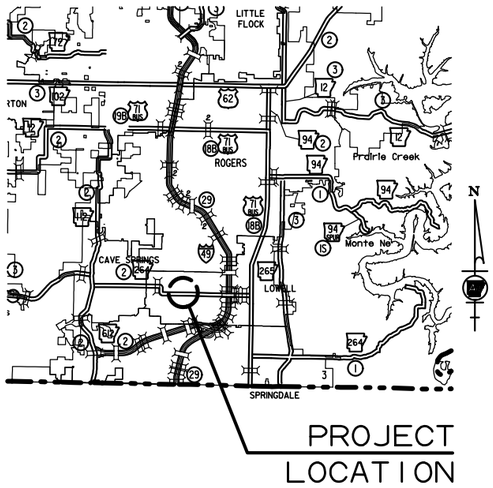
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
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		HWY. 264/BELLVIEW ST./SPRING CREEK RD. INTERS. IMPVTS. (LOWELL)(S)				



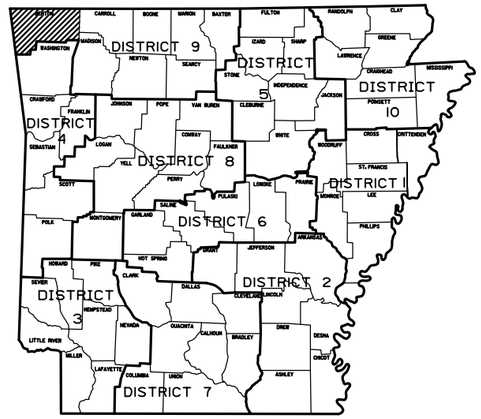
ARKANSAS DEPARTMENT OF TRANSPORTATION
CONSTRUCTION PLANS FOR STATE HIGHWAY

HWY. 264/BELLVIEW ST./SPRING CREEK RD. INTERS. IMPVTS. (LOWELL)(S)

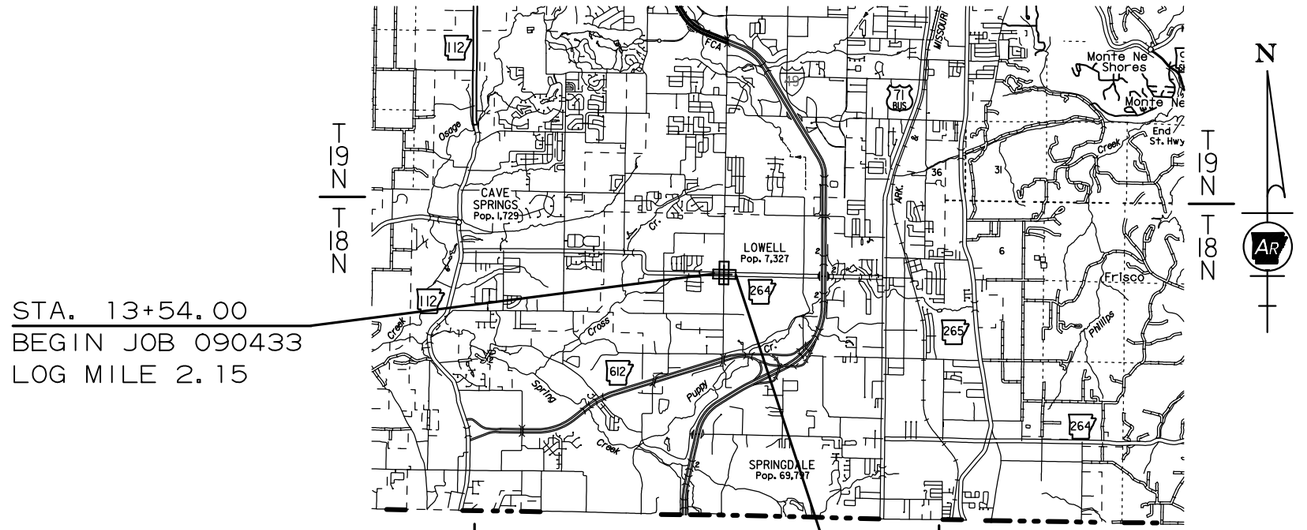
BENTON COUNTY
ROUTE 264, SECTION 2

JOB 090433

FED. AID PROJ. STPSC-9259(6)
NOT TO SCALE



ARK. HWY. DIST. NO. 9



DESIGN TRAFFIC DATA

DESIGN YEAR	2045
2025 ADT	14,000
2045 ADT	21,000
2045 DHV	2,310
DIRECTIONAL DISTRIBUTION	60%
TRUCKS	4%
DESIGN SPEED:	20 MPH

CERTIFICATE OF AUTHORIZATION
CRAFTON, TULL & ASSOCIATES, INC.
No. 109
ARKANSAS ENGINEER

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 9620
8/25/25
HUBERT BURNS

BEGINNING OF PROJECT
LAT. = N 36°15′18"
LONG. = W 94°10′33"

MID-POINT OF PROJECT
LAT. = N 36°15′18"
LONG. = W 94°10′22"

END OF PROJECT
LAT. = N 36°15′18"
LONG. = W 94°10′11"

LENGTH OF PROJECT CALCULATED ALONG C.L.

GROSS LENGTH OF PROJECT	1,746.00	FEET	OR	0.331	MILES
NET " " ROADWAY	1,746.00	"	"	0.331	"
NET " " BRIDGES	00.00	"	"	0.000	"
NET " " PROJECT	1,746.00	"	"	0.331	"

USER: JJ5206
DESIGN FILE: G:\21100800_Roundabout\TRANSP\dgn\misc\090433 Title.dgn
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DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	2	73
		INDEX OF SHEETS & STANDARD DRAWINGS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 15560
09-25-2025
JEROME PAUL DAVIS

INDEX OF SHEETS

SHEET NO.			TITLE
1			TITLE SHEET
2			INDEX OF SHEETS AND STANDARD DRAWINGS
3			GOVERNING SPECIFICATIONS AND GENERAL NOTES
4	-	5	TYPICAL SECTIONS OF IMPROVEMENT
6	-	16	SPECIAL DETAILS
17	-	25	TEMPORARY EROSION CONTROL DETAILS
26	-	34	MAINTENANCE OF TRAFFIC DETAILS
35			PERMANENT PAVEMENT MARKING DETAILS
36	-	39	QUANTITIES
40			SUMMARY OF QUANTITIES AND REVISIONS
41			SURVEY CONTROL DETAILS
42	-	48	PLAN AND PROFILE SHEETS
49	-	54	LIGHTING QUANTITIES AND NOTES
55	-	57	SIGNAGE PLAN SHEETS AND QUANTITIES
58	-	73	CROSS SECTIONS

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

ROADWAY STANDARD DRAWINGS

DRWG.NO.	TITLE	DATE
CG-1	CURBING DETAILS	11-29-07
DR-1	DETAILS OF DRIVEWAYS & ISLANDS	05-22-25
FES-1	FLARED END SECTION	10-18-96
FES-2	FLARED END SECTION	10-18-96
FPC-9	DETAILS OF DROP INLETS & JUNCTION BOXES	11-16-01
FPC-9E	DETAILS OF DROP INLETS (TYPE C)	08-22-02
FPC-9M	DETAILS OF DROP INLET (TYPE MO)	08-22-02
MB-1	MAILBOX DETAILS	11-18-04
PCC-1	CONCRETE PIPE CULVERT FILL HEIGHTS & BEDDING	02-27-14
PCM-1	METAL PIPE CULVERT FILL HEIGHTS & BEDDING	02-27-14
PCP-1	PLASTIC PIPE CULVERT (HIGH DENSITY POLYETHYLENE)	02-27-14
PCP-2	PLASTIC PIPE CULVERT (PVC F949)	02-27-14
PCP-3	PLASTIC PIPE CULVERT (POLYPROPYLENE)	02-27-20
PM-1	PAVEMENT MARKING DETAILS	02-27-20
PU-1	DETAILS OF PIPE UNDERDRAIN	12-08-16
SD-6	HEAVY DUTY PULL BOX	02-13-24
SD-9	SERVICE POINT	11-07-19
SD-12	SERVICE POINT INSTALLATION WITH SUPPLEMENTAL GROUNDING ARRAY	11-07-19
SHS-1	STANDARD HIGHWAY SIGNS AND SUPPORTS ASSEMBLIES	09-12-13
SHS-2	U-CHANNEL POST ASSEMBLIES	07-25-19
SHS-3	DETAIL OF BREAKAWAY SIGN SUPPORTS FOR GUIDE SIGNS	05-19-22
SHS-4	DETAIL OF BREAKAWAY SIGN SUPPORTS FOR STANDARD SIGNS	09-12-13
SHS-7	DETAIL OF OMNI-DIRECTIONAL BREAKAWAY SIGN SUPPORTS	09-12-13
SI-1	DETAILS OF SPECIAL ITEMS	10-25-18
TC-1	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION	08-14-25
TC-2	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION	08-14-25
TC-3	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION	08-14-25
TEC-1	TEMPORARY EROSION CONTROL DEVICES	11-16-17
TEC-2	TEMPORARY EROSION CONTROL DEVICES	06-02-94
TEC-3	TEMPORARY EROSION CONTROL DEVICES	11-03-94
WF-3	CHAIN LINK FENCE	11-17-10
WF-4	WIRE FENCE TYPE C AND D	08-22-02
WR-1	WHEELCHAIR RAMPS NEW CONSTRUCTION AND ALTERATIONS	11-10-05

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DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	3	73
		GOVERNING SPECIFICATIONS & GENERAL NOTES				

GOVERNING SPECIFICATIONS (BOX 1 OF 2)

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

NUMBER	TITLE
ERRATA_____	ERRATA FOR THE BOOK OF STANDARD SPECIFICATIONS
FHWA-1273__	REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS
FHWA-1273__	SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - NOTICE TO CONTRACTORS
FHWA-1273__	SUPPLEMENT - SPECIFIC EQUAL EMPLOYMENT OPPORTUNITY RESPONSIBILITIES (23 U.S.C. 140)
FHWA-1273__	SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - GOALS AND TIMETABLES
FHWA-1273__	SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - FEDERAL STANDARDS
FHWA-1273__	SUPPLEMENT - POSTERS AND NOTICES REQUIRED FOR FEDERAL-AID PROJECTS
FHWA-1273__	SUPPLEMENT - WAGE RATE DETERMINATION
100-3_____	CONTRACTOR'S LICENSE
100-4_____	DEPARTMENT NAME CHANGE
102-2_____	ISSUANCE OF PROPOSALS
102-3_____	PREQUALIFICATION OF BIDDERS
103-2_____	CONTACT INFORMATION FOR MOTORIST DAMAGE CLAIMS
105-4_____	MAINTENANCE DURING CONSTRUCTION
107-2_____	RESTRAINING CONDITIONS
108-1_____	LIQUIDATED DAMAGES
108-2_____	WORK ALLOWED PRIOR TO ISSUANCE OF WORK ORDER
110-1_____	PROTECTION OF WATER QUALITY AND WETLANDS
210-1_____	UNCLASSIFIED EXCAVATION
303-1_____	AGGREGATE BASE COURSE
306-1_____	QUALITY CONTROL AND ACCEPTANCE
400-1_____	TACK COATS
400-4_____	DESIGN AND QUALITY CONTROL OF ASPHALT MIXTURES
400-5_____	PERCENT AIR VOIDS FOR ACHM MIX DESIGNS
400-6_____	LIQUID ANTI-STRIP ADDITIVE
400-7_____	TRACKLESS TACK
404-3_____	DESIGN OF ASPHALT MIXTURES
409-2_____	ASPHALT LABORATORY FACILITY
410-1_____	CONSTRUCTION REQUIREMENTS AND ACCEPTANCE OF ASPHALT CONCRETE PLANT MIX COURSES
410-2_____	DEVICES FOR MEASURING DENSITY FOR ROLLING PATTERNS
410-4_____	EVALUATION OF ACHM SUBLOT REPLACEMENT MATERIAL
416-1_____	RECYCLED ASPHALT PAVEMENT
501-3_____	PORTLAND CEMENT CONCRETE PAVEMENT
502-1_____	WELDED WIRE REINFORCEMENT
505-1_____	PORTLAND CEMENT CONCRETE DRIVEWAY
600-2_____	INCIDENTAL CONSTRUCTION
603-1_____	LANE CLOSURE NOTIFICATION
604-1_____	RETROREFLECTIVE SHEETING FOR TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES
604-3_____	TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES (MASH)
619-1_____	FENCES
620-1_____	MULCH COVER
621-1_____	FILTER SOCKS
632-1_____	CONCRETE ISLAND
633-1_____	CONCRETE WALKS, CONCRETE STEPS, AND HANDRAILING
634-1_____	CURBING
637-1_____	MAILBOXES
723-1_____	GENERAL REQUIREMENTS FOR SIGNS
800-1_____	STRUCTURES
802-5_____	CONCRETE FOR STRUCTURES
804-2_____	REINFORCING STEEL FOR STRUCTURES
JOB_090433_	ASPHALT MIXTURES WITH PG76-22 BINDER
JOB_090433_	BIDDING REQUIREMENTS AND CONDITIONS
JOB_090433_	BROADBAND INTERNET SERVICE FOR FIELD OFFICE
JOB_090433_	BUY AMERICA - CONSTRUCTION MATERIALS
JOB_090433_	CARGO PREFERENCE ACT REQUIREMENTS
JOB_090433_	CLASS C FLY ASH IN PORTLAND CEMENT CONCRETE PAVEMENT AND CLASS S(AE) CONCRETE
JOB_090433_	COLD MILLING – COUNTY PROPERTY
JOB_090433_	CONCRETE PULL BOX
JOB_090433_	DESIGN AND QUALITY CONTROL OF ASPHALT MIXTURES
JOB_090433_	DESIGN OF ASPHALT MIXTURES - AGGREGATES
JOB_090433_	DOCUMENTATION OF PAYMENTS MADE TO DISADVANTAGED BUSINESS ENTERPRISES
JOB_090433_	ELECTRICAL CONDUCTORS FOR LUMINAIRES
JOB_090433_	ELECTRICAL CONDUCTORS-IN-CONDUIT
JOB_090433_	FLEXIBLE BEGINNING OF WORK
JOB_090433_	HYDRIC GRASS PLANTING
JOB_090433_	LED ROADWAY ILLUMINATION POLE
JOB_090433_	LIQUIDATED DAMAGES PROCEDURE FOR BID LETTINGS
JOB_090433_	LONGITUDINAL JOINT DENSITIES FOR ACHM SURFACE COURSES

GOVERNING SPECIFICATIONS (BOX 1 OF 2)

NUMBER	TITLE
JOB_090433_	MANDATORY ELECTRONIC CONTRACT
JOB_090433_	MANDATORY ELECTRONIC DOCUMENT SUBMITTAL
JOB_090433_	OMNI-DIRECTIONAL BREAKAWAY SIGN SUPPORT
JOB_090433_	PARTNERING REQUIREMENTS
JOB_090433_	PEDESTAL TYPE SERVICE POINT ASSEMBLY
JOB_090433_	PRICE ADJUSTMENT FOR ASPHALT BINDER
JOB_090433_	PRICE ADJUSTMENT FOR FUEL
JOB_090433_	PROHIBITION OF CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT
JOB_090433_	REACTIVE AGGREGATE TESTING
JOB_090433_	SHORING FOR CULVERTS
JOB_090433_	SOIL STABILIZATION
JOB_090433_	STORM WATER POLLUTION PREVENTION PLAN
JOB_090433_	SUBMISSION OF ASPHALT CONCRETE HOT MIX ACCEPTANCE TEST RESULTS
JOB_090433_	THERMOPLASTIC PAVEMENT MARKING (YIELD LINE)
JOB_090433_	UTILITY ADJUSTMENTS
JOB_090433_	VALUE ENGINEERING
JOB_090433_	WARM MIX ASPHALT

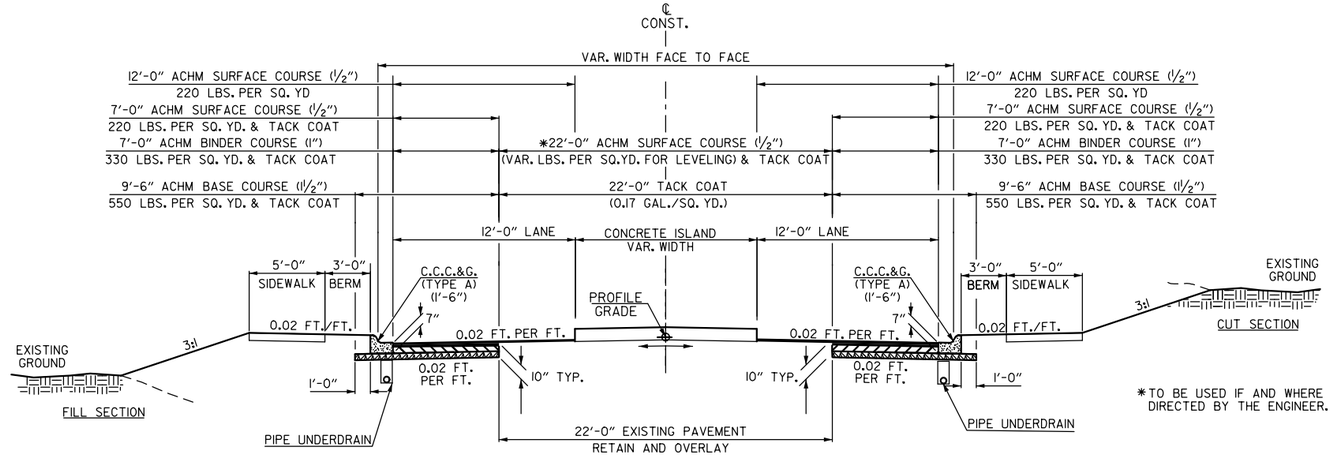
STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 15560
10-02-2025
JEROME PAUL DAVIS

GENERAL NOTES

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

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11/03/2025		6	ARK.	090433	4	73
		TYPICAL SECTIONS OF IMPROVEMENT				



TYPICAL 2-LANE NOTCH AND WIDENING

STA. 13+54.00 TO STA. 21+36.91
STA. 23+16.91 TO STA. 31+00.00
SPRING CREEK RD. STA. 36+00.00 TO STA. 40+69.52
BELLVIEW ST. STA. 42+49.52 TO STA. 47+10.00

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 15560
11-03-2025
JEROME PAUL DAVIS

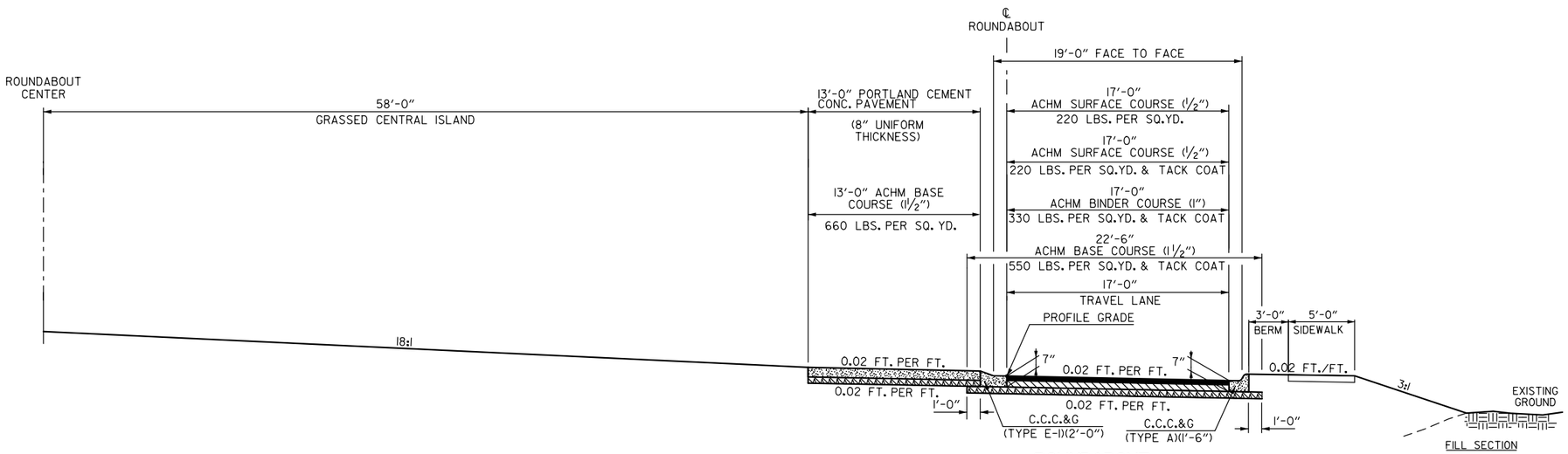
NOTES:

1. REFER TO CROSS SECTIONS FOR DEVIATIONS FROM THE NORMAL SLOPES. NO CHANGES SHALL BE MADE FROM THE PLANNED SLOPES WITHOUT THE APPROVAL OF THE ENGINEER.
2. ASPHALT FOR LEVELING OF EXISTING PAVEMENT SHALL BE PLACED ONLY IF AND WHERE DIRECTED BY THE ENGINEER. CALCULATIONS FOR THE AMOUNT OF LEVELING AND LEVELING OPERATIONS SHALL BE PERFORMED BEFORE CONSTRUCTING NOTCH AND WIDENING, CALCULATIONS WILL NOT BE PAID FOR DIRECTLY BUT PAYMENT WILL BE CONSIDERED INCLUDED IN THE VARIOUS PAY ITEMS.
3. THE FINAL 2" OF SURFACE COURSE IS TO BE PLACED AFTER ALL OTHER COURSES HAVE BEEN LAID. LONGITUDINAL JOINTS SHALL BE AT LANE LINES.
4. 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.
5. PRIOR TO AND DURING PLACEMENT OF PAVEMENT IN FRONT OF THE CURB AND GUTTER, THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES. THE METHOD(S) USED SHALL BE APPROVED BY THE ENGINEER. PAYMENT FOR THIS WORK SHALL BE CONSIDERED INCLUDED IN THE PRICE BID FOR THE VARIOUS CONTRACT ITEMS.

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		TYPICAL SECTIONS OF IMPROVEMENT				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 15560
JEROME PAUL DAVIS
08-25-2025



ROUNDABOUT
1-LANE TYPICAL SECTION
STA. 0+00.00 TO STA. 4+58.67

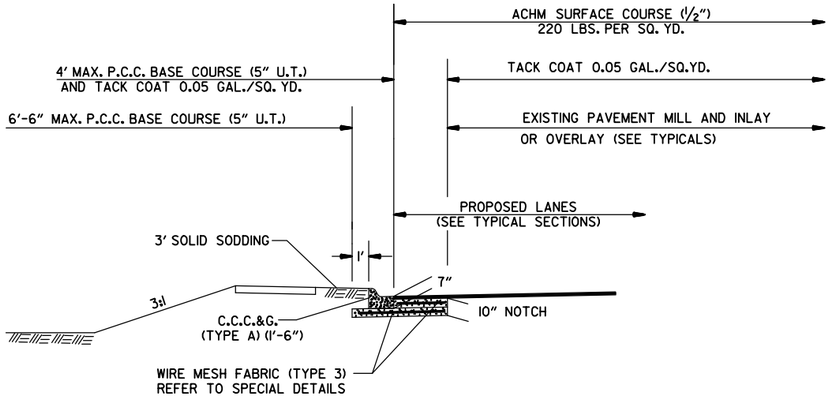
NOTES:

1. REFER TO CROSS SECTIONS FOR DEVIATIONS FROM THE NORMAL SLOPES. NO CHANGES SHALL BE MADE FROM THE PLANNED SLOPES WITHOUT THE APPROVAL OF THE ENGINEER.
2. THE FINAL 2" OF SURFACE COURSE IS TO BE PLACED AFTER ALL OTHER COURSES HAVE BEEN LAID. LONGITUDINAL JOINTS SHALL BE AT LANE LINES.
3. PRIOR TO AND DURING PLACEMENT OF PAVEMENT IN FRONT OF THE CURB AND GUTTER, THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES. THE METHOD(S) USED SHALL BE APPROVED BY THE ENGINEER. PAYMENT FOR THIS WORK SHALL BE CONSIDERED INCLUDED IN THE PRICE BID FOR THE VARIOUS CONTRACT ITEMS.

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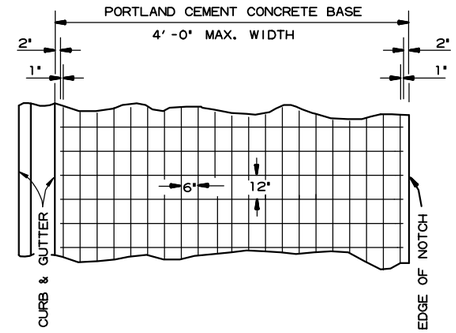
TYPICAL SECTIONS OF IMPROVEMENT

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	6	73
		SPECIAL DETAILS				



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

P.C.C. BASE WIDENING DETAIL



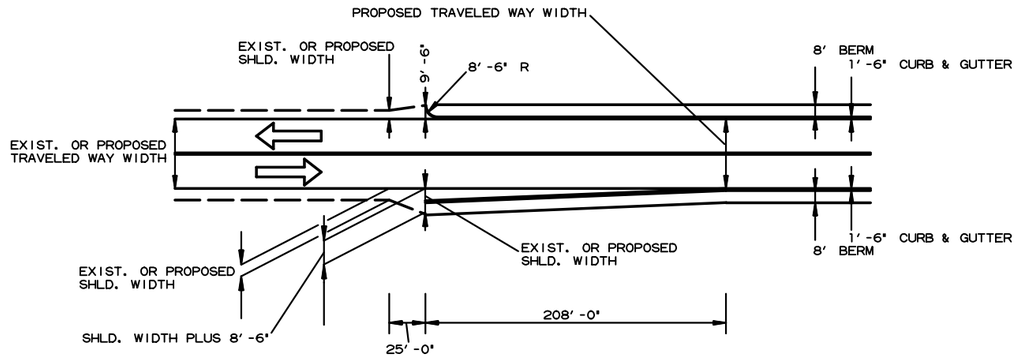
6" X 12" MESH FABRIC (TYPE 3) (W5.5 X W2.9) = 4.26 LBS./SQ. YD.

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

NOTES:

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

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 15560
JEROME PAUL DAVIS
Jerome Davis
08-25-2025



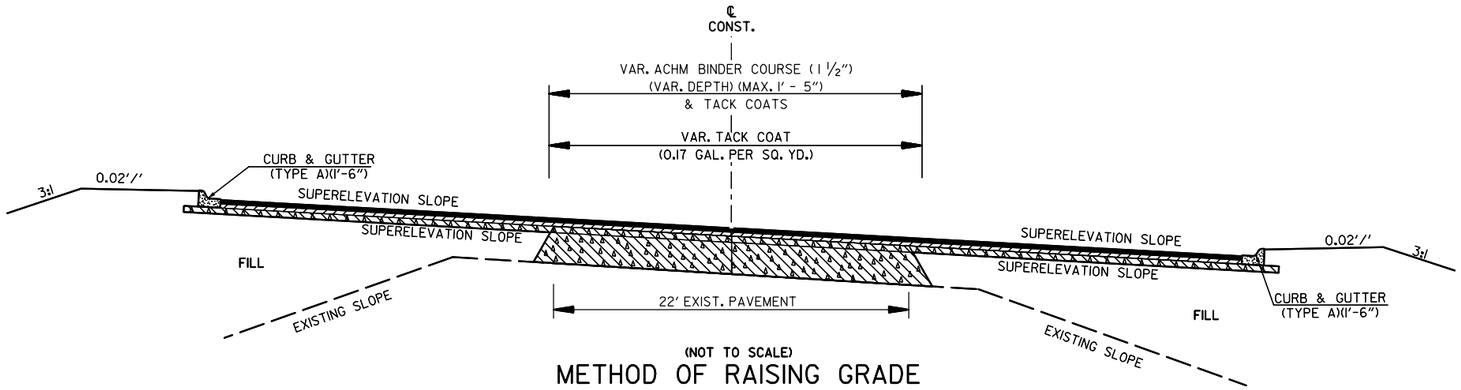
TRANSITION FROM OPEN SHOULDER TO CURB & GUTTER SECTION

SPECIAL DETAILS

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DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	7	73
		SPECIAL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 15560
JEROME PAUL DAVIS
08-25-2025

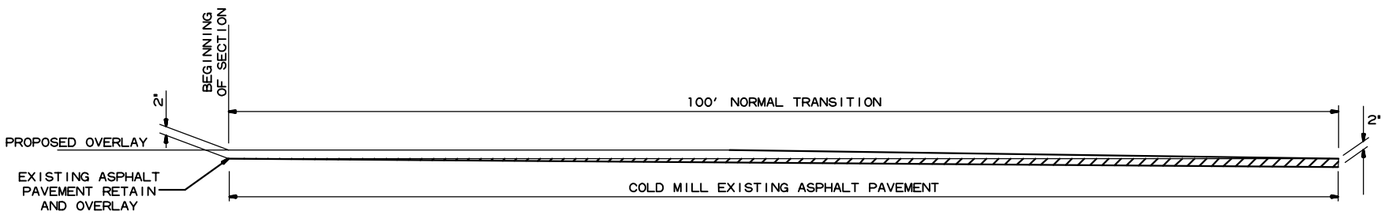


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METHOD OF RAISING GRADE

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 VETWEEN 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.



DETAIL FOR DEPTH TRANSITIONS

USER: JJ5206
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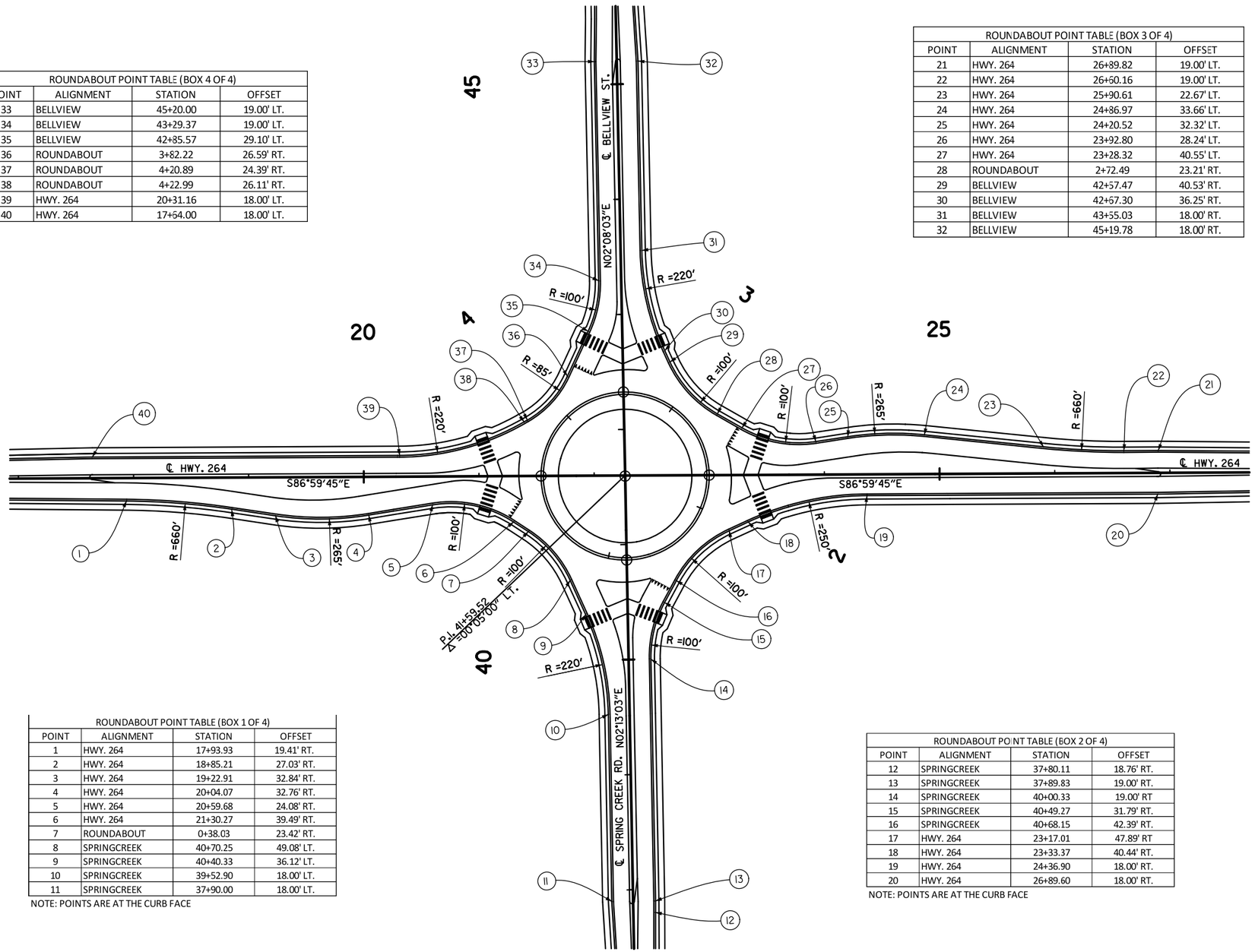
SPECIAL DETAILS

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	8	73
		SPECIAL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 15560
JEROME PAUL DAVIS
08-25-2025

ROUNDABOUT POINT TABLE (BOX 4 OF 4)			
POINT	ALIGNMENT	STATION	OFFSET
33	BELLVIEW	45+20.00	19.00' LT.
34	BELLVIEW	43+29.37	19.00' LT.
35	BELLVIEW	42+85.57	29.10' LT.
36	ROUNDABOUT	3+82.22	26.59' RT.
37	ROUNDABOUT	4+20.89	24.39' RT.
38	ROUNDABOUT	4+22.99	26.11' RT.
39	HWY. 264	20+31.16	18.00' LT.
40	HWY. 264	17+64.00	18.00' LT.

ROUNDABOUT POINT TABLE (BOX 3 OF 4)			
POINT	ALIGNMENT	STATION	OFFSET
21	HWY. 264	26+89.82	19.00' LT.
22	HWY. 264	26+60.16	19.00' LT.
23	HWY. 264	25+90.61	22.67' LT.
24	HWY. 264	24+86.97	33.66' LT.
25	HWY. 264	24+20.52	32.32' LT.
26	HWY. 264	23+92.80	28.24' LT.
27	HWY. 264	23+28.32	40.55' LT.
28	ROUNDABOUT	2+72.49	23.21' RT.
29	BELLVIEW	42+57.47	40.53' RT.
30	BELLVIEW	42+67.30	36.25' RT.
31	BELLVIEW	43+55.03	18.00' RT.
32	BELLVIEW	45+19.78	18.00' RT.



ROUNDABOUT POINT TABLE (BOX 1 OF 4)			
POINT	ALIGNMENT	STATION	OFFSET
1	HWY. 264	17+93.93	19.41' RT.
2	HWY. 264	18+85.21	27.03' RT.
3	HWY. 264	19+22.91	32.84' RT.
4	HWY. 264	20+04.07	32.76' RT.
5	HWY. 264	20+59.68	24.08' RT.
6	HWY. 264	21+30.27	39.49' RT.
7	ROUNDABOUT	0+38.03	23.42' RT.
8	SPRINGCREEK	40+70.25	49.08' LT.
9	SPRINGCREEK	40+40.33	36.12' LT.
10	SPRINGCREEK	39+52.90	18.00' LT.
11	SPRINGCREEK	37+90.00	18.00' LT.

NOTE: POINTS ARE AT THE CURB FACE

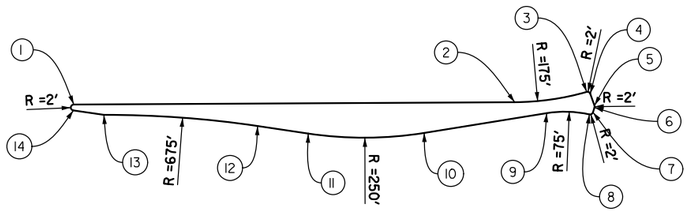
ROUNDABOUT POINT TABLE (BOX 2 OF 4)			
POINT	ALIGNMENT	STATION	OFFSET
12	SPRINGCREEK	37+80.11	18.76' RT.
13	SPRINGCREEK	37+89.83	19.00' RT.
14	SPRINGCREEK	40+00.33	19.00' RT
15	SPRINGCREEK	40+49.27	31.79' RT.
16	SPRINGCREEK	40+68.15	42.39' RT.
17	HWY. 264	23+17.01	47.89' RT
18	HWY. 264	23+33.37	40.44' RT.
19	HWY. 264	24+36.90	18.00' RT.
20	HWY. 264	26+89.60	18.00' RT.

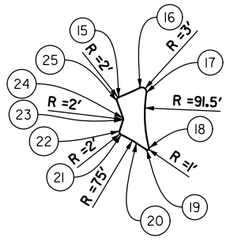
NOTE: POINTS ARE AT THE CURB FACE

ROUNDABOUT LAYOUT SPECIAL DETAILS

USER: JJ5206
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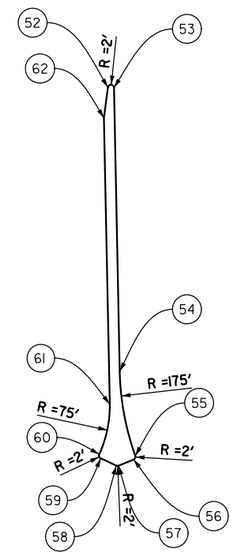
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	9	73
		SPECIAL DETAILS				





HWY. 264 MEDIAN ISLAND POINT TABLE (BOX 1 OF 4)		
POINT	STATION	OFFSET
1	17+64.00	3.00' LT.
2	20+55.10	3.00' LT.
3	21+02.52	9.55' LT.
4	21+04.95	8.28' LT.
5	21+07.65	0.54' LT.
6	21+07.67	0.72' RT.
7	21+06.64	3.96' RT.
8	21+04.29	5.30' RT.
9	20+76.07	4.32' RT.
10	19+95.23	16.93' RT.
11	19+18.66	17.01' RT.
12	18+85.21	11.86' RT.
13	17+83.85	4.00' RT.
14	17+63.70	0.98' RT.
15	21+17.54	14.52' LT.
16	21+31.56	20.59' LT.
17	21+35.83	17.40' LT.
18	21+37.29	19.27' RT.
19	21+35.77	20.34' RT.
20	21+29.01	15.87' RT.
21	21+19.05	10.32' RT.
22	21+19.98	7.90' RT.
23	21+20.32	0.55' RT.
24	21+20.30	0.72' LT.
25	21+16.37	11.99' LT.

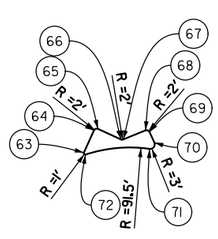
NOTE: SPLITTER ISLAND POINTS BASED ON HWY. 264 ALIGNMENT AND ARE AT THE CURB FACE

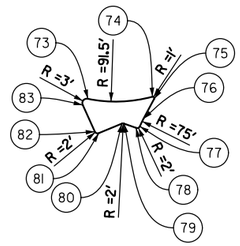


BELLVIEW ST. MEDIAN ISLAND POINT TABLE (BOX 3 OF 4)		
POINT	STATION	OFFSET
52	45+20.07	0.98' LT.
53	45+19.78	3.00' RT.
54	43+32.52	3.00' RT.
55	42+76.63	12.17' RT.
56	42+74.12	10.99' RT.
57	42+70.31	1.09' RT
58	42+70.38	0.50' LT.
59	42+75.36	10.72' LT.
60	42+78.04	11.64' LT.
61	43+11.01	4.00' LT.
62	44+99.93	4.00' LT.
63	42+49.14	25.72' LT.
64	42+63.65	18.65' LT.
65	42+64.57	15.97' LT.
66	42+57.31	1.06' LT.
67	42+57.24	0.53' RT.
68	42+62.98	15.34' RT.
69	42+61.87	17.89' RT.
70	42+54.81	20.96' RT.
71	42+50.66	17.72' RT.
72	42+47.75	24.52' RT.

NOTE: SPLITTER ISLAND POINTS BASED ON BELLVIEW RD. ALIGNMENT AND ARE AT THE CURB FACE

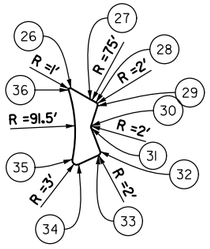
STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 15560
JEROME PAUL DAVIS
Jerome Paul Davis
08-25-2025

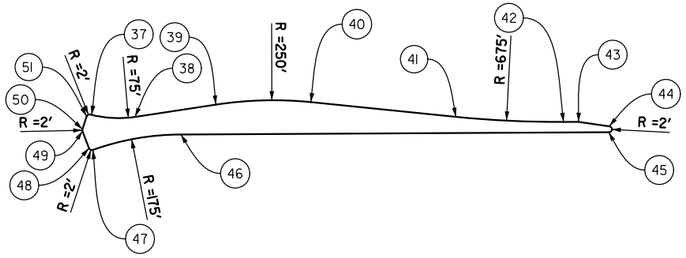




SPRINGCREEK RD. MEDIAN ISLAND POINT TABLE (BOX 4 OF 4)		
POINT	STATION	OFFSET
73	40+69.60	22.89' LT.
74	40+70.11	19.76' RT.
75	40+68.65	20.88' RT.
76	40+55.67	13.59' RT.
77	40+50.75	11.07' RT.
78	40+49.73	8.53' RT.
79	40+52.77	0.72' RT.
80	40+52.76	0.74' LT.
81	40+46.73	16.08' LT.
82	40+47.79	18.65' LT.
83	40+65.48	26.31' LT.
84	40+35.58	11.62' LT.
85	40+39.88	0.71' LT.
86	40+39.88	0.74' RT.
87	40+38.33	4.74' RT.
88	40+36.01	5.96' RT.
89	40+18.96	4.00' RT.
90	38+09.85	4.00' RT.
91	37+89.70	0.98' RT.
92	37+90.00	3.00' LT.
93	39+75.40	3.00' LT.
94	40+33.06	12.77' LT.

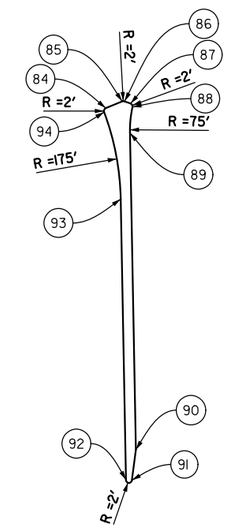
NOTE: SPLITTER ISLAND POINTS BASED ON SPRINGCREEK RD. ALIGNMENTAND ARE AT THE CURB FACE





HWY. 264 MEDIAN ISLAND POINT TABLE (BOX 2 OF 4)		
POINT	STATION	OFFSET
26	23+16.57	25.39' LT.
27	23+29.28	18.06' LT.
28	23+33.12	15.99' LT.
29	23+34.12	13.58' LT.
30	23+29.79	0.55' LT.
31	23+29.81	0.79' RT.
32	23+35.68	16.35' RT.
33	23+34.63	18.88' RT.
34	23+21.54	24.84' RT.
35	23+17.36	21.50' RT.
36	23+15.11	24.23' LT.'
37	23+47.71	10.49' LT.
38	23+77.64	8.83' LT.
39	24+30.70	16.63' LT.
40	24+93.38	17.89' LT.
41	25+89.03	7.76' LT.
42	26+60.16	4.00' LT.
43	26+70.04	4.00' LT.
44	26+90.30	0.98' LT.
45	26+90.00	3.00' RT.
46	24+07.48	3.00' RT.
47	23+49.31	12.95' RT.
48	23+46.77	11.77' RT.
49	23+42.54	0.54' RT.
50	23+42.52	0.80' LT.
51	23+45.31	9.19' LT.

NOTE: SPLITTER ISLAND POINTS BASED ON HWY. 264 ALIGNMENT AND ARE AT THE CURB FACE

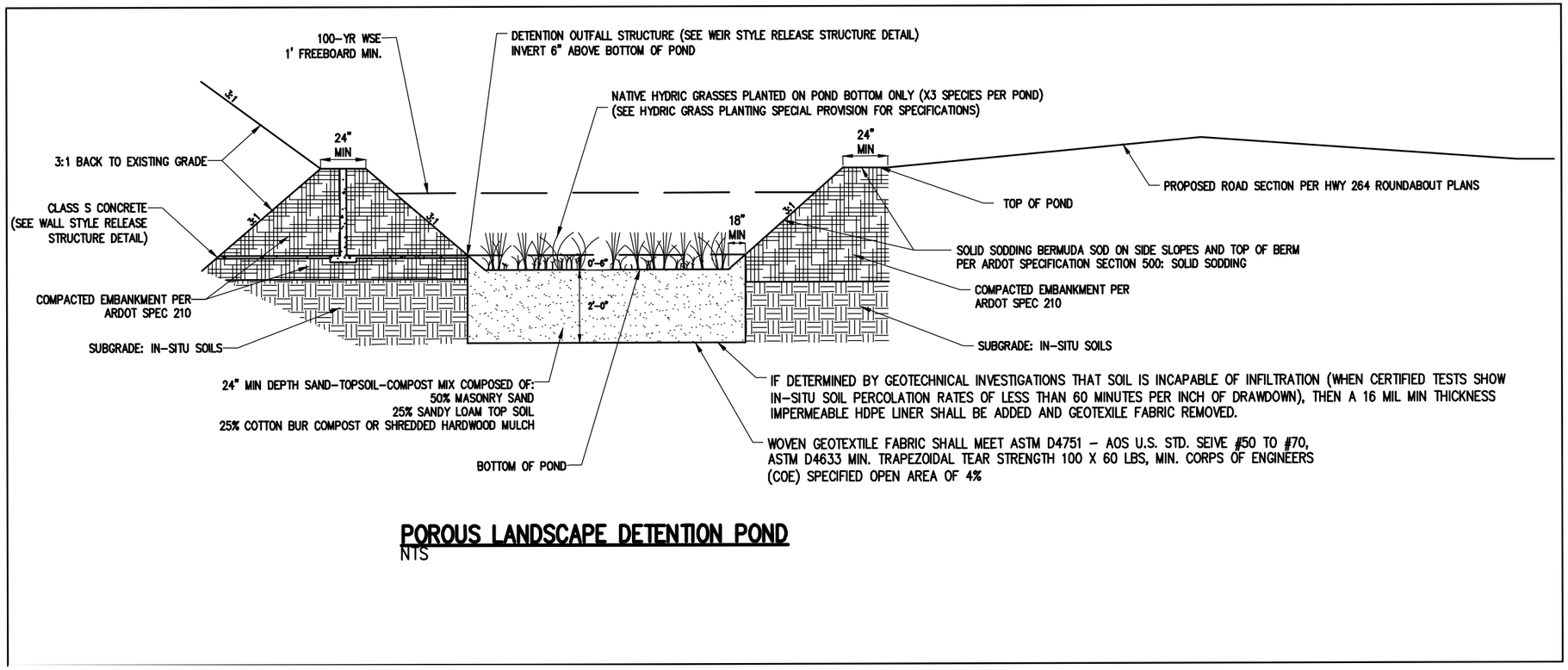


ROUNDABOUT LAYOUT SPECIAL DETAILS

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DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	10	74
		SPECIAL DETAILS				



POROUS LANDSCAPE DETENTION POND
NTS

SUMMARY OF DETENTION STORAGE PONDS QUANTITIES

DESCRIPTION	UNCLASSFIED EXCAVATION (FOR PONDS)	COMPACTED EMBANKMENT	CLASS S CONCRETE-ROADWAY	REINF. STEEL-ROADWAY (GRADE 60)	SOLID SODDING	HYDRIC GRASS 1 GAL. PLANTINGS	WATER	UNCLASSFIED EXCAVATION (FOR OUTFALL STRUCTURES)
	CU.YD.			POUND	SQ.YD.	EACH	M.GAL.	CU.YD
DENTENTION POND 1	400	412	5.22	224	1002	145	17.2	12.3
DENTENTION POND 2	357	412	5.22	224	975	122	16.1	19.4
DENTENTION POND 3	1000	722	7.31	386	1624	298	29.8	15.3
DENTENTION POND 4	387	625	6.06	319	1978	99	16.1	12.0
DENTENTION POND 5	1145	1310	10.28	500	6614	187	31.3	25.7
TOTALS	**3289**	**3481**	**34.09**	**1653**	**12193**	**851**	**110.5**	**84.7**

BASIS OF ESTIMATE:
WATER.....12.6 GAL. / SQ. YD. OF SOLID SODDING
WATER.....1 INCH DEPTH OVER BOTTOM OF POND SURFACE AREA PER WEEK FOR 8 WEEKS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 23100
TRENT R. WOESSNER
08/27/2025

SPECIAL DETAILS

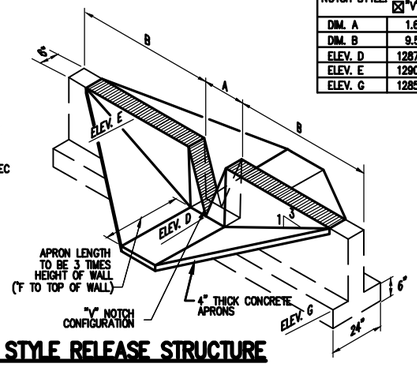
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DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	11	74
		SPECIAL DETAILS				

1. PROVIDE 3/4" CHAMFER ON ALL EXPOSED EDGES UNLESS ADJACENT TO SIDEWALKS OR OTHER CONCRETE SURFACES.
2. CONCRETE CHARACTERISTICS SHALL CONFORM TO CLASS S CONCRETE, PER TABLE 802-1 'CLASS OF CONCRETE' IN ARDOT SPEC 802.
3. STEEL REBAR SHALL CONFORM TO ARDOT SPEC 804. WHERE DISCREPANCY OCCURS, DETAIL HEREIN SHALL APPLY.
4. SEE STEEL REINFORCEMENT SCHEDULE THIS SHEET.

NOTCH STYLE:	☐SQUARE ☒"V"
DIM. A	1.60'
DIM. B	9.50'
ELEV. D	1287.50'
ELEV. E	1290.50'
ELEV. G	1285.50'



POND 4 WALL STYLE RELEASE STRUCTURE

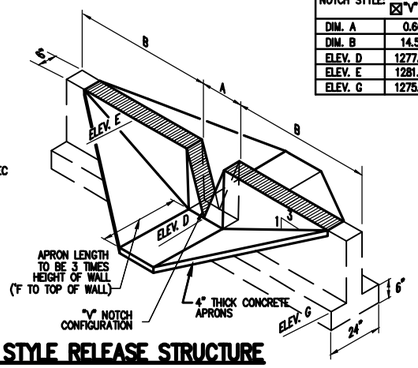
NTS

REVISED 04/16/15

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 23100
TRENT R. WOESSNER
08/27/2025

1. PROVIDE 3/4" CHAMFER ON ALL EXPOSED EDGES UNLESS ADJACENT TO SIDEWALKS OR OTHER CONCRETE SURFACES.
2. CONCRETE CHARACTERISTICS SHALL CONFORM TO CLASS S CONCRETE, PER TABLE 802-1 'CLASS OF CONCRETE' IN ARDOT SPEC 802.
3. STEEL REBAR SHALL CONFORM TO ARDOT SPEC 804. WHERE DISCREPANCY OCCURS, DETAIL HEREIN SHALL APPLY.
4. SEE STEEL REINFORCEMENT SCHEDULE THIS SHEET.

NOTCH STYLE:	☐SQUARE ☒"V"
DIM. A	0.66'
DIM. B	14.50'
ELEV. D	1277.00'
ELEV. E	1281.66'
ELEV. G	1275.00'



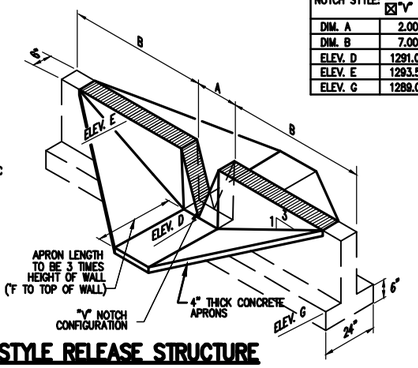
POND 5 WALL STYLE RELEASE STRUCTURE

NTS

REVISED 04/16/15

1. PROVIDE 3/4" CHAMFER ON ALL EXPOSED EDGES UNLESS ADJACENT TO SIDEWALKS OR OTHER CONCRETE SURFACES.
2. CONCRETE CHARACTERISTICS SHALL CONFORM TO CLASS S CONCRETE, PER TABLE 802-1 'CLASS OF CONCRETE' IN ARDOT SPEC 802.
3. STEEL REBAR SHALL CONFORM TO ARDOT SPEC 804. WHERE DISCREPANCY OCCURS, DETAIL HEREIN SHALL APPLY.
4. SEE STEEL REINFORCEMENT SCHEDULE THIS SHEET.

NOTCH STYLE:	☐SQUARE ☒"V"
DIM. A	2.00'
DIM. B	7.00'
ELEV. D	1291.00'
ELEV. E	1293.50'
ELEV. G	1289.00'



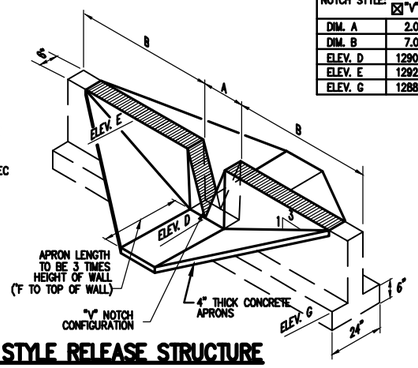
POND 2 WALL STYLE RELEASE STRUCTURE

NTS

REVISED 04/16/15

1. PROVIDE 3/4" CHAMFER ON ALL EXPOSED EDGES UNLESS ADJACENT TO SIDEWALKS OR OTHER CONCRETE SURFACES.
2. CONCRETE CHARACTERISTICS SHALL CONFORM TO CLASS S CONCRETE, PER TABLE 802-1 'CLASS OF CONCRETE' IN ARDOT SPEC 802.
3. STEEL REBAR SHALL CONFORM TO ARDOT SPEC 804. WHERE DISCREPANCY OCCURS, DETAIL HEREIN SHALL APPLY.
4. SEE STEEL REINFORCEMENT SCHEDULE THIS SHEET.

NOTCH STYLE:	☐SQUARE ☒"V"
DIM. A	2.00'
DIM. B	7.00'
ELEV. D	1290.25'
ELEV. E	1292.75'
ELEV. G	1288.25'

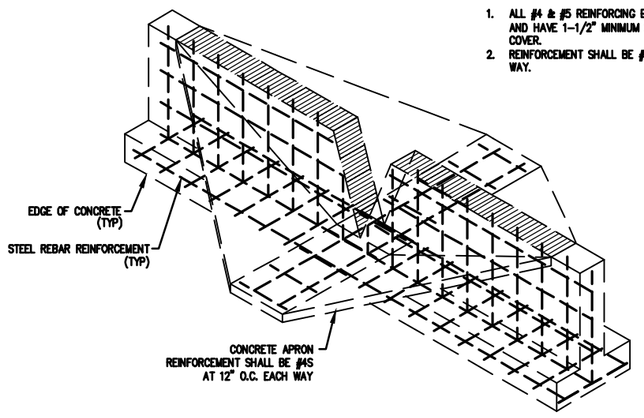


POND 1 WALL STYLE RELEASE STRUCTURE

NTS

REVISED 04/16/15

1. ALL #4 & #5 REINFORCING BARS TO BE GRADE 60 AND HAVE 1-1/2" MINIMUM COVER. >#5, 2" COVER.
2. REINFORCEMENT SHALL BE #4s AT 12" O.C. EACH WAY.

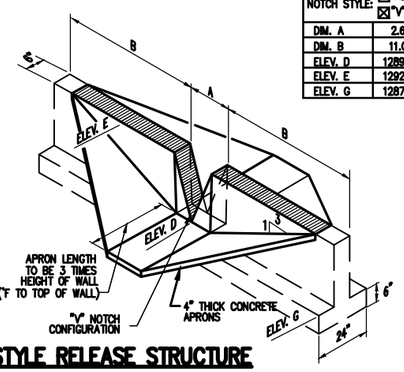


STEEL REINFORCEMENT SCHEDULE FOR WALL STYLE RELEASE STRUCTURE

NTS

1. PROVIDE 3/4" CHAMFER ON ALL EXPOSED EDGES UNLESS ADJACENT TO SIDEWALKS OR OTHER CONCRETE SURFACES.
2. CONCRETE CHARACTERISTICS SHALL CONFORM TO CLASS S CONCRETE, PER TABLE 802-1 'CLASS OF CONCRETE' IN ARDOT SPEC 802.
3. STEEL REBAR SHALL CONFORM TO ARDOT SPEC 804. WHERE DISCREPANCY OCCURS, DETAIL HEREIN SHALL APPLY.
4. SEE STEEL REINFORCEMENT SCHEDULE THIS SHEET.

NOTCH STYLE:	☐SQUARE ☒"V"
DIM. A	2.60'
DIM. B	11.00'
ELEV. D	1289.25'
ELEV. E	1292.75'
ELEV. G	1287.25'



POND 3 WALL STYLE RELEASE STRUCTURE

NTS

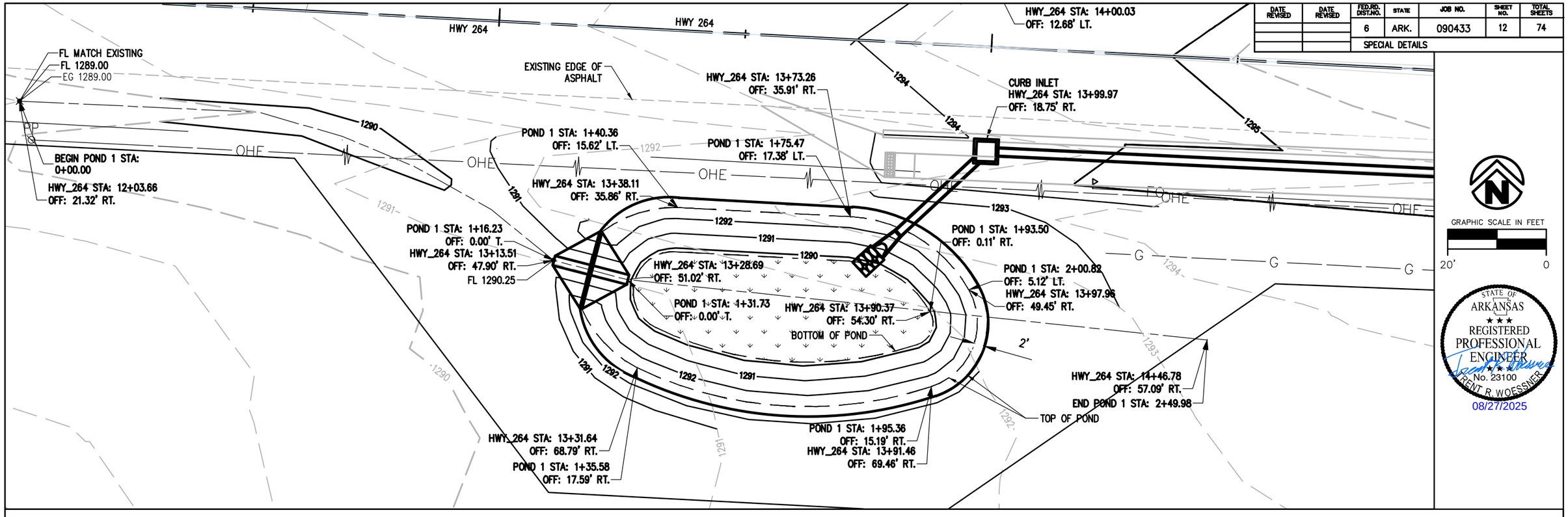
REVISED 04/16/15

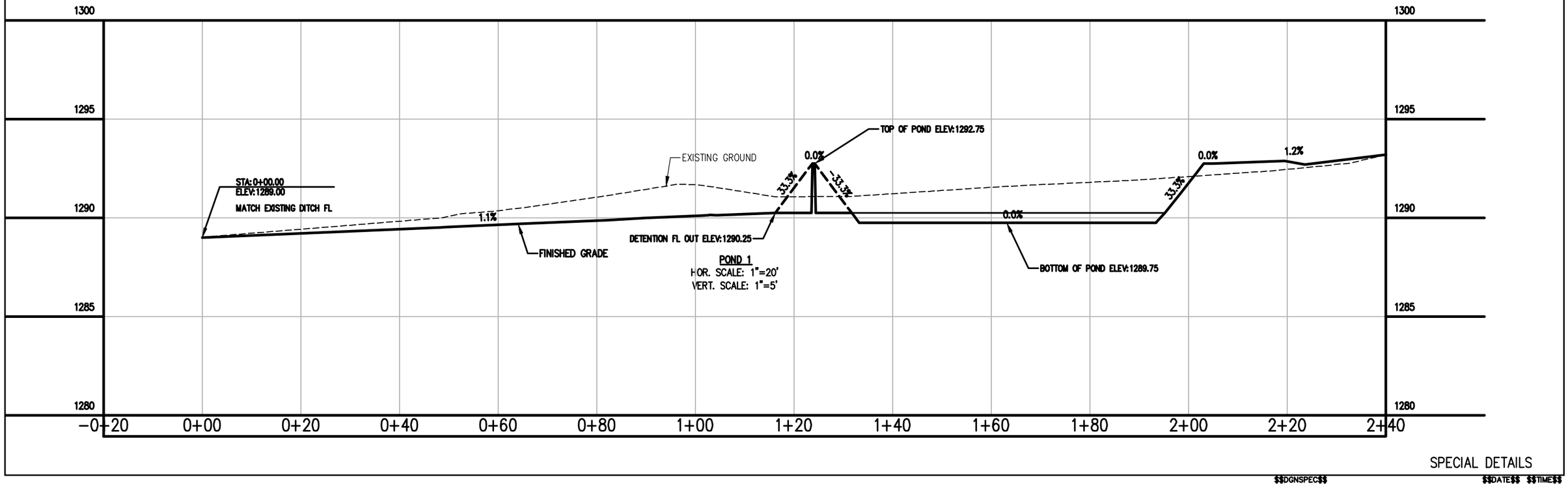
SPECIAL DETAILS

$$DGNSPEC$$ $$DATE$$ $$TIME$$

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DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	12	74
		SPECIAL DETAILS				





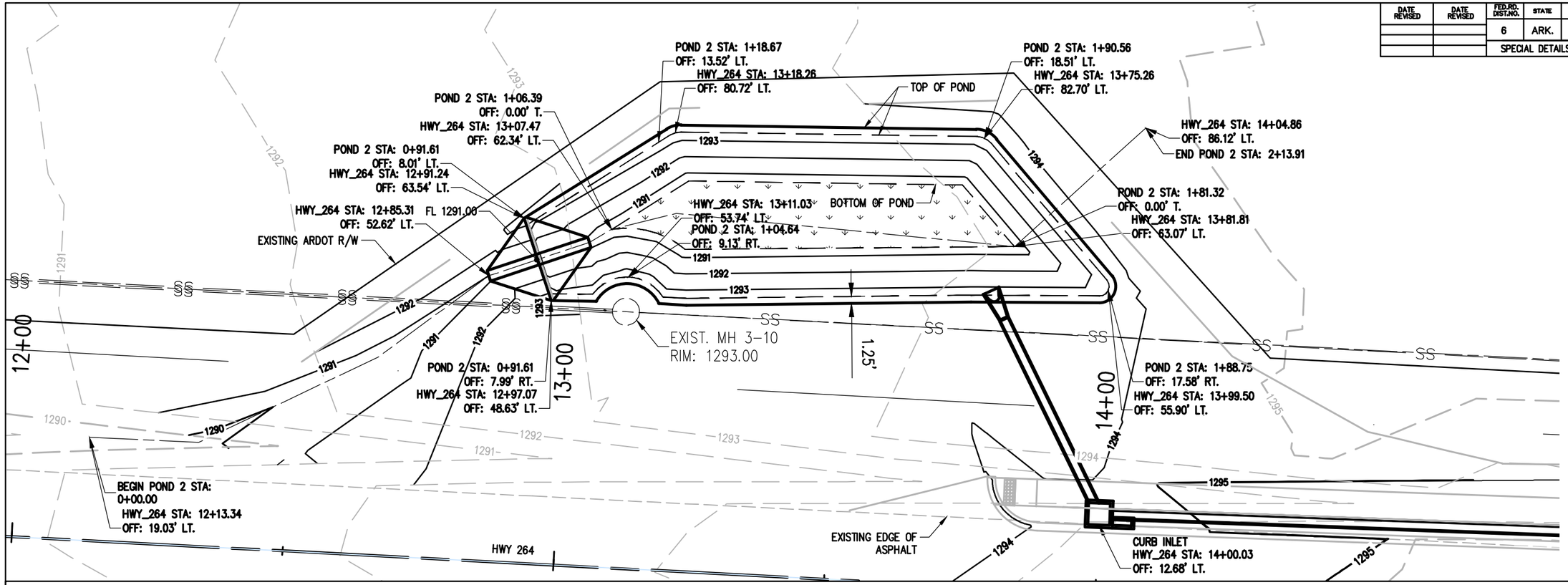
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 23100
TRENT R WOESSNER
08/27/2025

SPECIAL DETAILS

$$DGNSPEC$$ $$DATE$$ $$TIME$$

DRAWING: C:\21100800_ROUNDABOUT\INFRASTRUCTURE\CIVIL\REPORTS\DRAINAGE\MAPS\DETAILS\090433 SPECIAL PROVISION & POND DETAILS.DWG
LAYOUT: POND P&P 1 , LAST SAVED: TW5277, 7/2/2025 3:22:15 PM
LAST PLOTTED BY: TRENT WOESSNER, 7/2/2025 3:24:42 PM (PLOTTED BY: "VALID ON HARD COPY ONLY)

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	13	74
		SPECIAL DETAILS				

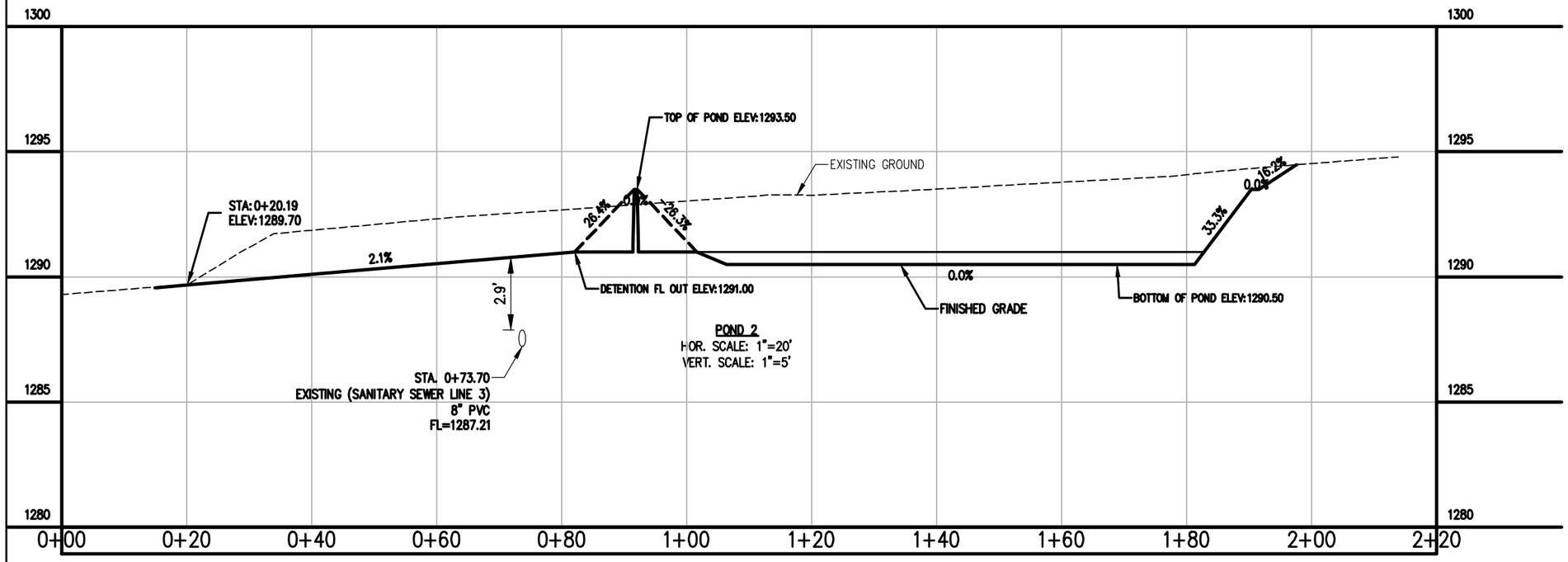


GRAPHIC SCALE IN FEET

20' 0

STATE OF ARKANSAS
★★★
REGISTERED PROFESSIONAL ENGINEER
★★★
No. 23100
TRENT R WOESSNER

08/27/2025

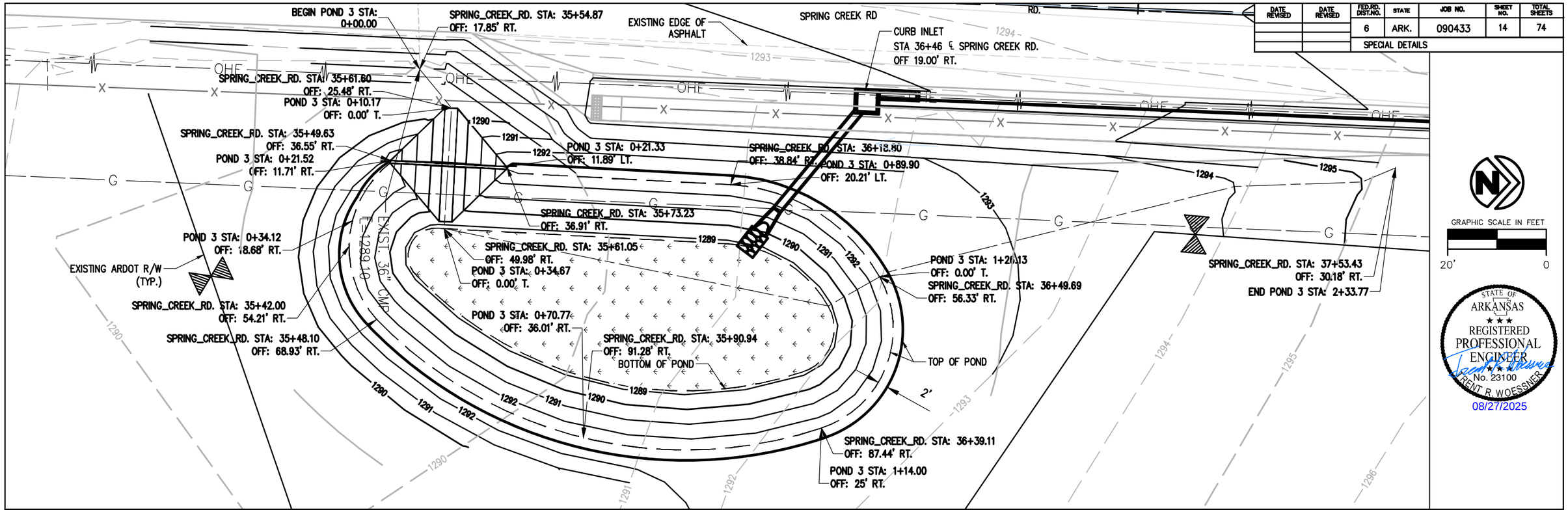


SPECIAL DETAILS

$$DGNSPEC$$ $$DATE$$ $$TIME$$

DRAWING: G:\21100800_ROUNDABOUT\INFRASTRUCTURE\CIVIL\REPORTS\DRAINAGE\MAPS\DETAILS\090433 SPECIAL PROVISION & POND DETAILS.DWG
LAYOUT: POND P&P 2 , LAST SAVED: TW5277, 7/2/2025 3:22:15 PM
LAST PLOTTED BY: TRENT WOESSNER, 7/2/2025 3:24:45 PM ("PLOTTED BY:" VALID ON HARD COPY ONLY)

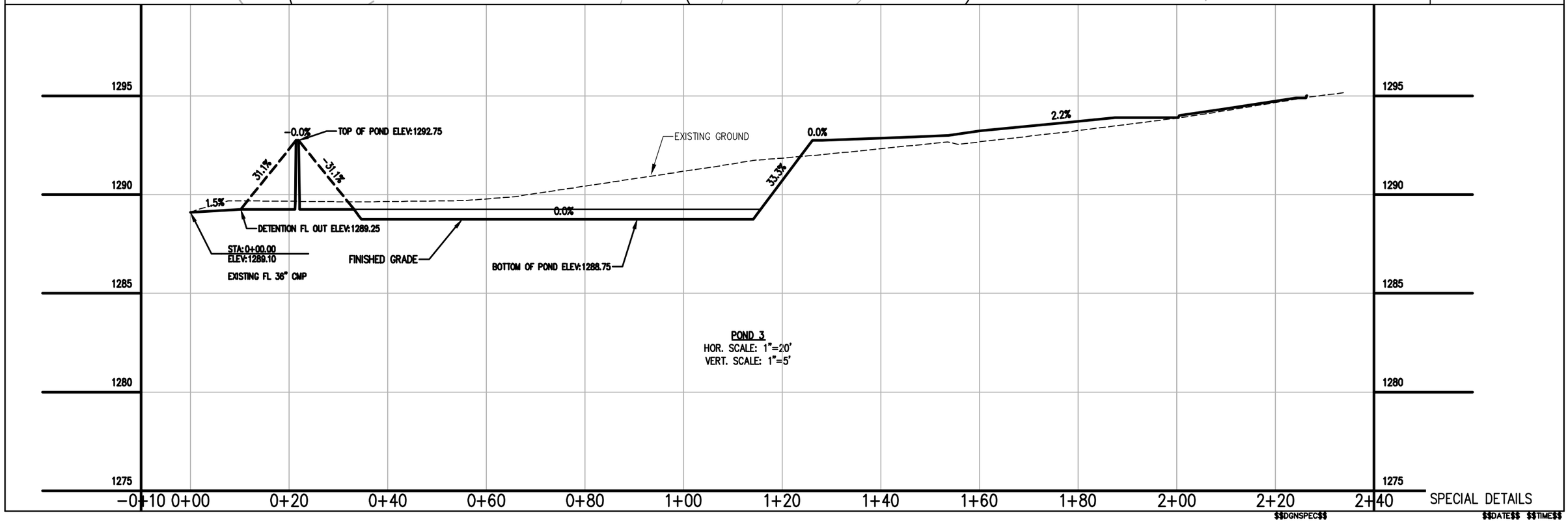
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	14	74
		SPECIAL DETAILS				



GRAPHIC SCALE IN FEET

20' 0

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 23100
TRENT R WOESSNER
08/27/2025



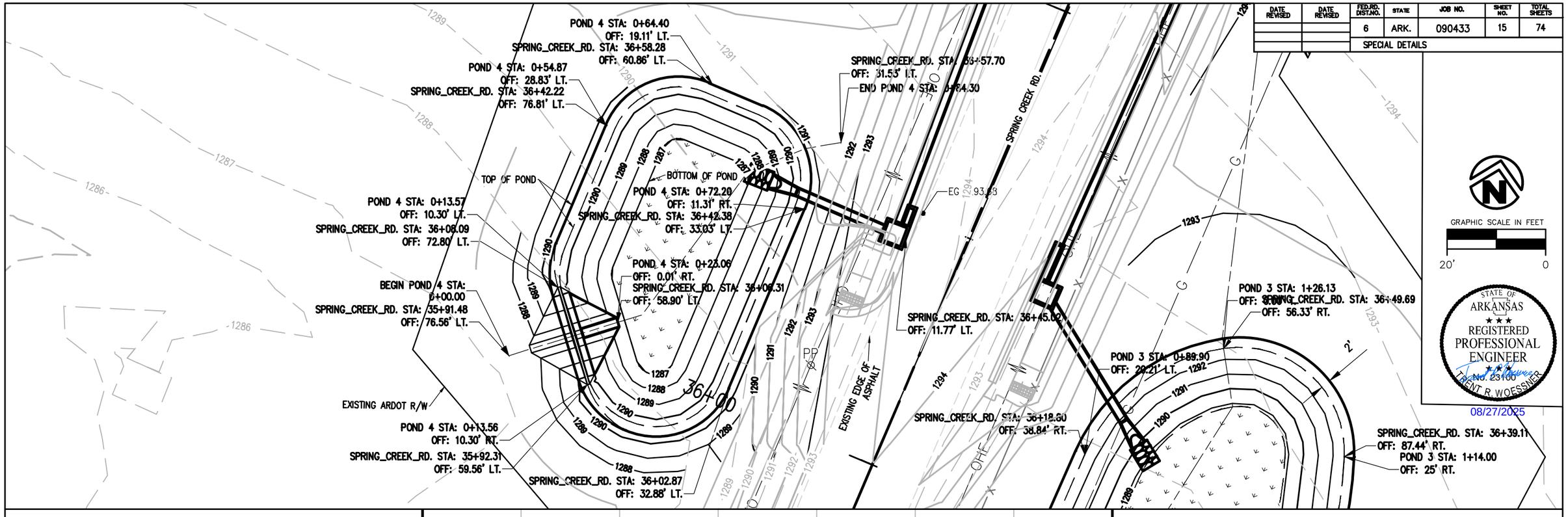
POND 3
HOR. SCALE: 1"=20'
VERT. SCALE: 1"=5'

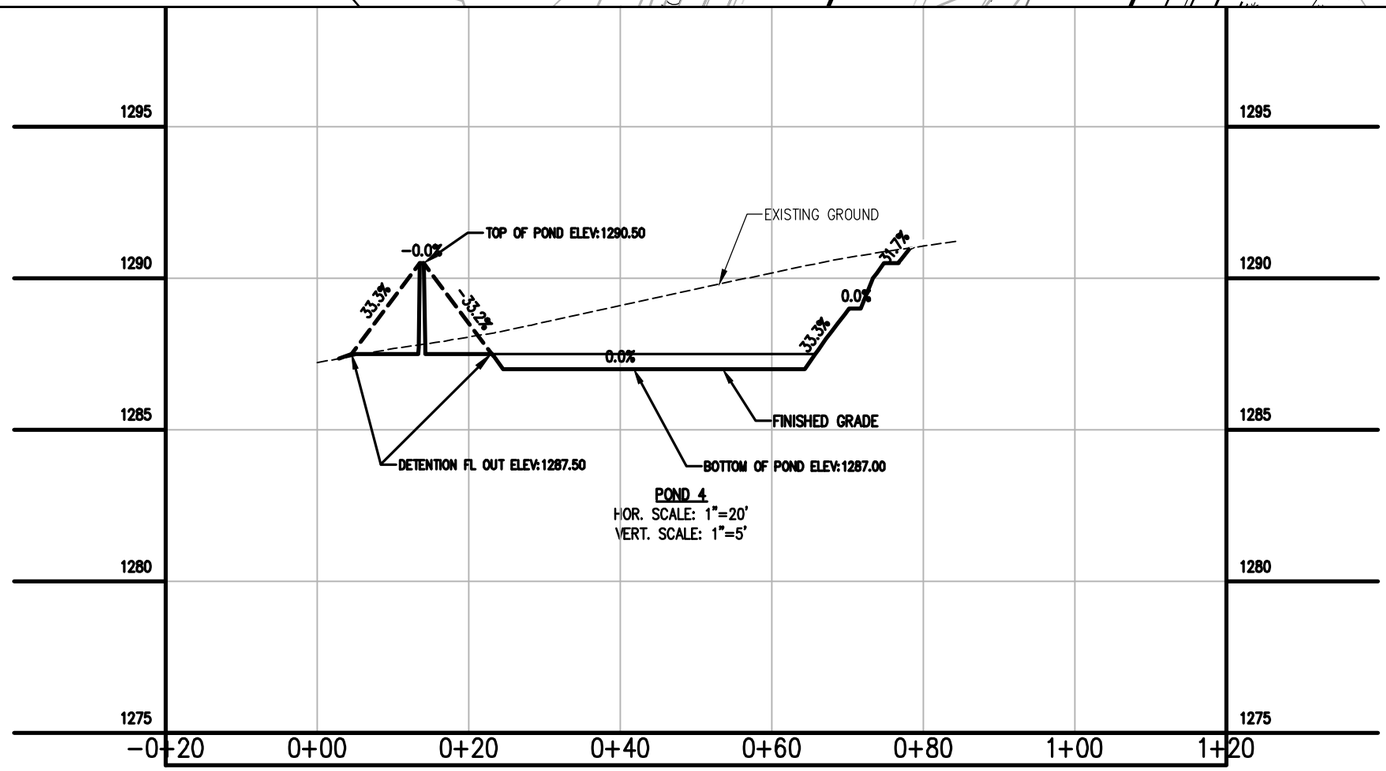
SPECIAL DETAILS

$$DGNSPEC$$ $$DATE$$ $$TIME$$

DRAWING: G:\21100800_ROUNDABOUT\INFRASTRUCTURE\CIVIL\REPORTS\DRAINAGE\MAPS\DETAILS\090433 SPECIAL PROVISION & POND DETAILS.DWG
LAYOUT: POND P & P 3 , LAST SAVED: TWS277, 7/2/2025 3:22:15 PM
LAST PLOTTED BY: TRENT WOESSNER, 7/2/2025 3:24:47 PM ("PLOTTED BY:" VALID ON HARD COPY ONLY)

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	15	74
		SPECIAL DETAILS				





POND 4
HOR. SCALE: 1"=20'
VERT. SCALE: 1"=5'

SPECIAL DETAILS

DRAWING: G:\21100800_ROUNDABOUT\INFRASTRUCTURE\CIVIL\REPORTS\DRAINAGE\MAPS\DETAILS\090433 SPECIAL PROVISION & POND DETAILS.DWG
LAYOUT: POND P&P 4 , LAST SAVED: TW5277, 8/27/2025 4:21:21 PM
LAST PLOTTED BY: TRENT WOESSNER, 8/27/2025 4:21:47 PM (PLOTTED BY: "VALID ON HARD COPY ONLY)

$$DGNSPEC$$ $$DATE$$ $$TIME$$

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	16	74
		SPECIAL DETAILS				

BELLVIEW_RD STA: 45+72.52
OFF: 90.68' LT.
POND 5 STA: 0+75.07
OFF: 23.67' LT.

TOP OF POND

POND 5 STA: 1+58.62
OFF: 14.83' LT.
BELLVIEW_RD STA: 46+44.40
OFF: 89.16' LT.

BELLVIEW_RD STA: 46+88.60
OFF: 86.38' LT.
END POND 5 STA: 2+00.20

EG 1275.79

BELLVIEW_RD STA: 45+60.01
OFF: 77.80' LT.
POND 5 STA: 0+65.48
OFF: 15.48' LT.

BOTTOM OF POND
BELLVIEW_RD STA: 45+75.20
OFF: 68.10' LT.

POND 5 STA: 1+43.40
OFF: 0.00' T.

BELLVIEW_RD STA: 45+92.67
OFF: 42.53' LT.
POND 5 STA: 0+92.24
OFF: 25.53' RT.

BELLVIEW_RD STA: 46+43.90
OFF: 67.94' LT.

BELLVIEW_RD STA: 46+64.89
OFF: 70.47' LT.
POND 5 STA: 1+58.31
OFF: 15.19' RT.

BELLVIEW_RD STA: 45+08.44
OFF: 34.58' LT.
BEGIN POND 5 STA: 0+00.00

POND 5 STA: 1+42.84
OFF: 26.24' RT.
BELLVIEW_RD STA: 46+51.29
OFF: 41.57' LT.

