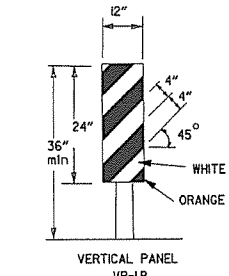
GENERAL NOTES:

1. A speed limit reduction may be implemented ONLY when designated in the plan or when recommended by the Roadway Design Division.
2. When the existing speed limit is 55mph and the plans require a speed limit of 45mph, the R2-1(55) shall be omitted and the R2-5A shall be installed at that location. Additional R2-145mph speed limit signs shall be installed at a maximum of 1/2 mile intervals. At the end of the work area a R2-1XX shall be installed to match original speed limit.
3. When the existing speed limit is 65mph and the plans require a speed limit of 55mph, the R2-1(65) shall be omitted. Additional R2-155mph speed limit signs shall be installed at a maximum of 1/2 mile intervals. At the end of the work area a R2-1XX shall be installed to match original speed limit.
4. The maximum spacing between channelizing devices in a taper should be approximately equal in feet to the speed limit. Beyond the taper, maximum spacing shall be two times the speed limit or as directed by the Engineer.
5. Warning lights and/or flags may be mounted to signs or channelizing devices at night as needed.
6. Pavement markings no longer applicable which might create confusion in the minds of vehicle operators shall be removed or obliterated as soon as practicable.
7. The G20-1 sign will be required on jobs of over two miles in length. When the lane closure is not at the beginning of the project, the G20-1 sign shall be erected 125' in advance of the job limit. Additional W20-1 (1/2 MILE) signs are not required in advance of lane closures that begin inside the project limits.
8. Flaggers shall use STOP/SLOW paddles for controlling traffic through work zones. Flags may be used only for emergency situations.
9. All plastic drums and cones shall meet the requirements of NCHRP-350 or Manual for Assessing Safety Hardware (MASH).
10. Trailer mounted devices such as arrow panels and portable changeable message signs shall be delineated by affixing conspicuity material in a continuous line on the face of the trailer. When placed on or adjacent to the shoulder and not behind a positive barrier, these devices shall be delineated by placing five (5) traffic drums, equally spaced along the traffic side of the device.

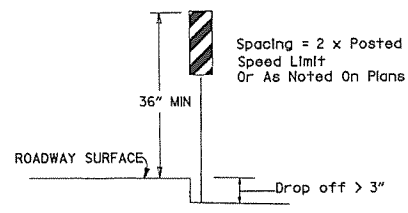
* When cones are used on freeways and multi-lane highways, they shall be 28" min. During hours of darkness, 28" cones shall be used on all roadways, and shall be reflectorized in accordance with the M.U.T.C.D.



NOTE: For all road closures, the Type III barricades shall be of sufficient length to extend across entire roadway.



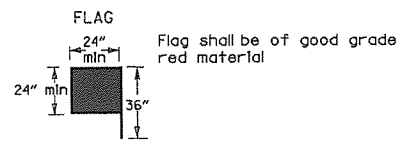
VERTICAL PANEL PLACEMENT



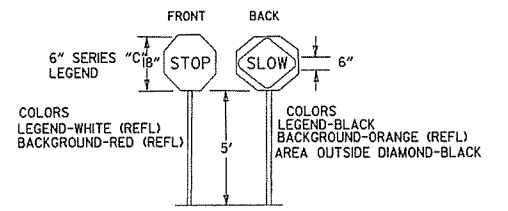
TRAFFIC CONTROL DEVICES FOR VERTICAL PAVEMENT DIFFERENTIALS

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

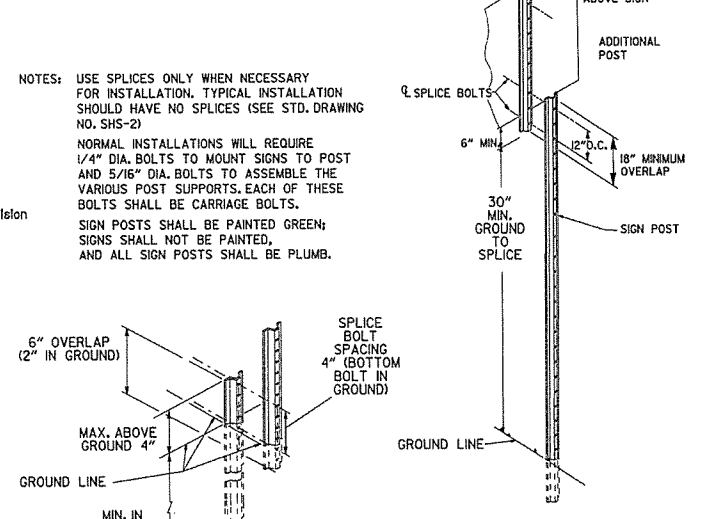
* When shown on the plans concrete barrier will be used. When the shoulder area is used as part of the traveled lane and there is insufficient width to place drums on the remaining shoulder width, then vertical panels shall be used.



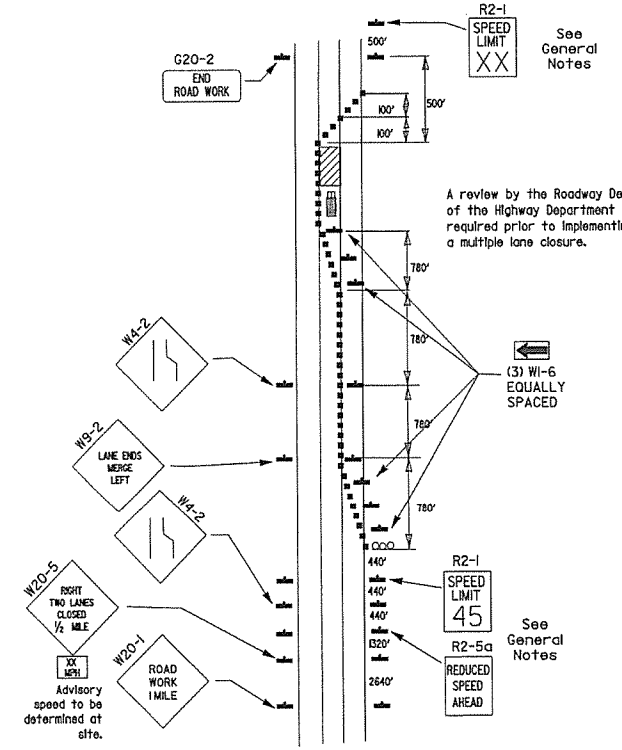
STOP SLOW PADDLE



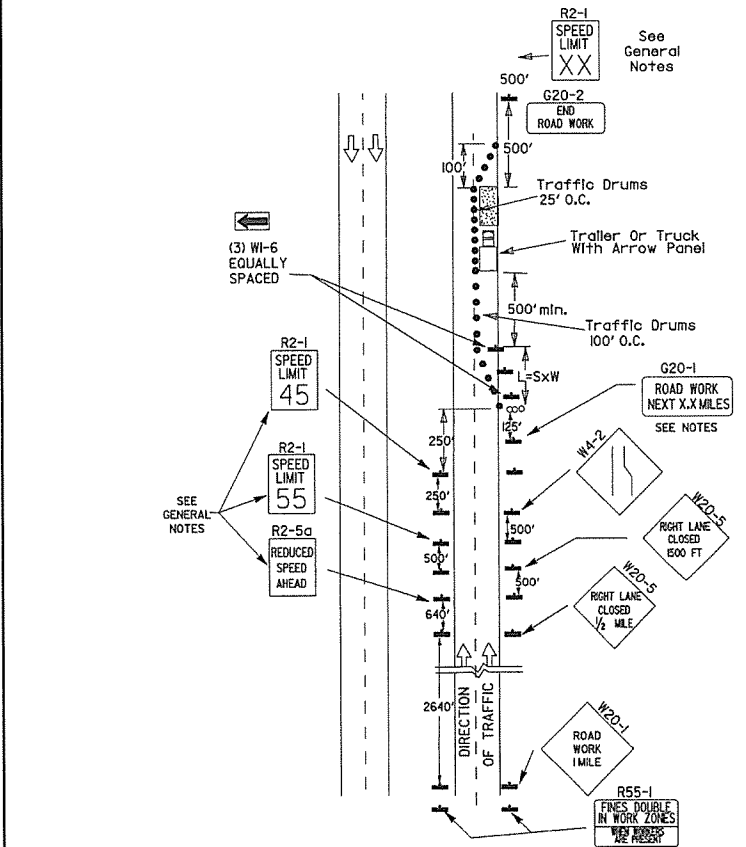
DETAIL OF SPLICES



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 CARRIAGE BOLTS. SIGN POSTS SHALL BE PAINTED GREEN; SIGNS SHALL NOT BE PAINTED, AND ALL SIGN POSTS SHALL BE PLUMB.



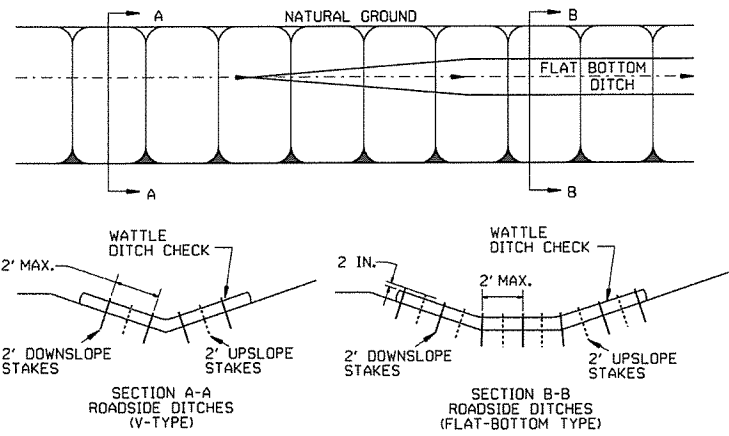
(D) Typical application - closing multiple lanes of a multi-lane highway.



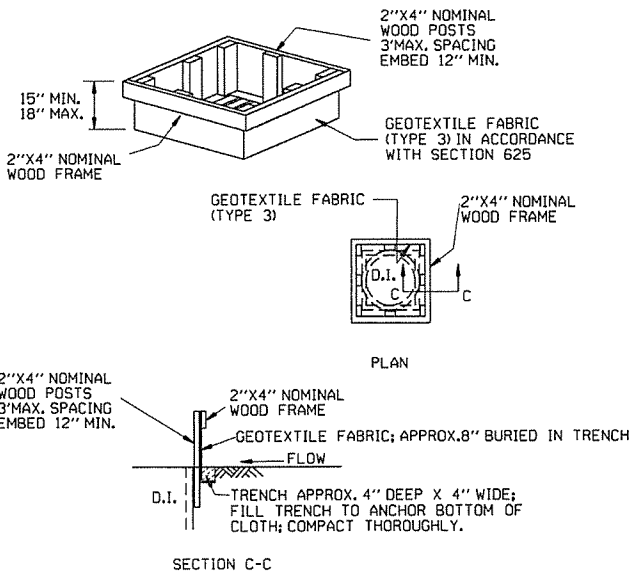
(C) Typical application - construction operations of intermediate to long term duration on a 4-lane divided roadway where half of the roadway is closed.

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

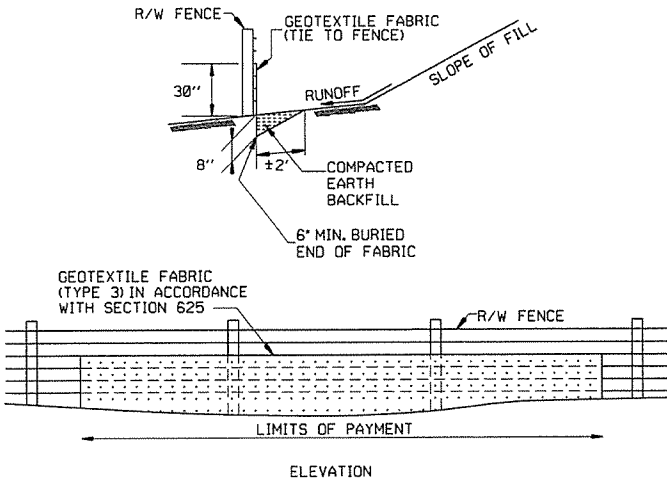
GENERAL NOTES
INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.



WATTLE DITCH CHECK (E-1)



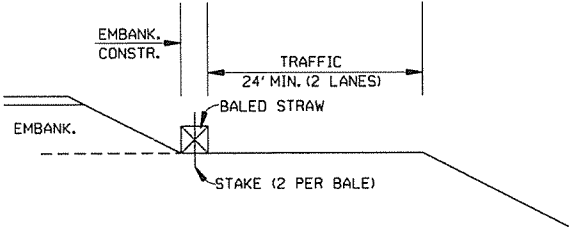
DROP INLET SILT FENCE (E-7)



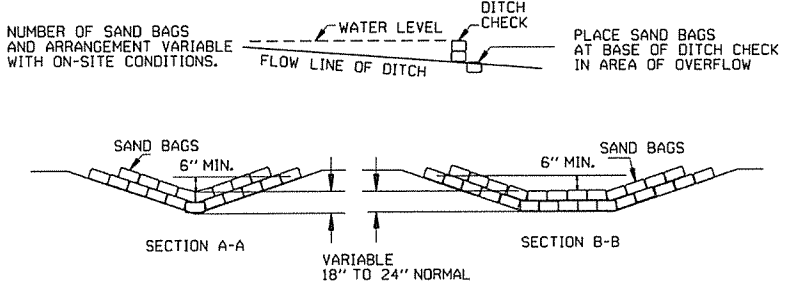
SILT FENCE ON R/W FENCE (E-4)

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

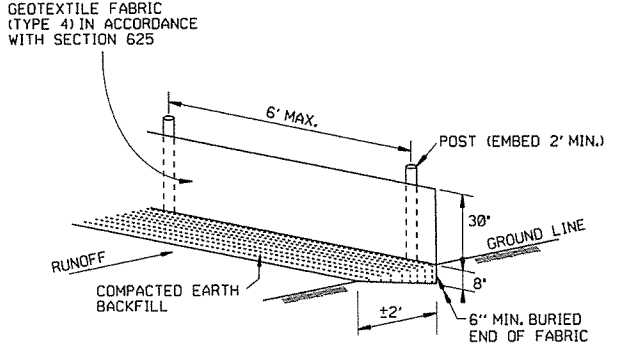
GENERAL NOTES
1. STRAW BALES SHALL BE INSTALLED SO THAT THE BINDINGS ARE ORIENTED AROUND THE SIDES RATHER THAN ALONG THE TOPS AND BOTTOMS OF THE BALES. THE BALES SHALL BE A MINIMUM OF 30 INCHES IN LENGTH.
2. NO GAPS SHALL BE LEFT BETWEEN BALES.
3. BALED STRAW FILTER BARRIERS COMPLETED AND ACCEPTED WILL BE MEASURED BY THE BALE IN PLACE AS AUTHORIZED BY THE ENGINEER AND WILL BE PAID FOR AT THE CONTRACT UNIT PRICE BID PER BALE FOR BALED STRAW DITCH CHECKS.



BALED STRAW FILTER BARRIER (E-2)

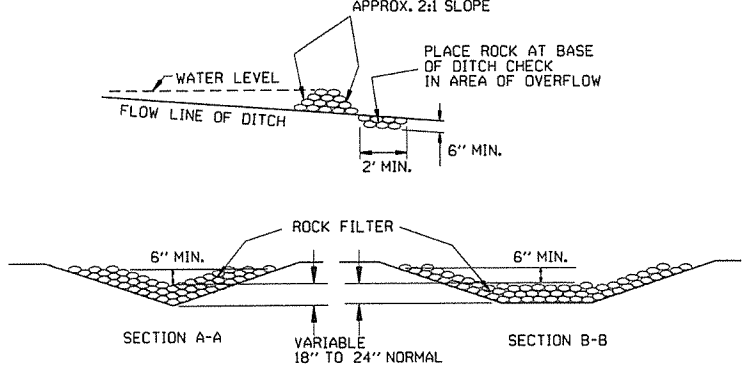


SAND BAG DITCH CHECK (E-5)



SILT FENCE (E-11)

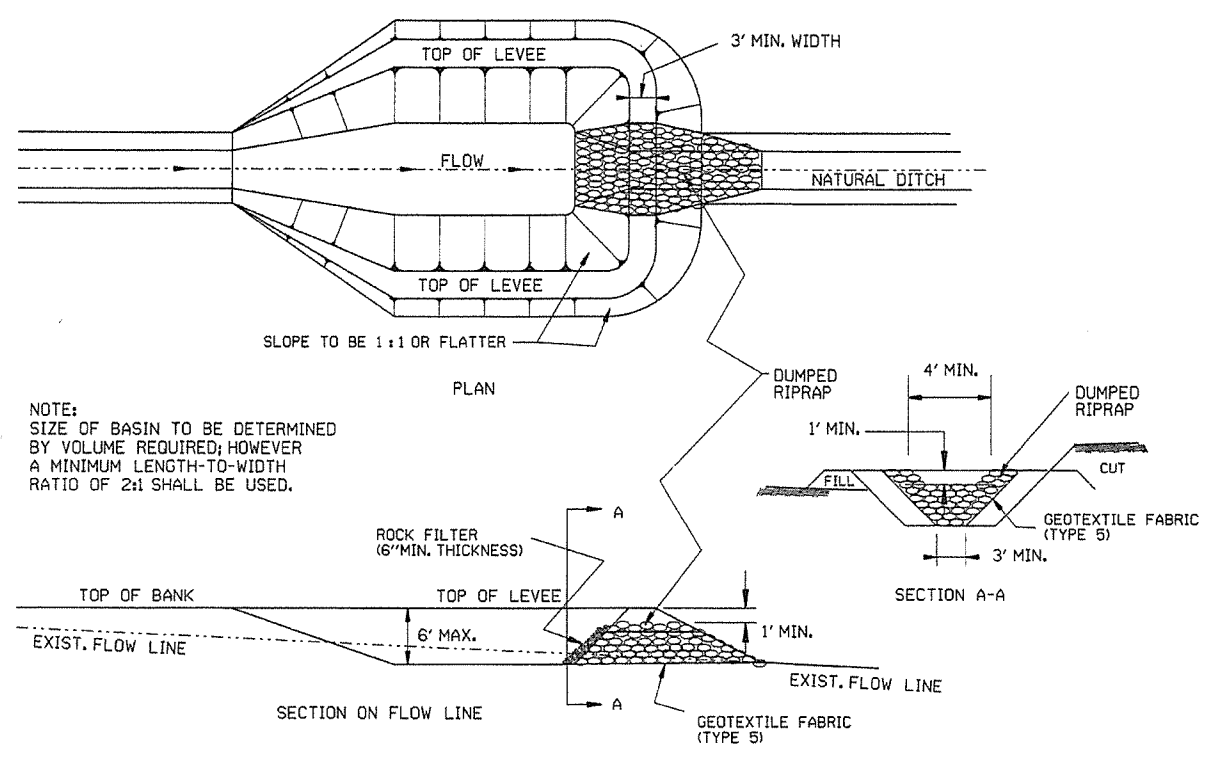
GENERAL NOTES
GEOTEXTILE FABRIC SHALL BE SPLICED TOGETHER WITH A SEWN SEAM ONLY AT A SUPPORT POST OR TWO SECTIONS OF FENCE MAY BE OVERLAPPED INSTEAD. PAYMENT OF ADDITIONAL MATERIAL FOR OVERLAP WILL NOT BE MADE.



ROCK DITCH CHECK (E-6)

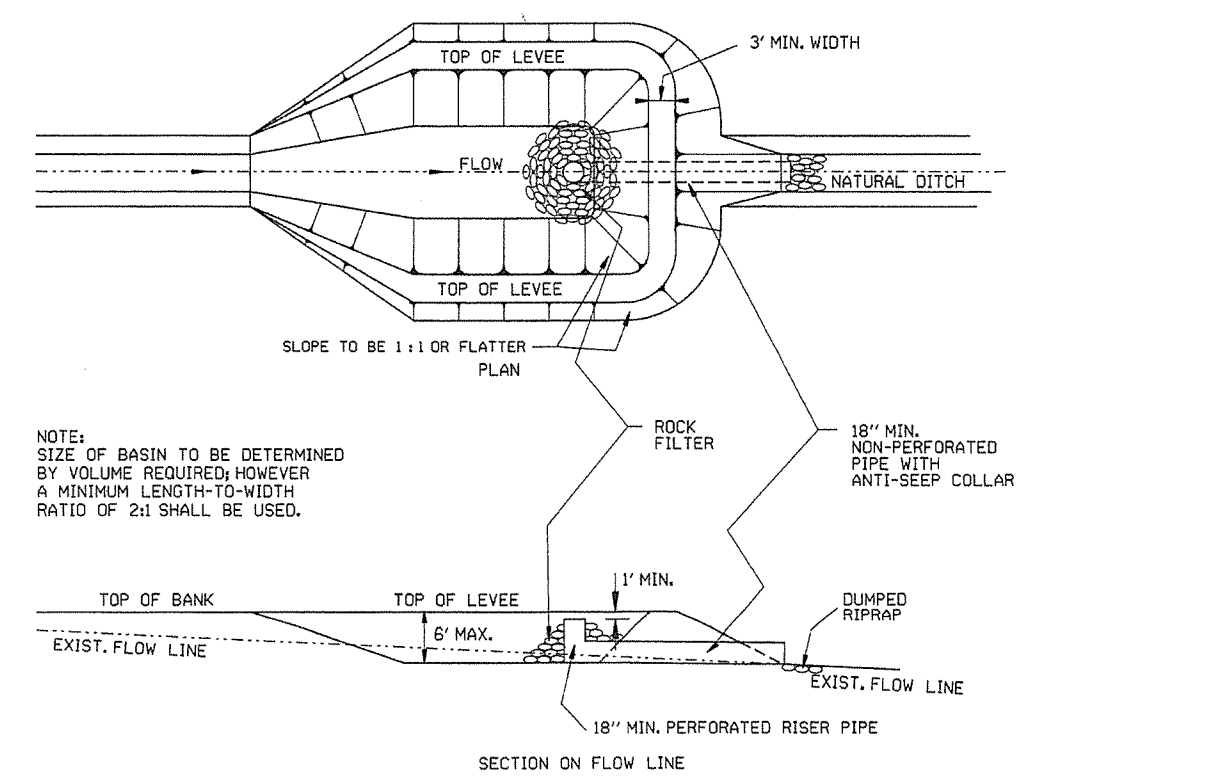
12-15-11	DELETED BALED STRAW DITCH CHECK & ADDED WATTLE DITCH CHECK		ARKANSAS STATE HIGHWAY COMMISSION
11-18-98	ADDED NOTES		
7-02-98	ADDED BALED STRAW FILTER BARRIER (E-2)		
7-20-95	REVISED SILT FENCE E-4 AND E-11	7-20-95	
7-15-94	REV. E-4 & E-11 MIN. 13" BURIED END OF FABRIC		
6-2-94	REVISED E-1, 4,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

TEMPORARY EROSION CONTROL DEVICES
STANDARD DRAWING TEC-1



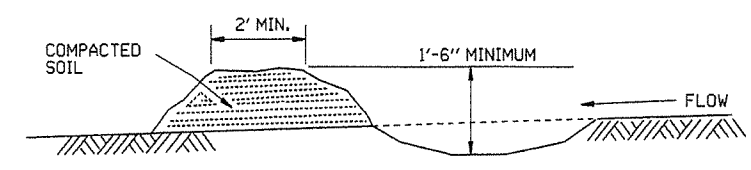
NOTE:
SIZE OF BASIN TO BE DETERMINED
BY VOLUME REQUIRED; HOWEVER
A MINIMUM LENGTH-TO-WIDTH
RATIO OF 2:1 SHALL BE USED.

SEDIMENT BASIN WITH RIPRAP OUTLET (E-9)

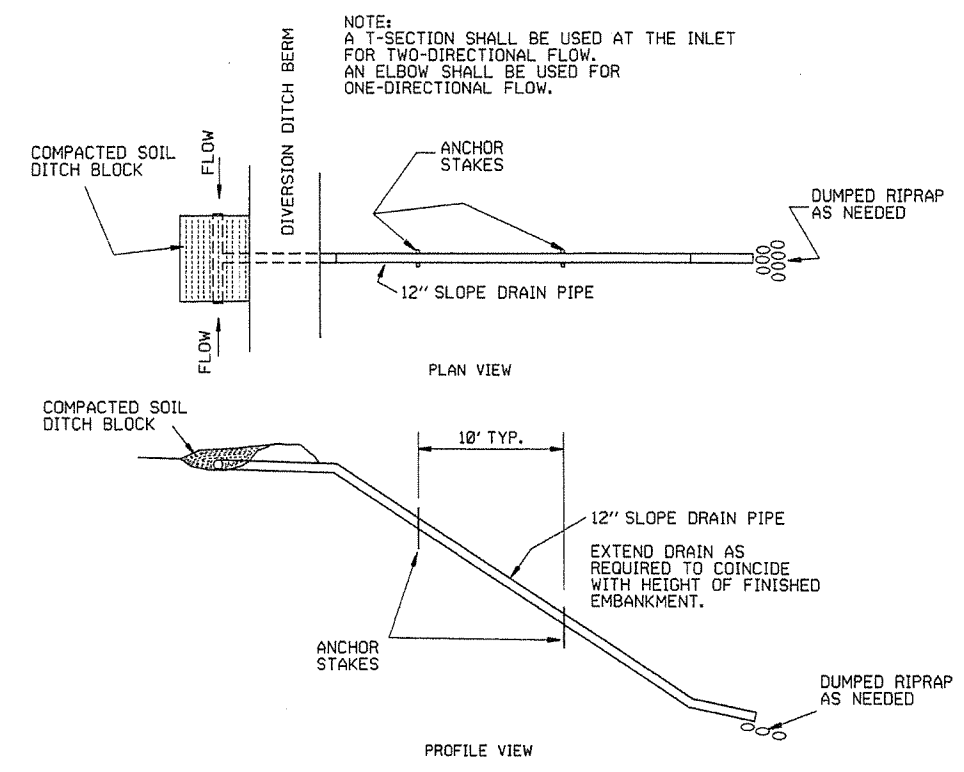


NOTE:
SIZE OF BASIN TO BE DETERMINED
BY VOLUME REQUIRED; HOWEVER
A MINIMUM LENGTH-TO-WIDTH
RATIO OF 2:1 SHALL BE USED.

SEDIMENT BASIN WITH PIPE OUTLET (E-10)

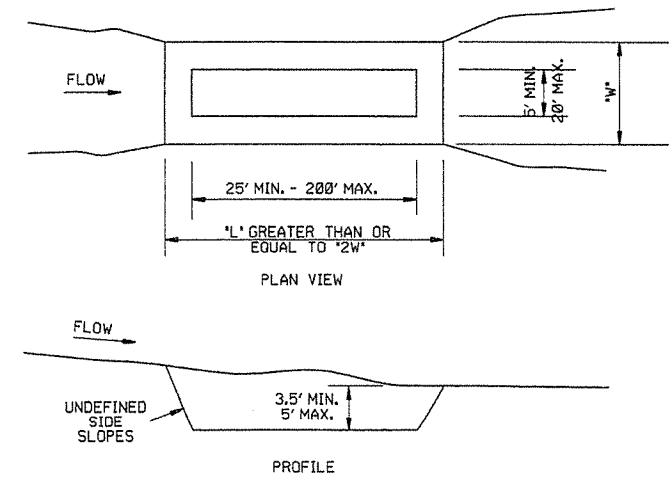


DIVERSION DITCH (E-8)



NOTE:
A T-SECTION SHALL BE USED AT THE INLET
FOR TWO-DIRECTIONAL FLOW.
AN ELBOW SHALL BE USED FOR
ONE-DIRECTIONAL FLOW.

SLOPE DRAIN (E-12)



SEDIMENT BASIN (E-14)

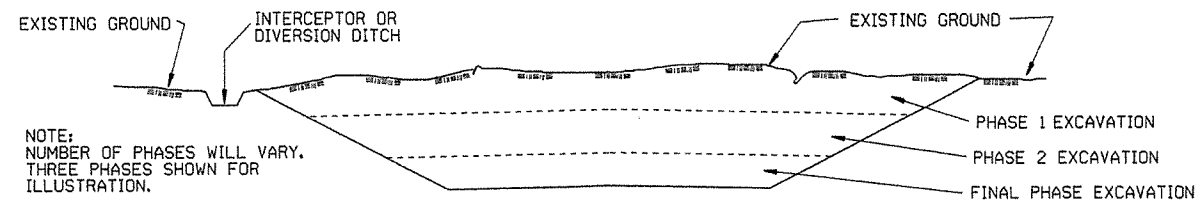
		ARKANSAS STATE HIGHWAY COMMISSION	
		TEMPORARY EROSION CONTROL DEVICES	
6-2-94	Revised E-8 & E-12; Added E-14 & Deleted E-13		
4-1-93	ISSUED		
DATE	REVISION		FILMED

CLEARING AND GRUBBING

CONSTRUCTION SEQUENCE

1. PLACE PERIMETER CONTROLS (I.E. SILT FENCES , DIVERSION DITCHES, SEDIMENT BASINS, ETC.)
2. PERFORM CLEARING AND GRUBBING OPERATION.

EXCAVATION



NOTE:
NUMBER OF PHASES WILL VARY.
THREE PHASES SHOWN FOR
ILLUSTRATION.

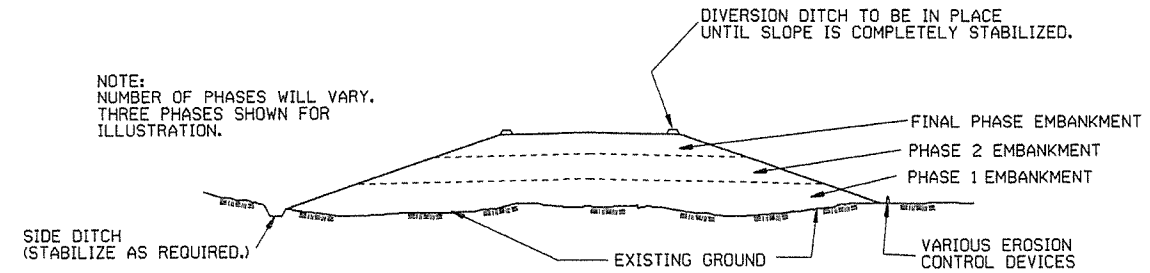
GENERAL NOTE

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

CONSTRUCTION SEQUENCE

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

EMBANKMENT



NOTE:
NUMBER OF PHASES WILL VARY.
THREE PHASES SHOWN FOR
ILLUSTRATION.

