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

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	1	263
				(2) SHEARERVILLE-HWY. 77 (S)				

SHEARERVILLE-HWY. 77 (S)

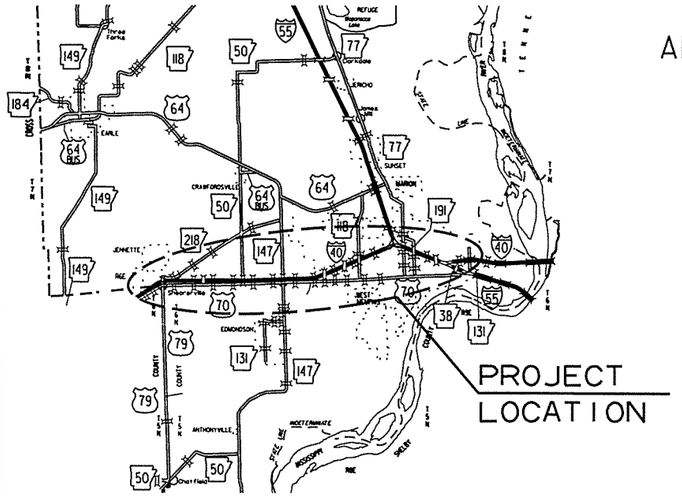
CRITTENDEN COUNTY

ROUTE 40 SECTION 52

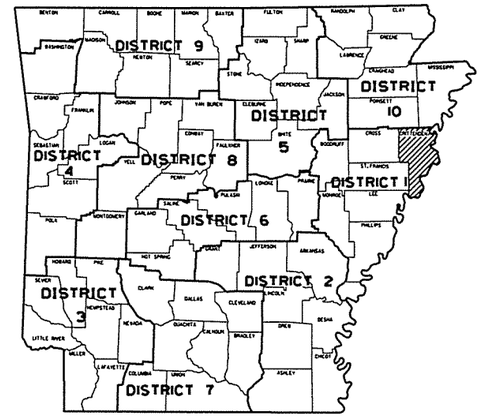
JOB BB0107

FED. AID PROJ. BIM-PEN-B40-0(207)

NOT TO SCALE



VICINITY MAP



ARK. HWY. DIST. NO. 1

BRIDGE DATA

(1) STA. 5902+54.50 BR. END
BR. NO. A7025
185'-0" CONTINUOUS COMPOSITE W-BEAM UNIT
(58'-69'-58')
188' - 0" BRIDGE LENGTH
128' - 0" CLEAR ROADWAY
STA. 5904+42.50 BR. END

(2) STA. 5964+48.00 BR. END
BR. NO. 07344
185'-0" CONTINUOUS COMPOSITE W-BEAM UNIT
(58'-69'-58')
188' - 0" BRIDGE LENGTH
128' - 0" CLEAR ROADWAY
STA. 5966+36.00 BR. END

(3) STA. 6015+66.25 BR. END
I-40 E.B. TO I-55 N.B. RAMP
EXISTING 458' - 5¼" BR. NO. 03123
28' - 0" CLEAR ROADWAY
STA. 6020+24.69 BR. END
REHABILITATE BRIDGE DECK - HYDRODEMOLITION

EXCEPTIONS TO JOB BB0107 (BRIDGES)

1. STA. 5416+86.43 BR. END
EXISTING 82.11' BRIDGE A6840
40'-0" CLEAR ROADWAY
STA. 5417+68.54 BR. END
RETAIN

2. STA. 5416+86.43 BR. END
EXISTING 82.11' BRIDGE B6840
40'-0" CLEAR ROADWAY
STA. 5417+68.54 BR. END
RETAIN

3. STA. 5469+48.43 BR. END
EXISTING 82.11' BRIDGE A6841
40'-0" CLEAR ROADWAY
STA. 5470+30.54 BR. END
RETAIN

4. STA. 5469+52.43 BR. END
EXISTING 82.11' BRIDGE B6841
40'-0" CLEAR ROADWAY
STA. 5470+34.54 BR. END
RETAIN

5. STA. 5521+63.43 BR. END
EXISTING 82.11' BRIDGE A6842
40'-0" CLEAR ROADWAY
STA. 5522+45.54 BR. END
RETAIN

6. STA. 5521+66.43 BR. END
EXISTING 82.11' BRIDGE B6842
40'-0" CLEAR ROADWAY
STA. 5522+48.54 BR. END
RETAIN

7. STA. 5575+60.43 BR. END
EXISTING 82.11' BRIDGE A6843
40'-0" CLEAR ROADWAY
STA. 5576+42.54 BR. END
RETAIN

8. STA. 5575+63.43 BR. END
EXISTING 82.11' BRIDGE B6843
40'-0" CLEAR ROADWAY
STA. 5576+45.54 BR. END
RETAIN

9. STA. 5602+03.99 BR. END
EXISTING 120.18' BRIDGE A6825
40'-0" CLEAR ROADWAY
STA. 5603+24.17 BR. END
RETAIN

10. STA. 5602+07.82 BR. END
EXISTING 120.18' BRIDGE B6825
40'-0" CLEAR ROADWAY
STA. 5603+28.00 BR. END
RETAIN

11. STA. 5628+28.55 BR. END
EXISTING 67.11' BRIDGE A6844
40'-0" CLEAR ROADWAY
STA. 5628+95.66 BR. END
RETAIN

12. STA. 5628+28.55 BR. END
EXISTING 67.11' BRIDGE B6844
40'-0" CLEAR ROADWAY
STA. 5628+95.66 BR. END
RETAIN

13. STA. 5681+84.28 BR. END
EXISTING 67.11' BRIDGE A6845
40'-0" CLEAR ROADWAY
STA. 5682+51.39 BR. END
RETAIN

14. STA. 5681+84.28 BR. END
EXISTING 67.11' BRIDGE B6845
40'-0" CLEAR ROADWAY
STA. 5682+51.39 BR. END
RETAIN

15. STA. 5707+77.46 BR. END
EXISTING 222.17' BRIDGE A3108
40'-0" CLEAR ROADWAY
STA. 5709+99.63 BR. END
RETAIN

16. STA. 5707+77.46 BR. END
EXISTING 222.17' BRIDGE B3108
40'-0" CLEAR ROADWAY
STA. 5709+99.63 BR. END
RETAIN

17. STA. 5740+48.30 BR. END
EXISTING 67.11' BRIDGE A6846
40'-0" CLEAR ROADWAY
STA. 5741+15.41 BR. END
RETAIN

18. STA. 5740+48.30 BR. END
EXISTING 67.11' BRIDGE B6846
40'-0" CLEAR ROADWAY
STA. 5741+15.41 BR. END
RETAIN

19. STA. 5794+29.42 BR. END
EXISTING 67.25' BRIDGE A6847
40'-0" CLEAR ROADWAY
STA. 5794+96.67 BR. END
RETAIN

20. STA. 5793+96.56 BR. END
EXISTING 67.25' BRIDGE B6847
40'-0" CLEAR ROADWAY
STA. 5794+63.81 BR. END
RETAIN

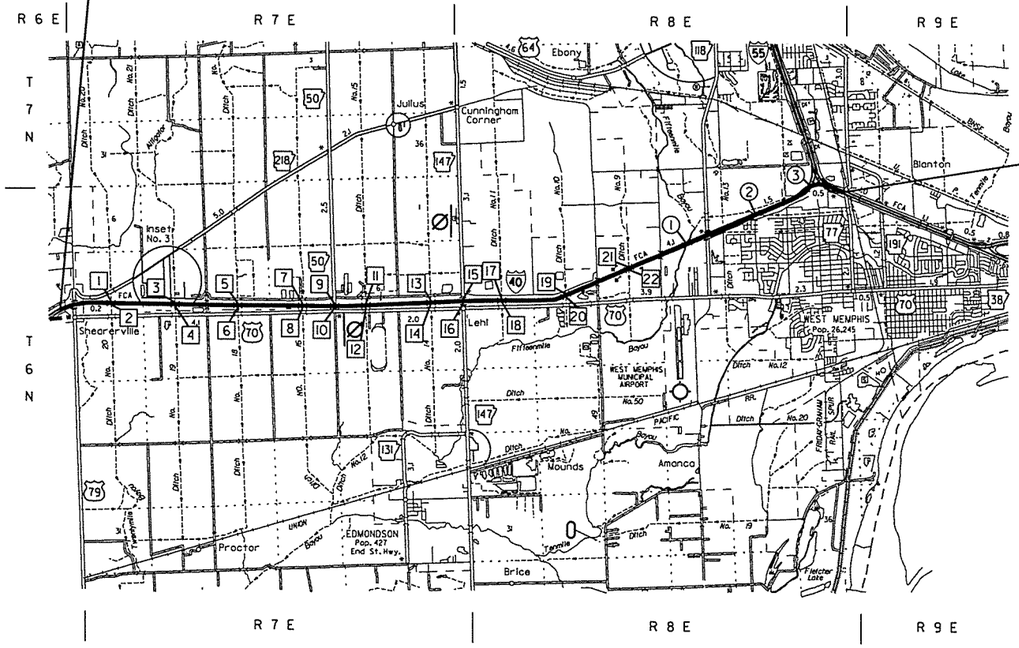
21. STA. 5851+36.34 BR. END
EXISTING 57.23' BRIDGE A6848
58'-0" CLEAR ROADWAY
STA. 5851+93.57 BR. END
RETAIN

22. STA. 5851+00.71 BR. END
EXISTING 57.23' BRIDGE B6848
40'-0" CLEAR ROADWAY
STA. 5851+57.94 BR. END
RETAIN

TOTAL LENGTH OF EXCEPTIONS
996.60' MEASURED ALONG CENTERLINE

BEGINNING OF PROJECT	MID POINT OF PROJECT	END OF PROJECT
LATITUDE = N 35°08'53" LONGITUDE = W 90°24'31"	LATITUDE = N 35°08'53" LONGITUDE = W 90°17'43"	LATITUDE = N 35°10'08" LONGITUDE = W 90°11'11"

STA. 5359+48.40
BEGIN JOB BB0107
LOG MILE 264.57



STA. 6045+40.69
END JOB BB0107
LOG MILE 277.57

GROSS LENGTH	OF	PROJECT	68592.29	FEET	OR	12.991	MILES
NET	.	.	ROADWAY	67219.69	.	.	12.731	.
NET	.	.	BRIDGES	376.00	.	.	0.071	.
NET	.	.	PROJECT	67595.69	.	.	12.802	.

N

APPROVED

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7836
M. E. BANKS

6-22-15

DEPUTY DIRECTOR
AND CHIEF ENGINEER

DESIGN TRAFFIC DATA

DESIGN YEAR	2035
2015 ADT	38500
2035 ADT	54000
2035 DHV	5940
DIRECTIONAL DISTRIBUTION	0.60
TRUCKS	55%
DESIGN SPEED	70 MPH

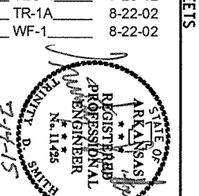
4/20/2015

RBB0107.DGN

RBB0107.DGN 5/21/2015

INDEX OF SHEETS

SHEET NO.	TITLE	BRIDGE NO.	DRWG.NO.	DATE
1	TITLE SHEET			
2	INDEX OF SHEETS			
3	GOVERNING SPECIFICATIONS AND GENERAL NOTES			
4 - 6	TYPICAL SECTIONS OF IMPROVEMENT			
7 - 18	SPECIAL DETAILS			
19 - 56	TEMPORARY EROSION CONTROL DETAILS			
57 - 78	MAINTENANCE OF TRAFFIC DETAILS			
79	PERMANENT PAVEMENT MARKING DETAILS			
80 - 86	QUANTITIES			
87	SCHEDULE OF BRIDGE QUANTITIES	A7025, 07344, 03123	56951	
88 - 89	SUMMARY OF QUANTITIES AND REVISIONS			
90 - 117	PLAN AND PROFILE SHEETS			
118	SIGNING SUMMARY OF QUANTITIES			
119 - 121	SIGNING QUANTITIES SHEET			
122 - 147	SIGN LAYOUT SHEET			
148 - 170	SIGN PLACEMENT SHEET			
171	LAYOUT OF BRIDGE OVER FIFTEEN MILE BAYOU (SHEET 1 OF 2)	A7025	56952	
172	LAYOUT OF BRIDGE OVER FIFTEEN MILE BAYOU (SHEET 2 OF 2)	A7025	56953	
173	DETAILS OF STAGE CONSTRUCTION (SHEET 1 OF 2)	A7025, 07344	56954	
174	DETAILS OF STAGE CONSTRUCTION (SHEET 2 OF 2)	A7025, 07344	56955	
175	DETAILS OF END BENTS 1 AND 4 FIFTEEN MILE BAYOU (SHEET 1 OF 5)	A7025	56956	
176	DETAILS OF END BENTS 1 AND 4 FIFTEEN MILE BAYOU (SHEET 2 OF 5)	A7025	56957	
177	DETAILS OF END BENTS 1 AND 4 FIFTEEN MILE BAYOU (SHEET 3 OF 5)	A7025	56958	
178	DETAILS OF END BENTS 1 AND 4 FIFTEEN MILE BAYOU (SHEET 4 OF 5)	A7025	56959	
179	DETAILS OF END BENTS 1 AND 4 FIFTEEN MILE BAYOU (SHEET 5 OF 5)	A7025	56960	
180	DETAILS OF BENTS 2 AND 3 FIFTEEN MILE BAYOU (SHEET 1 OF 4)	A7025	56961	
181	DETAILS OF BENTS 2 AND 3 FIFTEEN MILE BAYOU (SHEET 2 OF 4)	A7025	56962	
182	DETAILS OF BENTS 2 AND 3 FIFTEEN MILE BAYOU (SHEET 3 OF 4)	A7025	56963	
183	DETAILS OF BENTS 2 AND 3 FIFTEEN MILE BAYOU (SHEET 4 OF 4)	A7025	56964	
184	DETAILS OF ELASTOMERIC BEARINGS	A7025, 07344	56965	
185	DETAILS OF 185'-0" CONTINUOUS W-BEAM UNITS (SHEET 1 OF 13)	A7025, 07344	56966	
186	DETAILS OF 185'-0" CONTINUOUS W-BEAM UNITS (SHEET 2 OF 13)	A7025, 07344	56967	
187	DETAILS OF 185'-0" CONTINUOUS W-BEAM UNITS (SHEET 3 OF 13)	A7025, 07344	56968	
188	DETAILS OF 185'-0" CONTINUOUS W-BEAM UNITS (SHEET 4 OF 13)	A7025, 07344	56969	
189	DETAILS OF 185'-0" CONTINUOUS W-BEAM UNITS (SHEET 5 OF 13)	A7025, 07344	56970	
190	DETAILS OF 185'-0" CONTINUOUS W-BEAM UNITS (SHEET 6 OF 13)	A7025, 07344	56971	
191	DETAILS OF 185'-0" CONTINUOUS W-BEAM UNITS (SHEET 7 OF 13)	A7025, 07344	56972	
192	DETAILS OF 185'-0" CONTINUOUS W-BEAM UNITS (SHEET 8 OF 13)	A7025	56973	
193	DETAILS OF 185'-0" CONTINUOUS W-BEAM UNITS (SHEET 9 OF 13)	07344	56974	
194	DETAILS OF 185'-0" CONTINUOUS W-BEAM UNITS (SHEET 10 OF 13)	A7025, 07344	56975	
195	DETAILS OF 185'-0" CONTINUOUS W-BEAM UNITS (SHEET 11 OF 13)	A7025, 07344	56976	
196	DETAILS OF 185'-0" CONTINUOUS W-BEAM UNITS (SHEET 12 OF 13)	A7025, 07344	56977	
197	DETAILS OF 185'-0" CONTINUOUS W-BEAM UNITS (SHEET 13 OF 13)	A7025, 07344	56978	
198	LAYOUT OF BRIDGE OVER TEN MILE BAYOU (SHEET 1 OF 2)	07344	56979	
199	LAYOUT OF BRIDGE OVER TEN MILE BAYOU (SHEET 2 OF 2)	07344	56980	
200	DETAILS OF END BENTS 1 AND 4 TEN MILE BAYOU (SHEET 1 OF 5)	07344	56981	
201	DETAILS OF END BENTS 1 AND 4 TEN MILE BAYOU (SHEET 2 OF 5)	07344	56982	
202	DETAILS OF END BENTS 1 AND 4 TEN MILE BAYOU (SHEET 3 OF 5)	07344	56983	
203	DETAILS OF END BENTS 1 AND 4 TEN MILE BAYOU (SHEET 4 OF 5)	07344	56984	
204	DETAILS OF END BENTS 1 AND 4 TEN MILE BAYOU (SHEET 5 OF 5)	07344	56985	
205	DETAILS OF BENTS 2 AND 3 TEN MILE BAYOU (SHEET 1 OF 4)	07344	56986	
206	DETAILS OF BENTS 2 AND 3 TEN MILE BAYOU (SHEET 2 OF 4)	07344	56987	
207	DETAILS OF BENTS 2 AND 3 TEN MILE BAYOU (SHEET 3 OF 4)	07344	56988	
208	DETAILS OF BENTS 2 AND 3 TEN MILE BAYOU (SHEET 4 OF 4)	07344	56989	
209	DETAILS OF TYPE 1 SPECIAL APPROACH GUTTERS	A7025	56990	
210	DETAILS OF TYPE 2 SPECIAL APPROACH GUTTERS	07344	56991	
211	DETAILS OF TYPE SPECIAL APPROACH SLAB (SHEET 1 OF 2)	A7025, 07344	56992	
212	DETAILS OF TYPE SPECIAL APPROACH SLAB (SHEET 2 OF 2)	A7025, 07344	56993	
213	DETAILS OF VERY EARLY STRENGTH LATEX MODIFIED CONCRETE OVERLAY (SHEET 1 OF 2)	03123	56994	
214	DETAILS OF VERY EARLY STRENGTH LATEX MODIFIED CONCRETE OVERLAY (SHEET 2 OF 2)	03123	56995	
215	LAYOUT OF UNDERPASS WEST MEMPHIS INTERCHANGE (FOR INFORMATION ONLY)	03123	56996	
216	SUPPLEMENTAL DETAILS (SHEET 1 OF 2) (FOR INFORMATION ONLY)	03123	56997	
217	SUPPLEMENTAL DETAILS (SHEET 2 OF 2) (FOR INFORMATION ONLY)	03123	56998	
218	DETAILS OF STANDARD 55'-100' COMPOSITE I-BEAM SPANS (FOR INFORMATION ONLY)	03123	56999	
219	DETAILS FOR 58' STEEL OVERHEAD SIGN STRUCTURES (SHEET 1 OF 5)	OH-040-18-31, OH-040-18-32, OH-040-18-33	57000	
220	DETAILS FOR 58' STEEL OVERHEAD SIGN STRUCTURES (SHEET 2 OF 5)	OH-040-18-31, OH-040-18-32, OH-040-18-33	57001	
221	DETAILS FOR 58' STEEL OVERHEAD SIGN STRUCTURES (SHEET 3 OF 5)	OH-040-18-31, OH-040-18-32, OH-040-18-33	57002	
222	DETAILS FOR 58' STEEL OVERHEAD SIGN STRUCTURES (SHEET 4 OF 5)	OH-040-18-31, OH-040-18-32, OH-040-18-33	57003	
223	DETAILS FOR 58' STEEL OVERHEAD SIGN STRUCTURES (SHEET 5 OF 5)	OH-040-18-31, OH-040-18-32, OH-040-18-33	57004	
224	DETAILS FOR 65' STEEL OVERHEAD SIGN STRUCTURES (SHEET 1 OF 5)	OH-040-18-34, OH-040-18-35	57005	
225	DETAILS FOR 65' STEEL OVERHEAD SIGN STRUCTURES (SHEET 2 OF 5)	OH-040-18-34, OH-040-18-35	57006	
226	DETAILS FOR 65' STEEL OVERHEAD SIGN STRUCTURES (SHEET 3 OF 5)	OH-040-18-34, OH-040-18-35	57007	
227	DETAILS FOR 65' STEEL OVERHEAD SIGN STRUCTURES (SHEET 4 OF 5)	OH-040-18-34, OH-040-18-35	57008	
228	DETAILS FOR 65' STEEL OVERHEAD SIGN STRUCTURES (SHEET 5 OF 5)	OH-040-18-34, OH-040-18-35	57009	
229	DETAILS OF 35' STEEL CANTILEVER SIGN STRUCTURE (SHEET 1 OF 5)	OC-040-18-36, OC-040-18-37	57010	
230	DETAILS OF 35' STEEL CANTILEVER SIGN STRUCTURE (SHEET 2 OF 5)	OC-040-18-36, OC-040-18-37	57011	
231	DETAILS OF 35' STEEL CANTILEVER SIGN STRUCTURE (SHEET 3 OF 5)	OC-040-18-36, OC-040-18-37	57012	
232	DETAILS OF 35' STEEL CANTILEVER SIGN STRUCTURE (SHEET 4 OF 5)	OC-040-18-36, OC-040-18-37	57013	
233	DETAILS OF 35' STEEL CANTILEVER SIGN STRUCTURE (SHEET 5 OF 5)	OC-040-18-36, OC-040-18-37	57014	
234	STANDARD DETAILS FOR EMBANKMENT CONSTRUCTION AND BACKFILL AT BRIDGE ENDS		55000	2-27-14
235	STANDARD DETAILS FOR DUMPED RIPRAP AND FILTER BLANKET AND COMPUTING EXCAVATION FOR STRUCTURES		55001	2-27-14
236	STANDARD DETAILS FOR CONCRETE RIPRAP		55002	2-27-14
237	STANDARD DETAILS FOR PERMANENT STEEL BRIDGE DECK FROMS FOR STEEL & CONCRETE GIRDER SPANS		55005	2-27-14
238	STANDARD DETAILS FOR TYPE D BRIDGE NAME PLATE		55010	1-14-15
239	STANDARD DETAILS FOR CONCRETE FILLED STEEL SHELL PILES AND PILE ENCASEMENTS		55021	2-27-14
240	CONCRETE DITCH PAVING		CDP-1	11-17-10
241	DETAILS OF DROP INLETS		FPC-9D	8-22-02
242	DETAILS OF DROP INLET & JUNCTION BOX (TYPE ST)		FPC-9S	7-26-12
243	GUARD RAIL DETAILS		GR-8	7-14-10
244	GUARD RAIL DETAILS		GR-8A	7-14-10
245	GUARD RAIL DETAILS		GR-9	4-17-08
246	GUARD RAIL DETAILS		GR-9A	4-17-08
247	GUARD RAIL DETAILS		GR-10	7-14-10
248	GUARD RAIL DETAILS		GR-10A	7-14-10
249	GUARD RAIL DETAILS		GRT-1	7-14-10
250	CONCRETE PIPE CULVERT FILL HEIGHTS & BEDDING		PCC-1	2-27-14
251	PAVEMENT MARKING DETAILS		PM-1	9-12-13
252	PERMANENT PAVEMENT MARKING ON ACCESS CONTROLLED ROADWAYS		PM-2	9-12-13
253	SAFETY END SECTION FOR CIRCULAR AND ARCH PIPES		SES-1	10-18-96
253A	STANDARD HIGHWAY SIGNS AND SUPPORT ASSEMBLIES		SHS-1	9-12-13
253B	U-CHANNEL POST ASSEMBLIES		SHS-2	2-27-14
253C	DETAIL OF BREAKAWAY SIGN SUPPORTS FOR GUIDE SIGNS		SHS-3	9-12-13
253D	DETAIL OF BREAKAWAY SIGN SUPPORTS FOR STANDARD SIGNS		SHS-4	9-12-13
253E	DETAILS OF GUIDE SIGN PANELS		SHS-5	9-12-13
253F	MOUNTING DETAILS FOR DEMOUNTABLE LEGEND ON GUIDE SIGNS		SHS-6	9-12-13
253G	DETAIL OF OMNI-DIRECTIONAL BREAKAWAY SIGN SUPPORTS		SHS-7	9-12-13
253H	TYPICAL DELINEATOR PLACEMENT ALONG THE INTERSTATE SYSTEM		SHS-8	9-12-13
254	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION		TC-1	12-15-11
255	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION		TC-2	9-12-13
256	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION		TC-3	10-15-09
257	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION-TEMPORARY PRECAST BARRIER		TC-4	2-27-14
258	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION-TEMPORARY PRECAST BARRIER		TC-5	10-15-09
259	TEMPORARY EROSION CONTROL DEVICES		TEC-1	12-15-11
260	TEMPORARY EROSION CONTROL DEVICES		TEC-3	11-03-94
261	TEMPORARY EROSION CONTROL DEVICES		TEC-4	7-26-12
262	DETAILS OF STANDARD TURNOUT FOR ENTRANCE & EXIT RAMPS (NON-REINFORCED)		TR-1A	8-22-02
263	WIRE FENCE TYPE A AND B		WF-1	8-22-02



DATE REVISED	DATE REVISED	DATE REVISED	DATE REVISED	FED.AID PROJ. NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
7-13-15				6	ARK.	BB0107	2	263

(2) INDEX OF SHEETS

INDEX OF SHEETS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6-30-15				6	ARK.			
				JOB NO.		BB0107	3	263

(2) GOVERNING SPECIFICATIONS AND GEN. NOTES

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-30-15

GOVERNING SPECIFICATIONS

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

NUMBER	TITLE
ERRATA_____	ERRATA FOR THE BOOK OF STANDARD SPECIFICATIONS
FHWA-1273__	REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS
FHWA-1273__	SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - NOTICE TO CONTRACTORS
FHWA-1273__	SUPPLEMENT - SPECIFIC EQUAL EMPLOYMENT OPPORTUNITY RESPONSIBILITIES (23 U.S.C. 140)
FHWA-1273__	SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - GOALS AND TIMETABLES
FHWA-1273__	SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - FEDERAL STANDARDS
FHWA-1273__	SUPPLEMENT - TRAINING PROGRAM - JOB BB0107
FHWA-1273__	SUPPLEMENT - POSTERS AND NOTICES REQUIRED FOR FEDERAL-AID PROJECTS
FHWA-1273__	SUPPLEMENT - WAGE RATE DETERMINATION
108-1_____	LIQUIDATED DAMAGES
410-1_____	CONSTRUCTION REQUIREMENTS AND ACCEPTANCE OF ASPHALT CONCRETE PLANT MIX COURSES
604-1_____	RETROREFLECTIVE SHEETING FOR TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES
620-1_____	MULCH COVER
JOB BB0107_	AIRPORT CLEARANCE REQUIREMENTS
JOB BB0107_	AUTOMATED WORK ZONE INFORMATION SYSTEM
JOB BB0107_	BIDDING REQUIREMENTS AND CONDITIONS
JOB BB0107_	BRIDGE DECK REPAIR
JOB BB0107_	BROADBAND INTERNET SERVICE FOR ASPHALT CONCRETE PLANT
JOB BB0107_	BROADBAND INTERNET SERVICE FOR FIELD OFFICE
JOB BB0107_	CONCRETE BARRIER WALL
JOB BB0107_	CONCRETE DITCH PAVING
JOB BB0107_	CONSTRUCTION IN SPECIAL FLOOD HAZARD AREAS
JOB BB0107_	COORDINATION OF WORK
JOB BB0107_	DIRECT TENSION INDICATORS FOR HIGH STRENGTH BOLT ASSEMBLIES
JOB BB0107_	DISADVANTAGED BUSINESS ENTERPRISE BIDDER'S RESPONSIBILITIES
JOB BB0107_	EMPLOYMENT REPORTING
JOB BB0107_	FURNISH AND OPERATION OF MOBILE SPEED NOTIFICATION SYSTEM
JOB BB0107_	GEOSYNTHETIC INTERNAL REINFORCED EMBANKMENT CONSTRUCTION
JOB BB0107_	GOALS FOR DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION
JOB BB0107_	HIGH PERFORMANCE PAVEMENT MARKING
JOB BB0107_	HYDRODEMOLITION
JOB BB0107_	MAINTENANCE OF TRAFFIC
JOB BB0107_	MANAGEMENT OF HYDRODEMOLITION WASTEWATER
JOB BB0107_	MANDATORY ELECTRONIC CONTRACT
JOB BB0107_	MOTORIST ASSISTANCE PATROL
JOB BB0107_	NESTING SITES OF MIGRATORY BIRDS
JOB BB0107_	OMNI-DIRECTIONAL BREAKAWAY SIGN SUPPORT
JOB BB0107_	PARTNERING REQUIREMENTS
JOB BB0107_	PERCENT WITHIN LIMITS/PAVEMENT SMOOTHNESS
JOB BB0107_	PORTABLE CONSTRUCTION LIGHTING
JOB BB0107_	PROSECUTION AND PROGRESS
JOB BB0107_	REMOVAL AND DISPOSAL OF OVERHEAD SIGN STRUCTURE
JOB BB0107_	RUMBLE STRIP REMOVAL
JOB BB0107_	SECTION 404 NATIONWIDE 14 PERMIT REQUIREMENTS
JOB BB0107_	SEQUENCE OF CONSTRUCTION
JOB BB0107_	SHORING FOR CULVERTS
JOB BB0107_	SIGN PANEL MATERIALS AND FABRICATION
JOB BB0107_	SITE USE (A+C METHOD)
JOB BB0107_	SOIL STABILIZATION
JOB BB0107_	SPECIAL SAFETY REQUIREMENTS FOR BRIDGES
JOB BB0107_	SPECIAL SAFETY REQUIREMENTS FOR OVERHEAD SIGNS
JOB BB0107_	STEEL SIGN STRUCTURES
JOB BB0107_	STORM WATER POLLUTION PREVENTION PLAN
JOB BB0107_	SUBMISSION OF ASPHALT CONCRETE HOT MIX ACCEPTANCE TEST RESULTS
JOB BB0107_	TEMPORARY PORTABLE RUMBLE STRIPS
JOB BB0107_	TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES
JOB BB0107_	UNDERDRAIN FLUSHING AND REHABILITATION
JOB BB0107_	UTILITY ADJUSTMENTS
JOB BB0107_	VALUE ENGINEERING
JOB BB0107_	VERY EARLY STRENGTH LATEX MODIFIED CONCRETE OVERLAY
JOB BB0107_	WARM MIX ASPHALT
JOB BB0107_	WIRE ROPE SAFETY FENCE (POST REPAIR)
JOB BB0107_	WIRE ROPE SAFETY FENCE (WRSF) SPECIFICATIONS
JOB BB0107_	WIRE ROPE SAFETY FENCE MAINTENANCE MATERIALS
JOB BB0107_	WRSF TRAINING WORKSHOP

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. ALL LAND MONUMENTS LOCATED WITHIN THE CONSTRUCTION AREA SHALL BE PROTECTED IN ACCORDANCE WITH SECTION 107.12 OF THE STANDARD SPECIFICATIONS.
5. ALL TREES THAT DO NOT DIRECTLY INTERFERE WITH THE PROPOSED CONSTRUCTION SHALL BE SPARED AS DIRECTED BY THE ENGINEER. CARE AND DISCRETION SHALL BE USED TO INSURE THAT ALL TREES NOT TO BE REMOVED SHALL BE HARMED AS LITTLE AS POSSIBLE DURING THE CONSTRUCTION OPERATIONS.
6. ALL FLEXIBLE BASE AND ASPHALTIC PAVEMENTS REMOVED SHALL BE PAID FOR UNDER THE ITEM NO. 210 - UNCLASSIFIED EXCAVATION.
7. 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.

5/21/2015

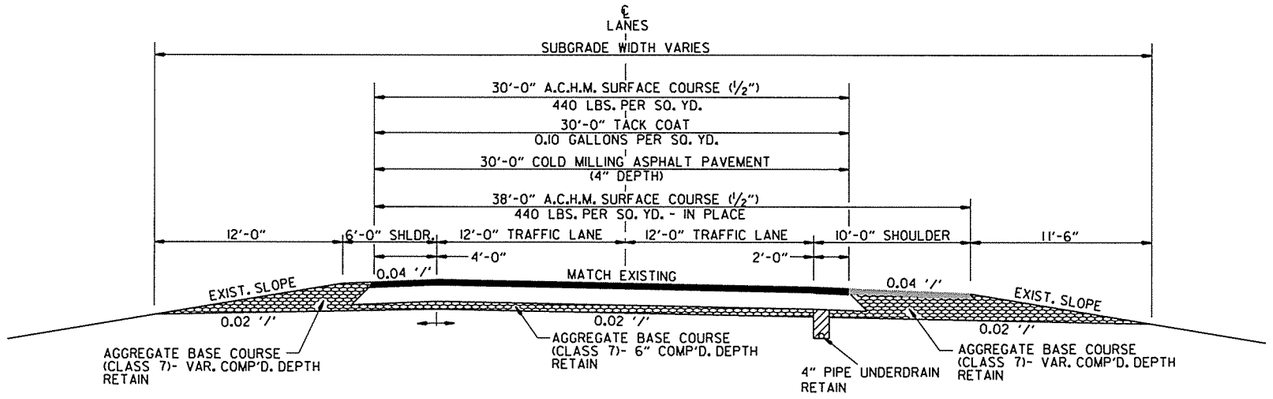
RBB0107.DGN

GOVERNING SPECIFICATIONS AND GENERAL NOTES

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	4	263

(2) TYPICAL SECTIONS OF IMPROVEMENT

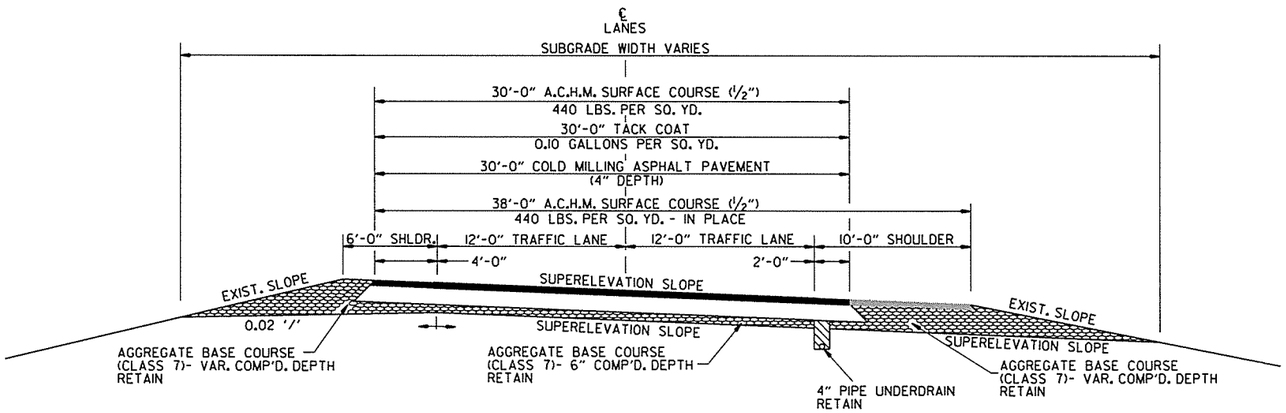
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15



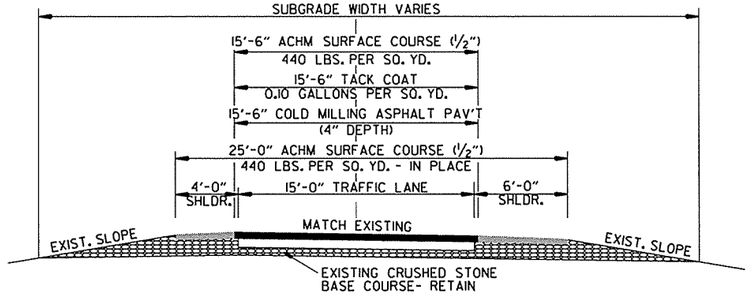
INTERSTATE 40 - MILL & INLAY
(SHOWN IN DIRECTION OF TRAFFIC)

NOTE:

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



INTERSTATE 40 WITH SUPERELEVATION - MILL & INLAY
(SHOWN IN DIRECTION OF TRAFFIC)



TYPICAL RAMP - MILL & INLAY
(SHOWN IN DIRECTION OF TRAFFIC)

5/16/2014

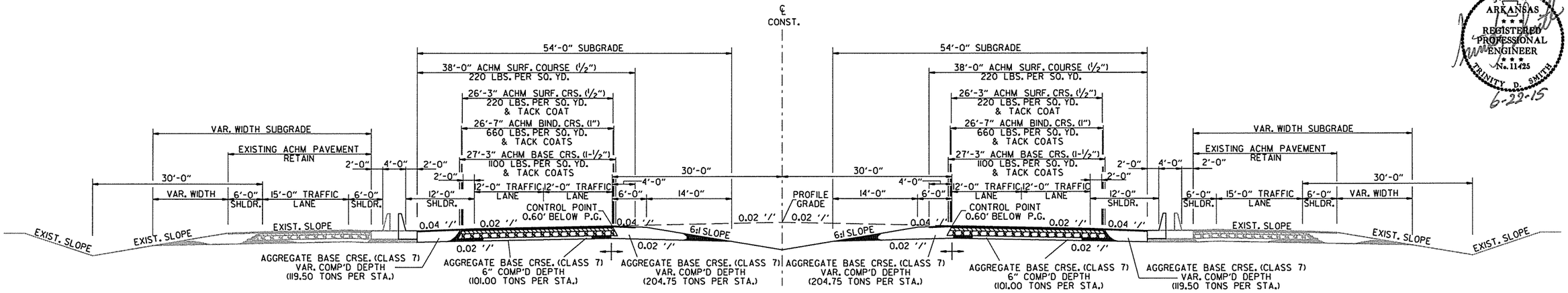
RBB0107.DGN

TYPICAL SECTIONS OF IMPROVEMENT

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	5	263

(2) TYPICAL SECTIONS OF IMPROVEMENT

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15



INTERSTATE 40
TYPICAL SECTION OF IMPROVEMENT
FULL DEPTH SECTION

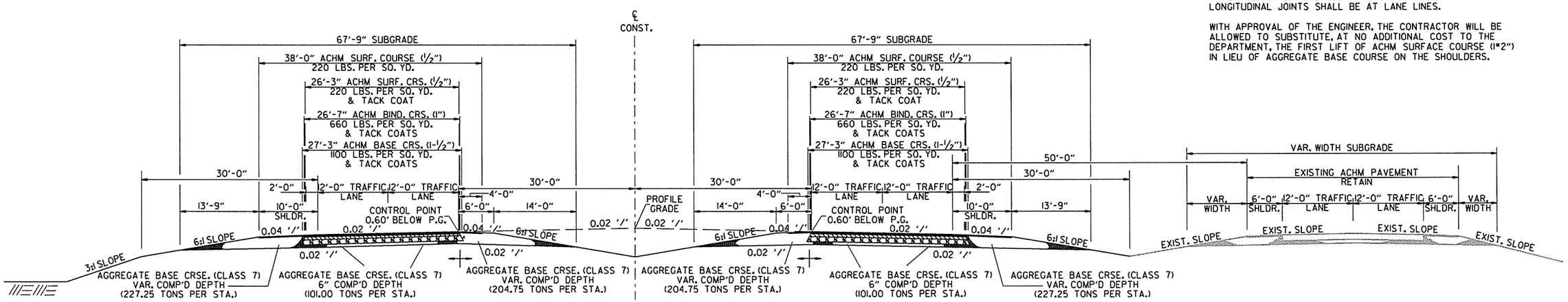
STA. 5891+64.00 TO STA. 5913+33.00

NOTES:

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

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

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



INTERSTATE 40
TYPICAL SECTION OF IMPROVEMENT
FULL DEPTH SECTION

STA. 5953+57.50 TO STA. 5975+26.50

6/12/2015

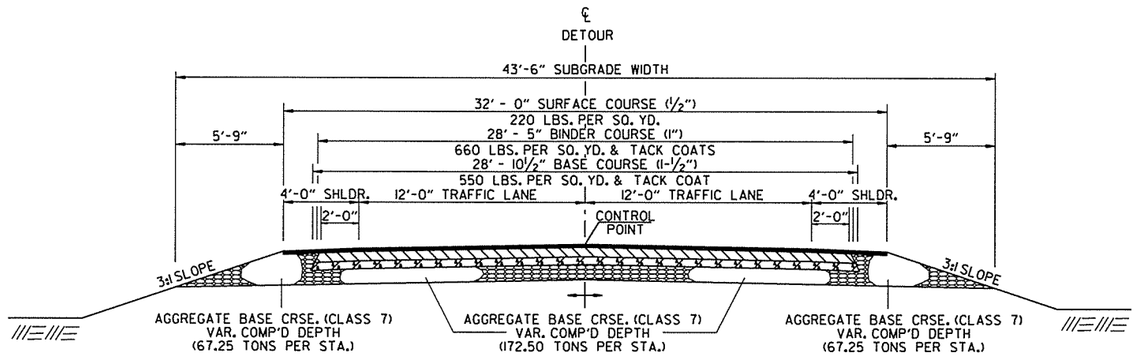
RBB0107.DGN

TYPICAL SECTIONS OF IMPROVEMENT

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	6	263

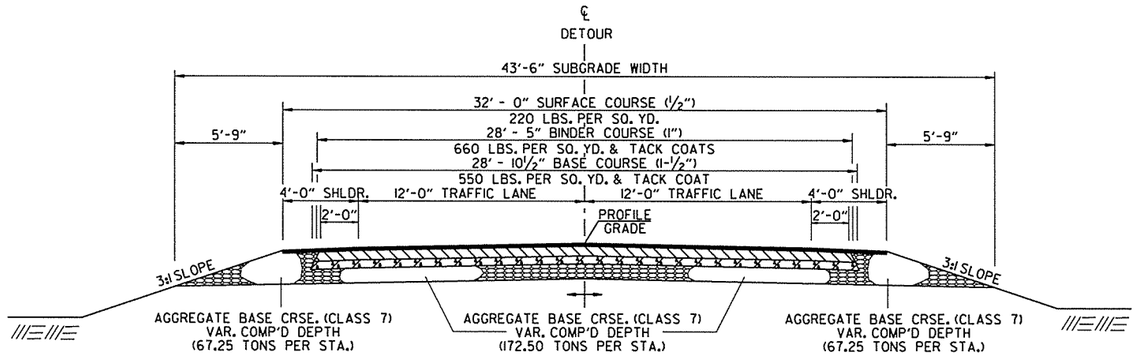
(2) TYPICAL SECTIONS OF IMPROVEMENT

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15



DETOUR ROAD
TYPICAL SECTION OF IMPROVEMENT
FULL DEPTH SECTION

STA. 5887+11.14 TO STA. 5891+64.00
STA. 5913+33.00 TO STA. 5918+24.33
STA. 5948+73.87 TO STA. 5953+57.50
STA. 5975+26.50 TO STA. 5979+81.92



DETOUR ROAD
TYPICAL SECTION OF IMPROVEMENT
FULL DEPTH SECTION

STA. 5891+64.00 TO STA. 5902+54.50
STA. 5904+42.50 TO STA. 5913+33.00
STA. 5953+57.50 TO STA. 5964+48.00
STA. 5966+36.00 TO STA. 5975+26.50

NOTE:

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

5/16/2014

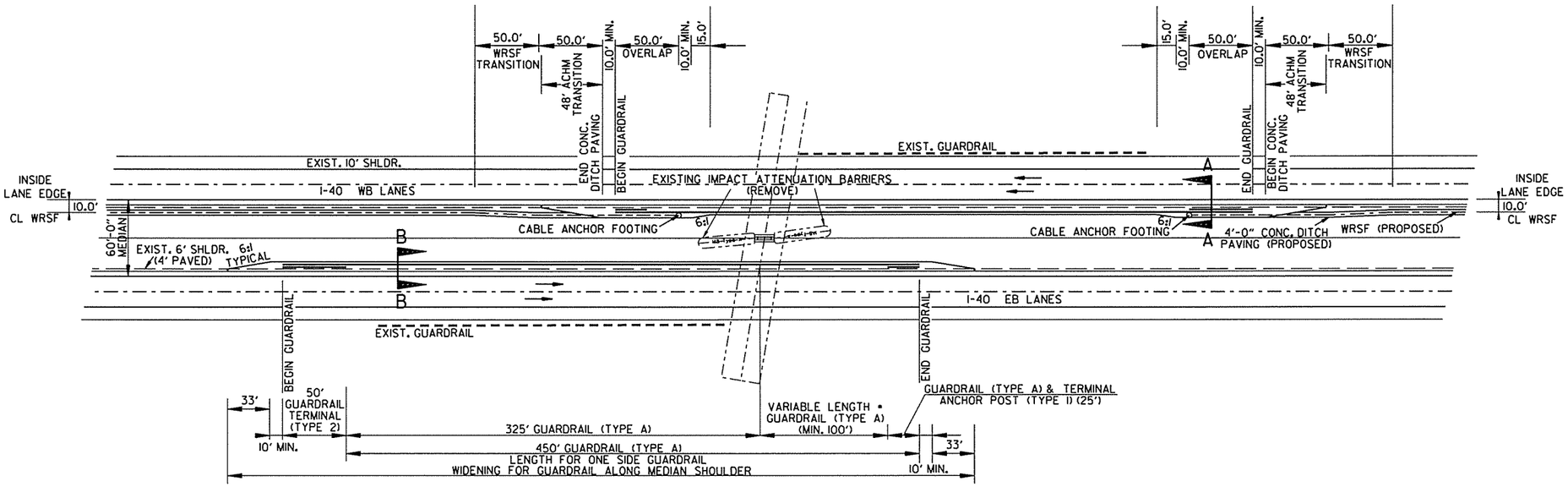
RBB0107.DGN

TYPICAL SECTIONS OF IMPROVEMENT

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	7	263

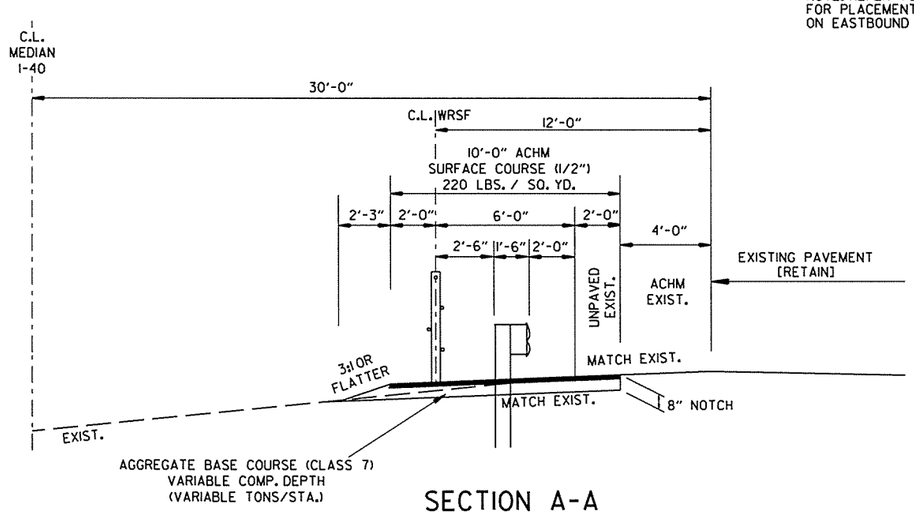
(2) SPECIAL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15

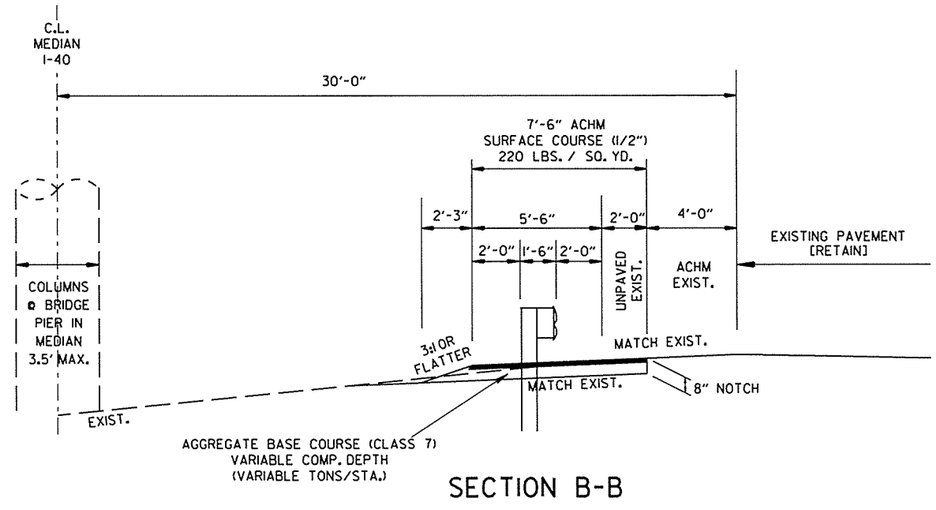


DETAIL AT OVERPASSES

NOTE: REFER TO PLAN SHEETS FOR PLACEMENT OF WIRE ROPE SAFETY FENCE ON EASTBOUND OR WESTBOUND FORESLOPES.



SECTION A-A



SECTION B-B

DETAILS OF SHOULDER WIDENING FOR GUARDRAIL AND OVERLAPS WITH ENDS OF WIRE ROPE SAFETY FENCE

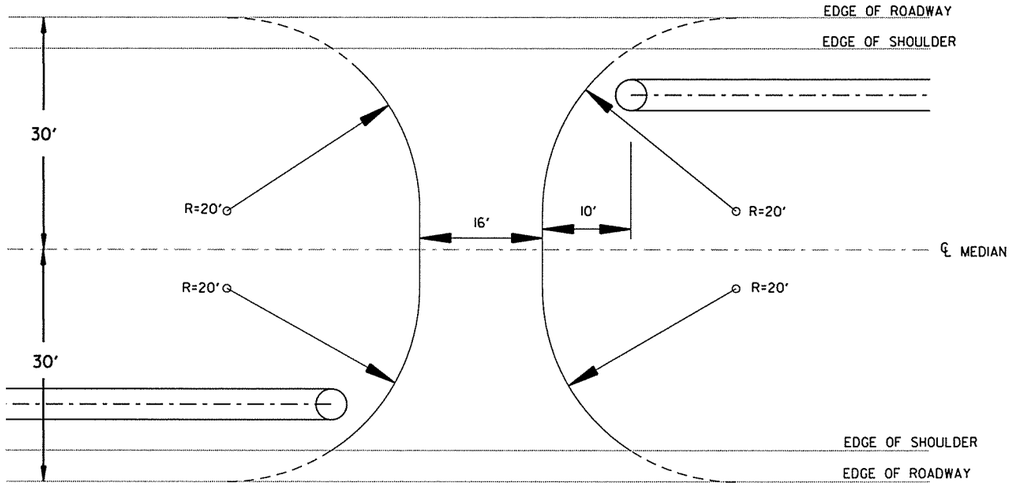
6/17/2015

RBB0107.DGN

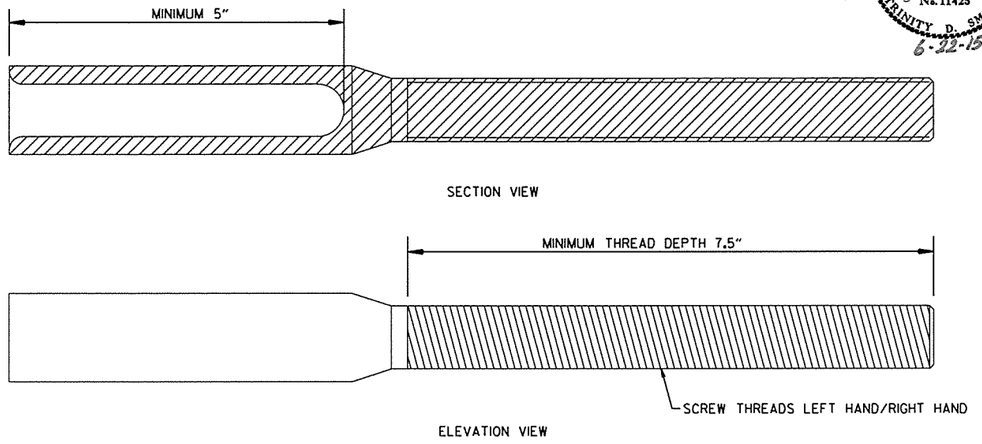
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	8	263

(2) SPECIAL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15

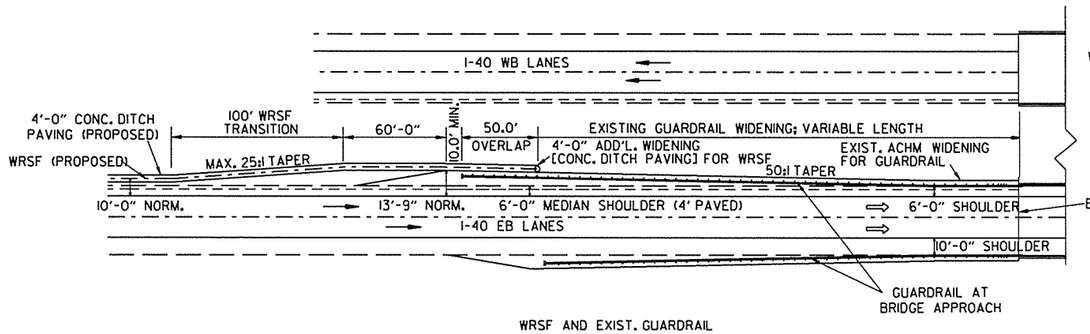


DETAIL OF PROPOSED MEDIAN CROSSING

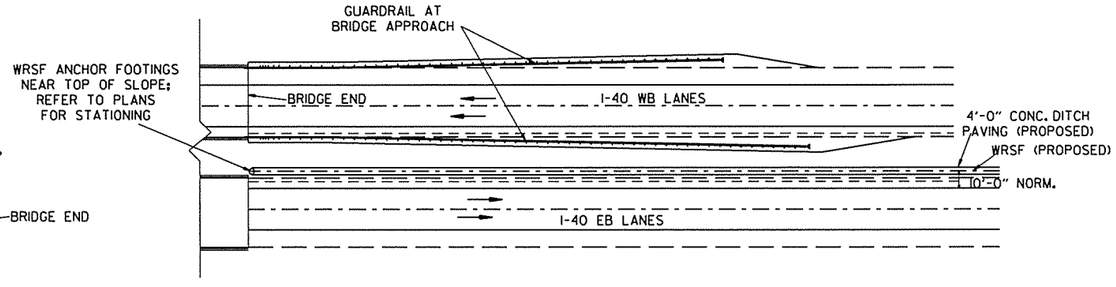


NOTE:
REFER TO "WIRE ROPE SAFETY FENCE (WRSF) SPECIFICATIONS" SPECIAL PROVISION FOR ADDITIONAL REQUIREMENTS.

THREADED TERMINAL DETAIL



WRSF AND EXIST. GUARDRAIL ON SAME SIDE OF MEDIAN



WRSF AND EXIST. GUARDRAIL ON OPPOSITE SIDES OF MEDIAN

DETAIL OF WIRE ROPE SAFETY FENCE AT EXISTING BRIDGE ENDS

NOTE:
REFER TO PLANS FOR RELATIVE PLACEMENT OF GUARDRAIL AND WIRE ROPE SAFETY FENCE AT EACH BRIDGE END.

6/17/2015

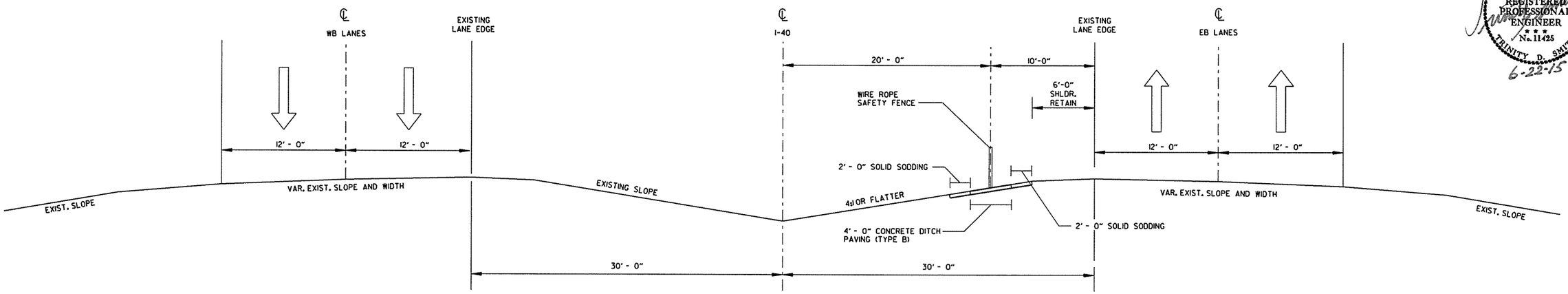
RBB0107.DGN

SPECIAL DETAILS

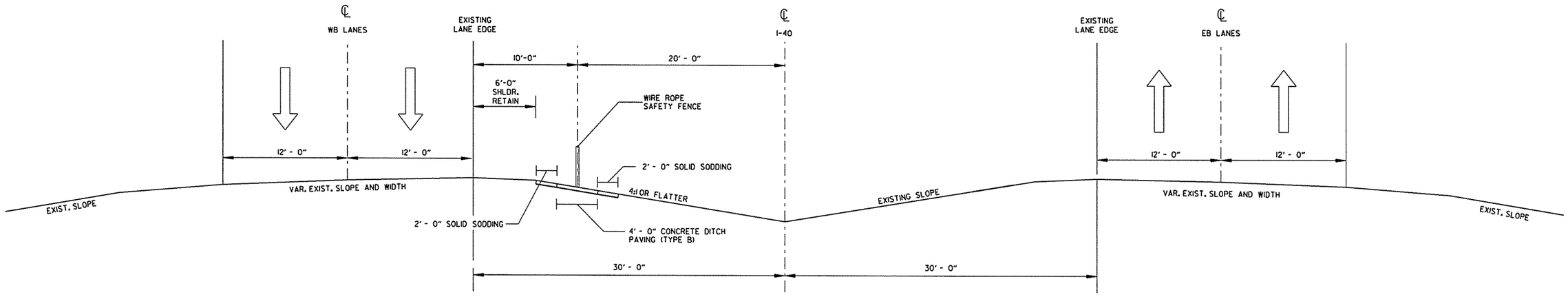
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	9	263

(2) SPECIAL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15



TYPICAL SECTION OF IMPROVEMENT
FOR WIRE ROPE SAFETY FENCE RIGHT OF CENTERLINE



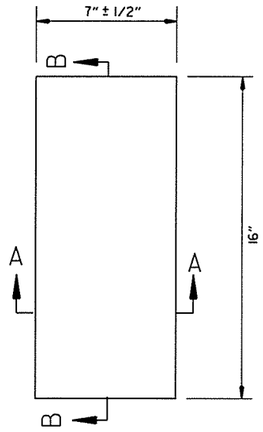
TYPICAL SECTION OF IMPROVEMENT
FOR WIRE ROPE SAFETY FENCE LEFT OF CENTERLINE

6/17/2015

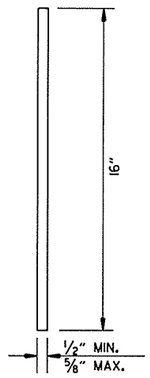
RBB0107.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	10	263

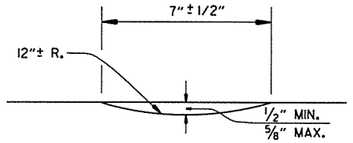
(2) SPECIAL DETAILS



PLAN

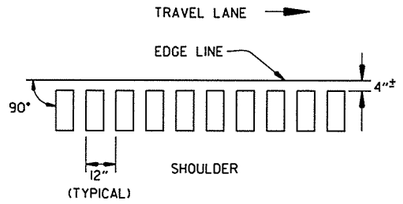


SECTION B-B

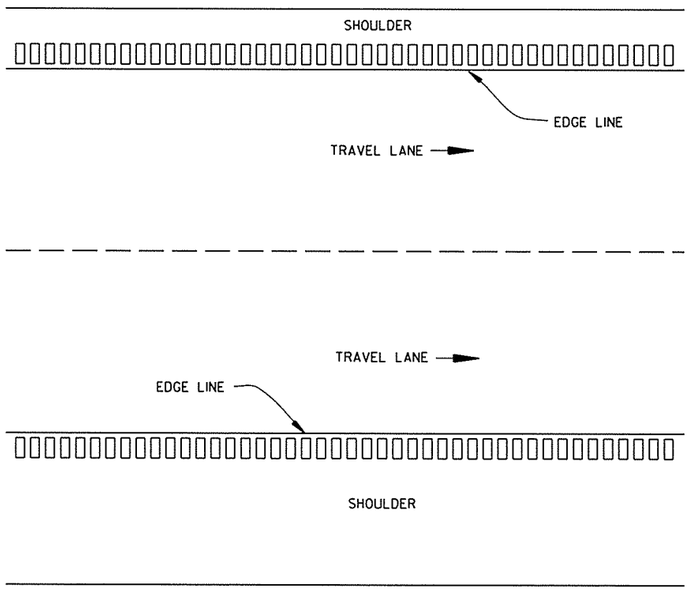


SECTION A-A

DETAILS OF RUMBLE STRIPS



LOCATION PLAN OF RUMBLE STRIPS
LEFT OR RIGHT SHOULDER



PLAN VIEW

NOTES:

1. ALIGNMENT OF RUMBLE STRIPS SHALL GENERALLY BE STRAIGHT AND OFFSET APPROXIMATELY 4" FROM THE OUTER EDGE OF THE EDGE LINE. THIS OFFSET MAY BE ADJUSTED TO ACCOMMODATE VARIATIONS IN THE EDGE LINE.
2. THE 1/2" DEPTH SHALL GENERALLY APPLY FOR THE ENTIRE 16" LENGTH. SOME VARIATION TO SUIT SHOULDER SLOPE BREAKS MAY BE NECESSARY.
3. RUMBLE STRIPS SHALL NOT BE INSTALLED ON BRIDGE DECKS, APPROACH SLABS, OR ACROSS TRANSVERSE JOINTS OF CONCRETE SHOULDERS.

6/17/2015

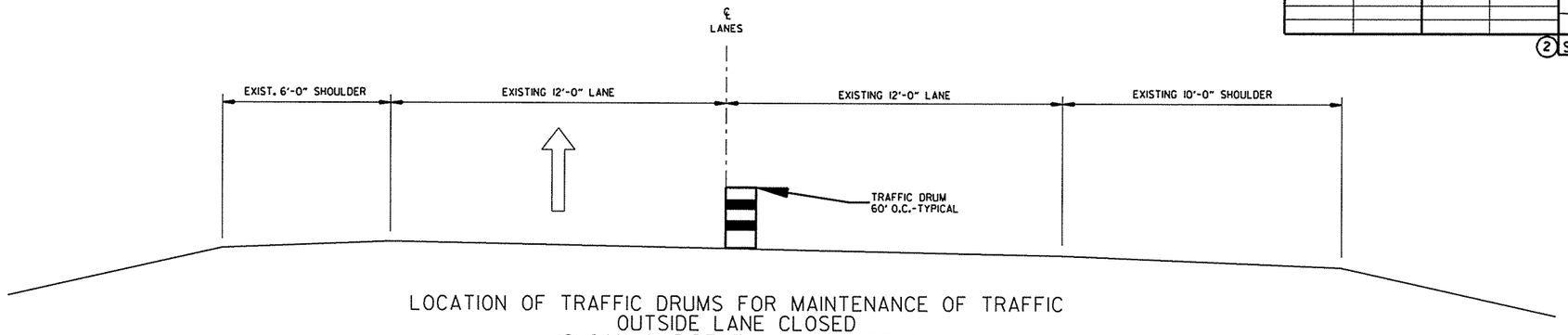
RBB0107.DGN

SPECIAL DETAILS

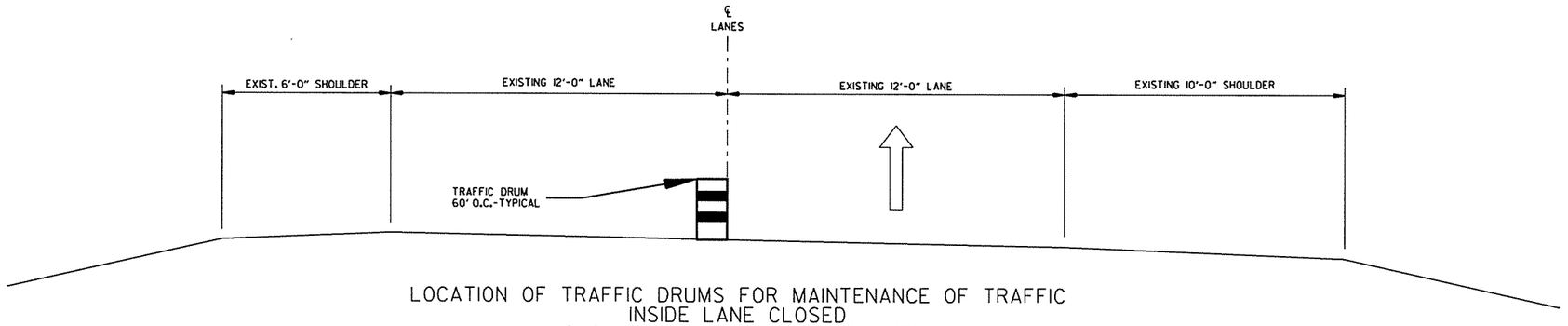
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	11	263

(2) SPECIAL DETAILS

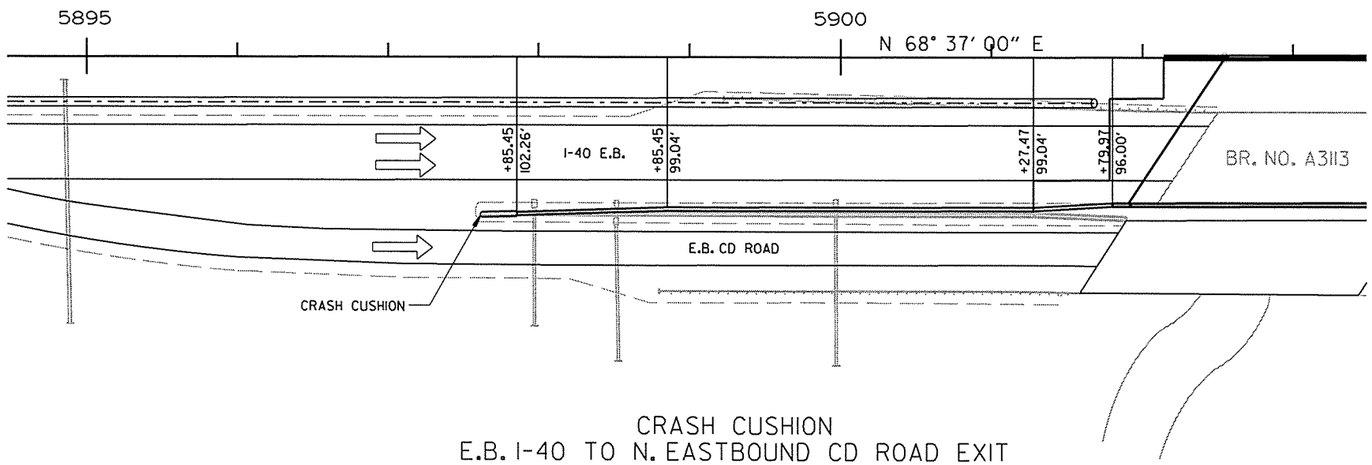
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15



LOCATION OF TRAFFIC DRUMS FOR MAINTENANCE OF TRAFFIC
OUTSIDE LANE CLOSED
(SHOWN IN DIRECTION OF TRAFFIC)



LOCATION OF TRAFFIC DRUMS FOR MAINTENANCE OF TRAFFIC
INSIDE LANE CLOSED
(SHOWN IN DIRECTION OF TRAFFIC)



CRASH CUSHION
E.B. I-40 TO N. EASTBOUND CD ROAD EXIT

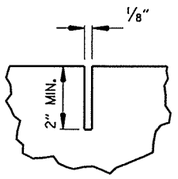
6/17/2015

RBB0107.DGN

SPECIAL DETAILS

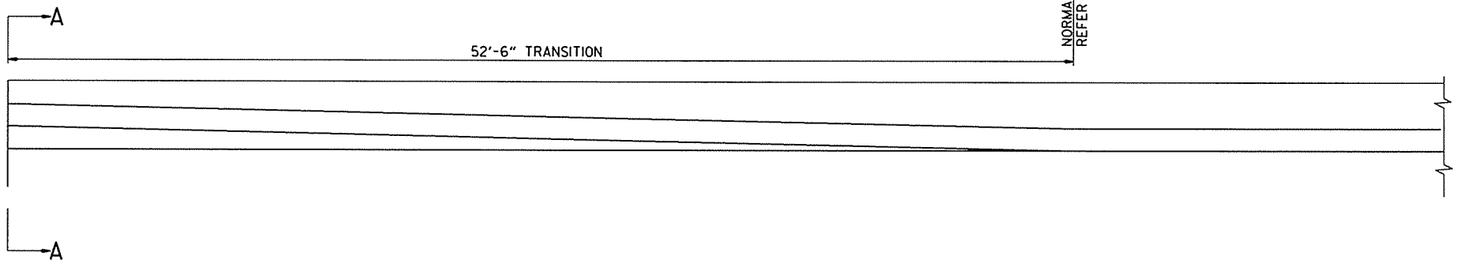
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
7-7-15				6	ARK.			
				JOB NO.		BB0107	11A	263

(2) SPECIAL DETAILS

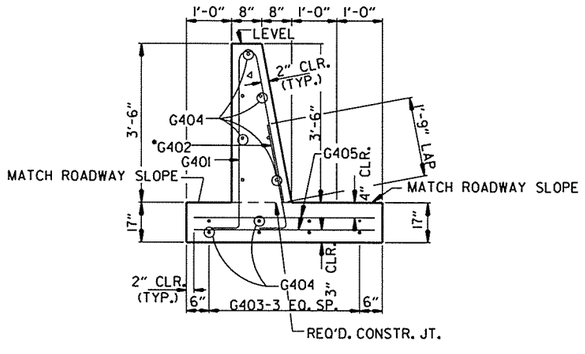


CONTRACTION JOINT DETAIL

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



PLAN VIEW
CONCRETE BARRIER WALL (SIDE TYPE A) TRANSITION



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

* OMIT G402 BARS IN LOCATIONS OF DROP INLETS. OMIT G401, G402 & G403 BARS IN LOCATIONS OF DRAINAGE OPENINGS.

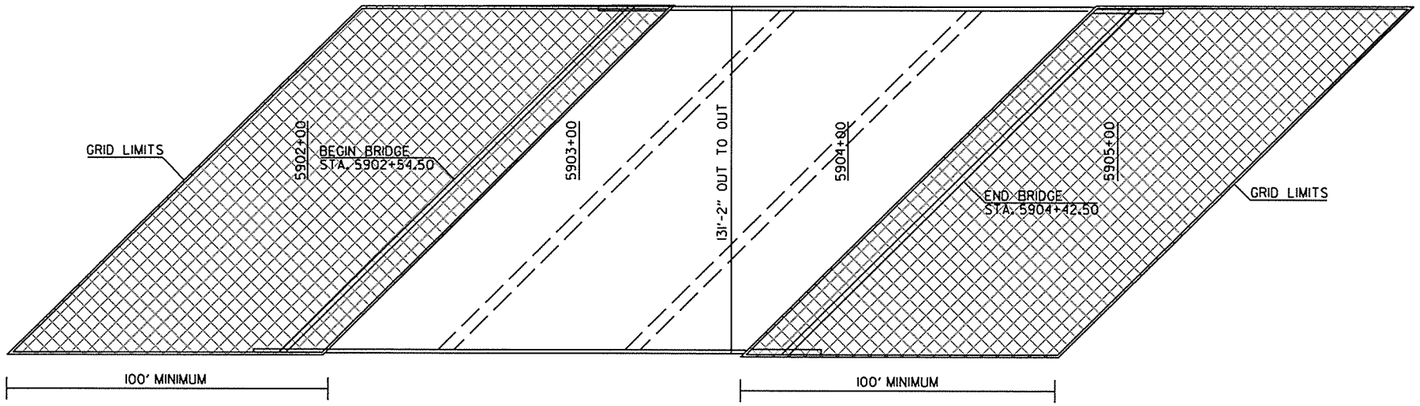
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
7-7-15

7/7/2015
RBB0107.DGN

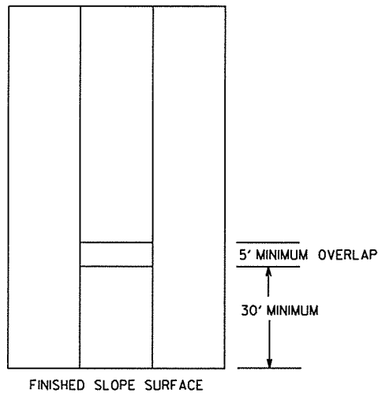
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	12	263

(2) SPECIAL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15

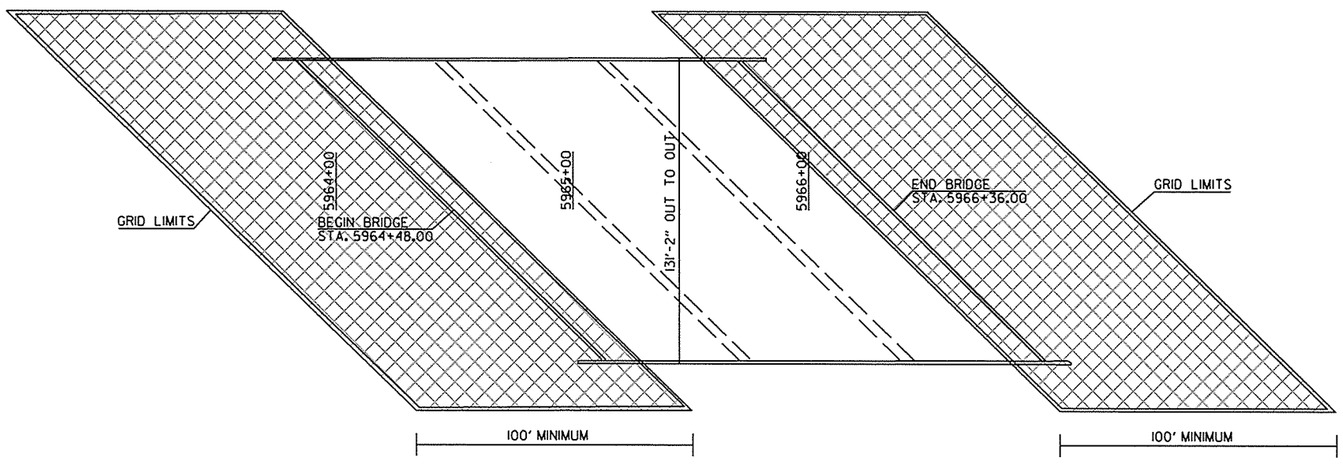


FIFTEEN MILE BAYOU GEOGRID LIMITS



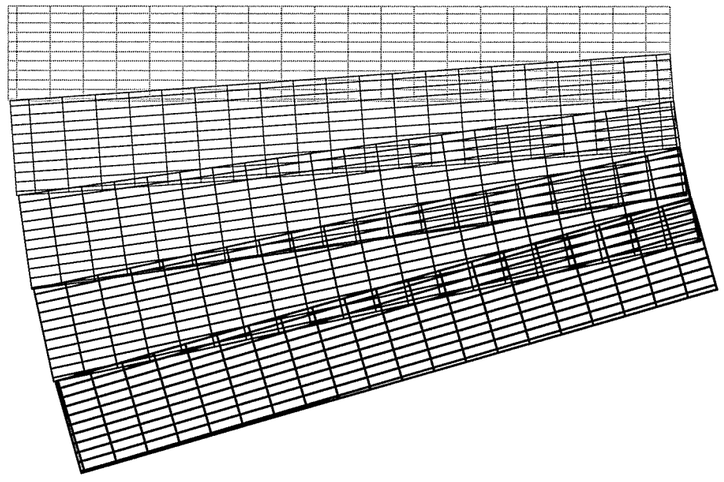
GEOGRID OVERLAP

LEGEND: GEOGRID PLACEMENT AREA



TEN MILE BAYOU GEOGRID LIMITS

LEGEND: GEOGRID PLACEMENT AREA



SIDE SLOPE TO END SLOPE
GEOGRID TRANSITION

NOTES:

PLACEMENT SHALL BE 4 LAYERS OF GEOGRID ON 1FOOT INTERVALS.

TOP LAYER SHALL BEGIN 2' BELOW TOP OF SUBGRADE.

TALLOW = 26,000 LB/FT MINIMUM

GEOGRID SHALL EXTEND TO OUTSIDE EDGE OF SIDE SLOPES.

SEE SP: GEOSYNTHETIC INTERNAL REINFORCED EMBANKMENT CONSTRUCTION.

6/17/2015

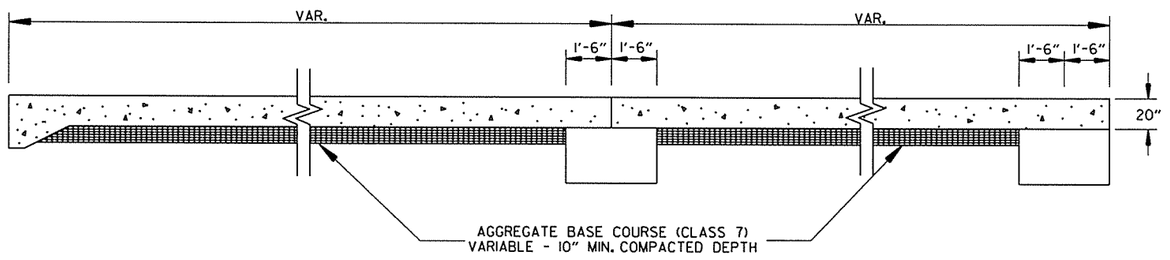
RBB0107.DGN

SPECIAL DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	13	263

(2) SPECIAL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15



DETAIL OF APPROACH SLAB

NOTE: REFER TO BRIDGE DRAWINGS
56992 & 56993 FOR ADDITIONAL INFORMATION.

6/17/2015

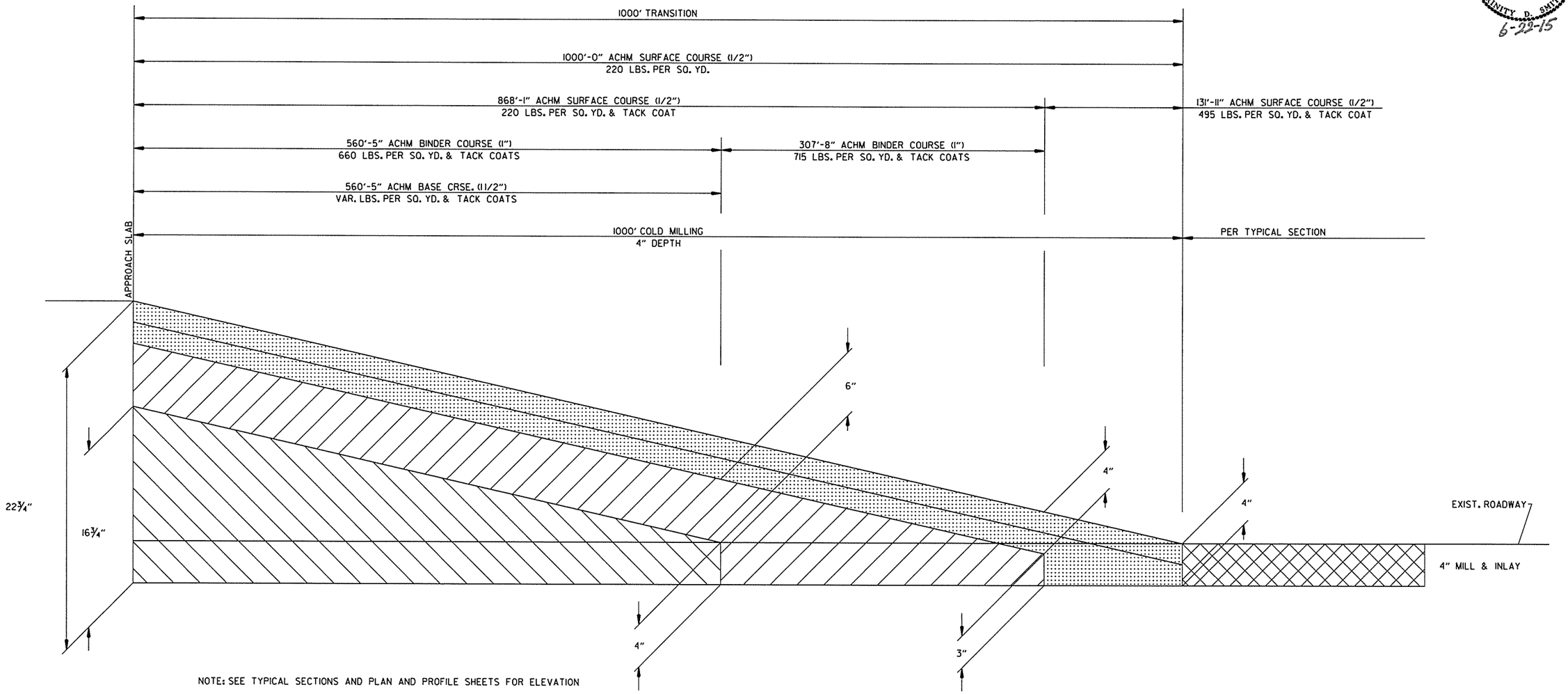
RBB0107.DGN

SPECIAL DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	14	263

(2) SPECIAL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15



NOTE: SEE TYPICAL SECTIONS AND PLAN AND PROFILE SHEETS FOR ELEVATION

PAVEMENT TRANSITION
BRIDGE NO. A7025

STA. 5891+64.00 TO STA. 5901+64.00

6/17/2015

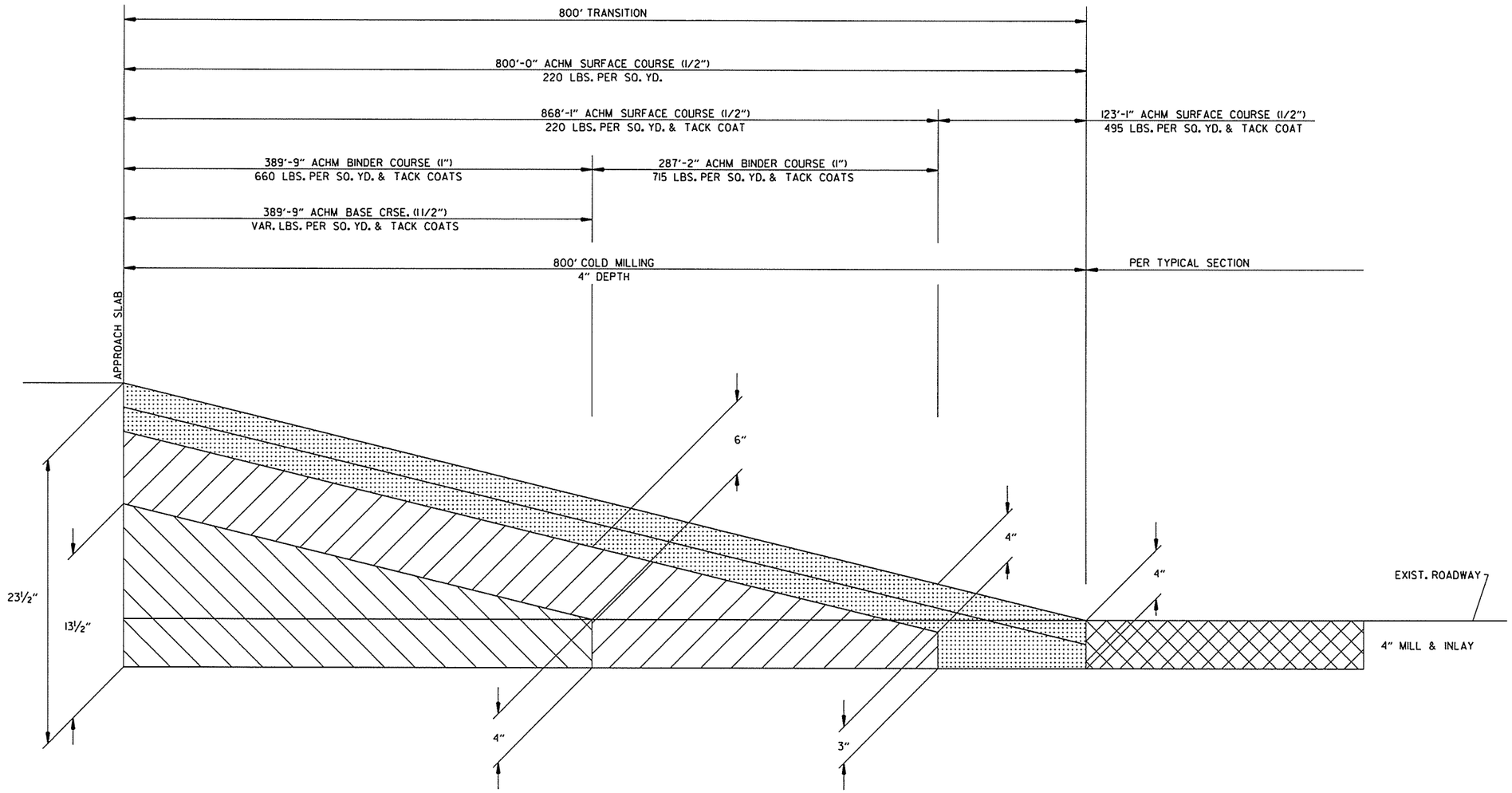
RBB0107.DGN

SPECIAL DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	15	263

(2) SPECIAL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15



NOTE: SEE TYPICAL SECTIONS AND PLAN AND PROFILE SHEETS FOR ELEVATION

PAVEMENT TRANSITION
BRIDGE NO. A7025

STA. 5905+33.00 TO STA. 5913+33.00

6/17/2015

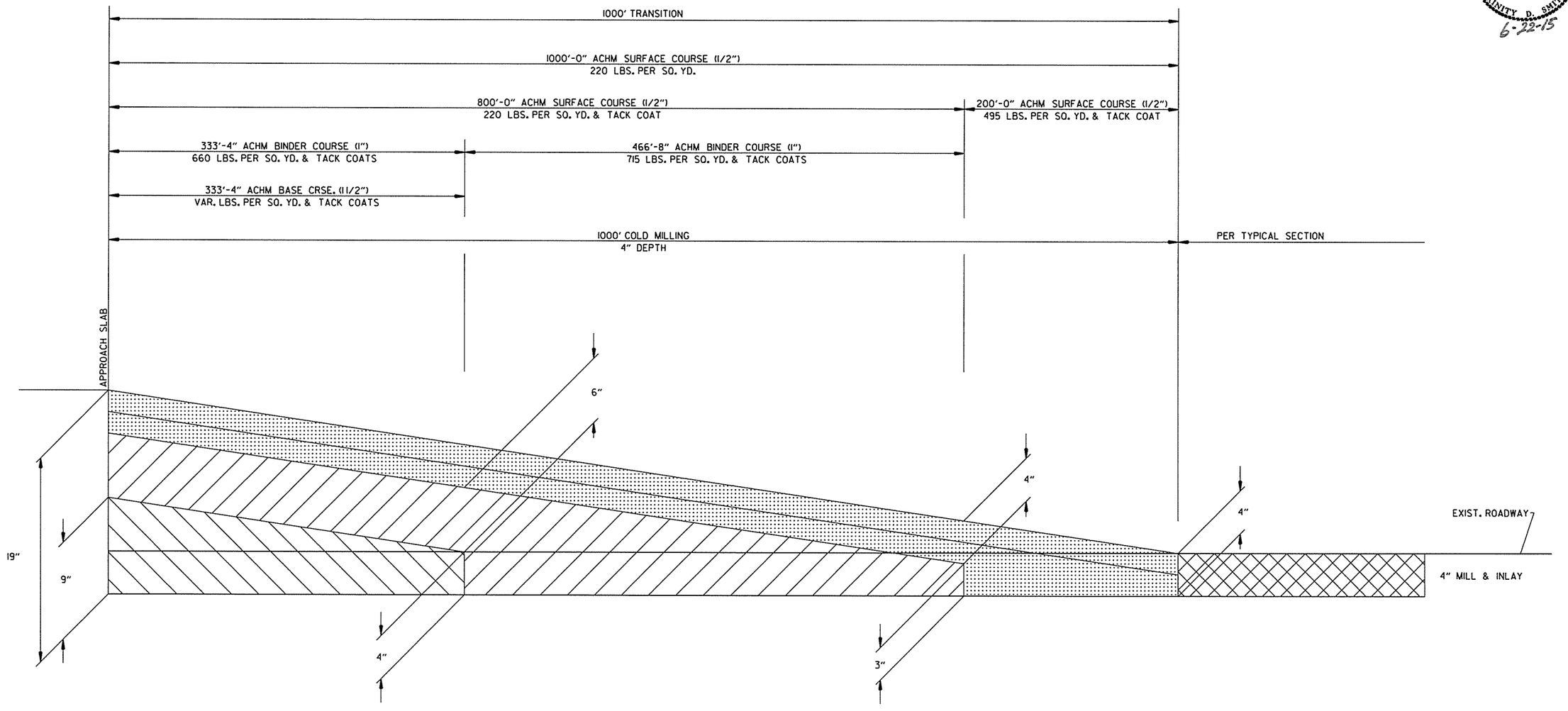
RBB0107.DGN

SPECIAL DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	16	263

(2) SPECIAL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15



NOTE: SEE TYPICAL SECTIONS AND PLAN AND PROFILE SHEETS FOR ELEVATION

PAVEMENT TRANSITION
BRIDGE NO. 07344

STA. 5953+57.50 TO STA. 5963+57.50

6/17/2015

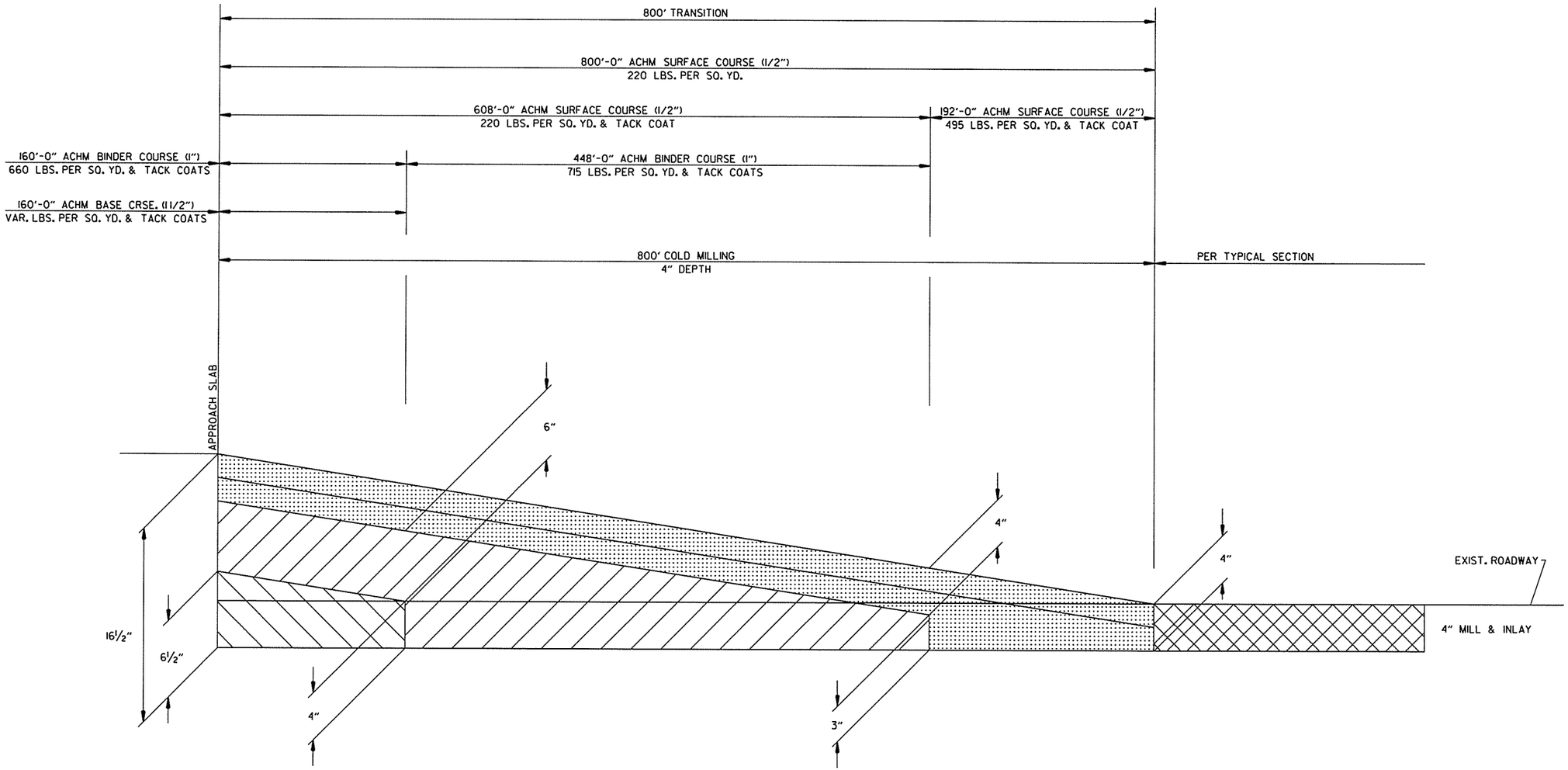
RBB0107.DGN

SPECIAL DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
7-13-15				6	ARK.			
				JOB NO.		BB0107	17	263

(2) SPECIAL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
7-14-15



NOTE: SEE TYPICAL SECTIONS AND PLAN AND PROFILE SHEETS FOR ELEVATION

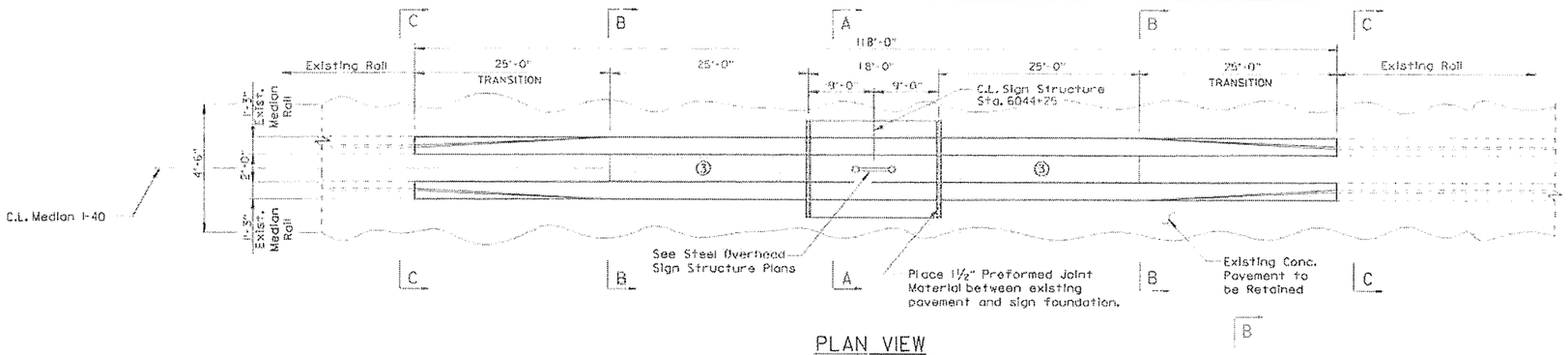
PAVEMENT TRANSITION
BRIDGE NO. 07344

STA. 5967+26.50 TO STA. 5975+26.50

7/13/2015

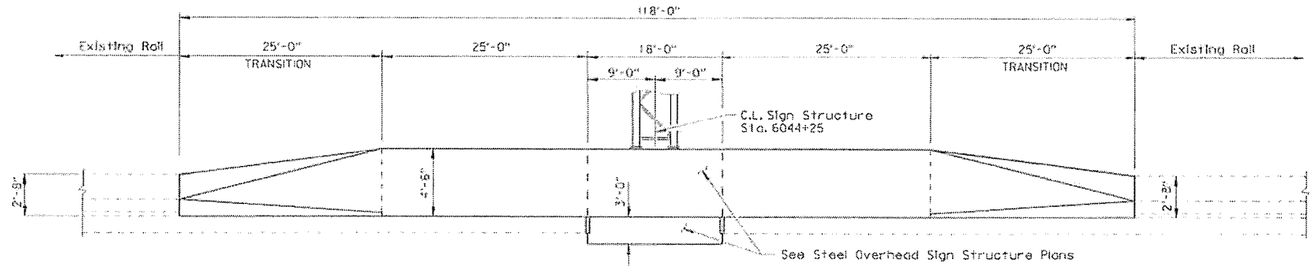
RBB0107.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		880107	18	263
				(2)	SPECIAL DETAILS			



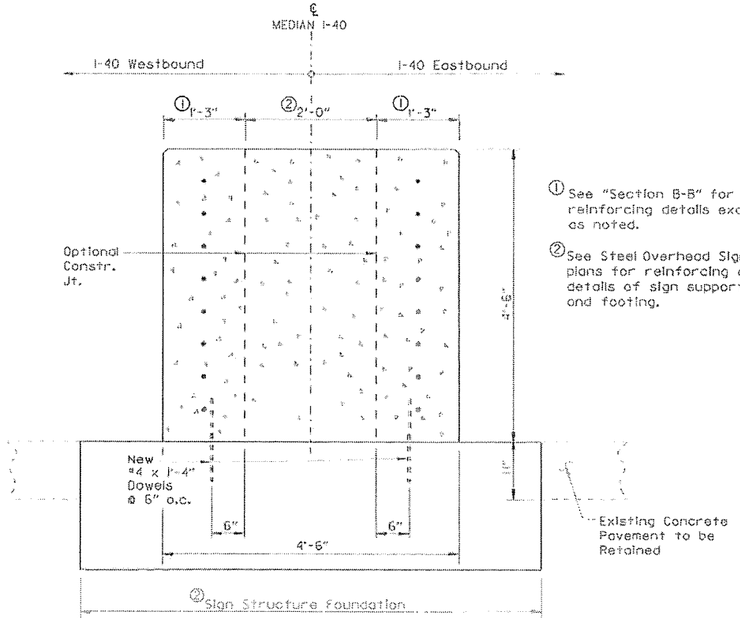
PLAN VIEW

CONCRETE BARRIER WALL TRANSITION (MEDIAN TYPE SP-I)



ELEVATION VIEW

CONCRETE BARRIER WALL TRANSITION (MEDIAN TYPE SP-I)



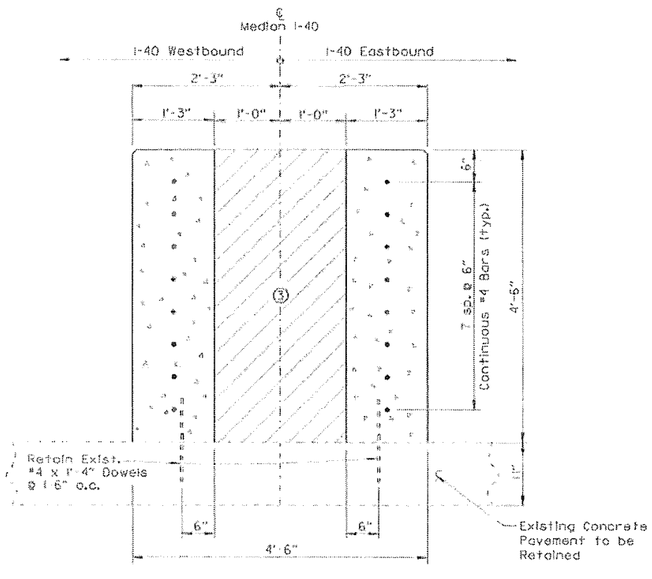
① See "Section B-B" for reinforcing details except as noted.