CURB INLET
BELLVIEW RD. STA: 46+58 LT.
OFF: 19.00'

EXISTING EDGE OF ASPHALT

BELLVIEW RD.

OHE

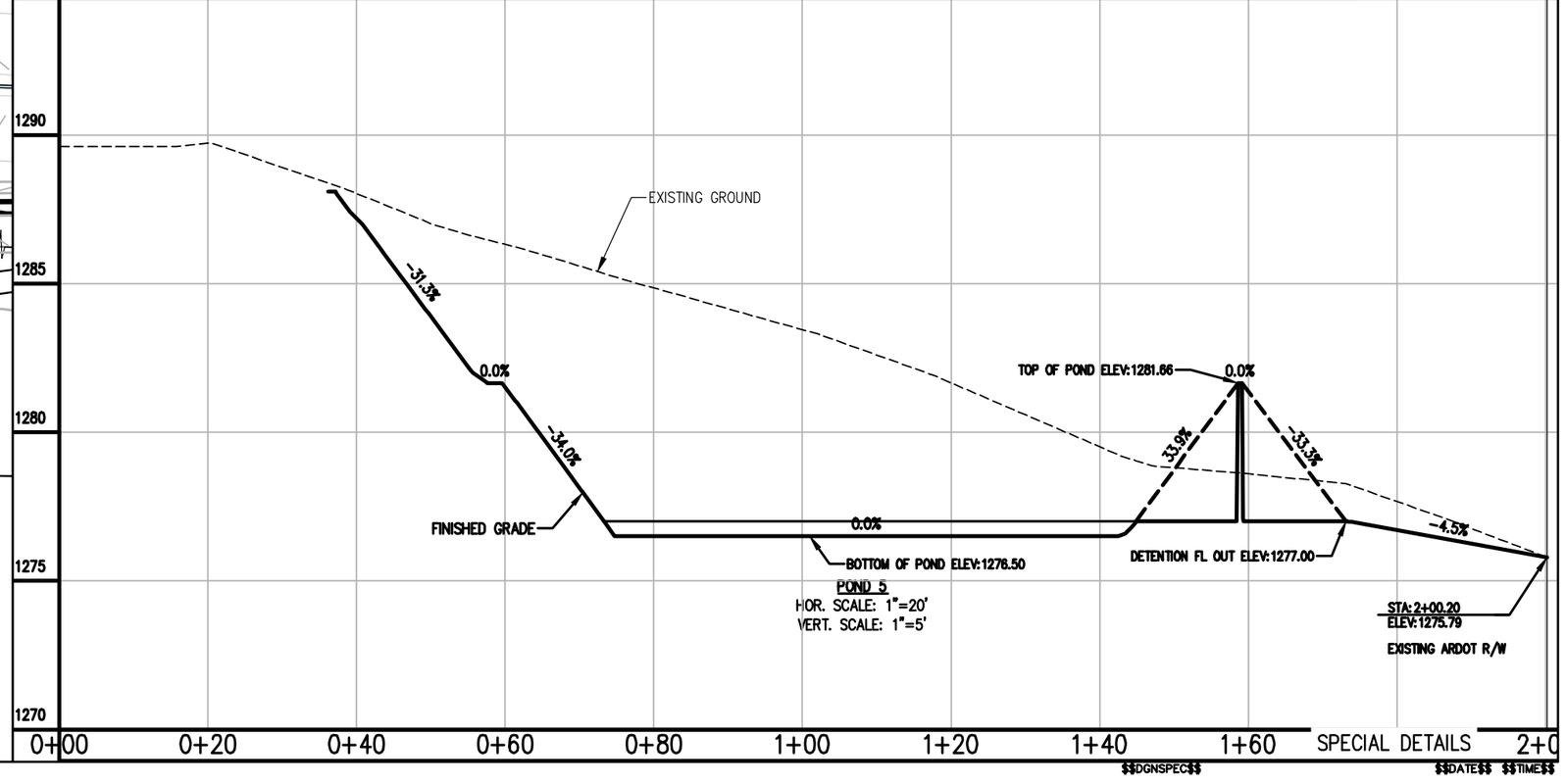
EXIST. 24" CMP E=1274.51

EXIST. 24" CMP E=1274.47

EXIST. 30" CPP E=1274.79

GRAPHIC SCALE IN FEET
20' 0

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 23100
TRENT R WOESSNER
08/27/2025



SPECIAL DETAILS

$$DGNSPEC$$ $$DATE$$ $$TIME$$

DRAWING: G:\21100800_ROUNDABOUT\INFRASTRUCTURE\CIVIL\REPORTS\DRAINAGE\MAPS\DETAILS\090433 SPECIAL PROVISION & POND DETAILS.DWG
LAYOUT: POND P&P 5 , LAST SAVED: TW5277, 7/2/2025 3:22:15 PM
LAST PLOTTED BY: TRENT WOESSNER, 7/2/2025 3:24:54 PM (PLOTTED BY: "VALID ON HARD COPY ONLY)

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	17	73
		TEMPORARY EROSION CONTROL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 15560
JEROME PAUL DAVIS
08-25-2025

N

15

SILT FENCE = 848 LIN. FT.

PROP R/W
EXIST. R/W
℄ HWY. 264 (W. MONROE AVE)
S86°59'45"E

STA. 13+54.00
BEGIN JOB 090433
LOG MILE 2.15

SILT FENCE = 848 LIN. FT.

STA. 21+53.91 ℄ HWY. 264 =
STA. 0+00.00 ℄ ROUNDABOUT =
STA. 4+58.67 ℄ ROUNDABOUT
△ = 89°41'25"

20

45

PROP R/W
℄ BELLVIEW ST.
N02°08'03"E

STA. 42+32.52 ℄ BELLVIEW ST. =
STA. 3+45.51 ℄ ROUNDABOUT
△ = 90°00'00"

25

STA. 22+99.91 ℄ HWY. 264 =
STA. 2+30.13 ℄ ROUNDABOUT
△ = 89°41'25"

PROP R/W
SILT FENCE = 284 LIN. FT.
EXIST. R/W
S86°59'45"E
SILT FENCE = 313 LIN. FT.
PROP R/W

T.C.E.

P.I. 41+59.52
△ = 00°03'00" LT.

40

STA. 40+86.52 ℄ SPRING CREEK RD. =
STA. 1+16.07 ℄ ROUNDABOUT
△ = 90°00'00"

STA. 22+26.91 ℄ HWY. 264 =
STA. 41+59.92 ℄ SPRING CREEK/BELLVIEW ST. =
△ = 89°07'48"

16'
+06
N02°13'03"E
℄ SPRING CREEK RD.
PROP R/W
PROP R/W

REVISIONS

DATE	REVISION

LEGEND

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

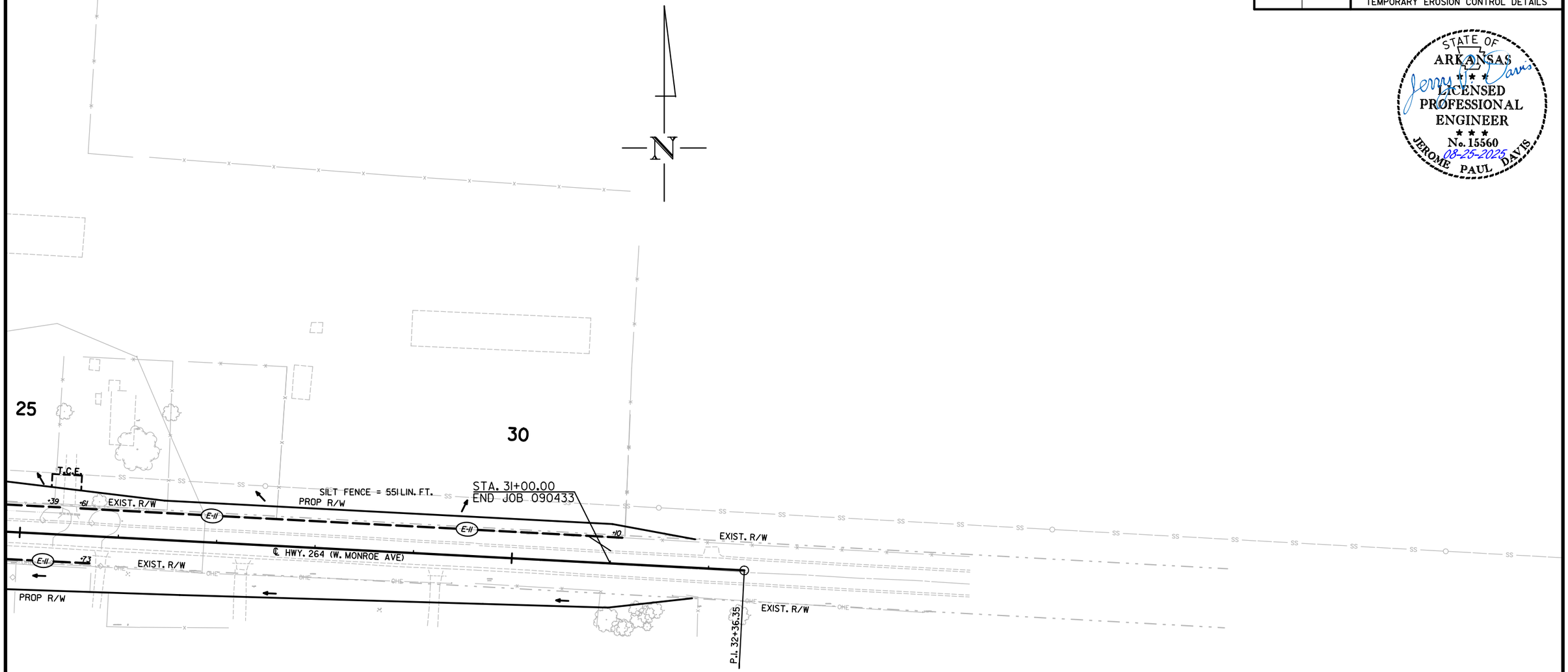
CLEARING AND GRUBBING
TEMPORARY EROSION CONTROL DETAILS

USER: JJ5206
DESIGN FILE: G:\21100800_Roundabout\TRANSP\dgn\erosion\090433 EC.dgn
PLOTTED: 8/22/2025 13:19
SCALE: 1:100

G:\21100800_Roundabout\TRANSP\dgn\erosion\090433 EC.dgn 8/22/2025 13:19

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	18	73
		TEMPORARY EROSION CONTROL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 15560
JEROME PAUL DAVIS
Jerry P. Davis
08-25-2025



REVISIONS

DATE	REVISION

LEGEND

E-II = SILT FENCE

CLEARING AND GRUBBING
TEMPORARY EROSION CONTROL DETAILS

USER: JJS206
DESIGN FILE: G:\21100800_Roundabout\TRANSP\dgn\erosion\090433 EC.dgn
PLOTTED: 8/22/2025 13:19
SCALE: 1:100

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	19	73
		TEMPORARY EROSION CONTROL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 15560
JEROME PAUL DAVIS
Jerry Paul Davis
08-25-2025

35

STA. 40+86.52 ℄ SPRING CREEK RD. =
STA. 1+16.07 ℄ ROUNDABOUT
△ = 90°00'00"

40

R=141+59.52
Δ=200°05'00" LT.

20

45

STA. 21+53.91 ℄ HWY. 264 =
STA. 0+00.00 ℄ ROUNDABOUT =
STA. 4+58.67 ℄ ROUNDABOUT
△ = 89°41'25"

S89°59'45"E 3,465.49'

PROP R/W

16'

+06 N02°13'03"E

℄ SPRING CREEK RD.

N02°08'03"E ℄ BELLVIEW ST.

PROP R/W

STA. 35+65.00
BEGIN CONST.
SPRING CREEK RD.

PROP R/W

STA. 42+32.52 ℄ BELLVIEW ST. =
STA. 3+45.51 ℄ ROUNDABOUT
△ = 90°00'00"

STA. 47+10.00
END CONST.
BELLVIEW ST.

3

STA. 22+26.91 ℄ HWY. 264 =
STA. 41+59.92 ℄ SPRING CREEK/BELLVIEW ST. =
△ = 89°07'48"

STA. 22+99.91 ℄ HWY. 264 =
STA. 2+30.13 ℄ ROUNDABOUT
△ = 89°41'25"

2

S89°59'45"E

PROP R/W

PROP R/W

25

T.C.E.

39'

81'

23'

LEGEND

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

REVISIONS

DATE	REVISION

USER: JJ5206
DESIGN FILE: G:\21100800_Roundabout\TRANSP\dgn\erosion\090433 EC.dgn
PLOTTED: 8/22/2025 13:19
SCALE: 1"=100'

CLEARING AND GRUBBING
TEMPORARY EROSION CONTROL DETAILS

G:\21100800_Roundabout\TRANSP\dgn\erosion\090433 EC.dgn 8/22/2025 13:19

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	20	73
		TEMPORARY EROSION CONTROL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 15560
JEROME PAUL DAVIS
08-25-2025

N

STA. 13+54.00
BEGIN JOB 090433
LOG MILE 2.15

STA. 21+53.91 ℄ HWY. 264 =
STA. 0+00.00 ℄ ROUNDABOUT =
STA. 4+58.67 ℄ ROUNDABOUT
△ = 89°41′25″

STA. 42+32.52 ℄ BELLVIEW ST. =
STA. 3+45.51 ℄ ROUNDABOUT
△ = 90°00′00″

STA. 22+99.91 ℄ HWY. 264 =
STA. 2+30.13 ℄ ROUNDABOUT
△ = 89°41′25″

STA. 40+86.52 ℄ SPRING CREEK RD. =
STA. 1+16.07 ℄ ROUNDABOUT
△ = 90°00′00″

STA. 22+26.91 ℄ HWY. 264 =
STA. 41+59.92 ℄ SPRING CREEK/BELLVIEW ST. =
△ = 89°07′48″

P.I. 41+59.52
△ = 00°03′00″ LT.

℄ HWY. 264 (W. MONROE AVE)
S86°59′45″E
N02°08′03″E
℄ BELLVIEW ST.
℄ SPRING CREEK RD.
N02°13′03″E
EXIST. R/W
PROP R/W
CONST. LIMITS
SILT FENCE = 290 LIN. FT.
T.C.E.

15 20 45 4 3 25 40 2

REVISIONS

DATE	REVISION

LEGEND

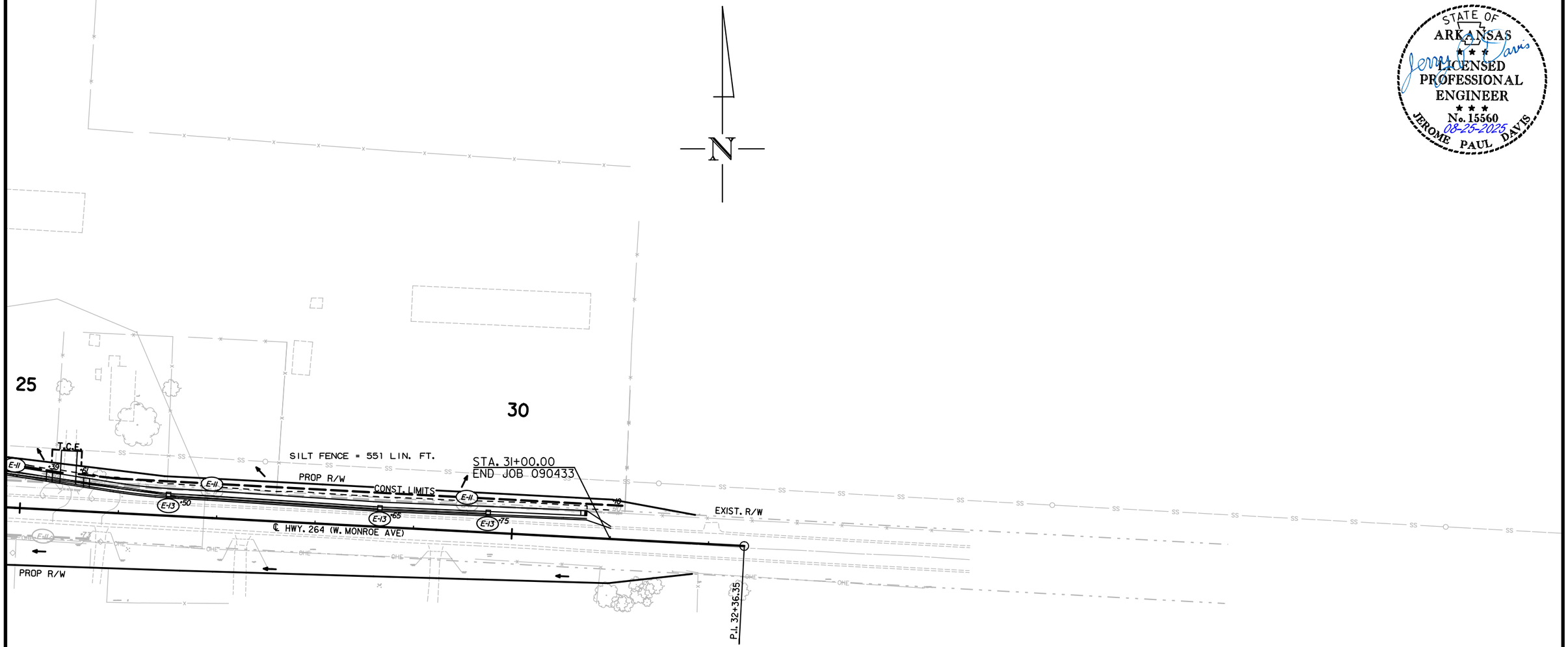
(E-5) = SAND BAG DITCH CHECK
(E-6) = ROCK DITCH CHECK
(E-11) = SILT FENCE
(E-13) = COMPOST FILTER SOCK

USER: JJ5206
DESIGN FILE: G:\21100800_Roundabout\TRANSP\dgn\erosion\090433 EC.dgn
PLOTTED: 8/22/2025 13:19
SCALE: 1:100

STAGE 1
TEMPORARY EROSION CONTROL DETAILS

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	21	73
		TEMPORARY EROSION CONTROL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 15560
JEROME PAUL DAVIS
Jerome P. Davis
08-25-2025



REVISIONS

DATE	REVISION

LEGEND

(E-11) = SILT FENCE
(E-13) = COMPOST FILTER SOCK

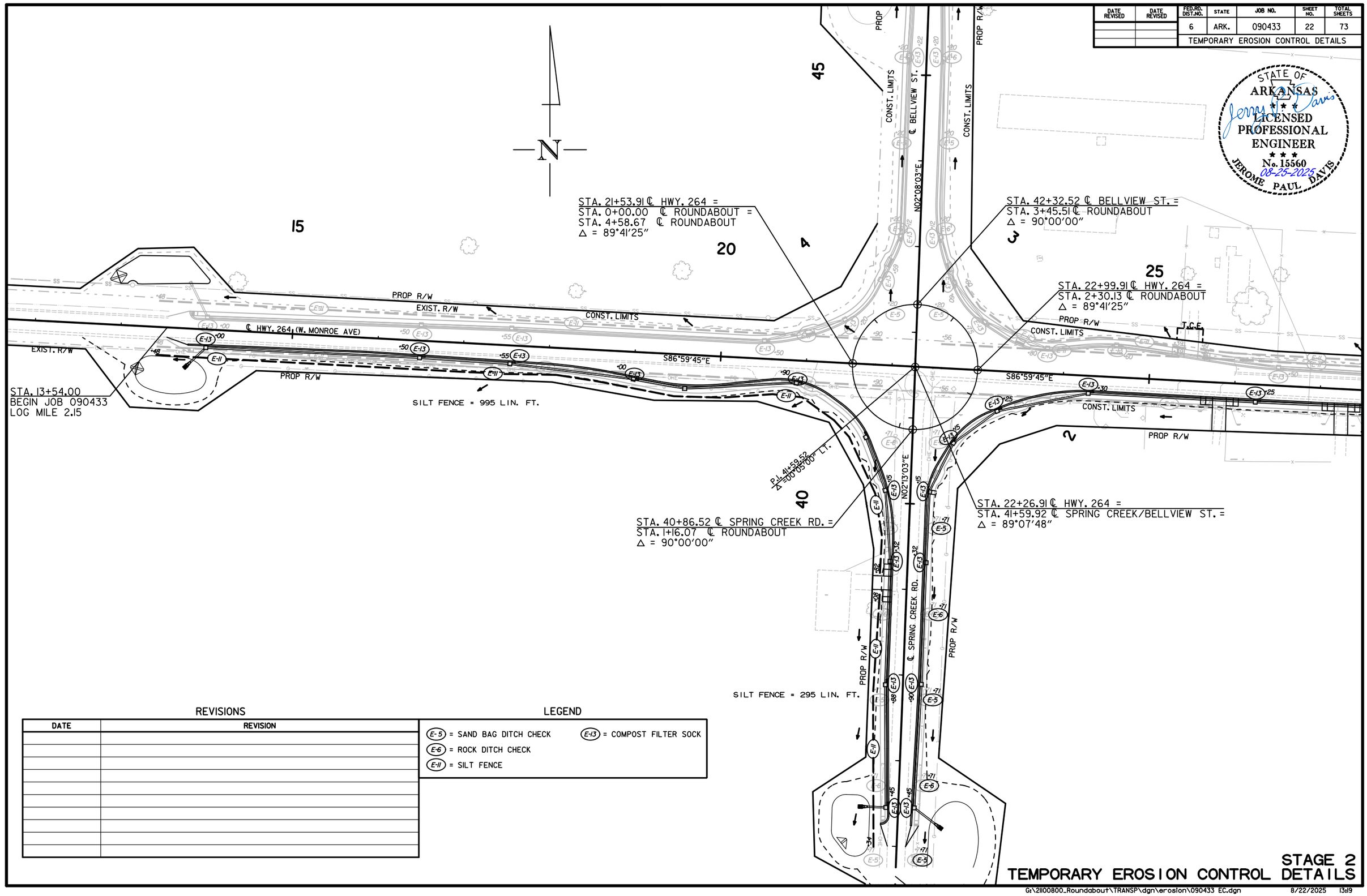
STAGE 1
TEMPORARY EROSION CONTROL DETAILS

USER: JJS206
DESIGN FILE: G:\21100800_Roundabout\TRANSP\dgn\erosion\090433 EC.dgn
PLOTTED: 8/22/2025 13:19
SCALE: 1:100

G:\21100800_Roundabout\TRANSP\dgn\erosion\090433 EC.dgn 8/22/2025 13:19

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	22	73
		TEMPORARY EROSION CONTROL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 15560
JEROME PAUL DAVIS
Jerry Davis
08-25-2025



REVISIONS

DATE	REVISION

LEGEND

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

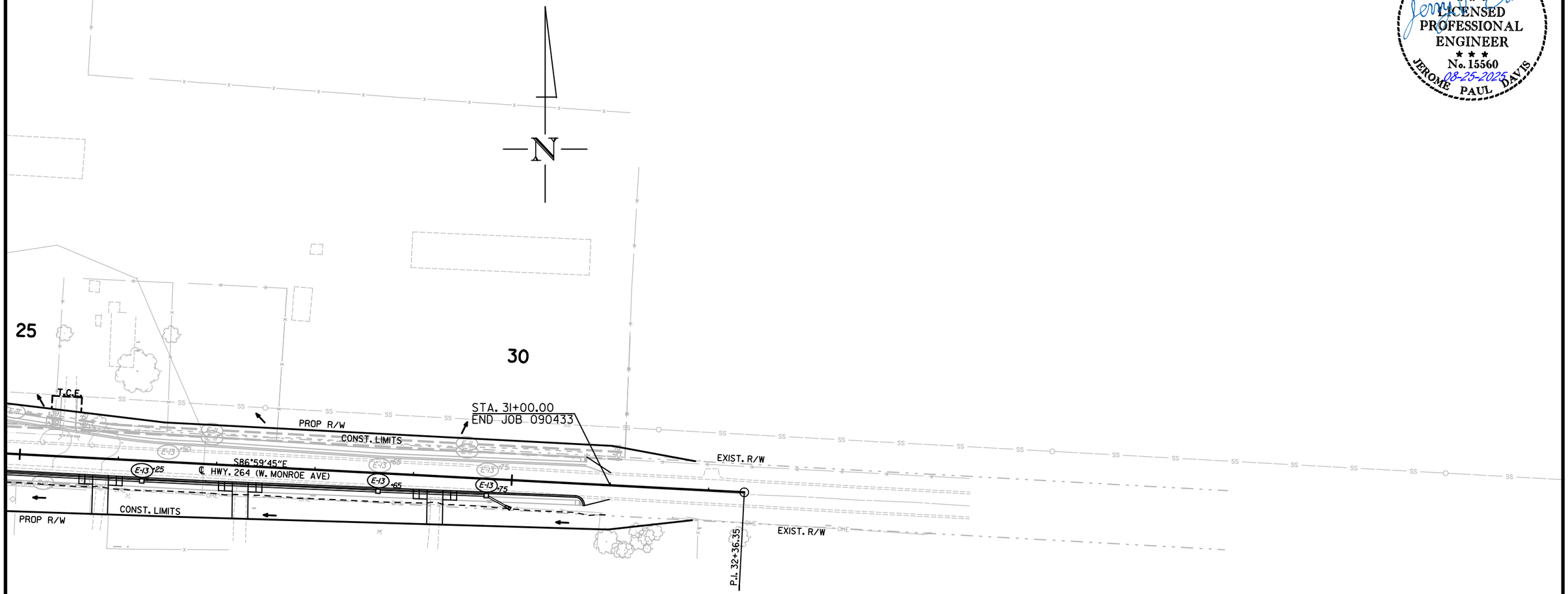
STAGE 2 TEMPORARY EROSION CONTROL DETAILS

USER: JJ5206
DESIGN FILE: G:\2110800_Roundabout\TRANSP\dgn\erosion\090433 EC.dgn
PLOTTED: 8/22/2025 13:19
SCALE: 1:100

G:\2110800_Roundabout\TRANSP\dgn\erosion\090433 EC.dgn 8/22/2025 13:19

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	23	73
		TEMPORARY EROSION CONTROL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 15560
JEROME PAUL DAVIS
Jerome Davis
08-25-2025



REVISIONS

DATE	REVISION

LEGEND

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

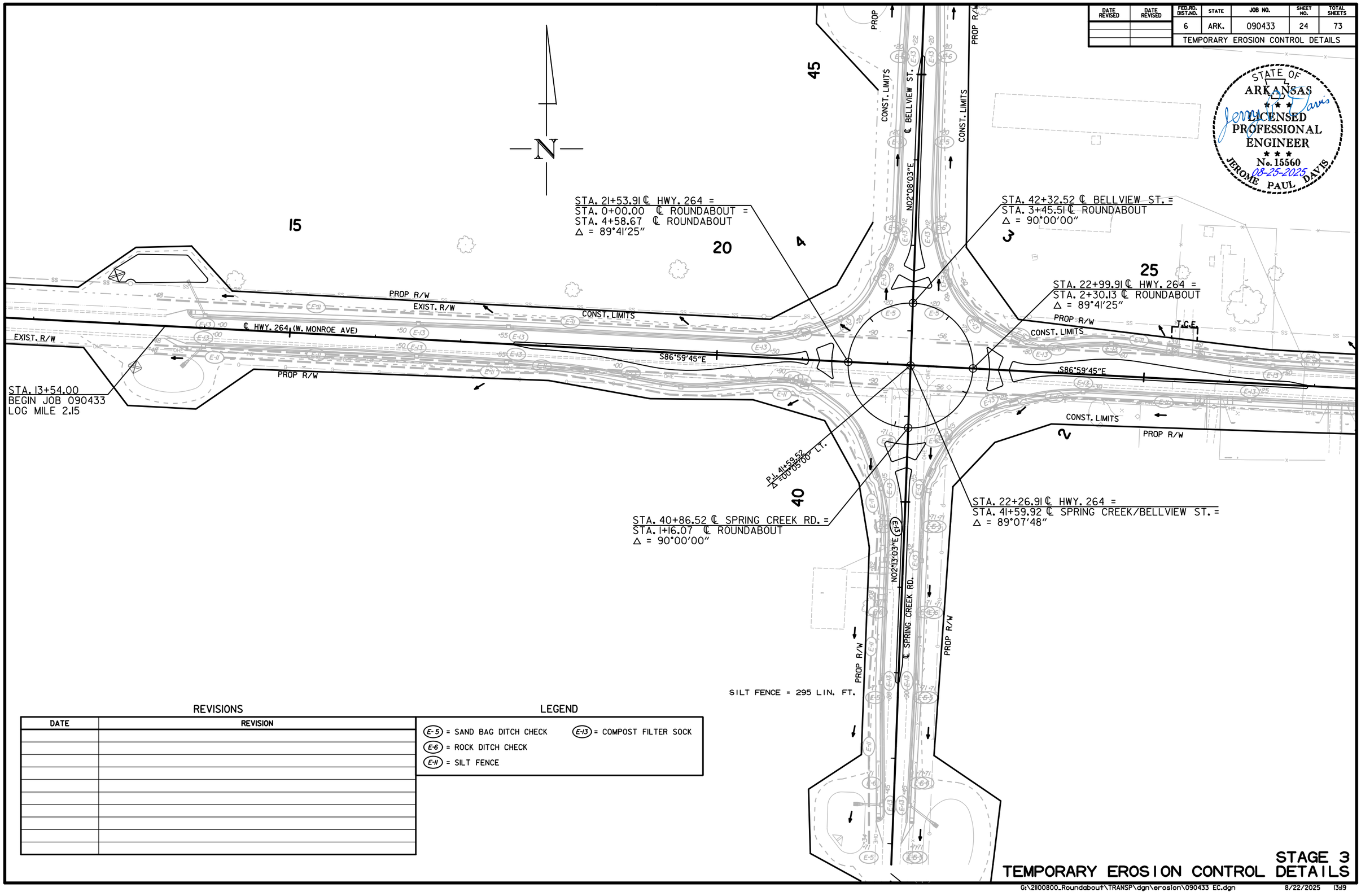
USER: JJS206
DESIGN FILE: G:\21100800_Roundabout\TRANSP\dgn\erosion\090433 EC.dgn
PLOTTED: 8/22/2025 13:19
SCALE: 1:100

STAGE 2
TEMPORARY EROSION CONTROL DETAILS

G:\21100800_Roundabout\TRANSP\dgn\erosion\090433 EC.dgn 8/22/2025 13:19

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	24	73
		TEMPORARY EROSION CONTROL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 15560
JEROME PAUL DAVIS
Jerome P. Davis
08-25-2025



REVISIONS

DATE	REVISION

LEGEND

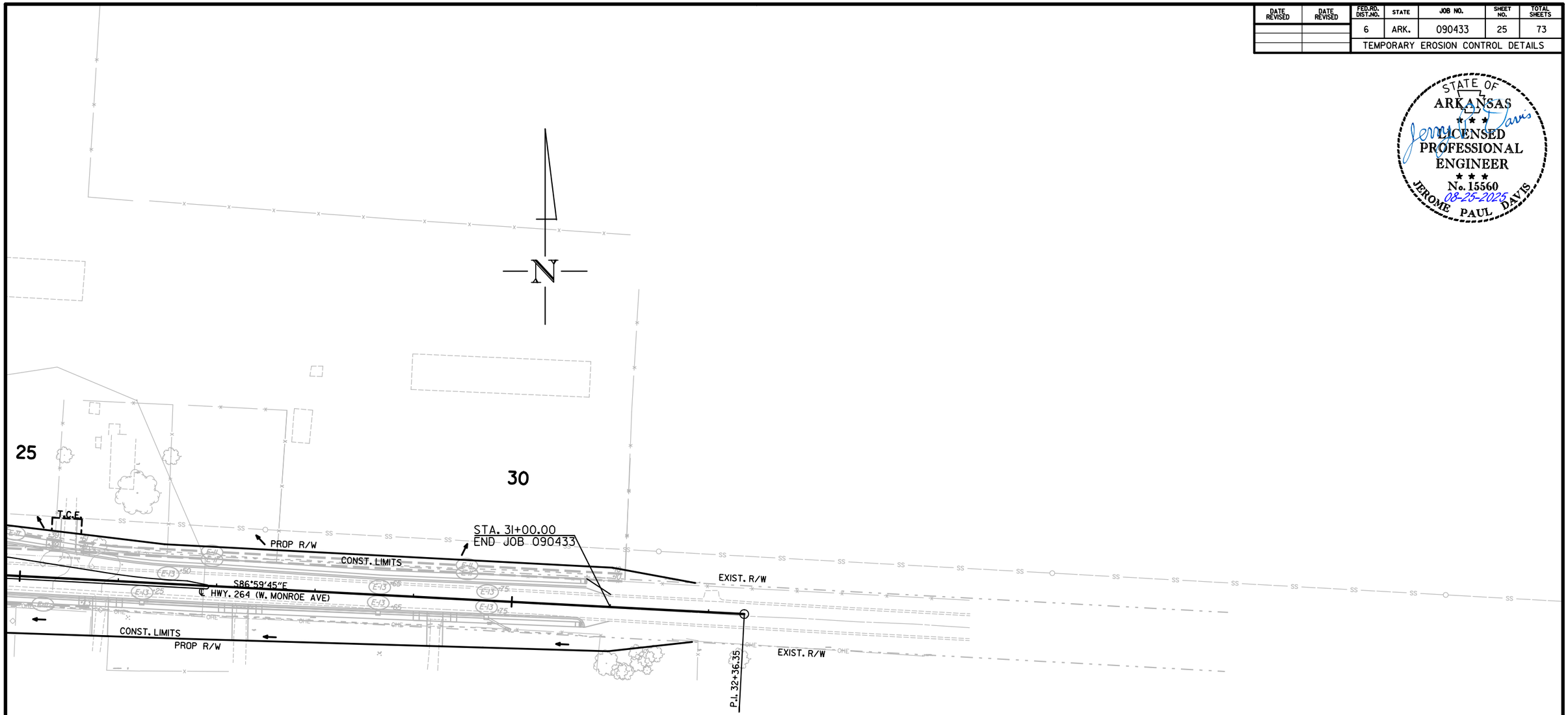
E-5 = SAND BAG DITCH CHECK
E-6 = ROCK DITCH CHECK
E-11 = SILT FENCE
E-13 = COMPOST FILTER SOCK

STAGE 3 TEMPORARY EROSION CONTROL DETAILS

USER: JJ5206
DESIGN FILE: G:\21100800_Roundabout\TRANSP\dgn\erosion\090433 EC.dgn
PLOTTED: 8/22/2025 13:19
SCALE: 1:100

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	25	73
		TEMPORARY EROSION CONTROL DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 15560
JEROME PAUL DAVIS
Jerome P. Davis
08-25-2025



REVISIONS

DATE	REVISION

LEGEND

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

USER: JJS206
DESIGN FILE: G:\21100800_Roundabout\TRANSP\dgn\erosion\090433 EC.dgn
PLOTTED: 8/22/2025 13:19
SCALE: 1:100

STAGE 3
TEMPORARY EROSION CONTROL DETAILS

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	26	73
		MAINTENANCE OF TRAFFIC DETAILS				

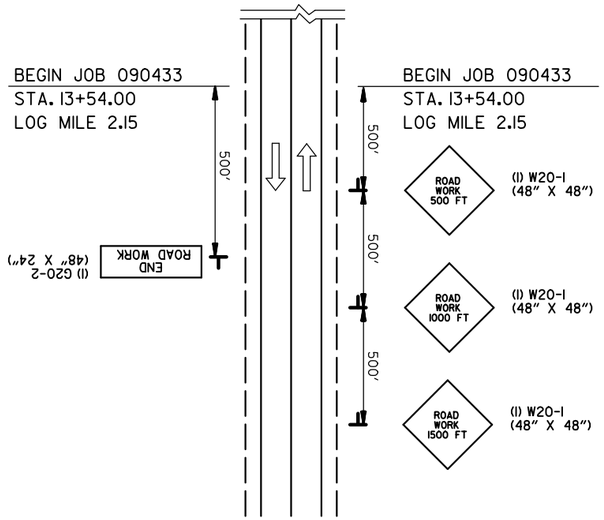
DO NOT PASS — (4) R4-1 (24" X 30") ALL STAGES

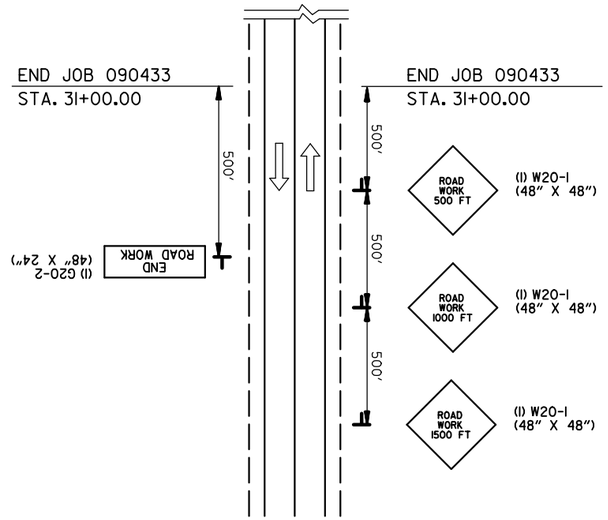
SHOULDER DROP-OFF — (4) W8-9a (36" X 36") ALL STAGES

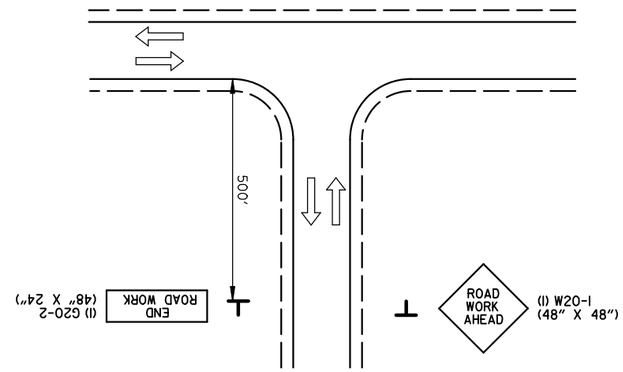
RIGHT SHOULDER CLOSED — (5) W21-5a (36" X 36") ALL STAGES

BUMP — (2) W8-1 (30" X 30") ALL STAGES

R4-1, W8-1, W8-9a, & W21-5a TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER.







ADVANCE WARNING - SIDE ROADS (ALL ROADS)

2 LOCATIONS
STA. 36+00 SPRING CREEK - RT.
STA. 47+10 BELLVIEW ST. - LT.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 15560
JEROME PAUL DAVIS
08-25-2025

STAGE IA & STAGE 1:

1) INSTALL ADVANCE WARNING SIGNS.

2) INSTALL PAVEMENT MARKINGS AND TRAFFIC CONTROL DEVICES AS DIRECTED BY THE ENGINEER.

3) CONSTRUCT LT. SIDE OF HWY. 264 AS SHOWN IN STAGE IA AND STAGE 1.

4) CONSTRUCT RT. SIDE OF BELLVIEW ST. AS SHOWN IN STAGE IA.

5) CONSTRUCT LT. SIDE OF BELLVIEW ST. AS SHOWN IN STAGE 1.

STAGE 2A & STAGE 2:

1) MAINTAIN ADVANCE WARNING SIGNS AND TRAFFIC CONTROL DEVICES AS DIRECTED BY THE ENGINEER.

2) INSTALL PAVEMENT MARKINGS AS DIRECTED BY THE ENGINEER.

3) CONSTRUCT RT. SIDE OF HWY. 264 AS SHOWN IN STAGE 2A AND STAGE 2.

4) CONSTRUCT LT. SIDE OF SPRING CREEK RD. AS SHOWN IN STAGE 2A.

5) CONSTRUCT RT. SIDE OF SPRING CREEK RD. AS SHOWN IN STAGE 2.

STAGE 3:

1) MAINTAIN ADVANCE WARNING SIGNS.

2) CONSTRUCT MEDIAN ISLANDS AND APPROACH ISLANDS AT ROUNDABOUT. CONSTRUCT TRUCK APRONS AT ROUNDABOUT.

3) INSTALL FINAL LIFT OF ASPHALT AND PERMANENT PAVEMENT MARKING.

MOT NOTES

1) INSTALL THE PERMANENT ROUNDABOUT SIGNING AND COVER SIGNS DURING STAGE I CONSTRUCTION. ANY PERMANENT SIGNING THAT CANNOT BE INSTALLED INITIALLY SHALL BE PLACED ON TEMPORARY SUPPORTS AND COVERED IN THE PROPOSED LOCATION UNTIL PERMANENT INSTALLATION CAN BE COMPLETE.

2) PRIOR TO THE CONSTRUCTION OF THE CENTRAL ISLAND, SPLITTER ISLANDS, AND TRAFFIC BEING PLACED IN THE ROUNDABOUT THE PERMANENT SIGNS SHALL BE UNCOVERED

3) THE PERMANENT ROUNDABOUT LIGHTING SHALL BE INSTALLED AND OPERATIONAL PRIOR TO TRAFFIC BEING PLACED IN THE ROUNDABOUT.

4) IF THE PERMANENT LIGHTING IS NOT INSTALLED OR OPERATIONAL PRIOR TO TRAFFIC BEING PLACED IN THE ROUNDABOUT, THE CONTRACTOR SHALL PROVIDE TEMPORARY LIGHTING UNTIL THE PERMANENT LIGHTING IS OPERATIONAL AT NO ADDITIONAL COST TO THE DEPT.

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ADVANCE WARNING MAINTENANCE OF TRAFFIC DETAILS

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	27	73
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 15560
JEROME PAUL DAVIS
08-25-2025

N

VERTICAL PANELS SPACED 50' O.C. (TYP.)

WHITE CONSTRUCTION PAVEMENT MARKINGS. (TYP)

DOUBLE YELLOW PAVEMENT CONSTRUCTION MARKINGS (TYP)

VERTICAL PANELS SPACED 20' O.C. (TYP.)

WHITE CONSTRUCTION PAVEMENT MARKINGS. (TYP)

DOUBLE YELLOW PAVEMENT CONSTRUCTION MARKINGS (TYP)

VERTICAL PANELS SPACED 50' O.C. (TYP.)

45

15

20

4

STOP (1) R1-1 EXIST. (30" X 30")

STA. 21+53.91 ℄ HWY. 264 =
STA. 0+00.00 ℄ ROUNDABOUT =
STA. 4+58.67 ℄ ROUNDABOUT
△ = 89°41'25"

STA. 42+32.52 ℄ BELLVIEW ST. =
STA. 3+45.51 ℄ ROUNDABOUT
△ = 90°00'00"

3

STOP (1) R1-1 (30" X 30")

25

STA. 22+99.91 ℄ HWY. 264 =
STA. 2+30.13 ℄ ROUNDABOUT
△ = 89°41'25"

CONST. LIMITS

℄ BELLVIEW ST.

N02°08'03"E

PROP. R/W

EXIST. R/W

T.C.E.

S86°59'45"E

℄ HWY. 264 (W. MONROE AVE)

EXIST. R/W

PROP. R/W

STA. 13+54.00
BEGIN JOB 090433
LOG MILE 2.15

WHITE CONSTRUCTION PAVEMENT MARKINGS. (TYP)

STOP (1) R1-1 (30" X 30")

P.I. 41+59.52
△=00°05'00" LT.

40

STA. 40+86.52 ℄ SPRING CREEK RD. =
STA. 1+16.07 ℄ ROUNDABOUT
△ = 90°00'00"

2

STOP (1) R1-1 EXIST. (30" X 30")

STA. 22+26.91 ℄ HWY. 264 =
STA. 41+59.92 ℄ SPRING CREEK/BELLVIEW ST. =
△ = 89°07'48"

N02°13'03"E

℄ SPRING CREEK RD.

STAGE IA & STAGE I:

1) INSTALL ADVANCE WARNING SIGNS.

2) INSTALL PAVEMENT MARKINGS AND TRAFFIC CONTROL DEVICES AS DIRECTED BY THE ENGINEER.

3) CONSTRUCT LT. SIDE OF HWY. 264 AS SHOWN IN STAGE IA AND STAGE I.

4) CONSTRUCT LT. SIDE OF BELLVIEW ST. AS SHOWN IN STAGE IA.

STAGE 1A
MAINTENANCE OF TRAFFIC DETAILS

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DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	28	73
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 15560
JEROME PAUL DAVIS
08-25-2025

N

15

EXIST. R/W

100' TRANSITION

WHITE CONSTRUCTION PAVEMENT MARKINGS. (TYP)

PROP. R/W

EXIST. R/W

℄ HWY. 264 (W. MONROE AVE)

EXIST. R/W

STA. 13+54.00
BEGIN JOB 090433
LOG MILE 2.15

DOUBLE YELLOW PAVEMENT CONSTRUCTION MARKINGS (TYP)

WHITE CONSTRUCTION PAVEMENT MARKINGS. (TYP)

STA. 21+53.91 ℄ HWY. 264 =
STA. 0+00.00 ℄ ROUNDABOUT =
STA. 4+58.67 ℄ ROUNDABOUT
△ = 89°41'25"

CONST. LIMITS

EXIST. R/W

PROP. R/W

S86°59'45"E

WHITE CONSTRUCTION PAVEMENT MARKINGS. (TYP)

20

45

DOUBLE YELLOW PAVEMENT CONSTRUCTION MARKINGS (TYP)

℄ BELLVIEW ST.

CONST. LIMITS

CONST. LIMITS

N02°08'03"E

VERTICAL PANELS SPACED 50' O.C. (TYP.)

WHITE CONSTRUCTION PAVEMENT MARKINGS. (TYP)

STOP (1) R1-1 EXIST. (30" X 30")

4

STA. 42+32.52 ℄ BELLVIEW ST. =
STA. 3+45.51 ℄ ROUNDABOUT
△ = 90°00'00"

3

VERTICAL PANELS SPACED 20' O.C. (TYP.)

STOP (1) R1-1 (30" X 30")

25

STA. 22+99.91 ℄ HWY. 264 =
STA. 2+30.13 ℄ ROUNDABOUT
△ = 89°41'25"

CONST. LIMITS

PROP. R/W

T.C.E.

S86°59'45"E

2

PROP. R/W

VERTICAL PANELS SPACED 50' O.C. (TYP.)

STOP (1) R1-1 EXIST. (30" X 30")

STA. 22+26.91 ℄ HWY. 264 =
STA. 41+59.92 ℄ SPRING CREEK/BELLVIEW ST. =
△ = 89°07'48"

STOP (1) R1-1 (30" X 30")

P.I. 41+59.52
△ = 00°03'00" LT.

40

STA. 40+86.52 ℄ SPRING CREEK RD. =
STA. 1+16.07 ℄ ROUNDABOUT
△ = 90°00'00"

N02°13'03"E

℄ SPRING CREEK RD.

STAGE 1A & STAGE 1:

1) INSTALL ADVANCE WARNING SIGNS.

2) INSTALL PAVEMENT MARKINGS AND TRAFFIC CONTROL DEVICES AS DIRECTED BY THE ENGINEER.

3) CONSTRUCT LT. SIDE OF HWY. 264 AS SHOWN IN STAGE 1A AND STAGE 1.

4) CONSTRUCT RT. SIDE OF BELLVIEW ST. AS SHOWN IN STAGE 1.

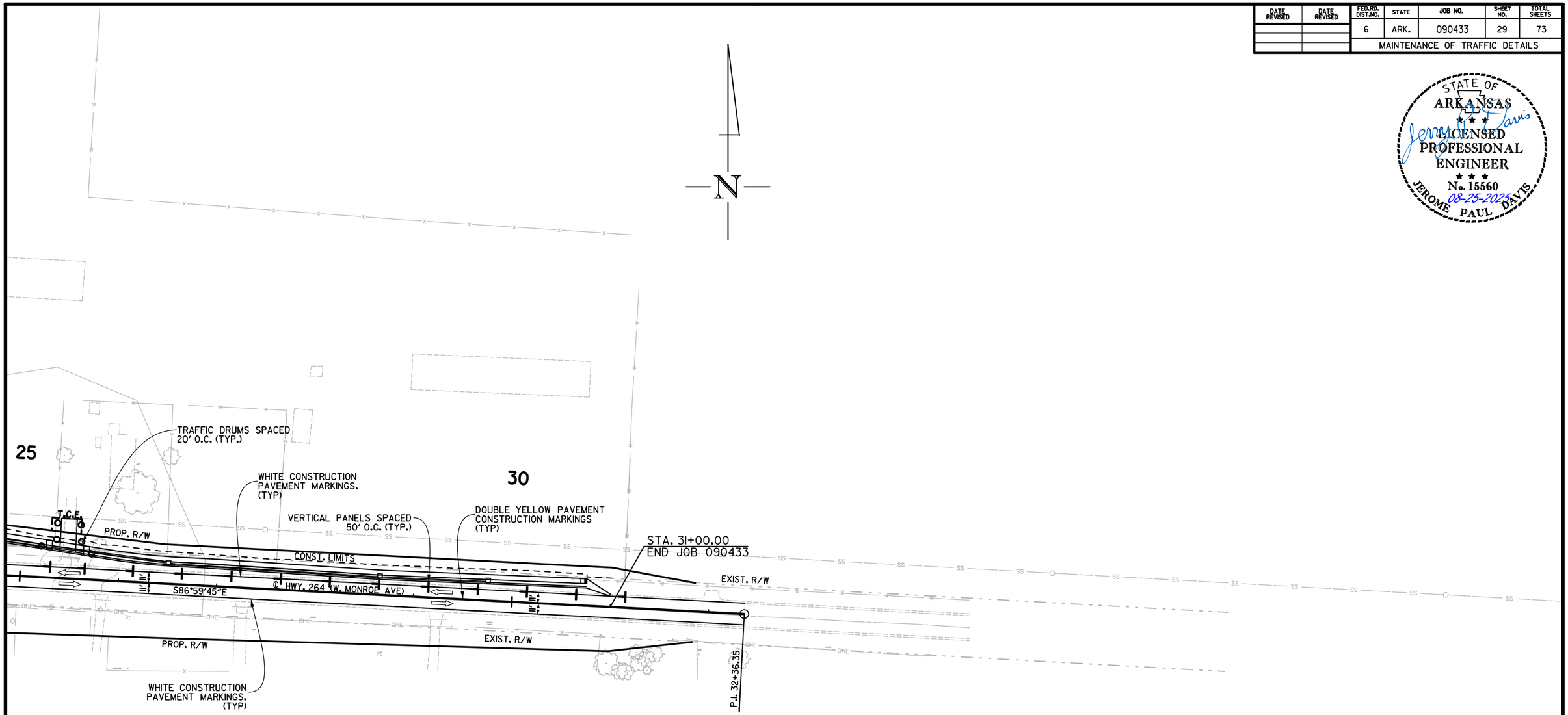
STAGE 1
MAINTENANCE OF TRAFFIC DETAILS

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DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	29	73
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 15560
JEROME PAUL DAVIS
08-25-2025



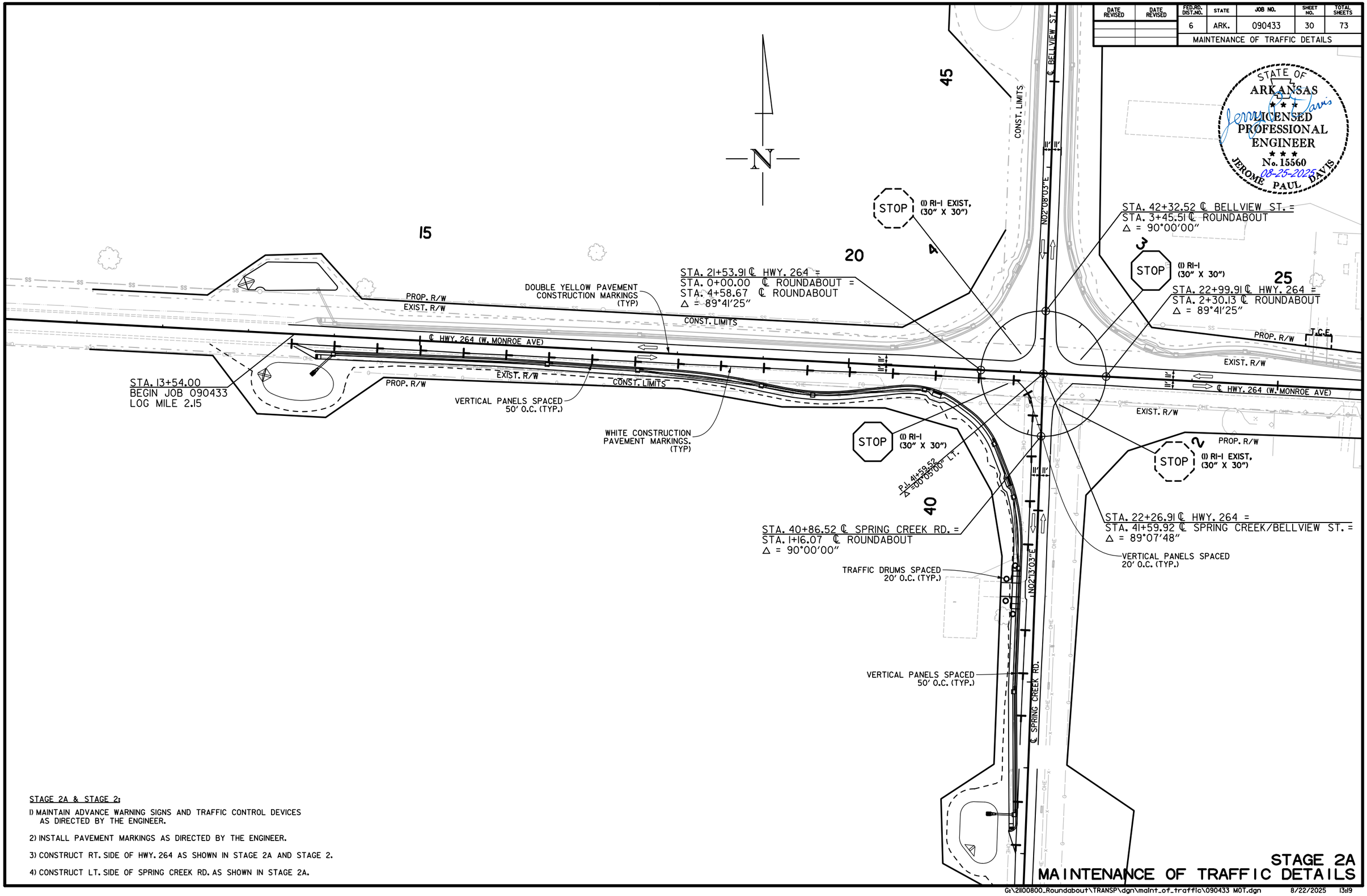
STAGE 1
MAINTENANCE OF TRAFFIC DETAILS

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DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	30	73
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 15560
JEROME PAUL DAVIS
08-25-2025



STAGE 2A & STAGE 2:

1) MAINTAIN ADVANCE WARNING SIGNS AND TRAFFIC CONTROL DEVICES AS DIRECTED BY THE ENGINEER.

2) INSTALL PAVEMENT MARKINGS AS DIRECTED BY THE ENGINEER.

3) CONSTRUCT RT. SIDE OF HWY. 264 AS SHOWN IN STAGE 2A AND STAGE 2.

4) CONSTRUCT LT. SIDE OF SPRING CREEK RD. AS SHOWN IN STAGE 2A.

STAGE 2A
MAINTENANCE OF TRAFFIC DETAILS

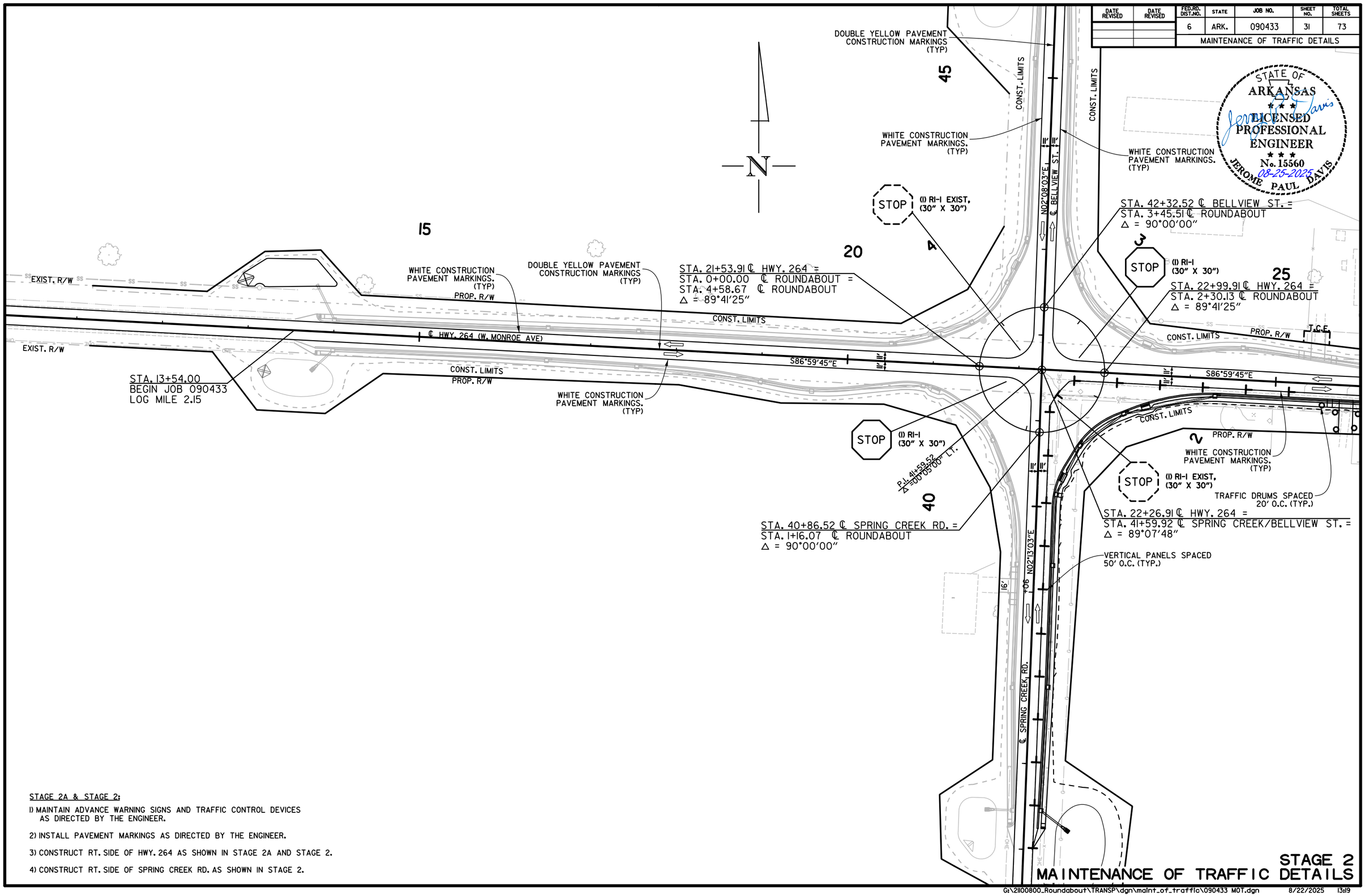
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DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	31	73

MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 15560
JEROME PAUL DAVIS
08-25-2025



STAGE 2A & STAGE 2:

1) MAINTAIN ADVANCE WARNING SIGNS AND TRAFFIC CONTROL DEVICES AS DIRECTED BY THE ENGINEER.

2) INSTALL PAVEMENT MARKINGS AS DIRECTED BY THE ENGINEER.

3) CONSTRUCT RT. SIDE OF HWY. 264 AS SHOWN IN STAGE 2A AND STAGE 2.

4) CONSTRUCT RT. SIDE OF SPRING CREEK RD. AS SHOWN IN STAGE 2.

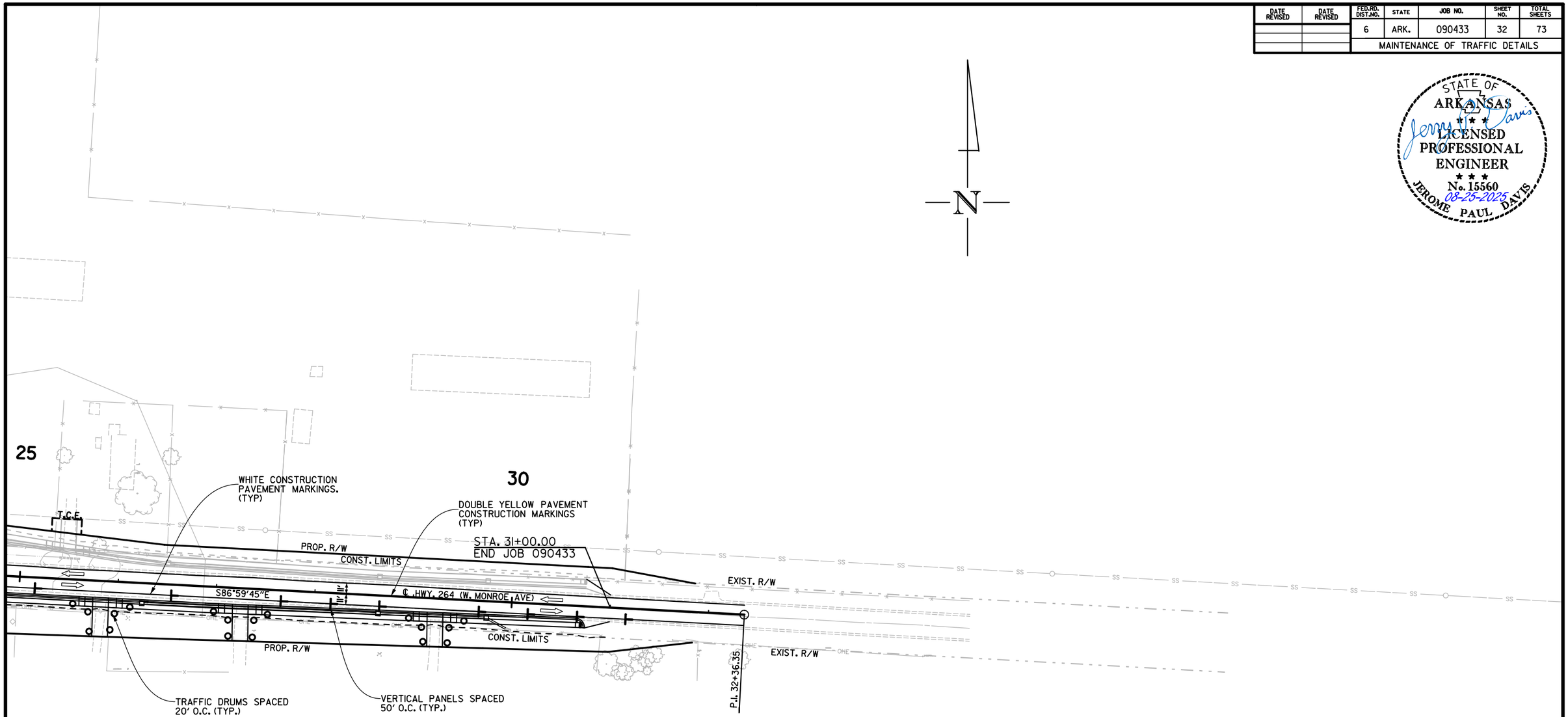
STAGE 2
MAINTENANCE OF TRAFFIC DETAILS

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DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	32	73
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 15560
JEROME PAUL DAVIS
Jerry Paul Davis
08-25-2025



USER: JJ5206
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STAGE 2
MAINTENANCE OF TRAFFIC DETAILS

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DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	33	73
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 15560
JEROME PAUL DAVIS
08-25-2025

N

℄ BELLVIEW ST.

CONST. LIMITS

TRAFFIC DRUM (TYP)

WHITE CONSTRUCTION PAVEMENT MARKINGS (TYP)

VERTICAL PANELS SPACED 20' O.C. (TYP.)

N02°08'03"E

STA. 42+32.52 ℄ BELLVIEW ST. =
STA. 3+45.51 ℄ ROUNDABOUT
△ = 90°00'00"

VERTICAL PANELS SPACED 20' O.C. (TYP.)

STA. 22+99.91 ℄ HWY. 264 =
STA. 2+30.13 ℄ ROUNDABOUT
△ = 89°41'25"

T.C.E.

PROP. R/W

S86°59'45"E

CONST. LIMITS

WHITE CONSTRUCTION PAVEMENT MARKINGS (TYP)

TRAFFIC DRUM (TYP)

STA. 21+53.91 ℄ HWY. 264 =
STA. 0+00.00 ℄ ROUNDABOUT =
STA. 4+58.67 ℄ ROUNDABOUT
△ = 89°41'25"

PROP. R/W

EXIST. R/W

℄ HWY. 264 (W. MONROE AVE)

EXIST. R/W

STA. 13+54.00
BEGIN JOB 090433
LOG MILE 2.15

PROP. R/W

CONST. LIMITS

DOUBLE YELLOW CONSTRUCTION PAVEMENT MARKINGS (TYP)

WHITE CONSTRUCTION PAVEMENT MARKINGS (TYP)

VERTICAL PANELS SPACED 20' O.C. (TYP.)

P.I. 41+59.52
△=00°05'00" LT.

STA. 40+86.52 ℄ SPRING CREEK RD. =
STA. 1+16.07 ℄ ROUNDABOUT
△ = 90°00'00"

STA. 22+26.91 ℄ HWY. 264 =
STA. 41+59.92 ℄ SPRING CREEK/BELLVIEW ST. =
△ = 89°07'48"

N02°13'03"E

WHITE CONSTRUCTION PAVEMENT MARKINGS (TYP)

VERTICAL PANELS SPACED 20' O.C. (TYP.)

TRAFFIC DRUM (TYP)

℄ SPRING CREEK RD.

PROP. R/W

VERTICAL PANELS SPACED 20' O.C. (TYP.)

15' 15' 15' 15' 15' 15' 15' 15'

15 20 4 45 3 25 2 40

STAGE 3:

1) MAINTAIN ADVANCE WARNING SIGNS.

2) CONSTRUCT MEDIAN ISLANDS AND APPROACH ISLANDS AT ROUNDABOUT. CONSTRUCT TRUCK APRONS AT ROUNDABOUT.

3) INSTALL FINAL LIFT OF ASPHALT AND PERMANENT PAVEMENT MARKING.

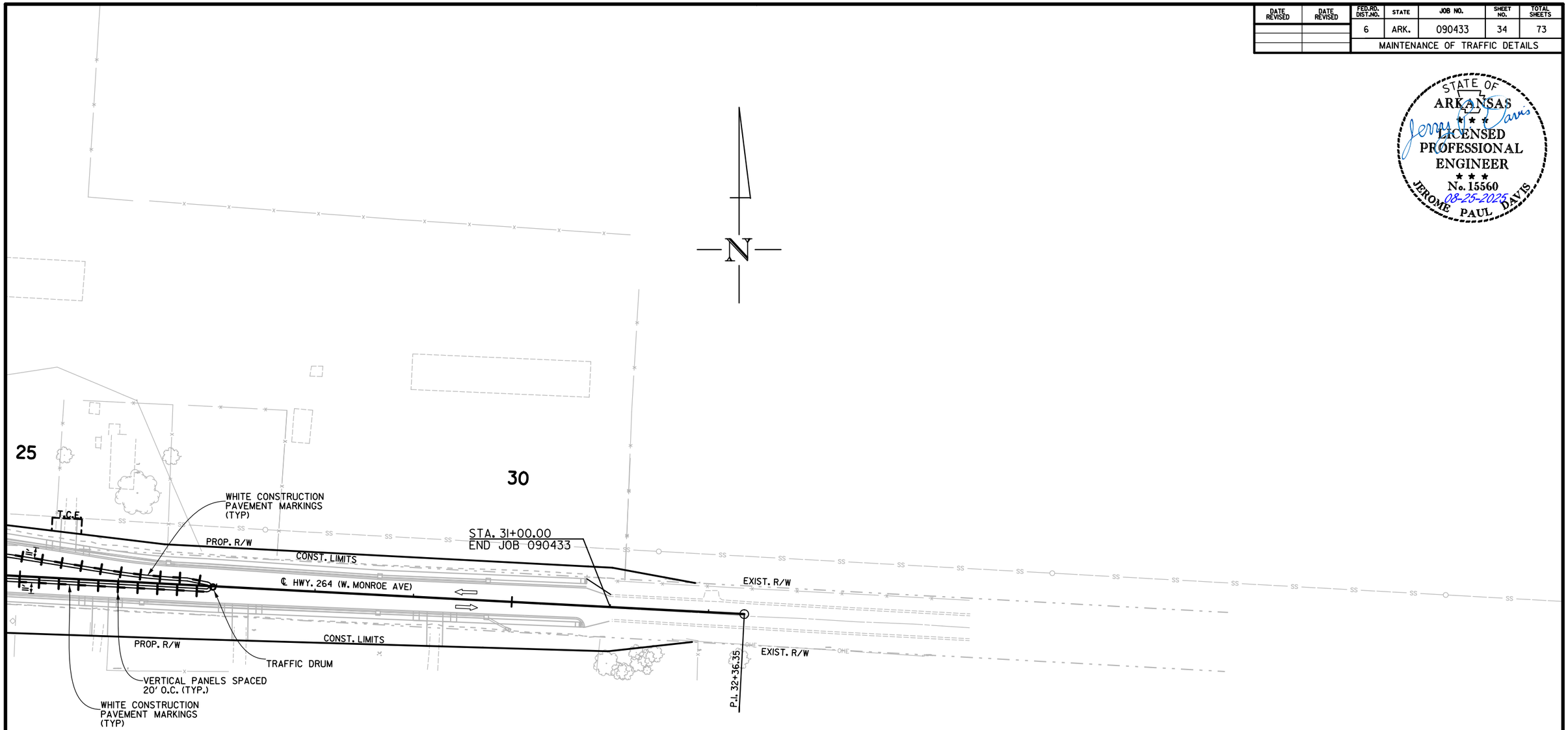
STAGE 3
MAINTENANCE OF TRAFFIC DETAILS

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DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	34	73
		MAINTENANCE OF TRAFFIC DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 15560
Jerry Paul Davis
08-25-2025
JEROME PAUL DAVIS



STAGE 3
MAINTENANCE OF TRAFFIC DETAILS

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DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	35	73
		PERMANENT PAVEMENT MARKING DETAILS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 15560
JEROME PAUL DAVIS
08-25-2025

6" WHITE THERMOPLASTIC PAVEMENT MARKING

BELLVIEW ST.

6" DBL. YELLOW THERMOPLASTIC PAVEMENT MARKINGS W/ RAISED PAVEMENT MARKERS (TYPE II) (YELLOW/YELLOW) SPACED 80' O.C.

1' TYP. 1' TYP. 1.5' TYP.

WHITE YIELD LINE THERMOPLASTIC PERPENDICULAR TO ENTRY LINE

TYPICAL YIELD LINE STRIPING

N

8'

9'

YIELD

WORD "YIELD" THERMOPLASTIC DIMENSION

WORD "YIELD" THERMOPLASTIC

WHITE YIELD LINE THERMOPLASTIC

6" DOTTED WHITE THERMOPLASTIC PAVEMENT MARKING (2' STRIPE, 6' GAP) (TYP.)

6" DBL. YELLOW THERMOPLASTIC PAVEMENT MARKINGS W/ RAISED PAVEMENT MARKERS (TYPE II) (YELLOW/YELLOW) SPACED 80' O.C.

HWY. 264 (MONROE AVE.)

6" DOTTED WHITE THERMOPLASTIC PAVEMENT MARKING (2' STRIPE, 6' GAP) (TYP.)

WHITE YIELD LINE THERMOPLASTIC

WORD "YIELD" THERMOPLASTIC

6" WHITE THERMOPLASTIC PAVEMENT MARKING

6" DBL. YELLOW THERMOPLASTIC PAVEMENT MARKINGS W/ RAISED PAVEMENT MARKERS (TYPE II) (YELLOW/YELLOW) SPACED 80' O.C.

HWY. 264 (MONROE AVE.)

6" WHITE THERMOPLASTIC PAVEMENT MARKING

12" WHITE SOLID THERMOPLASTIC PAVEMENT MARKING (CROSS WALK LINE)

WORD "YIELD" THERMOPLASTIC

WHITE YIELD LINE THERMOPLASTIC

6" DOTTED WHITE THERMOPLASTIC PAVEMENT MARKING (2' STRIPE, 6' GAP) (TYP.)

6" DOTTED WHITE THERMOPLASTIC PAVEMENT MARKING (2' STRIPE, 6' GAP) (TYP.)

WHITE YIELD LINE THERMOPLASTIC

WORD "YIELD" THERMOPLASTIC

6" DBL. YELLOW THERMOPLASTIC PAVEMENT MARKINGS W/ RAISED PAVEMENT MARKERS (TYPE II) (YELLOW/YELLOW) SPACED 80' O.C.

8" YELLOW THERMOPLASTIC PAVEMENT MARKING AND 12" YELLOW REFLECTORIZED PAINT ON CURB

8" WHITE THERMOPLASTIC PAVEMENT MARKING ON CURB

12" WHITE REFLECTORIZED PAINT ON CURB

6" DBL. YELLOW THERMOPLASTIC PAVEMENT MARKINGS W/ RAISED PAVEMENT MARKERS (TYPE II) (YELLOW/YELLOW) SPACED 80' O.C.

8" YELLOW THERMOPLASTIC PAVEMENT MARKING AND 12" YELLOW REFLECTORIZED PAINT ON CURB

8" WHITE THERMOPLASTIC PAVEMENT MARKING ON CURB

TYPICAL SPLITTER ISLAND STRIPING DETAIL

6" DBL. YELLOW THERMOPLASTIC PAVEMENT MARKINGS W/ RAISED PAVEMENT MARKERS (TYPE II) (YELLOW/YELLOW) SPACED 80' O.C.

SPRING CREEK RD.

6" WHITE THERMOPLASTIC PAVEMENT MARKING

PERMANENT PAVEMENT MARKING DETAILS

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DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	36	73
		QUANTITIES				

ADVANCE WARNING SIGNS AND DEVICES

SIGN NUMBER	DESCRIPTION	SIGN SIZE	STAGE 1	STAGE 2	STAGE 3	MAXIMUM NUMBER REQUIRED	TOTAL SIGNS REQUIRED		VERTICAL PANELS	TRAFFIC DRUMS
			LIN. FT. - EACH				NO.	SQ. FT.	EACH	
W20-1	ROAD WORK 1500 FT.	48"x48"	2	2	2	2	2	32.0		
W20-1	ROAD WORK 1000 FT.	48"x48"	2	2	2	2	2	32.0		
W20-1	ROAD WORK 500 FT.	48"x48"	2	2	2	2	2	32.0		
W20-1	ROAD WORK AHEAD	48"x48"	2	2	2	2	2	32.0		
G20-2	END ROAD WORK	48"x24"	4	4	4	4	4	32.0		
R1-1	STOP	30"x30"	2	2		2	2	12.5		
R4-1	DO NOT PASS	24"x30"	4	4	4	4	4	20.0		
W21-5a	RIGHT SHOULDER CLOSED	36"x36"	5	5	5	5	5	45.0		
W8-1	BUMP	30"x30"	2	2	2	2	2	12.5		
W8-9a	SHOULDER DROP-OFF	36"X36"	4	4	4	4	4	36.0		
	VERTICAL PANELS		61	55	163	163			163	
	TRAFFIC DRUMS		6	22	4	22				22
TOTALS:								**286.0**	**163**	**22**

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

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

EARTHWORK

STATION	STATION	LOCATION / DESCRIPTION	UNCLASSIFIED EXCAVATION	COMPACTED EMBANKMENT
			CU. YD.	
ENTIRE	PROJECT	STAGE 1-MAIN LANES	177	1360
ENTIRE	PROJECT	STAGE 2-MAIN LANES	164	1039
ENTIRE	PROJECT	APPROACHES		30
		SPRINGCREEK RD.	137	452
		BELLVIEW ST.	5	1522
TOTALS:			**483**	**4403**

NOTE: EARTHWORK QUANTITIES SHALL BE PAID AS PLAN QUANTITY.

STATE OF ARKANSAS
Jerome Paul Davis
LICENSED PROFESSIONAL ENGINEER
No. 15560
08-25-2025
JEROME PAUL DAVIS

SOIL STABILIZATION

STATION	STATION	LOCATION / DESCRIPTION	SOIL STABILIZATION
			TON
ENTIRE	PROJECT	TO BE USED IF AND WHERE	50
		DIRECTED BY THE ENGINEER	
TOTAL:			**50**

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

BENCH MARKS

STATION	LOCATION	BENCH MARKS
		EACH
20+50	DROP INLET - HWY. 264 LT.	1
TOTAL:		**1**

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

CONSTRUCTION PAVEMENT MARKINGS AND PERMANENT PAVEMENT MARKINGS

DESCRIPTION	STAGE 1	STAGE 2	STAGE 3	END OF JOB	REMOVAL OF PERMANENT PAVEMENT MARKINGS	CONSTRUCTION PAVEMENT MARKINGS	REMOVAL OF CONSTRUCTION PAVEMENT MARKINGS	RAISED PAVEMENT MARKERS	THERMOPLASTIC PAVEMENT MARKING							REFLECTORIZED PAINT PAVEMENT MARKING	
								TYPE II	6"		8"	8"	12"	YIELD	WORDS	12"	
								(YELLOW/YELLOW)	WHITE	YELLOW	YELLOW	WHITE	WHITE	WHITE		WHITE	YELLOW
	LIN. FT. - EACH				LIN. FT.		LIN. FT.	EACH	LIN. FT.						EACH	LIN. FT.	
REMOVAL OF PERMANENT PAVEMENT MARKINGS		1500			1500												
CONSTRUCTION PAVEMENT MARKINGS		11945				11945											
REMOVAL OF CONSTRUCTION PAVEMENT MARKINGS			11945				11945										
RAISED PAVEMENT MARKERS TYPE II (YELLOW/YELLOW)	40	40		40				120									
THERMOPLASTIC PAVEMENT MARKING DOTTED WHITE (6")				60					60								
THERMOPLASTIC PAVEMENT MARKING YELLOW (6")				3130						3130							
THERMOPLASTIC PAVEMENT MARKING WHITE (6")				1770					1770								
THERMOPLASTIC PAVEMENT MARKING YELLOW (8")				2640							2640						
THERMOPLASTIC PAVEMENT MARKING WHITE (8")				360								360					
THERMOPLASTIC PAVEMENT MARKING WHITE (12")				400									400				
THERMOPLASTIC PAVEMENT MARKING WHITE (YIELD)				68										68			
THERMOPLASTIC PAVEMENT MARKING (WORDS)				4											4		
REFLECTORIZED PAINT PAVEMENT MARKING YELLOW (12")				2640													2640
REFLECTORIZED PAINT PAVEMENT MARKING WHITE (12")				276												276	
TOTALS:					**1500**	**11945**	**11945**	**120**	**1830**	**3130**	**2640**	**360**	**400**	**68**	**4**	**276**	**2640**

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

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SCALE: NOO

QUANTITIES

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	37	73
		QUANTITIES				

CLEARING AND GRUBBING

STATION	STATION	LOCATION	CLEARING	GRUBBING
			STATION	
12+54	16+60	HWY. 264	5	5
25+00	26+35	HWY. 264	2	2
27+40	31+57	HWY. 264	5	5
35+00	41+00	SPRING CREEK RD.	6	6
43+30	47+00	BELLVIEW ST.	4	4
TOTALS:			**22**	**22**

REMOVAL AND DISPOSAL OF FENCE

STATION	STATION	LOCATION	FENCE	GATES
			LIN. FT.	EACH
22+47	22+60	HWY. 264 - LT.		1
21+52	25+74	HWY. 264 - RT.	374	
21+60	31+85	HWY. 264 - LT.	1091	3
29+64	31+85	HWY. 264 - RT.	221	
35+00	41+26	SPRING CREEK RD. - RT.	677	2
42+00	48+10	BELLVIEW ST. - RT.	640	
TOTALS:			**3003**	**6**

REMOVAL AND DISPOSAL OF CULVERTS

STATION	DESCRIPTION	PIPE CULVERTS
		EACH
25+47	18" x 21' R.C. PIPE CULVERT LT. SIDE DRAIN	1
25+85	12" X 18' R.C. PIPE CULVERT RT. SIDE DRAIN	1
27+25	12" X 21' R.C. PIPE CULVERT RT. SIDE DRAIN	1
29+23	12" X 19' R.C. PIPE CULVERT RT. SIDE DRAIN	1
TOTAL:		**4**

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

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 15560
JEROME PAUL DAVIS
08-25-2025

REMOVAL AND DISPOSAL OF ITEMS

STATION	STATION	LOCATION	CONCRETE DRIVEWAYS	BOLLARDS	SIGNS
			SQ. YD.	EACH	EACH
22+00		HWY. 264 - RT.			1
22+62		HWY. 264 - RT.			1
29+15	29+31	HWY. 264 - RT.	46		
39+06		SPRING CREEK - LT.	54		
41+00	41+26	SPRING CREEK - RT.		9	
TOTALS:			**100**	**9**	**2**

DRIVEWAYS & TURNOUTS

STATION	SIDE	LOCATION	WIDTH	**MODIFIED CURB		PORTLAND CEMENT CONCRETE DRIVEWAY	ACHM SURFACE COURSE (1/2") 220 LBS. PER SQ. YD. (PG 64-22)		AGGREGATE BASE COURSE (CLASS 7)
			FEET	STATION	STATION	SQ. YD.	SQ. YD.	TON	TON
25+47	LT.	HWY. 264	16	25+25	25+69	39.11	44.44	4.89	18.15
25+85	RT.	HWY. 264	16	25+63	26+07	39.11	53.33	5.87	21.78
27+25	RT.	HWY. 264	16	27+03	27+47	39.11	49.78	5.48	20.33
29+23	RT.	HWY. 264	16	29+01	29+45	39.11	46.22	5.08	18.87
39+06	LT.	SPRING CREEK RD.	16	38+84	39+28	39.11	22.22	2.44	9.07
* ENTIRE PROJECT TEMPORARY DRIVES						20.00	25.00	2.75	25.00
TOTALS:						**215.55**	**240.99**	**26.51**	**113.20**

BASIS OF ESTIMATE:
ACHM SURFACE COURSE (1/2").....94.0% MIN. AGGR.....6.0% ASPHALT BINDER

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

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

FENCING

STATION	STATION	LOCATION	WIRE FENCE		* 4' CHAIN LINK FENCE
			(TYPE C)	(TYPE D-2)	
			LIN. FT.		
23+30	24+98	HWY. 264 - RT.	173		
24+98	25+75	HWY. 264 - RT.			76
27+60	31+85	HWY. 264 - LT.		425	
29+64	31+85	HWY. 264 - RT.		155	
35+00	40+74	SPRING CREEK RD. - RT.	595		
43+00	48+10	BELLVIEW ST. - RT.	620		
TOTALS:			**1388**	**580**	**76**

* DENOTES ALTERNATE BID ITEM.