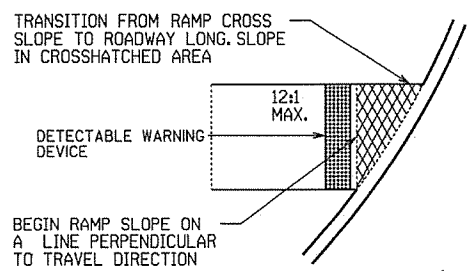
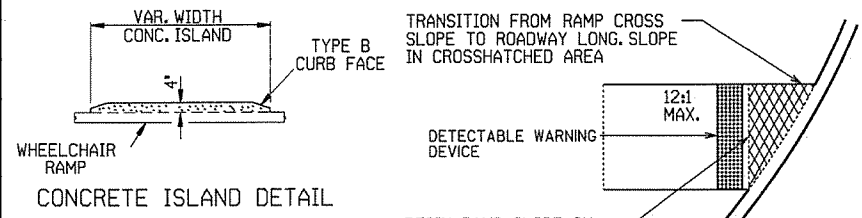
GENERAL NOTE

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

CONSTRUCTION SEQUENCE

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

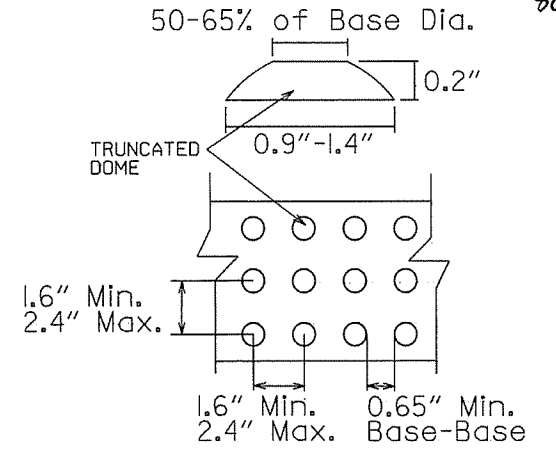
		ARKANSAS STATE HIGHWAY COMMISSION	
		TEMPORARY EROSION CONTROL DEVICES	
11-03-94	CORRECTED SPELLING		
6-2-94	Drawn & Issued		6-2-94
DATE	REVISION		FILMED
		STANDARD DRAWING TEC-3	



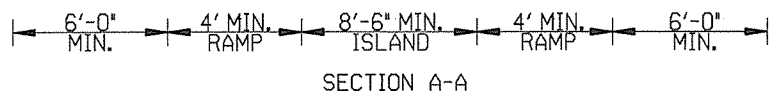
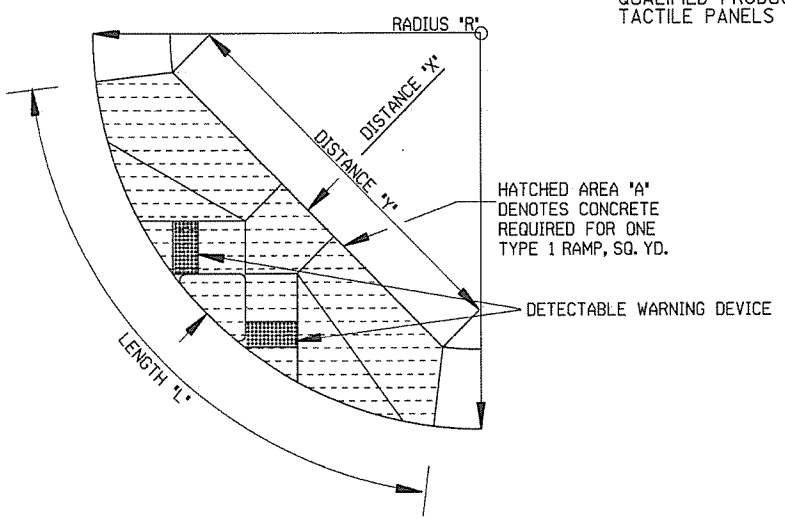
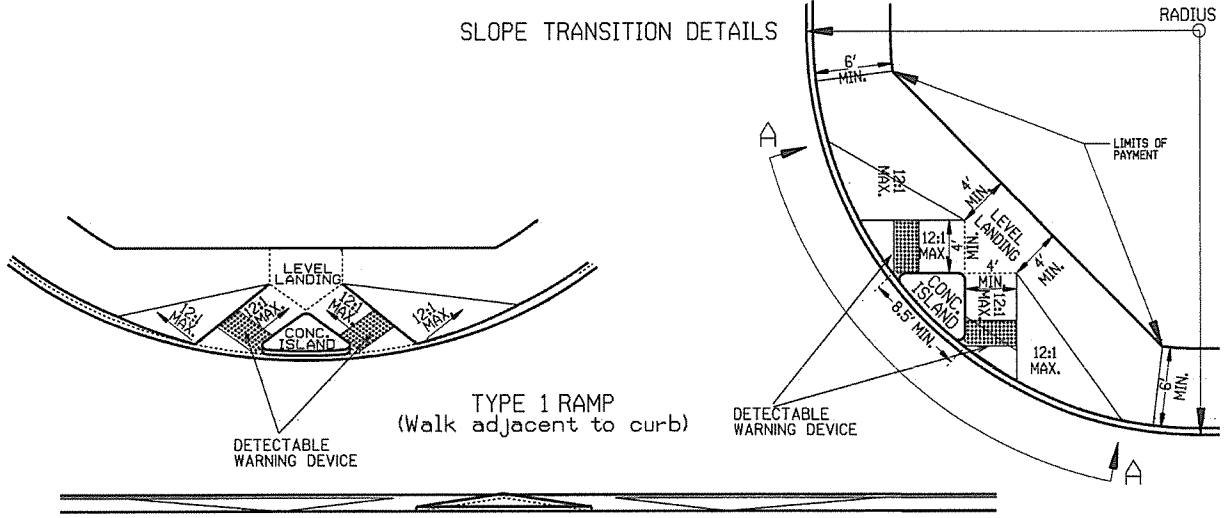
TYPE 1 RAMP DIMENSIONS AND QUANTITIES

RADIUS 'R'	DISTANCE 'X'	DISTANCE 'Y'	LENGTH 'L'	RAMP AREA 'A'
FEET	FEET	FEET	FEET	SQ. YD.
15	11.67	18.82	32.18	26.21
20	11.52	22.28	35.46	30.07
25	11.43	26.60	38.77	33.80
30	11.37	30.26	40.93	36.90
35	11.33	33.51	43.11	39.77
40	11.30	36.45	45.26	42.45
45	11.27	39.16	47.34	44.97
50	11.25	41.69	49.36	47.35
55	11.24	44.07	51.31	49.63
60	11.22	46.33	53.21	51.80

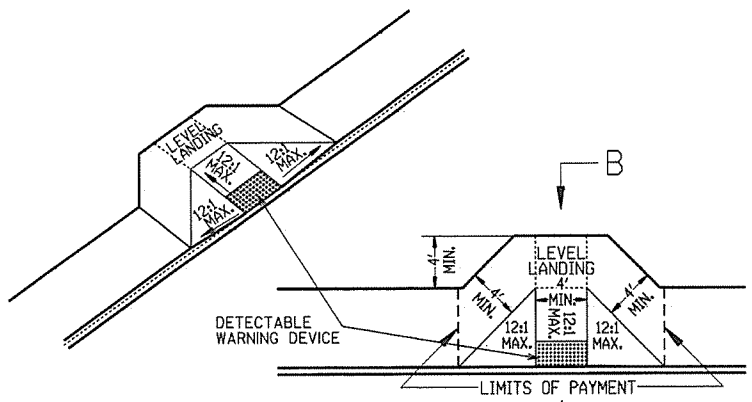
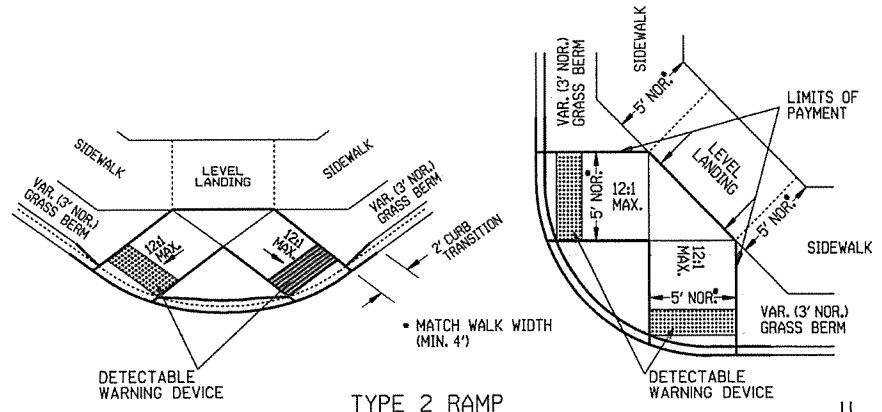
GENERAL NOTES FOR DETECTABLE WARNING DEVICES
 THE DETECTABLE WARNING DEVICE SHALL BE LOCATED SO THAT THE NEAREST EDGE OF THE DEVICE IS 6 TO 8 INCHES FROM THE FACE OF THE CURB.
 TRUNCATED DOMES IN THE DETECTABLE WARNING SURFACE SHALL MEET THE REQUIREMENTS OF THE GEOMETRIC CONFIGURATION SHOWN.
 DOMES SHALL BE ALIGNED ON A SQUARE GRID IN THE PREDOMINANT DIRECTION OF TRAVEL TO PERMIT WHEELS TO ROLL BETWEEN DOMES.
 DETECTABLE WARNING DEVICE SHALL BE 24 INCHES IN THE DIRECTION OF TRAVEL AND EXTEND THE FULL WIDTH OF THE CURB RAMP OR FLUSH SURFACE.
 DETECTABLE WARNING DEVICE SHALL BE ON THE AHTD QUALIFIED PRODUCTS LIST FOR CAST-IN-PLACE TACTILE PANELS (ADA DETECTABLE WARNING).



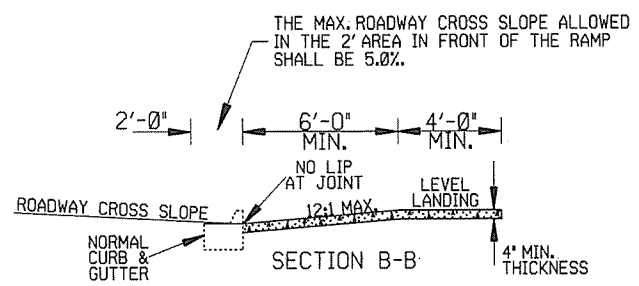
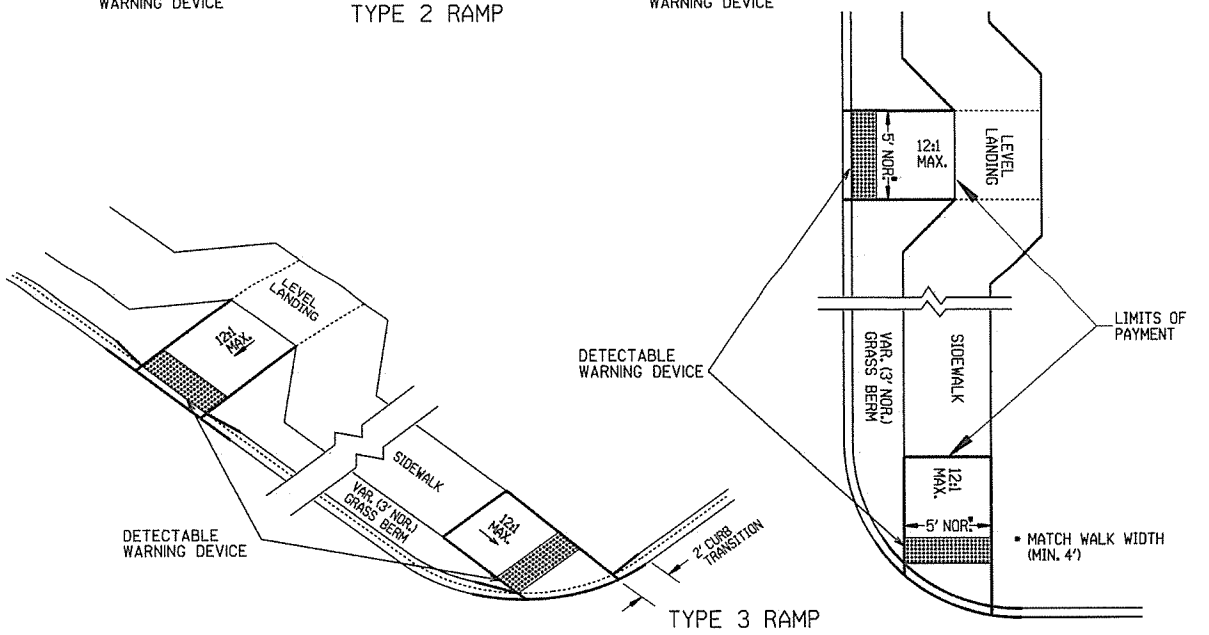
DETECTABLE WARNING DEVICE DETAIL



NOTE:
 THE CROSS SLOPE OF THE RAMPS, LEVEL LANDINGS, AND SIDEWALKS SHALL NOT EXCEED 2.0% UNLESS REQUIRED TO MATCH STREET LONGITUDINAL GRADE.



TYPE 4 RAMP (Walk adjacent to curb)



GENERAL NOTES:

IN NEW CONSTRUCTION, UNLESS OTHERWISE INDICATED ON THE PLANS, WHEELCHAIR RAMPS ARE TO BE PROVIDED AT ALL CORNERS OF CURBED STREET INTERSECTIONS AND MID-BLOCK CROSSWALK LOCATIONS.
 IN ALTERATIONS WHEELCHAIR RAMPS ARE TO BE PROVIDED AT CURBED STREET INTERSECTIONS WITH PEDESTRIAN TRAFFIC AND MID-BLOCK CROSSWALK LOCATIONS.
 THE LENGTH OF THE RAMP SHALL BE SUCH THAT THE SLOPE DOES NOT EXCEED 12:1. THE SURFACE TEXTURE OF THE RAMP SHALL CONFORM TO A CLASS 6 FINISH ACCORDING TO SECTION 802.19.
 THE NORMAL GUTTER GRADE SHALL BE MAINTAINED THROUGH THE AREA OF THE RAMP.
 ALL PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION.
 THE MINIMUM THICKNESS OF THE RAMP, WALK, & LANDING SHALL BE 4". THE MINIMUM WIDTH OF THE RAMPS SHALL BE THE WALK WIDTH OR 36", WHICHEVER IS GREATER.
 RAMPS SHALL BE MODIFIED AS NECESSARY TO INSURE THAT THEY ARE PARALLEL TO A LINE DRAWN FROM THE CENTER OF ONE RAMP TO THE CENTER OF THE RAMP ON THE OPPOSITE SIDE OF THE INTERSECTION.
 THE DIMENSIONS AND QUANTITIES SHOWN ON THIS DRAWING ARE FOR A 90° INTERSECTION ONLY. DIMENSIONS AND QUANTITIES FOR SKEWED INTERSECTIONS WILL VARY, AND ARE TO BE DETERMINED BY THE ENGINEER.

RAMP SELECTION CRITERIA

CHOICE	TYPE	DESCRIPTION
FIRST CHOICE	TYPE 1	CORNER LOCATIONS WITH THE WALK ADJACENT TO THE CURB (BOTH NEW CONSTRUCTION AND ALTERATIONS).
	TYPE 2	CORNER LOCATIONS WITH THE WALK OFFSET FROM THE CURB A DISTANCE INSUFFICIENT TO ALLOW THE REQUIRED RAMP SLOPE (BOTH NEW CONSTRUCTION AND ALTERATIONS).
	TYPE 3	CORNER LOCATIONS WITH THE WALK OFFSET FROM THE CURB A DISTANCE SUFFICIENT TO ALLOW THE REQUIRED RAMP SLOPE (BOTH NEW CONSTRUCTION AND ALTERATIONS).
	TYPE 4	TANGENT LOCATIONS (BOTH NEW CONSTRUCTION AND ALTERATIONS).
SECOND CHOICE	TYPE 5	TANGENT LOCATIONS (ALTERATIONS ONLY).
THIRD CHOICE	TYPE 6	CORNER LOCATIONS (ALTERATIONS ONLY). THIS RAMP MAY BE USED ONLY IF THE TYPE 5 RAMPS CANNOT BE PLACED AT THE ENDS OF THE RADIUS.
FOURTH CHOICE		IF SITE CONSTRAINTS PREVENT THE CONSTRUCTION OF ANY OF THE TYPES LISTED, THEN AND ONLY THEN CAN THE 12:1 MAX. SLOPE ON THE RAMP BE EXCEEDED TO PROVIDE ACCESS TO THE STREET LEVEL (ALTERATIONS ONLY). THE SLOPE CAN BE STEEPENED TO A 10:1 MAX. FOR A MAX. LENGTH OF 5' OR A 8:1 MAX. FOR A MAX. LENGTH OF 2'. SLOPES STEEPER THAN 8:1 ARE NOT ALLOWED UNDER ANY CIRCUMSTANCES.

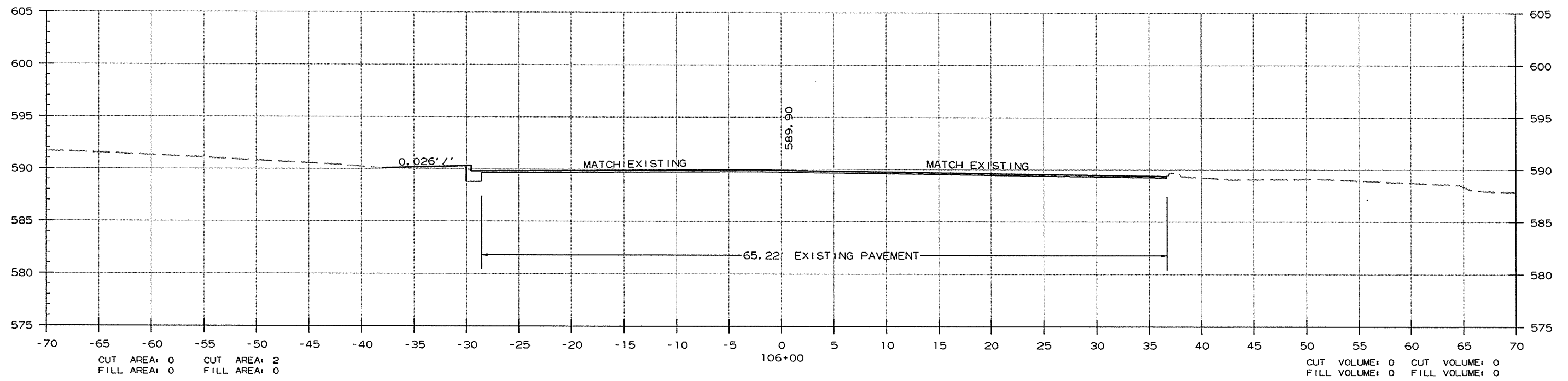
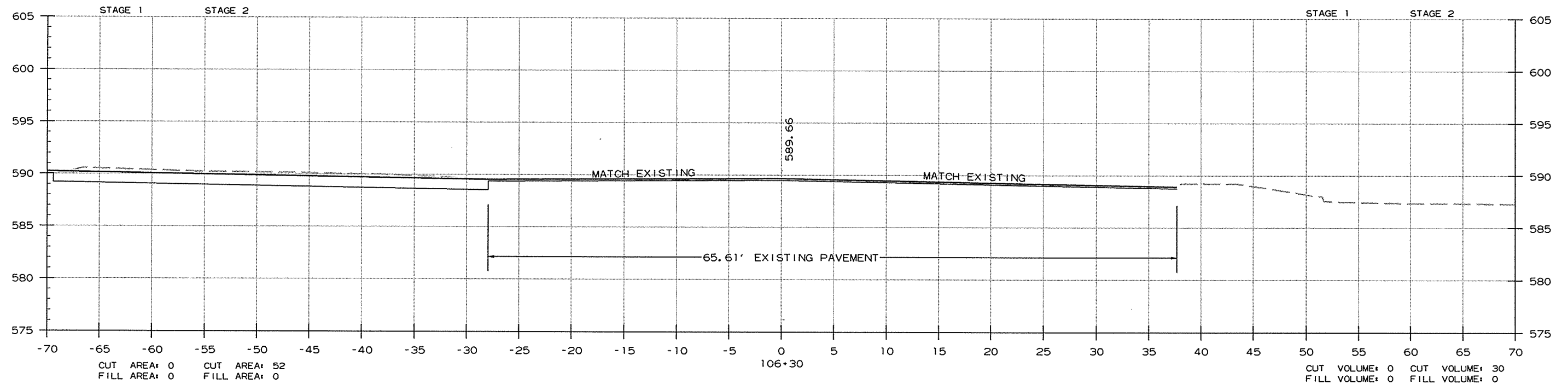
NOTE: IN ALTERATIONS, THE SELECTION OF THE TYPE OF WHEELCHAIR RAMP TO BE CONSTRUCTED SHALL BE BASED ON THE AMOUNT OF RIGHT-OF-WAY AVAILABLE, AND ON THE PRESENCE OF OTHER SITE CONSTRAINTS (UTILITIES, BUILDINGS, ETC.). THE TABLE ABOVE LISTS THE ORDER IN WHICH THE RAMPS ARE TO BE CONSIDERED. AN ALTERATION IS DEFINED AS A PROJECT THAT CHANGES OR AFFECTS THE USE OF A PEDESTRIAN PATHWAY (OVERLAYS, SIGNALIZATION PROJECTS, ETC.) BUT DOES NOT REQUIRE THE PURCHASE OF ADDITIONAL RIGHT-OF-WAY. ALL PROJECTS THAT REQUIRE THE PURCHASE OF ADDITIONAL RIGHT-OF-WAY WILL USUALLY BE CONSIDERED NEW CONSTRUCTION FOR THE PURPOSES OF THE CHART ABOVE.

DATE	REVISION	DATE FILM
11-10-05	REVISED TO NEW SIDEWALK POLICY	
10-9-03	REVISED GEN. NOTES & ADDED NOTE	
4-10-03	REV. DETECTABLE WARNING DEVICES	
8-22-02	ADD DETECTABLE WARNING DEVICES	
3-30-00	ADD SLOPE TRANS. & REV. ISL. DIMS.	
11-18-98	REVISED NOTES	
8-12-98	REVISED TEXTURE	
7-02-98	REDRAWN & REISSUED	
10-18-95	CORRECTED DIMENSIONS	10-18-96
5-24-90	FROM 10:1 MAX. SLOPES	5-24-90
7-15-88	ADJUSTED MAX. SLOPE	652-7-15-88
7-14-88	INCL. "CONC. ISL." IN PAY ITEM	
6-02-76	ISSUED-P.H.D.	299-7-28-76

ARKANSAS STATE HIGHWAY COMMISSION
 WHEELCHAIR RAMPS
 NEW CONSTRUCTION
 AND ALTERATIONS
 STANDARD DRAWING WR-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. 061194							81	141

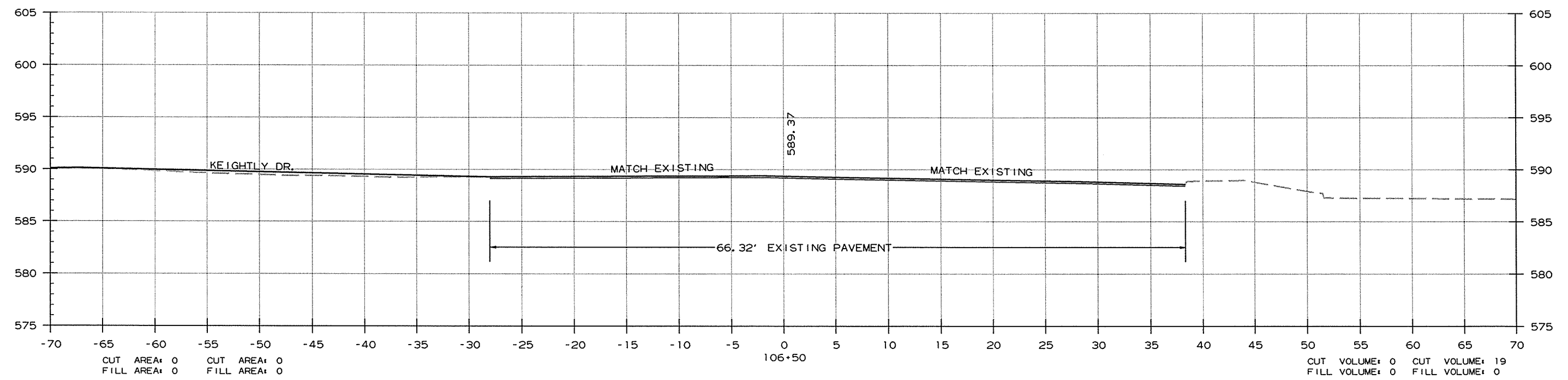
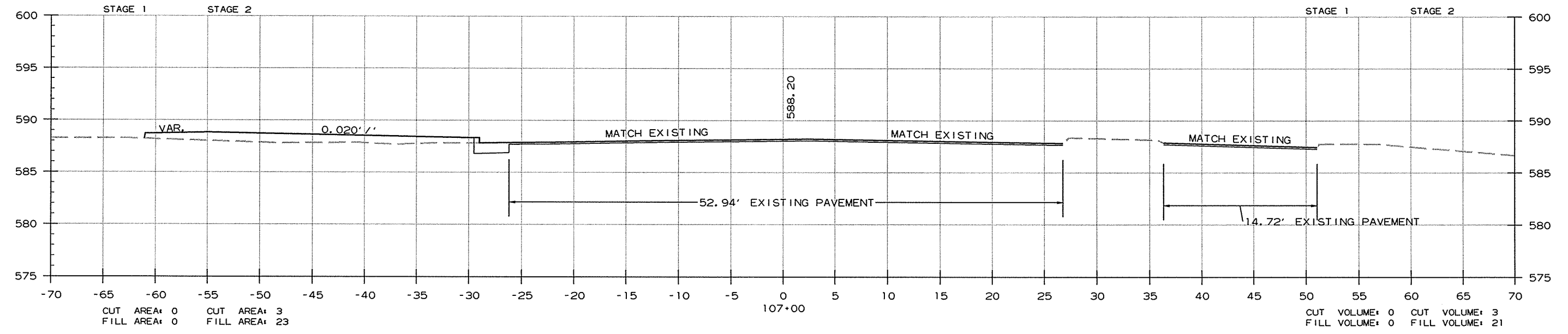
② CROSS SECTIONS



CROSS SECTION STA. 106+00 TO STA. 106+30

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
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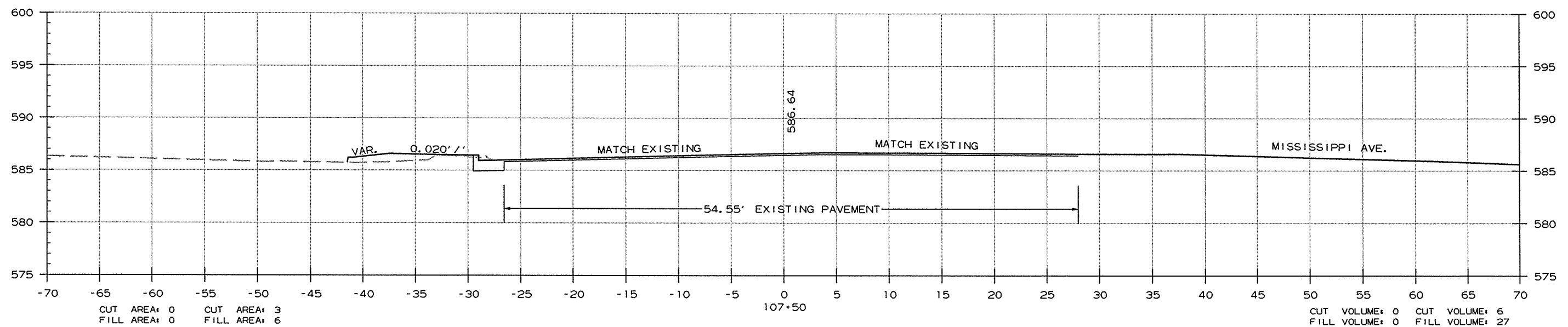
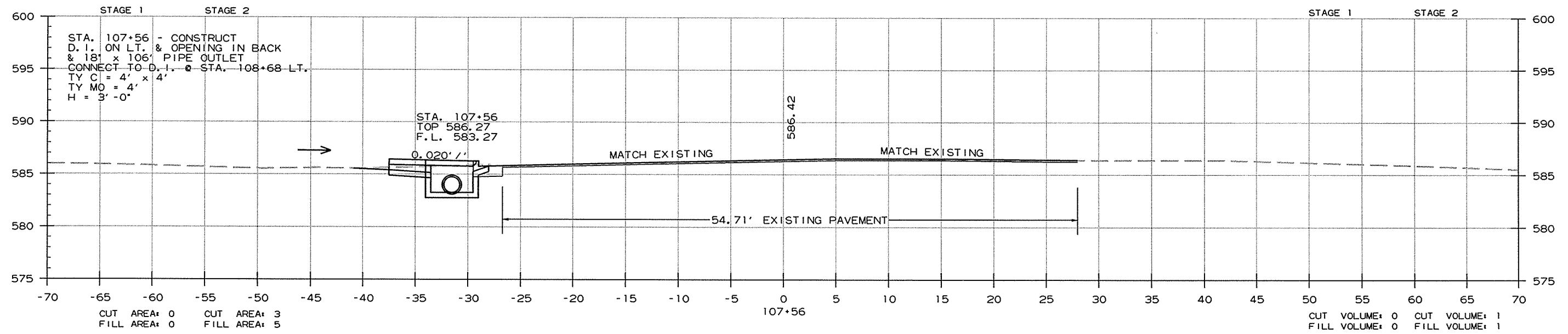
② CROSS SECTIONS



CROSS SECTION STA. 106+50 TO STA. 107+00

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
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JOB NO. 061194							83	141

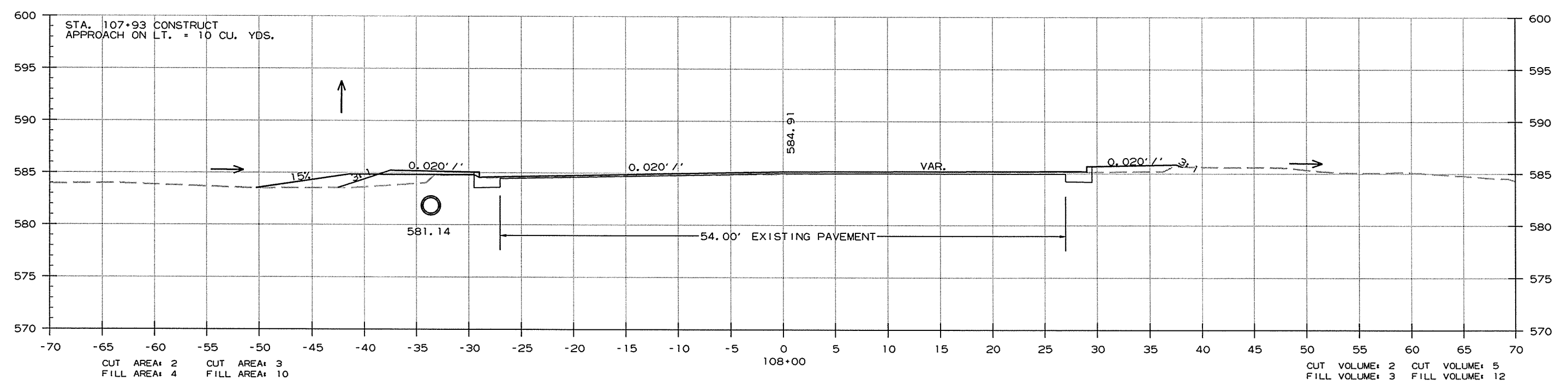
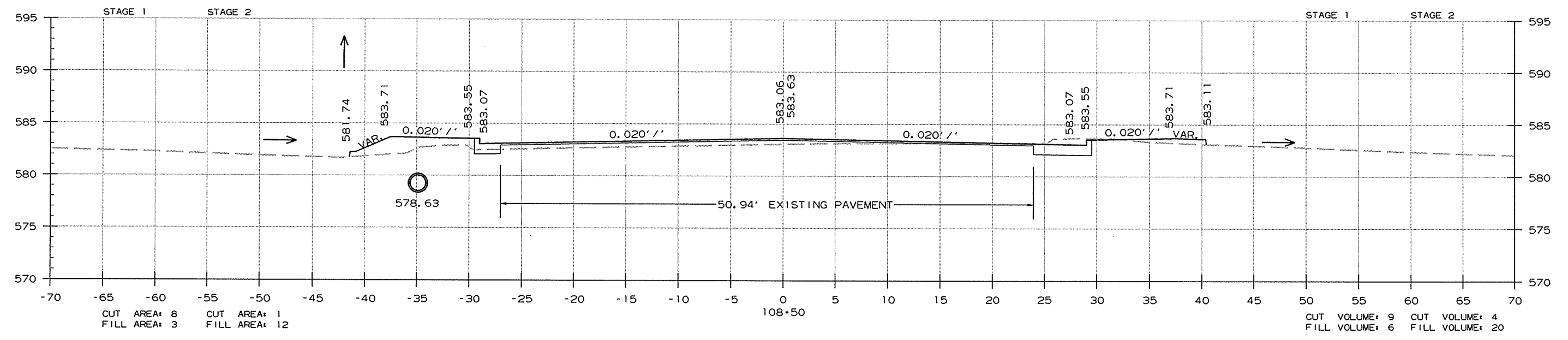
② CROSS SECTIONS



CROSS SECTION STA. 107+50 TO STA. 107+56

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JOB NO. 061194							84	141

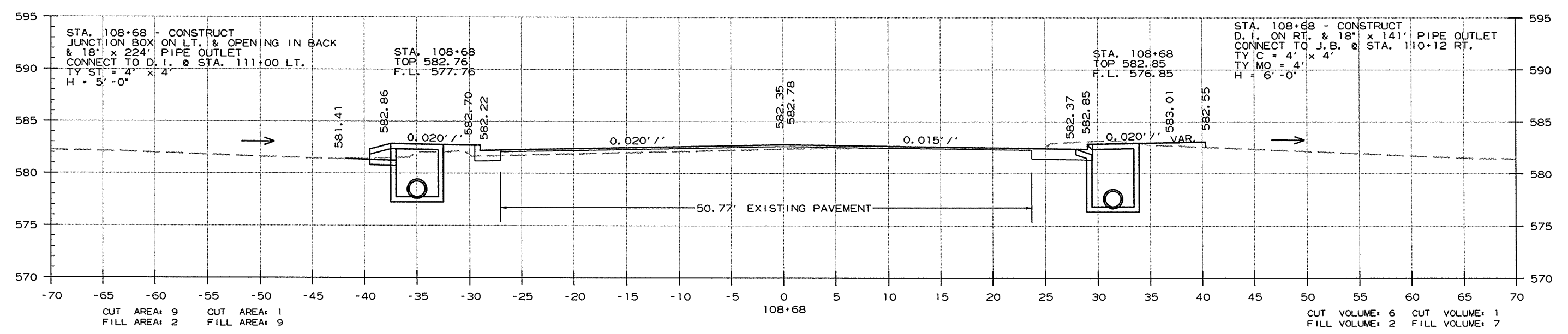
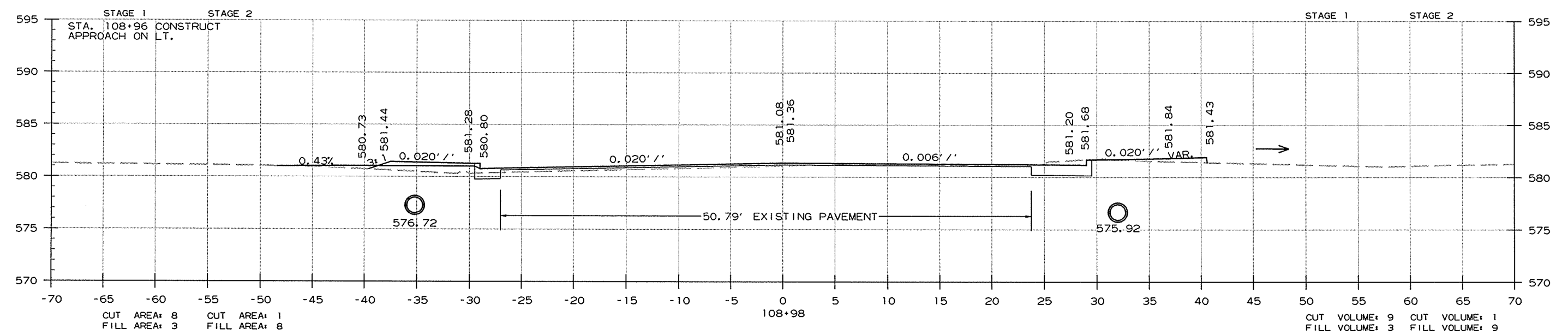
2 CROSS SECTIONS



CROSS SECTION STA. 108+00 TO STA. 108+50

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
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JOB NO. 061194							85	141

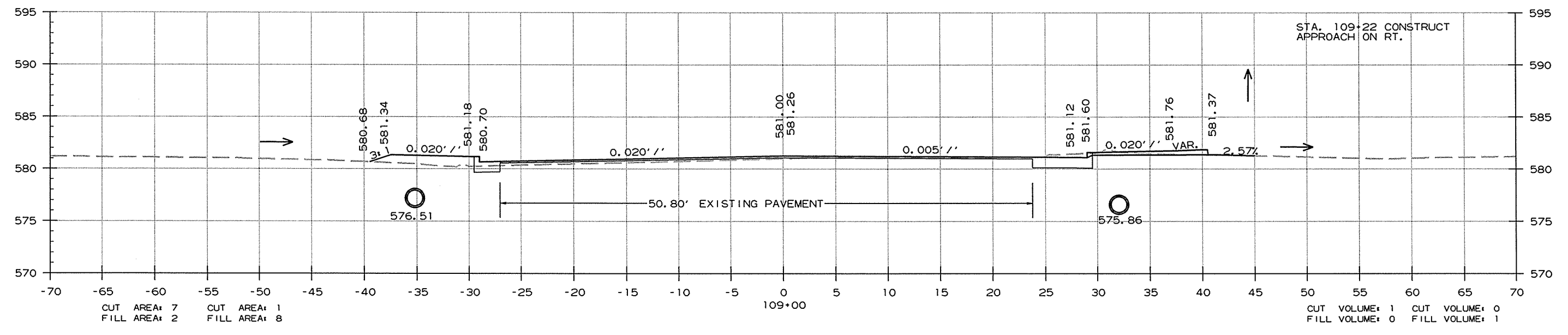
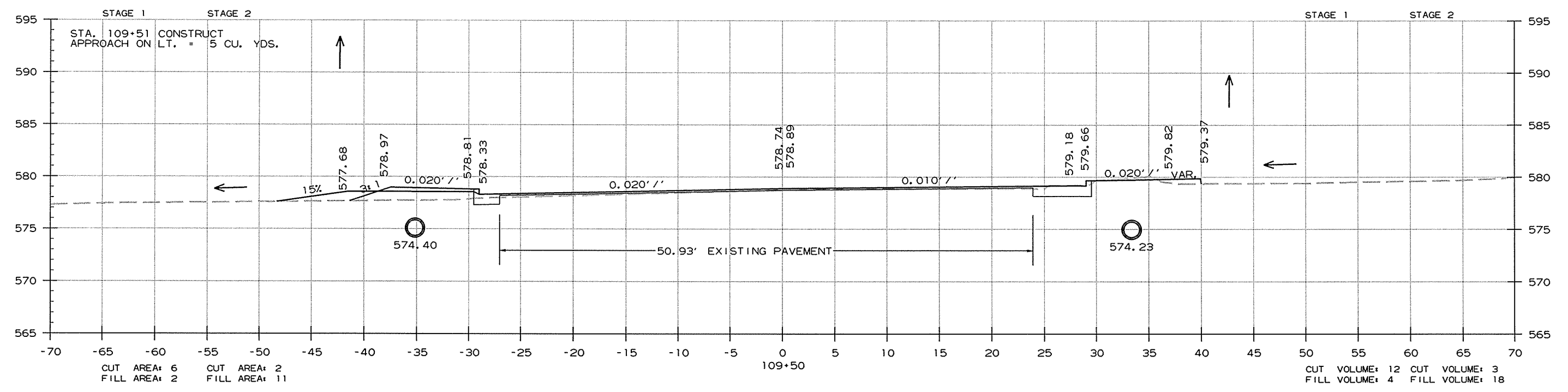
2 CROSS SECTIONS