② See Steel Overhead Sign Structure plans for reinforcing and additional details of sign support pedestal and footing.

CONCRETE BARRIER WALL (MEDIAN TYPE SP-I)

(SECTION A-A)

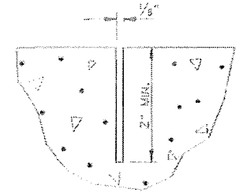
STA. 6044+16.00 TO STA. 6044+34.00



CONCRETE BARRIER WALL (MEDIAN TYPE SP-I)

(SECTION B-B)

③ Backfill area between barrier rails for 25' on both sides of sign foundation with Class S or S(AE) Concrete. Payment for this work shall be considered incidental to "Concrete Barrier Wall (Median Type SP-I)".



CONTRACTION JOINT DETAIL

STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
6-14-15
CHARLES R. ELLIS

Notes for Concrete Barrier Wall:

Concrete Barrier Walls shall be constructed in accordance with Section 631 of the Standard Specifications and these details.

All exposed edges shall have a ¾" chamfer.

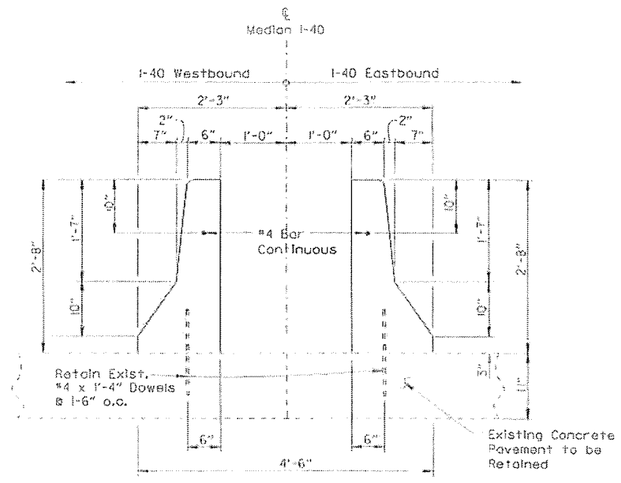
Contraction joints shall be constructed at 30'-0" maximum spacing in top and sides of median barrier and shall be formed in fresh concrete.

All reinforcing bars shall have 2" minimum cover.

Existing dowel bars which are to be incorporated into new construction and are damaged by the Contractor shall be replaced at his expense to the satisfaction of the Engineer.

Preformed joint material, and removal and disposal of existing pavement for construction of the overhead sign foundation shall be included in the price bid for "Steel Overhead Sign Structure".

Removal of the existing median barrier shall be paid for under the price bid for "Removal & Disposal of Concrete Median Barrier".



CONCRETE BARRIER WALL (MEDIAN TYPE SP-I)

(SECTION C-C)

CONCRETE BARRIER WALL TRANSITION
(MEDIAN TYPE SP-I)
FOR OVERHEAD SIGN STRUCTURE
OH-040-18-35

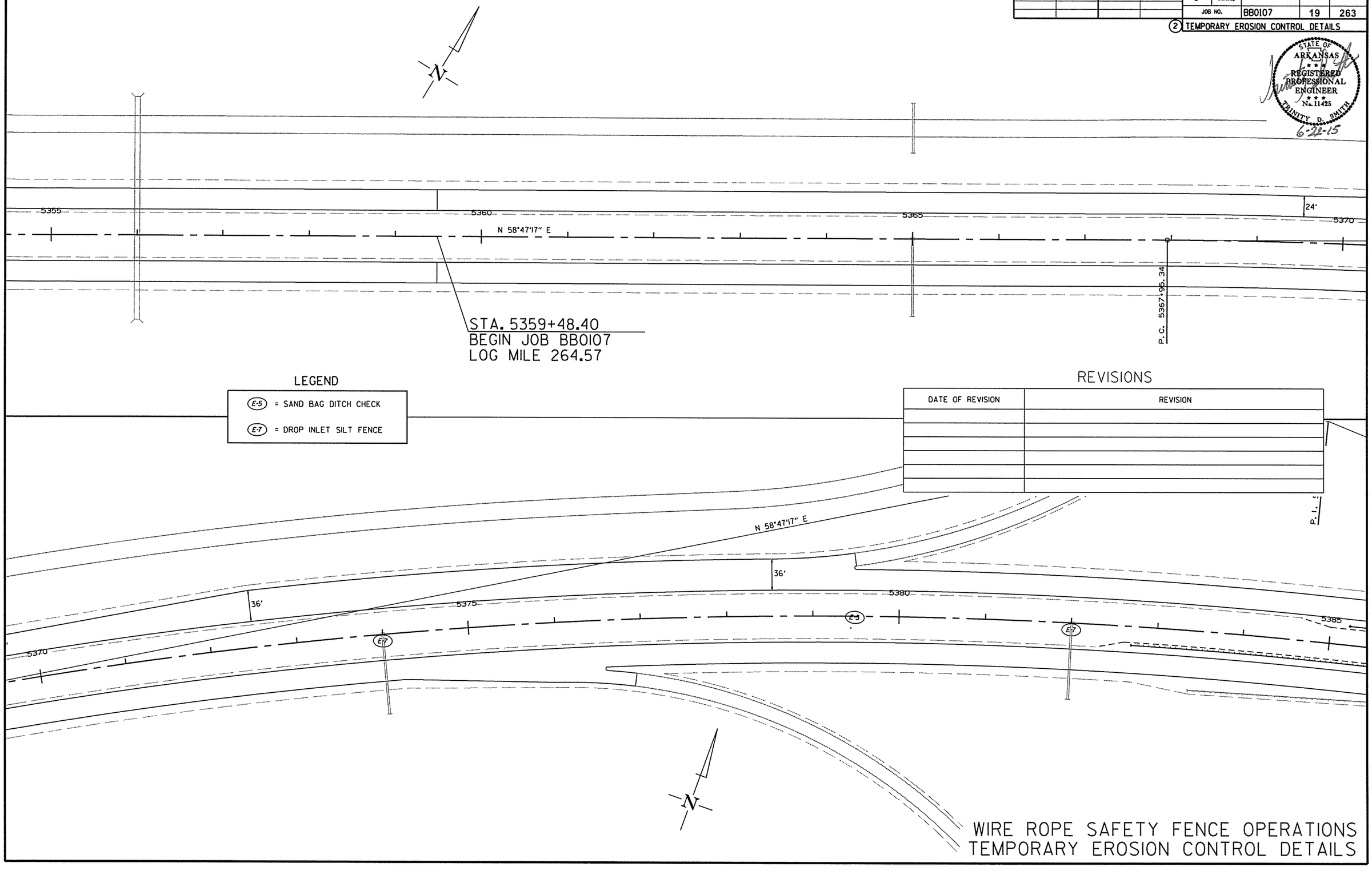
SPECIAL DETAILS

5/2012

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	19	263

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15



LEGEND

(E-5)	= SAND BAG DITCH CHECK
(E-7)	= DROP INLET SILT FENCE

REVISIONS

DATE OF REVISION	REVISION

6/17/2015

RBB0107.DGN

WIRE ROPE SAFETY FENCE OPERATIONS
TEMPORARY EROSION CONTROL DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	20	263

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15

P.I. 5385+23.77

S 87° 38' 18" E

N

5385 5390 5395 5400

E-5 E-7

STA. 5387+22
BEGIN WRSF

BR. NO. 03844

BING'S STORE RD.

36'

LEGEND

E-5 = SAND BAG DITCH CHECK

E-7 = DROP INLET SILT FENCE

REVISIONS

DATE OF REVISION	REVISION

N

5400 5405 5410 5415

S 87° 38' 18" E

E-5 E-7

P.T. 5401+52.72

36'

24'

STA. 5414+01
END WRSF

6/17/2015

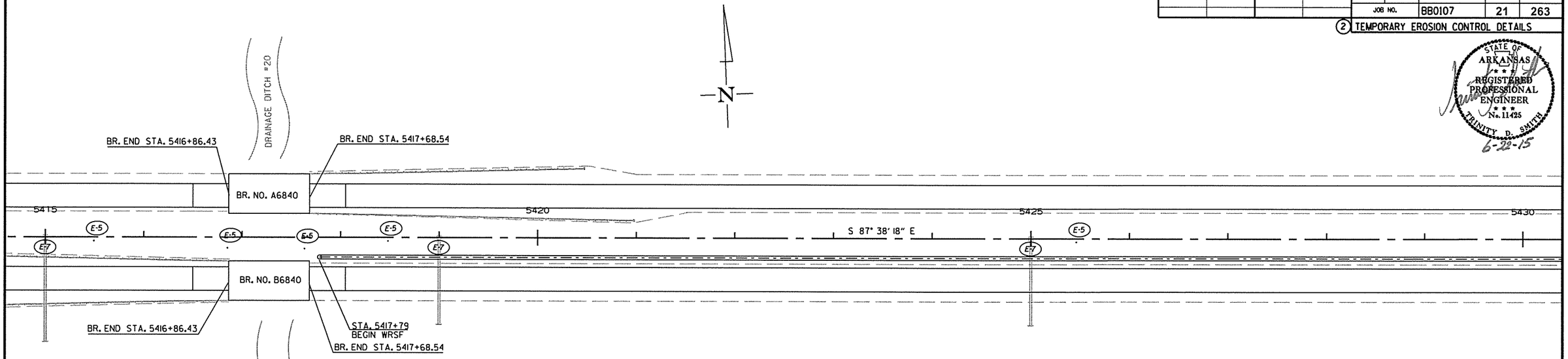
RBB0107.DGN

WIRE ROPE SAFETY FENCE OPERATIONS
TEMPORARY EROSION CONTROL DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	21	263

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15



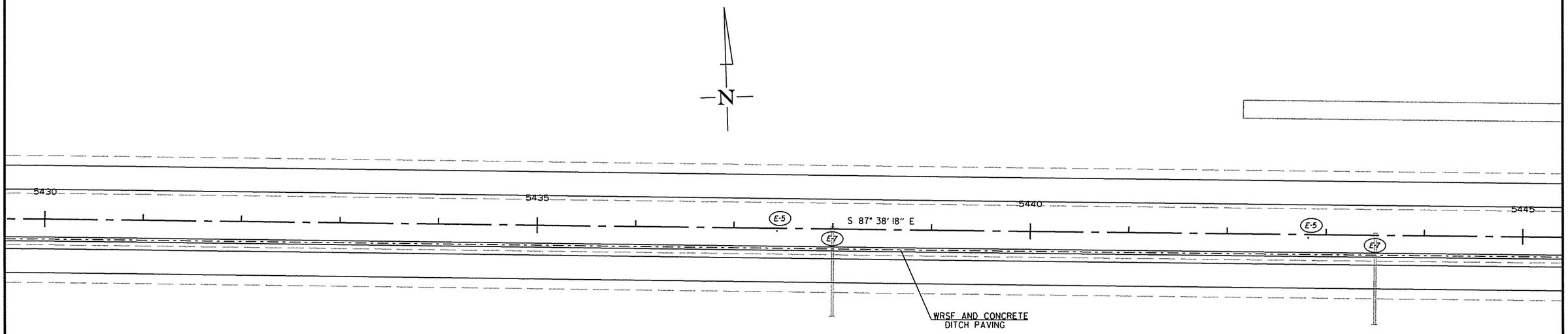
REVISIONS

DATE OF REVISION	REVISION

LEGEND

(E-5) = SAND BAG DITCH CHECK

(E-7) = DROP INLET SILT FENCE



6/17/2015

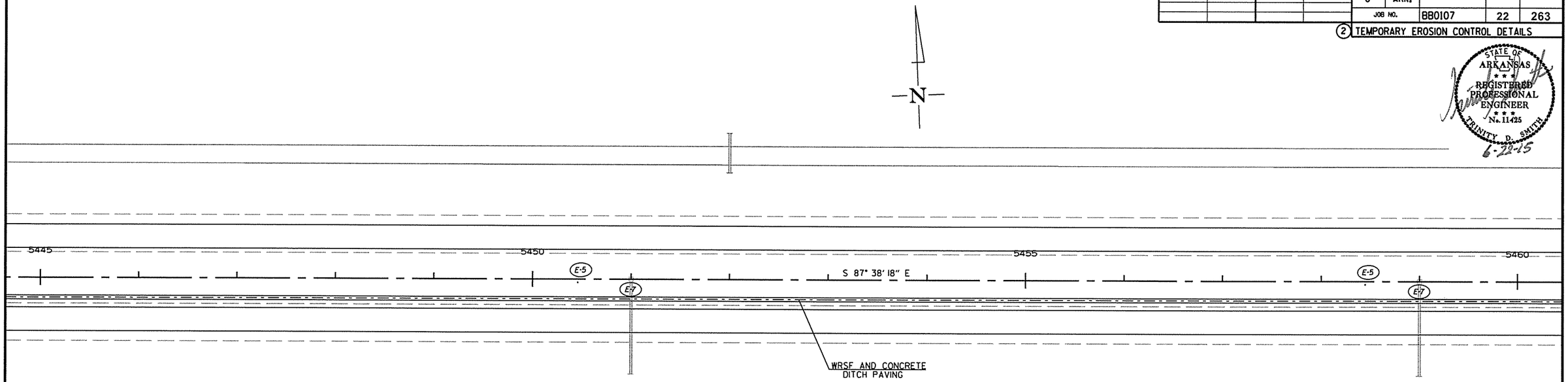
RBB0107.DGN

WIRE ROPE SAFETY FENCE OPERATIONS
TEMPORARY EROSION CONTROL DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	22	263

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15



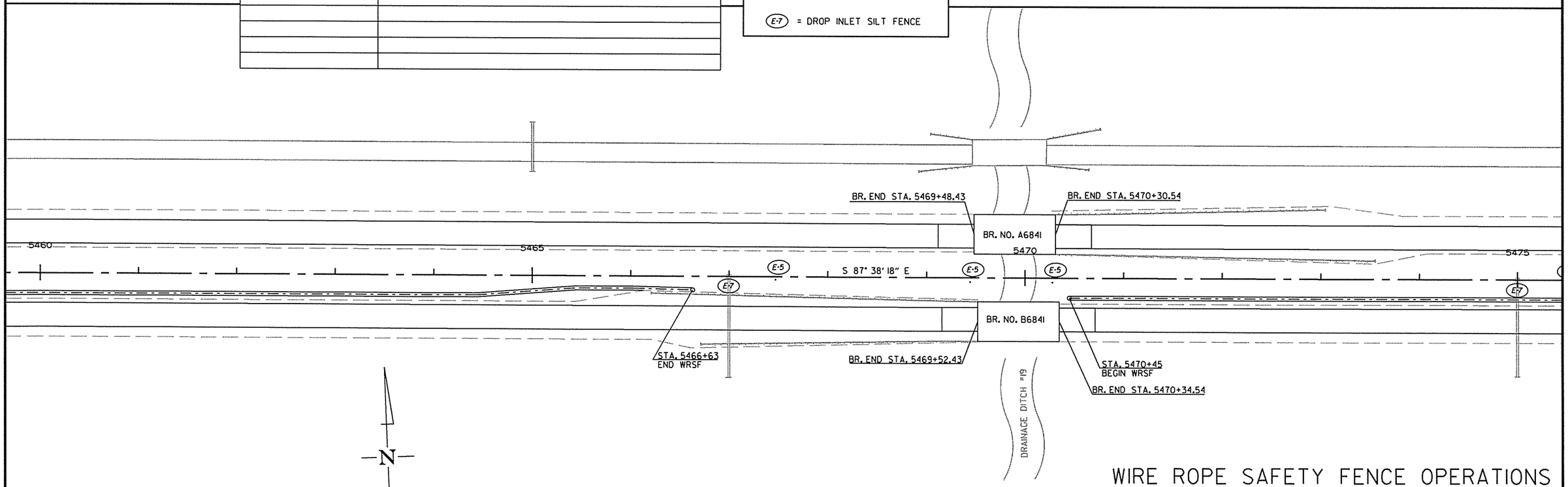
REVISIONS

DATE OF REVISION	REVISION

LEGEND

(E-5) = SAND BAG DITCH CHECK

(E-7) = DROP INLET SILT FENCE



6/17/2015

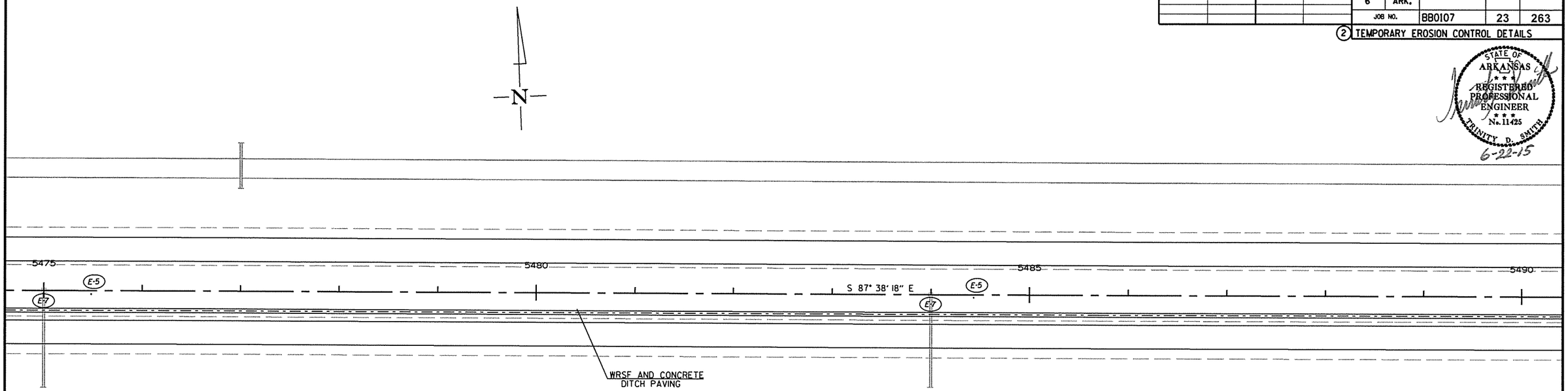
RBB0107.DGN

WIRE ROPE SAFETY FENCE OPERATIONS
TEMPORARY EROSION CONTROL DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	23	263

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15



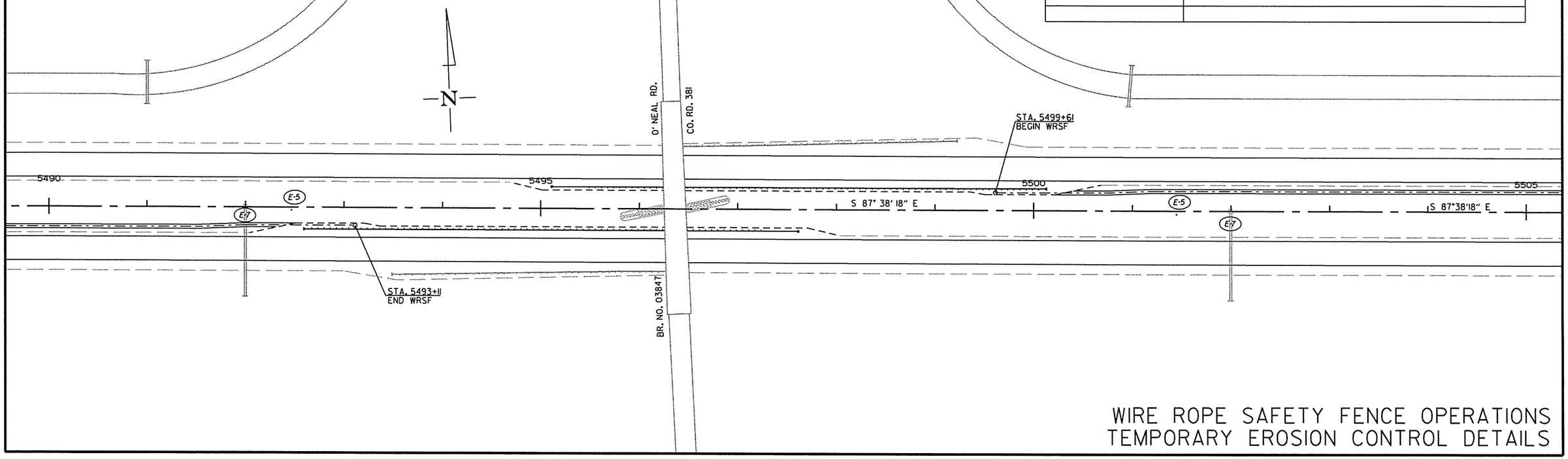
LEGEND

(E-5) = SAND BAG DITCH CHECK

(E-7) = DROP INLET SILT FENCE

REVISIONS

DATE OF REVISION	REVISION



6/17/2015

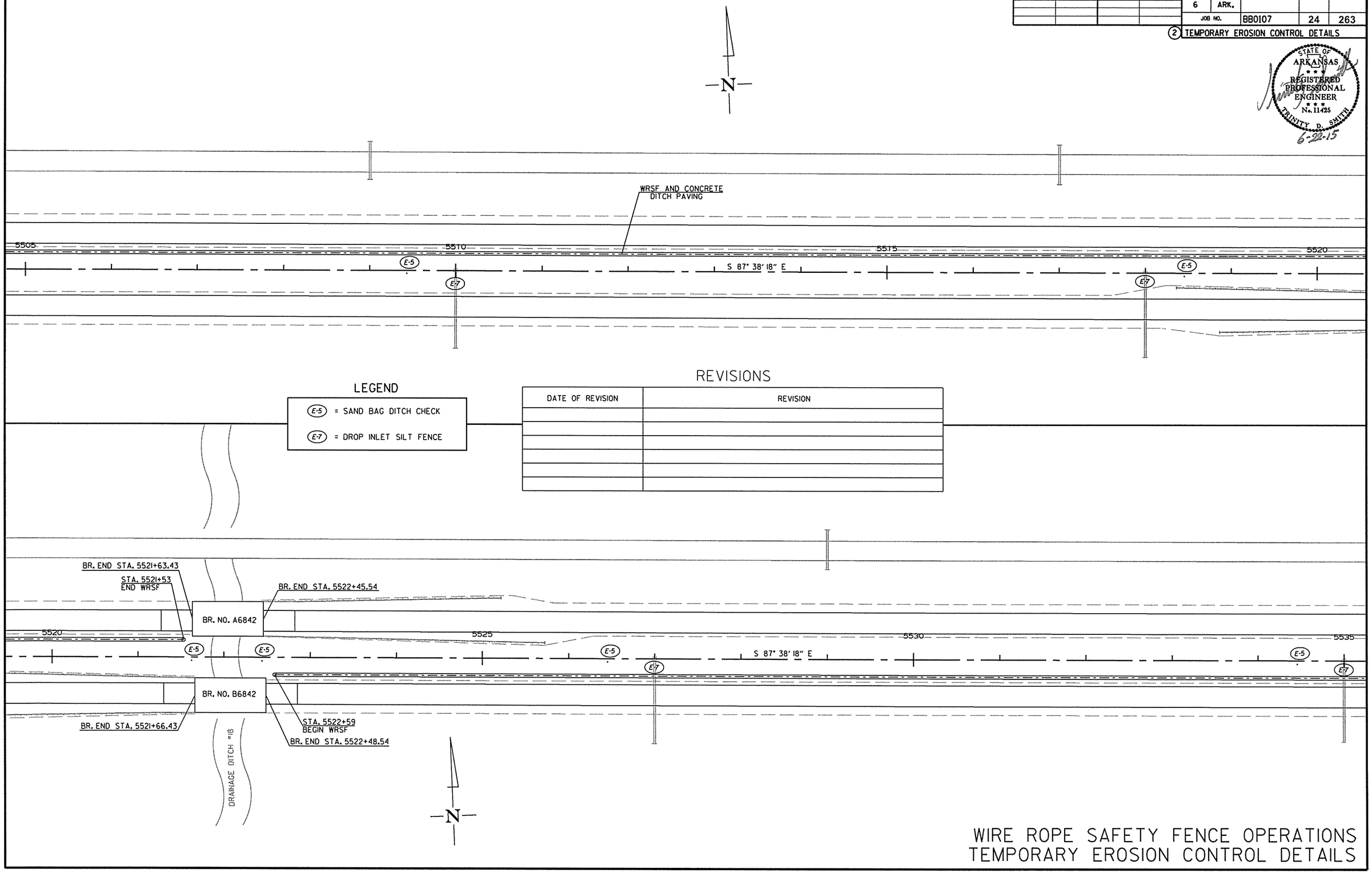
RBB0107.DGN

WIRE ROPE SAFETY FENCE OPERATIONS
TEMPORARY EROSION CONTROL DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	24	263

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15



REVISIONS

DATE OF REVISION	REVISION

6/17/2015

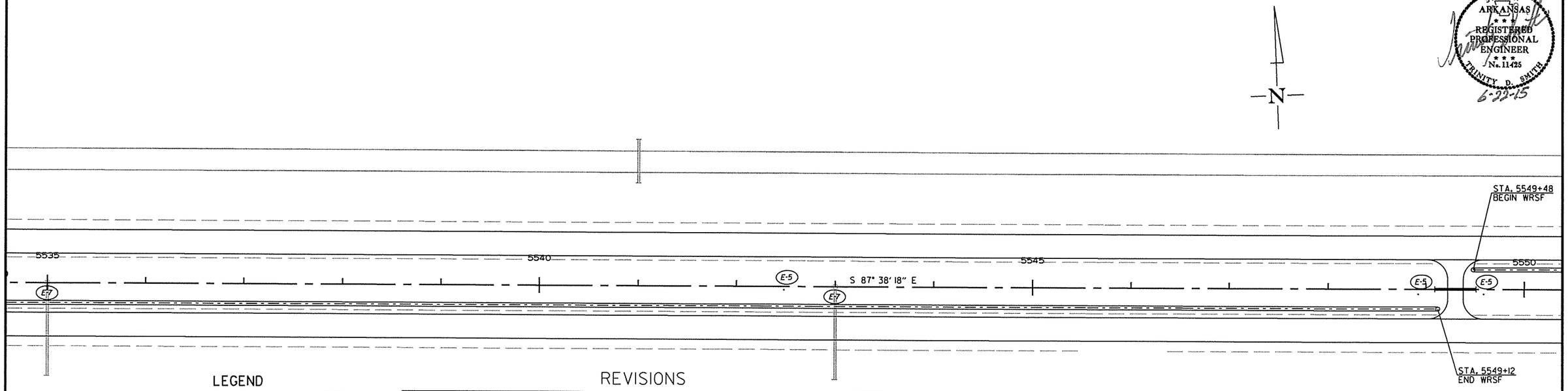
RBB0107.DGN

WIRE ROPE SAFETY FENCE OPERATIONS
TEMPORARY EROSION CONTROL DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	25	263

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15



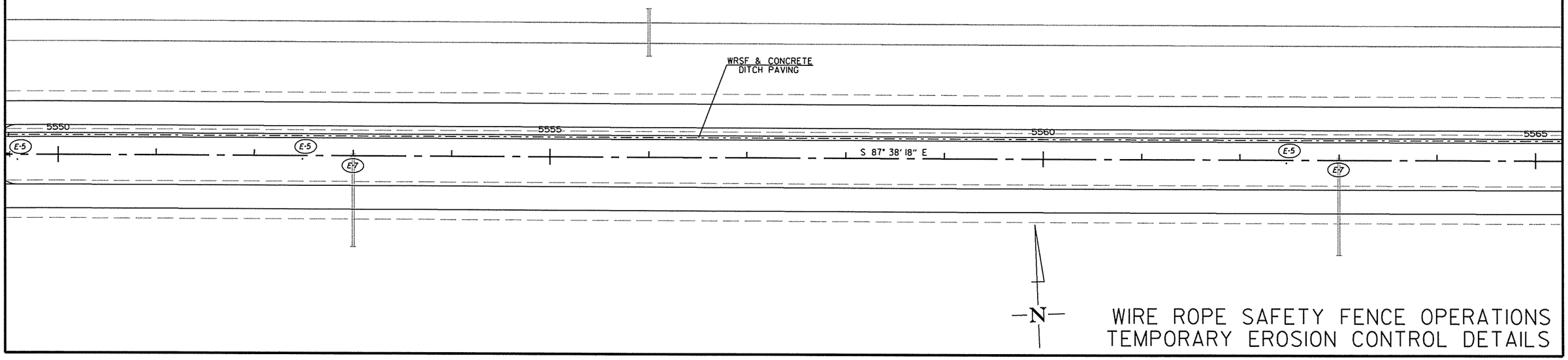
LEGEND

(E-5) = SAND BAG DITCH CHECK

(E-7) = DROP INLET SILT FENCE

REVISIONS

DATE OF REVISION	REVISION



WIRE ROPE SAFETY FENCE OPERATIONS
TEMPORARY EROSION CONTROL DETAILS

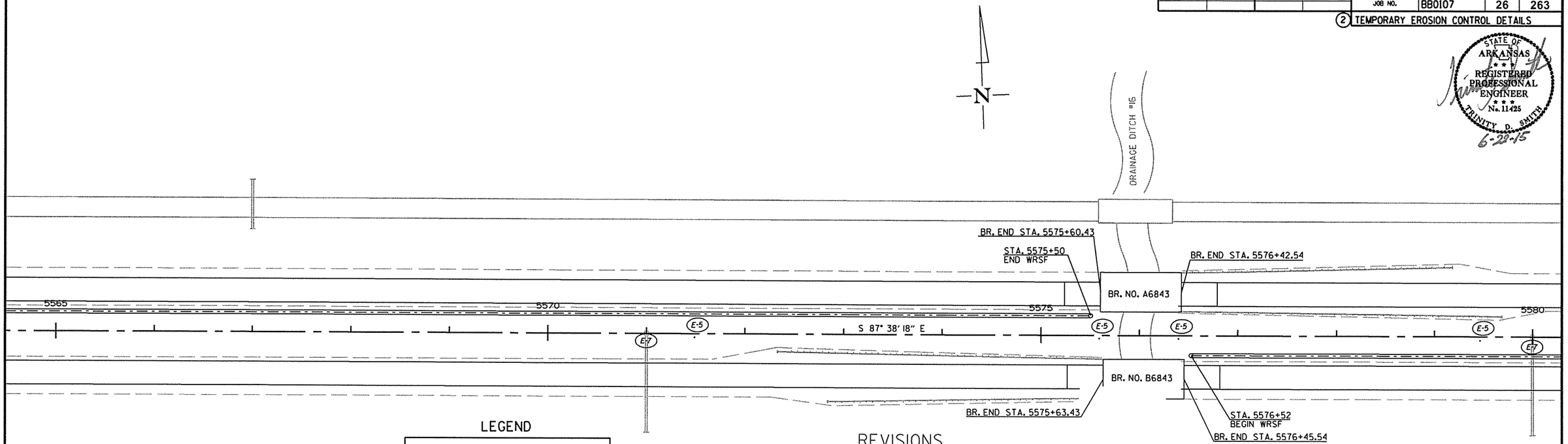
6/17/2015

RBB0107.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	26	263

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15



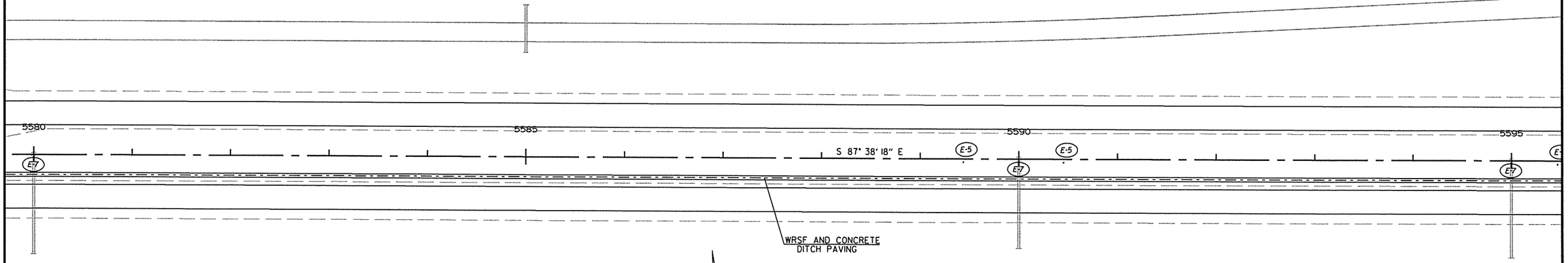
LEGEND

E-5 = SAND BAG DITCH CHECK

E-7 = DROP INLET SILT FENCE

REVISIONS

DATE OF REVISION	REVISION



6/17/2015

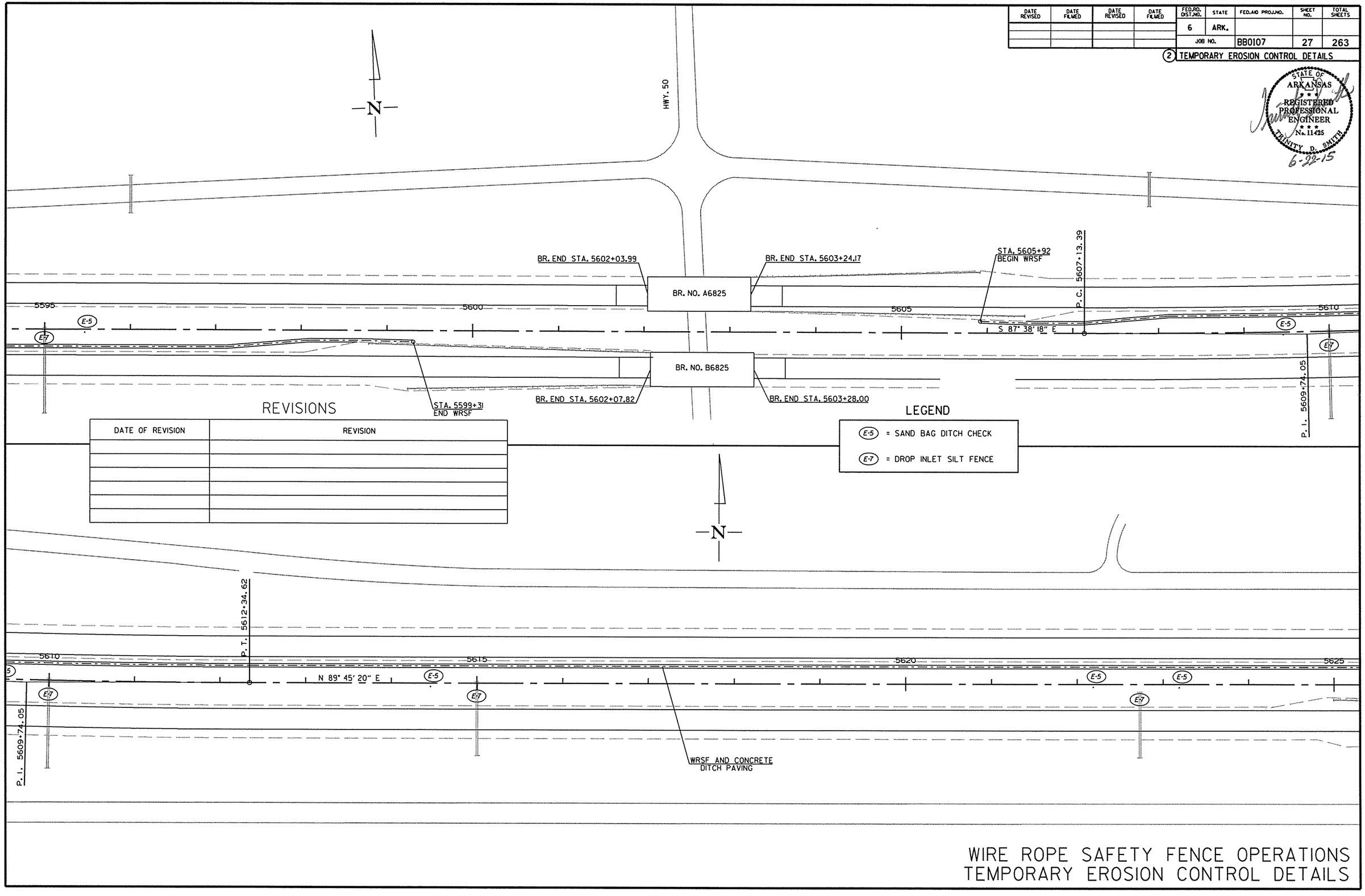
RBB0107.DGN

WIRE ROPE SAFETY FENCE OPERATIONS
TEMPORARY EROSION CONTROL DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	27	263

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15



REVISIONS

DATE OF REVISION	REVISION

LEGEND

(E-5) = SAND BAG DITCH CHECK

(E-7) = DROP INLET SILT FENCE

6/17/2015

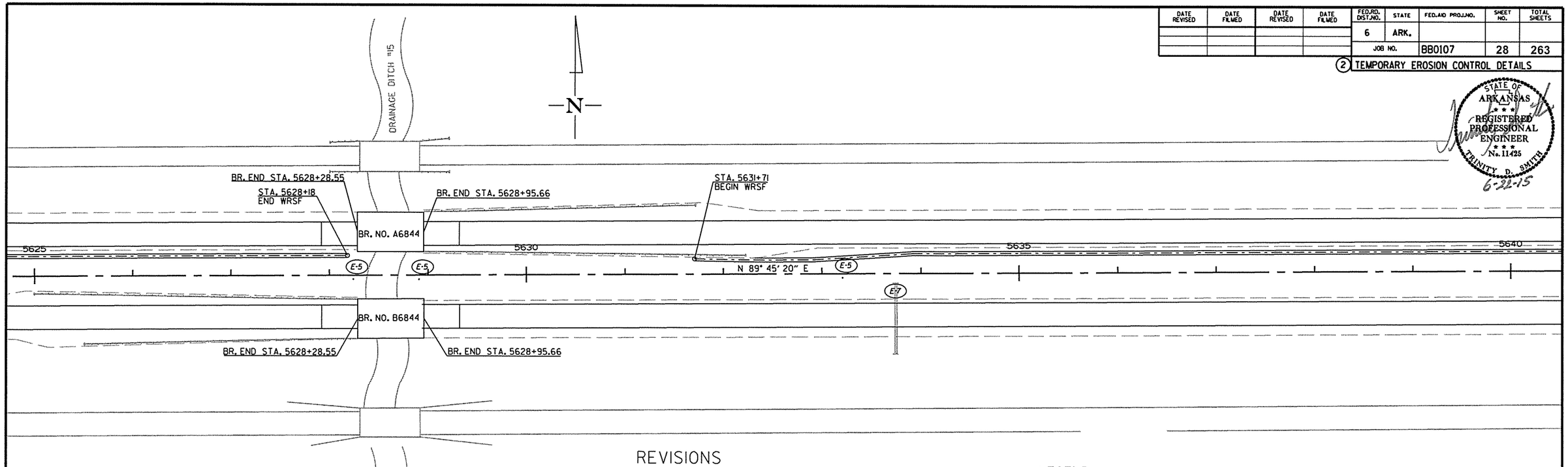
RBB0107.DGN

WIRE ROPE SAFETY FENCE OPERATIONS
TEMPORARY EROSION CONTROL DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	28	263

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15



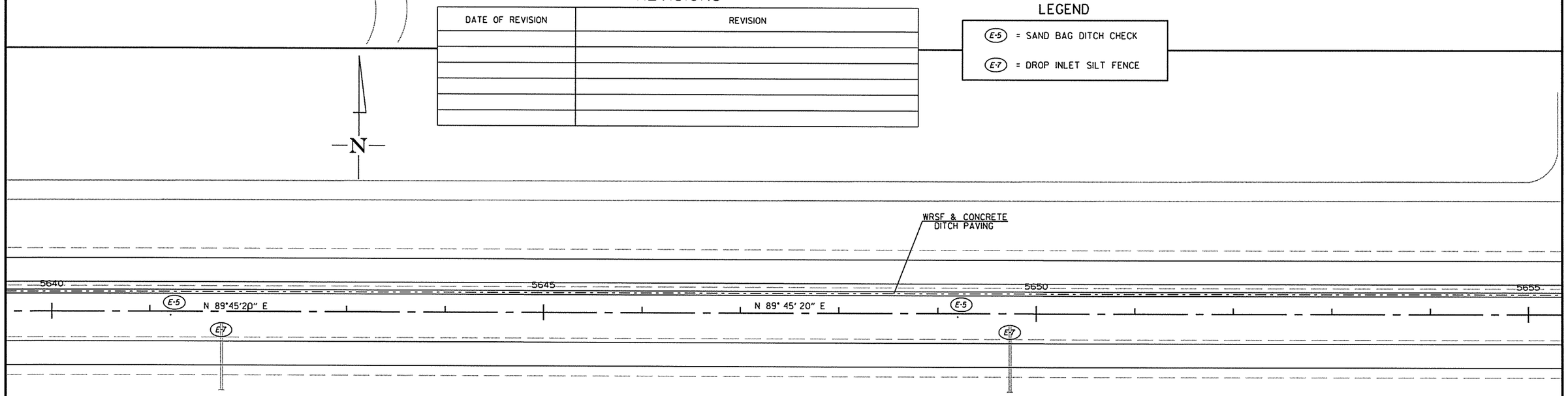
REVISIONS

DATE OF REVISION	REVISION

LEGEND

E-5 = SAND BAG DITCH CHECK

E-7 = DROP INLET SILT FENCE



6/17/2015

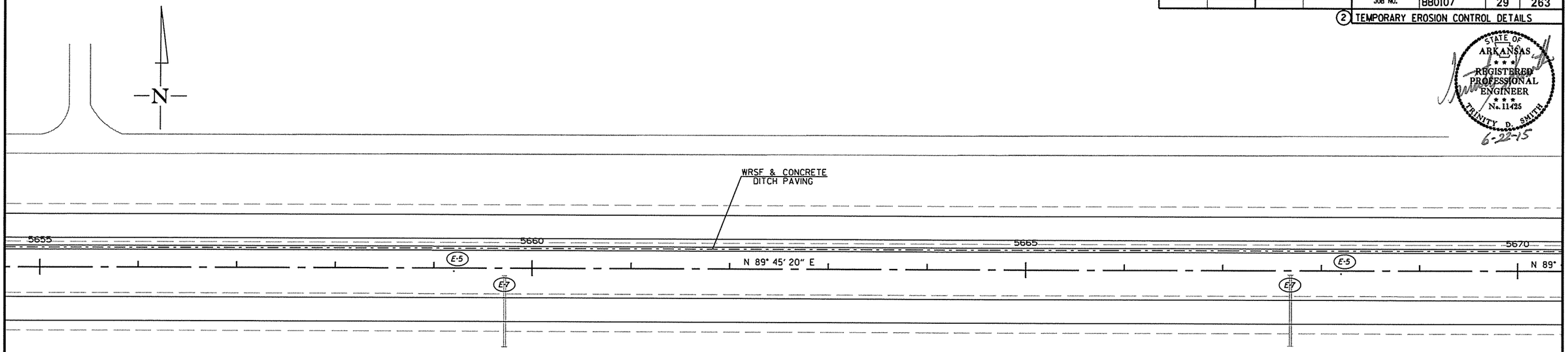
RBB0107.DGN

WIRE ROPE SAFETY FENCE OPERATIONS
TEMPORARY EROSION CONTROL DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	29	263

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15



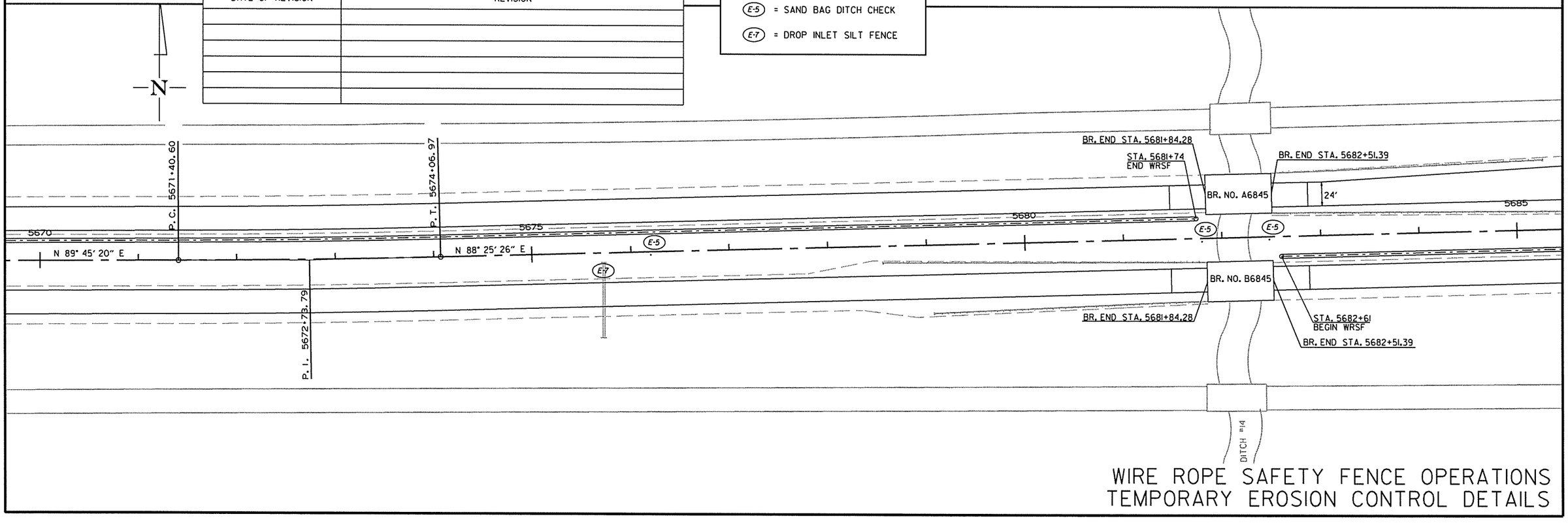
REVISIONS

DATE OF REVISION	REVISION

LEGEND

E-5 = SAND BAG DITCH CHECK

E-7 = DROP INLET SILT FENCE



6/17/2015

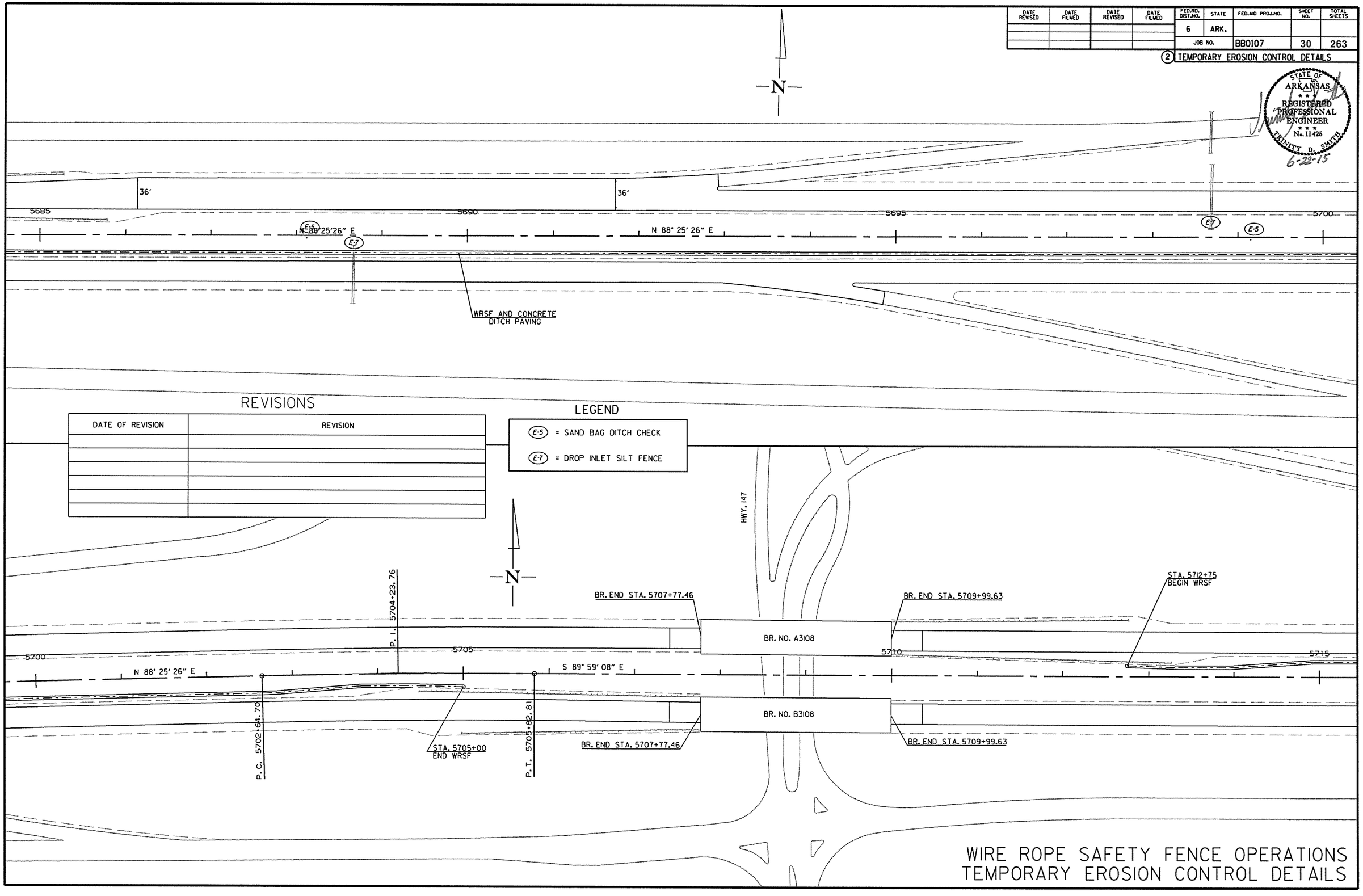
RBB0107.DGN

WIRE ROPE SAFETY FENCE OPERATIONS
TEMPORARY EROSION CONTROL DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	30	263

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15



REVISIONS

DATE OF REVISION	REVISION

LEGEND

(E-5) = SAND BAG DITCH CHECK

(E-7) = DROP INLET SILT FENCE

6/17/2015

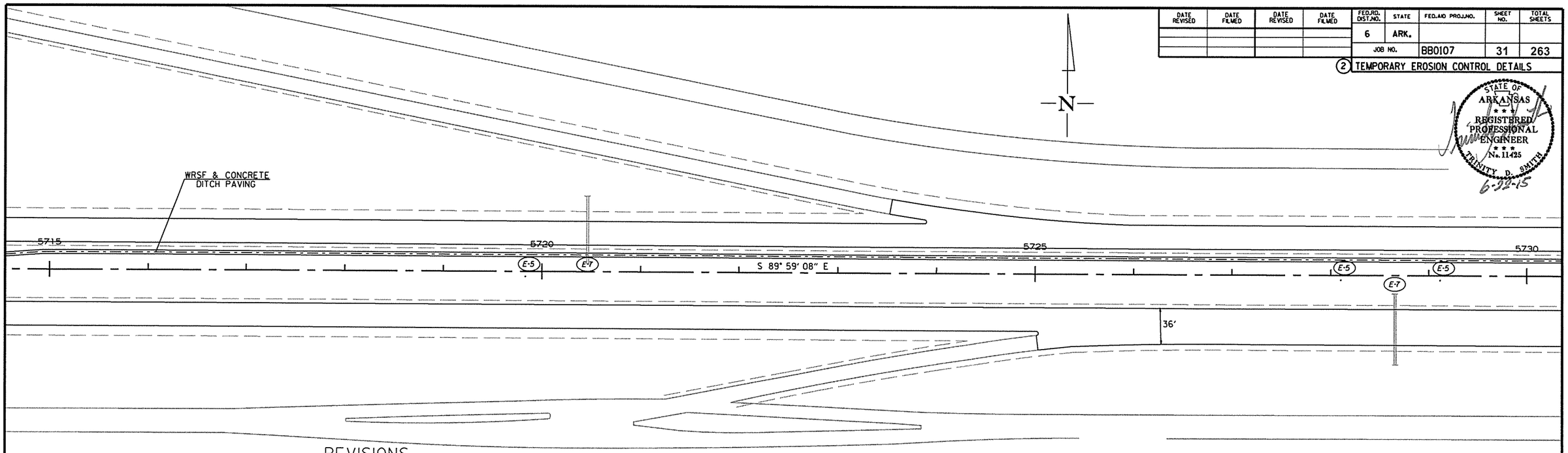
RBB0107.DGN

WIRE ROPE SAFETY FENCE OPERATIONS
TEMPORARY EROSION CONTROL DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	31	263

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-12-15



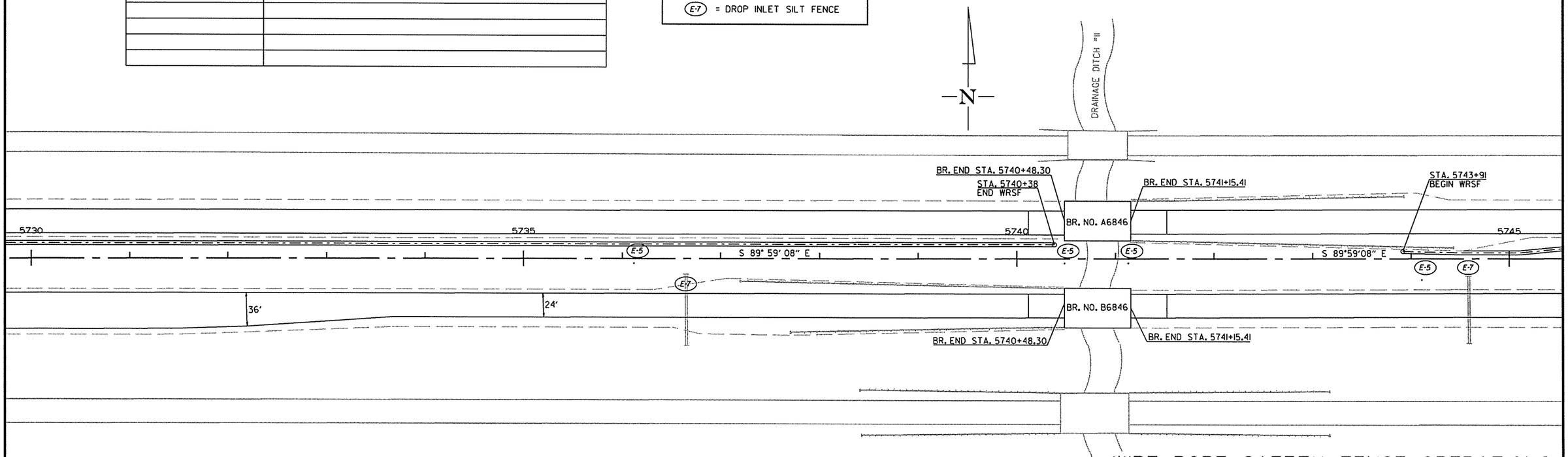
REVISIONS

DATE OF REVISION	REVISION

LEGEND

(E-5) = SAND BAG DITCH CHECK

(E-7) = DROP INLET SILT FENCE



6/17/2015

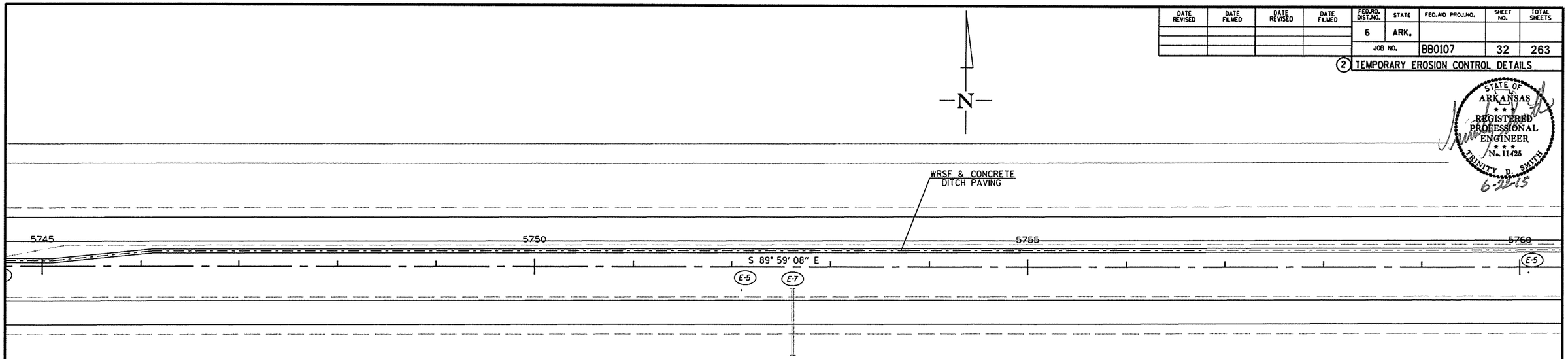
RBB0107.DGN

WIRE ROPE SAFETY FENCE OPERATIONS TEMPORARY EROSION CONTROL DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	32	263

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15



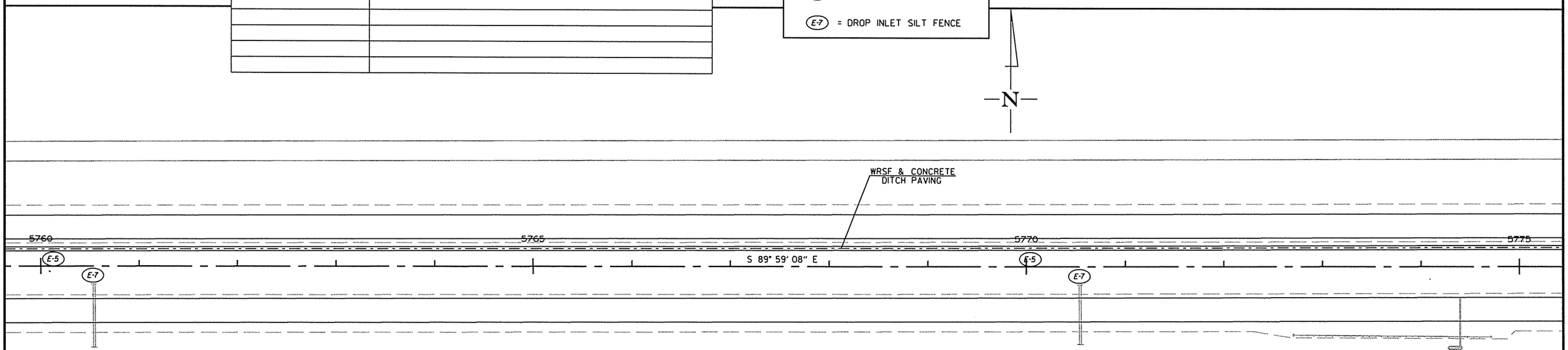
REVISIONS

DATE OF REVISION	REVISION

LEGEND

(E-5) = SAND BAG DITCH CHECK

(E-7) = DROP INLET SILT FENCE



6/17/2015

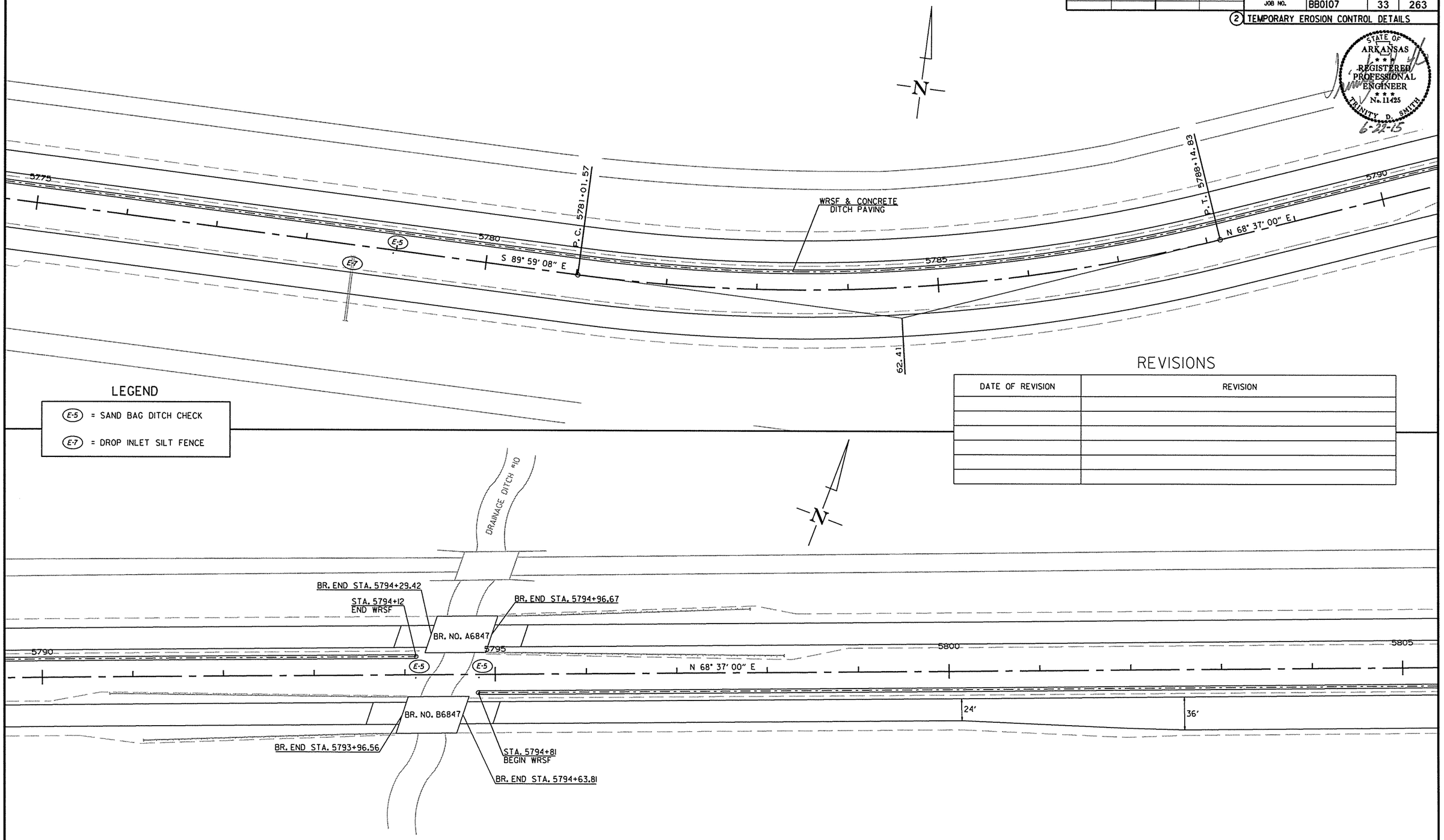
RBB0107.DGN

WIRE ROPE SAFETY FENCE OPERATIONS
TEMPORARY EROSION CONTROL DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	33	263

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15



LEGEND

E-5 = SAND BAG DITCH CHECK

E-7 = DROP INLET SILT FENCE

REVISIONS

DATE OF REVISION	REVISION

6/17/2015

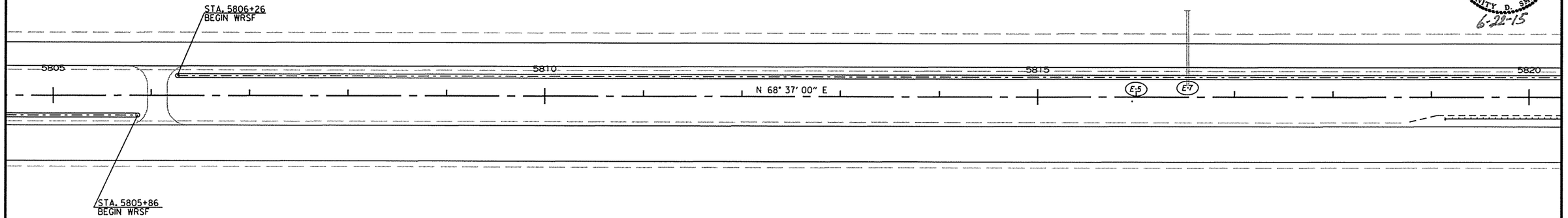
RBB0107.DGN

WIRE ROPE SAFETY FENCE OPERATIONS TEMPORARY EROSION CONTROL DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	34	263

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15



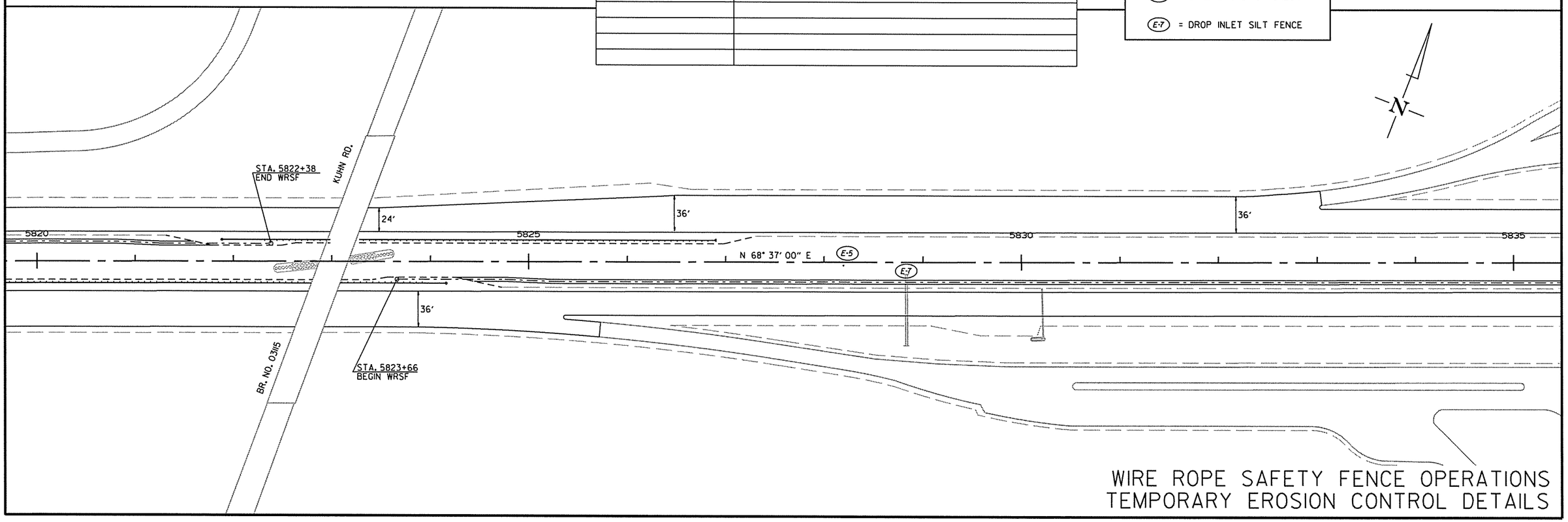
REVISIONS

DATE OF REVISION	REVISION

LEGEND

(E-5) = SAND BAG DITCH CHECK

(E-7) = DROP INLET SILT FENCE



WIRE ROPE SAFETY FENCE OPERATIONS
TEMPORARY EROSION CONTROL DETAILS

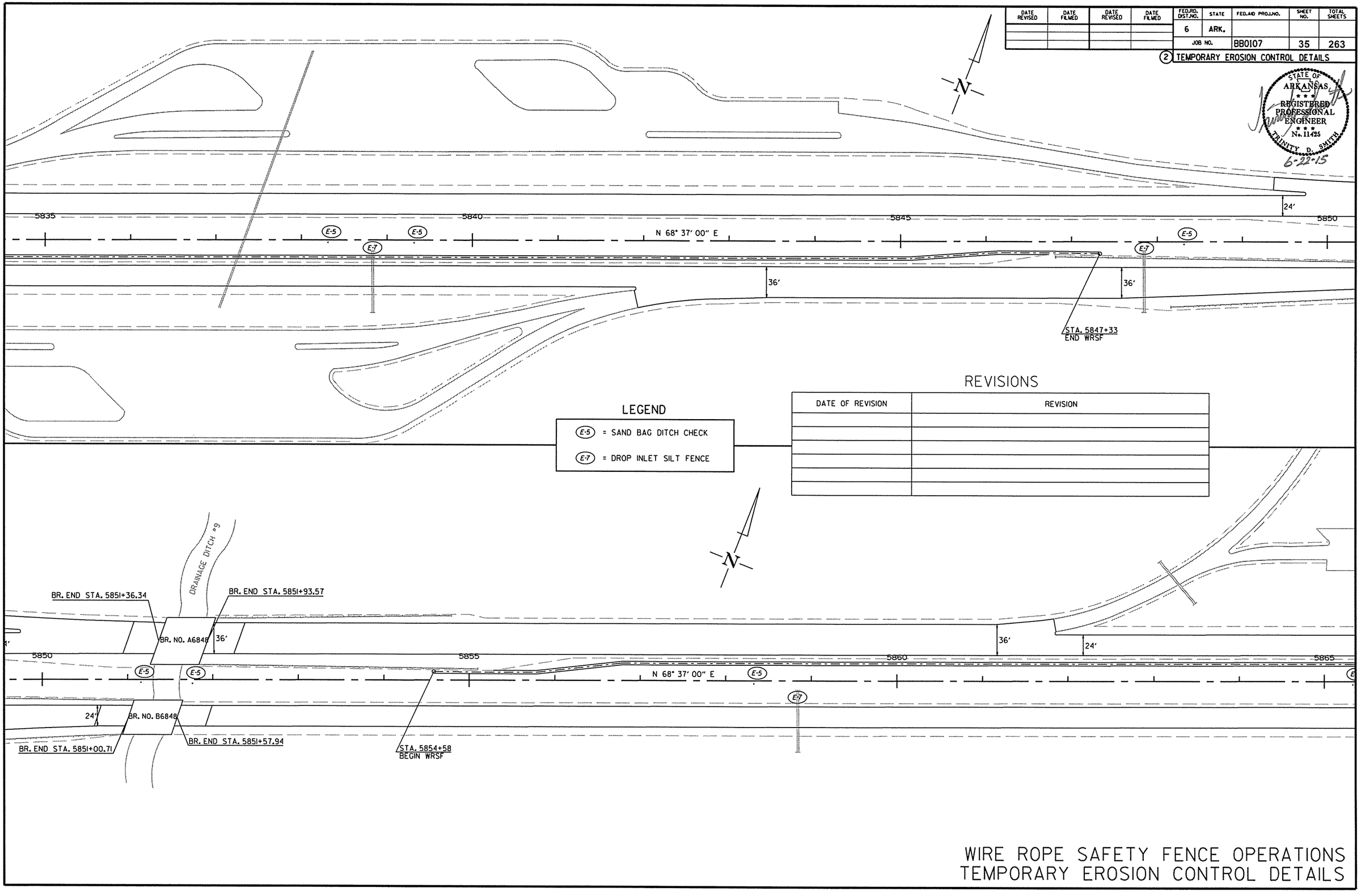
6/17/2015

RBB0107.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	35	263

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15



LEGEND

E-5 = SAND BAG DITCH CHECK

E-7 = DROP INLET SILT FENCE

REVISIONS

DATE OF REVISION	REVISION

6/17/2015

RBB0107.DGN

WIRE ROPE SAFETY FENCE OPERATIONS
TEMPORARY EROSION CONTROL DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	36	263

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15

STA. 5879+24
END WRSF

5865 5870 5875 5880

E-5 E-7 E-7 N 68° 37' 00" E E-5 E-7

BR. NO. 03116

MASNER RD.

LEGEND

(E-5) = SAND BAG DITCH CHECK

(E-7) = DROP INLET SILT FENCE

REVISIONS

DATE OF REVISION	REVISION

MASNER RD.

P.C. 5887+11.14 P.I. 5888+59.39 P.T. 5890+07.38 P.C. 5891+17.76 P.I. 5892+66.01 P.T. 5894+14.00

5890 5885 5895

N 68° 37' 00" E 24' 36' N 74° 32' 29" E N 62° 41' 31" E 36' N 68° 37' 00" E

E-5 E-5 E-7 E-7

STA. 5880+51
BEGIN WRSF

6/17/2015

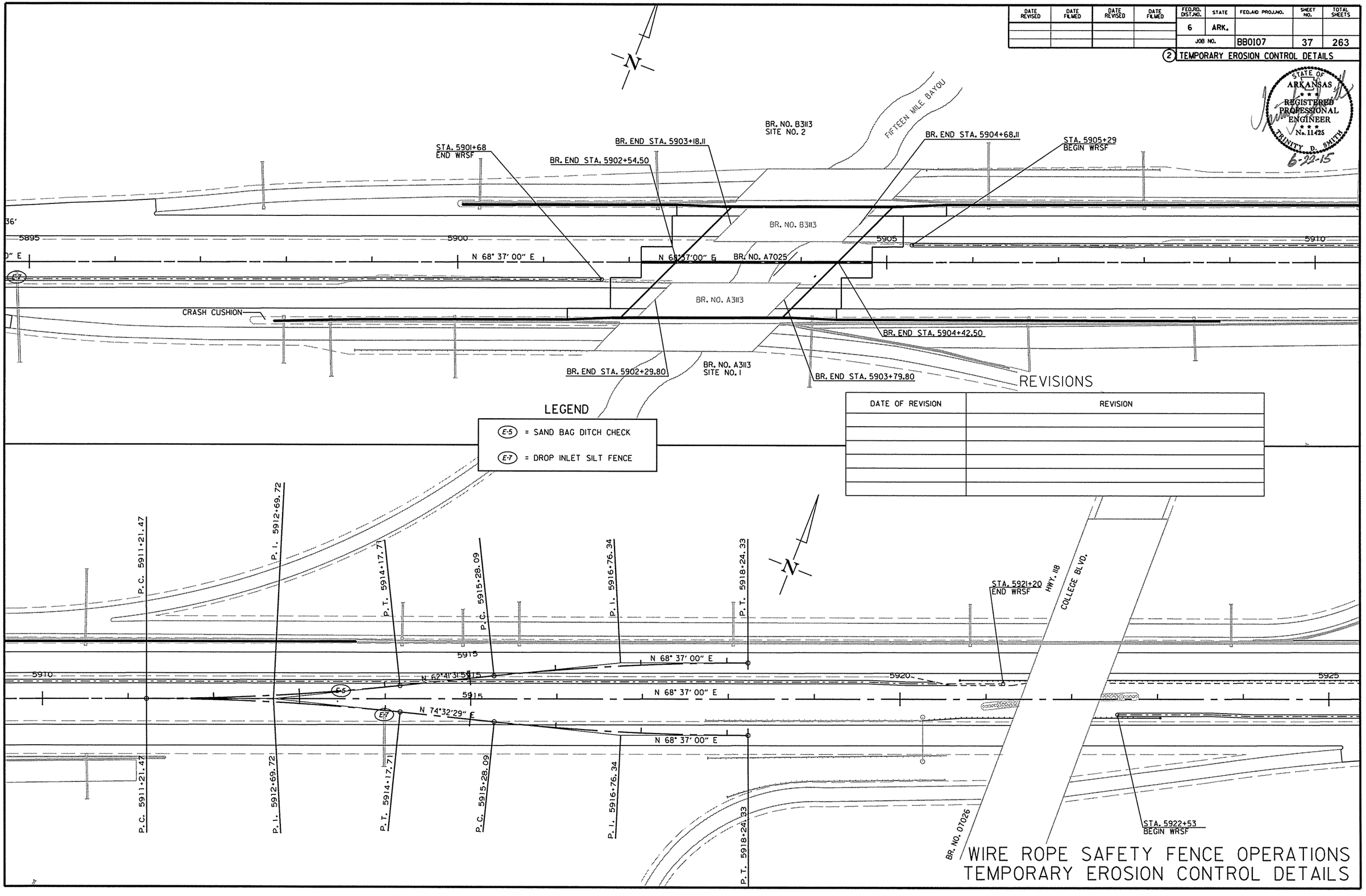
RBB0107.DGN

WIRE ROPE SAFETY FENCE OPERATIONS
TEMPORARY EROSION CONTROL DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	37	263

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15



REVISIONS

DATE OF REVISION	REVISION

WIRE ROPE SAFETY FENCE OPERATIONS
TEMPORARY EROSION CONTROL DETAILS

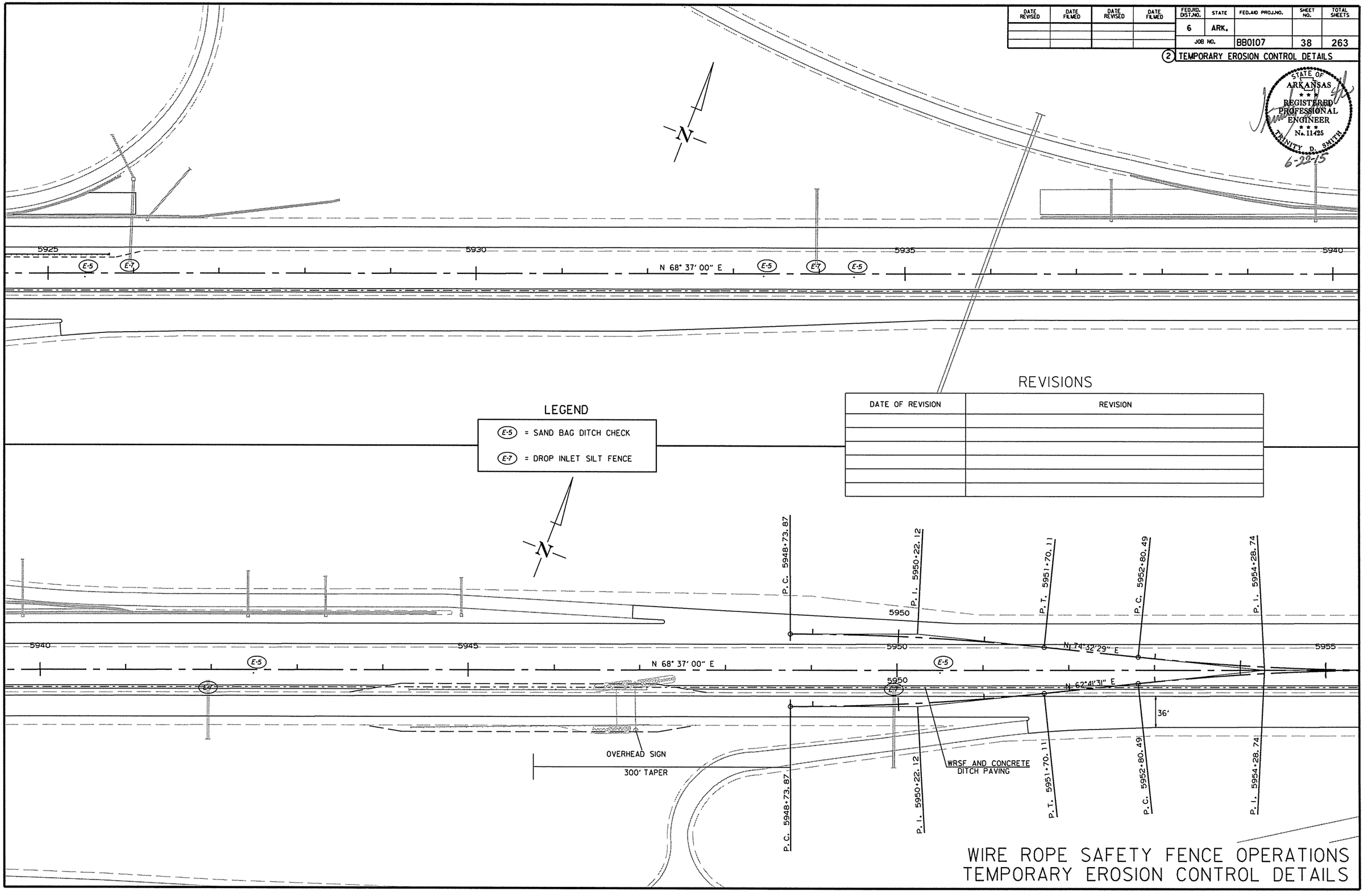
6/17/2015

RBB0107.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	38	263

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15



LEGEND

E-5 = SAND BAG DITCH CHECK

E-7 = DROP INLET SILT FENCE

REVISIONS

DATE OF REVISION	REVISION

6/17/2015

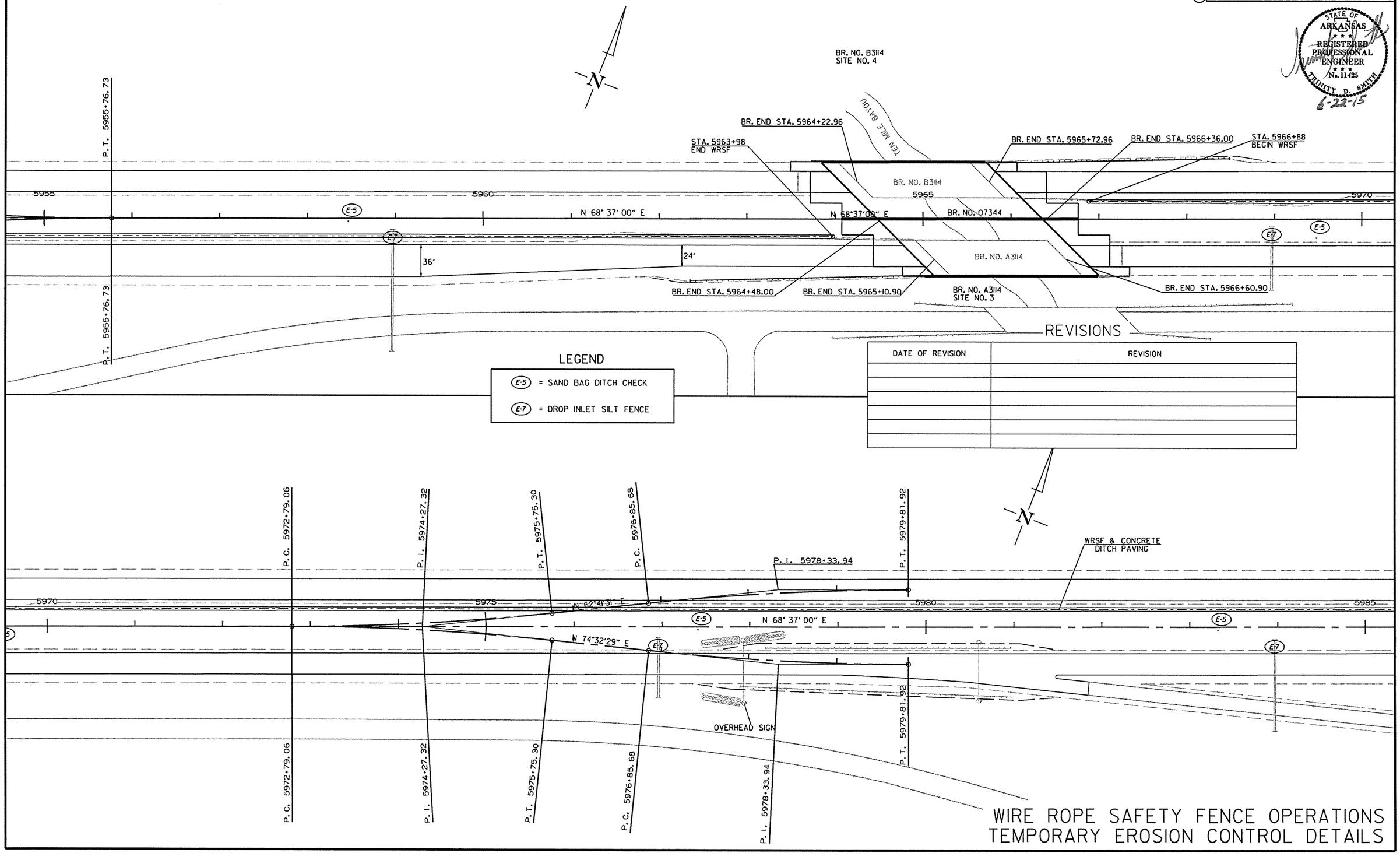
RBB0107.DGN

WIRE ROPE SAFETY FENCE OPERATIONS
TEMPORARY EROSION CONTROL DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	39	263

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15



6/17/2015

RBB0107.DGN

WIRE ROPE SAFETY FENCE OPERATIONS
TEMPORARY EROSION CONTROL DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	40	263