MAILBOXES

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

DUMPED RIPRAP AND FILTER BLANKET

STATION	LOCATION	DUMPED RIPRAP	FILTER BLANKET
		CU. YD.	SQ. YD.
13+79	OUTLET OF PIPE CULVERT	1	2
36+25	OUTLET OF PIPE CULVERT	1	2
36+45	OUTLET OF PIPE CULVERT	1	2
TOTALS:		**3**	**6**

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

EROSION CONTROL

STATION	STATION	LOCATION	PERMANENT EROSION CONTROL							TEMPORARY EROSION CONTROL							
			SEEDING	LIME	MULCH COVER	WATER	SECOND SEEDING APPLICATION	SOLID SODDING	WATER	TEMPORARY SEEDING	MULCH COVER	WATER	SAND BAG DITCH CHECKS (E-5)	ROCK DITCH CHECKS (E-6)	SILT FENCE (E-11)	DROP INLET FILTER SOCK (12") (E-13)	*SEDIMENT REMOVAL & DISPOSAL
			ACRE	TON	ACRE	M.GAL.	ACRE	SQ.YD.	M.GAL.	ACRE	ACRE	M.GAL.	BAG	CU.YD.	LIN. FT.	LIN. FT.	CU. YD.
ENTIRE	PROJECT	CLEARING AND GRUBBING											264	36	2844		129
ENTIRE	PROJECT	STAGE 1	0.21	0.42	0.21	30.5	0.21	723	9	1.14	1.14	23.3			841	437	31
ENTIRE	PROJECT	STAGE 2	0.34	0.68	0.34	42.8	0.34	644	8	1.08	1.08	22.0	66	6	1290	437	53
*ENTIRE PROJECT TO BE USED IF AND WHERE DIRECTED BY THE ENG			0.14	0.28	0.14	14.3	0.14			0.56	0.56	11.4	88	12	550	75	25
TOTALS:			**0.69**	**1.38**	**0.69**	**87.6**	**0.69**	**1367**	**17**	**2.78**	**2.78**	**56.7**	**418**	**54**	**5525**	**949**	**238**

BASIS OF ESTIMATE:
LIME .....2 TONS / ACRE OF SEEDING
WATER.....102.0 M.G. / ACRE OF SEEDING
WATER.....20.4 M.G. / ACRE OF TEMPORARY SEEDING
WATER.....12.6 GAL. / SQ. YD. OF SOLID SODDING
SAND BAG DITCH CHECKS.....22 BAGS / LOCATION
ROCK DITCH CHECKS.....3 CU.YD./LOCATION
FILTER SOCKS.....23 LIN. FT./ 4' DIA. INLET
.....27 LIN. FT. / 5' DIA. INLET
.....30 LIN. FT. / 6' DIA. INLET

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

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

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SCALE: NOO

QUANTITIES

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	38	73
		QUANTITIES				

COLD MILLING ASPHALT PAVEMENT

STATION	STATION	LOCATION	AVG. WIDTH	COLD MILLING ASPHALT PAVEMENT
			FEET	SQ. YD.
12+54.00	13+54.00	HWY. 264	22.00	244.44
31+00.00	32+00.00	HWY. 264	22.00	244.44
35+00.00	36+00.00	SPRING CREEK RD.	20.00	222.22
42+10.00	43+10.00	BELLVIEW ST.	20.00	222.22
TOTAL:				933.32

NOTE: AVERAGE MILLING DEPTH 1".

4" PIPE UNDERDRAIN

STATION	STATION	LOCATIONS	4" PIPE UNDERDRAINS	UNDERDRAIN OUTLET PROTECTORS
			LIN. FT.	EACH
13+54	20+22		692	
23+17	23+40		31	
25+40	31+00		584	
39+90	40+70		88	
46+80	48+20		148	
* ENTIRE PROJECT TO BE USED IF AND			500	2
WHERE DIRECTED BY THE ENGINEER				
TOTALS:			2043	2

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

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

CONCRETE WALKS

STATION	STATION	LOCATION	LENGTH	CONCRETE WALKS
			LIN. FT.	SQ.YD.
13+86	21+58	HWY. 264 RT.	789	438
13+88	21+57	HWY. 264 LT.	783	435
22+89	25+25	HWY. 264 LT.	252	140
22+96	25+61	HWY. 264 RT.	277	154
25+69	30+69	HWY. 264 LT.	500	278
26+05	27+03	HWY. 264 RT.	98	54
27+47	29+01	HWY. 264 RT.	154	86
29+45	30+66	HWY. 264 RT.	121	67
36+30	38+85	SPRING CREEK LT.	255	142
36+34	40+87	SPRING CREEK RT.	506	281
39+29	40+89	SPRING CREEK LT.	176	98
42+31	46+78	BELLVIEW LT.	463	257
42+37	46+76	BELLVIEW RT.	452	251
TOTALS:				2681

CONCRETE COMBINATION CURB AND GUTTER

STATION	STATION	LOCATION	TYPE A (1' 6")	TYPE E-1 (2' 0")
			LIN. FT.	LIN. FT.
13+79	21+63	HWY. 264 - LT.	763	
13+79	21+64	HWY. 264 - RT.	764	
23+07	30+75	HWY. 264 - LT.	738	
23+07	30+75	HWY. 264 - RT.	746	
36+25	40+94	SPRING CREEK RD. - LT.	483	
36+25	40+93	SPRING CREEK RD. - RT.	481	
42+10	46+85	BELLVIEW ST. - LT.	438	
42+12	46+85	BELLVIEW ST. - RT.	465	
0+00	4+59	RAB TRUCK APRON		453
TOTAL:			4878	453

SELECTED PIPE BEDDING

LOCATION	SELECTED PIPE BEDDING
	CU.YD.
ENTIRE PROJECT TO BE USED IF	
AND WHERE DIRECTED BY THE ENGINEER	350
TOTAL:	350

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

CONCRETE ISLAND

STATION	STATION	LOCATION	CURB FACE TYPE	CONCRETE ISLAND
				SQ.YD.
16+62	21+37	HWY. 264	C	623
23+17	26+92	HWY. 264	C	678
37+88	40+69	SPRING CREEK RD.	C	332
42+49	45+21	BELLVIEW ST.	C	318
TOTAL:				1951

STATE OF ARKANSAS
Jerry Davis
LICENSED PROFESSIONAL ENGINEER
No. 15560
08-25-2025
JEROME PAUL DAVIS

STRUCTURES

STATION	DESCRIPTION	REINFORCED CONCRETE (CLASS III)	PIPE CULVERT STORM DRAIN ALTERNATES 1 &		FLARED END SECTIONS	DROP INLETS TYPE	DROP INLETS EXT.		JUNCT. BOXES	SOLID SODDING	WATER	STD. DWG. NOS.
		18"	18"	24"	18"	MO	4'	8'	(TYPE E)	SQ.YD.	M.GAL.	
		LIN. FT.			EACH							
14+00	DROP INLET LT. W/ FES LT.	38			1	1	1			5	0.06	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1
14+00	DROP INLET RT. W/ FES RT.	22			1	1				5	0.06	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1
16+50	DROP INLET LT. W/ 4' EXT.		246			1	1					FPC-9E, FPC-9M, PCC-1, PCM-1
16+50	DROP INLET RT. W/ 4' EXT.		246			1	1					FPC-9E, FPC-9M, PCC-1, PCM-1
17+55	DROP INLET LT. W/ 4' EXT.		102			1	1					FPC-9E, FPC-9M, PCC-1, PCM-1
17+55	DROP INLET RT. W/ 4' EXT.		102			1	1					FPC-9E, FPC-9M, PCC-1, PCM-1
19+00	DROP INLET RT. W/ 4' EXT.		142			1	1					FPC-9E, FPC-9M, PCC-1, PCM-1
19+60	JUNC. BOX RT.		58						1			FPC-9E, FPC-9M, PCC-1, PCM-1
20+50	DROP INLET LT.		292			1	1					FPC-9E, FPC-9M, PCC-1, PCM-1
20+90	DROP INLET RT. W/ 4' EXT.		128			1	1					FPC-9E, FPC-9M, PCC-1, PCM-1
23+25	DROP INLET RT. W/ 4' EXT.		60			1	1					FPC-9E, FPC-9M, PCC-1, PCM-1
23+80	DROP INLET LT.		76			1						FPC-9E, FPC-9M, PCC-1, PCM-1
24+30	DROP INLET RT. W/ 4' EXT.		104			1	1					FPC-9E, FPC-9M, PCC-1, PCM-1
24+60	DROP INLET LT.		76			1						FPC-9E, FPC-9M, PCC-1, PCM-1
26+25	DROP INLET RT. W/ 4' EXT.		192			1	1					FPC-9E, FPC-9M, PCC-1, PCM-1
26+50	DROP INLET LT. W/ 4' EXT.		188			1	1					FPC-9E, FPC-9M, PCC-1, PCM-1
28+65	DROP INLET LT.		212			1						FPC-9E, FPC-9M, PCC-1, PCM-1
28+65	DROP INLET RT.		236			1						FPC-9E, FPC-9M, PCC-1, PCM-1
29+75	DROP INLET LT.		106			1						FPC-9E, FPC-9M, PCC-1, PCM-1
29+75	DROP INLET RT.	20	106		1	1				5	0.06	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1
SPRING CREEK RD.												
36+45	DROP INLET LT. W/ FES LT. & 4' EXT.	18			1	1	1			5	0.06	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1
36+45	DROP INLET RT. W/ FES RT. & 8' EXT.	28			1	1		1		5	0.06	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1
37+88	DROP INLET LT. W/ 4' EXT.		140			1	1					FPC-9E, FPC-9M, PCC-1, PCM-1
37+90	DROP INLET RT. W/ 8' EXT.		140			1		1				FPC-9E, FPC-9M, PCC-1, PCM-1
39+32	DROP INLET LT.		140			1						FPC-9E, FPC-9M, PCC-1, PCM-1
39+32	DROP INLET RT. W/ 8' EXT.		138			1		1				FPC-9E, FPC-9M, PCC-1, PCM-1
40+15	DROP INLET RT. W/ OPENING IN BACK		80			1						FPC-9E, FPC-9M, PCC-1, PCM-1
40+15	DROP INLET LT.		80			1						FPC-9E, FPC-9M, PCC-1, PCM-1
BELLVIEW ST.												
42+59	DROP INLET LT.		52			1						FPC-9E, FPC-9M, PCC-1, PCM-1
42+59	DROP INLET RT. W/ 4' EXT.		52			1	1					FPC-9E, FPC-9M, PCC-1, PCM-1
43+12	DROP INLET RT. W/ 4' EXT.		204			1	1					FPC-9E, FPC-9M, PCC-1, PCM-1
43+12	DROP INLET LT. W/ 4' EXT.		206			1	1					FPC-9E, FPC-9M, PCC-1, PCM-1
45+20	DROP INLET RT. W/ 4' EXT.		126			1	1					FPC-9E, FPC-9M, PCC-1, PCM-1
45+22	DROP INLET LT. W/ 8' EXT.		124			1		1				FPC-9E, FPC-9M, PCC-1, PCM-1
46+50	DROP INLET LT. W/ FES LT. & 4' EXT.	24			1	1	1			5	0.06	FES-1, FES-2, FPC-9E, FPC-9M, PCC-1
46+50	DROP INLET RT. W/ 4' EXT.	30				1	1					FES-1, FES-2, FPC-9E, FPC-9M, PCC-1
46+89	IN PLACE 24" X 56' CMP PIPE CULVERT, EXTEND 9' RT. FOR TOTAL 65'			10								PCC-1, PCM-1
46+95	IN PLACE 24" X 55' CMP PIPE CULVERT, EXTEND 9' RT. FOR TOTAL 64'			10								PCC-1, PCM-1
47+01	IN PLACE 24" X 54' CMP PIPE CULVERT, EXTEND 6' RT. FOR TOTAL 60'			6								PCC-1, PCM-1
RAB												
0+75	DROP INLET RT. W/ 4' EXT.		60			1	1					FPC-9E, FPC-9M, PCC-1, PCM-1
1+52	DROP INLET RT. W/ 4' EXT.		60			1	1					FPC-9E, FPC-9M, PCC-1, PCM-1
2+75	DROP INLET RT. W/ 4' EXT.		54			1	1					FPC-9E, FPC-9M, PCC-1, PCM-1
4+20	DROP INLET RT.		94			1						FPC-9E, FPC-9M, PCC-1, PCM-1
TOTALS:		180	4422	26	6	39	23	4	1	30	0.36	

BASIS OF ESTIMATE:
WATER.....12.6 GAL. / SQ. YD. OF SOLID SODDING
NOTE: FOR R.C. PIPE CULVERT INSTALLATIONS USE TYPE 3 BEDDING UNLESS OTHERWISE SPECIFIED.
NOTE: FOR C.M. PIPE CULVERT INSTALLATIONS USE TYPE 2 BEDDING UNLESS OTHERWISE SPECIFIED.

QUANTITIES

USER: JJ5206
DESIGN FILE: G:\2il00800_Roundabout\TRANSP\dgn\quantities\r090433 QUANT.dgn SCALE: 1:100
PLOTTED: 8/22/2025 13:19

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
11/03/2025		6	ARK.	090433	39	73
		QUANTITIES				

WHEELCHAIR RAMPS

STATION	LOCATION	TYPE 3
		SQ.YD.
13+83	HWY. 264 LT.	4.0
13+83	HWY. 264 RT.	3.3
21+03	HWY. 264 LT.	6.7
21+05	HWY. 264 RT.	6.8
23+48	HWY. 264 LT.	6.8
23+48	HWY. 264 RT.	6.7
30+71	HWY. 264 RT.	4.0
30+77	HWY. 264 LT.	3.3
36+27	SPRING CREEK RD. RT.	3.3
36+30	SPRING CREEK RD. LT.	4.0
40+33	SPRING CREEK RD. LT.	6.7
40+36	SPRING CREEK RD. RT.	7.0
42+75	BELLVIEW ST. RT.	6.7
42+79	BELLVIEW ST. LT.	6.7
46+81	BELLVIEW ST. RT.	4.0
46+83	BELLVIEW ST. LT.	3.3
TOTALS:		**83.3**

ACHM PATCHING OF EXISTING ROADWAY

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

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

PORTLAND CEMENT CONCRETE PAVEMENT

STATION	STATION	LOCATION	LENGTH	PORTLAND CEMENT CONCRETE PAVEMENT (8" UNIFORM THICKNESS)	
				AVG. WID.	SQ. YD.
			FEET	FEET	
0+00	4+58.67	LOWELL ROUNDABOUT APRON	459.67	11.49	586.85
TOTAL:					**586.85**

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 15560
11-03-2025
JEROME PAUL DAVIS

ASPHALT CONCRETE PATCHING FOR MAINTENANCE OF TRAFFIC

LOCATION	TON	TACK COAT
		GALLON
ENTIRE PROJECT - TO BE USED IF AND WHERE	18	36
DIRECTED BY THE ENGINEER		
TOTALS:	**18**	**36**

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

CONCRETE BASE

STATION	STATION	LOCATION	LENGTH	PORTLAND CEMENT CONCRETE BASE	
				AVG. WID.	5" U.T.
			FEET	FEET	SQ. YD.
13+88.00	16+60.00	HWY. 264	272.00	6.58	198.86
27+91.50	30+65.35	HWY. 264	273.85	7.71	234.60
36+34.80	37+32.73	SPRING CREEK RD.	97.93	6.16	67.03
40+88.55	41+75.23	BELLVIEW ST.	86.68	6.70	64.53
TOTAL:					**565.02**

BASE AND SURFACING

STATION	STATION	LOCATION	LENGTH	TACK COAT (0.05 GAL. PER SQ. YD.)			TACK COAT (0.17 GAL. PER SQ. YD.)			TOTAL GALLONS	ACHM BASE COURSE (1 1/2")				ACHM BINDER COURSE (1")				ACHM SURFACE COURSE (1/2")								TOTAL PG 76-22
				TOTAL WID.	SQ.YD.	GALLON	TOTAL WID.	SQ.YD.	GALLON		AVG. WID.	SQ.YD.	POUND / SQ.YD.	PG 70-22	AVG. WID.	SQ.YD.	POUND / SQ.YD.	PG 70-22	AVG. WID.	SQ.YD.	POUND / SQ.YD.	PG 76-22	AVG. WID.	SQ.YD.	POUND / SQ.YD.	PG 76-22	
			FEET	FEET			FEET				FEET			TON	FEET			TON	FEET			TON	FEET			TON	TON
MAIN LANES																											
12+54.00	13+54.00	HWY. 264 TRANSITION	100.00				22.00	244.44	41.55	41.55													22.00	244.44	220.00	26.89	26.89
13+54.00	21+37.32	HWY. 264 NOTCH AND WIDEN	783.32	60.62	5276.10	263.81				263.81	18.86	1641.49	550.00	451.41	14.77	1285.52	330.00	212.11	14.77	1285.52	220.00	141.41	31.08	2705.07	220.00	297.56	438.97
23+15.07	31+00.00	HWY. 264 NOTCH AND WIDEN	784.93	62.51	5451.77	272.59				272.59	19.74	1721.61	550.00	473.44	15.59	1359.67	330.00	224.35	15.59	1359.67	220.00	149.56	31.33	2732.43	220.00	300.57	450.13
31+00.00	32+00.00	HWY. 264 TRANSITION	100.00				22.00	244.44	41.55	41.55													22.00	244.44	220.00	26.89	26.89
35+00.00	36+00.00	SPRING CREEK RD. TRANSITION	100.00				20.00	222.22	37.78	37.78													20.00	222.22	220.00	24.44	24.44
36+00.00	40+70.14	SPRING CREEK RD. NOTCH AND WIDEN	470.14	61.25	3199.56	159.98				159.98	20.13	1051.55	550.00	289.18	15.49	809.16	330.00	133.51	15.49	809.16	220.00	89.01	30.27	1581.24	220.00	173.94	262.95
42+47.70	47+10.00	BELLVIEW ST. NOTCH AND WIDEN	462.30	65.31	3354.76	167.74				167.74	20.83	1069.97	550.00	294.24	17.06	876.32	330.00	144.59	17.06	876.32	220.00	96.40	31.19	1602.13	220.00	176.23	272.63
47+10.00	48+10.00	BELLVIEW ST. TRANSITION	100.00				20.00	222.22	37.78	37.78													20.00	222.22	220.00	24.44	24.44
0+00.00	4+58.67	LOWELL ROUNDABOUT	458.67	63.59	3240.76	162.04				162.04	23.66	1205.79	550.00	331.59	19.95	1016.72	330.00	167.76	19.95	1016.72	220.00	111.84	23.69	1207.32	220.00	132.81	244.65
0+00.01	4+58.67	LOWELL ROUNDABOUT APRON	459.67								11.49	586.85	660.00	193.66													
ADDITIONAL FOR LEVELING																											
13+54.00	21+37.32	HWY. 264	783.32				22.00	1914.78	325.51	325.51									20.00	1740.71	220.00	191.48					191.48
23+15.07	31+00.00	HWY. 264	784.93				22.00	1918.72	326.18	326.18									20.00	1744.29	220.00	191.87					191.87
36+00.00	40+70.14	SPRING CREEK RD.	470.14				20.00	1044.76	177.61	177.61									20.00	1044.76	220.00	114.92					114.92
42+47.70	47+10.00	BELLVIEW ST.	462.30	20.00	1027.33	51.37	20.00	1027.33	174.65	226.02					20.00	1027.33	440.00	226.01	20.00	1027.33	220.00	113.01					113.01
TOTALS:					**21550.28**	**1077.53**		**6838.91**	**1162.61**	**2240.14**		**7277.26**		**2033.52**		**6374.72**		**1108.33**		**10904.48**		**1199.50**		**10761.51**		**1183.77**	**2383.27**

BASIS OF ESTIMATE:
ACHM SURFACE COURSE (1/2").....94.1% MIN. AGGR.....5.9% ASPHALT BINDER
ACHM BINDER COURSE (1").....95.5% MIN. AGGR.....4.5% ASPHALT BINDER
ACHM BASE COURSE (1 1/2").....96.0% MIN. AGGR.....4.0% ASPHALT BINDER
TACK COAT QUANTITIES WERE CALCULATED USING THE EMULSIFIED ASPHALT RATES. REFER TO SS-400-1 FOR THE RESIDUAL ASPHALT APPLICATION RATES.

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QUANTITIES

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
11/03/2025		6	ARK.	090433	40	73
		SUMMARY OF QUANTITIES AND REVISIONS				

SUMMARY OF QUANTITIES (BOX 1 OF 2)

	ITEM NUMBER	ITEM		QUANTITY	UNIT
	201	CLEARING		22	STATION
	201	GRUBBING		22	STATION
	202	REMOVAL AND DISPOSAL OF FENCE		3003	LIN. FT.
	202	REMOVAL AND DISPOSAL OF GATES		6	EACH
	202	REMOVAL AND DISPOSAL OF CONCRETE DRIVEWAYS		100	SQ. YD.
	202	REMOVAL AND DISPOSAL OF PIPE CULVERTS		4	EACH
	202	REMOVAL AND DISPOSAL OF SIGNS		2	EACH
	202	REMOVAL AND DISPOSAL OF BOLLARDS		9	EACH
	SP, SS, & 210	UNCLASSIFIED EXCAVATION		3772	CU. YD.
	SP & 210	COMPACTED EMBANKMENT		7884	CU. YD.
	SP & 210	SOIL STABILIZATION		50	TON
	SP, SS, & 303	AGGREGATE BASE COURSE (CLASS 7)		113	TON
	SP, SS, & 309	PORTLAND CEMENT CONCRETE BASE (5" UNIFORM THICKNESS)		565	SQ. YD.
	SS & 401	TACK COAT		2276	GAL.
	SP, SS, & 405	MINERAL AGGREGATE IN ACHM BASE COURSE (1 1/2")		1953	TON
	SP, SS, & 405	ASPHALT BINDER (PG 70-22) IN ACHM BASE COURSE (1 1/2")		81	TON
	SP, SS, & 406	MINERAL AGGREGATE IN ACHM BINDER COURSE (1")		1058	TON
	SP, SS, & 406	ASPHALT BINDER (PG 70-22) IN ACHM BINDER COURSE (1")		50	TON
	SP, SS, & 407	MINERAL AGGREGATE IN ACHM SURFACE COURSE (1/2")		2267	TON
	SP, SS, & 407	ASPHALT BINDER (PG 64-22) IN ACHM SURFACE COURSE (1/2")		2	TON
	SP, SS, & 407	ASPHALT BINDER (PG 76-22) IN ACHM SURFACE COURSE (1/2")		141	TON
	SP & 412	COLD MILLING ASPHALT PAVEMENT		933	SQ. YD.
	SP, SS, & 414	ASPHALT CONCRETE PATCHING FOR MAINTENANCE OF TRAFFIC		18	TON
	SP, SS, & 415	ACHM PATCHING OF EXISTING ROADWAY		50	TON
	SP, SS, & 501	PORTLAND CEMENT CONCRETE PAVEMENT (8" UNIFORM THICKNESS)		587	SQ. YD
	SP, SS, & 505	PORTLAND CEMENT CONCRETE DRIVEWAY		215.55	SQ. YD.
	601	MOBILIZATION		1.00	LUMP SUM
	SP & 602	FURNISHING FIELD OFFICE		1	EACH
	SS & 603	MAINTENANCE OF TRAFFIC		1.00	LUMP SUM
	SS & 604	SIGNS		286	SQ. FT.
	SS & 604	TRAFFIC DRUMS		22	EACH
	604	CONSTRUCTION PAVEMENT MARKINGS		11945	LIN. FT.
	604	REMOVAL OF CONSTRUCTION PAVEMENT MARKINGS		11945	LIN. FT.
	604	REMOVAL OF PERMANENT PAVEMENT MARKINGS		1500	LIN. FT.
	SS & 604	VERTICAL PANELS		163	EACH
	SS & 606	18" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)		180	LIN. FT.
*	SS & 606	18" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)	(ALTERNATE NO. 1)	4422	LIN. FT.
*	SS & 606	18" SMOOTH LINED POLYMER PRECOATED METALLIC COATED CORRUGATED STEEL PIPE	(ALTERNATE NO. 2)	4422	LIN. FT.
*	SS & 606	24" REINFORCED CONCRETE PIPE CULVERTS (CLASS III)	(ALTERNATE NO. 1)	26	LIN. FT.
*	SS & 606	24" SMOOTH LINED POLYMER PRECOATED METALLIC COATED CORRUGATED STEEL PIPE	(ALTERNATE NO. 2)	26	LIN. FT.
	SS & 606	18" FLARED END SECTIONS FOR REINFORCED CONCRETE PIPE CULVERTS		6	EACH
	SS & 606	SELECTED PIPE BEDDING		350	CU. YD.
	SS & 609	DROP INLETS (TYPE MO)		39	EACH
	SS & 609	JUNCTION BOXES (TYPE E)		1	EACH
	SS & 609	DROP INLET EXTENSIONS (4')		23	EACH
	SS & 609	DROP INLET EXTENSIONS (8')		4	EACH
	SS & 611	4" PIPE UNDERDRAINS		2043	LIN. FT.
	SS & 611	UNDERDRAIN OUTLET PROTECTORS		2	EACH
	SS & 619	WIRE FENCE (TYPE C)		1388	LIN. FT.
	SS & 619	WIRE FENCE (TYPE D-2)		580	LIN. FT.
*	SS & 619	4' STEEL CHAIN LINK FENCE	(ALTERNATE NO. 1)	76	LIN. FT.
*	SS & 619	4' ALUMINUM CHAIN LINK FENCE	(ALTERNATE NO. 2)	76	LIN. FT.
	620	LIME		1	TON
	620	SEEDING		0.69	ACRE
	SS & 620	MULCH COVER		3.47	ACRE
	620	WATER		272.2	M. GAL.
	621	TEMPORARY SEEDING		2.78	ACRE
	621	SILT FENCE		5525	LIN. FT.
	621	SAND BAG DITCH CHECKS		418	BAG
	621	SEDIMENT REMOVAL AND DISPOSAL		238	CU. YD.
	621	ROCK DITCH CHECKS		54	CU. YD.
	SS & 621	FILTER SOCK (12")		949	LIN. FT.
	623	SECOND SEEDING APPLICATION		0.69	ACRE
	624	SOLID SODDING		13590	SQ. YD.
	SP	HYDRIC GRASS 1 GAL. PLANTINGS		851	EACH
	SP, SS, & 632	CONCRETE ISLAND		1951	SQ. YD.
	SP, SS, & 633	CONCRETE WALKS		2681	SQ. YD.
	SS & 634	CONCRETE COMBINATION CURB AND GUTTER (TYPE A) (1' 6")		4878	LIN. FT.
	SS & 634	CONCRETE COMBINATION CURB AND GUTTER (TYPE E-1) (2' 0")		453	LIN. FT.
	635	ROADWAY CONSTRUCTION CONTROL		1.00	LUMP SUM

* DENOTES ALTERNATE BID ITEMS.

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 9620
11/3/25
HUBERT BURNS

SUMMARY OF QUANTITIES (BOX 2 OF 2)

ITEM NUMBER	ITEM	QUANTITY	UNIT
637	MAILBOXES	2	EACH
SS & 637	MAILBOX SUPPORTS (SINGLE)	2	EACH
SP, SS, & 641	WHEELCHAIR RAMPS (TYPE 3)	83	SQ. YD.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (2C/8 A.W.G., E.G.C.)	2046	LIN. FT.
SP	ELECTRICAL CONDUCTORS FOR LUMINAIRES	832	LIN. FT.
710	NON-METALLIC CONDUIT (2")	2090	LIN. FT.
SP, SS, & 711	CONCRETE PULL BOX (TYPE 2 HD)	20	EACH
SP	LED ROADWAY ILLUMINATION POLE (20,000 LUMENS, COBRA HEAD, SHOE BASE, 30')	16	EACH
SP	PEDESTAL TYPE SERVICE POINT (100 AMP)	1	EACH
718	REFLECTORIZED PAINT PAVEMENT MARKING WHITE (12")	276	LIN. FT.
718	REFLECTORIZED PAINT PAVEMENT MARKING YELLOW (12")	2640	LIN. FT.
719	THERMOPLASTIC PAVEMENT MARKING WHITE (6")	1830	LIN. FT.
719	THERMOPLASTIC PAVEMENT MARKING WHITE (8")	360	LIN. FT.
719	THERMOPLASTIC PAVEMENT MARKING WHITE (12")	400	LIN. FT.
719	THERMOPLASTIC PAVEMENT MARKING YELLOW (6")	3130	LIN. FT.
719	THERMOPLASTIC PAVEMENT MARKING YELLOW (8")	2640	LIN. FT.
SP & 719	THERMOPLASTIC PAVEMENT MARKING (YIELD LINE)	68	LIN. FT.
719	THERMOPLASTIC PAVEMENT MARKING (WORDS)	4	EACH
721	RAISED PAVEMENT MARKERS (TYPE II)	120	EACH
SS & 726	STANDARD SIGN	597	SQ. FT.
SP	OMNI-DIRECTIONAL BREAKAWAY SIGN SUPPORTS (TYPE G-1)	26	EACH
SP	OMNI-DIRECTIONAL BREAKAWAY SIGN SUPPORTS (TYPE G-2)	8	EACH
SP	OMNI-DIRECTIONAL BREAKAWAY SIGN SUPPORTS (TYPE G2-1)	2	EACH
801	UNCLASSIFIED EXCAVATION FOR STRUCTURES-ROADWAY	85	CU. YD.
SP, SS, & 802	CLASS S CONCRETE-ROADWAY	34.09	CU. YD.
SS & 804	REINFORCING STEEL-ROADWAY (GRADE 60)	1653	POUND
SS & 816	FILTER BLANKET	6	SQ. YD.
SS & 816	DUMPED RIPRAP	3	CU. YD.

REVISIONS

DATE	REVISION	SHEET NUMBER
11/03/2025	REVISED "TYPICAL 2-LANE NOTCH AND WIDENING" TYPICAL SECTION. REVISED QUANTITIES FOR MINERAL AGGREGATE IN ACHM BASE COURSE (1/ 1/2"), ASPHALT BINDER (PG 70-22) IN ACHM BASE COURSE (1 1/2"), MINERAL AGGREGATE IN ACHM BINDER COURSE (1"), AND ASPHALT BINDER (PG 70-22) IN ACHM BINDER COURSE (1").	4, 39, & 40

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SUMMARY OF QUANTITIES AND REVISIONS

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	41	73
		SURVERY CONTROL DETAILS				

CONTROL POINT TABLE				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
31	707757.81	673716.44	1315.00	FND GPS MONUMENT NSR 31 NEW COR
100	706577.8	671705.42	1302.75	BLUE CTA CAP
101	705317.16	671693.72	1309.77	CTA BLUE CAP
103	706544.77	670503.74	1283.95	CTA BLUE CAP

Alignment Name: CL Const. SPRING CREEK RD.				
8039	P.O.B.	30+00.00	705382.6949	671681.8600
8023	P.I.	41+59.52	706541.3493	671726.7252
8040	P.O.E.	50+08.15	707389.3897	671758.3294

Alignment Name: CL Const. W. MONROE AVE. (HWY. 264)				
8052	P.O.B.	10+00.00	706606.0457	670501.5203
8053	P.O.E.	32+36.35	706488.8392	672734.7936

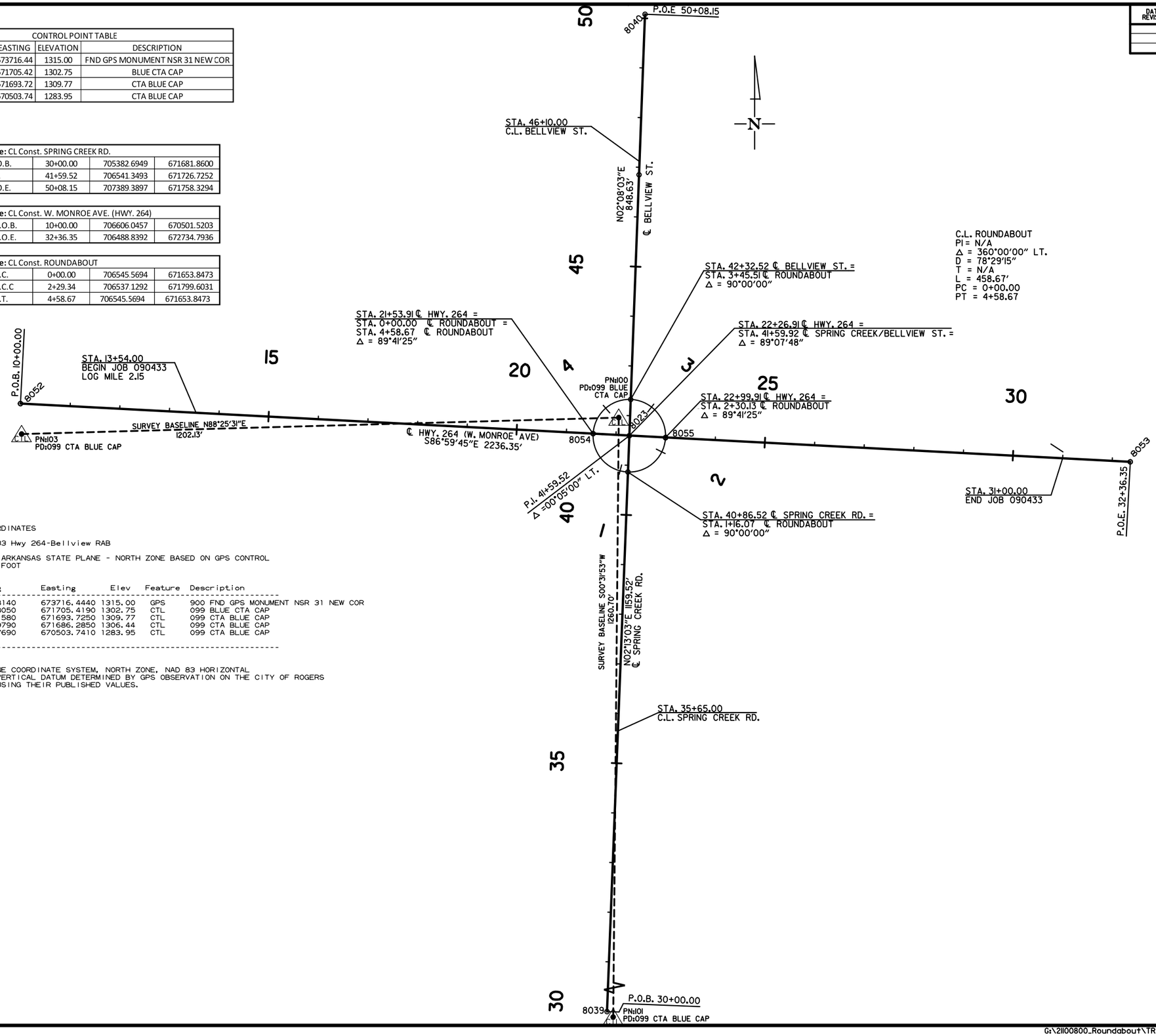
Alignment Name: CL Const. ROUNDABOUT				
8054	P.C.	0+00.00	706545.5694	671653.8473
8055	P.C.C	2+29.34	706537.1292	671799.6031
8054	P.T.	4+58.67	706545.5694	671653.8473

SURVEY CONTROL COORDINATES

Project Name: 090433 Hwy 264-Bellview RAB
Date: 6/7/2022
Coordinate System: ARKANSAS STATE PLANE - NORTH ZONE BASED ON GPS CONTROL
Units: U.S. SURVEY FOOT

Point Name	Northing	Easting	Elev	Feature	Description
31	707757.8140	673716.4440	1315.00	GPS	900 FND GPS MONUMENT NSR 31 NEW COR
100	706577.8050	671705.4190	1302.75	CTL	099 BLUE CTA CAP
101	705317.1580	671693.7250	1309.77	CTL	099 CTA BLUE CAP
102	703723.9790	671686.2850	1306.44	CTL	099 CTA BLUE CAP
103	706544.7690	670503.7410	1283.95	CTL	099 CTA BLUE CAP

BASIS OF BEARING:
ARKANSAS STATE PLANE COORDINATE SYSTEM, NORTH ZONE, NAD 83 HORIZONTAL DATUM AND NAVD 88 VERTICAL DATUM DETERMINED BY GPS OBSERVATION ON THE CITY OF ROGERS CONTROL MONUMENTS USING THEIR PUBLISHED VALUES.



STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 15560
JEROME PAUL DAVIS
08-25-2025

SURVEY CONTROL DETAILS

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DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	42	73
		PLAN AND PROFILE SHEETS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 15560
JEROME PAUL DAVIS
Jerry Paul Davis
08-25-2025

REMOVAL AND DISPOSAL OF FENCE

STA.	STA.	SIDE	LIN. FT.	GATE
22+47	22+60	LT.		1
21+52	25+74	RT.	374	
21+60	31+85	LT.	1091	3

FENCE

STA.	STA.	SIDE	TYPE	LIN. FT.
23+30	24+98	RT.	WIRE TYPE C	173
24+98	25+75	RT.	4' CHAIN LINK	76

STA. 14+00 CONSTRUCT
DROP INLET ON LT. H = 3'-9"
W/ 4' EXTENSION
18" X 38' R.C. PIPE CULVERT OUTLET
(CLASS III)(TYPE 3 BEDDING)
W/ FES LT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 4'

STA. 16+50 CONSTRUCT
DROP INLET ON LT. H = 3'-9"
W/ 4' EXTENSION
18" X 246' PIPE CULVERT
TO D.I. STA. 14+00 LT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 4'

STA. 17+55 CONSTRUCT
DROP INLET ON LT. H = 3'-10"
W/ 4' EXTENSION
18" X 102' PIPE CULVERT
TO D.I. STA. 16+50 LT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 4'

STA. 20+50 CONSTRUCT
DROP INLET ON LT. H = 3'-8"
W/ 4' EXTENSION
18" X 292' PIPE CULVERT
TO D.I. STA. 17+55 LT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 4'

C.L. ROUNDABOUT
PI = N/A
Δ = 360°00'00" LT.
D = 78°29'15"
T = N/A
L = 458.67'
PC = 0+00.00
PT = 4+58.67
NO SUPER

STA. 13+83 CONSTRUCT TYPE 3
WHEELCHAIR RAMP ON LT. = 4.5 SQ. YDS.

STA. 21+03 CONSTRUCT TYPE 3
WHEELCHAIR RAMP ON LT. = 7.8 SQ. YDS.

STA. 23+80 CONSTRUCT
DROP INLET ON LT. H = 3'-8"
18" X 76' PIPE CULVERT
TO D.I. STA. 2+75 (RAB)
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 4'

STA. 24+60 CONSTRUCT
DROP INLET ON LT. H = 3'-8"
18" X 76' PIPE CULVERT
TO D.I. STA. 23+80 LT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 4'

STA. 42+32.52 ℄ BELLVIEW ST. =
STA. 3+45.51 ℄ ROUNDABOUT
Δ = 90°00'00"

STA. 22+26.91 ℄ HWY. 264 =
STA. 41+59.52 ℄ SPRING CREEK/BELLVIEW ST. =
Δ = 89°07'48"

STA. 25+47 - IN PLACE
18" X 21' R.C. PIPE CULVERT
LT. SIDE DRAIN - REMOVE
CONSTRUCT APPROACH
ON LT. = 10 CU. YDS.

STA. 26+50 CONSTRUCT
DROP INLET ON LT. H = 3'-8"
W/ 4' EXTENSION
18" X 188' PIPE CULVERT
TO D.I. STA. 24+60 LT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 4'

STA. 23+48 CONSTRUCT TYPE 3
WHEELCHAIR RAMP ON LT. = 7.9 SQ. YDS.

STA. 20+53.91 ℄ HWY. 264 =
STA. 0+00.00 ℄ ROUNDABOUT =
STA. 4+58.67 ℄ ROUNDABOUT
Δ = 89°41'25"

STA. 13+54.00
BEGIN JOB 090433
LOG MILE 2.15

STA. 13+83 CONSTRUCT TYPE 3
WHEELCHAIR RAMP ON RT. = 3.9 SQ. YDS.

STA. 14+00 CONSTRUCT
DROP INLET ON RT. H = 2'-6"
18" X 22' R.C. PIPE CULVERT OUTLET
(CLASS III)(TYPE 3 BEDDING)
W/ FES RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 4'
DUMPED RIPRAP = 1 CU. YD.

STA. 16+50 CONSTRUCT
DROP INLET ON RT. H = 3'-9"
W/ 4' EXTENSION
18" X 246' PIPE CULVERT
TO D.I. STA. 14+00 RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 4'

STA. 17+55 CONSTRUCT
DROP INLET ON RT. H = 3'-9"
W/ 4' EXTENSION
18" X 102' PIPE CULVERT
TO D.I. STA. 16+50 RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 4'

STA. 19+00 CONSTRUCT
DROP INLET RT. H = 3'-9"
W/ 4' EXTENSION
18" X 142' PIPE CULVERT
TO D.I. STA. 17+55 RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 4'

STA. 19+60 CONSTRUCT
JUNC. BOX ON RT. H = 3'-8"
18" X 58' PIPE CULVERT
TO D.I. STA. 19+00 RT.
TYPE E JUNC. BOX = 4' X 4'

STA. 20+90 CONSTRUCT
DROP INLET RT H = 3'-8"
W/ 4' EXTENSION
18" X 128' PIPE CULVERT
TO J.B. STA. 19+60 RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 4'

STA. 21+05 CONSTRUCT TYPE 3
WHEELCHAIR RAMP ON RT. = 7.9 SQ. YDS.

STA. 40+86.52 ℄ SPRING CREEK RD. =
STA. 1+16.07 ℄ ROUNDABOUT
Δ = 90°00'00"

STA. 23+25 CONSTRUCT
DROP INLET ON RT. H = 3'-8"
W/ 4' EXTENSION
18" X 60' PIPE CULVERT
TO D.I. STA. 1+52 RAB
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 4'

STA. 24+30 CONSTRUCT
DROP INLET ON RT. H = 3'-8"
W/ 4' EXTENSION
18" X 104' PIPE CULVERT
TO D.I. STA. 23+25 RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 4'

STA. 25+85 - IN PLACE
12" X 18' R.C. PIPE CULVERT
RT. SIDE DRAIN - REMOVE
CONSTRUCT APPROACH
ON RT. = 5 CU. YDS.

STA. 26+25 CONSTRUCT
DROP INLET ON RT. H = 3'-8"
W/ 4' EXTENSION
18" X 192' PIPE CULVERT
TO D.I. STA. 24+30 RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 4'

STA. 22+99.91 ℄ HWY. 264 =
STA. 2+30.13 ℄ ROUNDABOUT
Δ = 89°41'25"

STA. 23+48 CONSTRUCT TYPE 3
WHEELCHAIR RAMP ON RT. = 7.8 SQ. YDS.

REFER TO SURVEY CONTROL DETAILS SHEETS
FOR HORIZONTAL AND VERTICAL CONTROL DATA

HWY. 264 (W. MONROE AVE.)

USER: JJ5206
DESIGN FILE: G:\2I100800_Roundabout\TRANSP\dgn\p&p\r090433_PL_HWY264_001.dgn
PLOTTED: 8/22/2025 13:20
SCALE: 1"=100'

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DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	43	73
		PLAN AND PROFILE SHEETS				

STATE OF ARKANSAS
JERRY PAUL DAVIS
LICENSED PROFESSIONAL ENGINEER
No. 15560
08-25-2025

LEFT SIDE HWY. 264

STA. 13+54.00
BEGIN JOB 090433
LOG MILE 2.15

PVI 13+54.00
ELEV. 1293.71

14+00 LT
TOP 1294.69
FL IN 1291.19
FL OUT 1290.94

1.56%

18" x 38'
@ 0.30%
FL OUT 1290.80

18" x 246' @ 1.34%

PVC 14+29.00
ELEV. 1294.88

100' V.C.
K = 625.00
e=-0.02'

PVI 14+79.00
ELEV. 1295.66

PVT 15+29.00
ELEV. 1296.36

PROFILE GRADE

16+50 LT
TOP 1298.23
FL IN 1294.73
FL OUT 1294.48

1.40%

17+55 LT
TOP 1299.67
FL IN 1296.27
FL OUT 1296.02

18" x 102' @ 1.27%

PVC 17+49.00
ELEV. 1299.44

18" x 292' @ 0.73%

PVI 18+49.00
ELEV. 1300.84

200' V.C.
K = 350.88
e=-0.14'

PVT 19+49.00
ELEV. 1301.67

20+50 LT
TOP 1302.64
FL IN 1299.24
FL OUT 1298.99

0.83%

18" x 94'
@ 1.20%

EXISTING GROUND

℄ HWY. 264 STA. 21+36.91 =
℄ ROUNDABOUT STA. 0+00.07, 17.00' RT.
ELEV 1303.22

4+20 RAB
TOP 1303.76
FL OUT 1300.36

℄ HWY. 264 STA. 23+16.91 =
℄ ROUNDABOUT STA. 2+30.05, 17.00' RT.
ELEV 1304.87

RAB 2+75
TOP 1304.88
FL IN 1301.48
FL OUT 1301.23

23+80 LT
TOP 1305.52
FL IN 1302.12
FL OUT 1301.87

PROFILE GRADE
24+60 LT
TOP 1306.18
FL IN 1302.78
FL OUT 1302.53

1.05%

18" x 76'
@ 0.52%

18" x 76' @ 0.54%

18" x 188' @ 1.01%

PVC 25+25.00
ELEV. 1307.06

550' V.C.
K = 486.73
e=-0.78'

RIGHT SIDE HWY. 264

STA. 13+54.00
BEGIN JOB 090433
LOG MILE 2.15

PVI 13+54.00
ELEV. 1293.71

14+00 RT
TOP 1294.55
FL IN 1292.30
FL OUT 1292.05

1.56%

18" x 22'
@ 5.68%
FL OUT 1290.50

18" x 246' @ 0.88%

PVC 14+29.00
ELEV. 1294.88

100' V.C.
K = 625.00
e=-0.02'

PVI 14+79.00
ELEV. 1295.66

PVT 15+29.00
ELEV. 1296.36

PROFILE GRADE

16+50 RT
TOP 1298.21
FL IN 1294.71
FL OUT 1294.46

1.40%

17+55 RT
TOP 1299.65
FL IN 1296.25
FL OUT 1296.00

18" x 102' @ 1.27%

PVC 17+49.00
ELEV. 1299.44

18" x 142' @ 0.73%

PVI 18+49.00
ELEV. 1300.84

200' V.C.
K = 350.88
e=-0.14'

PVT 19+49.00
ELEV. 1301.67

19+00 RT
TOP 1301.15
FL IN 1297.53
FL OUT 1297.28

JB 19+60 RT
TOP 1301.54
FL IN 1289.14
FL OUT 1297.89

18" x 58'
@ 0.63%

18" x 128' @ 0.89%

20+90 RT
TOP 1302.86
FL OUT 1299.26

0.83%

EXISTING GROUND

℄ HWY. 264 STA. 21+36.91 =
℄ ROUNDABOUT STA. 0+00.07, 17.00' RT.
ELEV 1303.22

℄ HWY. 264 STA. 23+16.91 =
℄ ROUNDABOUT STA. 2+30.05, 17.00' RT.
ELEV 1304.87

23+25 RT
TOP 1304.73
FL IN 1301.33
FL OUT 1301.08

PROFILE GRADE
24+30 RT
TOP 1306.18
FL IN 1302.76
FL OUT 1302.51

1.05%

18" x 104' @ 1.13%

18" x 192' @ 0.90%

PVC 25+25.00
ELEV. 1307.06

550' V.C.
K = 486.73
e=-0.78'

1315 1310 1305 1300 1295 1290 1285 1280

11+00 12+00 13+00 14+00 15+00 16+00 17+00 18+00 19+00 20+00 21+00 22+00 23+00 24+00 25+00 26+00

HWY. 264 (W. MONROE AVE.)

USER: JJ5206
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PLOTTED: 8/22/2025 13:20
SCALE: 1:100
MODEL: PROPOSED DESIGN

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DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	44	73
		PLAN AND PROFILE SHEETS				

C.L. ROUNDABOUT
PI = N/A
Δ = 360°00'00" LT.
D = 78°29'15"
T = N/A
L = 458.67'
PC = 0+00.00
PT = 4+58.67
NO SUPER

STA. 28+65 CONSTRUCT
DROP INLET ON LT. H = 2'-9"
18" X 212' PIPE CULVERT
TO D.I. STA. 26+50 LT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 4'

STA. 29+75 CONSTRUCT
DROP INLET ON LT. H = 2'-3"
18" X 106' PIPE CULVERT
TO D.I. STA. 28+65 LT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 4'

REMOVAL AND DISPOSAL OF FENCE

STA.	STA.	SIDE	LIN. FT.
29+64	31+85	RT.	221

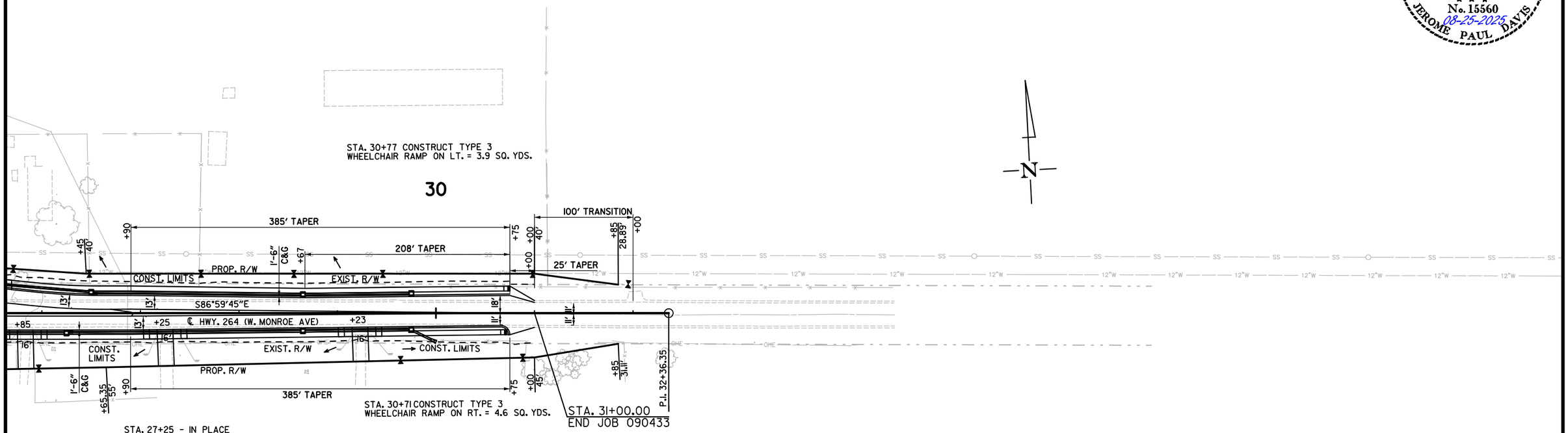
FENCE

STA.	STA.	SIDE	TYPE	LIN. FT.
27+60	31+85	LT.	WIRE TYPE D-2	425
29+64	31+85	RT.	WIRE TYPE D-2	155

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 15560
JEROME PAUL DAVIS
Jerry P. Davis
08-25-2025

STA. 30+77 CONSTRUCT TYPE 3
WHEELCHAIR RAMP ON LT. = 3.9 SQ. YDS.

30



STA. 27+25 - IN PLACE
12" X 21' R.C. PIPE CULVERT
RT. SIDE DRAIN - REMOVE
CONSTRUCT APPROACH
ON RT. = 5 CU. YDS.

STA. 30+71 CONSTRUCT TYPE 3
WHEELCHAIR RAMP ON RT. = 4.6 SQ. YDS.

STA. 29+23 - IN PLACE
12" X 19' R.C. PIPE CULVERT
RT. SIDE DRAIN - REMOVE
CONSTRUCT APPROACH
ON RT. = 5 CU. YDS.

STA. 28+65 CONSTRUCT
DROP INLET ON RT. H = 3'-0"
18" X 236' PIPE CULVERT
TO D.I. STA. 26+25 RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 4'

STA. 29+75 CONSTRUCT
DROP INLET ON RT. H = 2'-9"
18" X 20' PIPE CULVERT INLET
W/ FES RT. AND
18" X 106' PIPE CULVERT
TO D.I. STA. 28+65 RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 4'

REFER TO SURVEY CONTROL DETAILS SHEETS
FOR HORIZONTAL AND VERTICAL CONTROL DATA

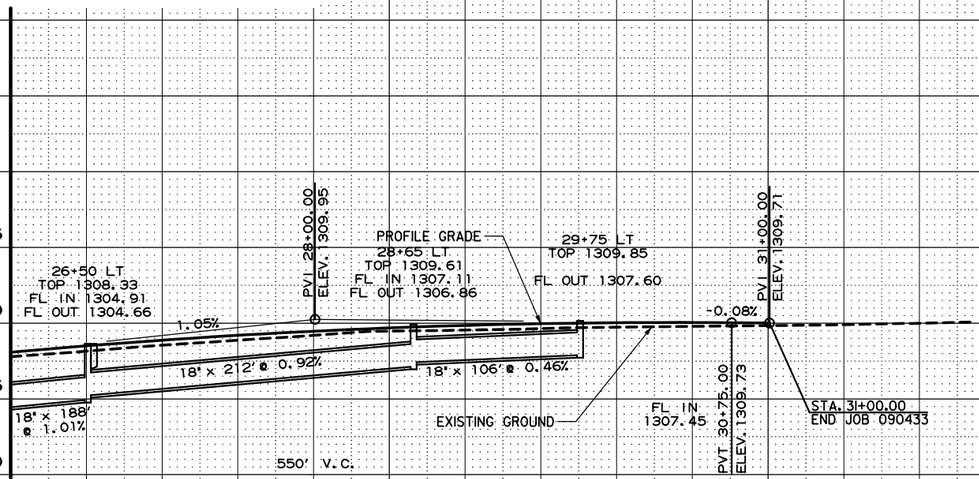
HWY. 264 (W. MONROE AVE.)

USER: JJ5206
DESIGN FILE: G:\21100800_Roundabout\TRANSP\dgn\p&p\r090433_PL_HWY264_002.dgn
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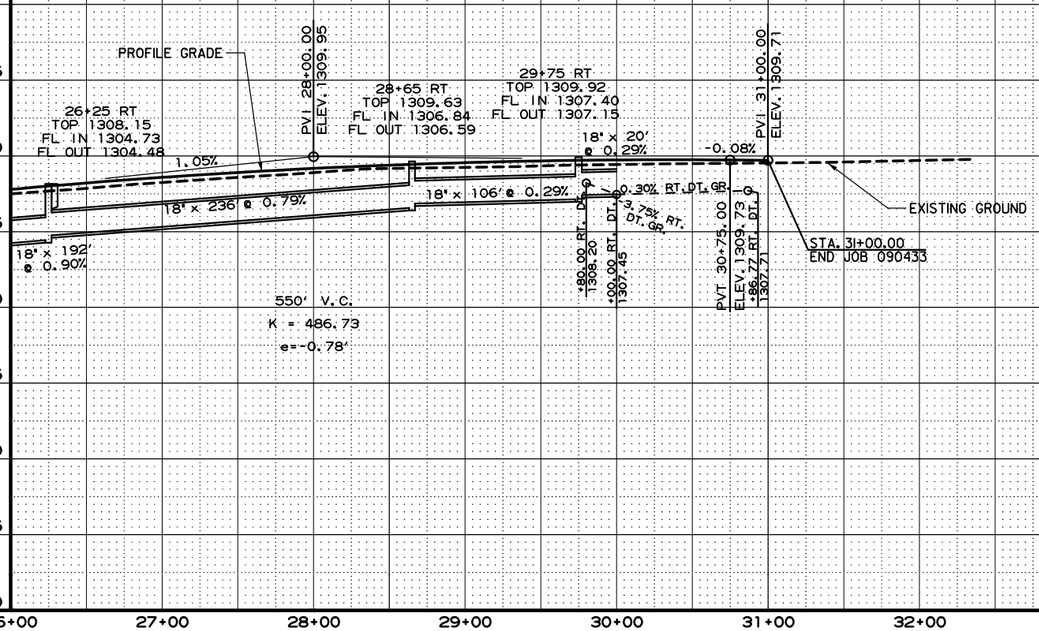
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DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	45	73
		PLAN AND PROFILE SHEETS				

LEFT SIDE HWY. 264



RIGHT SIDE HWY. 264



HWY. 264 (W. MONROE AVE.)

26+00 27+00 28+00 29+00 30+00 31+00 32+00 33+00 34+00 35+00 36+00 37+00 38+00 39+00 40+00 27+00

STATE OF ARKANSAS
Jerry Davis
LICENSED PROFESSIONAL ENGINEER
No. 15560
08-25-2025
JEROME PAUL DAVIS

USER: JJ5206
DESIGN FILE: G:\21100800_Roundabout\TRANSP\dgn\p&p\r090433_PR_HWY264_002.dgn MODEL: PROPOSED DESIGN
PLOTTED: 8/22/2025 13:20 SCALE: 1in00

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DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	46	73
		PLAN AND PROFILE SHEETS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 15560
JEROME PAUL DAVIS
08-25-2025

REMOVAL AND DISPOSAL OF FENCE

STA.	STA.	SIDE	LIN. FT.	GATE
35+00	41+26	RT.	677	2
42+00	48+10	RT.	640	

FENCE

STA.	STA.	SIDE	TYPE	LIN. FT.
35+00	40+74	RT.	WIRE TYPE C	595
43+00	48+10	RT.	WIRE TYPE C	620

STA. 36+30 CONSTRUCT TYPE 3 WHEELCHAIR RAMP ON LT. = 4.6 SQ. YDS.

STA. 36+45 SPRING CREEK RD. CONSTRUCT
DROP INLET ON LT. H = 3'-8"
W/ 4' EXTENSION
18" X 20' R.C. PIPE CULVERT OUTLET
(CLASS III)(TYPE 3 BEDDING)
W/ FES LT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 4'
DUMPED RIPRAP = 1 CU. YD.

STA. 36+27 CONSTRUCT TYPE 3 WHEELCHAIR RAMP ON RT. = 3.9 SQ. YDS.

STA. 36+45 SPRING CREEK RD. CONSTRUCT
DROP INLET ON RT. H = 3'-9"
W/ 8' EXTENSION
18" X 28' R.C. PIPE CULVERT OUTLET
(CLASS III)(TYPE 3 BEDDING)
W/ FES RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 4'
DUMPED RIPRAP = 1 CU. YD.

STA. 37+88 SPRING CREEK RD. CONSTRUCT
DROP INLET ON LT. H = 3'-8"
W/ 4' EXTENSION
18" X 140' PIPE CULVERT
TO D.I. STA. 36+45 SPRING CREEK RD. LT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 4'

STA. 39+06 CONSTRUCT
APPROACH ON LT. = 5 CU. YDS.

STA. 39+32 SPRING CREEK RD. CONSTRUCT
DROP INLET ON LT. H = 3'-8"
18" X 140' PIPE CULVERT
TO D.I. STA. 37+88 SPRING CREEK RD. LT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 4'

STA. 40+15 SPRING CREEK RD. CONSTRUCT
DROP INLET ON LT. H = 3'-8"
18" X 80' PIPE CULVERT
TO D.I. STA. 39+32 SPRING CREEK RD. LT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 4'

STA. 39+32 SPRING CREEK RD. CONSTRUCT
DROP INLET ON RT. H = 3'-8"
W/ 8' EXTENSION
18" X 138' PIPE CULVERT
TO D.I. STA. 37+90 SPRING CREEK RD. RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 4'

STA. 37+90 SPRING CREEK RD. CONSTRUCT
DROP INLET ON RT. H = 3'-8"
W/ 8' EXTENSION
18" X 140' PIPE CULVERT
TO D.I. STA. 36+45 SPRING CREEK RD. RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 4'

STA. 40+36 CONSTRUCT TYPE 3 WHEELCHAIR RAMP ON RT. = 8.2 SQ. YDS.

STA. 40+15 SPRING CREEK RD. CONSTRUCT
DROP INLET ON RT. H = 3'-8"
W/ OPENING IN BACK
18" X 80' PIPE CULVERT
TO D.I. STA. 39+32 SPRING CREEK RD. RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 4'

C.L. ROUNDABOUT
PI = N/A
Δ = 360°00'00" LT.
D = 78°29'15"
T = N/A
L = 458.67'
PC = 0+00.00
PT = 4+58.67
NO SUPER

STA. 40+33 CONSTRUCT TYPE 3 WHEELCHAIR RAMP ON LT. = 7.8 SQ. YDS.

STA. 42+59 BELLVIEW ST. CONSTRUCT
DROP INLET LT. H = 3'-5"
18" X 52' PIPE CULVERT
TO D.I. STA. 43+12 BELLVIEW ST. LT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 4'

STA. 43+12 BELLVIEW ST. CONSTRUCT
DROP INLET ON LT. H = 3'-8"
W/ 4' EXTENSION
18" X 206' PIPE CULVERT
TO D.I. STA. 45+22 BELLVIEW ST. LT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 4'

STA. 45+22 BELLVIEW ST. CONSTRUCT
DROP INLET ON LT. H = 3'-9"
W/ 8' EXTENSION
18" X 124' PIPE CULVERT
TO D.I. STA. 46+50 BELLVIEW ST. LT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 4'

STA. 46+50 BELLVIEW ST. CONSTRUCT
DROP INLET ON LT. H = 4'-0"
W/ 4' EXTENSION
18" X 24' R.C. PIPE CULVERT OUTLET
(CLASS III)(TYPE 3 BEDDING)
W/ FES LT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 4'

STA. 46+83 CONSTRUCT TYPE 3 WHEELCHAIR RAMP ON LT. = 3.9 SQ. YDS.

STA. 42+79 CONSTRUCT TYPE 3 WHEELCHAIR RAMP ON LT. = 7.8 SQ. YDS.

STA. 46+81 CONSTRUCT TYPE 3 WHEELCHAIR RAMP ON RT. = 4.6 SQ. YDS.

STA. 42+59 BELLVIEW ST. CONSTRUCT
DROP INLET ON RT. H = 3'-8"
W/ 4' EXTENSION
18" X 52' PIPE CULVERT
TO D.I. STA. 43+12 BELLVIEW ST. RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 4'

STA. 43+12 BELLVIEW ST. CONSTRUCT
DROP INLET ON RT. H = 3'-8"
W/ 4' EXTENSION
18" X 204' PIPE CULVERT
TO D.I. STA. 45+20 BELLVIEW ST. RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 4'

STA. 45+20 BELLVIEW ST. CONSTRUCT
DROP INLET ON RT. H = 3'-8"
W/ 4' EXTENSION
18" X 126' PIPE CULVERT
TO D.I. STA. 46+50 BELLVIEW ST. RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 4'

STA. 46+50 BELLVIEW ST. CONSTRUCT
DROP INLET ON RT. H = 3'-9"
W/ 4' EXTENSION
18" X 30' R.C. PIPE CULVERT OUTLET
(CLASS III)(TYPE 3 BEDDING)
TO D.I. STA. 46+50 BELLVIEW ST. LT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 4'

STA. 46+89 IN PLACE
24" x 56' C.M.P. PIPE CULV'T.
RETAIN AND EXTEND 10' RT.
TO A COMPLETED LENGTH OF 66'

STA. 46+95 IN PLACE
24" x 55' C.M.P. PIPE CULV'T.
RETAIN AND EXTEND 10' RT.
TO A COMPLETED LENGTH OF 65'

STA. 47+01 IN PLACE
24" x 54' C.M.P. PIPE CULV'T.
RETAIN AND EXTEND 6' RT.
TO A COMPLETED LENGTH OF 60'

STA. 47+10.00
END CONST.
BELLVIEW ST.

STA. 36+00.00
BEGIN CONST.
SPRING CREEK RD.

STA. 40+86.52 ℄ SPRING CREEK RD. =
STA. 1+16.07 ℄ ROUNDABOUT
Δ = 90°00'00"

STA. 21+53.91 ℄ HWY. 264 =
STA. 0+00.00 ℄ ROUNDABOUT =
STA. 4+58.67 ℄ ROUNDABOUT
Δ = 89°41'25"

STA. 22+26.91 ℄ HWY. 264 =
STA. 41+59.92 ℄ SPRING CREEK/BELLVIEW ST. =
Δ = 89°07'48"

STA. 42+32.52 ℄ BELLVIEW ST. =
STA. 3+45.51 ℄ ROUNDABOUT
Δ = 90°00'00"

STA. 22+99.91 ℄ HWY. 264 =
STA. 2+30.13 ℄ ROUNDABOUT
Δ = 89°41'25"

DETENTION POND 3
DETENTION POND 4
DETENTION POND 5
100' DEPTH TRANSITION
25' TAPER
165' TAPER
128' TAPER
PROP. R/W
CONST. LIMITS
EXIST. R/W
℄ SPRING CREEK RD.
℄ BELLVIEW ST.
℄ HWY. 264 (W. MONROE AVE)
N02°13'03"E
N02°08'03"E
S86°59'45"E
R=8.5'
1'-6" C&G
10' 10'
14' 14'
17' 17'
13' 13'
15' 15'

REFER TO SURVEY CONTROL DETAILS SHEETS
FOR HORIZONTAL AND VERTICAL CONTROL DATA

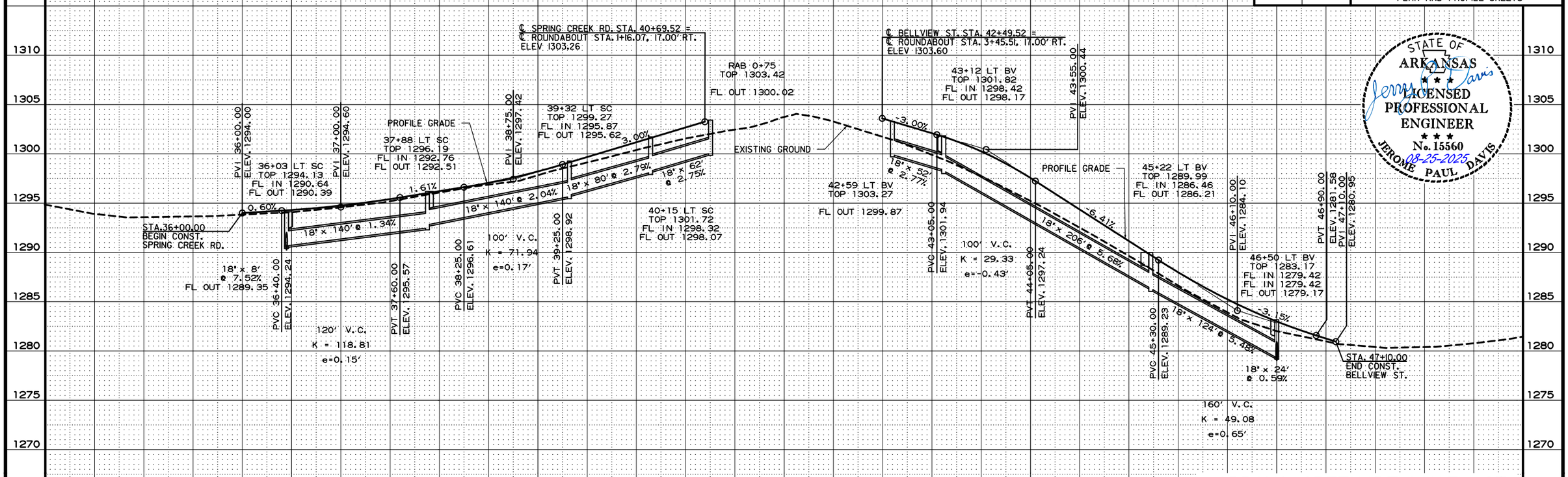
SPRING CREEK RD./BELLVIEW ST.

USER: JJ5206
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PLOTTED: 8/22/2025 13:20
SCALE: 1"=100'

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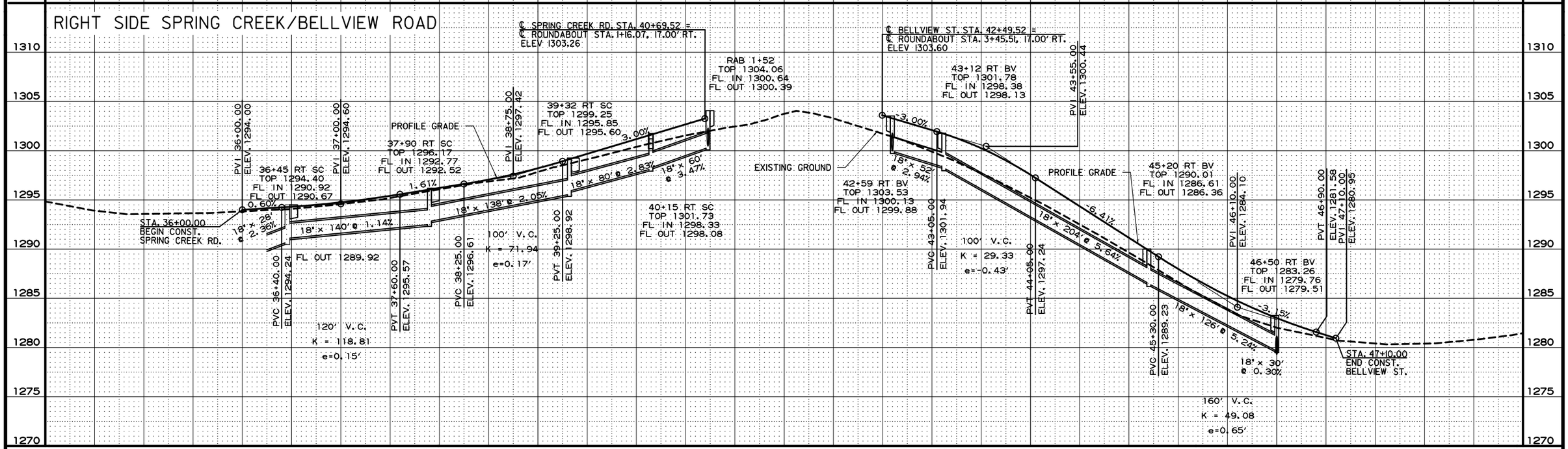
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	47	73
		PLAN AND PLOTTING SHEETS				

LEFT SIDE SPRING CREEK/BELLVIEW ROAD



SPRING CREEK/BELLVIEW ST.

RIGHT SIDE SPRING CREEK/BELLVIEW ROAD



35+00 36+00 37+00 38+00 39+00 40+00 41+00 42+00 43+00 44+00 45+00 46+00 47+00 48+00 49+00

STATE OF ARKANSAS
Jerry L. Davis
LICENSED PROFESSIONAL ENGINEER
No. 15560
08-25-2025
JEROME PAUL DAVIS

USER: JJ5206
DESIGN FILE: G:\2ll00800_Roundabout\TRANSP\dgn\p&p\r090433_PR_SPRINGCRK_002.dgn
PLOTTED: 8/22/2025 13:20
SCALE: HOO
MODEL: PROPOSED DESIGN

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	48	73
		PLAN AND PROFILE SHEETS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 15560
JEROME PAUL DAVIS
08-25-2025

STA. 4+20 RAB CONSTRUCT
DROP INLET ON RT. H = 3'-5"
18" X 94' PIPE CULVERT
TO D.I. STA. 20+50 (W. MONROE AVE.) LT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 4'

STA. 2+75 RAB CONSTRUCT
DROP INLET ON RT. H = 3'-8"
W/ 4' EXTENSION
18" X 54' PIPE CULVERT
TO D.I. STA. 42+59 (BELLVIEW ST.) RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 4'

C.L. ROUNDABOUT
PI= N/A
Δ = 360°00'00" LT.
D = 78°29'15"
T = N/A
L = 458.67'
PC = 0+00.00
PT = 4+58.67

STA. 42+32.52 ℄ BELLVIEW ST. =
STA. 3+45.51 ℄ ROUNDABOUT
Δ = 90°00'00"

STA. 21+53.91 ℄ HWY. 264 =
STA. 0+00.00 ℄ ROUNDABOUT =
STA. 4+58.67 ℄ ROUNDABOUT
Δ = 89°41'25"

STA. 22+26.91 ℄ HWY. 264 =
STA. 41+59.92 ℄ SPRING CREEK/BELLVIEW ST. =
Δ = 89°07'48"

STA. 0+75 RAB CONSTRUCT
DROP INLET ON RT. H = 3'-5"
W/ 4' EXTENSION
18" X 60' PIPE CULVERT
TO D.I. STA. 40+15 (SPRING CREEK RD.) LT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 4'

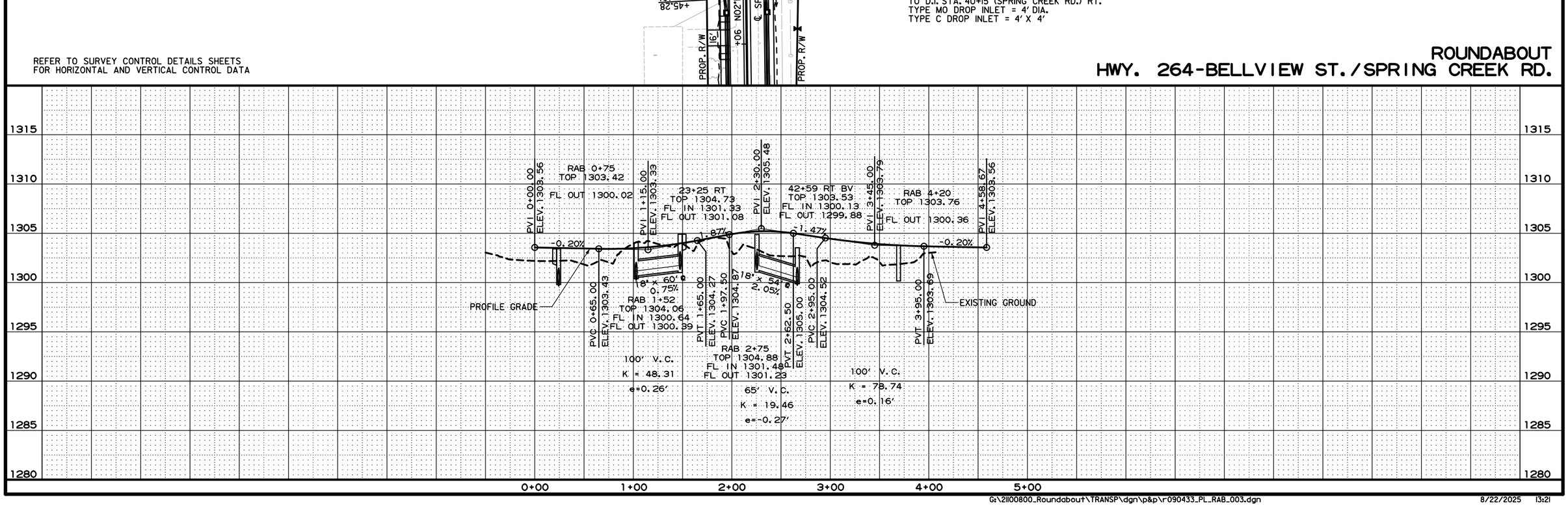
STA. 40+86.52 ℄ SPRING CREEK RD. =
STA. 1+16.07 ℄ ROUNDABOUT
Δ = 90°00'00"

STA. 22+99.91 ℄ HWY. 264 =
STA. 2+30.13 ℄ ROUNDABOUT
Δ = 89°41'25"

STA. 1+52 RAB CONSTRUCT
DROP INLET ON RT. H = 3'-8"
W/ 4' EXTENSION
18" X 60' PIPE CULVERT
TO D.I. STA. 40+15 (SPRING CREEK RD.) RT.
TYPE MO DROP INLET = 4' DIA.
TYPE C DROP INLET = 4' X 4'

REFER TO SURVEY CONTROL DETAILS SHEETS
FOR HORIZONTAL AND VERTICAL CONTROL DATA

ROUNDABOUT
HWY. 264-BELLVIEW ST./SPRING CREEK RD.



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MODEL: PROPOSED DESIGN

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DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	49	73

ILLUMINATION NOTES AND SUMMARY OF LIGHTING QUANTITIES

GENERAL NOTES

1. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE (NFPA 70, CURRENT EDITION), LIFE SAFETY CODE (NFPA 101, CURRENT EDITION), UNDERGROUND FACILITIES DAMAGE PREVENTION ACT (§14-271-101 ET SEQ.), AND LOCAL ELECTRICAL CODE. IN ADDITION, ALL PARTS OF THIS INSTALLATION SHALL BE IN ACCORDANCE WITH THE ARKANSAS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, CURRENT EDITION.

2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE DOCUMENTATION TO PROJECT ENGINEER, TO ENSURE ARKANSAS STATE CODES (§17-28-101 ET SEQ. AND §20-31-101 ET SEQ.) ARE MET. THE DOCUMENTATION SHALL INCLUDE:
   (1) ELECTRICIANS' LICENSE INFORMATION AND EXPIRATION DATE.
   (2) THE RATIO OF LICENSED-ELECTRICIAN-TO-APPRENTICE-ELECTRICIANS.
   (3) PRINTED SEARCH RESULT OF LICENSED ELECTRICIANS FROM ARKANSAS DEPARTMENT OF LABOR ELECTRICIAN LICENSEE DIRECTOR (https://www.ark.org/labor/electrician/search.php)
   ALL LICENSES SHALL BE VALID AND CURRENT

3. THE CONTRACTOR SHALL NOT ENGAGE IN EXCAVATION OR DEMOLITION ACTIVITIES WITHOUT HAVING FIRST NOTIFIED THE ARKANSAS ONE CALL CENTER IN ACCORDANCE WITH A.C.A. §14-271 UNDERGROUND UTILITIES DAMAGE PREVENTION ACT. NOT ALL UTILITY COMPANIES ARE MEMBERS OF THE ARKANSAS ONE CALL SYSTEM. THE CONTRACTOR IS ADVISED TO CONTACT ALL NON-MEMBER UTILITIES AS WELL AS THE ONE CALL CENTER.

4. UNDERGROUND UTILITIES EXIST WITHIN AND ADJACENT TO THE LIMITS OF CONSTRUCTION. SOME UTILTIES MAY HAVE BEEN RELOCATED SINCE THE TIME OF DESIGN AND THE CONTRACTOR'S NOTICE TO PROCEED. THE CONTRACTOR SHALL CONTACT THE UTILITY COMPANIES INVOLVED AND VERIFY THE LOCATIONS OF UNDERGROUND UTILITIES. THE CONTRACTOR SHALL MAINTAIN THE UTILITY LOCATION MARKINGS UNTIL IT IS NO LONGER NECESSARY.

5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS OF REPAIR OR REPLACEMENT OF EXISTING UTILITIES DAMAGED DURING THE CONSTRUCTION.

6. 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.

7. CONDUIT INSTALLED UNDER ROADWAY SURFACES SHALL BE INSTALLED BY A PUSHING OR BORING METHOD OR AS DIRECTED BY ENGINEER. PVC OR HDPE CONDUIT SHALL BE USED. PVC CONDUIT SHALL BE MARKED "DIR. BORING" OR "DIRECTIONAL BORING" AS PER NEC.

8. NON-DESTRUCTIVE MEG TEST AND CURRENT LEAKAGE TEST SHALL BE PERFORMED ON NEW CONDUCTORS, IN THE PRESENCE OF FIELD INSPECTOR. THE TEST VOLTAGE SHALL BE LIMITED TO 600 VOLTS. ANY CONDUCTOR NOT MEETING THE MINIMUM ACCEPTABLE VALUE SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE USING NEW CONDUCTOR. THE RESULTS SHALL BE DOCUMENTED AND PROVIDED TO THE JOB ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGES CAUSED BY MEG TEST WHILE DEVICES OR ACCESSORIES ARE STILL CONNECTED AND SHALL BE REPLACED AT CONTRACTOR'S EXPENSE. SEE SPECIAL PROVISION ELECTRICAL CONDUCTORS-IN-CONDUIT

9. PULL BOX LIDS SHALL CLOSE FLUSH WITHOUT PINCHING ANY CONDUCTORS. CONDUIT LENGTHS IN PULL BOXES SHALL BE SET ACCORDINGLY. ANY CONDUCTORS THAT HAVE BEEN DAMAGED BY PINCHING SHALL BE COMPLETELY REPLACED AT THE CONTRACTOR'S EXPENSE.

10. EACH ROADWAY ILLUMINATION POLE SHALL BE BONDED TO EQUIPMENT GROUNDING CONDUCTOR PER NEC. SEE ARTICLES 250 AND 410.

11. ALL ELECTRICAL COMPONENTS SHALL BE UL LISTED.

12. ALL LUMINAIRE ASSEMBLIES SHALL HAVE BUG RATING OF U0.

13. BEFORE FINAL ACCEPTANCE, CONTRACTOR SHALL PROVIDE 2 SETS OF LEDGER SIZE (11"X17") AS-BUILT PLANS TO THE MAINTENANCE AUTHORITY AND ARDOT.

14. PULL CABLE SHALL BE MINIMUM 1/4" PULL NYLON OR POLYESTER ROPE, OR 1200 LBS PULL TAPE WHEN PULLING CONDUCTORS. STEEL CABLE OR FISH TAPE SHALL NOT BE USED. CONNECT PULLING DEVICES TO COPPER WIRE AND NOT TO JACKET. USE PULLING COMPOUND PER MANUFACTURER'S REQUIREMENTS. ALL BENDS SHALL NOT BE LESS THAN RECOMMENDED BY NEC FOR CONDUCTORS USED.

15. ALL CONCRETE PULL BOXES SHALL BE TYPE 2 HD UNLESS OTHERWISE INDICATED ON THE PLANS.

16. SLACK CABLES IN PULL BOXES SHALL BE 3 FEET.

17. POLE FOUNDATION/NON-BREAKAWAY FOUNDATION SHALL NOT PROTRUDE MORE THAN 4 INCHES ABOVE FINISH GRADE LEVEL.

18. ELECTRICAL SERVICE SHALL BE PROVIDED BY THE CITY/COUNTY (MAINTENANCE AUTHORITY) TO A SERVICE POLE WITH EXTERNAL RAINTIGHT BREAKER (MAIN BREAKER), GALVANIZED STEEL SERVICE RISER, METER LOOP (IF REQUIRED), AND WEATHERHEAD AT A MUTUALLY ACCEPTABLE POINT WITHIN THE RIGHT-OF-WAY. THE CONTRACTOR SHALL PROVIDE THE SERVICE POINT ASSEMBLY PER PLANS SET AND CONTRACT PRIOR TO THE DATE ELECTRICAL COMPANIES PROVIDE SERVICE.

19. CONTRACTOR SHALL ATTACH A PERMANENT TAG OF RIGID PLASTIC OR NON-FERROUS METAL TO EACH CONDUIT AT PULLBOXES, POLE BASES, AND JUNCTION BOXES. TAGS SHALL BE EMBOSSED, STAMPED, OR ENGRAVED WITH LETTERS 1/4" OR GREATER IN HEIGHT AND SECURED TO THE CONDUIT WITH NYLON OR PLASTIC TIES. EACH TAG SHALL INDICATE THE END LOCATION OF CONDUIT RUN. THE COST OF THE TAGS SHALL BE SUBSIDIARY TO THE CONDUIT PAY ITEM.
   EXAMPLES FOR CONDUIT: SERVICE POINT TO PULL BOX 1 (SP TO PB-1)
   PULL BOX 1 TO SERVICE POINT (PB-1 TO SP)
   PULL BOX 1 TO PULL BOX 2 (PB-1 TO PB-1)

20. CONDUIT BELL END FITTINGS SHALL BE INSTALLED ON ALL TERMINATING ENDS OF NON-METALLIC CONDUIT RUNS. THIS INCLUDES PULL BOXES AND POLE BASES. THE COST OF THE FITTINGS SHALL BE CONSIDERED SUBSIDIARY TO THE PAY ITEM. ALL NON-METALLIC CONDUIT SHALL USE LONG SWEEP 90 DEGREE ELBOWS ON ALL CONDUIT BENDS.