CROSS SECTION STA. 108+68 TO STA. 108+98

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
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JOB NO. 061194							86	141

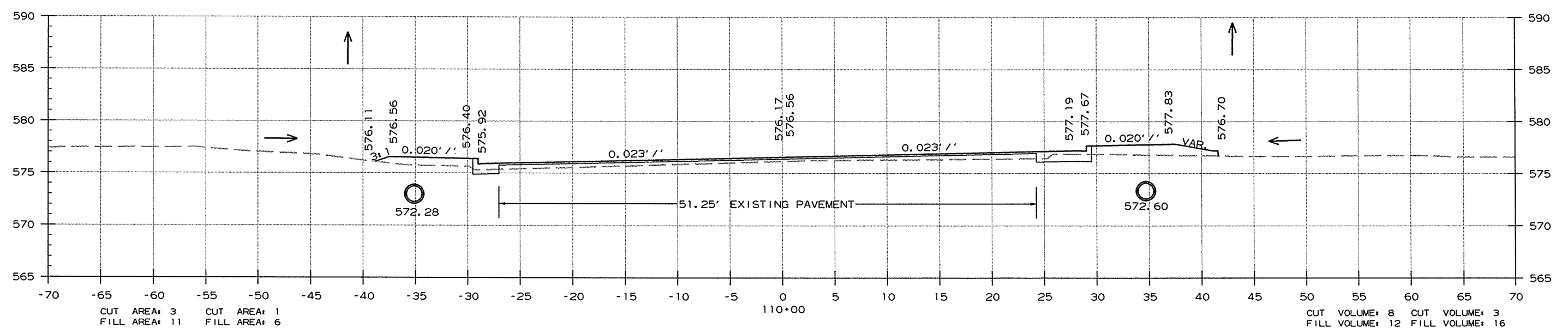
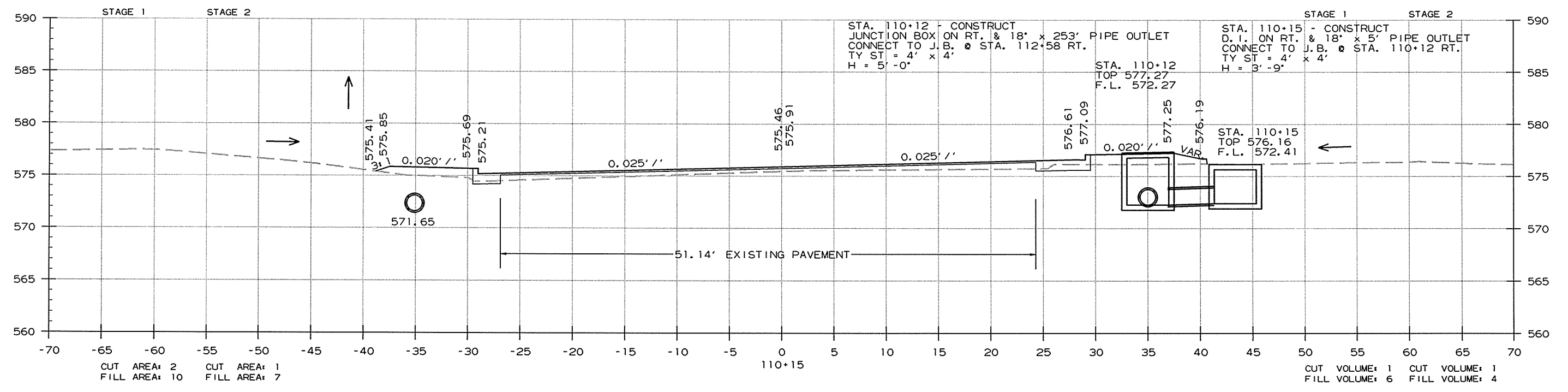
2 CROSS SECTIONS



CROSS SECTION STA. 109+00 TO STA. 109+50

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
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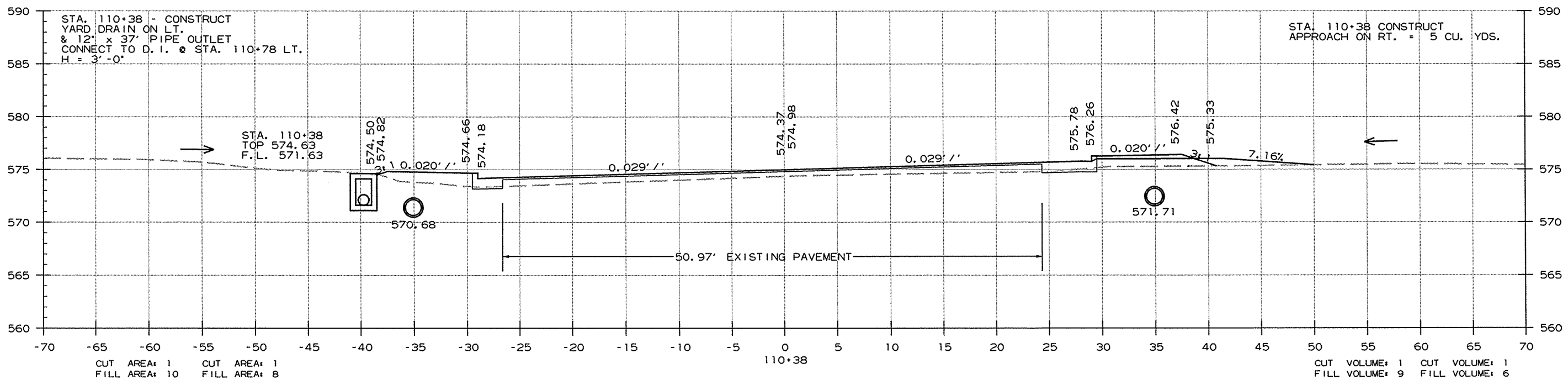
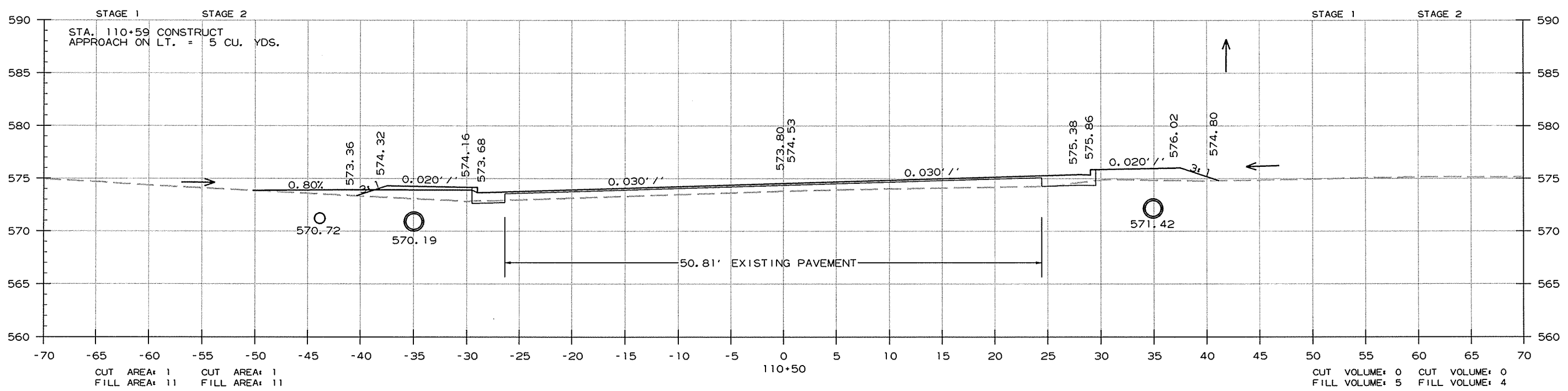
2 CROSS SECTIONS



CROSS SECTION STA. 110+00 TO STA. 110+15

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		88	141
				JOB NO.		061194		

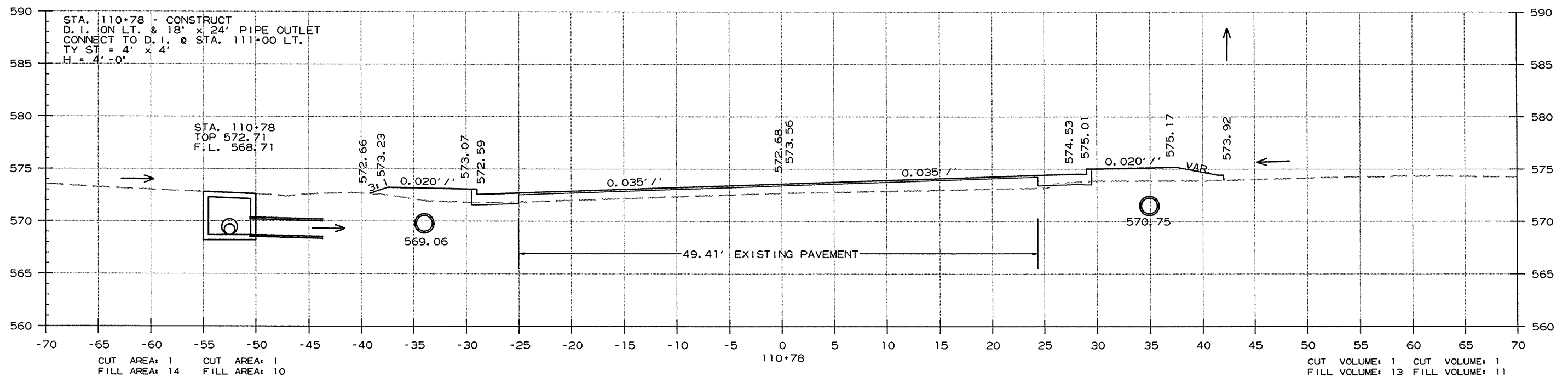
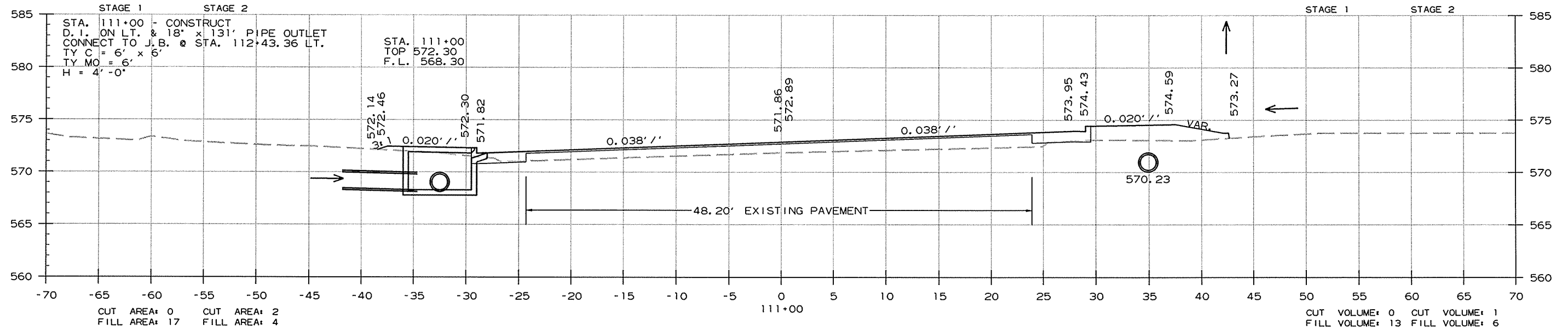
2 CROSS SECTIONS



CROSS SECTION STA. 110+38 TO STA. 110+50

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 061194							89	141

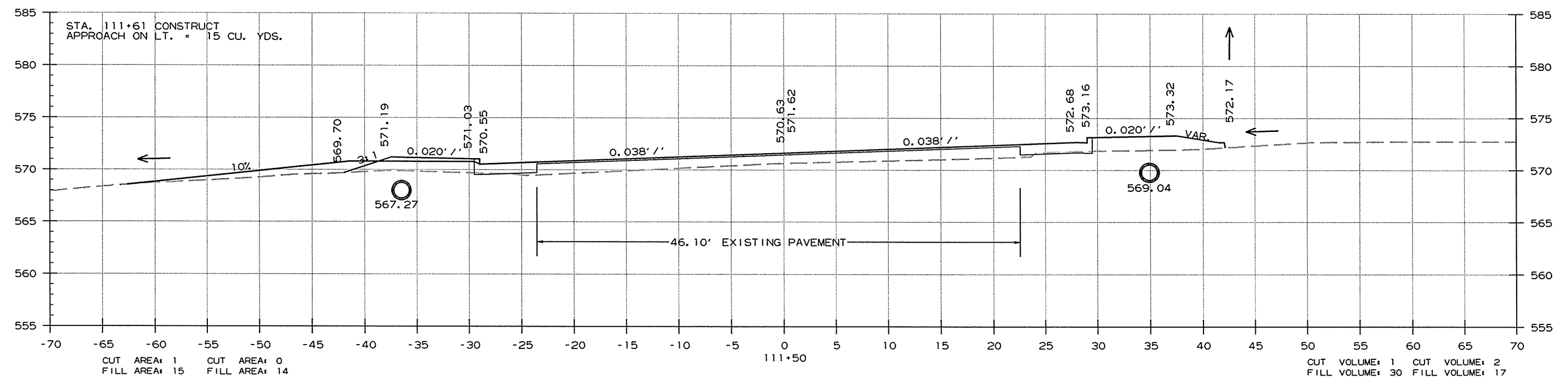
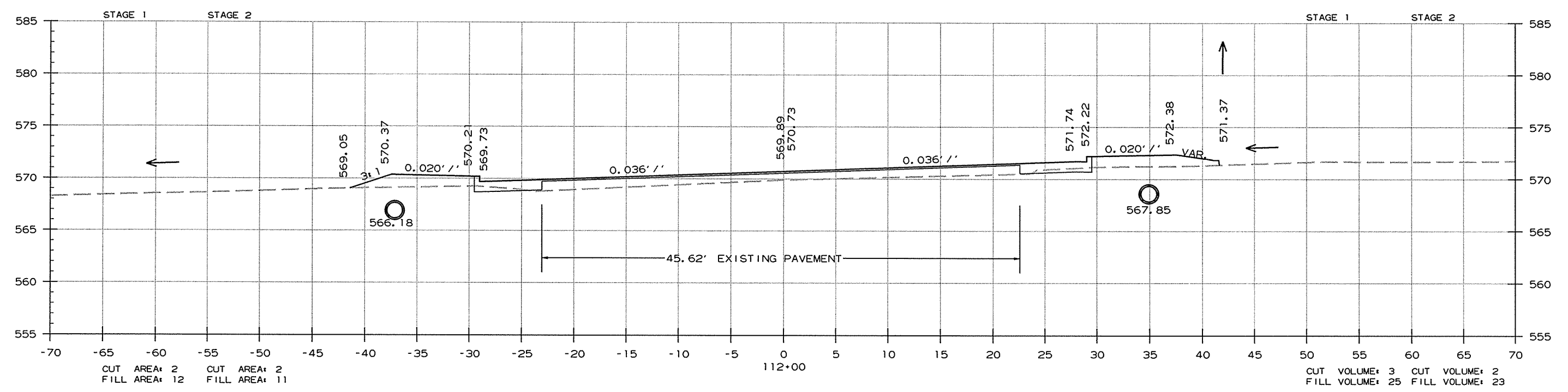
2 CROSS SECTIONS



CROSS SECTION STA. 110+78 TO STA. 111+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. 061194	90	141

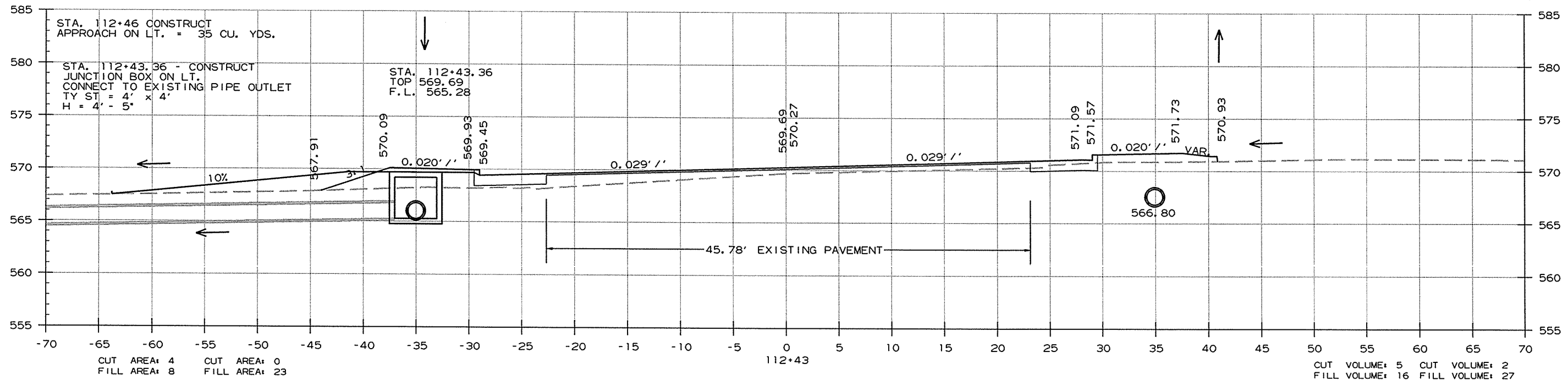
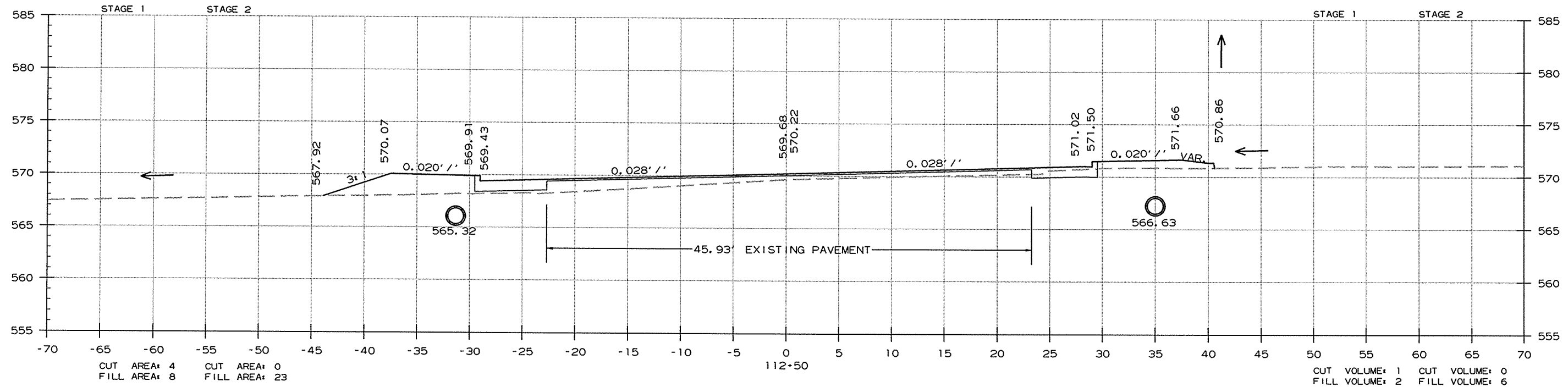
2 CROSS SECTIONS



CROSS SECTION STA. 111+50 TO STA. 112+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. 061194							91	141

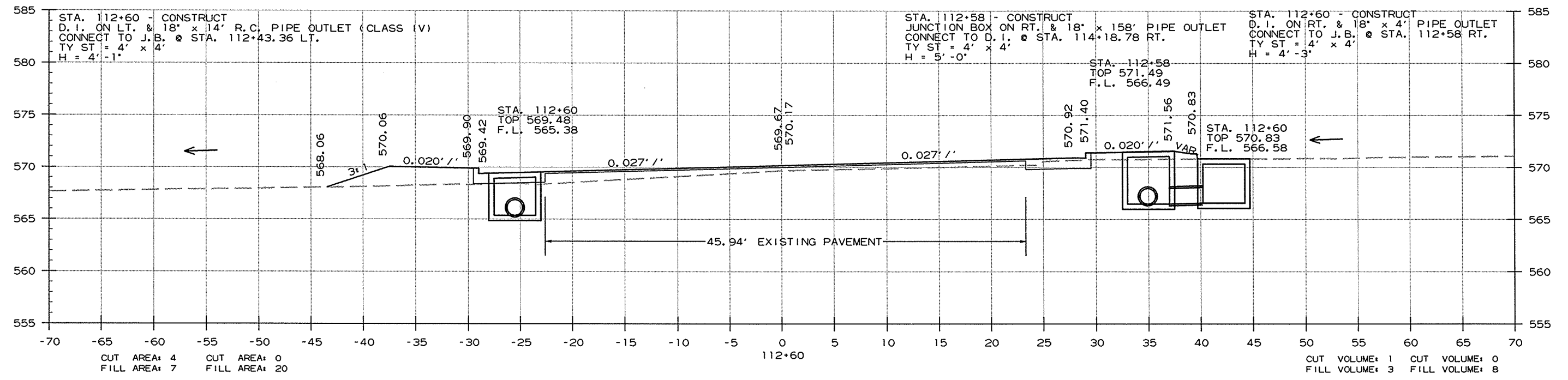
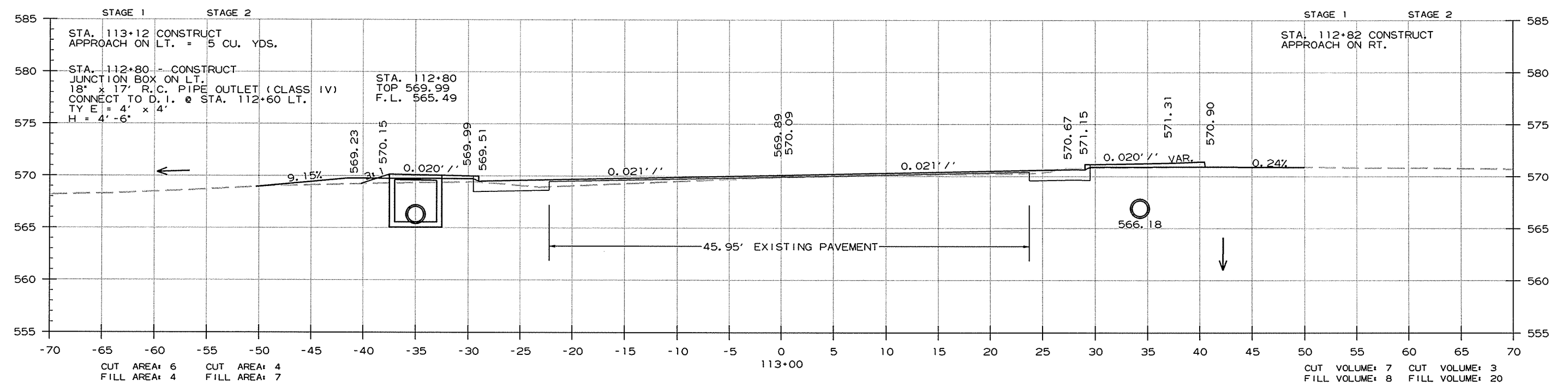
2 CROSS SECTIONS



CROSS SECTION STA. 112+43 TO STA. 112+50

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		92	141
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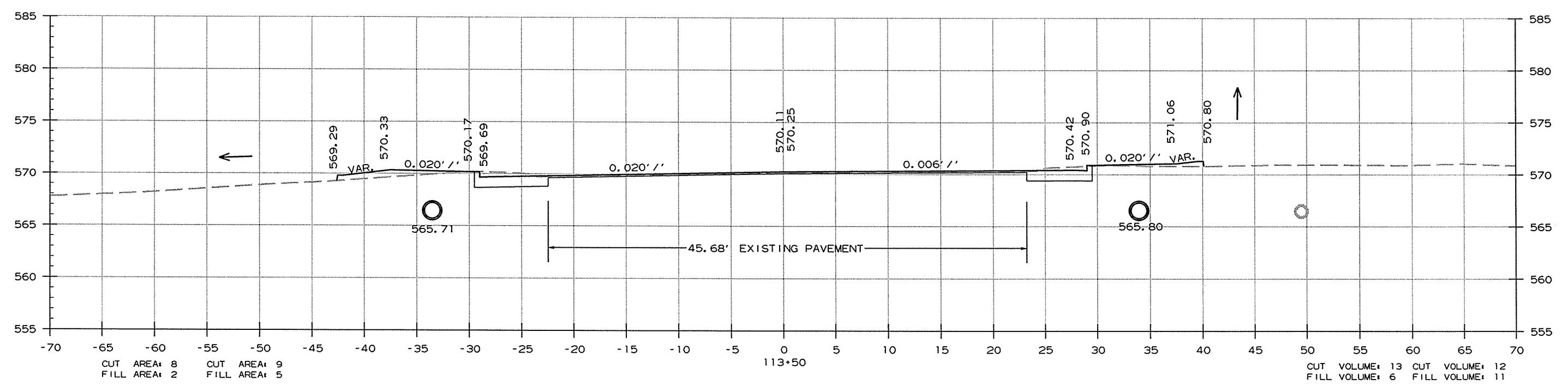
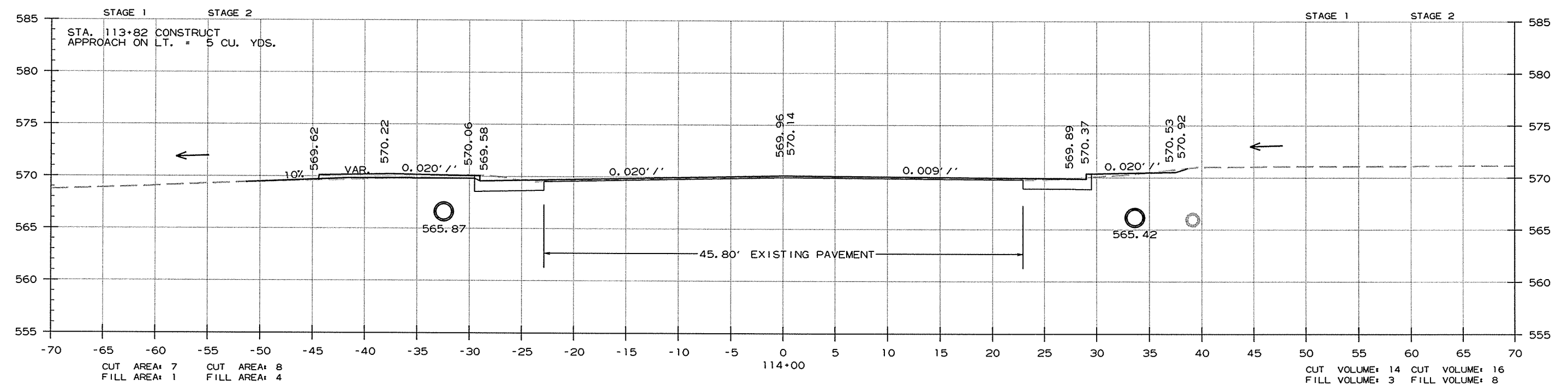
2 CROSS SECTIONS



CROSS SECTION STA. 112+60 TO STA. 113+00

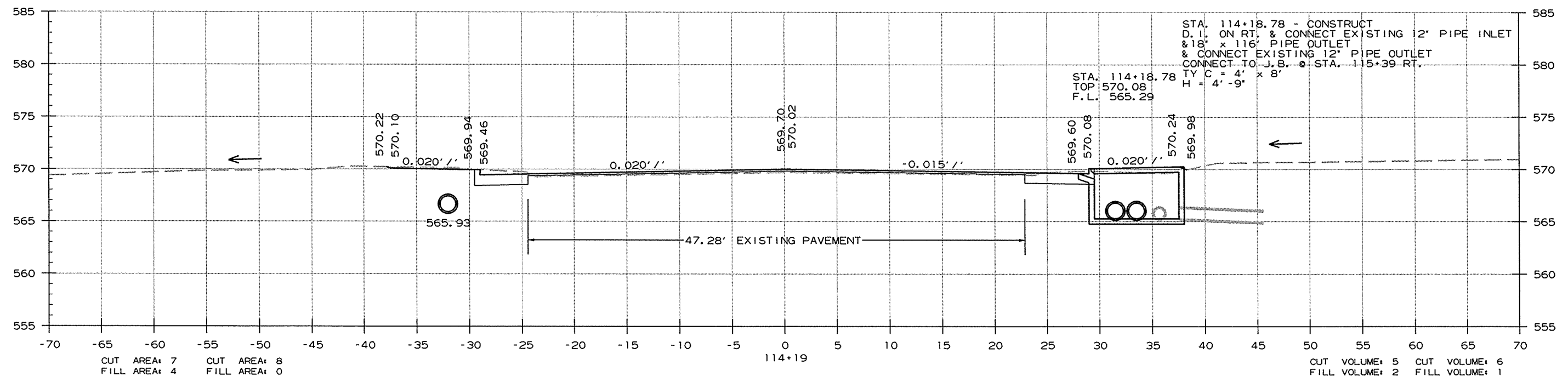
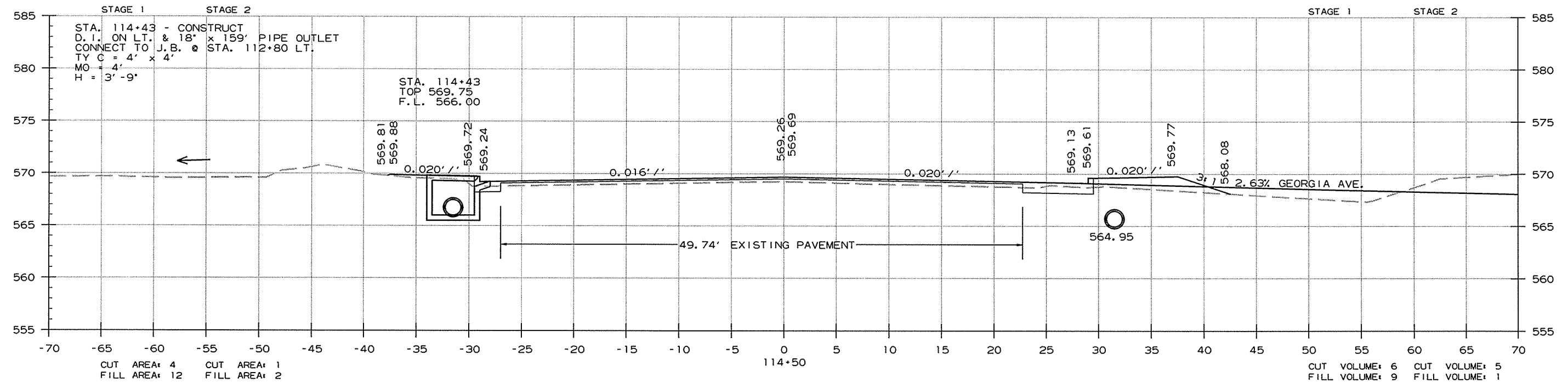
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 061194							93	141

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.		061194	94	141

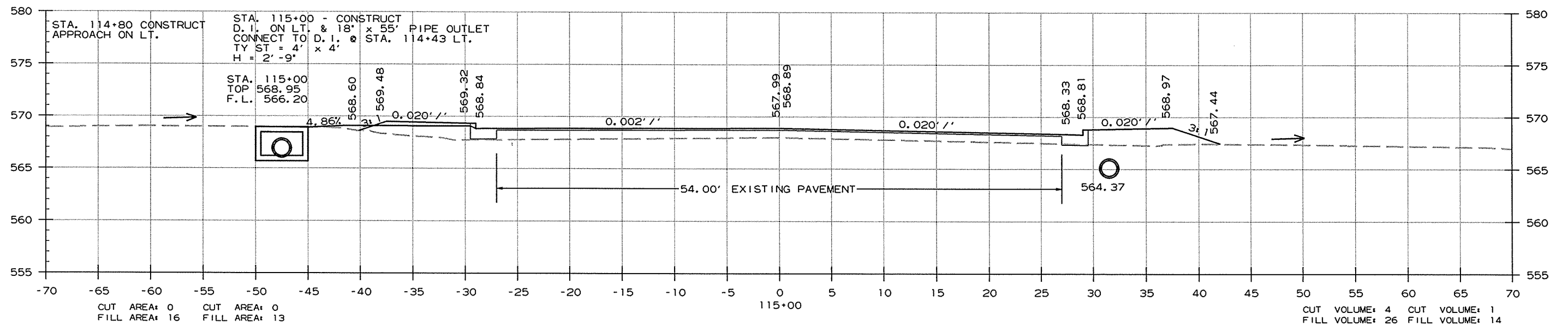
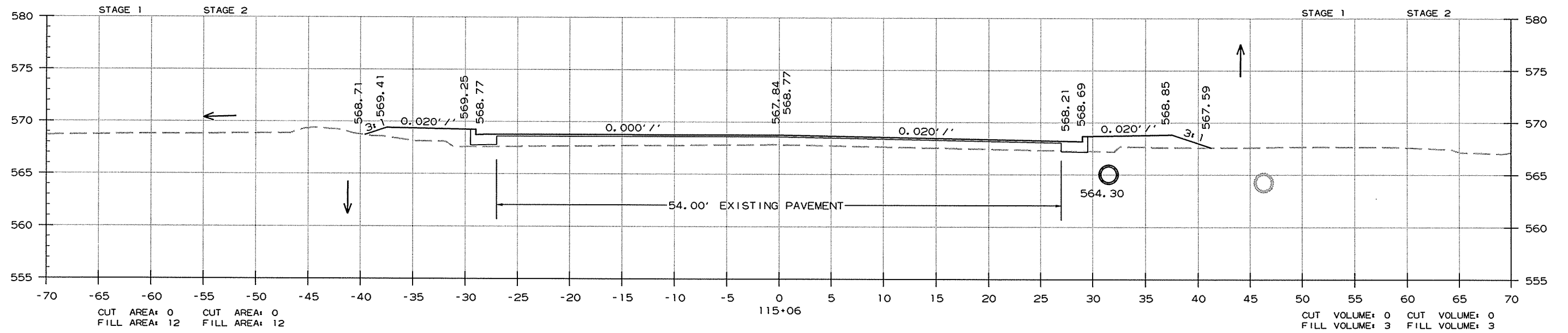
2 CROSS SECTIONS



CROSS SECTION STA. 114+19 TO STA. 114+50

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
							JOB NO.	061194
							SHEET NO.	95
							TOTAL SHEETS	141