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15

N

5985 5990 5995 6000

P.C. 5997+26.39

STA. 5999+58
END WRSF

P.C. 5999+43.68

E-5

E-7

N 68° 37' 00" E

OVERHEAD SIGN

LEGEND

E-5 = SAND BAG DITCH CHECK

E-7 = DROP INLET SILT FENCE

REVISIONS

DATE OF REVISION	REVISION

N

6000 6005 6010 6015

P.T. 6005+81.12

N 51°31'19" E

P.C. 6011+34.45

PCC6015+66.26

P.I. 6001+56.95

P.I. 6002+79.28

PCC6006+14.79

LIGHT POLE

LIGHT POLE

L.M. 6010

WIRE ROPE SAFETY FENCE OPERATIONS
TEMPORARY EROSION CONTROL DETAILS

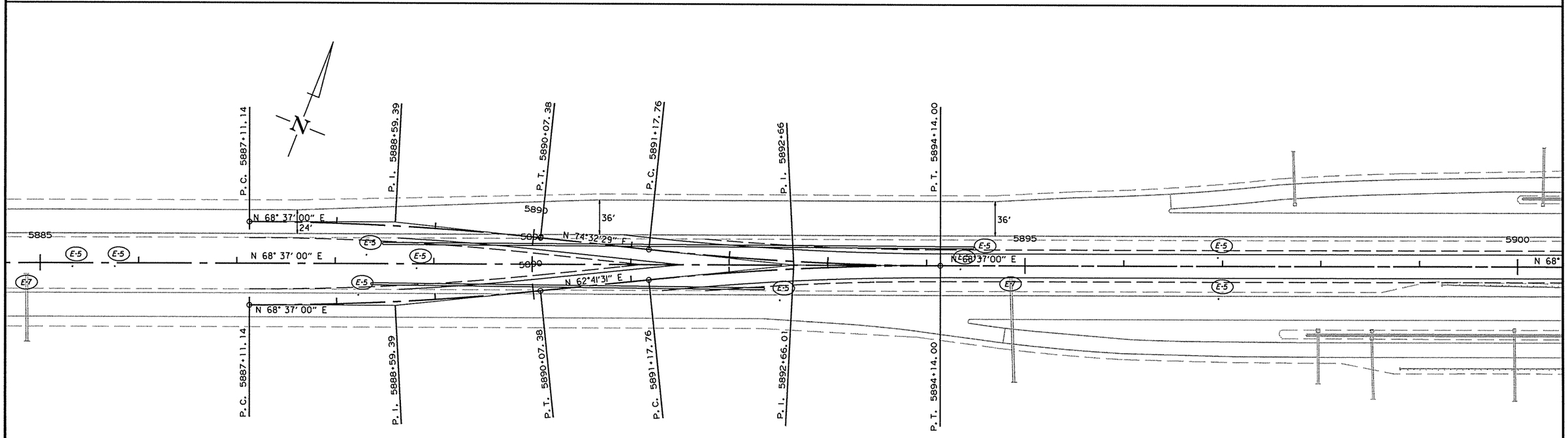
6/17/2015

RBB0107.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	41	263

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15



STAGE I
TEMPORARY EROSION CONTROL DETAILS

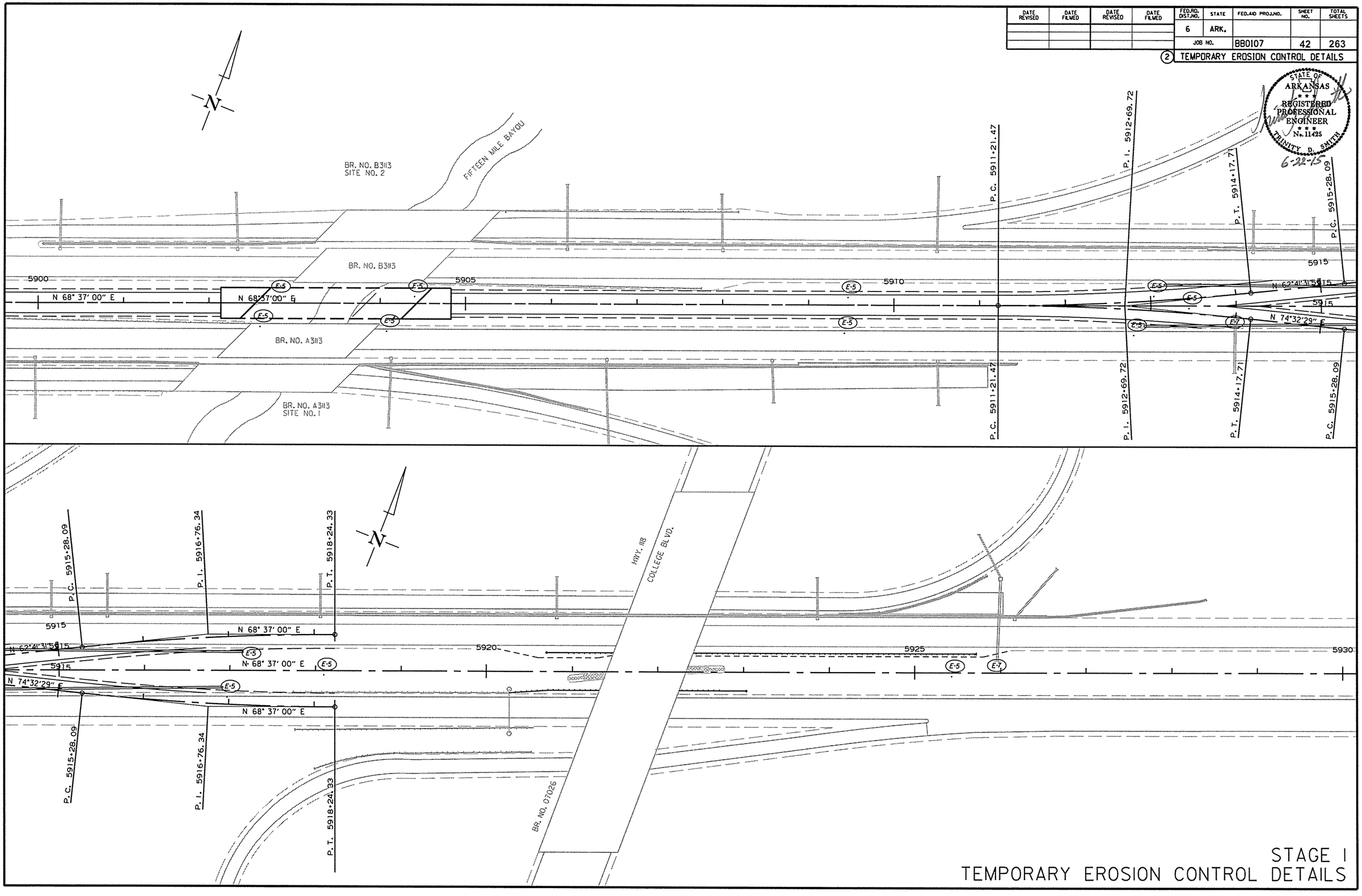
6/17/2015

RBB0107.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	42	263

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15



6/17/2015

RBB0107.DGN

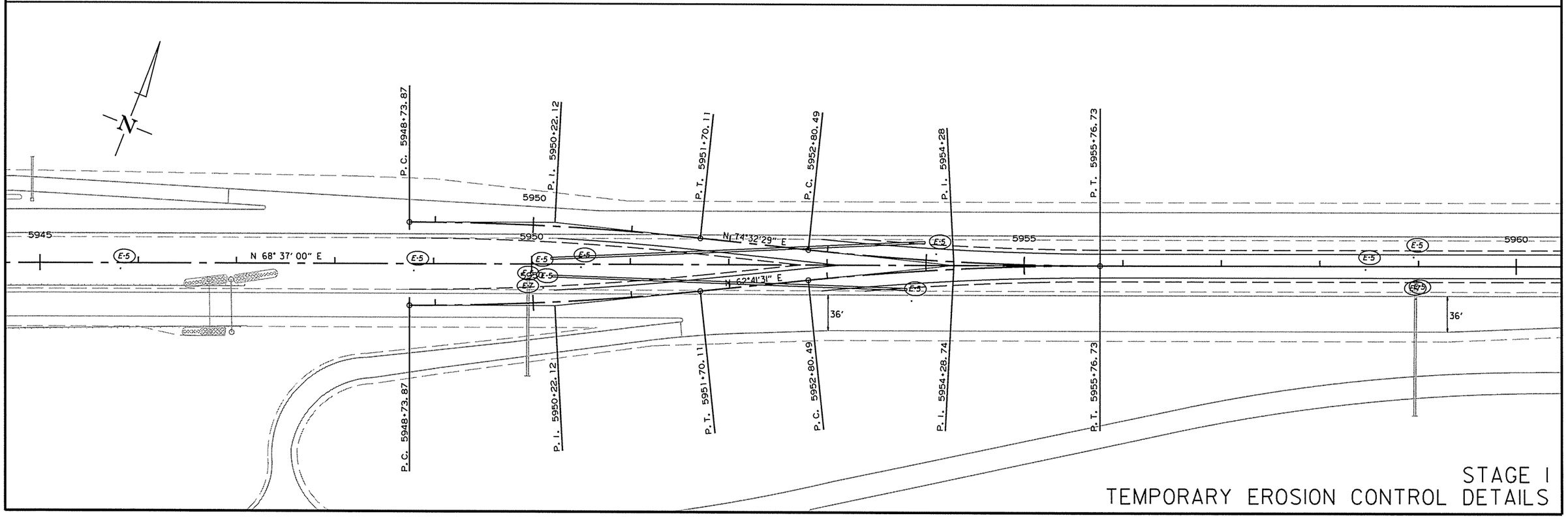
STAGE I
TEMPORARY EROSION CONTROL DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		BB0107	43	263

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15



STAGE I
TEMPORARY EROSION CONTROL DETAILS

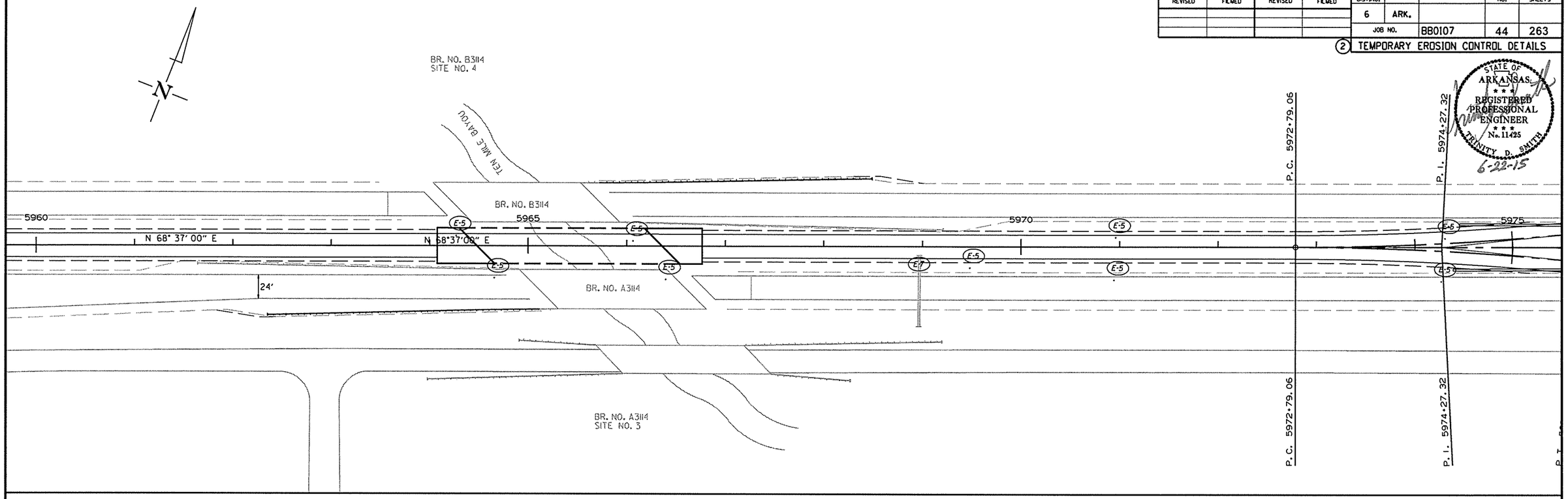
6/17/2015

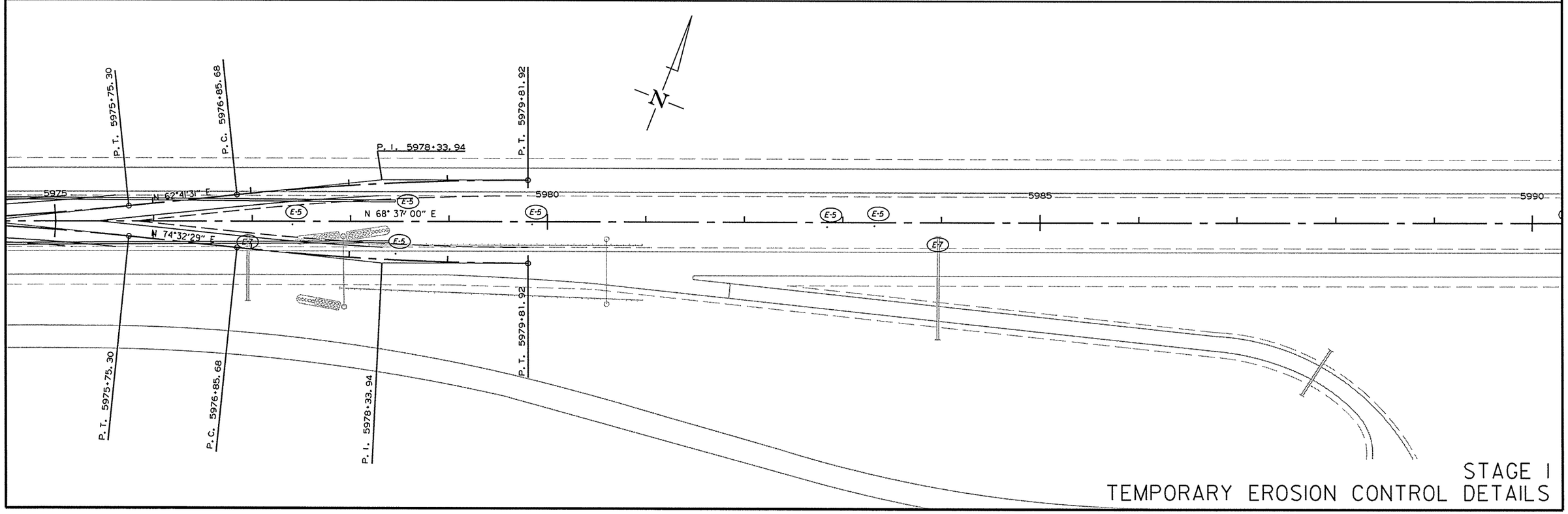
RBB0107.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	44	263

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15





STAGE I
TEMPORARY EROSION CONTROL DETAILS

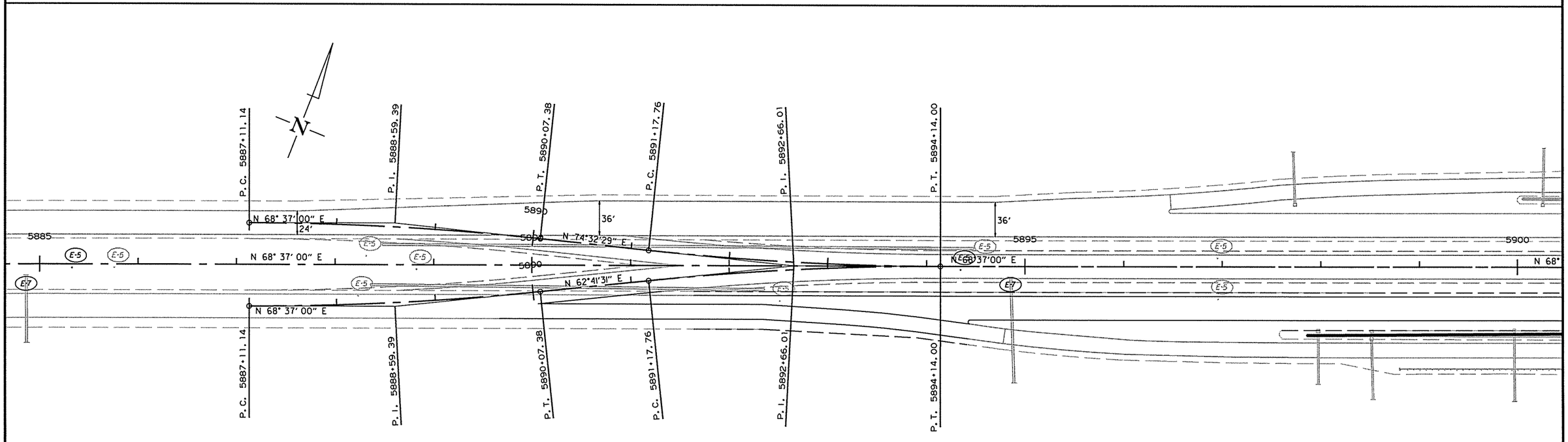
6/17/2015

RBB0107.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	45	263

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15



6/17/2015

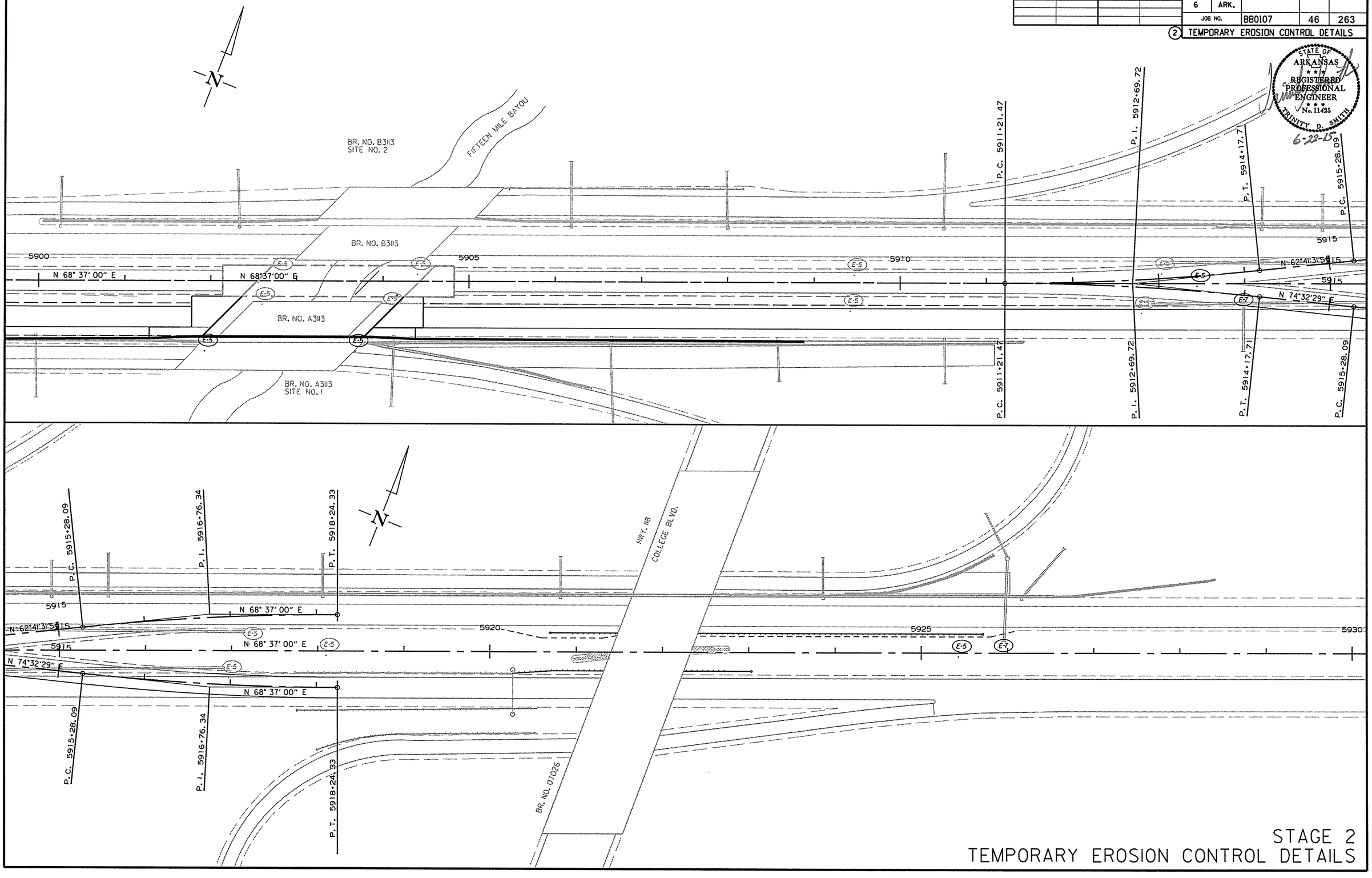
RBB0107.DGN

STAGE 2
TEMPORARY EROSION CONTROL DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	46	263

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15



STAGE 2
TEMPORARY EROSION CONTROL DETAILS

6/17/2015

RBB0107.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

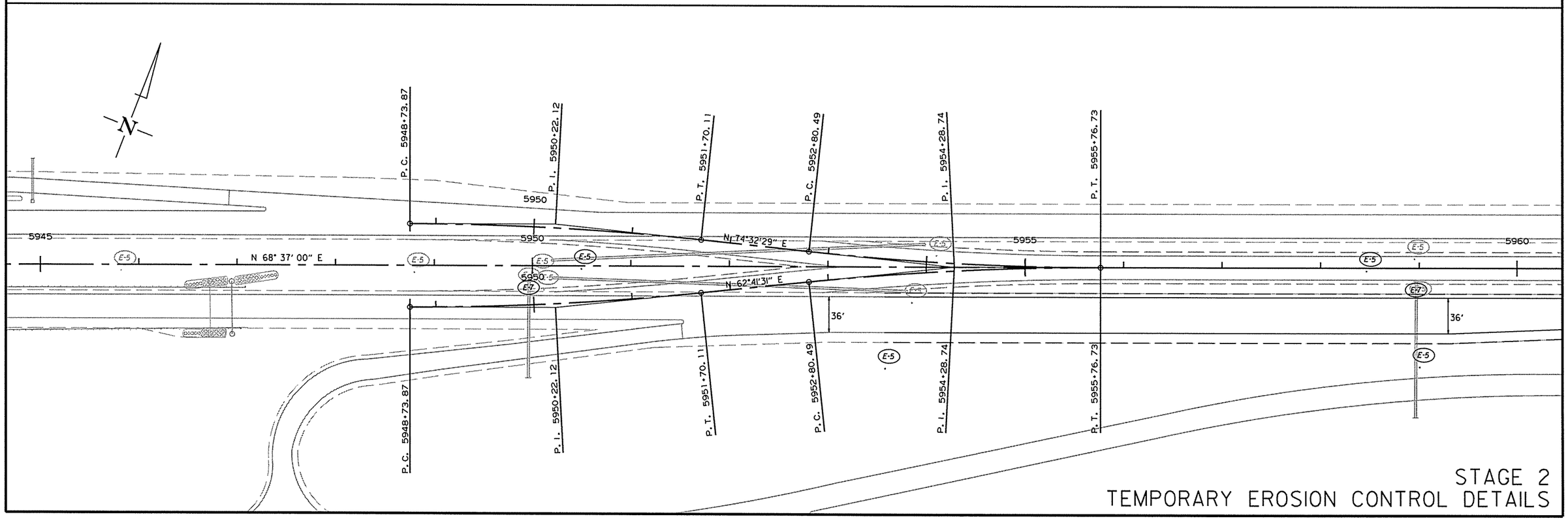
FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		BB0107	47	263

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15

6/17/2015

RBB0107.DGN

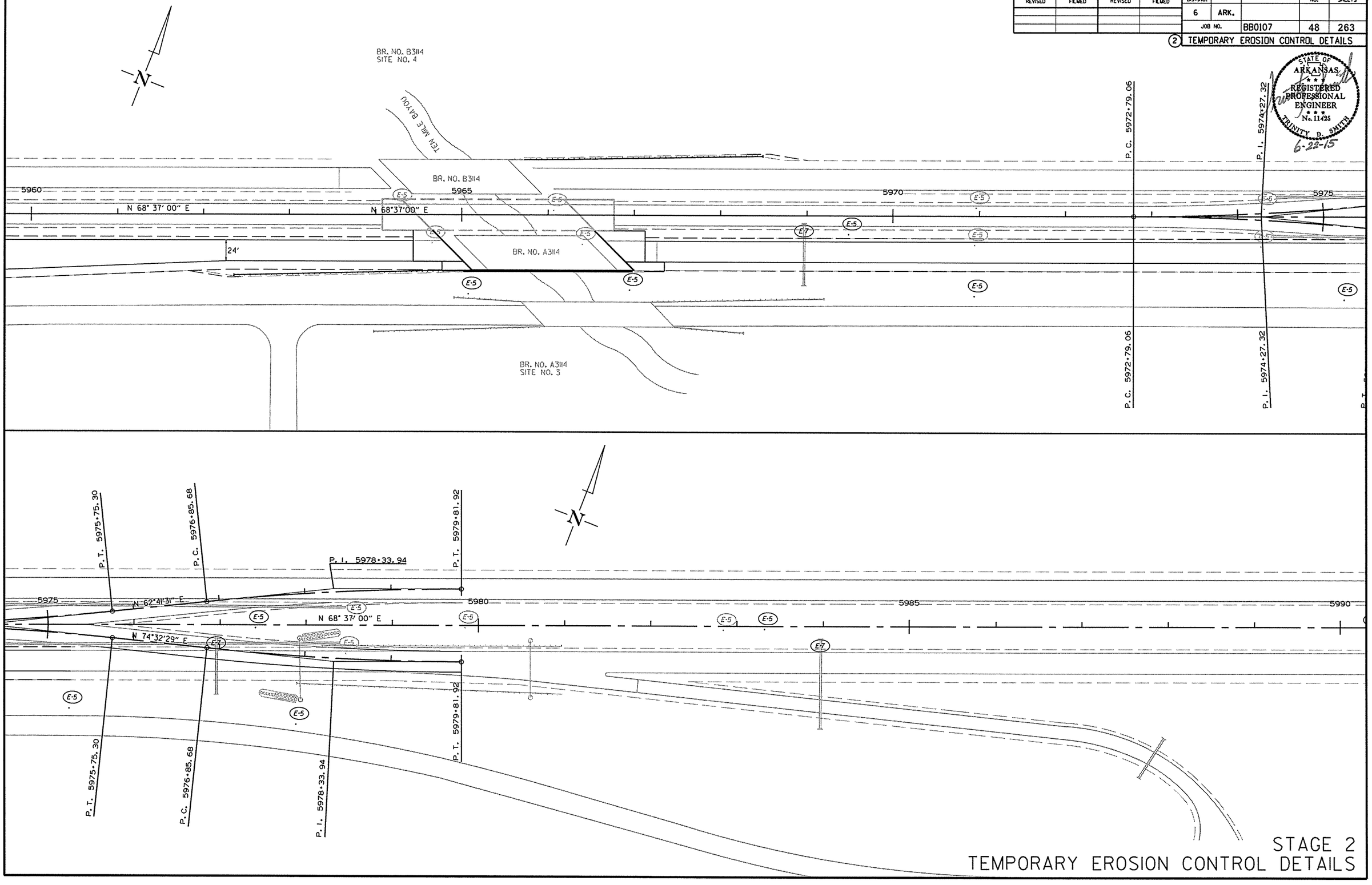


STAGE 2
TEMPORARY EROSION CONTROL DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	48	263

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15



STAGE 2
TEMPORARY EROSION CONTROL DETAILS

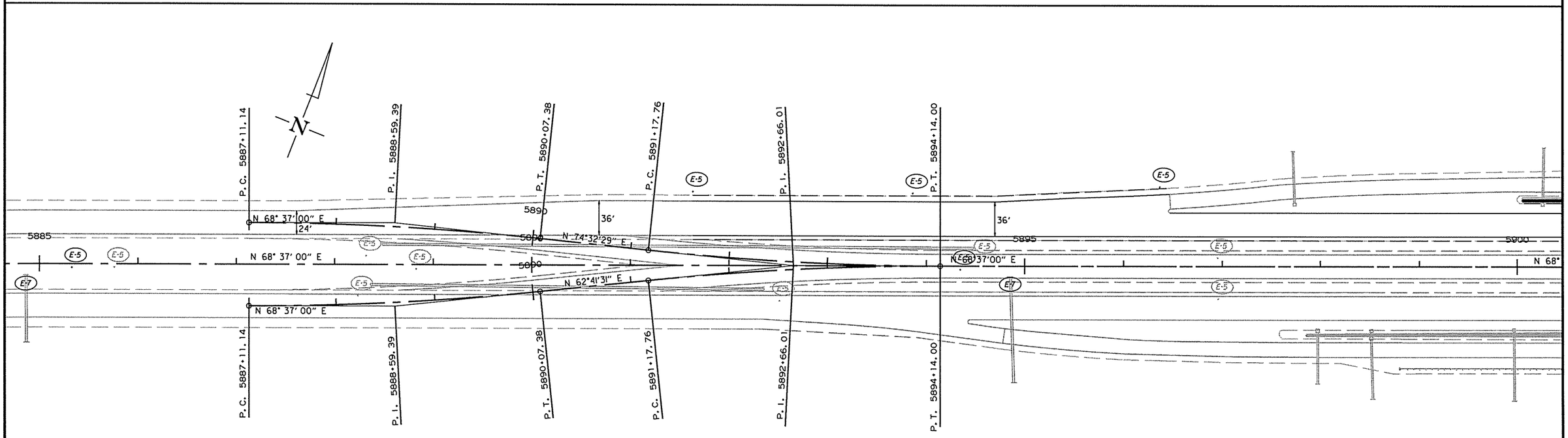
6/17/2015

RBB0107.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	49	263

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15



6/17/2015

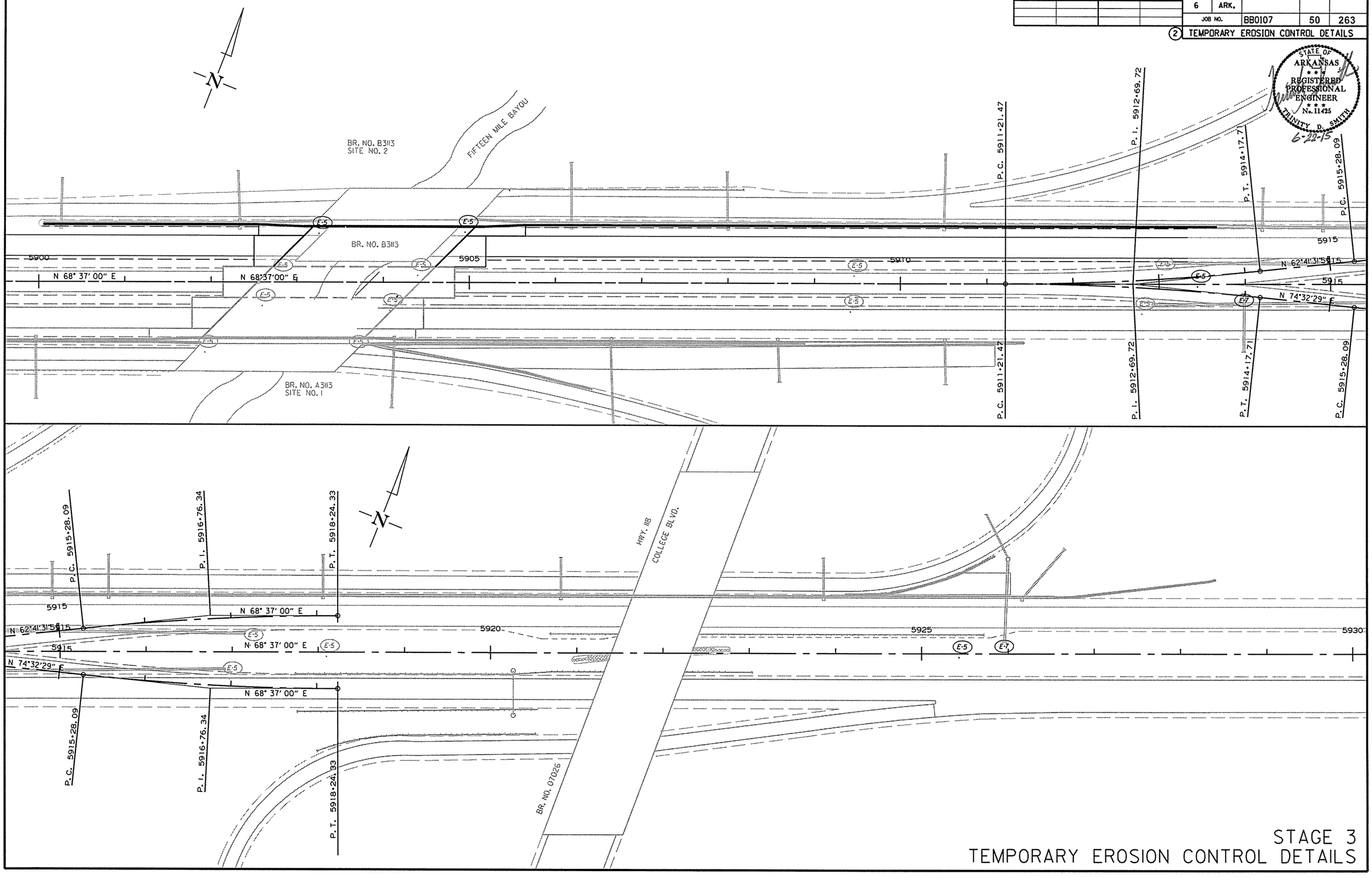
RBB0107.DGN

STAGE 3
TEMPORARY EROSION CONTROL DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	50	263

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15



STAGE 3
TEMPORARY EROSION CONTROL DETAILS

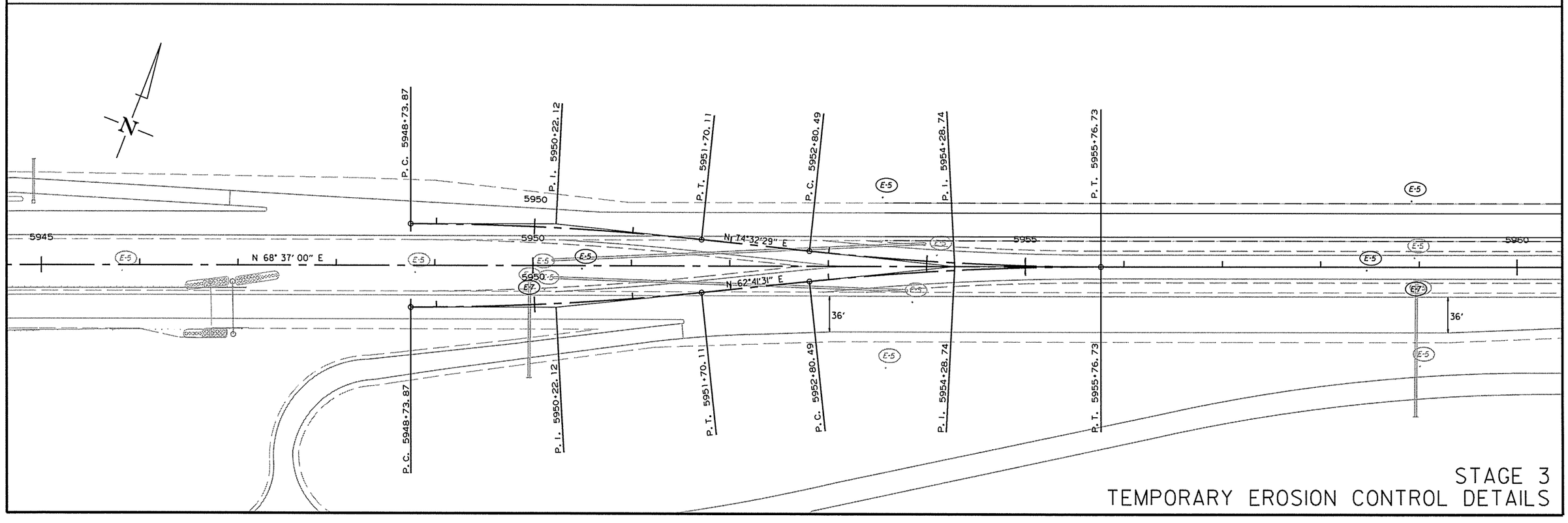
6/17/2015

RBB0107.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	51	263

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15



STAGE 3
TEMPORARY EROSION CONTROL DETAILS

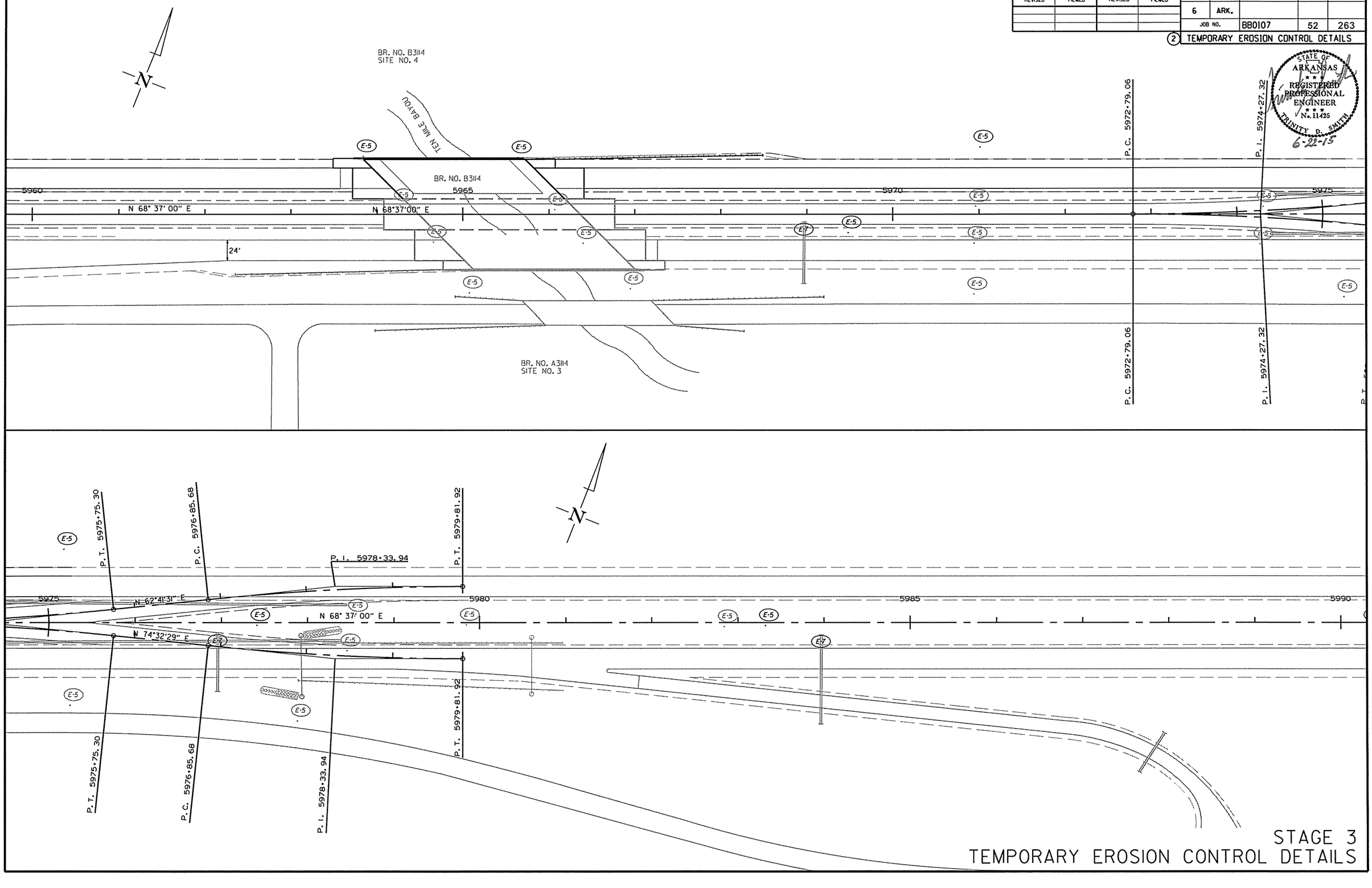
6/17/2015

RBB0107.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	52	263

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15



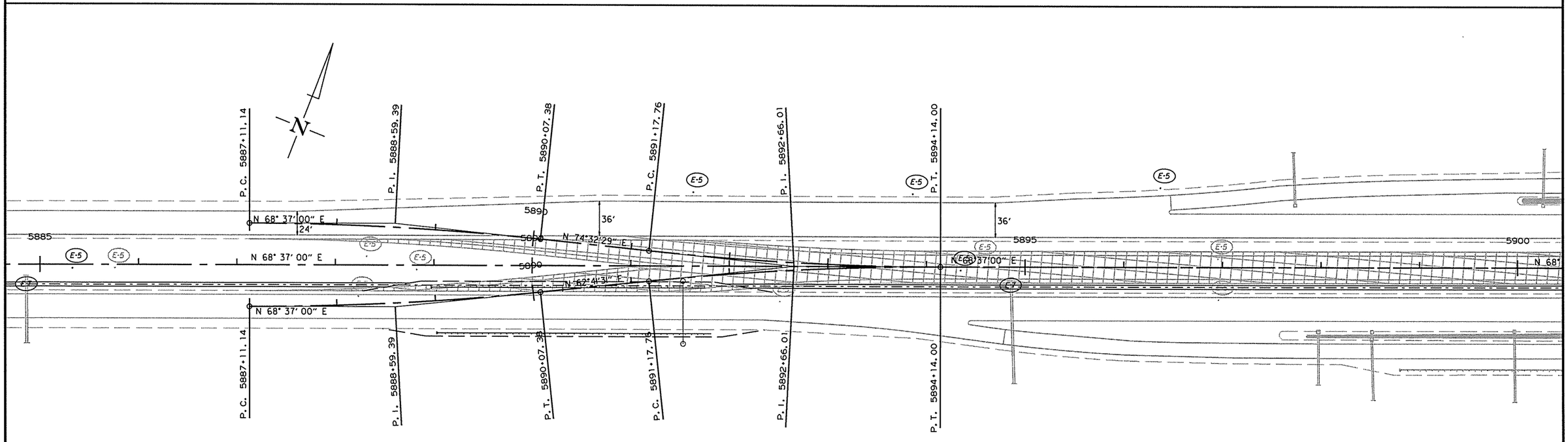
STAGE 3
TEMPORARY EROSION CONTROL DETAILS

6/18/2015
RBB0107.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	53	263

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15



STAGE 4
TEMPORARY EROSION CONTROL DETAILS

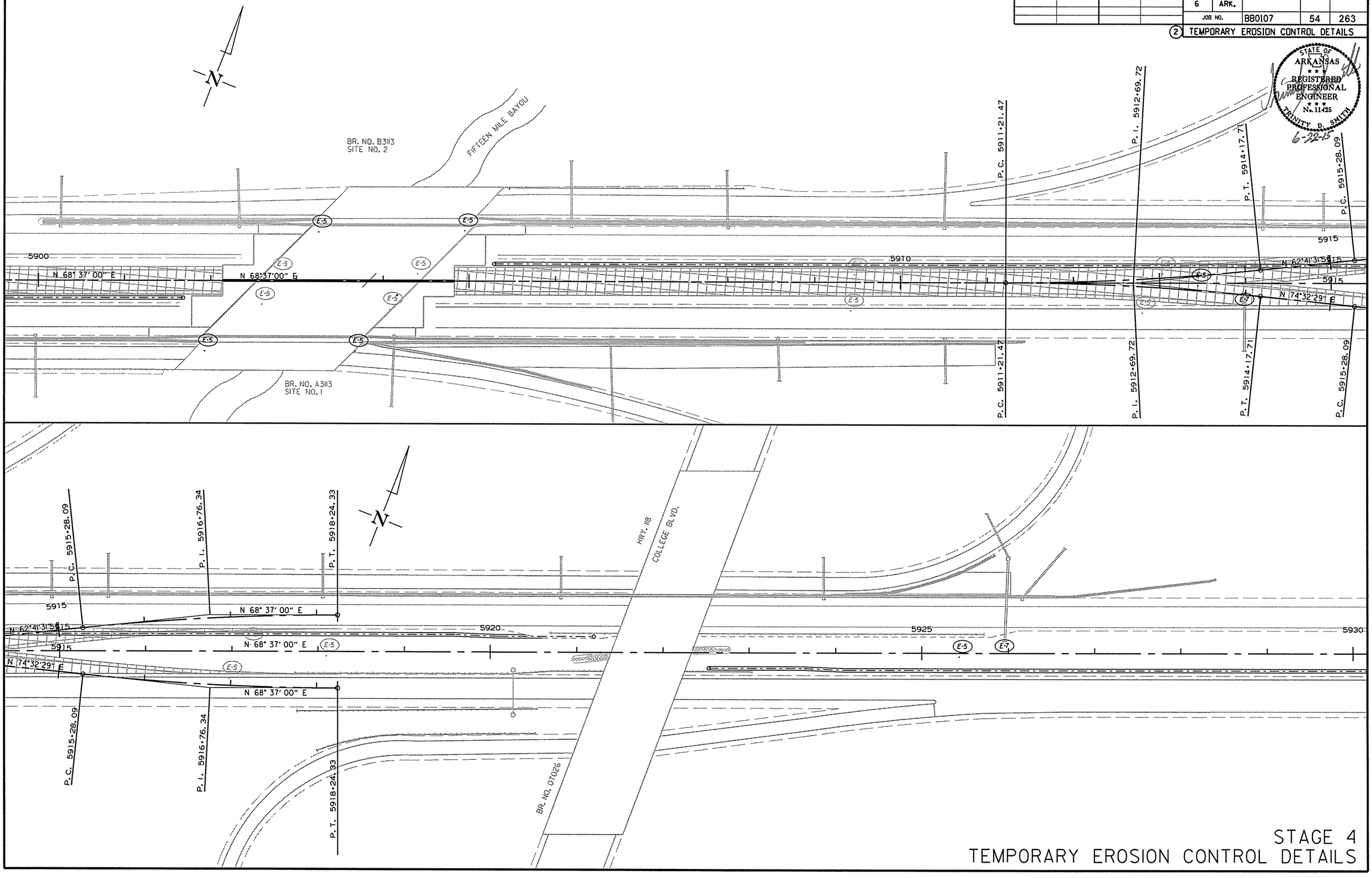
6/17/2015

RBB0107.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	54	263

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15



STAGE 4
TEMPORARY EROSION CONTROL DETAILS

6/17/2015

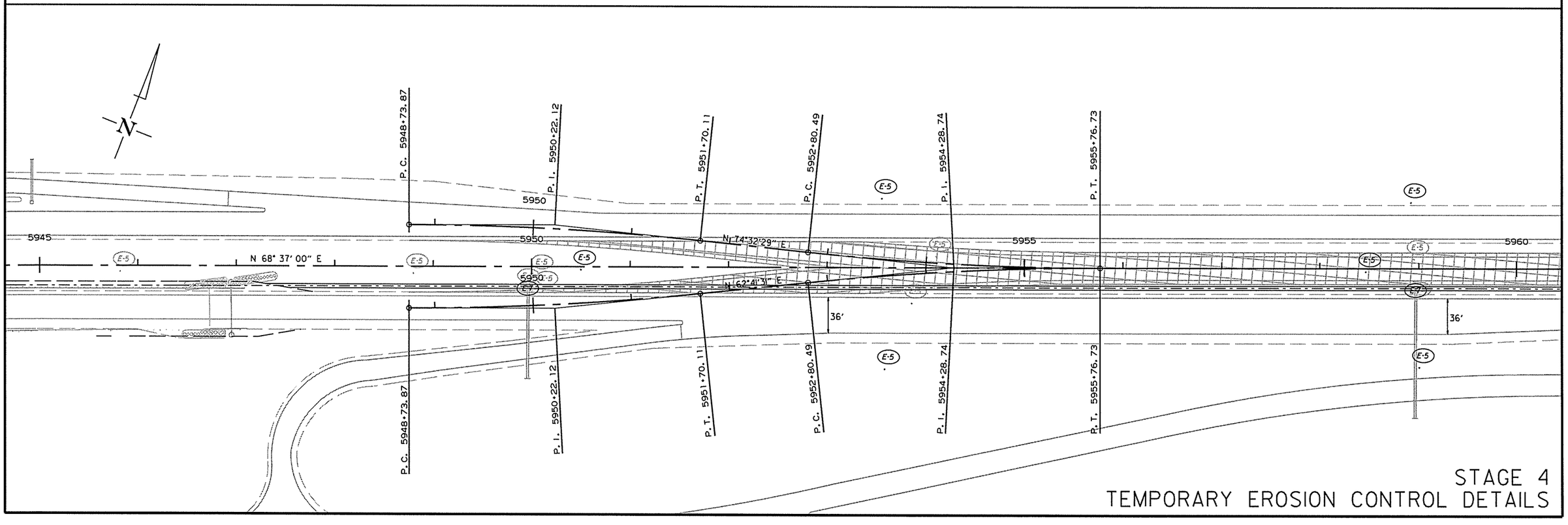
RBB0107.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

FED.RD. DST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		BB0107	55	263

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15



STAGE 4
TEMPORARY EROSION CONTROL DETAILS

6/17/2015

RBB0107.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	56	263

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15

BR. NO. B3114
SITE NO. 4

TEN MILE BAYOU

5960 5970 5975

N 68° 37' 00" E

24'

P. C. 5972+79.06

P. I. 5974+27.32

BR. NO. A3114
SITE NO. 3

P. T. 5975+75.30

P. C. 5976+85.68

P. I. 5978+33.94

P. T. 5979+81.92

5975 5980 5985 5990

N 62° 41' 31" E

N 74° 32' 29" E

N 68° 37' 00" E

STAGE 4
TEMPORARY EROSION CONTROL DETAILS

6/18/2015

RBB0107.DGN

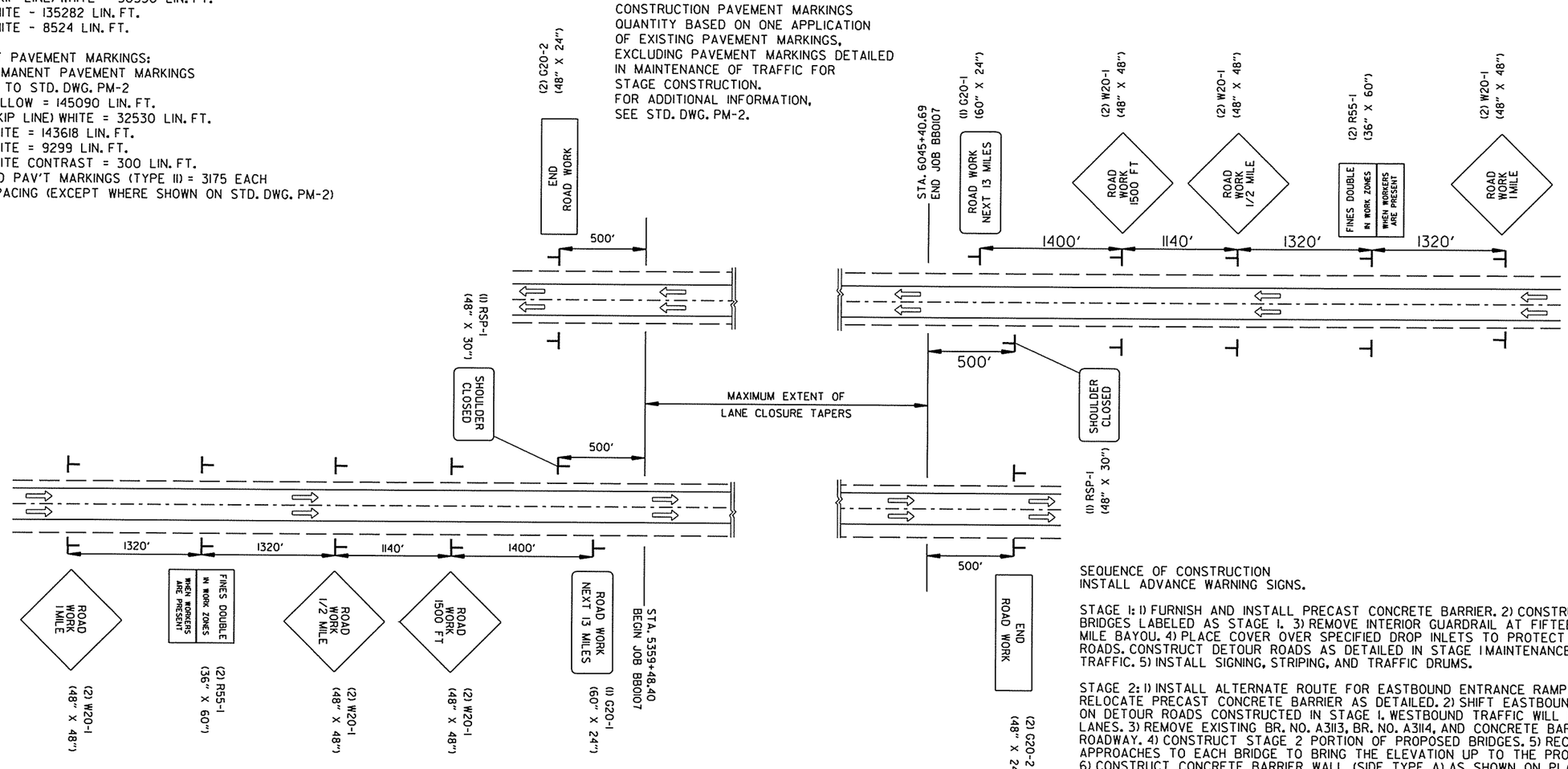
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	57	263

(2) MAINTENANCE OF TRAFFIC DETAILS

CONSTRUCTION PAVEMENT MARKINGS:
APPLY CONSTRUCTION PAVEMENT MARKINGS
ACCORDING TO STD. DWG. PM-2
- 4" YELLOW - 136414 LIN. FT.
- 4" (SKIP LINE) WHITE - 30350 LIN. FT.
- 4" WHITE - 135282 LIN. FT.
- 8" WHITE - 8524 LIN. FT.

PERMANENT PAVEMENT MARKINGS:
APPLY PERMANENT PAVEMENT MARKINGS
ACCORDING TO STD. DWG. PM-2
- 4" YELLOW = 145090 LIN. FT.
- 4" (SKIP LINE) WHITE = 32530 LIN. FT.
- 4" WHITE = 143618 LIN. FT.
- 8" WHITE = 9299 LIN. FT.
- 4" WHITE CONTRAST = 300 LIN. FT.
- RAISED PAV'T MARKINGS (TYPE II) = 3175 EACH
- 80' SPACING (EXCEPT WHERE SHOWN ON STD. DWG. PM-2)

NOTE:
CONSTRUCTION PAVEMENT MARKINGS QUANTITY BASED ON ONE APPLICATION OF EXISTING PAVEMENT MARKINGS, EXCLUDING PAVEMENT MARKINGS DETAILED IN MAINTENANCE OF TRAFFIC FOR STAGE CONSTRUCTION.
FOR ADDITIONAL INFORMATION, SEE STD. DWG. PM-2.



PORTABLE CHANGEABLE MESSAGE SIGN
PLACED AS DIRECTED BY THE ENGINEER

PORTABLE CHANGEABLE MESSAGE SIGN
PLACED AS DIRECTED BY THE ENGINEER

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15

SEQUENCE OF CONSTRUCTION
INSTALL ADVANCE WARNING SIGNS.

STAGE 1: 1) FURNISH AND INSTALL PRECAST CONCRETE BARRIER. 2) CONSTRUCT PORTIONS OF PROPOSED BRIDGES LABELED AS STAGE 1. 3) REMOVE INTERIOR GUARDRAIL AT FIFTEEN MILE BAYOU. 4) PLACE COVER OVER SPECIFIED DROP INLETS TO PROTECT DURING USE OF DETOUR ROADS. CONSTRUCT DETOUR ROADS AS DETAILED IN STAGE 1 MAINTENANCE OF TRAFFIC. 5) INSTALL SIGNING, STRIPING, AND TRAFFIC DRUMS.

STAGE 2: 1) INSTALL ALTERNATE ROUTE FOR EASTBOUND ENTRANCE RAMP LOCATED AT STA. 5948+00. RELOCATE PRECAST CONCRETE BARRIER AS DETAILED. 2) SHIFT EASTBOUND TRAFFIC ON DETOUR ROADS CONSTRUCTED IN STAGE 1. WESTBOUND TRAFFIC WILL REMAIN ON THEIR EXISTING LANES. 3) REMOVE EXISTING BR. NO. A3113, BR. NO. A3114, AND CONCRETE BARRIER WALL (TYPE B) ALONG ROADWAY. 4) CONSTRUCT STAGE 2 PORTION OF PROPOSED BRIDGES. 5) RECONSTRUCT THE APPROACHES TO EACH BRIDGE TO BRING THE ELEVATION UP TO THE PROPOSED PROFILE GRADE. 6) CONSTRUCT CONCRETE BARRIER WALL (SIDE TYPE A) AS SHOWN ON PLAN SHEETS. 7) CONSTRUCT REMAINDER OF DETOUR ROAD FOR USE IN STAGE 3 MAINTENANCE OF TRAFFIC.

STAGE 3: 1) SHIFT EASTBOUND TRAFFIC ONTO EASTBOUND LANES RECONSTRUCTED IN STAGE 2. 2) OPEN EASTBOUND ENTRANCE RAMP AT STA. 5948+00. 3) INSTALL STRIPING, TRAFFIC DRUMS, AND SIGNING AS DETAILED IN STAGE 3 MAINTENANCE OF TRAFFIC SHEETS. RELOCATE PRECAST CONCRETE BARRIER AS DETAILED. 4) SHIFT WESTBOUND TRAFFIC ON DETOUR ROADS. EASTBOUND TRAFFIC WILL REMAIN ON RECONSTRUCTED LANES. 5) REMOVE EXISTING BR. NO. B3113, BR. NO. B3114, AND CONCRETE BARRIER WALL (TYPE B) ALONG ROADWAY. 6) CONSTRUCT STAGE 3 PORTION OF PROPOSED BRIDGES. 7) RECONSTRUCT THE APPROACHES TO EACH BRIDGE TO BRING THE ELEVATION UP TO THE PROPOSED PROFILE GRADE. 8) CONSTRUCT CONCRETE BARRIER WALL (TYPE C) AS SHOWN ON PLAN SHEETS.

STAGE 4: 1) SHIFT WESTBOUND TRAFFIC ONTO WESTBOUND LANES RECONSTRUCTED IN STAGE 3. 2) INSTALL STRIPING AS DETAILED IN STAGE 4 MAINTENANCE OF TRAFFIC. 3) PERFORM HYDRODEMOLITION ON BRIDGE 03123 AS SHOWN ON MAINTENANCE OF TRAFFIC - DETAIL OF BRIDGES SHEET. 4) INSTALL OVERHEAD SIGNS. 5) CONSTRUCT MEDIAN BARRIER ALONG CENTERLINE OF NEWLY CONSTRUCTED BRIDGES. 6) INSTALL WIRE ROPE SAFETY FENCE AS SHOWN ON PLANS. 7) REMOVE DETOUR ROAD TO PROVIDE A DEPRESSED MEDIAN. REMOVE COVERS FROM DROP INLETS.

MILL AND INLAY AND WIRE ROPE SAFETY FENCE OPERATIONS WILL BE ALLOWED DURING ALL STAGES OF CONSTRUCTION.

6/22/2015

RBB0107.DGN

ADVANCE SIGNS AT JOB ENDS
MAINTENANCE OF TRAFFIC DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	58	263

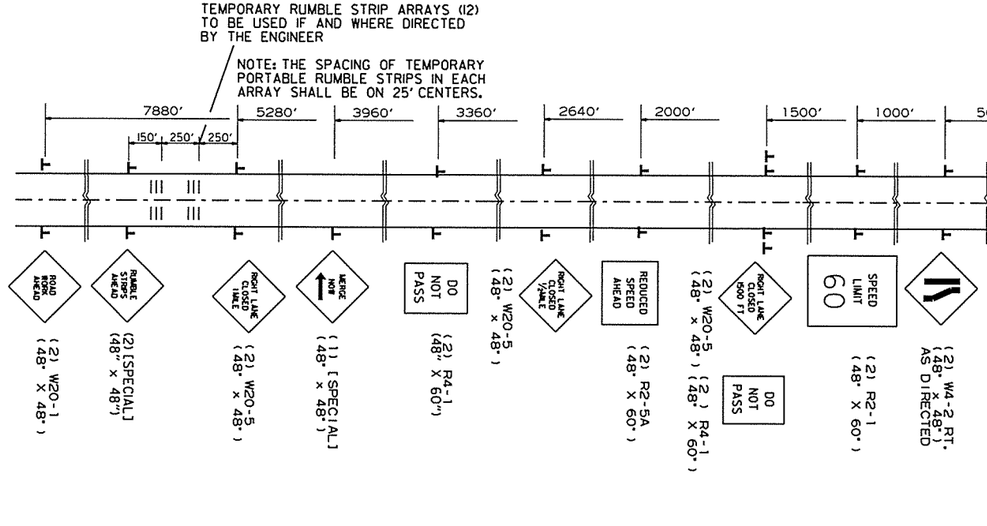
(2) MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15

PORTABLE CHANGEABLE MESSAGE SIGN TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER

TEMPORARY RUMBLE STRIP ARRAYS (12) TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER

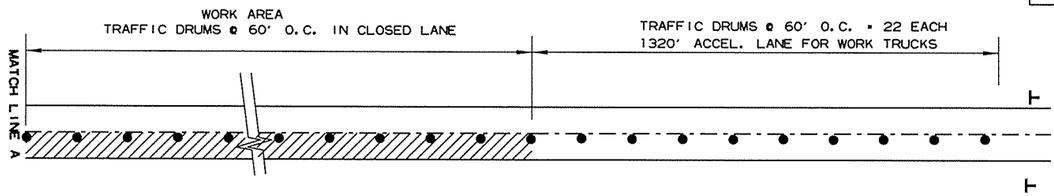
NOTE: THE SPACING OF TEMPORARY PORTABLE RUMBLE STRIPS IN EACH ARRAY SHALL BE ON 25' CENTERS.



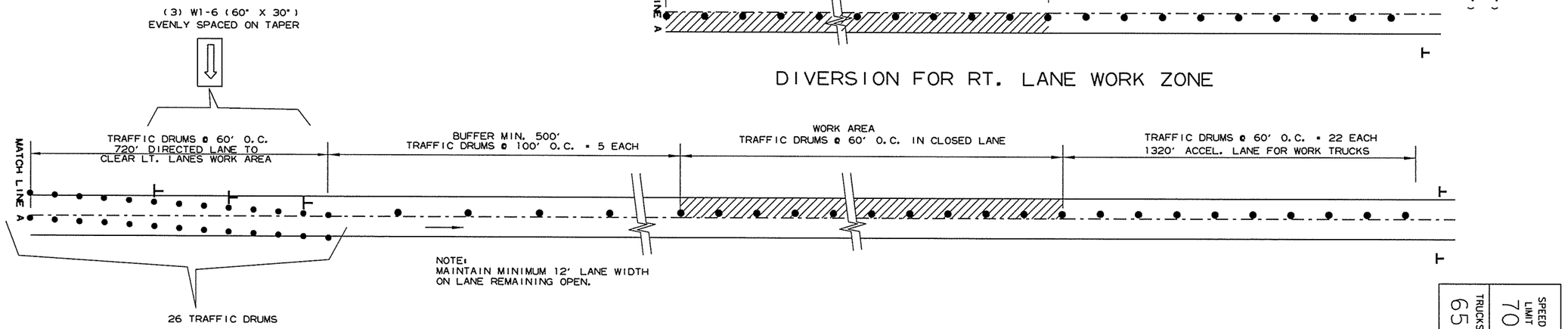
NOTE:
MAINTAIN MINIMUM 12' LANE WIDTH ON LANE REMAINING OPEN.

RT. LANE CLOSURE

SPEED LIMIT SIGNS ARE ALSO PROVIDED FOR PLACEMENT PAST ENTRANCE RAMPS WITHIN THE WORK ZONE.



DIVERSION FOR RT. LANE WORK ZONE



NOTE:
MAINTAIN MINIMUM 12' LANE WIDTH ON LANE REMAINING OPEN.

DIVERSION FOR LT. LANE WORK ZONE

LANE CLOSURE MAINTENANCE OF TRAFFIC DETAILS

6/17/2015

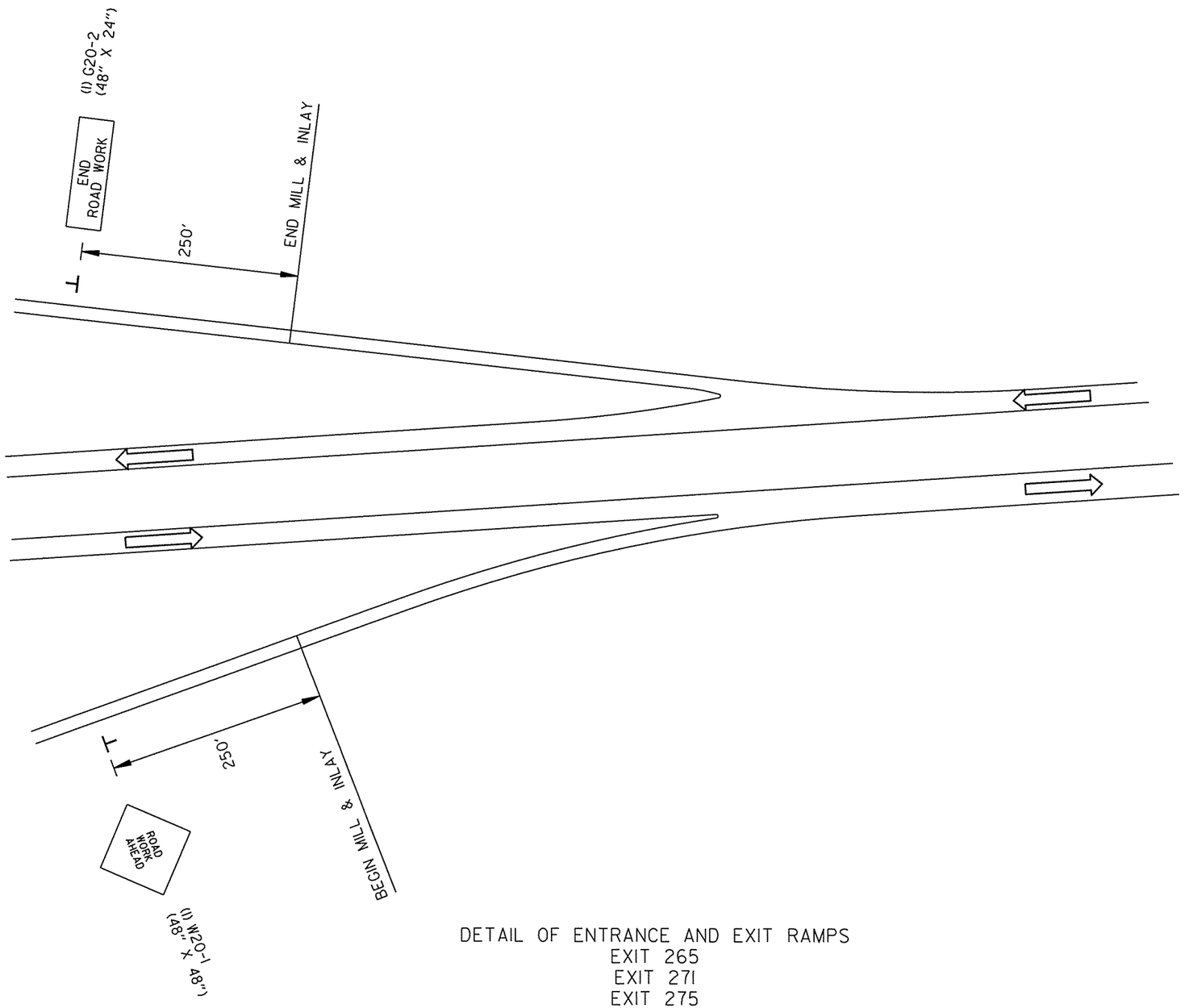
RBB0107.DGN

ADVANCE WARNING SIGNS FOR ENTRANCE AND EXIT RAMPS
ROAD WORK AHEAD (16) = 256 SQ. FT.
END ROAD WORK (16) = 128 SQ. FT.

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	59	263

(2) MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15



DETAIL OF ENTRANCE AND EXIT RAMPS
EXIT 265
EXIT 271
EXIT 275
EXIT 276
EXIT 277

6/17/2015

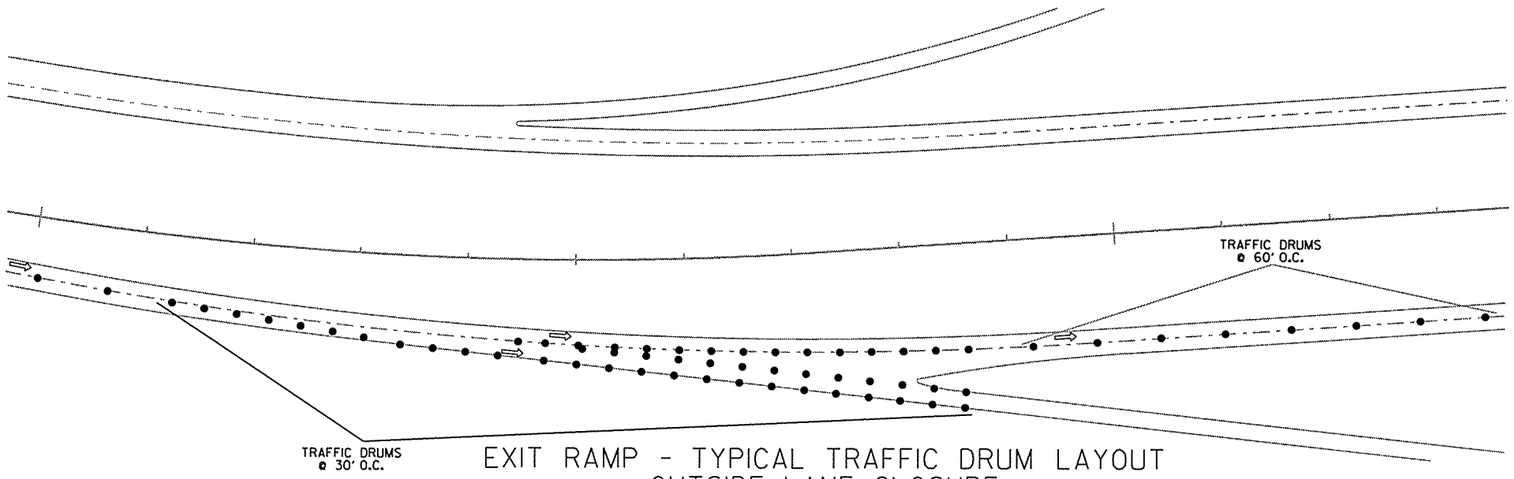
RBB0107.DGN

DETAIL OF RAMPS
MAINTENANCE OF TRAFFIC DETAILS

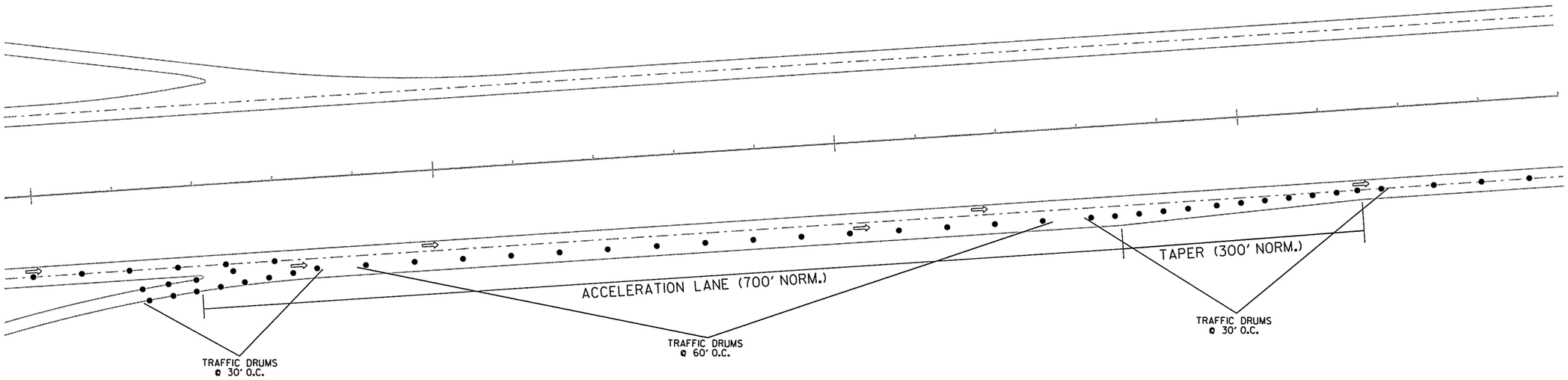
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	60	263

(2) MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15



EXIT RAMP - TYPICAL TRAFFIC DRUM LAYOUT
OUTSIDE LANE CLOSURE



ENTRANCE RAMP - TYPICAL TRAFFIC DRUM LAYOUT
ACCELERATION LANE CLOSURE

EXIT 265:
EASTBOUND EXIT = 40 TRAFFIC DRUMS
WESTBOUND ENTRANCE = 17 TRAFFIC DRUMS

EASTBOUND EXIT = 40 TRAFFIC DRUMS
WESTBOUND ENTRANCE = 17 TRAFFIC DRUMS

EXIT 271:
EASTBOUND EXIT = 40 TRAFFIC DRUMS
WESTBOUND ENTRANCE = 17 TRAFFIC DRUMS

EASTBOUND EXIT = 40 TRAFFIC DRUMS
WESTBOUND ENTRANCE = 17 TRAFFIC DRUMS

EXIT 275:
EASTBOUND EXIT = 40 TRAFFIC DRUMS
WESTBOUND ENTRANCE = 17 TRAFFIC DRUMS

EASTBOUND EXIT = 40 TRAFFIC DRUMS
WESTBOUND ENTRANCE = 17 TRAFFIC DRUMS

EXIT 276:
EASTBOUND EXIT = 40 TRAFFIC DRUMS
WESTBOUND ENTRANCE = 17 TRAFFIC DRUMS

EASTBOUND EXIT = 40 TRAFFIC DRUMS
WESTBOUND ENTRANCE = 17 TRAFFIC DRUMS

EXIT 277:
EASTBOUND EXIT = 40 TRAFFIC DRUMS
WESTBOUND ENTRANCE = 17 TRAFFIC DRUMS

EASTBOUND EXIT = 40 TRAFFIC DRUMS
WESTBOUND ENTRANCE = 17 TRAFFIC DRUMS

6/17/2015

RBB0107.DGN

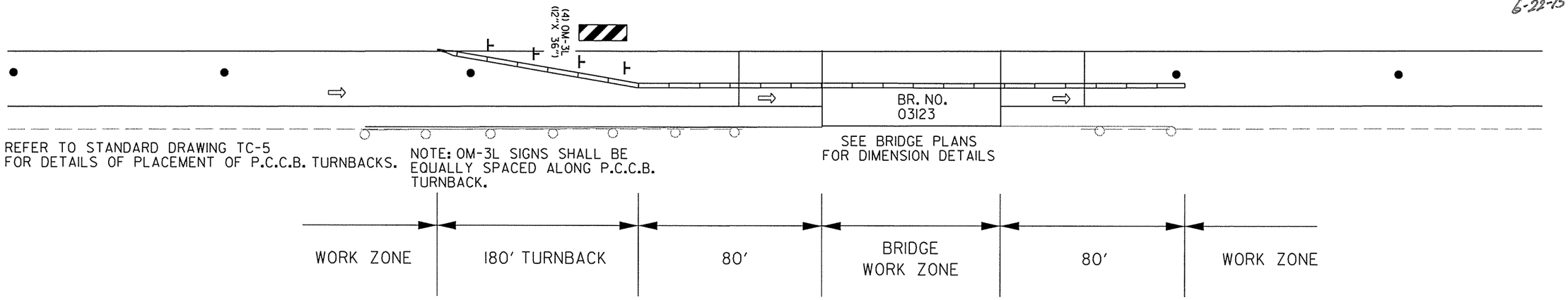
DETAIL OF RAMPS WITH LANE CLOSURE
MAINTENANCE OF TRAFFIC DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	61	263

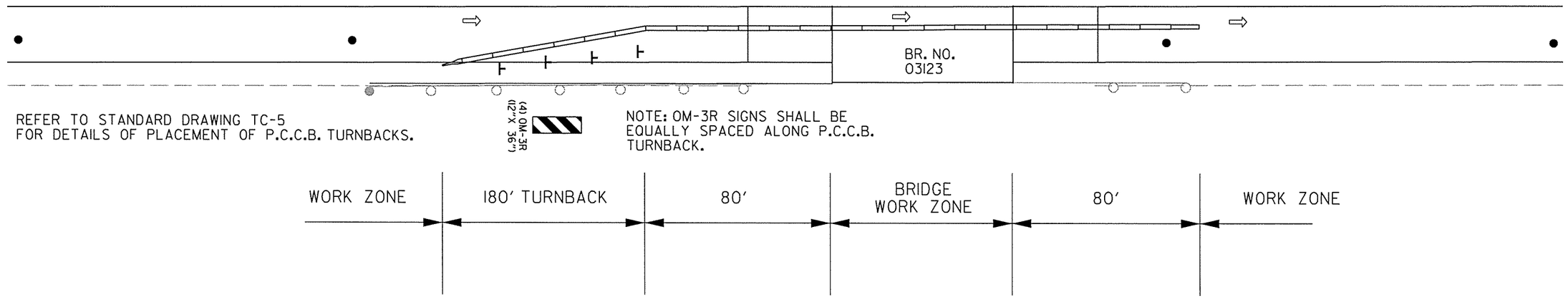
(2) MAINTENANCE OF TRAFFIC DETAILS

PRECAST CONCRETE BARRIER WALL (1 LOCATIONS - 2 INSTALLATIONS)
(1) FURNISH AND INSTALL = 820 LIN. FT.
INCLUDES (1) SPECIAL END UNIT
(1) RELOCATE = 820 LIN. FT.
INCLUDES (1) SPECIAL END UNIT

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15



DIVERSION FOR INSIDE BRIDGE WORK



DIVERSION FOR OUTSIDE BRIDGE WORK

6/17/2015

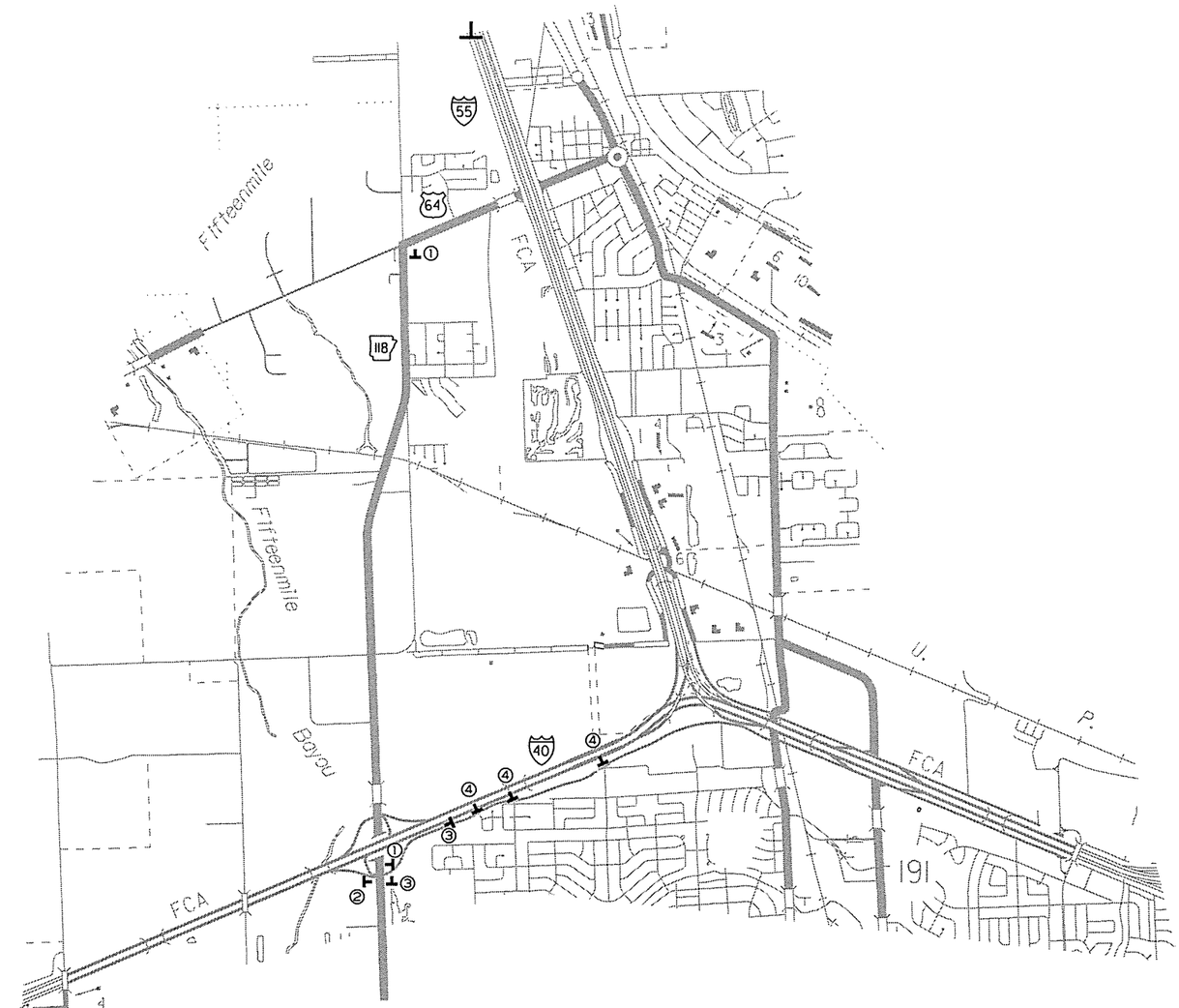
RBB0107.DGN

DETAIL OF BRIDGES
MAINTENANCE OF TRAFFIC DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	62	263

(2) MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15



DETOUR ROUTE FOR FRONTAGE ROAD ENTRANCE RAMP AT STA. 5948+00

STAGE 2A: DETOUR TRAFFIC FROM NORTHBOUND HWY. 118 TO THE INTERSECTION OF HWY. 118 & 64 FOR ACCESS TO I-55 NORTH.
DETOUR TRAFFIC TO FRONTAGE ROAD FOR ACCESS TO I-40 EAST & I-55 SOUTH.

STAGE 2B: CONSTRUCT STAGE 2 PORTION OF BRIDGE 07344.

STAGE 2C: REMOVE DETOUR AND RETURN TRAFFIC TO ORIGINAL FLOW.

NOTE: REFER TO MAINTENANCE OF TRAFFIC SPECIAL PROVISION.

(1)
55 (I) MI-1 (36" X 36")
NORTH (I) M3-1 (36" X 18")
DETOUR (I) M4-8 (24" X 12")
(I) M6-1 (21" X 15")

(2)
55 (I) MI-1 (36" X 36")
NORTH (I) M3-1 (36" X 18")
DETOUR (I) M4-8 (24" X 12")
(I) M6-1 (21" X 15")

(3)
55 (I) MI-1 (36" X 36")
NORTH (I) M3-1 (36" X 18")
DETOUR (I) M4-8 (24" X 12")
(I) M6-3 (21" X 15")

(4)
40 (I) MI-1 (36" X 36")
EAST (I) M3-2 (36" X 18")
DETOUR (I) M4-8 (24" X 12")
(I) M6-1 (21" X 15")

SIGNING FOR DETOUR
MAINTENANCE OF TRAFFIC DETAILS

6/22/2015

RBB0107.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	63	263

(2) MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15

STAGE I CONSTRUCTION SEQUENCE

FURNISH AND INSTALL PRECAST CONCRETE BARRIER.

CONSTRUCT PORTIONS OF PROPOSED BRIDGES LABELED AS STAGE I.

PERFORM HYDRODEMOLITION ON BRIDGE 03123 AS SHOWN ON MAINTENANCE OF TRAFFIC - DETAIL OF BRIDGES SHEET.

REMOVE INTERIOR GUARDRAIL AT FIFTEEN MILE BAYOU.

PLACE COVER OVER SPECIFIED DROP INLETS TO PROTECT DURING USE OF DETOUR ROADS. CONSTRUCT TEMPORARY RAMP AND DETOUR ROADS AS DETAILED IN STAGE I MAINTENANCE OF TRAFFIC.

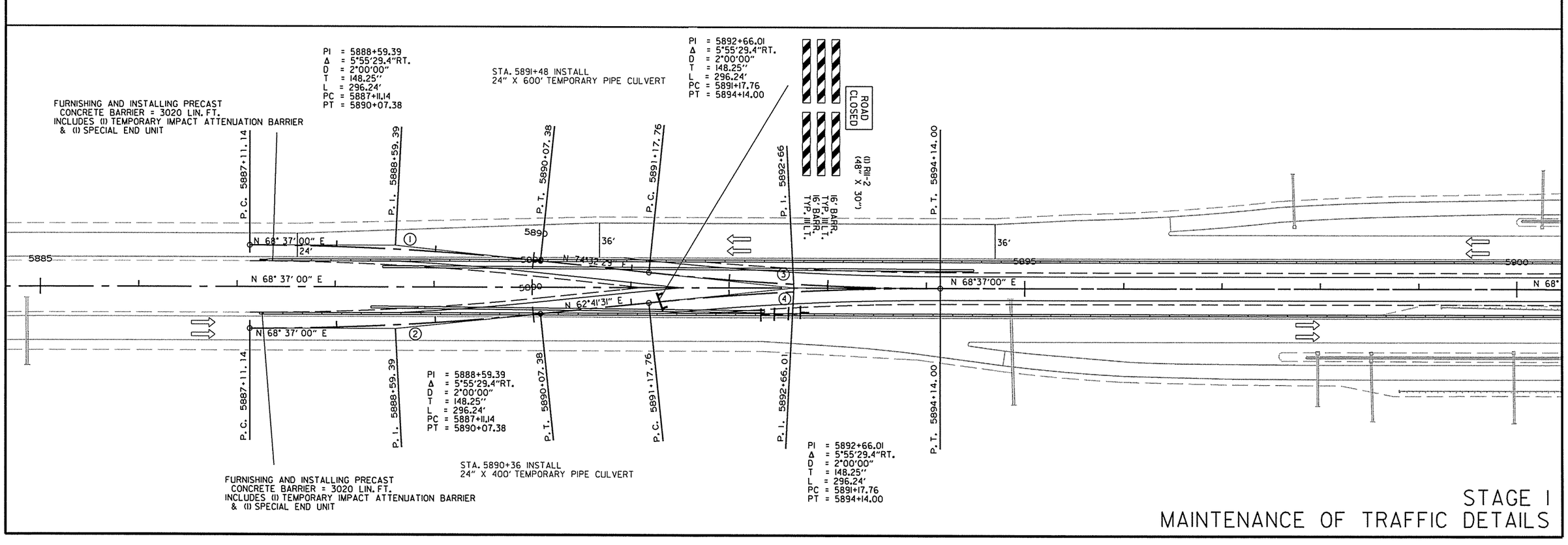
INSTALL SIGNING AND TRAFFIC DRUMS.

MILL AND INLAY AND WIRE ROPE SAFETY FENCE OPERATIONS WILL BE ALLOWED IN ALL STAGES OF CONSTRUCTION.

STAGE I QUANTITIES
SIGNS = 1650 SQ. FT.
TRAFFIC DRUMS = 1020 EACH
FURNISHING AND INSTALLING PRECAST CONCRETE BARRIER = 12860 LIN. FT.
RELOCATING PRECAST CONCRETE BARRIER = 820 LIN. FT.
TEMPORARY IMPACT ATTENUATION BARRIER = 4 EACH
TYPE III BARRICADE LT. (16') = 6 EACH

NOTE: THE CONSTRUCTION PAVEMENT MARKING QUANTITY IS BASED ON A SINGLE APPLICATION OF THE STRIPING SHOWN ON THE MAINTENANCE OF TRAFFIC DETAILS STAGE I SHEETS.

QUANTITIES FOR SIGNS AND TRAFFIC DRUMS INCLUDE WHAT IS NECESSARY IN WORK ZONES FOR BRIDGE REPLACEMENT, MILL AND INLAY OPERATIONS, AND WIRE ROPE SAFETY FENCE INSTALLATION.



STAGE I
MAINTENANCE OF TRAFFIC DETAILS

6/17/2015

RBB0107.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	64	263

(2) MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15

PI = 5912+69.72
Δ = 5°55'29.4"RT.
D = 2°00'00"
T = 148.25'
L = 296.24'
PC = 5911+21.47
PT = 5914+17.71

BR. NO. B313
SITE NO. 2
FIFTEEN MILE BAYOU
BR. NO. B313
BR. NO. A313
BR. NO. A313
SITE NO. 1

N 68° 37' 00" E
N 68°37'00" E
5900
5905
5910
5915
5920
5925
5930

P.C. 5911+21.47
P.I. 5912+69.72
P.T. 5914+17.71
P.C. 5915+28.09

ROAD CLOSED
(1) RII-2 (48" X 30")
(6) BARRICADE TYPE III, T.
(6) BARRICADE TYPE III, T.

N 62°41'31" E
N 74°32'29" E

STA. 5915+15 INSTALL
24" X 400' TEMPORARY PIPE CULVERT

PI = 5916+76.34
Δ = 5°55'29.4"RT.
D = 2°00'00"
T = 148.25'
L = 296.24'
PC = 5915+28.09
PT = 5918+24.33

P.C. 5915+28.09
P.I. 5916+76.34
P.T. 5918+24.33

HWY. 18B
COLLEGE BLVD.

STA. 5914+92 INSTALL
24" X 400' TEMPORARY PIPE CULVERT

BR. NO. 07026

STAGE I
MAINTENANCE OF TRAFFIC DETAILS

6/17/2015

RBB0107.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	65	263

(2) MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15

FURNISHING AND INSTALLING PRECAST CONCRETE BARRIER = 2960 LIN. FT.
INCLUDES (1) TEMPORARY IMPACT ATTENUATION BARRIER & (1) SPECIAL END UNIT

PI = 5950+22.12
Δ = 5°55'29.4"RT.
D = 2°00'00"
T = 148.25'
L = 296.24'
PC = 5948+73.87
PT = 5951+70.11

STA. 5852+09 INSTALL
24" X 380' TEMPORARY PIPE CULVERT

ROAD CLOSED

(1) RII-2 (48" X 30")

16' BARR. TYP. III LT.
16' BARR. TYP. III LT.

PI = 5954+28.74
Δ = 5°55'29.4"RT.
D = 2°00'00"
T = 148.25'
L = 296.24'
PC = 5952+80.49
PT = 5955+76.73

P.C. 5948+73.87
P.I. 5950+22.12
P.T. 5951+70.11
P.C. 5952+80.49
P.I. 5954+28
P.T. 5955+76.73

5945
5950
5955
5960

N 74° 32' 29" E
N 68° 37' 00" E
N 62° 41' 31" E

36'
36'

PI = 5950+22.12
Δ = 5°55'29.4"RT.
D = 2°00'00"
T = 148.25'
L = 296.24'
PC = 5948+73.87
PT = 5951+70.11

PI = 5954+28.74
Δ = 5°55'29.4"RT.
D = 2°00'00"
T = 148.25'
L = 296.24'
PC = 5952+80.49
PT = 5955+76.73

STA. 5952+01 INSTALL
24" X 360' TEMPORARY PIPE CULVERT

FURNISHING AND INSTALLING PRECAST CONCRETE BARRIER = 3040 LIN. FT.
INCLUDES (1) TEMPORARY IMPACT ATTENUATION BARRIER & (1) SPECIAL END UNIT

STAGE I
MAINTENANCE OF TRAFFIC DETAILS

6/17/2015

RBB0107.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	66	263

(2) MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15

BR. NO. B3114
SITE NO. 4

TEN MILE BAYOU

BR. NO. B3114

5960 5965 5970 5975

N 68° 37' 00" E

N 68°37'00" E

24'

BR. NO. A3114

BR. NO. A3114
SITE NO. 3

P. C. 5972+79.06
P. I. 5974+27.32

PI = 5974+27.32
Δ = 5°55'29.4"RT.
D = 2°00'00"
T = 148.25'
L = 296.24'
PC = 5972+79.06
PT = 5975+75.30

P. C. 5972+79.06
P. I. 5974+27.32

PI = 5974+27.32
Δ = 5°55'29.4"RT.
D = 2°00'00"
T = 148.25'
L = 296.24'
PC = 5972+79.06
PT = 5975+75.30

STA. 5976+46 INSTALL
24" X 400' TEMPORARY PIPE CULVERT

PI = 5978+33.94
Δ = 5°55'29.4"RT.
D = 2°00'00"
T = 148.25'
L = 296.24'
PC = 5976+85.68
PT = 5979+81.92

P. T. 5975+75.30
P. C. 5976+85.68
P. T. 5979+81.92
P. I. 5978+33.94

5975 5980 5985 5990

N 62°41'31" E

N 68° 37' 00" E

N 74°32'29" E

P. T. 5975+75.30
P. C. 5976+85.68
P. T. 5979+81.92

PI = 5978+33.94
Δ = 5°55'29.4"RT.
D = 2°00'00"
T = 148.25'
L = 296.24'
PC = 5976+85.68
PT = 5979+81.92

P. I. 5978+33.94

STA. 5976+39 INSTALL
24" X 400' TEMPORARY PIPE CULVERT

STA. 5977+90
REMOVE IMPACT ATTENUATION BARRIER ON
WEST SIDE OF OVERHEAD SIGN STRUCTURE.