21. PRIOR TO THE ORDERING OF ALL LIGHTING EQUIPMENT, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER A COPY OF THE APPLICABLE BROCHURES CONTAINING THE DESIGN CRITERIA FOR THE EQUIPMENT WHICH THE CONTRACTOR PROPOSES TO INSTALL FOR APPROVAL. THE SPECIFIC ITEMS THAT ARE PROPOSED FOR USE SHALL BE THE APPLICABLE BROCHURES. A LIST SHALL BE ATTACHED TO INDENTIFY THE PAY ITEM AND CONTAIN THE MANUFACTURER, QUANTITY, MODEL, AND IDENTIFYING DESCRIPTIONS OF EACH ITEM. ADEQUATE ENGINEERING DATA, ESSENTIAL SHOP DRAWINGS, AND SCHEMATIC DIAGRAMS SHALL BE PROVIDED FOR REVIEW. PARTIAL SUBMITTALS WILL NOT BE ACCEPTED FOR CONSIDERATION AND SHALL BE RETURNED FOR CORRECTION WITHOUT REVIEW.

IF THE ENGINEER DETERMINES THAT THE EQUIPMENT SUBMITTAL MEETS THE DESIGN CRITERIA APPROVAL WILL BE PROVIDED. IF THE EQUIPMENT SUBMITTAL FOR USE IS REJECTED, THE CONTRACTOR SHALL RE-SUBMIT THE EQUIPMENT SUBMITTAL WITHIN FIFTEEN (15) DAYS OF NOTIFICATION OF EQUIPMENT REJECTION. THE EQUIPMENT RESUBMITTAL WILL BE CONSIDERED THE STARTING POINT OF A NEW APPROVAL CYCLE AS DESCRIBED.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 15560
JEROME PAUL DAVIS
08-25-2025

SUMMARY OF LIGHTING QUANTITIES

ITEM NUMBER	ITEM	QUANTITY	UNIT
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (2C/8 A.W.G., E.G.C.)	2046	LIN. FT.
SP	ELECTRICAL CONDUCTORS FOR LUMINAIRES	832	LIN. FT.
710	NON-METALLIC CONDUIT (2")	2090	LIN. FT.
SP, SS, & 711	CONCRETE PULL BOX (TYPE 2 HD)	20	EACH
SP	LED ROADWAY ILLUMINATION POLE (20,000 LUMENS, COBRA HEAD, SHOE BASE, 30')	16	EACH
SP	PEDESTAL TYPE SERVICE POINT (100 AMP)	1	EACH

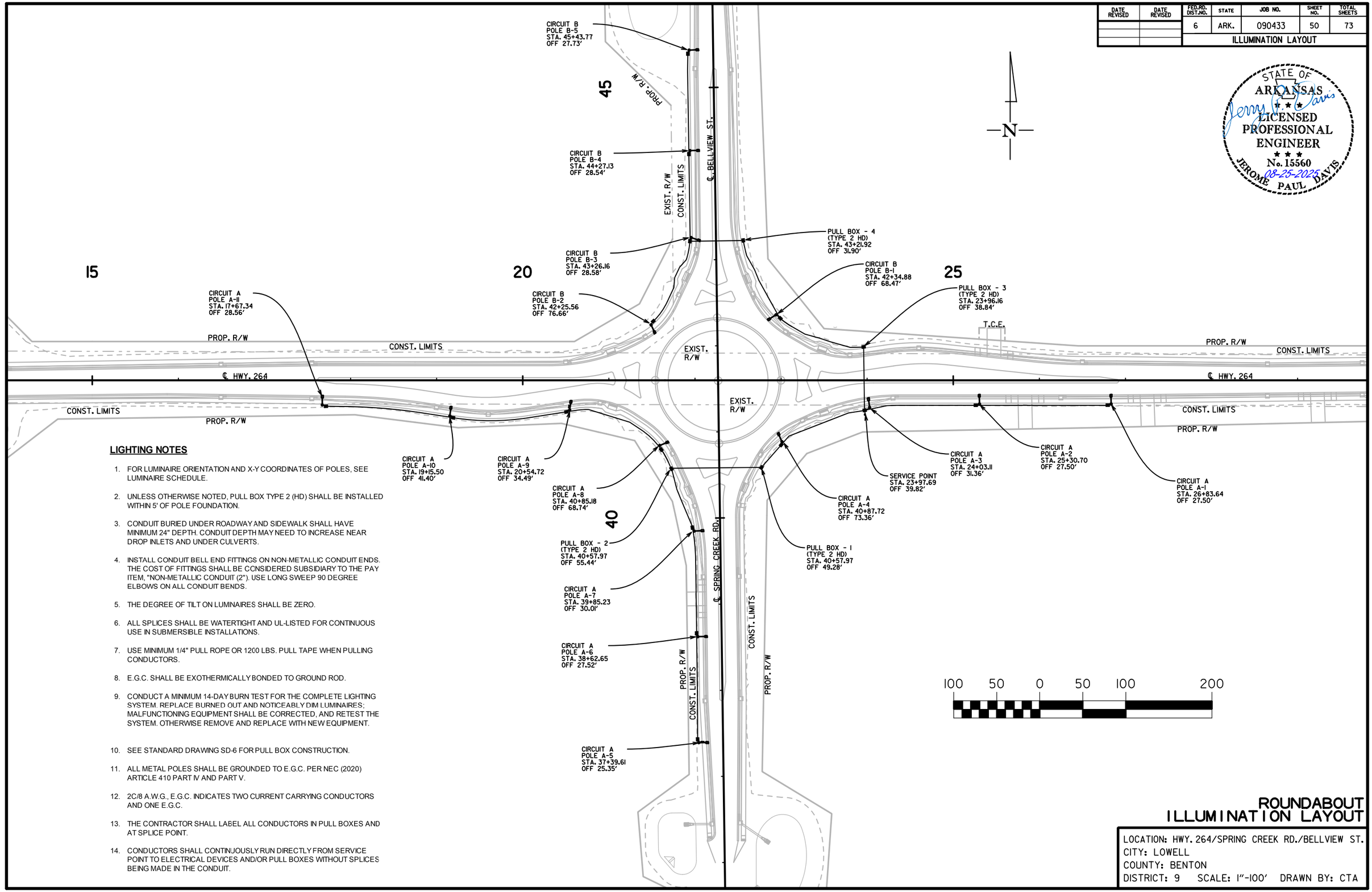
ILLUMINATION NOTES AND SUMMARY OF LIGHTING QUANTITIES

LOCATION: HWY. 264/SPRING CREEK RD./BELLVIEW ST.
CITY: LOWELL
COUNTY: BENTON
DISTRICT: 9 SCALE: N/A DRAWN BY: CTA

USER: JJ5206
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DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	50	73
		ILLUMINATION LAYOUT				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 15560
JEROME PAUL DAVIS
Jerry Davis
08-25-2025



LIGHTING NOTES

1. FOR LUMINAIRE ORIENTATION AND X-Y COORDINATES OF POLES, SEE LUMINAIRE SCHEDULE.
2. UNLESS OTHERWISE NOTED, PULL BOX TYPE 2 (HD) SHALL BE INSTALLED WITHIN 5' OF POLE FOUNDATION.
3. CONDUIT BURIED UNDER ROADWAY AND SIDEWALK SHALL HAVE MINIMUM 24" DEPTH. CONDUIT DEPTH MAY NEED TO INCREASE NEAR DROP INLETS AND UNDER CULVERTS.
4. INSTALL CONDUIT BELL END FITTINGS ON NON-METALLIC CONDUIT ENDS. THE COST OF FITTINGS SHALL BE CONSIDERED SUBSIDIARY TO THE PAY ITEM, "NON-METALLIC CONDUIT (2"). USE LONG SWEEP 90 DEGREE ELBOWS ON ALL CONDUIT BENDS.
5. THE DEGREE OF TILT ON LUMINAIRES SHALL BE ZERO.
6. ALL SPLICES SHALL BE WATERTIGHT AND UL-LISTED FOR CONTINUOUS USE IN SUBMERSIBLE INSTALLATIONS.
7. USE MINIMUM 1/4" PULL ROPE OR 1200 LBS. PULL TAPE WHEN PULLING CONDUCTORS.
8. E.G.C. SHALL BE EXOTHERMICALLY BONDED TO GROUND ROD.
9. CONDUCT A MINIMUM 14-DAY BURN TEST FOR THE COMPLETE LIGHTING SYSTEM. REPLACE BURNED OUT AND NOTICEABLY DIM LUMINAIRES; MALFUNCTIONING EQUIPMENT SHALL BE CORRECTED, AND RETEST THE SYSTEM. OTHERWISE REMOVE AND REPLACE WITH NEW EQUIPMENT.
10. SEE STANDARD DRAWING SD-6 FOR PULL BOX CONSTRUCTION.
11. ALL METAL POLES SHALL BE GROUNDED TO E.G.C. PER NEC (2020) ARTICLE 410 PART IV AND PART V.
12. 2C/8 A.W.G., E.G.C. INDICATES TWO CURRENT CARRYING CONDUCTORS AND ONE E.G.C.
13. THE CONTRACTOR SHALL LABEL ALL CONDUCTORS IN PULL BOXES AND AT SPLICE POINT.
14. CONDUCTORS SHALL CONTINJOUSLY RUN DIRECTLY FROM SERVICE POINT TO ELECTRICAL DEVICES AND/OR PULL BOXES WITHOUT SPLICES BEING MADE IN THE CONDUIT.

ROUNDABOUT ILLUMINATION LAYOUT

LOCATION: HWY. 264/SPRING CREEK RD./BELLVIEW ST.
CITY: LOWELL
COUNTY: BENTON
DISTRICT: 9 SCALE: 1"-100' DRAWN BY: CTA

USER: JJ5206
DESIGN FILE: G:\21100800_Roundabout\TRANSP\dgn\Lighting\090433 Lighting SD.dgn
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DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	51	73
		ILLUMINTATION TABLES				

LUMINAIRE SCHEDULE

POLE NO.	NORTHING	EASTING	STA.	OFFSET (FT.)	CENTERLINE	MOUNTING HT. (FT.)	POLE ARM (FT.)	BASE TYPE	WATTS	FIXTURE CURRENT	VOLTAGE	DELIVERED LUMENS	ORIENTATION ANGLE (PLAN NORTH = 0°, CLOCKWISE ROTATION)	IES CLASSIFICATION	FIXTURE NAME
POLE A-1	706490.34	672181.40	26+83.64	27.50	HWY. 264.	30	8	SHOE BASE	145W	0.60	240V	19,810	0°	TYPE IV	ATB0-P305-MVOLT-R4
POLE A-2	706498.36	672028.68	25+30.70	27.50		30	8	SHOE BASE	145W	0.60	240V	19,810	0°	TYPE IV	ATB0-P305-MVOLT-R4
POLE A-3	706501.20	671901.06	24+03.11	31.36		30	8	SHOE BASE	145W	0.60	240V	19,810	355°	TYPE IV	ATB0-P305-MVOLT-R4
POLE A-4	706466.76	671797.25	40+87.72	73.36	SPRING CREEK RD.	30	8	SHOE BASE	145W	0.60	240V	19,810	340°	TYPE IV	ATB0-P305-MVOLT-R4
POLE A-5	706122.73	671685.14	37+39.61	25.35		30	8	SHOE BASE	145W	0.60	240V	19,810	90°	TYPE IV	ATB0-P305-MVOLT-R4
POLE A-6	706245.76	671687.74	38+62.65	27.52		30	8	SHOE BASE	145W	0.60	240V	19,810	90°	TYPE IV	ATB0-P305-MVOLT-R4
POLE A-7	706368.35	671689.99	39+85.23	30.01		30	8	SHOE BASE	145W	0.60	240V	19,810	90°	TYPE IV	ATB0-P305-MVOLT-R4
POLE A-8	706469.73	671655.16	40+85.18	68.74		30	8	SHOE BASE	145W	0.60	240V	19,810	70°	TYPE IV	ATB0-P305-MVOLT-R4
POLE A-9	706516.32	671552.98	20+54.72	34.49	HWY. 264.	30	8	SHOE BASE	145W	0.60	240V	19,810	10°	TYPE IV	ATB0-P305-MVOLT-R4
POLE A-10	706516.72	671413.59	19+15.50	41.40		30	8	SHOE BASE	145W	0.60	240V	19,810	10°	TYPE IV	ATB0-P305-MVOLT-R4
POLE A-11	706537.31	671266.31	17+67.34	28.56		30	8	SHOE BASE	145W	0.60	240V	19,810	5°	TYPE IV	ATB0-P305-MVOLT-R4
POLE B-1	706614.10	671797.95	42+34.88	68.47	BELLVIEW ST.	30	8	SHOE BASE	145W	0.60	240V	19,810	240°	TYPE IV	ATB0-P305-MVOLT-R4
POLE B-2	706610.20	671652.58	42+25.56	76.66		30	8	SHOE BASE	145W	0.60	240V	19,810	160°	TYPE IV	ATB0-P305-MVOLT-R4
POLE B-3	706708.93	671704.37	43+26.16	28.58		30	8	SHOE BASE	145W	0.60	240V	19,810	115°	TYPE IV	ATB0-P305-MVOLT-R4
POLE B-4	706809.83	671708.17	44+27.13	28.54		30	8	SHOE BASE	145W	0.60	240V	19,810	90°	TYPE IV	ATB0-P305-MVOLT-R4
POLE B-5	706926.36	671713.33	45+43.77	27.73		30	8	SHOE BASE	145W	0.60	240V	19,810	90°	TYPE IV	ATB0-P305-MVOLT-R4
SERVICE POINT	706493.03	671895.21	23+97.69	39.82	HWY. 264.	N/A	N/A	N/A	N/A	0.60	N/A	N/A	N/A	TYPE IV	ATB0-P305-MVOLT-R4



HWY. 264 / SPRING CREEK RD. / BELLVIEW ST. ROUNDABOUT - VOLTAGE DROP, CIRCUIT A, 2C/8AWG, EGC

SEGMENT	VOLTAGE	PHASE	SETS	CONDUCTOR	SEGMENT AMP	Z/1000ft	LENGTH	VD	% VD
SP TO PB A-3	240	1	1	8	6.65	0.78	27	0.28	0.12
PB A-3 TO POLE A-3	240	1	1	12	0.60	1.02	52	0.06	0.03
PB A-3 TO PB A-2	240	1	1	8	1.21	0.78	132	0.25	0.10
PB A-2 TO POLE A-2	240	1	1	12	0.60	1.02	52	0.06	0.03
PB A-2 TO PB A-1	240	1	1	8	0.60	0.78	156	0.15	0.06
PB A-1 TO POLE A-1	240	1	1	12	0.60	1.02	52	0.06	0.03
PB A-3 TO PB A-4	240	1	1	8	4.83	0.78	110	0.83	0.35
PB A-4 TO POLE A-4	240	1	1	12	0.60	1.02	52	0.06	0.03
PB A-4 TO PB-1	240	1	1	8	4.23	0.78	38	0.25	0.10
PB-1 TO PB-2	240	1	1	8	4.23	0.78	108	0.71	0.30
PB-2 TO PB A-7	240	1	1	8	1.81	0.78	75	0.21	0.09
PB A-7 TO POLE A-7	240	1	1	12	0.60	1.02	52	0.06	0.03
PB A-7 TO PB A-6	240	1	1	8	1.21	0.78	126	0.24	0.10
PB A-6 TO POLE A-6	240	1	1	12	0.60	1.02	52	0.06	0.03
PB A-6 TO PB A-5	240	1	1	8	0.60	0.78	126	0.12	0.05
PB A-5 TO POLE A-5	240	1	1	12	0.60	1.02	52	0.06	0.03
PB-2 TO PB A-8	240	1	1	8	2.42	0.78	28	0.11	0.04
PB A-8 TO POLE A-8	240	1	1	12	0.60	1.02	52	0.06	0.03
PB A-8 TO PB A-9	240	1	1	8	1.81	0.78	128	0.36	0.15
PB A-9 TO POLE A-9	240	1	1	12	0.60	1.02	52	0.06	0.03
PB A-9 TO PB A-10	240	1	1	8	1.21	0.78	135	0.25	0.11
PB A-10 TO POLE A-10	240	1	1	12	0.60	1.02	52	0.06	0.03
PB A-10 TO PB A-11	240	1	1	8	0.60	0.78	151	0.14	0.06
PB A-11 TO POLE A-11	240	1	1	12	0.60	1.02	52	0.06	0.03
NOTE: NEC 230.31(B) STATES MINIMUM UNDERGROUND SERVICE CONDUCTOR SIZE TO BE 8 AWG.								TOTAL	1.96

HWY. 264 / SPRING CREEK RD. / BELLVIEW ST. ROUNDABOUT - VOLTAGE DROP, CIRCUIT B, 2C/8AWG, EGC

SEGMENT	VOLTAGE	PHASE	SETS	CONDUCTOR	SEGMENT AMP	Z/1000ft	LENGTH	VD	% VD
SP TO PB A-3	240	1	1	8	3.02	0.78	27	0.13	0.05
PB A-3 TO PB-3	240	1	1	8	3.02	0.78	74	0.35	0.15
PB-3 TO PB B-1	240	1	1	8	3.02	0.78	104	0.49	0.20
PB B-1 TO POLE B-1	240	1	1	12	0.60	1.02	52	0.06	0.03
PB B-1 TO PB-4	240	1	1	8	2.42	0.78	101	0.38	0.16
PB-4 TO PB B-3	240	1	1	8	2.42	0.78	63	0.24	0.10
PB B-3 TO POLE B-3	240	1	1	12	0.60	1.02	52	0.06	0.03
PB B-3 TO PB B-2	240	1	1	8	0.60	0.78	105	0.10	0.04
PB-2 TO POLE B-2	240	1	1	12	0.60	1.02	52	0.06	0.03
PB B-3 TO PB B-4	240	1	1	8	1.21	0.78	95	0.18	0.07
PB B-4 TO POLE B-4	240	1	1	12	0.60	1.02	52	0.06	0.03
PB B-4 TO PB B-5	240	1	1	8	0.60	0.78	116	0.11	0.05
PB B-5 TO POLE B-5	240	1	1	12	0.60	1.02	52	0.06	0.03
NOTE: NEC 230.31(B) STATES MINIMUM UNDERGROUND SERVICE CONDUCTOR SIZE TO BE 8 AWG.								TOTAL	0.97

ILLUMINATION STATISTICS

DESCRIPTION	AVERAGE (FC)	MAXIMUM (FC)	MINIMUM (FC)	AVG/MIN
BELLVIEW ST.	1.45	2.6	0.5	2.90:1
BELLVIEW ST. - CROSSWALK NB	1.65	2.0	0.6	2.75:1
BELLVIEW ST. - CROSSWALK SB	2.08	2.4	1.4	1.49:1
HWY. 264 EAST	1.16	2.6	0.4	2.90:1
HWY. 264 EAST - CROSSWALK EB	1.68	2.0	1.0	1.68:1
HWY. 264 EAST - CROSSWALK WB	1.57	1.8	1.2	1.31:1
HWY. 264 WEST	1.15	2.6	0.4	2.88:1
HWY. 264 WEST - CROSSWALK EB	1.93	2.3	1.3	1.48:1
HWY. 264 WEST - CROSSWALK WB	1.60	2.0	0.9	1.78:1
ROUNDABOUT	1.50	2.8	0.6	2.50:1
SPRING CREEK RD.	1.34	2.6	0.7	1.91:1
SPRING CREEK RD. - CROSSWALK NB	1.81	2.2	1.1	1.65:1
SPRING CREEK RD. - CROSSWALK SB	1.55	2.0	0.9	1.71:1

NOTES:
1. CALCULATIONS WERE BASED ON 0.85 LIGHT LOSS FACTOR.
2. ILLUMINATION STATISTICS FOR CROSSWALKS ARE VERTICAL CALCULATIONS.

ILLUMINATION DESIGN CRITERIA

DESCRIPTION	AVERAGE (FC)	AVG/MIN
ROUNDABOUT	1.5	3:1
ROADWAY - HWY. 264	1.0	3:1
ROADWAY - SPRING CREEK	0.8	3:1
ROADWAY - BELLVIEW	0.8	3:1

NOTES:
1. DESIGN BASIS WAS AASHTO ROADWAY LIGHTING DESIGN GUIDE, 7TH ED. AND IES RP-8-18.
2. NON-CONTINUOUSLY LIGHTED ROADWAY WAS TAKEN INTO CONSIDERATION.
3. ATB0_P305_MVOLT_R4.IES DESIGN FIXTURE OR APPROVED EQUAL SHALL BE USED.

ELECTRICAL SERVICE DATA

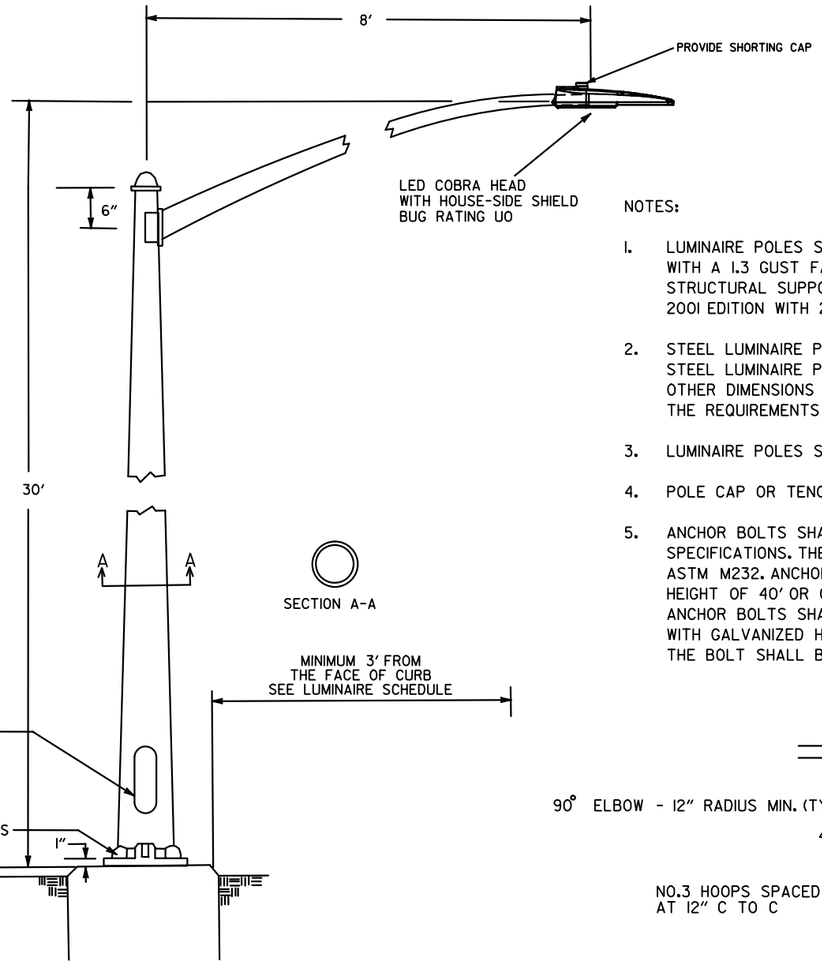
CIRCUIT ID	LOCATION	SERVICE VOLTAGE	SERVICE CONDUIT SIZE	SERVICE CONDUCTORS	MAIN CIRCUIT BREAKER	BRANCH CIRCUIT BREAKER	BRANCH CIRCUIT (AMPS)	KVA LOAD
A	N 706493.03	240V, SINGLE PHASE	2" NMC	2C/8 A.W.G., E.G.C.	2P/100A	2P/20A	6.65	1.60
B	E 671895.21	240V, SINGLE PHASE	2" NMC	2C/8 A.W.G., E.G.C.		2P/20A	3.02	0.73

ILLUMINATION TABLES

LOCATION: HWY. 264/SPRING CREEK RD./BELLVIEW ST.
CITY: LOWELL
COUNTY: BENTON
DISTRICT: 9 SCALE: N/A DRAWN BY: CTA

USER: JJ5206
DESIGN FILE: G:\2110800_Roundabout\TRANSP\dgn\Lighting\090433 Lighting SD.dgn
PLOTTED: 8/22/2025 13:21 SCALE: NOO

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	52	73
		ILLUMINTATION DETAILS				



COBRA HEAD LUMINAIRE WITH SHOE BASE

NOTES:

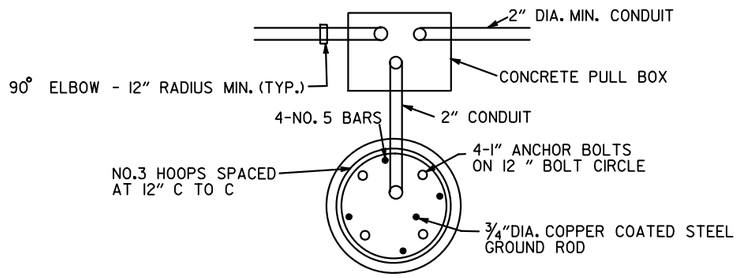
1. LUMINAIRE POLES SHALL MEET THE REQUIREMENTS OF 90 MPH WIND ZONE WITH A 1.3 GUST FACTOR ON THE AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS LUMINAIRES AND TRAFFIC SIGNALS, 2001 EDITION WITH 2003 AND 2006 INTERIMS.

2. STEEL LUMINAIRE POLES SHALL BE A MINIMUM OF 11 GAUGE. STEEL LUMINAIRE POLES SHALL BE HOT-DIPPED GALVANIZED. OTHER DIMENSIONS PER MANUFACTURER'S RECOMMENDATION AS NECESSARY TO MEET THE REQUIREMENTS OF THE SP - LED ROADWAY ILLUMINATION POLE.

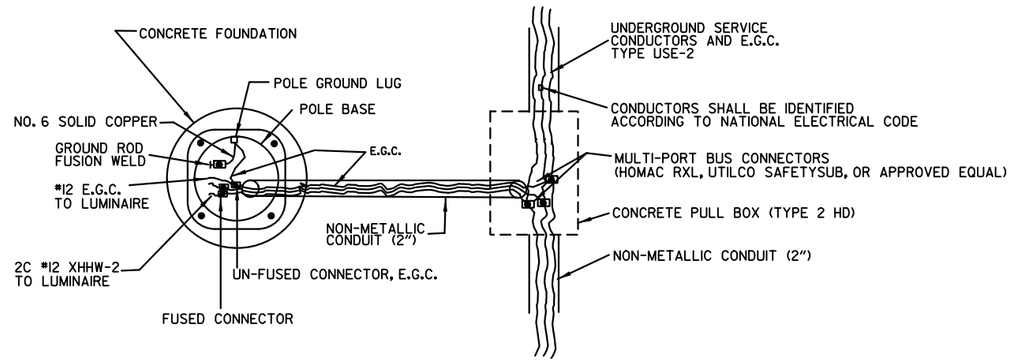
3. LUMINAIRE POLES SHALL BE FABRICATED FROM ASTM A572 GRADE 50 OR 65 STEEL.

4. POLE CAP OR TENON CAP SHALL BE PROVIDED.

5. ANCHOR BOLTS SHALL MEET THE REQUIREMENTS OF SECTION 714 OF THE STANDARD SPECIFICATIONS. THE TOP 8″ OF ALL ANCHOR BOLTS SHALL BE GALVANIZED PER ASTM M232. ANCHOR BOLTS IN FOUNDATIONS SHALL BE 1.25″ X 30″ FOR MOUNTING HEIGHT OF 40′ OR GREATER, 1″ X 30″ FOR MOUNTING HEIGHT LESS THAN 40′. ANCHOR BOLTS SHALL HAVE TOP END THREADED NOT LESS THAN 5″ AND FURNISHED WITH GALVANIZED HEX NUTS, LOCK WASHERS, AND TEMPLATE. THE LOWER END OF THE BOLT SHALL BE THREADED AND FURNISHED WITH HEX NUT AND TEMPLATE.

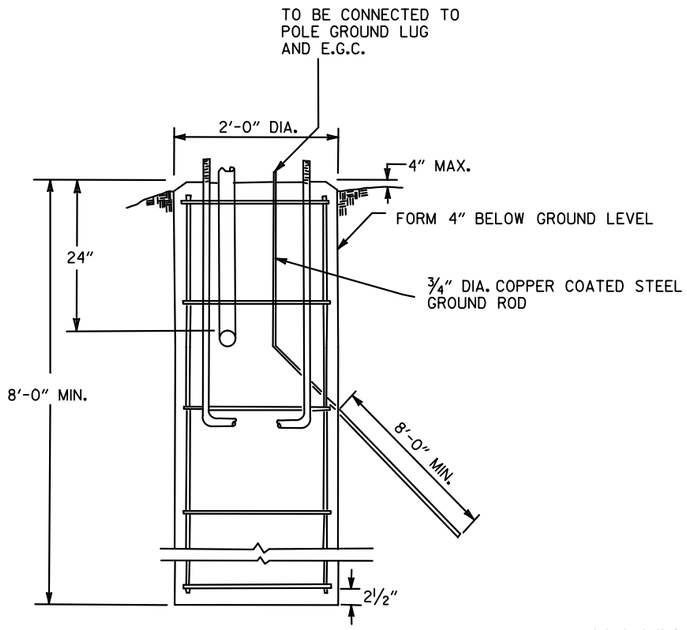


PLAN



POLE FOUNDATION/PULL BOX WIRING DETAIL

ANCHOR BOLT DETAIL



ROADWAY LUMINAIRE
POLE FOUNDATION

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 15560
JEROME PAUL DAVIS
08-25-2025

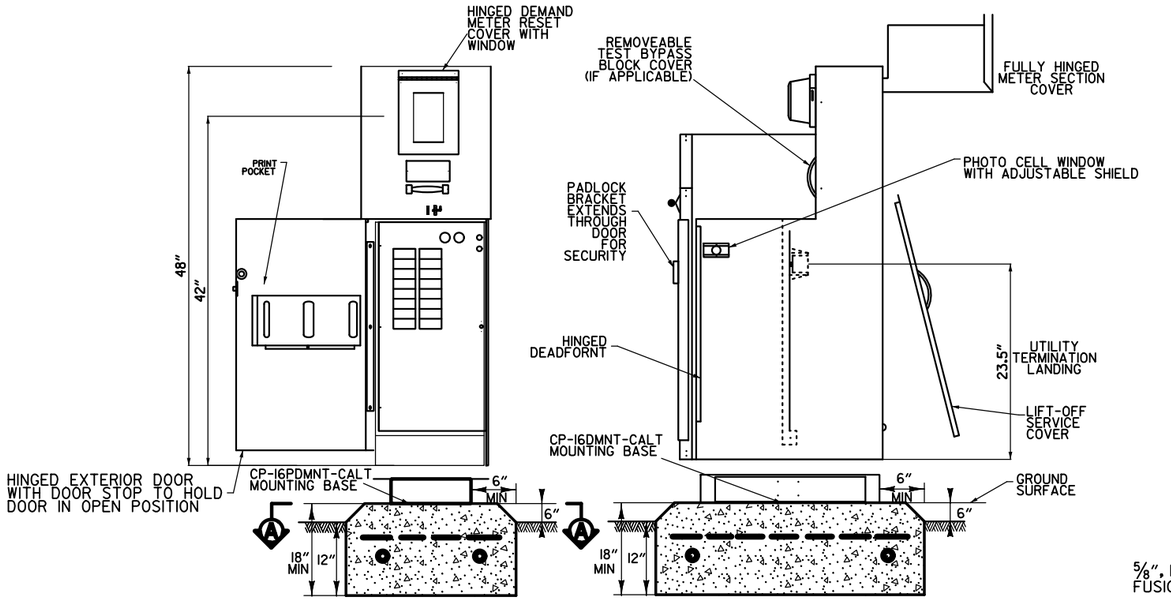
ILLUMINATION DETAILS

LOCATION: HWY. 264/SPRING CREEK RD./BELLVIEW ST.
CITY: LOWELL
COUNTY: BENTON
DISTRICT: 9 SCALE: N/A DRAWN BY: CTA

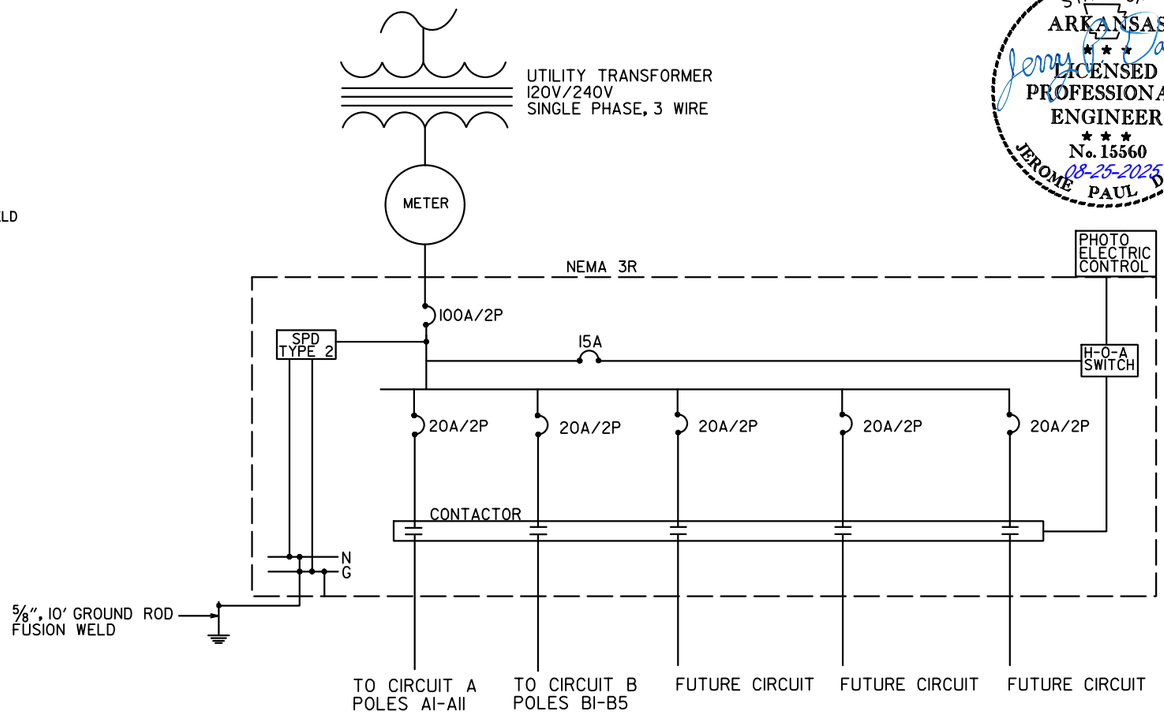
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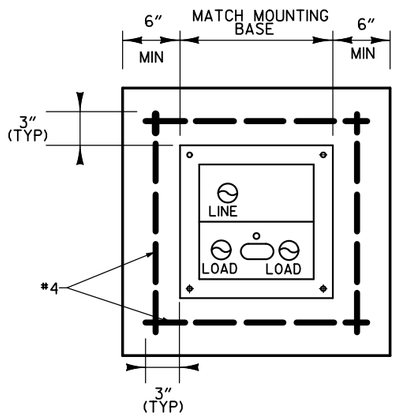
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		ILLUMINTATION DETAILS				



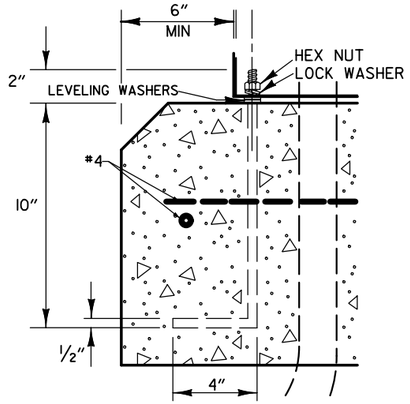
METERED COMMERCIAL PEDESTAL
100 AMP (N.T.S)



ONE-LINE DIAGRAM
HWY. 264 / SPRING CREEK RD. / BELLVIEW ST.



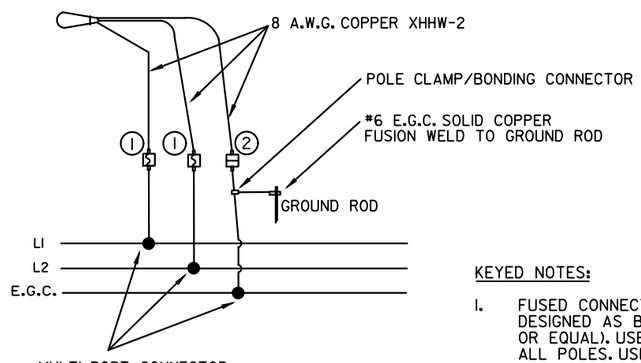
SECTION A-A



ANCHOR BOLT

NOTES:

1. CONCRETE FOR CAST-IN-PLACE FOUNDATION SHALL BE CLASS S WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH, f'c = 3,500 PSI.
2. ALL REINFORCING STEEL SHALL BE GRADE 60 AND CONFORM TO AASHTO M31 OR M53.



TYPICAL WIRING FOR LUMINAIRES
THREE-WIRE CIRCUIT-CENTER GROUNDED
LUMINIARES SERVED AT 240 VAC.

(120/240 VOLT SERVICE)

LUMINAIRE WIRING SCHEMATICS

KEYED NOTES:

1. FUSED CONNECTOR - SHALL BE WATERTIGHT, UL-LISTED, AND DESIGNED AS BREAKAWAY (HOMAC FLOOD-SEAL, EATON BUSSMANN OR EQUAL). USE A FUSED CONNECTOR FOR THE LINE WIRE ON ALL POLES. USE MANUFACTURER'S RECOMMENDED FUSE SIZE.
2. UN-FUSED CONNECTOR - SHALL BE WATERTIGHT AND SHALL BE DESIGNED AS BREAKAWAY (HOMAC FLOOD-SEAL, EATON BUSSMANN, OR EQUAL).

STATE OF ARKANSAS
Jerome P. Davis
LICENSED PROFESSIONAL ENGINEER
No. 15560
08-25-2025
JEROME PAUL DAVIS

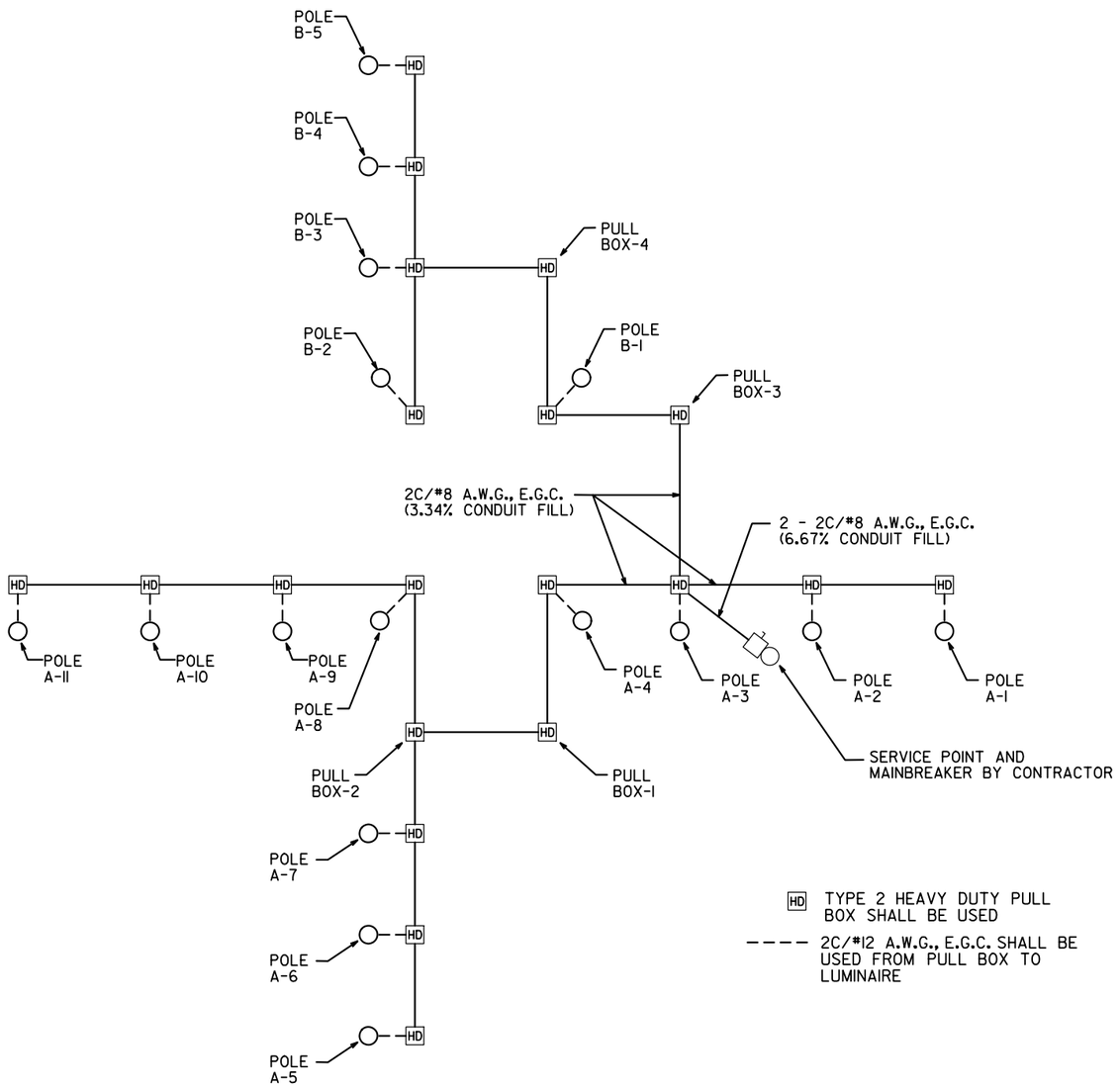
ILLUMINATION DETAILS

LOCATION: HWY. 264/SPRING CREEK RD./BELLVIEW ST.
CITY: LOWELL
COUNTY: BENTON
DISTRICT: 9 SCALE: N/A DRAWN BY: CTA

USER: JJ5206
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DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	54	73
		ILLUMINTATION DETAILS				



WIRING DIAGRAM

HWY. 264 / SPRING CREEK RD. / BELLVIEW ST.

STATE OF ARKANSAS
Jerry Davis
LICENSED PROFESSIONAL ENGINEER
No. 15560
08-25-2025
JEROME PAUL DAVIS

WIRING NOTES:

1. CIRCUIT A
   1-2C/#8 A.W.G., E.G.C. IN SCH.40 NON-METALLIC CONDUIT (2"). CONDUCTOR SHALL BRANCH AT PULL BOXES ASSOCIATED WITH LUMINAIRES A-1, A-2, A-3, A-4, A-5, A-6, A-7, A-8, A-9, A-10, AND A-11 USING MULTI-PORT BUS CONNECTORS (HOMAC RXL, UTILCO SAFTYSUB, OR APPROVED EQUAL). CONDUCTOR SHALL BE CONNECTED TO THE LUMINAIRE WIRING IN THE POLE BASE USING BREAKAWAY CONNECTORS. REFER TO POLE FOUNDATION/PULL BOX WIRING DETAIL IN ILLUMINATION DETAILS SHEET.

2. CIRCUIT B
   1-2C/#8 A.W.G., E.G.C. IN SCH.40 NON-METALLIC CONDUIT (2"). CONDUCTOR SHALL CONTINUE THROUGH PULL BOX A-3 TO PULL BOX B-1. CONDUCTOR SHALL BRANCH AT PULL BOXES ASSOCIATED WITH LUMINAIRES B-1, B-2, B-3, B-4, AND B-5 USING MULTI-PORT BUS CONNECTORS (HOMAC RXL, UTILCO SAFTYSUB, OR APPROVED EQUAL). CONDUCTOR SHALL BE CONNECTED TO THE LUMINAIRE WIRING IN THE POLE BASE USING BREAKAWAY CONNECTORS. REFER TO POLE FOUNDATION/PULL BOX WIRING DETAIL IN ILLUMINATION DETAILS SHEET.

3. UNLESS OTHERWISE NOTED, TYPE 2 HD PULL BOXES AND 1-2C/#8 A.W.G., E.G.C. SHALL BE USED.

4. REFER TO VOLTAGE DROP TABLE FOR ELECTRICAL CONDUCTOR FOR LUMINAIRE SIZE FROM PULL BOX TO LIGHT FIXTURE.

CONDUIT FILL			
CONDUIT SIZE	CONDUCTORS	CONDUIT FILL	MAX FILL
2"	2C/#8 A.W.G., E.G.C.	3.34%	40%
2"	2 - 2C/#8 A.W.G., E.G.C.	6.67%	40%
2"	2C/#12 A.W.G., E.G.C.	1.21%	40%

NOTE:
CONDUIT FILL IS CALCULATED USING VALUES IN TABLE 5, CHAPTER 9 OF NATIONAL ELECTRICAL CODE (NFPA 70, 2023).

ILLUMINATION DETAILS

LOCATION: HWY. 264/SPRING CREEK RD./BELLVIEW ST.
CITY: LOWELL
COUNTY: BENTON
DISTRICT: 9 SCALE: N/A DRAWN BY: CTA

USER: JJS206
DESIGN FILE: G:\2100800_Roundabout\TRANSP\dgn\Lighting\090433 Lighting SD.dgn SCALE: 1:100
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DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	55	73
		SIGNING SUMMARY OF QUANTITIES				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 15560
JEROME PAUL DAVIS
Jerry Paul Davis
08-25-2025

SIGNING SUMMARY OF QUANTITIES BELLVIEW ST.

ITEM NUMBER	ITEM	TOTAL	UNIT
SS & 726	STANDARD SIGN	596.6	SQ. FT.
SP	OMNI-DIRECTIONAL BREAKAWAY SIGN SUPPORTS (TYPE G-1)	26	EACH
SP	OMNI-DIRECTIONAL BREAKAWAY SIGN SUPPORTS (TYPE G-2)	8	EACH
SP	OMNI-DIRECTIONAL BREAKAWAY SIGN SUPPORTS (TYPE G2-1)	2	EACH

STANDARD SIGNS

SIGN NO./	STANDARD SIGNS FLAT SHEET OMNI-DIRECTIONAL SIGN SUPPORTS TYPE			STANDARD SIGN
	G1	G2	G2-1	
	EA.			SQ. FT.
SS-1	1			5
SS-2	1			5
SS-3	1			5
SS-4	1			5
SS-5	1			9.2
SS-6	1			9.2
SS-7	1			7
SS-8	1			7
SS-9		1		13.2
SS-10		1		13.2
SS-11		1		13.2
SS-12		1		13.2
SS-13	1			22
SS-14	1			22
SS-15				72
SS-16				22
SS-17	1			9
SS-18	1			9
SS-19	1			9
SS-20	1			9
SS-21	1			8.6
SS-22	1			8.6
SS-23	1			8.6
SS-24	1			8.6
SS-25		1		30
SS-26		1		30
SS-27			1	63
SS-28			1	63
SS-29		1		4.5
SS-30		1		4.5
SS-31	1			11
SS-32	1			11
SS-33	1			11
SS-34	1			11
SS-35	1			11
SS-36	1			11
SS-37	1			11
SS-38	1			11
TOTALS:	26	8	2	596.6

NOTE: SEE SIGN PLACEMENT SHEETS FOR SIGN LOCATIONS

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DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	56	73
		SIGN PLACEMENT SHEETS				

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 15560
JEROME PAUL DAVIS
Jerome Davis
08-25-2025

STA. 49+00.00
200'
STA. 47+00.00
200'
STA. 45+00.00

SS-24 NB 264 EAST
SS-25 Spring Creek Rd WEST 264 EAST

SS-17 45

SS-15 SPEED LIMIT 45
2200'
STA. 26+00.00

SS-27 Bellview Street / WEST 264 / Spring Creek Road

SS-22 25 MPH

SS-9 SS-32 SS-1 SS-6 WEST 264 ONE WAY 20 4 SS-29 Bellview Street SS-33 3 SS-4 ONE WAY SS-12 YIELD 25 SS-18 SS-8 WEST 264 SS-13 SS-31 SS-34

15

BELLVIEW ST.

HWY. 264 / W. MONROE AVE.

W. MONROE AVE.

30

SS-21 25 MPH

Bellview Street / EAST 264 / Spring Creek Road

SS-28

SS-20

SS-38 SS-2 ONE WAY P.I. 4+59.52 Δ=00°05'00" L.T. SS-10 YIELD 40 Spring Creek Road SS-30 SS-37

SS-3 ONE WAY 2 SS-14 EAST 264 SS-7 SS-5 SS-35 YIELD SS-36 SS-11

SPRING CREEK RD.

STA. 19+00.00

SS-16 SPEED LIMIT 45
2200'

SS-19

STA. 38+00.00
200'
STA. 36+00.00
200'
STA. 34+00.00

Bellview St / WEST 264 / EAST 264 SS-26

SS-23 25 MPH

SIGN PLACEMENT SHEETS

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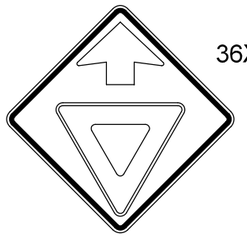
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DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	57	73
		SIGN LAYOUT SHEETS				



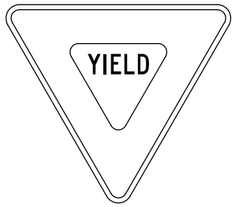
24X30 R6-2R

SS-1
SS-2
SS-3
SS-4



36X36 W3-2A

SS-17
SS-18
SS-19
SS-20

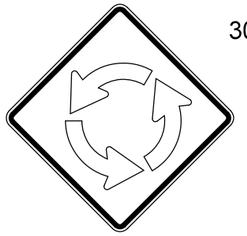


48" R1-2



30X30 R6-5P

SS-9
SS-10
SS-11
SS-12



30X30 W2-6

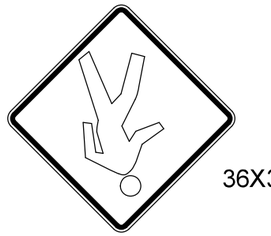


18X18 W13-1

SS-21
SS-22
SS-23
SS-24



24X12 W16-7pR



36X36 W11-2



36X36 W11-2



24X12 W16-7pR

SS-13
SS-14



36X36 W11-2



24X12 W16-7pL

SS-31
SS-32
SS-33
SS-34
SS-35
SS-36
SS-37
SS-38



WEST 12X24 M3-4

24X30 M1-5



21X15 M6-2

SS-6

EAST 12X24 M3-2

24X30 M1-5



21X15 M6-2

SS-5

WEST 12X24 M3-4

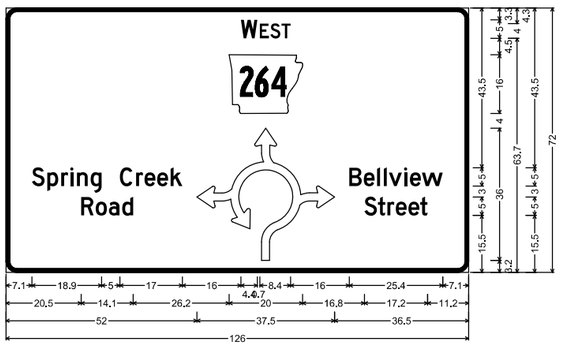
24X30 M1-5

SS-8

EAST 12X24 M3-2

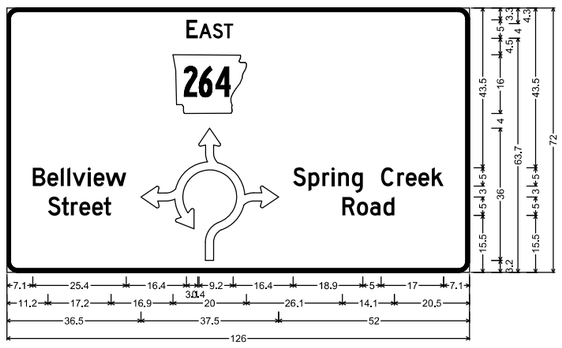
24X30 M1-5

SS-7



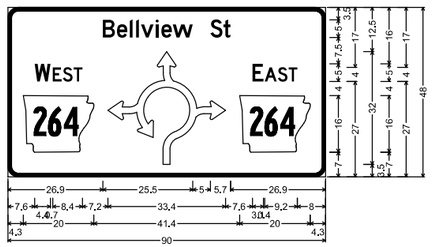
SS-27:
3.0" Radius, 1.0" Border, White on, Green;
"Spring Creek", D 2K; "Road", D 2K; "WEST", D 2K; "Bellview", D 2K; "Street", D 2K;

SS-27



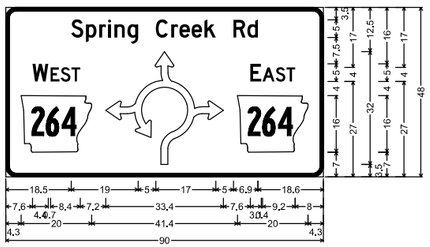
SS-28:
3.0" Radius, 1.0" Border, White on, Green;
"Bellview", D 2K; "Street", D 2K; "EAST", D 2K; "Spring Creek", D 2K; "Road", D 2K;

SS-28



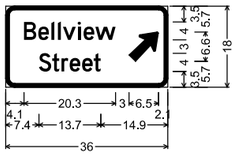
SS-26:
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"Bellview St", D 2K; "WEST", D 2K; "EAST", D 2K;

SS-26



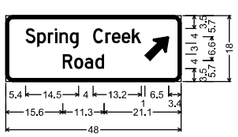
SS-25:
3.0" Radius, 1.0" Border, White on, Green;
"Spring Creek Rd", D 2K; "WEST", D 2K; "EAST", D 2K;

SS-25



D1-2:
2.0" Radius, 0.8" Border, White on, Green;
"Bellview", D 2K;
"Street", D 2K;
Arrow Custom - 8.1" 45°;

SS-29



D1-2:
2.0" Radius, 0.8" Border, White on, Green;
"Spring Creek", D 2K 80% spacing;
"Road", D 2K;
Arrow Custom - 8.1" 45°;

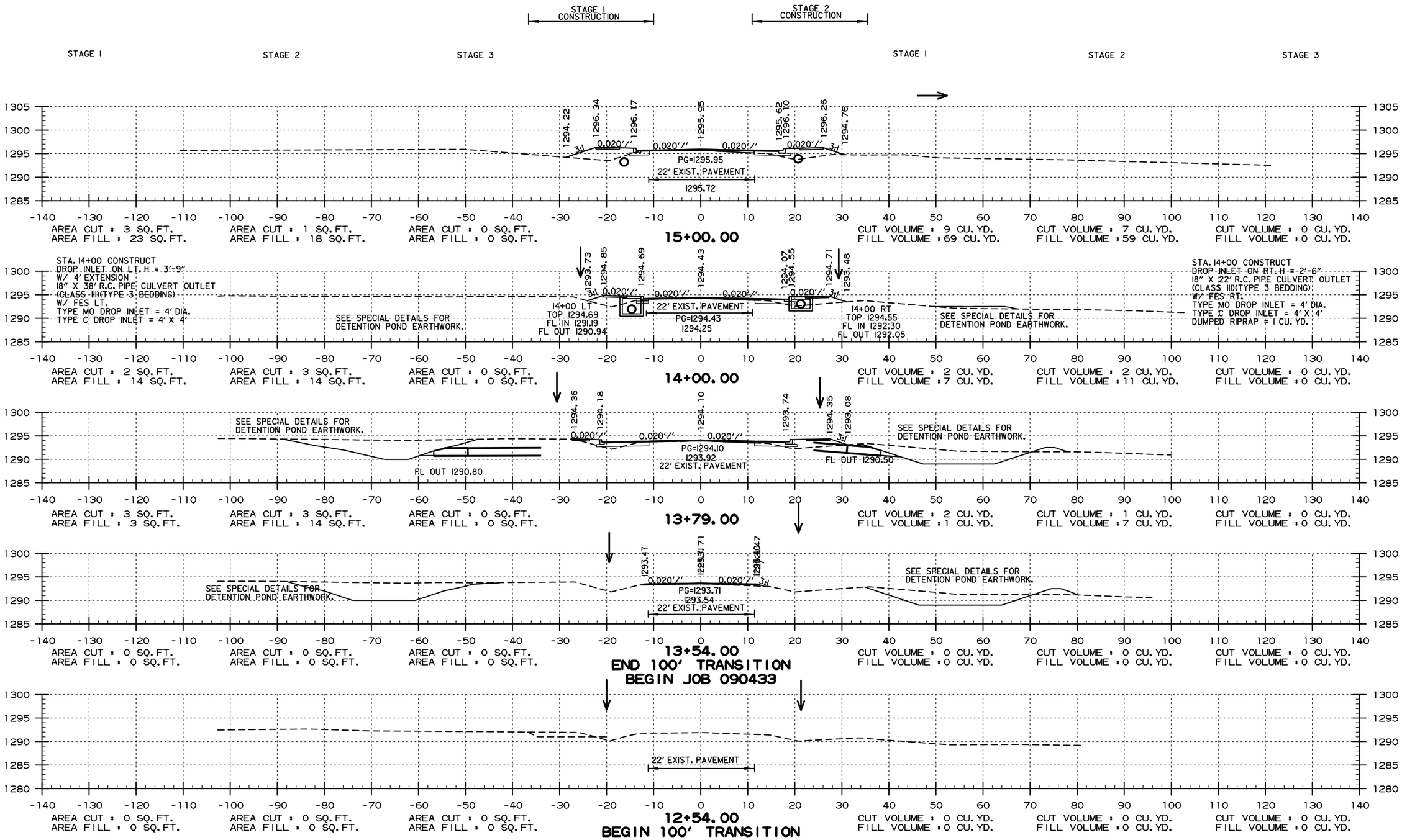
SS-30

ROUNDABOUT 2
SIGN LAYOUT SHEETS

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DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	58	73
		CROSS SECTIONS				

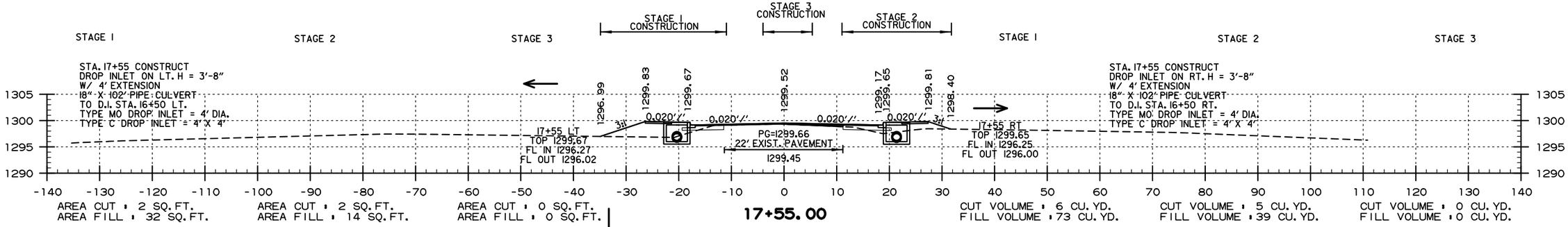


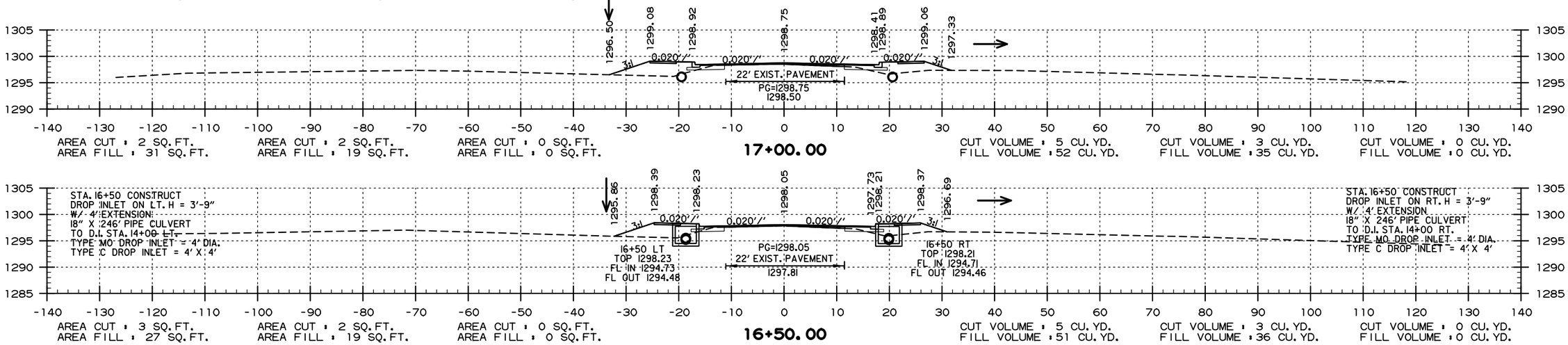
STA. 12+54 TO STA. 15+00

USER: JJ5206
DESIGN FILE: G:\2I100800_Roundabout\TRANSP\dgn\xsect\090433 XSect.dgn SCALE: 1:20
PLOTTED: 8/22/2025 13:21

G:\2I100800_Roundabout\TRANSP\dgn\xsect\090433 XSect.dgn 8/22/2025 13:21

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	59	73
		CROSS SECTIONS				



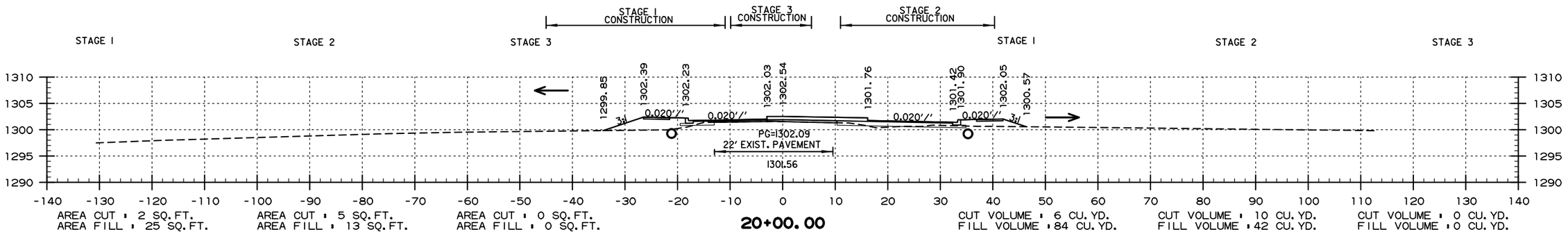


STA. 15+63 TO STA. 17+55

USER: JJ5206
DESIGN FILE: G:\2110800_Roundabout\TRANSP\dgn\xsect\090433 XSect.dgn
PLOTTED: 8/22/2025 13:22
SCALE: 1:20

G:\2110800_Roundabout\TRANSP\dgn\xsect\090433 XSect.dgn 8/22/2025 13:22

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	60	73
		CROSS SECTIONS				

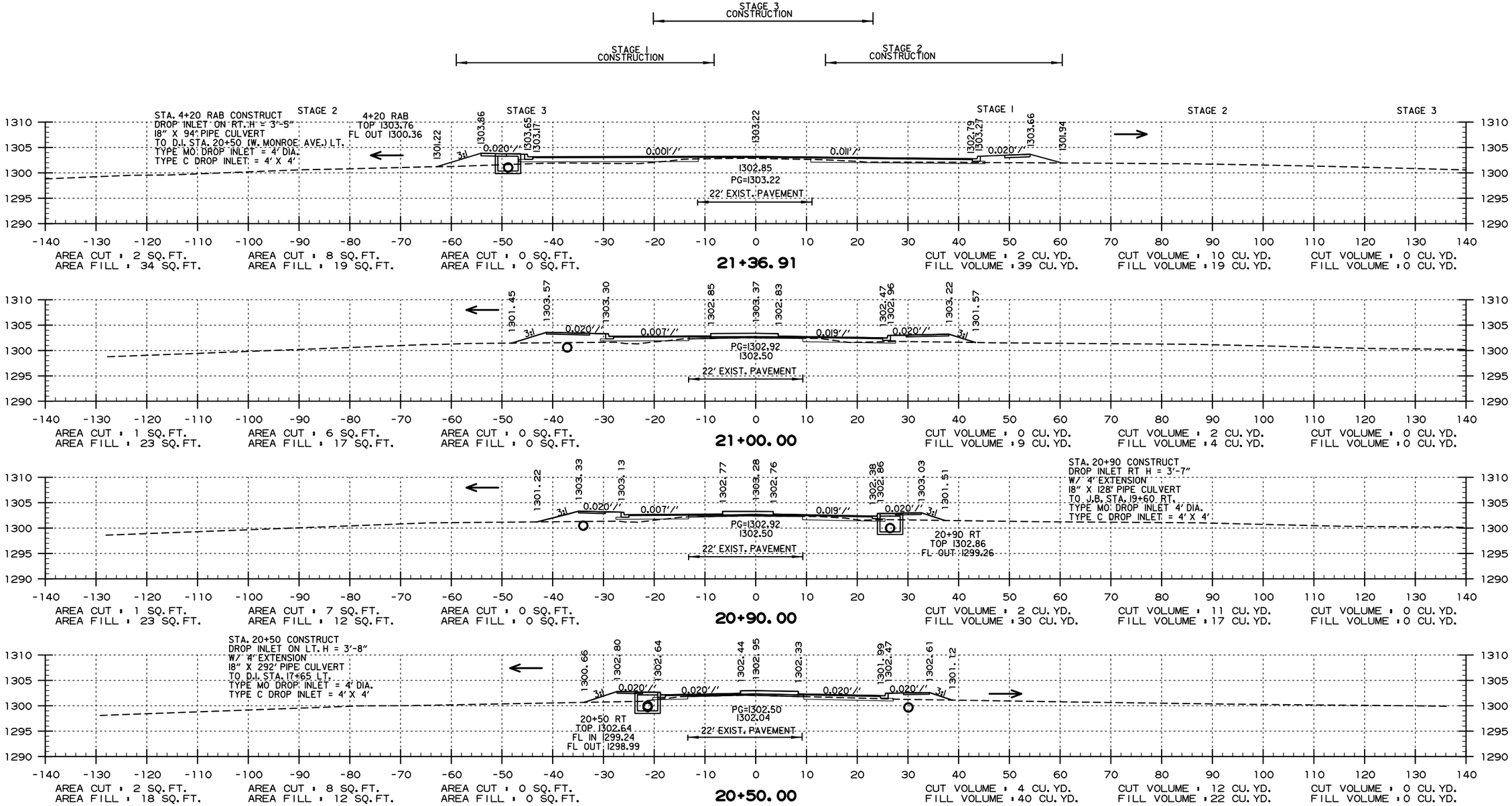


STA. 18+00 TO STA. 20+00

USER: JJ5206
DESIGN FILE: G:\21I00800_Roundabout\TRANSP\dgn\xsect\090433 XSect.dgn
PLOTTED: 8/22/2025 13:22
SCALE: 1:20

G:\21I00800_Roundabout\TRANSP\dgn\xsect\090433 XSect.dgn 8/22/2025 13:22

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	61	73
		CROSS SECTIONS				

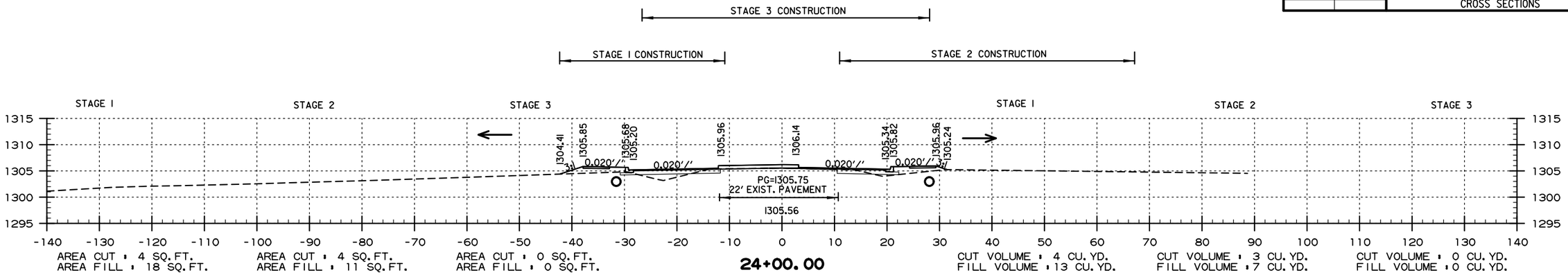


STA. 20+50 TO STA. 21+37

USER: JJ5206
DESIGN FILE: G:\2ll00800_Roundabout\TRANSP\dgn\xsect\090433 XSect.dgn
PLOTTED: 8/22/2025 13:22
SCALE: h20

G:\2ll00800_Roundabout\TRANSP\dgn\xsect\090433 XSect.dgn 8/22/2025 13:22

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	62	73
		CROSS SECTIONS				



STA. 23+04 TO STA. 24+00

USER: JJ5206
DESIGN FILE: G:\2100800_Roundabout\TRANSP\dgn\xsect\090433 XSect.dgn
PLOTTED: 8/22/2025 13:22
SCALE: 1:20

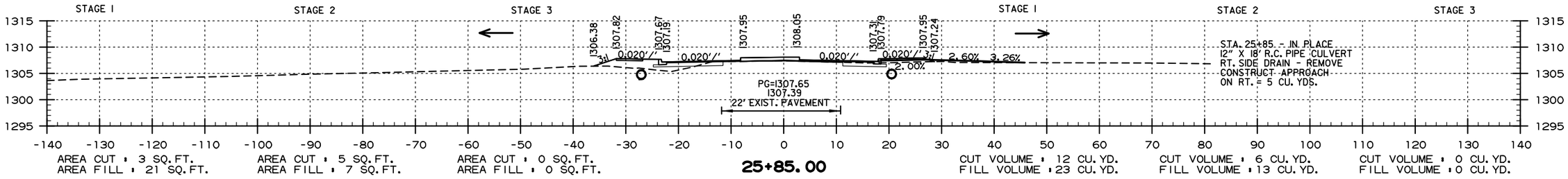
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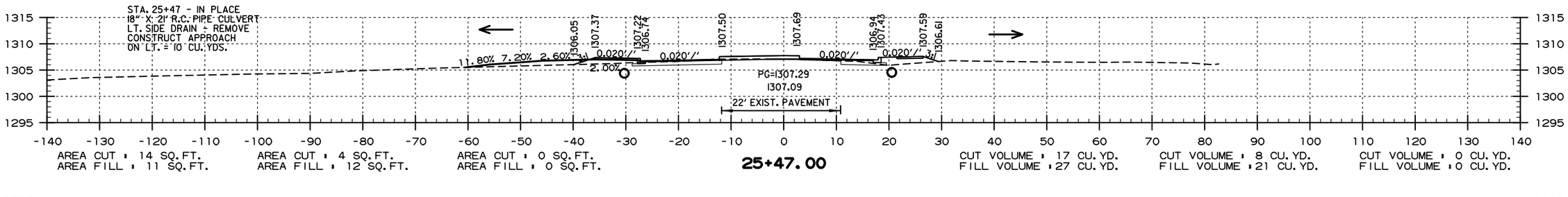
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	63	73
		CROSS SECTIONS				

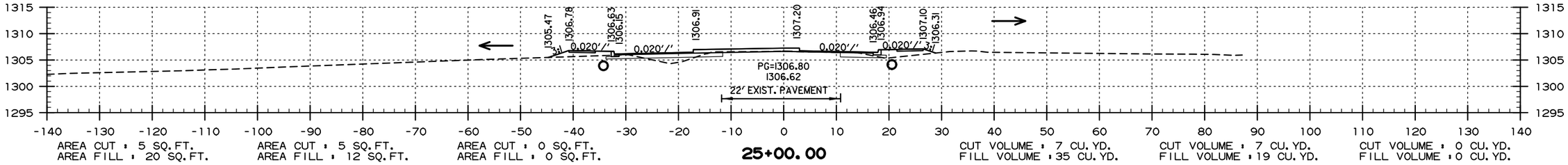
STAGE 3 CONSTRUCTION

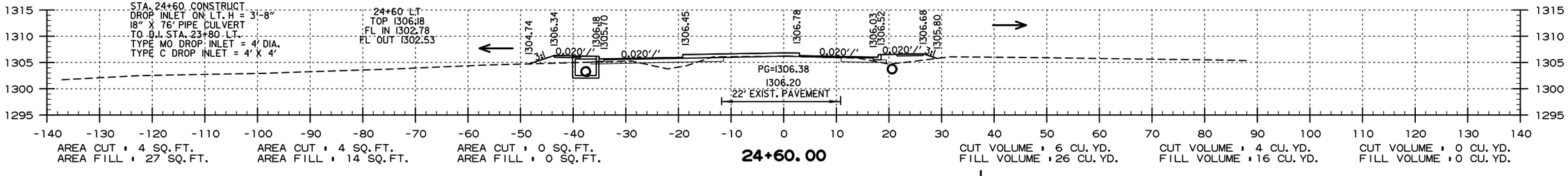
STAGE 1 CONSTRUCTION

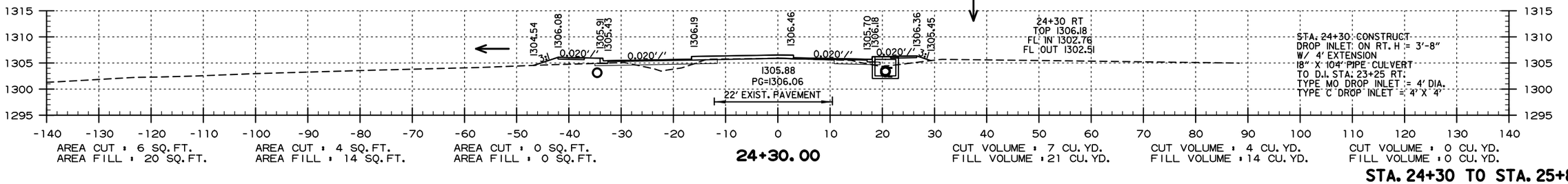
STAGE 2 CONSTRUCTION











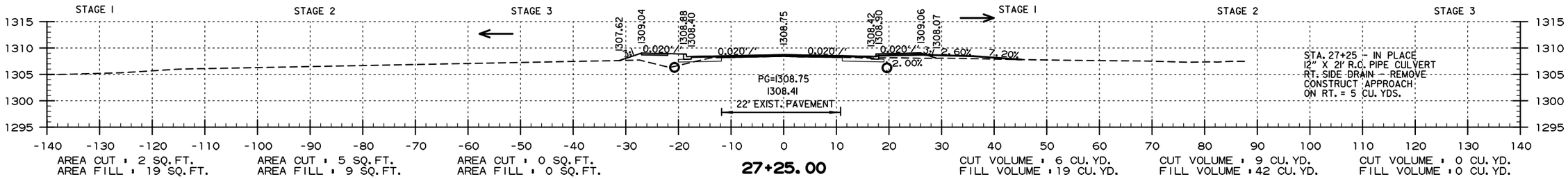
STA. 24+30 TO STA. 25+85

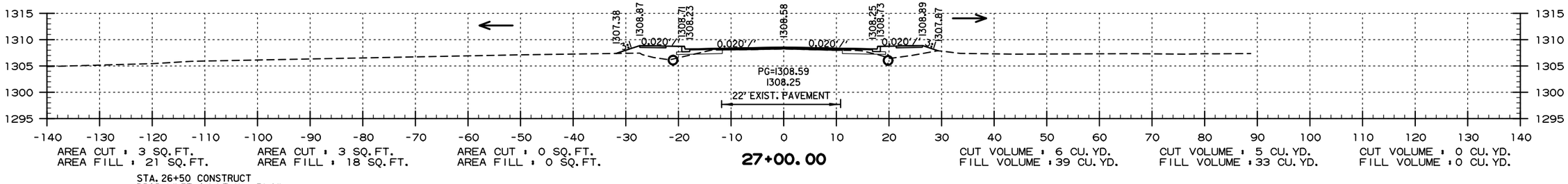
USER: JJ5206
DESIGN FILE: G:\2I100800_Roundabout\TRANSP\dgn\xsect\090433 XSect.dgn
PLOTTED: 8/22/2025 13:22
SCALE: 1:20

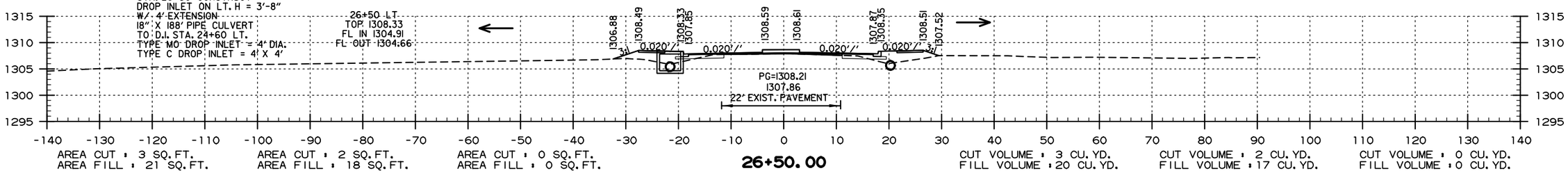
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	64	73
		CROSS SECTIONS				

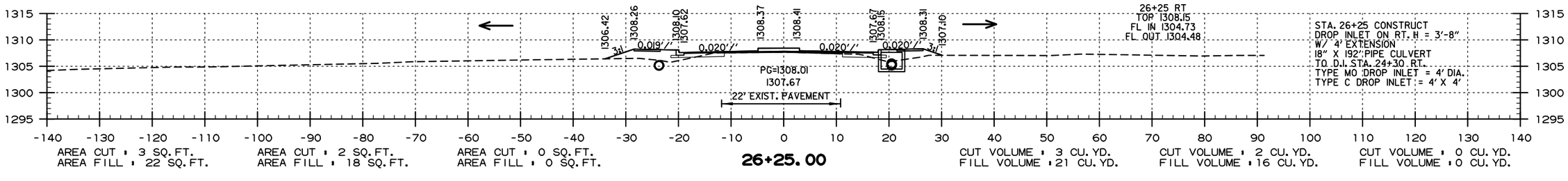
STAGE 3 CONSTRUCTION

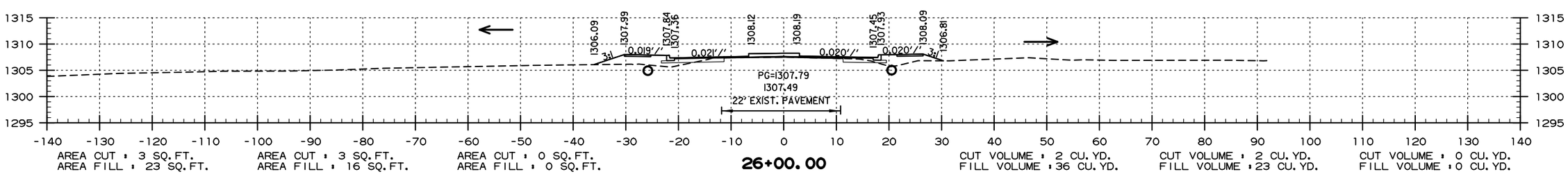
STAGE 1 CONSTRUCTION | STAGE 2 CONSTRUCTION







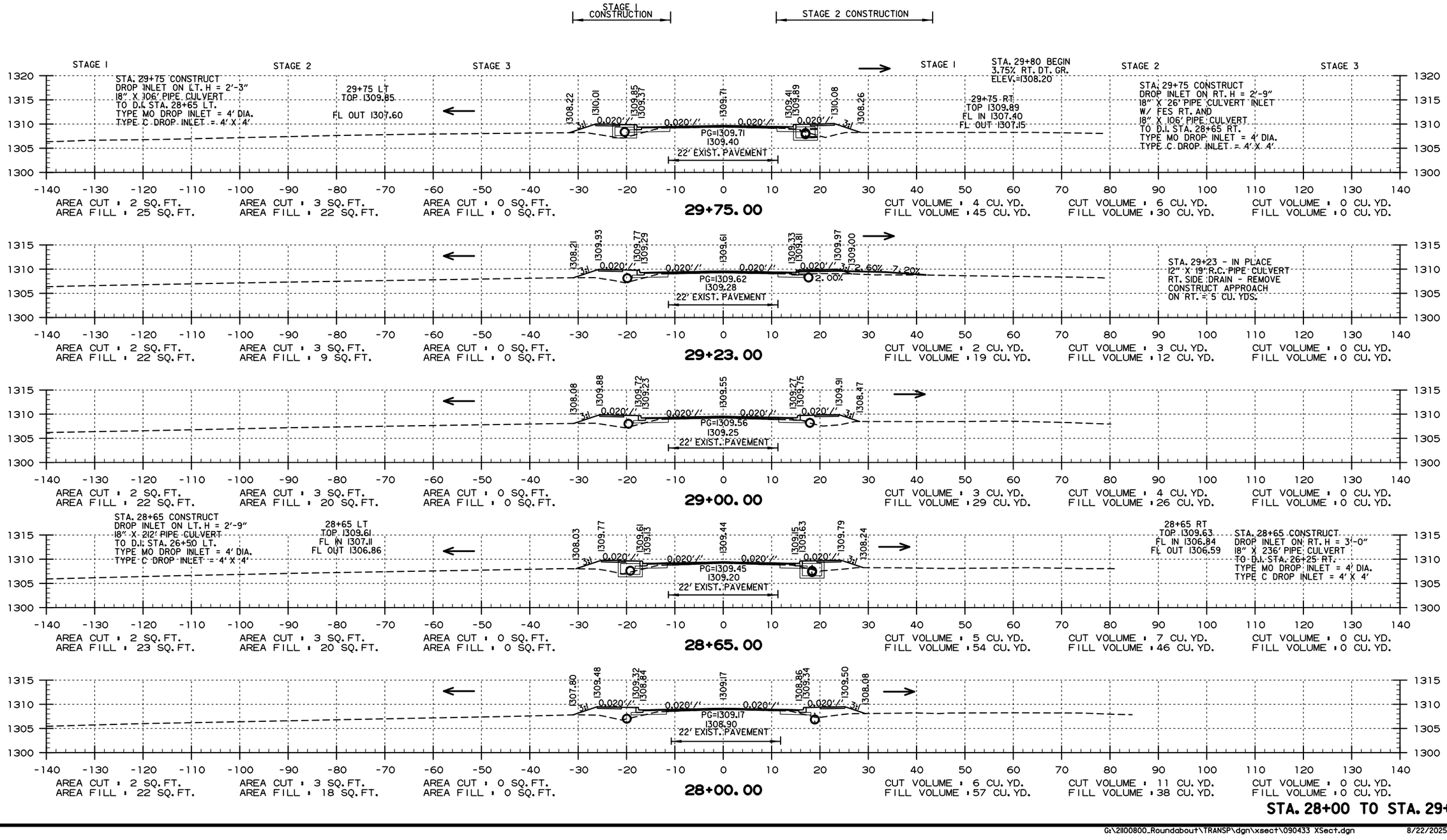




STA. 26+00 TO STA. 27+25

USER: JJ5206
DESIGN FILE: G:\2110800_Roundabout\TRANSP\dgn\xsect\090433 XSect.dgn
PLOTTED: 8/22/2025 13:23
SCALE: 1:20

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	65	73
		CROSS SECTIONS				



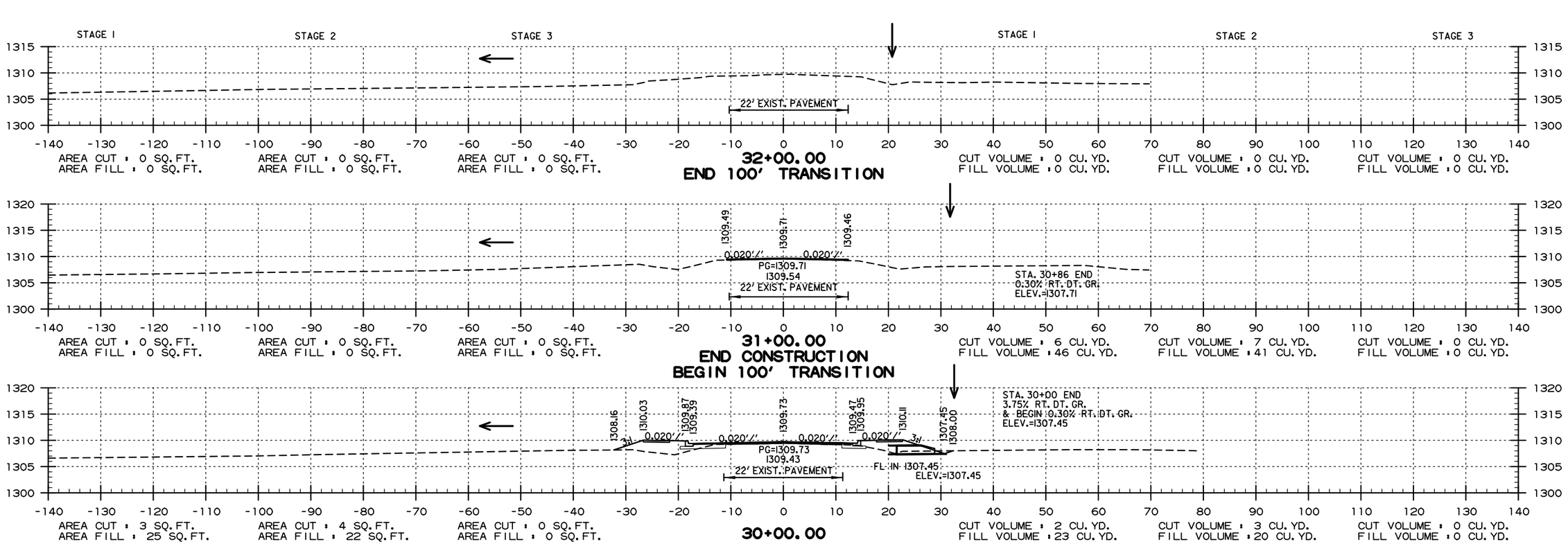
STA. 28+00 TO STA. 29+75

USER: JJ5206
DESIGN FILE: G:\21100800_Roundabout\TRANSP\dgn\xsect\090433 XSect.dgn
PLOTTED: 8/22/2025 13:23
SCALE: 1:20

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	66	73
		CROSS SECTIONS				

STAGE 1 CONSTRUCTION

STAGE 2 CONSTRUCTION



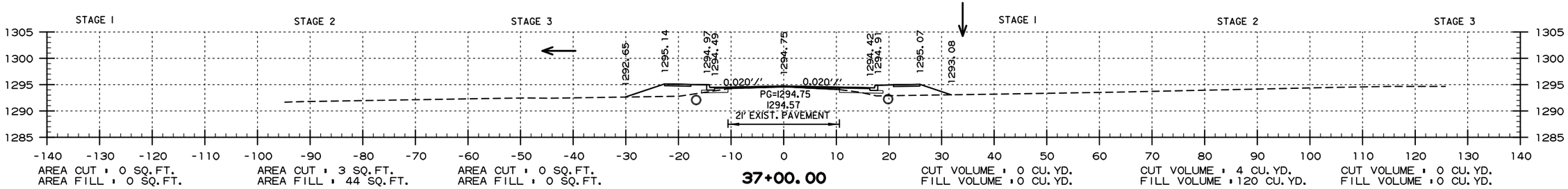
STA. 30+00 TO STA. 32+00

USER: JJ5206
DESIGN FILE: G:\2100800_Roundabout\TRANSP\dgn\xsect\090433 XSect.dgn SCALE: 1:20
PLOTTED: 8/22/2025 13:23

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	67	73
		CROSS SECTIONS				

STAGE 3 CONSTRUCTION

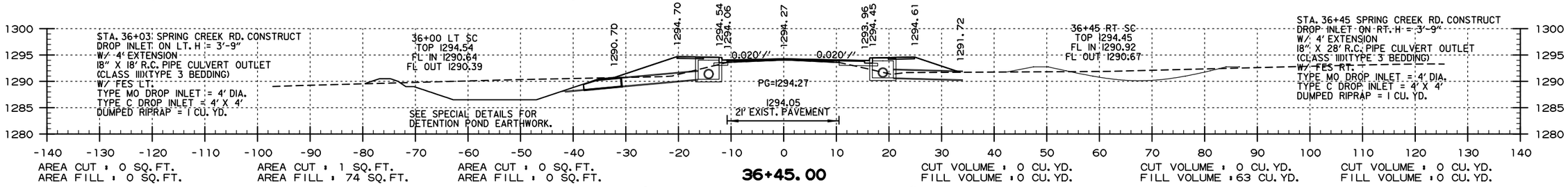
STAGE 2 CONSTRUCTION



AREA CUT = 0 SQ.FT. AREA FILL = 0 SQ.FT. | AREA CUT = 3 SQ.FT. AREA FILL = 44 SQ.FT. | AREA CUT = 0 SQ.FT. AREA FILL = 0 SQ.FT.