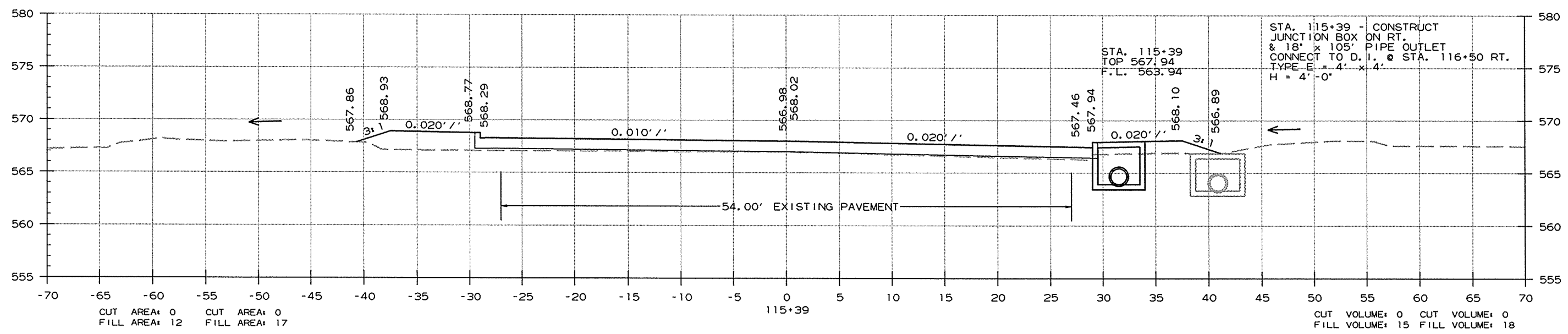
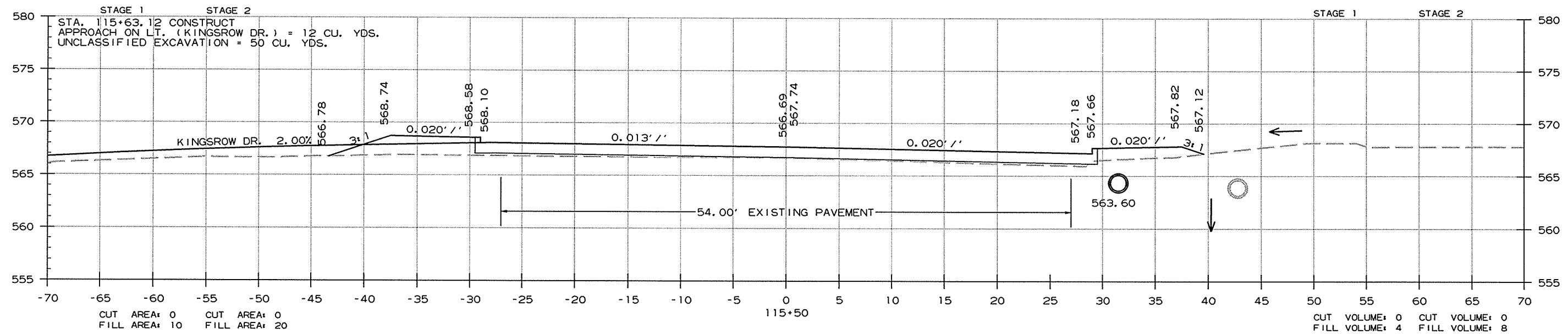
2 CROSS SECTIONS



CROSS SECTION STA. 115+00 TO STA. 115+06

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 061194							96	141

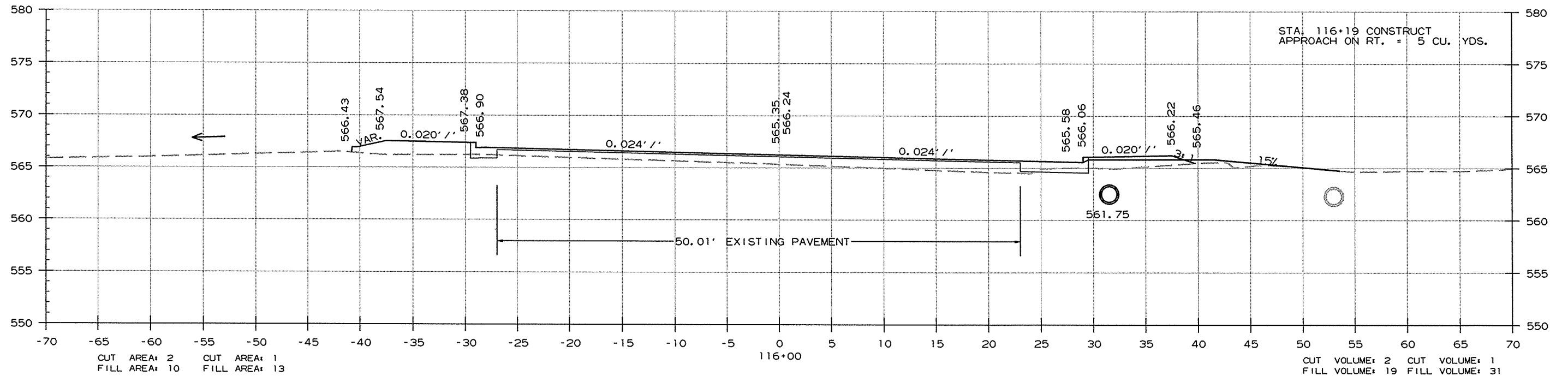
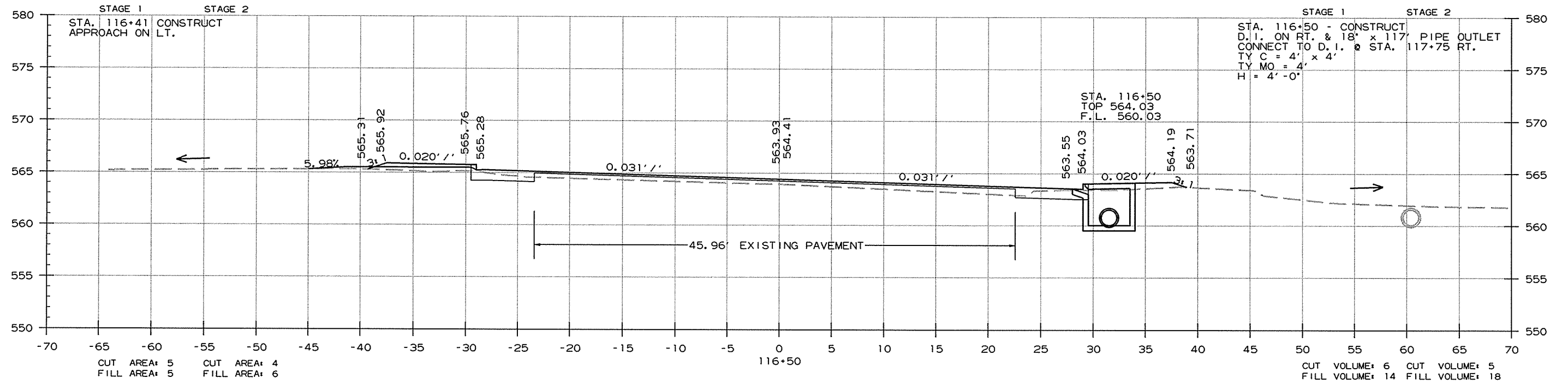
2 CROSS SECTIONS



CROSS SECTION STA. 115+39 TO STA. 115+50

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 061194							97	141

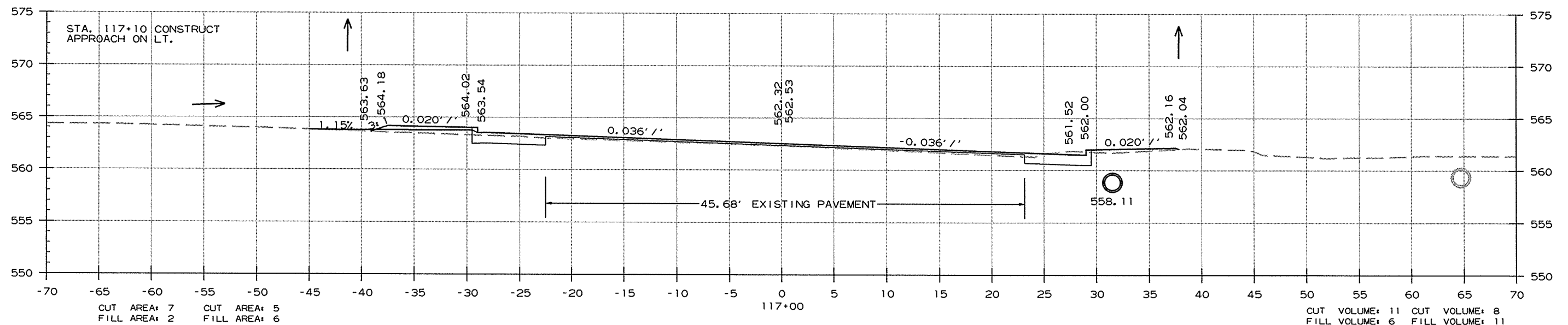
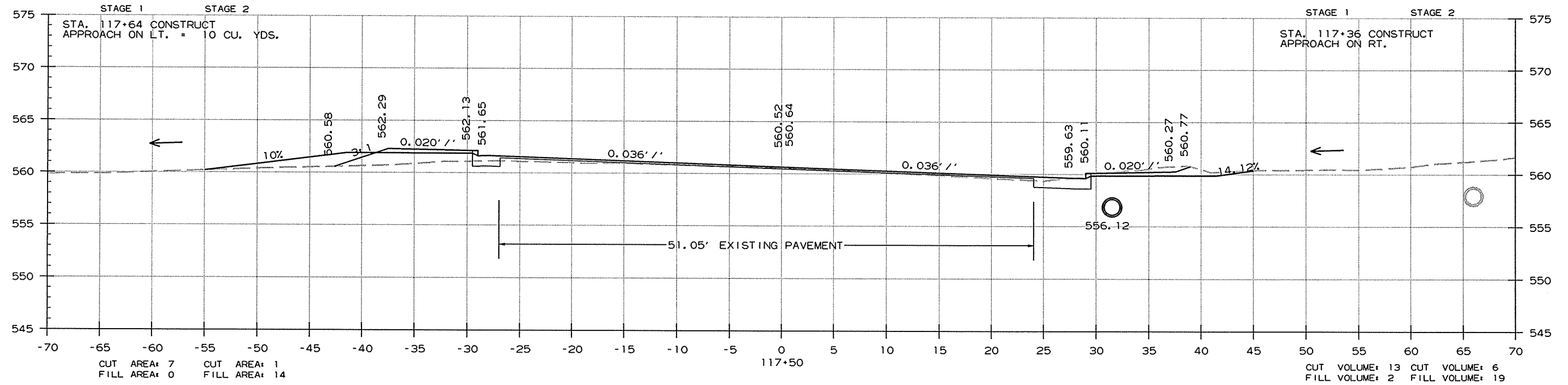
2 CROSS SECTIONS



CROSS SECTION STA. 116+00 TO STA. 116+50

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 061194							98	141

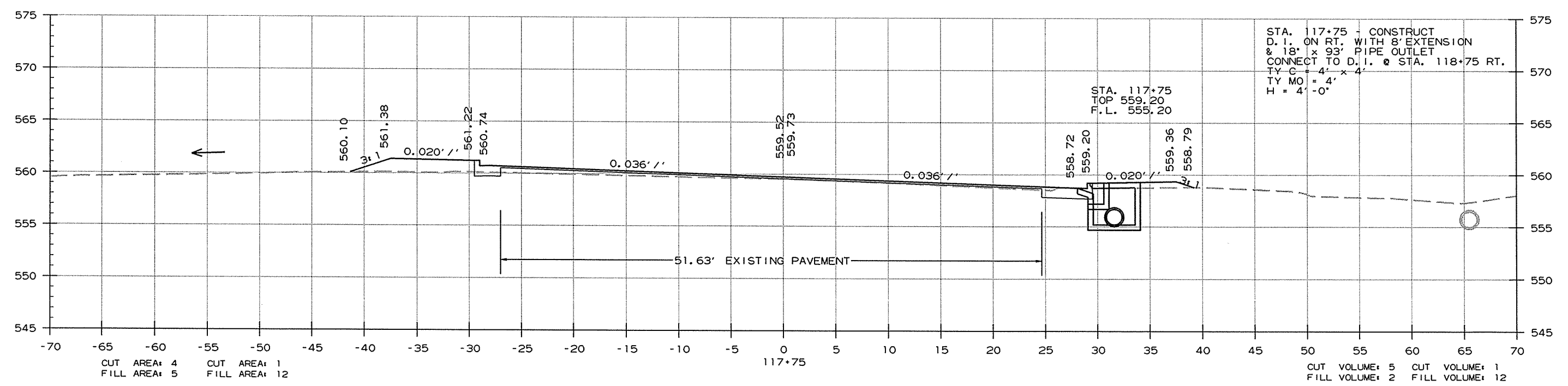
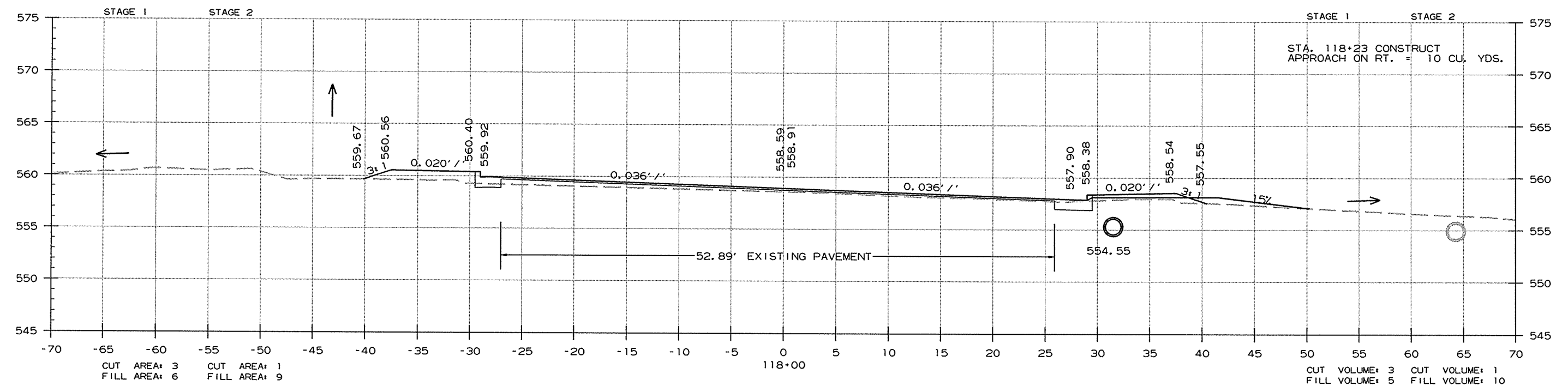
2 CROSS SECTIONS



CROSS SECTION STA. 117+00 TO STA. 117+50

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 061194							99	141

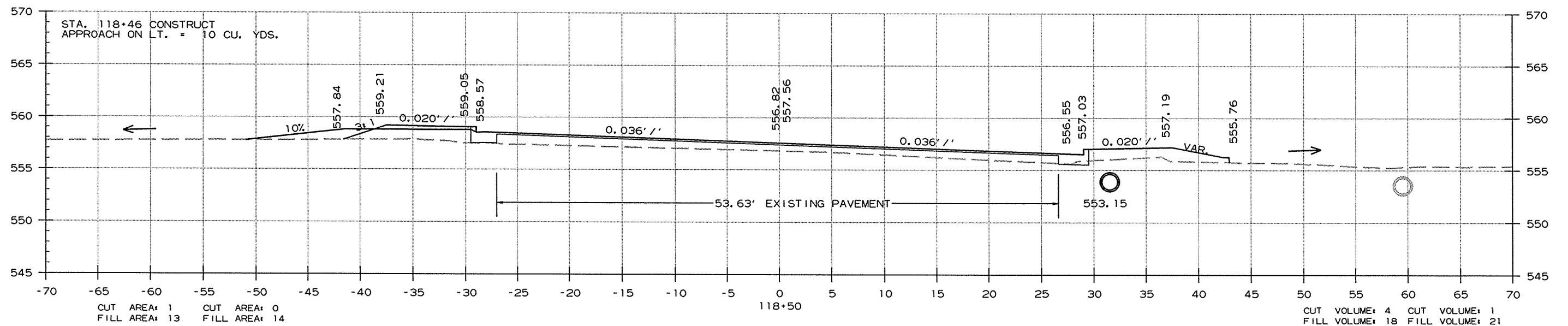
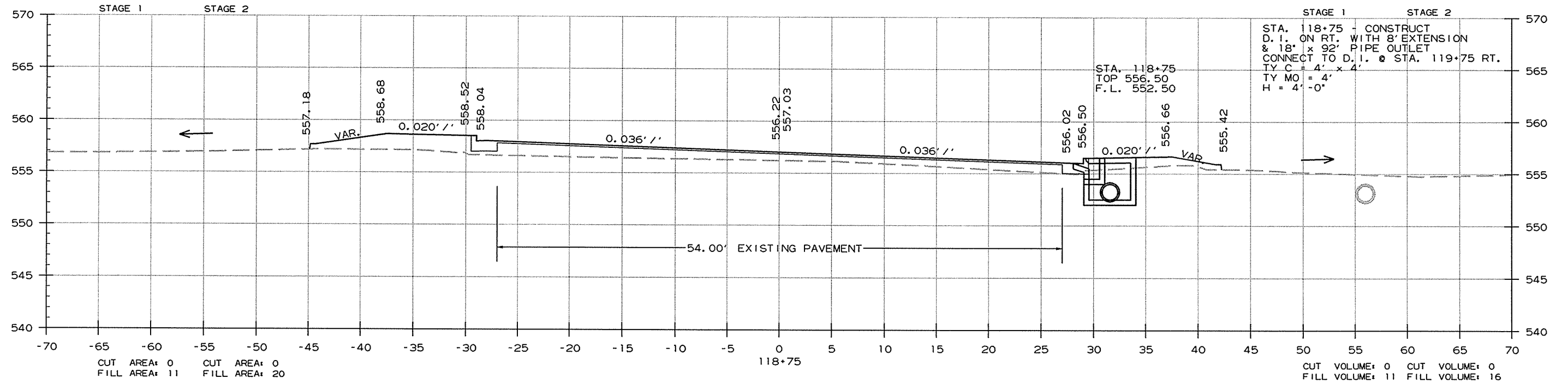
2 CROSS SECTIONS



CROSS SECTION STA. 117+75 TO STA. 118+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. 061194							100	141

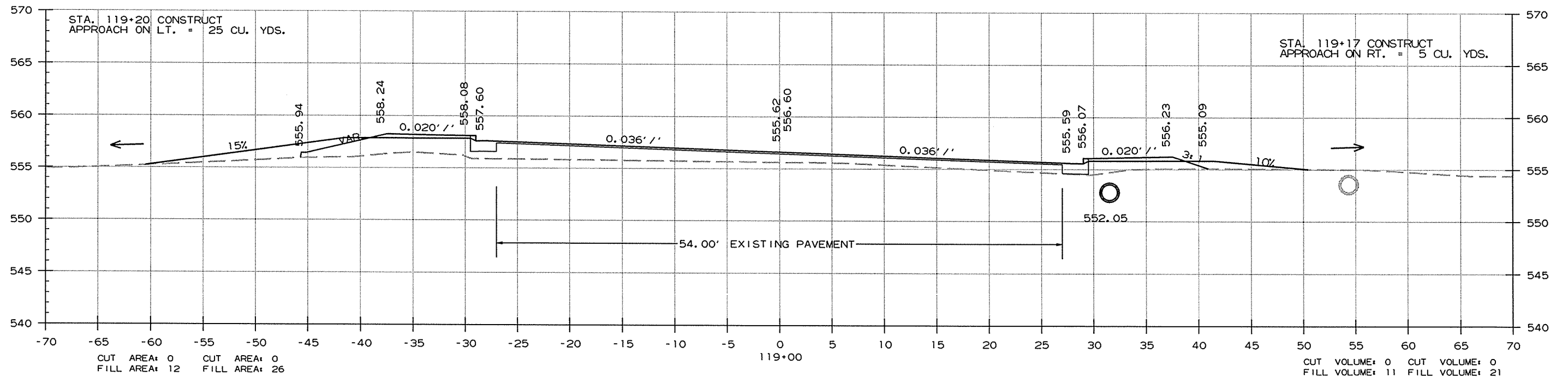
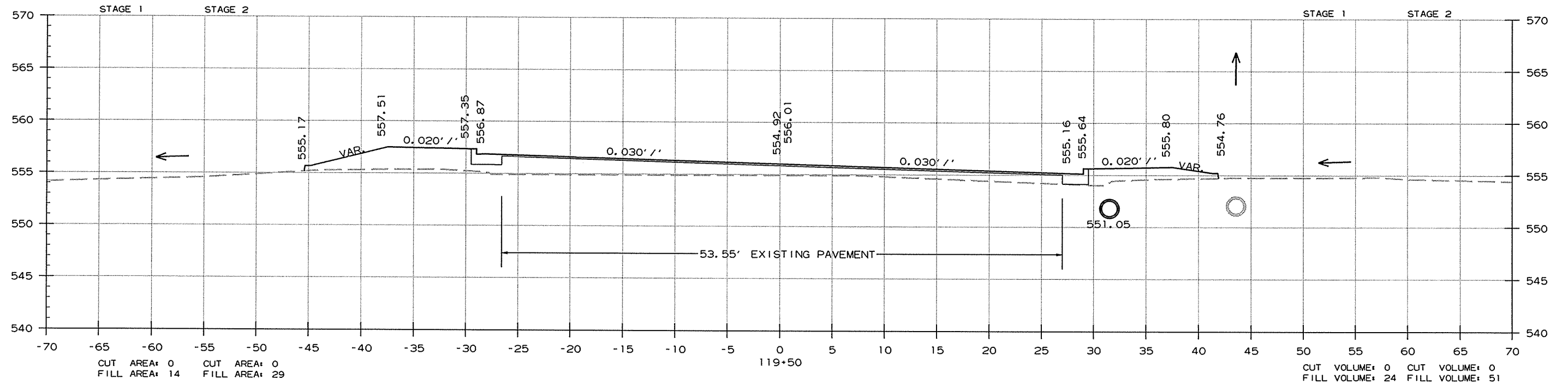
2 CROSS SECTIONS



CROSS SECTION STA. 118+50 TO STA. 118+75

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 061194							101	141

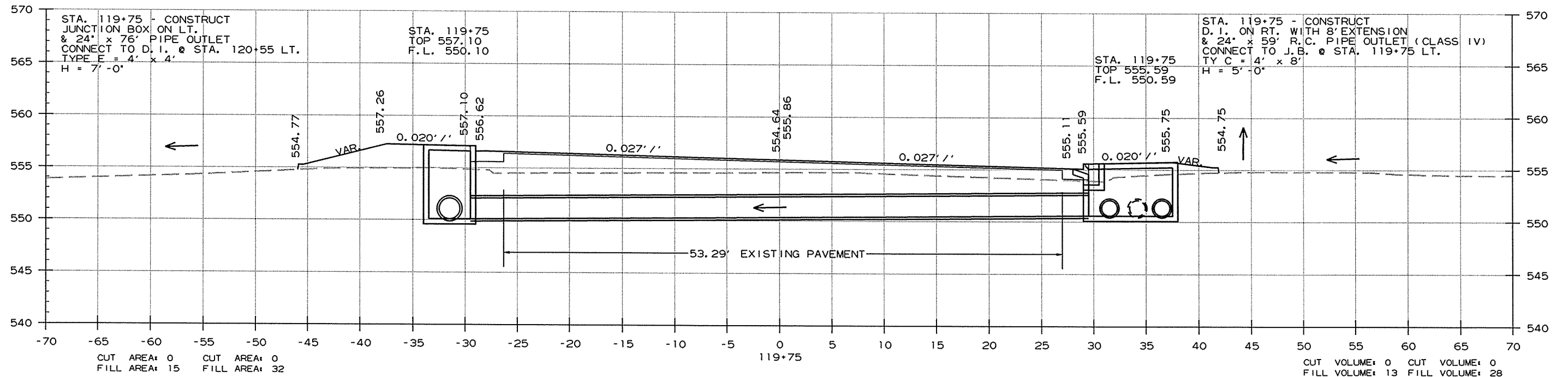
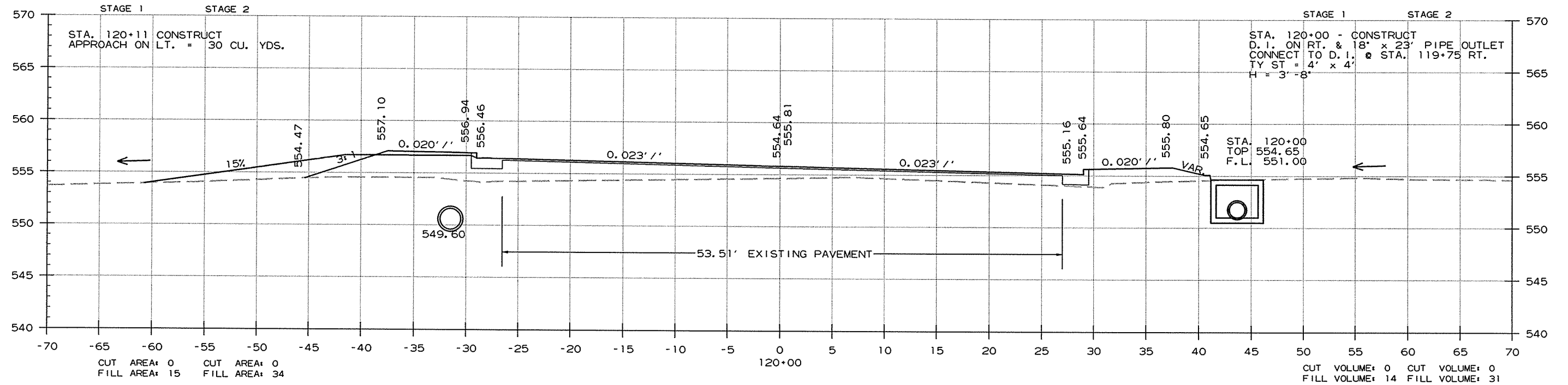
2 CROSS SECTIONS



CROSS SECTION STA. 119+00 TO STA. 119+50

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 061194							102	141

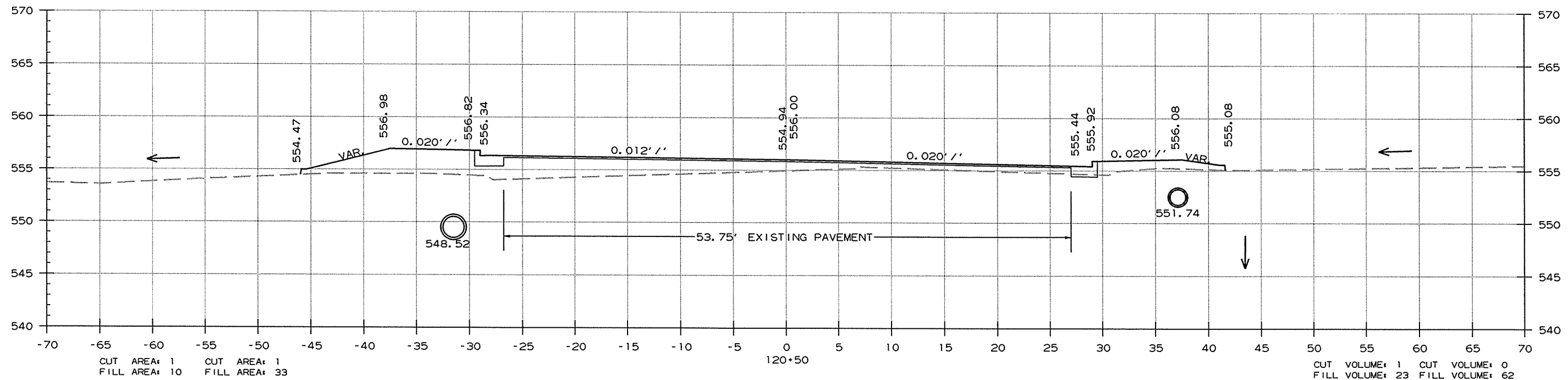
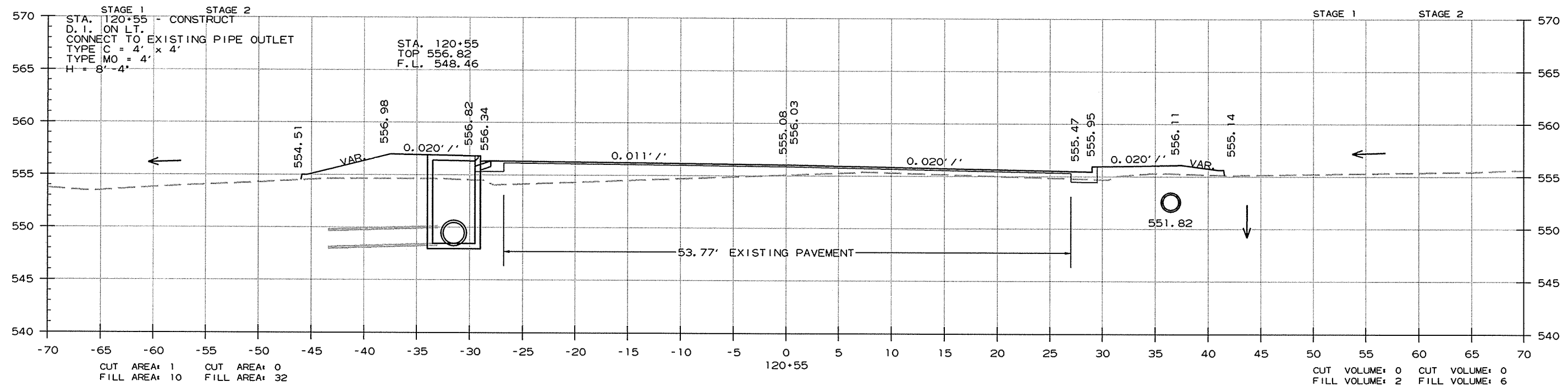
2 CROSS SECTIONS



CROSS SECTION STA. 119+75 TO STA. 120+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. 061194							103	141

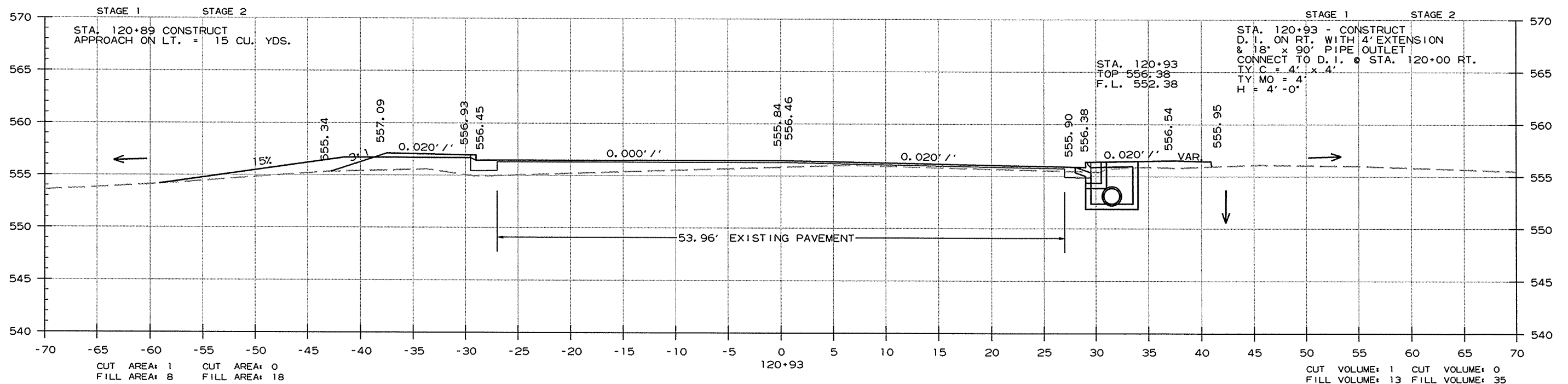
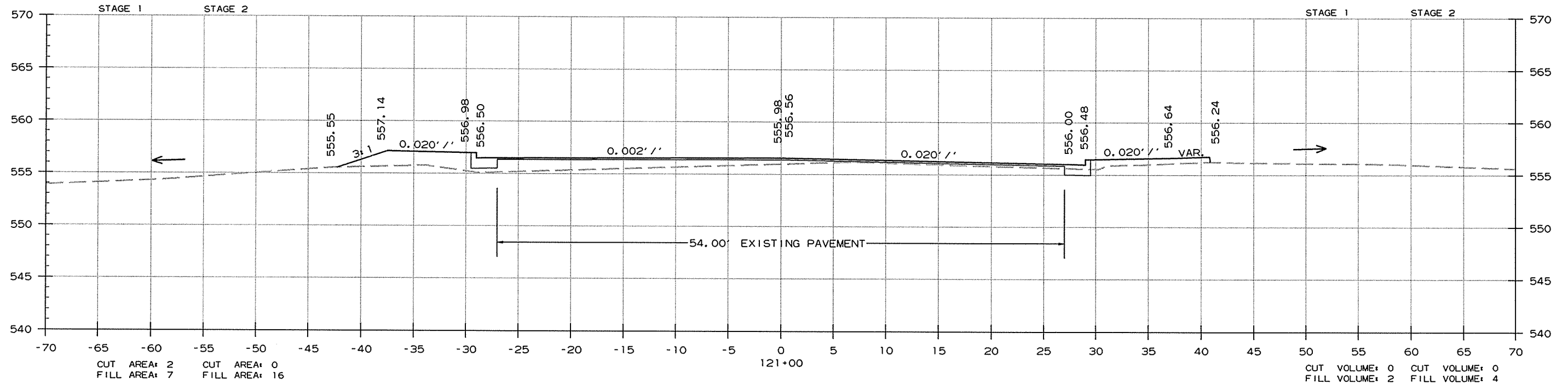
2 CROSS SECTIONS



CROSS SECTION STA. 120+50 TO STA. 120+55

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
							JOB NO.	061194
							SHEET NO.	104
							TOTAL SHEETS	141