STAGE I
MAINTENANCE OF TRAFFIC DETAILS

6/22/2015

RBB0107.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	67	263

(2) MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15

STAGE 2 CONSTRUCTION SEQUENCE

INSTALL STRIPING, TRAFFIC DRUMS, AND SIGNING AS DETAILED IN STAGE 2 MAINTENANCE OF TRAFFIC SHEETS. RELOCATE PRECAST CONCRETE BARRIER AS DETAILED.

SHIFT EASTBOUND TRAFFIC ON DETOUR ROADS CONSTRUCTED IN STAGE 1. WESTBOUND TRAFFIC WILL REMAIN ON THEIR EXISTING LANES.

REMOVE EXISTING BR. NO. A3113 AND CONCRETE BARRIER WALL (TYPE B) ALONG ROADWAY.

CONSTRUCT STAGE 2 PORTION OF PROPOSED BRIDGES.

RECONSTRUCT THE WEST AND EAST APPROACHES TO EACH BRIDGE TO BRING THE ELEVATION UP TO THE PROPOSED PROFILE GRADE.

CONSTRUCT CONCRETE BARRIER WALL (SIDE TYPE A) AS SHOWN ON PLAN SHEETS.

CONSTRUCT REMAINDER OF DETOUR ROAD FOR USE IN STAGE 3 MAINTENANCE OF TRAFFIC.

STAGE 2 QUANTITIES
SIGNS = 1854 SQ. FT.
TRAFFIC DRUMS = 1135 EACH
RELOCATING PRECAST CONCRETE BARRIER = 10360 LIN. FT.
TEMPORARY IMPACT ATTENUATION BARRIER = 8 EACH
TYPE III BARRICADE RT. (16') = 4 EACH
TYPE III BARRICADE LT. (16') = 2 EACH
REMOVABLE CONSTRUCTION PAVEMENT MARKINGS = 12443 LIN. FT.
REMOVAL OF PERMANENT PAVEMENT MARKINGS = 4831 LIN. FT.
CONSTRUCTION PAVEMENT MARKINGS = 1523 LIN. FT.

NOTE: THE CONSTRUCTION PAVEMENT MARKING QUANTITY IS BASED ON A SINGLE APPLICATION OF THE STRIPING SHOWN ON THE MAINTENANCE OF TRAFFIC DETAILS STAGE 2 SHEETS.

QUANTITIES FOR SIGNS AND TRAFFIC DRUMS INCLUDE WHAT IS NECESSARY IN WORK ZONES FOR BRIDGE REPLACEMENT, MILL AND INLAY OPERATIONS, AND WIRE ROPE SAFETY FENCE INSTALLATION.

( ) WI-4bL (48" X 48")

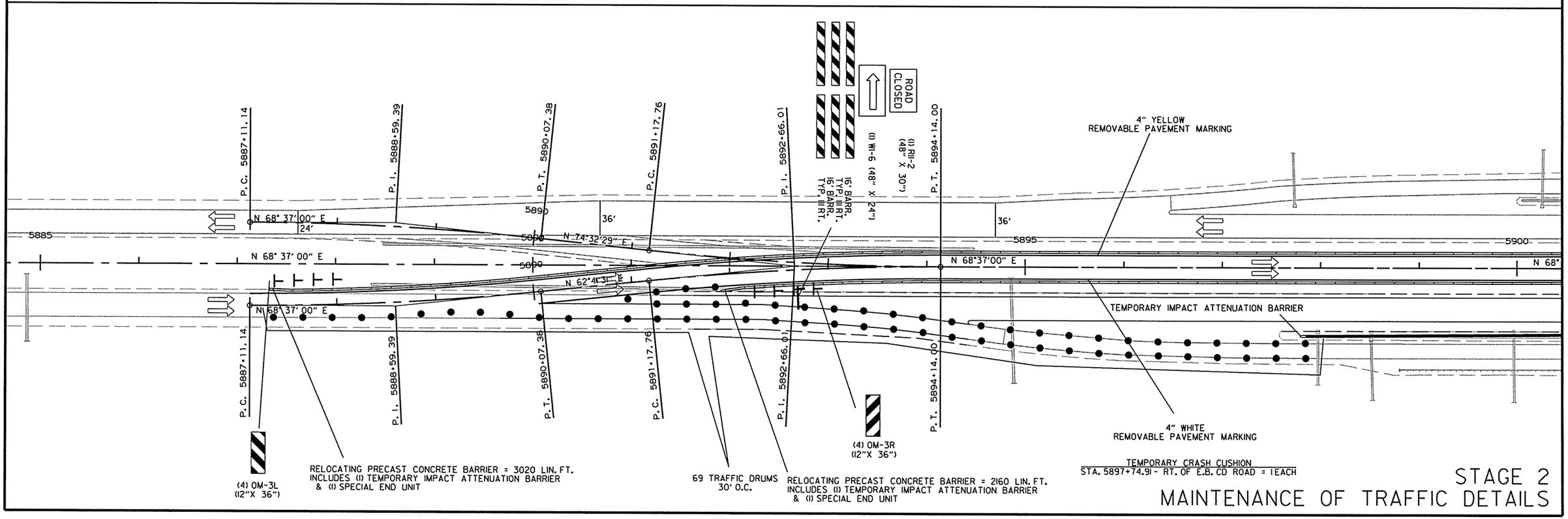
INSTALLATION STA. ⊥ × ⊥

( ) WI-4bL (48" X 48")

( ) WI-4bR (48" X 48")

INSTALLATION STA. ⊥ × ⊥

( ) WI-4bR (48" X 48")



STAGE 2
MAINTENANCE OF TRAFFIC DETAILS

6/19/2015
RBB0107.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	68	263

(2) MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15

BR. NO. B3113
SITE NO. 2

FIFTEEN MILE BAYOU

BR. NO. B3113

BR. NO. A3113

BR. NO. A3113
SITE NO. 1

4" YELLOW
REMOVABLE PAVEMENT MARKING

IN PLACE - 420 LIN. FT. PRECAST CONCRETE BARRIER
INCLUDES (1) TEMPORARY IMPACT ATTENUATION BARRIER
& (1) SPECIAL END UNIT

4" WHITE
REMOVABLE PAVEMENT MARKING

5900 5905 5910 5915 5920 5925 5930

N 68° 37' 00" E

N 62°41'31"E

N 74°32'29" E

P.C. 5911+21.47
P.I. 5912+69.72
P.T. 5914+17.71
P.C. 5915+28.09
P.I. 5916+76.34
P.T. 5918+24.33

(3) OM-3L
(12"X 36")

5 TRAFFIC DRUMS
30' O.C.

(3) OM-3R
(12"X 36")

11 TRAFFIC DRUMS
30' O.C.

HWY. 118
COLLEGE BLVD.

BR. NO. 07026

STAGE 2
MAINTENANCE OF TRAFFIC DETAILS

6/17/2015

RBB0107.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		B80107	69	263

(2) MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15

( ) WI-4bL (48" X 48")

INSTALLATION STA. ⊥ × ⊥

( ) WI-4bL (48" X 48")

( ) WI-4bR (48" X 48")

INSTALLATION STA. ⊥ × ⊥

( ) WI-4bR (48" X 48")

6/17/2015

RBB0107.DGN

P.C. 5948+73.87
P.I. 5950+22.12
P.T. 5951+70.11
P.C. 5952+80.49
P.I. 5954+28.74
P.T. 5955+76.73

5945 5950 5955 5960

N 68° 37' 00" E
N 74°32'29" E
N 62°41'31" E

(1) WI-9 (48" X 24")
(1) RII-2 (48" X 30")
ROAD CLOSED

16' BARR. TYP. III R.T.
16' BARR. TYP. III R.T.

36'

15 TRAFFIC DRUMS 30' O.C.

(4) OM-3L (12"X 36")

(4) OM-3R (12"X 36")

4" YELLOW REMOVABLE PAVEMENT MARKING

4" WHITE REMOVABLE PAVEMENT MARKING

RELOCATING PRECAST CONCRETE BARRIER = 3020 LIN. FT.
INCLUDES (1) TEMPORARY IMPACT ATTENUATION BARRIER & (1) SPECIAL END UNIT

RELOCATING PRECAST CONCRETE BARRIER = 2160 LIN. FT.
INCLUDES (1) TEMPORARY IMPACT ATTENUATION BARRIER & (1) SPECIAL END UNIT

STAGE 2
MAINTENANCE OF TRAFFIC DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	70	263

(2) MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15

BR. NO. B3114
SITE NO. 4

TEN MILE BAYOU

4" YELLOW
REMOVABLE PAVEMENT MARKING

IN PLACE- 420 LIN. FT. PRECAST CONCRETE BARRIER
INCLUDES (1) TEMPORARY IMPACT ATTENUATION BARRIER
& (1) SPECIAL END UNIT

P. C. 5972+79.06

P. I. 5974+27.32

5960 | 5965 | 5970 | 5975

N 68° 37' 00" E

24'

BR. NO. A3114

BR. NO. B3114

BR. NO. A3114
SITE NO. 3

4" WHITE
REMOVABLE PAVEMENT MARKING

(3) OM-3L
(12"X 36")

P. T. 5975+75.30

P. C. 5976+85.68

P. I. 5978+33.94

P. T. 5979+81.92

5975 | 5980 | 5985 | 5990

N 62°41'31" E

N 74°32'29" E

N 68° 37' 00" E

15 TRAFFIC DRUMS
30' O.C.

4" YELLOW
REMOVABLE PAVEMENT MARKING

(3) OM-3R
(12"X 36")

4" WHITE
REMOVABLE PAVEMENT MARKING

STAGE 2
MAINTENANCE OF TRAFFIC DETAILS

6/17/2015

RBB0107.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	71	263

(2) MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15

STAGE 3 CONSTRUCTION SEQUENCE

SHIFT EASTBOUND TRAFFIC ONTO EASTBOUND LANES RECONSTRUCTED IN STAGE 2.

INSTALL STRIPING, TRAFFIC DRUMS, AND SIGNING AS DETAILED IN STAGE 3 MAINTENANCE OF TRAFFIC SHEETS. RELOCATE PRECAST CONCRETE BARRIER AS DETAILED.

SHIFT WESTBOUND TRAFFIC ON DETOUR ROADS CONSTRUCTED IN STAGE 2. EASTBOUND TRAFFIC WILL REMAIN ON RECONSTRUCTED LANES.

REMOVE EXISTING BR. NO. B3113 AND CONCRETE BARRIER WALL (TYPE B) ALONG ROADWAY.

CONSTRUCT STAGE 3 PORTION OF PROPOSED BRIDGES.

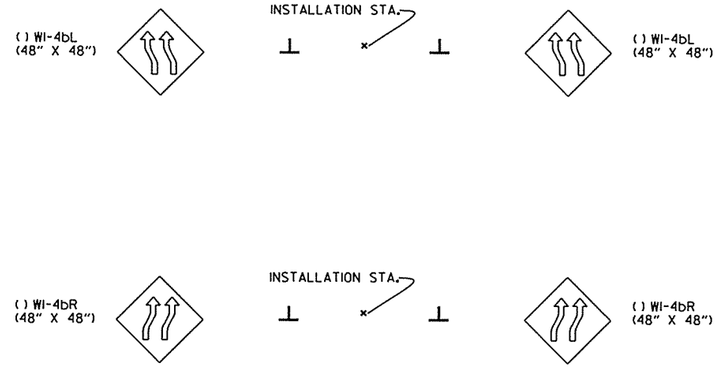
RECONSTRUCT THE WEST AND EAST APPROACHES TO EACH BRIDGE TO BRING THE ELEVATION UP TO THE PROPOSED PROFILE GRADE.

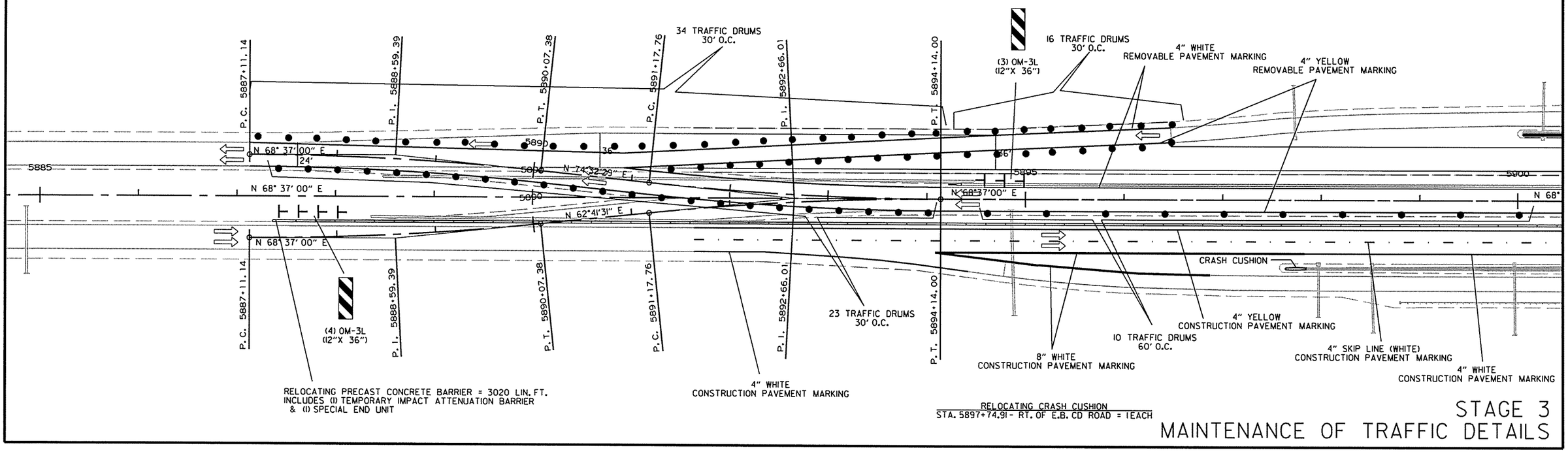
CONSTRUCT CONCRETE BARRIER WALL (TYPE C) AS SHOWN ON PLAN SHEETS.

STAGE 3 QUANTITIES
SIGNS = 1844 SQ. FT.
TRAFFIC DRUMS = 1243 EACH
RELOCATING PRECAST CONCRETE BARRIER = 6740 LIN. FT.
TEMPORARY IMPACT ATTENUATION BARRIER = 4 EACH
TYPE III BARRICADE RT. (16') = 4 EACH
REMOVABLE CONSTRUCTION PAVEMENT MARKINGS = 12755 LIN. FT.
REMOVAL OF PERMANENT PAVEMENT MARKINGS = 5763 LIN. FT.
CONSTRUCTION PAVEMENT MARKINGS = 10081 LIN. FT.

NOTE: THE CONSTRUCTION PAVEMENT MARKING QUANTITY IS BASED ON A SINGLE APPLICATION OF THE STRIPING SHOWN ON THE MAINTENANCE OF TRAFFIC DETAILS STAGE 3 SHEETS.

QUANTITIES FOR SIGNS AND TRAFFIC DRUMS INCLUDE WHAT IS NECESSARY IN WORK ZONES FOR BRIDGE REPLACEMENT, MILL AND INLAY OPERATIONS, AND WIRE ROPE SAFETY FENCE INSTALLATION.





RELOCATING CRASH CUSHION
STA. 5897+74.91 - RT. OF E.B. CD ROAD = 1EACH

STAGE 3
MAINTENANCE OF TRAFFIC DETAILS

6/22/2015
RBB0107.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	72	263

(2) MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15

RELOCATING PRECAST CONCRETE BARRIER = 240 LIN. FT.
INCLUDES (1) TEMPORARY IMPACT ATTENUATION BARRIER

BR. NO. B3113
SITE NO. 2

FIFTEEN MILE BAYOU

BR. NO. B3113

BR. NO. A3113
SITE NO. 1

4" YELLOW
REMOVABLE PAVEMENT MARKING

4" WHITE
REMOVABLE PAVEMENT MARKING

4" SKIP LINE (WHITE)
CONSTRUCTION PAVEMENT MARKING

4" YELLOW
CONSTRUCTION PAVEMENT MARKING

4" WHITE
CONSTRUCTION PAVEMENT MARKING

18 TRAFFIC DRUMS
60' O.C.

14 TRAFFIC DRUMS
30' O.C.

6 TRAFFIC DRUMS
30' O.C.

9 TRAFFIC DRUMS
30' O.C.

9 TRAFFIC DRUMS
30' O.C.

(4) OM-3R
(12"X 36")

(3) OM-3R
(12"X 36")

(1) RI-2
(48" X 30")

(1) WI-6 (48" X 24")

16' BARR. TYP. III RT.

16' BARR. TYP. III RT.

ROAD CLOSED

P.C. 5911+21.47

P.I. 5912+69.72

P.T. 5914+17.71

P.C. 5915+28.09

P.I. 5916+76.34

P.T. 5918+24.33

5900 5905 5910 5915 5920 5925 5930

N 68° 37' 00" E

N 74°32'29" E

Δ 62°41'31" 5915

HWY. 118
COLLEGE BLVD.

BR. NO. 07026

6/17/2015

RBB0107.DGN

STAGE 3
MAINTENANCE OF TRAFFIC DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	73	263

(2) MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15

( ) W1-4bL (48" X 48")

INSTALLATION STA.

( ) W1-4bL (48" X 48")

( ) W1-4bR (48" X 48")

INSTALLATION STA.

( ) W1-4bR (48" X 48")

RELOCATING PRECAST CONCRETE BARRIER = 220 LIN. FT.
INCLUDES (1) SPECIAL END UNIT

(4) OM-3L (12"X 36")

(3) OM-3L (12"X 36")

P.C. 5948+73.87
P.I. 5950+22.12
P.T. 5951+70.11
P.C. 5952+80.49
P.I. 5954+28.74
P.T. 5955+76.73

4" YELLOW REMOVABLE PAVEMENT MARKING

4" WHITE REMOVABLE PAVEMENT MARKING

5945
5950
5955
5960

N 68° 37' 00" E
N 74° 32' 29" E
N 62° 41' 31" E

36'

4" YELLOW CONSTRUCTION PAVEMENT MARKING

4" SKIP LINE (WHITE) CONSTRUCTION PAVEMENT MARKING

4" WHITE CONSTRUCTION PAVEMENT MARKING

RELOCATING PRECAST CONCRETE BARRIER = 3020 LIN. FT.
INCLUDES (1) TEMPORARY IMPACT ATTENUATION BARRIER & (1) SPECIAL END UNIT

STAGE 3
MAINTENANCE OF TRAFFIC DETAILS

6/17/2015

RBB0107.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	74	263

(2) MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15

BR. NO. B3114
SITE NO. 4

TEN MILE BAYOU

BR. NO. B3114

5960 5965 5970 5975

N 68° 37' 00" E

24

4" YELLOW
CONSTRUCTION PAVEMENT MARKING

4" SKIP LINE (WHITE)
CONSTRUCTION PAVEMENT MARKING

BR. NO. A3114
SITE NO. 3

4" WHITE
CONSTRUCTION PAVEMENT MARKING

4" WHITE
REMOVABLE PAVEMENT MARKING

4" YELLOW
REMOVABLE PAVEMENT MARKING

RELOCATING PRECAST CONCRETE BARRIER = 240 LIN. FT.
INCLUDES (1) TEMPORARY IMPACT ATTENUATION BARRIER

P. C. 5972+79.06

P. I. 5974+27.32

(4) OM-3R
(12"X 36")

ROAD CLOSED

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

(1) W1-6 (48" X 24")

16' BARR.
TYP. III RT.
16' BARR.
TYP. III RT.

4" YELLOW
REMOVABLE PAVEMENT MARKING

P. T. 5975+75.30

P. C. 5976+85.68

4" WHITE
REMOVABLE PAVEMENT MARKING

P. T. 5979+81.92

P. I. 5978+33.94

5975 5980 5985 5990

N 62°41'31" E

N 68° 37' 00" E

N 74°32'29" E

(3) OM-3R
(12"X 36")

4" YELLOW
CONSTRUCTION PAVEMENT MARKING

4" SKIP LINE (WHITE)
CONSTRUCTION PAVEMENT MARKING

4" WHITE
CONSTRUCTION PAVEMENT MARKING

6/17/2015

RBB0107.DGN

STAGE 3
MAINTENANCE OF TRAFFIC DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	75	263

(2) MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15

STAGE 4 CONSTRUCTION SEQUENCE

SHIFT WESTBOUND TRAFFIC ONTO WESTBOUND LANES RECONSTRUCTED IN STAGE 3.

INSTALL STRIPING AS DETAILED IN STAGE 4 MAINTENANCE OF TRAFFIC.

CONSTRUCT MEDIAN BARRIER ALONG CENTERLINE OF NEWLY CONSTRUCTED BRIDGES.

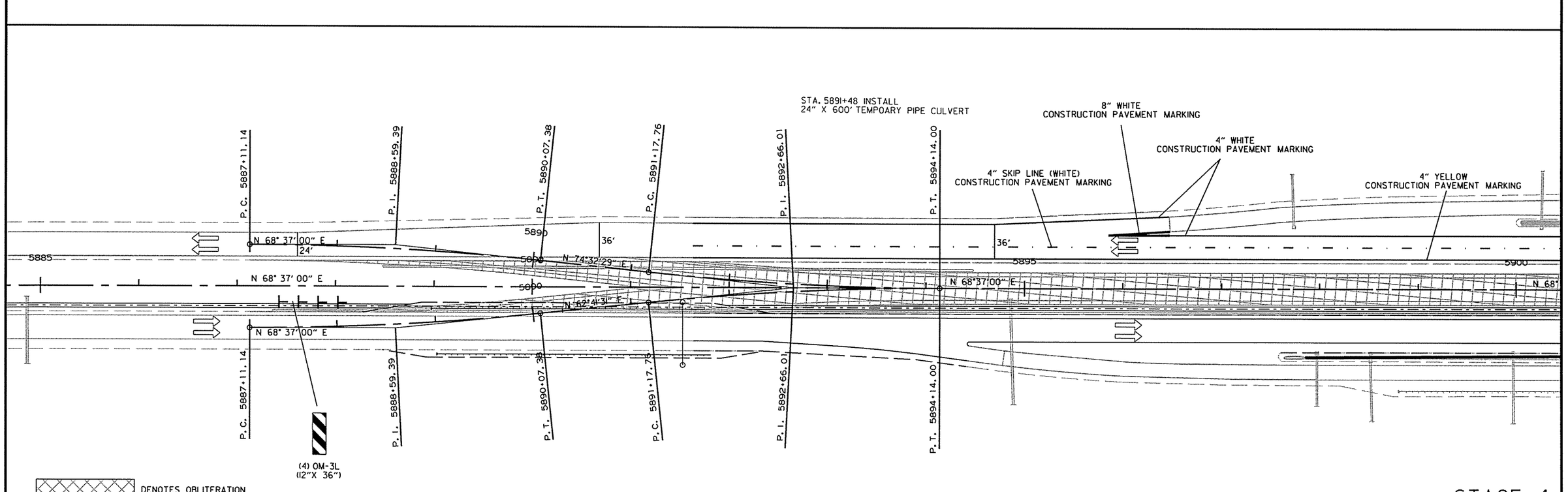
INSTALL WIRE ROPE SAFETY FENCE AS SHOWN ON PLANS.

REMOVE DETOUR ROAD TO PROVIDE A DEPRESSED MEDIAN. REMOVE COVERS FROM DROP INLETS.

STAGE 4 QUANTITIES
SIGNS = 1680 SQ. FT.
TRAFFIC DRUMS = 1014 EACH
TEMPORARY IMPACT ATTENUATION BARRIER = 2 EACH
CONSTRUCTION PAVEMENT MARKINGS = 9886 LIN. FT.

NOTE: THE CONSTRUCTION PAVEMENT MARKING QUANTITY IS BASED ON A SINGLE APPLICATION OF THE STRIPING SHOWN ON THE MAINTENANCE OF TRAFFIC DETAILS STAGE 4 SHEETS.

QUANTITIES FOR SIGNS AND TRAFFIC DRUMS INCLUDE WHAT IS NECESSARY IN WORK ZONES FOR BRIDGE REPLACEMENT, MILL AND INLAY OPERATIONS, AND WIRE ROPE SAFETY FENCE INSTALLATION.



STAGE 4
MAINTENANCE OF TRAFFIC DETAILS

6/22/2015

RBB0107.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	76	263

(2) MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15

4" YELLOW CONSTRUCTION PAVEMENT MARKING

(3) OM-3R (12"X 36")

BR. NO. B3113 SITE NO. 2

FIFTEEN MILE BAYOU

4" WHITE CONSTRUCTION PAVEMENT MARKING

(4) OM-3L (12"X 36")

4" SKIP LINE (WHITE) CONSTRUCTION PAVEMENT MARKING

P.C. 5911+21.47

P.I. 5912+69.72

P.T. 5914+17.71

P.C. 5915+28.09

5900 5905 5910 5915

N 68° 37' 00" E

N 62°41'31"E

N 74°32'29" E

BR. NO. A3113 SITE NO. 1

915+15 INSTALL 400' TEMPOARY PIPE CULVERT

P.I. 5916+76.34

P.T. 5918+24.33

5915 5920 5925 5930

HWY. 118 COLLEGE BL VD.

BR. NO. 07026

DENOTES OBLITERATION OF DETOUR ROAD

6/17/2015

RBB0107.DGN

STAGE 4
MAINTENANCE OF TRAFFIC DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

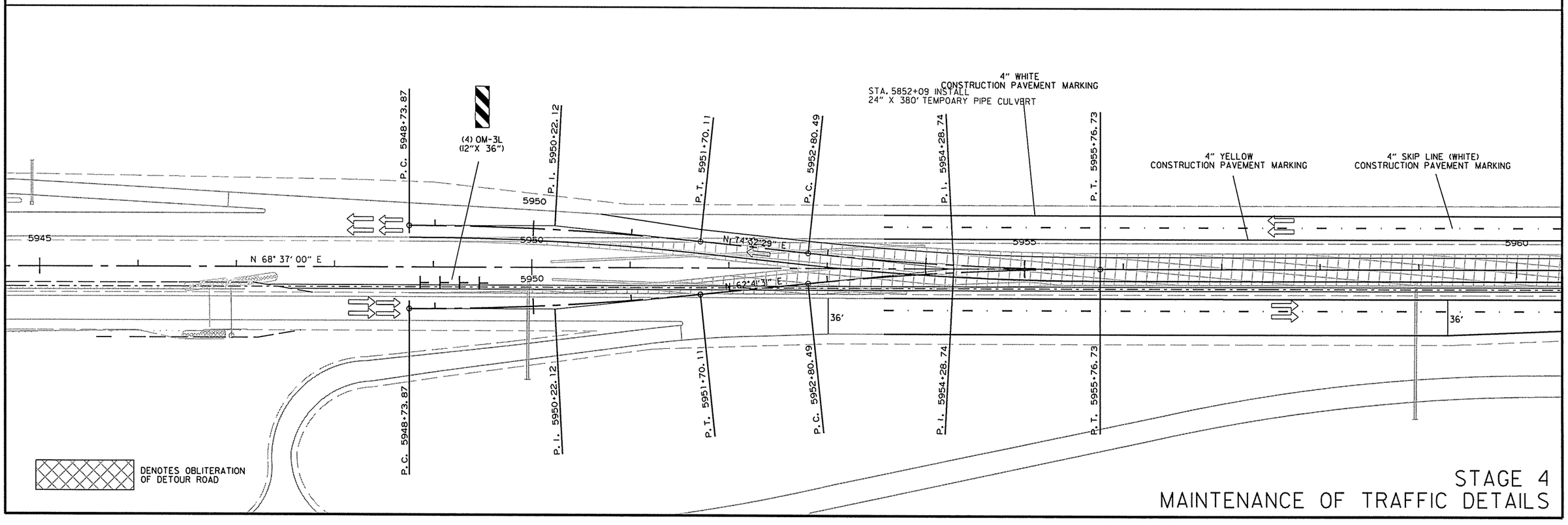
FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		BB0107	77	263

(2) MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15

6/17/2015

RBB0107.DGN

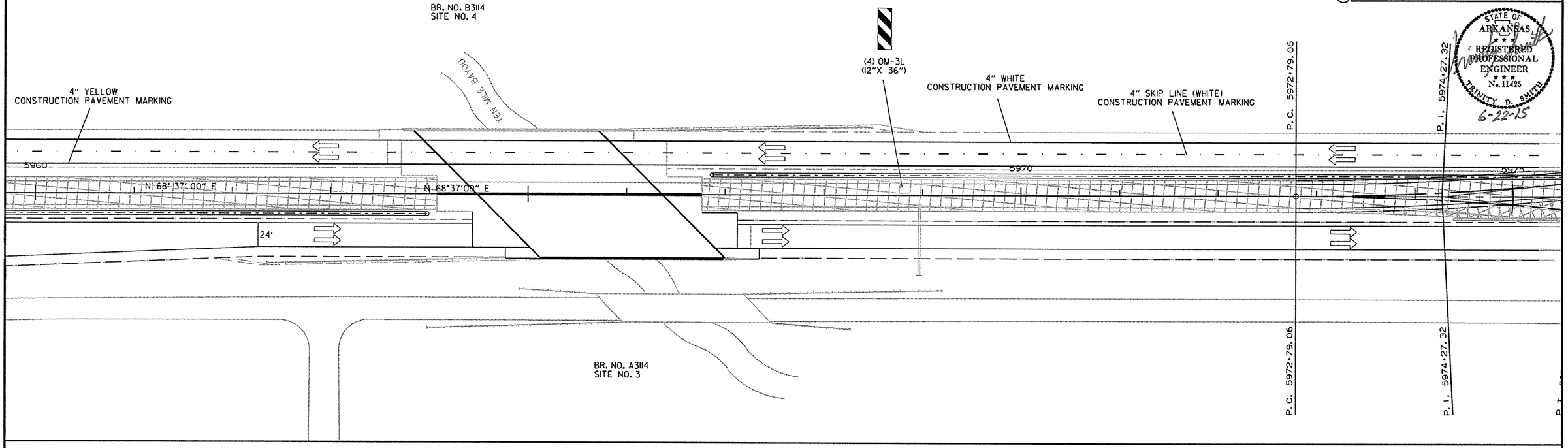


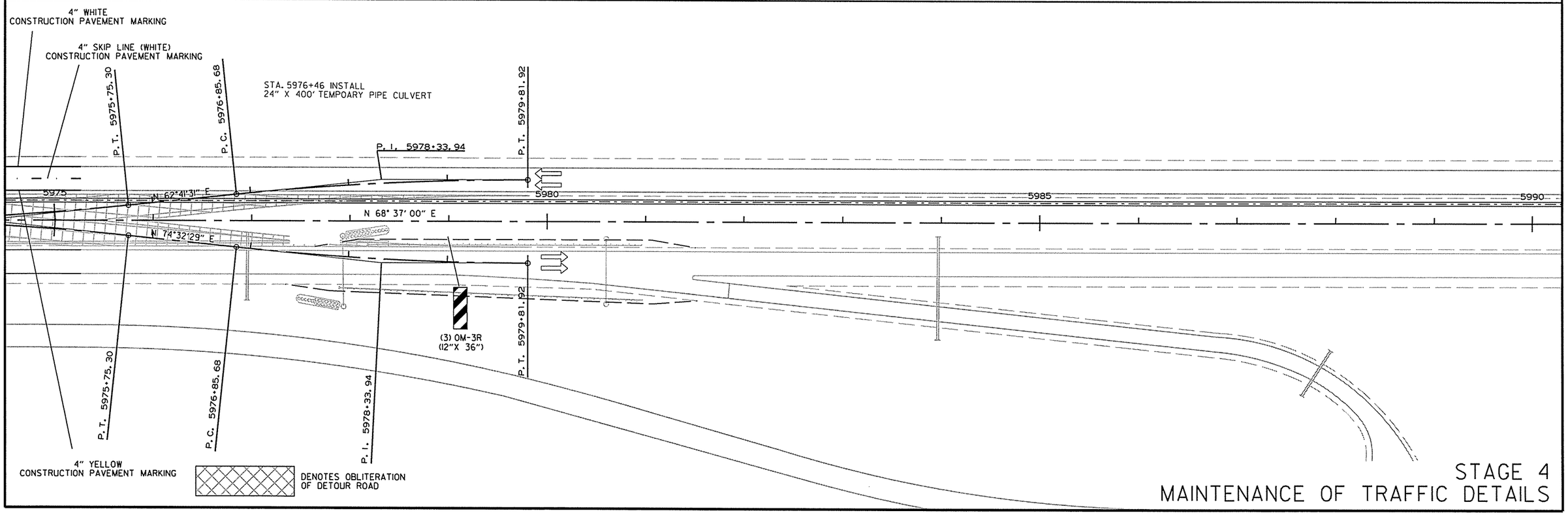
STAGE 4
MAINTENANCE OF TRAFFIC DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	78	263

(2) MAINTENANCE OF TRAFFIC DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15





6/17/2015

RBB0107.DGN

STAGE 4
MAINTENANCE OF TRAFFIC DETAILS

PERMANENT PAVEMENT MARKINGS

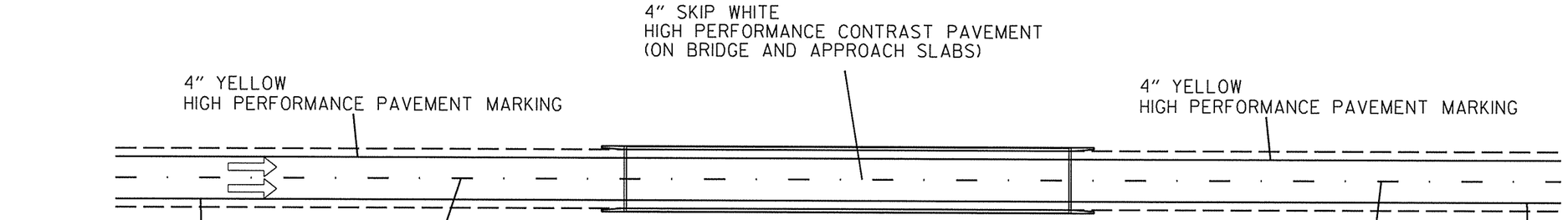
THERMOPLASTIC PAVEMENT MARKINGS WORDS - 1EACH
THERMOPLASTIC PAVEMENT MARKINGS ARROWS - 1EACH
HIGH PERFORMANCE CONTRAST PAVEMENT MARKING WHITE (4") - 300 LIN. FT.
HIGH PERFORMANCE PAVEMENT MARKING WHITE (4") - 143618 LIN. FT.
HIGH PERFORMANCE PAVEMENT MARKING (SKIP LINE) WHITE (4") - 32530 LIN. FT.
HIGH PERFORMANCE PAVEMENT MARKING YELLOW (4") - 145090
HIGH PERFORMANCE PAVEMENT MARKING WHITE (8") - 9299 LIN. FT.

RAISED PAVEMENT MARKERS TYPE II (WHITE/RED) - 3175 EACH
80' SPACING (EXCEPT WHERE SHOWN ON STD. DWG. PM-2)

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	79	263

(2) PERMANENT PAVEMENT MARKING DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15



TYPICAL STRIPING DETAIL

I-40 EASTBOUND AND WESTBOUND LANES

NOTE: SEE STD. DWG. PM-2 FOR ENTRANCE RAMP, EXIT RAMP, GORE AREAS, AND ACCEL. LANE PAV'T MARKING.

6/17/2015

RBB0107.DGN

PERMANENT PAVEMENT MARKING DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	80	263

(2) QUANTITIES

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15

CONSTRUCTION PAVEMENT MARKINGS AND PERMANENT PAVEMENT MARKINGS

DESCRIPTION	STAGE 2	STAGE 3	STAGE 4	END OF JOB	REMOVAL OF PERMANENT PAVEMENT MARKINGS	CONSTRUCTION PAVEMENT MARKINGS	CONSTRUCTION PAVEMENT MARKINGS		REMOVABLE CONSTRUCTION PAVEMENT MARKINGS	RAISED PAVEMENT MARKERS	THERMOPLASTIC PAVEMENT MARKING		HIGH PERFORMANCE CONTRAST PAVEMENT MARKING	HIGH PERFORMANCE PAVEMENT MARKING			
							WORDS	ARROWS		TYPE II (WHITE/RED)	WORDS	ARROWS	4" WHITE	4" WHITE	4" WHITE (SKIP LINE)	4" YELLOW	8" WHITE
	LIN. FT. - EACH				LIN. FT.		EACH			EACH	EACH	EACH	LIN. FT.	LIN. FT.			
REMOVAL OF PERMANENT PAVEMENT MARKINGS	4831	5763			10594												
CONSTRUCTION PAVEMENT MARKINGS	1523	10081	9886	305268		326758											
CONSTRUCTION PAVEMENT MARKINGS (WORDS)				1			1										
CONSTRUCTION PAVEMENT MARKINGS (ARROWS)				1				1									
REMOVABLE CONSTRUCTION PAVEMENT MARKINGS	12443	12755							25198								
RAISED PAVEMENT MARKERS TYPE II (WHITE/RED)				3175						3175							
THERMOPLASTIC PAVEMENT MARKING (WORDS)				1							1						
THERMOPLASTIC PAVEMENT MARKING (ARROWS)				1								1					
HIGH PERFORMANCE CONTRAST PAVEMENT MARKING WHITE (4")				300									300				
HIGH PERFORMANCE PAVEMENT MARKING WHITE (4")				143618										143618			
HIGH PERFORMANCE PAVEMENT MARKING (SKIP LINE) WHITE (4")				32530											32530		
HIGH PERFORMANCE PAVEMENT MARKING YELLOW (4")				145090												145090	
HIGH PERFORMANCE PAVEMENT MARKING WHITE (8")				9299													9299
TOTALS:					**10594**	**326758**	**1**	**1**	**25198**	**3175**	**1**	**1**	**300**	**143618**	**32530**	**145090**	**9299**

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

ADVANCE WARNING SIGNS AND DEVICES

SIGN NUMBER	DESCRIPTION	SIGN SIZE	STAGE 1	STAGE 2	STAGE 3	STAGE 4	MAXIMUM NUMBER REQUIRED	TOTAL SIGNS REQUIRED		TRAFFIC DRUMS	BARRICADES (TYPE III)		FURNISHING & INSTALLING PRECAST CONC. BARRIER	RELOCATING PRECAST CONCRETE BARRIER	TEMPORARY IMPACT ATTENUATION BARRIER	TEMP. IMPACT ATTEN.BARR. (REPAIR)	ADVANCE WARNING ARROW PANEL	MOBILE SPEED NOTIFICATION SYSTEM	PORTABLE CHANGEABLE MESSAGE SIGN	TEMPORARY PORTABLE RUMBLE STRIPS	PORTABLE CONSTRUCTION LIGHTING
											RIGHT	LEFT									
			LIN. FT. - EACH					NO.	SQ. FT.	EACH	LIN. FT.				EACH		DAY	EACH	WEEK	EACH	DAY
W20-1	ROAD WORK 1 MILE	48"x48"	4	4	4	4	4	4	64.0												
W20-1	ROAD WORK 1/2 MILE	48"x48"	4	4	4	4	4	4	64.0												
W20-1	ROAD WORK 1500 FT.	48"x48"	4	4	4	4	4	4	64.0												
W20-1	ROAD WORK AHEAD	48"x48"	16	16	16	16	16	16	256.0												
G20-2	END ROAD WORK	48"x24"	16	16	16	16	16	16	128.0												
G20-1	ROAD WORK NEXT XX MILES	60"x24"	2	2	2	2	2	2	20.0												
W20-5	RIGHT LANE CLOSED 1 MILE	48"x48"	4	4	4	4	4	4	64.0												
W20-5	RIGHT LANE CLOSED 1/2 MILE	48"x48"	4	4	4	4	4	4	64.0												
W20-5	RIGHT LANE CLOSED 1500 FT.	48"x48"	4	4	4	4	4	4	64.0												
R2-5A	REDUCED SPEED AHEAD	48"X60"	4	4	4	4	4	4	80.0												
OM-3L	OBJECT MARKER	12"x36"	4	14	14	16	16	16	48.0												
OM-3R	OBJECT MARKER	12"x36"	4	14	14	12	14	14	42.0												
W1-6	LARGE ARROW	48"x24"	6	8	8	6	8	8	64.0												
R4-1	DO NOT PASS	48"X60"	8	8	8	8	8	8	160.0												
RSP-1	SHOULDER CLOSED	48"x30"	2	2	2	2	2	2	20.0												
W1-4bR	DOUBLE REVERSE CURVE RT.	48"x48"		4	4		4	4	64.0												
W1-4bL	DOUBLE REVERSE CURVE LT.	48"x48"		4	4		4	4	64.0												
R55-1	FINES DOUBLE IN WORK ZONES	36"X60"	4	4	4	4	4	4	60.0												
SPECIAL	RUMBLE STRIPS AHEAD	48"X48"	4	4	4	4	4	4	64.0												
SPECIAL	MERGE NOW W/ ARROW	48"x48"	2	2	2	2	2	2	32.0												
W4-2 RT.	MERGE RIGHT	48"X48"	4	4	4	4	4	4	64.0												
R2-1	SPEED LIMIT 60 MPH	48"X60"	10	10	10	10	10	10	200.0												
R2-1	SPEED LIMIT 70 MPH	48"X60"	4	4	4	4	4	4	80.0												
RII-2	ROAD CLOSED	48"X30"	3	3	2		3	3	30.0												
M1-1	INTERSTATE	36"X36"	8	8			8	8	72.0												
M3-1	NORTH	36"X18"	5	5			5	5	22.5												
M3-2	EAST	36"X18"	3	3			3	3	13.5												
M4-8	DETOUR	24"X12"	8	8			8	8	16.0												
M6-1	HORIZONTAL ARROW	21"X15"	6	6			6	6	13.1												
M6-3	VERTICAL ARROW	21"X15"	2	2			2	2	4.4												
	TRAFFIC DRUMS		1020	1135	1243	1014	1243			1243											
	TYPE III BARRICADE-RT. (16')			4	4		4				64										
	TYPE III BARRICADE-LT. (16')		6	2			6					96									
	FURNISHING AND INSTALLING PRECAST CONCRETE BARRIER		12860				12860						12860								
	RELOCATING PRECAST CONCRETE BARRIER		820	10360	6740		17920							17920							
	TEMPORARY IMPACT ATTENUATION BARRIER		4	7	4	2	17								17						
	TEMPORARY IMPACT ATTENUATION BARRIER (REPAIR)		4	7	4	2	17									17					
	ADVANCE WARNING ARROW PANEL		2	2	2	2	2										1500				
	FURNISH AND OPERATION OF MOBILE SPEED NOTIFICATION SYSTEM		2	2	2	2	2											2			
	PORTABLE CHANGEABLE MESSAGE SIGN		4	4	4	4	4												432		
	TEMPORARY PORTABLE RUMBLE STRIPS		24	24	24	24	24													24	
	PORTABLE CONSTRUCTION LIGHTING		2	2	2	2	2														1200
TOTALS:									**2001.5**	**1243**	**64**	**96**	**12860**	**17920**	**17**	**17**	**1500**	**2**	**432**	**24**	**1200**

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

NOTE: THE QUANTITY OF TRAFFIC DRUMS PROVIDED IS FOR A 4-MILE WORK AREA IN ONE DIRECTION, A 2-MILE WORK AREA IN THE OTHER DIRECTION, AND THE BRIDGE RECONSTRUCTION AREA. HOWEVER, THE INSTALLATION OF TRAFFIC DRUMS SHALL NEVER EXCEED THE ACTUAL WORK AREA BY MORE THAN 1/4 MILE, UNLESS APPROVED BY THE ENGINEER.

6/17/2015

RBB0107.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6-23-15				6	ARK.			
7-13-15				JOB NO.		BB0107	81	263

(2) QUANTITIES

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
7-14-15

COLD MILLING ASPHALT PAVEMENT

STATION	STATION	LOCATION	AVG. WIDTH	COLD MILLING ASPHALT PAVEMENT
			FEET	SQ. YD.
5359+48.40	5416+49.93	RT. MAIN LANES	30.00	19005.10
5418+05.04	5469+15.93	RT. MAIN LANES	30.00	17036.30
5470+71.04	5521+29.93	RT. MAIN LANES	30.00	16862.97
5522+85.04	5575+26.93	RT. MAIN LANES	30.00	17472.97
5576+82.04	5601+71.32	RT. MAIN LANES	30.00	8297.60
5603+64.50	5627+92.05	RT. MAIN LANES	30.00	8091.83
5629+32.16	5681+47.78	RT. MAIN LANES	30.00	17385.40
5682+87.89	5707+40.96	RT. MAIN LANES	30.00	8176.90
5710+36.13	5740+11.80	RT. MAIN LANES	30.00	9918.90
5741+51.91	5793+60.06	RT. MAIN LANES	30.00	17360.50
5795+00.31	5850+64.21	RT. MAIN LANES	30.00	18546.33
5851+94.44	5891+64.00	RT. MAIN LANES	30.00	13231.87
5913+33.00	5953+57.50	RT. MAIN LANES	30.00	13415.00
5975+26.50	6032+00.48	RT. MAIN LANES	30.00	18913.27
6032+00.48	6039+49.38	RT. MAIN LANES	VAR.	1978.48
6039+49.38	6045+04.19	RT. MAIN LANES	18.00	1109.62
5359+48.40	5416+49.93	LT. MAIN LANES	30.00	19005.10
5418+05.04	5469+11.93	LT. MAIN LANES	30.00	17022.97
5470+67.04	5521+26.93	LT. MAIN LANES	30.00	16866.30
5522+82.04	5575+23.93	LT. MAIN LANES	30.00	17472.97
5576+79.04	5601+67.49	LT. MAIN LANES	30.00	8294.83
5603+60.67	5627+92.05	LT. MAIN LANES	30.00	8104.60
5629+32.16	5681+47.78	LT. MAIN LANES	30.00	17385.40
5682+87.89	5707+40.96	LT. MAIN LANES	30.00	8176.90
5710+36.13	5740+11.80	LT. MAIN LANES	30.00	9918.90
5741+51.91	5793+92.92	LT. MAIN LANES	30.00	17470.03
5795+33.17	5850+99.84	LT. MAIN LANES	30.00	18555.57
5852+30.07	5891+64.00	LT. MAIN LANES	30.00	13113.10
5913+33.00	5953+57.50	LT. MAIN LANES	30.00	13415.00
5975+26.50	6045+04.19	LT. MAIN LANES	30.00	23258.97
ADDITIONAL FOR ENTRANCE AND EXIT RAMPS				
5374+22.32	5376+58.69	EXIT 265 RT. MAIN LANES - TURN OUT	VAR.	264.51
5376+58.69	5382+08.69	EXIT 265 RAMP 1 - EXIT RAMP	15.5	947.22
5394+94.40	5404+72.08	EXIT 265 RT. MAIN LANES - ACCELERATION LANE & TAPER	VAR.	1117.29
5389+44.40	5394+94.40	EXIT 265 RAMP 2 - ENTRANCE RAMP	15.5	947.22
5395+29.79	5396+84.33	EXIT 265 LT. MAIN LANES - TURN OUT	VAR.	160.76
5389+79.79	5395+29.79	EXIT 265 RAMP 3 - EXIT RAMP	15.5	947.22
5369+53.47	5379+49.31	EXIT 265 LT. MAIN LANES - ACCELERATION LANE & TAPER	VAR.	1123.43
5379+49.31	5384+99.31	EXIT 265 RAMP 4 - ENTRANCE RAMP	15.5	947.22
5692+94.90	5694+50.59	EXIT 271 RT. MAIN LANES - TURN OUT	VAR.	149.58
5694+50.59	5700+00.59	EXIT 271 RAMP 1 - EXIT RAMP	15.5	947.22
5725+02.49	5733+66.89	EXIT 271 RT. MAIN LANES - ACCELERATION LANE & TAPER	VAR.	1075.71
5721+52.49	5725+02.49	EXIT 271 RAMP 2 - ENTRANCE RAMP	15.5	602.78
5723+89.12	5725+94.63	EXIT 271 LT. MAIN LANES - TURN OUT	VAR.	172.22
5718+39.12	5723+89.12	EXIT 271 RAMP 3 - EXIT RAMP	15.5	947.22
5683+02.31	5692+92.64	EXIT 271 LT. MAIN LANES - ACCELERATION LANE & TAPER	VAR.	1216.81
5692+92.64	5697+03.58	EXIT 271 RAMP 4 - ENTRANCE RAMP	15.5	707.73
5800+13.48	5825+36.29	WEIGH STATION RT. MAIN LANES - TURN OUT	VAR.	3257.45
5825+36.29	5827+58.06	WEIGH STATON RAMP 1 - EXIT RAMP	15.5	381.94
5841+91.14	5850+60.23	WEIGH STATION RT. MAIN LANES - ACCELERATION LANE & TAPER	VAR.	1025.61
5841+41.14	5841+91.14	WEIGH STATION RAMP 2 - ENTRANCE RAMP	VAR.	121.69
5823+93.27	5833+03.87	WEIGH STATION LT. MAIN LANES - ACCELERATION LANE & TAPER	VAR.	1155.51
5833+03.87	5834+28.87	WEIGH STATION RAMP 1 - ENTRANCE RAMP	VAR.	251.18
5849+72.87	5851+06.00	WEIGH STATION LT. MAIN LANES - TURN OUT	VAR.	233.01
5847+72.87	5849+72.87	WEIGH STATION RAMP 2 - EXIT RAMP	15.5	344.44
5852+36.46	5861+84.67	WEIGH STATION LT. MAIN LANES - ACCELERATION LANE & TAPER	VAR.	1287.38
5861+84.67	5863+59.67	WEIGH STATION RAMP 1 - ENTRANCE RAMP	15.5	301.39
5877+04.08	5879+03.80	WEIGH STATION LT. MAIN LANES - TURN OUT	VAR.	225.11
5874+04.08	5877+04.08	WEIGH STATION RAMP 2 - EXIT RAMP	15.5	516.67
5892+35.00	5894+43.09	EXIT 275 RT. MAIN LANES - TURN OUT	VAR.	181.01
5894+43.09	5901+25.43	EXIT 275 RAMP 1 - EXIT RAMP	15.5	1175.14
5925+14.52	5935+31.92	EXIT 275 RT. MAIN LANES - ACCELERATION LANE & TAPER	VAR.	1279.15
5919+64.52	5925+14.52	EXIT 275 RAMP 2 - ENTRANCE RAMP	15.5	947.22
5951+51.74	5962+26.05	EXIT 275 RT. MAIN LANES - ACCELERATION LANE & TAPER	VAR.	1287.16
5947+01.74	5951+51.74	EXIT 275 RAMP 2 - ENTRANCE RAMP	15.5	775.00
5947+27.75	5950+70.61	EXIT 275 LT. MAIN LANES - TURN OUT	VAR.	363.21
5941+77.75	5947+27.75	EXIT 275 RAMP 3 - EXIT RAMP	15.5	947.22
5887+61.38	5896+47.35	EXIT 275 LT. MAIN LANES - ACCELERATION LANE & TAPER	VAR.	969.21
5896+47.35	5902+99.26	EXIT 275 RAMP 4 - ENTRANCE RAMP	15.5	1122.73
5979+00.80	5981+48.94	EXIT 276 RT. MAIN LANES - TURN OUT	VAR.	212.55
5981+48.94	5986+98.94	EXIT 276 RAMP 1 - EXIT RAMP	15.5	947.22
5994+91.48	5999+45.08	EXIT 277 RT. MAIN LANES - TURN OUT	VAR.	310.65
5999+45.08	6004+95.08	EXIT 277 RAMP 1 - EXIT RAMP	15.5	947.22
6042+86.19	6045+04.19	EXIT 277 RT. MAIN LANES - ACCELERATION LANE & TAPER	VAR.	603.50
6037+36.19	6042+86.19	EXIT 277 RAMP 2 - ENTRANCE RAMP	24.5	1497.22
6031+14.07	6045+04.19	EXIT 277 LT. MAIN LANES - TURN OUT	VAR.	1991.20
6026+61.75	6031+14.07	EXIT 277 RAMP 3 - EXIT RAMP	24.5	1231.32
6003+45.22	6011+78.42	EXIT 277 LT. MAIN LANES - ACCELERATION LANE & TAPER	VAR.	1064.08
6011+78.42	6017+28.42	EXIT 277 RAMP 4 - ENTRANCE RAMP	15.5	947.22
6015+66.25	6020+24.69	BRIDGE NUMBER 03123	28	1426.26
TOTAL:				456464.69

NOTE: AVERAGE MILLING DEPTH 4".
NOTE: NO DIRECT PAYMENT WILL BE MADE FOR REMOVAL AND DISPOSAL OF PLOWABLE PAVEMENT MARKERS, BUT REMOVAL AND DISPOSAL OF ANY PLOWABLE PAVEMENT MARKERS WILL BE CONSIDERED INCLUDED IN THE PRICE BID FOR COLD MILLING ASPHALT PAVEMENT.

REMOVAL AND DISPOSAL OF ITEMS

STATION	STATION	LOCATION	GUARDRAIL	APPROACH GUTTERS	APPROACH SLABS	CONCRETE MEDIAN BARRIER	IMPACT ATTENUATION BARRIER
			LIN. FT.	EACH	EACH	LIN. FT.	EACH
5386+45		C.L. OF I-40					2
5496+35		C.L. OF I-40					2
5823+00		C.L. OF I-40					2
5880+00		C.L. OF I-40					2
5897+75		RT. OF E.B. CD ROAD					
5897+85.45	5901+27.60	RIGHT OF RIGHT MAIN LANES				342.15	
5899+24.80	5902+49.80	LT. OF RT. MAIN LANES	325				
5900+05.40	5902+55.40	LEFT OF LEFT MAIN LANES				250.00	
5902+10		I-40 E.B. ON RIGHT		1			
5902+32		I-40 E.B. MAIN LANES			1		
5902+50		I-40 E.B. ON LEFT		1			
5902+98		I-40 W.B. ON RIGHT		1			
5903+16		I-40 W.B. MAIN LANES			1		
5903+38		I-40 W.B. ON LEFT		1			
5903+60		I-40 E.B. ON RIGHT		1			
5903+82		I-40 E.B. MAIN LANES			1		
5904+00		I-40 E.B. ON LEFT		1			
5904+41.50	5908+88.59	RIGHT OF RIGHT MAIN LANES				447.09	
5904+48.11	5907+73.11	RT. OF LT. MAIN LANES	325				
5904+48		I-40 W.B. ON RIGHT		1			
5904+66		I-40 W.B. MAIN LANES			1		
5904+88		I-40 W.B. ON LEFT		1			
5905+69.50	5913+66.37	LEFT OF LEFT MAIN LANES				796.87	
5920+26.57	5920+51.57	LT. OF RT. MAIN LANES	25				
5922+00		C.L. OF I-40					2
5961+65.91	5964+90.91	LT. OF RT. MAIN LANES	325				
5962+55.88	5965+30.88	RT. OF RT. MAIN LANES	275				
5964+03		I-40 W.B. ON LEFT		1			
5964+23		I-40 W.B. MAIN LANES			1		
5964+43		I-40 W.B. ON RIGHT		1			
5964+91		I-40 E.B. ON LEFT		1			
5965+11		I-40 E.B. MAIN LANES			1		
5965+31		I-40 E.B. ON RIGHT		1			
5965+52.96	5968+27.96	LT. OF LT. MAIN LANES	275				
5965+53		I-40 W.B. ON LEFT		1			
5965+73		I-40 W.B. MAIN LANES			1		
5965+92.96	5969+17.96	RT. OF LT. MAIN LANES	325				
5965+93		I-40 W.B. ON RIGHT		1			
5966+41		I-40 E.B. ON LEFT		1			
5966+61		I-40 E.B. MAIN LANES			1		
5966+81		I-40 E.B. ON RIGHT		1			
TOTALS:			1875	16	8	1836.11	10

NOTE: THE QUANTITY SHOWN ABOVE FOR THE REMOVAL OF GUARDRAIL SHALL INCLUDE THE REMOVAL AND DISPOSAL OF GUARDRAIL TERMINAL POSTS.

REMOVAL OF RUMBLE STRIP

STATION	STATION	LOCATION	RUMBLE STRIP
			LIN. FT.
5887+14	5891+76	LT. OF RT. MAIN LANES	462
5913+60	5918+22	LT. OF RT. MAIN LANES	462
5948+76	5953+38	LT. OF RT. MAIN LANES	462
5975+19	5979+81	LT. OF RT. MAIN LANES	462
5887+14	5891+76	RT. OF LT. MAIN LANES	462
5913+60	5918+22	RT. OF LT. MAIN LANES	462
5948+76	5953+38	RT. OF LT. MAIN LANES	462
5975+19	5979+81	RT. OF LT. MAIN LANES	462
TOTAL:			3696

EARTHWORK

STATION	STATION	LOCATION / DESCRIPTION	UNCLASSIFIED EXCAVATION	COMPACTED EMBANKMENT	COMPACTED EMBANKMENT (SPECIAL)	* SOIL STABILIZATION
			CU. YD.			TON
5384+64	5390+65	LT. OF RT. MAIN LANES SHLDR. WIDENING FOR GUARDRAIL AT HWY. 79 OVERPASS	119			
5382+29	5388+30	RT. OF LT. MAIN LANES SHLDR. WIDENING FOR GUARDRAIL AT HWY. 79 OVERPASS	119			
5492+03	5498+04	LT. OF RT. MAIN LANES SHLDR. WIDENING FOR GUARDRAIL AT O' NEAL RD. OVERPASS	119			
5494+68	5500+69	RT. OF LT. MAIN LANES SHLDR. WIDENING FOR GUARDRAIL AT O' NEAL RD. OVERPASS	119			
5549+30		MEDIAN CROSSOVER	15	100		
5818+73	5824+74	LT. OF RT. MAIN LANES SHLDR. WIDENING FOR GUARDRAIL AT KUHN RD. OVERPASS	119			
5821+30	5827+31	RT. OF LT. MAIN LANES SHLDR. WIDENING FOR GUARDRAIL AT KUHN RD. OVERPASS	119			
5875+58	5881+59	LT. OF RT. MAIN LANES SHLDR. WIDENING FOR GUARDRAIL AT MASNER RD. OVERPASS	119			
5878+16	5884+17	RT. OF LT. MAIN LANES SHLDR. WIDENING FOR GUARDRAIL AT MASNER RD. OVERPASS	119			
5920+12	5926+13	RT. OF LT. MAIN LANES SHLDR. WIDENING FOR GUARDRAIL AT HWY. 118 OVERPASS	119			
5891+64	5913+33	FIFTEEN MILE BAYOU LANE RECONSTRUCTION	1000	4500		
5953+58	5975+27	TEN MILE BAYOU LANE RECONSTRUCTION	1000	4800		
5887+11	5918+24	FIFTEEN MILE BAYOU DETOUR ROAD		7321		
5887+11	5918+24	OBLITERATION OF FIFTEEN MILE BAYOU DETOUR ROAD	15482			
5948+74	5979+82	TEN MILE BAYOU DETOUR ROAD		6989		
5948+74	5979+82	OBLITERATION OF TEN MILE BAYOU DETOUR ROAD	15137			
5901+11	5905+93	FIFTEEN MILE BAYOU EMBANKMENT			5741	
5962+88	5968+02	TEN MILE BAYOU EMBANKMENT			7040	
5963+00	5967+00	EXCAVATION OF EXISTING APPROACH EMBANKMENT	2200			
* ENTIRE	PROJECT	TO BE USED IF AND WHERE	200	200		200
		DIRECTED BY THE ENGINEER				
TOTALS:			36105	23910	12781	200

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

7/14/2015
RBB0107.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
7-13-15				6	ARK.			
				JOB NO.		BB0107	82	263

(2) QUANTITIES

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
7-15-15

SELECTED PIPE BEDDING

LOCATION	SELECTED PIPE BEDDING
	CU.YD.
ENTIRE PROJECT TO BE USED IF	
AND WHERE DIRECTED BY THE	5
ENGINEER	
TOTAL:	5

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

ACHM PATCHING OF EXISTING ROADWAY

DESCRIPTION	TON
ENTIRE PROJECT - TO BE USED IF AND WHERE	200
DIRECTED BY THE ENGINEER	
TOTAL:	200

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

ASPHALT CONCRETE PATCHING FOR MAINTENANCE OF TRAFFIC

LOCATION	TON	TACK COAT
		GALLON
ENTIRE PROJECT - TO BE USED IF AND WHERE	300	600
DIRECTED BY THE ENGINEER		
TOTALS:	300	600

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

AUTOMATED WORK ZONE INFORMATION SYSTEM

LOCATION	AWIS MOBILIZATION	AWIS OPERATION	DEVICE RELOCATION	FURNISH AND INSTALL			
				CLOSED CIRCUIT TELEVISION SYSTEM	PUBLIC NOTIFICATION SYSTEM	VARIABLE MESSAGE SIGN	VEHICLE DETECTION SYSTEM
	LUMP SUM	MONTH	EACH	EACH			
ENTIRE PROJECT	1.00	25	25	1	2	6	55
TOTALS:	1.00	25	25	1	2	6	55

THE DEVICES NEEDED FOR THE AWIS SYSTEM ARE ESTIMATED BASED ON THE FOLLOWING CRITERIA:
VEHICLE DETECTION SYSTEM - EASTBOUND: 1/2 MILE SPACING FOR 6 MILES IN ADVANCE OF THE PROJECT. 1 MILE SPACING IN THE WORK ZONE.
WESTBOUND: 1/2 MILE SPACING STARTING AT THE MLK EXITS ON I-40 AND NB I-55, THE HWY. 64 EXIT ON SB I-55 AND CONTINUING FOR 2 MILES INSIDE THE WORK ZONE.
VARIABLE MESSAGE SIGN - ONE IN ADVANCE OF EACH OF THE FOLLOWING:
EASTBOUND: EARLE (EXIT 250), PARKIN (EXIT 256)
WESTBOUND: MLK (I-40 EXIT 280), MLB (I-55 EXIT 3B), 7TH ST./MISSOURI ST. (I-40 EXIT 278)
SOUTHBOUND I-55: MARION (EXIT 10)
PUBLIC NOTIFICATION SYSTEM - ONE AT THE I-55 WB WEIGH STATION AND ONE AT THE EARLE INTERCHANGE.
CLOSED CIRCUIT TELEVISION SYSTEM - ONE AT THE BEGINNING OF THE PROJECT.

APPROACH GUTTERS AND SLABS

STATION	STATION	LOCATION	APPROACH GUTTER (TYPE 1 SPECIAL)	APPROACH GUTTER (TYPE 2 SPECIAL)	APPROACH SLABS (TYPE SPECIAL)	REINFORCING STEEL-RDWY. (GR. 60)	EPOXY COATED REINFORCING STEEL	AGGREGATE BASE CRS. (CLASS 7)
			CU. YD.	CU. YD.	CU.YD.	POUND	POUND	TON
5901+27.50	5902+00.50	RT. SIDE	40.55			5080		
5901+78.00	5903+08.50	I-40 MAIN LANES			253.70	31173	887	223.75
5902+55.50	5903+18.50	LT. SIDE	40.55			5080		
5903+78.50	5904+41.50	RT. SIDE	40.55			5080		
5903+88.50	5905+19.00	I-40 MAIN LANES			253.70	31173	887	223.75
5904+96.50	5905+69.50	LT. SIDE	40.55			5080		
5963+49.00	5963+94.00	LT. SIDE		17.70		1035		
5963+71.50	5965+02.00	I-40 MAIN LANES			253.70	31173	887	223.75
5964+77.00	5965+12.00	RT. SIDE		17.70		1035		
5965+72.00	5966+07.00	LT. SIDE		17.70		1035		
5965+82.00	5967+12.50	I-40 MAIN LANES			253.70	31173	887	223.75
5966+90.00	5967+35.00	RT. SIDE		17.70		1035		
TOTALS:			162.20	70.80	1014.80	149152	3548	895.00

STRUCTURES

STATION	DESCRIPTION	REINFORCED CONCRETE PIPE CULVERT (CLASS IV)	SAFETY END SECTIONS FOR CROSS DRAIN PIPE CULVERTS (CLASS 2)	TEMPORARY CULVERTS	MODIFYING DROP INLETS	STD. DWG. NOS.
		24"	24"	24"		
		LIN. FT.	EACH	LIN. FT.	EACH	
5549+30	MEDIAN CROSSING	42	2			PCC-1, SES-1
5897+74	MODIFY TYPE RM D.I.				1	FPC-9D
5897+97	MODIFY TYPE ST D.I.				1	FPC-9S
5898+52	MODIFY TYPE ST D.I.				1	FPC-9S
5899+97	MODIFY TYPE ST D.I.				1	FPC-9S
5900+26	MODIFY TYPE ST D.I.				1	FPC-9S
5902+33	MODIFY TYPE ST D.I.				1	FPC-9S
5904+13	MODIFY TYPE ST D.I.				1	FPC-9S
5906+19	MODIFY TYPE ST D.I.				1	FPC-9S
5906+65	MODIFY TYPE ST D.I.				1	FPC-9S
5908+00	MODIFY TYPE ST D.I.				1	FPC-9S
5908+58	MODIFY TYPE ST D.I.				1	FPC-9S
5910+50	MODIFY TYPE ST D.I.				1	FPC-9S
5914+20	MODIFY TYPE ST D.I.				1	FPC-9S
5914+91	MODIFY TYPE ST D.I.				1	FPC-9S
5915+57	MODIFY TYPE ST D.I.				1	FPC-9S
5918+06	MODIFY TYPE ST D.I.				1	FPC-9S
5920+82	MODIFY TYPE ST D.I.				1	FPC-9S
5923+86	MODIFY TYPE ST D.I.				1	FPC-9S
5890+36	TEMPORARY PIPE CULVERT FOR MAINTENANCE OF TRAFFIC (STAGE 1 & 2)			400		
5914+92	TEMPORARY PIPE CULVERT FOR MAINTENANCE OF TRAFFIC (STAGE 1 & 2)			400		
5952+01	TEMPORARY PIPE CULVERT FOR MAINTENANCE OF TRAFFIC (STAGE 1 & 2)			360		
5976+39	TEMPORARY PIPE CULVERT FOR MAINTENANCE OF TRAFFIC (STAGE 1 & 2)			400		
5891+48	TEMPORARY PIPE CULVERT FOR MAINTENANCE OF TRAFFIC (STAGE 3)			600		
5915+15	TEMPORARY PIPE CULVERT FOR MAINTENANCE OF TRAFFIC (STAGE 3)			400		
5952+09	TEMPORARY PIPE CULVERT FOR MAINTENANCE OF TRAFFIC (STAGE 3)			380		
5976+46	TEMPORARY PIPE CULVERT FOR MAINTENANCE OF TRAFFIC (STAGE 3)			400		
TOTALS:		42	2	3340	18	

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.

CONCRETE DITCH PAVING (WIRE ROPE SAFETY FENCE)

STATION	STATION	LOCATION	LENGTH	"W"	CONC. DITCH PAVING (TYPE B)	SOLID SODDING	WATER
			LIN. FT.	FEET	SQ. YD.	SQ. YD.	M. GAL.
5387+91	5414+01	LEFT OF RIGHT MAIN LANES	2610.00	4	1160.00	1160.00	14.62
5417+79	5466+63	LEFT OF RIGHT MAIN LANES	4884.00	4	2170.67	2170.67	27.35
5470+45	5492+42	LEFT OF RIGHT MAIN LANES	2197.00	4	976.44	976.44	12.30
5500+31	5521+53	RIGHT OF LEFT MAIN LANES	2122.00	4	943.11	943.11	11.88
5522+59	5572+82	LEFT OF RIGHT MAIN LANES	5023.00	4	2232.44	2232.44	28.13
5576+52	5599+31	LEFT OF RIGHT MAIN LANES	2279.00	4	1012.89	1012.89	12.76
5605+92	5628+18	RIGHT OF LEFT MAIN LANES	2226.00	4	989.33	989.33	12.47
5631+71	5681+74	RIGHT OF LEFT MAIN LANES	5003.00	4	2223.56	2223.56	28.02
5682+60	5705+00	LEFT OF RIGHT MAIN LANES	2240.00	4	995.56	995.56	12.54
5712+75	5740+38	RIGHT OF LEFT MAIN LANES	2763.00	4	1228.00	1228.00	15.47
5743+91	5794+12	RIGHT OF LEFT MAIN LANES	5021.00	4	2231.56	2231.56	28.12
5794+81	5805+86	LEFT OF RIGHT MAIN LANES	1105.00	4	491.11	491.11	6.19
5806+26	5822+38	RIGHT OF LEFT MAIN LANES	1612.00	4	716.44	716.44	9.03
5823+66	5847+33	LEFT OF RIGHT MAIN LANES	2367.00	4	1052.00	1052.00	13.26
5854+58	5878+54	RIGHT OF LEFT MAIN LANES	2396.00	4	1064.89	1064.89	13.42
5880+51	5901+68	LEFT OF RIGHT MAIN LANES	2117.00	4	940.89	940.89	11.86
5905+29	5921+20	RIGHT OF LEFT MAIN LANES	1591.00	4	707.11	707.11	8.91
5922+53	5963+98	LEFT OF RIGHT MAIN LANES	4145.00	4	1842.22	1842.22	23.21
5966+88	5999+58	RIGHT OF LEFT MAIN LANES	3270.00	4	1453.33	1453.33	18.31
TOTALS:					24431.55	24431.55	307.85

BASIS OF ESTIMATE:
WATER.....12.6 GAL. / SQ. YD. OF SOLID SODDING.

7/14/2015
RBB0107.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	83	263

(2) QUANTITIES

GUARDRAIL

STATION	STATION	LOCATION	GUARDRAIL (TYPE A)	THRIE BEAM GUARDRAIL TERMINAL	GUARDRAIL TERMINAL (TYPE 2)	TERMINAL ANCHOR POSTS (TYPE 1)
			LIN. FT.	EACH		
5382+72.14	5387+72.14	LT. OF RT. MAIN LANES	450		1	1
5385+22.14	5390+22.14	RT. OF LT. MAIN LANES	450		1	1
5492+61.21	5497+61.21	LT. OF RT. MAIN LANES	450		1	1
5495+11.22	5500+11.22	RT. OF LT. MAIN LANES	450		1	1
5819+15.88	5824+15.88	LT. OF RT. MAIN LANES	450		1	1
5821+88.30	5826+88.30	RT. OF LT. MAIN LANES	450		1	1
5876+00.83	5881+00.83	LT. OF RT. MAIN LANES	450		1	1
5878+73.67	5883+73.67	RT. OF LT. MAIN LANES	450		1	1
5920+26.57	5923+06.57	LT. OF RT. MAIN LANES	280			1
5920+69.86	5925+69.86	RT. OF LT. MAIN LANES	450		1	1
5962+42.25	5965+12.00	RT. OF RT. MAIN LANES	200	1	1	
5965+72.00	5968+41.75	LT. OF LT. MAIN LANES	200	1	1	
TOTALS:			4730	2	11	10

WIRE ROPE SAFETY FENCE

STATION	STATION	LOCATION	WIRE ROPE SAFETY FENCE	*WRSF ANCHOR	WRSF MAINTENANCE MATERIALS	**WRSF POST REPAIR
			LIN. FT.	EACH	LUMP SUM	EACH
5387+22	5414+01	LEFT OF RIGHT MAIN LANES	2679	2		
5417+79	5466+63	LEFT OF RIGHT MAIN LANES	4884	2		
5470+45	5493+11	LEFT OF RIGHT MAIN LANES	2266	2		
5499+61	5521+53	RIGHT OF LEFT MAIN LANES	2192	2		
5522+59	5572+82	LEFT OF RIGHT MAIN LANES	5023	2		
5576+52	5599+31	LEFT OF RIGHT MAIN LANES	2279	2		
5605+92	5628+18	RIGHT OF LEFT MAIN LANES	2226	2		
5631+71	5681+74	RIGHT OF LEFT MAIN LANES	5003	2		
5682+61	5705+00	LEFT OF RIGHT MAIN LANES	2239	2		
5712+75	5740+38	RIGHT OF LEFT MAIN LANES	2763	2		
5743+91	5794+12	RIGHT OF LEFT MAIN LANES	5021	2		
5794+81	5805+86	LEFT OF RIGHT MAIN LANES	1105	2		
5806+26	5822+38	RIGHT OF LEFT MAIN LANES	1612	2		
5823+66	5847+33	LEFT OF RIGHT MAIN LANES	2367	2		
5854+58	5879+24	RIGHT OF LEFT MAIN LANES	2466	2		
5880+51	5901+68	LEFT OF RIGHT MAIN LANES	2117	2		
5905+29	5921+20	RIGHT OF LEFT MAIN LANES	1591	2		
5922+53	5963+98	LEFT OF RIGHT MAIN LANES	4145	2		
5966+88	5999+58	RIGHT OF LEFT MAIN LANES	3270	2		
ENTIRE	PROJECT				1.00	50
TOTALS:			55248	38	1.00	50

SHOWN FOR INFORMATION ONLY.
QUANTITY ESTIMATED.
SEE SECTION 104.03 OF THE STD. SPECS.

BENCH MARKS

STATION	LOCATION	BENCH MARKS
		EACH
5902+55	C.L. I-40	1
5964+48	C.L. I-40	1
TOTAL:		2

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

CONCRETE BARRIER WALL

STATION	STATION	LOCATION	SIDE TYPE A	MEDIAN TYPE SP-1
			LIN. FT.	LIN. FT.
5897+85.45	5901+27.60	RIGHT OF RIGHT MAIN LANES	342.15	
5900+05.40	5902+55.40	LEFT OF LEFT MAIN LANES	250.00	
5904+41.50	5908+88.59	RIGHT OF RIGHT MAIN LANES	447.09	
5905+69.50	5913+66.37	LEFT OF LEFT MAIN LANES	796.87	
6043+66.00	6044+84.00	I-40 C.L.		118.00
TOTALS:			1836.11	118.00

CRASH CUSHION

STATION	LOCATION	CRASH CUSHION
		EACH
5897+74.91	RT. OF E.B. CD ROAD	1
TOTAL:		1

NOTE: THE CRASH CUSHION SHALL BE NON-GATING AND REDIRECTIVE AND COMPATIBLE WITH THE SITE GEOMETRY SHOWN ON THE PLANS.

FLUSHING UNDERDRAIN

STA.	STA.	LOCATION	LIN. FT.
5359+48	5416+50	LT. MAIN LANES	5702
5418+06	5469+12	LT. MAIN LANES	5106
5470+68	5521+27	LT. MAIN LANES	5059
5522+83	5575+24	LT. MAIN LANES	5241
5576+80	5601+68	LT. MAIN LANES	2488
5603+61	5627+93	LT. MAIN LANES	2432
5629+33	5681+48	LT. MAIN LANES	5215
5682+88	5707+41	LT. MAIN LANES	2453
5710+37	5740+12	LT. MAIN LANES	2975
5741+52	5793+93	LT. MAIN LANES	5241
5794+84	5851+00	LT. MAIN LANES	5616
5852+31	5902+82	LT. MAIN LANES	5051
5905+05	5963+87	LT. MAIN LANES	5882
5966+10	6045+05	LT. MAIN LANES	7895
5359+48	5416+50	RT. MAIN LANES	5702
5418+06	5469+16	RT. MAIN LANES	5110
5470+72	5521+30	RT. MAIN LANES	5058
5522+86	5575+27	RT. MAIN LANES	5241
5576+83	5601+72	RT. MAIN LANES	2489
5603+65	5627+93	RT. MAIN LANES	2428
5629+33	5681+48	RT. MAIN LANES	5215
5682+88	5707+41	RT. MAIN LANES	2453
5710+37	5740+12	RT. MAIN LANES	2975
5741+52	5793+61	RT. MAIN LANES	5209
5795+01	5850+65	RT. MAIN LANES	5564
5851+95	5901+94	RT. MAIN LANES	4999
5904+17	5964+75	RT. MAIN LANES	6058
5966+98	6045+05	RT. MAIN LANES	7807
TOTAL:			132664

EROSION CONTROL

STATION	STATION	LOCATION	PERMANENT EROSION CONTROL					TEMPORARY EROSION CONTROL								
			SEEDING	LIME	MULCH COVER	WATER	SECOND SEEDING APPLICATION	TEMPORARY SEEDING	MULCH COVER	WATER	WATTLE (20") DITCH CHECKS (E-1)	SAND BAG DITCH CHECKS (E-5)	DROP INLET SILT FENCE (E-7)	TRIANGULAR SILT DIKE	SILT FENCE (E-11)	*SEDIMENT REMOVAL & DISPOSAL
			ACRE	TON	ACRE	M.GAL.	ACRE	ACRE	ACRE	M.GAL.	LIN. FT.	BAG	LIN. FT.	LIN. FT.	LIN. FT.	CU. YD.
ENTIRE	PROJECT	WIRE ROPE SAFETY FENCE OPERATIONS	12.68	25.36	12.68	1293.4	12.68					2002	1675			153
ENTIRE	PROJECT	STAGE 1						3.71	3.71	75.7		880				40
ENTIRE	PROJECT	STAGE 2						0.45	0.45	9.2		198				9
ENTIRE	PROJECT	STAGE 3						1.90	1.90	38.8		242				
ENTIRE	PROJECT	STAGE 4	8.38	16.76	8.38	854.8	8.38									11
*ENTIRE PROJECT TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER.			5.27	10.54	5.27	537.5	5.27	1.52	1.52	31.0	501	501	419	1000	500	100
TOTALS:			26.33	52.66	26.33	2685.7	26.33	7.58	7.58	154.7	501	3823	2094	1000	500	313

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
WATTLE DITCH CHECKS.....9 LIN. FT. / LOCATION
SAND BAG DITCH CHECKS.....22 BAGS / LOCATION

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

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

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15

6/19/2015

RBB0107.DGN

QUANTITIES

RUMBLE STRIPS IN ASPHALT SHOULDERS

STATION	STATION	LOCATION	* RUMBLE STRIPS IN ASPHALT SHOULDERS
			LIN.FT.
5359+48	5376+58	RT. OF RT. MAIN LANES	1710
5376+60	5394+93	RT. OF RT. MAIN LANES	1833
5394+96	5416+50	RT. OF RT. MAIN LANES	2154
5418+05	5469+16	RT. OF RT. MAIN LANES	5111
5470+71	5521+30	RT. OF RT. MAIN LANES	5059
5522+85	5575+27	RT. OF RT. MAIN LANES	5242
5576+82	5601+71	RT. OF RT. MAIN LANES	2489
5603+65	5627+92	RT. OF RT. MAIN LANES	2427
5629+32	5681+48	RT. OF RT. MAIN LANES	5216
5682+88	5694+50	RT. OF RT. MAIN LANES	1162
5694+52	5707+41	RT. OF RT. MAIN LANES	1289
5710+36	5725+02	RT. OF RT. MAIN LANES	1466
5725+03	5740+11	RT. OF RT. MAIN LANES	1508
5741+52	5793+57	RT. OF RT. MAIN LANES	5205
5794+97	5825+36	RT. OF RT. MAIN LANES	3039
5825+38	5841+90	RT. OF RT. MAIN LANES	1652
5841+93	5850+61	RT. OF RT. MAIN LANES	868
5851+91	5894+42	RT. OF RT. MAIN LANES	4251
5894+44	5901+28	RT. OF RT. MAIN LANES	684
5904+38	5925+15	RT. OF RT. MAIN LANES	2077
5925+15	5951+52	RT. OF RT. MAIN LANES	2637
5951+52	5964+77	RT. OF RT. MAIN LANES	1325
5967+35	5981+48	RT. OF RT. MAIN LANES	1413
5981+50	5999+44	RT. OF RT. MAIN LANES	1794
5999+46	6042+86	RT. OF RT. MAIN LANES	4340
6042+87	6045+04	RT. OF RT. MAIN LANES	217
5359+48	5379+48	LT. OF LT. MAIN LANES	2000
5379+50	5395+28	LT. OF LT. MAIN LANES	1578
5395+31	5416+50	LT. OF LT. MAIN LANES	2119
5418+05	5469+12	LT. OF LT. MAIN LANES	5107
5470+67	5521+27	LT. OF LT. MAIN LANES	5060
5522+82	5575+24	LT. OF LT. MAIN LANES	5242
5576+79	5601+67	LT. OF LT. MAIN LANES	2488
5603+61	5627+92	LT. OF LT. MAIN LANES	2431
5629+32	5681+48	LT. OF LT. MAIN LANES	5216
5682+88	5692+92	LT. OF LT. MAIN LANES	1004
5692+93	5707+41	LT. OF LT. MAIN LANES	1448
5710+36	5723+88	LT. OF LT. MAIN LANES	1352
5723+90	5740+12	LT. OF LT. MAIN LANES	1622
5741+52	5793+96	LT. OF LT. MAIN LANES	5244
5795+37	5833+03	LT. OF LT. MAIN LANES	3766
5833+05	5849+73	LT. OF LT. MAIN LANES	1668
5849+73	5851+08	LT. OF LT. MAIN LANES	135
5852+38	5861+83	LT. OF LT. MAIN LANES	945
5861+87	5877+02	LT. OF LT. MAIN LANES	1515
5877+05	5896+47	LT. OF LT. MAIN LANES	1942
5896+47	5902+55	LT. OF LT. MAIN LANES	608
5905+65	5947+27	LT. OF LT. MAIN LANES	4162
5947+28	5963+49	LT. OF LT. MAIN LANES	1621
5966+07	6011+77	LT. OF LT. MAIN LANES	4570
6011+79	6031+12	LT. OF LT. MAIN LANES	1933
6031+16	6045+04	LT. OF LT. MAIN LANES	1388
5359+48	5416+50	LT. OF RT. MAIN LANES	5702
5418+05	5469+16	LT. OF RT. MAIN LANES	5111
5470+71	5521+30	LT. OF RT. MAIN LANES	5059
5522+85	5575+26	LT. OF RT. MAIN LANES	5241
5576+82	5601+71	LT. OF RT. MAIN LANES	2489
5603+65	5627+92	LT. OF RT. MAIN LANES	2427
5629+32	5681+48	LT. OF RT. MAIN LANES	5216
5682+88	5707+41	LT. OF RT. MAIN LANES	2453
5710+36	5740+12	LT. OF RT. MAIN LANES	2976
5741+52	5793+65	LT. OF RT. MAIN LANES	5213
5795+05	5850+69	LT. OF RT. MAIN LANES	5564
5851+99	5901+78	LT. OF RT. MAIN LANES	4979
5904+47	5964+44	LT. OF RT. MAIN LANES	5997
5967+13	6045+04	LT. OF RT. MAIN LANES	7791
5359+48	5416+50	RT. OF LT. MAIN LANES	5702
5418+05	5469+12	RT. OF LT. MAIN LANES	5107
5470+67	5521+27	RT. OF LT. MAIN LANES	5060
5522+82	5575+24	RT. OF LT. MAIN LANES	5242
5576+79	5601+67	RT. OF LT. MAIN LANES	2488
5603+61	5627+92	RT. OF LT. MAIN LANES	2431
5629+32	5681+48	RT. OF LT. MAIN LANES	5216
5682+88	5707+41	RT. OF LT. MAIN LANES	2453
5710+36	5740+12	RT. OF LT. MAIN LANES	2976
5741+52	5793+88	RT. OF LT. MAIN LANES	5236
5795+28	5850+94	RT. OF LT. MAIN LANES	5566
5852+25	5902+50	RT. OF LT. MAIN LANES	5025
5905+19	5963+72	RT. OF LT. MAIN LANES	5853
5966+40	6045+04	RT. OF LT. MAIN LANES	7864
TOTAL:			264769

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

QUANTITIES

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11,425
TIMOTHY D. SMITH
6-22-15

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.	BB0107	84	263

(2) QUANTITIES
JOB NO.