37+00.00

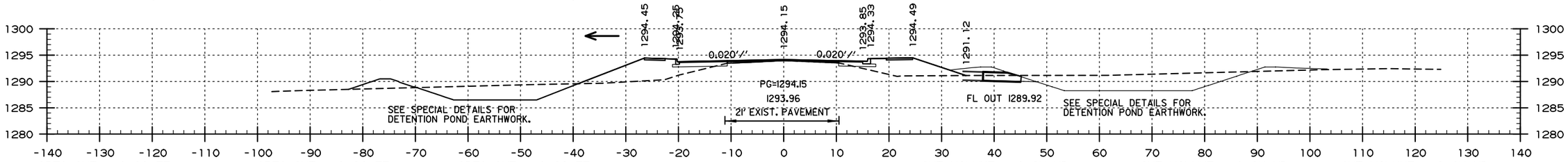
CUT VOLUME = 0 CU.YD. FILL VOLUME = 0 CU.YD. | CUT VOLUME = 4 CU.YD. FILL VOLUME = 120 CU.YD. | CUT VOLUME = 0 CU.YD. FILL VOLUME = 0 CU.YD.



AREA CUT = 0 SQ.FT. AREA FILL = 0 SQ.FT. | AREA CUT = 1 SQ.FT. AREA FILL = 74 SQ.FT. | AREA CUT = 0 SQ.FT. AREA FILL = 0 SQ.FT.

36+45.00

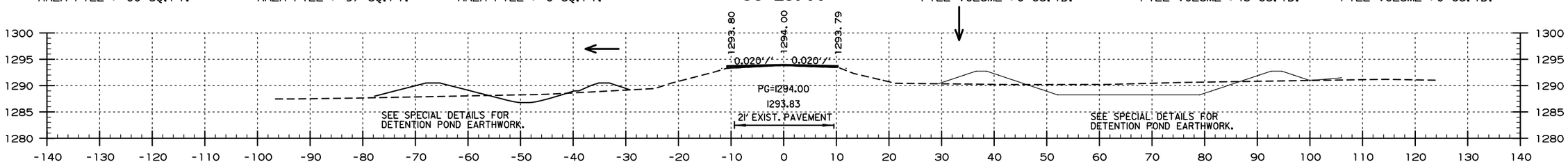
CUT VOLUME = 0 CU.YD. FILL VOLUME = 0 CU.YD. | CUT VOLUME = 0 CU.YD. FILL VOLUME = 63 CU.YD. | CUT VOLUME = 0 CU.YD. FILL VOLUME = 0 CU.YD.



AREA CUT = 0 SQ.FT. AREA FILL = 00 SQ.FT. | AREA CUT = 1 SQ.FT. AREA FILL = 97 SQ.FT. | AREA CUT = 0 SQ.FT. AREA FILL = 0 SQ.FT.

36+25.00

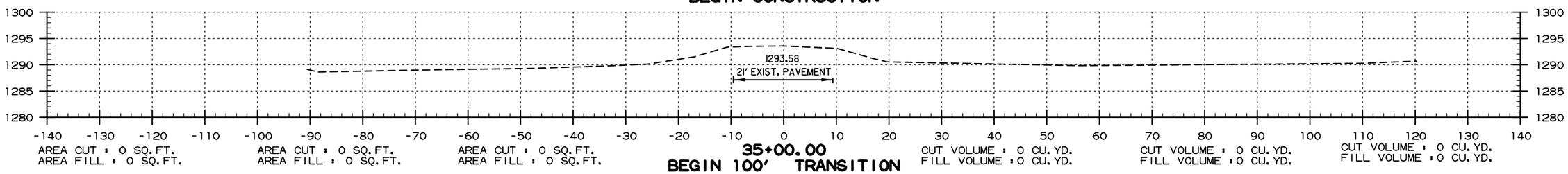
CUT VOLUME = 0 CU.YD. FILL VOLUME = 0 CU.YD. | CUT VOLUME = 0 CU.YD. FILL VOLUME = 45 CU.YD. | CUT VOLUME = 0 CU.YD. FILL VOLUME = 0 CU.YD.



AREA CUT = 0 SQ.FT. AREA FILL = 0 SQ.FT. | AREA CUT = 0 SQ.FT. AREA FILL = 0 SQ.FT. | AREA CUT = 0 SQ.FT. AREA FILL = 0 SQ.FT.

36+00.00
END 100' TRANSITION
BEGIN CONSTRUCTION

CUT VOLUME = 0 CU.YD. FILL VOLUME = 0 CU.YD. | CUT VOLUME = 0 CU.YD. FILL VOLUME = 0 CU.YD. | CUT VOLUME = 0 CU.YD. FILL VOLUME = 0 CU.YD.



AREA CUT = 0 SQ.FT. AREA FILL = 0 SQ.FT. | AREA CUT = 0 SQ.FT. AREA FILL = 0 SQ.FT. | AREA CUT = 0 SQ.FT. AREA FILL = 0 SQ.FT.

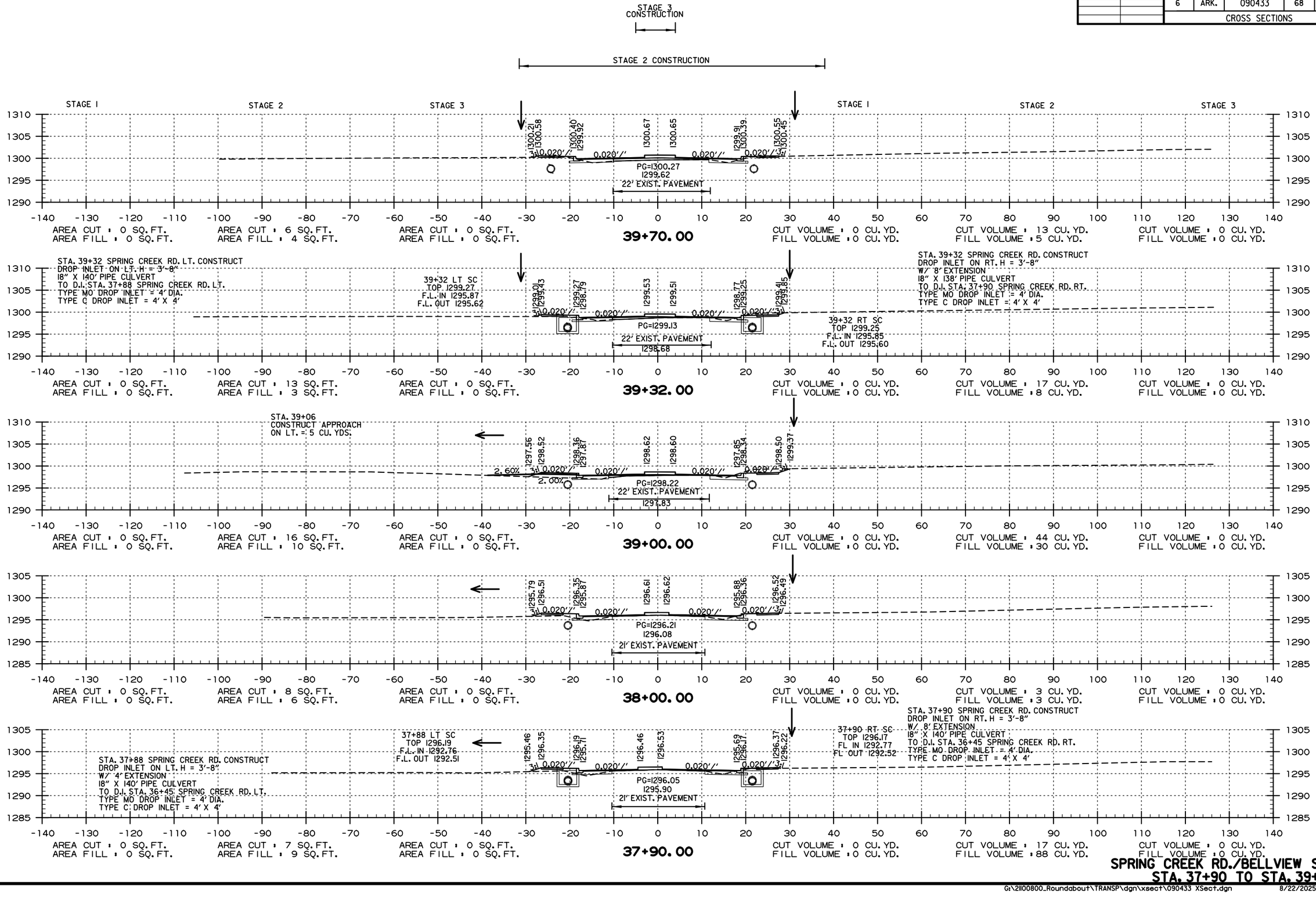
35+00.00
BEGIN 100' TRANSITION

CUT VOLUME = 0 CU.YD. FILL VOLUME = 0 CU.YD. | CUT VOLUME = 0 CU.YD. FILL VOLUME = 0 CU.YD. | CUT VOLUME = 0 CU.YD. FILL VOLUME = 0 CU.YD.

STA. 35+00 TO STA. 37+00

USER: JJ5206
DESIGN FILE: G:\2I100800_Roundabout\TRANSP\dgn\xsect\090433 XSect.dgn
PLOTTED: 8/25/2025 15:00
SCALE: 1:20

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	68	73
		CROSS SECTIONS				

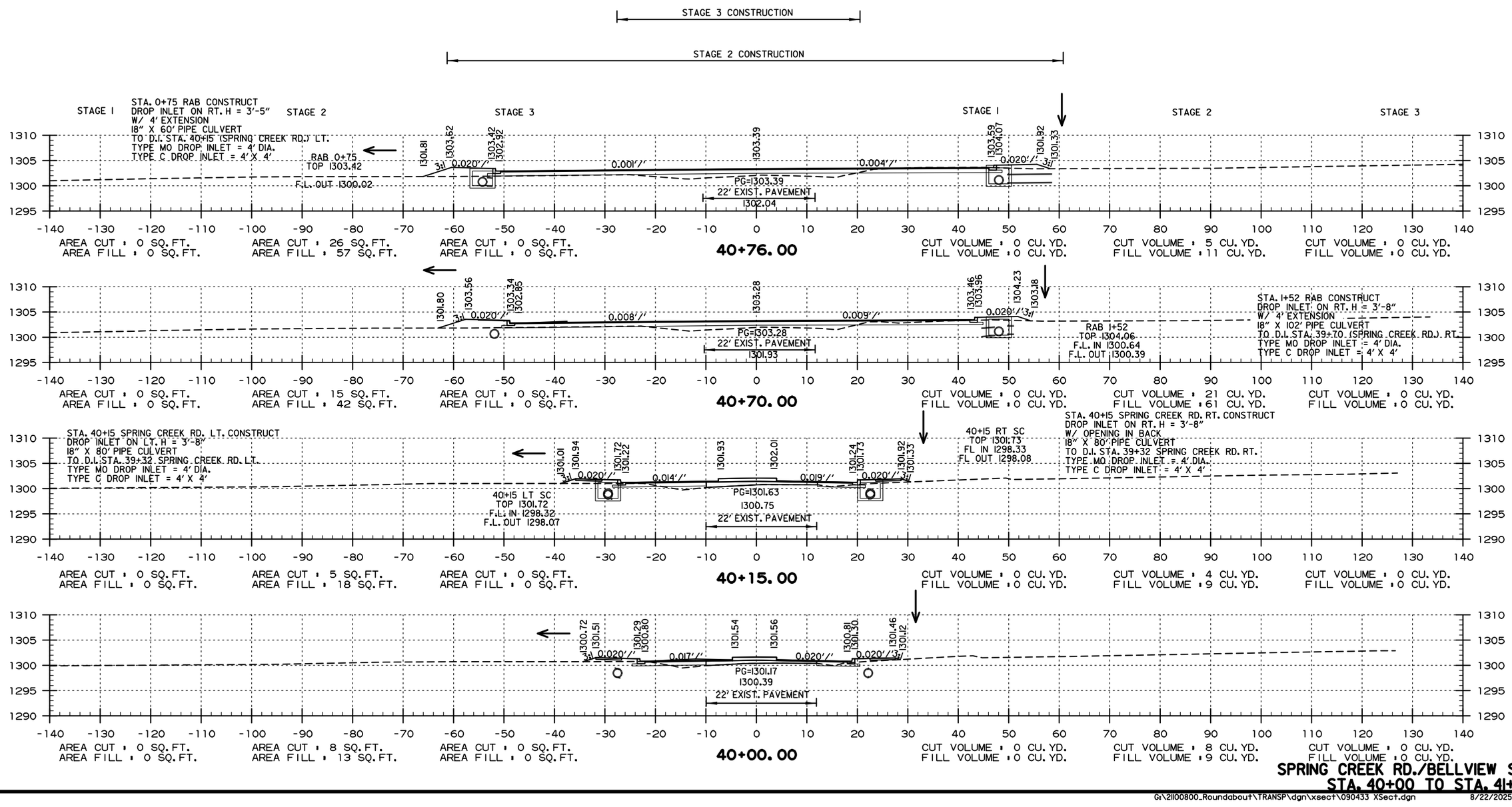


SPRING CREEK RD./BELLVIEW ST.
STA. 37+90 TO STA. 39+70

USER: JJ5206
DESIGN FILE: G:\2110800_Roundabout\TRANSP\dgn\xsect\090433 XSect.dgn
PLOTTED: 8/22/2025 13:24
SCALE: 1:20

G:\2110800_Roundabout\TRANSP\dgn\xsect\090433 XSect.dgn 8/22/2025 13:24

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	69	73
		CROSS SECTIONS				

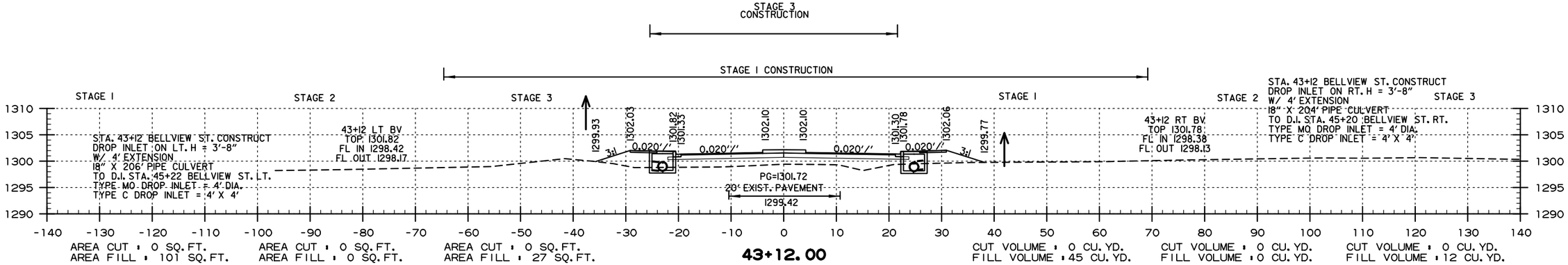


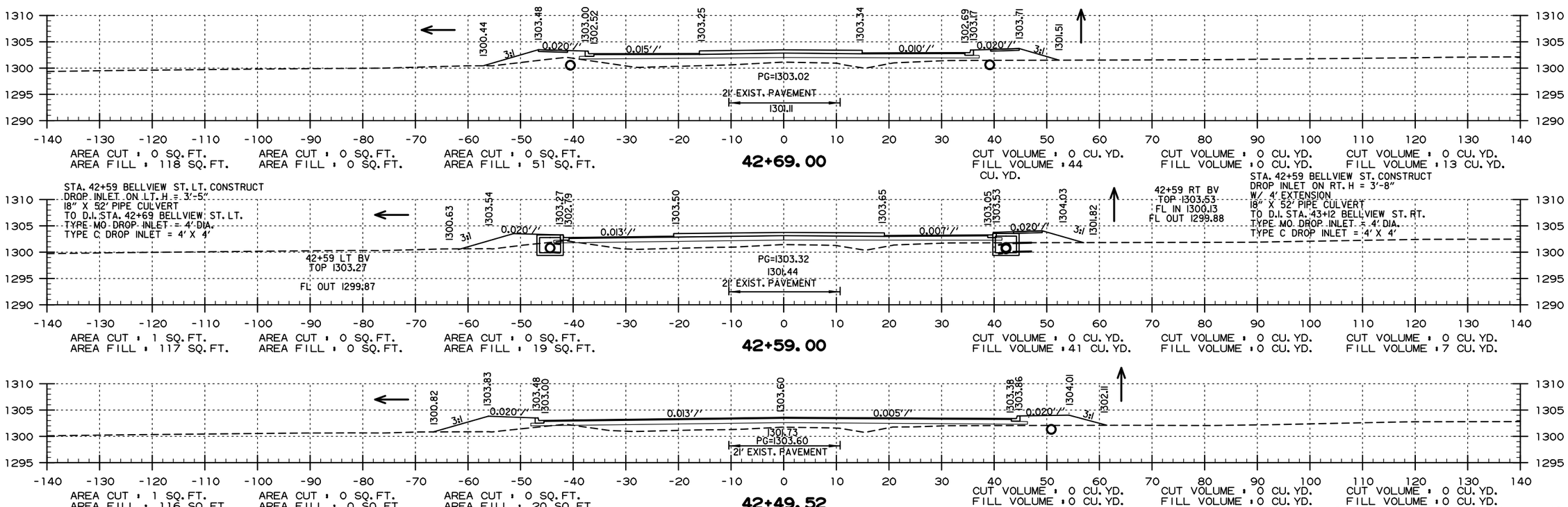
USER: JJ5206
DESIGN FILE: G:\2I100800_Roundabout\TRANSP\dgn\xsect\090433 XSect.dgn SCALE: 1:20
PLOTTED: 8/22/2025 13:24

SPRING CREEK RD./BELLVIEW ST.
STA. 40+00 TO STA. 41+00

G:\2I100800_Roundabout\TRANSP\dgn\xsect\090433 XSect.dgn 8/22/2025 13:24

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	70	73
		CROSS SECTIONS				





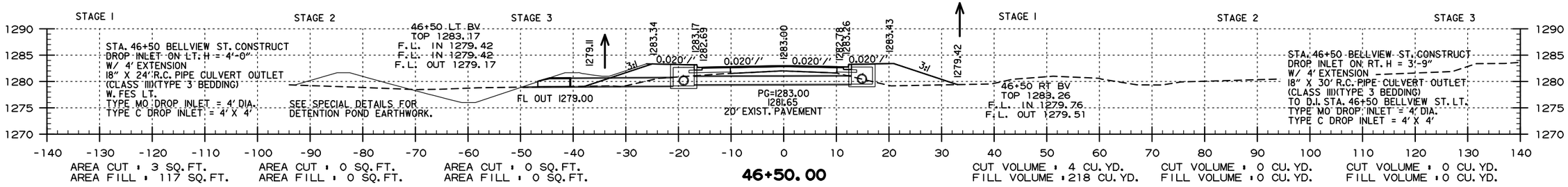
USER: JJ5206
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PLOTTED: 8/22/2025 13:24
SCALE: 1:20

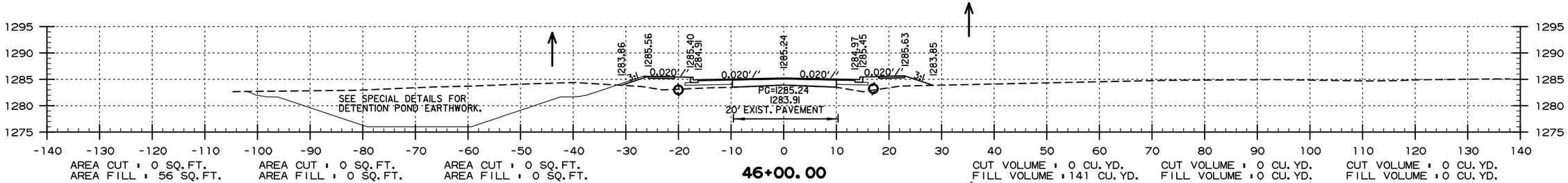
SPRING CREEK RD./BELLVIEW ST.
STA. 42+50 TO STA. 43+12

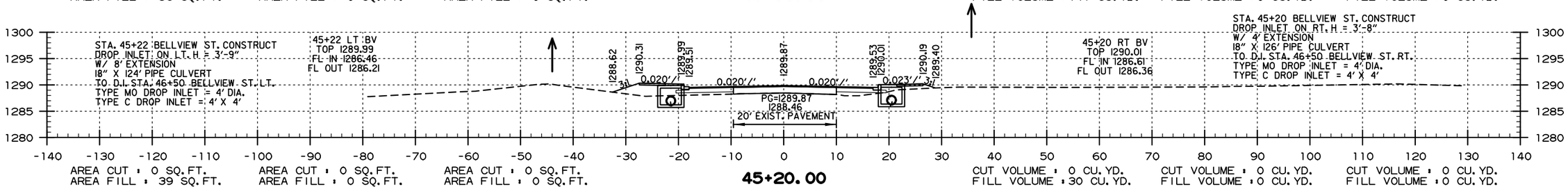
DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	71	73
		CROSS SECTIONS				

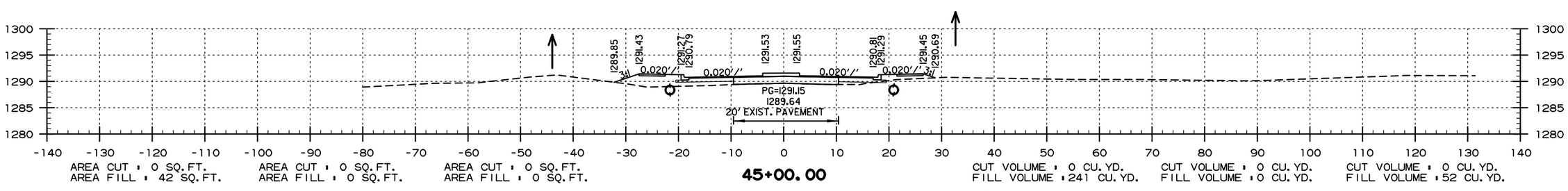
STAGE 3
CONSTRUCTION

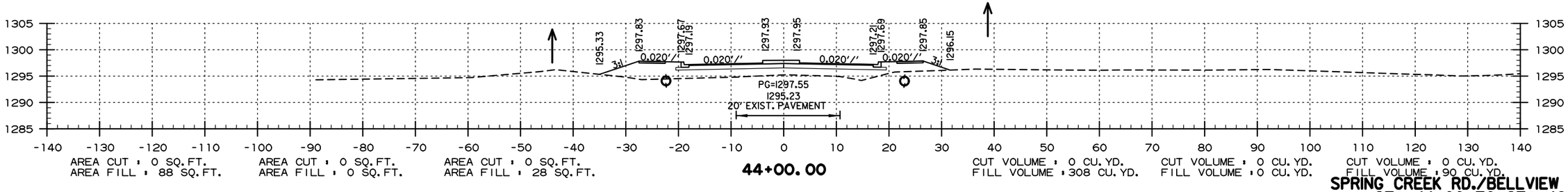
STAGE 1 CONSTRUCTION







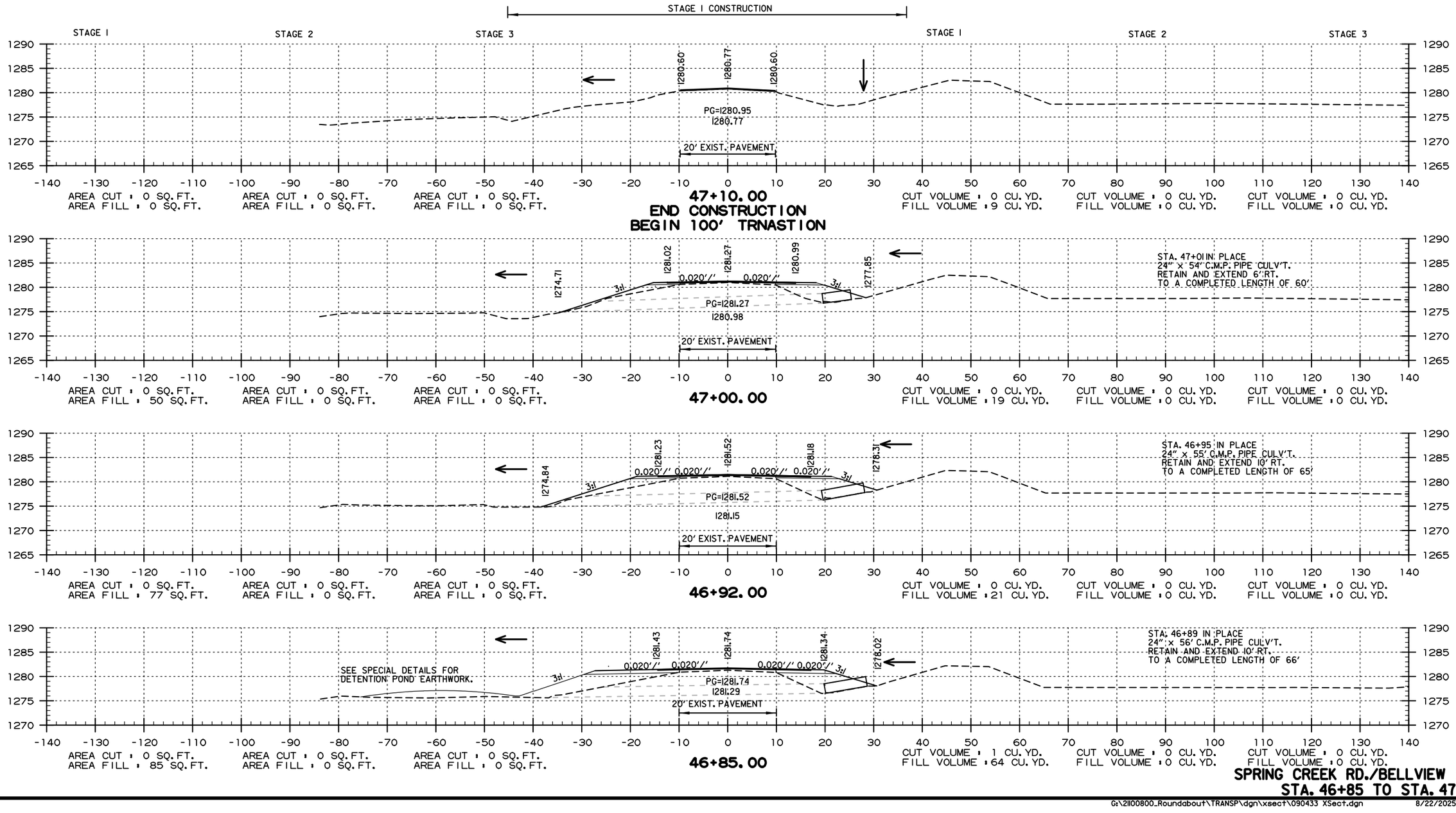




SPRING CREEK RD./BELLVIEW ST.
STA. 44+00 TO STA. 46+68

USER: JJ5206
DESIGN FILE: G:\2110800_Roundabout\TRANSP\dgn\xsect\090433 XSect.dgn SCALE: 1:20
PLOTTED: 8/22/2025 13:24

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	72	73
		CROSS SECTIONS				

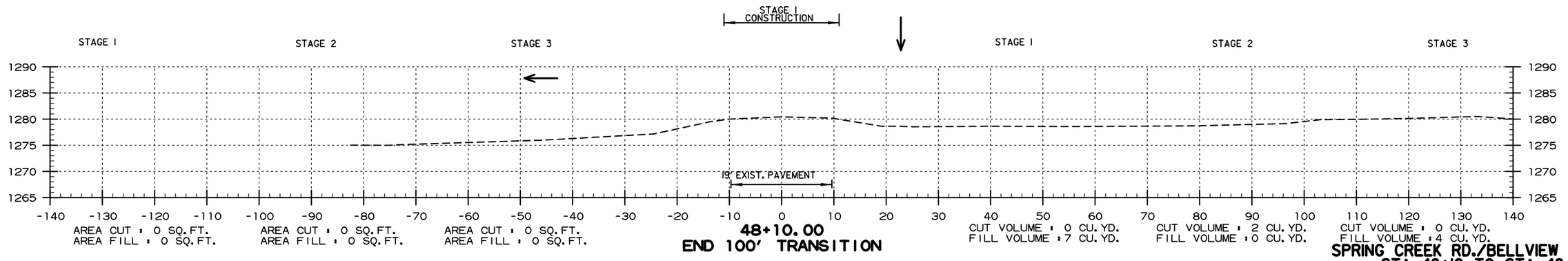


SPRING CREEK RD./BELLVIEW ST.
STA. 46+85 TO STA. 47+10

USER: JJ5206
DESIGN FILE: G:\21I00800_Roundabout\TRANSP\dgn\xsect\090433 XSect.dgn
PLOTTED: 8/22/2025 13:25
SCALE: 1:20

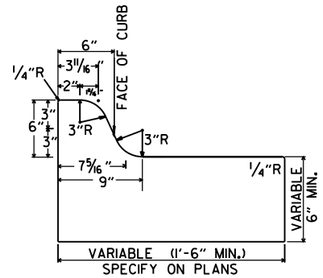
G:\21I00800_Roundabout\TRANSP\dgn\xsect\090433 XSect.dgn 8/22/2025 13:25

DATE REVISED	DATE REVISED	FED.RD. DIST.NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	090433	73	73
		CROSS SECTIONS				

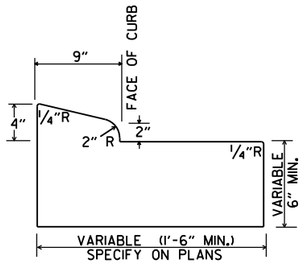


SPRING CREEK RD./BELLVIEW ST.
STA. 48+10 TO STA. 48+10

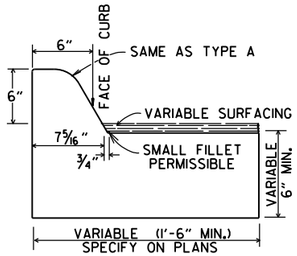
USER: JJ5206
DESIGN FILE: G:\21100800_Roundabout\TRANSP\dgn\xsect\090433 XSect.dgn
PLOTTED: 8/22/2025 13:25
SCALE: 1:20



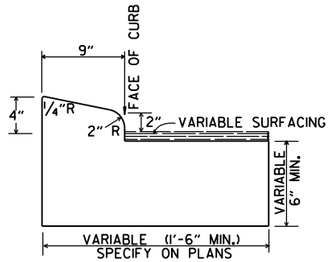
TYPE A



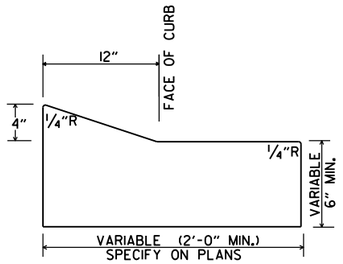
TYPE B-1



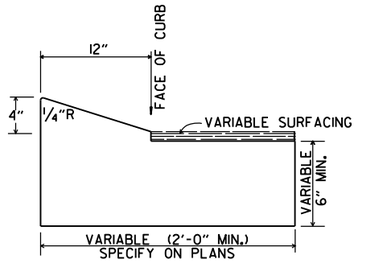
TYPE C



TYPE B-2

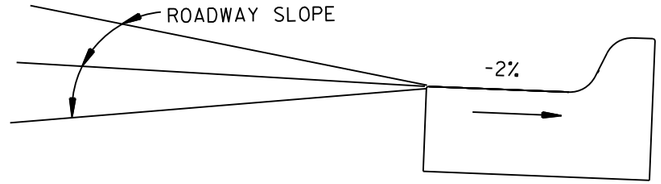


TYPE E-1



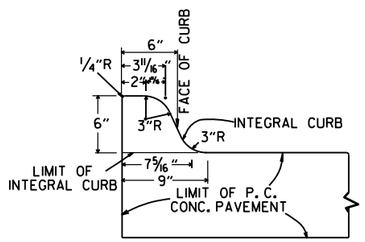
TYPE E-2

CONCRETE COMBINATION CURB AND GUTTER

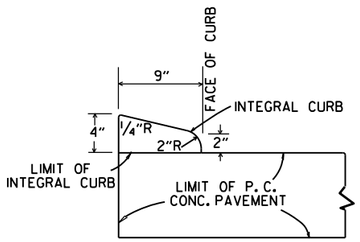


DETAIL OF GUTTER SLOPE

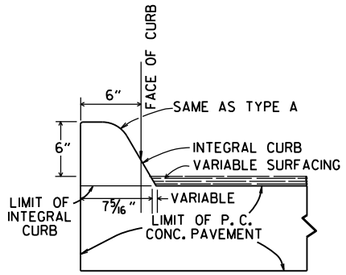
GUTTER SHALL BE CONSTRUCTED ON 2% SLOPE AWAY FROM ROADWAY, REGARDLESS OF ROADWAY SLOPE.



TYPE A

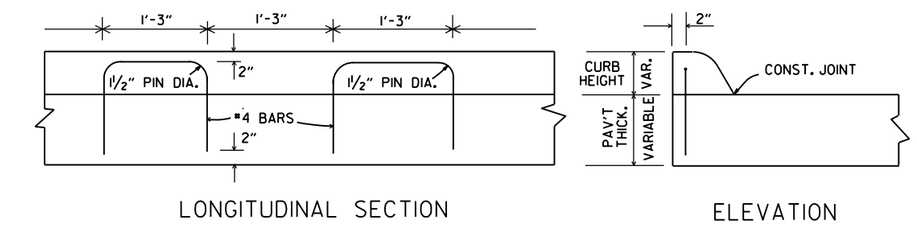


TYPE B



TYPE C

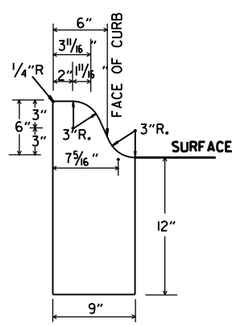
INTEGRAL CURB



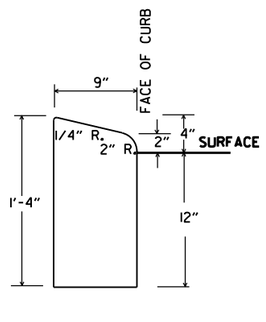
LONGITUDINAL SECTION

ELEVATION

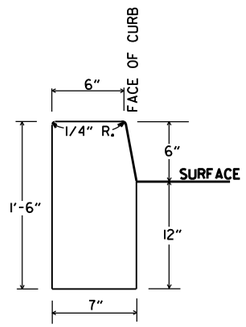
ALTERNATE CONSTRUCTION METHOD FOR INTEGRAL CURB



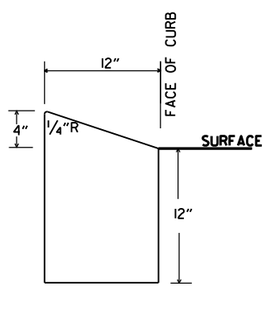
TYPE A



TYPE B

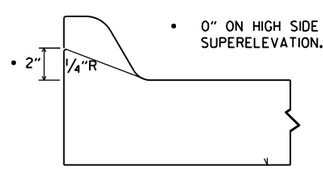


TYPE D



TYPE E

CONCRETE CURB



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

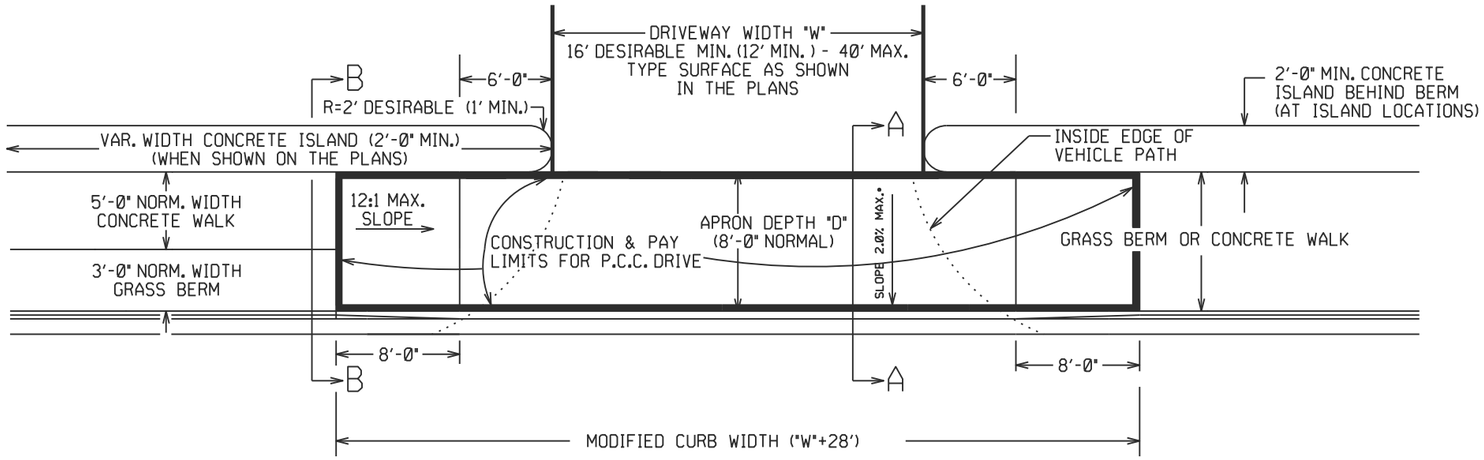
DETAILS OF MODIFIED CURB

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

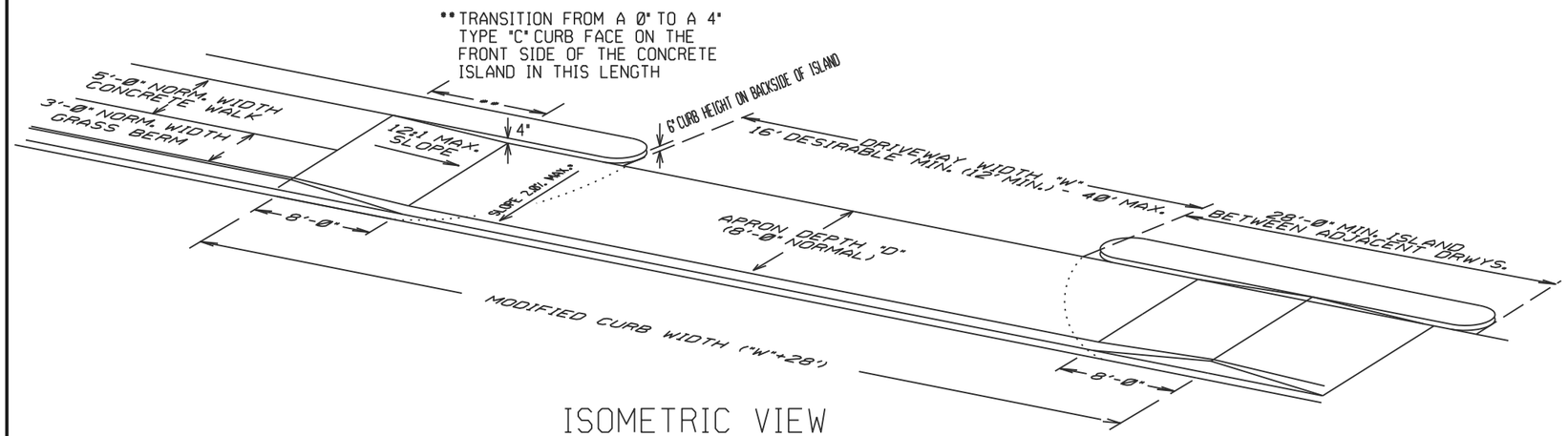
ARKANSAS STATE HIGHWAY COMMISSION

CURBING DETAILS

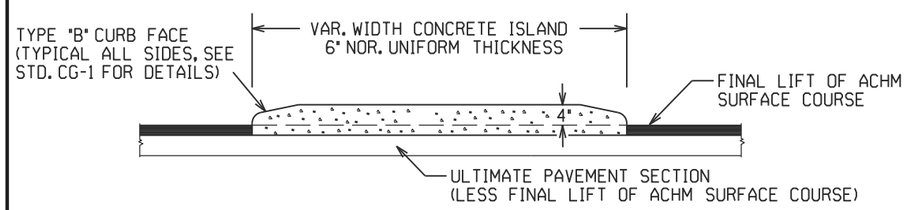
STANDARD DRAWING CG-1



PLAN VIEW



ISOMETRIC VIEW

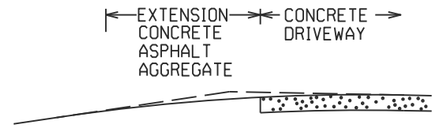


CURBED ISLANDS FOR CHANNELIZATION

CONCRETE ISLAND NOTES:

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

2. TRANSVERSE EXPANSION JOINTS, NOT LESS THAN 1/2" WIDE, SHALL BE PLACED AT MINIMUM INTERVAL OF 45'. TRANSVERSE JOINT SHALL BE CONSTRUCTED USING A JOINT FILLER COMPLYING WITH AASHTO M213.



EXTENSION TYPICAL SECTIONS

1: CONCRETE - 6" P.C. CONCRETE DRIVEWAY

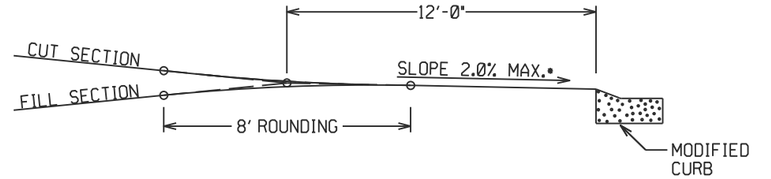
2: ASPHALT - 2" ACHM SURFACE COURSE (1/2")
4" ACHM BINDER COURSE (1") OR
4" ACHM BASE COURSE (1-1/2")

3: ASPHALT - 2" ACHM SURFACE COURSE (1/2")
7" AGGREGATE BASE COURSE

4: AGGREGATE - 6" AGGREGATE BASE COURSE

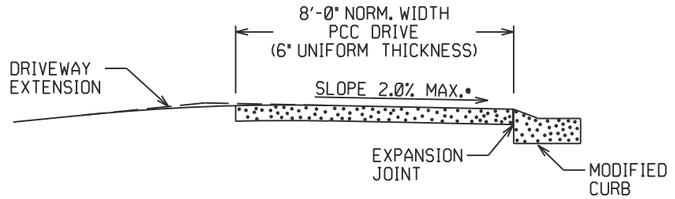
THE TYPE OF EXTENSION SHALL BE AS SHOWN IN THE PLANS. THE CONTRACTOR MAY, WITH THE APPROVAL OF THE ENGINEER, SUBSTITUTE A LOWER NUMBERED TYPE OF EXTENSION IN LIEU OF THE TYPE SPECIFIED IN THE PLANS, BUT AT NO ADDITIONAL COST TO THE DEPARTMENT.

DRIVEWAY EXTENSION DETAILS

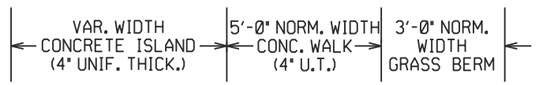


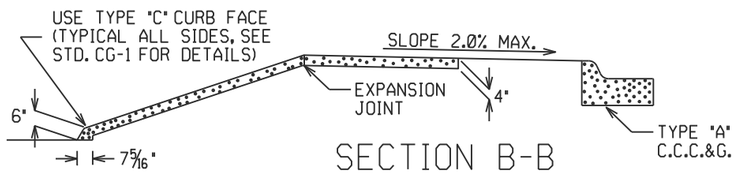
DRIVEWAY VERTICAL ALIGNMENT DETAILS

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



SECTION A-A





SECTION B-B

CURBED ISLAND BEHIND WALK

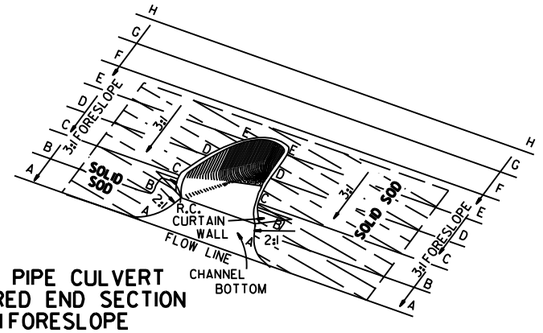
DATE REV	DESCRIPTION
05-22-25	REVISED ISLAND DETAILS & ADDED DESIRABLE MIN. DRIVEWAY WIDTH
05-19-22	REVISED ISLAND NOTES
11-07-19	REVISED WALK DETAILS
02-27-14	REVISED PLAN & ISOMETRIC VIEW
11-29-07	ADDED CHANNELIZATION ISLAND & REVISED DRIVEWAY SLOPE NOTE & VERTICAL ALIGNMENT DETAIL

ARDOT ARKANSAS DEPARTMENT OF TRANSPORTATION

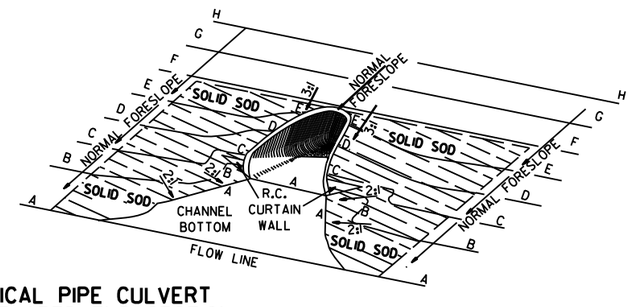
ARKANSAS STATE HIGHWAY COMMISSION

DETAILS OF DRIVEWAYS & ISLANDS

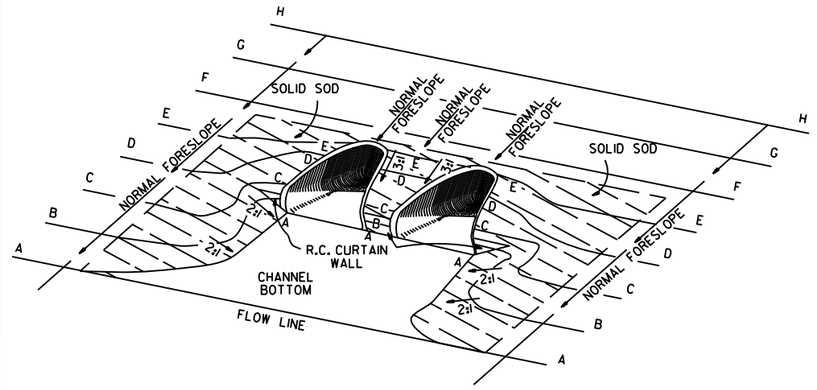
DATE EFFECTIVE	STANDARD DRAWING	DR-1
05-22-2025		



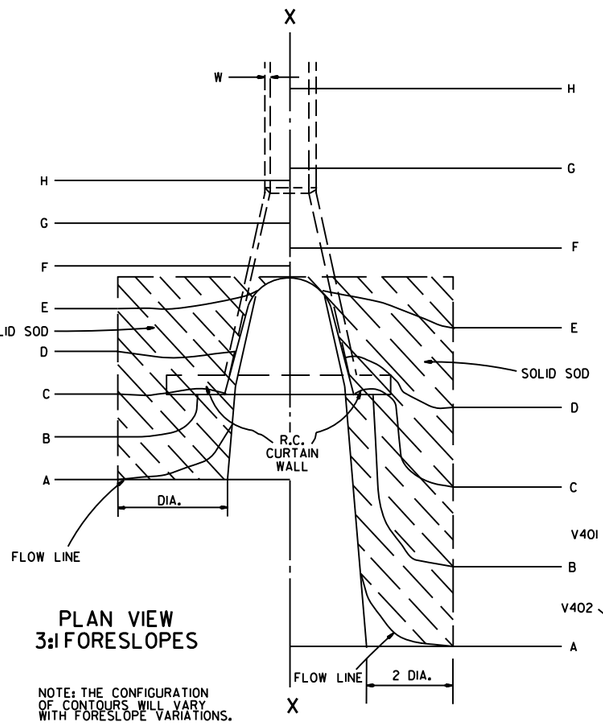
TYPICAL PIPE CULVERT
WITH FLARED END SECTION
& 3:1 FORESLOPE



TYPICAL PIPE CULVERT
WITH FLARED END SECTION
& FLATTENED ADJACENT SLOPES



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



PLAN VIEW
3:1 FORESLOPES

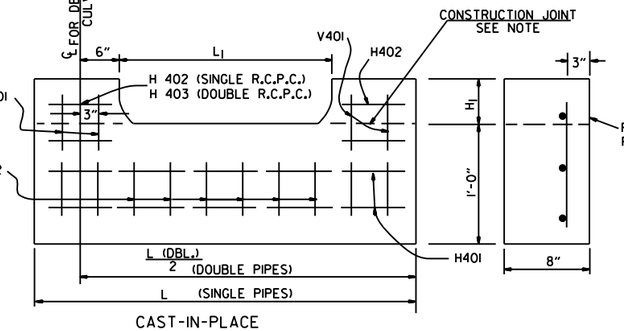
NOTE: THE CONFIGURATION OF CONTOURS WILL VARY WITH FORESLOPE VARIATIONS.

PLAN VIEW
FLATTENED FORESLOPES

R.C. CURTAIN WALL
DIMENSIONS & QUANTITIES

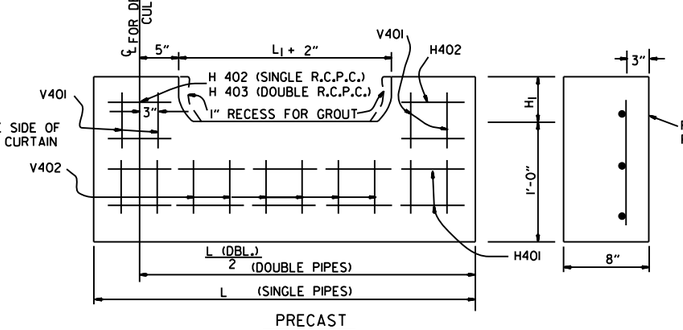
PIPE DIA.	H_1	L_1	L	L (DBL.) / 2	SINGLE R.C.P.C. CONC.	SINGLE R.C.P.C. REINF. STEEL	DOUBLE R.C.P.C. CONC.	DOUBLE R.C.P.C. REINF. STEEL
					CU. YDS.	LBS.	CU. YDS.	LBS.
18"	1'-11½"	3'-5"	8'-0"	6'-3"	0.31	27.7	0.45	39.5
24"	1'-0½"	4'-6"	9'-6"	7'-6"	0.37	33.4	0.53	48.0
30"	1'-3½"	5'-7"	11'-0"	9'-0"	0.45	39.0	0.67	59.0
36"	1'-7"	6'-8"	13'-0"	10'-6"	0.58	52.6	0.83	73.9
42"	2'-1½"	7'-3"	15'-6"	12'-0"	0.82	77.1	1.10	100.7
48"	2'-5"	7'-10"	17'-0"	13'-0"	0.98	94.9	1.27	120.4
54"	2'-9½"	8'-5"	18'-6"	14'-0"	1.16	115.8	1.47	143.7
60"	3'-4"	9'-0"	20'-6"	15'-6"	1.47	149.7	1.84	180.3
72"	4'-5"	10'-2"	25'-6"	18'-6"	2.31	232.6	2.73	271.0

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



CAST-IN-PLACE

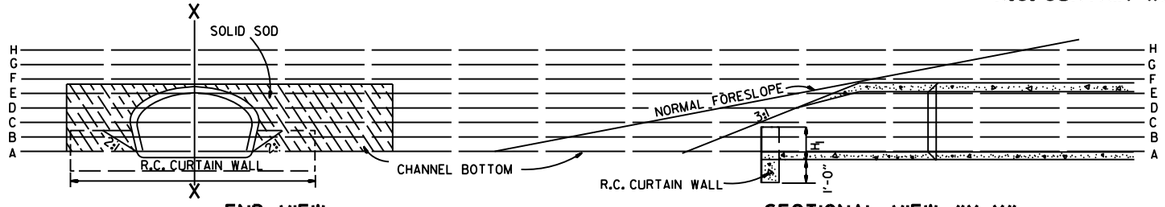
NOTE: THE PORTION OF THE R.C. CURTAIN WALL BENEATH THE FLARED END SECTION (LOWER 1'-0") SHALL BE PLACED MONOLITHICALLY. THE FLARED END SECTION SHALL THEN BE SET IN PLACE & THE REMAINING PORTIONS OF THE R.C. CURTAIN WALL PLACED.



PRECAST

NOTE: THE PRECAST CURTAIN WALL WILL BE SET AND BACKFILLED WITH COMPACTED MATERIAL. THE FLARED END SECTION SHALL THEN BE SET IN PLACE AND THE 1" RECESS FILLED WITH GROUT. WHERE "L" EXCEEDS 11' THE CURTAIN WALL MAY BE CAST IN TWO (2) OR MORE SECTIONS. THE METHOD OF JOINING THE SECTIONS FOR INSTALLATION SHALL BE APPROVED BY THE ENGINEER.

R.C. CURTAIN WALL DETAILS



END VIEW

SECTIONAL VIEW "X-X"

REINFORCING STEEL SCHEDULE

PIPE DIA.	SINGLE R.C. PIPE CULVERT H401 L	H401 NO.	H402 L	H402 NO.	V401 L	V401 NO.	V402 L	V402 NO.	DOUBLE R.C. PIPE CULVERT H401 L	H401 NO.	H402 L	H402 NO.	H403 L	H403 NO.	V401 L	V401 NO.	V402 L	V402 NO.
18"	7'-8"	2	1'-11½"	4	1'-7½"	8	8"	8	12'-2"	2	1'-11½"	4	8"	2	1'-7½"	10	8"	14
24"	9'-2"	2	2'-2"	4	1'-8½"	10	8"	9	14'-8"	2	2'-2"	4	8"	2	1'-8½"	12	8"	18
30"	10'-8"	2	2'-4½"	4	1'-11½"	10	8"	12	17'-8"	2	2'-4½"	4	8"	2	1'-11½"	14	8"	22
36"	12'-8"	2	2'-10"	6	2'-3"	12	8"	14	20'-8"	2	2'-10"	6	8"	3	2'-3"	14	8"	28
42"	15'-2"	2	3'-9½"	8	2'-9½"	16	8"	15	23'-8"	2	3'-9½"	8	8"	4	2'-9½"	18	8"	30
48"	16'-8"	2	4'-3"	10	3'-1"	18	8"	16	25'-8"	2	4'-3"	10	8"	5	3'-1"	20	8"	32
54"	18'-2"	2	4'-8½"	12	3'-5½"	20	8"	17	27'-8"	2	4'-9"	12	8"	6	3'-5½"	22	8"	34
60"	20'-2"	2	5'-5"	14	4'-0"	24	8"	18	30'-8"	2	5'-5"	14	8"	7	4'-0"	26	8"	36
72"	25'-2"	2	7'-4"	18	5'-1"	30	8"	20	36'-8"	2	7'-4"	18	8"	9	5'-1"	33	8"	40

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

SOLID SODDING

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

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

GENERAL NOTES

1. A CAST-IN-PLACE OR PRECAST CURTAIN WALL MAY BE USED. PAYMENT FOR THE CURTAIN WALL SHALL BE CONSIDERED TO BE INCLUDED IN THE UNIT PRICE BID EACH FOR FLARED END SECTIONS OF THE SEVERAL SIZES, WHICH PRICE SHALL BE FULL COMPENSATION FOR FURNISHING ALL MATERIALS INCLUDING REINFORCING STEEL AND CONCRETE: FOR FORMS, MIXING AND PLACING; FOR EXCAVATION AND BACKFILL, AND FOR ALL LABOR, TOOLS, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE WORK.
2. ALL EXPOSED EDGES SHALL BE CHAMFERED ¾".
3. CONCRETE FOR CURTAIN WALL SHALL MEET THE REQUIREMENTS FOR CLASS A OR S CONCRETE AS PROVIDED IN SECTION 802 OF THE STANDARD SPECIFICATIONS OR FOR PAVING CONCRETE AS PROVIDED IN SECTION 501 OF THE STANDARD SPECIFICATIONS.
4. WELDED WIRE MESH 3 x 3 W10 x W10 MAY BE USED IN LIEU OF REINFORCING BARS.

DATE	REVISION	FILMED
10-18-96	ADDED NOTE TO SOLID SODDING	
10-12-95	CORRECTED SPELLING	
11- 3-94	ADDED GENERAL NOTE NO. 4	
8-15-91	REV. CURTAIN WALL QUANT. STEEL SCH. & SOLID SOD QUANT.	
3-2-81	ALLOW PRECAST IN 2 OR MORE PIECES CHAMFER EDGES	
5-15-80	ADDED PRECAST WALL & GENERAL NOTES	
10-2-72	REVISED AND REDRAWN	

ARKANSAS STATE HIGHWAY COMMISSION

FLARED END SECTION

STANDARD DRAWING FES-1

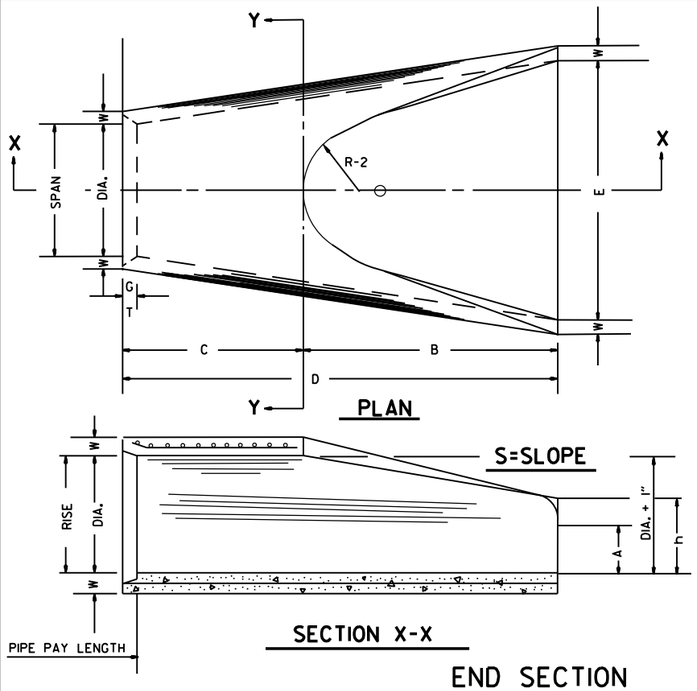
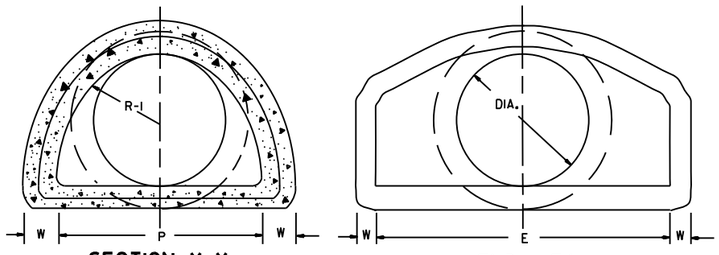


TABLE OF DIMENSIONS

DIA.	WALL	A	B	C	D	E	S	DIA. + 1"	P	R-1	R-2	G-T	WT.	h
18"	2½"	9"	2'-3"	3'-10"	6'-1"	3'-0"	3:1	19"	29"	15½"	12"	2"	1000	1'-0½"
24"	3"	9½"	3'-7½"	2'-6"	6'-1½"	4'-0"	3:1	25"	33 3/16"	16 15/16"	14"	2½"	1600	1'-1½"
30"	3½"	1'-0"	4'-6"	1'-7 3/4"	6'-1 3/4"	5'-0"	3:1	31"	37"	18½"	15"	3¼"	1940	1'-4 5/8"
36"	4"	1'-3"	5'-3"	2'-10 3/4"	8'-1 3/4"	6'-0"	3:1	37"	47 13/16"	24 5/16"	20"	3½"	4100	1'-8"
42"	4½"	1'-9"	5'-3"	2'-11"	8'-2"	6'-6"	3:1	43"	53⅞"	27½"	22"	3½"	5380	2'-2½"
48"	5"	2'-0"	6'-0"	2'-2"	8'-2"	7'-0"	3:1	49"	56½"	28½"	22"	3½"	6550	2'-6"
54"	5½"	2'-4"	6'-6"	1'-10"	8'-4"	7'-6"	3:1	55"	65½"	33⅛"	24"	4"	8750	2'-10½"
60"	6"	2'-10"	6'-6"	1'-10"	8'-4"	8'-0"	3:1	61"	72½"	36 11/16"	24"	4"	9270	3'-5"
72"	7"	3'-10"	6'-6"	1'-10"	8'-4"	9'-0"	3:1	73"	77 13/16"	38 15/16"	24"	5"	13250	4'-6"

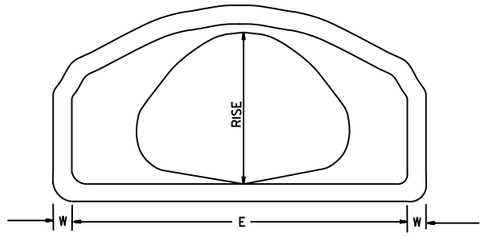


NOTE: TONGUE END ON UPSTREAM SECTION
GROOVE END ON DOWNSTREAM SECTION

ARCH PIPE

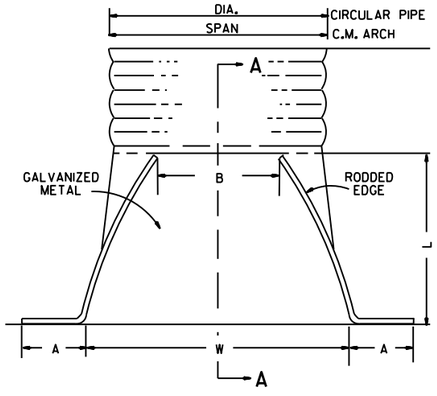
EQUIV. DIA.	• SPAN AASHTO M 206	• SPAN AHD NOMINAL	• RISE AASHTO M 206	• RISE AHD NOMINAL	W	A	B	C	D	E	P	R2	G-T	S
	INCHES													
15	18	18	11	11	2"	4"	2'-0"	4'-0"	6'-0"	3'-0"	29"	12"	1½"	2½:1
18	22	22	13½	14	2½"	5"	2'-0"	4'-1"	6'-1"	3'-6"	32⅛"	13"	2½"	2½:1
21	26	26	15½	16	2¾"	7"	2'-3"	3'-10"	6'-1"	4'-0"	34⅛"	14"	2½"	2½:1
24	28½	29	18	18	3"	9"	2'-3"	3'-10"	6'-1"	5'-0"	36 11/16"	15"	2½"	2½:1
30	36¼	36	22½	23	3½"	10"	3'-1"	3'-0½"	6'-1½"	6'-0"	47 11/16"	20"	3"	2½:1
36	43¾	44	26⅜	27	4"	10½"	4'-0"	2'-11½"	6'-1½"	6'-6"	54 5/16"	22"	3½"	2½:1
42	51⅛	51	31 5/16	31	4½"	11½"	4'-7"	1-10¼"	6'-5¼"	7'-2"	59½"	23"	3¾"	2½:1
48	58½	59	36	36	5"	1'-3"	5'-3"	2'-10¾"	8'-1¾"	7'-10"	70 5/16"	24"	4¼"	2½:1
54	65	65	40	40	5½"	1'-7"	5'-3"	2'-11"	8'-2"	8'-6"	72 1/16"	24"	4¾"	2¼:1
60	73	73	45	45	6"	1'-10"	5'-6"	2'-8"	8'-2"	9'-0"	77 1/16"	24"	5"	2¼:1

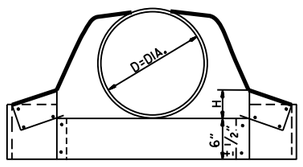
• THE MEASURED SPAN AND RISE SHALL NOT VARY MORE THAN ± 2 PER CENT FROM THE VALUES SPECIFIED BY AASHTO M 206.



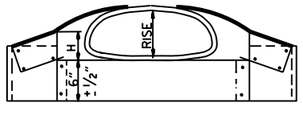
END VIEW
CONCRETE ARCH PIPE

END SECTION FOR REINFORCED CONCRETE PIPE CULVERTS





CIRCULAR PIPE



C.M. ARCH PIPE

CIRCULAR PIPE

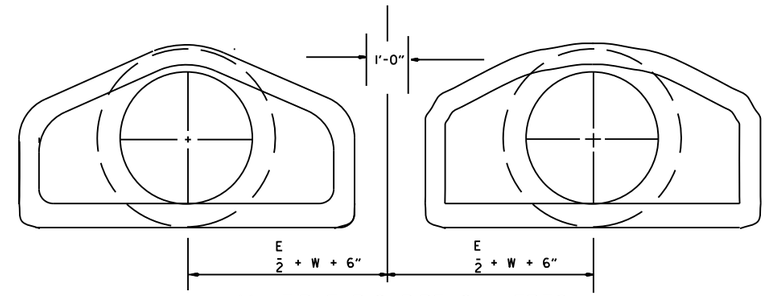
D. DIA.	GAUGE	A 1" ±	B. MAX.	H 1" ±	L 1½" ±	W 2" ±	S
		INCHES					
12	16	6	6	6	21	24	2½:1
15	16	7	8	6	26	30	2½:1
18	16	8	10	6	31	36	2½:1
21	16	9	12	6	36	42	2½:1
24	16	10	13	6	41	48	2½:1
30	14	12	16	8	51	60	2½:1
36	14	14	19	9	60	72	2½:1
42	12	16	22	11	69	84	2½:1
48	12	18	27	12	78	90	2½:1
54	12	18	30	12	84	102	2:1
60	12	18	33	12	87	114	1¾:1
66	12	18	36	12	87	120	1½:1
72	12	18	39	12	87	126	1 1/3:1

C.M. ARCH PIPE

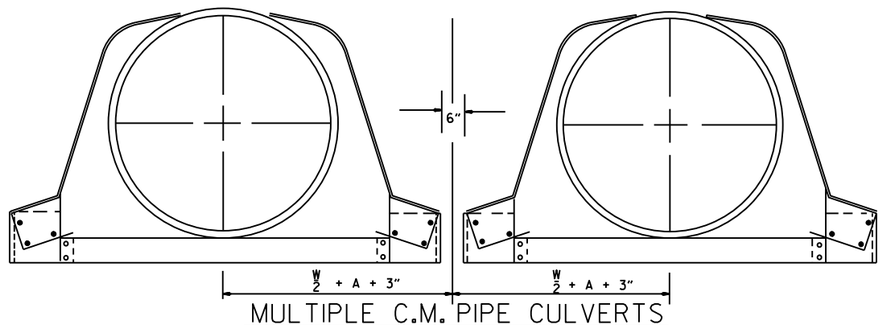
EQUIV. DIA.	SPAN	RISE	A 1" ±	B MAX.	H 1" ±	L 1½" ±	W 2" ±	S	GAUGE
	INCHES								
15"	17	13	7	9	6	19	30	2½:1	16
18"	21	15	7	10	6	23	36	2½:1	16
21"	24	18	8	12	6	28	42	2½:1	16
24"	28	20	9	14	6	32	48	2½:1	16
30"	35	24	10	16	6	39	60	2½:1	14
36"	42	29	12	18	8	46	75	2½:1	14
42"	49	33	13	21	9	53	85	2½:1	12
48"	57	38	18	26	12	63	90	2½:1	12
54"	64	43	18	30	12	70	102	2¼:1	12
60"	71	47	18	33	12	77	114	2¼:1	12

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

END SECTIONS FOR CORRUGATED METAL PIPE CULVERTS



MULTIPLE R.C. PIPE CULVERTS



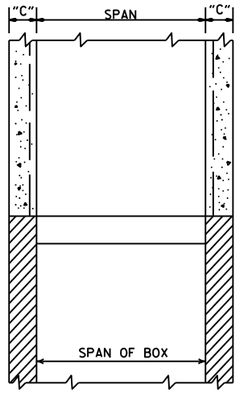
MULTIPLE C.M. PIPE CULVERTS

DATE	REVISION	FILMED
10-18-96	REVISED ASTM REF. TO AASHTO	
5-15-80	REVISED DISTANCE BETWEEN MULTIPLE R.C.P. F.E.S.	664-5-15-80
7-14-78	C.M. ARCH SIZES TO CONFORM WITH AASHTO SIZES	752-7-14-78
8-22-75	ADDED MULTIPLE PIPE CULVERTS	517-8-22-75
12-5-74	REMOVED NOTE RE REINF. FOR R.C. F.E.S.	500-12-5-74
5-24-73	CMP END SECTION, SHOW PIPE PAY LENGTH	627-5-24-73
10-2-72	REVISED AND REDRAWN	760-10-2-72

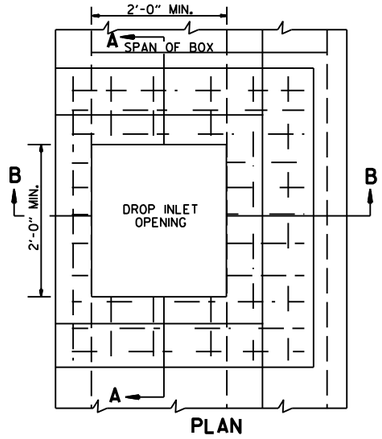
ARKANSAS STATE HIGHWAY COMMISSION

FLARED END SECTION

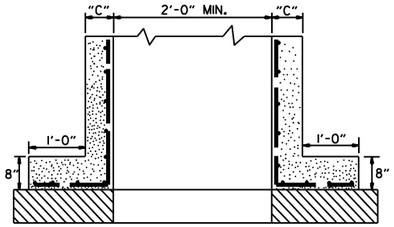
STANDARD DRAWING FES-2



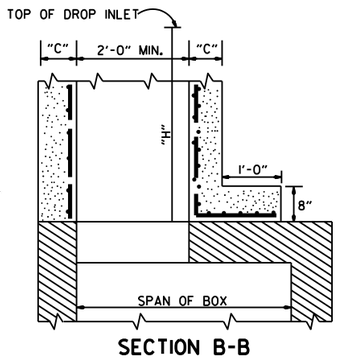
SECTION B-B



PLAN

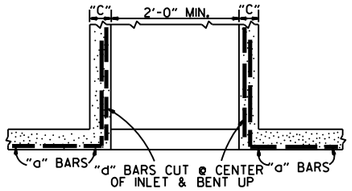


SECTION A-A

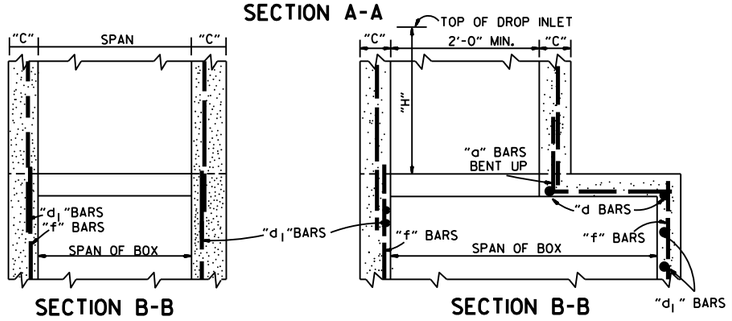


SECTION B-B

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



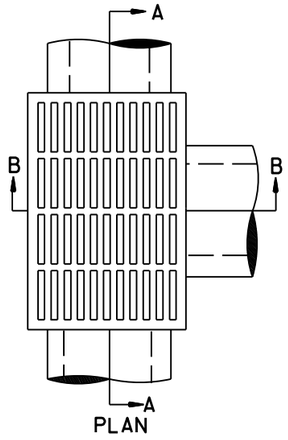
SECTION A-A



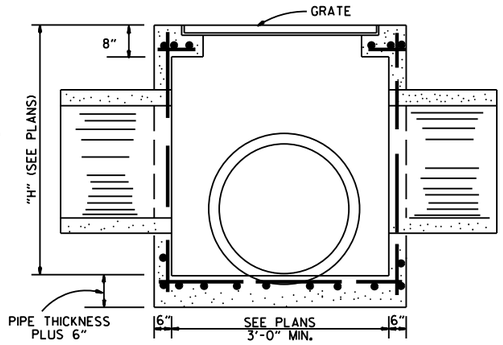
SECTION B-B SECTION B-B

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

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

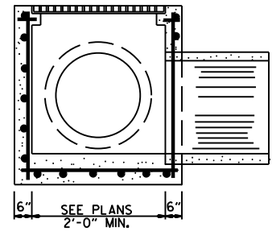


PLAN



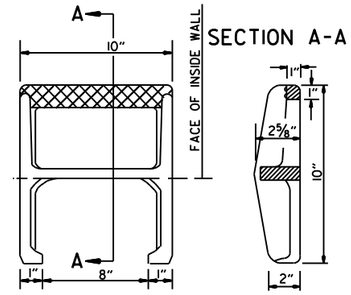
SECTION A-A

NOTE: REINF. BARS TO BE #4 BARS ON 6" CTRS. WITH 1½" MIN. COVER. THIS TYPE DROP INLET TO BE USED WHERE NOT SUBJECTED TO TRAFFIC.



SECTION B-B

DROP INLET (TYPE E)

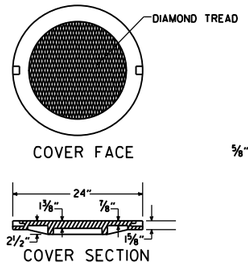


APPROX. WEIGHT = 11 LBS. (CAST IRON)

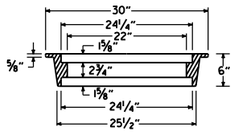
PLAN

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

DETAIL OF STEP FOR DROP INLET



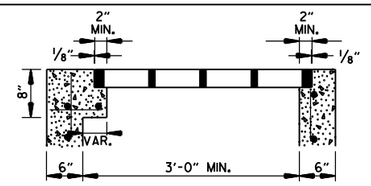
COVER SECTION



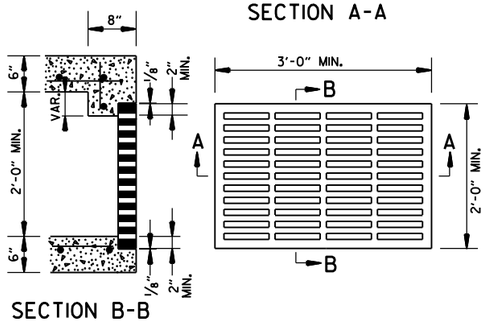
RING SECTION

APPROXIMATE TOTAL WEIGHT = 333 LBS.

HEAVY DUTY RING & COVER



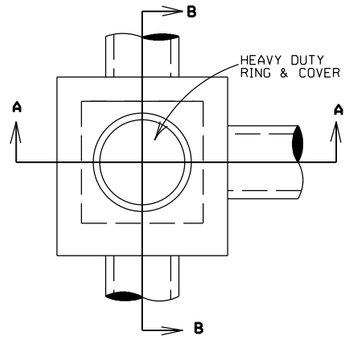
SECTION A-A



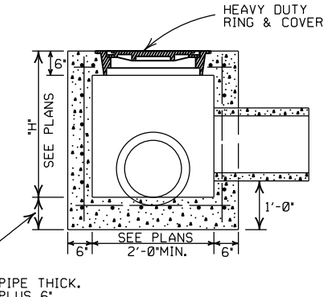
SECTION B-B

APPROXIMATE MINIMUM WATERWAY OPENING = 260 SQ. IN.

GRATE FOR TYPE E DROP INLET

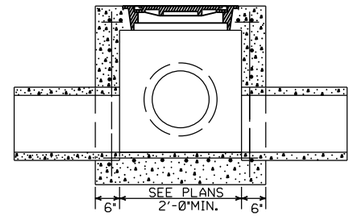


PLAN



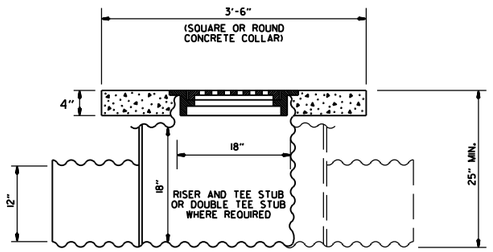
SECTION A-A

NOTE: REINF. BARS TO BE #4 BARS ON 6" CTRS. WITH 1½" MIN. COVER. THIS TYPE JUNCTION BOX TO BE USED WHERE NOT SUBJECTED TO TRAFFIC.

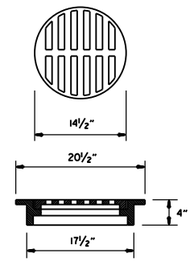


SECTION B-B

JUNCTION BOX (TYPE E)



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



USE NEENAH R-5901-C OR EQUIVALENT BICYCLE SAFE FRAME AND GRATE

DETAIL OF YARD DRAIN

GENERAL NOTES:

1. ALL EXPOSED CORNERS SHALL BE ¾" CHAMFERED.
2. STEPS SHALL BE INSTALLED ON 16" CENTERS ON ALL INLETS 4'-0" HIGH OR OVER, OR AS APPROVED BY THE ENGINEER.
3. EXPANSION JOINT MATERIAL SHALL BE ¾" PREFORMED FIBER.
4. GRATE OR GRATE AND FRAME SHALL BE CONSTRUCTED OF CAST IRON AND SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR GRAY IRON CASTINGS AASHTO M 105 CLASS 35B. GRATE MAY BE USED WITHOUT FRAME.
5. GRATE AND FRAME SHALL NOT BE PAINTED.
6. GRATE SHALL BE BICYCLE SAFE.
7. HEAVY DUTY RING SHALL ALWAYS BE INSTALLED WITH FLANGE ON TOP.
8. HEAVY DUTY RING AND COVER SHALL BE CONSTRUCTED OF CAST IRON AND SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR GRAY IRON CASTINGS AASHTO M105 CLASS 35B & AASHTO M306.
9. HEAVY DUTY RING AND COVER SHALL NOT BE PAINTED.
10. DIMENSIONS SHOWN FOR RING AND COVER ARE TYPICAL. THE CONTRACTOR MAY SUBSTITUTE SIMILAR CASTINGS WITH THE APPROVAL OF THE ENGINEER. REQUESTING APPROVAL FOR CASTING DESIGNS MAY BE MADE BY REFERRING TO PREVIOUSLY APPROVED DRAWINGS.