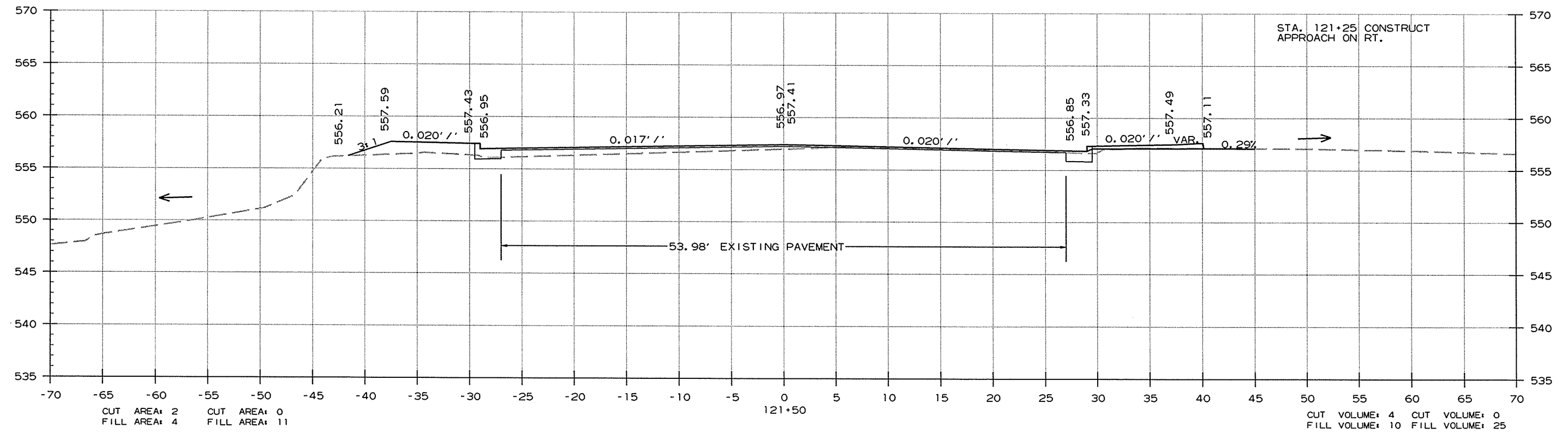
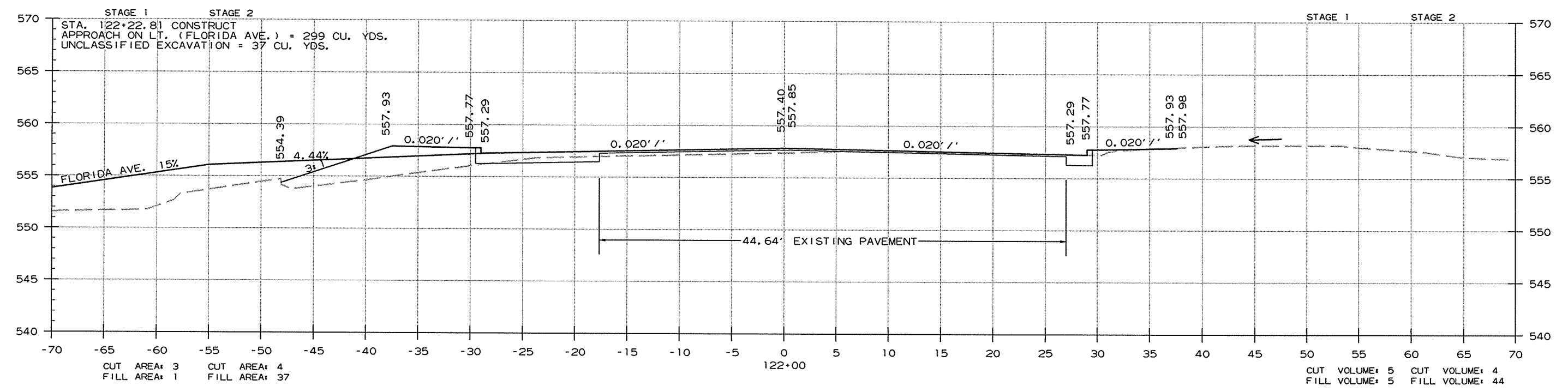
2 CROSS SECTIONS



CROSS SECTION STA. 120+93 TO STA. 121+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. 061194	105	141

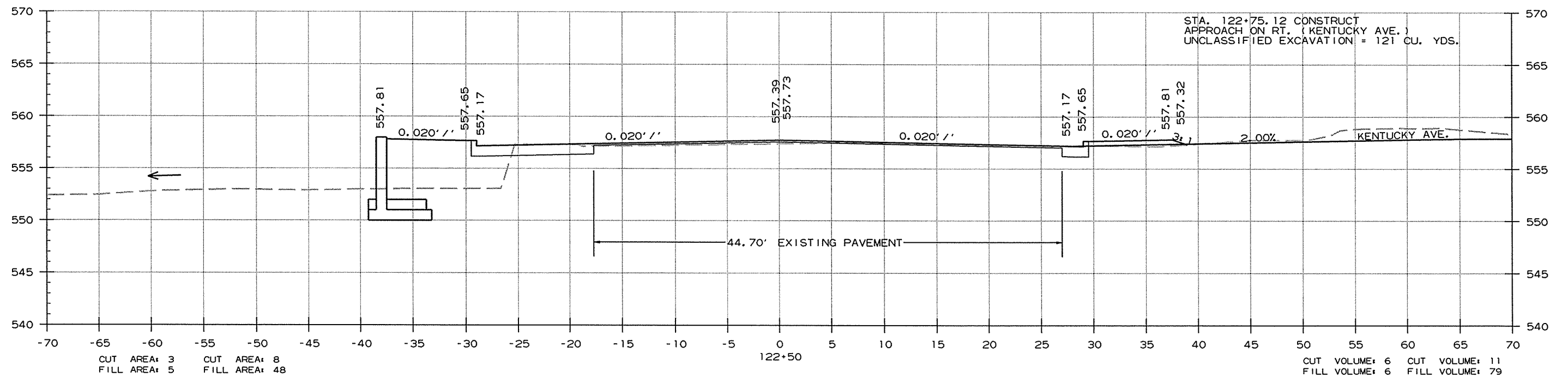
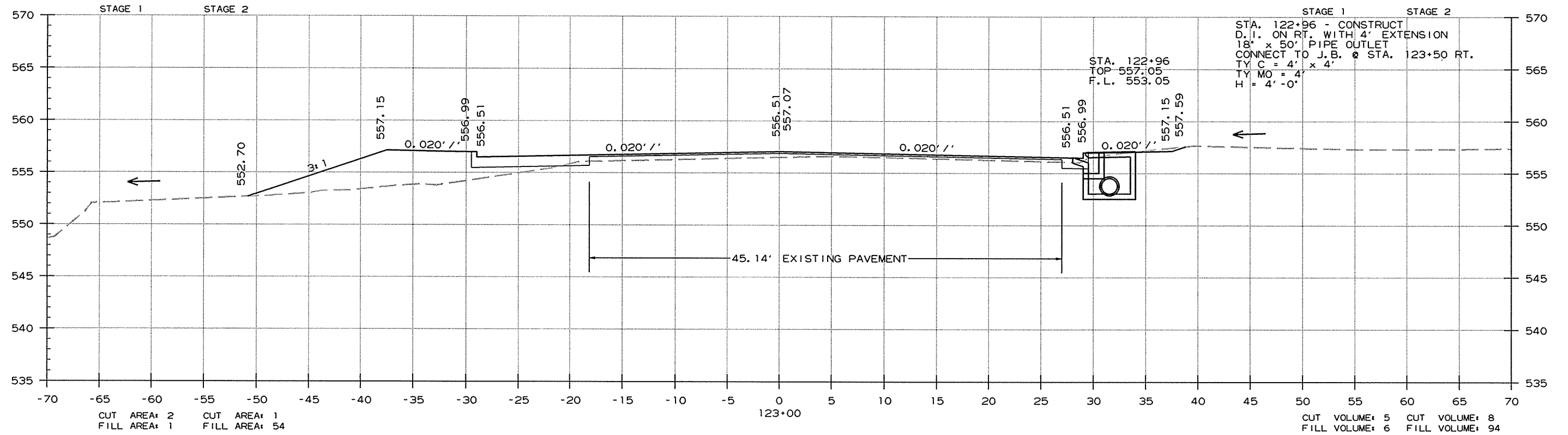
2 CROSS SECTIONS



CROSS SECTION STA. 121+50 TO STA. 122+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. 061194							106	141

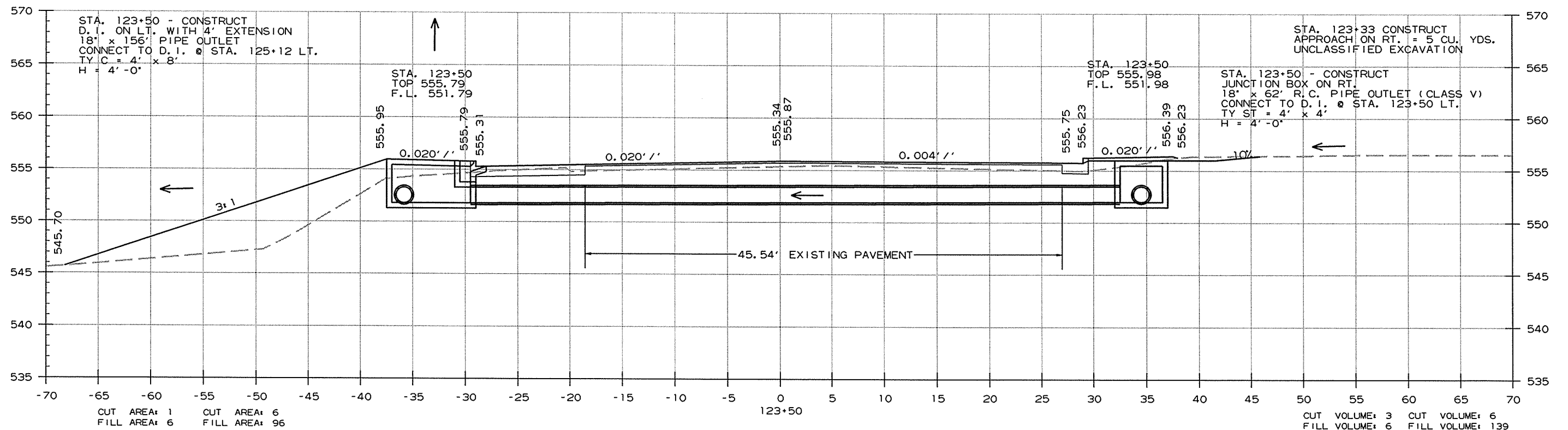
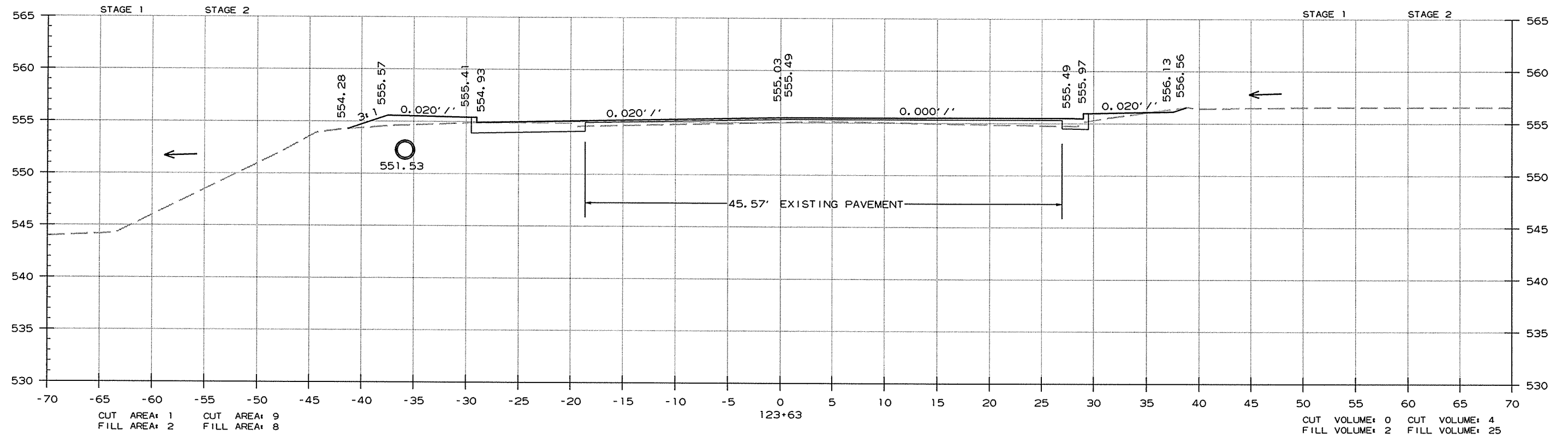
2 CROSS SECTIONS



CROSS SECTION STA. 122+50 TO STA. 123+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. 061194							107	141

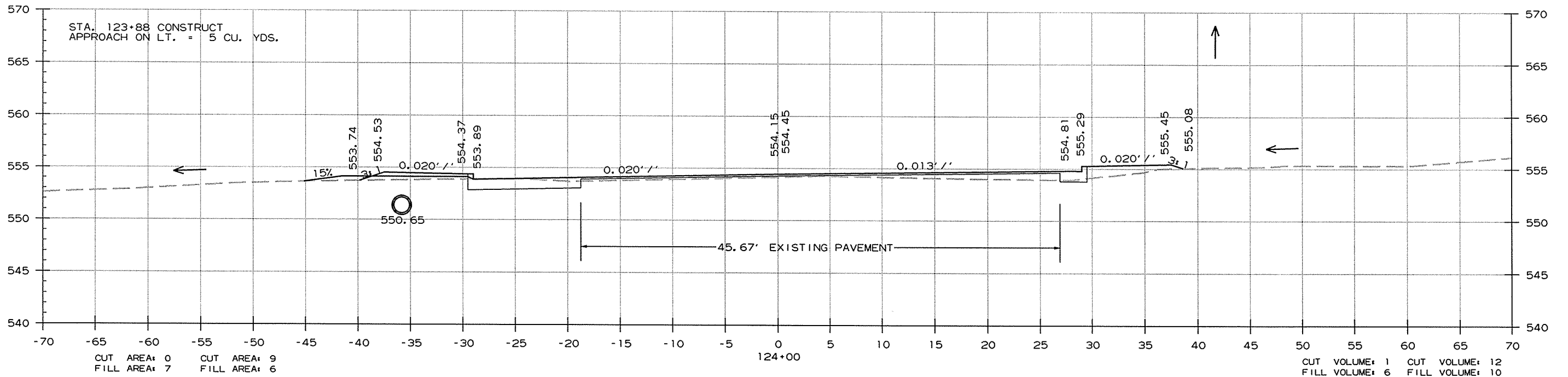
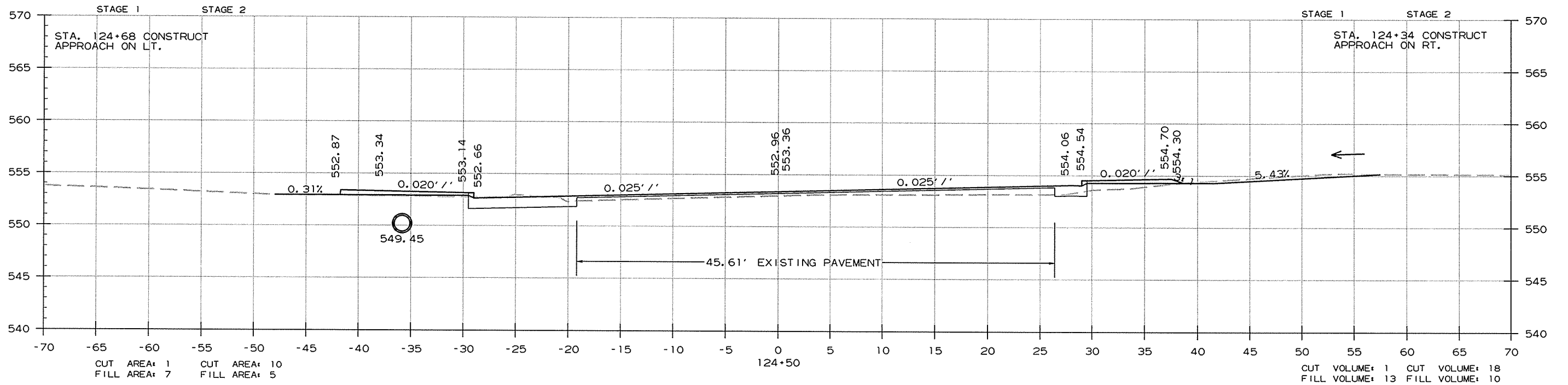
② CROSS SECTIONS



CROSS SECTION STA. 123+50 TO STA. 123+63

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	061194		108	141

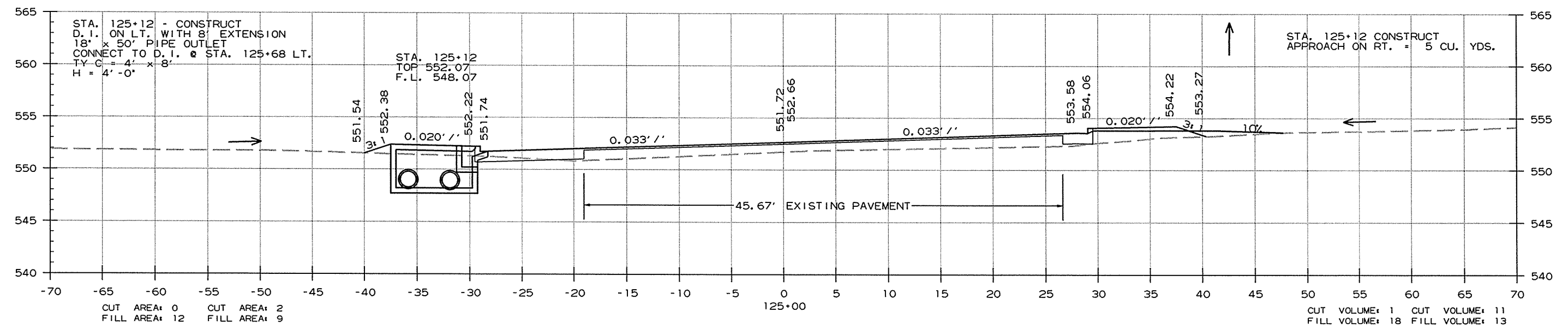
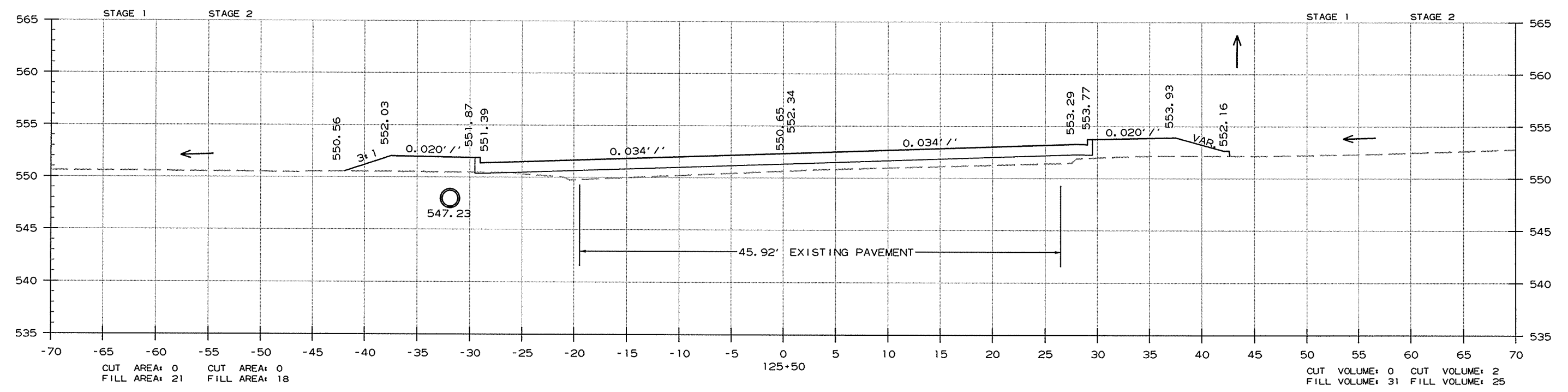
2 CROSS SECTIONS



CROSS SECTION STA. 124+00 TO STA. 124+50

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 061194							109	141

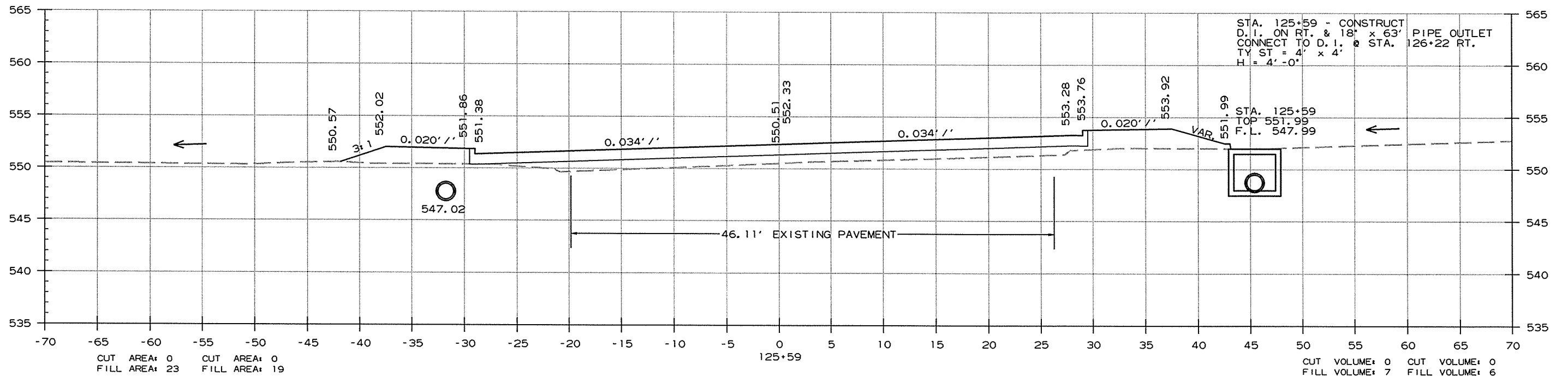
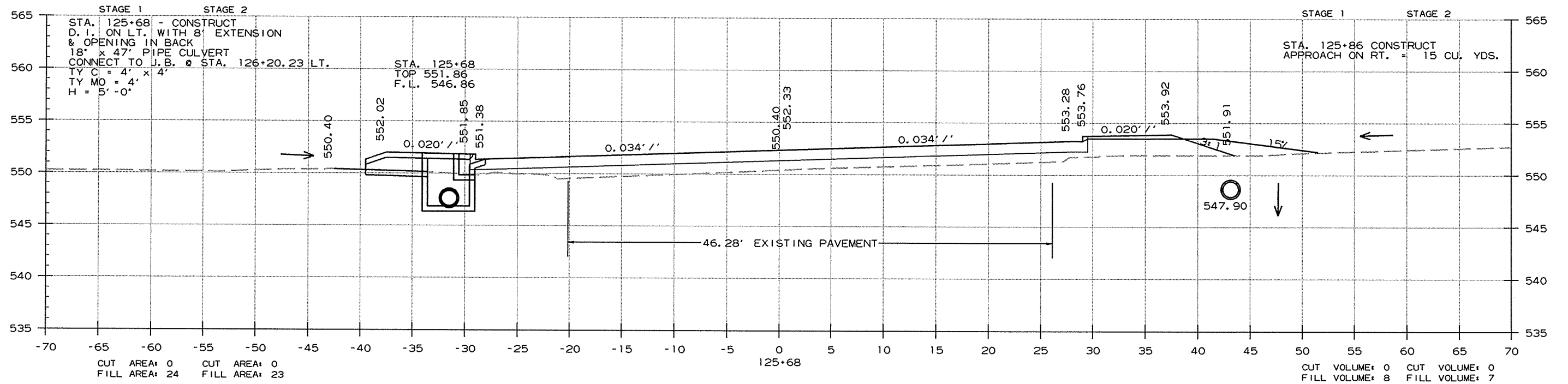
② CROSS SECTIONS



CROSS SECTION STA. 125+00 TO STA. 125+50

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
							JOB NO.	061194
							SHEET NO.	110
							TOTAL SHEETS	141

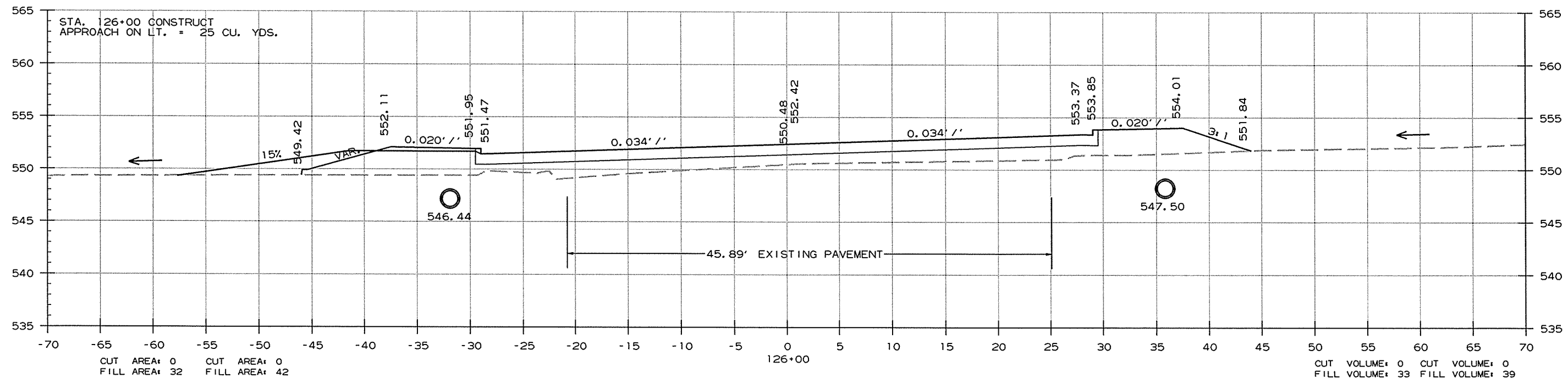
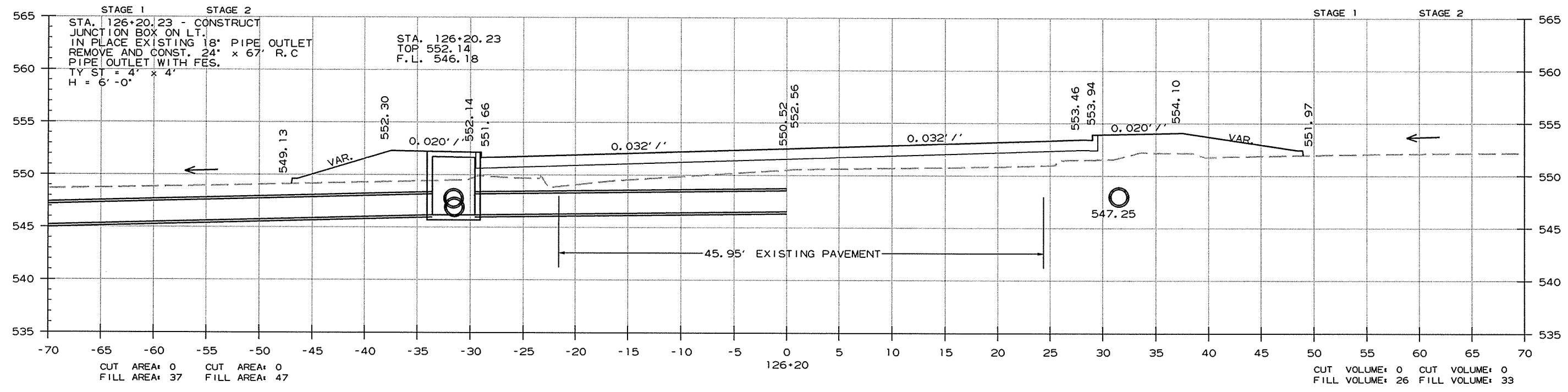
2 CROSS SECTIONS



CROSS SECTION STA. 125+59 TO STA. 125+68

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 061194							111	141

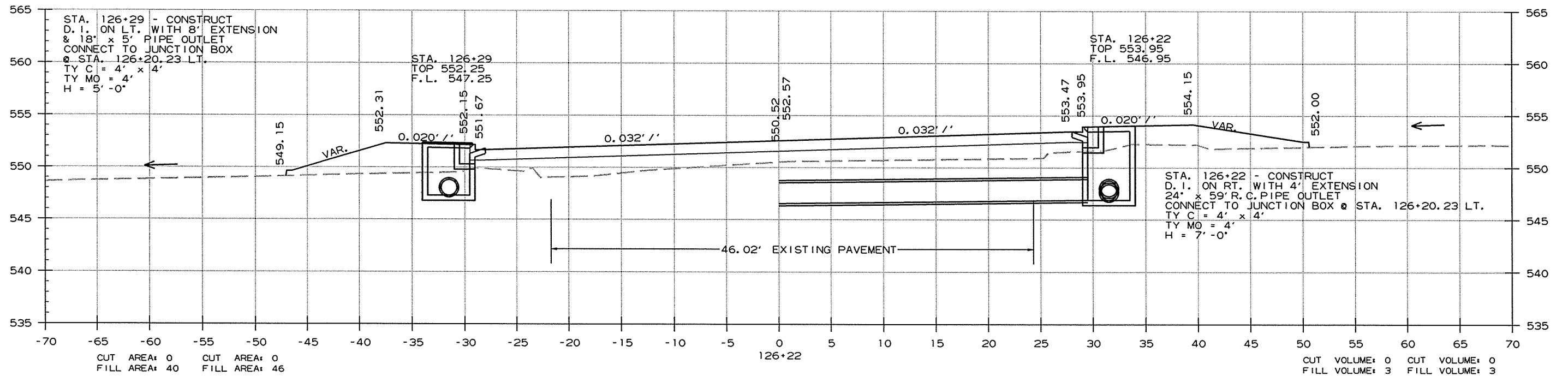
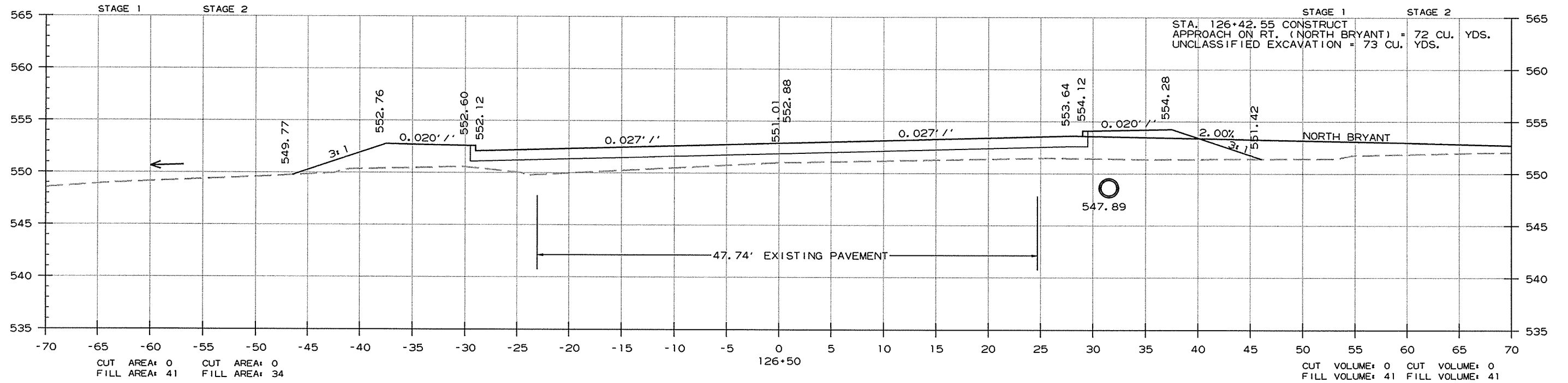
2 CROSS SECTIONS



CROSS SECTION STA. 126+00 TO STA. 126+20

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 061194							112	141

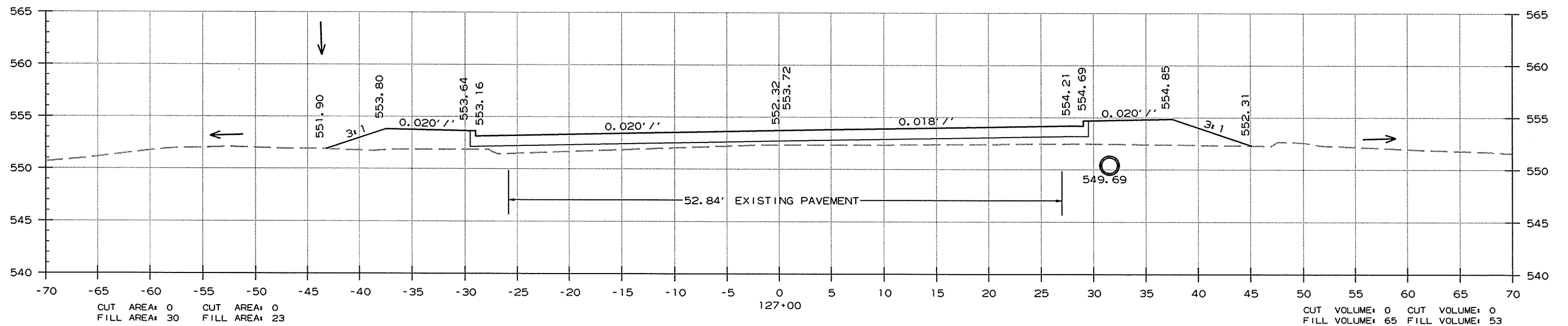
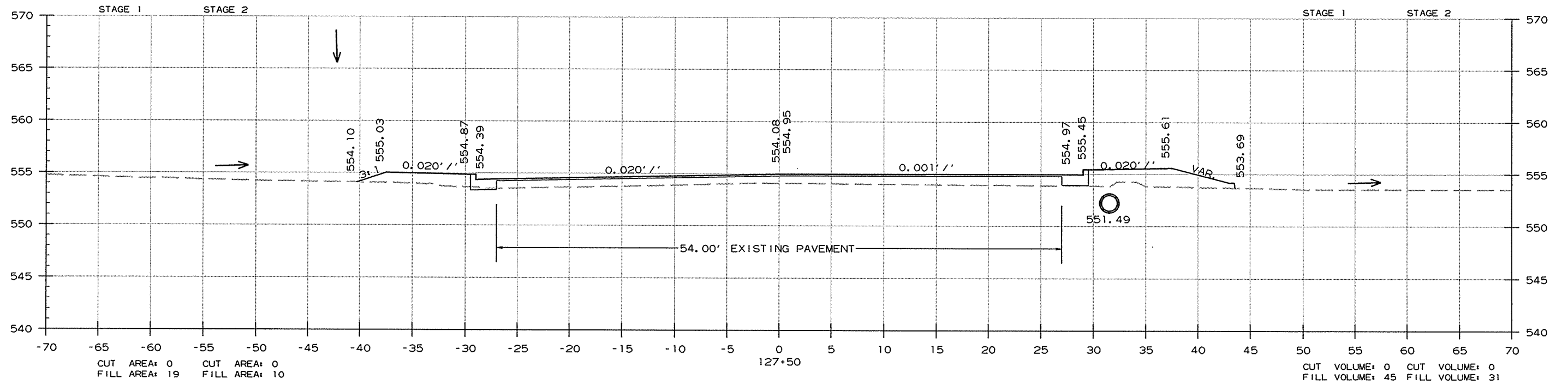
2 CROSS SECTIONS