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	85	263

(2) QUANTITIES

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15

BASE AND SURFACING (BOX 1 OF 2)

STATION	STATION	LOCATION	LENGTH	TACK COAT				ACHM SURFACE COURSE (1/2")			
				AVG. WID.	SQ.YD.	GALLONS / SQ.YD.	GALLON	AVG. WID.	SQ.YD.	POUND / SQ.YD.	PG 76-22
			FEET	FEET				FEET			TON
MAIN LANES - MILL AND INLAY											
5359+48.40	5416+49.93	RT. MAIN LANES	5701.53	60.00	38010.20	0.10	3801.02	30.00	19005.10	440.00	4181.12
5418+05.04	5469+15.93	RT. MAIN LANES	5110.89	60.00	34072.60	0.10	3407.26	30.00	17036.30	440.00	3747.99
5470+71.04	5521+29.93	RT. MAIN LANES	5058.89	60.00	33725.93	0.10	3372.59	30.00	16862.97	440.00	3709.85
5522+85.04	5575+26.93	RT. MAIN LANES	5241.89	60.00	34945.93	0.10	3494.59	30.00	17472.97	440.00	3844.05
5576+82.04	5601+71.32	RT. MAIN LANES	2489.28	60.00	16595.20	0.10	1659.52	30.00	8297.60	440.00	1825.47
5603+64.50	5627+92.05	RT. MAIN LANES	2427.55	60.00	16183.67	0.10	1618.37	30.00	8091.83	440.00	1780.20
5629+32.16	5681+47.78	RT. MAIN LANES	5215.62	60.00	34770.80	0.10	3477.08	30.00	17385.40	440.00	3824.79
5682+87.89	5707+40.96	RT. MAIN LANES	2453.07	60.00	16353.80	0.10	1635.38	30.00	8176.90	440.00	1798.92
5710+36.13	5740+11.80	RT. MAIN LANES	2975.67	60.00	19837.80	0.10	1983.78	30.00	9918.90	440.00	2182.16
5741+51.91	5793+60.06	RT. MAIN LANES	5208.15	60.00	34721.00	0.10	3472.10	30.00	17360.50	440.00	3819.31
5795+00.31	5850+64.21	RT. MAIN LANES	5563.90	60.00	37092.67	0.10	3709.27	30.00	18546.33	440.00	4080.19
5851+94.44	5891+64.00	RT. MAIN LANES	3969.56	60.00	26463.73	0.10	2646.37	30.00	13231.87	440.00	2911.01
5913+33.00	5953+57.50	RT. MAIN LANES	4024.50	60.00	26830.00	0.10	2683.00	30.00	13415.00	440.00	2951.30
5975+26.50	6032+00.48	RT. MAIN LANES	5673.98	60.00	37826.53	0.10	3782.65	30.00	18913.27	440.00	4160.92
6032+00.48	6039+49.38	RT. MAIN LANES	748.90	VAR.	3956.96	0.10	395.70	VAR.	1978.48	440.00	435.27
6039+49.38	6045+04.19	RT. MAIN LANES	554.81	36.00	2219.24	0.10	221.92	18.00	1109.62	440.00	244.12
5359+48.40	5416+49.93	LT. MAIN LANES	5701.53	60.00	38010.20	0.10	3801.02	30.00	19005.10	440.00	4181.12
5418+05.04	5469+11.93	LT. MAIN LANES	5106.89	60.00	34045.93	0.10	3404.59	30.00	17022.97	440.00	3745.05
5470+67.04	5521+26.93	LT. MAIN LANES	5059.89	60.00	33732.60	0.10	3373.26	30.00	16866.30	440.00	3710.59
5522+82.04	5575+23.93	LT. MAIN LANES	5241.89	60.00	34945.93	0.10	3494.59	30.00	17472.97	440.00	3844.05
5576+79.04	5601+67.49	LT. MAIN LANES	2488.45	60.00	16589.67	0.10	1658.97	30.00	8294.83	440.00	1824.86
5603+60.67	5627+92.05	LT. MAIN LANES	2431.38	60.00	16209.20	0.10	1620.92	30.00	8104.60	440.00	1783.01
5629+32.16	5681+47.78	LT. MAIN LANES	5215.62	60.00	34770.80	0.10	3477.08	30.00	17385.40	440.00	3824.79
5682+87.89	5707+40.96	LT. MAIN LANES	2453.07	60.00	16353.80	0.10	1635.38	30.00	8176.90	440.00	1798.92
5710+36.13	5740+11.80	LT. MAIN LANES	2975.67	60.00	19837.80	0.10	1983.78	30.00	9918.90	440.00	2182.16
5741+51.91	5793+92.92	LT. MAIN LANES	5241.01	60.00	34940.07	0.10	3494.01	30.00	17470.03	440.00	3843.41
5795+33.17	5850+99.84	LT. MAIN LANES	5566.67	60.00	37111.13	0.10	3711.11	30.00	18555.57	440.00	4082.23
5852+30.07	5891+64.00	LT. MAIN LANES	3933.93	60.00	26226.20	0.10	2622.62	30.00	13113.10	440.00	2884.88
5913+33.00	5953+57.50	LT. MAIN LANES	4024.50	60.00	26830.00	0.10	2683.00	30.00	13415.00	440.00	2951.30
5975+26.50	6045+04.19	LT. MAIN LANES	6977.69	60.00	46517.93	0.10	4651.79	30.00	23258.97	440.00	5116.97
ADDITIONAL FOR ENTRANCE AND EXIT RAMPS											
5374+22.32	5376+58.69	EXIT 265 RT. MAIN LANES - TURN OUT	236.37	VAR.	529.02	0.10	52.90	VAR.	264.51	440.00	58.19
5376+58.69	5382+08.69	EXIT 265 RAMP 1 - EXIT RAMP	550.00	31.00	1894.44	0.10	189.44	15.50	947.22	440.00	208.39
5394+94.40	5404+72.08	EXIT 265 RT. MAIN LANES - ACCELERATION LANE & TAPER	977.68	VAR.	2234.58	0.10	223.46	VAR.	1117.29	440.00	245.80
5389+44.40	5394+94.40	EXIT 265 RAMP 2 - ENTRANCE RAMP	550.00	31.00	1894.44	0.10	189.44	15.50	947.22	440.00	208.39
5395+29.79	5396+84.33	EXIT 265 LT. MAIN LANES - TURN OUT	154.54	VAR.	321.52	0.10	32.15	VAR.	160.76	440.00	35.37
5389+79.79	5395+29.79	EXIT 265 RAMP 3 - EXIT RAMP	550.00	31.00	1894.44	0.10	189.44	15.50	947.22	440.00	208.39
5369+53.47	5379+49.31	EXIT 265 LT. MAIN LANES - ACCELERATION LANE & TAPER	995.84	VAR.	2246.86	0.10	224.69	VAR.	1123.43	440.00	247.15
5379+49.31	5384+99.31	EXIT 265 RAMP 4 - ENTRANCE RAMP	550.00	31.00	1894.44	0.10	189.44	15.50	947.22	440.00	208.39
5692+94.90	5694+50.59	EXIT 271 RT. MAIN LANES - TURN OUT	155.69	VAR.	299.16	0.10	29.92	VAR.	149.58	440.00	32.91
5694+50.59	5700+00.59	EXIT 271 RAMP 1 - EXIT RAMP	550.00	31.00	1894.44	0.10	189.44	15.50	947.22	440.00	208.39
5725+02.49	5733+66.89	EXIT 271 RT. MAIN LANES - ACCELERATION LANE & TAPER	864.40	VAR.	2151.42	0.10	215.14	VAR.	1075.71	440.00	236.66
5721+52.49	5725+02.49	EXIT 271 RAMP 2 - ENTRANCE RAMP	350.00	31.00	1205.56	0.10	120.56	15.50	602.78	440.00	132.61
5723+89.12	5725+94.63	EXIT 271 LT. MAIN LANES - TURN OUT	205.51	VAR.	344.44	0.10	34.44	VAR.	172.22	440.00	37.89
5718+39.12	5723+89.12	EXIT 271 RAMP 3 - EXIT RAMP	550.00	31.00	1894.44	0.10	189.44	15.50	947.22	440.00	208.39
5683+02.31	5692+92.64	EXIT 271 LT. MAIN LANES - ACCELERATION LANE & TAPER	990.33	VAR.	2433.62	0.10	243.36	VAR.	1216.81	440.00	267.70
5692+92.64	5697+03.58	EXIT 271 RAMP 4 - ENTRANCE RAMP	410.94	31.00	1415.46	0.10	141.55	15.50	707.73	440.00	155.70
5800+13.48	5825+36.29	WEIGH STATION RT. MAIN LANES - TURN OUT	2522.81	VAR.	6514.90	0.10	651.49	VAR.	3257.45	440.00	716.64
5825+36.29	5827+58.06	WEIGH STATON RAMP 1 - EXIT RAMP	221.77	31.00	763.87	0.10	76.39	15.50	381.94	440.00	84.03
5841+91.14	5850+60.23	WEIGH STATION RT. MAIN LANES - ACCELERATION LANE & TAPER	869.09	VAR.	2051.22	0.10	205.12	VAR.	1025.61	440.00	225.63
5841+41.14	5841+91.14	WEIGH STATION RAMP 2 - ENTRANCE RAMP	50.00	VAR.	243.38	0.10	24.34	VAR.	121.69	440.00	26.77
5823+93.27	5833+03.87	WEIGH STATION LT. MAIN LANES - ACCELERATION LANE & TAPER	910.60	VAR.	2311.02	0.10	231.10	VAR.	1155.51	440.00	254.21
5833+03.87	5834+28.87	WEIGH STATION RAMP 1 - ENTRANCE RAMP	125.00	VAR.	502.36	0.10	50.24	VAR.	251.18	440.00	55.26
5849+72.87	5851+06.00	WEIGH STATION LT. MAIN LANES - TURN OUT	133.13	VAR.	466.02	0.10	46.60	VAR.	233.01	440.00	51.26
5847+72.87	5849+72.87	WEIGH STATION RAMP 2 - EXIT RAMP	200.00	31.00	688.89	0.10	68.89	15.50	344.44	440.00	75.78
5852+36.46	5861+84.67	WEIGH STATION LT. MAIN LANES - ACCELERATION LANE & TAPER	948.21	VAR.	2574.76	0.10	257.48	VAR.	1287.38	440.00	283.22
5861+84.67	5863+59.67	WEIGH STATION RAMP 1 - ENTRANCE RAMP	175.00	31.00	602.78	0.10	60.28	15.50	301.39	440.00	66.31
5877+04.08	5879+03.80	WEIGH STATION LT. MAIN LANES - TURN OUT	199.72	VAR.	450.22	0.10	45.02	VAR.	225.11	440.00	49.52
5874+04.08	5877+04.08	WEIGH STATION RAMP 2 - EXIT RAMP	300.00	31.00	1033.33	0.10	103.33	15.50	516.67	440.00	113.67
5892+35.00	5894+43.09	EXIT 275 RT. MAIN LANES - TURN OUT	208.09	VAR.	362.02	0.10	36.20	VAR.	181.01	440.00	39.82
5894+43.09	5901+25.43	EXIT 275 RAMP 1 - EXIT RAMP	682.34	31.00	2350.28	0.10	235.03	15.50	1175.14	440.00	258.53
5925+14.52	5935+31.92	EXIT 275 RT. MAIN LANES - ACCELERATION LANE & TAPER	1017.40	VAR.	2558.30	0.10	255.83	VAR.	1279.15	440.00	281.41
5919+64.52	5925+14.52	EXIT 275 RAMP 2 - ENTRANCE RAMP	550.00	31.00	1894.44	0.10	189.44	15.50	947.22	440.00	208.39
5951+51.74	5962+26.05	EXIT 275 RT. MAIN LANES - ACCELERATION LANE & TAPER	1074.31	VAR.	2574.32	0.10	257.43	VAR.	1287.16	440.00	283.18
5947+01.74	5951+51.74	EXIT 275 RAMP 2 - ENTRANCE RAMP	450.00	31.00	1550.00	0.10	155.00	15.50	775.00	440.00	170.50
5947+27.75	5950+70.61	EXIT 275 LT. MAIN LANES - TURN OUT	342.86	VAR.	726.42	0.10	72.64	VAR.	363.21	440.00	79.91
5941+77.75	5947+27.75	EXIT 275 RAMP 3 - EXIT RAMP	550.00	31.00	1894.44	0.10	189.44	15.50	947.22	440.00	208.39
5887+61.38	5896+47.35	EXIT 275 LT. MAIN LANES - ACCELERATION LANE & TAPER	885.97	VAR.	1938.42	0.10	193.84	VAR.	969.21	440.00	213.23
5896+47.35	5902+99.26	EXIT 275 RAMP 4 - ENTRANCE RAMP	651.91	31.00	2245.47	0.10	224.55	15.50	1122.73	440.00	247.00
5979+00.80	5981+48.94	EXIT 276 RT. MAIN LANES - TURN OUT	248.14	VAR.	425.10	0.10	42.51	VAR.	212.55	440.00	46.76
5981+48.94	5986+98.94	EXIT 276 RAMP 1 - EXIT RAMP	550.00	31.00	1894.44	0.10	189.44	15.50	947.22	440.00	208.39
5994+91.48	5999+45.08	EXIT 277 RT. MAIN LANES - TURN OUT	453.60	VAR.	621.30	0.10	62.13	VAR.	310.65	440.00	68.34
5999+45.08	6004+95.08	EXIT 277 RAMP 1 - EXIT RAMP	550.00	31.00	1894.44	0.10	189.44	15.50	947.22	440.00	208.39
6042+86.19	6045+04.19	EXIT 277 RT. MAIN LANES - ACCELERATION LANE & TAPER	218.00	VAR.	1207.00	0.10	120.70	VAR.	603.50	440.00	132.77
6037+36.19	6042+86.19	EXIT 277 RAMP 2 - ENTRANCE RAMP	550.00	49.00	2994.44	0.10	299.44	24.50	1497.22	440.00	329.39
6031+14.07	6045+04.19	EXIT 277 LT. MAIN LANES - TURN OUT	1390.12	VAR.	3982.40	0.10	398.24	VAR.	1991.20	440.00	438.06
6026+61.75	6031+14.07	EXIT 277 RAMP 3 - EXIT RAMP	452.32	49.00	2462.63	0.10	246.26	24.50	1231.32	440.00	270.89
6003+45.22	6011+78.42	EXIT 277 LT. MAIN LANES - ACCELERATION LANE & TAPER	833.20	VAR.	2128.16	0.10	212.82	VAR.	1064.08	440.00	234.10
6011+78.42	6017+28.42	EXIT 277 RAMP 4 - ENTRANCE RAMP	550.00	31.00	1894.44	0.10	189.44	15.50	947.22	440.00	208.39
SUBTOTALS:					**910076.81**		**91007.63**		**455038.43**		**100108.47**

BASIS OF ESTIMATE:
ACHM SURFACE COURSE (1/2").....94.9% MIN. AGGR.....5.1% ASPHALT BINDER
MAXIMUM NUMBER OF GYRATIONS = 205 FOR PG 76-22

6/18/2015

RBB0107.DGN

QUANTITIES

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	86	263

(2) QUANTITIES

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15

BASE AND SURFACING (BOX 2 OF 2)

STATION	STATION	LOCATION	LENGTH	AGGREGATE BASE COURSE (CLASS 7)		TACK COAT				ACHM BASE COURSE (1 1/2")				ACHM BINDER COURSE (1")				ACHM SURFACE COURSE (1/2")								
				TON / STATION	TON	AVG. WID.	SQ.YD.	GALLONS / SQ.YD.	GALLON	AVG. WID.	SQ.YD.	POUND / SQ.YD.	PG 76-22	AVG. WID.	SQ.YD.	POUND / SQ.YD.	PG 76-22	AVG. WID.	SQ.YD.	POUND / SQ.YD.	PG 76-22	AVG. WID.	SQ.YD.	POUND / SQ.YD.	PG 76-22	TOTAL PG 76-22
			FEET			FEET				FEET			TON	FEET			TON	FEET			TON	FEET			TON	TON
DETOUR ROADS & TEMPORARY RAMP																										
5887+11.14	5891+75.51	FIFTEEN MILE BAYOU DETOUR ROAD (STAGE 1)	464.37	VAR.	601.52	VAR.	1599.87	0.03	48.00	VAR.	539.47	550.00	148.35	VAR.	530.20	660.00	174.97					VAR.	608.66	220.00	66.95	66.95
5891+75.51	5902+14.00	FIFTEEN MILE BAYOU DETOUR ROAD (STAGE 1)	1038.49	307.00	3188.16	85.72	9891.04	0.03	296.73	28.88	3332.40	550.00	916.41	28.42	3279.32	660.00	1082.18					32.00	3692.41	220.00	406.17	406.17
5904+83.00	5913+59.61	FIFTEEN MILE BAYOU DETOUR ROAD (STAGE 1)	876.61	307.00	2691.19	85.72	8349.22	0.03	250.48	28.88	2812.94	550.00	773.56	28.42	2768.14	660.00	913.49					32.00	3116.84	220.00	342.85	342.85
5913+59.61	5918+24.33	FIFTEEN MILE BAYOU DETOUR ROAD (STAGE 1)	464.72	VAR.	601.85	VAR.	1601.27	0.03	48.04	VAR.	539.93	550.00	148.48	VAR.	530.67	660.00	175.12					VAR.	609.16	220.00	67.01	67.01
5948+73.87	5953+36.63	TEN MILE BAYOU DETOUR ROAD (STAGE 1)	462.76	VAR.	600.44	VAR.	1599.89	0.03	48.00	VAR.	539.47	550.00	148.35	VAR.	530.21	660.00	174.97					VAR.	608.66	220.00	66.95	66.95
5953+36.63	5964+07.50	TEN MILE BAYOU DETOUR ROAD (STAGE 1)	1070.87	307.00	3287.57	85.72	10199.44	0.03	305.98	28.88	3436.30	550.00	944.98	28.42	3381.57	660.00	1115.92					32.00	3807.54	220.00	418.83	418.83
5966+76.50	5975+19.17	TEN MILE BAYOU DETOUR ROAD (STAGE 1)	842.67	307.00	2587.00	85.72	8025.96	0.03	240.78	28.88	2704.03	550.00	743.61	28.42	2660.96	660.00	878.12					32.00	2996.16	220.00	329.58	329.58
5975+19.17	5979+81.92	TEN MILE BAYOU DETOUR ROAD (STAGE 1)	462.75	VAR.	600.43	VAR.	1582.35	0.03	47.47	VAR.	521.93	550.00	143.53	VAR.	530.21	660.00	174.97					VAR.	608.66	220.00	66.95	66.95
5887+11.14	5894+72.85	FIFTEEN MILE BAYOU DETOUR ROAD (STAGE 3)	761.71	VAR.	523.94	VAR.	2839.16	0.03	85.17	VAR.	946.90	550.00	260.40	VAR.	946.13	660.00	312.22					VAR.	954.98	220.00	105.05	105.05
5911+21.47	5918+24.33	FIFTEEN MILE BAYOU DETOUR ROAD (STAGE 3)	702.86	VAR.	375.69	VAR.	2061.44	0.03	61.84	VAR.	692.06	550.00	190.32	VAR.	684.69	660.00	225.95					VAR.	743.28	220.00	81.76	81.76
5948+73.87	5955+76.73	TEN MILE BAYOU DETOUR ROAD (STAGE 3)	702.86	VAR.	375.69	VAR.	2061.44	0.03	61.84	VAR.	692.06	550.00	190.32	VAR.	684.69	660.00	225.95					VAR.	743.28	220.00	81.76	81.76
5972+79.06	5979+81.92	TEN MILE BAYOU DETOUR ROAD (STAGE 3)	702.86	VAR.	375.69	VAR.	2061.44	0.03	61.84	VAR.	692.06	550.00	190.32	VAR.	684.69	660.00	225.95					VAR.	743.28	220.00	81.76	81.76
FULL DEPTH RECONSTRUCTION																										
5891+64.00	5901+78.00	RT. MAIN LANES	1014.00	425.25	4312.04	133.91	15087.19	0.03	452.62	27.25	3070.17	1100.00	1688.59	26.58	2994.68	660.00	988.24	26.25	2957.50	220.00	325.33	38.00	4281.33	220.00	470.95	796.28
5904+47.00	5913+33.00	RT. MAIN LANES	886.00	425.25	3767.72	133.91	13182.70	0.03	395.48	27.25	2682.61	1100.00	1475.44	26.58	2616.65	660.00	863.49	26.25	2584.17	220.00	284.26	38.00	3740.89	220.00	411.50	695.76
5953+57.50	5964+43.50	RT. MAIN LANES	1086.00	533.00	5788.38	133.91	16158.47	0.03	484.75	27.25	3288.17	1100.00	1808.49	26.58	3207.32	660.00	1058.42	26.25	3167.50	220.00	348.43	38.00	4585.33	220.00	504.39	852.82
5967+12.50	5975+26.50	RT. MAIN LANES	814.00	533.00	4338.62	133.91	12111.42	0.03	363.34	27.25	2464.61	1100.00	1355.54	26.58	2404.01	660.00	793.32	26.25	2374.17	220.00	261.16	38.00	3436.89	220.00	378.06	639.22
5891+64.00	5902+50.00	LT. MAIN LANES	1086.00	425.25	4618.22	133.91	16158.47	0.03	484.75	27.25	3288.17	1100.00	1808.49	26.58	3207.32	660.00	1058.42	26.25	3167.50	220.00	348.43	38.00	4585.33	220.00	504.39	852.82
5905+19.00	5913+33.00	LT. MAIN LANES	814.00	425.25	3461.54	133.91	12111.42	0.03	363.34	27.25	2464.61	1100.00	1355.54	26.58	2404.01	660.00	793.32	26.25	2374.17	220.00	261.16	38.00	3436.89	220.00	378.06	639.22
5953+57.50	5963+71.50	LT. MAIN LANES	1014.00	533.00	5404.62	133.91	15087.19	0.03	452.62	27.25	3070.17	1100.00	1688.59	26.58	2994.68	660.00	988.24	26.25	2957.50	220.00	325.33	38.00	4281.33	220.00	470.95	796.28
5966+40.50	5975+26.50	LT. MAIN LANES	886.00	533.00	4722.38	133.91	13182.70	0.03	395.48	27.25	2682.61	1100.00	1475.44	26.58	2616.65	660.00	863.49	26.25	2584.17	220.00	284.26	38.00	3740.89	220.00	411.50	695.76
ADDDITIONAL FOR WIDENING FOR GUARDRAIL																										
5382+29.85	5388+30.85	LT. OF RT. MAIN LANES	601.00	29.50	177.30																	VAR.	504.28	220.00	55.47	55.47
5384+65.38	5390+66.38	RT. OF LT. MAIN LANES	601.00	29.50	177.30																	VAR.	504.28	220.00	55.47	55.47
5429+04.26	5435+05.26	LT. OF RT. MAIN LANES	601.00	29.50	177.30																	VAR.	504.28	220.00	55.47	55.47
5494+69.07	5500+70.07	RT. OF LT. MAIN LANES	601.00	29.50	177.30																	VAR.	504.28	220.00	55.47	55.47
5818+73.74	5824+74.74	LT. OF RT. MAIN LANES	601.00	29.50	177.30																	VAR.	504.28	220.00	55.47	55.47
5821+31.36	5827+32.36	RT. OF LT. MAIN LANES	601.00	29.50	177.30																	VAR.	504.28	220.00	55.47	55.47
5875+58.81	5881+59.81	LT. OF RT. MAIN LANES	601.00	29.50	177.30																	VAR.	504.28	220.00	55.47	55.47
5878+16.72	5884+17.72	RT. OF LT. MAIN LANES	601.00	29.50	177.30																	VAR.	504.28	220.00	55.47	55.47
5920+12.91	5926+13.91	RT. OF LT. MAIN LANES	601.00	29.50	177.30																	VAR.	504.28	220.00	55.47	55.47
ADDDITIONAL FOR MEDIAN CROSSOVER																										
5549+30.00		I-40 MAIN LANE MEDIAN	60.00	VAR.	59.13																	VAR.	144.81	220.00	15.93	15.93
SUBTOTALS (BOX 1 OF 2):							**910076.81**		**91007.63**														**455038.43**		**100108.47**	**100108.47**
SUBTOTALS (BOX 2 OF 2):					**53877.52**		**164952.08**		**4948.55**		**40460.67**		**17454.75**		**39656.80**		**13086.75**		**22166.68**		**2438.36**		**56005.12**		**6160.58**	**8598.94**
TOTALS:					**53877.52**		**1075028.89**		**95956.18**		**40460.67**		**17454.75**		**39656.80**		**13086.75**		**22166.68**		**2438.36**		**511043.55**		**106269.05**	**108707.41**

BASIS OF ESTIMATE:
ACHM SURFACE COURSE (1/2").....94.9% MIN. AGGR.....5.1% ASPHALT BINDER
ACHM BINDER COURSE (1").....95.9% MIN. AGGR.....4.1% ASPHALT BINDER
ACHM BASE COURSE (1 1/2").....96.2% MIN. AGGR.....3.8% ASPHALT BINDER
MAXIMUM NUMBER OF GYRATIONS = 205 FOR PG 76-22

6/19/2015

RBB0107.DGN

QUANTITIES

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		BB0107	87	263
① A7025, 07344, 03123		QUANTITIES		56951

SCHEDULE OF BRIDGE QUANTITIES - JOB NO. BB0107

BRIDGE NO. / NAME PLATE TITLE	UNIT OF STRUCTURE	ITEM NO.	205	802	802	802	803	803	804	804	805	805	805	SP & 807	808	809	812	816	816	816	SP JOB BB0107	SP JOB BB0107	SP JOB BB0107
		ITEM	REMOVAL OF EXISTING BRIDGE STRUCTURE (SITE NO.)	CLASS S CONCRETE-BRIDGE	CLASS S(AE) CONCRETE-BRIDGE	GROOVING	CLASS 1 PROTECTIVE SURFACE TREATMENT	CLASS 3 PROTECTIVE SURFACE TREATMENT	REINFORCING STEEL-BRIDGE (GRADE 60)	EPOXY COATED REINFORCING STEEL (GRADE 60)	① STEEL SHELL PILING (18" DIAMETER)	① STEEL SHELL PILING (24" DIAMETER)	PILE ENCASEMENT	STRUCTURAL STEEL IN BEAM SPANS (M 270, GRADE 50W)	ELASTOMERIC BEARINGS	SILICONE JOINT SEALANT	BRIDGE NAME PLATE (TYPE D)	CONCRETE RIPRAP	DUMPED RIPRAP	FILTER BLANKET	HYDRODEMOLITION	BRIDGE DECK REPAIR	VERY EARLY STRENGTH LATEX MODIFIED CONCRETE OVERLAY (1½" THICK)
		UNIT	LUMP SUM	CU. YD.	CU. YD.	SQ. YD.	GAL.	LIN. FT.	LB.	LB.	LIN. FT.	LIN. FT.	LIN. FT.	LB.	CU. IN.	LIN. FT.	EACH	CU. YD.	CU. YD.	SQ. YD.	SQ. YD.	SQ. FT.	SQ. YD.
A7025 FIFTEEN MILE BAYOU	END BENT NOS. 1 AND 4			229.00			1.3		24,035	3,464	2,635			6,840	8,619.0			306					
	INTERIOR BENT NOS. 2 AND 3			182.70					17,435			2,635	648		11,092.5								
	185'-0" CONT. COMP. W-BEAM UNIT				707.10		58.1			174,746				529,970		368	1						
	SITE NO. 1 (EX. BR. NO. A3113)		1																				
	SITE NO. 2 (EX. BR. NO. B3113)		1																				
TOTALS FOR BRIDGE NO. A7025				411.70	707.10		59.4		41,470	178,210	2,635	2,635	648	536,810	19,711.5	368	1	306					
07344 TEN MILE BAYOU	END BENT NOS. 1 AND 4			226.98			1.3		24,415	3,464	2,975			6,840	8,619.0			156	241	442			
	INTERIOR BENT NOS. 2 AND 3			182.72					17,435			2,975	372		11,092.5								
	185'-0" CONT. COMP. W-BEAM UNIT				707.10		58.1			174,746				529,970		368	1						
	SITE NO. 3 (EX. BR. NO. A3114)		1																				
	SITE NO. 4 (EX. BR. NO. B3114)		1																				
TOTALS FOR BRIDGE NO. 07344				409.70	707.10		59.4		41,850	178,210	2,975	2,975	372	536,810	19,711.5	368	1	156	241	442			
③ EX. BRIDGE NO. 03123 (LOG MILE 277.06)						1,264		910	500												1,416	1,911	1,420
TOTALS FOR EXISTING BRIDGE NO. 03123						1,264		910	500 ②												1,416	1,911 ②	1,420
TOTALS FOR JOB NO. BB0107				821.40	1,414.20	1,264	118.8	910	83,820	356,420	5,610	5,610	1,020	1,073,620	39,423.0	736	2	462	241	442	1,416	1,911	1,420

① STEEL SHELL PILES SHALL CONFORM TO ASTM A252, GRADE 3, Fy = 45 ksi.

② QUANTITIES OF REINFORCING STEEL AND BRIDGE DECK REPAIR SHOWN FOR EXISTING BR. NO. 03123 IS FOR ESTIMATING AND BIDDING PURPOSES ONLY. ACTUAL QUANTITY, IF ANY, WILL BE DETERMINED IN THE FIELD.

③ EXISTING BRIDGE DECK HAS ¼" +/- THICK EPOXY/SLAG OVERLAY.

AILEEN SCHUBEL
DESIGN SECTION SUPERVISOR

STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
5-14-15
CHARLES R. ELLIS
BRIDGE ENGINEER

SCHEDULE OF BRIDGE QUANTITIES
SHEARERVILLE - HWY. 77 (S)
CRITTENDEN COUNTY
ROUTE 40 SEC. 52
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: A.M.S. DATE: 11/19/14 FILENAME: BBB0107_Q1.DGN
CHECKED BY: JYP DATE: 5/14/15 SCALE: NONE
DESIGNED BY: — DATE: —
BRIDGE NO. A7025, 07344, 03123 DRAWING NO. 56951

SUMMARY OF QUANTITIES (BOX 1 OF 2)

ITEM NUMBER	ITEM	QUANTITY			UNIT
		PEN-B40-0(207)	BIM-B40-0(207)	TOTAL	
202	REMOVAL AND DISPOSAL OF APPROACH GUTTERS		16	16	EACH
202	REMOVAL AND DISPOSAL OF APPROACH SLABS		8	8	EACH
202	REMOVAL AND DISPOSAL OF GUARDRAIL		1875	1875	LIN. FT.
202	REMOVAL AND DISPOSAL OF CONCRETE MEDIAN BARRIER		1836	1836	LIN. FT.
202	REMOVAL AND DISPOSAL OF IMPACT ATTENUATION BARRIER		12	12	EACH
SP	REMOVAL AND DISPOSAL OF OVERHEAD SIGN STRUCTURE		3	3	EACH
210	UNCLASSIFIED EXCAVATION		36105	36105	CU. YD.
210	COMPACTED EMBANKMENT		23910	23910	CU. YD.
SP & 210	COMPACTED EMBANKMENT (SPECIAL)		12781	12781	CU. YD.
SP & 210	SOIL STABILIZATION		200	200	TON
303	AGGREGATE BASE COURSE (CLASS 7)		55403	55403	TON
401	TACK COAT		96556	96556	GAL.
SP & 405	MINERAL AGGREGATE IN ACHM BASE COURSE (1 1/2")		16792	16792	TON
SP & 405	ASPHALT BINDER (PG 76-22) IN ACHM BASE COURSE (1 1/2")		663	663	TON
SP, SS, & 406	MINERAL AGGREGATE IN ACHM BINDER COURSE (1")		12550	12550	TON
SP, SS, & 406	ASPHALT BINDER (PG 76-22) IN ACHM BINDER COURSE (1")		537	537	TON
SP, SS, & 407	MINERAL AGGREGATE IN ACHM SURFACE COURSE (1/2")		103309	103309	TON
SP, SS, & 407	ASPHALT BINDER (PG 76-22) IN ACHM SURFACE COURSE (1/2")		5551	5551	TON
412	COLD MILLING ASPHALT PAVEMENT		456465	456465	SQ. YD.
SP & 414	ASPHALT CONCRETE PATCHING FOR MAINTENANCE OF TRAFFIC		300	300	TON
SP & 415	ACHM PATCHING OF EXISTING ROADWAY		200	200	TON
504	APPROACH GUTTERS		233.00	233.00	CU. YD.
504	APPROACH SLABS		1014.80	1014.80	CU. YD.
601	MOBILIZATION		1.00	1.00	LUMP SUM
SP & 602	FURNISHING FIELD OFFICE		1	1	EACH
SP & 603	MAINTENANCE OF TRAFFIC		1.00	1.00	LUMP SUM
603	24" TEMPORARY CULVERT		3340	3340	LIN. FT.
603	TRAFFIC CONTROL SUPERVISOR		1.00	1.00	LUMP SUM
SS & 604	SIGNS		2002	2002	SQ. FT.
SS & 604	BARRICADES		160	160	LIN. FT.
SS & 604	TRAFFIC DRUMS		1243	1243	EACH
604	FURNISHING AND INSTALLING PRECAST CONCRETE BARRIER		12860	12860	LIN. FT.
604	RELOCATING PRECAST CONCRETE BARRIER		17920	17920	LIN. FT.
604	CONSTRUCTION PAVEMENT MARKINGS		326758	326758	LIN. FT.
604	CONSTRUCTION PAVEMENT MARKINGS (WORDS)		1	1	EACH
604	CONSTRUCTION PAVEMENT MARKINGS (ARROWS)		1	1	EACH
604	REMOVABLE CONSTRUCTION PAVEMENT MARKINGS		25198	25198	LIN. FT.
604	REMOVAL OF PERMANENT PAVEMENT MARKINGS		10594	10594	LIN. FT.
604	ADVANCE WARNING ARROW PANEL		1500	1500	DAY
SP & 604	PORTABLE CHANGEABLE MESSAGE SIGN		432	432	WEEK
SP & 605	CONCRETE DITCH PAVING (TYPE B)	24432		24432	SQ. YD.
606	24" REINFORCED CONCRETE PIPE CULVERTS (CLASS IV)		42	42	LIN. FT.
606	24" SAFETY END SECTIONS FOR CROSS DRAIN PIPE CULVERTS (CLASS 2)		2	2	EACH
606	SELECTED PIPE BEDDING		5	5	CU. YD.
617	GUARDRAIL (TYPE A)		6305	6305	LIN. FT.
617	GUARDRAIL TERMINAL (TYPE 2)		20	20	EACH
617	THRIE BEAM GUARDRAIL TERMINAL		2	2	EACH
617	TERMINAL ANCHOR POSTS (TYPE 1)		19	19	EACH
620	LIME		53	53	TON
620	SEEDING		26.33	26.33	ACRE
SS & 620	MULCH COVER		33.91	33.91	ACRE
620	WATER	307.9	2840.4	3148.3	M.GAL.
621	TEMPORARY SEEDING		7.58	7.58	ACRE
621	SILT FENCE		500	500	LIN. FT.
621	SAND BAG DITCH CHECKS		3823	3823	BAG
621	DROP INLET SILT FENCE		2094	2094	LIN. FT.
621	TRIANGULAR SILT DIKE		1000	1000	LIN. FT.
621	SEDIMENT REMOVAL AND DISPOSAL		313	313	CU. YD.
621	WATTLE (20")		501	501	LIN. FT.
623	SECOND SEEDING APPLICATION		26.33	26.33	ACRE
624	SOLID SODDING	24432		24432	SQ. YD.
SP & 631	CONCRETE BARRIER WALL (SIDE TYPE A)		1836	1836	LIN. FT.
631	CONCRETE BARRIER WALL (MEDIAN TYPE SP-1)		118	118	LIN. FT.
635	ROADWAY CONSTRUCTION CONTROL		1.00	1.00	LUMP SUM
640	MODIFYING DROP INLETS		18	18	EACH
642	RUMBLE STRIPS IN ASPHALT SHOULDERS		264769	264769	LIN. FT.
719	THERMOPLASTIC PAVEMENT MARKING (WORDS)		1	1	EACH
719	THERMOPLASTIC PAVEMENT MARKING (ARROWS)		1	1	EACH
* SP & 719	INVERTED PROFILE THERMOPLASTIC PAVEMENT MARKING WHITE (4") (ALTERNATE NO. 1)		143618	143618	LIN. FT.
* SP	HIGH PERFORMANCE MARKING TAPE WHITE (4") (ALTERNATE NO. 2)		143618	143618	LIN. FT.
* SP & 719	INVERTED PROFILE THERMOPLASTIC PAVEMENT MARKING (SKIP LINE) WHITE (4") (ALTERNATE NO. 1)		32530	32530	LIN. FT.
* SP	HIGH PERFORMANCE MARKING TAPE (SKIP LINE) WHITE (4") (ALTERNATE NO. 2)		32530	32530	LIN. FT.
* SP & 719	INVERTED PROFILE THERMOPLASTIC PAVEMENT MARKING WHITE (8") (ALTERNATE NO. 1)		9299	9299	LIN. FT.
* SP	HIGH PERFORMANCE MARKING TAPE WHITE (8") (ALTERNATE NO. 2)		9299	9299	LIN. FT.
* SP & 719	INVERTED PROFILE THERMOPLASTIC PAVEMENT MARKING YELLOW (4") (ALTERNATE NO. 1)		145090	145090	LIN. FT.
* SP	HIGH PERFORMANCE MARKING TAPE YELLOW (4") (ALTERNATE NO. 2)		145090	145090	LIN. FT.
* SP & 719	INVERTED PROFILE THERMOPLASTIC CONTRAST PAVEMENT MARKING WHITE (4") (ALTERNATE NO. 1)		300	300	LIN. FT.
* SP	HIGH PERFORMANCE CONTRAST MARKING TAPE WHITE (4") (ALTERNATE NO. 2)		300	300	LIN. FT.
721	RAISED PAVEMENT MARKERS (TYPE II)		3175	3175	EACH
SP	STEEL OVERHEAD SIGN STRUCTURE (OH-040-18-31)		1	1	EACH
SP	STEEL OVERHEAD SIGN STRUCTURE (OH-040-18-32)		1	1	EACH

* DENOTES ALTERNATE BID ITEMS.

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6-23-15				6	ARK.			
7-13-15				JOB NO.		BB0107	88	263

(2) SUMMARY OF QUANTITIES

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
7-14-15

7/14/2015

RBB0107.DGN

SUMMARY OF QUANTITIES

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6-23-15		7-13-15		6	ARK.			
6-30-15				JOB NO.		BB0107	89	263
7-7-15								

(2) SUMMARY OF QUANTITIES AND REVISIONS

SUMMARY OF QUANTITIES (BOX 2 OF 2)

ITEM NUMBER	ITEM	QUANTITY			UNIT
		PEN-B40-0(207)	BIM-B40-0(207)	TOTAL	
SP	STEEL OVERHEAD SIGN STRUCTURE (OH-040-18-33)		1	1	EACH
SP	STEEL OVERHEAD SIGN STRUCTURE (OH-040-18-34)		1	1	EACH
SP	STEEL OVERHEAD SIGN STRUCTURE (OH-040-18-35)		1	1	EACH
SP	STEEL CANTILEVER SIGN STRUCTURE (OC-040-18-36)		1	1	EACH
SP	STEEL CANTILEVER SIGN STRUCTURE (OC-040-18-37)		1	1	EACH
725	GUIDE SIGN-ROADSIDE MOUNTED (DEMOUNTABLE LEGEND)		5226	5226	SQ. FT.
725	GUIDE SIGN-OVERHEAD MOUNTED (DEMOUNTABLE LEGEND)		2156	2156	SQ. FT.
726	STANDARD SIGN		1643	1643	SQ. FT.
727	EXIT NUMBER PANEL (TYPE A)		400	400	SQ. FT.
SP	OMNI-DIRECTIONAL BREAKAWAY SIGN SUPPORTS (TYPE G2-1)		76	76	EACH
729	CHANNEL POST SIGN SUPPORT (TYPE G1)		24	24	EACH
730	BREAKAWAY SIGN SUPPORT (TYPE G-2)		28601	28601	POUND
731	TEMPORARY IMPACT ATTENUATION BARRIER		17	17	EACH
731	TEMPORARY IMPACT ATTENUATION BARRIER (REPAIR)		17	17	EACH
732	CRASH CUSHION		1	1	EACH
804	REINFORCING STEEL-ROADWAY (GRADE 60)		149152	149152	POUND
804	EPOXY COATED REINFORCING STEEL (GRADE 60)		3548	3548	POUND
SP	PORTABLE CONSTRUCTION LIGHTING		1200	1200	DAY
SP	AWIS MOBILIZATION		1.00	1.00	LUMP SUM
SP	AWIS OPERATION		25	25	MNTH
SP	DEVICE RELOCATION		25	25	EACH
SP	FURNISH AND INSTALL CLOSED CIRCUIT TELEVISION SYSTEM		1	1	EACH
SP	FURNISH AND INSTALL PUBLIC NOTIFICATION SYSTEM		2	2	EACH
SP	FURNISH AND INSTALL VARIABLE MESSAGE SIGN		6	6	EACH
SP	FURNISH AND INSTALL VEHICLE DETECTION SYSTEM		55	55	EACH
SP	MOBILE SPEED NOTIFICATION SYSTEM		2	2	EACH
SP	FLUSHING UNDERDRAIN		132664	132664	LIN. FT.
SP	MOTORIST ASSISTANCE PATROL		1.00	1.00	LUMP SUM
SP	TEMPORARY PORTABLE RUMBLE STRIPS		24	24	EACH
SP	REMOVAL OF RUMBLE STRIP		3696	3696	LIN. FT.
SP	WIRE ROPE SAFETY FENCE	55248		55248	LIN. FT.
SP	WIRE ROPE SAFETY FENCE (POST REPAIR)	50		50	EACH
SP	WIRE ROPE SAFETY FENCE MAINTENANCE MATERIALS	1.00		1.00	LUMP SUM
	STRUCTURES OVER 20' SPAN				
205	REMOVAL OF EXISTING BRIDGE STRUCTURE (SITE NO. 1)		1.00	1.00	LUMP SUM
205	REMOVAL OF EXISTING BRIDGE STRUCTURE (SITE NO. 2)		1.00	1.00	LUMP SUM
205	REMOVAL OF EXISTING BRIDGE STRUCTURE (SITE NO. 3)		1.00	1.00	LUMP SUM
205	REMOVAL OF EXISTING BRIDGE STRUCTURE (SITE NO. 4)		1.00	1.00	LUMP SUM
636	BRIDGE CONSTRUCTION CONTROL		1.00	1.00	LUMP SUM
802	CLASS S CONCRETE-BRIDGE		821.40	821.40	CU. YD.
802	CLASS S(AE) CONCRETE-BRIDGE		1414.20	1414.20	CU. YD.
802	GROOVING		1264	1264	SQ. YD.
803	CLASS 1 PROTECTIVE SURFACE TREATMENT		118.8	118.8	GAL.
803	CLASS 3 PROTECTIVE SURFACE TREATMENT		910	910	LIN. FT.
804	REINFORCING STEEL-BRIDGE (GRADE 60)		83820	83820	POUND
804	EPOXY COATED REINFORCING STEEL (GRADE 60)		356420	356420	POUND
805	STEEL SHELL PILING (18" DIAMETER)		5610	5610	LIN. FT.
805	STEEL SHELL PILING (24" DIAMETER)		5610	5610	LIN. FT.
805	PILE ENCASEMENT		1020	1020	LIN. FT.
SP & 807	STRUCTURAL STEEL IN BEAM SPANS (M270-GR50W)		1073620	1073620	POUND
808	ELASTOMERIC BEARINGS		39423	39423	CU. IN.
809	SILICONE JOINT SEALANT		736	736	LIN. FT.
812	BRIDGE NAME PLATE (TYPE D)		2	2	EACH
816	CONCRETE RIPRAP		462	462	CU. YD.
816	DUMPED RIPRAP		241	241	CU. YD.
816	FILTER BLANKET		442	442	SQ. YD.
SP	HYDRODEMOLITION		1416	1416	SQ. YD.
SP	BRIDGE DECK REPAIR		1911	1911	SQ. FT.
SP	VERY EARLY STRENGTH LATEX MODIFIED CONCRETE OVERLAY (1 1/2" THICK)		1420	1420	SQ. YD.

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
7-15-15

REVISIONS

DATE	REVISION	SHEET NUMBER
6/23/2015	REMOVED UNCLASSIFIED EXCAVATION AND COMPACTED EMBANKMENT QUANTITY FOR TEMPORARY RAMP; CHANGED INCENTIVE DAYS ON "SITE USE (A+C METHOD)" SPECIAL PROVISION FROM 60 DAYS TO 50 DAYS	81, 88, 89
6/30/2015	ADDED "MANDATORY ELECTRONIC CONTRACT" SPECIAL PROVISION	3, 89
7/7/2015	ADDED SHEET 11A FOR CONCRETE BARRIER WALL (SIDE TYPE A) TRANSITION SPECIAL DETAIL	11A, 89
7/13/2015	ADDED SHEETS 253A-253H FOR SIGN STANDARD DRAWINGS, CHANGED STATION LIMITS FOR PAVEMENT TRANSITION FOR BRIDGE NO. 07344, ADDED ITEM "REMOVAL AND DISPOSAL OF APPROACH SLABS," REVISED UNCLASSIFIED EXCAVATION AND COMPACTED EMBANKMENT QUANTITIES FOR FIFTEEN MILE BAYOU LANE RECONSTRUCTION AND TEN MILE BAYOU LANE RECONSTRUCTION, CHANGED "FURNISH AND INSTALL VEHICLE DETECTION SYSTEM" QUANTITY FROM 88 EACH TO 55 EACH	2, 17, 81, 82, 88, 89, 253A, 253B, 253C, 253D,253E, 253F, 253G, 253H

7/14/2015

RBB0107.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	90	263

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15

STA. 5356+00 - IN PLACE
6' X 5' X 258' R.C. BOX CULV'T
UNDER LT. AND RT. LANE
RETAIN

STA. 5365+00 - IN PLACE
24" X 58' R.C. PIPE CULV'T
UNDER LT. FRONT. ROAD
RETAIN

+57.49 300' TAPER

24'

5355 5360 5365 5370

N 58°47'17" E

STA. 5359+48.40
BEGIN JOB BB0107
LOG MILE 264.57

P.C. 5367+95.34

STA. 5365+00 - IN PLACE
24" X 50' R.C. PIPE CULV'T
UNDER RT. LANE WITH
TYPE "H" DROP INLET IN MEDIAN
(2 OPENINGS) (4'-0" X 4'-0" X 2'-10")
RETAIN

I-40
PI = 5385+23.77
Δ = 33°34'26"RT.
D = 1°00'00"
T = 1728.43'
L = 3357.38'
PC = 5367+95.34
PT = 5401+52.72
e = MATCH EXISTING
Ls = MATCH EXISTING

300' TAPER +57.49 700' ACCELERATION LANE +57.49

P.I. 5385+23.77

I-40
PI = 5385+23.77
Δ = 33°34'26"RT.
D = 1°00'00"
T = 1728.43'
L = 3357.38'
PC = 5367+95.34
PT = 5401+52.72
e = MATCH EXISTING
Ls = MATCH EXISTING

N 58°47'17" E

36' 36'

NOSE +57.49 55.98'

5370 5375 5380 5385

NOSE +57.49 55.98'

STA. 5374+00 - IN PLACE
24" X 90' R.C. PIPE CULV'T
UNDER RT. LANE WITH
TYPE "H" DROP INLET IN MEDIAN
(2 OPENINGS) (4'-0" X 4'-0" X 2'-10")
RETAIN

STA. 5382+00 - IN PLACE
24" X 86' R.C. PIPE CULV'T
UNDER RT. LANE WITH
TYPE "H" DROP INLET IN MEDIAN
(2 OPENINGS) (4'-0" X 4'-0" X 2'-10")
RETAIN

6/17/2015

RBB0107.DGN

I-40

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	91	263

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15

STA. 5390+00 - IN PLACE
24" X 88' R.C. PIPE CULV'T
UNDER RT. LANE WITH
TYPE "H" DROP INLET IN MEDIAN
(2 OPENINGS) (4'-0" X 4'-0" X 2'-10")
RETAIN

S 87° 38' 18" E

N

I-40
PI = 5385+23.77
Δ = 33°34'26"RT.
D = 1°00'00"
T = 1728.43'
L = 3357.38'
PC = 5367+95.34
PT = 5401+52.72
e = MATCH EXISTING
Ls = MATCH EXISTING

5385 5390 5395 5400

NOSE +30.50 55.66

NOSE +92.91 54.01

STA. 5387+22
BEGIN WRSF

BR. NO. 03844

HWY. 79

BING'S STORE RD.

36'

REMOVAL AND DISPOSAL OF IMPACT ATTENUATION BARRIER
STA. 5386+45 C.L. OF I-40 = 2 EACH

STA.	STA.	SIDE	GUARDRAIL (TYPE A)	GUARDRAIL TERMINAL (TYPE 1)	GUARDRAIL TERMINAL (TYPE 2)
5382+72.14	5387+72.14	R.M.L. - LT.	450 LIN. FT.	1EA.	1EA.
5385+22.14	5390+22.14	L.M.L. - RT.	450 LIN. FT.	1EA.	1EA.

STA. 5399+00 - IN PLACE
24" X 204' R.C. PIPE CULV'T
UNDER MAIN LANES WITH
TYPE "H" DROP INLET IN MEDIAN
(2 OPENINGS) (4'-0" X 4'-0" X 5'-1")
RETAIN

+92.91

700' ACCELERATION LANE

STA. 5406+00 - IN PLACE
30" X 60' R.C. PIPE CULV'T
UNDER STATE HWY. 218
RETAIN

I-40
PI = 5385+23.77
Δ = 33°34'26"RT.
D = 1°00'00"
T = 1728.43'
L = 3357.38'
PC = 5367+95.34
PT = 5401+52.72
e = MATCH EXISTING
Ls = MATCH EXISTING

N

5400 5405 5410 5415

S 87° 38' 18" E

P. T. 5401+52.72

36' 24'

STA. 5414+01
END WRSF

700' ACCELERATION LANE 300' TAPER

+92.91 +92.91

STA. 5407+00 - IN PLACE
24" X 96' R.C. PIPE CULV'T
UNDER MAIN LANES WITH
TYPE "H" DROP INLET IN MEDIAN
(2 OPENINGS) (4'-0" X 4'-0" X 2'-10")
RETAIN

STA. 5415+00 - IN PLACE
24" X 104' R.C. PIPE CULV'T
UNDER RT. LANE WITH
TYPE "H" DROP INLET IN MEDIAN
(2 OPENINGS) (4'-0" X 4'-0" X 2'-10")
RETAIN

6/17/2015

RBB0107.DGN

I-40

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	92	263

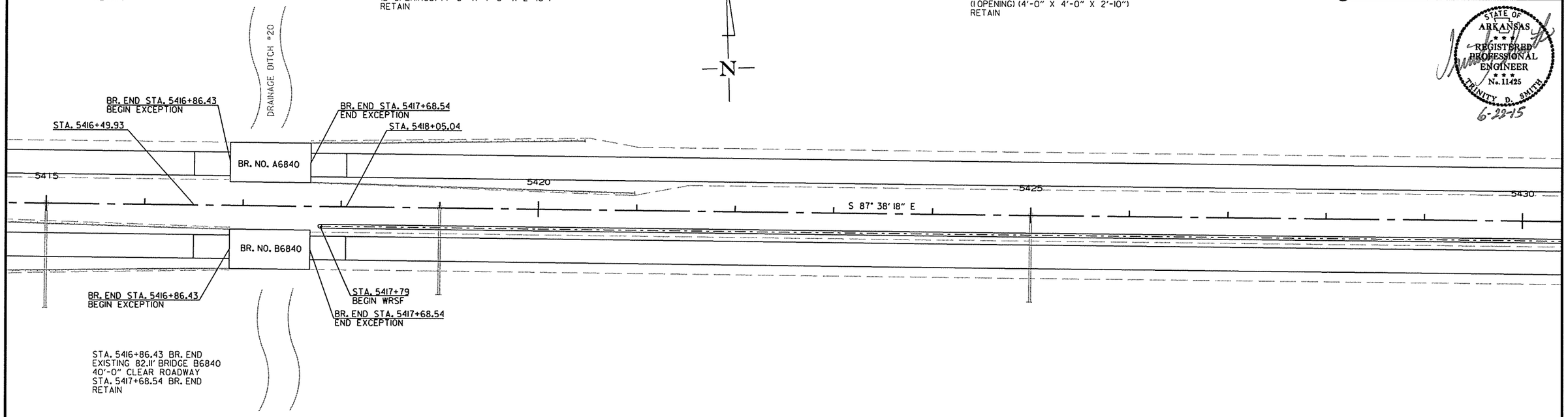
(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15

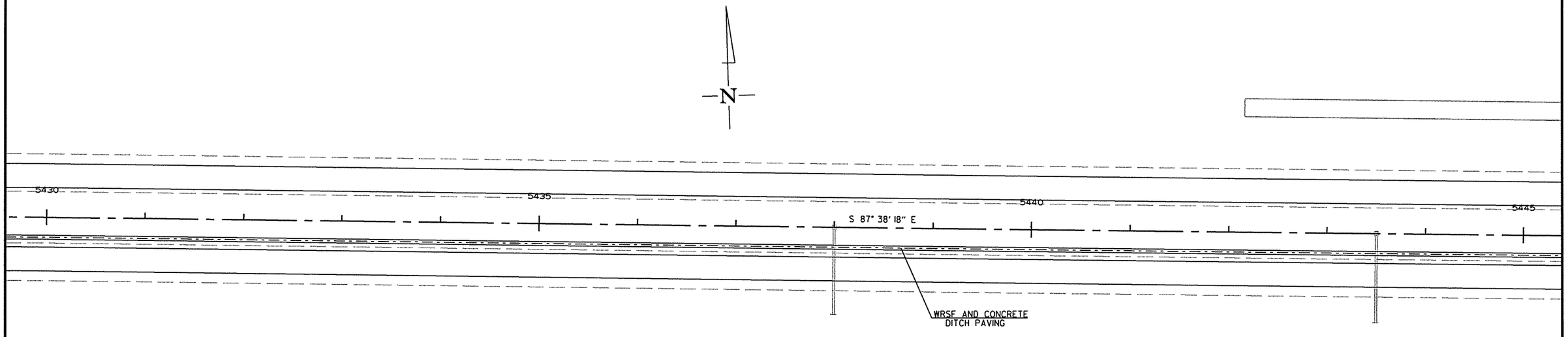
STA. 5416+86.43 BR. END
EXISTING 82.11' BRIDGE A6840
40'-0" CLEAR ROADWAY
STA. 5417+68.54 BR. END
RETAIN

STA. 5419+00 - IN PLACE
24" X 86' R.C. PIPE CULV'T
UNDER RT. LANE WITH
TYPE "H" DROP INLET IN MEDIAN
(2 OPENINGS) (4'-0" X 4'-0" X 2'-10")
RETAIN

STA. 5425+00 - IN PLACE
24" X 86' R.C. PIPE CULV'T
UNDER RT. LANE WITH
TYPE "H" DROP INLET IN MEDIAN
(1 OPENING) (4'-0" X 4'-0" X 2'-10")
RETAIN



STA. 5416+86.43 BR. END
EXISTING 82.11' BRIDGE B6840
40'-0" CLEAR ROADWAY
STA. 5417+68.54 BR. END
RETAIN



STA. 5438+00 - IN PLACE
24" X 86' R.C. PIPE CULV'T
UNDER RT. LANE WITH
TYPE "H" DROP INLET IN MEDIAN
(1 OPENING) (4'-0" X 4'-0" X 2'-10")
RETAIN

STA. 5443+50 - IN PLACE
24" X 88' R.C. PIPE CULV'T
UNDER RT. LANE WITH
TYPE "H" DROP INLET IN MEDIAN
(2 OPENINGS) (4'-0" X 4'-0" X 3'-4")
RETAIN

6/19/2015

RBB0107.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		B80107	93	263

(2) PLAN AND PROFILE SHEETS

STA. 5451+00 - IN PLACE
24" X 94' R.C. PIPE CULV'T
UNDER RT. LANE WITH
TYPE "H" DROP INLET IN MEDIAN
(2 OPENINGS) (4'-0" X 4'-0" X 2'-10")
RETAIN

STA. 5452+00 - IN PLACE
24" X 40' R.C. PIPE CULV'T
UNDER LT. FRONT. ROAD
RETAIN

STA. 5459+00 - IN PLACE
24" X 94' R.C. PIPE CULV'T
UNDER RT. LANE WITH
TYPE "H" DROP INLET IN MEDIAN
(2 OPENINGS) (4'-0" X 4'-0" X 2'-10")
RETAIN

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15

5445 5450 5455 5460

S 87° 38' 18" E

WRSF AND CONCRETE DITCH PAVING

STA. 5469+48.43 BR. END
EXISTING 82.11' BRIDGE A6841
40'-0" CLEAR ROADWAY
STA. 5470+30.54 BR. END
RETAIN

BR. END STA. 5469+48.43
BEGIN EXCEPTION

BR. END STA. 5470+30.54
END EXCEPTION

STA. 5469+11.93

STA. 5470+67.04

BR. NO. A6841

5460 5465 5470 5475

S 87° 38' 18" E

BR. NO. B6841

STA. 5466+63
END WRSF

STA. 5469+15.93

BR. END STA. 5469+52.43
BEGIN EXCEPTION

STA. 5470+71.04

STA. 5470+45
BEGIN WRSF

BR. END STA. 5470+34.54
END EXCEPTION

DRAINAGE DITCH #19

STA. 5465+00 - IN PLACE
24" X 50' R.C. PIPE CULV'T
UNDER LT. FRONT. ROAD
RETAIN

STA. 5467+00 - IN PLACE
24" X 100' R.C. PIPE CULV'T
UNDER RT. LANE WITH
TYPE "H" DROP INLET IN MEDIAN
(2 OPENINGS) (4'-0" X 4'-0" X 2'-10")
RETAIN

STA. 5469+52.43 BR. END
EXISTING 82.11' BRIDGE B6841
40'-0" CLEAR ROADWAY
STA. 5470+34.54 BR. END
RETAIN

STA. 5475+00 - IN PLACE
24" X 96' R.C. PIPE CULV'T
UNDER RT. LANE WITH
TYPE "H" DROP INLET IN MEDIAN
(2 OPENINGS) (4'-0" X 4'-0" X 2'-10")
RETAIN

6/19/2015

RBB0107.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	94	263

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15

STA. 5477+00 - IN PLACE
24" X 46' R.C. PIPE CULV'T
UNDER LT. FRONT. ROAD
RETAIN

STA. 5484+00 - IN PLACE
24" X 92' R.C. PIPE CULV'T
UNDER RT. LANE WITH
TYPE "H" DROP INLET IN MEDIAN
(2 OPENINGS) (4'-0" X 4'-0" X 2'-10")
RETAIN

N

5475 5480 5485 5490

S 87° 38' 18" E

WRSF AND CONCRETE DITCH PAVING

STA. 5491+00 - IN PLACE
24" X 44' R.C. PIPE CULV'T
UNDER LT. FRONT. ROAD
RETAIN

STA. 5501+00 - IN PLACE
24" X 42' R.C. PIPE CULV'T
UNDER LT. FRONT. ROAD
RETAIN

N

O' NEAL RD.
CO. RD. 381

STA. 5499+61
BEGIN WRSF

5490 5495 5500 5505

S 87° 38' 18" E

S 87°38'18" E

STA. 5493+11
END WRSF

BR. NO. 03847

STA.	STA.	SIDE	GUARDRAIL (TYPE A)	GUARDRAIL TERMINAL (TYPE I)	GUARDRAIL TERMINAL (TYPE 2)
5492+61.21	5497+61.21	R.M.L. - LT.	450 LIN. FT.	1 EA.	1 EA.
5495+11.22	5500+11.22	L.M.L - RT.	450 LIN. FT.	1 EA.	1 EA.

REMOVAL AND DISPOSAL OF IMPACT ATTENUATION BARRIER
STA. 5496+35 C.L. OF I-40 = 2 EACH

STA. 5492+00 - IN PLACE
24" X 88' R.C. PIPE CULV'T
UNDER RT. LANE WITH
TYPE "H" DROP INLET IN MEDIAN
(2 OPENINGS) (4'-0" X 4'-0" X 2'-10")
RETAIN

STA. 5502+00 - IN PLACE
24" X 88' R.C. PIPE CULV'T
UNDER RT. LANE WITH
TYPE "H" DROP INLET IN MEDIAN
(2 OPENINGS) (4'-0" X 4'-0" X 2'-10")
RETAIN

I-40

6/17/2015

RBB0107.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		B80107	95	263

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-29-15

STA. 5509+00 - IN PLACE
24" X 44' R.C. PIPE CULV'T
UNDER LT. FRONT. ROAD
RETAIN

STA. 5510+00 - IN PLACE
24" X 88' R.C. PIPE CULV'T
UNDER RT. LANE WITH
TYPE "H" DROP INLET IN MEDIAN
(2 OPENINGS) (4'-0" X 4'-0" X 2'-10")
RETAIN

STA. 5517+00 - IN PLACE
24" X 46' R.C. PIPE CULV'T
UNDER LT. FRONT. ROAD
RETAIN

STA. 5518+00 - IN PLACE
24" X 96' R.C. PIPE CULV'T
UNDER RT. LANE WITH
TYPE "H" DROP INLET IN MEDIAN
(2 OPENINGS) (4'-0" X 4'-0" X 2'-10")
RETAIN

WRSF AND CONCRETE DITCH PAVING

5505 5510 5515 5520

E S 87° 38' 18" E

STA. 5521+63.43 BR. END
EXISTING 82.11' BRIDGE A6842
40'-0" CLEAR ROADWAY
STA. 5522+45.54 BR. END
RETAIN

BR. END STA. 5521+63.43
BEGIN EXCEPTION

STA. 5521+53
END WRSF

STA. 5521+26.93

BR. END STA. 5522+45.54
END EXCEPTION

STA. 5522+82.04

BR. NO. A6842

5520 5525 5530 5535

S 87° 38' 18" E

BR. NO. B6842

STA. 5521+29.93

BR. END STA. 5521+66.43
BEGIN EXCEPTION

DRAINAGE DITCH #18

STA. 5522+85.04

STA. 5522+59
BEGIN WRSF

BR. END STA. 5522+48.54
END EXCEPTION

STA. 5521+66.43 BR. END
EXISTING 82.11' BRIDGE B6842
40'-0" CLEAR ROADWAY
STA. 5522+48.54 BR. END
RETAIN

STA. 5527+00 - IN PLACE
24" X 96' R.C. PIPE CULV'T
UNDER RT. LANE WITH
TYPE "H" DROP INLET IN MEDIAN
(2 OPENINGS) (4'-0" X 4'-0" X 2'-10")
RETAIN

STA. 5529+00 - IN PLACE
24" X 46' R.C. PIPE CULV'T
UNDER LT. FRONT. ROAD
RETAIN

6/19/2015

RBB0107.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	96	263

(2) PLAN AND PROFILE SHEETS

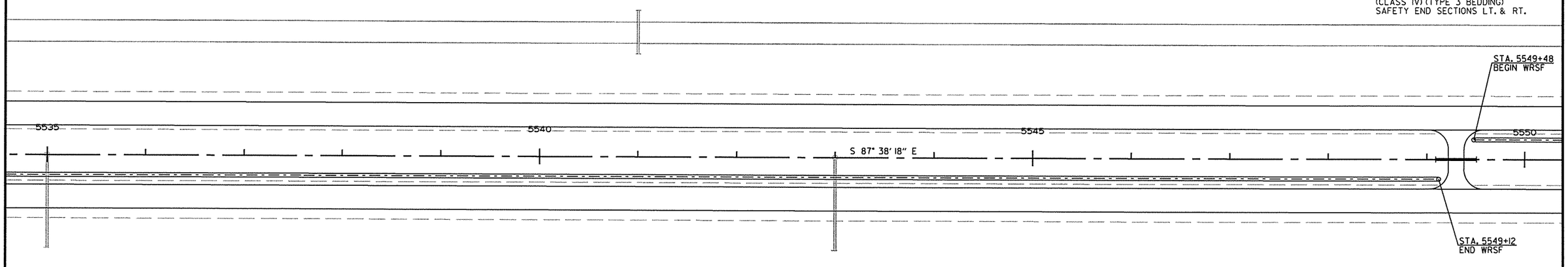
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15

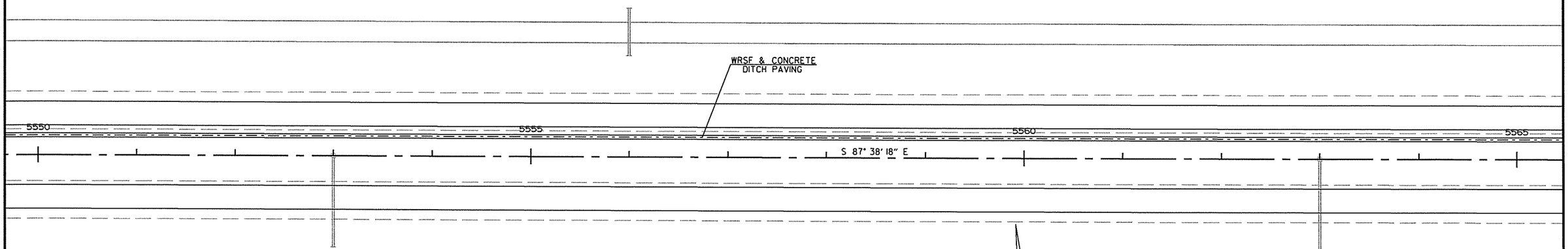
STA. 5535+00 - IN PLACE
24" X 92' R.C. PIPE CULV'T
UNDER RT. LANE WITH
TYPE "H" DROP INLET IN MEDIAN
(2 OPENINGS) (4'-0" X 4'-0" X 2'-10")
RETAIN

STA. 5541+00 - IN PLACE
24" X 44' R.C. PIPE CULV'T
UNDER LT. FRONT. ROAD
RETAIN

STA. 5543+00 - IN PLACE
24" X 90' R.C. PIPE CULV'T
UNDER RT. LANE WITH
TYPE "H" DROP INLET IN MEDIAN
(2 OPENINGS) (4'-0" X 4'-0" X 2'-10")
RETAIN

STA. 5549+30 - CONSTRUCT
24" X 42' R.C. PIPE CULV'T
(CLASS IV) (TYPE 3 BEDDING)
SAFETY END SECTIONS LT. & RT.





STA. 5553+00 - IN PLACE
24" X 90' R.C. PIPE CULV'T
UNDER RT. LANE WITH
TYPE "H" DROP INLET IN MEDIAN
(2 OPENINGS) (4'-0" X 4'-0" X 2'-10")
RETAIN

STA. 5556+00 - IN PLACE
24" X 48' R.C. PIPE CULV'T
UNDER LT. FRONT. ROAD
RETAIN

STA. 5563+00 - IN PLACE
24" X 94' R.C. PIPE CULV'T
UNDER RT. LANE WITH
TYPE "H" DROP INLET IN MEDIAN
(2 OPENINGS) (4'-0" X 4'-0" X 2'-10")
RETAIN

6/17/2015

RBB0107.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		B80107	97	263

(2) PLAN AND PROFILE SHEETS

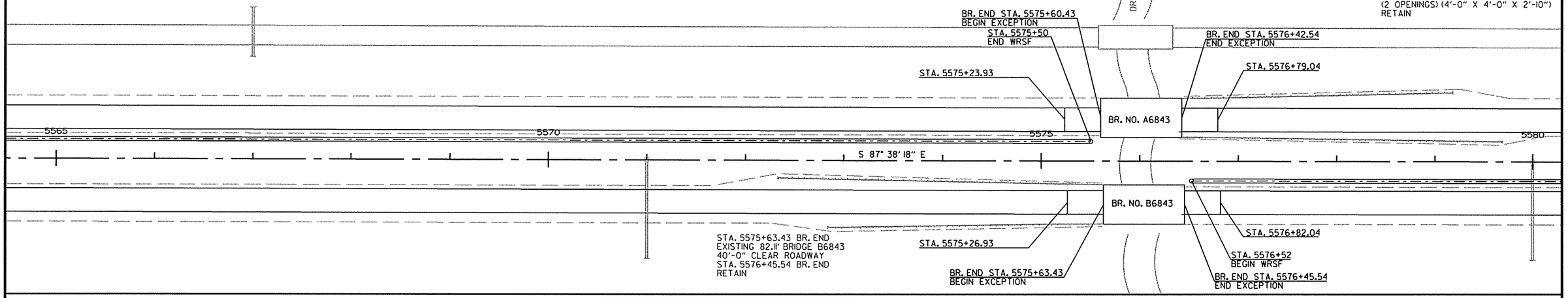
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-19-15

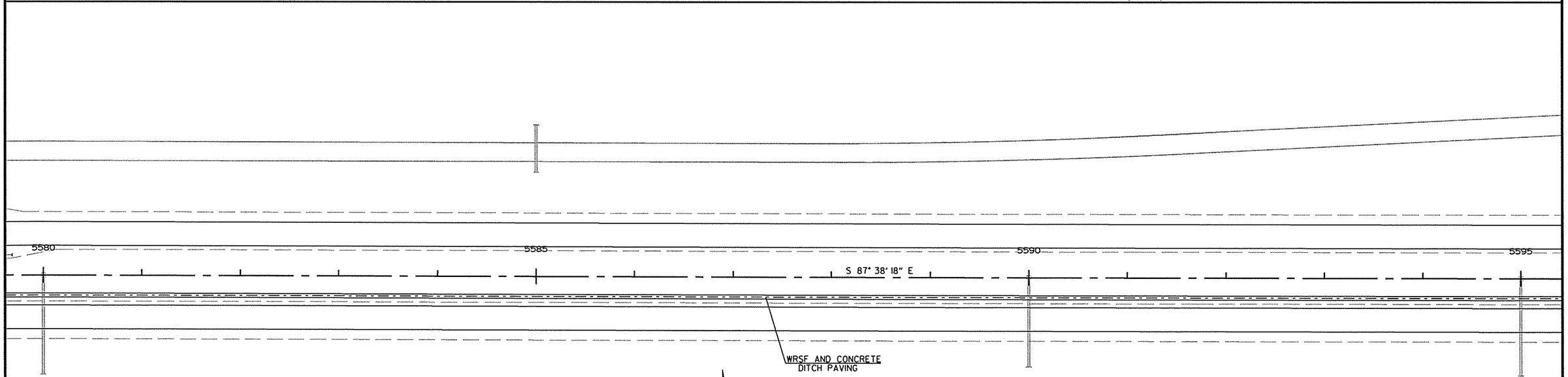
STA. 5567+00 - IN PLACE
24" X 50' R.C. PIPE CULV'T
UNDER LT. FRONT. ROAD
RETAIN

STA. 5571+00 - IN PLACE
24" X 98' R.C. PIPE CULV'T
UNDER RT. LANE WITH
TYPE "H" DROP INLET IN MEDIAN
(2 OPENINGS) (4'-0" X 4'-0" X 2'-10")
RETAIN

STA. 5575+60.43 BR. END
EXISTING 82.11' BRIDGE A6843
40'-0" CLEAR ROADWAY
STA. 5576+42.54 BR. END
RETAIN

STA. 5580+00 - IN PLACE
24" X 98' R.C. PIPE CULV'T
UNDER RT. LANE WITH
TYPE "H" DROP INLET IN MEDIAN
(2 OPENINGS) (4'-0" X 4'-0" X 2'-10")
RETAIN





STA. 5585+00 - IN PLACE
24" X 48' R.C. PIPE CULV'T
UNDER LT. FRONT. ROAD
RETAIN

STA. 5590+00 - IN PLACE
24" X 88' R.C. PIPE CULV'T
UNDER RT. LANE WITH
TYPE "H" DROP INLET IN MEDIAN
(2 OPENINGS) (4'-0" X 4'-0" X 2'-10")
RETAIN

6/19/2015

RBB0107.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	98	263

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15

STA. 5595+00 - IN PLACE
24" X 96' R.C. PIPE CULV'T
UNDER RT. LANE WITH
TYPE "H" DROP INLET IN MEDIAN
(2 OPENINGS) (4'-0" X 4'-0" X 4'-10")
RETAIN

STA. 5596+00 - IN PLACE
24" X 44' R.C. PIPE CULV'T
UNDER LT. FRONT. ROAD
RETAIN

HWY. 50

STA. 5602+03.99 BR. END
EXISTING 120.18' BRIDGE A6825
40'-0" CLEAR ROADWAY
STA. 5603+24.17 BR. END
RETAIN

STA. 5608+00 - IN PLACE
24" X 40' R.C. PIPE CULV'T
UNDER LT. FRONT. ROAD
RETAIN

BR. END STA. 5602+03.99
BEGIN EXCEPTION

STA. 5601+67.49

BR. END STA. 5603+24.17
END EXCEPTION

STA. 5603+60.67

STA. 5605+92
BEGIN WRSF

P. C. 5607+13.39

BR. NO. A6825

BR. NO. B6825

5595 5600 5605 5610

S 87° 38' 18" E

STA. 5599+31
END WRSF

STA. 5601+71.32

BR. END STA. 5602+07.82
BEGIN EXCEPTION

STA. 5603+64.50

BR. END STA. 5603+28.00
END EXCEPTION

STA. 5602+07.82 BR. END
EXISTING 120.18' BRIDGE B6825
40'-0" CLEAR ROADWAY
STA. 5603+28.00 BR. END
RETAIN

P. I. 5609+74.05

P. T. 5612+34.62

5610 5615 5620 5625

N 89° 45' 20" E

P. I. 5609+74.05

STA. 5610+00 - IN PLACE
24" X 100' R.C. PIPE CULV'T
UNDER RT. LANE WITH
TYPE "H" DROP INLET IN MEDIAN
(2 OPENINGS) (4'-0" X 4'-0" X 5'-3")
RETAIN

STA. 5615+00 - IN PLACE
24" X 82' R.C. PIPE CULV'T
UNDER RT. LANE WITH
TYPE "H" DROP INLET IN MEDIAN
(2 OPENINGS) (4'-0" X 4'-0" X 2'-10")
RETAIN

STA. 5622+73 - IN PLACE
18" X 76' R.C. PIPE CULV'T
UNDER RT. LANE
RETAIN

6/19/2015

RBB0107.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	99	263

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15

STA. 5628+28.55 BR. END
EXISTING 67.11' BRIDGE A6844
40'-0" CLEAR ROADWAY
STA. 5628+95.66 BR. END
RETAIN

DRAINAGE DITCH #15

STA. 5633+74 - IN PLACE
18" X 72' R.C. PIPE CULV'T
UNDER RT. LANE
RETAIN

BR. END STA. 5628+28.55
BEGIN EXCEPTION

STA. 5628+18
END WRSF

BR. END STA. 5628+95.66
END EXCEPTION

STA. 5629+32.16

STA. 5631+71
BEGIN WRSF

STA. 5627+92.05

BR. NO. A6844

5625 5630 5635 5640

N 89° 45' 20" E

BR. NO. B6844

STA. 5627+92.05

STA. 5629+32.16

BR. END STA. 5628+28.55
BEGIN EXCEPTION

BR. END STA. 5628+95.66
END EXCEPTION

STA. 5628+28.55 BR. END
EXISTING 67.11' BRIDGE B6844
40'-0" CLEAR ROADWAY
STA. 5628+95.66 BR. END
RETAIN

WRSF & CONCRETE
DITCH PAVING

5640 5645 5650 5655

N 89°45'20" E

N 89° 45' 20" E

STA. 5641+73 - IN PLACE
18" X 68' R.C. PIPE CULV'T
UNDER RT. LANE
RETAIN

STA. 5649+73 - IN PLACE
18" X 68' R.C. PIPE CULV'T
UNDER RT. LANE
RETAIN

6/19/2015

RBB0107.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	100	263

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15

STA. 5659+72 - IN PLACE
18" X 72' R.C. PIPE CULV'T
UNDER RT. LANE
RETAIN

STA. 5667+69 - IN PLACE
18" X 72' R.C. PIPE CULV'T
UNDER RT. LANE
RETAIN

WRSF & CONCRETE DITCH PAVING

5655 5660 5665 5670

N 89° 45' 20" E

N 89°

STA. 5680+00.00 TO STA. 6045+40.69
SPECIAL FLOOD HAZARD AREA

STA. 5681+84.28 BR. END
EXISTING 67.11' BRIDGE A6845
40'-0" CLEAR ROADWAY
STA. 5682+51.39 BR. END
RETAIN

300' TAPER

+93.27

BR. END STA. 5681+84.28
BEGIN EXCEPTION

STA. 5681+74
END WRSF

STA. 5681+47.78

BR. END STA. 5682+51.39
END EXCEPTION

STA. 5682+87.89

BR. NO. A6845

24'

5685

5680

5675

5670

P. C. 5671+40.60

P. T. 5674+06.97

N 89° 45' 20" E

N 88° 25' 26" E

P. I. 5672+78.79

BR. NO. B6845

STA. 5682+87.89

STA. 5681+47.78

STA. 5682+61
BEGIN WRSF

BR. END STA. 5681+84.28
BEGIN EXCEPTION

BR. END STA. 5682+51.39
END EXCEPTION

STA. 5681+84.28 BR. END
EXISTING 67.11' BRIDGE B6845
40'-0" CLEAR ROADWAY
STA. 5682+51.39 BR. END
RETAIN

DRAINAGE DITCH #14

STA. 5675+72 - IN PLACE
18" X 76' R.C. PIPE CULV'T
UNDER RT. LANE
RETAIN

6/19/2015

RBB0107.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	101	263

(2) PLAN AND PROFILE SHEETS

STA. 5688+67 - IN PLACE
18" X 68' R.C. PIPE CULV'T
UNDER RT. LANE
RETAIN

STA. 5680+00.00 TO STA. 6045+40.69
SPECIAL FLOOD HAZARD AREA

STA. 5698+68 - IN PLACE
18" X 76' R.C. PIPE CULV'T
UNDER LT. LANE
RETAIN

STA. 5698+68 - IN PLACE
18" X 48' R.C. PIPE CULV'T
UNDER LT. FRONT. ROAD
RETAIN

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15

300' TAPER | +93.27 | 700' ACCELERATION LANE | +93.27

36' | 36'

5685 | 5690 | 5695 | 5700

N 88°25'26" E | N 88° 25' 26" E

NOSE +93.27 5.00'

NOSE +49.90 56.02'

WRSF AND CONCRETE DITCH PAVING

STA. 5707+77.46 BR. END
EXISTING 222.17' BRIDGE A3108
40'-0" CLEAR ROADWAY
STA. 5709+99.63 BR. END
RETAIN

HWY. 147

STA. 5680+00.00 TO STA. 6045+40.69
SPECIAL FLOOD HAZARD AREA

BR. END STA. 5707+77.46
BEGIN EXCEPTION

STA. 5707+40.96

P. I. 5704+23.76

BR. END STA. 5709+99.63
END EXCEPTION

STA. 5710+36.13

STA. 5712+75
BEGIN WRSF

BR. NO. A3108

5700 | 5705 | 5710 | 5715

N 88° 25' 26" E | S 89° 59' 08" E

BR. NO. B3108

P. C. 5702+64.70

STA. 5705+00
END WRSF

P. T. 5705+82.81

STA. 5707+40.96

STA. 5710+36.13

BR. END STA. 5707+77.46
BEGIN EXCEPTION

BR. END STA. 5709+99.63
END EXCEPTION

STA. 5707+77.46 BR. END
EXISTING 222.17' BRIDGE B3108
40'-0" CLEAR ROADWAY
STA. 5709+99.63 BR. END
RETAIN

6/19/2015

RBB0107.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	102	263

(2) PLAN AND PROFILE SHEETS

STA. 5720+47 - IN PLACE
18" X 68' R.C. PIPE CULV'T
UNDER LT. LANE
RETAIN

STA. 5680+00.00 TO STA. 6045+40.69
SPECIAL FLOOD HAZARD AREA

STA. 5728+65 - IN PLACE
18" X 72' R.C. PIPE CULV'T
UNDER RT. LANE
RETAIN

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15

WRSF & CONCRETE DITCH PAVING

5715 5720 5725 5730

NOSE +89.65 52.32'

S 89° 59' 08" E

NOSE +01.64 58.04'

36'

+01.64

700' ACCELERATION LANE

STA. 5680+00.00 TO STA. 6045+40.69
SPECIAL FLOOD HAZARD AREA

DRAINAGE DITCH #11

STA. 5740+48.30 BR. END
EXISTING 67.11' BRIDGE A6846
40'-0" CLEAR ROADWAY
STA. 5741+15.41 BR. END
RETAIN

BR. END STA. 5740+48.30
BEGIN EXCEPTION

STA. 5740+38
END WRSF

STA. 5740+11.80

BR. END STA. 5741+15.41
END EXCEPTION

STA. 5741+51.91

STA. 5743+91
BEGIN WRSF

BR. NO. A6846

5730 5735 5740 5745

S 89° 59' 08" E S 89°59'08" E

36' 24'

BR. NO. B6846

STA. 5740+11.80

STA. 5741+51.91

BR. END STA. 5740+48.30
BEGIN EXCEPTION

BR. END STA. 5741+15.41
END EXCEPTION

700' ACCELERATION LANE 300' TAPER

+01.64 +01.64

STA. 5736+65 - IN PLACE
18" X 72' R.C. PIPE CULV'T
UNDER RT. LANE
RETAIN

STA. 5740+48.30 BR. END
EXISTING 67.11' BRIDGE B6846
40'-0" CLEAR ROADWAY
STA. 5741+15.41 BR. END
RETAIN

STA. 5744+59 - IN PLACE
18" X 68' R.C. PIPE CULV'T
UNDER RT. LANE
RETAIN

6/19/2015

RBB0107.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	103	263

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15

STA. 5680+00.00 TO STA. 6045+40.69
SPECIAL FLOOD HAZARD AREA

STA. 5752+62 - IN PLACE
18" X 68' R.C. PIPE CULV'T
UNDER RT. LANE
RETAIN

N

WRSF & CONCRETE DITCH PAVING

5745 5750 5755 5760

S 89° 59' 08" E

STA. 5680+00.00 TO STA. 6045+40.69
SPECIAL FLOOD HAZARD AREA

N

WRSF & CONCRETE DITCH PAVING

5760 5765 5770 5775

S 89° 59' 08" E

STA. 5760+54 - IN PLACE
18" X 64' R.C. PIPE CULV'T
UNDER RT. LANE
RETAIN

STA. 5770+54 - IN PLACE
18" X 60' R.C. PIPE CULV'T
UNDER RT. LANE
RETAIN

STA. 5774+41 - IN PLACE
WEIGH STATION TRANSPONDER
OVER RT. LANES
RETAIN

6/17/2015

RBB0107.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	104	263

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-18-15

STA. 5778+54 - IN PLACE
18" X 72' R.C. PIPE CULV'T
UNDER RT. LANE
RETAIN

STA. 5680+00.00 TO STA. 6045+40.69
SPECIAL FLOOD HAZARD AREA

N

5775
5780
5785
5790
P. C. 5781+01.57
S 89° 59' 08" E
WRSF & CONCRETE DITCH PAVING
P. T. 5788+14.83
N 68° 37' 00" E
P. I. 5784+62.41

STA. 5680+00.00 TO STA. 6045+40.69
SPECIAL FLOOD HAZARD AREA

N

STA. 5794+29.42 BR. END
EXISTING 67.25' BRIDGE A6847
40'-0" CLEAR ROADWAY
STA. 5794+96.67 BR. END
RETAIN

DRAINAGE DITCH #10

BR. END STA. 5794+29.42
BEGIN EXCEPTION
STA. 5794+12
END WRSF
STA. 5793+92.92
BR. NO. A6847
BR. END STA. 5794+96.67
END EXCEPTION
STA. 5795+33.17

5790
5795
5800
5805
N 68° 37' 00" E

BR. NO. B6847
STA. 5795+00.31
STA. 5793+60.06
BR. END STA. 5793+96.56
BEGIN EXCEPTION
STA. 5794+81
BEGIN WRSF
BR. END STA. 5794+63.81
END EXCEPTION

24'
36'
250' TAPER
2275' DECELERATION LANE
+10.28
+60.28

STA. 5793+96.56 BR. END
EXISTING 67.25' BRIDGE B6847
40'-0" CLEAR ROADWAY
STA. 5794+63.81 BR. END
RETAIN

6/19/2015
RBB0107.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	105	263

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15

STA. 5680+00.00 TO STA. 6045+40.69
SPECIAL FLOOD HAZARD AREA

STA. 5816+53 - IN PLACE
18" X 76' R.C. PIPE CULV'T
UNDER LT. LANE
RETAIN

STA. 5806+26
BEGIN WRSF

5805 5810 5815 5820

N 68° 37' 00" E

STA. 5805+86
BEGIN WRSF

2275' DECELERATION LANE

STA.	STA.	SIDE	GUARDRAIL (TYPE A)	GUARDRAIL TERMINAL (TYPE I)	GUARDRAIL TERMINAL (TYPE 2)
5819+15.88	5824+15.88	R.M.L. - LT.	450 LIN. FT.	1EA.	1EA.
5821+88.30	5826+88.30	L.M.L. - RT.	450 LIN. FT.	1EA.	1EA.

REMOVAL AND DISPOSAL OF IMPACT ATTENUATION BARRIER
STA. 5823+00 C.L. OF I-40 - 2 EACH

+54.63 +54.63 +04.63

300' TAPER 650' ACCELERATION LANE

KUHN RD.

STA. 5822+38
END WRSF

24' 36' 36'

5820 5825 5830 5835

NOSE +04.63 54.00'

N 68° 37' 00" E

NOSE +35.28 55.86'

36'

BR. NO. 03115

STA. 5823+66
BEGIN WRSF

2275' DECELERATION LANE

+35.28

STA. 5828+83 - IN PLACE
18" X 72' R.C. PIPE CULV'T
UNDER RT. LANE
RETAIN

STA. 5830+21 - IN PLACE
WEIGH STATION TRANSPONDER
OVER RT. LANE
RETAIN

I-40

6/17/2015

RBB0107.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	106	263

(2) PLAN AND PROFILE SHEETS

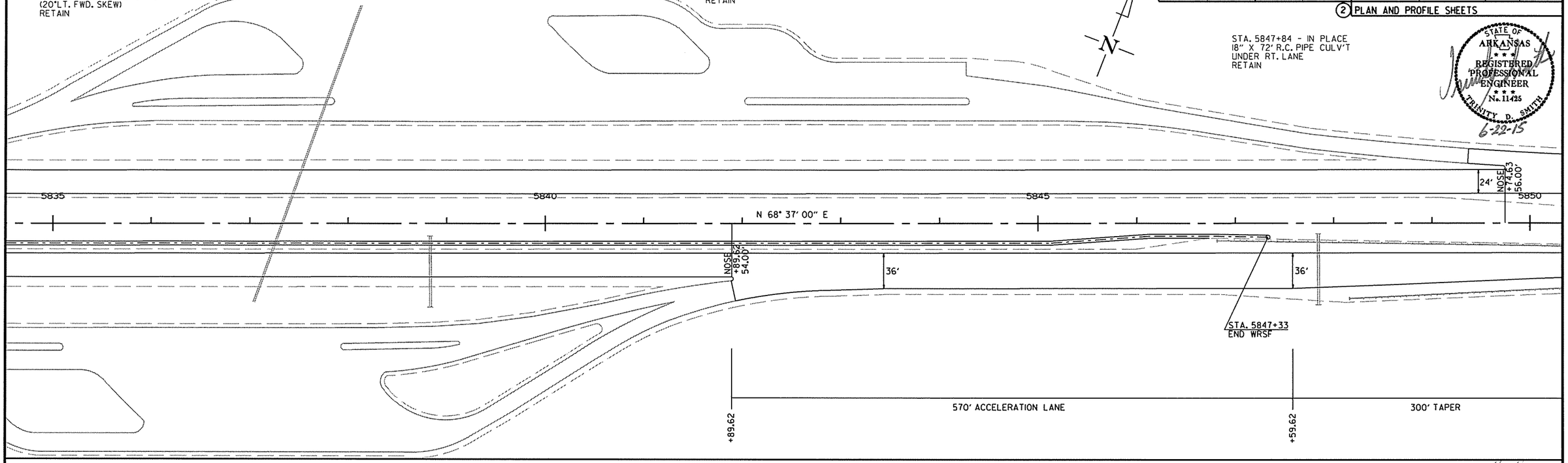
STA. 5615+00 - IN PLACE
18" X 320' C.M. PIPE SIPHON
(20°LT. FWD. SKEW)
RETAIN

STA. 5838+83 - IN PLACE
18" X 72' R.C. PIPE CULV'T
UNDER RT. LANE
RETAIN

STA. 5680+00.00 TO STA. 6045+40.69
SPECIAL FLOOD HAZARD AREA

STA. 5847+84 - IN PLACE
18" X 72' R.C. PIPE CULV'T
UNDER RT. LANE
RETAIN

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15



STA. 5680+00.00 TO STA. 6045+40.69
SPECIAL FLOOD HAZARD AREA

STA. 5851+36.34 BR. END
EXISTING 57.23' BRIDGE A6848
58'-0" CLEAR ROADWAY
STA. 5851+93.57 BR. END
RETAIN

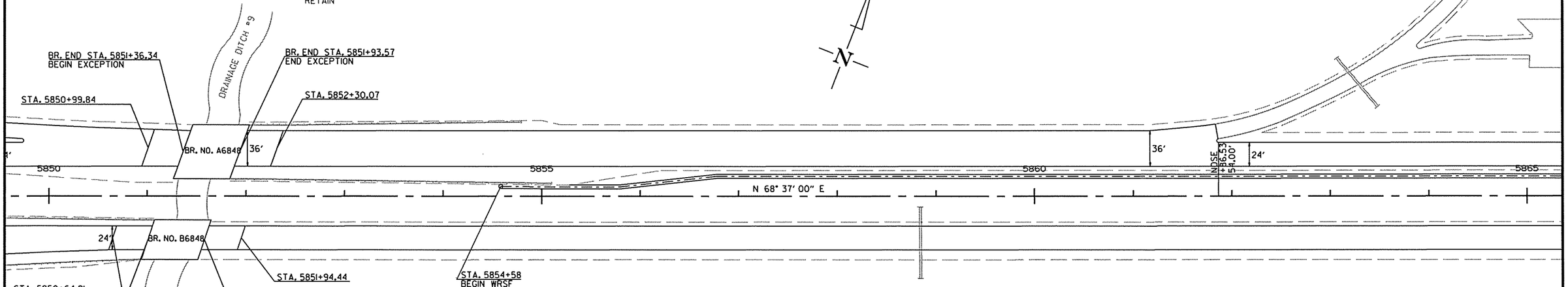
BR. END STA. 5851+36.34
BEGIN EXCEPTION

DRAINAGE DITCH #9

BR. END STA. 5851+93.57
END EXCEPTION

STA. 5852+30.07

STA. 5850+99.84



STA. 5851+00.71 BR. END
EXISTING 57.23' BRIDGE B6848
40'-0" CLEAR ROADWAY
STA. 5851+57.94 BR. END
RETAIN

300' TAPER
+59.62

STA. 5858+84 - IN PLACE
18" X 72' R.C. PIPE CULV'T
UNDER RT. LANE
RETAIN

STA. 5863+24 - IN PLACE
24" X 64' R.C. PIPE CULV'T
UNDER ENTRANCE RAMP
RETAIN

6/19/2015

RBB0107.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	107	263

(2) PLAN AND PROFILE SHEETS

STA. 5865+76 - IN PLACE
18" X 72' R.C. PIPE CULV'T
UNDER RT. LANE
RETAIN

STA. 5865+93 - IN PLACE
18" X 64' R.C. PIPE CULV'T
UNDER LT. LANE
RETAIN

STA. 5680+00.00 TO STA. 6045+40.69
SPECIAL FLOOD HAZARD AREA

STA. 5873+65 - IN PLACE
24" X 48' R.C. PIPE CULV'T
UNDER EXIT RAMP
RETAIN

STA. 5875+85 - IN PLACE
18" X 68' R.C. PIPE CULV'T
UNDER RT. LANE
RETAIN

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15

STA. 5879+24
END WRSF

NOSE
STA. 5875+04.72
OFF 55.75' LT.

5865 5870 5875 5880

N 68° 37' 00" E

BR. NO. 03116

MASNER RD.

REMOVAL AND DISPOSAL OF IMPACT ATTENUATION BARRIER
STA. 5880+00 C.L. OF I-40 • 2 EACH

STA.	STA.	SIDE	GUARDRAIL (TYPE A)	GUARDRAIL TERMINAL (TYPE I)	GUARDRAIL TERMINAL (TYPE 2)
5876+00.83	5881+00.83	R.M.L. - LT.	450 LIN. FT.	1EA.	1EA.
5878+73.67	5883+73.67	L.M.L - RT.	450 LIN. FT.	1EA.	1EA.

RBB0107.DGN 6/17/2015

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	108	263

(2) PLAN AND PROFILE SHEETS

STA. 5680+00.00 TO STA. 6045+40.69
SPECIAL FLOOD HAZARD AREA

(1) DETOUR L.M.L.
PI = 5888+59.39
Δ = 5°55'29.4"RT.
D = 2°00'00"
T = 148.25'
L = 296.24'
PC = 5887+11.14
PT = 5890+07.38

(2) DETOUR R.M.L.
PI = 5888+59.39
Δ = 5°55'29.4"LT.
D = 2°00'00"
T = 148.25'
L = 296.24'
PC = 5887+11.14
PT = 5890+07.38

(3) DETOUR L.M.L.
PI = 5892+66.01
Δ = 5°55'29.4"LT.
D = 2°00'00"
T = 148.25'
L = 296.24'
PC = 5891+17.76
PT = 5894+14.00

(4) DETOUR R.M.L.
PI = 5892+66.01
Δ = 5°55'29.4"RT.
D = 2°00'00"
T = 148.25'
L = 296.24'
PC = 5891+17.76
PT = 5894+14.00

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15

MASNER RD.

+72.23 300' TAPER 575' ACCELERATION LANE +72.23

STA. 5894+14.00 ON I-40
= STA. 5894+14.00 ON DETOUR L.M.L.
= STA. 5894+14.00 ON DETOUR R.M.L.
WITH 0' OFFSET LT. AND RT.

P.C. 5887+11.14 | P.I. 5888+59.39 | P.T. 5890+07.38 | P.C. 5891+17.76 | P.I. 5892+66.01 | P.T. 5894+14.00

5880 5885 5890 5895

N 68° 37' 00" E

N 74° 32' 29" E

N 62° 41' 31" E

24' 36' 36'

STA. 5880+51
BEGIN WBSF

STA. 5887+12.78 ON I-40
= STA. 5887+11.14 ON DETOUR L.M.L.
= STA. 5887+11.14 ON DETOUR R.M.L.
WITH 42' OFFSET LT. AND RT.

STA. 5884+86 - IN PLACE
18" X 68' R.C. PIPE CULV'T
UNDER RT. LANE
RETAIN

STA. 5891+50 - INSTALL
OH-040-18-31
RIGHT MAIN LANES

STA. 5894+85 COVER DROP INLET AS DIRECTED BY THE ENGINEER PRIOR TO CONSTRUCTION OF THE TEMPORARY RAMP. REMOVE COVER WHEN THE TEMPORARY RAMP IS REMOVED. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR VARIOUS CONTRACT ITEMS.

STA. 5894+85 - IN PLACE
18" X 72' R.C. PIPE CULV'T
UNDER RT. LANE
RETAIN

I-40

STA. 5891+64.00
BEGIN RECONSTRUCTION
LT. & RT. MAIN LANES

P.V.C. 5891+64.00
ELEV. 215.31

0.00%

K=1326.46
VC=500'
e=0.24'

P.V.I. 5894+14.00
ELEV. 215.31

250 240 230 220 210 200 190 180

5880+00 5881+00 5882+00 5883+00 5884+00 5885+00 5886+00 5887+00 5888+00 5889+00 5890+00 5891+00 5892+00 5893+00 5894+00 5895+00

6/17/2015

RBB0107.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	109	263

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15

STA. 5680+00.00 TO STA. 6045+40.69
SPECIAL FLOOD HAZARD AREA

STA. 5897+74 - IN PLACE
3'-0" X 3'-0" TYPE RM DROP INLET
15.28' RT. OF WB C-D ROAD
WITH 18" X 52' R.C. PIPE OUTLET (CL. III)
WITH F.E.S. LT. & TYPE 3 BEDDING
(H = 2'-11")
MODIFY DROP INLET

STA. 5900+26 - IN PLACE
3'-0" X 3'-0" TYPE ST DROP INLET
19' RT. OF WB C-D ROAD
WITH 18" X 56' R.C. PIPE OUTLET (CL. III)
WITH F.E.S. LT. & TYPE 3 BEDDING
(H = 4'-0")
MODIFY DROP INLET

STA. 5902+33 - IN PLACE
3'-0" X 3'-0" TYPE ST DROP INLET
19' RT. OF WB C-D ROAD
WITH 18" X 4' R.C. STUB OUTLET (CL. III)
TO D.I. AT STA. 5902+33 WD C-D ROAD
WITH TYPE 3 BEDDING
(H = 4'-0")
MODIFY DROP INLET

STA. 5902+33 - IN PLACE
3'-0" X 3'-0" TYPE ST DROP INLET
12' RT. OF WB C-D ROAD
WITH 18" X 56' R.C. PIPE OUTLET (CL. III)
WITH F.E.S. LT. & TYPE 3 BEDDING
(H = 7'-0")
RETAIN

STA. 5906+19 - IN PLACE
3'-0" X 3'-0" TYPE ST DROP INLET
19' RT. OF WB C-D ROAD
WITH 18" X 74' R.C. PIPE OUTLET (CL. III)
WITH F.E.S. LT. & TYPE 3 BEDDING
(H = 4'-0")
MODIFY DROP INLET

STA. 5907+99 - IN PLACE
3'-0" X 3'-0" TYPE ST DROP INLET
12' RT. OF WB C-D ROAD
WITH 18" X 56' R.C. PIPE OUTLET (CL. III)
WITH F.E.S. LT. & TYPE 3 BEDDING
(H = 4'-3")
RETAIN

STA. 5908+00 - IN PLACE
3'-0" X 3'-0" TYPE ST DROP INLET
19' RT. OF WB C-D ROAD
WITH 18" X 4' R.C. STUB OUTLET (CL. III)
TO D.I. AT STA. 5907+99
(H = 4'-0")
MODIFY DROP INLET

REMOVAL AND DISPOSAL OF GUARDRAIL
STA. 5899+24.80 TO STA. 5902+49.80 LT. OF RT. LANES = 325 LIN. FT.
STA. 5904+48.11 TO STA. 5907+73.11 RT. OF LT. LANES = 325 LIN. FT.

STA. 5900+05.40 TO STA. 5902+55.40 CONST.
LEFT OF LEFT MAIN LANES
CONNECT TO APPROACH GUTTER
BARRIER WALL (SIDE TYPE A) = 250.00 LIN. FT.

STA. 5905+69.50 TO STA. 5919+66.37 CONST.
LEFT OF LEFT MAIN LANES
CONNECT TO APPROACH GUTTER AND
CONNECT TO EXISTING
BARRIER WALL (SIDE TYPE A) = 796.87 LIN. FT.

575' ACCELERATION LANE

BR. NO. B3113
SITE NO. 2

FIFTEEN MILE BAYOU

BR. END STA. 5903+18.11

BR. END STA. 5902+54.50

BR. END STA. 5904+68.11

STA. 5901+68
END WRSF

STA. 5905+29
BEGIN WRSF

+47.23

36'

NOSE +47.23 54.00'

5895

5900

5905

5910

+05.40 66.00'

+85.40 66.00'

+08.00 64.00'

+05.00 64.00'

+59.50 66.00'

BR. NO. B3113

BR. NO. A7025

N 68° 37' 00" E

+85.42 68.18'

+85.42 66.00'

+27.54 66.00'

+80.00 64.00'

+89.00 64.00'

+41.50 66.00'

+88.59 66.25'

BR. NO. A3113

CRASH CUSHION

BR. END STA. 5904+42.50

INSTALL CRASH CUSHION
STA. 5897+74.91 - RT. OF E.B. CD ROAD = 1EACH

BR. END STA. 5902+29.80

BR. NO. A3113
SITE NO. 1

BR. END STA. 5903+79.80

EXISTING PRECAST CONCRETE BARRIER WALL
RETAIN

STA. 5908+58 - IN PLACE
3'-0" X 3'-0" TYPE ST DROP INLET
19' LT. OF EB C-D ROAD
WITH 18" X 48' R.C. PIPE OUTLET (CL. III)
WITH F.E.S. RT.
& TYPE 3 BEDDING
(H = 4'-0")
MODIFY DROP INLET

STA. 5897+85.45 TO STA. 5901+27.60 CONST.
RIGHT OF RIGHT MAIN LANES
CONNECT TO APPROACH GUTTER
BARRIER WALL (SIDE TYPE A) = 342.15 LIN. FT.

STA. 5904+41.50 TO STA. 5908+88.59 CONST.
RIGHT OF RIGHT MAIN LANES
CONNECT TO APPROACH GUTTER AND
CONNECT TO EXIST.
BARRIER WALL (SIDE TYPE A) = 447.09 LIN. FT.