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

ARKANSAS STATE HIGHWAY COMMISSION

DETAILS OF DROP INLETS & JUNCTION BOXES

STANDARD DRAWING FPC-9

4'-0" LENGTH DROP INLET

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

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

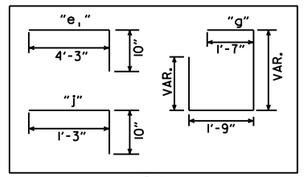
DROP INLET EXTENSION

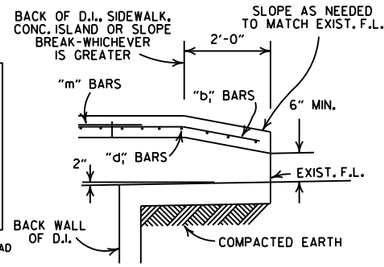
4'-0" CLASS A CONC. CU. YDS.	4'-0" REINF. STEEL POUNDS	8'-0" CLASS A CONC. CU. YDS.	8'-0" REINF. STEEL POUNDS
0.58	38	0.87	72
DEDUCT FROM QUANTITY COMPUTED FOR EACH EXTENSION ADDED.			
0.04	3		

DEDUCT FROM QUANTITY COMPUTED FOR EACH PIPE ENTERING INLET

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

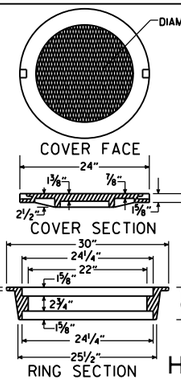
BAR DIAMETER





BACK OPENING

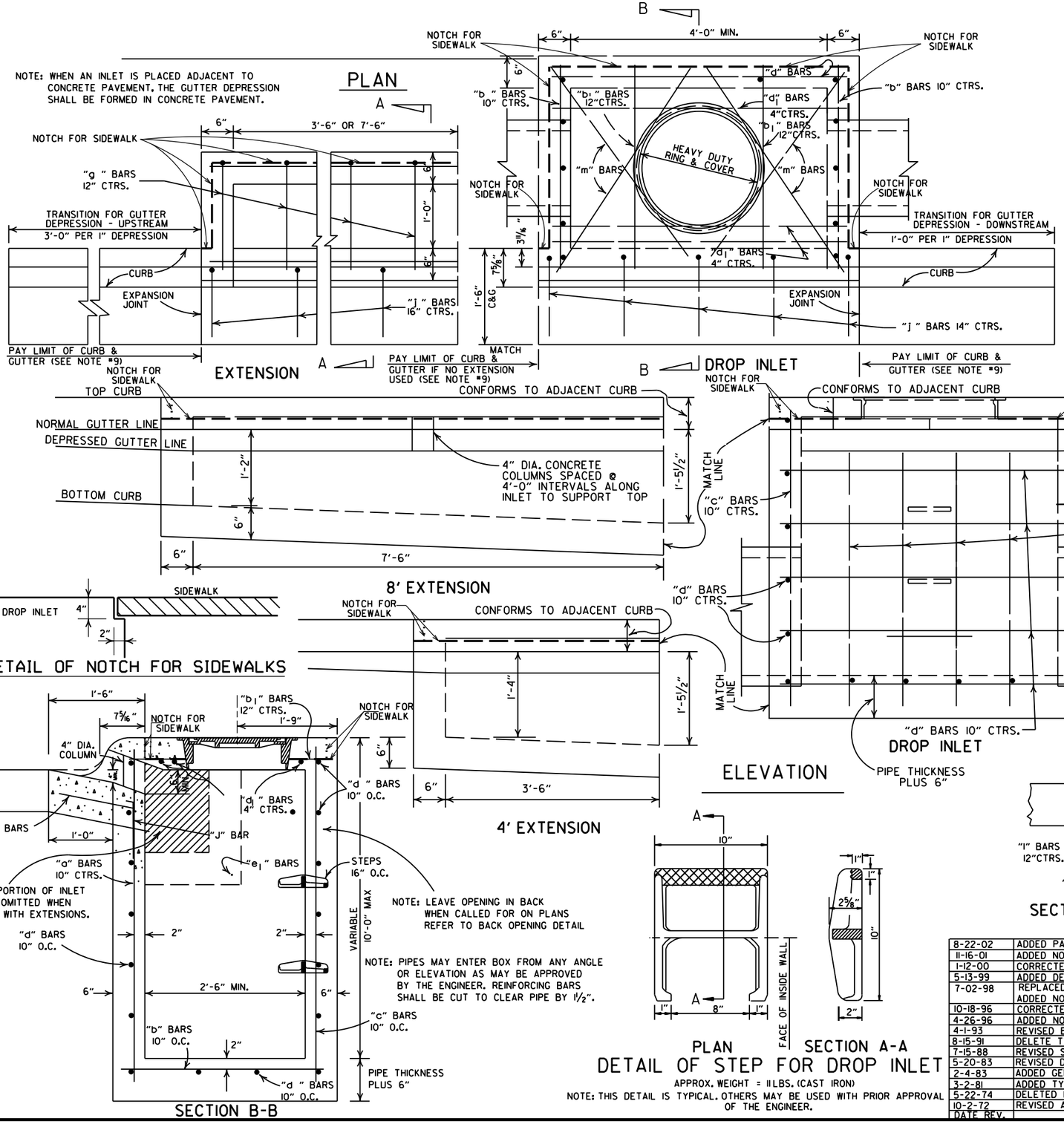
WHEN OPENING IN BACK IS CALLED FOR ON PLANS EXTEND OPENING AS SHOWN IN DETAIL. PAYMENT TO BE INCLUDED IN PRICE BID FOR DROP INLET (TYPE C).



APPROXIMATE TOTAL WEIGHT = 333 LBS.

HEAVY DUTY RING & COVER

GENERAL NOTES:
1. ALL EXPOSED CORNERS TO HAVE ¾" CHAMFER.
2. STEPS SHALL BE INSTALLED IN ALL INLETS 4'-0" HIGH AND OVER OF AS APPROVED BY THE ENGINEER.
3. ALL REINF. BARS SHALL BE #4 AND HAVE 1½" COVER.
4. DROP INLETS AND EXTENSION ON CURVED SECTIONS SHALL CONFORM TO THE CURVATURE OF THE CURB.
5. THIS DROP INLET MAY BE CONSTRUCTED ON NEW OR EXISTING R.C. BOX CULVERT AS SHOWN ON F.P.C.-9.
6. WHEN PLANS CALL FOR DROP INLET OVER 10'-0" HIGH, FLOOR AND WALLS SHALL BE CONSTRUCTED AS SHOWN FOR TYPE "RM" DROP INLET (FPC-9D).
7. HEAVY DUTY RING SHALL ALWAYS BE INSTALLED WITH FLANGE ON TOP.
8. DURING CONSTRUCTION OF THE ROADWAY THE CONTRACTOR SHALL MAINTAIN DRAINAGE INTO OR AROUND THE DROP INLET AS APPROVED BY THE ENGINEER.
9. PAYMENT FOR CURB AND/OR CURB AND GUTTER WITHIN THE LIMITS OF DROP INLETS AND DROP INLET EXTENSIONS SHALL BE CONSIDERED INCLUDED IN PAYMENT MADE FOR DROP INLETS AND/OR DROP INLET EXTENSIONS.
10. HEAVY DUTY RING AND COVER SHALL BE CONSTRUCTED OF CAST IRON AND SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR GRAY IRON CASTINGS AASHTO M105 CLASS 35B & AASHTO M306.
11. HEAVY DUTY RING AND COVER SHALL NOT BE PAINTED.
12. 4"×2" NOTCH SHALL BE FORMED IN ALL DROP INLETS TO SUPPORT SIDEWALK CONSTRUCTION. REFER TO DETAIL OF NOTCH FOR SIDEWALKS.
13. DIMENSIONS SHOWN FOR RING AND COVER ARE TYPICAL. THE CONTRACTOR MAY SUBSTITUTE SIMILAR CASTINGS WITH THE APPROVAL OF THE ENGINEER. REQUESTING APPROVAL FOR CASTING DESIGNS MAY BE MADE BY REFERRING TO PREVIOUSLY APPROVED DRAWINGS.



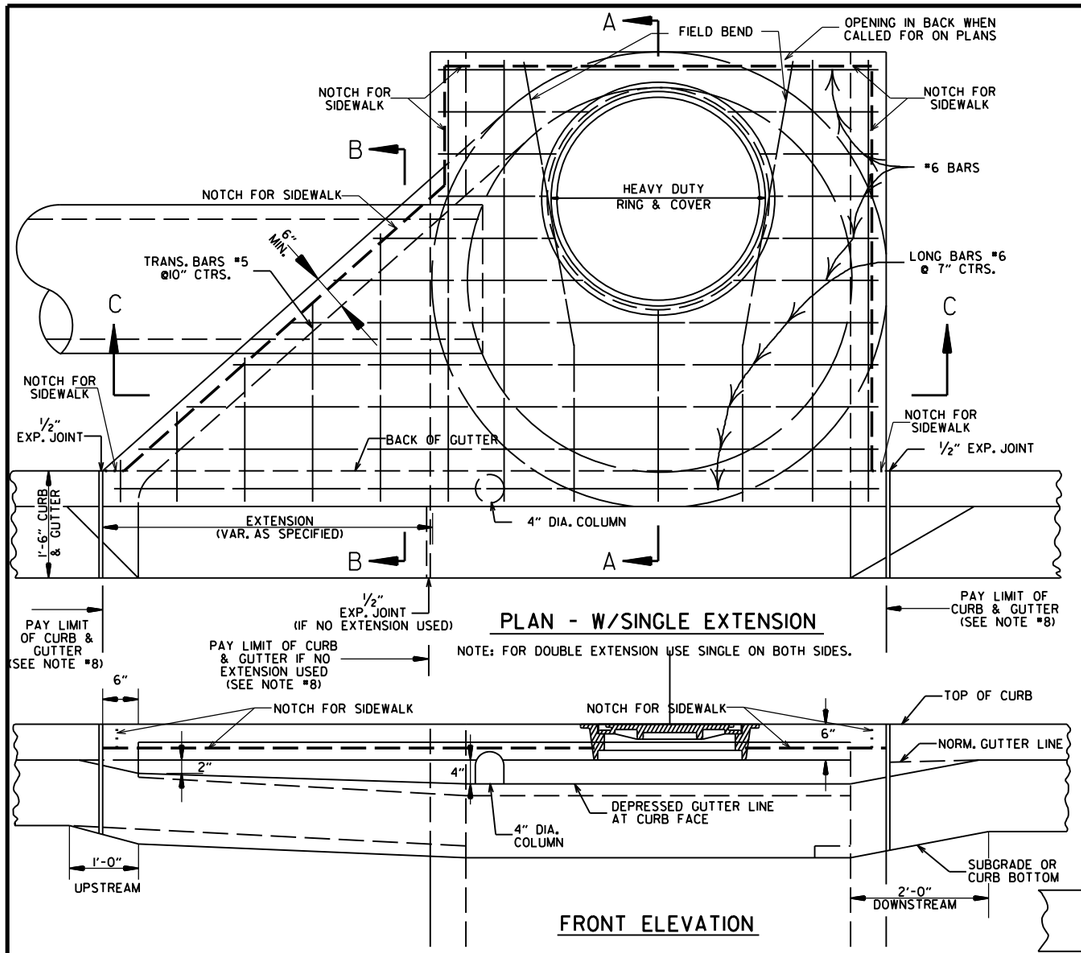
DATE REV.	REVISION	DATE FILMED
8-22-02	ADDED PAY LIMIT CURB NOTES TO SECTIONS A-A & B-B	
11-16-01	ADDED NOTE 13; REVISED SECTION B-B	
1-12-00	CORRECTED DIMENSION ON SECTION B-B & REVISED RING & COVER	
5-13-99	ADDED DETAIL OF NOTCH FOR SIDEWALKS	
7-02-98	REPLACED RING & COVER W/HEAVY DUTY RING & COVER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

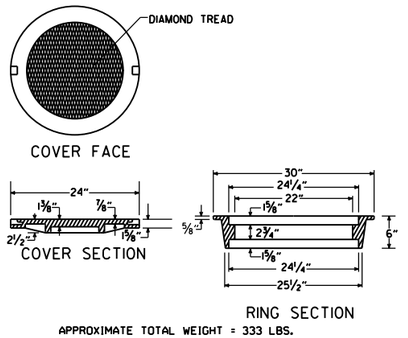
ARKANSAS STATE HIGHWAY COMMISSION

DETAILS OF DROP INLETS

(TYPE C)

STANDARD DRAWING FPC-9E

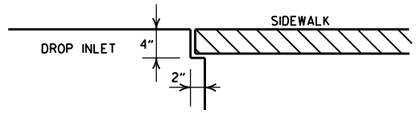




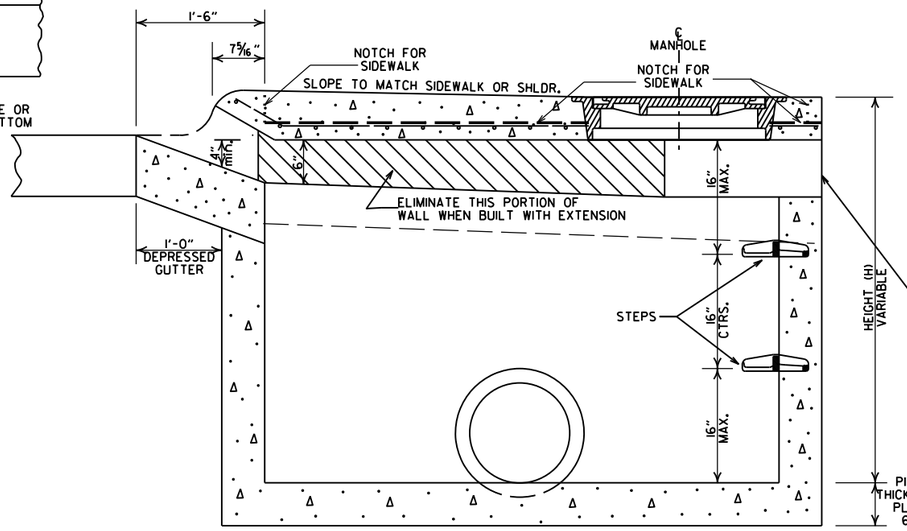
APPROXIMATE TOTAL WEIGHT = 333 LBS.

HEAVY DUTY RING & COVER

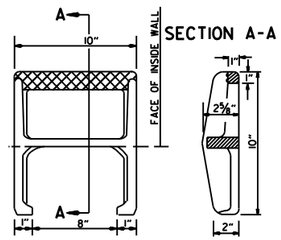
1. HEAVY DUTY RING AND COVER SHALL BE CONSTRUCTED OF CAST IRON AND SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR GRAY IRON CASTINGS AASHTO M105 CLASS 35B & AASHTO M306.
2. HEAVY DUTY RING AND COVER SHALL NOT BE PAINTED.
3. HEAVY DUTY RING SHALL ALWAYS BE INSTALLED WITH FLANGE ON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



DETAIL OF NOTCH FOR SIDEWALKS



SECTION A-A



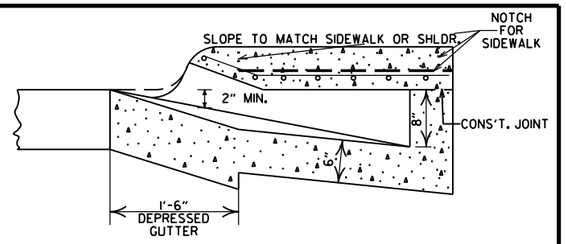
SECTION A-A

APPROX. WEIGHT = 11LBS. (CAST IRON)

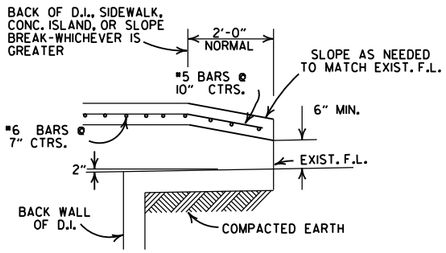
PLAN

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

DETAIL OF STEP FOR DROP INLET



SECTION B-B



BACK OPENING

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

GENERAL NOTES:

1. ALL EXPOSED CORNERS TO HAVE ¾" CHAMFER.
2. STEPS SHALL BE INSTALLED IN ALL INLETS 4'-0" HIGH AND OVER OR AS DIRECTED BY THE ENGINEER.
3. ALL REINFORCING BARS SHALL BE GRADE 60 AND HAVE MIN. 1½" COVER.
4. DROP INLETS AND EXTENSION ON CURVED SECTIONS SHALL CONFORM TO THE CURVATURE OF THE CURB.
5. 4" DIA. COLUMNS SPACED AT MAX. 4'-0" INTERVALS SHALL BE INSTALLED ALONG INLET AND EXTENSION TO SUPPORT TOP.
6. BASE AND INLET WALLS SHALL BE CAST MONOLITHICALLY.
7. THE THROAT SHALL BE CAST INTEGRALLY WITH THE GUTTER.
8. PAYMENT FOR CURB AND/OR CURB AND GUTTER WITHIN THE LIMITS OF DROP INLETS AND DROP INLET EXTENSIONS SHALL BE CONSIDERED INCLUDED IN PAYMENT MADE FOR DROP INLETS AND/OR DROP INLET EXTENSIONS.
9. PIPES MAY ENTER DROP INLET FROM ANY ANGLE OR ELEVATION AS MAY BE APPROVED BY THE ENGINEER.
10. APPROPRIATE SIZE TYPE C DROP INLETS MAY BE SUBSTITUTED FOR TYPE MO DROP INLETS AS APPROVED BY THE ENGINEER. PAYMENT TO BE AS DROP INLET (TYPE MO).
11. DURING CONSTRUCTION OF THE ROADWAY THE CONTRACTOR SHALL MAINTAIN DRAINAGE INTO OR AROUND THE DROP INLET AS APPROVED BY THE ENGINEER.
12. 4"x2" NOTCH SHALL BE FORMED IN ALL DROP INLETS TO SUPPORT SIDEWALK CONSTRUCTION. REFER TO DETAIL OF NOTCH FOR SIDEWALKS.
13. DIMENSIONS SHOWN FOR RING AND COVER ARE TYPICAL. THE CONTRACTOR MAY SUBSTITUTE SIMILAR CASTINGS WITH THE APPROVAL OF THE ENGINEER. REQUESTING APPROVAL FOR CASTING DESIGNS MAY BE MADE BY REFERRING TO PREVIOUSLY APPROVED DRAWINGS.

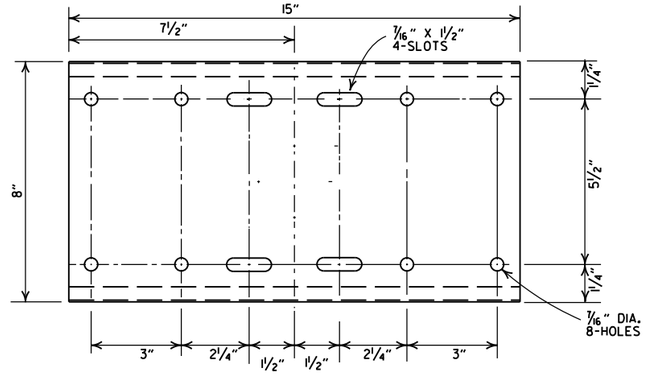
DIA. OF D.I.	DIA. OF OUTLET PIPE	MINIMUM WALL THICKNESS	
		CAST IN PLACE	PRECAST
4' I.D.	12" THRU 27"	6"	5"
5' I.D.	30" THRU 42"	8"	6"
6' I.D.	48" THRU 54"	8"	7"

DATE	REVISIONS	DATE FILMED
8-22-02	ADDED PAY LIMIT CURB NOTES TO SECTIONS A-A & B-B	
11-16-01	ADDED NOTE 13	
1-12-00	REVISED HEAVY DUTY RING & COVER	
5-13-99	ADDED NOTCH DETAIL FOR SIDEWALKS	
7-02-98	REP. NOTE 8, REM. PLAN DET., REV. PICTURE FOR NEW RING & COVER, ADDED HEAVY DUTY RING & COVER AND DETAIL OF STEP FOR DROP INLET	
4-26-96	ADDED NOTE 11, ADJ. OPENING DIMENSION	
10-12-95	CORRECTED #6 BAR SPACING	
7-20-95	CORRECTED DIAMETER OF D.I. IN BOX	
2-2-95	TYPE C TO MO (OPEN BACK DETAIL)	
11-3-94	REVISED GENERAL NOTES	11-3-94
4-1-93	REV. BACK OPEN. DETAIL & NOTE	4-1-93
8-16-91	REVISED NOTES 11,12 & ADDED BK.OPEN DETAIL	8-15-91
11-30-89	ADDED NOTE NO. 12	11-30-89
5-23-89	ADDED NOTE & MINIMUM WALL THICKNESS	513-5-23-89
7-15-88	ADDED EXTEND NOTE TO SECTION A-A	629-7-15-88
1-14-87	MODIFIED WALL THICKNESS	783-1-14-87
6-12-87	ISSUED	4-6-12-87

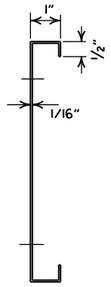
ARKANSAS STATE HIGHWAY COMMISSION

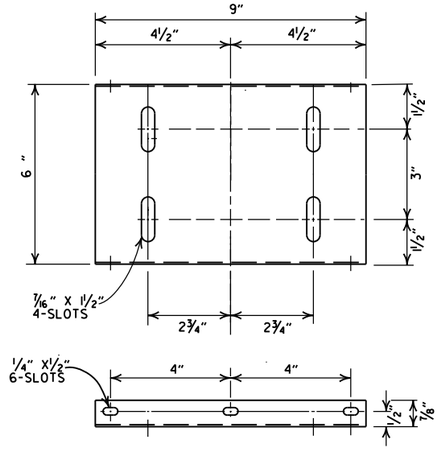
DETAILS OF DROP INLET (TYPE MO)

STANDARD DRAWING FPC-9M

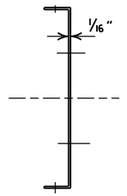


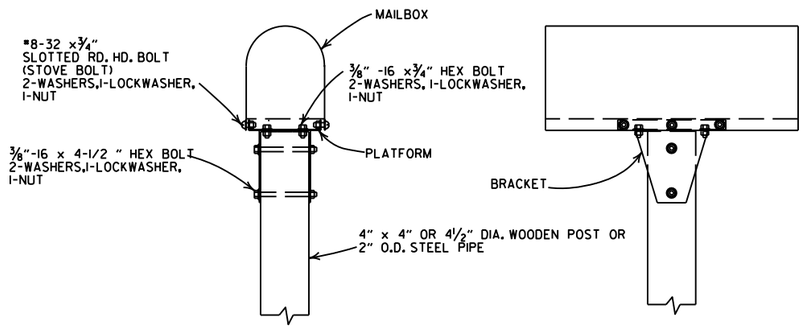
SHELF



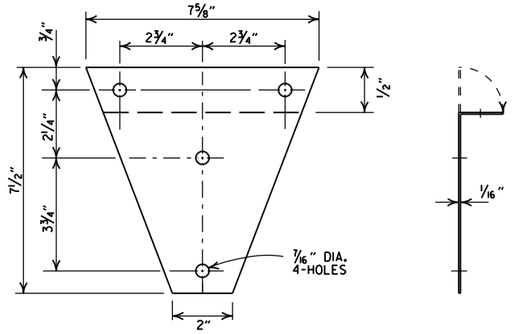


PLATFORM





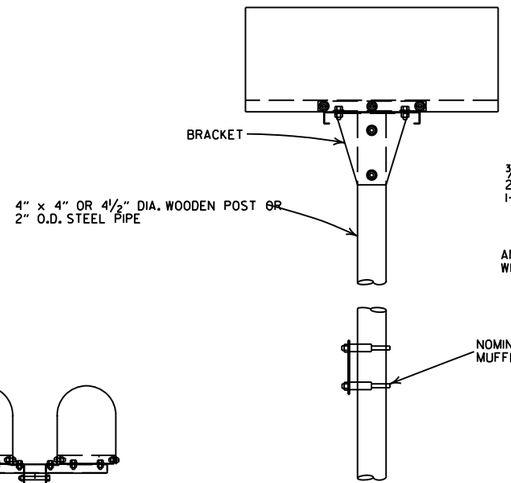
SINGLE INSTALLATION



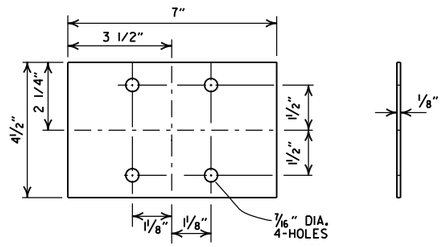
BRACKET

GENERAL NOTES

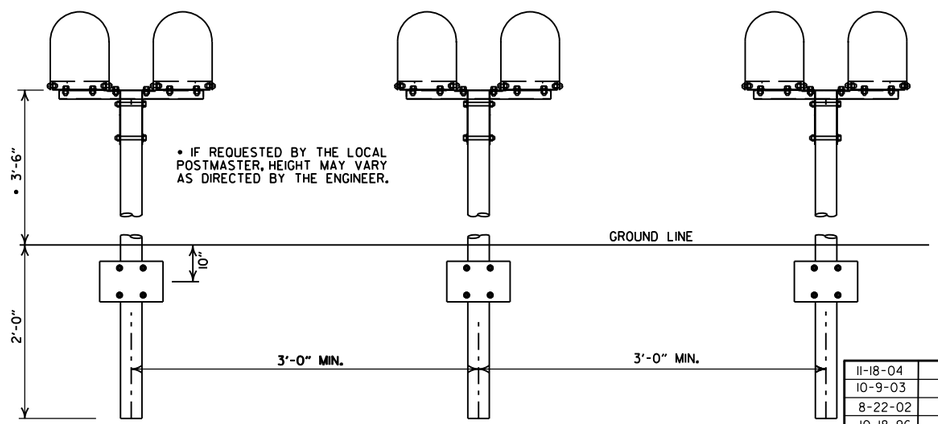
1. MAILBOX POSTS MAY BE WOOD OR METAL. WOOD POSTS SHALL BE PRESSURE TREATED FOR GROUND CONTACT IN ACCORDANCE WITH SECTION 637.02 OF THE STANDARD SPECIFICATIONS.
2. ANTI-TWIST PLATES SHALL BE USED ONLY ON METAL POSTS.
3. MAILBOX SHELF, BRACKET & PLATFORM SHALL BE GALVANIZED OR PAINTED STEEL, HOWEVER TREATED WOOD MAY BE USED WITH WOODEN POSTS. THE WOODEN SHELF, BRACKET & PLATFORM SHALL BE A MINIMUM OF ¾" THICK AND SHALL BE ASSEMBLED WITH BOLTS OF THE APPROPRIATE LENGTH WITH SIX 8 X¾" FLATHEAD WOOD SCREWS USED TO ATTACH THE MAILBOX TO THE PLATFORM.
4. THE MAILBOX SHELF AND PLATFORM THAT IS SHOWN IS FOR STANDARD SIZE MAILBOXES. THE SHELF AND PLATFORM SIZE SHALL BE MODIFIED TO FIT MAILBOXES OF A DIFFERENT SIZE.
5. METAL PIPE FOR MAILBOX SUPPORT SHALL BE 2" OUTSIDE DIAMETER STEEL WITH A WALL THICKNESS OF 0.145" AND A WEIGHT OF 2.72 LBS PER FT. OUTSIDE DIAMETER AND WEIGHT SHALL HAVE A TOLERANCE OF +/- 5% ACCORDING TO AASHTO M 181.
6. MAILBOX SUPPORT SYSTEM DIFFERING FROM THOSE SHOWN MAY BE USED, PROVIDED THEY ARE ON THE ARDOT QUALIFIED PRODUCTS LIST FOR MAILBOX SUPPORTS.



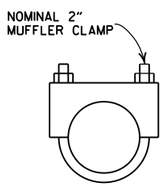
DOUBLE INSTALLATION



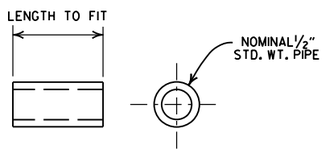
ANTI-TWIST PLATE



SPACING FOR MULTIPLE POST INSTALLATION



CLAMP



SPACER

DATE	FILMED	REVISION
11-18-04		REVISED NOTES
10-9-03		REVISED NOTE 6
8-22-02		REVISED NOTE 6
10-18-96		CORRECTED AASHTO
10-1-92		CORRECTED SPELLING
9-26-91		NEW PHONE NUMBER
8-15-91		ADDED NOTE
11-30-89		ADJUSTED HEIGHT & ADDED NOTE
2-16-89		DELETED SLOTS FROM SHELF & PLTF
11-17-88	10-1-92	ADJUSTED DIMENSIONS OF STEEL POSTS
7-15-88	20-7-15-88	ISSUED

ARKANSAS STATE HIGHWAY COMMISSION

MAILBOX DETAILS

STANDARD DRAWING MB-1

REINFORCED CONCRETE ARCH PIPE DIMENSIONS

EQUIV. DIA.	SPAN		RISE	
	AASHTO M 206	ARDOT NOMINAL	AASHTO M 206	ARDOT NOMINAL
INCHES	INCHES			
15	18	18	11	11
18	22	22	13½	14
21	26	26	15½	16
24	28½	29	18	18
30	36¼	36	22½	23
36	43⅜	44	26⅝	27
42	51⅛	51	31⅜	31
48	58½	59	36	36
54	65	65	40	40
60	73	73	45	45
72	88	88	54	54
84	102	102	62	62
90	115	115	72	72
96	122	122	77½	77
108	138	138	87⅛	87
120	154	154	96⅞	97
132	168¾	169	106½	107

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

REINFORCED CONCRETE HORIZONTAL ELLIPTICAL PIPE DIMENSIONS

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

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

CONSTRUCTION SEQUENCE

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

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

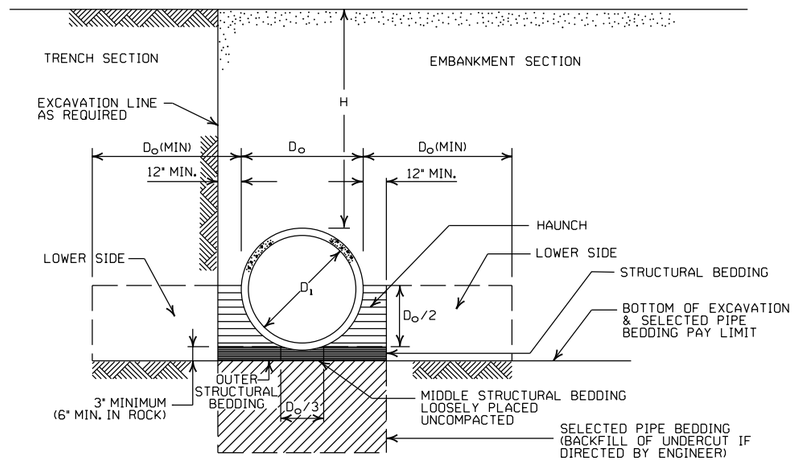
- LEGEND -

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

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

* SM-3 WILL NOT BE ALLOWED.

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



EMBANKMENT AND TRENCH INSTALLATIONS

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

GENERAL NOTES

1. CONCRETE PIPE CULVERT CONSTRUCTION SHALL CONFORM TO ARKANSAS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION), WITH APPLICABLE SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS. UNLESS OTHERWISE NOTED IN THE PLANS, SECTION AND SUBSECTION REFER TO THE STANDARD CONSTRUCTION SPECIFICATIONS.
2. CONCRETE PIPE CULVERT DESIGN SHALL CONFORM TO AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, FIFTH EDITION (2010) WITH 2010 INTERIMS.
3. ALL PIPE SHALL CONFORM TO SECTION 606. CIRCULAR R.C. PIPE CULVERTS SHALL CONFORM TO AASHTO M170, R.C. ARCH PIPE CULVERTS SHALL CONFORM TO AASHTO M206 AND HORIZONTAL ELLIPTICAL PIPE CULVERTS SHALL CONFORM TO AASHTO M207.
4. ALL PIPE SHALL BE PROTECTED DURING CONSTRUCTION BY A COVER SUFFICIENT TO PREVENT DAMAGE FROM PASSAGE OF EQUIPMENT.
5. THE MINIMUM TRENCH WIDTH SHALL BE THE OUTSIDE DIAMETER OF THE PIPE PLUS 24 INCHES. THE MAXIMUM ALLOWABLE TRENCH WIDTH SHALL BE THE MINIMUM WIDTH PRACTICABLE FOR WORKING CONDITIONS.
6. MULTIPLE PIPE CULVERTS SHALL BE INSTALLED WITH A MINIMUM CLEARANCE OF 24 INCHES BETWEEN STRINGS OF PIPE. REFER TO STD. DWG. FES-2 FOR MINIMUM CLEARANCE WHERE FLARED END SECTIONS ARE USED.
7. IMPERVIOUS MATERIAL SHOULD BE PLACED AS DIRECTED BY THE ENGINEER AT THE ENDS OF THE CULVERT TO PREVENT LOSS OF STRUCTURAL BEDDING WHEN PERVIOUS MATERIAL IS USED FOR STRUCTURAL BEDDING AND/OR BACKFILL.
8. NOT MORE THAN ONE LIFTING HOLE MAY BE PROVIDED IN CONCRETE PIPE TO FACILITATE HANDLING. HOLE MAY BE CAST IN PLACE, CUT INTO THE FRESH CONCRETE AFTER FORMS ARE REMOVED, OR DRILLED. THE HOLE SHALL NOT BE MORE THAN TWO INCHES IN DIAMETER OR TWO INCHES SQUARE. CUTTING OR DISPLACEMENT OF REINFORCEMENT WILL NOT BE PERMITTED. SPALLED AREAS AROUND THE HOLE SHALL BE REPAIRED IN A WORKMANLIKE MANNER. LIFTING HOLE SHALL BE FILLED WITH MORTAR, CONCRETE, OR OTHER METHOD AS APPROVED BY THE ENGINEER.
9. WHEN DIRECTED BY THE ENGINEER, UNSUITABLE MATERIAL THAT IS ENCOUNTERED AT THE BOTTOM OF THE EXCAVATED TRENCH (BELOW THE AREA IDENTIFIED AS "STRUCTURAL BEDDING" ABOVE) WILL BE EXCAVATED AND REPLACED WITH SELECTED PIPE BEDDING. THE QUANTITY OF MATERIAL REQUIRED TO BACKFILL THE UNDERCUT AREA UP TO THE SELECTED PIPE BEDDING PAY LIMIT DESIGNATED ABOVE WILL BE MEASURED AND PAID FOR AS "SELECTED PIPE BEDDING."
10. WHEN THE EXISTING MATERIAL EXCAVATED FOR THE PIPE TRENCH IS DETERMINED BY THE ENGINEER TO BE UNSUITABLE FOR BACKFILLING THE PIPE (ABOVE THE AREA IDENTIFIED ABOVE AS THE HAUNCH), BORROW MATERIAL OR MATERIAL FROM THE ROADWAY EXCAVATION WILL BE USED TO BACKFILL THE PIPE. IF SUITABLE MATERIAL IS NOT AVAILABLE, THE ENGINEER MAY AUTHORIZE THE USE OF "SELECTED PIPE BACKFILL."

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

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

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

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

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

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

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

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

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

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

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

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

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

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

ARKANSAS STATE HIGHWAY COMMISSION

CONCRETE PIPE CULVERT FILL HEIGHTS & BEDDING

STANDARD DRAWING PCC-1

CORRUGATED STEEL PIPE (ROUND)

PIPE DIAMETER (INCHES)	① MINUMUM COVER TOP OF PIPE TO TOP OF GROUND "H" (FEET)	MAX. FILL HEIGHT "H" ABOVE TOP OF PIPE (FEET)				
		METAL THICKNESS (INCHES)				
		0.064	0.079	0.109	0.138	0.168
2⅔ INCH BY ½ INCH CORRUGATION RIVETED, WELDED, OR HELICAL LOCK-SEAM						
12	1	84	91			
15	1	67	73			
18	1	56	61			
24	1	42	46	59		
30	2	34	36	47		
36	2		30	39	41	
42	2		43	67	70	73
48	2		37	58	61	64
② 3 INCH BY 1 INCH OR 5 INCH BY 1 INCH CORRUGATION RIVETED, WELDED, BOLTED, OR HELICAL LOCK-SEAM						
36	1	48	60	88	111	118
42	1	41	51	72	90	102
48	1	36	45	64	77	85
54	2	32	40	59	71	79
60	2	29	36	53	64	71
66	2	26	33	47	58	64
72	2	24	30	44	53	59
78	2		28	41	49	54
84	2		26	38	45	51
90	2		24	35	43	45
96	2		22	33	40	44
102	2			31	38	42
108	2			30	35	39
114	2			28	34	37
120	2			27	32	35

CORRUGATED ALUMINUM PIPE (ROUND)

PIPE DIAMETER (INCHES)	① MINUMUM COVER TOP OF PIPE TO TOP OF GROUND "H" (FEET)	MAX. FILL HEIGHT "H" ABOVE TOP OF PIPE (FEET)				
		METAL THICKNESS IN INCHES				
		0.060	0.075	0.105	0.135	0.164
		2 ⅔ INCH BY ½ INCH CORRUGATION RIVETED OR HELICAL LOCK-SEAM				
12	1	45	45			
18	2	30	30	52		
24	2	22	22	39	41	
30	2		18	31	32	34
36	2.5		15	26	27	28
42	2			43	43	44
48	2			40	41	43
54	2			35	37	38
60	2				33	34
66	2					31
72	2					29

CONSTRUCTION SEQUENCE

1. PLACE STRUCTURAL BEDDING MATERIAL TO GRADE. DO NOT COMPACT.
2. INSTALL PIPE TO GRADE.
3. COMPACT STRUCTURAL BEDDING OUTSIDE THE MIDDLE THIRD OF THE PIPE.
4. COMPLETE STRUCTURAL BACKFILL OPERATION BY WORKING FROM SIDE TO SIDE OF THE PIPE. THE SIDE TO SIDE STRUCTURAL BACKFILL DIFFERENTIAL SHALL NOT EXCEED 24 INCHES OR 1/3 THE SIZE OF THE PIPE, WHICHEVER IS LESS.

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

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

③ SM-3 WILL NOT BE ALLOWED.

EQUIVALENT METAL THICKNESSES AND GAUGES

METAL THICKNESS IN INCHES			GAUGE NUMBER
STEEL			
ZINC COATED	UNCOATED	ALUMINUM	
0.064	0.0598	0.060	16
0.079	0.0747	0.075	14
0.109	0.1046	0.105	12
0.138	0.1345	0.135	10
0.168	0.1644	0.164	8

CORRUGATED METAL PIPE ARCHES

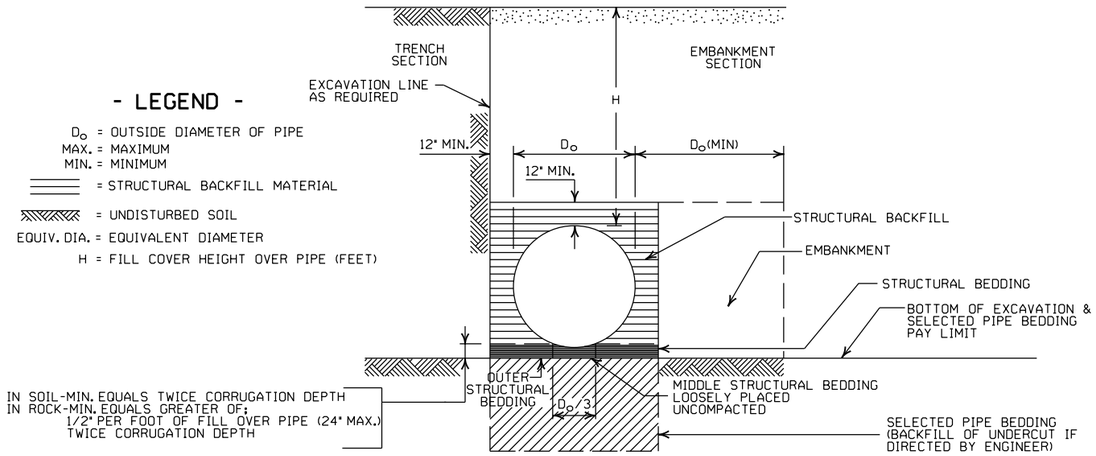
EQUIV. DIA. (INCHES)	PIPE DIMENSION SPAN X RISE (INCHES)	MINUMUM CORNER RADIUS (INCHES)	STEEL				ALUMINUM			
			MIN. THICKNESS REQUIRED INCHES	① MIN. HEIGHT OF FILL, "H" (FT.)	MAX. HEIGHT OF FILL, "H" (FT.)		MIN. THICKNESS REQUIRED INCHES	① MIN. HEIGHT OF FILL, "H" (FT.)	MAX. HEIGHT OF FILL, "H" (FT.)	
				INSTALLATION	INSTALLATION			INSTALLATION	INSTALLATION	
				TYPE 1	TYPE 1			TYPE 1	TYPE 1	
			2 ⅔ INCH BY ½ INCH CORRUGATION RIVETED, WELDED, OR HELICAL LOCK-SEAM				2 ⅔ INCH BY ½ INCH CORRUGATION RIVETED OR HELICAL LOCK-SEAM			
15	17x13	3	0.064	2	15		0.060	2	15	
18	21x15	3	0.064	2	15		0.060	2	15	
21	24x18	3	0.064	2.25	15		0.060	2.25	15	
24	28x20	3	0.064	2.5	15		0.075	2.5	15	
30	35x24	3	0.079	3	12		0.075	3	12	
36	42x29	3½	0.079	3	12		0.105	3	12	
42	49x33	4	0.079	3	12		0.105	3	12	
48	57x38	5	0.109	3	13		0.135	3	13	
54	64x43	6	0.109	3	14		0.135	3	14	
60	71x47	7	0.138	3	15		0.164	3	15	
66	77x52	8	0.168	3	15					
72	83x57	9	0.168	3	15					
			② 3 INCH BY 1 INCH OR 5 INCH BY 1 INCH CORRUGATION RIVETED, WELDED, OR HELICAL LOCK-SEAM							
				INSTALLATION		INSTALLATION				
				TYPE 2	TYPE 1	TYPE 2	TYPE 1			
36	40x31	5	0.079	3	2	12	15			
42	46x36	6	0.079	3	2	13	15			
48	53x41	7	0.079	3	2	13	15			
54	60x46	8	0.079	3	2	13	15			
60	66x51	9	0.079	3	2	13	15			
66	73x55	12	0.079	3	2	15	15			
72	81x59	14	0.079	3	2	15	15			
78	87x63	14	0.079	3	2	15	15			
84	95x67	16	0.109	3	2	15	15			
90	103x71	16	0.109	3	2	15	15			
96	112x75	18	0.109	3	2	15	15			
102	117x79	18	0.109	3	2	15	15			
108	128x83	18	0.138	3	2	15	15			

① FOR MINIMUM COVER VALUES, "H" SHALL INCLUDE A MINIMUM 12" OF PAVEMENT AND/OR BASE.

② WHERE THE STANDARD 2 2/3"x ½" CORRUGATION AND GAUGE IS SPECIFIED FOR A GIVEN DIAMETER, A PIPE OF THE SAME DIAMETER WITH A 3" x 1" OR 5" x 1" CORRUGATION MAY BE SUBSTITUTED, PROVIDING IT IS GAUGED FOR A FILL HEIGHT CONDITION EQUAL TO OR GREATER THAN THE MAXIMUM FILL HEIGHT CONDITION FOR THE SPECIFIED GAUGE AND CORRUGATION.

- LEGEND -

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



EMBANKMENT AND TRENCH INSTALLATIONS

1. STRUCTURAL BACKFILL, EMBANKMENT, AND OUTER STRUCTURAL BEDDING MATERIAL SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OR CLASS OF MATERIAL USED.
2. INSTALLATION TYPE 1 OR 2 MAY BE USED FOR CORRUGATED STEEL OR ALUMINUM PIPE (ROUND).
3. INSTALALTION TYPE 1 SHALL BE USED FOR CORRUGATED STEEL OR ALUMINUM PIPE ARCHES WITH 2⅔" X ½" CORRUGATION.
4. INSTALLATION TYPE 1 OR 2 MAY BE USED FOR CORRUGATED STEEL OR ALUMINUM PIPE ARCHES WITH 3" X 1" OR 5" X 1" CORRUGATION.

GENERAL NOTES

1. METAL PIPE CULVERT CONSTRUCTION SHALL CONFORM TO ARKANSAS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION), WITH APPLICABLE SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS. UNLESS OTHERWISE NOTED IN THE PLANS, SECTION AND SUBSECTION REFER TO THE STANDARD CONSTRUCTION SPECIFICATIONS.
2. METAL PIPE CULVERT DESIGN SHALL CONFORM TO AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, FIFTH EDITION (2010) WITH 2010 INTERIMS.
3. METAL PIPE CULVERT MATERIALS AND INSTALLATIONS SHALL CONFORM TO SECTION 606 AND JOB SPECIAL PROVISION "METAL PIPE".
4. ALL PIPE SHALL BE PROTECTED DURING CONSTRUCTION BY A COVER SUFFICIENT TO PREVENT DAMAGE FROM PASSAGE OF EQUIPMENT.
5. THE MINIMUM TRENCH WIDTH SHALL BE THE OUTSIDE DIAMETER OF THE PIPE PLUS 24 INCHES. THE MAXIMUM ALLOWABLE TRENCH WIDTH SHALL BE THE MINIMUM WIDTH PRACTICABLE FOR WORKING CONDITIONS.
6. MULTIPLE PIPE CULVERTS SHALL BE INSTALLED WITH A MINIMUM CLEARANCE OF 24 INCHES BETWEEN STRINGS OF PIPE. REFER TO STD. DWG. FES-2 FOR MINIMUM CLEARANCE WHERE FLARED END SECTIONS ARE USED.
7. IMPERVIOUS MATERIAL SHOULD BE PLACED AS DIRECTED BY THE ENGINEER AT THE ENDS OF THE CULVERT TO PREVENT LOSS OF STRUCTURAL BEDDING WHEN PERVIOUS MATERIAL IS USED FOR STRUCTURAL BEDDING AND/OR BACKFILL.
8. WHEN DIRECTED BY THE ENGINEER, UNSUITABLE MATERIAL THAT IS ENCOUNTERED AT THE BOTTOM OF THE EXCAVATED TRENCH (BELOW THE AREA IDENTIFIED AS "STRUCTURAL BEDDING" ABOVE) WILL BE EXCAVATED AND REPLACED WITH SELECTED PIPE BEDDING. THE QUANTITY OF MATERIAL REQUIRED TO BACKFILL THE UNDERCUT AREA UP TO THE SELECTED PIPE BEDDING PAY LIMIT DESIGNATED ABOVE WILL BE MEASURED AND PAID FOR AS "SELECTED PIPE BEDDING."
9. WHEN THE EXISTING MATERIAL EXCAVATED FOR THE PIPE TRENCH IS DETERMINED BY THE ENGINEER TO BE UNSUITABLE FOR BACKFILLING THE PIPE (ABOVE THE AREA IDENTIFIED AS STRUCTURAL BACKFILL), BORROW MATERIAL OR MATERIAL FROM THE ROADWAY EXCAVATION WILL BE USED TO BACKFILL THE PIPE. IF SUITABLE MATERIAL IS NOT AVAILABLE, THE ENGINEER MAY AUTHORIZE THE USE OF "SELECTED PIPE BACKFILL."

DATE	REVISION	DATE FILMED
2-27-14	REVISED GENERAL NOTE 1.	
12-15-11	REVISED FOR LRFD DESIGN SPECS	
3-30-00	REVISED INSTALLATIONS	
11-06-97	ISSUED	

ARKANSAS STATE HIGHWAY COMMISSION

METAL PIPE CULVERT FILL HEIGHTS & BEDDING

STANDARD DRAWING PCM-1

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

• AGGREGATE BASE COURSE (CLASS 4, 5, 6, OR 7) MAY BE USED IN LIEU OF SELECTED MATERIAL.

SM3 WILL NOT BE ALLOWED.

•• STRUCTURAL BEDDING MATERIAL SHALL HAVE A MAXIMUM PARTICLE SIZE OF 1INCH. STRUCTURAL BACKFILL MATERIAL SHALL BE FREE OF ORGANIC MATERIAL, STONES LARGER THAN 1.50 INCH IN GREATEST DIMENSION, OR FROZEN LUMPS.

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

MULTIPLE INSTALLATION OF HIGH DENSITY POLYETHYLENE PIPES

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

MINIMUM TRENCH WIDTH BASED ON FILL HEIGHT "H"

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

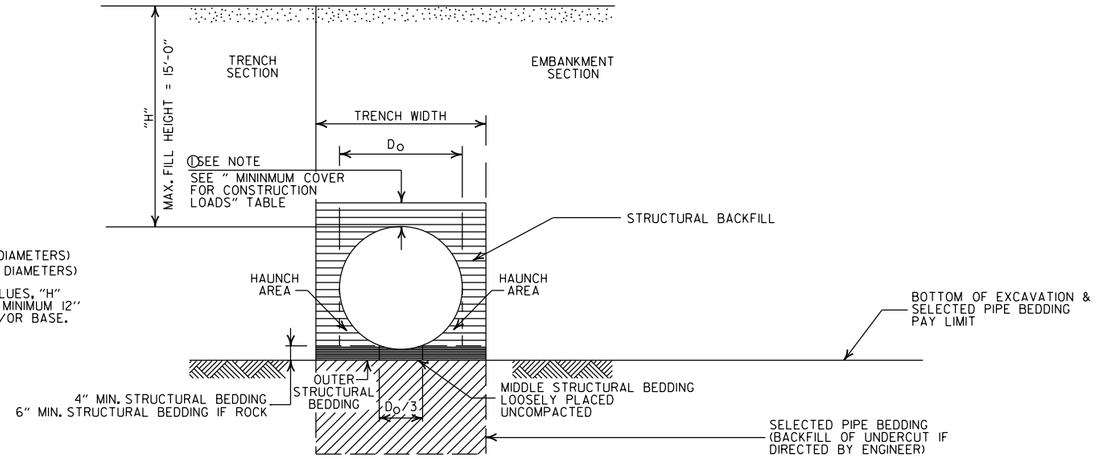
①NOTE:
18" MIN. (18" - 30" DIAMETERS)
24" MIN. (36" - 48" DIAMETERS)

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

MINIMUM COVER FOR CONSTRUCTION LOADS

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

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



TYPE 2 EMBANKMENT AND TRENCH INSTALLATIONS

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

CONSTRUCTION SEQUENCE

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

GENERAL NOTES

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

- LEGEND -

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

= STRUCTURAL BACKFILL MATERIAL

= UNDISTURBED SOIL

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

ARKANSAS STATE HIGHWAY COMMISSION

PLASTIC PIPE CULVERT (HIGH DENSITY POLYETHYLENE)

STANDARD DRAWING PCP-1

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

• AGGREGATE BASE COURSE (CLASS 4, 5, 6, OR 7) MAY BE USED IN LIEU OF SELECTED MATERIAL.

SM3 WILL NOT BE ALLOWED.

•• STRUCTURAL BEDDING MATERIAL SHALL HAVE A MAXIMUM PARTICLE SIZE OF 1INCH. STRUCTURAL BACKFILL MATERIAL SHALL BE FREE OF ORGANIC MATERIAL, STONES LARGER THAN 1.50 INCH IN GREATEST DIMENSION, OR FROZEN LUMPS.

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

MINIMUM TRENCH WIDTH BASED ON FILL HEIGHT "H"

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

MULTIPLE INSTALLATION OF PVC PIPES

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

MAXIMUM FILL HEIGHT BASED ON STRUCTURAL BACKFILL

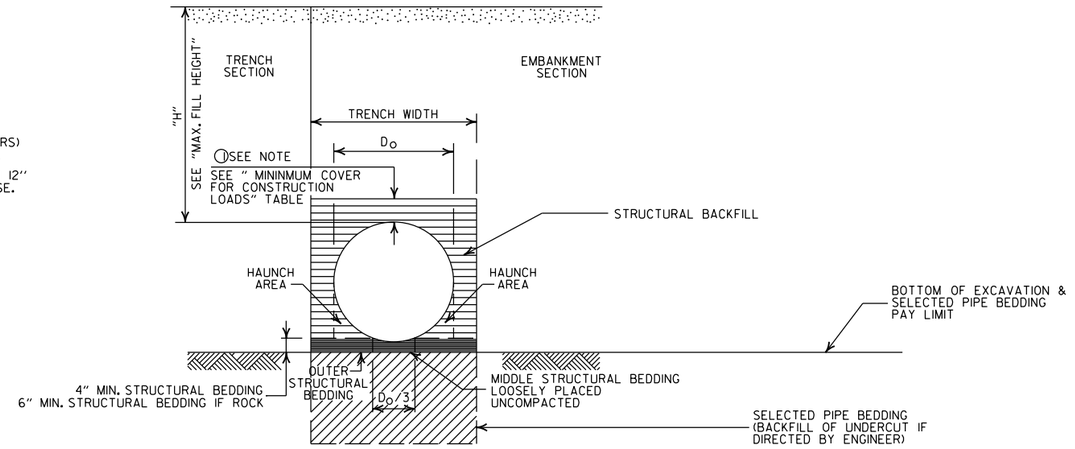
PIPE DIAMETER	"H"
18"	45'-0"
24"	45'-0"
30"	40'-0"
36"	40'-0"

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

MINIMUM COVER FOR CONSTRUCTION LOADS

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

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



TYPE 2 EMBANKMENT AND TRENCH INSTALLATIONS

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

CONSTRUCTION SEQUENCE

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

GENERAL NOTES

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

- LEGEND -

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

= STRUCTURAL BACKFILL MATERIAL
= UNDISTURBED SOIL

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

ARKANSAS STATE HIGHWAY COMMISSION

PLASTIC PIPE CULVERT (PVC F949)

STANDARD DRAWING PCP-2

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

*SM3 WILL NOT BE ALLOWED.

** STRUCTURAL BEDDING MATERIAL SHALL HAVE A MAXIMUM PARTICLE SIZE OF 1INCH. STRUCTURAL BACKFILL MATERIAL SHALL BE FREE OF ORGANIC MATERIAL, STONES LARGER THAN 1.50 INCH IN GREATEST DIMENSION, OR FROZEN LUMPS.

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

MULTIPLE INSTALLATION OF POLYPROPYLENE PIPES

PIPE DIAMETER	CLEAR DISTANCE BETWEEN PIPES
18"	1'-6"
24"	2'-0"
30"	2'-6"
36"	3'-0"
42"	3'-6"
48"	4'-0"
60"	5'-0"

MINIMUM TRENCH WIDTH BASED ON FILL HEIGHT "H"

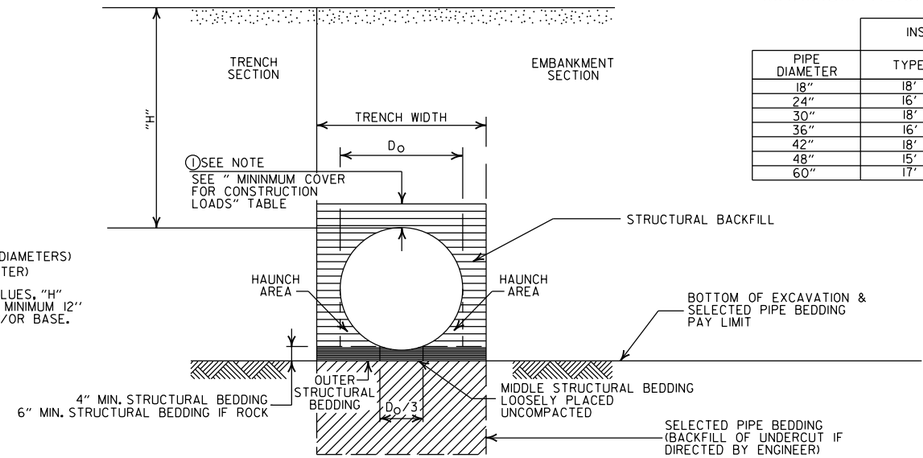
PIPE DIAMETER	TRENCH WIDTH (FEET)	
	"H" < 10'-0"	"H" >OR= 10'-0"
18"	4'-6"	4'-6"
24"	5'-0"	6'-0"
30"	5'-6"	7'-6"
36"	6'-0"	9'-0"
42"	7'-0"	10'-6"
48"	8'-0"	12'-0"
60"	10'-0"	15'-0"

①NOTE:
12" MIN. (18" - 42" DIAMETERS)
24" MIN. (60" DIAMETER)

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

MAXIMUM HEIGHT OF FILL "H"

PIPE DIAMETER	INSTALLATION TYPE	
	TYPE 1	TYPE 2
18"	18'	14'
24"	16'	12'
30"	18'	14'
36"	16'	12'
42"	18'	13'
48"	15'	11'
60"	17'	12'



MINIMUM COVER FOR CONSTRUCTION LOADS

PIPE DIAMETER	② MIN. COVER (FEET) FOR INDICATED CONSTRUCTION LOADS			
	18.0-50.0 (KIPS)	50.0-75.0 (KIPS)	75.0-110.0 (KIPS)	110.0-150.0 (KIPS)
36" OR LESS	2'-0"	2'-6"	3'-0"	3'-0"
42" OR GREATER	3'-0"	3'-0"	3'-6"	4'-0"

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

EMBANKMENT AND TRENCH INSTALLATIONS

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

CONSTRUCTION SEQUENCE

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

GENERAL NOTES

1. PIPE SHALL CONFORM TO AASHTO M330, TYPE S, INSTALLATION SHALL CONFORM TO JOB SPECIAL PROVISION "PLASTIC PIPE" AND SECTION 606 OF THE STANDARD SPECIFICIATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION).
2. PLASTIC PIPE CULVERT DESIGN SHALL CONFORM TO AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SIXTH EDITION (2012) WITH 2013 INTERIMS.
3. THE MAXIMUM ALLOWABLE TRENCH WIDTH SHALL BE THE MINIMUM WIDTH PLUS A SUFFICIENT WIDTH TO ENSURE WORKING ROOM TO PROPERLY AND SAFELY PLACE AND COMPACT HAUNCHING AND OTHER BACKFILL MATERIAL.
4. IMPERVIOUS MATERIAL SHOULD BE PLACED AS DIRECTED BY THE ENGINEER AT THE ENDS OF THE CULVERT TO PREVENT LOSS OF STRUCTURAL BEDDING WHEN PERVIOUS MATERIAL IS USED FOR STRUCTURAL BEDDING AND/OR BACKFILL.
5. WHEN DIRECTED BY THE ENGINEER, UNSUITABLE MATERIAL THAT IS ENCOUNTERED AT THE BOTTOM OF THE EXCAVATED TRENCH (BELOW THE AREA IDENTIFIED AS "STRUCTURAL BEDDING" ABOVE) WILL BE EXCAVATED AND REPLACED WITH SELECTED PIPE BEDDING. THE QUANTITY OF MATERIAL REQUIRED TO BACKFILL THE UNDERCUT AREA UP TO THE SELECTED PIPE BEDDING PAY LIMIT DESIGNATED ABOVE WILL BE MEASURED AND PAID FOR AS "SELECTED PIPE BEDDING."
6. WHEN THE EXISTING MATERIAL EXCAVATED FOR THE PIPE TRENCH IS DETERMINED BY THE ENGINEER TO BE UNSUITABLE FOR BACKFILLING THE PIPE (ABOVE THE AREA IDENTIFIED ABOVE AS STRUCTURAL BACKFILL), BORROW MATERIAL OR MATERIAL FROM THE ROADWAY EXCAVATION WILL BE USED TO BACKFILL THE PIPE. IF SUITABLE MATERIAL IS NOT AVAILABLE, THE ENGINEER MAY AUTHORIZE THE USE OF "SELECTED PIPE BACKFILL."
7. FOR PIPE TYPES THAT ARE NOT SMOOTH ON THE OUTSIDE (CORRUGATED OR PROFILE WALLS), BACKFILL GRADATIONS SHOULD BE SELECTED THAT WILL PERMIT THE FILLING OF THE CORRUGATION OR PROFILE VALLEY.
8. POLYPROPYLENE PIPES OF DIAMETERS OTHER THAN SHOWN WILL NOT BE ALLOWED.
9. JOINTS FOR POLYPROPYLENE PIPE SHALL MEET THE REQUIREMENTS FOR SOIL TIGHTNESS AS SPECIFIED IN SECTION 26.4.2.4 AND 30.4.2 OF THE AASHTO LRFD BRIDGE CONSTRUCTION SPECIFICATIONS 3RD EDITION (2010) WITH 2012 INTERIMS. JOINTS SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.

- LEGEND -

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

= STRUCTURAL BACKFILL MATERIAL

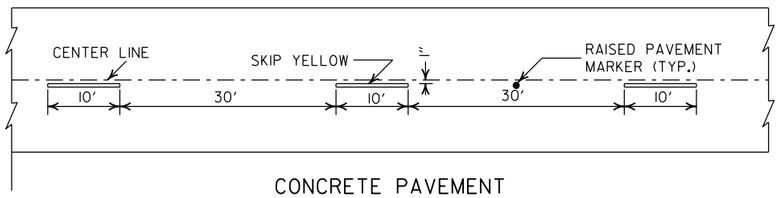
= UNDISTURBED SOIL

DATE	REVISION	DATE FILMED
02-27-20	REVISED	
11-07-19	ISSUED	

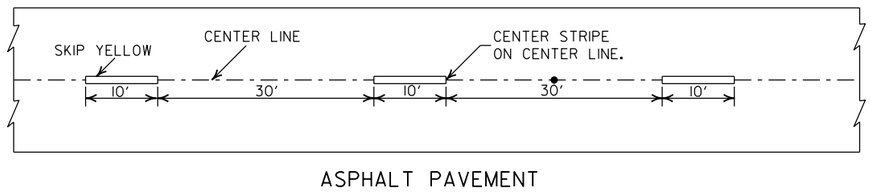
ARKANSAS STATE HIGHWAY COMMISSION

PLASTIC PIPE CULVERT (POLYPROPYLENE)

STANDARD DRAWING PCP-3

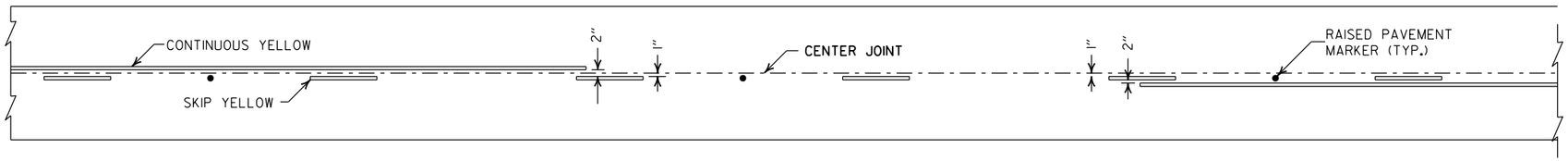


CONCRETE PAVEMENT

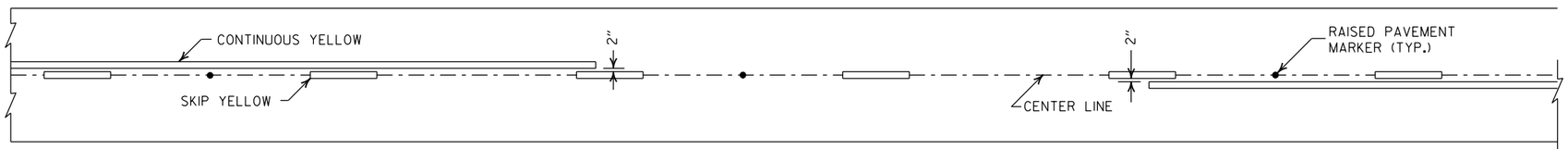


ASPHALT PAVEMENT

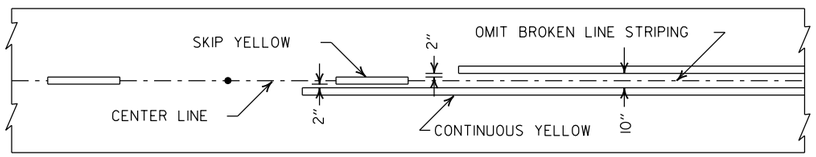
BROKEN LINE STRIPING



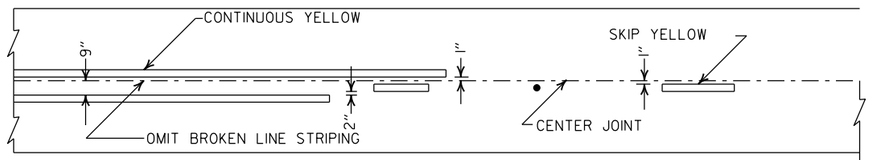
SOLID LINE STRIPING ON CONCRETE PAVEMENT



SOLID LINE STRIPING ON ASPHALT PAVEMENT

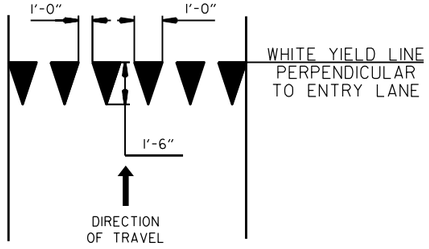


ASPHALT PAVEMENT

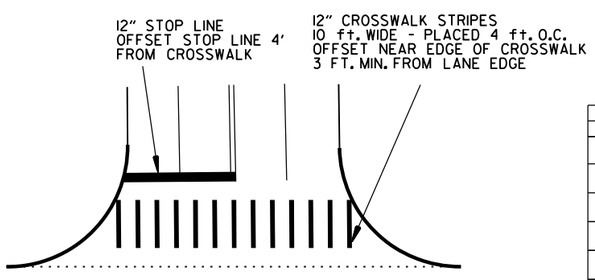


CONCRETE PAVEMENT

STRIPING AT ADJACENT NO PASSING LANES

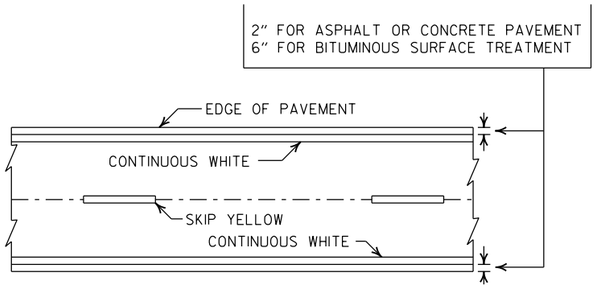


YIELD LINE DETAIL



CROSSWALK AND STOP LINE DETAILS

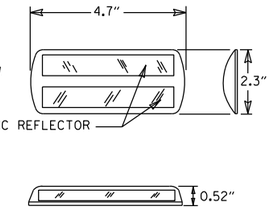
NOTES:
1. REFER TO THE STRIPING DETAILS FOR PAVEMENT MARKING LINE WIDTHS.
2. THIS DRAWING SHALL BE USED IN CONJUNCTION WITH THE LATEST REVISED ADDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES."
3. RAISED PAVEMENT MARKERS SHALL BE PLACED ON AN 80 FEET SPACING UNLESS OTHERWISE SHOWN IN THE PLANS.



PAVEMENT EDGE LINE MARKING

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

TYPE II
RED/CLEAR OR
YELLOW/YELLOW



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

DETAIL OF STANDARD RAISED PAVEMENT MARKERS

DATE	REVISION	FILMED
2-27-20	REVISED STOP LINE DETAILS	
6-1-17	ADDED YIELD LINE DETAIL	
5-12-16	REVISED LINE WIDTHS, SPACING, & NOTES	
9-12-13	REVISED DETAIL OF STANDARD RAISED PAVEMENT MARKERS	
11-17-10	REVISED GENERAL NOTES & REMOVED PLOWABLE PVMT MRKRS	
11-18-04	REVISED NOTE 2 & GENERAL NOTES	
8-22-02	ADDED CROSSWALK & STOPBAR DTLS.	
7-02-98	ADDED DETAILS OF STD. RAISED PAV'T. MARKERS	
4-26-96	REV. NOTES 3&4; ADDED R.P.M.	
9-30-80	DRAWN	1-9-30-80

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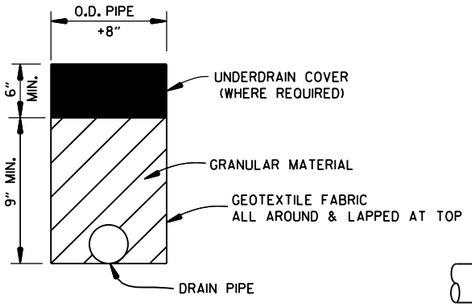
PAVEMENT MARKING DETAILS

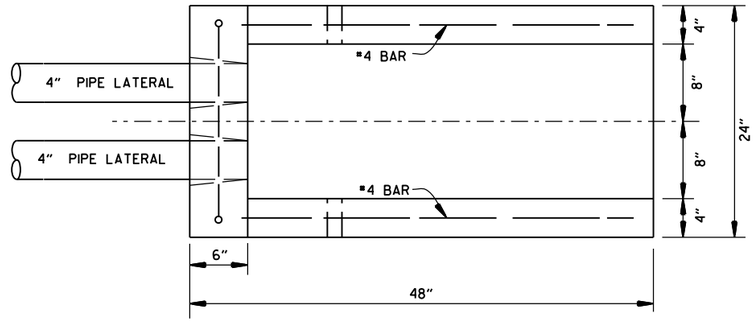
STANDARD DRAWING PM-1

NOTE:

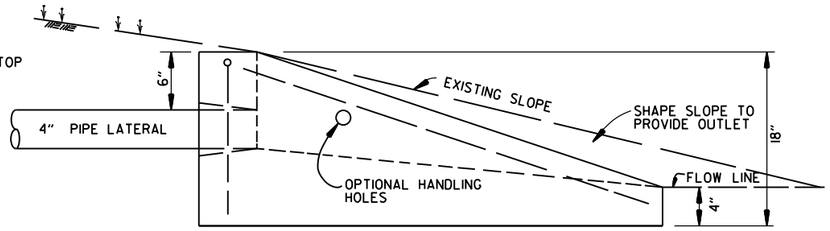
1. UNLESS OTHERWISE SPECIFIED ON THE PLANS, THE UNDERDRAIN COVER SHALL BE THOROUGHLY COMPACTED EARTH AND SHALL BE SUBSIDIARY TO PIPE UNDERDRAIN.

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

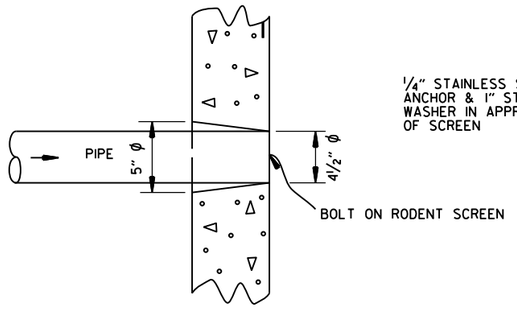




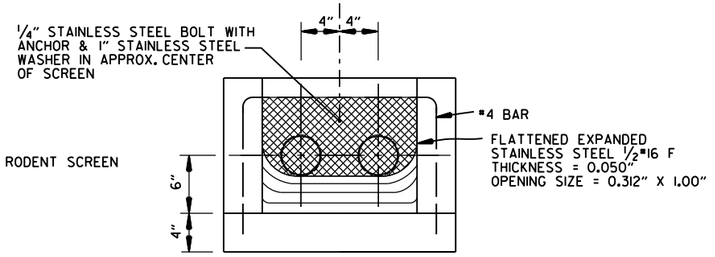
PLAN VIEW



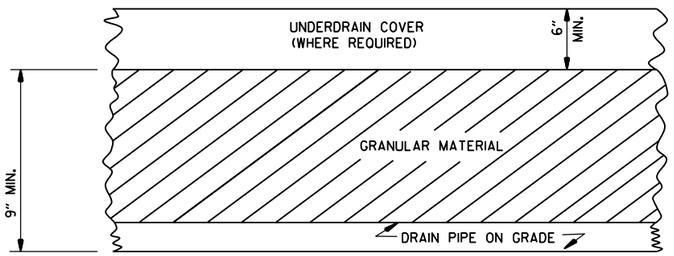
SIDE VIEW



DETAIL OF HOLE
FOR 4" PIPE



FRONT VIEW
(DETAIL OF RODENT SCREEN)



DETAILS OF PIPE UNDERDRAIN

NOTES FOR PIPE UNDERDRAINS

1. GEOTEXTILE FABRIC SHALL MEET THE REQUIREMENTS OF SECTION 625 FOR TYPE 1. PAYMENT FOR GEOTEXTILE FABRIC AND GRANULAR FILTER MATERIAL SHALL BE INCLUDED IN THE PRICE BID PER LIN. FT. FOR "4" PIPE UNDERDRAINS" IN ACCORDANCE WITH SECTION 611 OF THE STANDARD SPECIFICATIONS.

2. 4" NON-PERFORATED SCHEDULE 40 PVC PIPE LATERALS WITH OUTLET PROTECTORS SHALL BE INSTALLED AS SHOWN HEREON. LATERALS WILL BE MEASURED AND PAID FOR AS "4" PIPE UNDERDRAINS." UNDERDRAIN OUTLET PROTECTORS WILL BE MEASURED AND PAID FOR BY THE UNIT IN ACCORDANCE WITH SECTION 611 OF THE STANDARD SPECIFICATIONS.

3. EXISTING 4" PIPE UNDERDRAINS MAY BE CONNECTED TO PROPOSED DROP INLETS OR EXTENDED WHERE DIRECTED BY THE ENGINEER. PAYMENT FOR CONNECTING TO DROP INLETS SHALL BE CONSIDERED INCLUDED IN THE PRICE BID FOR "4" PIPE UNDERDRAINS."

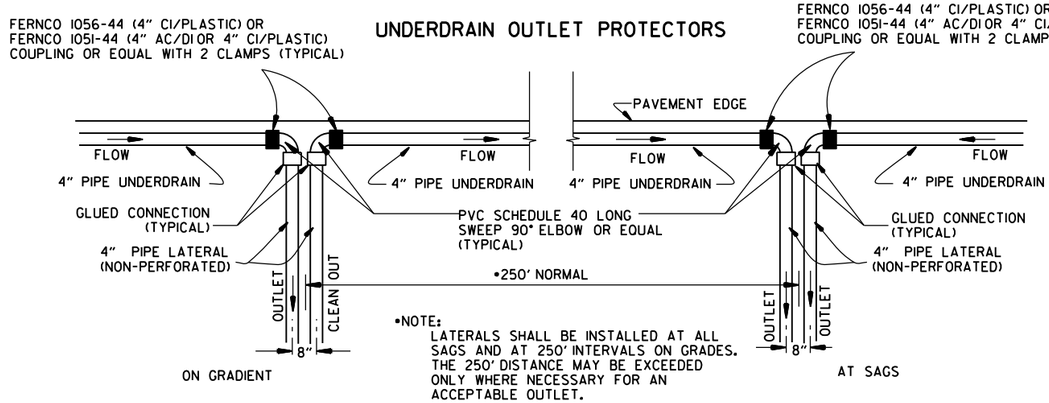
4. THE LOCATION OF ALL LATERALS SHALL BE MARKED WITH 4" X 12" PERMANENT PAVEMENT MARKING TAPE (TYPE III WHITE) AT THE OUTSIDE EDGE OF THE SHOULDER, PLACED TRANSVERSE TO TRAFFIC. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR THE VARIOUS CONTRACT ITEMS.

5. PAYMENT FOR THE RODENT SCREEN SHALL BE INCLUDED IN THE PRICE BID PER EACH FOR "UNDERDRAIN OUTLET PROTECTORS."

6. ANY EXISTING UNDERDRAINS THAT INTERFERE WITH INSTALLATION OF THE NEW UNDERDRAIN SYSTEM SHALL BE REMOVED AND DISPOSED OF AS DIRECTED BY THE ENGINEER. PAYMENT WILL BE CONSIDERED INCLUDED IN THE PRICE BID FOR THE VARIOUS CONTRACT ITEMS. EXISTING UNDERDRAIN OUTLET PROTECTORS SHALL BE REMOVED UNDER THE ITEM "REMOVAL AND DISPOSAL OF UNDERDRAIN OUTLET PROTECTORS."

7. AT LOCATIONS WHERE A SINGLE LATERAL IS USED THE CONTRACTOR SHALL HAVE THE FOLLOWING OPTIONS: 1. INSTALL OUTLET PROTECTOR AS SHOWN ON STANDARD DRAWING PU-1 AND GROUT THE UNUSED HOLE OR 2. INSTALL AN OUTLET PROTECTOR WITH A SINGLE HOLE.

UNDERDRAIN OUTLET PROTECTORS



DETAIL OF PIPE UNDERDRAIN LATERALS
WHEN PLACED ALONG PAVEMENT EDGE

NOTE: PVC PIPE FOR LATERALS SHALL MEET THE REQUIREMENTS OF ASTM D 1785 (LATEST REVISION) FOR SCHEDULE 40 PIPE.

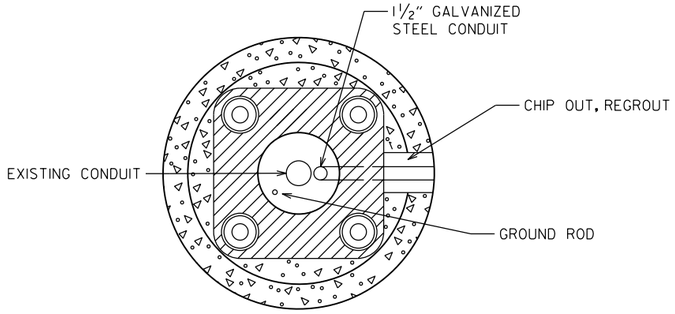
DATE	REVISION	DATE FILMED
12-8-16	ADDED NOTES FOR PIPE UNDERDRAINS, REVISED RODENT SCREEN DETAIL AND NOTES, REMOVED NOTE 1 FOR GRANULAR MATERIAL, ADDED NOTE FOR GEOTEXTILE FABRIC	
4-10-03	REVISED NOTE 3	
1-12-00	REVISED DETAIL OF UNDERDRAIN LATERALS	
11-18-98	REVISED NOTE	
10-18-96	REVISED MIN. DEPTH & GEOTEXTILE FABRIC	
4-26-96	ADDED LATERAL NOTE; 5½" TO 5"	
11-22-95	REVISED LATERALS	
7-20-95	REVISED LATERALS & ADDED NOTE	
11- 3-94	REVISED FOR DUAL LATERALS	11- 3-94
10- 1-92	SUBSTITUTED GEOTEXTILE	10- 1-92
8-15-91	ADDED POLYEDTHYLENE PIPE	8-15-91
11- 8-90	DELETED ALTERNATE NOTE	11- 8-90
1-25-90	ADDED 4" SNAP ADAPTER	1-25-90
11-30-89	DEL. (SUBGRADE); ADDED (WHERE REQUIRED)	11-30-89
7-15-88	ISSUED P.L.M.	647-7-15-88

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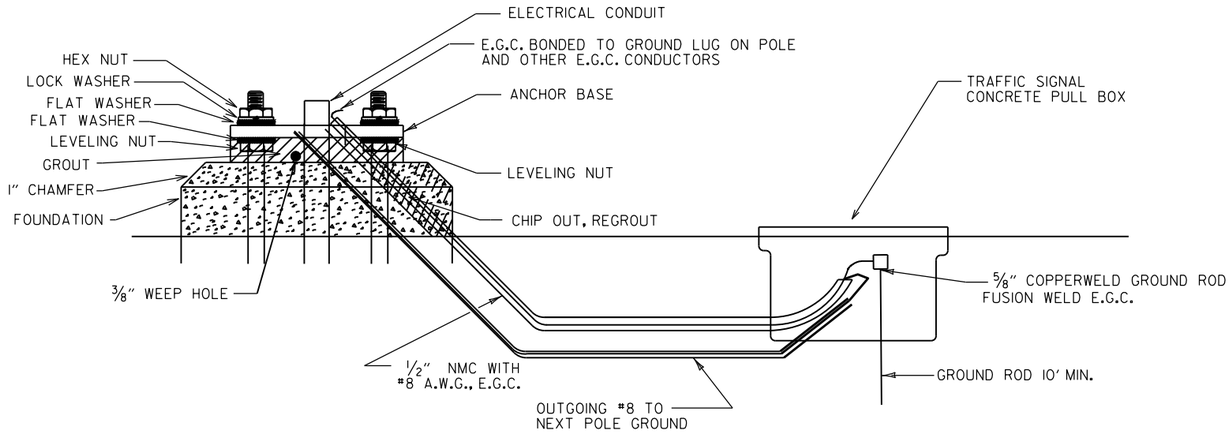
DETAILS OF PIPE UNDERDRAIN

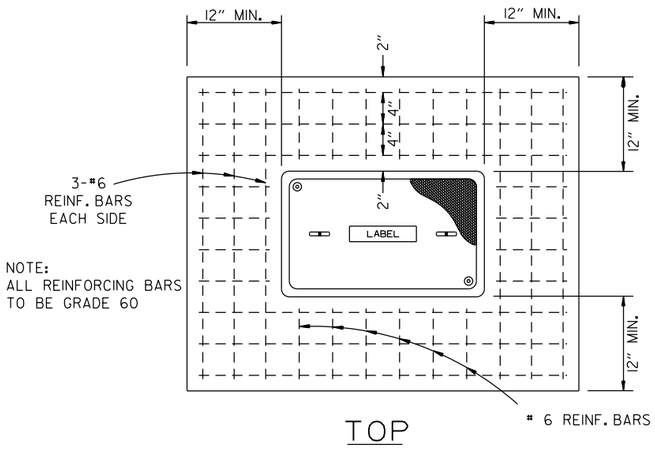
STANDARD DRAWING PU-1

CONDUIT ENTRY TO EXISTING POLE BASE

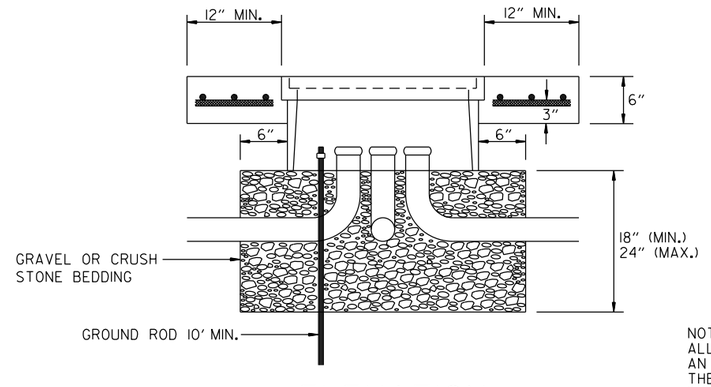


ANCHOR BASE



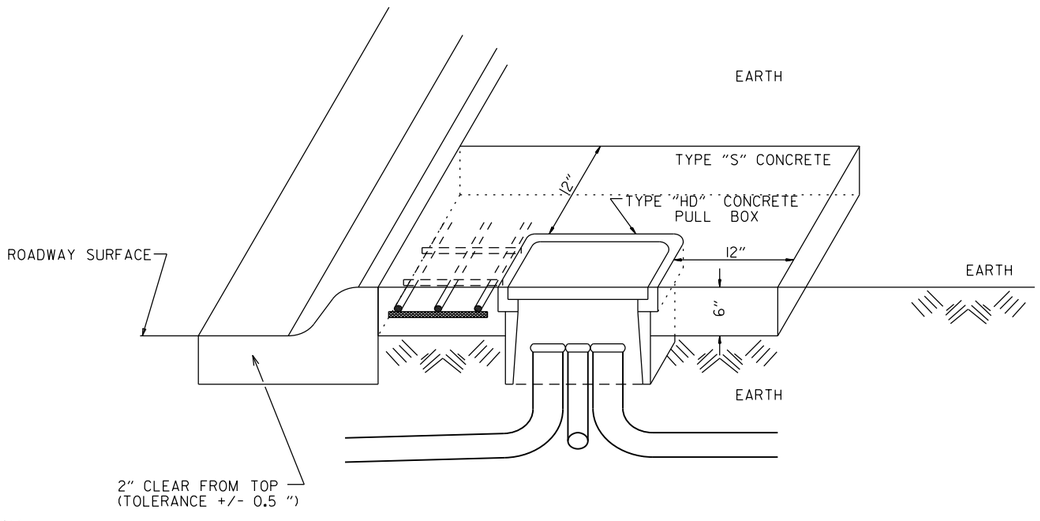


TOP



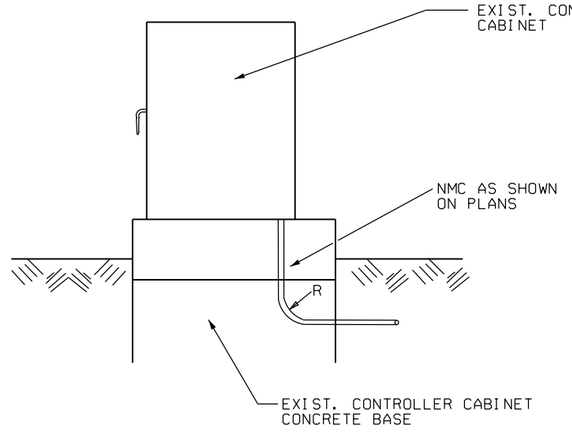
ELEVATION

TYPE "HD" CONCRETE PULL BOX DETAIL



NOTE:
ALL TYPE 1 HD, TYPE 2 HD, AND TYPE 3 HD CONCRETE PULL BOXES ARE INSTALLED WITH AN APRON OF CONCRETE 12" WIDE AND 6" IN DEPTH. ALL PAYMENT SHALL BE INCLUDED IN THE PRICE OF THE TYPE HD CONCRETE PULL BOX. THE CONCRETE PULL BOX SHALL BE INSTALLED FLUSH TO SURROUNDING GRADE UNLESS OTHERWISE INSTRUCTED BY THE ENGINEER. THE CONCRETE SHALL BE CLASS "S". THREE #6 REINFORCING BARS IN THE APRON ON ALL SIDES OF THE CONCRETE PULL BOX IS REQUIRED IN CONCRETE.