CROSS SECTION STA. 126+22 TO STA. 126+50

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 061194							113	141

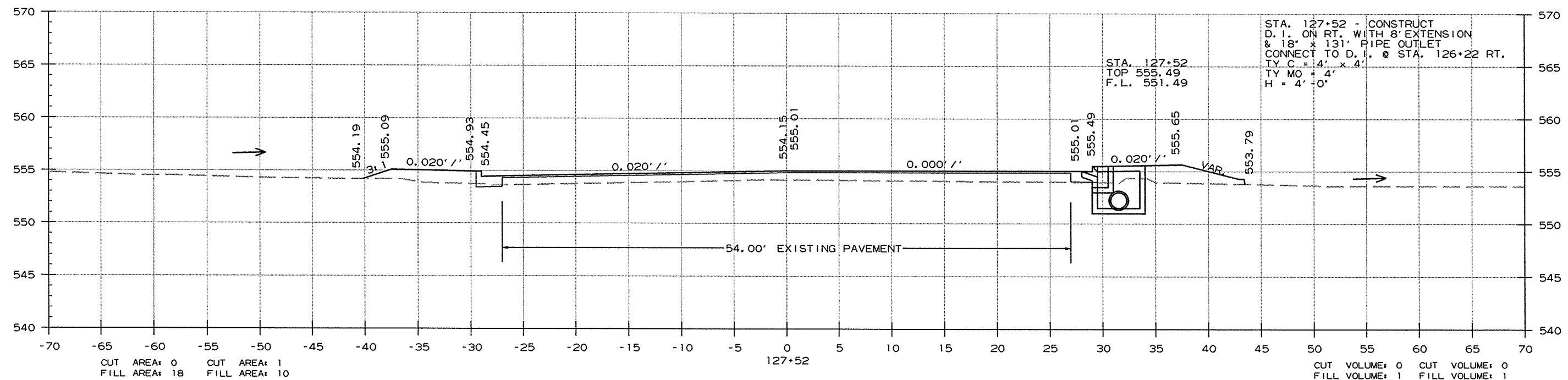
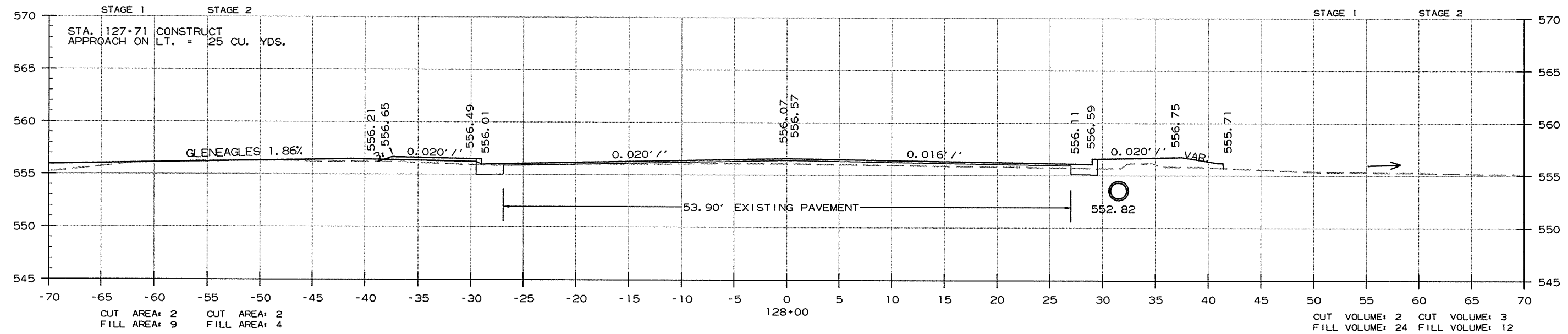
2 CROSS SECTIONS



CROSS SECTION STA. 127+00 TO STA. 127+50

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 061194							114	141

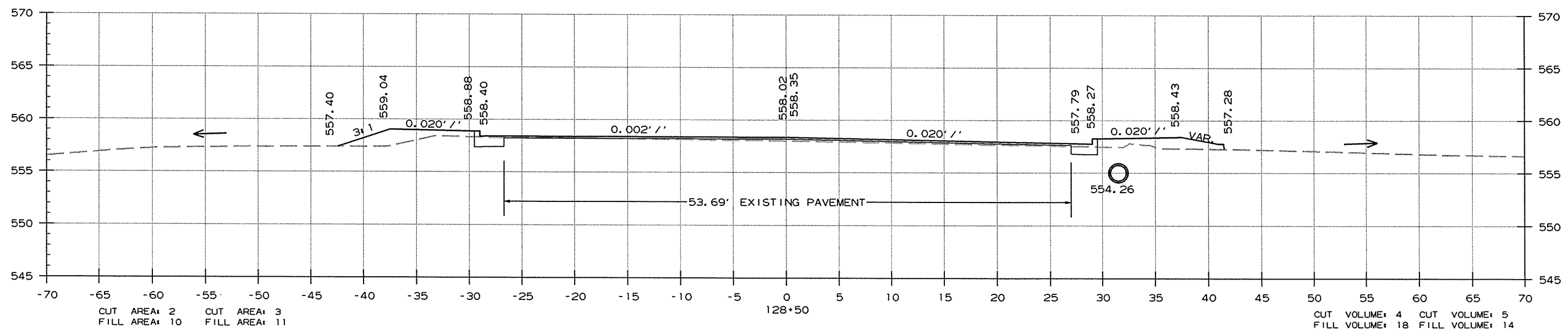
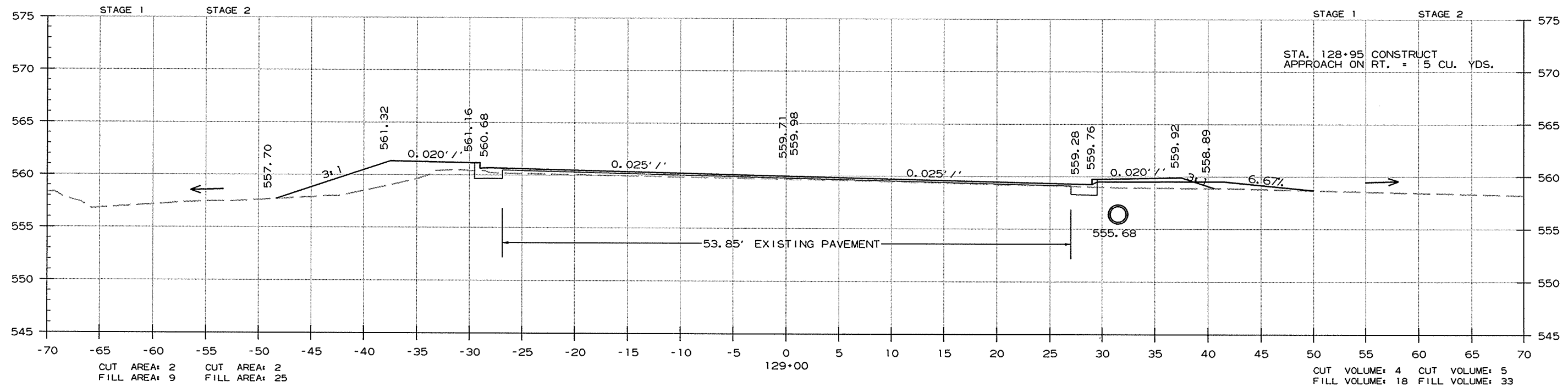
② CROSS SECTIONS



CROSS SECTION STA. 127+52 TO STA. 128+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. 061194							115	141

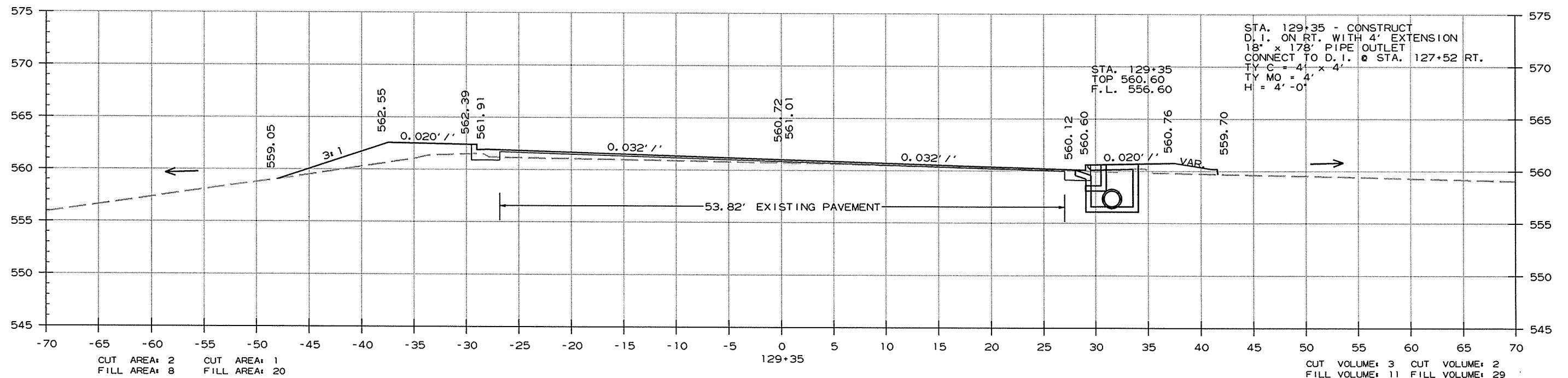
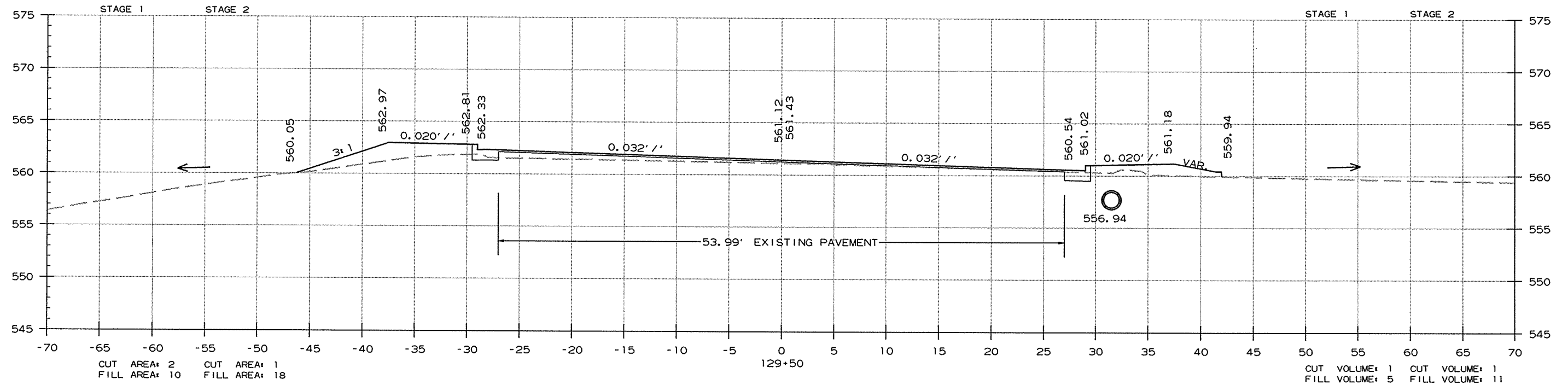
② CROSS SECTIONS



CROSS SECTION STA. 128+50 TO STA. 129+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. 061194	116	141

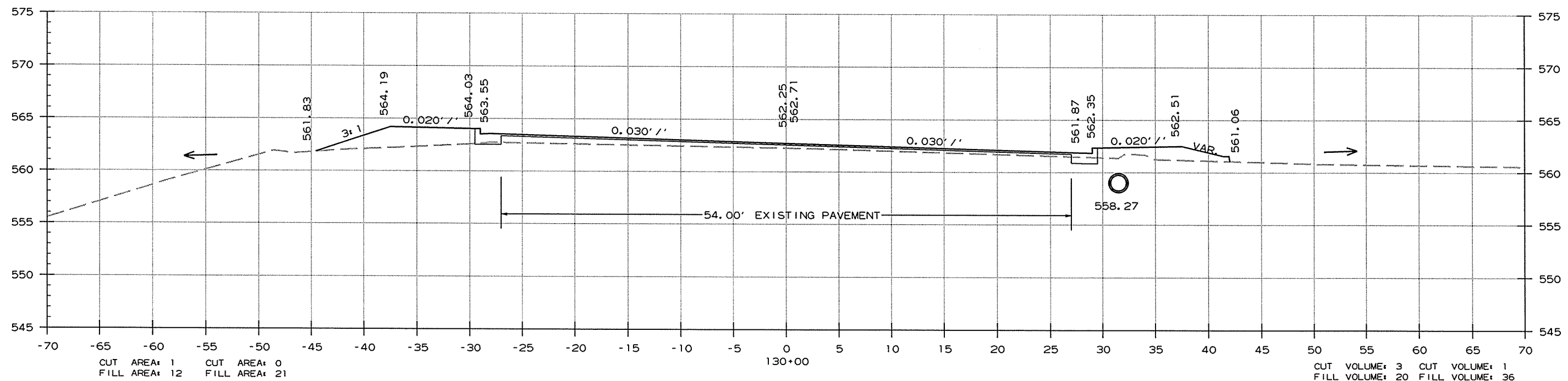
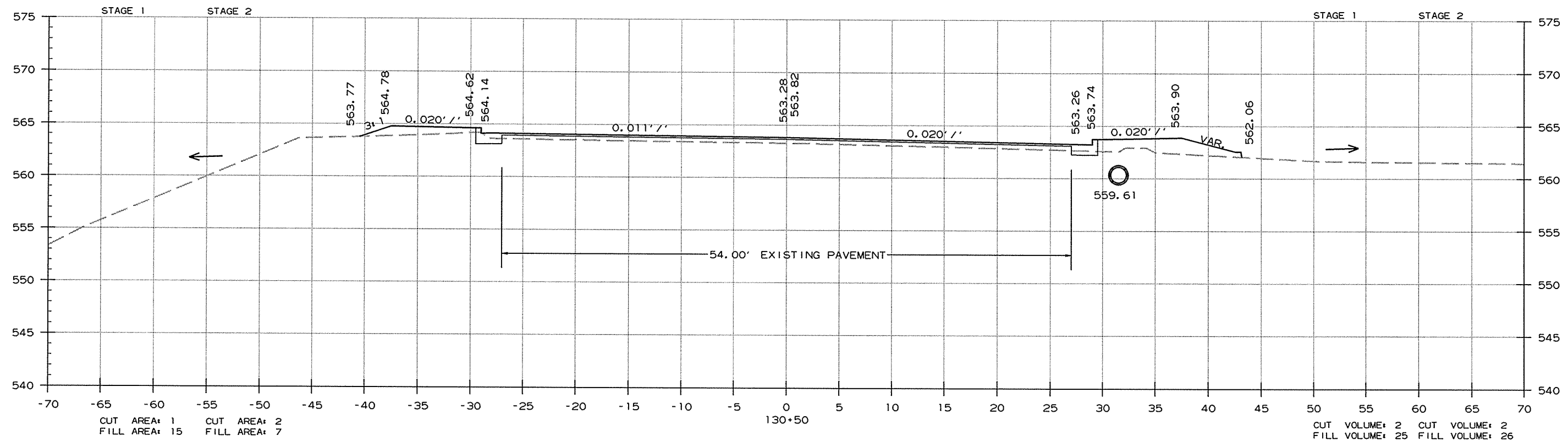
2 CROSS SECTIONS



CROSS SECTION STA. 129+35 TO STA. 129+50

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS	
				6	ARK.				
JOB NO.							061194	117	141

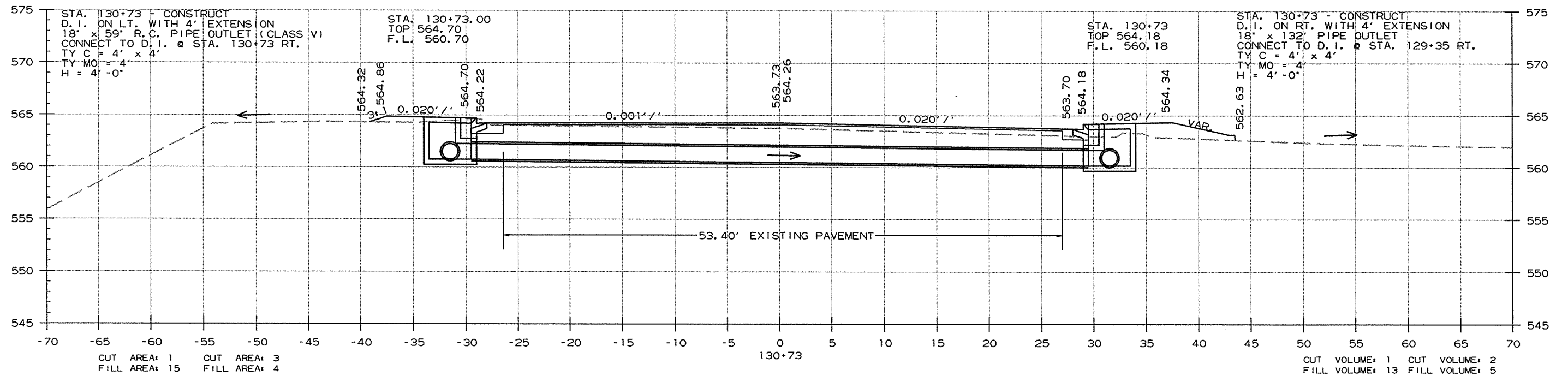
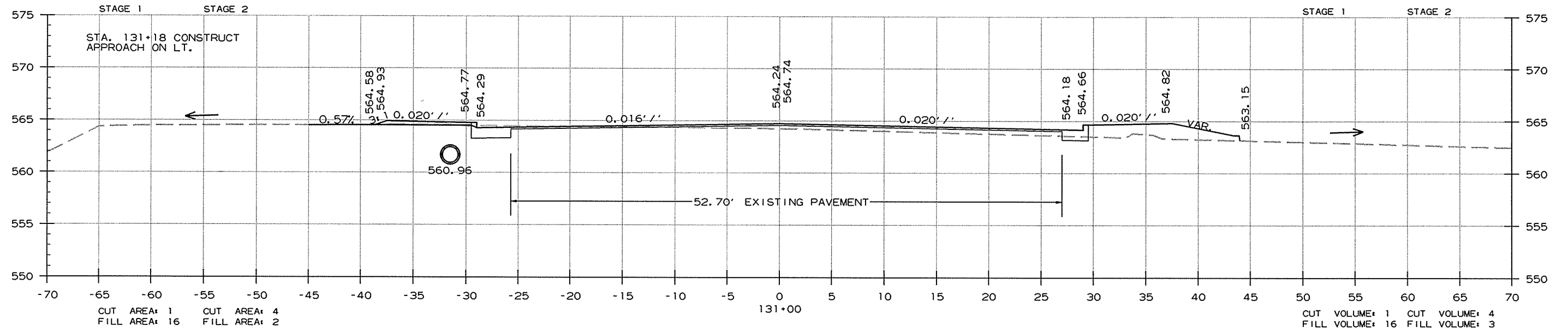
2 CROSS SECTIONS



CROSS SECTION STA. 130+00 TO STA. 130+50

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 061194							118	141

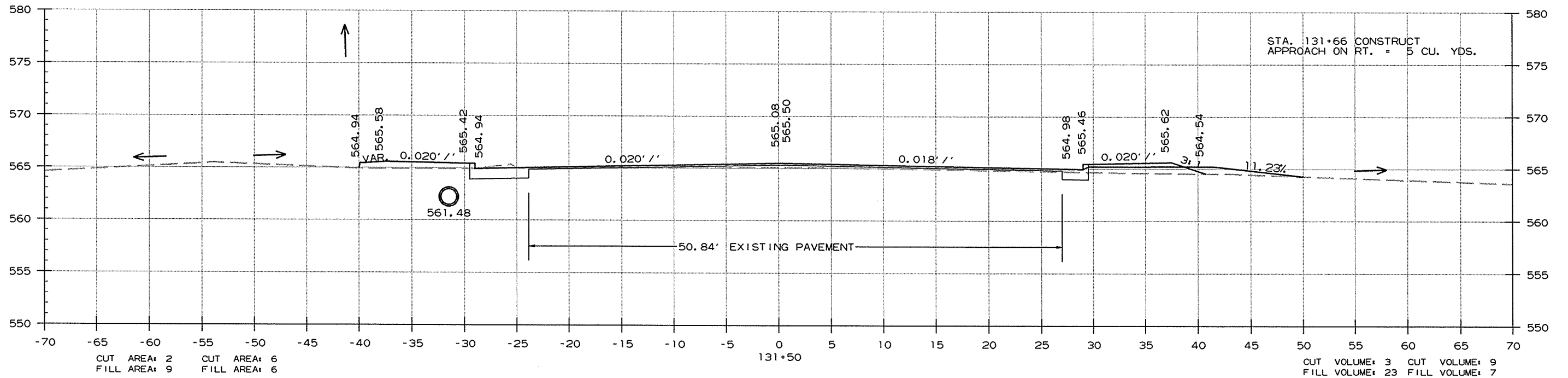
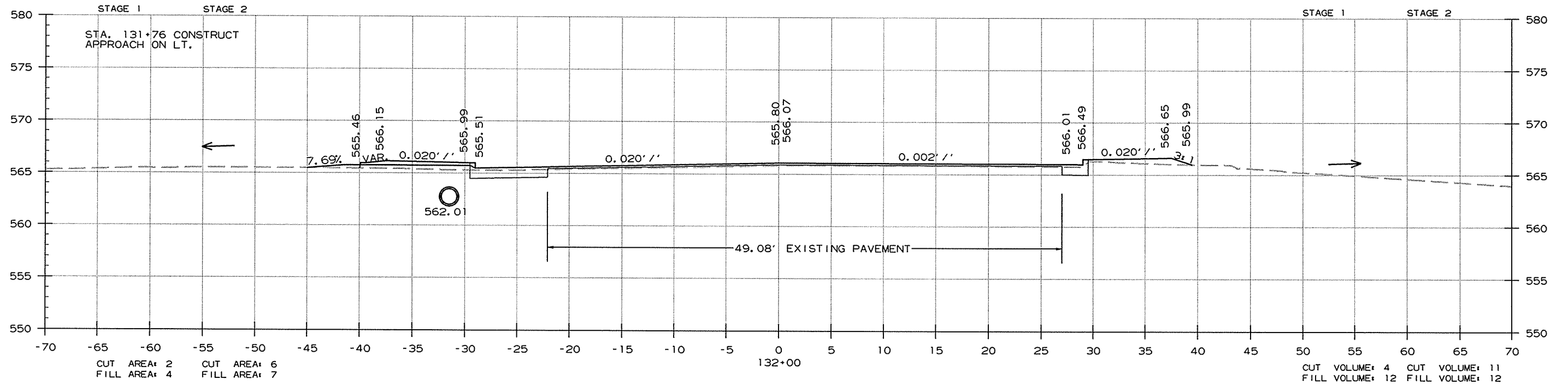
2 CROSS SECTIONS



CROSS SECTION STA. 130+73 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. 061194	119	141

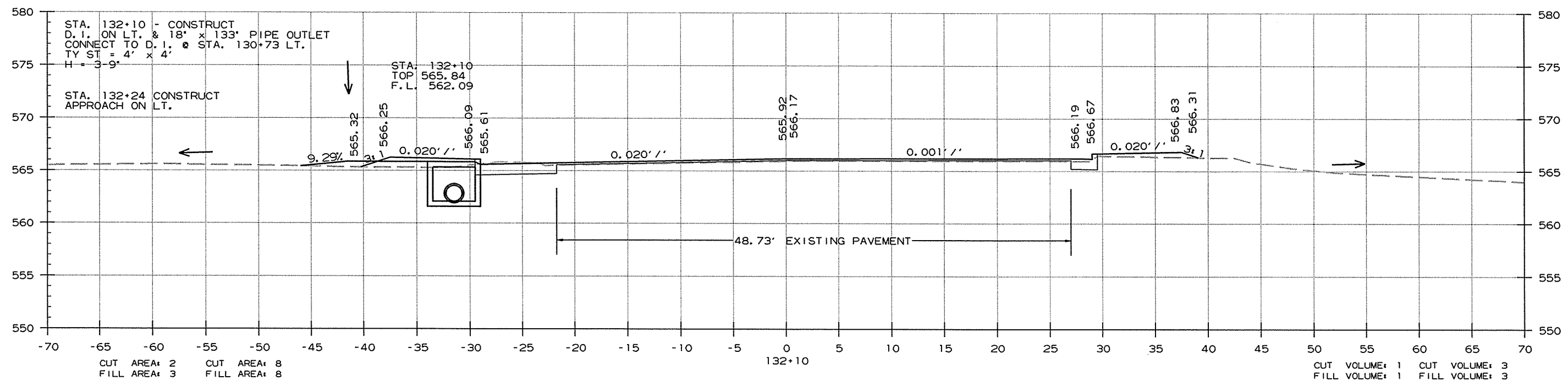
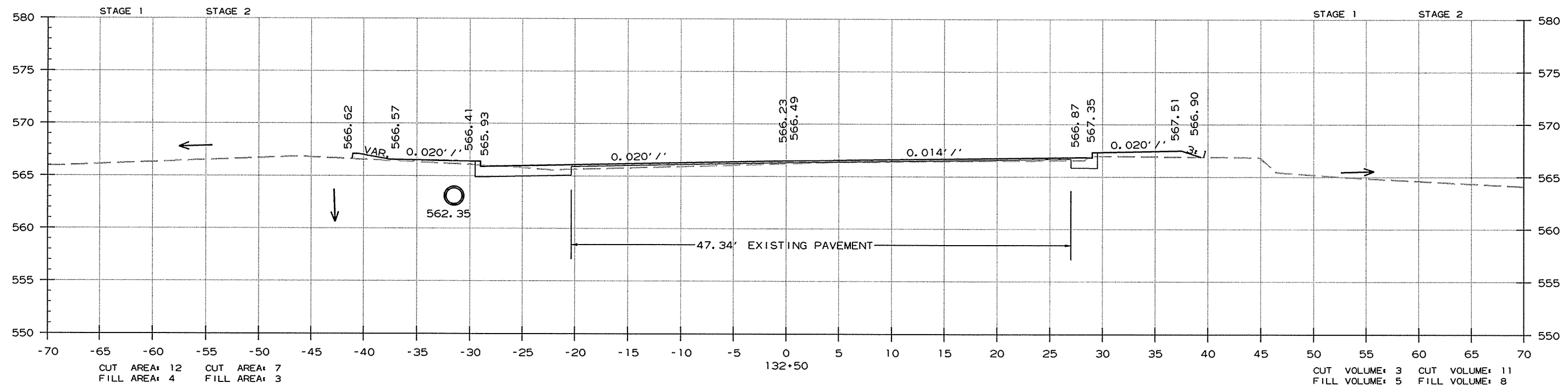
2 CROSS SECTIONS



CROSS SECTION STA. 131+50 TO STA. 132+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. 061194							120	141

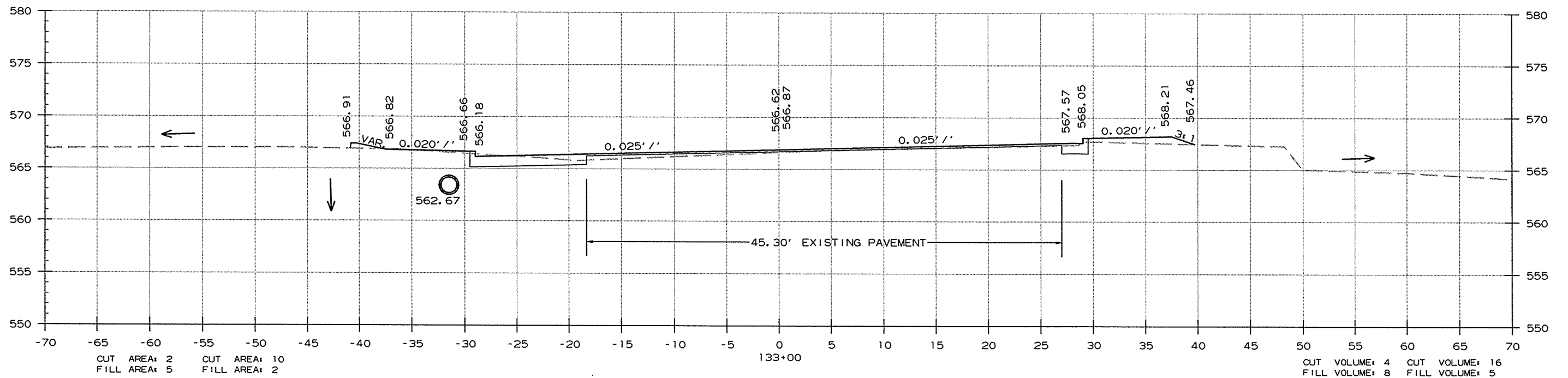
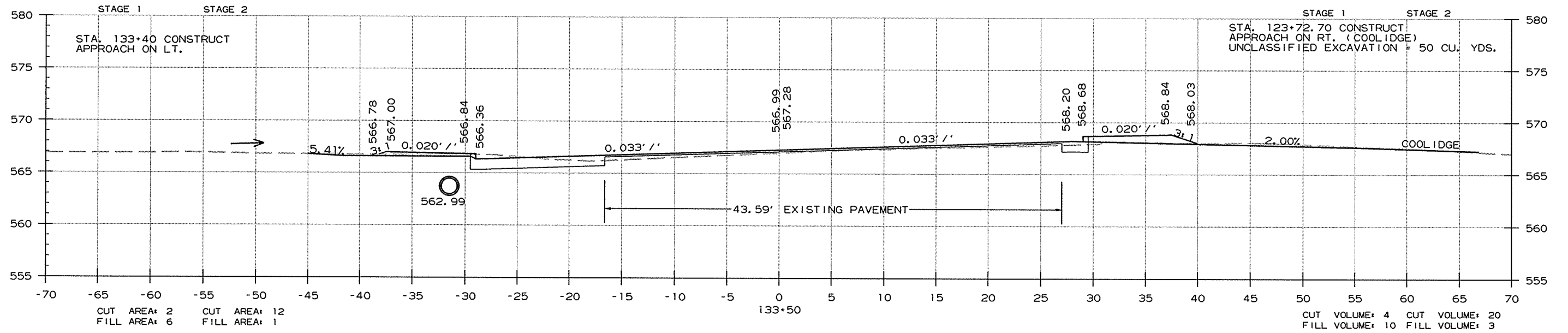
2 CROSS SECTIONS



CROSS SECTION STA. 132+10 TO STA. 132+50

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 061194							121	141

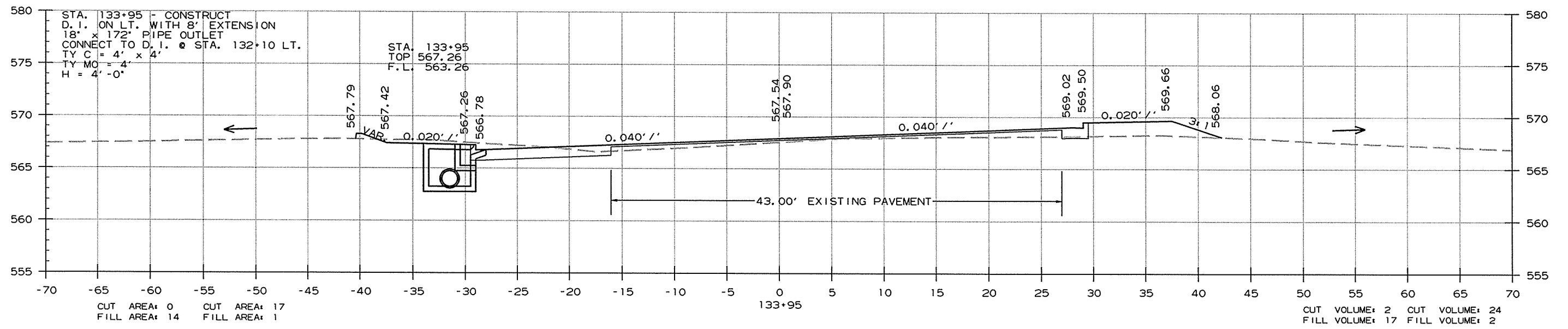
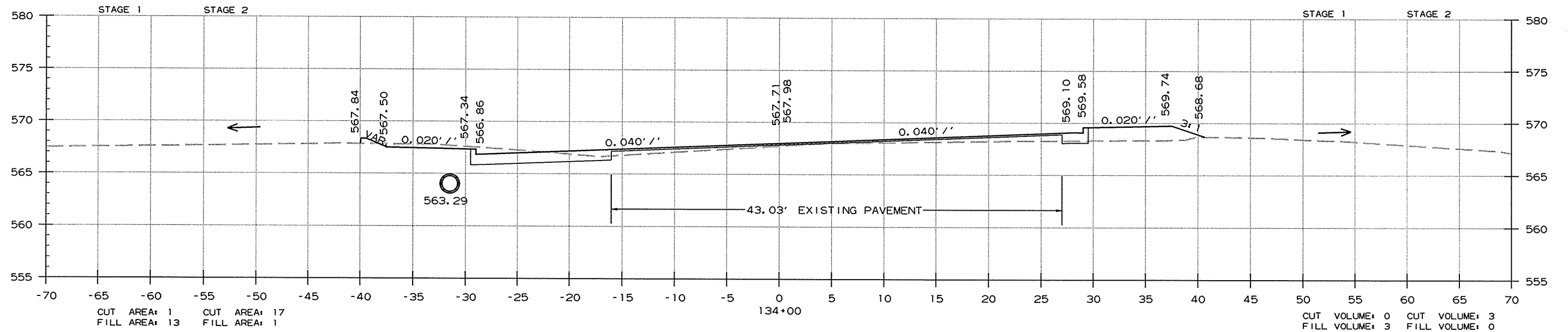
2 CROSS SECTIONS



CROSS SECTION STA. 133+00 TO STA. 133+50

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 061194							122	141

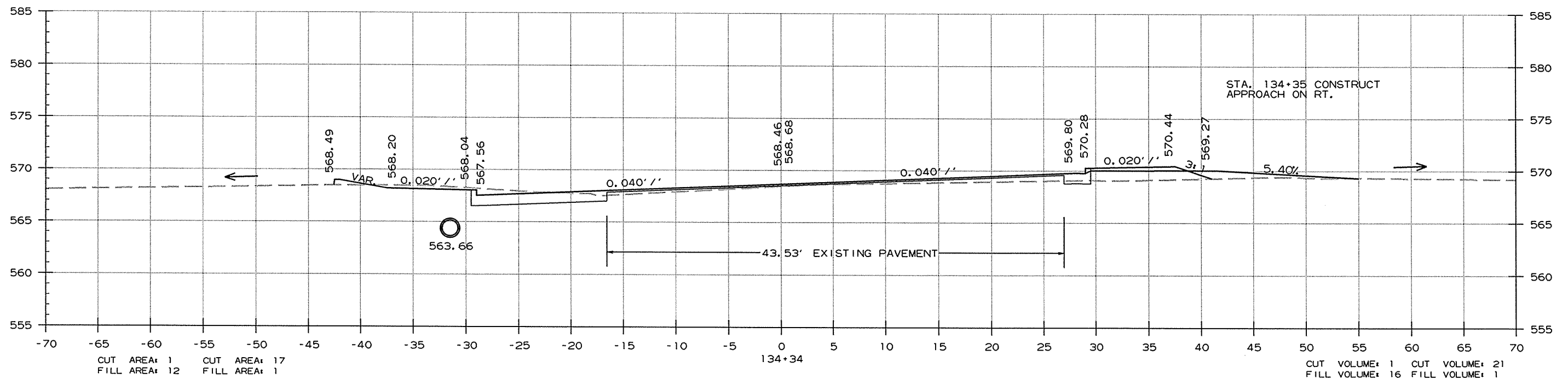
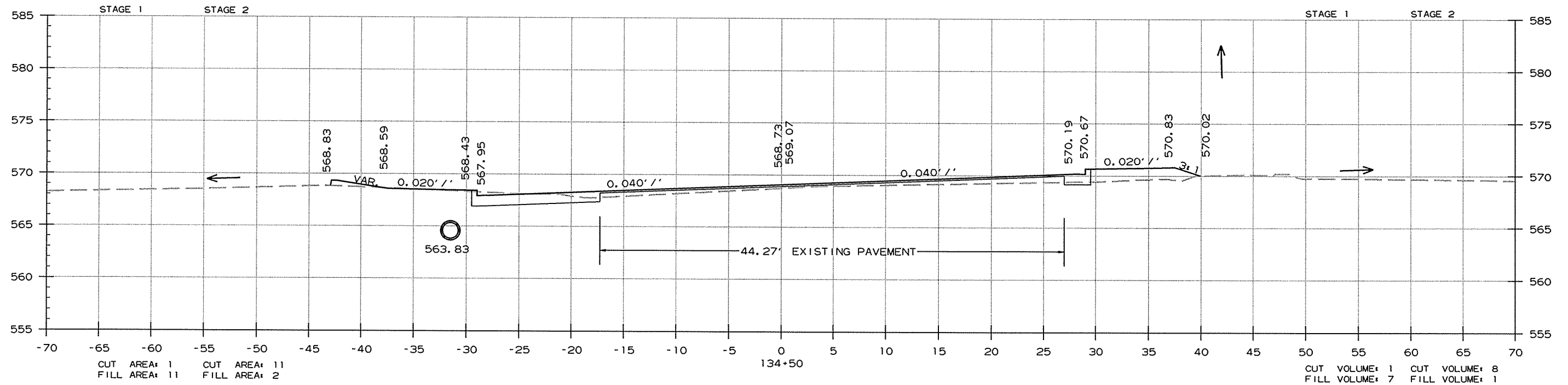
2 CROSS SECTIONS