STA. 5897+97 - IN PLACE
3'-0" X 3'-0" TYPE ST DROP INLET
12' LT. OF EB C-D ROAD
WITH 18" X 52' R.C. PIPE OUTLET (CL. III)
WITH F.E.S. RT. & TYPE 3 BEDDING
(H = 4'-0")
MODIFY DROP INLET

STA. 5898+52 - IN PLACE
3'-0" X 3'-0" TYPE ST DROP INLET
19' LT. OF EB C-D ROAD
WITH 18" X 4' R.C. STUB OUTLET (CL. III)
TO D.I. AT STA. 5898+51 WITH TYPE 3 BEDDING
(H = 4'-0")
MODIFY DROP INLET

STA. 5898+51 - IN PLACE
3'-0" X 3'-0" TYPE ST DROP INLET
12' LT. OF EB C-D ROAD
WITH 18" X 60' R.C. PIPE OUTLET (CL. III)
WITH F.E.S. RT. & TYPE 3 BEDDING
(H = 6'-6")
RETAIN

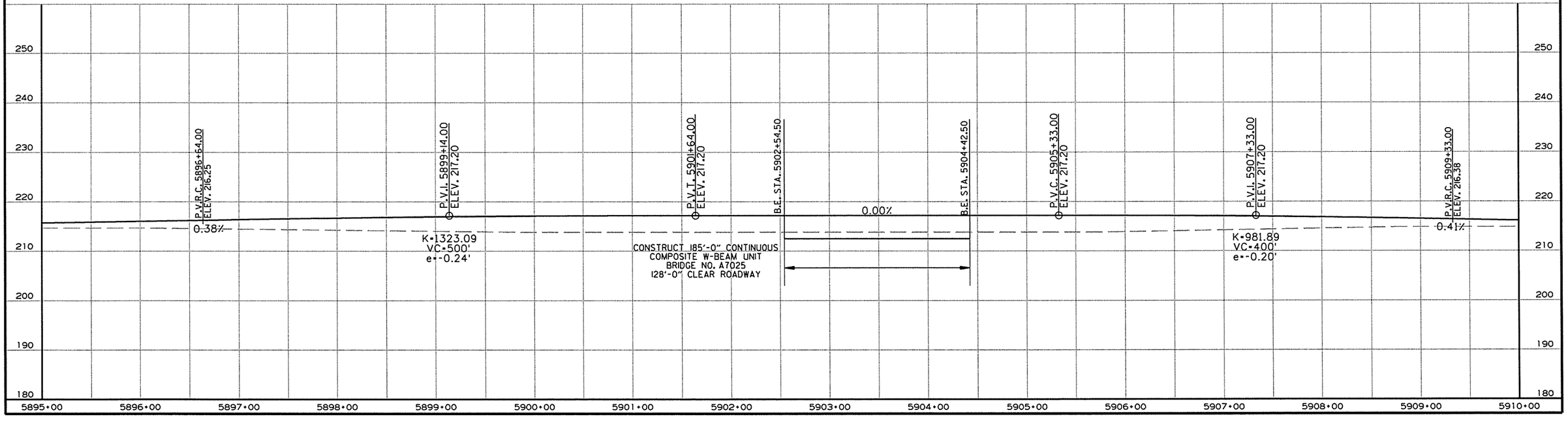
STA. 5899+97 - IN PLACE
3'-0" X 3'-0" TYPE ST DROP INLET
19' LT. OF EB C-D ROAD
WITH 18" X 70' R.C. PIPE OUTLET (CL. III)
WITH F.E.S. RT. & TYPE 3 BEDDING
(H = 4'-0")
MODIFY DROP INLET

STA. 5904+13 - IN PLACE
3'-0" X 3'-0" TYPE ST DROP INLET
19' LT. OF EB C-D ROAD
WITH 18" X 80' R.C. PIPE OUTLET (CL. III)
WITH F.E.S. RT. & TYPE 3 BEDDING
(H = 4'-0")
MODIFY DROP INLET

STA. 5906+64 - IN PLACE
3'-0" X 3'-0" TYPE ST DROP INLET
12' LT. OF EB C-D ROAD
WITH 18" X 108' R.C. PIPE OUTLET (CL. III)
WITH F.E.S. RT. & TYPE 3 BEDDING
(H = 4'-3")
RETAIN

STA. 5906+65 - IN PLACE
3'-0" X 3'-0" TYPE ST DROP INLET
19' LT. OF EB C-D ROAD
WITH 18" X 4' R.C. STUB OUTLET (CL. III)
TO D.I. AT STA. 5906+64 EB C-D ROAD
WITH TYPE 3 BEDDING
(H = 4'-0")
MODIFY DROP INLET

I-40



6/17/2015

RBB0107.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	110	263

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15

STA. 5910+50 - IN PLACE
3'-0" X 3'-0" TYPE ST DROP INLET
19' RT. OF WB C-D ROAD
WITH 18" X 86' R.C. PIPE OUTLET (CL. III)
TO RAMP 4 DITCH
WITH F.E.S. LT.
& TYPE 3 BEDDING
(H = 4'-0")
MODIFY DROP INLET

STA. 5914+20 - IN PLACE
3'-0" X 3'-0" TYPE ST DROP INLET
12' RT. OF WB C-D ROAD
WITH 18" X 40' R.C. PIPE OUTLET (CL. III)
WITH F.E.S. LT. & TYPE 3 BEDDING
(H = 4'-3")
RETAIN

STA. 5914+20 - IN PLACE
3'-0" X 3'-0" TYPE ST DROP INLET
17.35' RT. OF WB C-D ROAD
WITH 18" X 4' R.C. STUB OUTLET (CL. III)
TO D.I. AT STA. 5914+20 WB C-D ROAD
WITH TYPE 3 BEDDING
(H = 4'-0")
MODIFY DROP INLET

STA. 5914+91 - IN PLACE
3'-0" X 3'-0" TYPE ST DROP INLET
17' RT. OF WB C-D ROAD
WITH 18" X 40' R.C. PIPE OUTLET (CL. III)
WITH F.ES. LT. & TYPE 3 BEDDING
(H = 4'-0")
MODIFY DROP INLET

STA. 5915+57 - IN PLACE
3'-0" X 3'-0" TYPE ST DROP INLET
17' RT. OF WB C-D ROAD
WITH 18" X 48' R.C. PIPE OUTLET (CL. III)
WITH F.ES. LT. & TYPE 3 BEDDING
(H = 4'-0")
MODIFY DROP INLET

STA. 5918+06 - IN PLACE
3'-0" X 3'-0" TYPE ST DROP INLET
17' RT. OF WB C-D ROAD
WITH 18" X 48' R.C. PIPE OUTLET (CL. III)
WITH F.ES. LT. & TYPE 3 BEDDING
(H = 4'-0")
MODIFY DROP INLET

STA. 5920+82 - IN PLACE
3'-0" X 3'-0" TYPE ST DROP INLET
17' RT. OF WB C-D ROAD
WITH 18" X 46' R.C. PIPE OUTLET (CL. III)
WITH F.ES. LT. & TYPE 3 BEDDING
(H = 4'-0")
MODIFY DROP INLET

STA. 5923+86 - IN PLACE
3'-0" X 3'-0" TYPE ST DROP INLET
17' RT. OF WB C-D ROAD
WITH 18" X 46' R.C. PIPE OUTLET (CL. III)
WITH F.ES. LT. & TYPE 3 BEDDING
(H = 4'-0")
MODIFY DROP INLET

STA. 5921+20
END WRSF

HWY. 18
COLLEGE BLVD.

P.C. 5911+21.47
P.I. 5912+69.72
P.T. 5914+17.71
P.C. 5915+28.09
P.I. 5916+76.34
P.T. 5918+24.33

N 62°41'31" E
N 74°32'29" E
N 68° 37' 00" E

5910
5915
5920
5925

OVERHEAD SIGN

STA. 5922+53
BEGIN WRSF

BR. NO. 07026

STA. 5911+21.47 ON I-40
= STA. 5911+21.47 ON DETOUR L.M.L.
= STA. 5911+21.47 ON DETOUR R.M.L.
WITH 0' OFFSET LT. AND RT.

STA. 5918+22.69 ON I-40
= STA. 5918+24.33 ON DETOUR L.M.L.
= STA. 5918+24.33 ON DETOUR R.M.L.
WITH 42' OFFSET LT. AND RT.

⑤ DETOUR L.M.L.
PI = 5912+69.72
Δ = 5°55'29.4"LT.
D = 2°00'00"
T = 148.25'
L = 296.24'
PC = 5911+21.47
PT = 5914+17.71

⑥ DETOUR R.M.L.
PI = 5912+69.72
Δ = 5°55'29.4"RT.
D = 2°00'00"
T = 148.25'
L = 296.24'
PC = 5911+21.47
PT = 5914+17.71

⑦ DETOUR L.M.L.
PI = 5916+76.34
Δ = 5°55'29.4"RT.
D = 2°00'00"
T = 148.25'
L = 296.24'
PC = 5915+28.09
PT = 5918+24.33

⑧ DETOUR R.M.L.
PI = 5916+76.34
Δ = 5°55'29.4"LT.
D = 2°00'00"
T = 148.25'
L = 296.24'
PC = 5915+28.09
PT = 5918+24.33

STA. 5913+99 - IN PLACE
18" X 68' R.C. PIPE CULV'T
UNDER RT. LANE
RETAIN

STA. 5920+15 IN PLACE
OVERHEAD SIGN STRUCTURE
OVER RT. LANES
RETAIN

STA. 5913+99 COVER DROP INLET AS DIRECTED BY THE ENGINEER PRIOR TO CONSTRUCTION OF THE TEMPORARY RAMP. REMOVE COVER WHEN THE TEMPORARY RAMP IS REMOVED. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR VARIOUS CONTRACT ITEMS.

STA. 5910+52 - IN PLACE
3'-0" X 3'-0" TYPE ST DROP INLET
17' LT. OF EB C-D ROAD
WITH 18" X 50' R.C. PIPE OUTLET (CL. III)
WITH F.E.S. RT. & TYPE 3 BEDDING
(H = 4'-0")
MODIFY DROP INLET

STA. 5680+00.00 TO STA. 6045+40.69
SPECIAL FLOOD HAZARD AREA

REMOVAL AND DISPOSAL OF IMPACT ATTENUATION BARRIER
STA. 5922+00 C.L. OF I-40 = 2 EACH

REMOVAL AND DISPOSAL OF GUARDRAIL
STA. 5920+26.22 TO STA. 5920+51.22 LT. OF RT. LANES = 25 LIN. FT.

STA.	STA.	SIDE	GUARDRAIL (TYPE A)	GUARDRAIL TERMINAL (TYPE I)	GUARDRAIL TERMINAL (TYPE 2)
5920+26.57	5923+06.57	R.M.L. - LT.	280 LIN. FT.	1 EA.	
5920+69.86	5925+69.86	L.M.L - RT.	450 LIN. FT.	1 EA.	1 EA.

I-40

K=981.89
VC=400'
e=0.20%

P.V.I. 5911+33.00
ELEV. 215.57

P.V.I. 5913+33.00
ELEV. 215.57

0.00%

STA. 5913+33.00
END RECONSTRUCTION
LT. & RT. MAIN LANES

250 240 230 220 210 200 190 180

5910+00 5911+00 5912+00 5913+00 5914+00 5915+00 5916+00 5917+00 5918+00 5919+00 5920+00 5921+00 5922+00 5923+00 5924+00 5925+00

6/17/2015

RBB0107.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	111	263

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15

STA. 5680+00.00 TO STA. 6045+40.69
SPECIAL FLOOD HAZARD AREA

STA. 5926+00 - IN PLACE
4'-0" X 4'-0" TYPE RM DROP INLET
28' LT. OF WB C-D ROAD
WITH 18" X 56' R.C. PIPE OUTLET (CL. III)
WITH F.ES. LT. & TYPE 3 BEDDING
(H = 2'-6")
RETAIN

STA. 5926+16 - IN PLACE
3'-0" X 4'-0" TYPE ST DROP INLET
17' RT. OF WB C-D ROAD
WITH 18" X 76' R.C. PIPE OUTLET (CL. III)
(50° LT. FWD. SKEW)
WITH F.ES. LT. & TYPE 3 BEDDING
(H = 4'-0")
RETAIN

STA. 5925+96 - IN PLACE
18" X 94' R.C. PIPE CULV'T
UNDER LT. LANE
RETAIN

EXISTING PRECAST CONCRETE BARRIER WALL
RETAIN

STA. 5933+96 - IN PLACE
18" X 88' R.C. PIPE CULV'T
UNDER LT. LANE
RETAIN

STA. 5935+90 - IN PLACE
48" X 370' R.C. PIPE CULV'T
(20°LT. FWD. SKEW)
WITH F.E.S. LT. & RT.
WITH TYPE 3 BEDDING
RETAIN

STA. 5937+41 - IN PLACE
3'-0" X 3'-0" TYPE ST DROP INLET
17.00' RT. OF WB C-D ROAD
WITH 18" X 46' R.C. PIPE OUTLET (CL. III)
WITH F.E.S. LT. & TYPE III BEDDING
(H = 4'-0")
RETAIN

EXISTING PRECAST CONCRETE BARRIER WALL
RETAIN

N

5925 5930 5935 5940

N 68° 37' 00" E

WRSF AND CONCRETE
DITCH PAVING

I-40

6/17/2015

RBB0107.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	112	263

(2) PLAN AND PROFILE SHEETS

STA. 5939+80 - IN PLACE
3'-0" X 3'-0" TYPE ST DROP INLET
17.00' RT. OF WB C-D ROAD
WITH 18" X 64' R.C. PIPE OUTLET (CL. III)
WITH F.E.S. LT. & TYPE III BEDDING
(H = 4'-0")
RETAIN

STA. 5942+43 - IN PLACE
3'-0" X 3'-0" TYPE ST DROP INLET
17.00' RT. OF WB C-D ROAD
WITH 18" X 46' R.C. PIPE OUTLET (CL. III)
WITH F.E.S. LT. & TYPE III BEDDING
(H = 4'-0")
RETAIN

STA. 5943+34 - IN PLACE
3'-0" X 3'-0" TYPE ST DROP INLET
17.00' RT. OF WB C-D ROAD
WITH 18" X 44' R.C. PIPE OUTLET (CL. III)
WITH F.E.S. LT. & TYPE III BEDDING
(H = 4'-0")
RETAIN

STA. 5944+92 - IN PLACE
3'-0" X 3'-0" TYPE ST DROP INLET
14.00' RT. OF WB C-D ROAD
WITH 18" X 42' R.C. PIPE OUTLET (CL. III)
WITH F.E.S. LT. & TYPE III BEDDING
(H = 3'-2")
RETAIN

STA. 5949+96 COVER DROP INLET AS DIRECTED BY THE ENGINEER PRIOR TO CONSTRUCTION OF THE TEMPORARY RAMP. REMOVE COVER WHEN THE TEMPORARY RAMP IS REMOVED. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR VARIOUS CONTRACT ITEMS.

(9) DETOUR L.M.L.
PI = 5950+22.12
Δ = 5°55'29.4"RT.
D = 2°00'00"
T = 148.25'
L = 296.24'
PC = 5948+73.87
PT = 5951+70.11

(10) DETOUR R.M.L.
PI = 5950+22.12
Δ = 5°55'29.4"LT.
D = 2°00'00"
T = 148.25'
L = 296.24'
PC = 5948+73.87
PT = 5951+70.11

(11) DETOUR L.M.L.
PI = 5954+28.74
Δ = 5°55'29.4"LT.
D = 2°00'00"
T = 148.25'
L = 296.24'
PC = 5952+80.49
PT = 5955+76.73

(12) DETOUR R.M.L.
PI = 5954+28.74
Δ = 5°55'29.4"RT.
D = 2°00'00"
T = 148.25'
L = 296.24'
PC = 5952+80.49
PT = 5955+76.73

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15

N

P.C. 5948+73.87
P.I. 5950+22.12
P.T. 5951+70.11
P.C. 5952+80.49
P.I. 5954+28.74

5940 5945 5950 5955

NOSE +29.30 56.00'

N 68° 37' 00" E

N 74° 32' 29" E

N 62° 41' 31" E

NOSE +51.59 54.00'

36'

OVERHEAD SIGN

WRSF AND CONCRETE DITCH PAVING

STA. 5946+80 IN PLACE
OVERHEAD SIGN STRUCTURE
OVER RT. MAIN LANES
AND IMPACT ATTENUATION BARRIERS
REMOVE AND INSTALL
OH-040-18-32

STA. 5946+80 IN PLACE
TNDOT CAMERA
RETAIN

STA. 5948+75.51 ON I-40
= STA. 5948+73.87 ON DETOUR L.M.L.
= STA. 5948+73.87 ON DETOUR R.M.L.
WITH 42' OFFSET, LT. AND RT.

STA. 5949+96 - IN PLACE
18" X 100' R.C. PIPE CULV'T
WITH F.E.S.
UNDER RT. LANE AND RT. FRONT. ROAD
RETAIN

700' ACCELERATION LANE

STA. 5941+96 - IN PLACE
18" X 68' R.C. PIPE CULV'T
UNDER RT. LANE
RETAIN

STA. 5680+00.00 TO STA. 6045+40.69
SPECIAL FLOOD HAZARD AREA

I-40

STA. 5953+57.50
BEGIN RECONSTRUCTION
LT. & RT. MAIN LANES

P.V.C. 5953+57.50
ELEV. 216.85
0.00%

250 240 230 220 210 200 190 180

5940+00 5941+00 5942+00 5943+00 5944+00 5945+00 5946+00 5947+00 5948+00 5949+00 5950+00 5951+00 5952+00 5953+00 5954+00 5955+00

6/22/2015

RBB0107.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	113	263

(2) PLAN AND PROFILE SHEETS

STA. 5680+00.00 TO STA. 6045+40.69
SPECIAL FLOOD HAZARD AREA

STA. 5958+97 COVER DROP INLET AS DIRECTED BY THE ENGINEER PRIOR TO CONSTRUCTION OF THE TEMPORARY RAMP. REMOVE COVER WHEN THE TEMPORARY RAMP IS REMOVED. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR VARIOUS CONTRACT ITEMS.

STA. 5958+97 - IN PLACE
18" X 138' R.C. PIPE CULV'T
WITH F.E.S.
UNDER RT. LANE AND RT. FRONT. ROAD
RETAIN

BR. NO. B3114
SITE NO. 4

STA. 5968+97 - IN PLACE
18" X 72' R.C. PIPE CULV'T
UNDER RT. LANE
RETAIN

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15

P. T. 5955+76.73

STA. 5955+76.73 ON I-40
= STA. 5955+76.73 ON DETOUR L.M.L.
= STA. 5955+76.73 ON DETOUR R.M.L.
WITH 0' OFFSET LT. AND RT.

BR. END STA. 5964+22.96

STA. 5963+98
END WRSF

TEN MILE BAYOU

BR. END STA. 5965+72.96

BR. END STA. 5966+36.00

STA. 5966+88
BEGIN WRSF

5955 5960 5965 5970

N 68° 37' 00" E

BR. NO. B3114

BR. NO. 07344

N 68°37'00" E

BR. NO. A3114

36' 24'

BR. END STA. 5964+48.00

BR. END STA. 5965+10.90

BR. END STA. 5966+60.90

P. T. 5955+76.73

700' ACCELERATION LANE

300' TAPER

+51.59

+51.59

BR. NO. A3114
SITE NO. 3

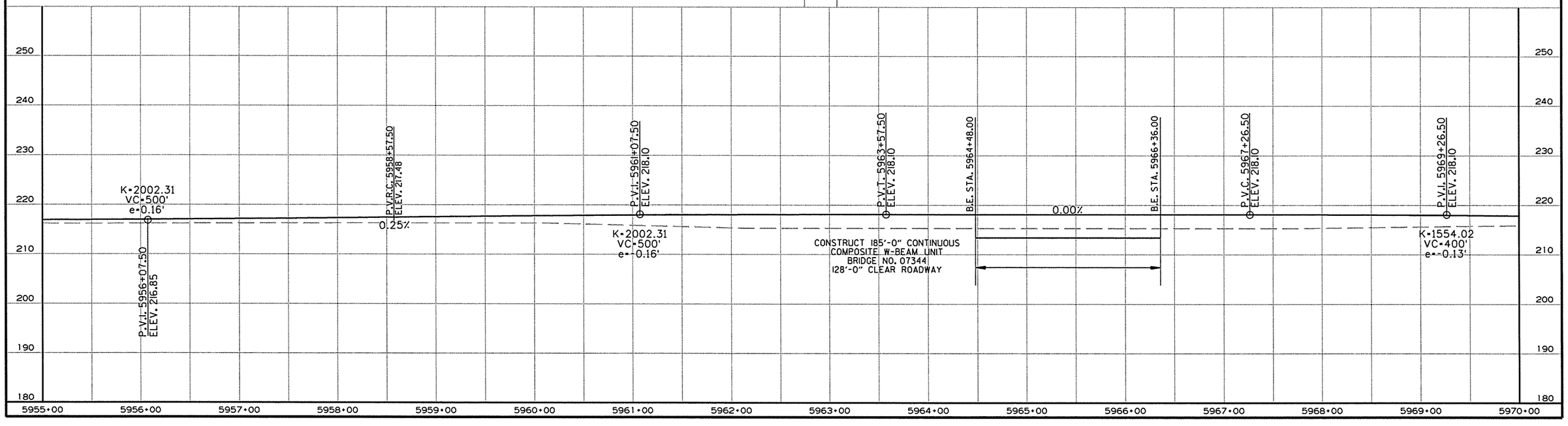
STA.	STA.	SIDE	GUARDRAIL (TYPE A)	THRIE BEAM TERMINAL	GUARDRAIL TERMINAL (TYPE 2)
5962+42.25	5965+12.00	R.M.L. - RT.	200 LIN. FT.	1 EA.	1 EA.
5965+72.00	5968+41.75	L.M.L - LT.	200 LIN. FT.	1 EA.	1 EA.

REMOVAL AND DISPOSAL OF GUARDRAIL

STA. 5961+65.91 TO STA. 5964+90.91 LT. OF RT. LANES = 325 LIN. FT.
STA. 5962+55.88 TO STA. 5965+30.88 RT. OF RT. LANES = 275 LIN. FT.
STA. 5965+52.96 TO STA. 5968+27.96 LT. OF LT. LANES = 275 LIN. FT.
STA. 5965+92.96 TO STA. 5969+17.96 RT. OF LT. LANES = 325 LIN. FT.

STA. 5968+97 COVER DROP INLET AS DIRECTED BY THE ENGINEER PRIOR TO CONSTRUCTION OF THE TEMPORARY RAMP. REMOVE COVER WHEN THE TEMPORARY RAMP IS REMOVED. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR VARIOUS CONTRACT ITEMS.

I-40



6/17/2015

RBB0107.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	114	263

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15

STA. 5680+00.00 TO STA. 6045+40.69
SPECIAL FLOOD HAZARD AREA

(13) DETOUR L.M.L.
PI = 5974+27.32
Δ = 5°55'29.4"LT.
D = 2°00'00"
T = 148.25'
L = 296.24'
PC = 5972+79.06
PT = 5975+75.30

(14) DETOUR R.M.L.
PI = 5974+27.32
Δ = 5°55'29.4"RT.
D = 2°00'00"
T = 148.25'
L = 296.24'
PC = 5972+79.06
PT = 5975+75.30

(15) DETOUR L.M.L.
PI = 5978+33.94
Δ = 5°55'29.4"RT.
D = 2°00'00"
T = 148.25'
L = 296.24'
PC = 5976+85.68
PT = 5979+81.92

(16) DETOUR R.M.L.
PI = 5978+33.94
Δ = 5°55'29.4"LT.
D = 2°00'00"
T = 148.25'
L = 296.24'
PC = 5976+85.68
PT = 5979+81.92

STA. 5976+96 COVER DROP INLET AS DIRECTED BY THE ENGINEER PRIOR TO CONSTRUCTION OF THE TEMPORARY RAMP. REMOVE COVER WHEN THE TEMPORARY RAMP IS REMOVED. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR VARIOUS CONTRACT ITEMS.

STA. 5972+79.06 ON I-40
= STA. 5972+79.06 ON DETOUR L.M.L.
= STA. 5972+79.06 ON DETOUR R.M.L.
WITH 0' OFFSET LT. AND RT.

P.C. 5972+79.06
P.I. 5974+27.32
P.T. 5975+75.30
P.C. 5976+85.68
P.I. 5978+33.94
P.T. 5979+81.92

N 62°41'31" E
N 74°32'29" E
N 68° 37' 00" E

WRSF & CONCRETE DITCH PAVING

OVERHEAD SIGN

STA. 5979+80.28 ON I-40
= STA. 5979+81.92 ON DETOUR L.M.L.
= STA. 5979+81.92 ON DETOUR R.M.L.
WITH 42' OFFSET LT. AND RT.

STA. 5976+96 - IN PLACE
18" X 68' R.C. PIPE CULV'T
UNDER RT. LANE
RETAIN

STA. 5980+50 INSTALL
OH-040-18-33
RIGHT MAIN LANES

STA. 5983+97 - IN PLACE
18" X 104' R.C. PIPE CULV'T
UNDER RT. LANE AND EXIT RAMP
WITH F.E.S.
RETAIN

STA 5977+90
REMOVE EXISTING OVERHAED SIGNS, SIGN STRUCTURE & IMPACT ATTENUATION BARRIERS. MAINTAIN TNDOT CAMERA & POLE.

I-40

STA. 5975+26.50
END RECONSTRUCTION
LT. & RT. MAIN LANES

P.V.R.C. 5971+26.50
ELEV. 217.58

K=1554.02
VC=400'
e=0.13'

P.V.I. 5973+26.50
ELEV. 217.07

P.V.T. 5975+26.50
ELEV. 217.07

0.26%

0.00%

250 240 230 220 210 200 190 180

5970+00 5971+00 5972+00 5973+00 5974+00 5975+00 5976+00 5977+00 5978+00 5979+00 5980+00 5981+00 5982+00 5983+00 5984+00 5985+00

6/22/2015

RBB0107.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	115	263

(2) PLAN AND PROFILE SHEETS

STA. 5680+00.00 TO STA. 6045+40.69
SPECIAL FLOOD HAZARD AREA

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15

STA. 5987+80 - IN PLACE
24" X 54' R.C. PIPE CULV'T
WITH F.E.S. LT. & RT.
RETAIN

STA. 5990+96 - IN PLACE
18" X 72' R.C. PIPE CULV'T
UNDER RT. LANE
RETAIN

N

5985 5990 5995 6000

P.C. 5997+26.39

N 68° 37' 00" E

P.C. 5999+43.69

STA. 5999+58
END WRSF

OVERHEAD SIGN

STA. 5999+00 INSTALL
OH-040-18-34
RIGHT MAIN LANES

STA 5999+50
REMOVE EXISTING OVERHAED
SIGNS, SIGN STRUCTURE.
MAINTAIN TNDOT CAMERA
& POLE.

STA. 5680+00.00 TO STA. 6045+40.69
SPECIAL FLOOD HAZARD AREA

STA. 6014+69 - IN PLACE
30" X 76' R.C. PIPE CULV'T
UNDER M.L. LINE
RETAIN

I-55 S.B.

N

6000 6005 6010 6015

P.T. 6005+81.12

N 51° 31' 19" E

P.C. 6011+34.145

PCC6015+66.22

STA. 6014+98
TYPE "H" DROP INLET IN MEDIAN
4' X 4' X H = 3'-9" 2 OPENINGS
24" X 64' R.C. PIPE CULV'T
UNDER SOUTH LANES (RT.) &
24" X 80' R.C. PIPE CULV'T
UNDER NORTH LANES (LT.)
RETAIN

LIGHT POLE

LIGHT POLE

P.I. 6001+69.95

PCC6006+14.79

P.I. 6002+79.28

L.M.

STA. 6000+98 - IN PLACE
18" X 78' R.C. PIPE CULV'T
UNDER NORTH LANES
RETAIN

STA. 6003+80 - IN PLACE
24" X 88' R.C. PIPE CULV'T
UNDER L.M. LINE
RETAIN

6/17/2015

RBB0107.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	116	263

(2) PLAN AND PROFILE SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15

M.L.

PRC6020+24.69

6020

I-55 N.B.

N

I-55 S.B.

BR. NO. 06102

T.M.

I-55 N.B.

6020

6025

6030

6015

P.I. 6017+96.63

PRC6015+66.28

BR. NO. 0323

STA. 6015+25 INSTALL
OC-040-18-36
RIGHT MAIN LANES

STA. 6025+00 INSTALL
OC-040-18-37
RIGHT MAIN LANES

STA. 6029+17 - IN PLACE
18" X 63' R.C. PIPE CULV'T
UNDER SOUTH LANES (RT.)
RETAIN

STA. 5680+00.00 TO STA. 6045+40.69
SPECIAL FLOOD HAZARD AREA

6015

STA. 5680+00.00 TO STA. 6045+40.69
SPECIAL FLOOD HAZARD AREA

N

I-55 N.B.

6030

6035

6040

6045

S 65° 54' 48" E
OVERHEAD SIGN

P.T. 6032+19.94

LIGHT POLE

STA. 6035+75 - IN PLACE
30" X 68' R.C. PIPE CULV'T
UNDER L.T.L. LANES

30" X 140' R.C. PIPE CULV'T
UNDER T.M. LANES
RETAIN

LIGHT POLE

LIGHT POLE

STA. 6045+00 INSTALL
OH-040-18-35
RIGHT MAIN LANES

6/19/2015

RBB0107.DGN

I-40

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	117	263

(2) PLAN AND PROFILE SHEETS

STA. 5680+00.00 TO STA. 6045+40.69
SPECIAL FLOOD HAZARD AREA

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
6-22-15

HWY. 77

BR. END STA. 6045+40.69

BR. END STA. 6055+24.37

6045 6050 6055 6060

BR. NO. B3126

S 65°54'48" E S 65°54'48" E

BR. NO. A3126

BR. END STA. 6045+40.69

STA. 6045+40.69
END JOB BB0107
LOG MILE 277.57

BR. END STA. 6055+24.37

N. MISSOURI ST.

I-40

6/19/2015

RBB0107.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	118	263
				(2)	SIGNING SUMMARY OF QUANTITIES			

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTIN

SIGNING SUMMARY OF QUANTITIES

ITEM NUMBER	ITEM	TOTAL	UNIT
202	REMOVAL AND DISPOSAL OF IMPACT ATTENUATION BARRIER	2	EACH
SP	REMOVAL AND DISPOSAL OF OVERHEAD SIGN STRUCTURE	3	EACH
303	AGGREGATE BASE COURSE (CLASS 7)	630	TON
SP, SS &407	MINERAL AGGREGATE IN ACHM SURFACE COURSE (1/2")	145	TON
SP, SS &407	ASPHALT BINDER (PG 76-22) IN ACHM SURFACE COURSE (1/2")	8	TON
617	GUARDRAIL (TYPE A)	1575	LIN FT
617	TERMINAL ANCHOR POSTS (TYPE 1)	9	EACH
617	GUARDRAIL TERMINAL (TYPE 2)	9	EACH
SP	STEEL OVERHEAD SIGN STRUCTURE (OH-040-18-31)	1	EACH
SP	STEEL OVERHEAD SIGN STRUCTURE (OH-040-18-32)	1	EACH
SP	STEEL OVERHEAD SIGN STRUCTURE (OH-040-18-33)	1	EACH
SP	STEEL OVERHEAD SIGN STRUCTURE (OH-040-18-34)	1	EACH
SP	STEEL OVERHEAD SIGN STRUCTURE (OH-040-18-35)	1	EACH
SP	STEEL CANTILEVER SIGN STRUCTURE (OC-040-18-36)	1	EACH
SP	STEEL CANTILEVER SIGN STRUCTURE (OC-040-18-37)	1	EACH
725	GUIDE SIGN - ROADSIDE MOUNTED (DEMOUNTABLE LEGEND)	5226	SQ. FT.
725	GUIDE SIGN - OVERHEAD MOUNTED (DEMOUNTABLE LEGEND)	2156	SQ. FT.
726	STANDARD SIGN	1643	SQ. FT.
727	EXIT NUMBER PANEL (TYPE A)	400	SQ. FT.
SP	OMNI-DIRECTIONAL BREAKAWAY SIGN SUPPORTS (TYPE G2-1)	76	EACH
729	CHANNEL POST SIGN SUPPORT (TYPE G1)	24	EACH
730	BREAKAWAY SIGN SUPPORT (TYPE G-2)	28601	POUND

NOTES:

ALL EXISTING GUIDE SIGNS SHALL BE MAINTAINED IN SUCH A MANNER THAT THE SIGNS ARE FULLY VISIBLE, INTACT, AND ERECT FOR THE DURATION OF THE PROJECT, AND SHALL BE REMOVED WHEN THEIR USE IS NO LONGER REQUIRED. REMOVAL AND DISPOSAL OF SIGNS, SUPPORTS AND FOUNDATIONS SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED SUBSIDIARY TO OTHER ITEMS IN THE CONTRACT.

THE EXISTING SIGNS AND SUPPORTS SHALL BECOME THE PROPERTY OF THE CONTRACTOR. THE EXISTING FOOTINGS SHALL BE REMOVED AND THE HOLES FILLED WITH A SUITABLE MATERIAL AND COMPACTED.

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

NOTE:
BREAKAWAY SIGN SUPPORT TOTAL IS CALCULATED BY TAKING THE LENGTH OF H1, H2, H3 AND THE STUB POST AND MULTIPLYING BY THE BEAM WEIGHT (LBS).

BASIS OF ESTIMATE:
NMAX = 205
MINERAL AGGREGATE 94.9%
ASPHALT BINDER (PG 76 – 22) 5.1%

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	119	203

(2) SIGNING QUANTITIES SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTINI

OVERHEAD SIGNING QUANTITIES

SIGN NO./ LOCATION	STRUCTURE TYPE: INSTALL SIGN STRUCTURE (EACH) ST	OC	OH	BM	MAINTAIN EXISTING SIGN STRUCTURE ST	OC	OH	BM	REMOVAL & DISPOSAL OF OVERHEAD SIGN STRUCTURE (EACH)	GUIDE SIGN Length LIN. FT.	Height LIN. FT.	SQ. FT.	LEGEND	EXIT NUMBER PANEL TYPE A SQ. FT.	TYPE B SQ. FT.	TYPE C SQ. FT.	GUARDRAIL TYPE A LIN. FT.	TERM. ANCHOR POSTS (TYPE 1) EACH	GUARDRAIL TERM. (TYPE 2) EACH	AGG. BASE CR (CL. 7) TON	ACHM SURF. CR. 220 LBS/SY TON
BM-040-18-13								1													
BM-040-5822+90EB										13.50	8.50	114.75									
OH-040-18-31			1														350	2	2	140	34
OH-040-5891+50EB-A										10.50	12.50	131.25	275	23.57							
OH-040-5891+50EB-B										14.00	13.00	182.00	277	23.57							
OH-040-18-32			1						1								350	2	2	140	34
OH-040-5946+80EB-A										14.50	11.50	166.75	276	23.57							
OH-040-5946+80EB-B										14.00	13.00	182.00	277	23.57							
OH-040-18-33			1						1								350	2	2	140	34
OH-040-5980+50EB-A										14.50	12.50	181.25	276	23.57							
OH-040-5980+50EB-B										14.00	13.50	189.00	277	23.57							
OH-040-5980+50EB-C										12.00	10.50	126.00									
OH-040-18-34			1						1								350	2	2	140	34
OH-040-5999+00EB-A										14.00	14.00	196.00									
OH-040-5999+00EB-B										14.00	7.50	105.00									
OH-040-5999+00EB-C										12.00	10.50	126.00									
OH-040-18-35			1																		
OH-040-6045+00EB-A										13.00	9.50	123.50									
OH-040-6045+00EB-B										12.00	10.50	126.00									
OC-040-18-36		1																			
OC-040-6015+25EB										14.00	7.50	105.00									
OC-040-18-37		1															175	1	1	70	17
OC-040-6025+00EB										13.50	7.50	101.25									
TOTALS:		**2**	**5**					**1**	**3**			**2155.75**		**141.42**			**1575**	**9**	**9**	**630**	**153**

MAIN LANES ROADSIDE MOUNTED SIGNING QUANTITIES

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	120	263
				(2)	SIGNING QUANTITIES SHEET			

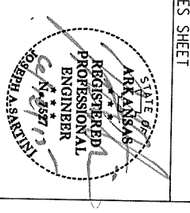
SIGN NO./ LOCATION	I-BEAM STRUCTURE TYPE			GUIDE SIGN DEMOUNTABLE LEGEND			I-BEAM BREAKAWAY SIGN SUPPORT												EXIT NUMBER PANEL			
				LENGTH	HEIGHT		STEEL SECT. A-572		SIGN POST LENGTH			STUB POST			FOOTINGS			SIGN POST AND STUB	LEGEND	TYPE		
	G-1	G-2	G-3	LIN. FT.		SQ. FT.	BEAM	LBS	H-1	H-2	H-3	H-1	H-2	H-3	DIA.	DEPTH	EMBED.	POUND		A	B	C
									LIN FT			LIN FT			LIN FT					SQ. FT.		
ML-040-5860+00EB		1		15.50	5.00	77.50	W6	9.00	12.00	13.00		2.50	2.50		2.00	3.50	2.00	270.00				
ML-040-5373+20EB		1		13.50	5.50	74.25	W6	9.00	12.50	13.50		2.50	2.50		2.00	3.50	2.00	279.00				
ML-040-5874+00EB		1		10.00	5.00	50.00	W6	12.00	12.00	13.00		2.50	2.50		2.00	3.50	2.00	360.00				
ML-040-5867+00EB		1		23.50	12.50	293.75	W8	21.00	19.50	20.50		4.00	4.00		3.00	5.50	5.00	1008.00				
ML-040-5958+00WB		1		23.50	12.50	293.75	W8	21.00	19.50	20.50		4.00	4.00		3.00	5.50	5.00	1008.00				
ML-040-5966+00WB		1		18.50	6.00	111.00	W8	18.00	13.00	14.00		3.99	3.99		2.50	5.50	3.66	629.64				
ML-040-5416+00WB		1		23.00	7.50	172.50	W8	18.00	14.50	15.50		3.99	3.99		2.50	5.50	3.66	683.64				
ML-040-5973+00EB		1		10.50	5.00	52.50	W6	9.00	12.00	13.00		2.50	2.50		2.00	3.50	2.00	270.00				
WS-040-5752+00EB		1		14.50	7.50	108.75	W8	18.00	14.50	15.50		3.99	3.99		2.50	5.50	3.66	683.64				
WS-040-5826+30EB		1		10.50	8.00	84.00	W6	12.00	15.00	16.00		2.50	2.50		2.00	3.50	2.00	432.00				
WS-040-5773+00EB		1		11.00	7.50	82.50	W6	12.00	14.50	15.50		2.50	2.50		2.00	3.50	2.00	420.00				
WS-040-5792+00EB		1		11.00	7.00	77.00	W6	12.00	14.00	15.00		2.50	2.50		2.00	3.50	2.00	408.00				
WS-040-5800+00EB		1		10.50	8.00	84.00	W6	12.00	15.00	16.00		2.50	2.50		2.00	3.50	2.00	432.00				
ML-040-5373+20EB		1		13.00	7.50	97.50	W8	18.00	14.50	15.50		3.99	3.99		2.50	5.50	3.66	683.64	265	23.57		
ML-040-5398+00WB		1		13.00	7.50	97.50	W8	18.00	14.50	15.50		3.99	3.99		2.50	5.50	3.66	683.64	265	23.57		
ML-040-5450+00WB		1		10.50	12.00	126.00	W8	18.00	19.00	20.00		3.99	3.99		2.50	5.50	3.66	845.64	265	23.57		
ML-040-5692+50EB		1		10.00	5.00	50.00	W8	18.00	12.00	13.00		3.99	3.99		2.50	5.50	3.66	593.64	271	23.57		
ML-040-5727+00WB		1		10.00	5.00	50.00	W8	18.00	12.00	13.00		3.99	3.99		2.50	5.50	3.66	593.64	271	23.57		
ML-040-5640+20EB		1		9.50	7.00	66.50	W8	18.00	14.00	15.00		3.99	3.99		2.50	5.50	3.66	665.64	271	23.57		
ML-040-5775+00WB		1		9.50	7.00	66.50	W8	18.00	14.00	15.00		3.99	3.99		2.50	5.50	3.66	665.64	271	23.57		
ML-040-5853+00EB		1		10.50	12.00	126.00	W8	21.00	19.00	20.00		2.50	2.50		2.00	3.50	2.00	924.00	275	23.57		
ML-040-5987+00WB		1		10.50	12.00	126.00	W8	21.00	19.00	20.00		2.50	2.50		2.00	3.50	2.00	924.00	275	23.57		
ML-040-5951+00WB		1		13.50	9.50	128.25	W8	21.00	16.50	17.50		2.50	2.50		2.00	3.50	2.00	819.00	275	23.57		
ML-040-5913+00EB		1		13.50	9.50	128.25	W8	21.00	16.50	17.50		2.50	2.50		2.00	3.50	2.00	819.00	276	23.57		
ML-040-5851+30WB-A		1		19.50	5.50	107.25	W8	21.00	12.50	13.50		2.50	2.50		2.00	3.50	2.00	651.00				
ML-040-5851+30WB-B				8.50	1.50	12.75			8.50	9.50												
ML-040-5858+00WB-A		1		17.00	7.50	127.50	W8	21.00	14.50	15.50		2.50	2.50		2.00	3.50	2.00	735.00				
ML-040-5858+00WB-B				8.50	1.50	12.75			8.50	9.50												
ML-040-5848+00WB-A		1		10.00	8.00	80.00	W8	18.00	15.00	16.00		3.99	3.99		2.50	5.50	3.66	701.64				
ML-040-5848+00WB-B				8.50	1.50	12.75			8.50	9.50												
ML-040-5875+00WB-A		1		10.00	8.00	80.00	W8	18.00	15.00	16.00		3.99	3.99		2.50	5.50	3.66	701.64				
ML-040-5875+00WB-B				8.50	1.50	12.75			8.50	9.50												
ML-040-5884+00WB-A		1		19.50	5.50	107.25	W8	21.00	12.50	13.50		2.50	2.50		2.00	3.50	2.00	651.00				
ML-040-5884+00WB-B				8.50	1.50	12.75			8.50	9.50												
ML-040-5927+50WB-A		1		17.00	7.50	127.50	W8	21.00	14.50	15.50		2.50	2.50		2.00	3.50	2.00	735.00				
ML-040-5927+50WB-B				8.50	1.50	12.75			8.50	9.50												
LG-40-5631+00EB		1		13.00	16.00	208.00	W8	21.00	23.00	24.00		2.50	2.50		2.00	3.50	2.00	1092.00				
LG-40-5793+00WB		1		13.00	16.00	208.00	W8	21.00	23.00	24.00		2.50	2.50		2.00	3.50	2.00	1092.00				
LL-040-5906+00EB		1		13.00	16.00	208.00	W8	21.00	23.00	24.00		2.50	2.50		2.00	3.50	2.00	1092.00				
LG-040-5941+00EB		1		18.00	12.00	216.00	W8	21.00	19.00	20.00		2.50	2.50		2.00	3.50	2.00	924.00				
LF-040-5936+00EB		1		18.00	12.00	216.00	W8	21.00	19.00	20.00		2.50	2.50		2.00	3.50	2.00	924.00				
LGF-040-5973+00WB		1		18.00	12.00	216.00	W8	21.00	19.00	20.00		2.50	2.50		2.00	3.50	2.00	924.00				
LLC-040-6005+00EB		1		13.00	16.00	208.00	W8	21.00	23.00	24.00		2.50	2.50		2.00	3.50	2.00	1092.00				
LF-040-6012+00EB		1		13.00	16.00	208.00	W8	21.00	23.00	24.00		2.50	2.50		2.00	3.50	2.00	1092.00				
LG-040-6022+00EB		1		13.00	16.00	208.00	W8	21.00	23.00	24.00		2.50	2.50		2.00	3.50	2.00	1092.00				
TOTALS:		**39**				**5226.00**												**28600.68**		**259.27**		

STANDARD SIGNS FLAT SHEET		
CHANNEL POST SIGN SUPPORTS		
	TYPE	STANDARD
SIGN NO./ LOCATION	G1	SIGN
	EA.	SQ. FT.
SS-040-5647+50WB	1	1.25
SS-040-5697+50EB	1	1.25
SS-040-5383+50WB	1	1.25
SS-040-5383+50EB	1	1.25
SS-040-5750+30WB	1	1.25
SS-040-5750+30EB	1	1.25
SS-040-5436+30WB	1	1.25
SS-040-5436+30EB	1	1.25
SS-040-5803+10WB	1	1.25
SS-040-5803+10EB	1	1.25
SS-040-5489+10WB	1	1.25
SS-040-5489+10EB	1	1.25
SS-040-5855+90WB	1	1.25
SS-040-5855+90EB	1	1.25
SS-040-5541+90WB	1	1.25
SS-040-5541+90EB	1	1.25
SS-040-5908+70WB	1	1.25
SS-040-5908+70EB	1	1.25
SS-040-5594+70WB	1	1.25
SS-040-5594+70EB	1	1.25
SS-040-5962+50WB	1	1.25
SS-040-5962+50EB	1	1.25
SS-040-5647+50WB	1	1.25
SS-040-5647+50EB	1	1.25
TOTALS:	**24**	**30.00**

REMOVAL AND DISPOSAL	
	IMPACT ATTENUATION BARRIERS
LOCATION	EACH
STA 5946+90	1
STA 5977+90	1
TOTAL:	2

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTINI
6/18/15

STANDARD SIGNS FLAT SHEET													
SIGN NO./ LOCATION	OMNI-DIRECTIONAL BREAKAWAY SIGN SUPPORTS TYPE												STANDARD SIGN
	G1	G2	G2-1	G2-2	G2-3	G2-4	G2-5	G2-6	G2-7	G2-8	G2-9	G2-10	
	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	SQ. FT.
SS-040-5367+00WB			1										20.50
SS-040-5679+00WB			1										20.50
SS-040-5821+00WB			1										20.50
SS-040-5992+00WB			1										20.50
SS-040-5410+00EB			1										20.50
SS-040-5737+00EB			1										20.50
SS-040-5946+00EB			1										20.50
SS-040-5406+00EB			1										16.00
SS-040-5636+00WB			1										16.00
SS-040-5462+00EB			1										16.00
SS-040-5477+00WB			1										16.00
SS-040-5515+00EB			1										16.00
SS-040-5529+00WB			1										16.00
SS-040-5568+00EB			1										16.00
SS-040-5583+00WB			1										16.00
SS-040-5596+00EB			1										16.00
SS-040-5610+00WB			1										16.00
SS-040-5621+00EB			1										16.00
SS-040-5636+00WB			1										16.00
SS-040-5675+00EB			1										16.00
SS-040-5689+00WB			1										16.00
SS-040-5701+00EB			1										16.00
SS-040-5717+00WB			1										16.00
SS-040-5734+00EB			1										16.00
SS-040-5747+00WB			1										16.00
SS-040-5787+00EB			1										16.00
SS-040-5840+00EB			1										16.00
SS-040-5860+00WB			1										16.00
SS-040-5909+50WB			1										16.00
SS-040-6038+00EB			1										16.00
SS-040-5384+00WB			1										16.00
SS-040-5389+90EB			1										16.00
SS-040-5699+00WB			1										16.00
SS-040-5719+00EB			1										16.00
SS-040-5837+00WB			1										16.00
SS-040-5865+00WB			1										16.00
SS-040-5905+00WB			1										16.00
SS-040-5948+00EB			1										16.00
SS-040-6016+00WB			1										16.00
SS-040-6035+00EB			1										16.00
SS-040-5355+00WB			1										36.00
SS-040-5418+20EB			1										36.00
SS-040-5673+00WB			1										36.00
SS-040-5745+00EB			1										36.00
SS-040-5779+00WB			1										36.00
SS-040-5779+00EB-A			1										20.00
SS-040-5779+00EB-B			1										20.00
SS-040-5849+60WB			1										20.00
SS-040-5969+00EB			1										20.00
SS-040-5980+00WB			1										20.00
SS-040-6022+00WB			1										20.00
SS-040-5821+30EB			1										20.00
SS-040-5724+00WB			1										20.00
SS-040-5849+60WB			1										20.00
SS-040-5878+10WB			1										20.00
SS-040-5891+50EB-OH													20.00
SS-040-5374+50EB			1										20.00
SS-040-5396+00WB			1										20.00
SS-040-5693+10EB			1										20.00
SS-040-5948+00WB			1										20.00
SS-040-5363+00WB			1										20.00
SS-040-5414+20EB			1										20.00
SS-040-5676+00WB			1										20.00
SS-040-5742+00EB			1										20.00
SS-040-5825+00EB			1										20.00
SS-040-5770+00EB-A			1										14.50
SS-040-5770+00EB-B			1										16.00
ML-040-5359+48EB			1										16.00
ML-040-5359+48WB			1										19.00
EX-040-5377+50EB			1										18.00
EX-040-5394+50WB			1										37.50
EX-040-5695+80EB			1										37.50
EX-040-5723+00WB			1										37.50
EX-040-5895+00EB			1										37.50
EX-040-5944+90WB			1										37.50
EX-040-5982+10EB			1										35.00
EX-040-6000+10EB			1										37.50
TOTALS:			76										37.50
													1612.50



DATE REVISED	DATE FILED	DATE REVISED	DATE FILED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.	BBOI07	121	263

(2) SIGNING QUANTITIES SHEET

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	122	263

(2) SIGN LAYOUT SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTINI
6/13/12

G2
M3-1 (BLUE) 36"X18"
M1-1 (40) 48"X48"

SS-040-5367+00WB
SS-040-5679+00WB
SS-040-5821+00WB
SS-040-5992+00WB

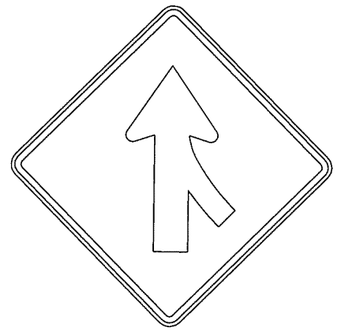
G2
M3-2 (BLUE) 36"X18"
M1-1 (40) 48"X48"

SS-040-5410+00EB
SS-040-5737+00EB
SS-040-5946+00EB

G2
W8-13
48"X48"

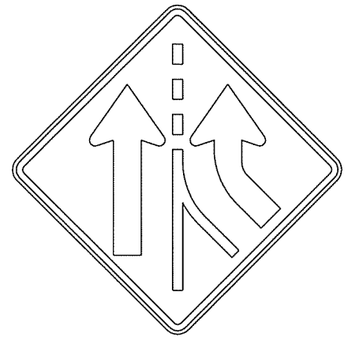
SS-040-5406+00EB
SS-040-5636+00WB
SS-040-5462+00EB
SS-040-5477+00WB
SS-040-5515+00EB
SS-040-5529+00WB
SS-040-5568+00EB
SS-040-5583+00WB
SS-040-5596+00EB
SS-040-5610+00WB
SS-040-5621+00EB
SS-040-5636+00WB
SS-040-5675+00EB
SS-040-5689+00WB
SS-040-5701+00EB
SS-040-5717+00WB
SS-040-5734+00EB
SS-040-5747+00WB
SS-040-5787+00EB
SS-040-5840+00EB
SS-040-5860+00WB
SS-040-5909+50WB
SS-040-6038+00EB

G2
W4-1RT
48"X48"



SS-040-5384+00WB
SS-040-5389+90EB
SS-040-5699+00WB
SS-040-5719+00EB
SS-040-5837+00WB
SS-040-5837+00EB
SS-040-5865+00WB
SS-040-5905+00WB
SS-040-5948+00EB
SS-040-6016+00WB

G2
W4-3RT
48"X48"



SS-040-6035+00EB

UI-1
DI0-2
I0"XI8"

MILE 271
SS-040-5647+50WB
SS-040-5697+50EB

MILE 272
SS-040-5750+30WB
SS-040-5750+30EB

MILE 273
SS-040-5803+I0WB
SS-040-5803+I0EB

MILE 274
SS-040-5855+90WB
SS-040-5855+90EB

MILE 275
SS-040-5908+70WB
SS-040-5908+70EB

MILE 276
SS-040-5962+50WB
SS-040-5962+50EB

MILE 265
SS-040-5383+50WB
SS-040-5383+50EB

MILE 266
SS-040-5436+30WB
SS-040-5436+30EB

MILE 267
SS-040-5489+I0WB
SS-040-5489+I0EB

MILE 268
SS-040-5541+90WB
SS-040-5541+90EB

MILE 269
SS-040-5594+70WB
SS-040-5594+70EB

MILE 270
SS-040-5647+50WB
SS-040-5647+50EB

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	123	263

(2) SIGN LAYOUT SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTINI
8/19/16

G2
R2-1(70)
48"X60"

SS-040-5355+00WB
SS-040-5418+20EB
SS-040-5673+00WB
SS-040-5745+00EB
SS-040-5779+00WB

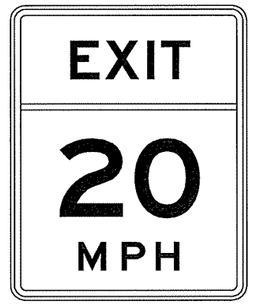
G2
R2-1(65)
48" X 60"

SS-040-5779+00EB-A
SS-040-5779+00EB-B
SS-040-5849+60WB
SS-040-5969+00EB
SS-040-5980+00WB
SS-040-6022+00WB

G2
W3-5
48"X48"

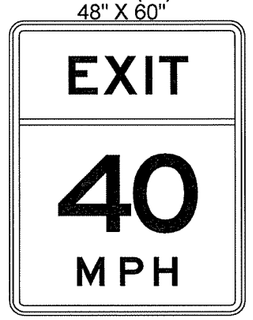
SS-040-5770+00EB-A
SS-040-5770+00EB-B

G2
W13-2(20)
48" X 60"



SS-040-5821+30EB

G2
W13-2(40)
48" X 60"



SS-040-5374+50EB
SS-040-5396+00WB
SS-040-5693+10EB

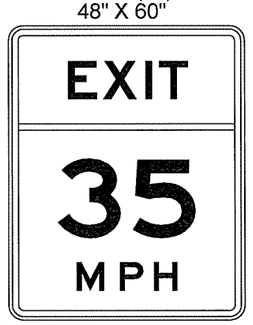
R4-3
48"X60"

SS-040-5363+00WB
SS-040-5414+20EB
SS-040-5676+00WB
SS-040-5742+00EB

G2
R2-1(20)
36" X 40"
36" X 18"

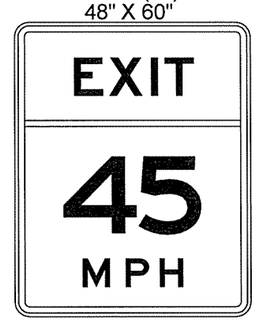
SS-040-5825+00EB

G2
W13-2(35)
48" X 60"



SS-040-5724+00WB
SS-040-5849+60WB
SS-040-5878+10WB
SS-040-5891+50EB-OH

G2
W13-2(45)
48" X 60"

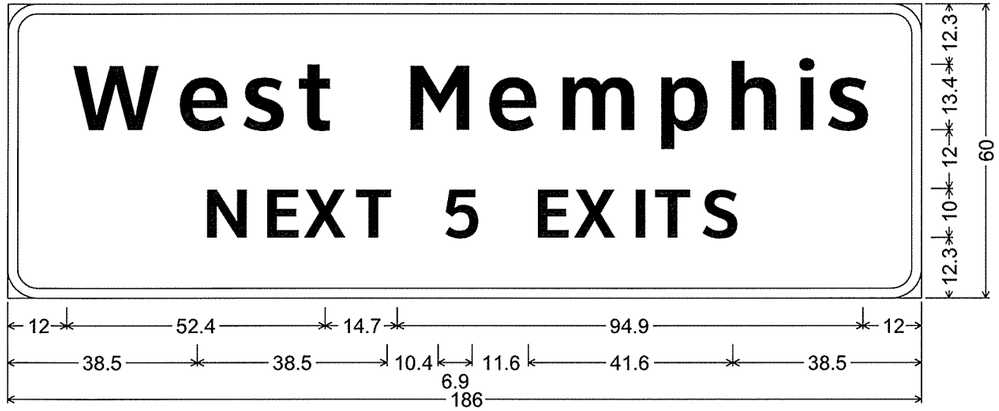


SS-040-5948+00WB

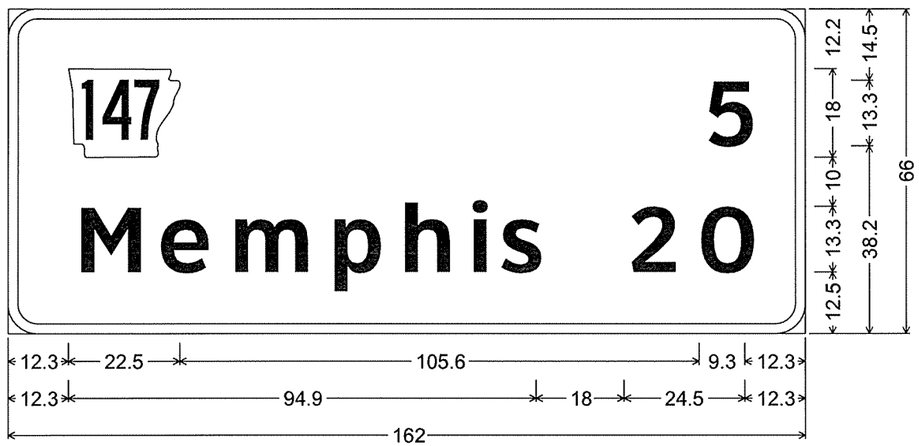
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	124	263

(2) SIGN PLACEMENT SHEET

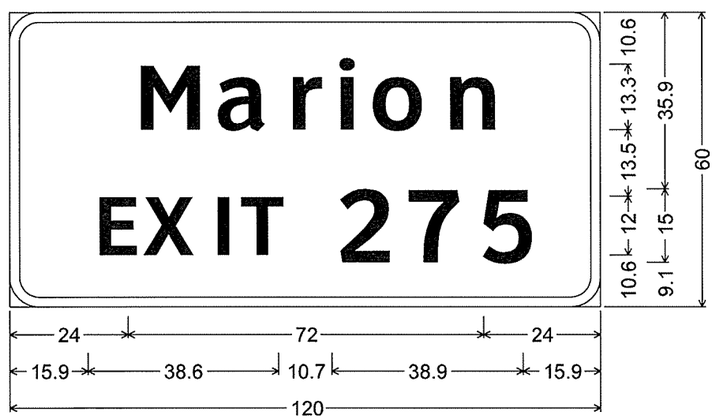
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTINI



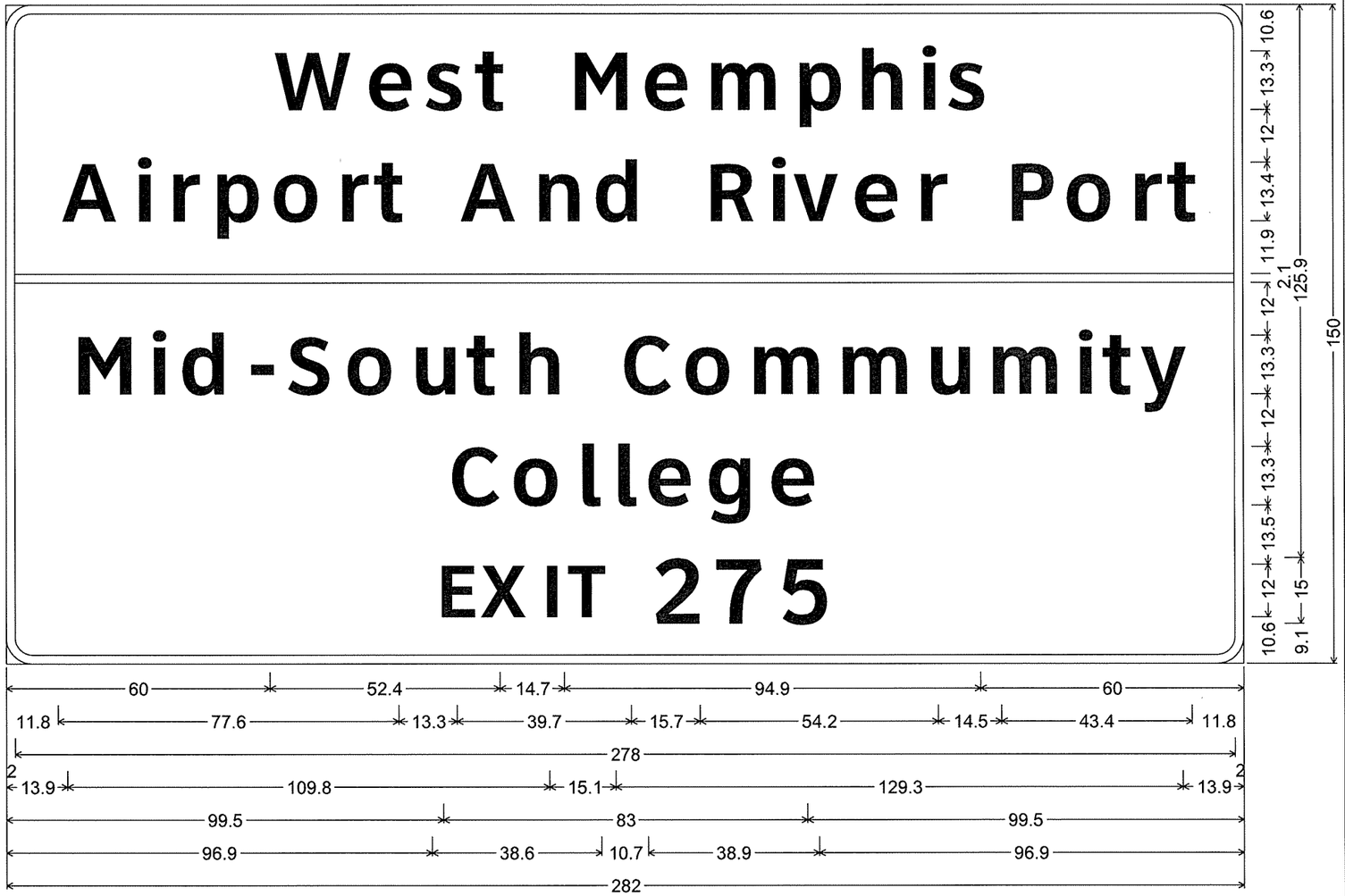
ML-040-5860+00EB; 6.0" Radius, 2.0" Border, White on Green;
[West Memphis] ClearviewHwy-5-W; [NEXT 5 EXITS] ClearviewHwy-5-W;



ML-040-5373+20EB; 6.0" Radius, 2.0" Border, White on Green;
M1-6; [5] ClearviewHwy-5-W; [Memphis] ClearviewHwy-5-W;
[20] ClearviewHwy-5-W;



ML-040-5874+00EB; 6.0" Radius, 2.0" Border, White on Green;
[Marion] ClearviewHwy-5-W;
[EXIT 275] ClearviewHwy-5-W;

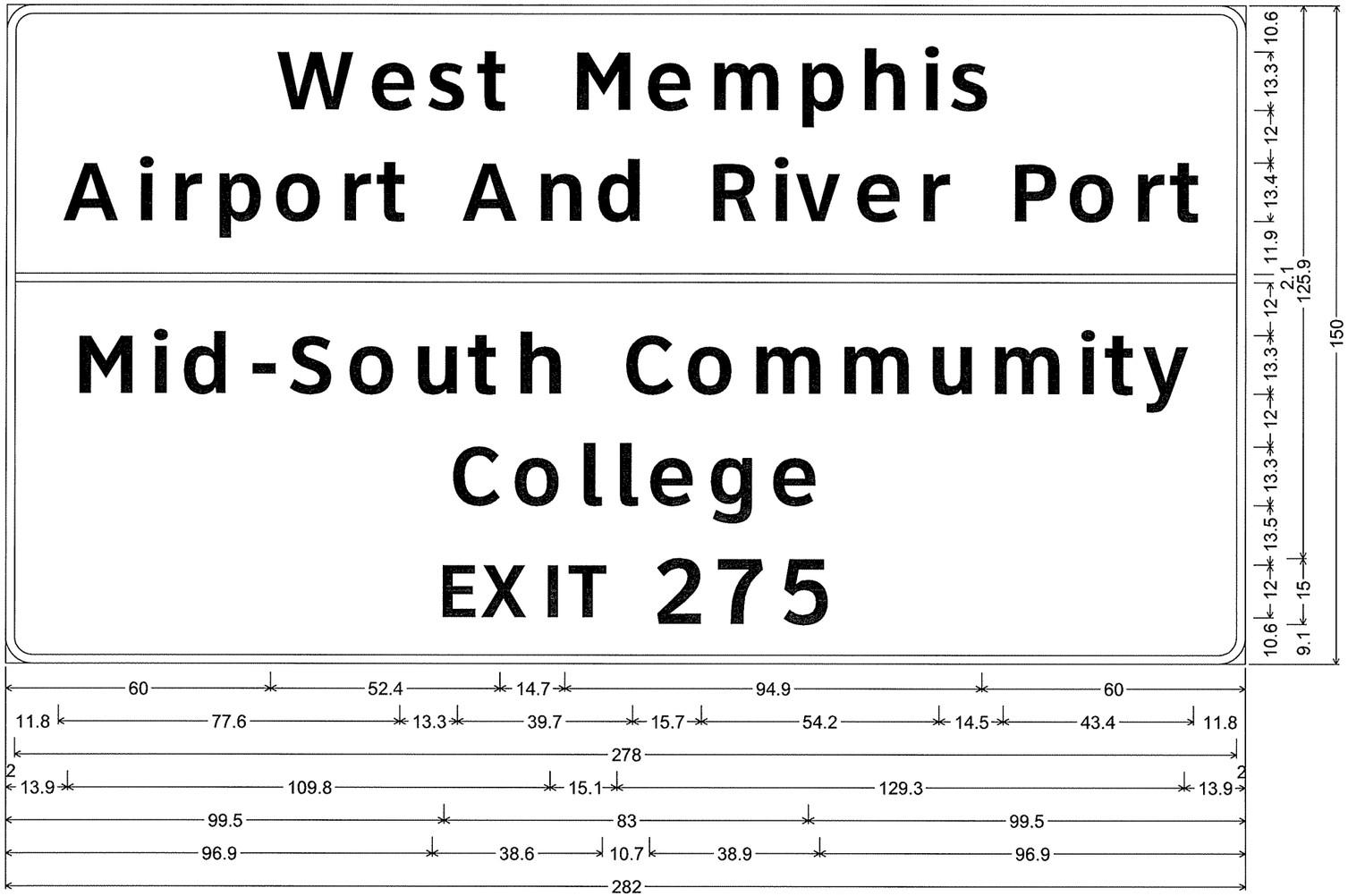


ML-040-5867+00EB; 6.0" Radius, 2.0" Border, White on Green;
[West Memphis] ClearviewHwy-5-W; [Airport And River Port] ClearviewHwy-5-W; [Mid-South Commumity] ClearviewHwy-5-W;
[College] ClearviewHwy-5-W; [EXIT 275] ClearviewHwy-5-W;

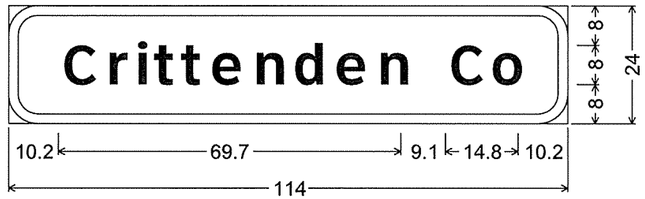
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	125	263

(2) SIGN LAYOUT SHEET

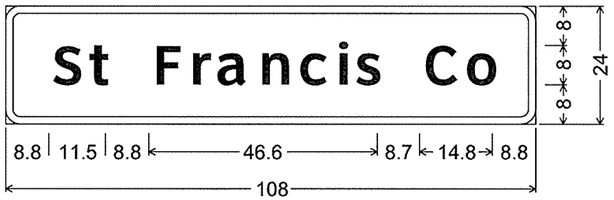
STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 7527 JOSEPH A. SARTINI 6/15/13



ML-040-5958+00WB; 6.0" Radius, 2.0" Border, White on Green;
[West Memphis] ClearviewHwy-5-W; [Airport And River Port] ClearviewHwy-5-W; [Mid-South Commumity] ClearviewHwy-5-W;
[College] ClearviewHwy-5-W; [EXIT 275] ClearviewHwy-5-W;



ML-040-5359+48EB;
6.0" Radius, 2.0" Border, White on Green;
[Crittenden Co] ClearviewHwy-5-W;

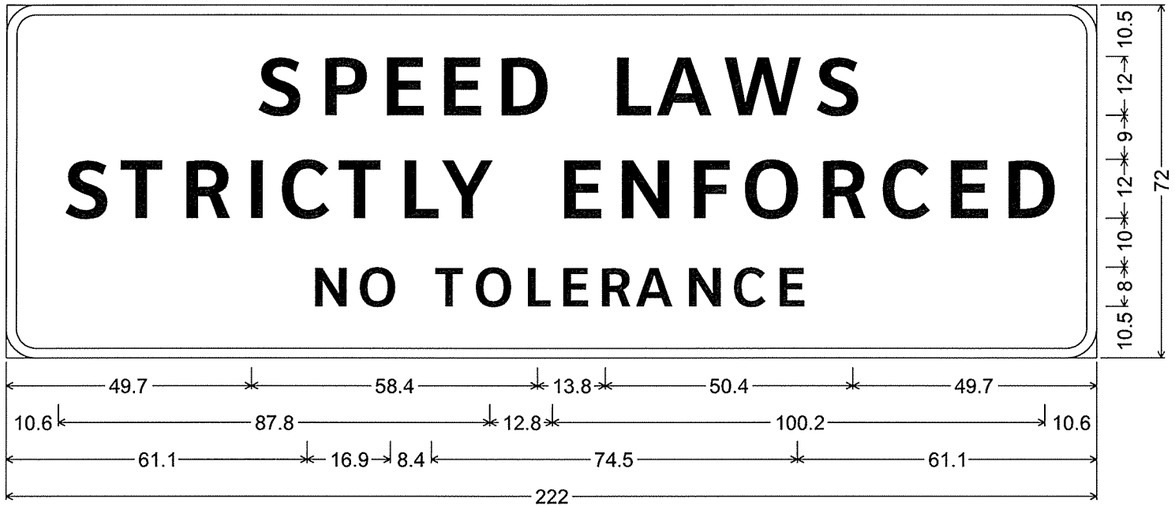


ML-040-5359+48WB;
3.0" Radius, 1.5" Border, White on Green;
[St Francis Co] ClearviewHwy-5-W;

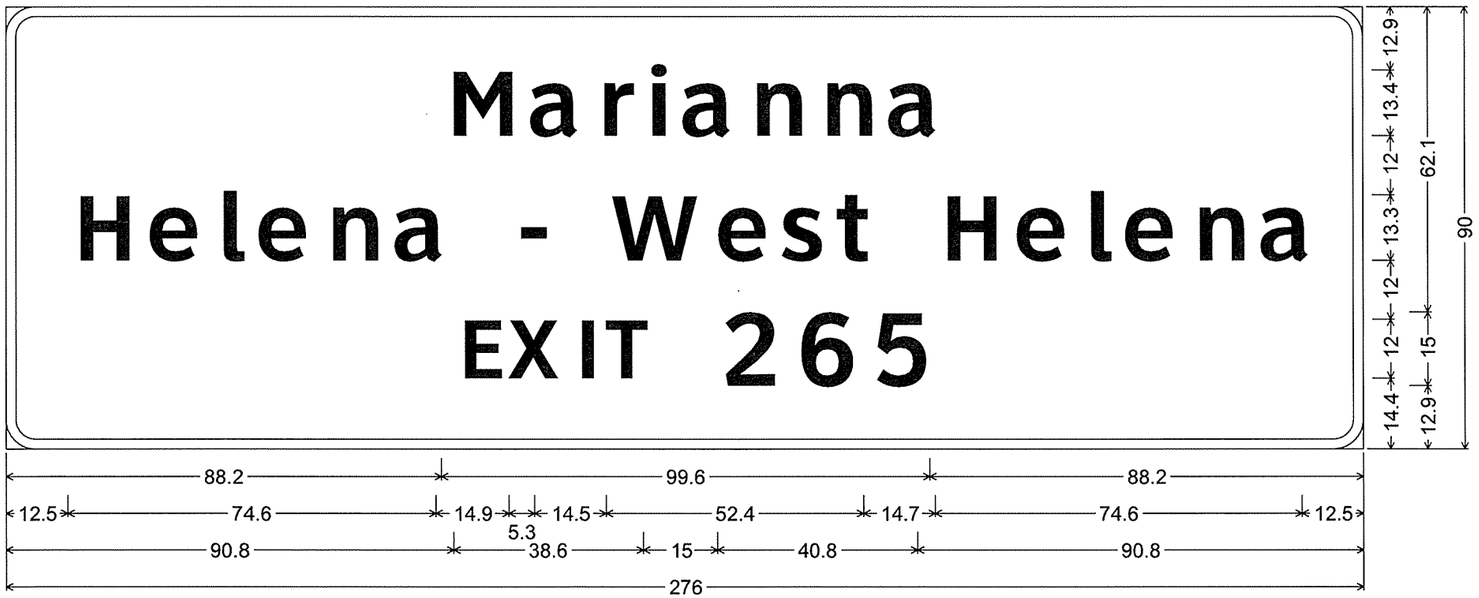
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	126	263

(2) SIGN LAYOUT SHEET

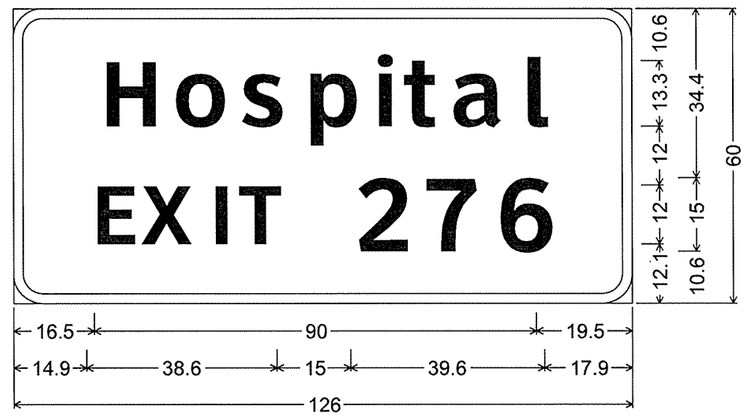
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTAIN



ML-040-5966+00WB; 6.0" Radius, 2.0" Border, Black on White;
[SPEED LAWS] ClearviewHwy-5-W; [STRICTLY ENFORCED] ClearviewHwy-5-W;
[NO TOLERANCE] ClearviewHwy-5-W;



ML-040-5416+00WB;
6.0" Radius, 2.0" Border, White on Green;
[Marianna] ClearviewHwy-5-W; [Helena - West Helena] ClearviewHwy-5-W; [EXIT] ClearviewHwy-5-W; [265] ClearviewHwy-5-W;

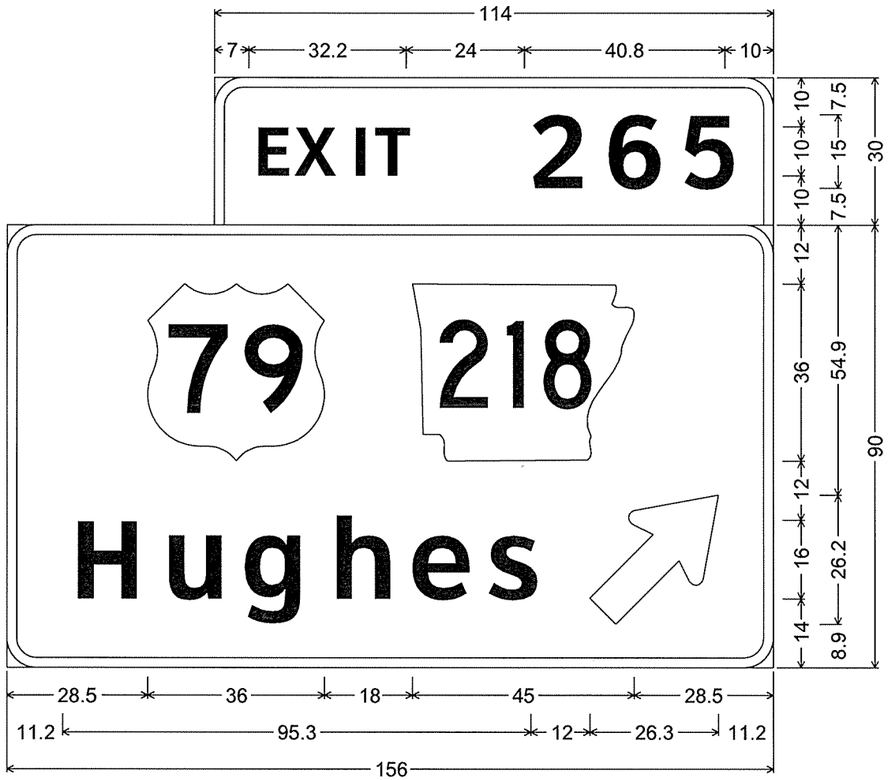


ML-040-5973+00EB; 6.0" Radius, 2.0" Border, White on Blue;
[Hospital] ClearviewHwy-5-W; [EXIT] ClearviewHwy-5-W;
[276] ClearviewHwy-5-W;

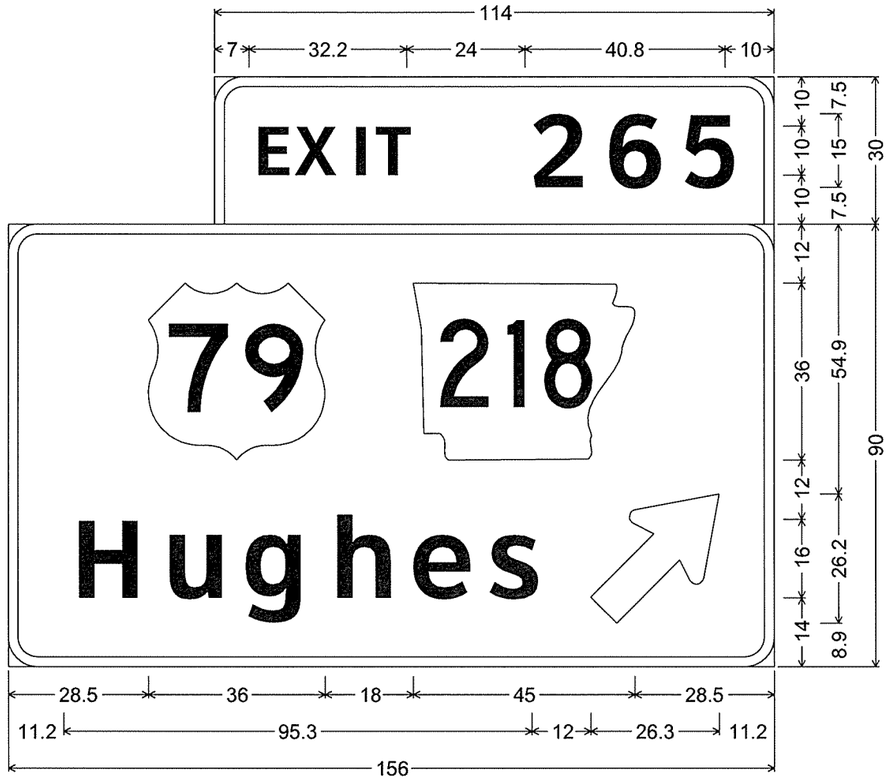
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	127	263

(2) SIGN PLACEMENT SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7525
JOSEPH A. SARTINI



ML-040-5373+20EB;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] ClearviewHwy-5-W; [265] ClearviewHwy-5-W;
6.0" Radius, 2.0" Border, White on Green;
M1-6; [Hughes] ClearviewHwy-5-W;
Standard Arrow Custom 33.4" X 20.3" 45°;

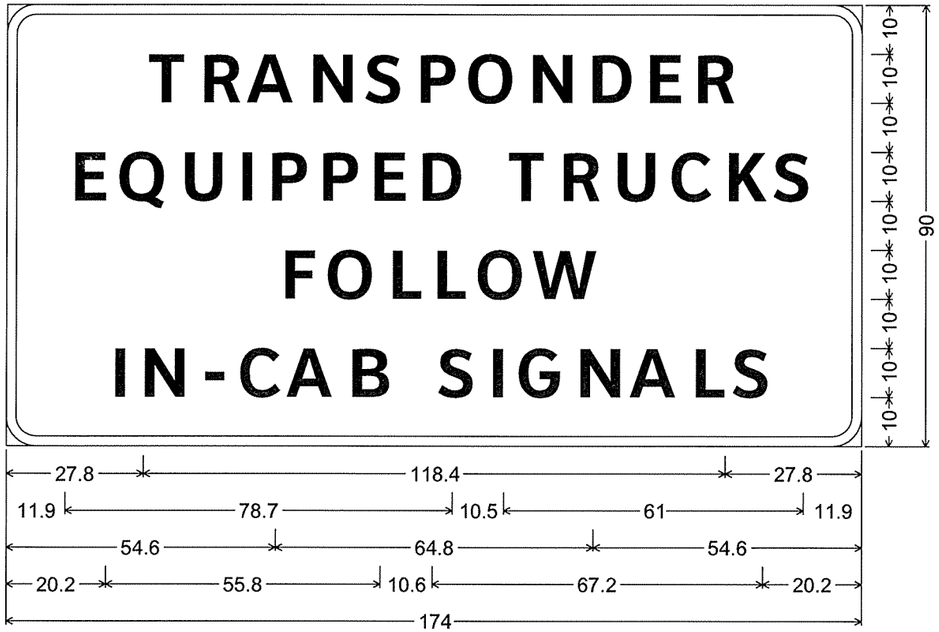


ML-040-5398+00WB;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] ClearviewHwy-5-W; [265] ClearviewHwy-5-W;
6.0" Radius, 2.0" Border, White on Green;
M1-6; [Hughes] ClearviewHwy-5-W;
Standard Arrow Custom 33.4" X 20.3" 45°;

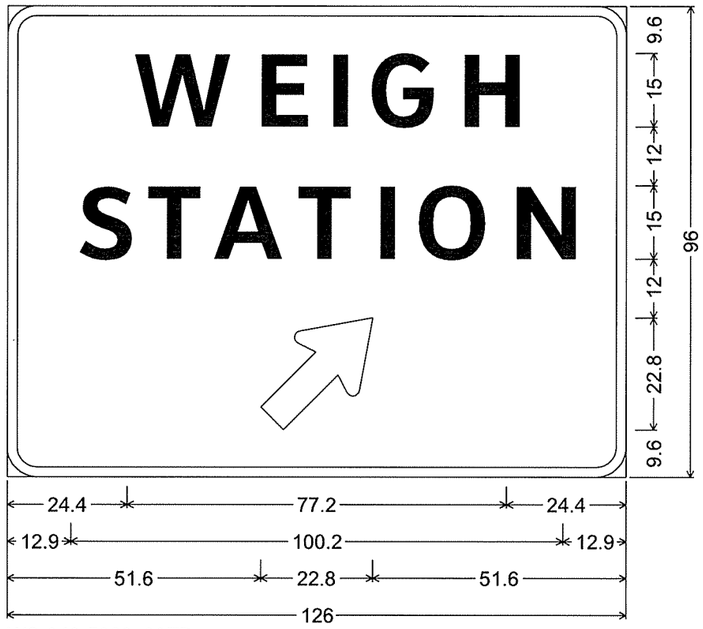
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	178	263

(2) SIGN LAYOUT SHEET

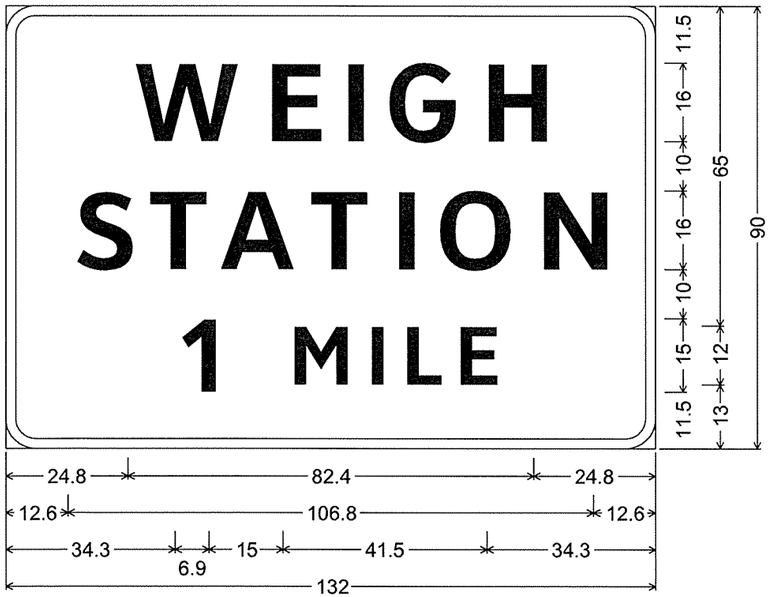
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTIN
6-15-15



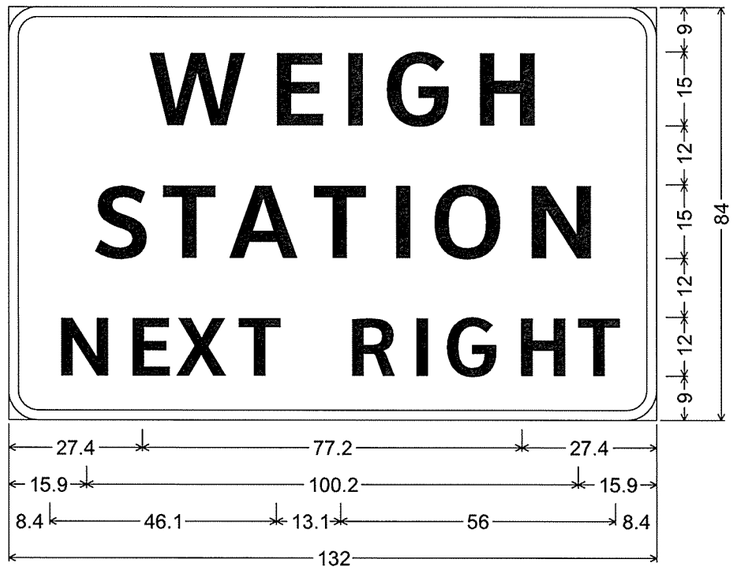
WS-040-5752+00EB; 6.0" Radius, 2.0" Border, Black on White;
[TRANSPONDER] ClearviewHwy-5-W; [EQUIPPED TRUCKS] ClearviewHwy-5-W;
[FOLLOW] ClearviewHwy-5-W; [IN-CAB SIGNALS] ClearviewHwy-5-W;



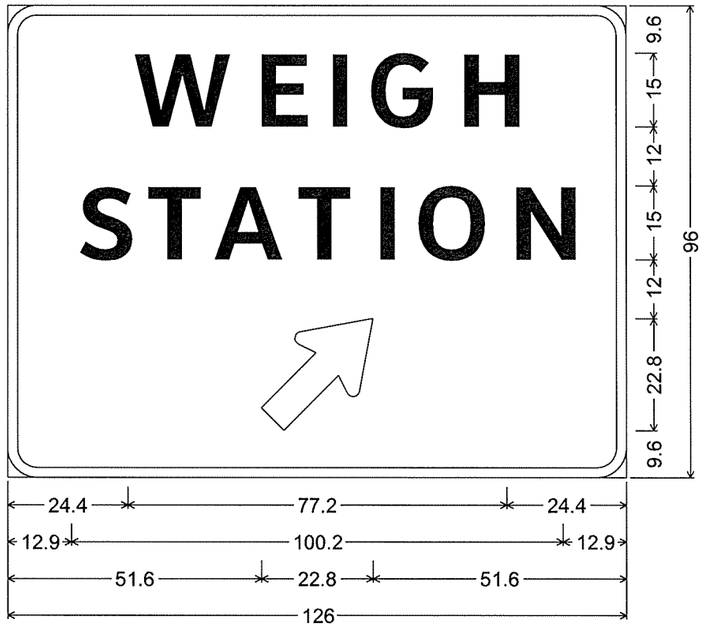
WS-040-5826+30EB;
6.0" Radius, 2.0" Border, White on Green;
[WEIGH] ClearviewHwy-5-W; [STATION] ClearviewHwy-5-W;
Standard Arrow Custom 29.0" X 17.6" 45°;



WS-040-5773+00EB; 6.0" Radius, 2.0" Border, White on Green;
[WEIGH] ClearviewHwy-5-W; [STATION] ClearviewHwy-5-W;
[1] ClearviewHwy-5-W; [MILE] ClearviewHwy-5-W;



WS-040-5792+00EB; 6.0" Radius, 2.0" Border, White on Green;
[WEIGH] ClearviewHwy-5-W; [STATION] ClearviewHwy-5-W;
[NEXT RIGHT] ClearviewHwy-5-W;

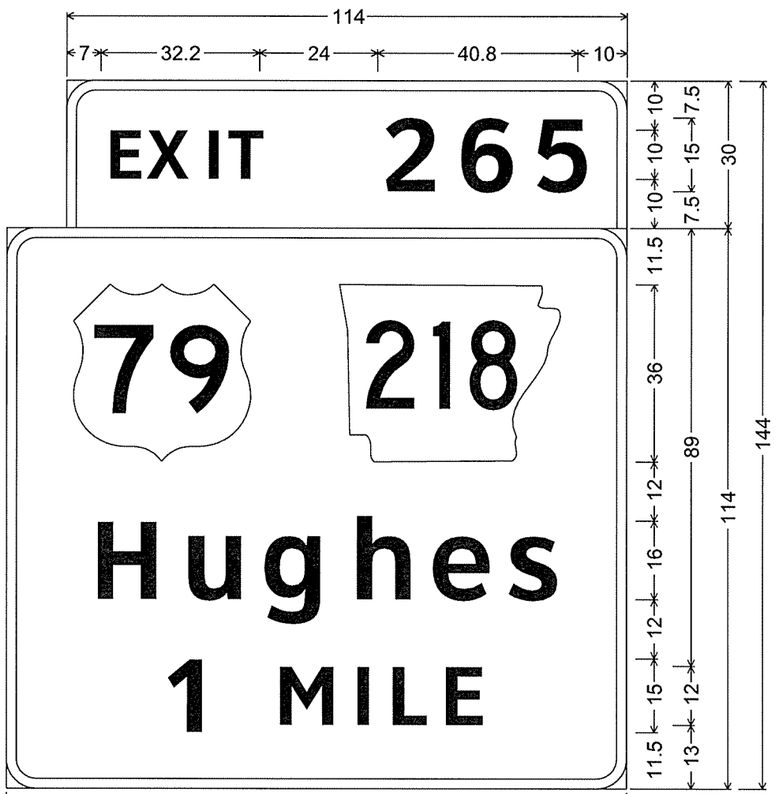


WS-040-5800+00EB;
6.0" Radius, 2.0" Border, White on Green;
[WEIGH] ClearviewHwy-5-W; [STATION] ClearviewHwy-5-W;
Standard Arrow Custom 29.0" X 17.6" 45°;

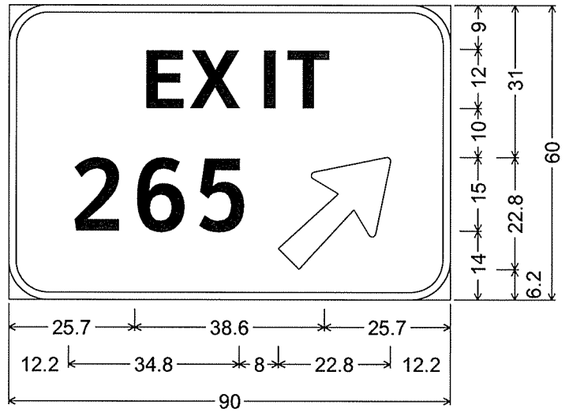
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	129	263

(2) SIGN LAYOUT SHEET

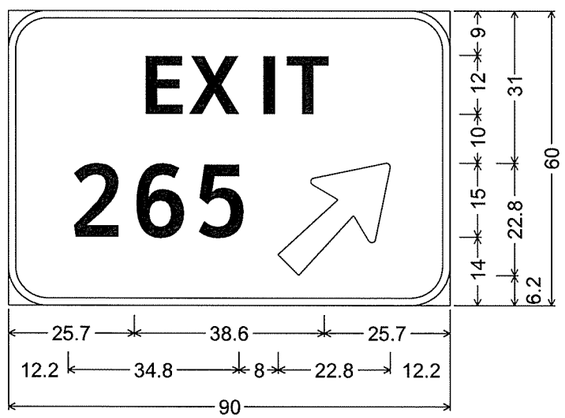
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTAIN



ML-040-5450+00WB;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] ClearviewHwy-5-W; [265] ClearviewHwy-5-W;
6.0" Radius, 2.0" Border, White on Green;
M1-6; [Hughes] ClearviewHwy-5-W; [1] ClearviewHwy-5-W;
[MILE] ClearviewHwy-5-W;



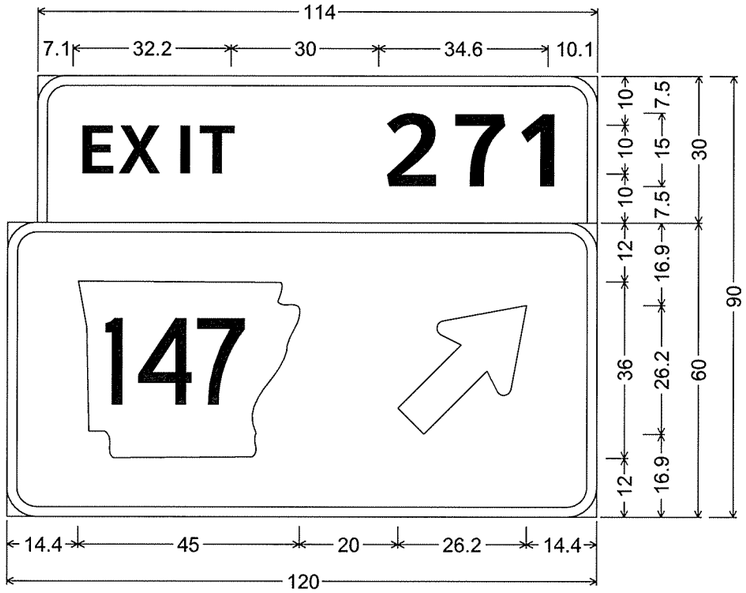
EX-040-5377+50EB;
8.0" Radius, 1.5" Border, White on Green;
[EXIT] ClearviewHwy-5-W;
[265] ClearviewHwy-3-B;
Arrow Custom - 29.0" 45°;



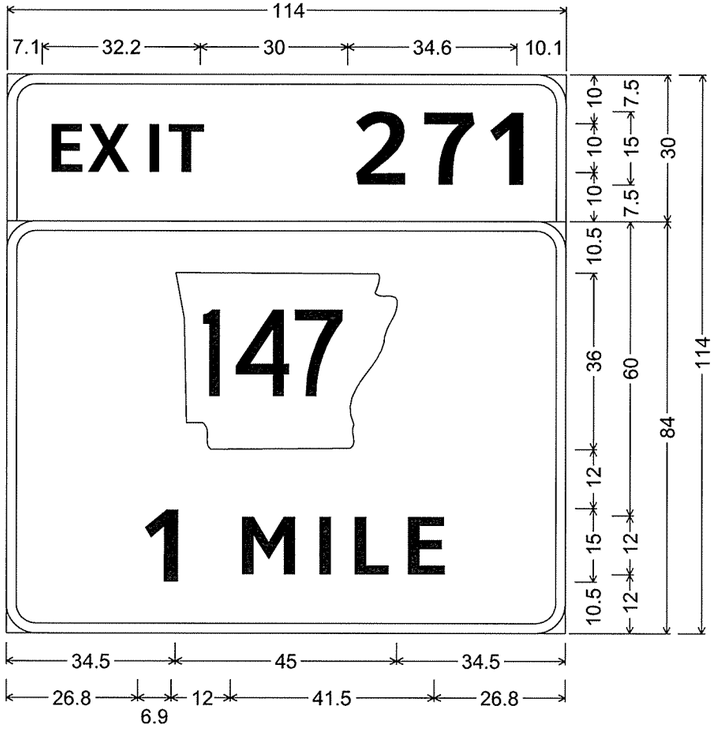
EX-040-5394+50WB;
8.0" Radius, 1.5" Border, White on Green;
[EXIT] ClearviewHwy-5-W;
[265] ClearviewHwy-3-B;
Arrow Custom - 29.0" 45°;

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	130	263

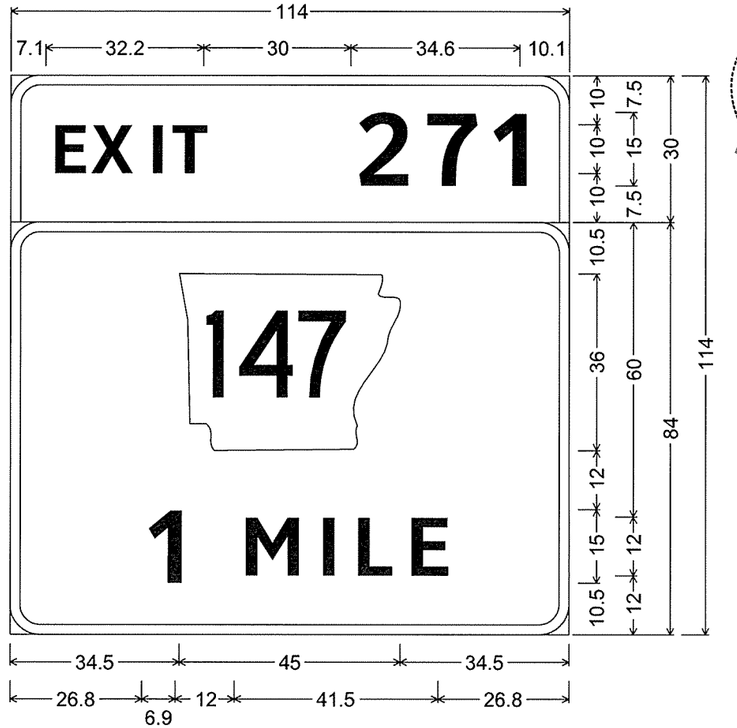
(2) SIGN PLACEMENT SHEET



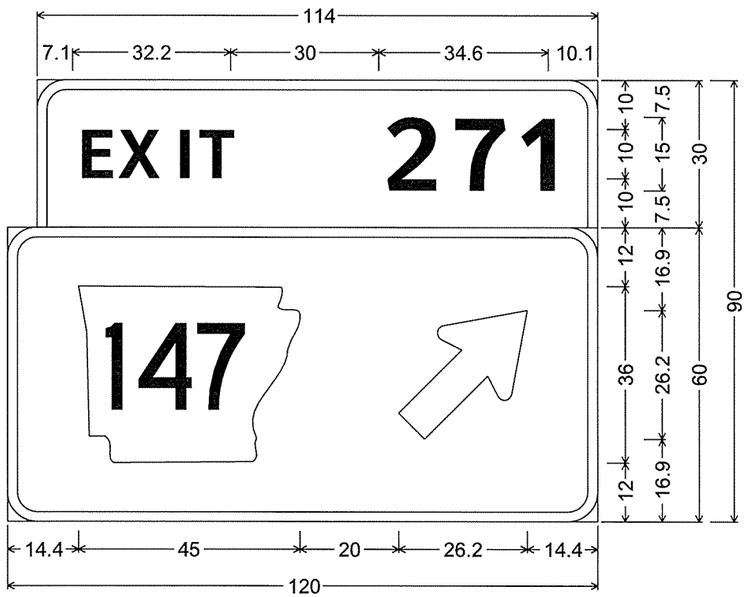
ML-040-5692+50EB;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] ClearviewHwy-5-W; [271] ClearviewHwy-5-W;
6.0" Radius, 2.0" Border, White on Green;
M1-6; Standard Arrow Custom 33.4" X 20.3" 45°;



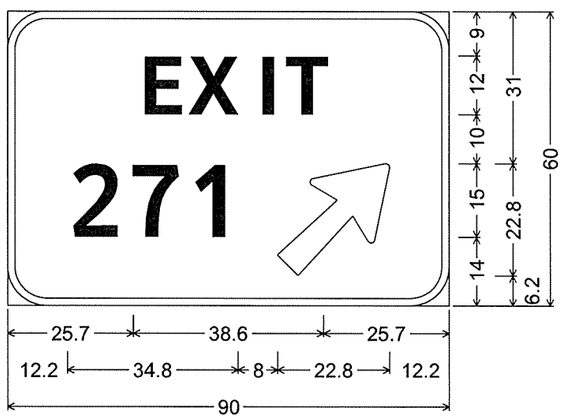
ML-040-5640+20EB; 6.0" Radius, 2.0" Border, White on Green;
[EXIT] ClearviewHwy-5-W; [271] ClearviewHwy-5-W;
6.0" Radius, 2.0" Border, White on Green;
M1-6; [1] ClearviewHwy-5-W;
[MILE] ClearviewHwy-5-W;



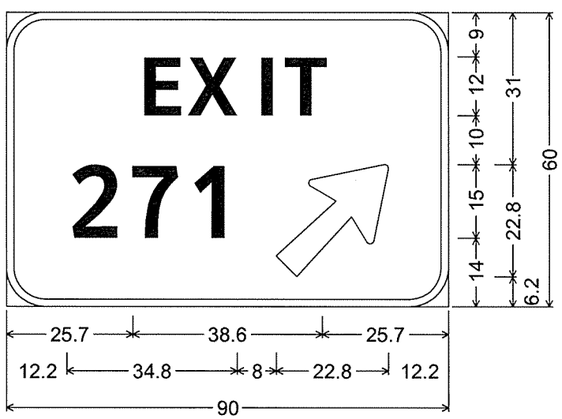
ML-040-5775+00WB; 6.0" Radius, 2.0" Border, White on Green;
[EXIT] ClearviewHwy-5-W; [271] ClearviewHwy-5-W;
6.0" Radius, 2.0" Border, White on Green;
M1-6; [1] ClearviewHwy-5-W;
[MILE] ClearviewHwy-5-W;



ML-040-5727+00WB;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] ClearviewHwy-5-W; [271] ClearviewHwy-5-W;
6.0" Radius, 2.0" Border, White on Green;
M1-6; Standard Arrow Custom 33.4" X 20.3" 45°;



EX-040-5695+80EB;
8.0" Radius, 1.5" Border, White on Green;
[EXIT] ClearviewHwy-5-W;
[265] ClearviewHwy-3-B;
Arrow Custom - 29.0" 45°;

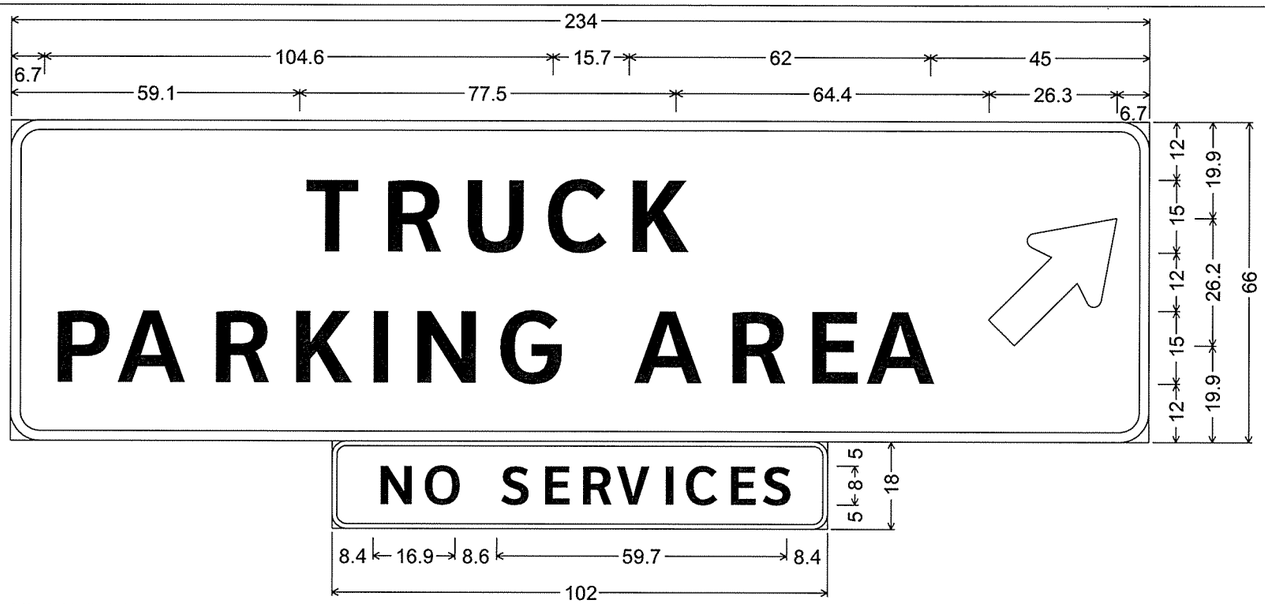


EX-040-5723+00WB;
8.0" Radius, 1.5" Border, White on Green;
[EXIT] ClearviewHwy-5-W;
[265] ClearviewHwy-3-B;
Arrow Custom - 29.0" 45°;

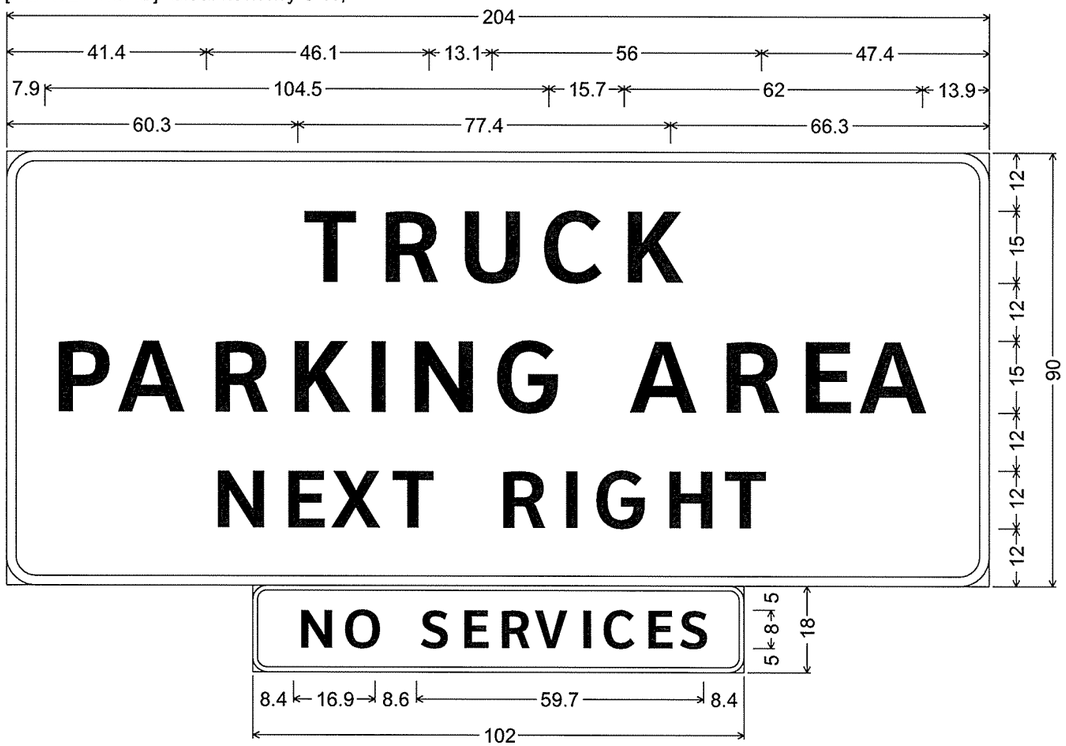
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	131	263

(2) SIGN LAYOUT SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTAIN



ML-040-5851+30WB-A&B; 6.0" Radius, 2.0" Border, White on Blue;
[TRUCK] ClearviewHwy-5-W; [PARKING AREA] ClearviewHwy-5-W; Standard Arrow Custom 33.4" X 20.3" 45°;
3.0" Radius, 1.0" Border, White on Blue;
[NO SERVICES] ClearviewHwy-5-W;



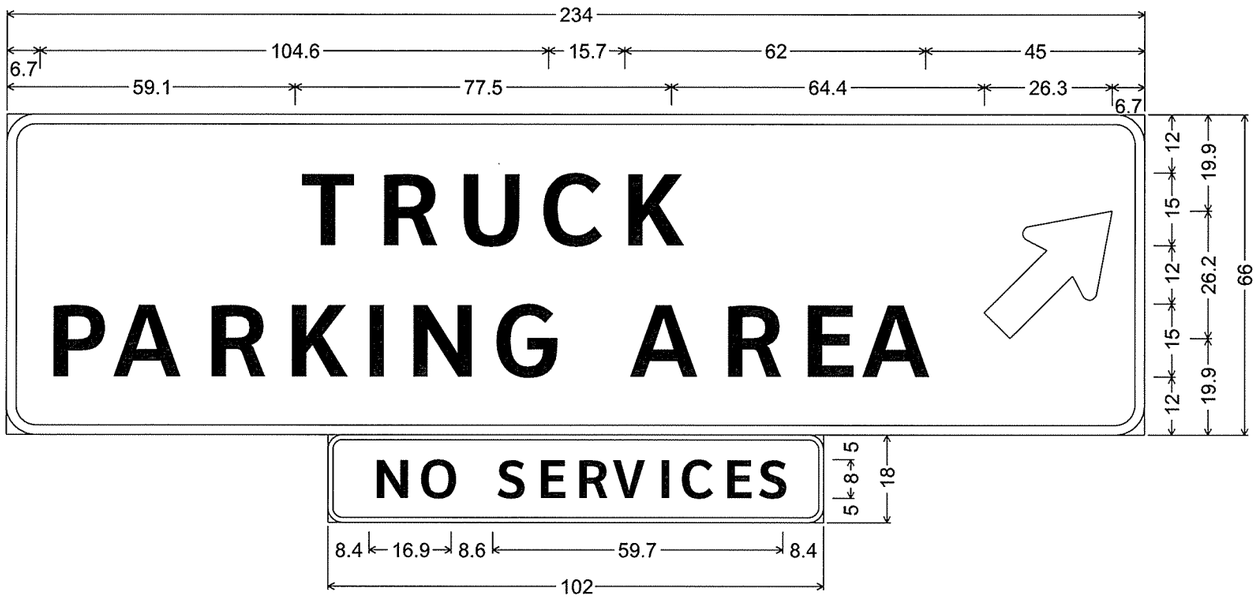
ML-040-5858+00WB-A&B; 6.0" Radius, 2.0" Border, White on Blue;
[TRUCK] ClearviewHwy-5-W; [PARKING AREA] ClearviewHwy-5-W;
[NEXT RIGHT] ClearviewHwy-5-W;
3.0" Radius, 1.0" Border, White on Blue;
[NO SERVICES] ClearviewHwy-5-W;

ML-040-5848+00WB-A&B;
6.0" Radius, 2.0" Border, White on Blue;
[TRUCK] ClearviewHwy-5-W;
[PARKING] ClearviewHwy-5-W;
Standard Arrow Custom 33.4" X 20.3" 45°;
3.0" Radius, 1.0" Border, White on Blue;
[NO SERVICES] ClearviewHwy-5-W;

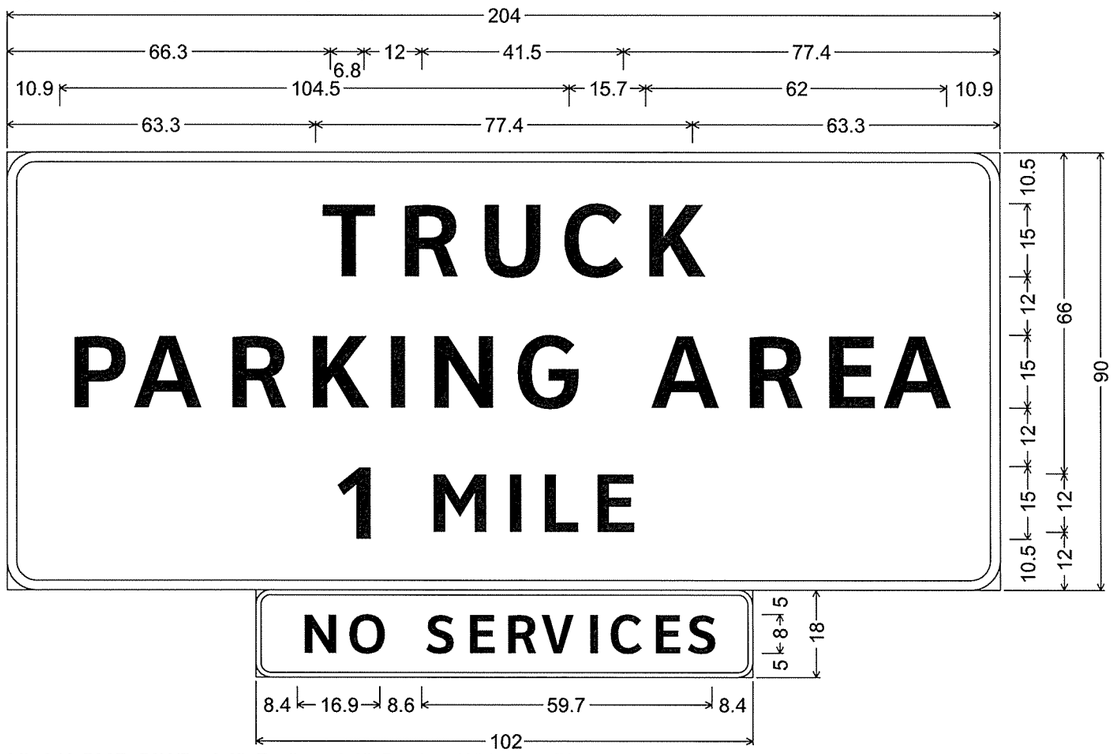
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	132	263

(2) SIGN LAYOUT SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTINI



ML-040-5884+00WB-A&B; 6.0" Radius, 2.0" Border, White on Blue;
[TRUCK] ClearviewHwy-5-W; [PARKING AREA] ClearviewHwy-5-W; Standard Arrow Custom 33.4" X 20.3" 45°;
3.0" Radius, 1.0" Border, White on Blue;
[NO SERVICES] ClearviewHwy-5-W;



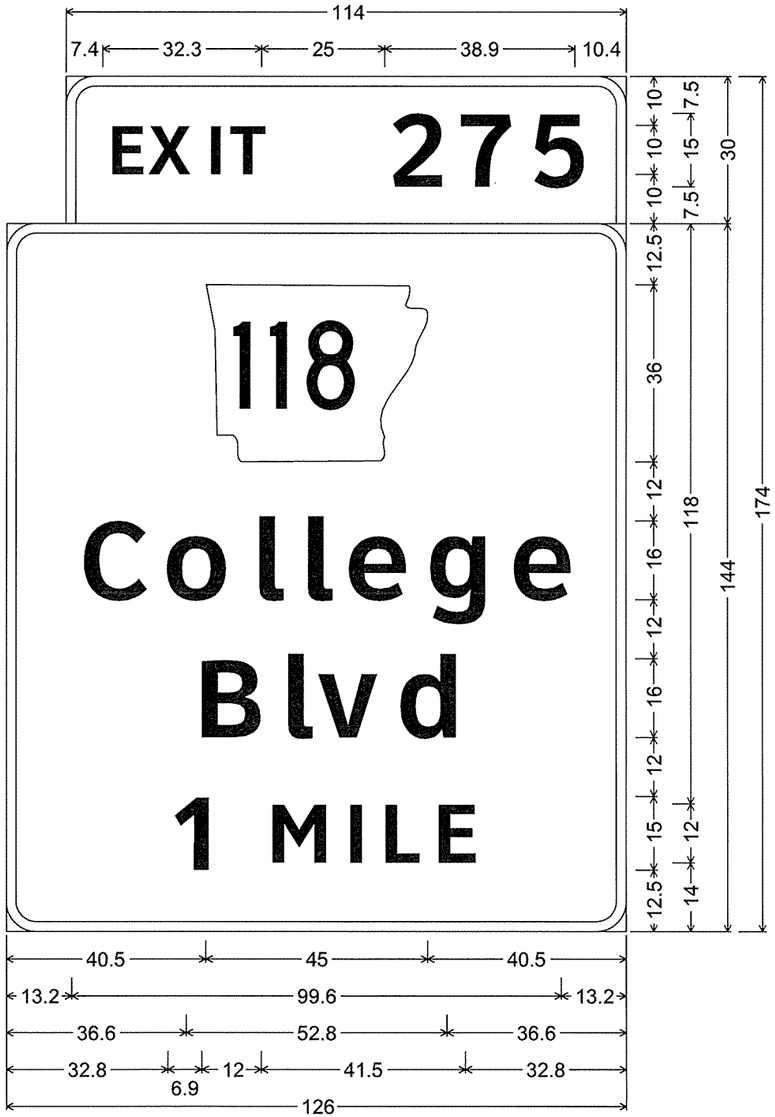
ML-040-5927+50WB; 6.0" Radius, 2.0" Border, White on Blue;
[TRUCK] ClearviewHwy-5-W; [PARKING AREA] ClearviewHwy-5-W; [1 MILE] ClearviewHwy-5-W;
3.0" Radius, 1.0" Border, White on Blue;
[NO SERVICES] ClearviewHwy-5-W;

ML-040-5875+00WB-A&B;
6.0" Radius, 2.0" Border, White on Blue;
[TRUCK] ClearviewHwy-5-W;
[PARKING] ClearviewHwy-5-W;
Standard Arrow Custom 33.4" X 20.3" 45°;
3.0" Radius, 1.0" Border, White on Blue;
[NO SERVICES] ClearviewHwy-5-W;

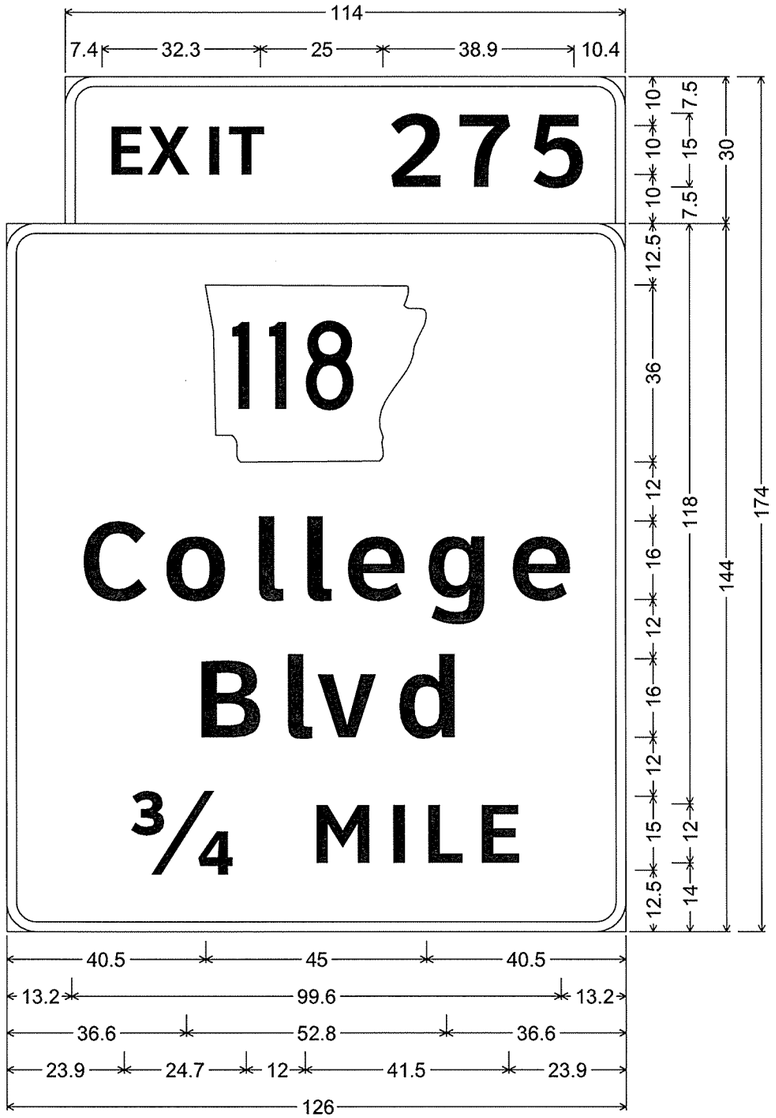
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	133	263

(2) SIGN LAYOUT SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTINI



ML-040-5853+00EB;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] ClearviewHwy-5-W; [275] ClearviewHwy-5-W;
6.0" Radius, 2.0" Border, White on Green;
M1-6; [College] ClearviewHwy-5-W; [Blvd] ClearviewHwy-5-W;
[1] ClearviewHwy-5-W; [MILE] ClearviewHwy-5-W;

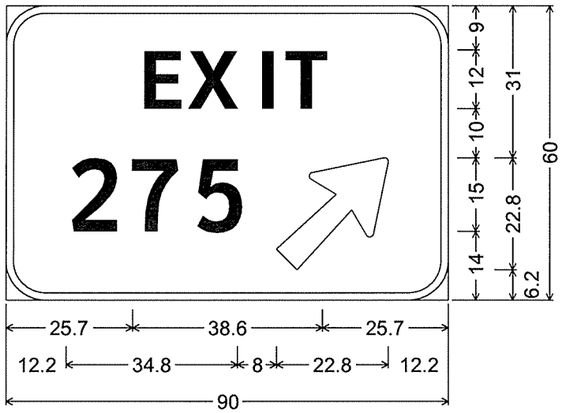


ML-040-5987+00WB;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] ClearviewHwy-5-W; [275] ClearviewHwy-5-W;
6.0" Radius, 2.0" Border, White on Green;
M1-6; [College] ClearviewHwy-5-W; [Blvd] ClearviewHwy-5-W;
[¾] ClearviewHwy-5-W; [MILE] ClearviewHwy-5-W;

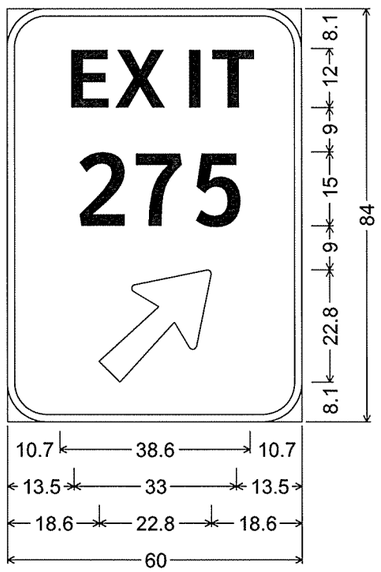
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	134	263

(2) SIGN LAYOUT SHEET

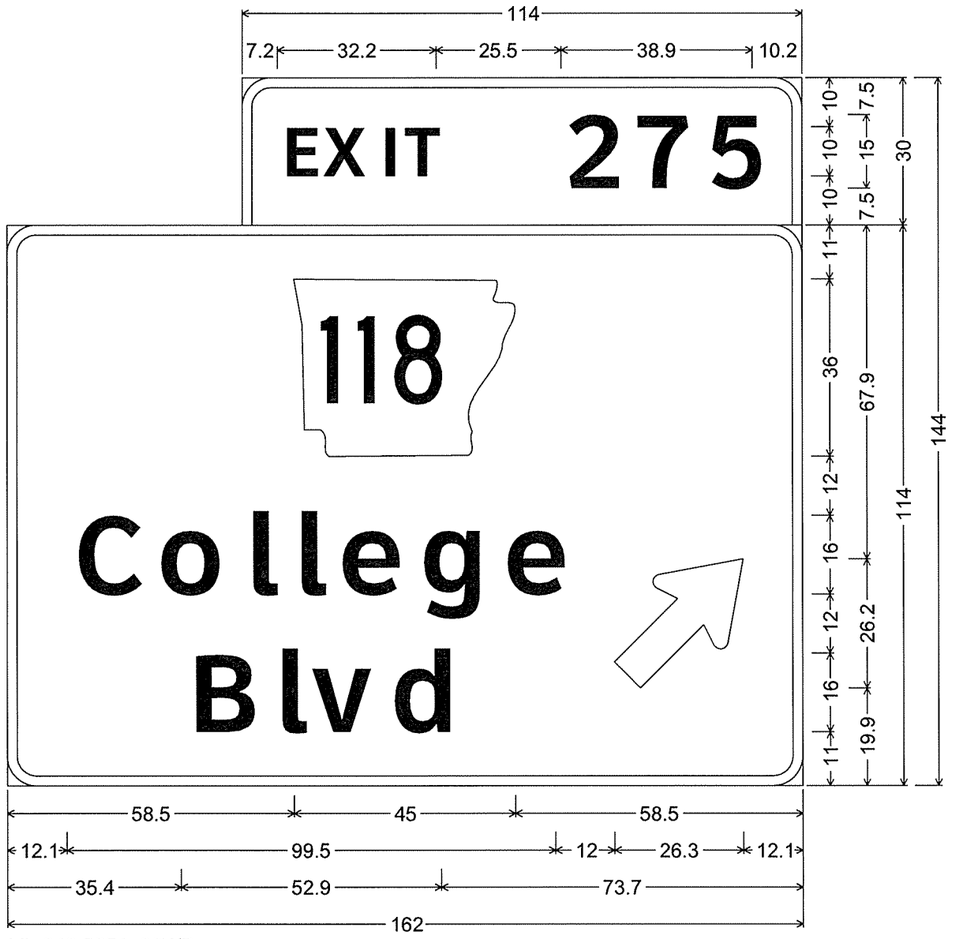
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. BARTIDLES



EX-040-5895+00EB;
8.0" Radius, 1.5" Border, White on Green;
[EXIT] ClearviewHwy-5-W;
[265] ClearviewHwy-3-B;
Arrow Custom - 29.0" 45°;



EX-040-5944+90WB;
8.0" Radius, 1.5" Border, White on Green;
[EXIT] ClearviewHwy-5-W;
[275] ClearviewHwy-3-B;
Arrow Custom - 29.0" 45°;



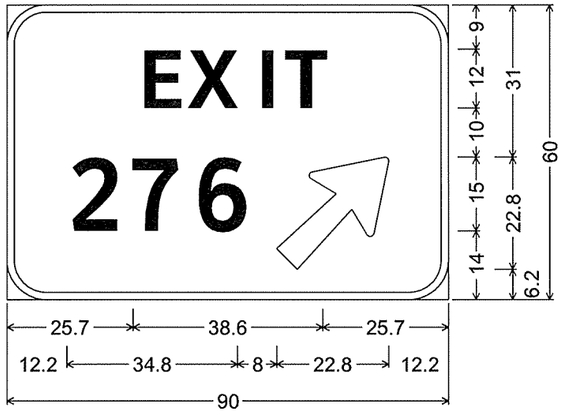
ML-040-5951+00WB;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] ClearviewHwy-5-W; [275] ClearviewHwy-5-W;
6.0" Radius, 2.0" Border, White on Green;
M1-6; [College] ClearviewHwy-5-W; [Blvd] ClearviewHwy-5-W;
Standard Arrow Custom 33.4" X 20.3" 45°;

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	135	263

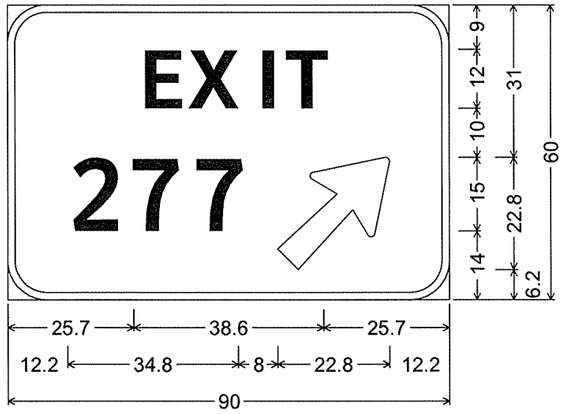
(2) SIGN LAYOUT SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTIN

ML-040-5913+00EB;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] ClearviewHwy-5-W; [276] ClearviewHwy-5-W;
6.0" Radius, 2.0" Border, White on Green;
M1-6; [Rich Rd] ClearviewHwy-5-W; [Missouri St] ClearviewHwy-5-W;
[1] ClearviewHwy-5-W; [MILE] ClearviewHwy-5-W;



EX-040-5982+10EB;
8.0" Radius, 1.5" Border, White on Green;
[EXIT] ClearviewHwy-5-W;
[265] ClearviewHwy-3-B;
Arrow Custom - 29.0" 45°;

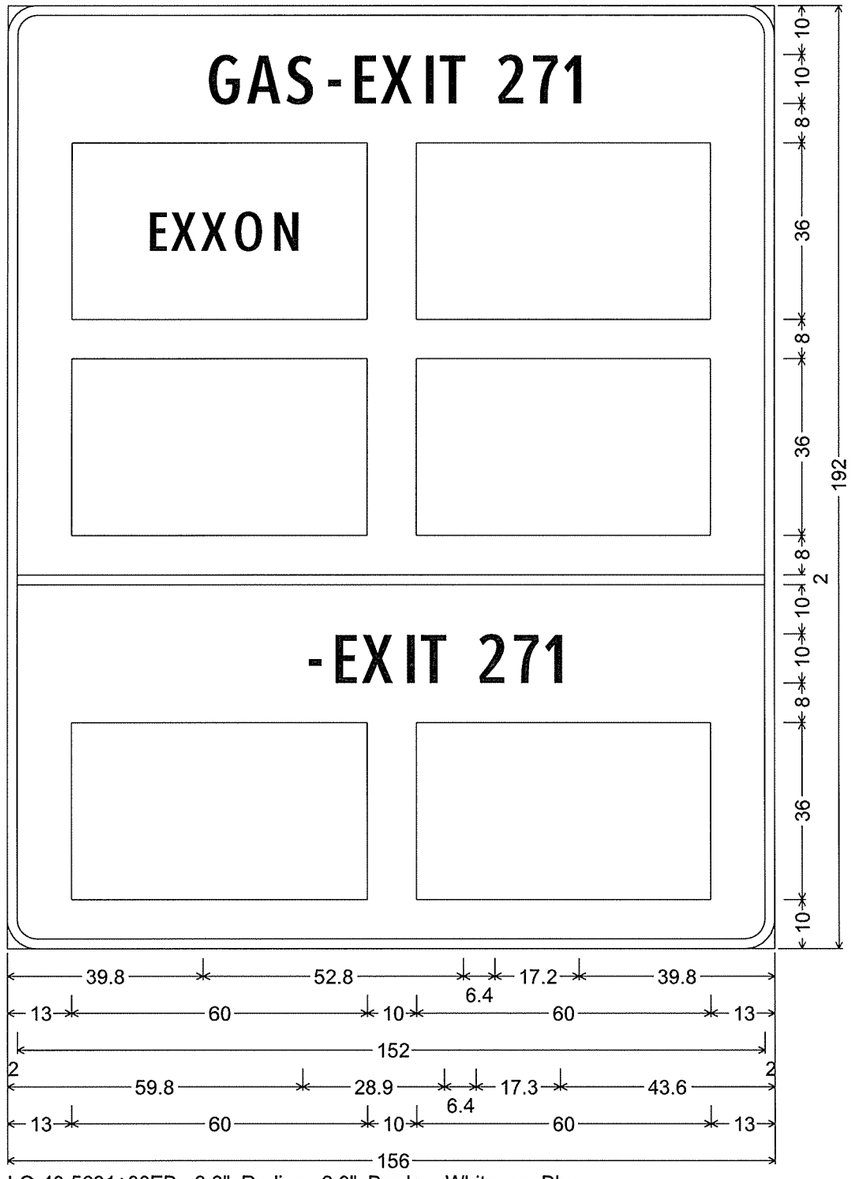


EX-040-6000+10EB;
8.0" Radius, 1.5" Border, White on Green;
[EXIT] ClearviewHwy-5-W;
[265] ClearviewHwy-3-B;
Arrow Custom - 29.0" 45°;

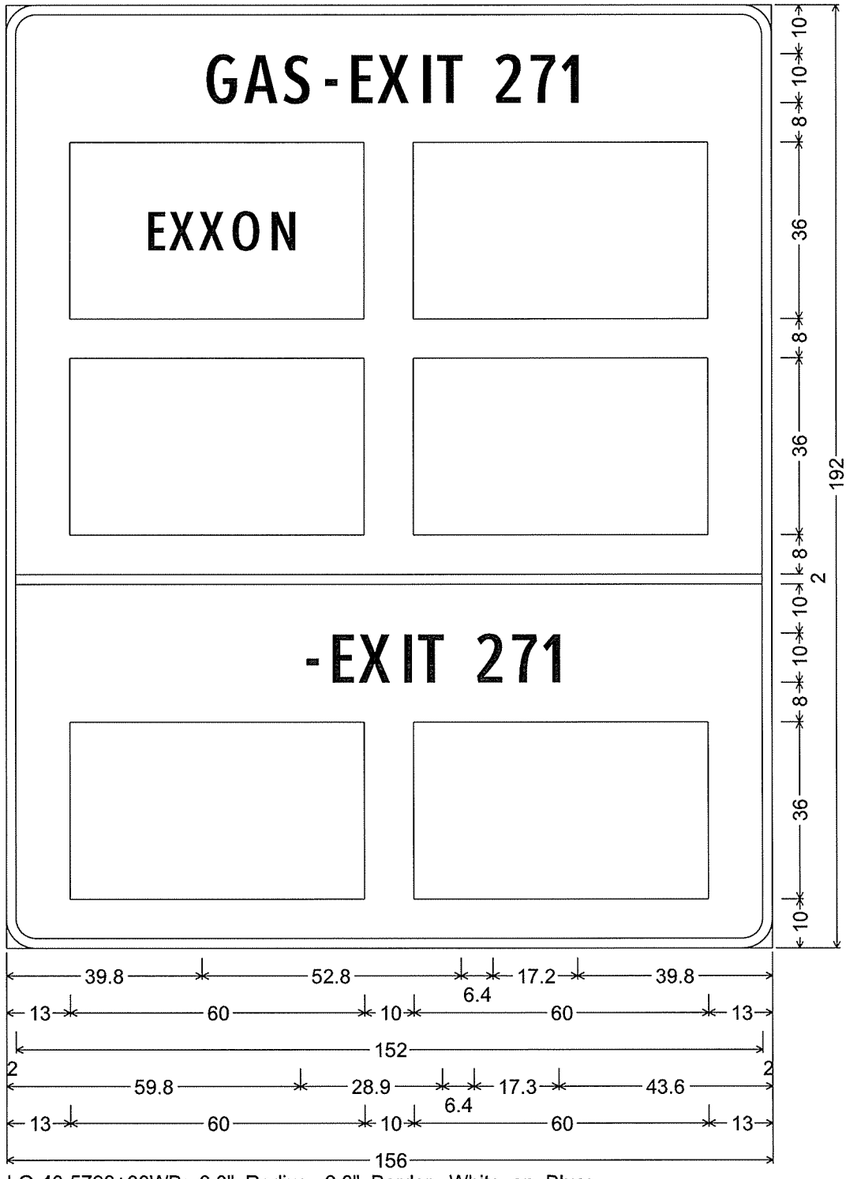
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	136	263

(2) SIGN LAYOUT SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTIN



LG-40-5631+00EB; 6.0" Radius, 2.0" Border, White on Blue;
[GAS-EXIT 271] ClearviewHwy-2-W;
[-EXIT 271] ClearviewHwy-2-W;

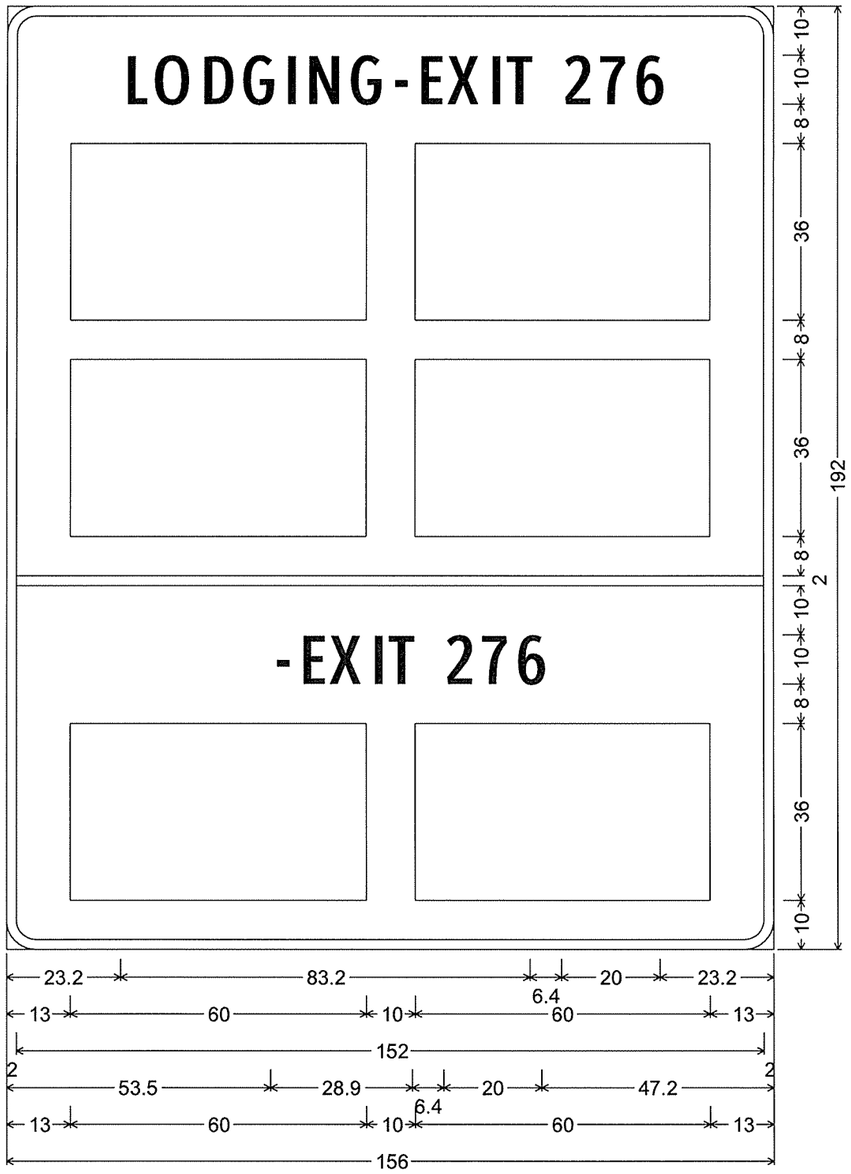


LG-40-5793+00WB; 6.0" Radius, 2.0" Border, White on Blue;
[GAS-EXIT 271] ClearviewHwy-2-W;
[-EXIT 271] ClearviewHwy-2-W;

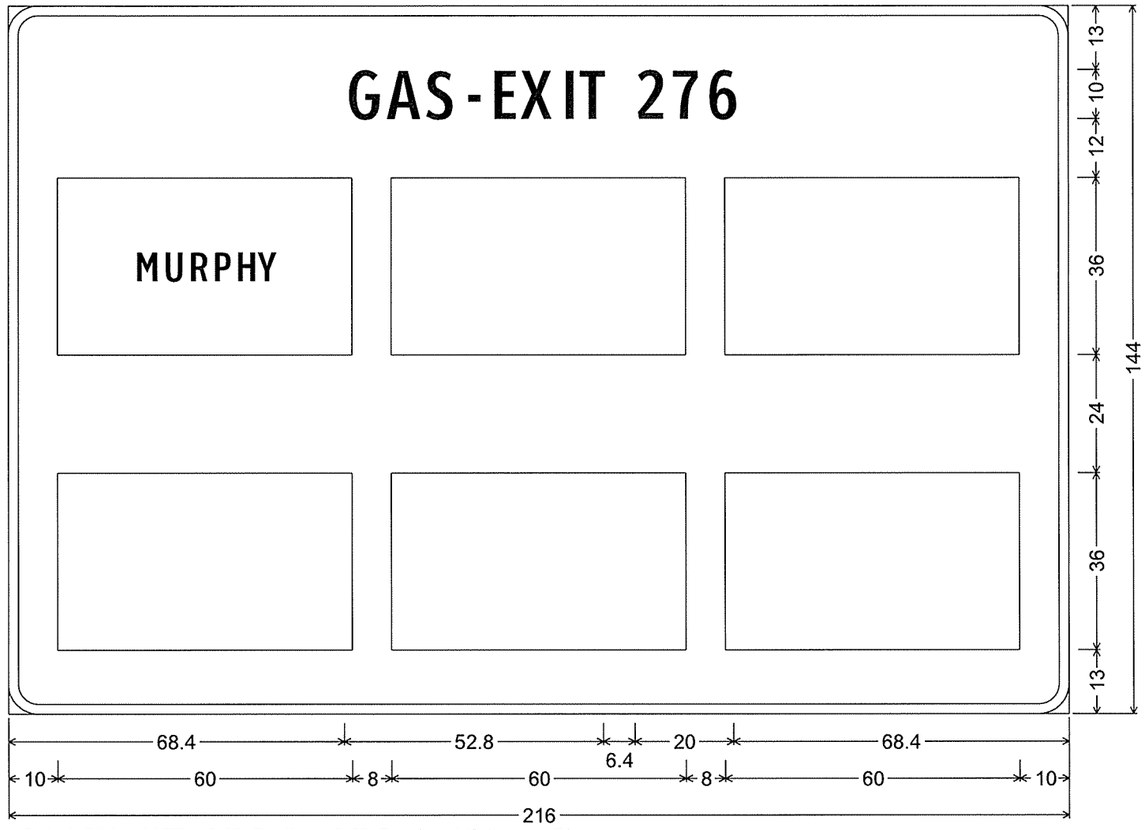
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	137	263

(2) SIGN LAYOUT SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTINI



LL-040-5906+00EB; 6.0" Radius, 2.0" Border, White on Blue;
[LODGING-EXIT 276] ClearviewHwy-2-W;
[-EXIT 276] ClearviewHwy-2-W;

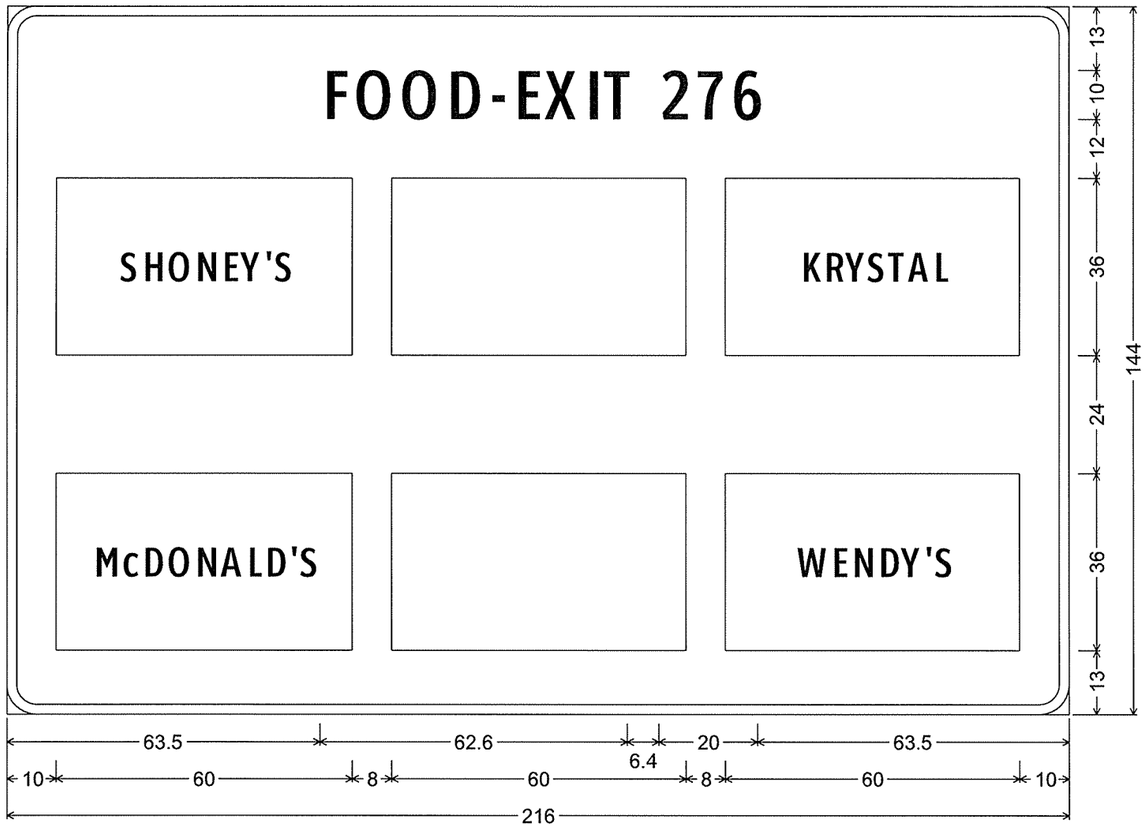


LG-040-5941+00EB; 6.0" Radius, 2.0" Border, White on Blue;
[GAS-EXIT 276] ClearviewHwy-2-W;

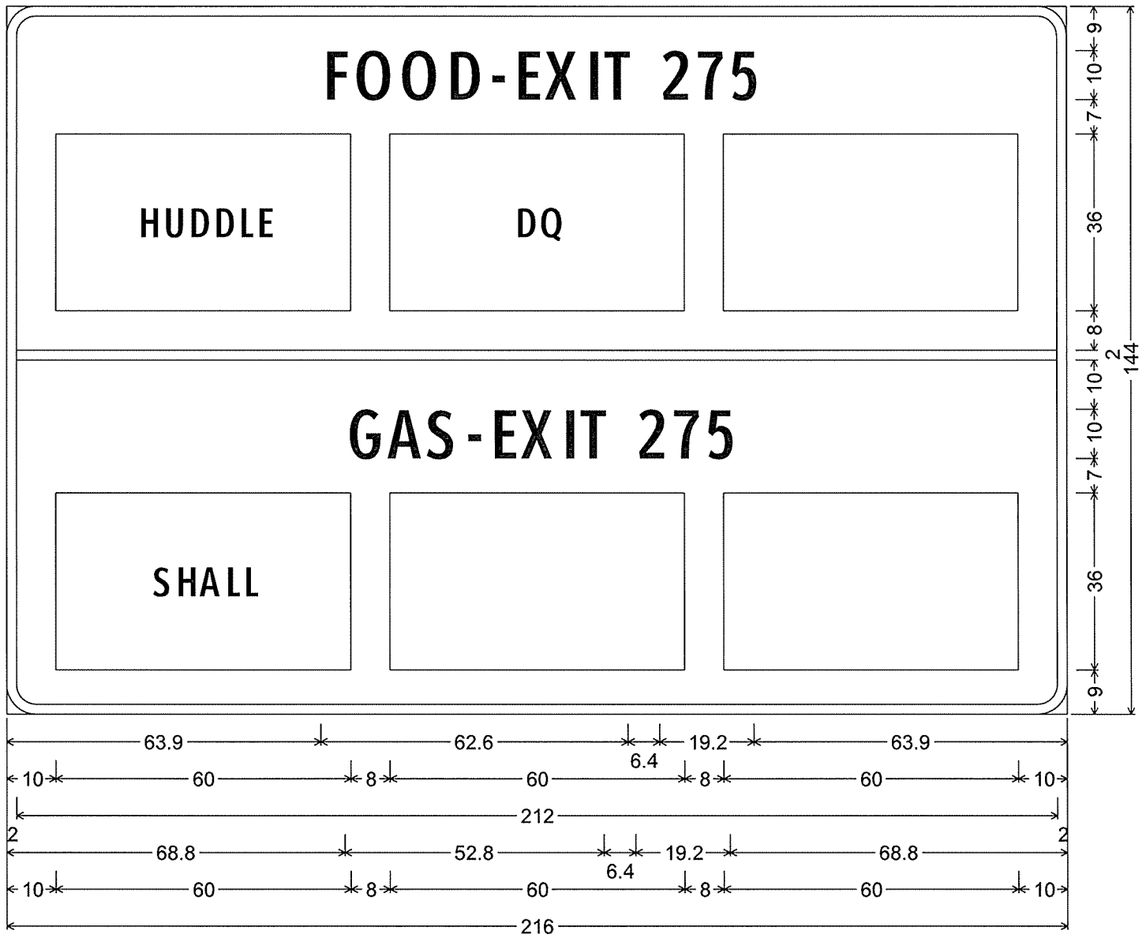
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	138	263

(2) SIGN LAYOUT SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTINI



LF40-276-EB; 6.0" Radius, 2.0" Border, White on Blue;
[FOOD-EXIT 276] ClearviewHwy-2-W;

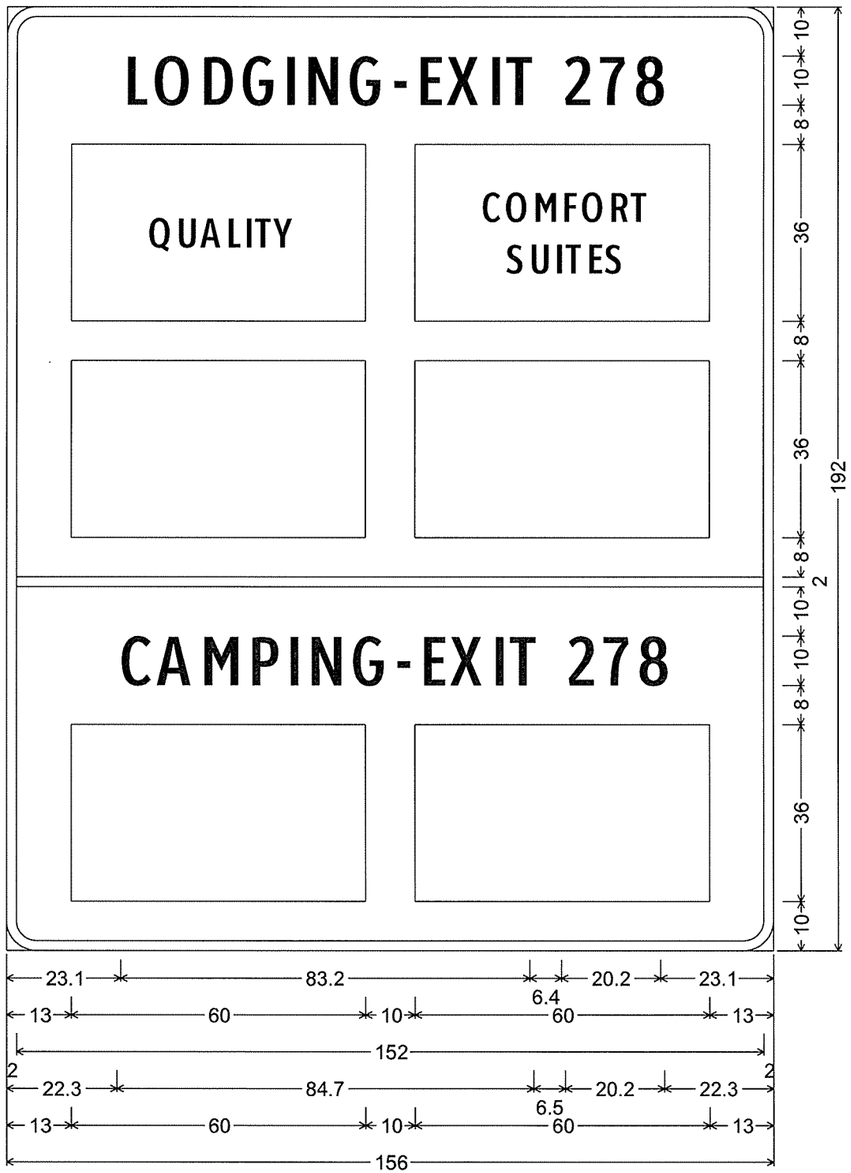


LGF-040-5973+00WB; 6.0" Radius, 2.0" Border, White on Blue;
[FOOD-EXIT 275] ClearviewHwy-2-W;
[GAS-EXIT 275] ClearviewHwy-2-W;

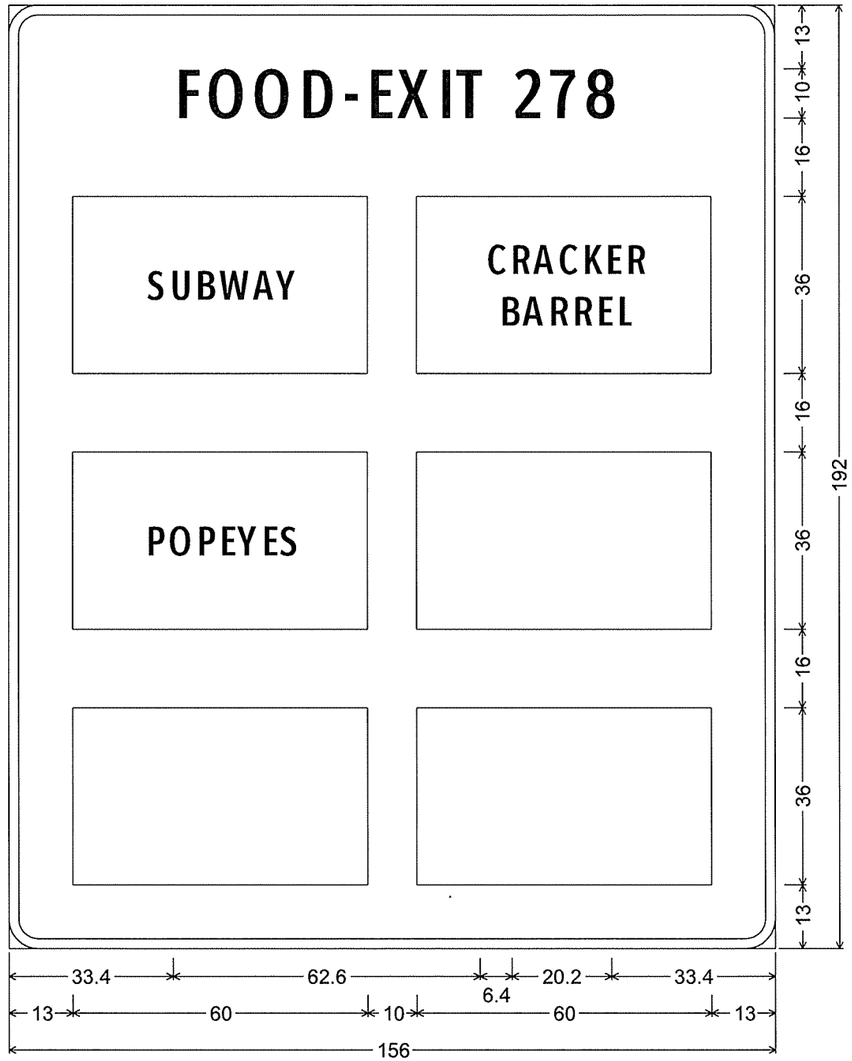
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	134	263

(2) SIGN LAYOUT SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTINI



LLC-040-6005+00EB; 6.0" Radius, 2.0" Border, White on Blue;
[LODGING-EXIT 278] ClearviewHwy-2-W;
[CAMPING-EXIT 278] ClearviewHwy-2-W;

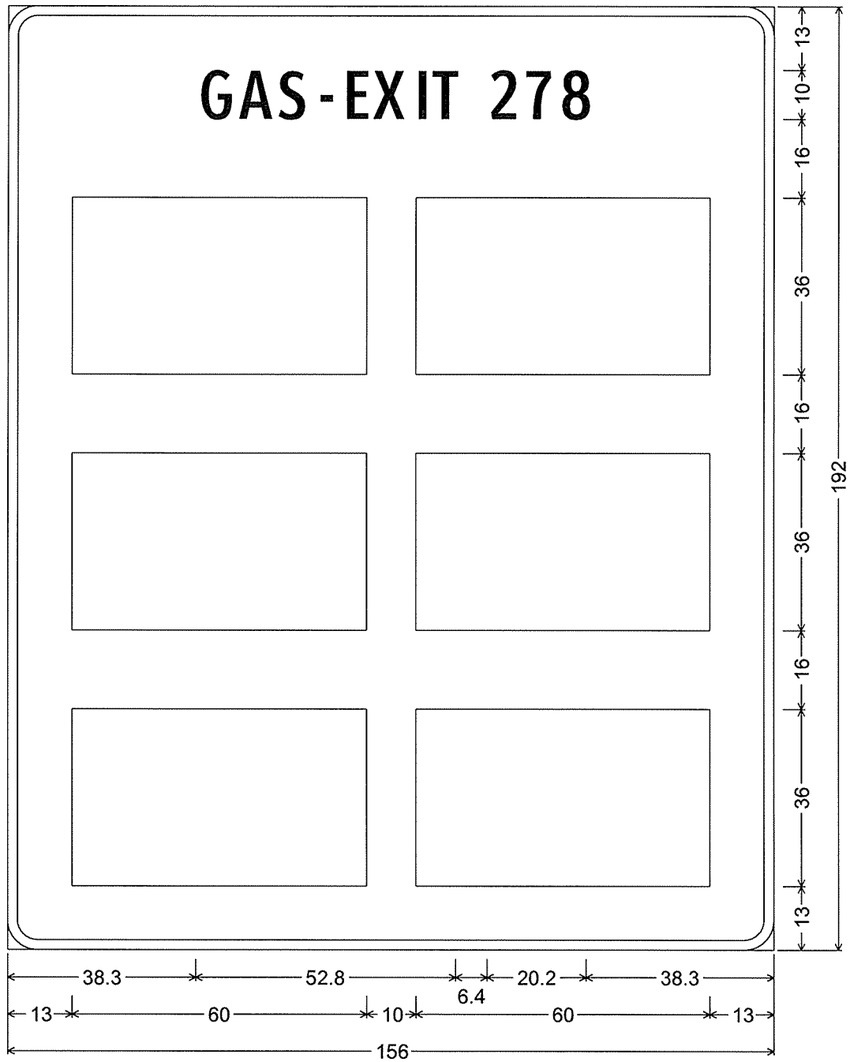


LF-040-6012+00EB; 6.0" Radius, 2.0" Border, White on Blue;
[FOOD-EXIT 278] ClearviewHwy-2-W;

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	140	263

(2) SIGN LAYOUT SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTAIN



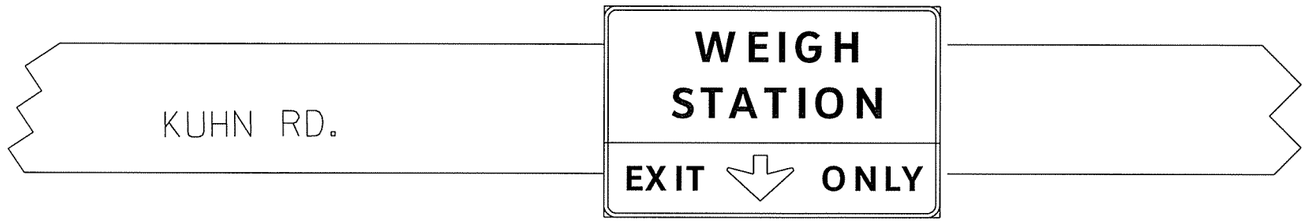
LG-040-6022+00EB; 6.0" Radius, 2.0" Border, White on Blue;
[GAS-EXIT 278] ClearviewHwy-2-W;

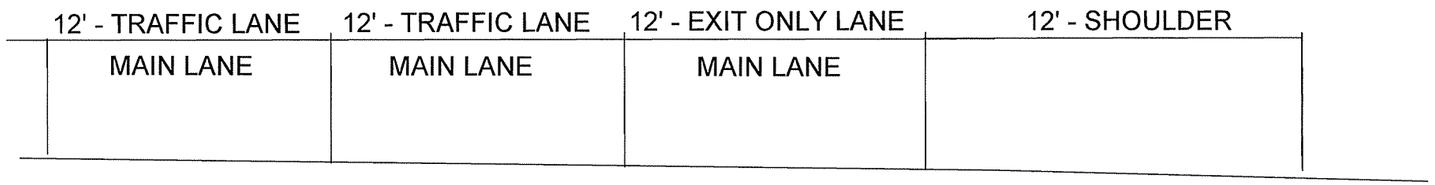
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	141	263

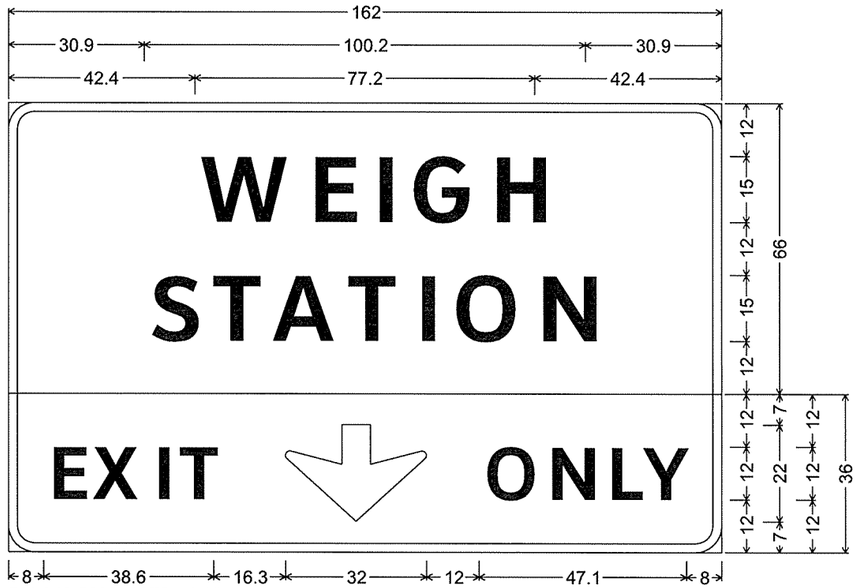
(2) SIGN LAYOUT SHEET

BM-040-18-13
BM-040-5822+90EB
MAINTAIN OVERHEAD SIGN
STRUCTURE, REPLACE SIGN

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTINI







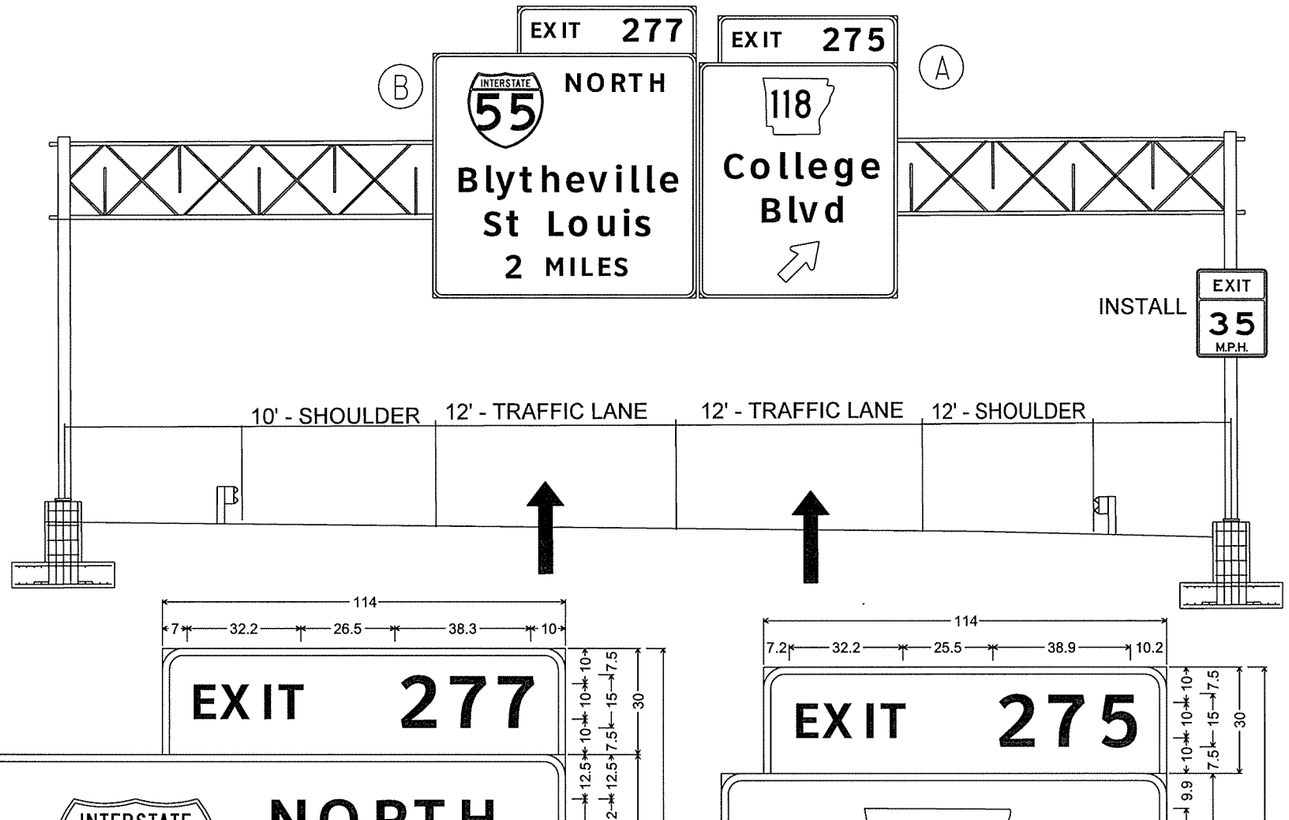
BM-040-5822+90EB; 6.0" Radius, 2.0" Border, White on Green;
[WEIGH] ClearviewHwy-5-W; [STATION] ClearviewHwy-5-W;
6.0" Radius, 2.0" Border, Black on Yellow;
[EXIT] ClearviewHwy-5-W; Down Arrow 22.0" 270°;
[ONLY] ClearviewHwy-5-W 75% spacing;

INSTALL
OH-040-18-31
OH-040-5891+50EB-A
OH-040-5891+50EB-B
SS-040-5891+50EB-OH

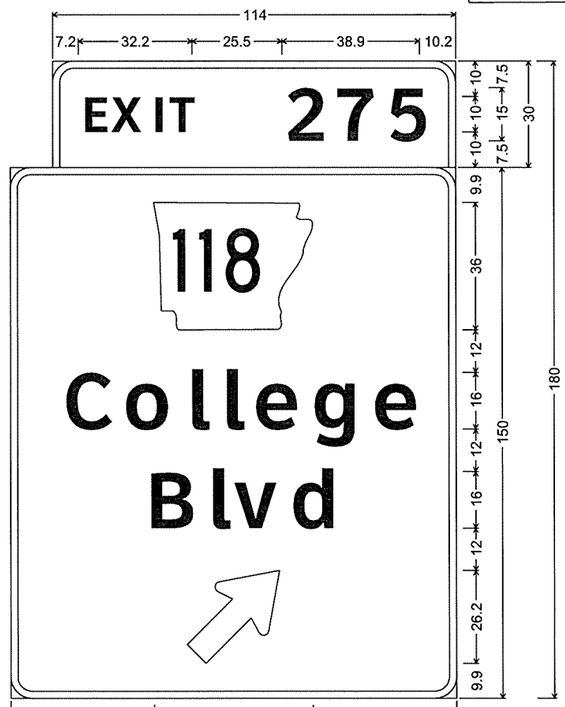
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	142	263

(2) SIGN LAYOUT SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTISKY



OH-040-5891+50EB-B;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] ClearviewHwy-5-W; [277] ClearviewHwy-5-W;
6.0" Radius, 2.0" Border, White on Green;
[NORTH] ClearviewHwy-5-W; [Blytheville] ClearviewHwy-5-W;
[St Louis] ClearviewHwy-5-W; [2] ClearviewHwy-5-W; [MILES] ClearviewHwy-5-W;

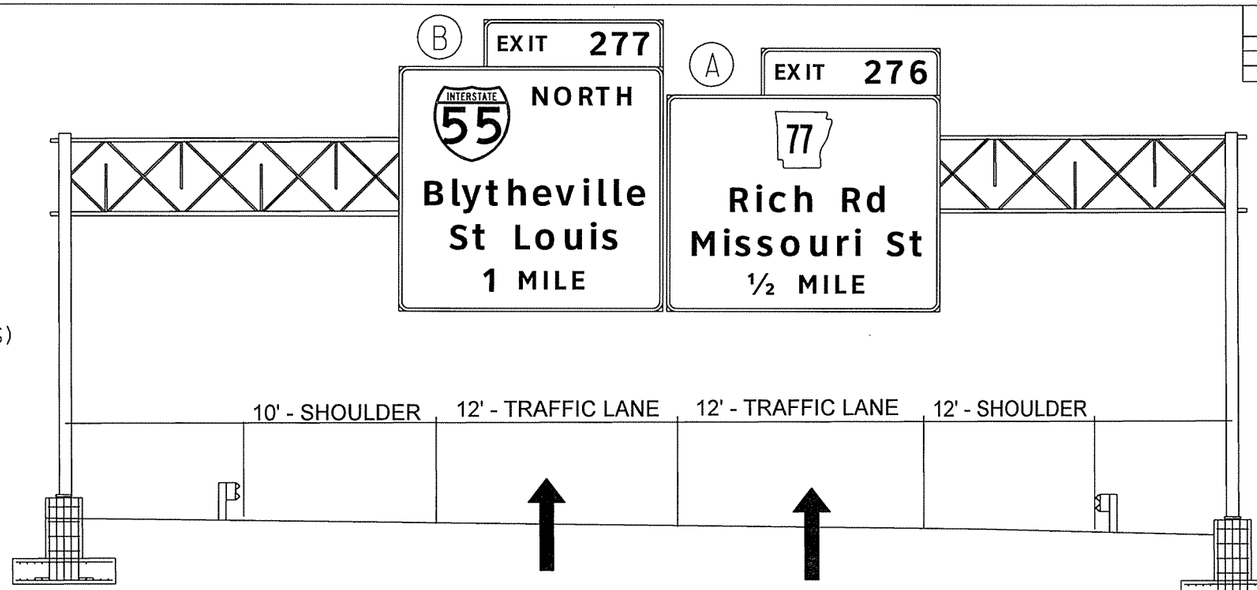


OH-040-5891+50EB-A;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] ClearviewHwy-5-W; [275] ClearviewHwy-5-W;
6.0" Radius, 2.0" Border, White on Green;
M1-6; [College] ClearviewHwy-5-W; [Blvd] ClearviewHwy-5-W;
Standard Arrow Custom 33.4" X 20.3" 45°;

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	143	263

(2) SIGN LAYOUT SHEET

OH-040-18-32 INSTALL
OH-040-5946+80EB-A
OH-040-5946+80EB-B
OH-040-18-02 (REMOVE EXISTING)



OH-040-5946+80EB-A;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] ClearviewHwy-5-W; [276] ClearviewHwy-5-W;
6.0" Radius, 2.0" Border, White on Green;
M1-6; [Rich Rd] ClearviewHwy-5-W; [Missouri St] ClearviewHwy-5-W;
[½] ClearviewHwy-5-W; [MILE] ClearviewHwy-5-W;

OH-040-5946+80EB-B;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] ClearviewHwy-5-W; [277] ClearviewHwy-5-W;
6.0" Radius, 2.0" Border, White on Green;
[NORTH] ClearviewHwy-5-W; [Blytheville] ClearviewHwy-5-W;
[St Louis] ClearviewHwy-5-W; [1] ClearviewHwy-5-W; [MILE] ClearviewHwy-5-W;

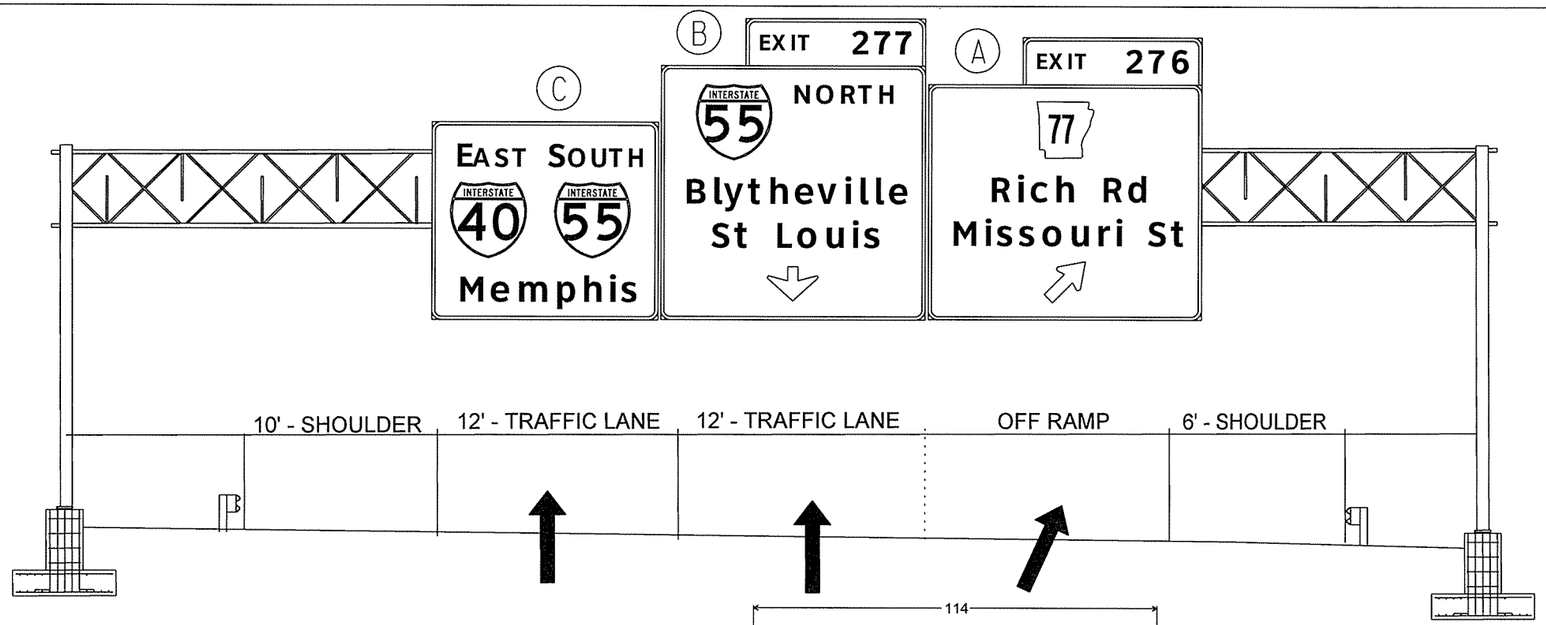
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTAIN

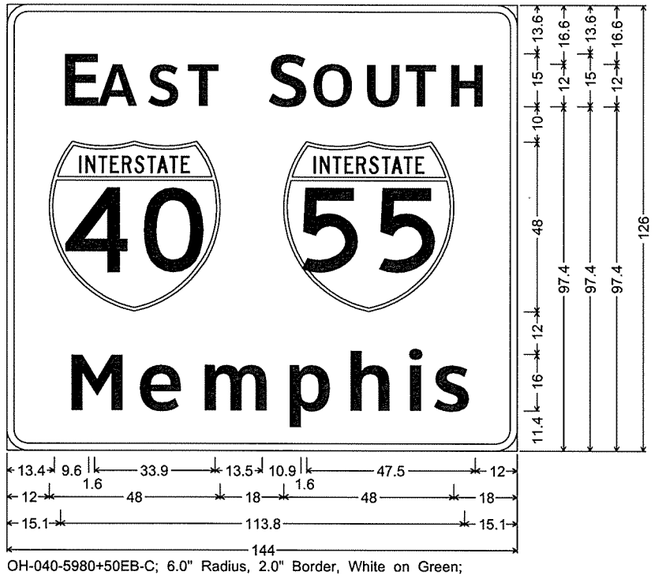
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	144	263

(2) SIGN LAYOUT SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTHOU

OH-040-I8-33 INSTALL
OH-040-5980+50EB-A
OH-040-5980+50EB-B
OH-040-5980+50EB-C
OH-040-I8-04 (REMOVE EXISTING)





OH-040-5980+50EB-C; 6.0" Radius, 2.0" Border, White on Green;
[E AST] ClearviewHwy-5-W;
[S OUTH] ClearviewHwy-5-W 80% spacing;
[Memphis] ClearviewHwy-5-W;

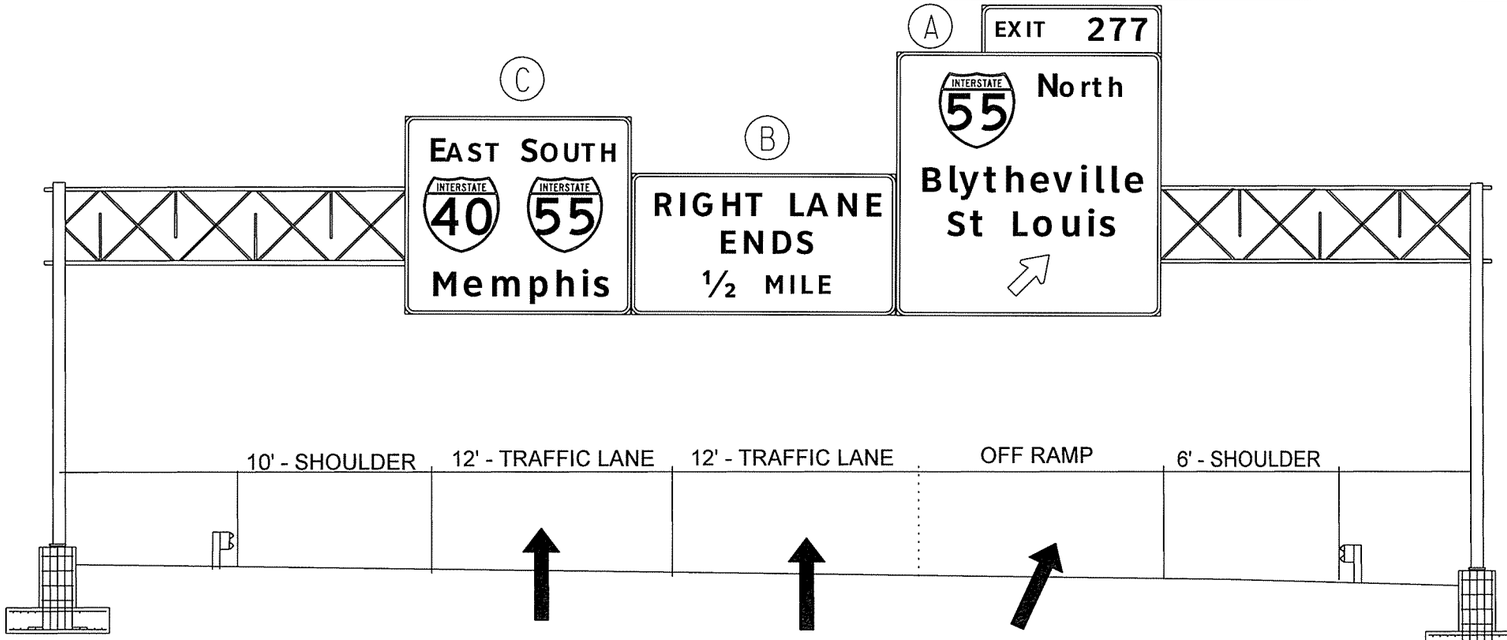
OH-040-5980+50EB-B;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] ClearviewHwy-5-W; [277] ClearviewHwy-5-W;
6.0" Radius, 2.0" Border, White on Green;
[NORTH] ClearviewHwy-5-W; [Blytheville] ClearviewHwy-5-W;
[St Louis] ClearviewHwy-5-W; Down Arrow 22.0" 270°;

OH-040-5980+50EB-A;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] ClearviewHwy-5-W; [276] ClearviewHwy-5-W;
6.0" Radius, 2.0" Border, White on Green;
M1-6; [Rich Rd] ClearviewHwy-5-W; [Missouri St] ClearviewHwy-5-W;
Standard Arrow Custom 33.4" X 20.3" 45°;

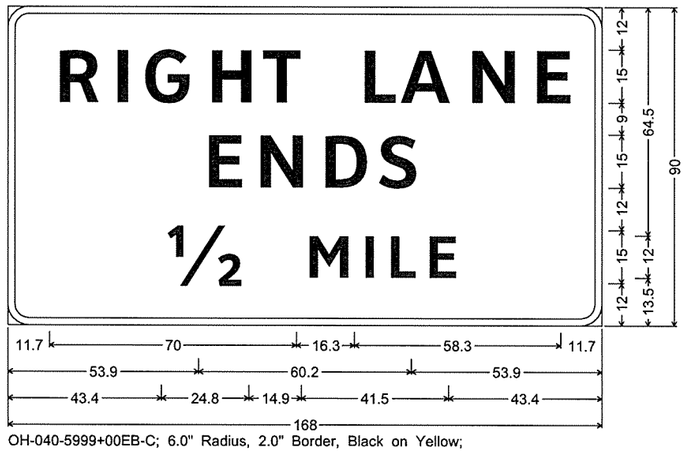
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	145	263
				(2) SIGN LAYOUT SHEET				

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7521
JOSEPH A. SARTINI

OH-040-18-34 INSTALL
OH-040-5999+00EB-A
OH-040-5999+00EB-B
OH-040-5999+00EB-C
OH-040-18-03 (REMOVE EXISTING)



OH-040-5999+00EB-C; 6.0" Radius, 2.0" Border, White on Green;
[E AST] ClearviewHwy-5-W;
[S OUTH] ClearviewHwy-5-W 80% spacing;
[Memphis] ClearviewHwy-5-W;



OH-040-5999+00EB-C; 6.0" Radius, 2.0" Border, Black on Yellow;
[RIGHT LANE] ClearviewHwy-5-W; [ENDS] ClearviewHwy-5-W;
[½] ClearviewHwy-5-W; [MILE] ClearviewHwy-5-W;

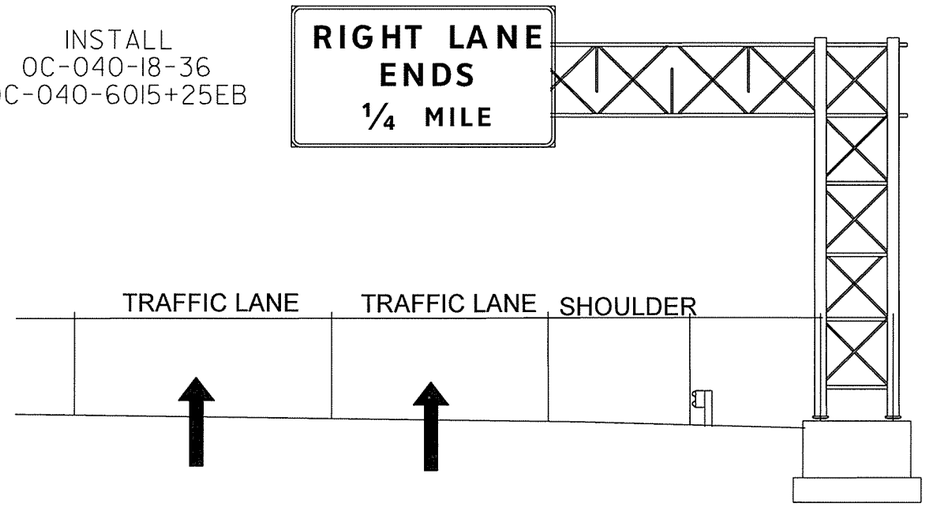
OH-040-5999+00EB-A;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] ClearviewHwy-5-W; [277] ClearviewHwy-5-W;
6.0" Radius, 2.0" Border, White on Green;
[N orth] ClearviewHwy-5-W; [Blytheville] ClearviewHwy-5-W;
[St Louis] ClearviewHwy-5-W; Standard Arrow Custom 33.4" X 20.3" 45°;

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	146	263

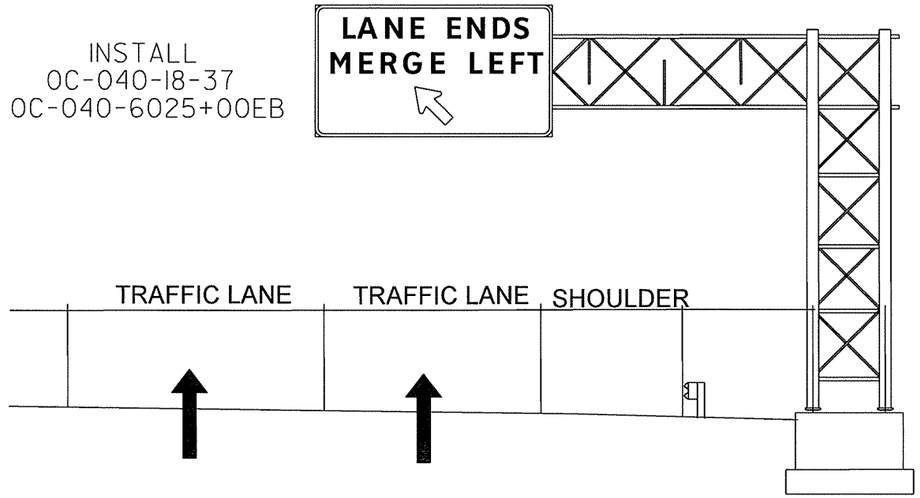
(2) SIGN LAYOUT SHEET

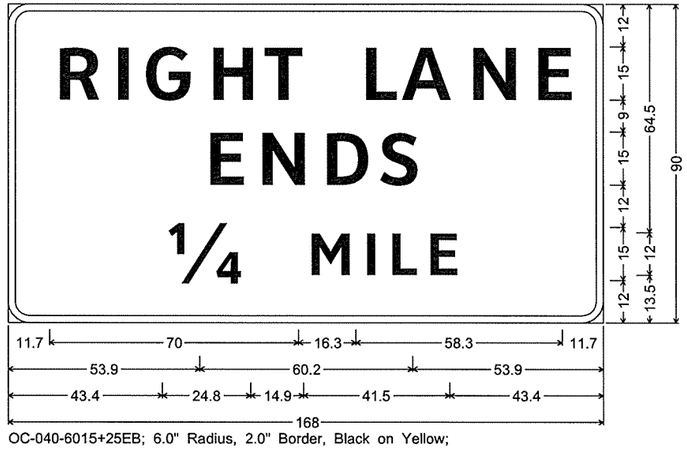
STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER N. 7527 JOSEPH A. SARTINI

INSTALL
OC-040-18-36
OC-040-6015+25EB

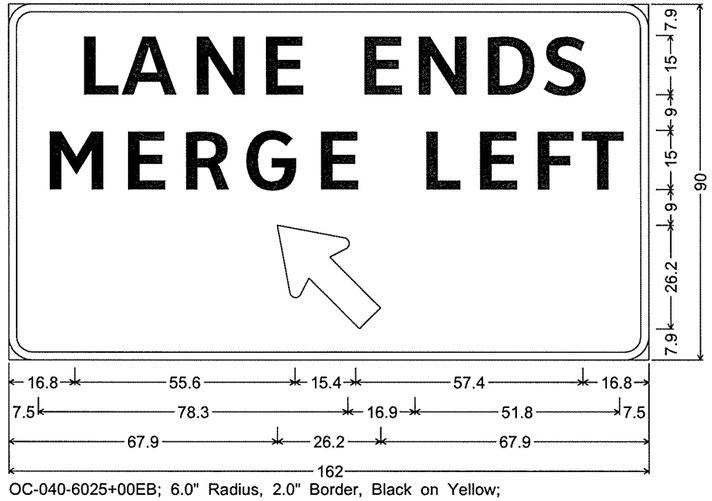


INSTALL
OC-040-18-37
OC-040-6025+00EB





OC-040-6015+25EB; 6.0" Radius, 2.0" Border, Black on Yellow;
[RIGHT LANE] ClearviewHwy-5-W; [ENDS] ClearviewHwy-5-W;
[1/4] ClearviewHwy-5-W; [MILE] ClearviewHwy-5-W;



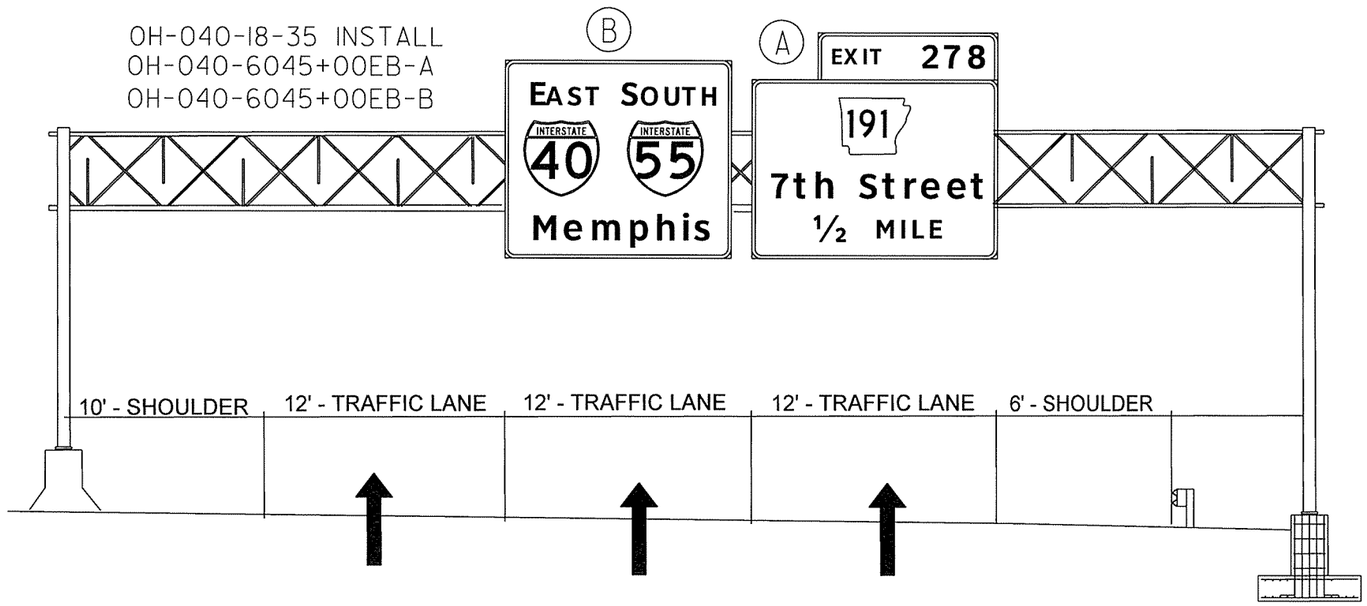
OC-040-6025+00EB; 6.0" Radius, 2.0" Border, Black on Yellow;
[LANE ENDS] ClearviewHwy-5-W-R; [MERGE LEFT] ClearviewHwy-5-W;
Standard Arrow Custom 33.4" X 20.3" 135°;

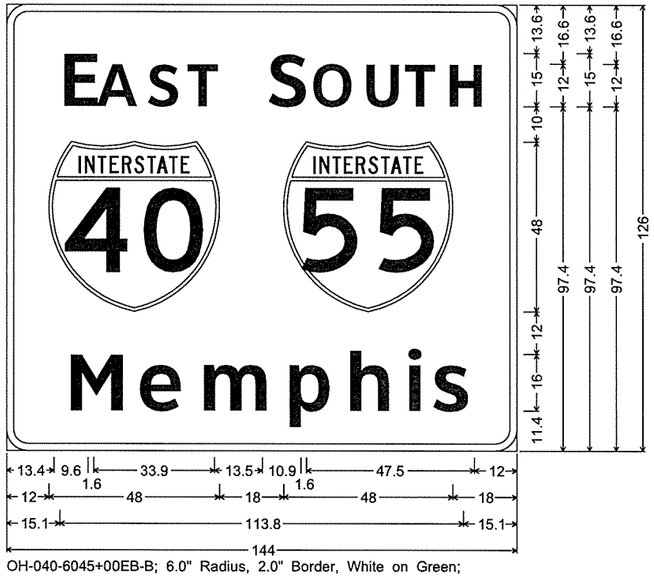
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	147	263

(2) SIGN LAYOUT SHEET

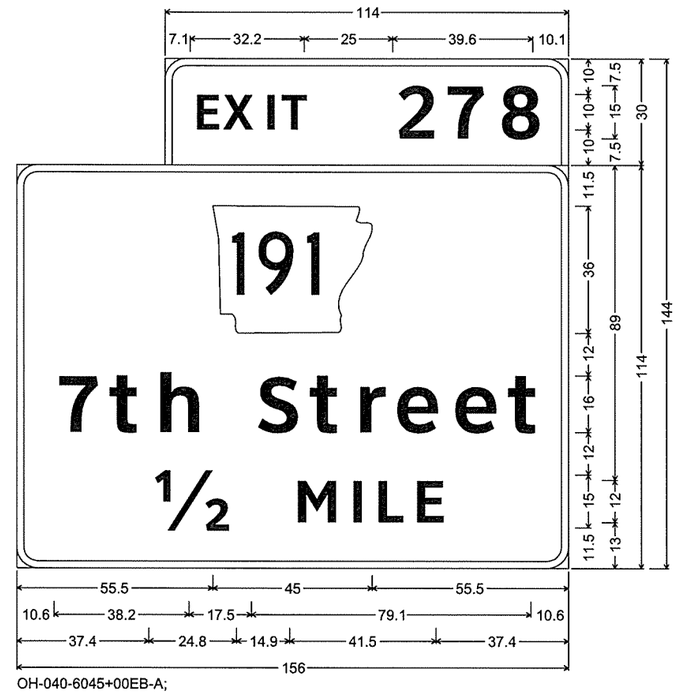
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTINI

OH-040-18-35 INSTALL
OH-040-6045+00EB-A
OH-040-6045+00EB-B





OH-040-6045+00EB-B; 6.0" Radius, 2.0" Border, White on Green;
[E AST] ClearviewHwy-5-W;
[S OUTH] ClearviewHwy-5-W 80% spacing;
[Memphis] ClearviewHwy-5-W;



OH-040-6045+00EB-A;
6.0" Radius, 2.0" Border, White on Green;
[EXIT] ClearviewHwy-5-W; [278] ClearviewHwy-5-W;
6.0" Radius, 2.0" Border, White on Green;
M1-6; [7th Street] ClearviewHwy-5-W; [½] ClearviewHwy-5-W;
[MILE] ClearviewHwy-5-W;

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	148	263

(2) SIGN PLACEMENT SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7827
JOSEPH A. SARTINI

REPLACE
ML-040-5359+48WB

St Francis Co

EXIST. WRSF &
CONCRETE DITCH PAVING

SPEED LIMIT 70

REPLACE
SS-040-5355+00WB

SLOWER TRAFFIC KEEP RIGHT

REPLACE
SS-040-5363+00WB

WEST MEMPHIS 40

REPLACE
SS-040-5367+00WB

5355

5360

5365

5370

Crittenden Co

REPLACE
ML-040-5359+48EB

STA. 5359+48.40
BEGIN JOB NO. BB0107
LOG MILE 264.57

PC5367+95.34

EXIST. WRSF &
CONCRETE DITCH PAVING

REPLACE
SS-040-5384+00WB

REPLACE
SS-040-5383+50WB

MILE 265

5370

5375

5380

5385

EXIT 40 MPH

REPLACE
SS-040-5374+50EB

Hughes 79 218 EXIT 265

REPLACE
ML-040-5373+20EB

EXIT 265

REPLACE
EX-040-5377+50EB

MILE 265

REPLACE
SS-040-5383+50EB

STA 5355+00 TO STA 5385+00

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	149	263

(2) SIGN PLACEMENT SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTINI

STA. 5385+72
END WRSF JOB BB0106

REPLACE
EX-040-5394+50WB

REPLACE
ML-040-5398+00WB

REPLACE
SS-040-5396+00WB

5385 5390 5395 5400

BR. NO. 03844

HWY. 79

BING'S STORE RD.