CONDUIT ENTRY TO EXISTING CONTROLLER CABINET



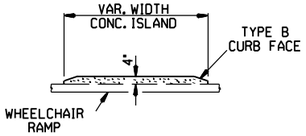
NOTE: ENTRY TO CABINET SHALL BE THROUGH A CUT IN THE BASE SUFFICIENT TO PROVIDE ADEQUATE CONDUIT RADIUS FOR ITEM.

DATE	REVISION	FILMED
02-13-24	REVISED NOTES AND TYPE "HD" CONCRETE PULL BOX DETAILS	
11-16-17	REVISED NOTES	
09-02-15	REVISED PULL BOX DEPTH	
09-12-13	ISSUED AS STANDARD DRAWING	
05-21-09	REVISED GROUNDING	
07-31-08	ADDED & REVISED CONDUIT ENTRY	
06-23-04	REVISED CLEARANCE AT CURB ENTRY	
01-04-02	ADDED REINFORCING TO BOX APRON	
07-02-01	REVISED	
12-27-99	REVISED NOTES	
11-18-98	ISSUED	

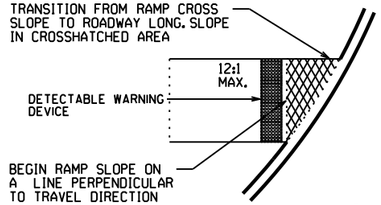
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HEAVY DUTY PULL BOX

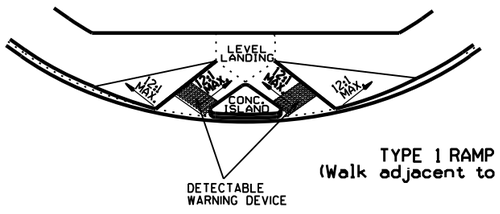
STANDARD DRAWING SD-6



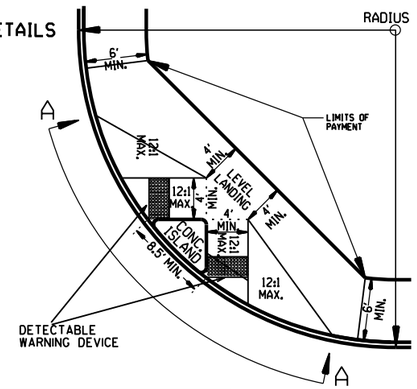
CONCRETE ISLAND DETAIL

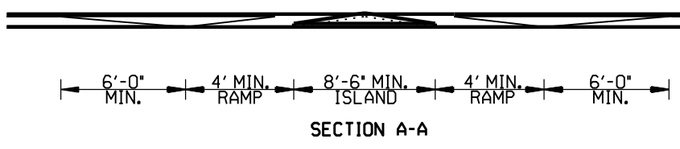


SLOPE TRANSITION DETAILS



TYPE 1 RAMP
(Walk adjacent to curb)

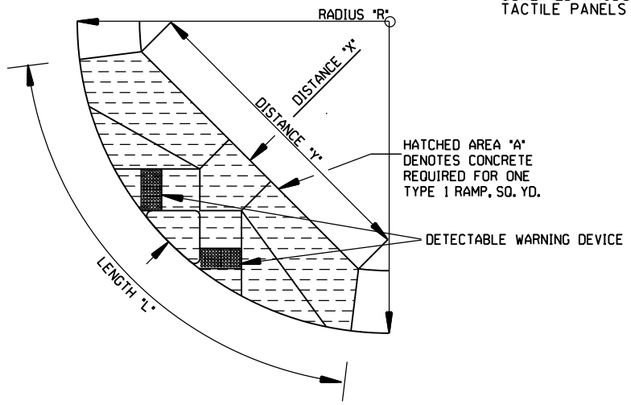




SECTION A-A

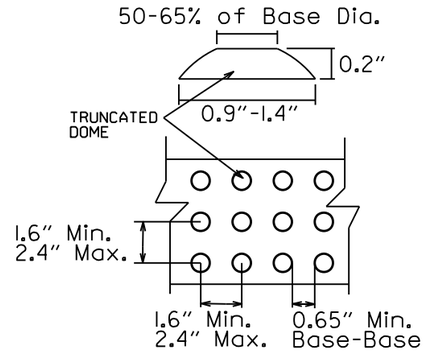
TYPE 1 RAMP DIMENSIONS AND QUANTITIES

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



GENERAL NOTES FOR DETECTABLE WARNING DEVICES

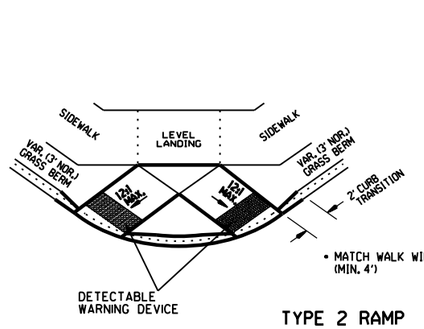
THE DETECTABLE WARNING DEVICE SHALL BE LOCATED SO THAT THE NEAREST EDGE OF THE DEVICE IS 6 TO 8 INCHES FROM THE FACE OF THE CURB.
TRUNCATED DOMES IN THE DETECTABLE WARNING SURFACE SHALL MEET THE REQUIREMENTS OF THE GEOMETRIC CONFIGURATION SHOWN.
DOMES SHALL BE ALIGNED ON A SQUARE GRID IN THE PREDOMINANT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



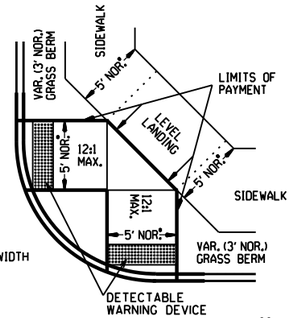
DETECTABLE WARNING DEVICE DETAIL

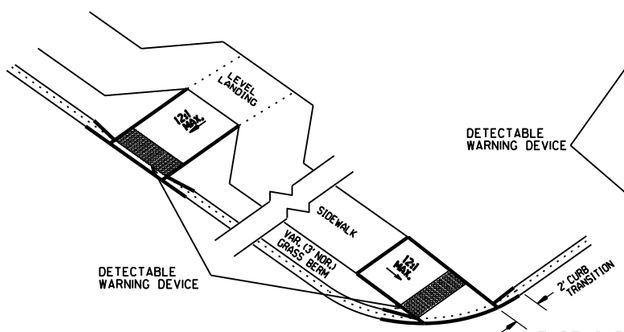
GENERAL NOTES:

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

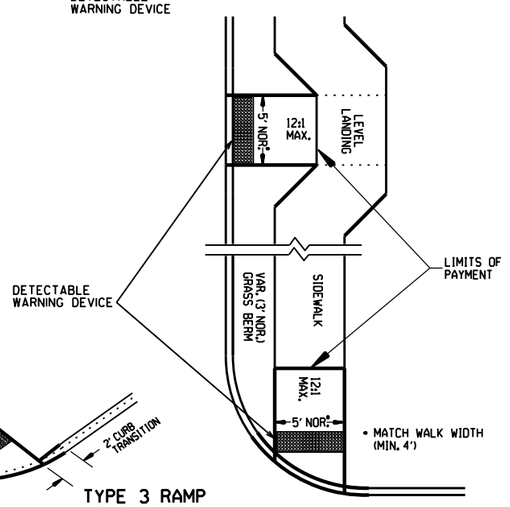


TYPE 2 RAMP

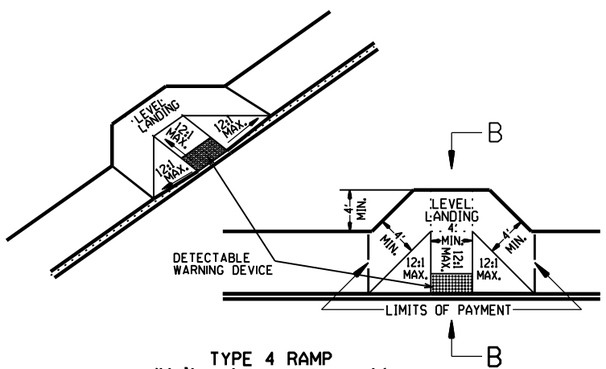




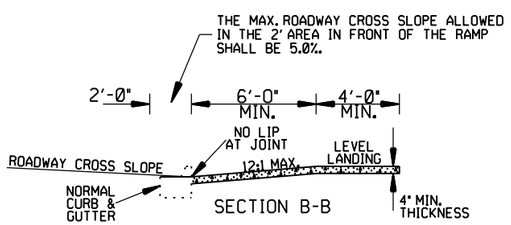
TYPE 3 RAMP



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



TYPE 4 RAMP
(Walk adjacent to curb)



SECTION B-B

RAMP SELECTION CRITERIA

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

NOTE: IN ALTERATIONS, THE SELECTION OF THE TYPE OF WHEELCHAIR RAMP TO BE CONSTRUCTED SHALL BE BASED ON THE AMOUNT OF RIGHT-OF-WAY AVAILABLE, AND ON THE PRESENCE OF OTHER SITE CONSTRAINTS (UTILITIES, BUILDINGS, ETC.). THE TABLE ABOVE LISTS THE ORDER IN WHICH THE RAMPS ARE TO BE CONSIDERED.

AN ALTERATION IS DEFINED AS A PROJECT THAT CHANGES OR AFFECTS THE USE OF A PEDESTRIAN PATHWAY (OVERLAYS, SIGNALIZATION PROJECTS, ETC.) BUT DOES NOT REQUIRE THE PURCHASE OF ADDITIONAL RIGHT-OF-WAY. ALL PROJECTS THAT REQUIRE THE PURCHASE OF ADDITIONAL RIGHT-OF-WAY WILL USUALLY BE CONSIDERED NEW CONSTRUCTION FOR THE PURPOSES OF THE CHART ABOVE.

DATE	REVISION	DATE FILM
11-10-05	REVISED TO NEW SIDEWALK POLICY	
10-9-03	REVISED GEN. NOTES & ADDED NOTE	
4-10-03	REV. DETECTABLE WARNING DEVICES	
8-22-02	ADD DETECTABLE WARNING DEVICES	
3-30-00	ADD.SLOPE TRANS. & REV. ISL. DIMS.	
11-18-98	REVISED NOTES	
8-12-98	REVISED TEXTURE	
7-02-98	REDRAWN & REISSUED	
10-18-96	CORRECTED DIMENSIONS	10-18-96
5-24-90	FROM8#TO12#MAX.SLOPES	5-24-90
7-15-88	ADJUSTED MAX. SLOPE	652-7-15-88
7-14-88	INCLUD."CONC. ISLD."IN PAY ITEM	------
6-02-76	ISSUED-P.H.D.	299-7-28-76

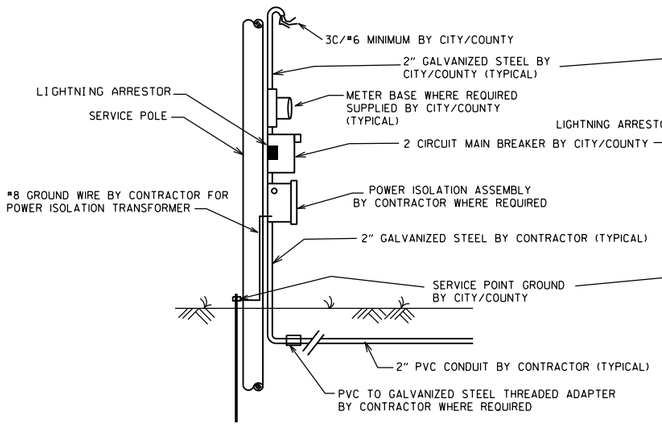
ARKANSAS STATE HIGHWAY COMMISSION

WHEELCHAIR RAMPS NEW CONSTRUCTION AND ALTERATIONS

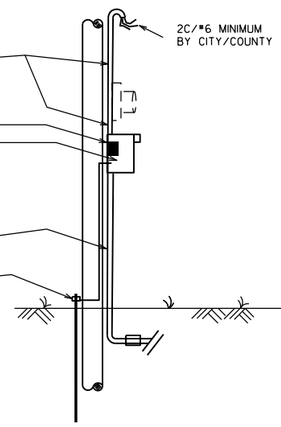
STANDARD DRAWING WR-1

MAIN BREAKER NOT NEAR CONTROLLER CABINET SECONDARY REQUIRED

WITH POWER ISOLATION ASSEMBLY



WITHOUT POWER ISOLATION ASSEMBLY



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

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

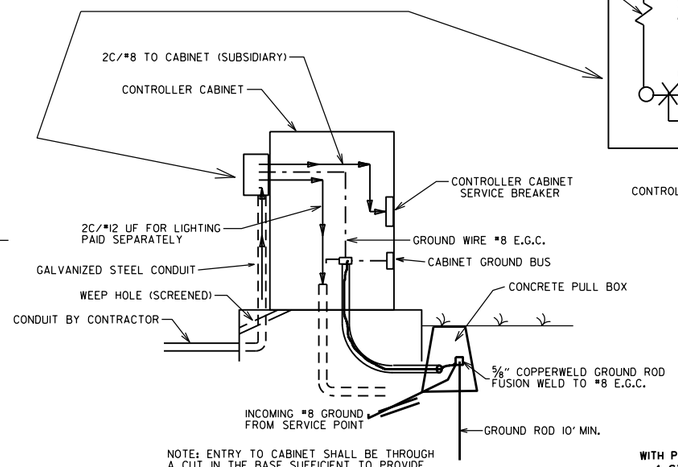
ALL SITUATIONS:
ELECTRICAL SERVICE SHALL BE PROVIDED BY THE CITY/COUNTY TO A SERVICE POLE WITH EXTERNAL RAINTIGHT BREAKER (MAIN BREAKER) AT A MUTUALLY ACCEPTABLE POINT WITHIN THE RIGHT-OF-WAY. SERVICE POINT INCLUDES GALVANIZED STEEL CONDUIT TO A POINT 18" BELOW GROUND LINE, TWO CIRCUIT MAIN BREAKER, LIGHTNING ARRESTOR, POWER ISOLATION ASSEMBLY WHERE REQUIRED, METER LOOP IF REQUIRED BY LOCAL UTILITY COMPANY, ELECTRICAL CONDUCTORS AND WEATHERHEAD. WHERE STREET LIGHTING IS INCLUDED AS PART OF SIGNAL INSTALLATION STREET LIGHTING CIRCUIT (2C/#12 A.W.G. UF RATED, TYPICAL) SHALL BE KEPT SEPARATE FROM THE CIRCUIT SERVING TRAFFIC SIGNAL. SERVICE WIRE AND WIRING FROM THE CONTROLLER TO MAIN BREAKER IS PROVIDED BY THE CONTRACTOR AS A PART OF THIS CONTRACT. WIRE AND WIRING FROM MAIN BREAKER, AND CONNECTION TO THE UTILITY IS THE RESPONSIBILITY OF THE CITY/COUNTY.

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

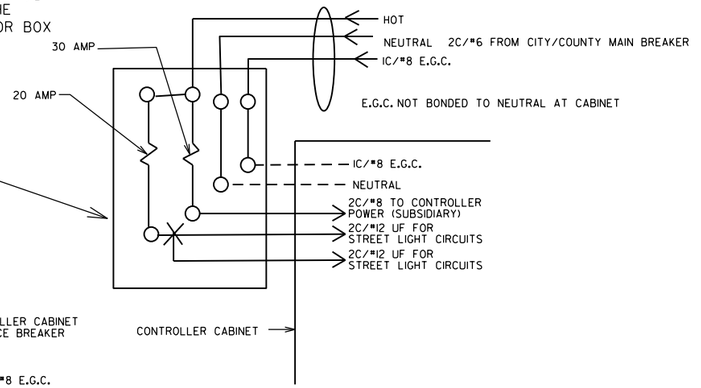
MAIN BREAKER NEAR CONTROLLER CABINET:
ALL COMPONENTS OF THE SERVICE POINT WITH THE EXCEPTION OF THE WIRE AND WIRING ABOVE THE MAIN BREAKER IS FURNISHED AND INSTALLED BY THE CONTRACTOR. WIRING FROM MAIN BREAKER INCLUDING CONNECTION TO THE UTILITY, IS THE RESPONSIBILITY OF THE CITY/COUNTY. IF METER LOOP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

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

SECONDARY BREAKER BY CONTRACTOR (SUBSIDIARY)



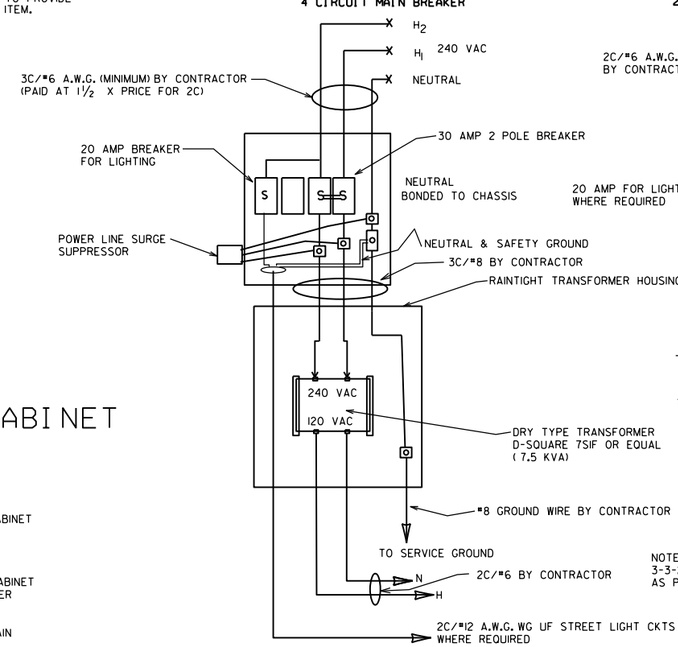
NOTE: ENTRY TO CABINET SHALL BE THROUGH A CUT IN THE BASE SUFFICIENT TO PROVIDE ADEQUATE CONDUIT RADIUS FOR ITEM.



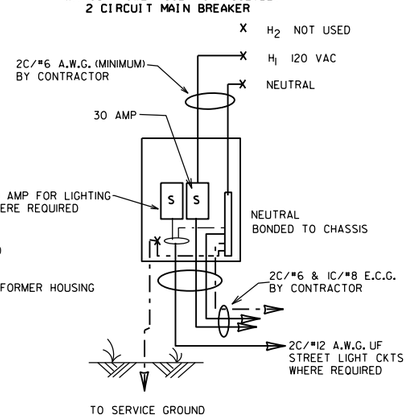
MAIN BREAKER WIRING (TYPICAL)

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

WITH POWER ISOLATION ASSEMBLY
4 CIRCUIT MAIN BREAKER

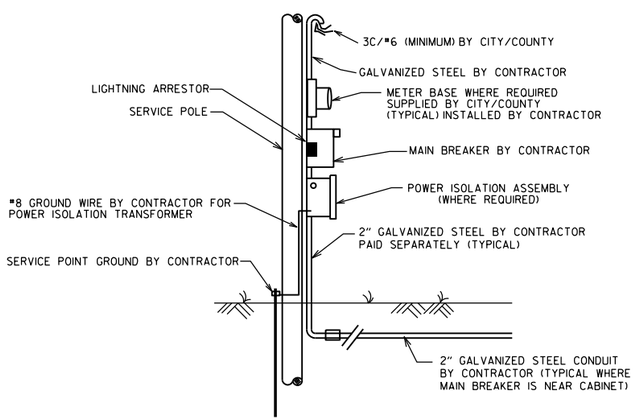


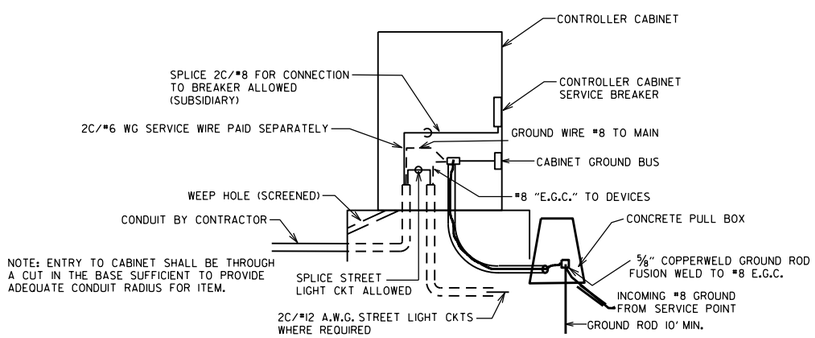
WITHOUT POWER ISOLATION ASSEMBLY
2 CIRCUIT MAIN BREAKER



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

MAIN BREAKER NEAR CONTROLLER CABINET SECONDARY NOT REQUIRED





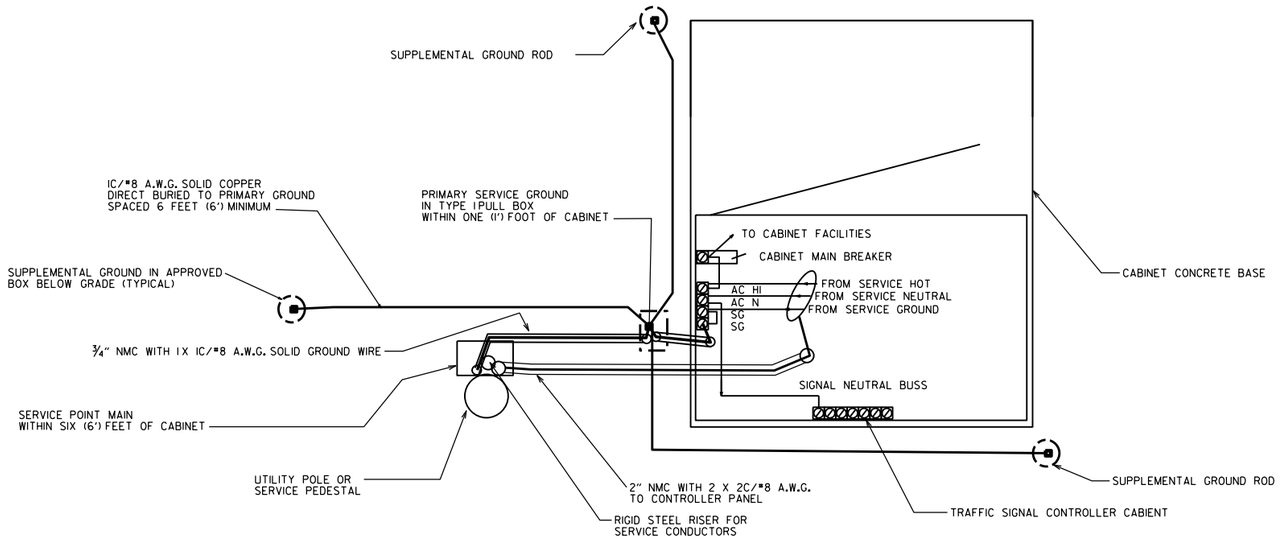
NOTE: ENTRY TO CABINET SHALL BE THROUGH A CUT IN THE BASE SUFFICIENT TO PROVIDE ADEQUATE CONDUIT RADIUS FOR ITEM.

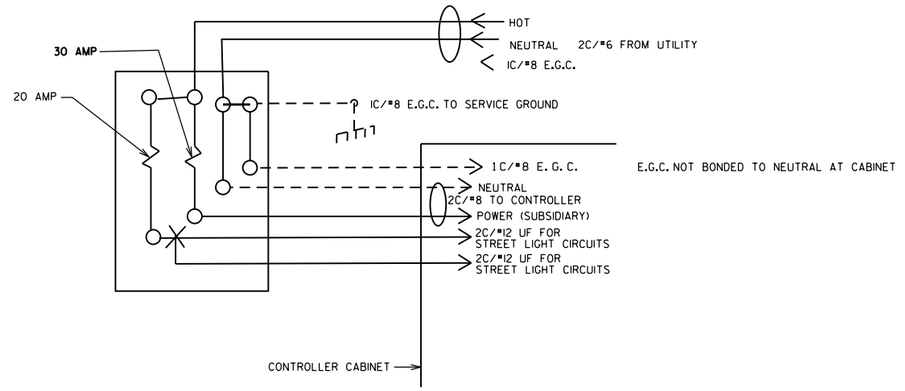
DATE	REVISION	FILMED
11-07-19	REVISED	
11-16-17	REVISED NOTES	
09-12-13	ISSUED AS STANDARD DRAWING	
04-18-13	ADDED LIGHTNING ARRESTOR	
05-21-09	REVISED GROUNDING	
07-31-08	REVISED GROUNDING	
03-03-03	ADDED EGC NOTE	
09-26-01	REVISED	
12-27-99	REVISED	
07-28-99	REVISED	
02-05-99	ISSUED	

ARKANSAS STATE HIGHWAY COMMISSION

SERVICE POINT

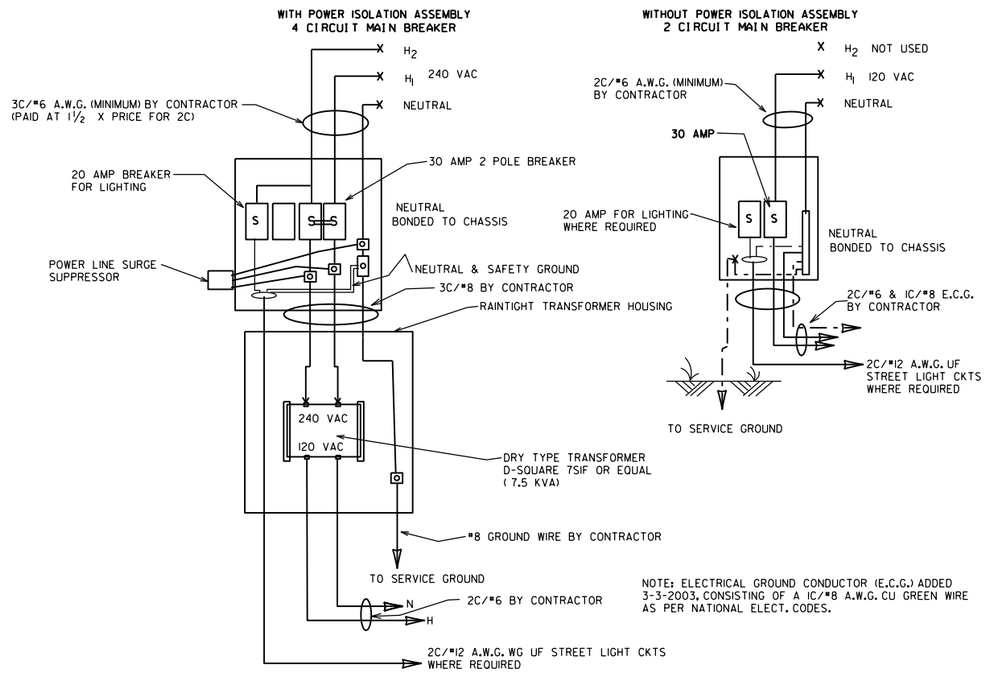
STANDARD DRAWING SD-9





MAIN BREAKER WIRING (TYPICAL)

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



NOTES:

LOCATION OF SERVICE:
TO MEET THE REQUIREMENTS FOR SAFETY AND MAXIMIZE LIGHTNING PROTECTION. THE "SERVICE POINT MAIN" FROM THE UTILITY PRIMARY SERVICE POINT MUST BE WITHIN SIX (6') FEET OF THE TRAFFIC SIGNAL CONTROLLER CABINET. ELECTRICAL SERVICE SHALL BE PROVIDED BY THE CITY/COUNTY TO A SERVICE POLE OR PEDESTAL WITH EXTERNAL RAINTIGHT BREAKER (MAIN BREAKER) AT A MUTUALLY ACCEPTABLE POINT WITHIN THE RIGHT-OF-WAY. SERVICE POINT INCLUDES GALVANIZED STEEL CONDUIT TO A POLE 18" BELOW GROUND LINE, TWO CIRCUIT MAIN BREAKER, POWER ISOLATION ASSEMBLY WHERE REQUIRED, METER LOOP IF REQUIRED BY LOCAL UTILITY COMPANY, ELECTRICAL CONDUCTORS AND WEATHERHEAD. WHERE STREET LIGHTING IS INCLUDED AS PART OF SIGNAL INSTALLATION, STREET LIGHTING CIRCUIT (2C/#12 A.W.G. UF RATED, TYPICAL) SHALL BE KEPT SEPARATE FROM THE CIRCUIT SERVING TRAFFIC SIGNAL. SERVICE WIRE AND WIRING FROM THE CONTROLLER TO MAIN BREAKER IS PROVIDED BY THE CONTRACTOR AS A PART OF THIS CONTRACT. WIRE AND WIRING FROM MAIN RESPONSIBILITY OF THE CITY/COUNTY.

METER LOOP:
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 ISTALLED BY THE CONTRACTOR.

SUPPLEMENT GROUND RODS:
SUPPLEMENT GROUND RODS ARE FUSION WELDED TO IC/#8 A.W.G. SOLID COPPER GROUND WIRE. ATTACHMENT TO PRIMARY GROUND MAY BE AN APPROVED CLAMP. GROUND RODS ARE LOCATED IN A BOX APPROVED BY THE ENGINEER MEETING THE SAME LOADING REQUIREMENTS AS SECTION 711 CONCRETE PULL BOX OF THE STANDARD SPECIFICATIONS, WITH THE EXCEPTION TO DIMENSIONS. THE CONCRETE PULL BOX MAY BE EITHER ROUND OR SQUARE APPROXIMATELY SIX (6") INCHES MINIMUM INSIDE DIMENSIONS AND SIX (6") INCHES DEPTH. (STRONGWELL PC0608BA06 WITH PC0608CA00 LID OR EQUAL).

DATE	REVISION	FILMED
11-07-19	REVISED NOTES	
11-16-17	REVISED NOTES	
09-12-13	ISSUED AS STANDARD DRAWING	
01-17-08	ISSUED	

ARKANSAS STATE HIGHWAY COMMISSION

SERVICE POINT INSTALLATION WITH SUPPLEMENT GROUNDING ARRAY

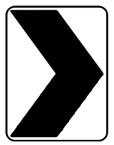
STANDARD DRAWING SD-12



R1-1
30"X30"



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



W1-8
18"X24"



W2-5
30"X30"



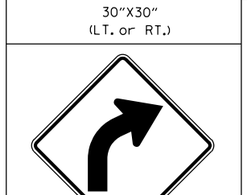
W3-1
36"X36"



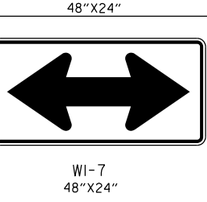
W5-1
36"X36"



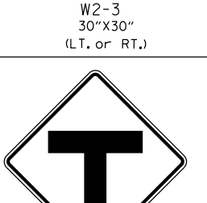
M6-3
21"X15"



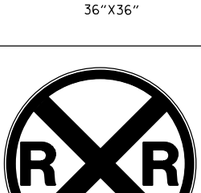
R1-2
36"X36"X36"



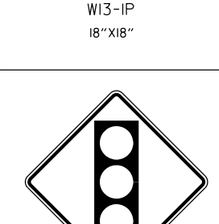
W1-4
30"X30"
(LT. or RT.)



W2-1
30"X30"



S1-1
36"X36"



W3-2
36"X36"

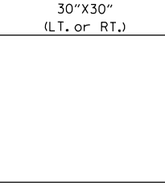


County
Route Marker
M1-6
24"X24"

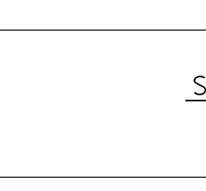
NOTE: REFLECTORIZED YELLOW LEGEND (COUNTY NAME, ROUTE LETTER & NUMBER) & BORDER ON A BLUE BACKGROUND.



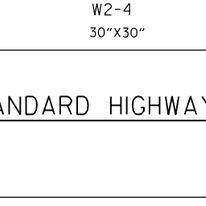
M6-4
21"X15"



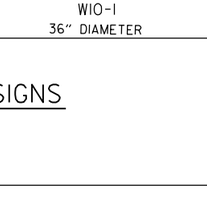
R2-1
24"X30"



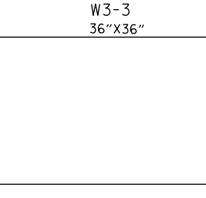
W1-5
30"X30"
(LT. or RT.)



W2-2
30"X30"

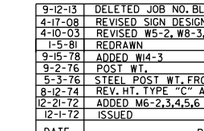


W5-2
36"X36"



W8-3
36"X36"

R1-3P
18"X6"



M6-5
21"X15"

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

W1-6
48"X24"

W1-7
48"X24"

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

W5-3
36"X36"

W13-1P
18"X18"

M6-1
21"X15"

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

M6-6
21"X15"

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

W2-4
30"X30"

W10-1
36" DIAMETER

W3-3
36"X36"

M6-2
21"X15"

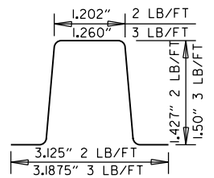
S4-3P
24"X8"

S4-2P
24"X10"

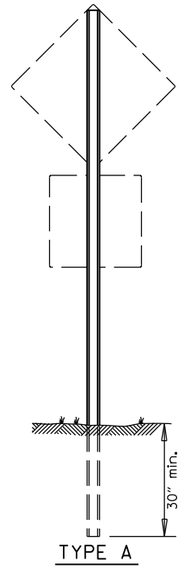
OM-3
12"X36"
(LT. or RT.)

MINIMUM DIMENSIONS SHOWN

SUPPORT SECTION



(U-CHANNEL)
STANDARD SUPPORT
ASSEMBLIES



TYPE A

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

TYPE B

TYPE C

MINIMUM WEIGHT

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

STANDARD HIGHWAY SIGNS

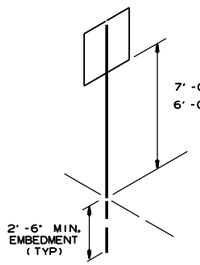
DATE	REVISION	DATE FILMED
9-12-13	DELETED JOB NO. BLOCK; REVISED RI-3 TO RI-3P	
4-17-08	REVISED SIGN DESIGNATION - W3-1 & W3-2	
4-10-03	REVISED W5-2, W8-3, OM-3; ADDED WI-8	
1-5-81	REDRAWN	960-1-15-81
9-15-78	ADDED WI4-3	877-9-15-78
9-2-76	POST WT.	623-9-3-76
5-3-76	STEEL POST WT. FROM 2"-3"; ADDED S4-2 & S4-3	504-5-3-76
8-12-74	REV. HT. TYPE "C" ASSEMBLY	500-8-21-74
12-21-72	ADDED M6-2,3,4,5,6	500-12-21-72
12-1-72	ISSUED	562-12-1-72

SUPPORT ASSEMBLIES

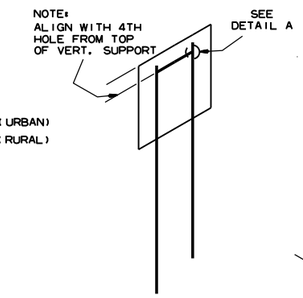
ARKANSAS STATE HIGHWAY COMMISSION

STANDARD HIGHWAY SIGNS AND SUPPORT ASSEMBLIES

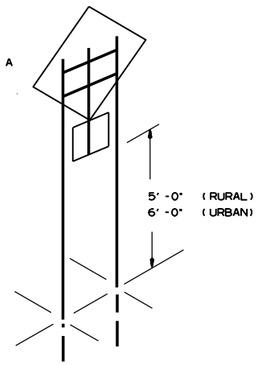
STANDARD DRAWING SHS-1



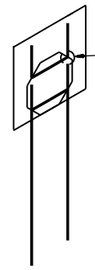
U-1



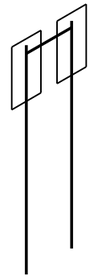
U-2



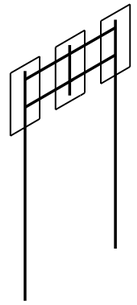
U-2 (A)



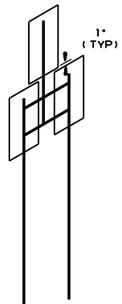
U-2 (B)



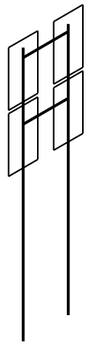
U-2 (1)



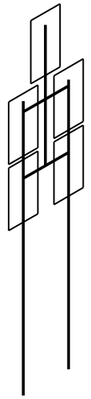
U-2 (2)



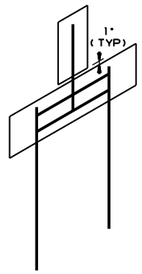
U-2 (3)



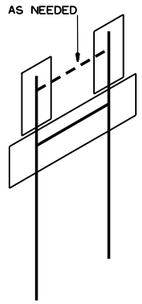
U-2 (4)



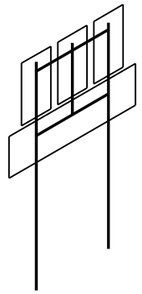
U-2 (5)



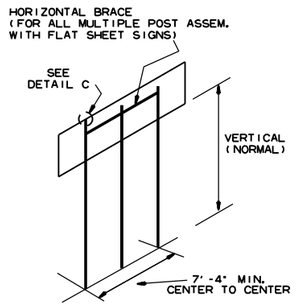
U-2 (6)



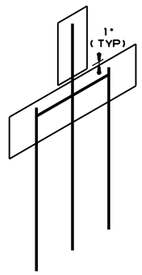
U-2 (7)



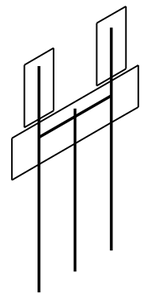
U-2 (8)



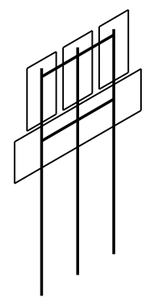
U-3



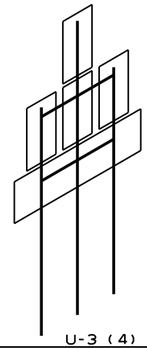
U-3 (1)



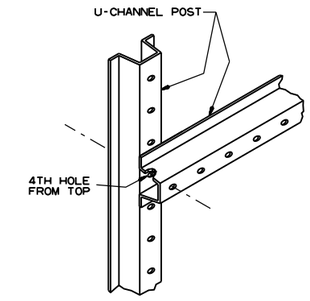
U-3 (2)



U-3 (3)

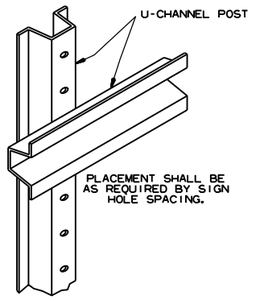


U-3 (4)



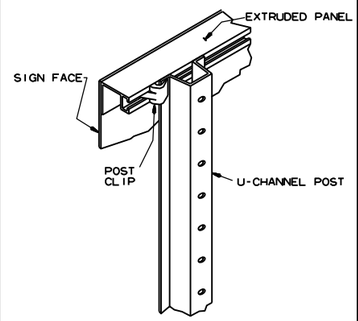
DETAIL A

SHOWING HORIZONTAL BRACE



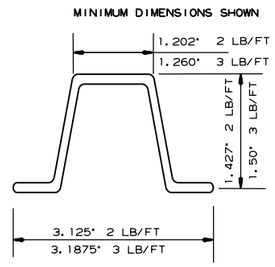
DETAIL B

SHOWING BACK-TO-BACK INSTALLATION



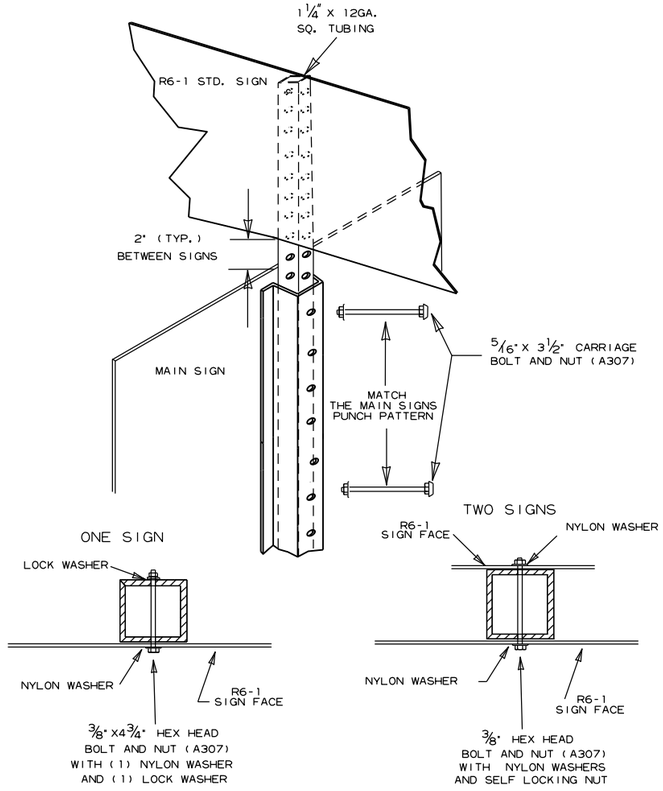
DETAIL C

SHOWING GUIDE SIGN MOUNTING WITH EXTRUDED PANELS



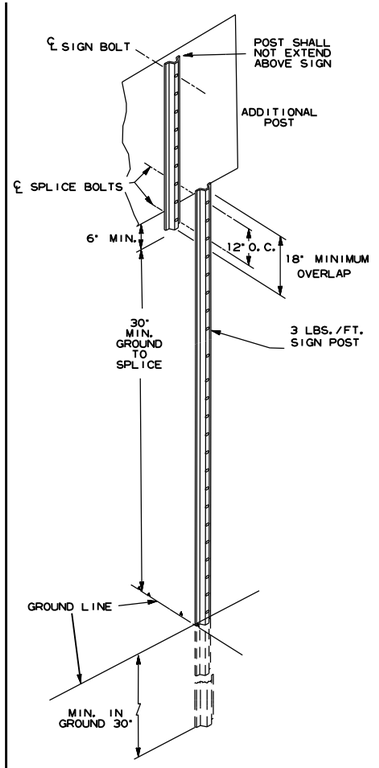
DETAIL C

U-CHANNEL POST



DETAIL E

R6-1 EXTENSION FOR U-CHANNEL POST



DETAIL F

DETAIL OF SPLICES

NOTES:

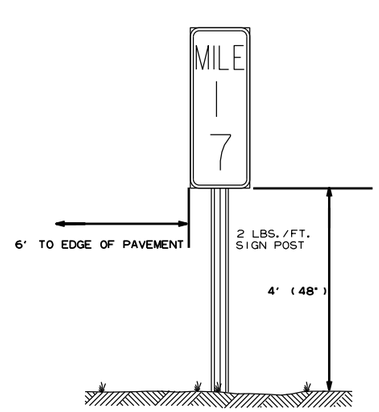
SIGNS AT LEAST 8' IN LENGTH MAY BE INSTALLED ON THREE 3 LB. POST. IN NO CASE SHALL THERE BE MORE THAN TWO 3 LB. POSTS WITHIN A 7' PATH.

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

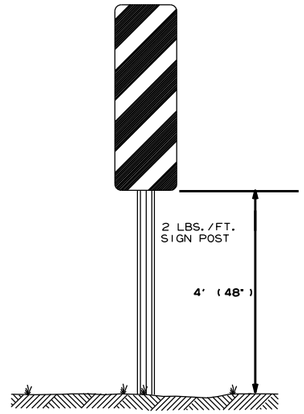
NORMAL INSTALLATIONS WILL REQUIRE 5/16" DIA. CARRIAGE BOLTS TO MOUNT SIGNS TO POST AND TO ASSEMBLE THE VARIOUS POST SUPPORTS.

ALL SIGN POSTS SHALL BE PLUMB.

THE POST FOR "TYPE U" SUPPORTS SHALL BE HOT DIP GALVANIZED.



TYPICAL MILE MARKER INSTALLATION



TYPICAL OM-3 INSTALLATION AT EDGE OF OBSTRUCTION

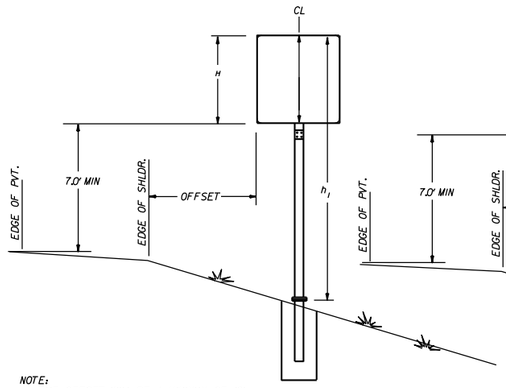
DATE	REVISION	FILMED
7-25-19	REVISED CARRIAGE BOLT WITH MATERIAL REQUIREMENT	
2-27-14	REVISED NOTES.	
9-12-13	REVISED U-2(3), U-2(6), U-3(1), DETAIL D; ADDED DETAILS E & F; ADDED TYPICAL MARKERS	
10-9-03	REMOVED ROUND POST & REVISED SPACING	
10-12-95	MOVED UPPER SPLICE	
6-8-95	REVISED SPLICE DETAIL	6-8-95
2-2-95	REDRAWN	2-2-95

ARKANSAS STATE HIGHWAY COMMISSION

U-CHANNEL POST ASSEMBLIES

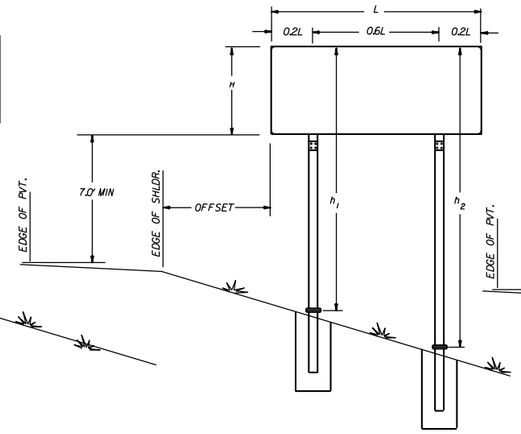
STANDARD DRAWING SHS-2

POST SIZE	BASE CONNECTION DATA											FUSE PLATE DATA									
	BOLT SIZE	BOLT TORQUE (INCH/LBS)	A	B	C	D	E	t_1	t_2	W	R	F	G		J	K	M	d_1	d_2	t_3	BOLT SIZE	WT.OF EACH FUSE PLATE LBS.
W 6X9																						
W 6X12	5/8" x 2 3/4"	450"-680"	5"	2"	1 1/4"	2 3/4"	1 1/8"	3/4"	1/2"	1/4"	11/32"	4 1/4"	2"		4"	2 1/4"	1"	9/16"	3/4"	1/4"	1/2" x 1 1/2"	1.01
W 6X15												5"	2 1/2"		6"	3 1/2"	1 1/2"	11/16"	1 1/4"	3/8"	5/8" x 2 1/4"	2.51
W 8X18												5"	2 1/2"		5 1/4"	2 3/4"	1 1/4"	13/16"	1 11/16"	3/8"	3/4" x 2 1/4"	2.26
W 8X21												5 1/2"	2 1/2"		5 1/4"	2 3/4"	1 1/4"	13/16"	1"	1/2"	3/4" x 2 1/4"	3.35
W 10X22	3/4" x 3 1/2"	750"-1050"	6"	2 1/4"	1 3/8"	3 1/2"	1 1/4"	1"	3/4"	5/16"	11/32"	6"	3"		5 3/4"	2 3/4"	1 3/8"	1 3/16"	1 1/8"	1/2"	3/4" x 2 1/4"	4.03
W 10X26																						
W 12X26												6"	3"		6 1/2"	3 1/2"	1 5/8"	1 3/16"	1 15/16"	1/2"	3/4" x 2 1/4"	4.47

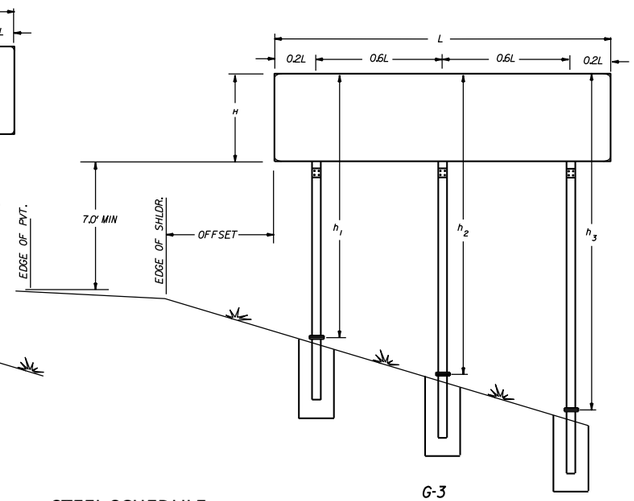


NOTE:
THE OFFSET WILL BE A MINIMUM OF 10' FROM THE EDGE OF PAVED SURFACE OR AS DIRECTED BY THE ENGINEER

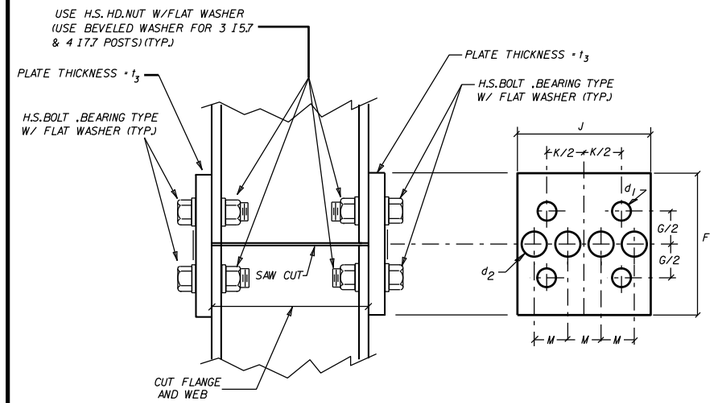
G-1



G-2

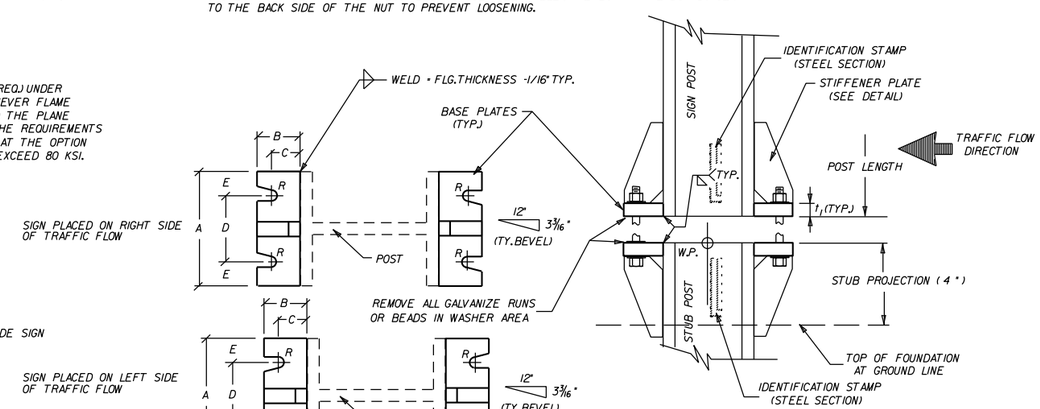


G-3

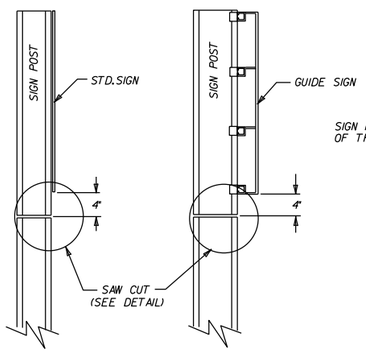


NOTE: USE H.S.HEX HEAD BOLTS,HEX HEAD NUTS AND BEVEL OR FLAT WASHERS (WHERE REQ.) UNDER NUTS. ALL HOLES SHALL BE DRILLED.ALL PLATE CUTS SHALL PREFERABLY BE SAW CUTS,HOWEVER FLAME CUTTING WILL BE PERMITTED PROVIDED ALL EDGES ARE GROUND. METAL PROJECTING BEYOND THE PLANE OF THE PLATE FACE WILL NOT BE PERMITTED.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

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



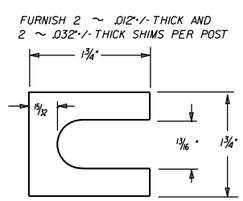
NOTE: BOLT HOLES,USED IN THE MOUNTING OF STANDARD SIGNS SHALL BE LOCATED IN THE FLANGE ADJACENT TO THE NEAR EDGE OF PAVEMENT FOR SINGLE POST ASSEMBLIES AND IN THE OUTSIDE FLANGES FOR MULTIPLE POST ASSEMBLIES.



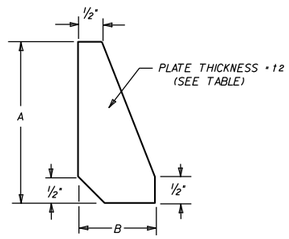
NOTE: POST SHALL BE SAW CUT AFTER GALVANIZING AND THE CUT SURFACE TREATED. AFTER PLATE IS INSTALLED AND ALL BOLTS FULLY TIGHTENED. REPAIR OF CUT SURFACES AFTER GALVANIZING SHALL BE IN ACCORDANCE WITH ASTM A123.

STANDARD SIGNS GUIDE SIGNS

FUSE PLATE DETAILS



SHIM DETAIL



STIFFENER PLATE DETAIL

GENERAL NOTES

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

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

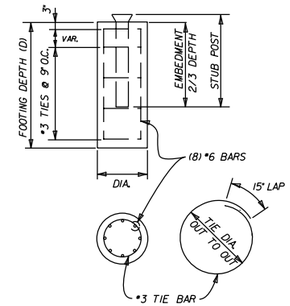
REFER TO THE PLANS FOR FOOTING DIMENSIONS.

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

STEEL SCHEDULE

FOOTING DIAMETER	#3 TIE BARS		
	DIAMETER	BAR LENGTH	POUNDS
INCHES	INCHES	FEET	
18	12	4.39	1.65
24	18	5.96	2.24
30	24	7.53	2.83
36	30	9.1	3.42

FOOTINIG DEPTH	#6 STRAIGHT BARS		
	BAR LENGTH	NUMBER REQ'D.	POUNDS
FEET	FEET		
2.50	2.00	8	24.03
3.00	2.50	8	30.04
3.50	3.00	8	36.05
4.00	3.50	8	42.06
4.50	4.00	8	48.06
5.00	4.50	8	54.07
5.50	5.00	8	60.08
6.00	5.50	8	66.09
6.50	6.00	8	72.10
7.00	6.50	8	78.10
7.50	7.00	8	84.11
8.00	7.50	8	90.12



FOOTING QUANTITIES

FOOTING DEPTH	NUMBER TIE BARS REQ'D	18" DIAMETER		24" DIAMETER		30" DIAMETER		36" DIAMETER	
		CLASS S CONCRETE	REINF STEEL	CLASS S CONCRETE	REINF STEEL	CLASS S CONCRETE	REINF STEEL	CLASS S CONCRETE	REINF STEEL
FEET		CU. YD.	(GRADE 60)	CU. YD.	(GRADE 60)	CU. YD.	(GRADE 60)	CU. YD.	(GRADE 60)
2.50	4	0.16	31						
3.00	4	0.20	37						
3.50	5	0.23	44						
4.00	6	0.26	52	0.47	56				
4.50	6	0.29	58	0.52	62				
5.00	7	0.33	66	0.58	70	0.91	74		
5.50	8			0.64	78	1.00	83		
6.00	8			0.70	84	1.09	89	1.57	93
6.50	9					1.18	98	1.70	103
7.00	10					1.27	106	1.83	112
7.50	10							1.96	118
8.00	11							2.09	128

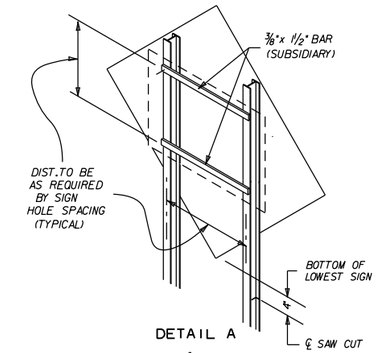
SIGN POST AND STUB POST

DATE	REVISION	FILMED
5-19-22	REVISED FUSE PLATE DETIALS' NOTE.	
9-12-13	ISSUED	

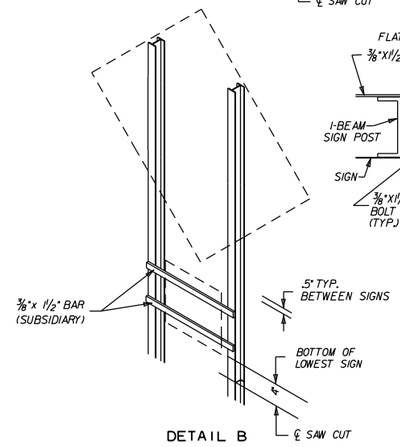
ARKANSAS STATE HIGHWAY COMMISSION

DETAIL OF BREAKAWAY SIGN SUPPORTS FOR GUIDE SIGNS

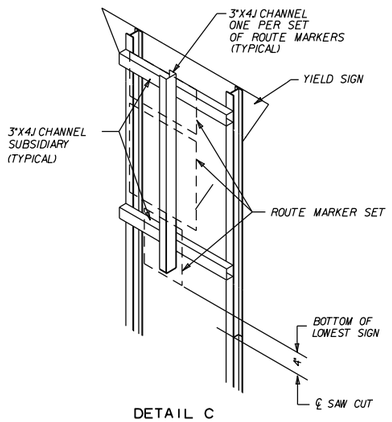
STANDARD DRAWING SHS-3



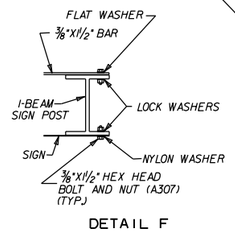
DETAIL A



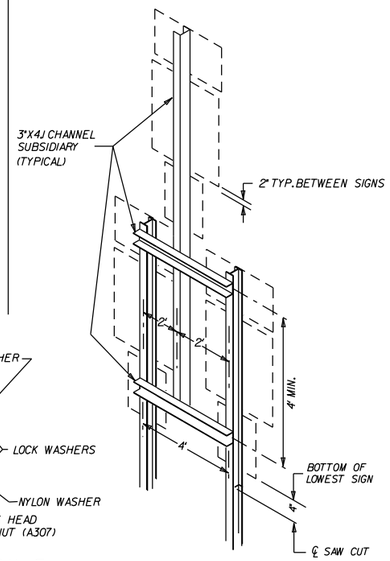
DETAIL B



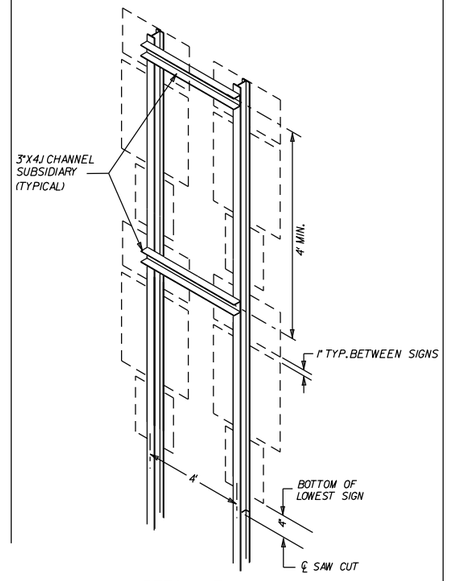
DETAIL C



DETAIL F



DETAIL D



DETAIL E

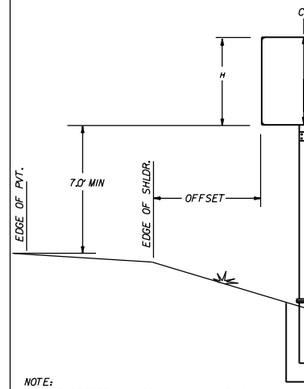
NOTE

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

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

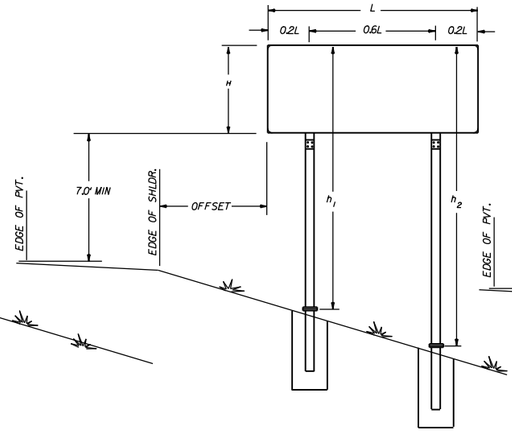
REFER TO THE P.C. RUTLEDGE FORMULA ON PAGE 58 OF THE AASHTO PUBLICATION "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS.

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

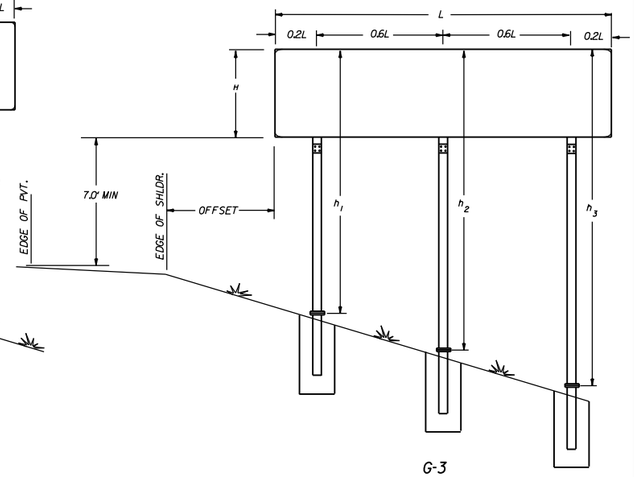


G-1

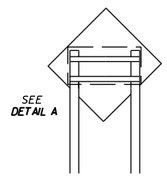
NOTE:
THE OFFSET WILL BE A MINUTE OF 10' FROM THE EDGE OF PAVED SURFACE OR AS DIRECTED BY THE ENGINEER.



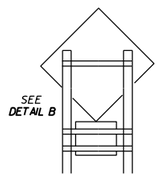
G-2



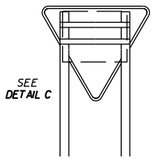
G-3



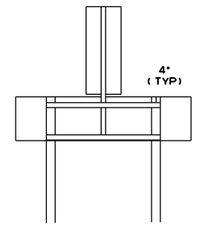
G2-1



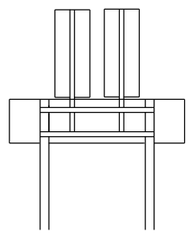
G2-2



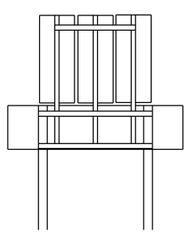
G2-3



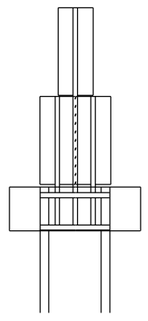
G2-4



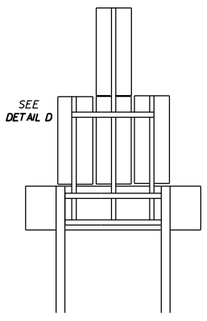
G2-5



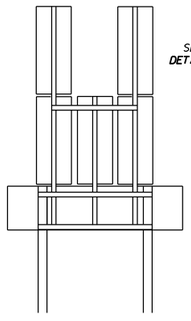
G2-6



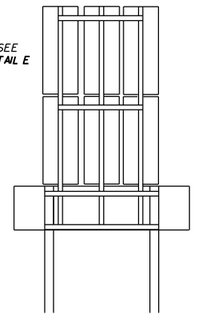
G2-7



G2-8

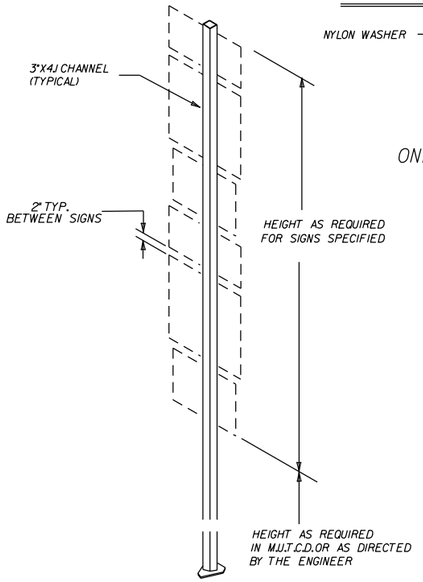


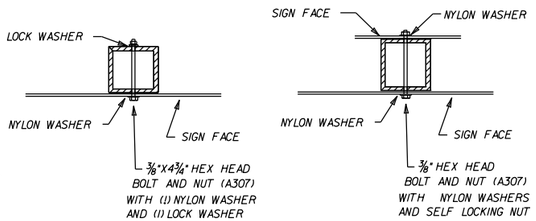
G2-9



G2-10

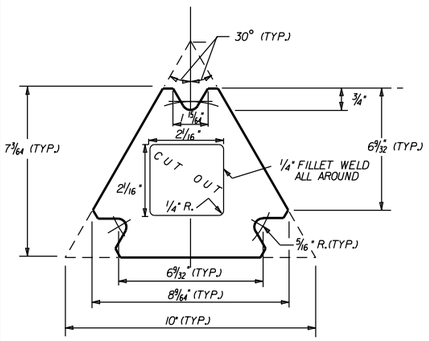
			ARKANSAS STATE HIGHWAY COMMISSION
			DETAIL OF BREAKAWAY SIGN SUPPORTS FOR STANDARD SIGNS
9-12-13	ISSUED		STANDARD DRAWING SHS-4
DATE	REVISION	FILMED	



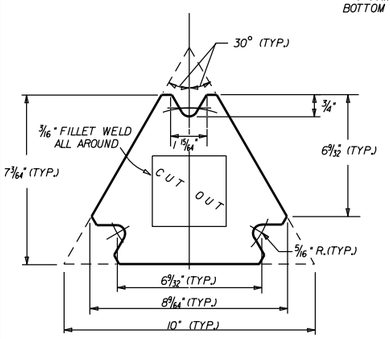


CHANNEL SHALL BE FULL LENGTH OF RECTANGULAR AND SQUARE SIGNS AND SHALL EXTEND 1½" BEYOND BOLT HOLES ON DIAMOND OR IRREGULAR SHAPED SIGNS.

MOUNTING HARDWARE



TOP PLATE



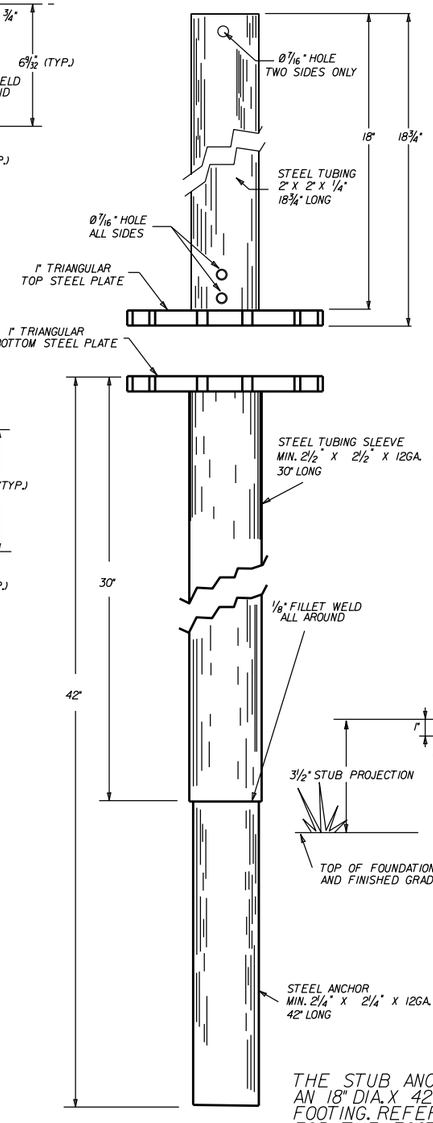
BOTTOM PLATE

GENERAL NOTES:

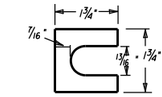
THE TOP PLATE OF TRIANGULAR SLIP BASES SHALL HAVE THE SAME EXTERIOR DIMENSIONS AS THE BOTTOM PLATE.

INSIDE DIAMETER OF THE SIGN POST SHALL BE CUT THROUGH THE CENTER OF THE TOP PLATE WITH THE HOLE EDGE BEVELED AS SHOWN. THE BEVEL END SHALL BE TANGENT TO THE BOLT HOLE . ANY MISALIGNMENT SHALL BE REMOVED BY GRINDING . FACE OF BEVEL SHALL BE FINISHED TO A MINIMUM SMOOTHNESS OF 1•500 .

OTHER MASH COMPLIANT BREAKAWAY SIGN SUPPORTS THAT HAVE THE SAME TOP PLATE DIMENSIONS AND SUPPORT 2¼" X 2¼" SQUARE TUBE SIGN POSTS MAY BE SUBSTITUTED AS APPROVED BY THE ENGINEER.

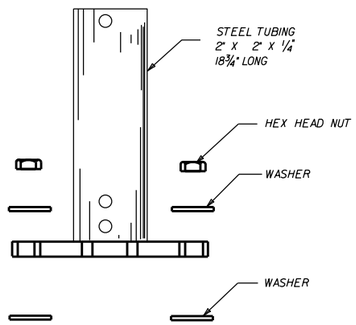


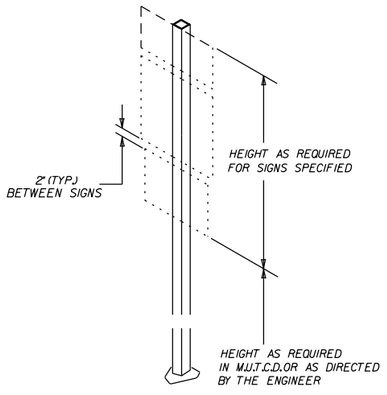
THE STUB ANCHOR SHALL BE SET IN AN 18" DIA. X 42" DEEP CONCRETE FOOTING. REFER TO STD.DRWG.SHS-3 FOR THE FOOTING DETAILS.



FURNISH (2) .012" THICK AND (2) .032" THICK SHIMS PER POST

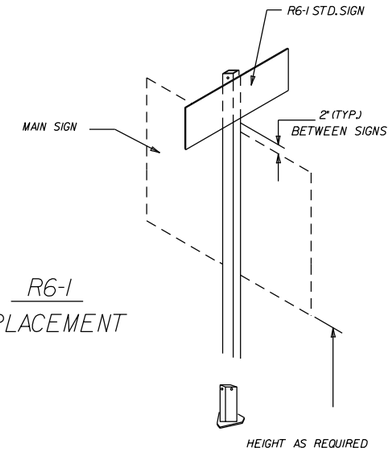
SHIM DETAIL





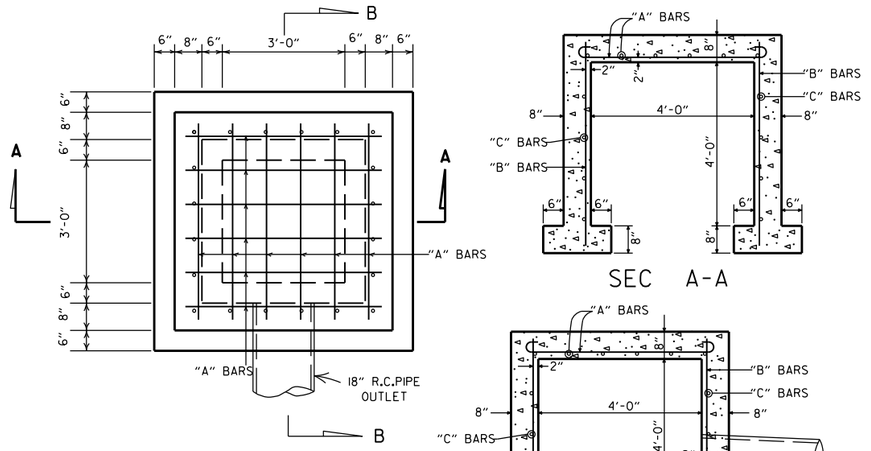
TYPE-I

BASIS OF ESTIMATE
APPROX. 100 lbs STEEL

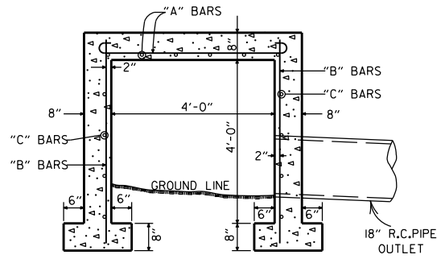


R6-1 PLACEMENT

			ARKANSAS STATE HIGHWAY COMMISSION
			DETAIL OF OMNI-DIRECTIONAL BREAKAWAY SIGN SUPPORTS
9-12-13	ISSUED		STANDARD DRAWING SHS-7
DATE	REVISION	FILMED	



SEC A-A



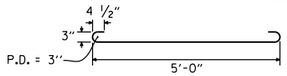
SEC B-B

NOTE: MAX FILL HEIGHT ABOVE TOP OF BOX = 13'-0".

STEEL SCHEDULE

BARS	NUMBER	LENGTH	SPACING
"A"	12	6'-0"	10"
"B"	20	5'-0"	10 ½"
"C"	16	5'-0"	12"

ALL STEEL TO BE #4 BARS



"A" BARS

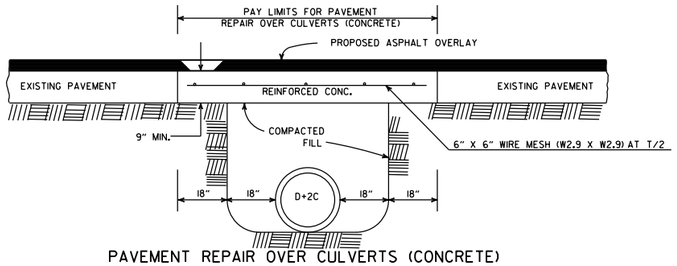
QUANTITIES

CONCRETE 3.31 CU. YDS.
REINFORCING STEEL 168 LB.

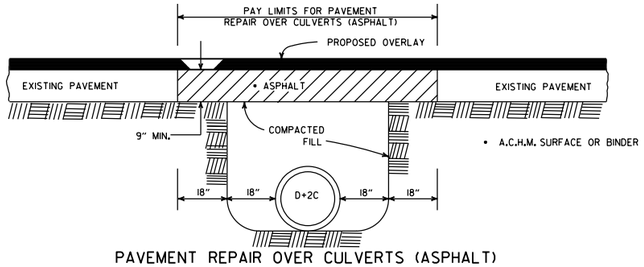
GENERAL NOTE:

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

REINFORCED CONCRETE SPRING BOX



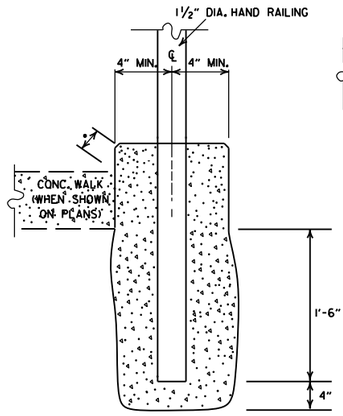
PAVEMENT REPAIR OVER CULVERTS (CONCRETE)



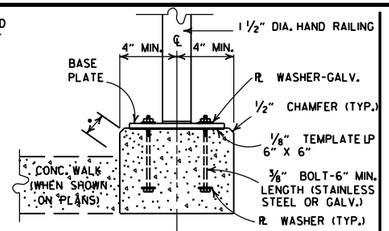
PAVEMENT REPAIR OVER CULVERTS (ASPHALT)

DETAIL SHOWING REPAIR OF EXISTING PAVEMENT AT CULVERT INSTALLATIONS

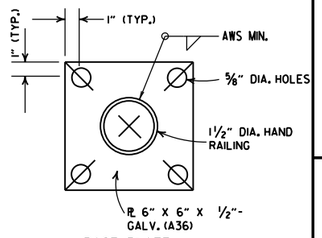
• A 2" MIN. HIGH CURB IS REQUIRED WHEN CONCRETE WALK IS ADJACENT TO THE HAND RAILING. PAYMENT FOR CURB SHALL BE CONSIDERED INCLUDED IN THE PRICE BID FOR CONCRETE WALKS.



DETAIL OF HAND RAILING SET IN CONCRETE

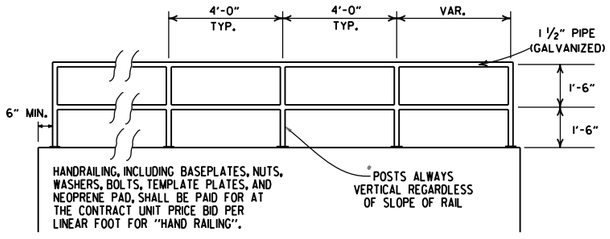


POST CONNECTION TO WALL

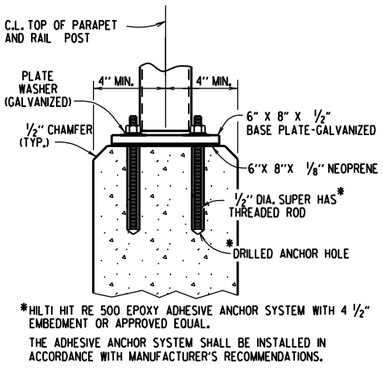


BASE PLATE

POST CONNECTION DETAILS



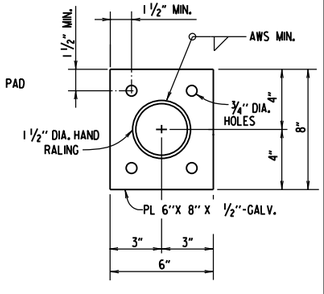
HAND RAILING SHALL CONFORM TO SECTION 633.



*HILTI HIT RE 500 EPOXY ADHESIVE ANCHOR SYSTEM WITH 4 ½" EMBEDMENT OR APPROVED EQUAL.

THE ADHESIVE ANCHOR SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

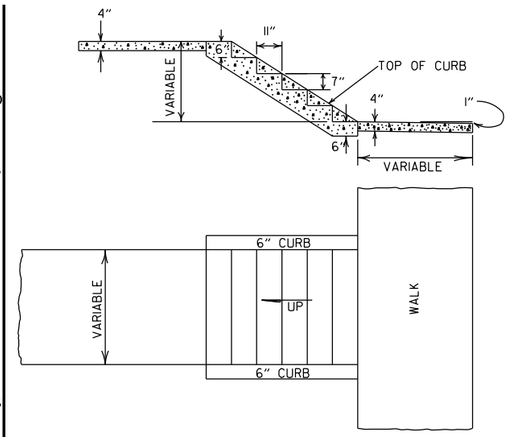
POST CONNECTION TO WALL



BASE PLATE

DETAILS OF ALTERNATE POST ANCHOR SYSTEM (EPOXY ADHESIVE ANCHORS)

HAND RAILING DETAILS



GENERAL NOTES

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

DETAILS OF CONCRETE STEPS & WALKS

DATE	REVISION	DATE FILMED
10-25-18	REVISED DETAIL SHOWING REPAIR OF EXISTING PAVEMENT AT CULVERT INSTALLATIONS	
9-12-13	REVISED REINFORCED CONCRETE SPRING BOX	
7-26-12	REMOVED RETAINING WALL DETAILS & REVISED HAND RAILING DETAILS	
4-17-08	REV. JOINT & FOOTING STEP DETAILS	
11-29-07	REVISED RETAINING WALL DRAINAGE	
5-25-06	REVISED PVMT REPAIR OVER CULVERTS (CONC); REVISED REINFORCED CONC SPRING BOX	
10-9-03	REVISED PIPE RAILING DETAILS TO HAND RAILING DETAILS	
4-10-03	REVISED RETAINING WALL DRAWING	
8-22-02	ADDED HAND RAILING DETAIL	
11-16-01	REVISED PVMT REPAIR OVER CULVERTS (CONC); CORRECTED SPELLING IN GENERAL NOTES	
11-18-98	ADDED GENERAL NOTES TO CONCRETE STEPS & WALKS	
7-02-98	ENLARGED PIPE	
4-03-97	ADDED NOTE TO STEEL BAR SCHED.	
10-18-96	CORRECTED SPELLING	
4-26-94	ADD WEEP HOLE;REV. JOINT SPACING IN RET. WALL	
6-2-94	CHANGED CONST. TO CONTRACTION JOINT	
10-1-92	CHANGED MESH FABRIC TO WIRE MESH	10-1-92
8-15-91	DELETED HDWL MODIFICATION DETAIL	8-15-91
11-8-90	DELETED COLD MIX FROM CULV'T. REPAIR	11-8-90
11-30-89	REV. RETAINING WALL STEEL SCHEDULE	11-30-89
11-17-88	V. BARS BEHIND ARROW	665-11-17-88
7-15-88	REV. PAVEMENT REPAIR ADDED HDWL. MODS, DEL. PIPE UNDERDRAINS	649-7-15-88
11-1-84	REV. TRENCH FOR PIPE UNDERDRAIN	510-11-1-84
1-4-83	ELIMINATED CONC. CLASS & ADDED CHAMFER NOTE	682-1-4-83
3-2-81	SPELLING OF "UNDERDRAIN"	721-3-2-81
4-20-79	REV. UNDERDRAIN DET& PAVEMENT REPAIR	674-4-20-79
2-2-76	12"MIN. GRAN. MAT'L. OVER PIPE	919-2-2-76
4-10-75	REM. SPECS. FOR GRAN. MAT'L.	568-4-10-75-853
5-22-74	GRANULAR MAT'L. TO BE SB-3	567-5-22-74-740
10-2-72	REVISED AND REDRAWN	564-10-16-72

ARKANSAS STATE HIGHWAY COMMISSION

DETAILS OF SPECIAL ITEMS

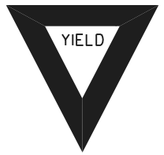
STANDARD DRAWING SI - 1

R1-1



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

R1-2



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

R2-1



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

W3-5



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

W3-5a



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

R4-1



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

R4-2



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

R2-6aP



48"X36"

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

R5-1



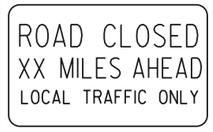
STD. 30"X30"
EXPWY. 36"X36"
SPECIAL 48"X48"

RII-2



48"X30"

RII-3A



60"X30"

RII-4



60"X30"

W21-5a



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

W1-1



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

W1-2



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

R2-11



36"X48"

W1-3



STD. 48"X48"

W1-4



STD. 48"X48"

W1-6



STD. 48"X24"
SPECIAL 60"X30"

W1-8



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

W3-1



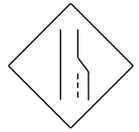
STD. 36"X36"
SPECIAL 48"X48"

W3-2



STD. 36"X36"
SPECIAL 48"X48"

W4-2



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

R56-1



STD. 18"X18"

W5-1



STD. 36"X36"
SPECIAL 48"X48"

W6-3



EXPWY. 36"X36"
SPECIAL 48"X48"

W8-7



EXPWY. 36"X36"
FWY. 48"X48"

W9-2



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

W13-1



STD. 24"X24"

W20-1



STD. 48"X48"

W20-2



STD. 48"X48"

W20-3



STD. 48"X48"

W20-4



STD. 48"X48"

W20-5



STD. 48"X48"

W20-7a



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

W21-2



STD. 30"X30"
SPECIAL 36"X36"

W21-5



STD. 30"X30"
SPECIAL 36"X36"

W24-1



STD. 36"X36"

W1-4b



STD. 48"X48"

W8-11



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

W8-9



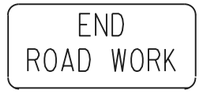
STD. 36"X36"
FWY. 48"X48"

G20-1



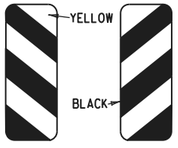
60"X24"

G20-2



48"X24"

OM-3L OM-3R



12"X36"

M4-9



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

M4-10



48"X18"

GENERAL NOTES:

1. ALL TRAFFIC CONTROL DEVICES USED ON ROAD CONSTRUCTION SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION, AND TO THE STANDARD HIGHWAY SIGNS, LATEST EDITION, OR AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION.