CROSS SECTION STA. 133+95 TO STA. 134+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. 061194							123	141

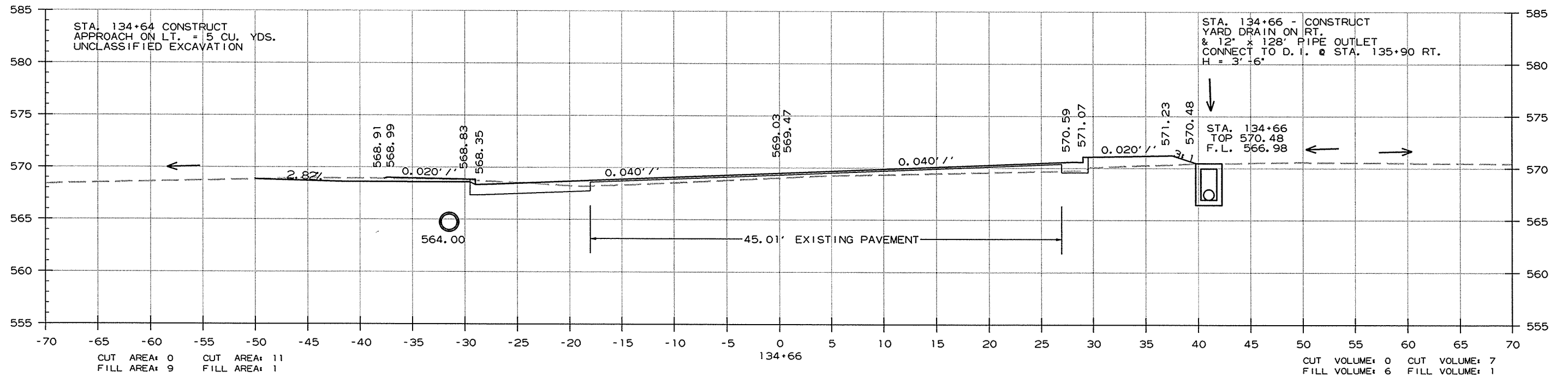
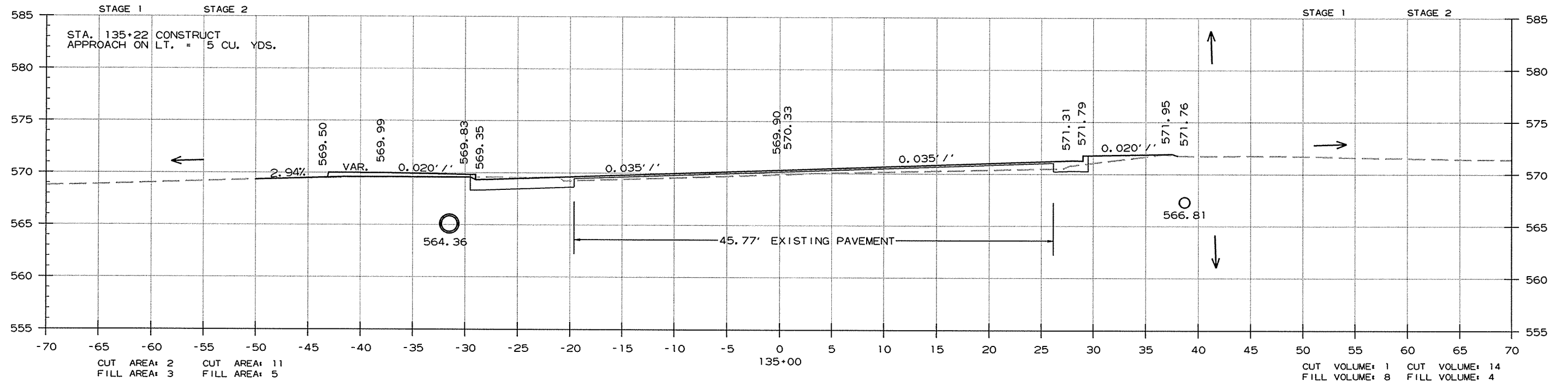
2 CROSS SECTIONS



CROSS SECTION STA. 134+34 TO STA. 134+50

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 061194							124	141

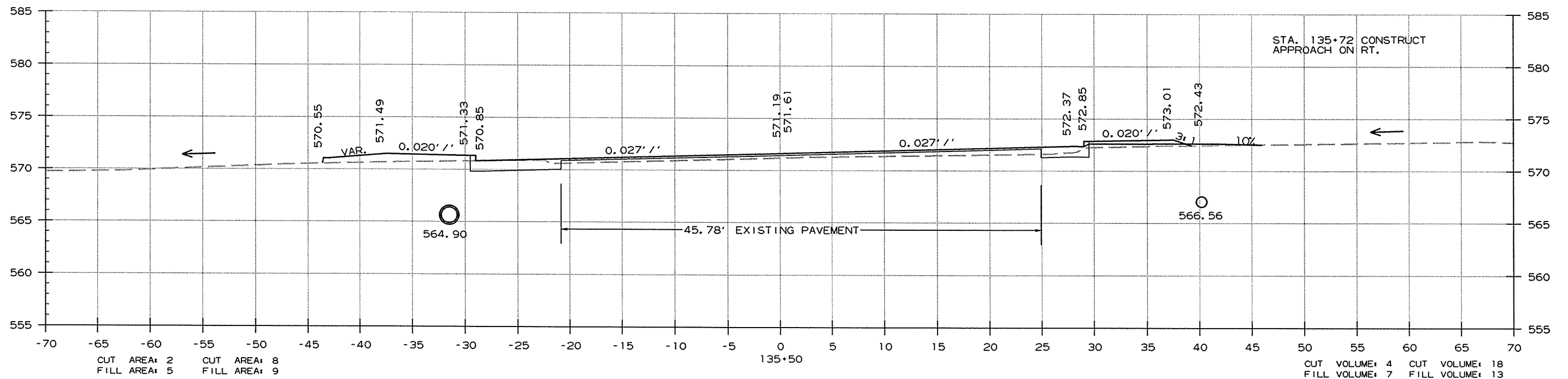
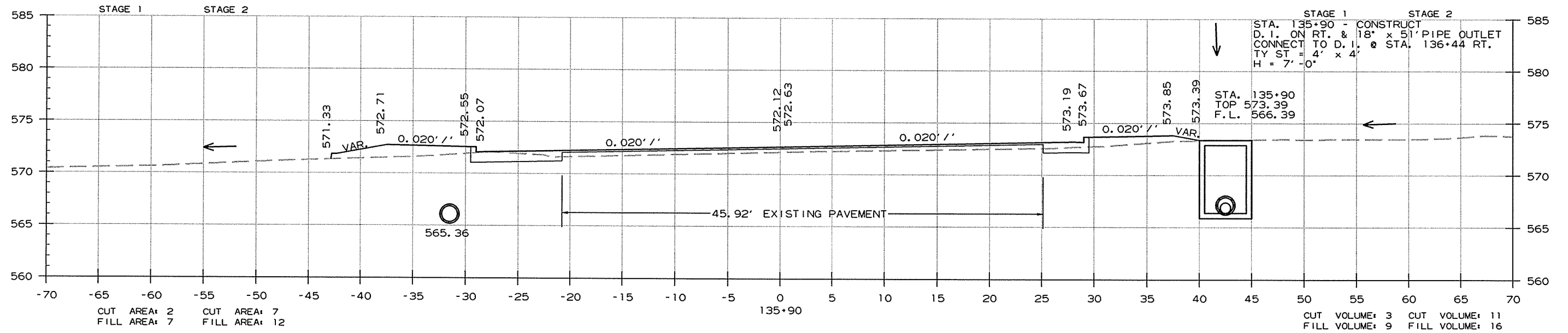
2 CROSS SECTIONS



CROSS SECTION STA. 134+66 TO STA. 135+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. 061194	125	141

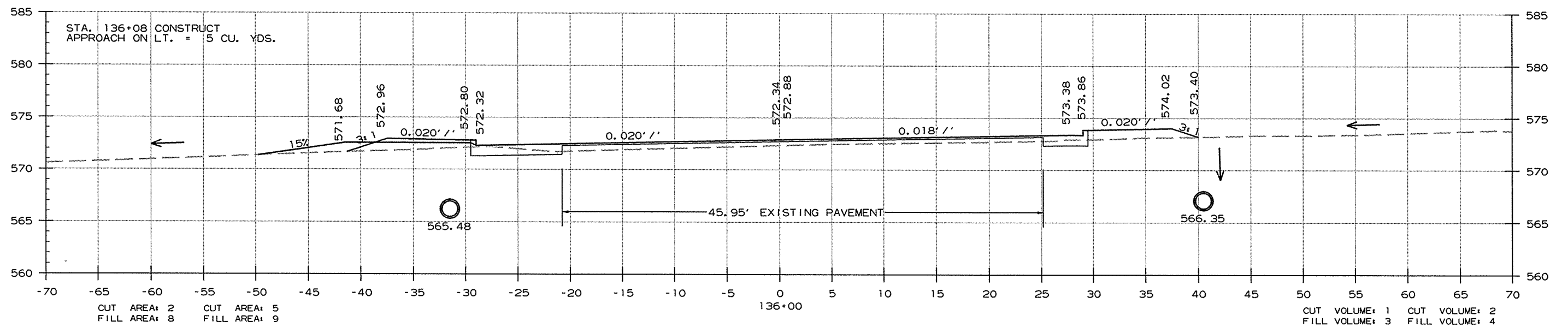
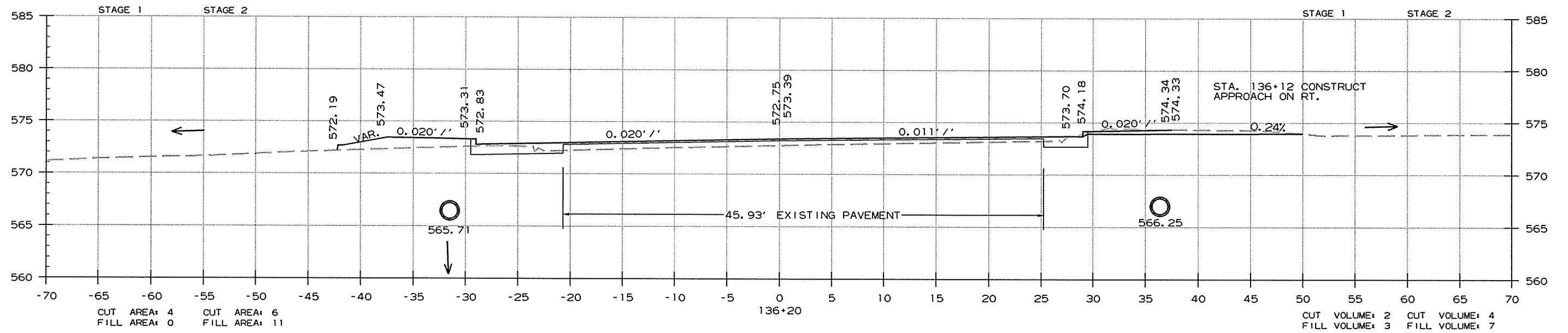
② CROSS SECTIONS



CROSS SECTION STA. 135+50 TO STA. 135+90

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 061194							126	141

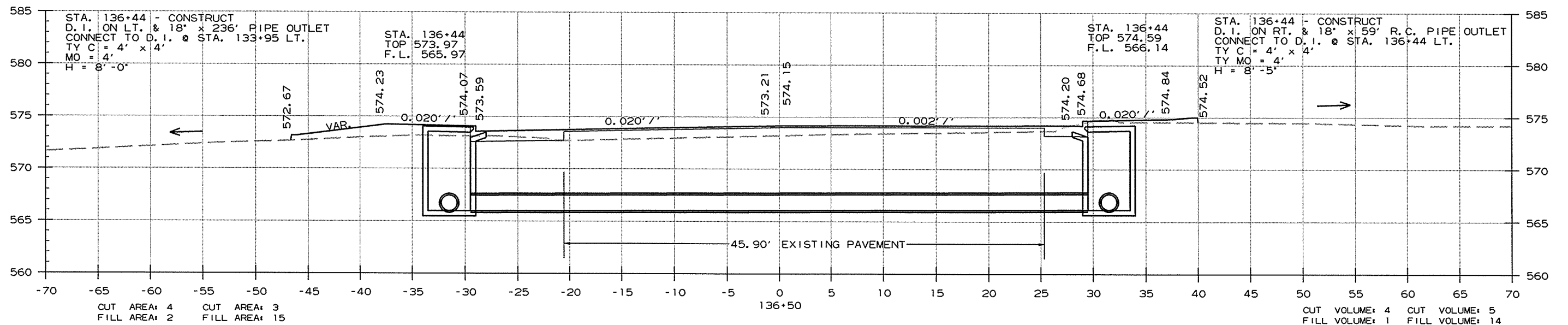
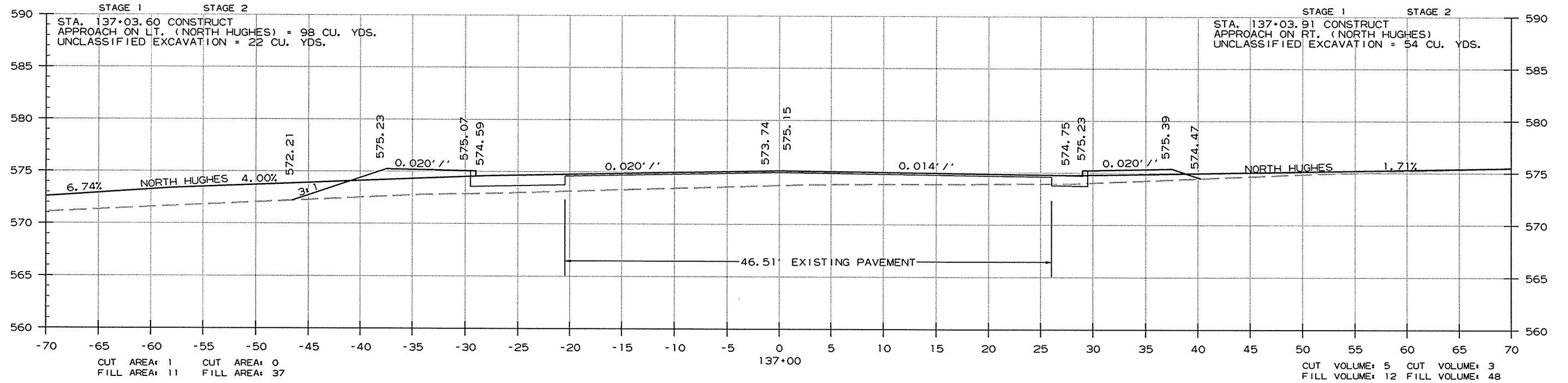
② CROSS SECTIONS



CROSS SECTION STA. 136+00 TO STA. 136+20

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 061194							127	141

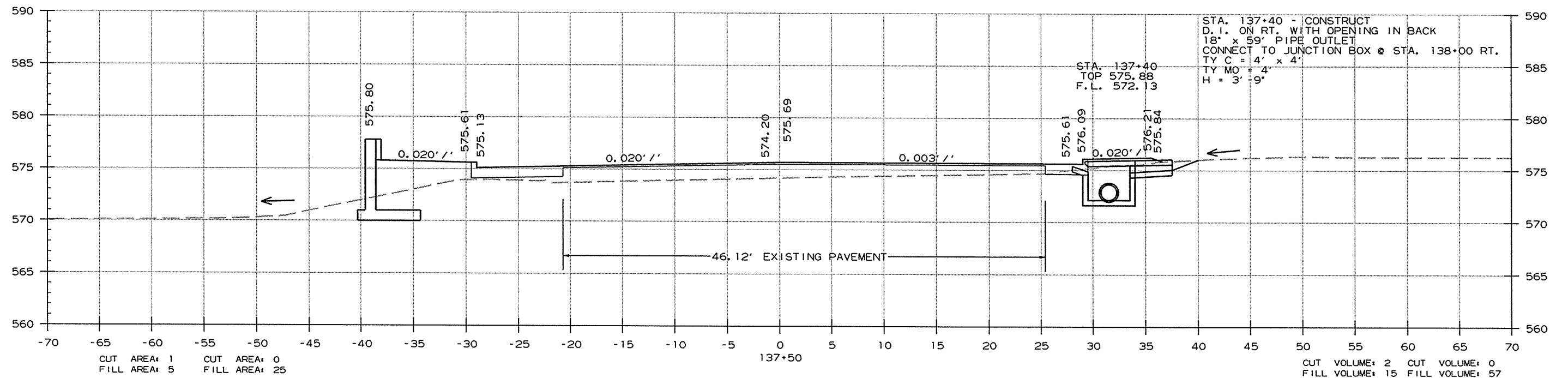
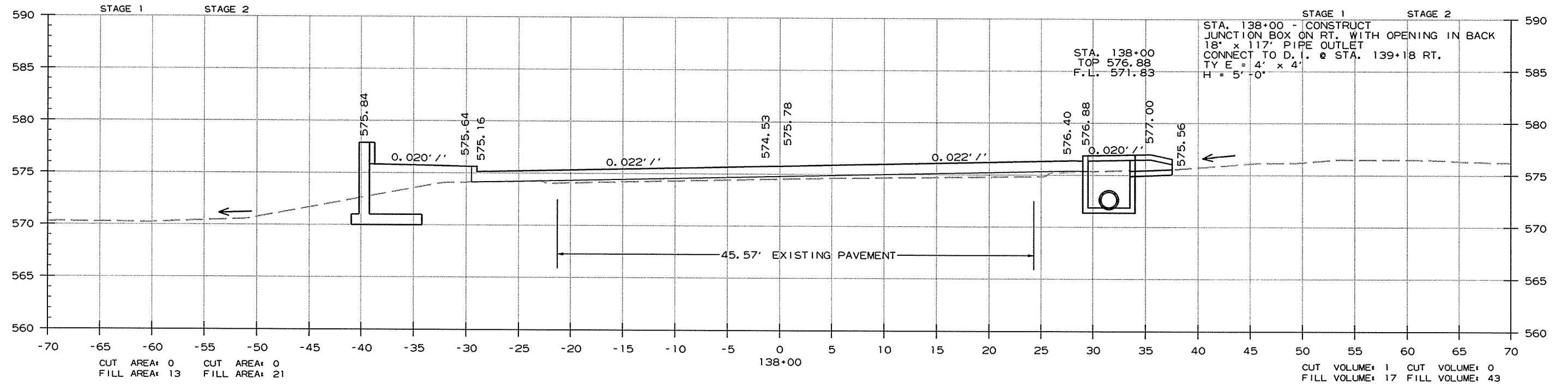
② CROSS SECTIONS



CROSS SECTION STA. 136+50 TO STA. 137+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. 061194							128	141

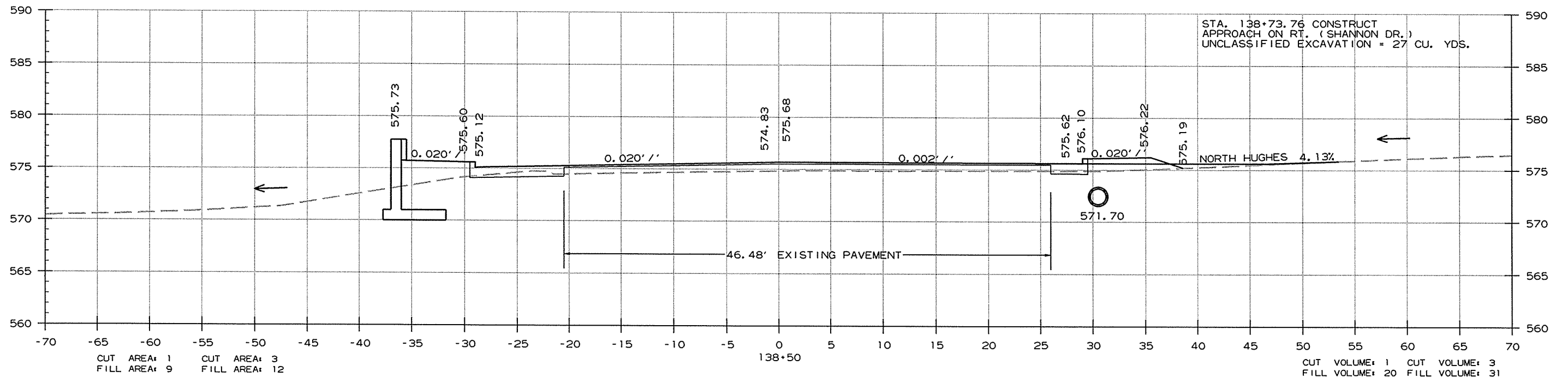
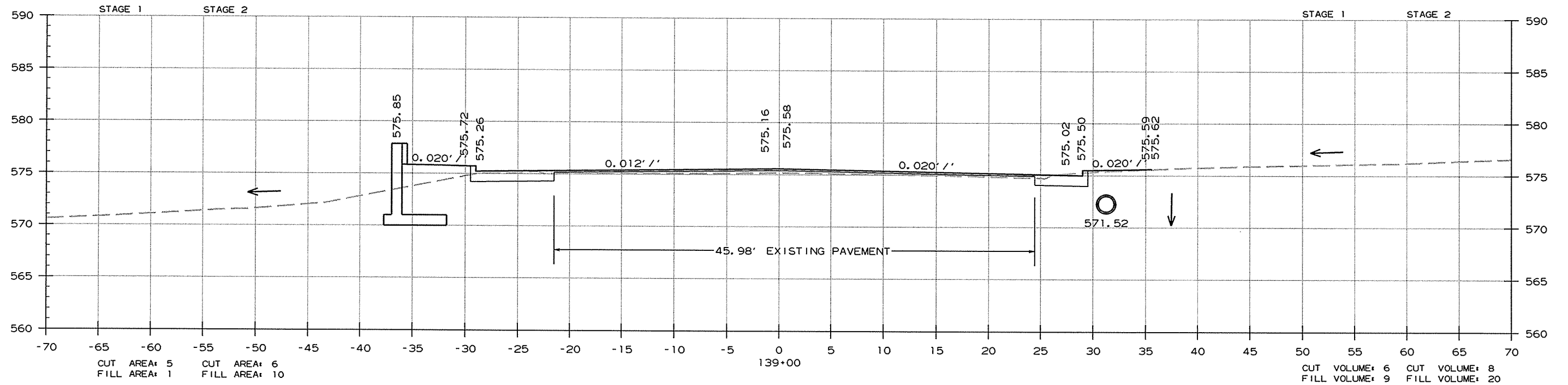
2 CROSS SECTIONS



CROSS SECTION STA. 137+50 TO STA. 138+00

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	061194		129	141

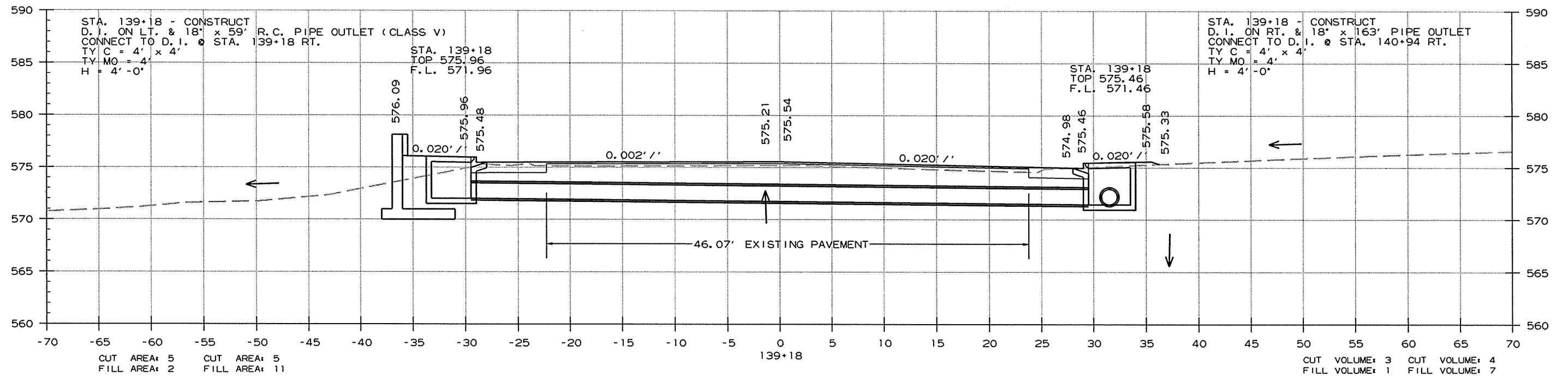
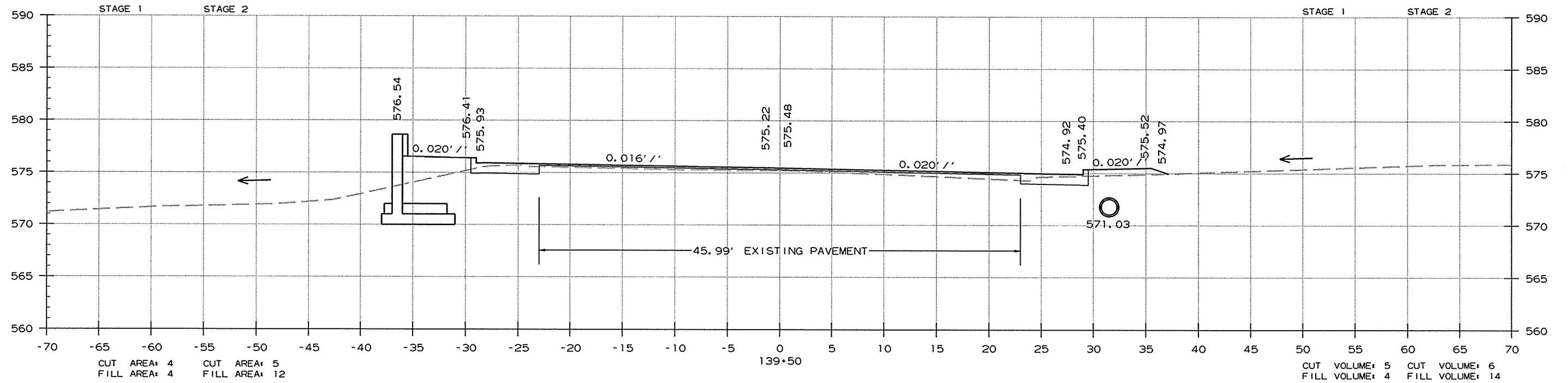
2 CROSS SECTIONS



CROSS SECTION STA. 138+50 TO STA. 139+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. 061194							130	141

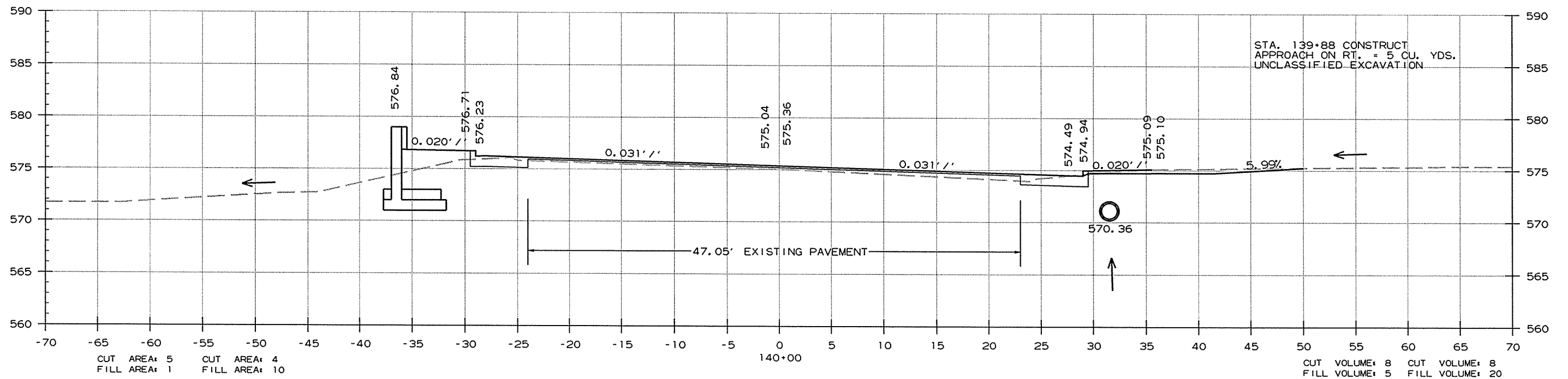
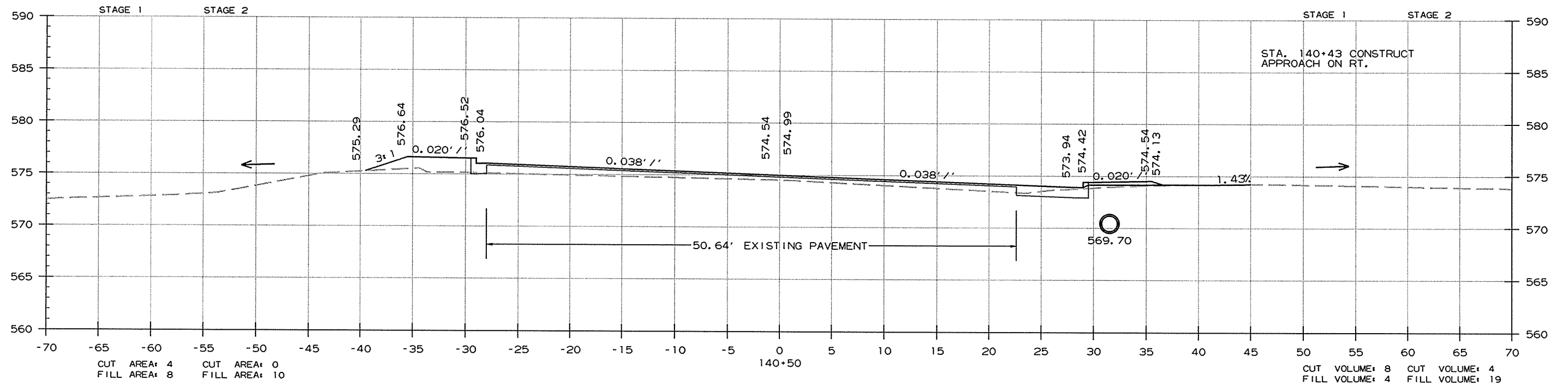
② CROSS SECTIONS



CROSS SECTION STA. 139+18 TO STA. 139+50

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 061194							131	141

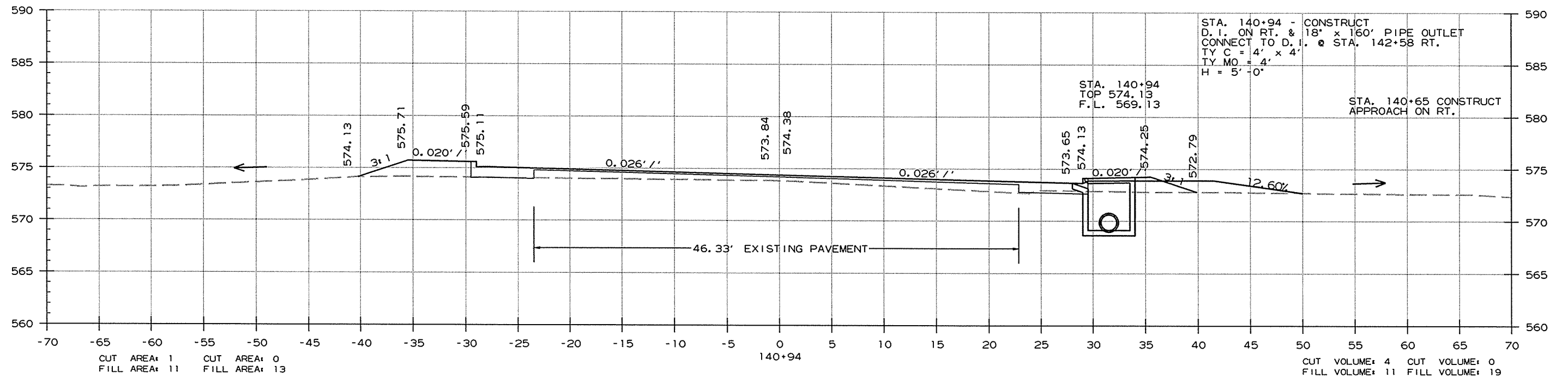
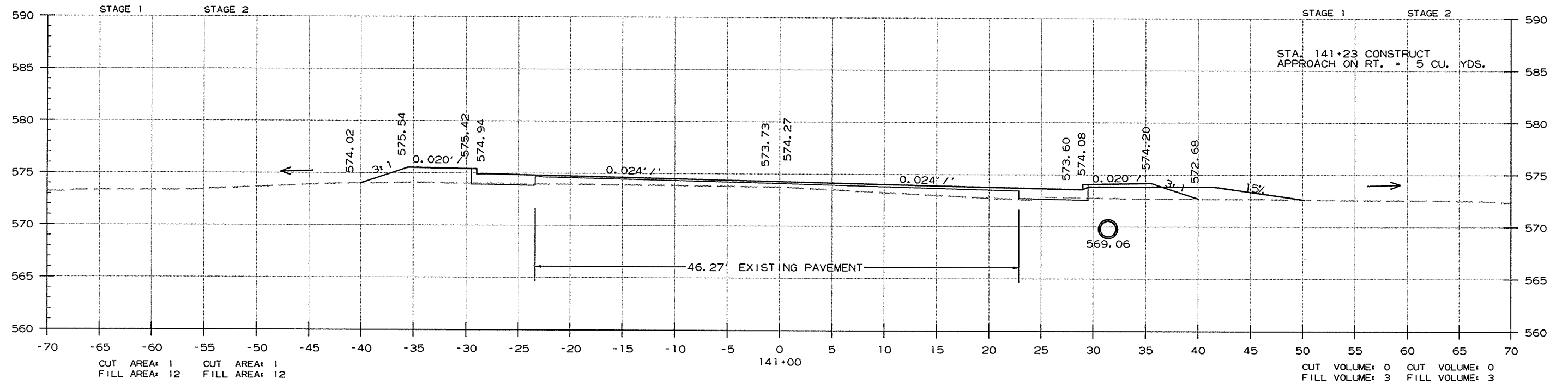
② CROSS SECTIONS