2. TRAFFIC CONTROL DEVICES SHALL BE SET UP JUST BEFORE THE START OF CONSTRUCTION OPERATIONS AND SHALL BE PROPERLY MAINTAINED DURING THE TIME SUCH CONDITIONS EXIST. THEY SHALL REMAIN IN PLACE ONLY AS LONG AS NEEDED AND REMOVED THEREAFTER.

3. EXISTING SIGNS AND CONSTRUCTION SIGNS SHALL BE KEPT IN PROPER POSITION, AND BE CLEAN AND LEGIBLE AT ALL TIMES. SIGNS THAT DO NOT APPLY TO EXISTING CONDITIONS SHALL BE REMOVED. SIGNS THAT ARE DAMAGED, DEFACED, OR THAT ACCUMULATE DIRT DURING CONSTRUCTION SHALL BE CLEANED, REPAIRED, OR REPLACED.

4. SIGNS ARE USUALLY MOUNTED ON A SINGLE POST, ALTHOUGH THOSE WIDER THAN 36" OR LARGER THAN 10 SQ. FT. SHALL BE MOUNTED ON TWO POSTS OR ABOVE A TYPE III BARRICADE.

5. SIGN POSTS DIRECT BURIED IN SOIL SHALL BE 2 LB. MINIMUM CHANNEL POST OR 4"x4" WOOD POSTS. CHANNEL POSTS SHALL BE PAINTED GREEN. WOOD POSTS SHALL BE PAINTED WHITE. ALL POSTS SHALL BE NEATLY CONSTRUCTED, AND SHALL BE REPLUMBED, CLEANED, OR REPAIRED AS NEEDED FOR THE DURATION OF THE JOB. THERE SHALL NOT BE MORE THAN 2 POSTS IN A 7' PATH FOR WOOD OR CHANNEL POSTS. ANY CHANNEL POST SPLICE SHALL BE IN ACCORDANCE WITH STANDARD DRAWING TC-3.

6. POST MOUNTED SIGNS IN RURAL AREAS SHALL BE CONSTRUCTED WITH THE NEAR EDGE OF THE SIGN FROM 6 TO 12 FEET FROM THE PAVEMENT EDGE. SIGNS IN URBAN AREAS AND BARRICADE MOUNTED SIGNS SHALL BE MOUNTED A MINIMUM OF 2 FEET FROM THE PAVEMENT EDGE.

7. ALL POST AND BARRICADE MOUNTED SIGNS MOUNTED IN URBAN AREAS SHALL BE MOUNTED A MINIMUM DISTANCE OF 7' FROM THE BOTTOM OF THE SIGN TO THE ROADWAY SURFACE. ALL POST AND BARRICADE MOUNTED SIGNS MOUNTED IN RURAL AREAS SHALL BE MOUNTED A MINIMUM DISTANCE OF 7' FROM THE BOTTOM OF THE SIGN TO THE ROADWAY SURFACE, EXCEPT A MINIMUM OF 6' SHALL BE USED WHEN MOUNTING AN ADVISORY SIGN BELOW A WARNING SIGN. TEMPORARY SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS FOR INTERMEDIATE TERM STATIONARY WORK CONDITIONS. THE SIGNS MINIMUM MOUNTING HEIGHT SHALL BE 5'. RETROREFLECTIVE DEVICES SHALL BE USED. TEMPORARY SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS FOR SHORT-TERM, SHORT DURATION, AND MOBILE CONDITIONS. THEY SHALL BE NO LESS THAN ONE (1) FOOT ABOVE THE TRAVELED WAY. LONG-TERM STATIONARY SIGNS SHALL BE DIRECT BURIED IN SOIL, UNLESS CONDITIONS NECESSITATE THE USE OF PORTABLE SIGNS, OR AS APPROVED BY THE ENGINEER. CONCRETE PADS, CONCRETE OR ROCK BALLAST, OR OTHER SOLID MATERIALS SHALL NOT BE UTILIZED WITH PORTABLE SIGN SUPPORTS.

8. FLAGGERS SHALL USE REFLECTORIZED STOP-SLOW PADDLES. FLAGS MAY BE USED ONLY FOR EMERGENCY SITUATIONS.

9. MOST OF THE SIGNS SHOWN ARE ORIENTED TO THE RIGHT. HOWEVER, THIS DOES NOT PRECLUDE THE USE OF MIRROR IMAGES OF THESE SIGNS WHERE THE REVERSE ORIENTATION MIGHT BETTER CONVEY TO MOTORISTS THE PROPER DIRECTION OF MOVEMENT.

10. R2-6aP PLAQUES SHALL BE MOUNTED BELOW AN APPLICABLE ADVANCE WARNING SIGN THAT IS LOCATED AT LEAST 1500' BUT NOT MORE THAN 1 MILE IN ADVANCE OF THE WORK ZONE. IF A SPEED LIMIT REDUCTION IS IN EFFECT, THE PLAQUE SHALL BE PLACED A MINIMUM OF 500' IN ADVANCE OF THE W3-5 "REDUCED SPEED AHEAD" SIGN. R2-11 SIGNS SHALL BE INSTALLED AT OR NEAR THE DOWNSTREAM END OF THE WORK ZONE. SEE STANDARD DRAWINGS TC-2, TC-3, AND TC-6 FOR TYPICAL PLACEMENT LOCATIONS.

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

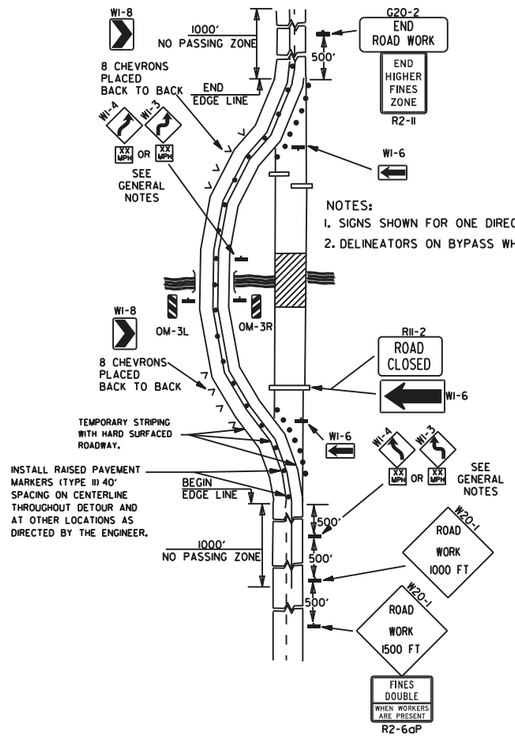
DATE REV	DESCRIPTION
08-14-25	REPLACED R55-1 WITH R2-6aP, ADDED R2-11 & REVISED NOTE 10
11-07-19	REVISED FOR MASH
04-13-17	DELETED RSP-1 & ADDED W21-5a
09-02-15	REVISED REDUCED SPEED LIMIT AHEAD SIGNS, REVISED ROAD WORK NEXT XX MILES
12-15-11	REVISED W24-1

ARDOT ARKANSAS DEPARTMENT OF TRANSPORTATION

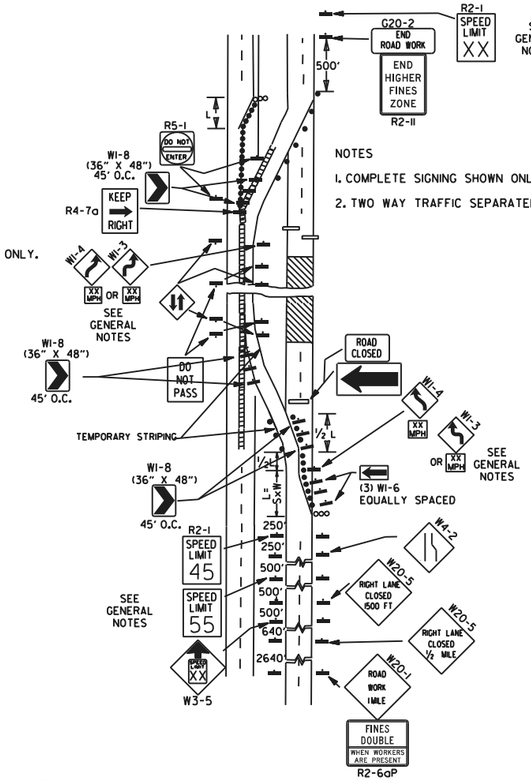
ARKANSAS STATE HIGHWAY COMMISSION

STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION

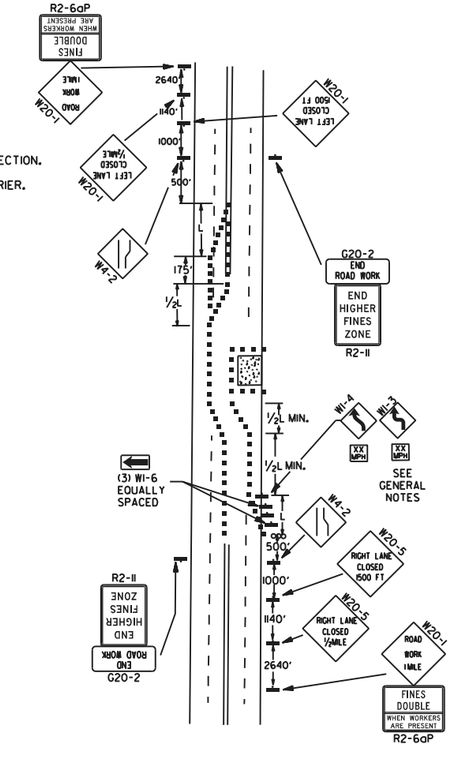
DATE EFFECTIVE	STANDARD DRAWING	TC-1
08-14-2025		



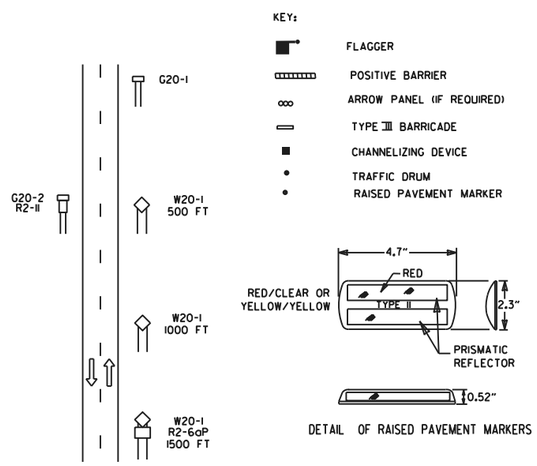
(A) TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES ON A 2-LANE HIGHWAY WHERE THE ENTIRE ROADWAY IS CLOSED AND A BYPASS DETOUR IS PROVIDED.



(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.



TYPICAL ADVANCE WARNING SIGN PLACEMENT

TAPER FORMULAE:

L=SXW FOR SPEEDS OF 45MPH OR MORE.

$L = \frac{WS^2}{60}$ FOR SPEEDS OF 40MPH OR LESS.

WHERE:

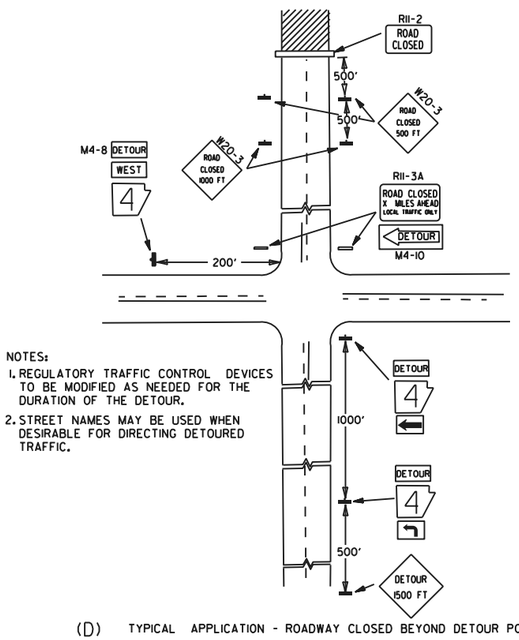
L= MINIMUM LENGTH OF TAPER.

S= NUMERICAL VALUE OF POSTED SPEED LIMIT PRIOR TO WORK OR 85TH PERCENTILE SPEED.

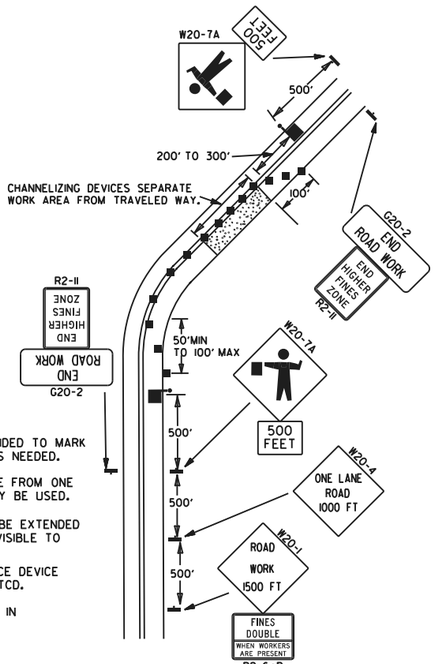
W= WIDTH OF OFFSET.

GENERAL NOTES:

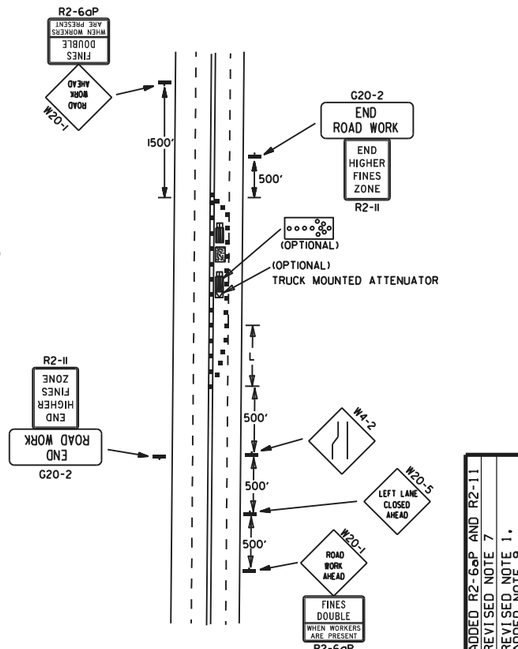
1. THE MAINTENANCE DIVISION SHALL CONDUCT A BALL BANK STUDY TO DETERMINE THE ADVISORY SPEED LIMIT PRIOR TO OPENING TO TRAFFIC. THE ADVISORY SPEED WILL BE POSTED ON W1-3 OR W1-4 CURVE WARNING SIGNS. USE W1-4 WHEN SPEED IS GREATER THAN 30MPH AND W1-3 WHEN 30MPH OR LESS
2. WHEN THE EXISTING SPEED LIMIT IS 55MPH AND THE PLANS REQUIRE A SPEED LIMIT OF 45MPH, THE R2-1(55) SHALL BE OMITTED AND THE W3-5 SHALL BE INSTALLED AT THAT LOCATION. ADDITIONAL R2-1 45MPH SPEED LIMIT SIGNS SHALL BE INSTALLED AT A MAXIMUM OF 1MILE INTERVALS. AT THE END OF THE WORK AREA A R2-1(XX) SHALL BE INSTALLED TO MATCH ORIGINAL SPEED LIMIT.
3. WHEN THE EXISTING SPEED LIMIT IS 65MPH AND THE PLANS REQUIRE A SPEED LIMIT OF 55MPH, THE R2-1(45) SHALL BE OMITTED. ADDITIONAL R2-1 55MPH SPEED LIMIT SIGNS SHALL BE INSTALLED AT A MAXIMUM OF 1MILE INTERVALS. AT THE END OF THE WORK AREA A R2-1(XX) SHALL BE INSTALLED TO MATCH ORIGINAL SPEED LIMIT.
4. THE MAXIMUM SPACING BETWEEN CHANNELIZING DEVICES IN A TAPER SHOULD BE APPROXIMATELY EQUAL IN FEET TO THE SPEED LIMIT. BEYOND THE TAPER, MAXIMUM SPACING SHALL BE TWO TIMES THE SPEED LIMIT, OR AS DIRECTED BY THE ENGINEER.
5. WARNING LIGHTS AND/OR FLAGS MAY BE MOUNTED TO SIGNS OR CHANNELIZING DEVICES AT NIGHT AS NEEDED.
6. PAVEMENT MARKINGS NO LONGER APPLICABLE WHICH MIGHT CREATE CONFUSION IN THE MINDS OF VEHICLE OPERATORS SHALL BE REMOVED OR OBLITERATED AS SOON AS PRACTICABLE.
7. TRAILER MOUNTED DEVICES SUCH AS ARROW PANELS AND PORTABLE CHANGEABLE MESSAGE SIGNS SHALL BE DELINEATED BY AFFIXING CONSPICUITY MATERIAL IN A CONTINUOUS LINE ON THE FACE OF THE TRAILER. WHEN PLACED ON OR ADJACENT TO THE SHOULDER AND NOT BEHIND A POSITIVE BARRIER, THESE DEVICES SHALL BE DELINEATED BY PLACING FIVE (5) TRAFFIC DRUMS, EQUALLY SPACED ALONG THE TRAFFIC SIDE OF THE DEVICE. PAYMENT FOR TRAFFIC DRUMS SHALL BE CONSIDERED INCLUDED IN THE PRICE BID FOR VARIOUS TRAILER MOUNTED DEVICES.
8. DIMENSIONS SHOWN FOR RAISED PAVEMENT MARKERS ARE TYPICAL. THE CONTRACTOR MAY SUBSTITUTE SIMILAR MARKERS WITH THE APPROVAL OF THE ENGINEER. REQUESTING APPROVAL FOR SIMILAR MARKERS MAY BE MADE BY REFERRING TO THE ARDOT QUALIFIED PRODUCTS LIST.
9. ALL TRAILER MOUNTED DEVICES SUCH AS ARROW PANELS AND PORTABLE CHANGEABLE MESSAGE SIGNS SHALL MEET THE REQUIREMENTS OF THE MANUAL FOR ASSESSING SAFETY HARDWARE (MASH).



(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.



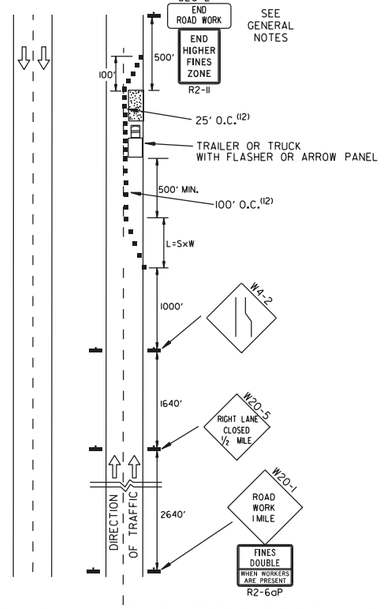
(F) TYPICAL APPLICATION - 4-LANE UNDIVIDED ROADWAY WITH INSIDE LANE CLOSED.

DATE REV	DESCRIPTION
08-14-25	ADDED R2-6aP AND R2-11
05-20-21	REVISED NOTE 7
11-07-19	REVISED NOTE 1. ADDED NOTE 9
09-02-15	REVISED NOTE 2, ADDED NOTE 8, REVISED DRAWING (AT & REPLACED R2-5A WITH W3-5
09-12-13	REVISED DETAIL OF RAISED PAVEMENT MARKINGS

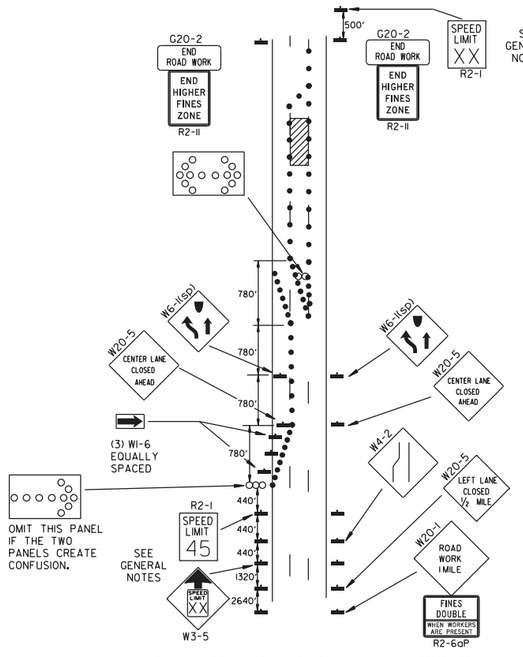
ARKANSAS STATE HIGHWAY COMMISSION

STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION

DATE EFFECTIVE	STANDARD DRAWING	TC-2
08-14-2025		



(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:

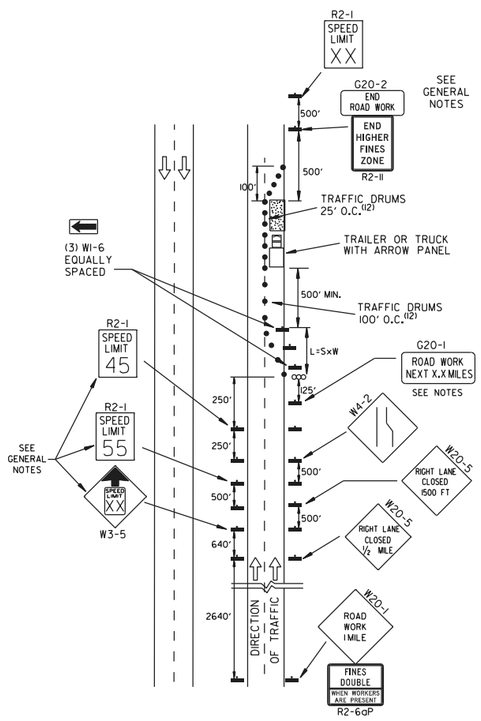
○○○ ARROW PANEL (IF REQUIRED)

■ CHANNELIZING DEVICE

● TRAFFIC DRUM

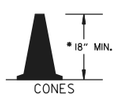
GENERAL NOTES:

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-I(55) SHALL BE OMITTED AND THE W3-5 SHALL BE INSTALLED AT THAT LOCATION. ADDITIONAL R2-I 45MPH SPEED LIMIT SIGNS SHALL BE INSTALLED AT A MAXIMUM OF 1MILE INTERVALS. AT THE END OF THE WORK AREA A R2-I(XX) SHALL BE INSTALLED TO MATCH ORIGINAL SPEED LIMIT.
3. WHEN THE EXISTING SPEED LIMIT IS 65MPH AND THE PLANS REQUIRE A SPEED LIMIT OF 55MPH, THE R2-I(45) SHALL BE OMITTED. ADDITIONAL R2-I 55MPH SPEED LIMIT SIGNS SHALL BE INSTALLED AT A MAXIMUM OF 1MILE INTERVALS. AT THE END OF THE WORK AREA A R2-I(XX) SHALL BE INSTALLED TO MATCH ORIGINAL SPEED LIMIT.
4. THE MAXIMUM SPACING BETWEEN CHANNELIZING DEVICES IN A TAPER SHOULD BE APPROXIMATELY EQUAL IN FEET TO THE SPEED LIMIT. BEYOND THE TAPER, MAXIMUM SPACING SHALL BE TWO TIMES THE SPEED LIMIT OR AS DIRECTED BY THE ENGINEER.
5. WARNING LIGHTS AND/OR FLAGS MAY BE MOUNTED TO SIGNS OR CHANNELIZING DEVICES AT NIGHT AS NEEDED.
6. PAVEMENT MARKINGS NO LONGER APPLICABLE WHICH MIGHT CREATE CONFUSION IN THE MINDS OF VEHICLE OPERATORS SHALL BE REMOVED OR OBLITERATED AS SOON AS PRACTICABLE.
7. THE G20-1 SIGN SHOULD BE INSTALLED ON JOBS OF OVER TWO MILES IN LENGTH. WHEN THE LANE CLOSURE IS NOT AT THE BEGINNING OF THE PROJECT, THE G20-1 SIGN SHALL BE ERECTED 125' IN ADVANCE OF THE JOB LIMIT. ADDITIONAL W20-1 (1 MILE) SIGNS ARE NOT REQUIRED IN ADVANCE OF LANE CLOSURES THAT BEGIN INSIDE THE PROJECT LIMITS. THE DISTANCE DISPLAYED ON THE G20-1 SIGN SHALL BE STATED TO THE NEAREST WHOLE MILE.
8. FLAGGERS SHALL USE STOP/SLOW PADDLES FOR CONTROLLING TRAFFIC THROUGH WORK ZONES. FLAGS MAY BE USED ONLY FOR EMERGENCY SITUATIONS.
9. ALL PLASTIC DRUMS AND CONES SHALL MEET THE REQUIREMENTS OF MANUAL FOR ASSESSING SAFETY HARDWARE (MASH).
10. TRAILER MOUNTED DEVICES SUCH AS ARROW PANELS AND PORTABLE CHANGEABLE MESSAGE SIGNS SHALL BE DELINEATED BY AFFIXING CONSPICUITY MATERIAL IN A CONTINUOUS LINE ON THE FACE OF THE TRAILER. WHEN PLACED ON OR ADJACENT TO THE SHOULDER AND NOT BEHIND A POSITIVE BARRIER, THESE DEVICES SHALL BE DELINEATED BY PLACING FIVE (5) TRAFFIC DRUMS, EQUALLY SPACED ALONG THE TRAFFIC SIDE OF THE DEVICE. PAYMENT FOR TRAFFIC DRUMS SHALL BE CONSIDERED INCLUDED IN THE PRICE BID FOR VARIOUS TRAILER MOUNTED DEVICES.
11. ALL TRAILER MOUNTED DEVICES SUCH AS ARROW PANELS AND PORTABLE CHANGEABLE MESSAGE SIGNS SHALL MEET THE REQUIREMENTS OF THE MANUAL FOR ASSESSING SAFETY HARDWARE (MASH).
12. ONLY WHERE SPACE RESTRICTIONS DO NOT ALLOW FOR TRAFFIC DRUMS, TUBULAR MARKERS MAY BE USED AT 50' O.C. IN STABILIZATION ZONES AND AT 10' O.C. DIRECTLY ADJACENT TO CONSTRUCTION OPERATIONS AND AT EXIT TAPERS. TUBULAR MARKERS SHALL BE STABILIZED WITH WEIGHTED BASES IN ACCORDANCE WITH THE M.U.T.C.D.

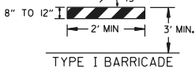


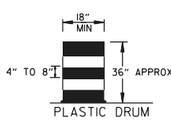
(C) TYPICAL APPLICATION - CONSTRUCTION OPERATIONS OF INTERMEDIATE TO LONG TERM DURATION ON A 4-LANE DIVIDED ROADWAY WHERE HALF OF THE ROADWAY IS CLOSED.

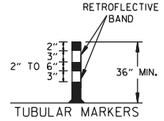
CHANNELIZING DEVICES

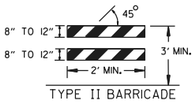


* WHEN CONES ARE USED ON FREEWAYS AND MULTI-LANE HIGHWAYS, THEY SHALL BE 28" MIN. DURING HOURS OF DARKNESS, 28" CONES SHALL BE USED ON ALL ROADWAYS, AND SHALL BE REFLECTORIZED IN ACCORDANCE WITH THE M.U.T.C.D.



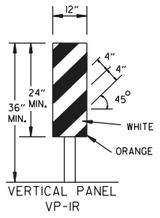


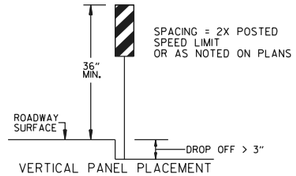


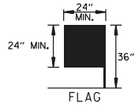




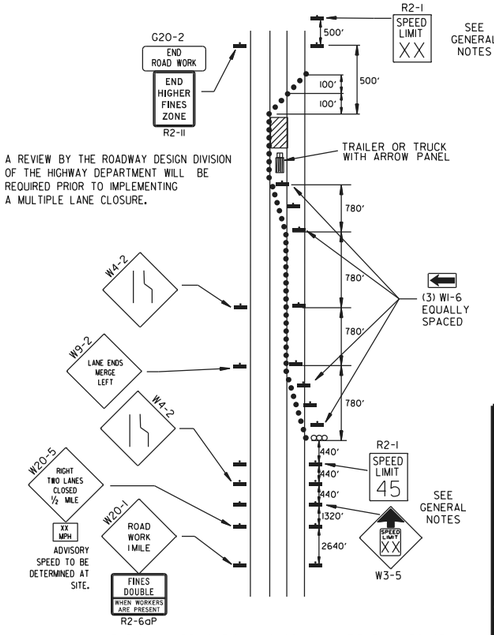
NOTE:
FOR ALL ROAD CLOSURES, THE TYPE III BARRICADES SHALL BE OF SUFFICIENT LENGTH TO EXTEND ACROSS ENTIRE ROADWAY.







FLAG SHALL BE OF GOOD GRADE RED MATERIAL



(D) TYPICAL APPLICATION - CLOSING MULTIPLE LANES OF A MULTILANE HIGHWAY.

TRAFFIC CONTROL DEVICES

NON-INTERSTATE

VERTICAL DIFFERENTIAL	LOCATION	TRAFFIC CONTROL ≤ 45 MPH	TRAFFIC CONTROL > 45 MPH
≤ 1"	CENTERLINE	W8-11	W8-11
> 1" ≤ 3"	CENTERLINE	W8-11 AND CENTERLINE LANE STRIPING	W8-11 AND CENTERLINE LANE STRIPING
> 3"	CENTERLINE	STANDARD LANE CLOSURE(6)	STANDARD LANE CLOSURE(6)
≤ 3"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	W8-9 AND TRAFFIC DRUMS(1)	W8-9 AND TRAFFIC DRUMS(1)
> 3" ≤ 6"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	W8-17, EDGE LINE STRIPING, AND TRAFFIC DRUMS(1)	W8-17, EDGE LINE STRIPING, AND TRAFFIC DRUMS(1)
> 6" ≤ 18"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	W8-17, EDGE LINE STRIPING, AND TRAFFIC DRUMS(1)	W8-17, EDGE LINE STRIPING, AND TRAFFIC DRUMS(2)
> 18" ≤ 24"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	W8-17, EDGE LINE STRIPING, AND TRAFFIC DRUMS(1)	A STABILIZED WEDGE, W8-17, EDGE LINE STRIPING, AND TRAFFIC DRUMS(3)
> 24"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	PRECAST CONCRETE BARRIER(4) & EDGE LINES	PRECAST CONCRETE BARRIER(4) & EDGE LINES

INTERSTATE

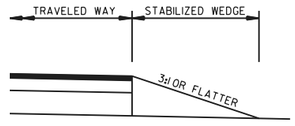
VERTICAL DIFFERENTIAL	LOCATION	TRAFFIC CONTROL
≤ 3"	CENTERLINE	W8-11 AND LANE STRIPING
≤ 3"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	W8-9, EDGE LINE STRIPING, AND TRAFFIC DRUMS(2)
> 3" ≤ 6"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	W8-17, EDGE LINE STRIPING, AND TRAFFIC DRUMS(2)
> 6"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	PRECAST CONCRETE BARRIER & EDGE LINES

INTERSTATE AND NON-INTERSTATE

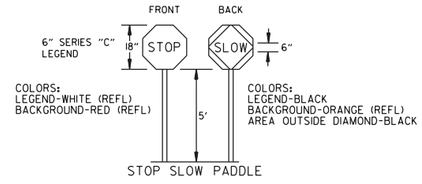
FORESLOPE	HEIGHT	TRAFFIC CONTROL
1:1	> 2 FT	PRECAST CONCRETE BARRIER
2:1	≤ 5 FT	TRAFFIC DRUMS
2:1	> 5 FT	PRECAST CONCRETE BARRIER
Flatter than 2:1	N/A	TRAFFIC DRUMS

GENERAL NOTES:

1. WHEN THE SHOULDER AREA IS USED AS PART OF THE TRAVELED LANE AND THERE IS INSUFFICIENT WIDTH TO PLACE TRAFFIC DRUMS ON THE REMAINING SHOULDER WIDTH, THEN VERTICAL PANELS SHALL BE USED.
2. WHEN THERE IS INSUFFICIENT WIDTH TO PLACE TRAFFIC DRUMS ON THE REMAINING SHOULDER WIDTH, A STABILIZED WEDGE SHALL BE USED.
3. PRECAST CONCRETE BARRIER WALL CAN BE USED IN LIEU OF A STABILIZED WEDGE, W8-17 SIGN, EDGE LINE STRIPING, AND TRAFFIC DRUMS, IF AND WHERE DIRECTED BY THE ENGINEER.
4. A STABILIZED WEDGE, W8-17 SIGN, EDGE LINE STRIPING, AND TRAFFIC DRUMS CAN BE USED IN LIEU OF PRECAST CONCRETE BARRIER WALL, IF AND WHERE DIRECTED BY THE ENGINEER.
5. W21-5, W21-5a, AND/OR W21-5b SIGNS SHALL BE USED WHERE THE ROADWAY IS UNOBSTRUCTED IF AND WHERE DIRECTED BY THE ENGINEER.
6. TIME LIMITATIONS MUST CONFORM TO SECTION 603 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION).



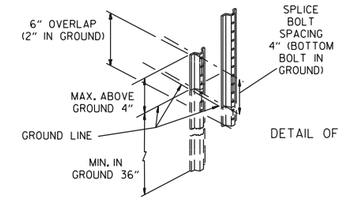
NOTE:
MATERIALS FOR THE STABILIZED WEDGE SHALL MEET THE REQUIREMENTS PROVIDED IN SECTION 603.02 OF THE STANDARD SPECIFICATIONS.

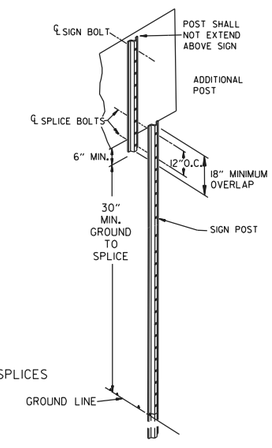


NOTES:
USE SPLICES ONLY WHEN NECESSARY FOR INSTALLATION. TYPICAL INSTALLATION SHOULD HAVE NO SPLICES (SEE STD. DRAWING NO. SHS-2)

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

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





DATE REV	DESCRIPTION
08-14-25	ADDED R2-6aP AND R2-11
05-22-25	REVISED TRAFFIC CONTROL DEVICES AND NOTES. ADDED NOTE 12.
08-12-21	REVISED TRAFFIC CONTROL DEVICES AND NOTES
05-20-21	REVISED NOTE 10
02-27-20	REVISED TRAFFIC CONTROL DEVICES DETAILS

ARKANSAS STATE HIGHWAY COMMISSION

STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION

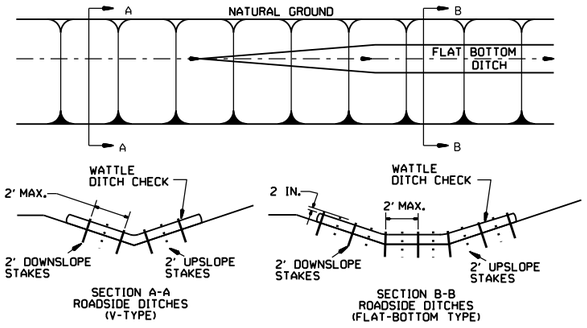
DATE EFFECTIVE 08-14-2025

STANDARD DRAWING

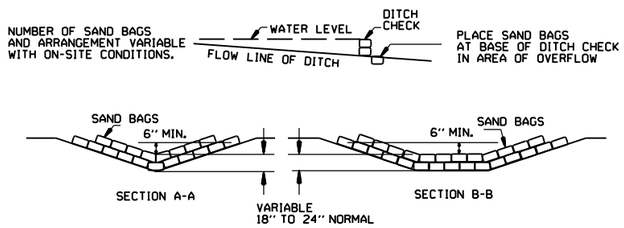
TC-3

GENERAL NOTES

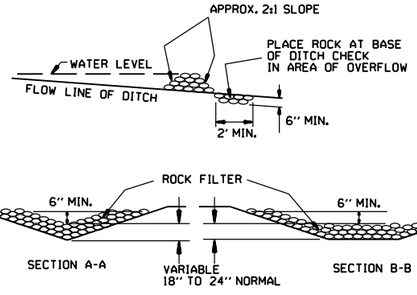
INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.



WATTLE DITCH CHECK (E-1)



SAND BAG DITCH CHECK (E-5)

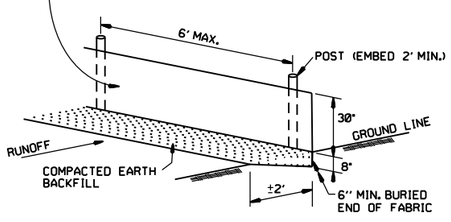


ROCK DITCH CHECK (E-6)

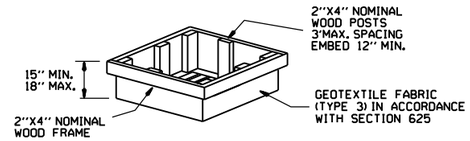
GENERAL NOTES

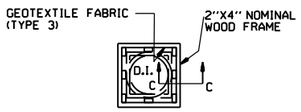
GEOTEXTILE FABRIC (TYPE 4) IN ACCORDANCE WITH SECTION 625

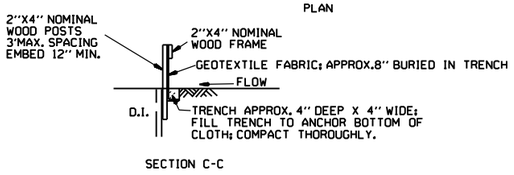
GEOTEXTILE FABRIC SHALL BE SPLICED TOGETHER WITH A SEWN SEAM ONLY AT A SUPPORT POST OR TWO SECTIONS OF FENCE MAY BE OVERLAPPED INSTEAD. PAYMENT OF ADDITIONAL MATERIAL FOR OVERLAP WILL NOT BE MADE.



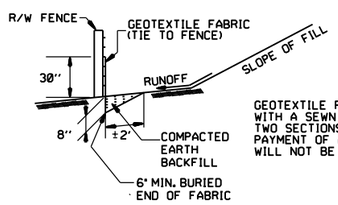
SILT FENCE (E-11)





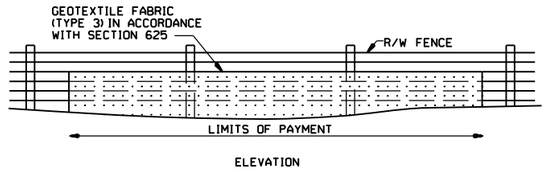


DROP INLET SILT FENCE (E-7)



GENERAL NOTES

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



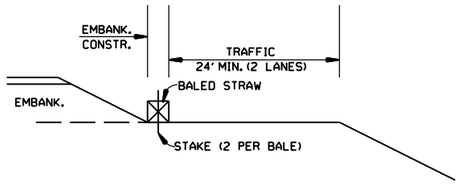
SILT FENCE ON R/W FENCE (E-4)

GENERAL NOTES

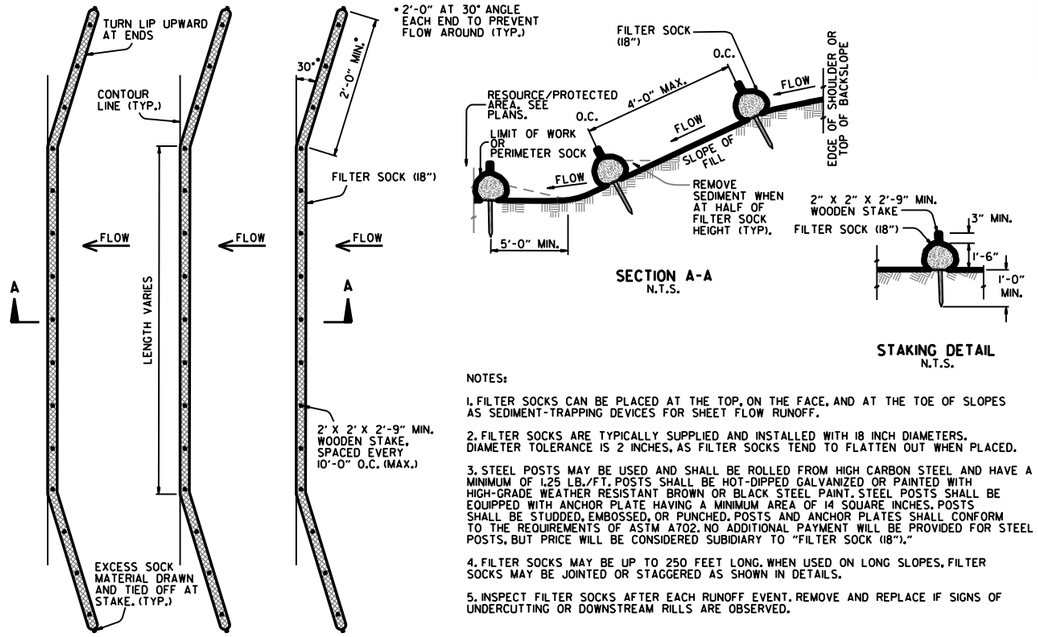
1. STRAW BALES SHALL BE INSTALLED SO THAT THE BINDINGS ARE ORIENTED AROUND THE SIDES RATHER THAN ALONG THE TOPS AND BOTTOMS OF THE BALES. THE BALES SHALL BE A MINIMUM OF 30 INCHES IN LENGTH.

2. NO GAPS SHALL BE LEFT BETWEEN BALES.

3. BALED STRAW FILTER BARRIERS COMPLETED AND ACCEPTED WILL BE MEASURED BY THE BALE IN PLACE AS AUTHORIZED BY THE ENGINEER AND WILL BE PAID FOR AT THE CONTRACT UNIT PRICE BID PER BALE FOR BALED STRAW DITCH CHECKS.



BALED STRAW FILTER BARRIER (E-2)



NOTES:

1. FILTER SOCKS CAN BE PLACED AT THE TOP, ON THE FACE, AND AT THE TOE OF SLOPES AS SEDIMENT-TRAPPING DEVICES FOR SHEET FLOW RUNOFF.

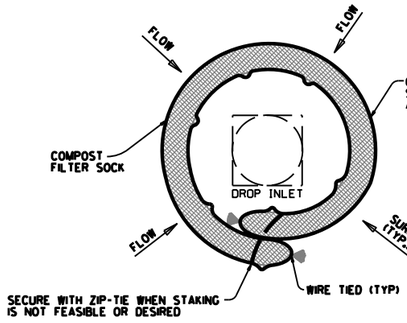
2. FILTER SOCKS ARE TYPICALLY SUPPLIED AND INSTALLED WITH 18 INCH DIAMETERS. DIAMETER TOLERANCE IS 2 INCHES, AS FILTER SOCKS TEND TO FLATTEN OUT WHEN PLACED.

3. STEEL POSTS MAY BE USED AND SHALL BE ROLLED FROM HIGH CARBON STEEL AND HAVE A MINIMUM OF 1.25 LB./FT. POSTS SHALL BE HOT-DIPPED GALVANIZED OR PAINTED WITH HIGH-GRADE WEATHER RESISTANT BROWN OR BLACK STEEL PAINT. STEEL POSTS SHALL BE EQUIPPED WITH ANCHOR PLATE HAVING A MINIMUM AREA OF 14 SQUARE INCHES. POSTS SHALL BE STUDDED, EMBOSSED, OR PUNCHED. POSTS AND ANCHOR PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A702. NO ADDITIONAL PAYMENT WILL BE PROVIDED FOR STEEL POSTS, BUT PRICE WILL BE CONSIDERED SUBIDIARY TO "FILTER SOCK (18")."

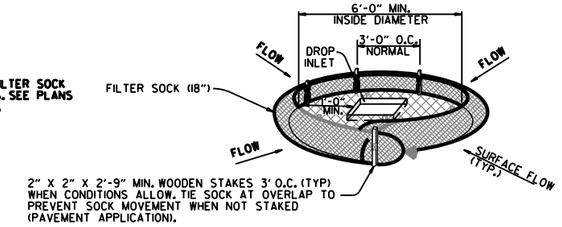
4. FILTER SOCKS MAY BE UP TO 250 FEET LONG. WHEN USED ON LONG SLOPES, FILTER SOCKS MAY BE JOINTED OR STAGGERED AS SHOWN IN DETAILS.

5. INSPECT FILTER SOCKS AFTER EACH RUNOFF EVENT. REMOVE AND REPLACE IF SIGNS OF UNDERCUTTING OR DOWNSTREAM RILLS ARE OBSERVED.

FILTER SOCK ALONG SLOPE (E-3)



DROP INLET PLAN VIEW
N.T.S.



DROP INLET PERSPECTIVE VIEW
N.T.S.

NOTES:

1. OVERLAP ENDS OF SOCK (1' MIN. 3' MAX.).

2. USE 18" DIA. SOCK IN NON-TRAFFIC AREAS OR AREAS WHERE SAFETY IS NOT A CONCERN.

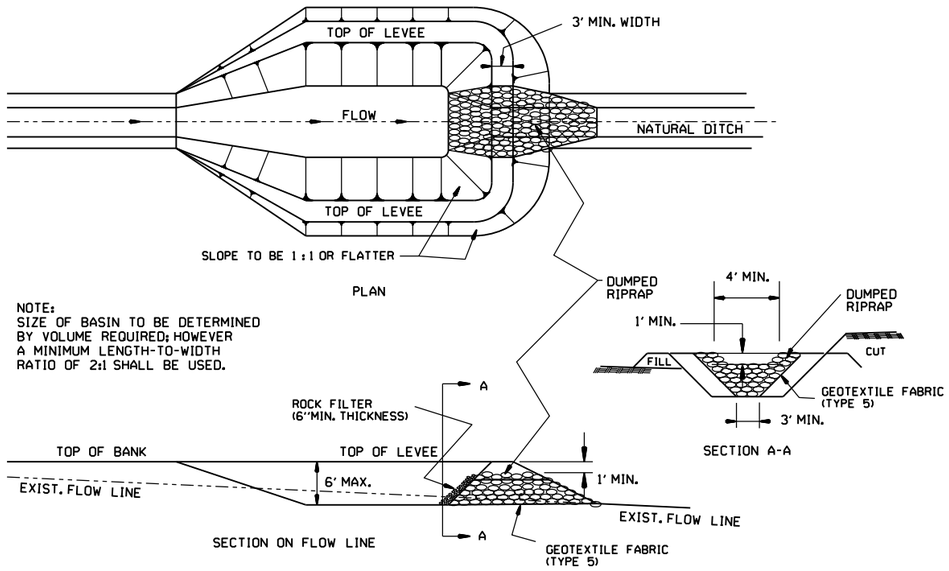
COMPOST FILTER SOCK DROP INLET PROTECTION (E-13)

DATE	REVISION	FILMED
11-16-17	ADDED FILTER SOCK E-3 AND E-13	
12-15-11	DELETED BALED STRAW DITCH CHECK & ADDED WATTLE DITCH CHECK	
11-18-98	ADDED NOTES	
07-02-98	ADDED BALED STRAW FILTER BARRIER (E-2)	
07-20-95	REVISED SILT FENCE E-4 AND E-11	7-20-95
07-15-94	REV. E-4 & E-11 MIN. 13" BURIED END OF FABRIC	
06-02-94	REVISED E-1,4,7 & 11; DELETED E-2 & 3	6-2-94
04-01-93	REDRAWN	
10-01-92	REDRAWN	
08-02-76	ISSUED R.D.M.	298-7-28-76

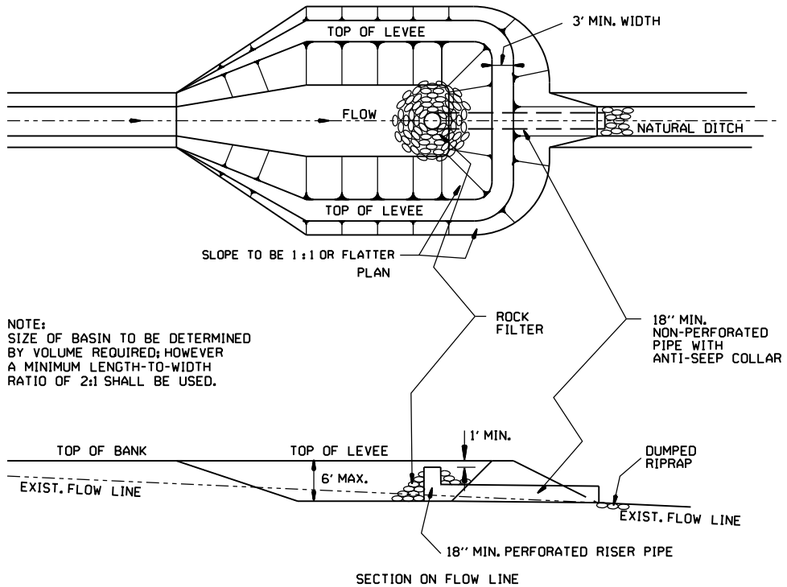
ARKANSAS STATE HIGHWAY COMMISSION

TEMPORARY EROSION CONTROL DEVICES

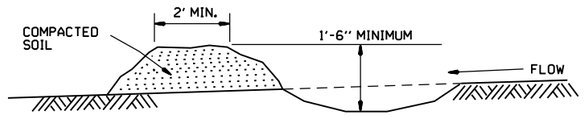
STANDARD DRAWING TEC-1



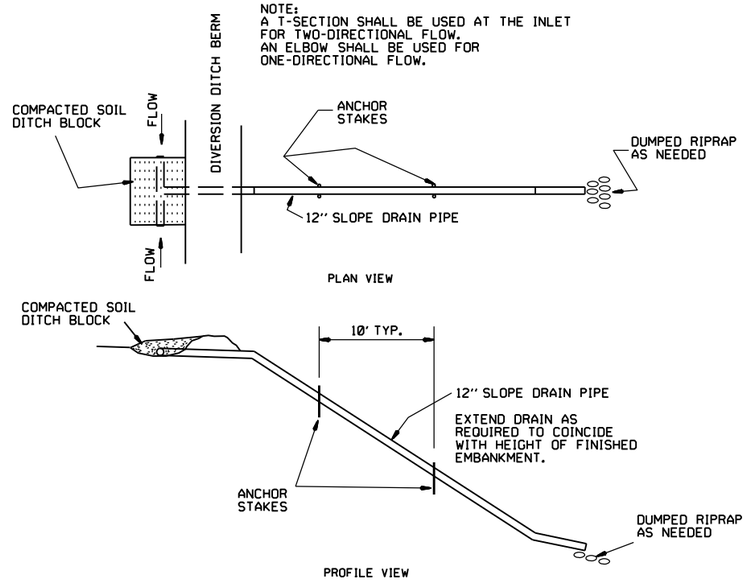
SEDIMENT BASIN WITH RIPRAP OUTLET (E-9)



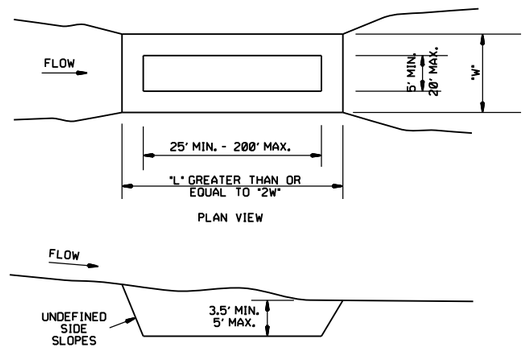
SEDIMENT BASIN WITH PIPE OUTLET (E-10)



DIVERSION DITCH (E-8)



SLOPE DRAIN (E-12)



SEDIMENT BASIN (E-14)

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

ARKANSAS STATE HIGHWAY COMMISSION

TEMPORARY EROSION CONTROL DEVICES

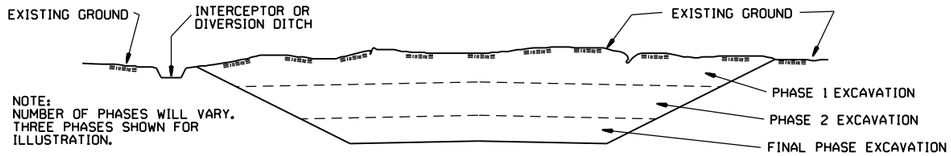
STANDARD DRAWING TEC-2

CLEARING AND GRUBBING

CONSTRUCTION SEQUENCE

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

EXCAVATION



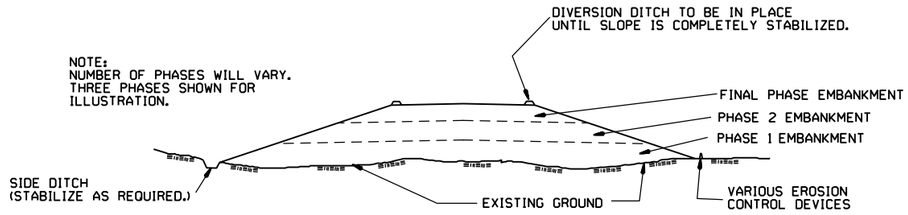
GENERAL NOTE

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

CONSTRUCTION SEQUENCE

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

EMBANKMENT



GENERAL NOTE

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

CONSTRUCTION SEQUENCE

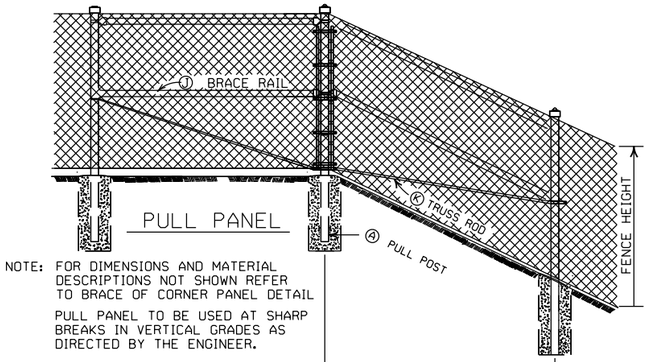
1. CONSTRUCT DIVERSION DITCHES, DITCH CHECKS, SEDIMENT BASINS, SILT FENCES, OR OTHER EROSION CONTROL DEVICES AS SPECIFIED.
2. PLACE PHASE 1 EMBANKMENT WITH PERMANENT OR TEMPORARY SEEDING. PROVIDE DIVERSION DITCHES AND SLOPE DRAINS IF EMBANKMENT CONSTRUCTION IS TO BE TEMPORARILY ABANDONED FOR A PERIOD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

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

ARKANSAS STATE HIGHWAY COMMISSION

TEMPORARY EROSION CONTROL DEVICES

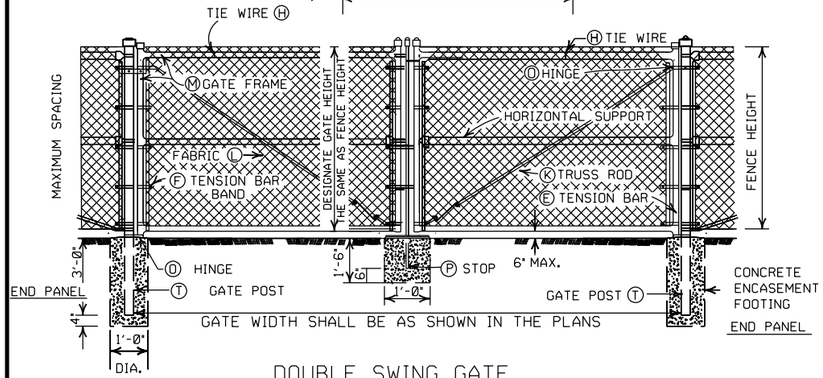
STANDARD DRAWING TEC-3



PULL PANEL

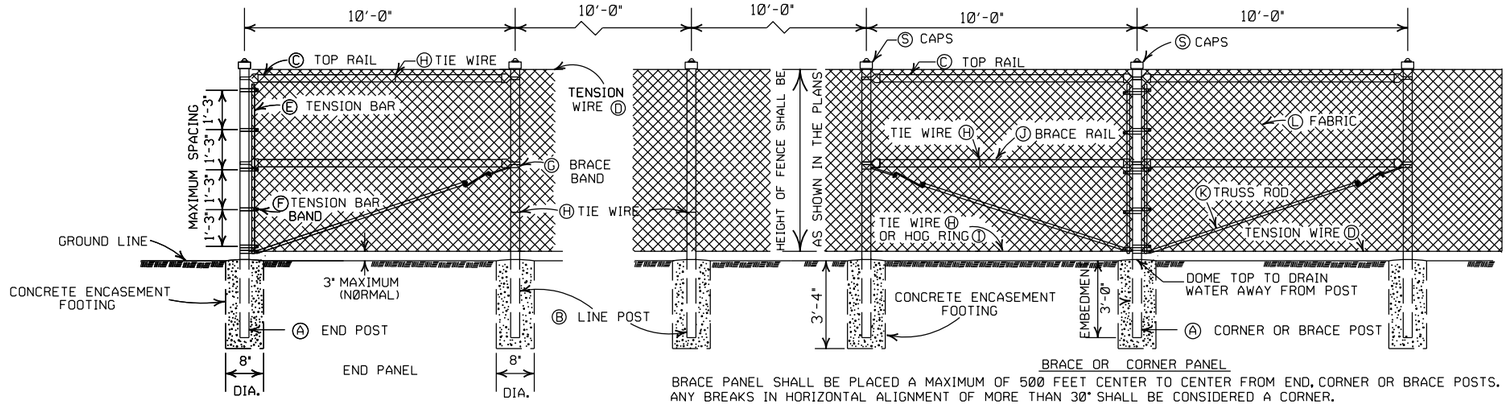
NOTE: FOR DIMENSIONS AND MATERIAL DESCRIPTIONS NOT SHOWN REFER TO BRACE OF CORNER PANEL DETAIL

PULL PANEL TO BE USED AT SHARP BREAKS IN VERTICAL GRADES AS DIRECTED BY THE ENGINEER.



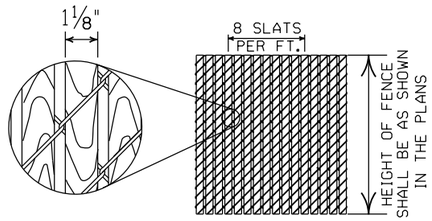
DOUBLE SWING GATE

POST SPACING DETAIL



BRACE OR CORNER PANEL

BRACE PANEL SHALL BE PLACED A MAXIMUM OF 500 FEET CENTER TO CENTER FROM END, CORNER OR BRACE POSTS. ANY BREAKS IN HORIZONTAL ALIGNMENT OF MORE THAN 30° SHALL BE CONSIDERED A CORNER.



1⅛" X ¼" REDWOOD SLATS(LENGTH TO MATCH HEIGHT OF FENCE)

DETAIL OF REDWOOD SLAT INSTALLATION

(WHERE APPLICABLE)

GENERAL NOTES:

(C) CHAIN LINK FENCE BEING PLACED ON PRIVATE PROPERTY SHALL INCLUDE A TOP RAIL. ALL LABOR, MATERIALS, EQUIPMENT, TOOLS, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE BID PER LIN. FT. OF CHAIN LINK FENCE.

(D) TENSION WIRE: SHALL BE SECURED TO ALL TERMINAL, PULL, BRACE OR CORNER POSTS WITH TENSION BAR BANDS.

(J) BRACE RAIL: BRACE RAILS SHALL BE PROVIDED AT ALL TERMINAL, PULL, BRACE OR CORNER POSTS HALFWAY BETWEEN THE TOP RAIL AND GROUND LEVEL WHEN TOPRAIL IS SPECIFIED AND TWELVE INCHES (12") DOWN FROM TOP OF FABRIC WHEN TOP TENSION WIRE IS SPECIFIED. BRACE RAIL SHALL EXTEND FROM SUCH POST TO THE FIRST ADJACENT LINE POST.

(L) FABRIC: SHALL CONFORM TO THE SPECIFICATIONS.

(M) GATE FRAMES: SHALL BE CONSTRUCTED OF TUBULAR MEMBERS ASSEMBLED BY USE OF HEAVY PRESSED STEEL, MALLEABLE FITTINGS OR BY WELDING. ALL GATES SHALL HAVE ONE HORIZONTAL SUPPORT EXTENDING THE WIDTH OF THE GATE AT THE MIDPOINTS OF VERTICAL FRAME MEMBERS. THE COMPLETE FRAME SHALL BE RIGID AND HAVE AMPLE STRENGTH TO BE FREE FROM SAG AND TWIST.

(O) HINGES: SHALL BE OF HEAVY PATTERN, OF ADEQUATE STRENGTH FOR GATE, AND WITH LARGE BEARING SURFACES FOR CLAMPING IN POSITION. THE HINGE SHALL BE OF THE PROPER TYPE TO ALLOW FOR THE DESIGNATED DEGREE OF SWING. THE HINGE SHALL NOT TWIST OR TURN UNDER THE ACTION OF THE GATE. THE GATES SHALL BE CAPABLE OF BEING OPENED AND CLOSED EASILY BY ONE PERSON.

(P) LATCHES AND STOPS: SHALL BE PROVIDED FOR ALL GATES. GATES SHALL HAVE A DROP BAR LATCH. LATCHES SHALL BE ARRANGED FOR LOCKING. THE STOP FOR DROP BAR LATCHES SHALL BE SET IN CONCRETE AND ENGAGE THE PLUNGER OF THE BAR LATCH.

(S) CAPS: ALL POSTS, EXCEPT ROLL FORMED POSTS AND "T" POSTS SHALL BE CAPPED OVER THE EXTERIOR OF THE POST, AND SHALL CONFORM TO ASTM F626.

CONCRETE REQUIRED FOR THE EMBEDMENT OF ALL POSTS SHALL NOT BE PAID FOR DIRECTLY BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE BID FOR CHAIN LINK FENCE.

POSTS SHALL BE SPACED EQUIDISTANT ON A MAXIMUM OF 10' CENTERS.

EXCAVATION FOR POSTS: IN OTHER THAN ROCK SHALL BE OF THE DIMENSIONS INDICATED. IF ROCK IS ENCOUNTERED BEFORE REACHING THE REQUIRED DEPTH, THE EXCAVATION SHALL BE CONTINUED TO THE DEPTH INDICATED OR 1'-6" INTO THE ROCK, WHICHEVER IS LESS, AND SHALL BE A MINIMUM OF 8 INCHES IN DIAMETER.

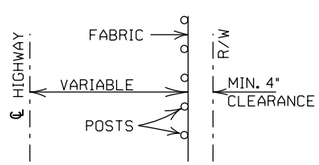
HEIGHT OF FENCE FABRIC	(A) END, PULL, CORNER OR BRACE POST	(B) LINE POSTS SIZE	(B) LINE POSTS TIE SPACING	(C) TOP RAIL SIZE	(C) TOP RAIL TIE SPACING	(C) TOP RAIL MIN. LENGTH	(D) TENSION WIRE SIZE	(D) TENSION WIRE TIE SPACING	(E) TENSION BAR SIZE	(E) TENSION BAR LENGTH	(F) TENSION BAR BAND SIZE	(F) TENSION BAR BAND BOLT SIZE	(F) TENSION BAR BAND SPACING	(G) BRACE BAND SIZE	(G) BRACE BAND BOLT SIZE
6' AND LESS	2½" O.D.	2" O.D.	1 TIE EVERY 1'-2" OF FABRIC HEIGHT	1⅝" O.D.	1 TIE EVERY 2'-0"	10'-0"	7 GAUGE COIL SPRING WIRE	1 TIE EVERY 1'-0"	MIN. OF ⅜" X ¾"	MIN. OF 2" LESS THAN FABRIC HEIGHT	MIN. OF ¾" X 0.074	⅝" X 1¼"	1 BAND AT TOP AND BOTTOM 15" MAX. INTERVAL BETWEEN BANDS	MIN. OF ¾" X 0.105	⅝" X 1¼"
OVER 6' TO 12' INCL.	3 " O.D.	2½" O.D.													

HEIGHT OF FENCE FABRIC	(H) TIE WIRE	(I) HOG RING	(J) BRACE RAIL SIZE	(J) BRACE RAIL TIE SPACING	(K) TRUSS ROD	(L) FABRIC SIZE	(L) FABRIC MESH	(L) FABRIC SELVAGE	(M) GATE FRAME SIZE	(M) GATE FRAME TIE SPACING	(N) HORIZONTAL SUPPORT SIZE	(N) HORIZONTAL SUPPORT TIE SPACING	(O) HINGE TYPE 180° SWING	(T) GATE POST GATE WIDTH 12' AND LESS	(T) GATE POST GATE WIDTH OVER 12' TO 24' INCL.
6' AND LESS	MIN. OF 12 GA. STEEL OR 9 GA. ALUM.	SAME GAUGE AS FABRIC	1⅝" O.D.	1 TIE EVERY 2'-0"	MIN. OF ⅝" ROUND WITH TIGHTNERS AND FITTINGS	9 GA.	2"	KNUCK -ING AND/OR TWIST -ING	2" O.D.	1 TIE EVERY 1'-0"	2" O.D.	1 TIE EVERY 1'-0"	OFFSET	3" O.D.	4" O.D.
OVER 6' TO 12' INCL.														4" O.D.	

NOTE: POST SIZES SHOWN ARE FOR STEEL. WHERE ALUMINUM IS PROVIDED, LINE POSTS SHALL HAVE AN OUT SIDE DIAMETER OF 2½" FOR FENCE HEIGHT OF 6' AND LESS, AN OUTSIDE DIAMETER OF 3" FOR FENCE HEIGHT OF 6' TO 12'. END, PULL, CORNER OR BRACE POSTS SHALL HAVE AN OUTSIDE DIAMETER OF 3" FOR FENCE HEIGHT OF 6' AND LESS; AN OUTSIDE DIAMETER OF 3½" FOR FENCE HEIGHTS OF 6' TO 12'. GATE POSTS WHERE GATE WIDTH IS 12' AND LESS SHALL HAVE AN OUTSIDE DIAMETER OF 3½" FOR FENCE HEIGHT OF 6' AND LESS. ALUMINUM TENSION WIRE SHALL BE 0.192" IN DIAMETER. MINIMUM THICKNESS OF MATERIAL FROM WHICH EXPANSION SLEEVES SHALL BE MADE WILL BE 0.078". POSTS AND RAILS MAY HAVE ANY CROSS-SECTIONAL SHAPE THAT WILL MEET THE SPECIFICATIONS.

OTHER DETAILS APPLY TO BOTH STEEL AND ALUMINUM FENCE.

ALL MISCELLANEOUS FITTINGS AND HARDWARE SHALL MEET THE REQUIREMENTS AND PRODUCTION TOLERANCES AS SET FORTH IN THE SPECIFICATIONS. 9 GAUGE ALUMINUM WIRE SHALL BE ACCEPTABLE FOR TIEING FABRIC TO TUBULAR AND ROLL FORMED MEMBERS OF STEEL FENCE.



INSTALLATION MAY BE MODIFIED AS SHOWN IN THE PLANS

TYPICAL INSTALLATION DIAGRAM

POSTS AND RAILS

SIZE O.D.	GRADE 1 AND ALUMINUM ALLOY O.D. INCHES	WALL THICKNESS	LBS. PER LINEAR FT. STEEL	LBS. PER LINEAR FT. ALUMINUM	GRADE 2 O.D. INCHES	WALL THICKNESS	LBS. PER LINEAR FT.
1⅝	1.660	0.140	2.27	0.786	1.660	0.111	1.84
2	1.900	0.145	2.72	0.940	1.900	0.120	2.28
2½	2.375	0.154	3.65	1.264	2.375	0.130	3.11
3	2.875	0.203	5.79	2.004	2.875	0.160	4.64
3½	3.500	0.216	7.58	2.621	3.500	0.160	5.71
4	4.000	0.226	9.11	3.151	4.000	0.160	6.56

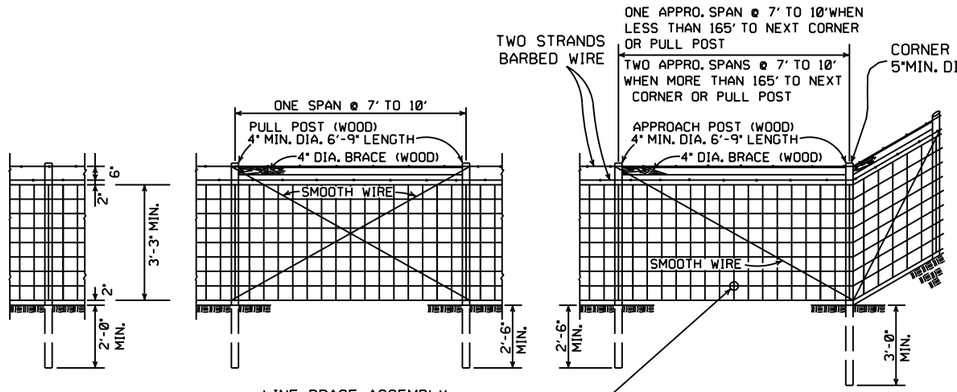
TOLERANCES ON DIMENSIONS AND WEIGHTS ACCORDING TO AASHTO M 181

DATE	REVISION	FILMED
11-17-10	REVISED TRUSS ROD	
12-10-09	REVISED POSTS & RAILS TABLE	
5-21-09	ADDED TABLE & GEN. NOTE (C)	
8-22-02	REVISED NOTES, REMOVED TABLE, & REMOVED FENCE ALTERNATE	
4-3-97	REVISED BRACE RAIL NOTE	
10-18-96	REVISED AASHTO & ASTM REF.	
11-3-94	REVISED NOTE (L)	
10-1-92	DELETED ALTERNATE POST	10-1-92
8-15-91	DELETED ROLL FORMED POST DETAIL & ADDED NOTE	8-15-91 8-15-91
11-30-89	DELETED CLASS CONCRETE	11-30-89
11-17-88	REVISED O.D. SIZES	668-11-17-88
10-30-87	GENERAL REVISIONS	548-10-30-87
4-20-79	REVISED TOP RAIL & TENSION WIRE	695-4-20-79
10-2-72	REVISED AND REDRAWN	530-10-2-72

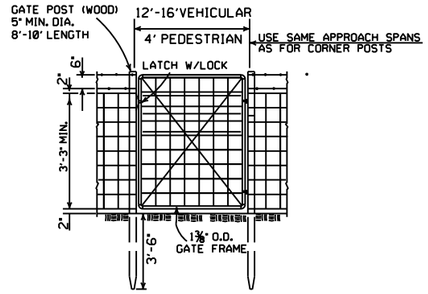
ARKANSAS STATE HIGHWAY COMMISSION

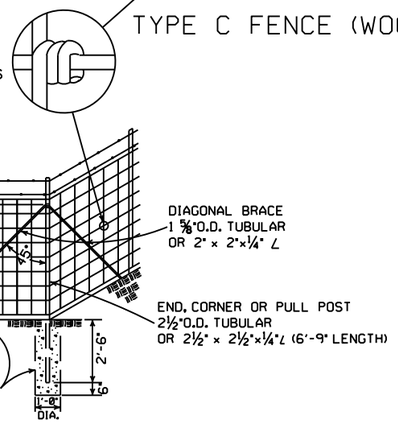
CHAIN LINK FENCE

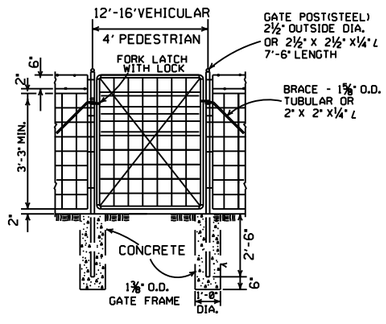
STANDARD DRAWING WF-3



TYPE C FENCE (WOOD POSTS)

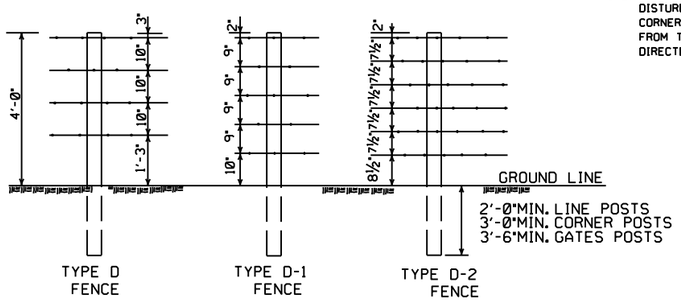




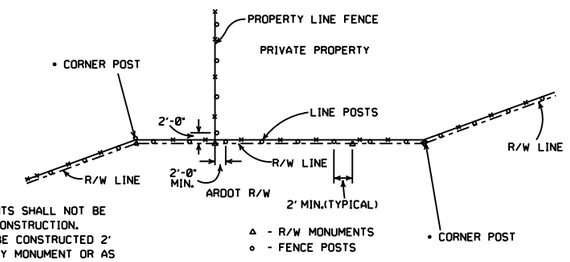


NOTE: STEEL LINE POSTS SHALL BE 6'-6" MINIMUM LENGTH.

TYPE C FENCE (STEEL POSTS)

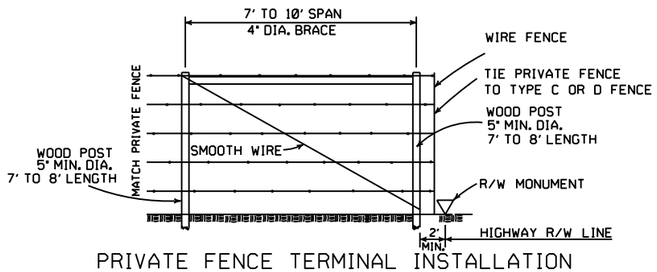


NOTE: SPACING AND SIZE (EXCEPT LENGTH) OF POSTS, APPROACH SPANS, PULL POST ASSEMBLIES, AND CORNER BRACING FOR TYPE D FENCE SHALL CONFORM TO TYPE C FENCE. USE GALVANIZED STAPLES ON WOOD POSTS AND APPROVED FASTENERS ON STEEL POSTS.



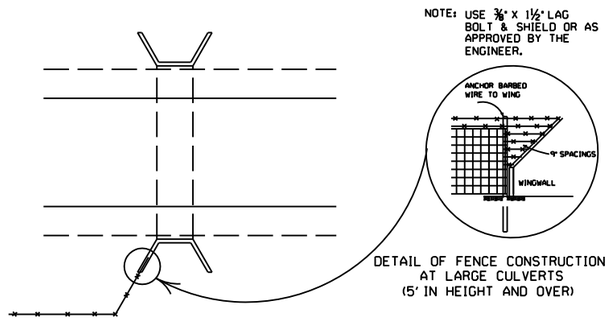
• NOTE: RIGHT-OF-WAY MONUMENTS SHALL NOT BE DISTURBED BY FENCE CONSTRUCTION. CORNER POSTS SHALL BE CONSTRUCTED 2' FROM THE RIGHT-OF-WAY MONUMENT OR AS DIRECTED BY THE ENGINEER.

RIGHT-OF-WAY FENCE LOCATION

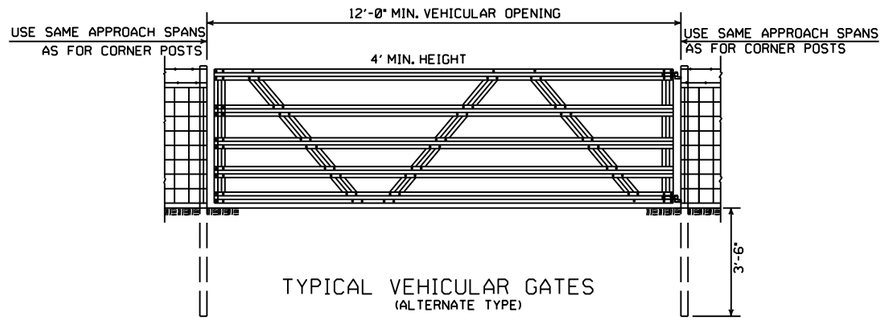


PRIVATE FENCE TERMINAL INSTALLATION

WHERE EXISTING FENCE CONSISTS OF STEEL POSTS, USE END POST ASSEMBLY AS SHOWN IN TYPE C FENCE OR OTHER END POST ASSEMBLY AS APPROVED BY THE ENGINEER.



DETAIL OF FENCE CONSTRUCTION AT LARGE CULVERTS (5' IN HEIGHT AND OVER)



TYPICAL VEHICULAR GATES

(ALTERNATE TYPE)

OTHER STYLE VEHICULAR GATES MAY BE USED WITH THE APPROVAL OF THE ENGINEER. THE METHOD OF SECURING GATE (LATCH AND/OR LOCK)SHALL MEET THE APPROVAL OF THE ENGINEER.

GENERAL NOTES:

STEEL LINE POSTS SHALL BE PAINTED OR GALVANIZED. TUBULAR END, CORNER, PULL, OR DIAGONAL BRACES MUST CONFORM TO THE DIMENSIONS AND WEIGHTS SPECIFIED ON STANDARD DRAWING WF-3 (CHAIN LINK). APPROVED ALTERNATES ARE ACCEPTABLE.
AN ACCEPTABLE TOLERANCE IN LENGTH OF TUBULAR OR WOODEN POSTS SHALL BE - 1" TO +2".
TUBULAR POSTS MUST BE PAINTED OR GALVANIZED.

THE CONTRACTOR SHALL FURNISH AT LEAST 25% OF TIMBER LINE POSTS OF 7 FOOT LENGTHS IN ORDER TO PROVIDE SUFFICIENT SET IN SOFT GROUND OR SMALL DEPRESSIONS.

DRIVEWAY GATES, EITHER SINGLE 12' TO 16' OR DOUBLE 6' TO 8' OPENING OF THE SAME TYPE AS THE PEDESTRIAN GATE, SHALL BE INSTALLED ON THE RIGHT SIDE OF EACH THROUGH LANE ROAD AT LARGE CULVERTS OR BRIDGE CROSS FENCE, FOR USE OF MAINTENANCE EQUIPMENT. LOCATION OF GATES TO BE SHOWN ON PLANS OR AS DESIGNATED BY THE ENGINEER.

AT STREAM CROSSINGS, THE FENCE SHALL NOT BE CONSTRUCTED ACROSS LARGE STREAMS. WHERE CLEARANCE IS SUFFICIENT FROM THE TOP OF THE BANK TO THE BRIDGE STRUCTURE A CROSS CONNECTION SHALL BE CONSTRUCTED BETWEEN THE FENCE ON EACH SIDE OF THE ROAD. WHERE THE CLEARANCE IS NOT SUFFICIENT, THE FENCE SHALL BE TERMINATED WITH CROSS CONNECTIONS AND END POSTS ADJACENT TO BRIDGE ABUTMENTS OR CULVERT WINGWALLS.

SPLICE FOR BARBED WIRE BETWEEN PULL POST ASSEMBLY SHALL BE BY THE "EYE METHOD" AS DESCRIBED AS FOLLOWS: THE ENDS OF THE BARBED WIRE SHALL BE BENT TO FORM A LOOP. THE LOOPS SHALL BE CONNECTED. AFTER THE LOOPS ARE CONNECTED THE ENDS OF THE WIRE SHALL BE WRAPPED AROUND THE PROJECTING WIRES A MINIMUM OF 4 TIMES FOR EACH WIRE LOOP.

SPLICE FOR WOVEN WIRE BETWEEN PULL POST SHALL BE BY THE "WESTERN UNION METHOD" AS DESCRIBED AS FOLLOWS: THE VERTICAL WIRES FOR EACH END OF THE FENCE FABRIC SHALL BE PLACED SIDE BY SIDE AND THE PROJECTING HORIZONTAL WIRES SHALL BE WRAPPED A MINIMUM OF 4 TIMES AROUND THE HORIZONTAL WIRES OF THE FIRST WEB.

STAPLE AT LEAST TOP, BOTTOM AND ALTERNATE WIRES OF WOVEN FABRIC FOR WOOD LINE POSTS.

DATE	REVISION	FILMED
8-22-02	REVISED GENERAL NOTES	
10-18-96	REVISED AASHTO	
11-22-95	REVISED R-O-W LOCATION DETAIL	
6-2-94	REVISED BARB WIRE AND ADDED CORNER POST NOTES	6-2-94
8-5-93	REVISED R/W INSTALLATION FENCE	8-5-93
10-1-92	ADDED STAPLE NOTE	10-1-92
8-15-91	ADDED TYPE D-2 FENCE	8-15-91
11-30-89	DELETED CLASS CONCRETE	11-30-89
7-15-88	ADDED SPLICE NOTE	700-7-15-88
10-30-87	GENERAL REVISIONS	549-10-30-87
11-1-84	MAX. POST SPACING MIN. WIRE GAUGE	507-11-1-84
1-4-83	MIN. DIA. LINE POST	648-1-4-83
3-2-81	TOLERANCE FOR POST LENGTH	722-3-2-81
12-1-72	ADDED D-1 & FENCE INSTALLATION	564-12-1-72
10-2-72	REVISED AND REDRAWN	540-10-2-72

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WIRE FENCE TYPE C AND D

STANDARD DRAWING WF-4