CROSS SECTION STA. 140+00 TO STA. 140+50

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 061194							132	141

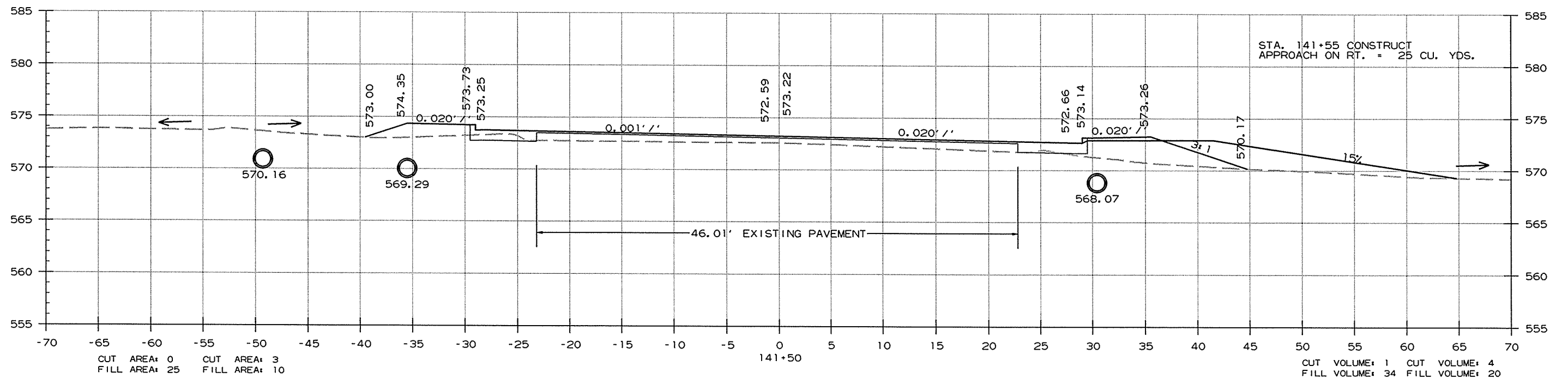
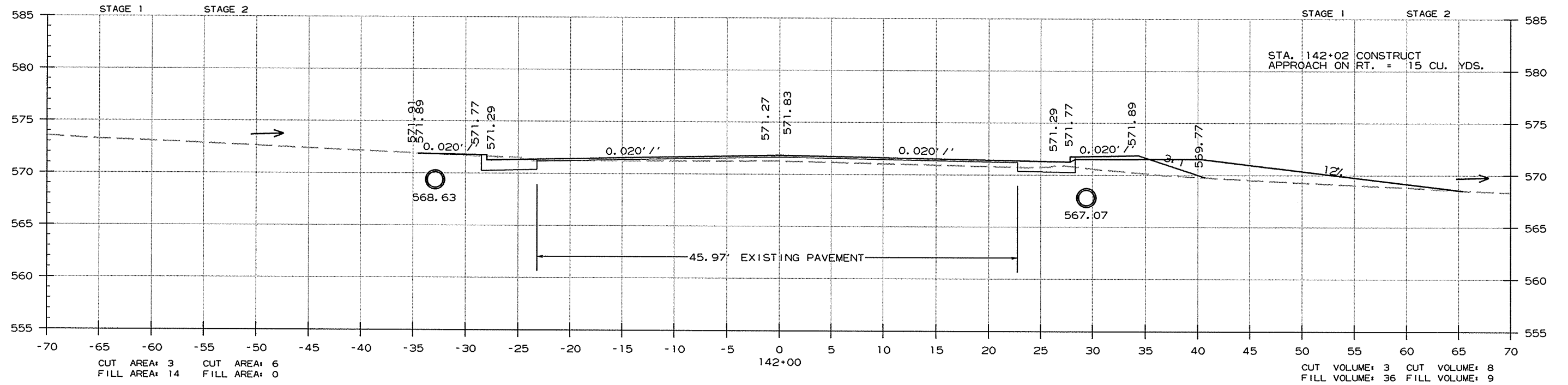
② CROSS SECTIONS



CROSS SECTION STA. 140+94 TO STA. 141+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. 061194							133	141

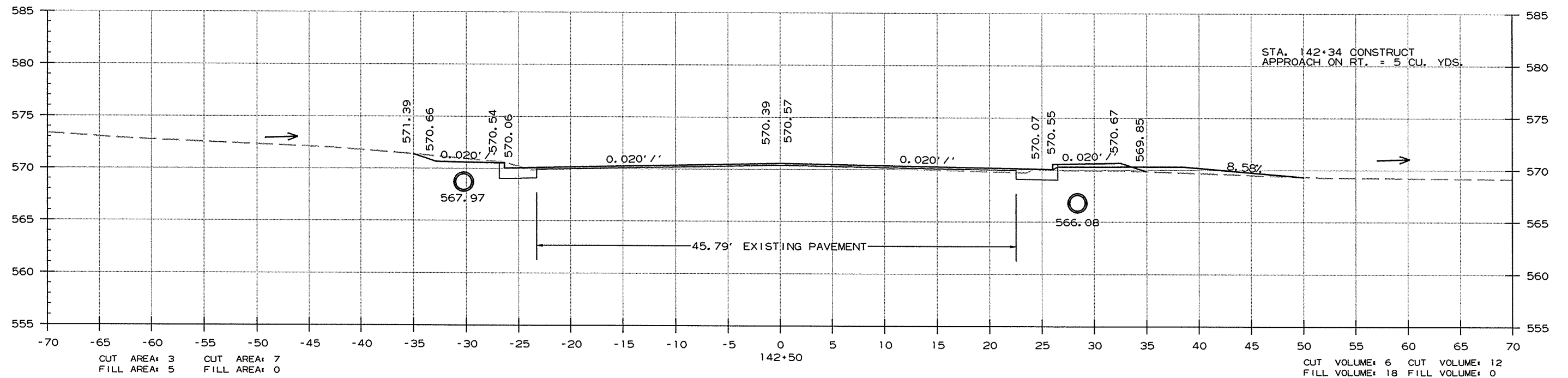
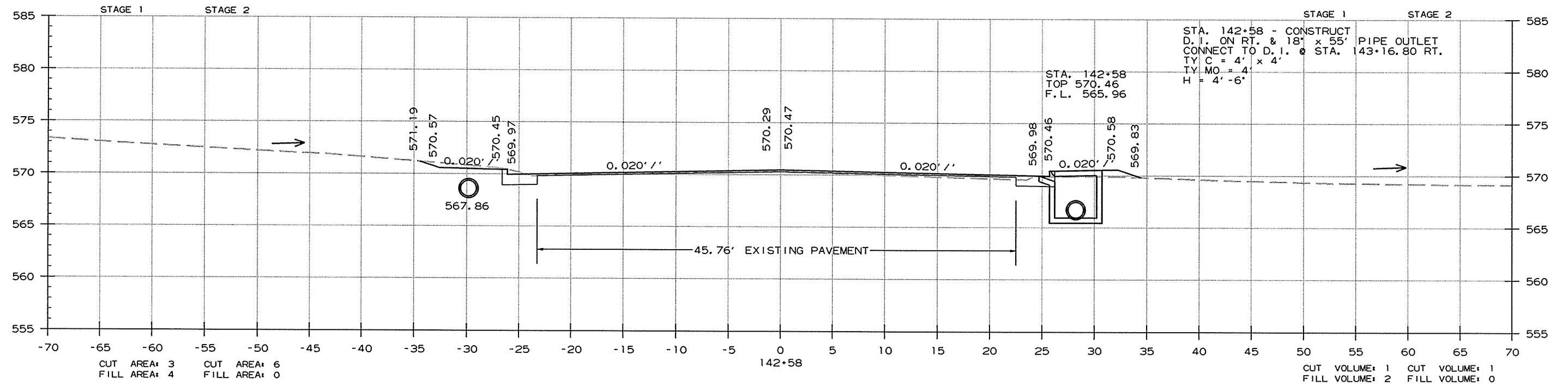
2 CROSS SECTIONS



CROSS SECTION STA. 141+50 TO STA. 142+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. 061194							134	141

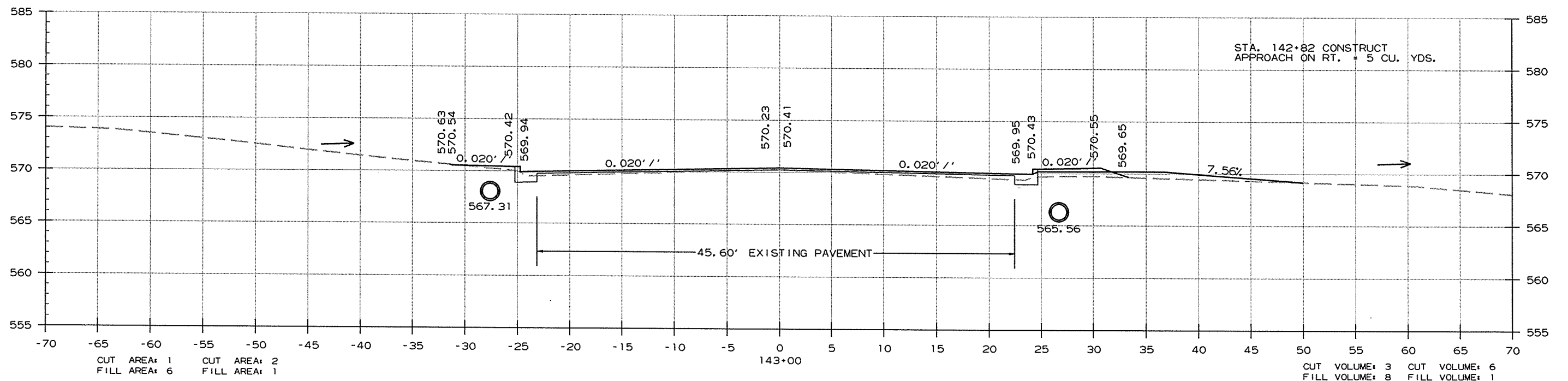
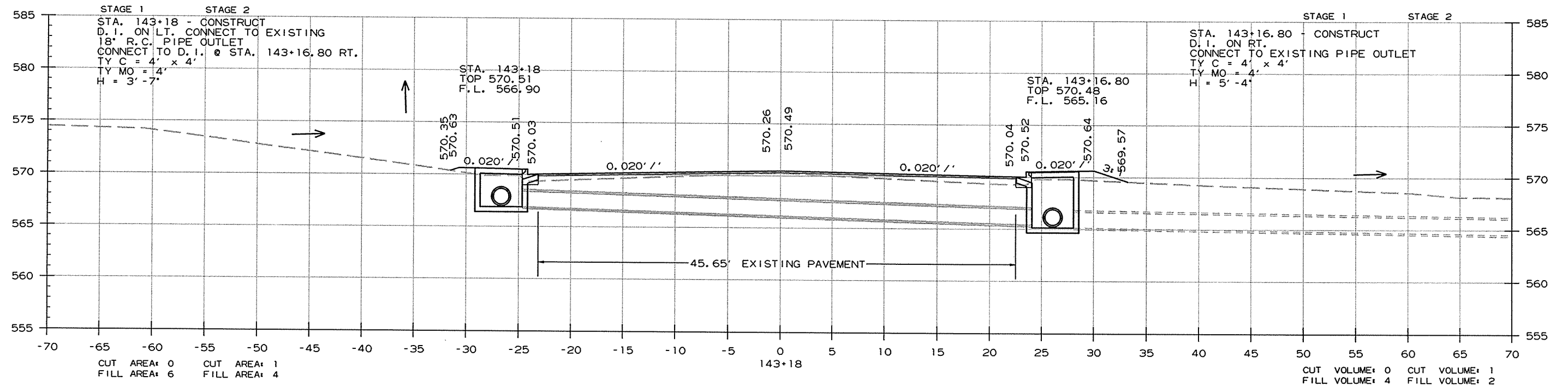
② CROSS SECTIONS



CROSS SECTION STA. 142+50 TO STA. 142+58

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 061194							135	141

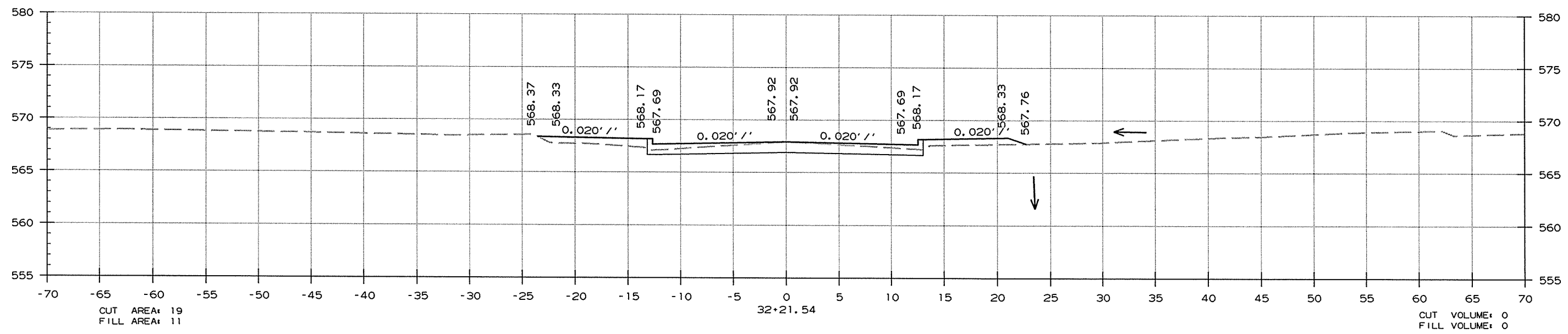
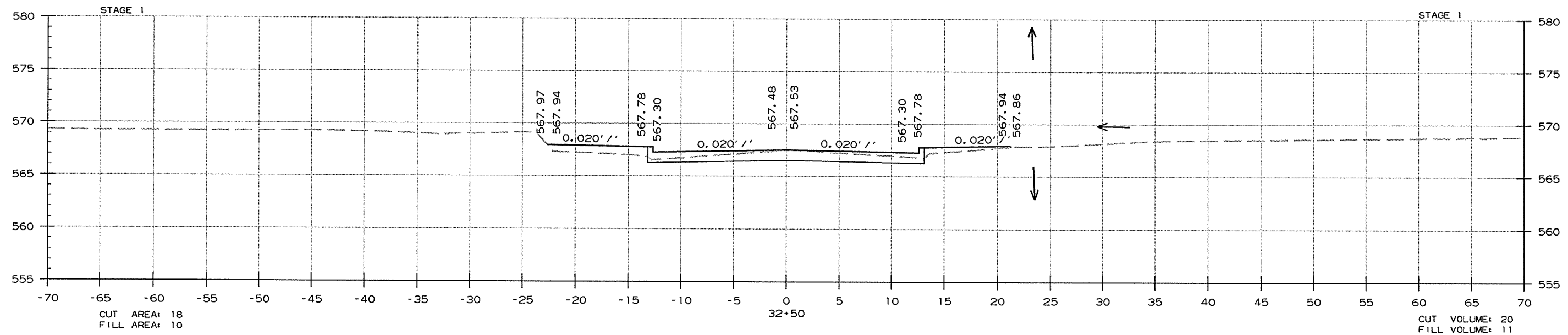
② CROSS SECTIONS



CROSS SECTION STA. 143+00 TO STA. 143+18

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	061194		136	141

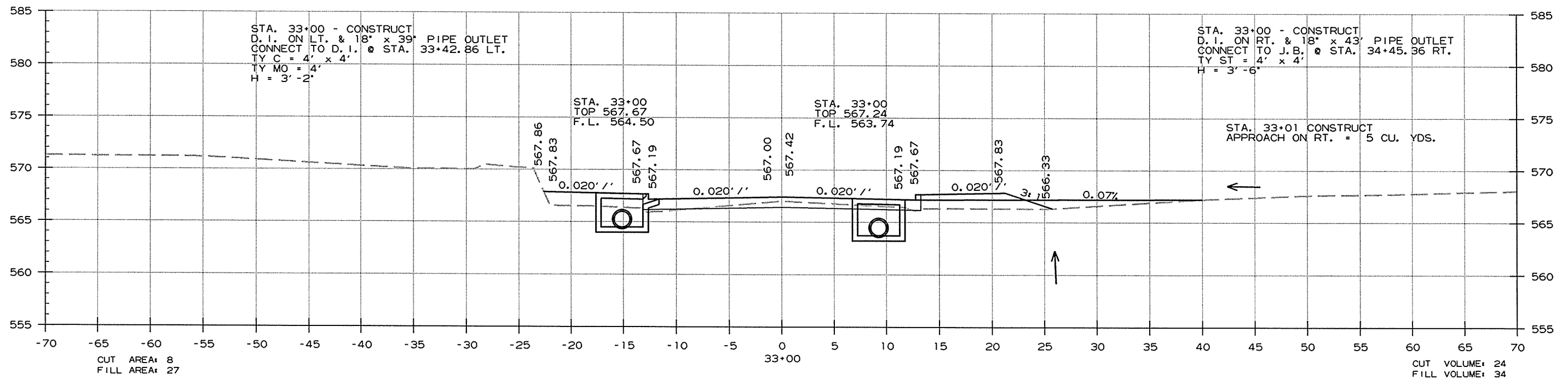
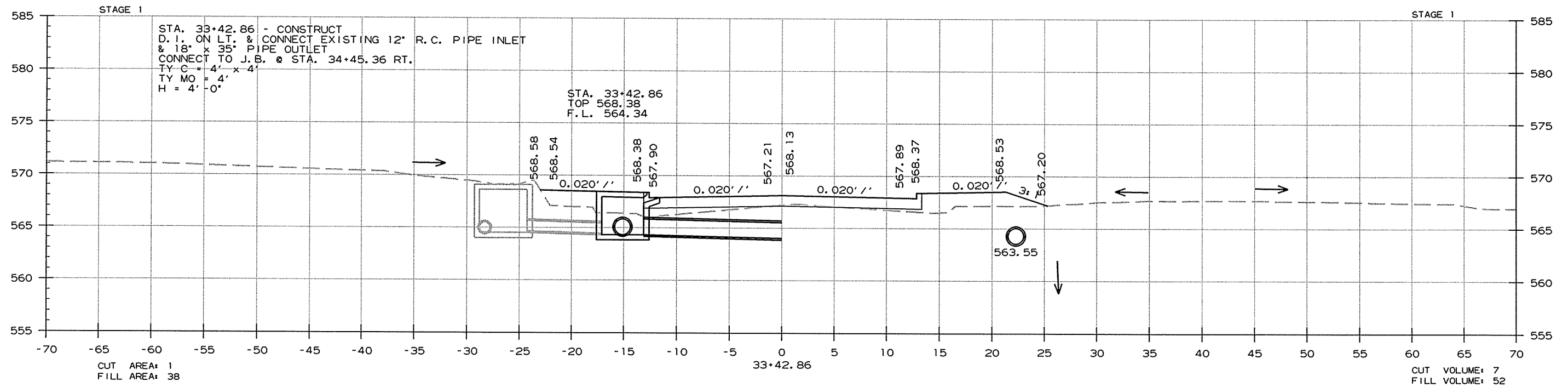
② CROSS SECTIONS



GEORGIA AVE.
CROSS SECTION STA. 32+21.54 TO STA. 32+50
(HWY. 10 - STA. 114+61RT.)

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 061194							137	141

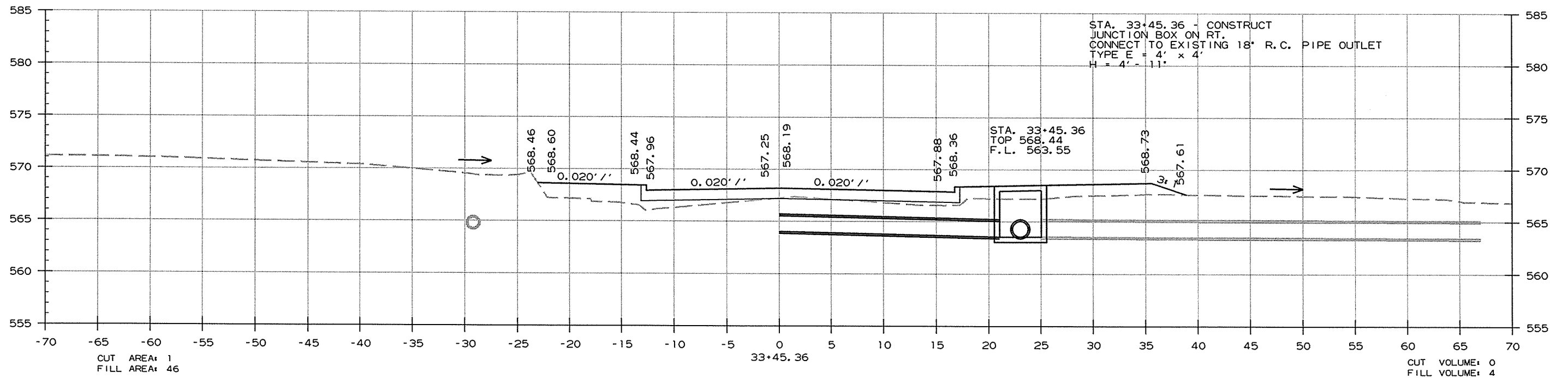
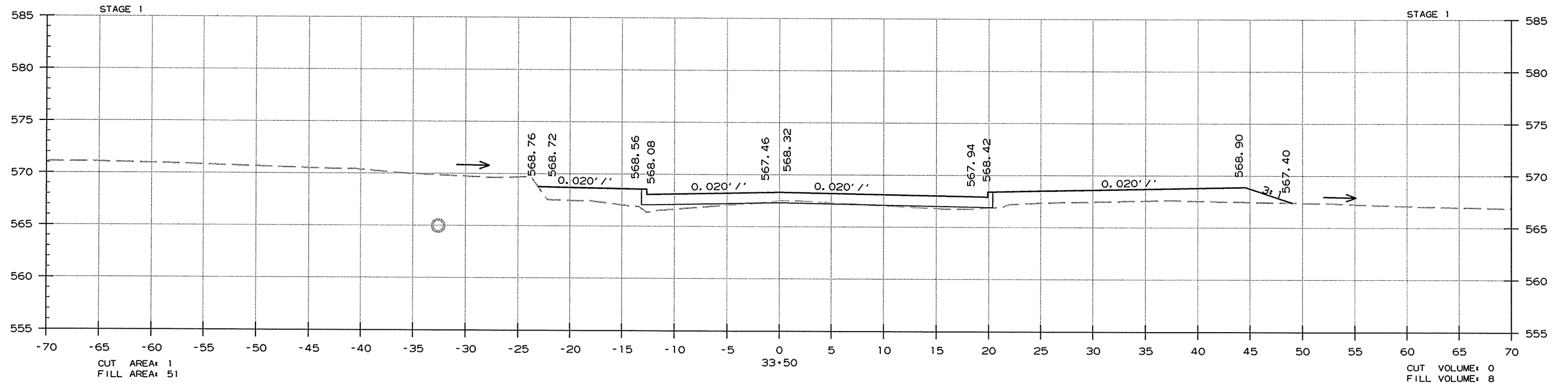
2 CROSS SECTIONS



GEORGIA AVE.
CROSS SECTION STA. 33+00 TO STA. 33+42.86

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 061194							138	141

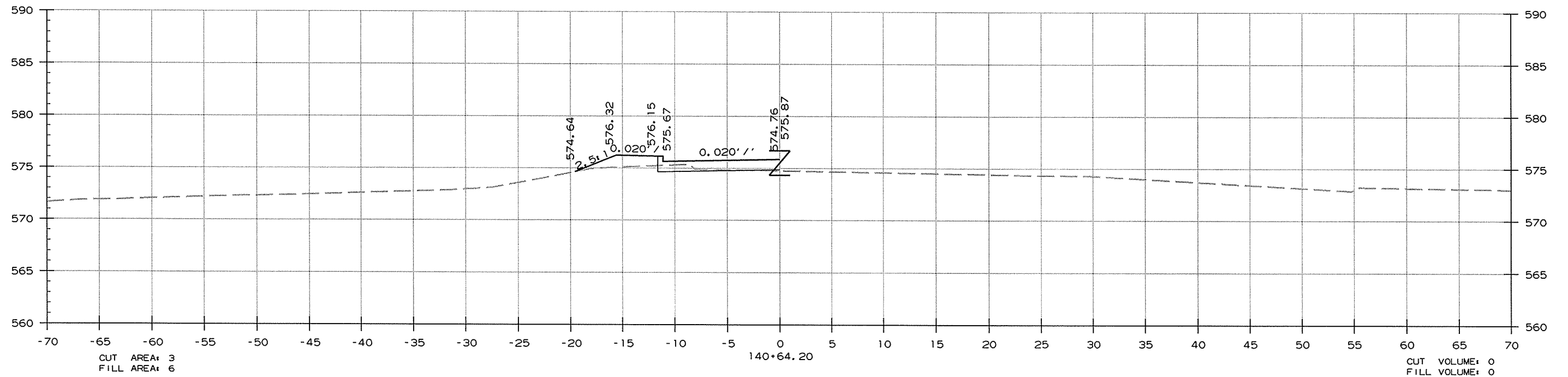
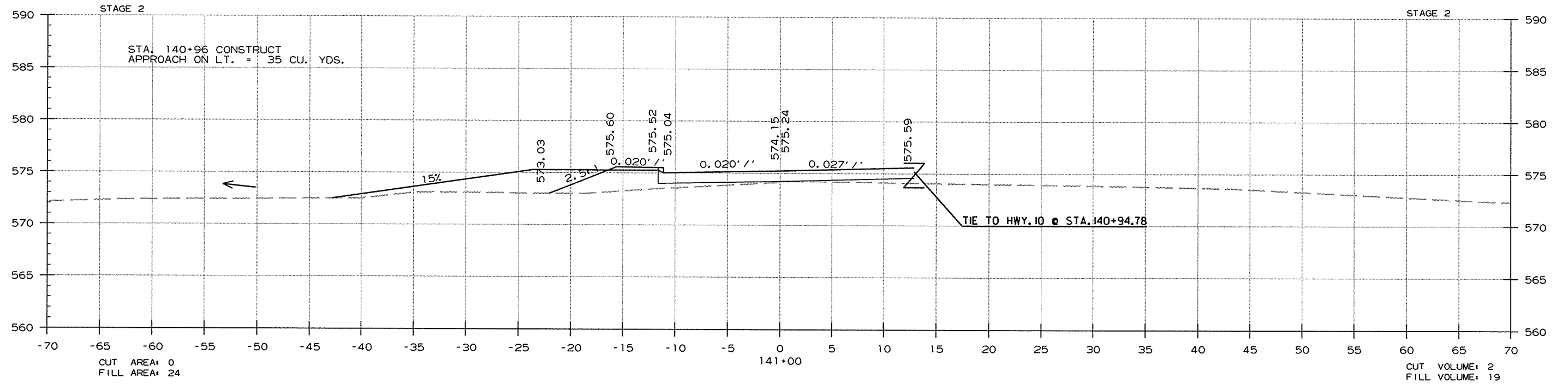
2 CROSS SECTIONS



GEORGIA AVE.
CROSS SECTION STA. 33+45.36 TO STA. 33+50

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 061194							139	141

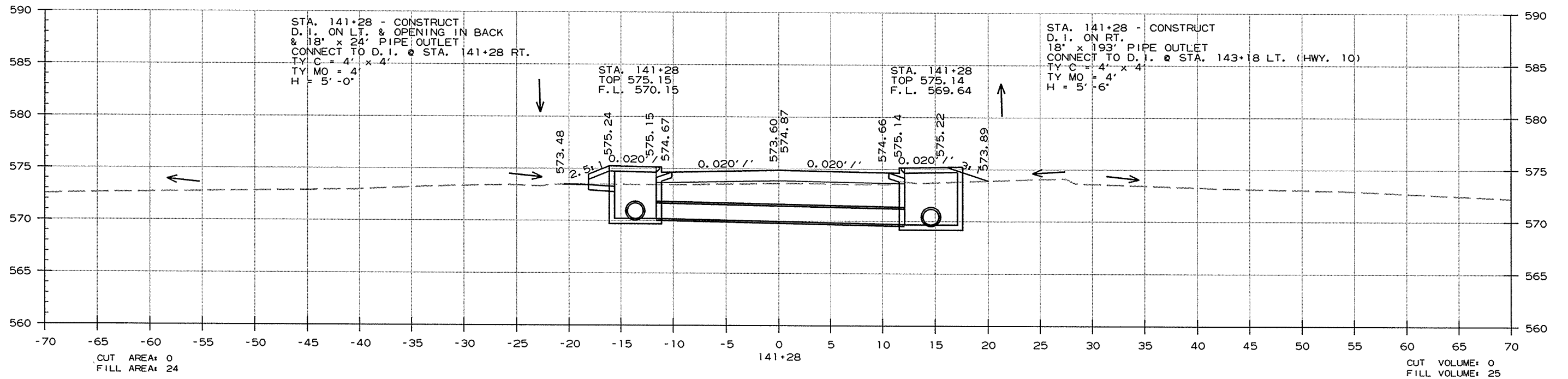
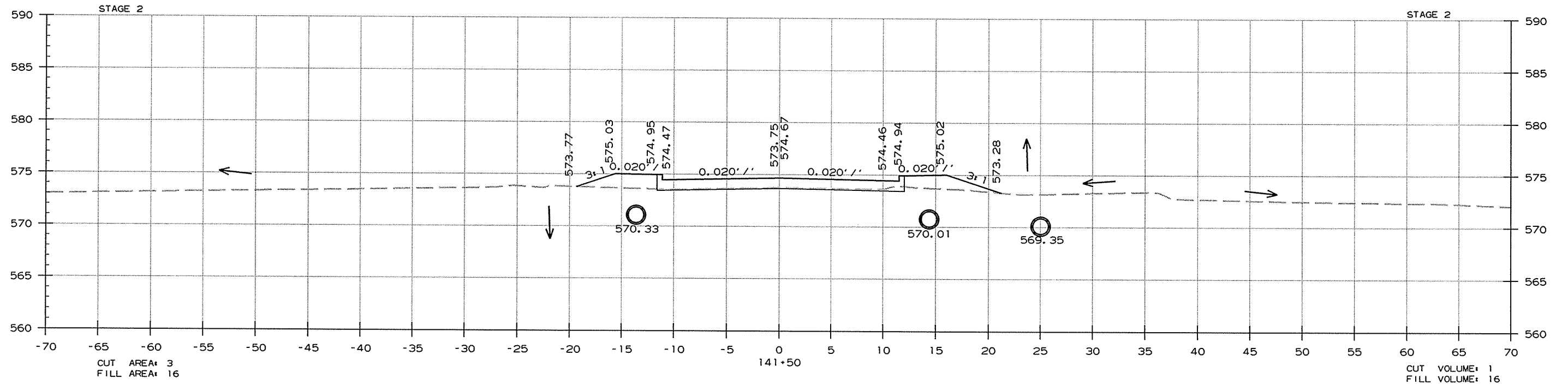
② CROSS SECTIONS



PERRYVILLE RD.
 CROSS SECTION STA. 140+64.20 TO STA. 141+00
 (HWY. 10 - STA. 140+58.79 LT.)

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. 061194							140	141

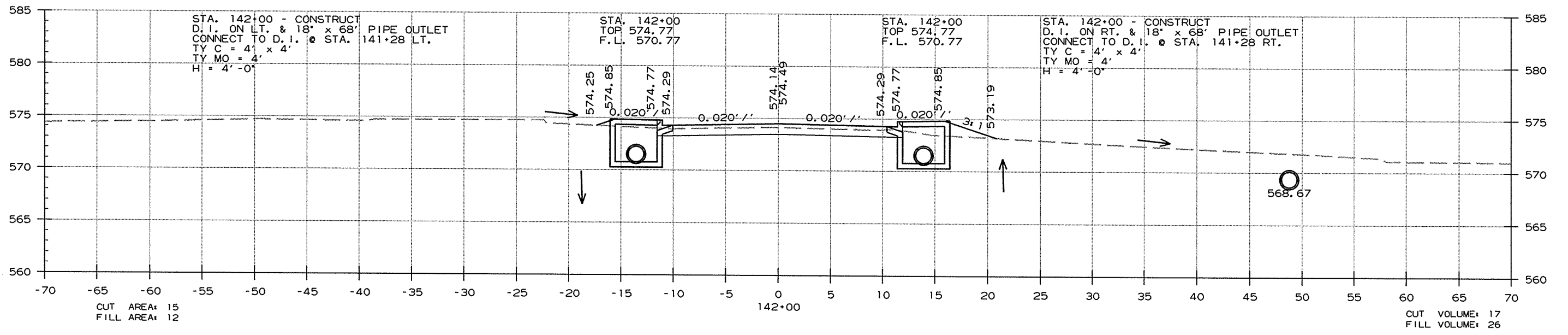
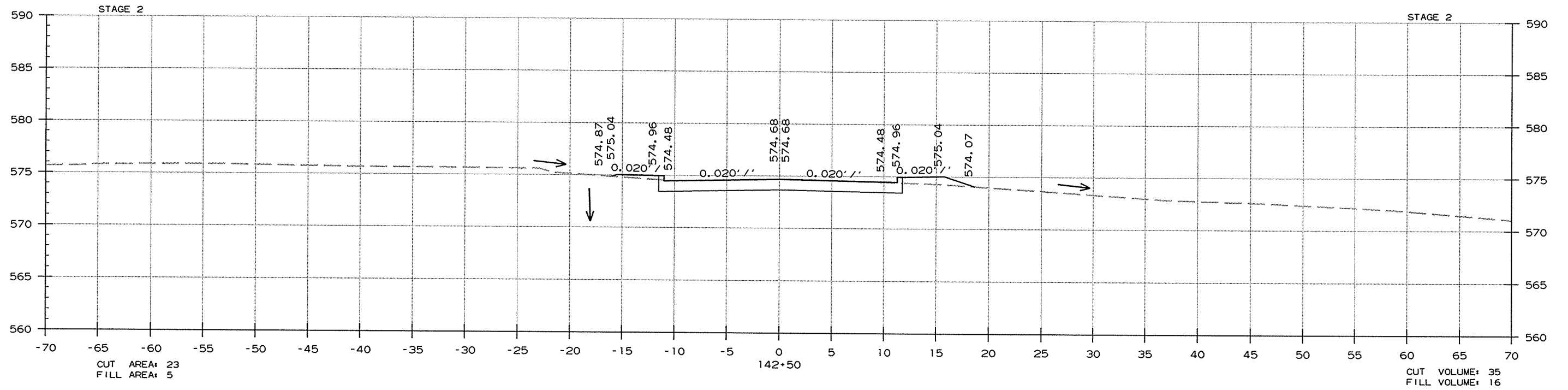
② CROSS SECTIONS



PERRYVILLE RD.
CROSS SECTION STA. 141+28 TO STA. 141+50

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
							JOB NO. 061194	141

2 CROSS SECTIONS



PERRYVILLE RD.
CROSS SECTION STA. 142+00 TO STA. 142+50