STA. 5387+22
BEGIN WRSF

REPLACE
SS-040-5389+90EB

5400 5405 5410 5415

PT 5401+56.72

REPLACE
SS-040-5406+00EB

REPLACE
SS-040-5410+00EB

STA. 5414+01
END WRSF

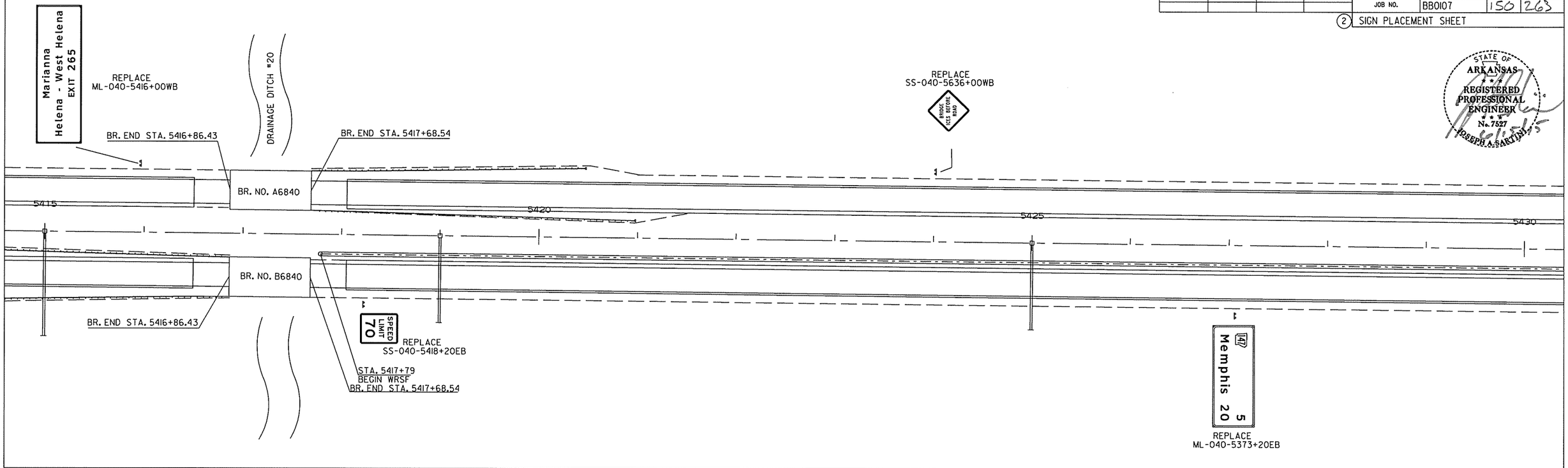
INSTALL
SS-040-5414+20EB

STA 5385+00 TO STA 5415+00

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	150	263

(2) SIGN PLACEMENT SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTINI



STA 5414+00 TO STA 5445+00

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	151	263

(2) SIGN PLACEMENT SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTAIN, JR.

REPLACE
ML-040-5450+00WB

EXIT 265 | 218 | 79 | Hughes 1 MILE

5445 5450 5455 5460

WRSF AND CONCRETE DITCH PAVING

5460 5465 5470 5475

BR. END STA. 5469+48.43

BR. END STA. 5470+30.54

BR. NO. A6841

BR. NO. B6841

STA. 5466+63
END WRSF

BR. END STA. 5469+52.43

STA. 5470+45
BEGIN WRSF

BR. END STA. 5470+34.54

DRAINAGE DITCH #19

BRIDGE 1255 AHEAD

REPLACE
SS-040-5462+00EB

STA 5445+00 TO STA 5475+00

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	152	263

(2) SIGN PLACEMENT SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTIN

REPLACE
SS-040-5477+00WB

BRIDGE ICES BEFORE ROAD

REPLACE
SS-040-5489+10WB
E267

5475 5480 5485 5490

WRSF AND CONCRETE DITCH PAVING

E267
REPLACE
SS-040-5489+10EB

O' NEAL RD.
CO. RD. 381

STA. 5499+61
BEGIN WRSF

5490 5495 5500 5505

STA. 5493+11
END WRSF

BR. NO. 03847

STA 5475+00 TO STA 5505+00

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	153	263

(2) SIGN PLACEMENT SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTINI

WRSF AND CONCRETE DITCH PAVING

5505 5510 5515 5520

REPLACE SS-040-5515+00EB

REPLACE SS-040-5529+00WB

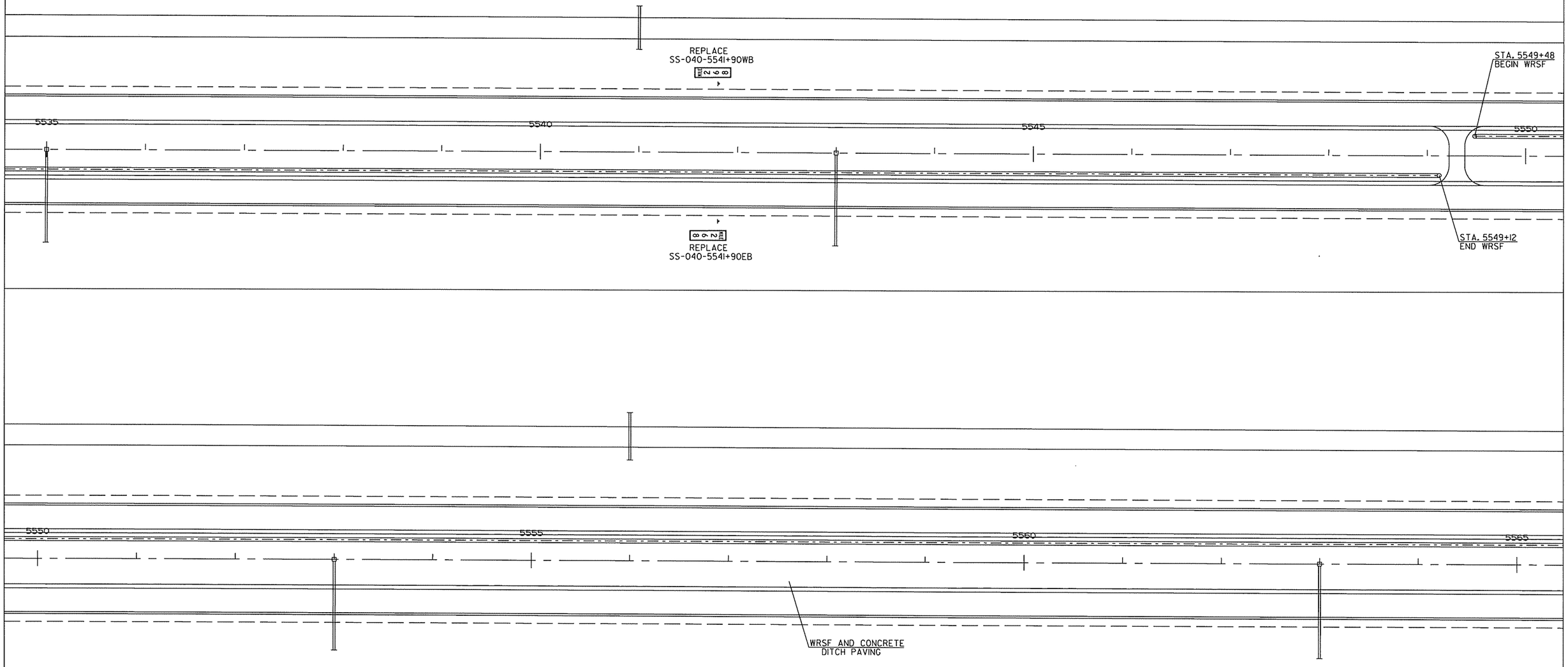
BR. END STA. 5521+63.43
STA. 5521+53 END WRSF
BR. END STA. 5522+45.54
BR. NO. A6842
5520 5525 5530 5535
BR. NO. B6842
BR. END STA. 5521+66.43
STA. 5522+59 BEGIN WRSF
BR. END STA. 5522+48.54
DRAINAGE DITCH #18

STA 5505+00 TO STA 5535+00

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	154	263

(2) SIGN PLACEMENT SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7337
JOSEPH A. SARTIN



STA 5535+00 TO STA5565+00

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	155	263

(2) SIGN PLACEMENT SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTISKY

DRAINAGE DITCH #16

BR. END STA. 5575+60.43

STA. 5575+50
END WRSF

BR. END STA. 5576+42.54

BR. NO. A6843

BR. NO. B6843

BR. END STA. 5575+63.43

STA. 5576+52
BEGIN WRSF

BR. END STA. 5576+45.54

5565 5570 5575 5580

REPLACE
SS-040-5568+00EB
BRIDGE NOT IN USE AHEAD

REPLACE
SS-040-5583+00WB
BRIDGE NOT IN USE AHEAD

REPLACE
SS-040-5594+70WB
MM 2 6 9

5580 5585 5590 5595

WRSF AND CONCRETE
DITCH PAVING

MM 2 6 9 2

REPLACE
SS-040-5594+70EB

STA 5565+00 TO STA 5595+00

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	156	263

(2) SIGN PLACEMENT SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTINI, JR.

HWY. 50

BR. END STA. 5602+03.99

BR. NO. A6825

BR. END STA. 5603+24.17

STA. 5605+92
BEGIN WRSF

PC5607+13.39

5595

5600

5605

5610

BR. NO. B6825

STA. 5599+31
END WRSF

BR. END STA. 5602+07.82

BR. END STA. 5603+28.00

REPLACE
SS-040-5596+00EB

REPLACE
SS-040-5610+00WB

PT5612+34.62

WRSF & CONCRETE
DITCH PAVING

5610

5615

5620

5625

PI5609+74.05

REPLACE
SS-040-5621+00EB

STA 5595+00 TO STA 5625+00

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	157	263

(2) SIGN PLACEMENT SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTIN
6/15/15

DRAINAGE DITCH #15

BR. END STA. 5628+28.55
STA. 5628+18
END WRSF
BR. NO. A6844
BR. END STA. 5628+95.66
STA. 5631+71
BEGIN WRSF

REPLACE
SS-040-5636+00WB
BRIDGE FREES BEFORE ROAD

5625 5630 5635 5640

BR. NO. B6844
BR. END STA. 5628+28.55
BR. END STA. 5628+95.66

VMS
MAINTAIN
TM-040-18-24

EXIT 271
EXXON
GAS-EXIT 271

REPLACE
LG-040-5631+00EB

REPLACE
SS-040-5647+50EB
MILE 270

WRSF & CONCRETE
DITCH PAVING

5640 5645 5650 5655

MILE 272
REPLACE
SS-040-5647+50EB

1 MILE
147
EXIT 271

REPLACE
ML-040-5640+20EB

STA 5625+00 TO STA 5655+00

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	158	263

(2) SIGN PLACEMENT SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTINI

WRSF & CONCRETE DITCH PAVING

5655 5660 5665 5670

PC 5671+40.60

REPLACE SS-040-5673+00WB

SPEED LIMIT 70

PT 5674+06.97

SLOWER TRAFFIC KEEP RIGHT

REPLACE SS-040-5676+00WB

WEST ARKANSAS 40

REPLACE SS-040-5679+00WB

BR. END STA. 5681+84.28

STA. 5681+74 END WRSF

BR. END STA. 5682+51.39

BR. NO. A6845

5670 5675 5680 5685

BR. NO. B6845

BR. END STA. 5681+84.28

STA. 5682+61 BEGIN WRSF

BR. END STA. 5682+51.39

P.I. 5672+73.79

ROAD WORK AHEAD 2500 FEET

REPLACE SS-040-5675+00EB

DRAINAGE DITCH #14

STA 5655+00 TO STA 5685+00

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	159	263

(2) SIGN PLACEMENT SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTIANI

REPLACE
SS-040-5689+00WB

REPLACE
SS-040-5699+00WB

REPLACE
SS-040-5647+50WB

5685 5690 5695 5700

WRSF AND CONCRETE DITCH PAVING

REPLACE
ML-040-5692+50EB

EXIT 271 (147)

INSTALL
SS-040-5693+10EB

EXIT 40 MPH

REPLACE
EX-040-5695+80EB

EXIT 271

REPLACE
SS-040-5697+50EB

HWY. 147

P.I. 5704+23.76

BR. END STA. 5707+77.46

BR. NO. A3108

BR. END STA. 5709+99.63

STA. 5712+75
BEGIN WRSF

5700 5705 5710 5715

PC 5702+64.70

STA. 5705+00
END WRSF

PT 5705+82.81

BR. END STA. 5707+77.46

BR. NO. B3108

BR. END STA. 5709+99.63

REPLACE
SS-040-5701+00EB

STA 5685+00 TO STA 5715+00

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	160	263

(2) SIGN PLACEMENT SHEET

REPLACE
EX-040-5723+00WB

REPLACE
SS-040-5724+00WB

REPLACE
ML-040-5727+00WB

REPLACE
SS-040-5717+00WB

WRSF & CONCRETE
DITCH PAVING

5715 5720 5725 5730

REPLACE
SS-040-5719+00EB

5730 5735 5740 5745

DRAINAGE DITCH #11

BR. END STA. 5740+48.30
STA. 5740+38
END WRSF

BR. END STA. 5741+15.41

STA. 5743+91
BEGIN WRSF

BR. NO. A6846

BR. NO. B6846

BR. END STA. 5740+48.30

BR. END STA. 5741+15.41

INSTALL
SS-040-5742+00EB

REPLACE
SS-040-5734+00EB

REPLACE
SS-040-5737+00EB

REPLACE
SS-040-5745+00EB

STA 5715+00 TO STA 5745+00

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTIN
6.1.5

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	161	263

(2) SIGN PLACEMENT SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTIN

REPLACE
SS-040-5747+00WB
BRIDGE ICES BEFORE ROAD

REPLACE
SS-040-5750+30WB
W8-13-72

WRSF & CONCRETE
DITCH PAVING

5745 5750 5755 5760

W8-13-72
REPLACE
SS-040-5750+30EB

TRANSPONDER
EQUIPPED TRUCKS
FOLLOW
IN-CAB SIGNALS

REPLACE
WS-040-5752+00EB

WRSF & CONCRETE
DITCH PAVING

5760 5765 5770 5775

W3-5a 1 MILE
REPLACE
SS-040-5770+00EB-A
SS-040-5770+00EB-B

WEIGH STATION 1 MILE
REPLACE
WS-040-5773+00EB
REMOVE GATED W3-5

MAINTAIN TRANSPONDER
STA 5774+40
REMOVE WEIGH STATION
1MILE STA 5774+90

STA 5745+00 TO STA 5775+00

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	162	263

(2) SIGN PLACEMENT SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTINE

REPLACE
ML-040-5775+00WB

EXIT 271 (147) 1 MILE

REPLACE
SS-040-5779+00WB

SPEED LIMIT 70

5775

5780

PC 5781+01.57

WRSF & CONCRETE DITCH PAVING

5785

PT 5788+14.83

5790

SPEED LIMIT 65

REPLACE
SS-040-5779+00EB-A
SS-040-5779+00EB-B

P.I. 5784+62.41

BRIDGE ICES BEFORE ROAD

REPLACE
SS-040-5787+00EB

REPLACE
LG-040-5793+00WB

GAS-EXIT 271 EXXON -EXIT 271

DRAINAGE DITCH #10

REPLACE
SS-040-5849+60WB

BRIDGE ICES BEFORE ROAD

REPLACE
SS-040-5803+10WB

MILE 2 7 3

BR. END STA. 5794+29.42

STA. 5794+12
END WRSF

BR. END STA. 5794+96.67

BR. NO. A6847

5790

5795

5800

5805

BR. NO. B6847

BR. END STA. 5793+96.56

STA. 5794+81
BEGIN WRSF

BR. END STA. 5794+63.81

WEIGH STATION NEXT RIGHT

REPLACE
WS-040-5792+00EB

WEIGH STATION
OPEN
CLOSED

REPLACE
WS-040-5800+00EB

MILE 2 7 3

REPLACE
SS-040-5803+10EB

STA 5775+00 TO 5805+00

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	163	263

(2) SIGN PLACEMENT SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTIN

REPLACE
SS-040-5814+00WB
SPEED LIMIT 65

STA. 5806+26
BEGIN WRSF

STA. 5805+86
BEGIN WRSF

5805 5810 5815 5820

INSTALL
SS-040-5821+00WB
WEST 40

STA. 5822+38
END WRSF

KUHN RD.

5820 5825 5830 5835

REPLACE
SS-040-5821+30EB
EXIT 20 MPH

BR. NO. 03115

STA. 5823+66
BEGIN WRSF

REPLACE
SS-040-5825+00EB
SPEED LIMIT 20

MAINTAIN TRANSPONDER
STA 5830+20

WEIGH STATION
EXIT ONLY
KUHN RD.

BM-040-18-13
BM-040-5822+90EB
MAINTAIN OVERHEAD SIGN
STRUCTURE, REPLACE SIGN

WEIGH STATION

REPLACE
ML-040-5826+30EB

12' - TRAFFIC LANE	12' - TRAFFIC LANE	12' - EXIT ONLY LANE	12' - SHOULDER
MAIN LANE	MAIN LANE	MAIN LANE	

STA 5805+00 TO STA 5835+00

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	164	263

(2) SIGN PLACEMENT SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTIN III

INSTALL
SS-040-5837+00WB

REPLACE
SS-040-5849+60WB
SPEED LIMIT 65

INSTALL
EX-040-5848+00WB
TRUCK PARKING
NO SERVICES

REPLACE
SS-040-5849+60WB
EXIT 35 MPH

5835 5840 5845 5850

REPLACE
SS-040-5837+00EB

REPLACE
SS-040-5840+00EB
BRIDGE ICES BEFORE ROAD

STA. 5847+33
END WRSF

INSTALL
ML-040-5851+30WB
TRUCK PARKING AREA
NO SERVICES

DRAINAGE DITCH #9

BR. END STA. 5851+36.34

BR. END STA. 5851+93.57

BR. NO. A6848

BR. NO. B6848

BR. END STA. 5851+00.71

BR. END STA. 5851+57.94

REPLACE
SS-040-5855+90WB
MILE 274

MAINTAIN
ML-040-5858+00WB
TRUCK PARKING AREA
NEXT RIGHT
NO SERVICES

REPLACE
SS-040-5860+00WB
BRIDGE ICES BEFORE ROAD

REPLACE
SS-040-5865+00WB

5850 5855 5860 5865

STA. 5854+58
BEGIN WRSF

REPLACE
SS-040-5855+90EB
MILE 274

REPLACE
ML-040-5853+00EB
College Blvd 1 MILE
EXIT 281 275

REPLACE
ML-040-5860+00EB
West Memphis
NEXT 5 EXITS

STA 5835+00 TO STA 5865+00

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	165	263

(2) SIGN PLACEMENT SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTIN

INSTALL
EX-040-5875+00WB

TRUCK PARKING
NO SERVICES

REPLACE
SS-040-5878+10WB

EXIT 35 MPH

STA. 5879+24
END WRSF

5865 5870 5875 5880

REPLACE
ML-040-5867+00EB

West Memphis
Airport And River Port
Mid-South Community College
EXIT 275

REPLACE
ML-040-5874+00EB

Marion
EXIT 275

BR. NO. 03116

MASNER RD.

TRUCK PARKING AREA
NO SERVICES

MAINTAIN
ML-040-5884+00WB

MASNER RD.

STA. 5883+24
BEGIN WRSF

5880 5885 5890 5895

(B) EXIT 277
55 NORTH
Blytheville
St Louis
2 MILES

(A) EXIT 275
118
College
Blvd

INSTALL
OH-040-18-31
OH-040-5891+50EB-A
OH-040-5891+50EB-B
SS-040-5891+50EB-OH

INSTALL
EXIT 35 MPH

10' - SHOULDER | 12' - TRAFFIC LANE | 12' - TRAFFIC LANE | 12' - SHOULDER

STA 5865+00 TO STA 5895+00

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	166	263

(2) SIGN PLACEMENT SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7627
JOSEPH A. SARTIN

FIFTEEN MILE BAYOU

REPLACE
SS-040-5905+00WB

REPLACE
SS-040-5909+50WB

REPLACE
SS-040-5908+70WB

BR. END STA. 5903+17.11

STA. 5902+88
END WRSF

BR. END STA. 5904+67.11

STA. 5907+25
BEGIN WRSF

BR. NO. A3113

5895 5900 5905 5910

BR. END STA. 5903+79.11

BR. NO. B3113

REPLACE
SS-040-5908+70EB

BR. END STA. 5902+29.11

EXIT 275

REPLACE
EX-040-5895+00EB

EXIT 276

LODGING-EXIT 276

REPLACE
LL-040-5906+00EB

REPLACE
SS-040-5915+00WB - RAMP

STA. 5921+20
END WRSF

HWY. 118

COLLEGE BLVD.

5910 5915 5925

Rich Rd
Missouri St
1 MILE
EXIT 276

REPLACE
ML-040-5913+00EB

VMS

MAINTAIN
STA 5920+15EB

10' - SHOULDER | 12' - TRAFFIC LANE | 12' - TRAFFIC LANE | 12' - SHOULDER

STA 5895+00 TO STA 5925+00

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	167	263

(2) SIGN PLACEMENT SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTISKI

TRUCK PARKING AREA
1 MILE
NO SERVICES

MAINTAIN
ML-040-5927+50WB

STA. 5925+20
BEGIN WRSF

5925 5930 5935 5940

REPLACE
LF-040-5936+00EB

FOOD EXIT 276
MCDONALD'S
SUBWAY'S
IHOP'S
TACO BELL

REPLACE
ML-040-5944+90WB

EXIT 275

REPLACE
SS-040-5948+00WB

EXIT 45 MPH

REPLACE
ML-040-5951+00WB

EXIT 275
118
College Blvd

WRSF & CONCRETE DITCH PAVING

5940 5945 5950 5955

GAS EXIT 276
ARBYS

REPLACE
LG-040-5941+00EB

EXIT 277
NORTH
55
Blytheville
St Louis
1 MILE

EXIT 276
77
Rich Rd
Missouri St
½ MILE

10' - SHOULDER | 12' - TRAFFIC LANE (B) | 12' - TRAFFIC LANE (A) | 12' - SHOULDER

INSTALL
OH-040-18-32
OH-040-5946+80EB-A
OH-040-5946+80EB-B

STA 5946+90
REMOVE EXISTING OVERHAED SIGNS, SIGN STRUCTURE & IMPACT ATTENUATION BARRIERS, MAINTAIN TNDOT CAMERA & POLE.

REPLACE
SS-040-5948+00EB

STA 5925+00 TO STA 5955+00

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	1163	263

(2) SIGN PLACEMENT SHEET

REPLACE
ML-040-5987+00WB

EXIT 275 — 118 College Blvd — ¾ MILE

REPLACE
SS-040-5992+00WB

WEST — 40

MAINTAIN
ML-040-5997+50WB

CHECK TRAVEL CONDITIONS AT IDRIVEARKANSAS.COM

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTINI

PC5997+26.39

STA. 5999+56
END WRSF

5985 5990 5995 6000

Ⓐ EXIT 277 — 55 North — Blytheville St Louis

Ⓑ RIGHT LANE ENDS ½ MILE

Ⓒ EAST SOUTH — 40 55 — Memphis

10' - SHOULDER | 12' - TRAFFIC LANE | 12' - TRAFFIC LANE | OFF RAMP | 6' - SHOULDER

INSTALL
OH-040-18-34
OH-040-5999+00EB-A
OH-040-5999+00EB-B
OH-040-5999+00EB-C

STA 5999+50
REMOVE EXISTING OVERHAED SIGNS, SIGN STRUCTURE. MAINTAIN TNDOT CAMERA & POLE.

I-55 S.B.

PC6005+81.12

6000 6005 6010 6015

PC6011+34.45

REPLACE
LLC-040-6005+00EB
REMOVE EXISTING

CAMPING-EXIT 278 | LODGING-EXIT 278 — QUALITY, COMFORT SUITES

LIGHT POLE

REPLACE
LF-040-6012+00EB
REMOVE EXISTING

FOOD-EXIT 278 — POPEYES, SUBWAY, CRACKER BARREL

LIGHT POLE

EXIT 277

REPLACE
EX-040-6000+10EB

PC6009+56.55

L.M.

STA 5985+00 TO STA 6015+00

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	169	263

(2) SIGN PLACEMENT SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTINI

M.L.

I-55 N.B.

REPLACE
SS-040-6016+00WB

REPLACE
SS-040-6022+00WB

SPEED LIMIT 65

I-55 S.B.

BR. NO. 02090

MAINTAIN
EX-040-6030+10WB

EXIT 276

6015

6020

6025

6030

BR. NO. 03123

RIGHT LANE ENDS 1/4 MILE

INSTALL
OC-040-18-36
OC-040-6015+25EB

TRAFFIC LANE | TRAFFIC LANE | SHOULDER

GAS-EXIT 278

REPLACE
LG-040-6022+00EB
REMOVE EXISTING

LANE ENDS MERGE LEFT

INSTALL
OC-040-18-37
OC-040-6025+00EB

TRAFFIC LANE | TRAFFIC LANE | SHOULDER

EXIT 277

40 WEST
Forrest City
Little Rock

55 NORTH
Blytheville
St Louis

Ⓑ Ⓐ

MAINTAIN
OH-040-18-TBD
OH-040-6032+90WB-A
OH-040-6032+90WB-B

10' - SHOULDER | 12' - TRAFFIC LANE | 12' - TRAFFIC LANE | 12' - TRAFFIC LANE | 12' - SHOULDER

I-55 N.B.

Jonesboro EXIT 277

MAINTAIN
ML-040-6041+30WB

6030

6035

6040

6045

OVERHEAD SIGN

PT6032+19.34

REPLACE
SS-040-6035+00EB

REPLACE
SS-040-6038+00EB

SPEED LIMIT 65

LIGHT POLE

LIGHT POLE

LIGHT POLE

STA 6015+00 TO STA 6045+00

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	170	263

(2) SIGN PLACEMENT SHEET

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7527
JOSEPH A. SARTINI

HWY. 77

BR. END STA. 6045+40.69

BR. END STA. 6055+24.37

6045 6050 6055 6060

BR. NO. B3126

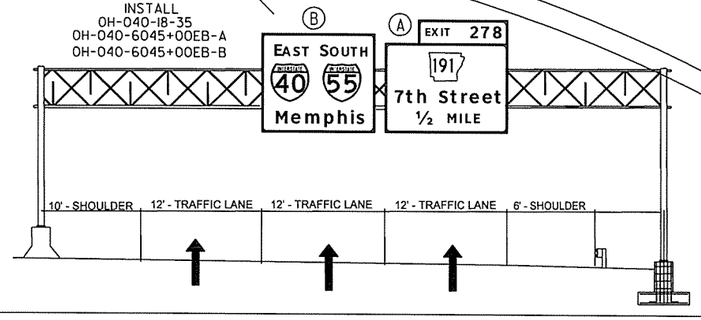
BR. NO. A3126

BR. END STA. 6045+40.69
STA. 6045+04.19
END JOB NO. BB0107
LOG MILE 277.57

N. MISSOURI ST.

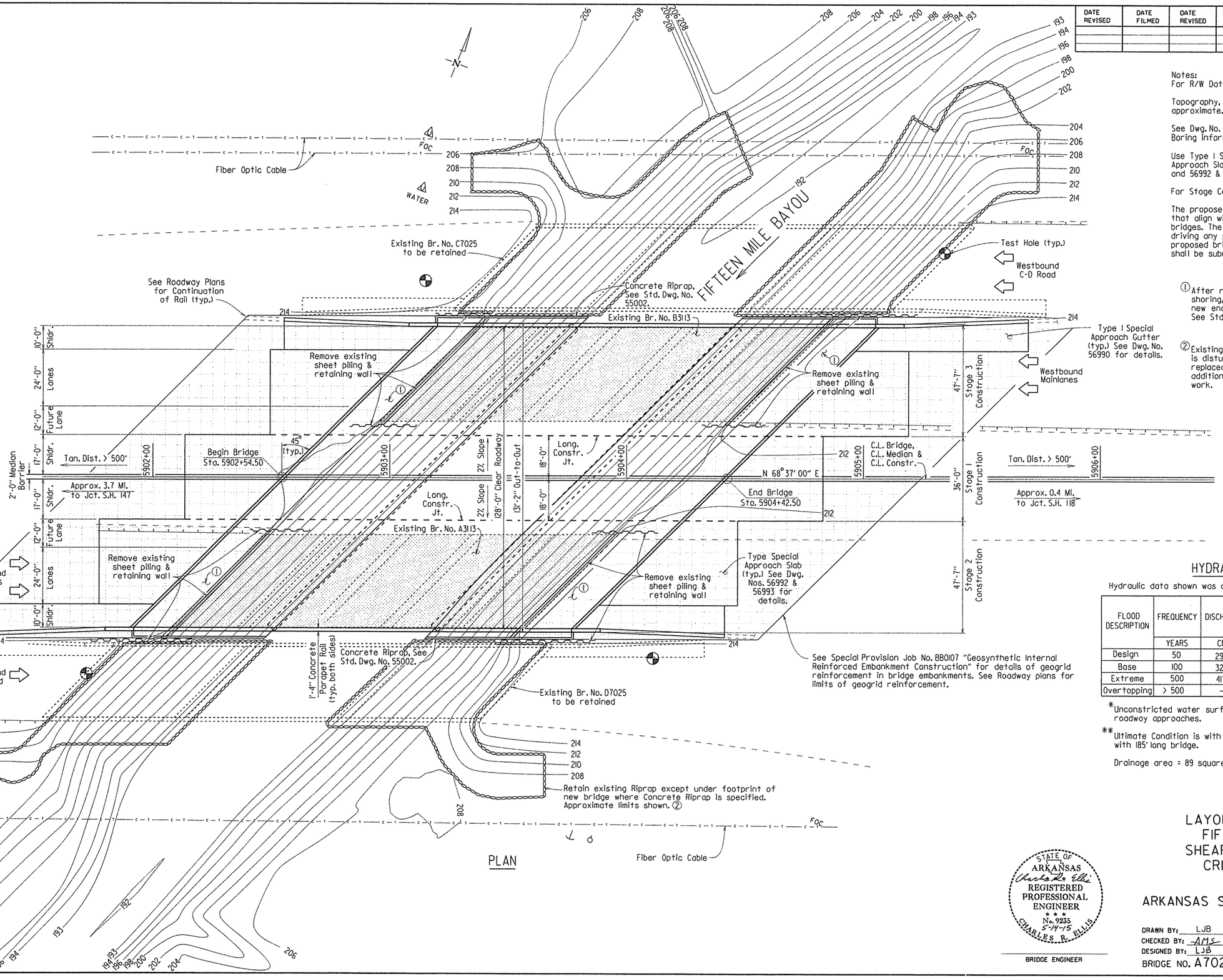
BR. END STA. 6055+24.37

INSTALL
OH-040-18-35
OH-040-6045+00EB-A
OH-040-6045+00EB-B



STA 6045+00 TO STA 6060+00

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	171	263
				①	A7025 -	LAYOUT	- 56952	



PLAN

Notes:
For R/W Data, See Roadway Plans.

Topography, contours, and utility locations shown are approximate. The Contractor shall field verify as needed.

See Dwg. No. 56953 for "ELEVATION", General Notes, and Soil Boring information.

Use Type I Special Approach Gutters and Type Special Approach Slabs at both ends of bridge. See Dwg. Nos. 56990 and 56992 & 56993, respectively.

For Stage Construction details, see Dwg. Nos. 56954 & 56955.

The proposed bridge is positioned to provide bent locations that align with existing bents at the adjacent C-D Road bridges. The Contractor shall verify measurements before driving any piling. Any adjustments necessary to align the proposed bridge to the existing C-D Road bridge locations shall be submitted for the Engineer's approval.

① After removal of existing retaining wall and shoring, extend IV:2H bridge end slopes to new end bents and place Concrete Riprap. See Std. Dwg. No. 55002.

② Existing dumped riprap to be retained that is disturbed during construction shall be replaced as directed by the Engineer. No additional payment shall be made for this work.

HYDRAULIC DATA

Hydraulic data shown was developed under previous Job 110358.

FLOOD DESCRIPTION	FREQUENCY	DISCHARGE	* NORMAL WATER SURFACE ELEVATION	** WATER SURFACE ELEVATION WITH BACKWATER AT ULTIMATE CONDITION
	YEARS	CFS	FEET	FEET
Design	50	2993	210.3	210.3
Base	100	3270	210.5	210.5
Extreme	500	4177	211.2	211.2
Overtopping	> 500	—	—	—

*Unconstricted water surface without structures or roadway approaches.

**Ultimate Condition is with existing mainlane bridges replaced with 185' long bridge.

Drainage area = 89 square miles

See Special Provision Job No. BB0107 "Geosynthetic Internal Reinforced Embankment Construction" for details of geogrid reinforcement in bridge embankments. See Roadway plans for limits of geogrid reinforcement.

STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
5-14-15
CHARLES R. ELLIS

BRIDGE ENGINEER

SHEET 1 OF 2
LAYOUT OF BRIDGE OVER FIFTEEN MILE BAYOU SHEARERVILLE-HWY.77 (S) CRITTENDEN COUNTY

ROUTE 40 SEC. 52

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: LJB DATE: 12-1-14
CHECKED BY: AMS DATE: 12/9/14
DESIGNED BY: LJB DATE: 11/14

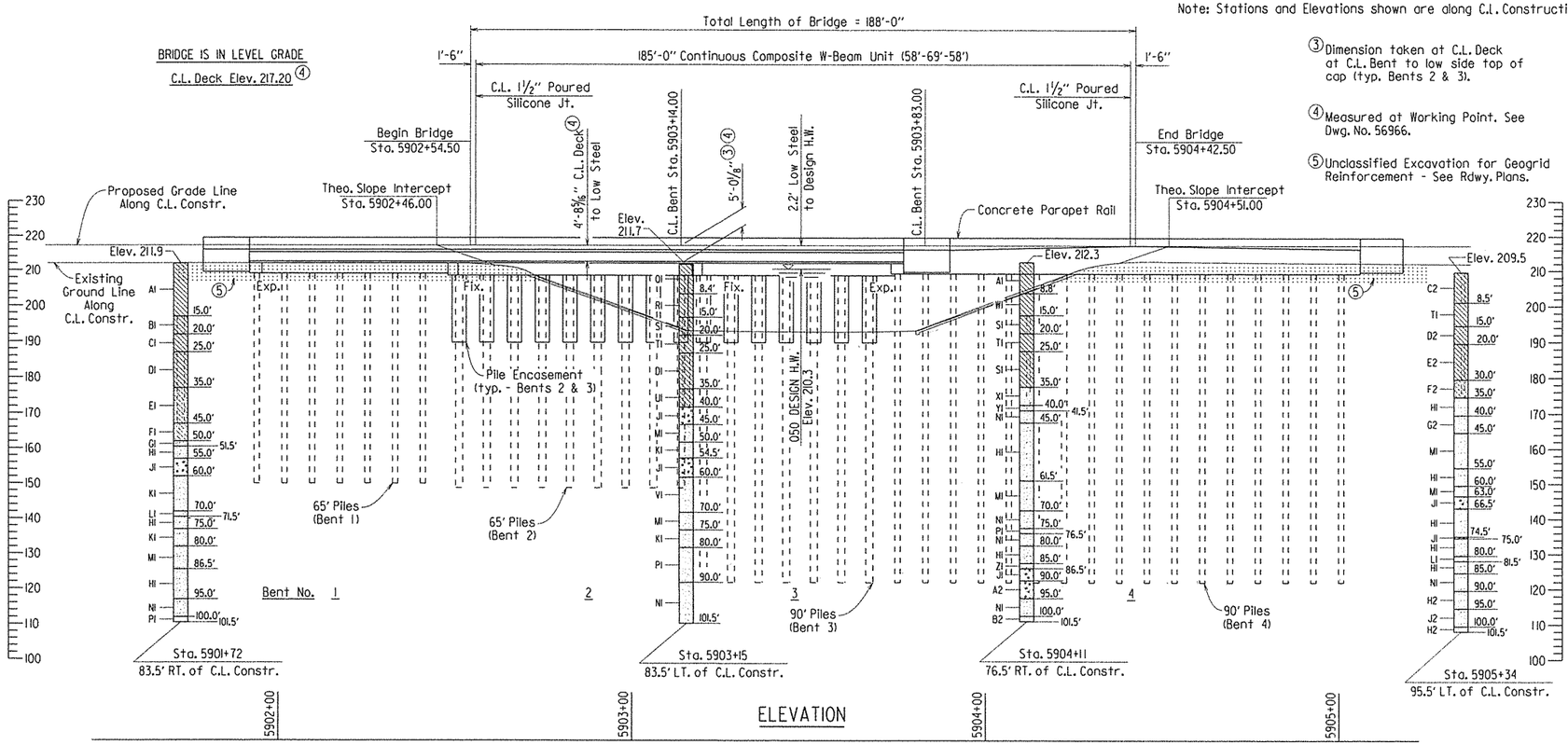
FILENAME: bbb0107x1_11.dgn
SCALE: 1" = 20'

BRIDGE NO. A7025 DRAWING NO. 56952

PRINT DATE: 5/13/2015

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	172	263
				(1)	A7025 -	LAYOUT	- 56953	

Note: Stations and Elevations shown are along C.L. Construction.



ELEVATION

③ Dimension taken at C.L. Deck at C.L. Bent to low side top of cap (typ. Bents 2 & 3).

④ Measured at Working Point. See Dwg. No. 56966.

⑤ Unclassified Excavation for Geogrid Reinforcement - See Rdwy. Plans.

"N" VALUES

Sta. 5901+72
83.5' RT. of C.L. Constr.

4.0- 5.0	N=7
9.0- 10.0	N=7
15.5- 16.5	N=4
20.5- 21.5	N=3
25.5- 26.5	N=4
30.5- 31.5	N=3
35.5- 36.5	N=4
40.5- 41.5	N=7
45.5- 46.5	N=13
50.5- 51.5	N=14
55.5- 56.5	N=11
60.5- 61.5	N=29
65.5- 66.5	N=29
70.5- 71.5	N=23
75.5- 76.5	N=29
80.5- 81.5	N=22
85.5- 86.5	N=18
90.5- 91.5	N=22
95.5- 96.5	N=38
100.5-101.5	N=50

Sta. 5903+15
83.5' LT. of C.L. Constr.

3.9- 4.9	N=8
8.9- 9.9	N=8
15.5- 16.5	N=3
20.5- 21.5	N=4
25.5- 26.5	N=3
30.5- 31.5	N=2
35.5- 36.5	N=2
40.5- 41.5	N=22
45.5- 46.5	N=17
50.5- 51.5	N=25
55.5- 56.5	N=29
60.5- 61.5	N=28
65.5- 66.5	N=34
70.5- 71.5	N=24
75.5- 76.5	N=27
80.5- 81.5	N=39
85.5- 86.5	N=31
90.5- 91.5	N=36
95.5- 96.5	N=36
100.5-101.5	N=47

Sta. 5904+11
76.5' RT. of C.L. Constr.

4.3- 5.3	N=6
9.3- 10.3	N=8
15.5- 16.5	N=4
20.5- 21.5	N=4
25.5- 26.5	N=3
30.5- 31.5	N=4
35.5- 36.5	N=7
40.5- 41.5	N=43
45.5- 46.5	N=26
50.5- 51.5	N=25
55.5- 56.5	N=28
60.5- 61.5	N=27
65.5- 66.5	N=30
70.5- 71.5	N=38
75.5- 76.5	N=33
80.5- 81.5	N=28
85.5- 86.5	N=25
90.5- 91.5	N=55
95.5- 96.5	N=35
100.5-101.5	N=60

Sta. 5905+34
95.5' LT. of C.L. Constr.

4.0- 5.0	N=3
9.0- 10.0	N=3
15.5- 16.5	N=3
20.5- 21.5	N=3
25.5- 26.5	N=4
30.5- 31.5	N=1
35.5- 36.5	N=17
40.5- 41.5	N=29
45.5- 46.5	N=22
50.5- 51.5	N=19
55.5- 56.5	N=19
60.5- 61.5	N=27
65.5- 66.5	N=18
70.5- 71.5	N=20
75.5- 76.5	N=26
80.5- 81.5	N=21
85.5- 86.5	N=41
90.5- 91.5	N=59
95.5- 96.5	N=37
100.5-101.5	N=55

BORING LEGEND

AI-Moist, Medium Stiff, Gray and Brown Clay with some Calcareous Nodules
BI-Moist, Soft, Gray and Brown Silty Clay with some Calcareous Nodules
CI-Wet, Soft, Gray Sandy Clay
DI-Moist, Soft, Gray Silty Clay
EI-Wet, Very Loose to Loose, Gray Silty Sand with Clay Seams
FI-Wet, Medium Dense, Gray Sand with Clay Seams
GI-Wet, Medium Dense, Gray Sand with Traces of Organic Matter (Wood)
HI-Wet, Medium Dense, Gray Sand
JI-Wet, Medium Dense, Gray Sand and Gravel
KI-Wet, Medium Dense, Gray Sand with some Gravel
LI-Wet, Medium Dense, Gray Sand with Traces of Lignite
MI-Wet, Medium Dense, Gray Sand with Traces of Gravel
NI-Wet, Dense, Gray Sand
PI-Wet, Dense, Gray Sand with Traces of Gravel
QI-Moist, Medium Stiff, Gray Sandy Clay with some Calcareous Nodules and Gravel
RI-Moist, Medium Stiff, Gray Clay with some Calcareous Nodules
SI-Moist, Soft, Gray and Brown Silty Clay
TI-Moist, Soft, Gray and Brown Clay
UI-Wet, Soft, Gray Sandy, Silty Clay
VI-Wet, Medium Dense to Dense, Gray Sand with Traces of Gravel
WI-Moist, Medium Stiff, Gray and Brown Clay with some Sand and Calcareous Nodules
XI-Wet, Loose, Gray Silty Sand
YI-Wet, Dense, Gray Sand with some Clay
ZI-Wet, Medium Dense, Gray Sand with some Lignite and Traces of Lignite
A2-Wet, Very Dense, Gray Sand and Gravel
B2-Wet, Very Dense, Gray Sand with Traces of Lignite
C2-Moist, Soft, Gray and Brown Silty Clay with Traces of Calcareous Nodules
D2-Moist, Soft, Gray Clay with Sand
E2-Moist, Soft, Gray and Brown to Gray Silty Clay
F2-Wet, Very Loose, Gray Silty Sand with Clay Seams
G2-Wet, Medium Dense, Gray Sand with some Pea Gravel
H2-Wet, Very Dense, Gray Sand
J2-Wet, Dense, Gray Sand with some Gravel

GENERAL NOTES:

BENCH MARK: Chiseled S.O. in S.E. Corner of existing Eastbound Mainlane Bridge (No. A3113), 67.62' right of C.L. Median Sta. 5903+54.10, Elev. 212.61.

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

DESIGN SPECIFICATIONS: AASHTO LRFD Bridge Design Specifications, Sixth Edition (2012) with 2013 Interims.

LIVE LOADING: HL-93
SEISMIC PERFORMANCE ZONE: 4

MATERIALS AND STRENGTHS

Class S(AE) Concrete (superstructure)	f'c = 4,000 psi
Class S Concrete (substructure)	f'c = 3,500 psi
Reinforcing Steel (Gr. 60, AASHTO M 31 or M 322, Type A)	fy = 60,000 psi
Structural Steel (AASHTO M 270, Gr. 36)	Fy = 36,000 psi
Structural Steel (AASHTO M 270, Gr. 50W)	Fy = 50,000 psi

BORING LOGS: Boring logs may be obtained from the Construction Contract Procurement Section of the Program Management Division.

STEEL SHELL PILING: Piling for all bents shall be concrete filled steel shell piles and shall be driven with an approved air, steam, or diesel hammer to the minimum ultimate bearing capacity per pile and minimum tip elevations shown in the table below. Piling in end bents shall be driven after embankment to bottom of cap is in place.

Bent No.	Pile Diameter	Minimum Tip Elevation	Ultimate Bearing Capacity	Minimum Rated Hammer Energy
1	18"ø	151.0	200 Tons	41,000
2	24"ø	151.0	342 Tons	84,000
3	24"ø	122.0	342 Tons	84,000
4	18"ø	122.0	200 Tons	41,000

Lengths of piling shown are assumed for estimating quantities only. Actual lengths shall be determined in the field. No additional payment will be made for cut-off or build-up. Test piles are not required but may be driven for the Contractor's information in accordance with Subsection 805.08(g).

Water jetting or other methods as approved by the Engineer may be required to achieve the required tip elevation. This work shall not be paid for directly, but shall be considered incidental to the item "Steel Shell Piling".

DRIVING SYSTEM: The driving system approval and the ultimate bearing capacity determination for piling shall be based on the requirements of Subsection 805.09(b), "Method B-Wave Equation Analysis (WEAP)". The estimated minimum rated hammer energy in foot pounds per blow required to obtain the ultimate bearing capacities are as shown in the above table.

PILE ENCASEMENT: Pile encasement for Bents 2 and 3 shall extend from bottom of cap to 3' below natural ground. Galvanized corrugated steel pipe shall be used for the pile encasement in accordance with the "Alternate Pile Encasement Detail for Steel Shell Piles" shown on Std. Dwg. No. 55021.

BRIDGE DECK: The concrete bridge deck shall be given a tine finish as specified for final finishing in Subsection 802.19 for Class 5 Tined Bridge Roadway Surface Finish.

DETAIL DRAWINGS:	DRAWING NOS.
Stage Construction	56954 & 56955
End Bents	56956 - 56960
Intermediate Bents	56961 - 56964
Elastomeric Bearings	56965
185'-0" Continuous W-Beam Unit	56966 - 56978
Concrete Filled Steel Shell Piling	55021
Type I Special Approach Gutters	56990
Type Special Approach Slabs	56992 & 56993

EXISTING BRIDGES: Existing Bridge Nos. A3113 and B3113 (Log Mile 274.89) are 42.0' wide and 150' long and consist of reinforced concrete slabs supported by concrete pile bents.

REMOVAL AND SALVAGE: Existing Bridge Nos. A3113 and B3113 , including sheet piling and retaining walls used for bridge end protection, and any accumulated drift, shall be removed in accordance with Section 205. All material from the existing bridges shall become the property of the Contractor. Removal of any accumulated drift, sheet piling, retaining walls, and all components of the existing bridge end protection system shall not be paid for directly, but shall be considered subsidiary to the item "Removal of Existing Bridge Structure". Plans of Existing Bridge Nos. C7025 and D7025, and the components of the existing bridge end protection system are available upon the Contractor's request to the Construction Contract Procurement Section of the Program Management Division.

MAINTENANCE OF TRAFFIC: See Stage Construction Dwg. Nos. 56954 & 55955 and Roadway Plans for additional details.

STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
5-14-15
CHARLES R. ELLIS

BRIDGE ENGINEER

SHEET 2 OF 2
LAYOUT OF BRIDGE OVER FIFTEEN MILE BAYOU
SHEARERVILLE-HWY.77 (S)
CRITTENDEN COUNTY

ROUTE 40 SEC. 52

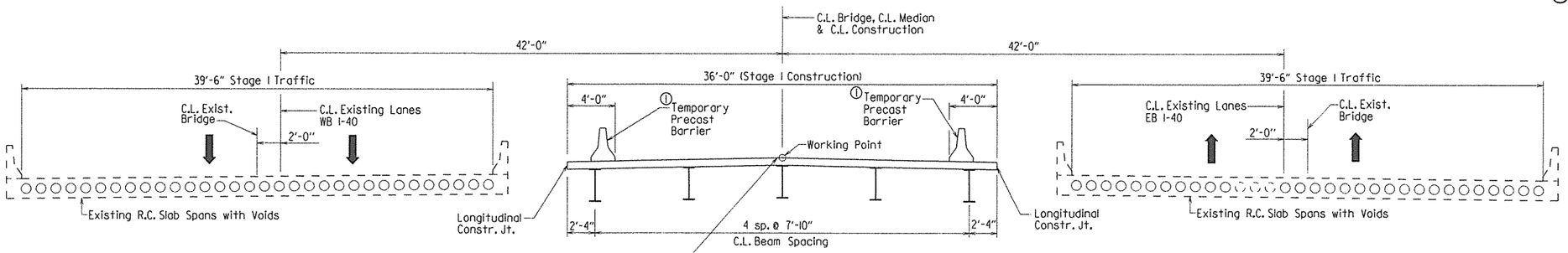
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: LJB DATE: 12-1-14
CHECKED BY: AMS DATE: 12/9/14
DESIGNED BY: LJB DATE: 11/14
FILENAME: bbb0107x1_11.dgn
SCALE: 1" = 20'

BRIDGE NO. A7025 DRAWING NO. 56953

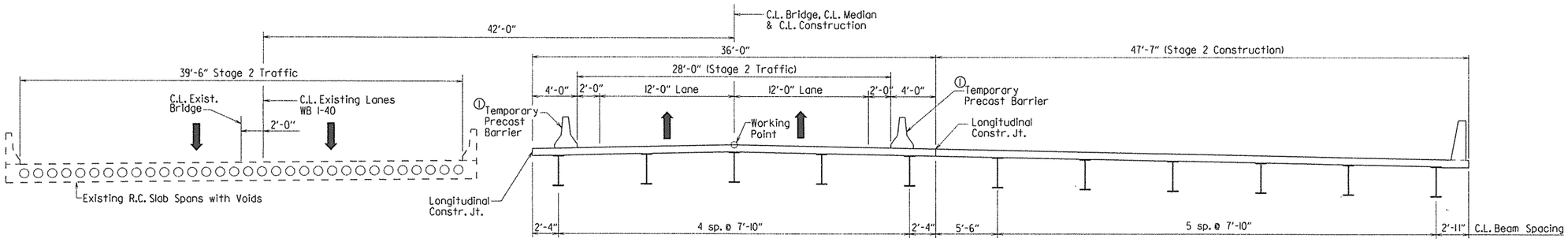
PRINT DATE: 5/13/2015

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	173	263
				① A7025, 07344 STAGE CONSTRUCTION			56954	



STAGE 1
(Looking Ahead)

① Threaded Inserts are required for Temporary Precast Barriers installed during Stage 1 Construction. Inserts shall be cast in place in new bridge deck. See Std. Dwg. No. TC-4.

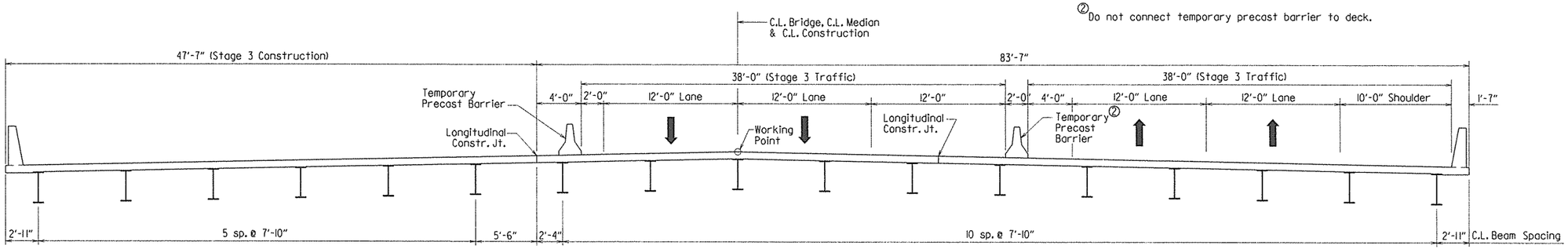


STAGE 2
(Looking Ahead)

Notes:
See Bent Details for stage construction of bents.

See Roadway Plans for details of staged roadway construction.

② Do not connect temporary precast barrier to deck.



STAGE 3
(Looking Ahead)

STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
5-14-15
CHARLES R. ELLIS

BRIDGE ENGINEER

SHEET 1 OF 2
DETAILS OF STAGE CONSTRUCTION

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

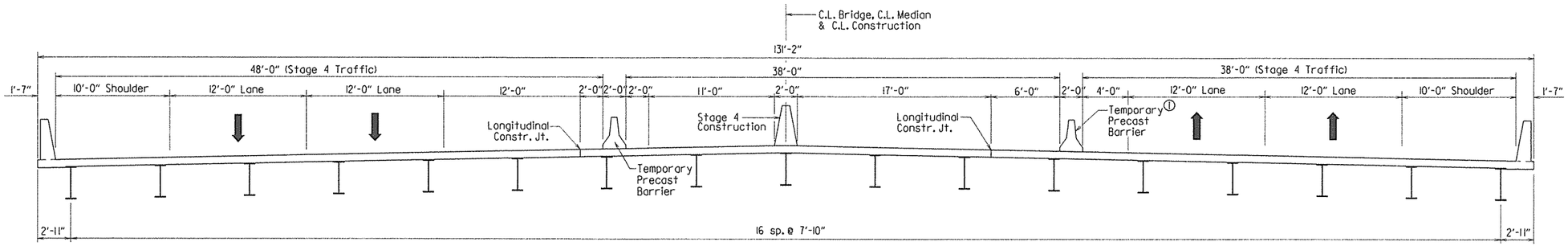
DRAWN BY: A.M.S. DATE: 11/18/14
CHECKED BY: L.J.B DATE: 5-13-15
DESIGNED BY: — DATE: —

FILENAME: bbb0107_sc.dgn
SCALE: 3/16" = 1'-0"

BRIDGE NO. A7025, 07344 DRAWING NO. 56954

PRINT DATE: 5/11/2015

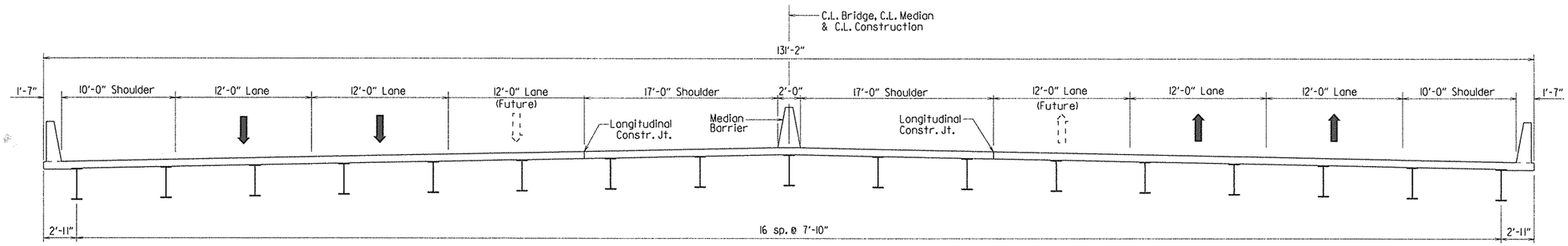
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	174	263
				①	A7025, 07344	STAGE CONSTRUCTION		56955



STAGE 4 - CONSTRUCT MEDIAN BARRIER

(Looking Ahead)

① Do not connect temporary precast barrier to deck.



CONSTRUCTION COMPLETE

(Looking Ahead)

Notes:
See Bent Details for stage construction of bents.

See Roadway Plans for details of staged roadway construction.

STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
5-14-15
CHARLES R. ELLIS

BRIDGE ENGINEER

SHEET 2 OF 2
DETAILS OF
STAGE CONSTRUCTION

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: A.M.S. DATE: 11/18/14
CHECKED BY: L.J.B. DATE: 5-13-15
DESIGNED BY: — DATE: —
FILENAME: bbb0107_sc.dgn
SCALE: 3/16" = 1'-0"

BRIDGE NO. A7025, 07344 DRAWING NO. 56955

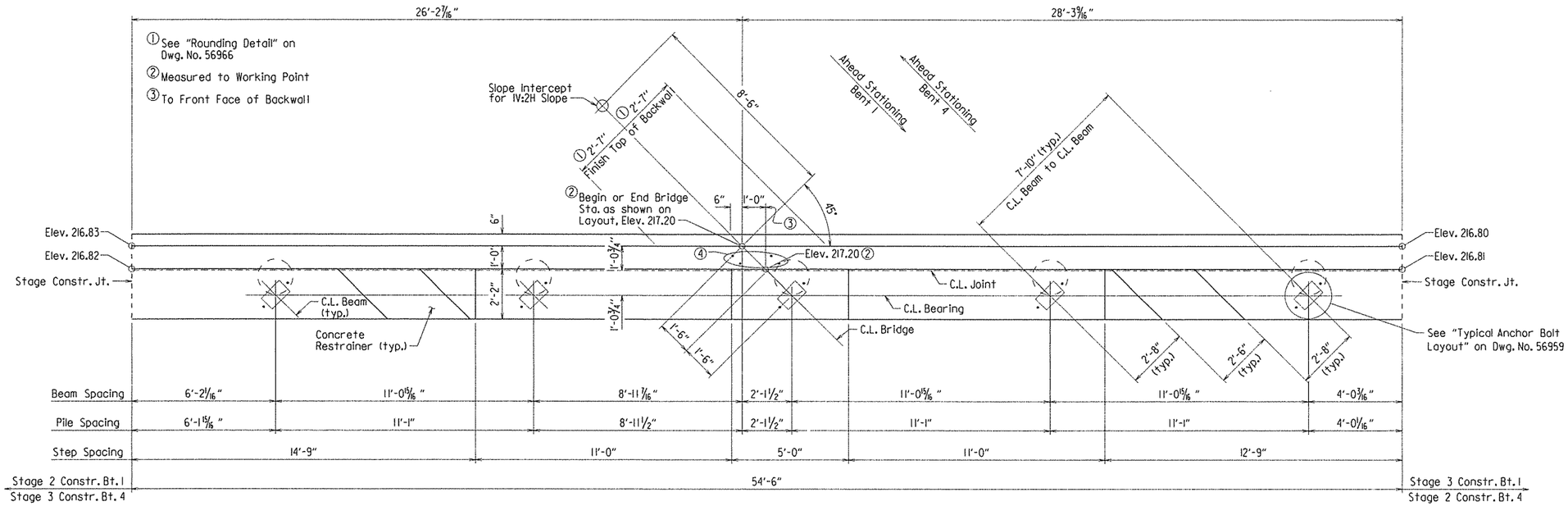
PRINT DATE: 5/11/2015

Note: Class I Protective Surface Treatment shall be applied to the top of the backwall.

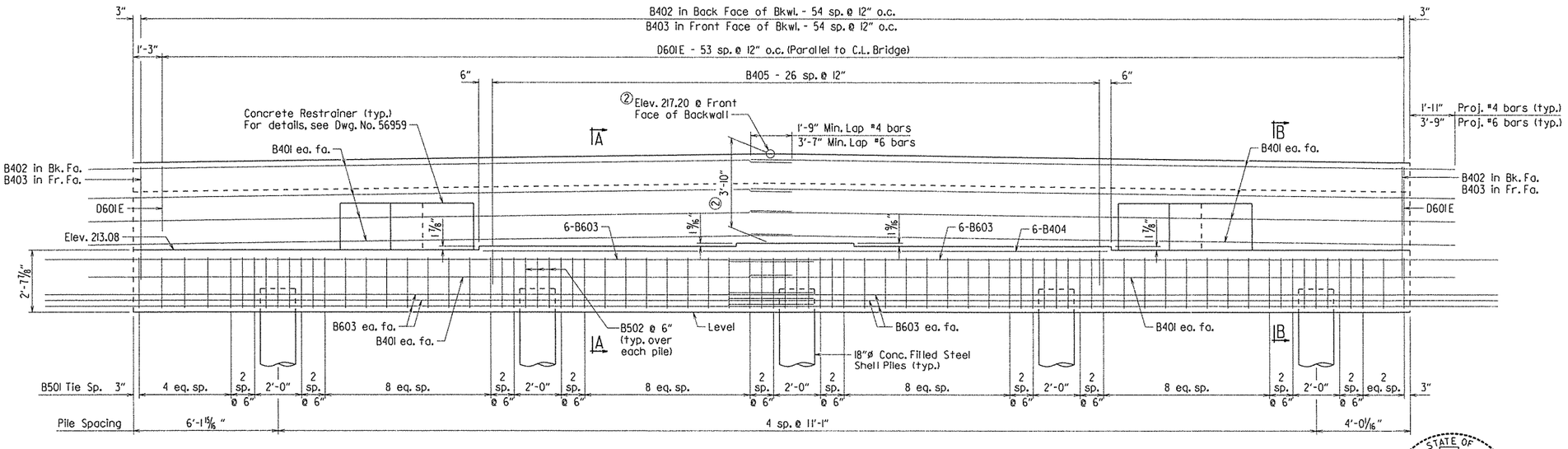
④ Insert threaded dowels with mechanical couplers in the backwall for the median barrier. For details, see Dwg. No. 56993.

For details of "Section A-A", "Section B-B" and "Detail of Weld Location for Expansion Device", see Dwg. No. 56959. For details of Wing & Rail, General Notes and Bar List, see Dwg. No. 56960.

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	175	2C3
				① A7025 -		END BENTS	- 56956	



PLAN - STAGE I CONSTRUCTION



ELEVATION - STAGE I CONSTRUCTION

Looking Back - Bent 1
Looking Ahead - Bent 4

NOTE: Longitudinal reinforcing bars in the cap and backwall may require threaded type mechanical rebar splices to minimize interference with Stage 2 or 3 pile driving. Mechanical couplers may be used in the regions of conflict only, shall be a OPL approved type and shall maintain a minimum concrete cover of 2". Mechanical couplers shall develop at least 125% of the specified yield strength of the reinforcing steel. Mechanical couplers, if required, shall be considered subsidiary to the item "Reinforcing Steel-Bridge (Grade 601)".

STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
5-14-15
CHARLES R. ELLIS
BRIDGE ENGINEER

SHEET 1 OF 5
DETAILS OF END BENTS 1 AND 4
FIFTEEN MILE BAYOU

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: JYP DATE: 2-19-15
CHECKED BY: AMS DATE: 3/22/15
DESIGNED BY: JYP DATE: 2-15
FILENAME: bbb0107x1_b1.dgn
SCALE: 3/8" = 1'-0"

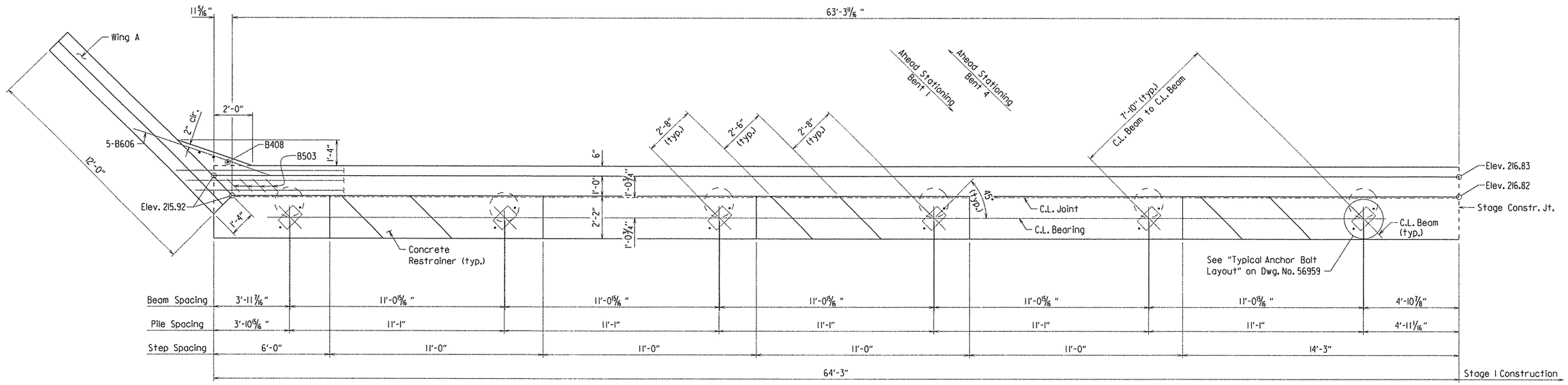
BRIDGE NO. A7025 DRAWING NO. 56956

PRINT DATE: 5/13/2015

Note: Class 1 Protective Surface Treatment shall be applied to the top of the backwall and to the roadway face and top of the wing rails.

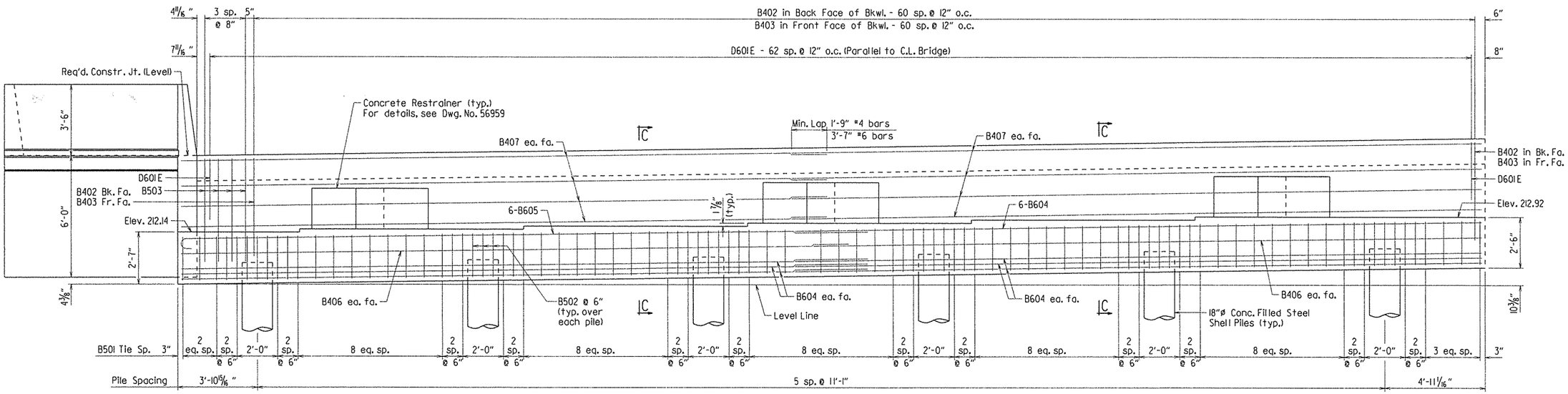
For details of "Section C-C", "Detail of Weld Location for Expansion Device" and "Construction Joint Detail", see Dwg. No. 56959. For details of Wing & Rail, General Notes and Bar List, see Dwg. No. 56960.

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	176	263
				(1) A7025 -		END BENTS	- 56957	



PLAN - STAGE 2 & 3 CONSTRUCTION

Bent 1 Stage 2, Bent 4 Stage 3



ELEVATION - STAGE 2 & 3 CONSTRUCTION

Looking Back - Bent 1 Stage 2
Looking Ahead - Bent 4 Stage 3

STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
5-14-15
CHARLES R. ELLIS

BRIDGE ENGINEER

SHEET 2 OF 5
DETAILS OF END BENTS 1 AND 4
FIFTEEN MILE BAYOU

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: JYP DATE: 2-19-15
CHECKED BY: AMS DATE: 3/22/15
DESIGNED BY: JYP DATE: 2-15
FILENAME: bbb0107x1_b1.dgn
SCALE: 3/8" = 1'-0"

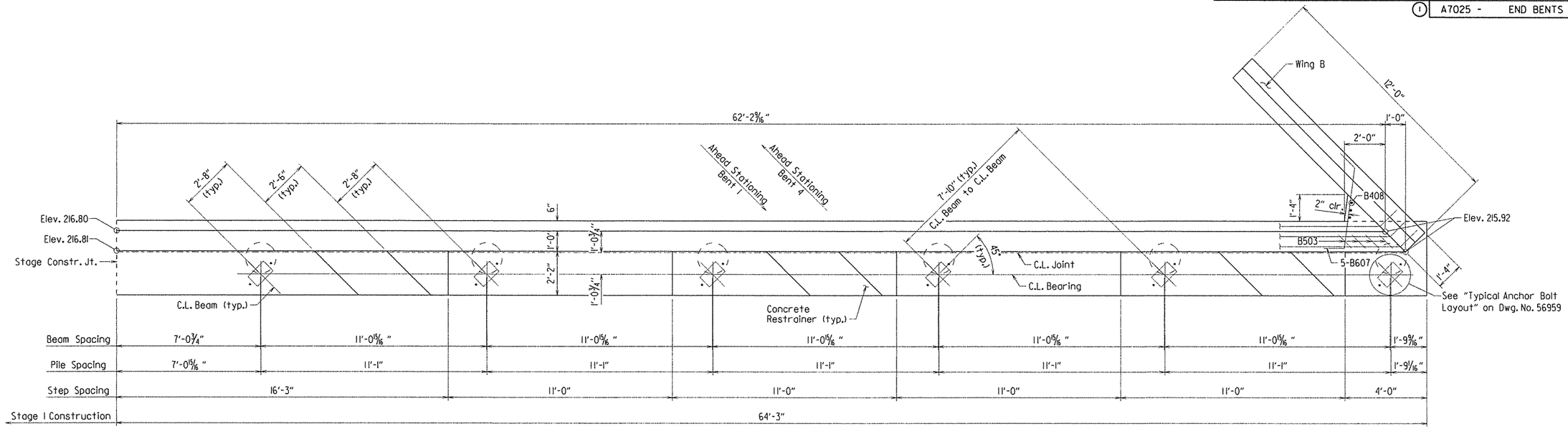
BRIDGE NO. A7025 DRAWING NO. 56957

PRINT DATE: 5/13/2015

Note: Class I Protective Surface Treatment shall be applied to the top of the backwall and to the roadway face and top of the wing rails.

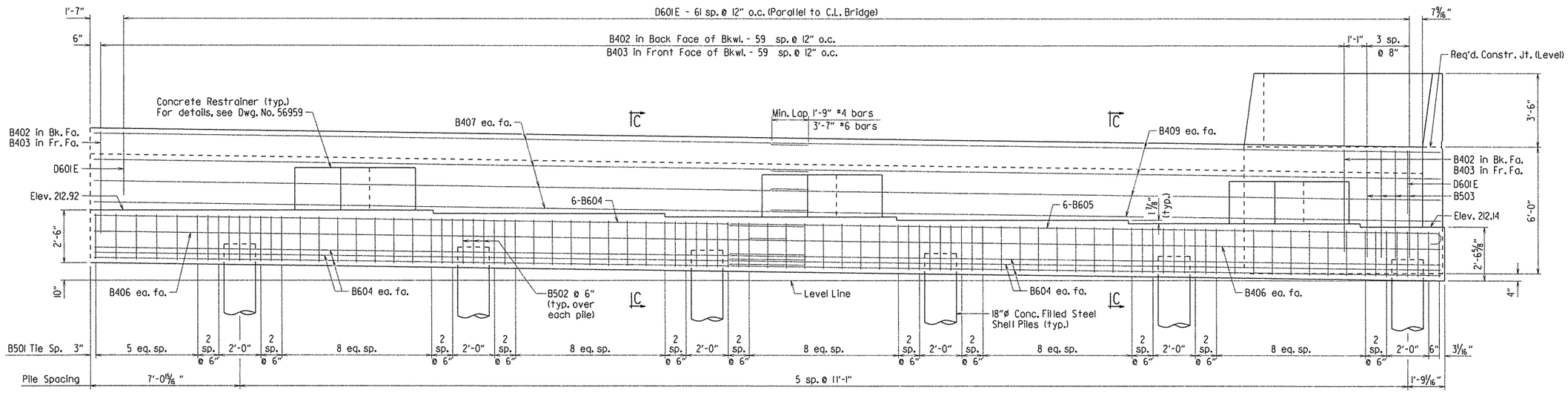
For details of "Section C-C", "Detail of Weld Location for Expansion Device" and "Construction Joint Detail", see Dwg. No. 56959. For details of Wing & Rail, General Notes and Bar List, see Dwg. No. 56960.

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	17	263
				(1) A7025 -		END BENTS	- 56958	



PLAN - STAGE 2 & 3 CONSTRUCTION

Bent I Stage 3, Bent 4 Stage 2



ELEVATION - STAGE 2 & 3 CONSTRUCTION

Looking Back - Bent I Stage 3
Looking Ahead - Bent 4 Stage 2

STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
5-14-15
CHARLES R. ELLIS
BRIDGE ENGINEER

SHEET 3 OF 5
DETAILS OF END BENTS I AND 4
FIFTEEN MILE BAYOU

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

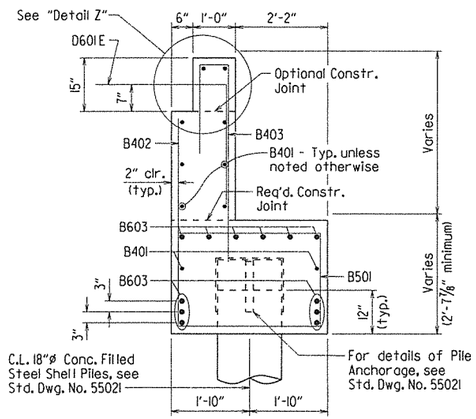
DRAWN BY: JYP DATE: 2-19-15
CHECKED BY: AMS DATE: 3/22/15
DESIGNED BY: JYP DATE: 2-15

FILENAME: bbb0107x1_b1.dgn
SCALE: 3/8" = 1'-0"

BRIDGE NO. A7025 DRAWING NO. 56958

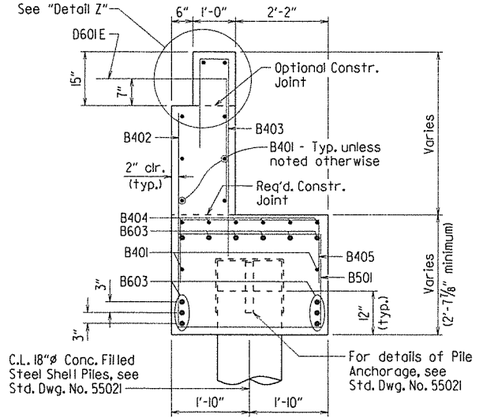
PRINT DATE: 5/13/2015

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	176	263
				(1)	A7025 -	END BENTS	- 56959	



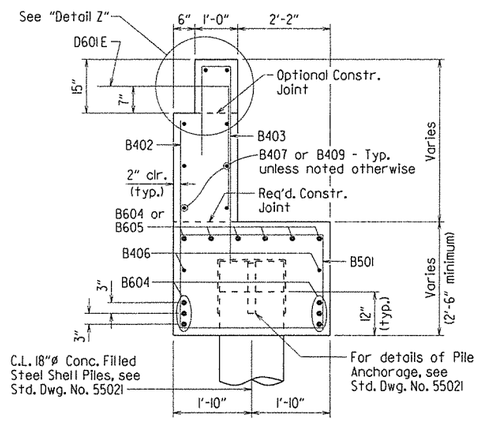
SECTION A-A

Stage 1 Construction



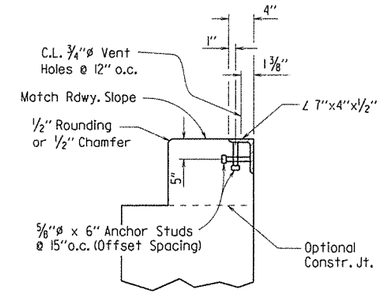
SECTION B-B

Stage 1 Construction



SECTION C-C

Stage 2 & 3 Construction

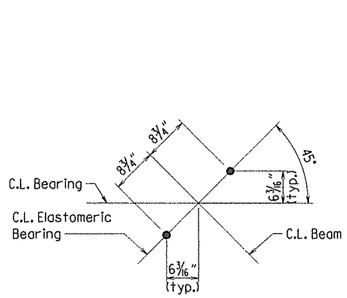


NOTE: For additional joint details, see Dwg. No. 56978.

DETAIL Z

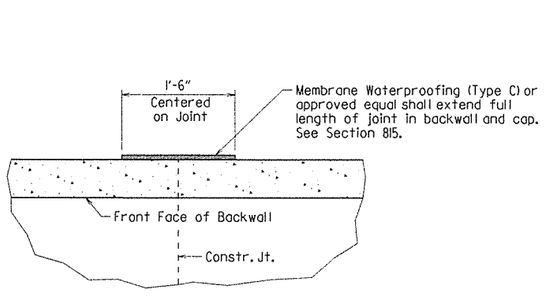
NOTE: Concrete shall be hand packed under the joint armor in the backwall.

NOTE: The Backwall above the required construction joint shall not be poured until the beams are in place. Backwall may be placed prior to placing the adjacent concrete deck only if the optional backwall construction joint is used. See Dwg. No. 56978, "Expansion Device Installation at End Bents", for additional information.



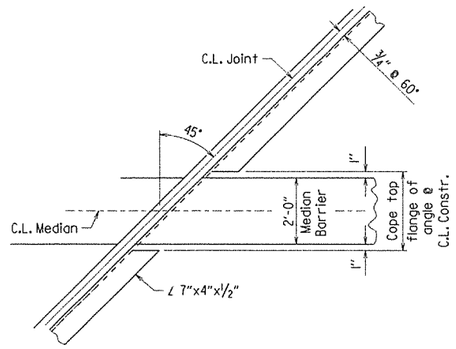
Note: For details of elastomeric bearings, see Dwg. No. 56965.

TYPICAL ANCHOR BOLT LAYOUT

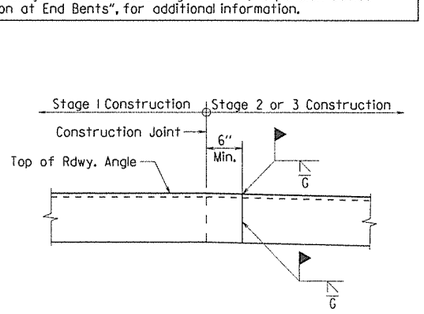


Note: Payment for membrane to be considered subsidiary to "Class S Concrete-Bridge".

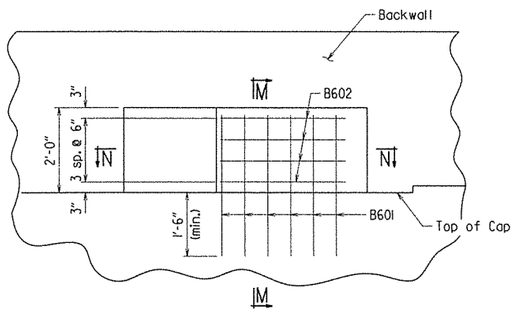
CONSTRUCTION JOINT DETAIL



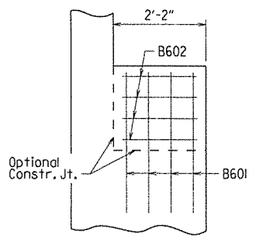
ANGLE COPE DETAIL



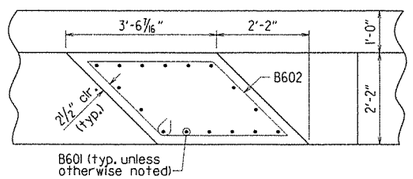
DETAIL OF WELD LOCATION FOR EXPANSION DEVICE



ELEVATION - CONCRETE RESTRAINER



SECTION M-M



SECTION N-N

STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
5-14-15
CHARLES R. ELLIS

BRIDGE ENGINEER

SHEET 4 OF 5
DETAILS OF END BENTS 1 AND 4
FIFTEEN MILE BAYOU

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

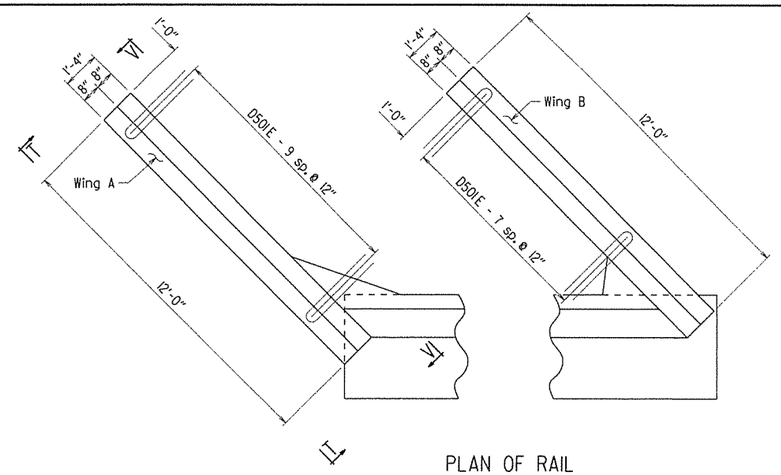
LITTLE ROCK, ARK.

DRAWN BY: JYP DATE: 2-19-15 FILENAME: bbb0107xl_bl.dgn
CHECKED BY: AMS DATE: 3/22/15 SCALE: No Scale
DESIGNED BY: JYP DATE: 2-15

BRIDGE NO. A7025 DRAWING NO. 56959

PRINT DATE: 5/13/2015

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	179	263
				(1)	A7025 -	END BENTS	- 56960	



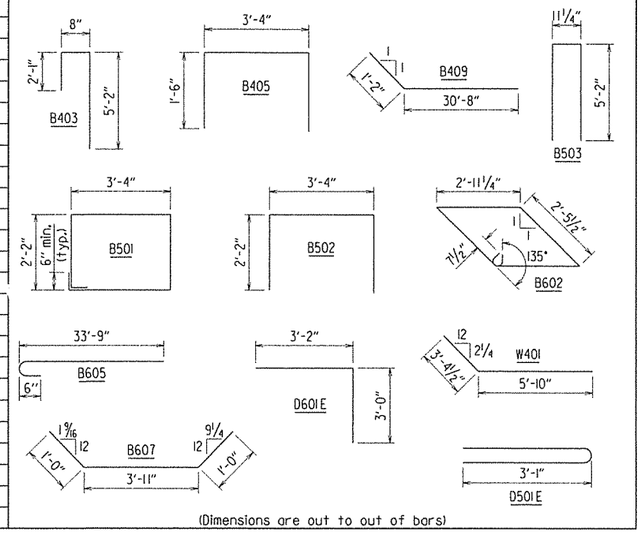
PLAN OF RAIL

3/8" = 1'-0"

BAR LIST - PER BENT

MARK	NO. REQ'D. STAGE 1	STAGE 2 BENT 1 OR STAGE 3 BENT 4	STAGE 3 BENT 1 OR STAGE 2 BENT 4	LENGTH	P.D.
B401	20	-	-	30'-1"	Str.
B402	55	61	60	4'-0"	Str.
B403	55	61	60	7'-9"	2"
B404	6	-	-	26'-8"	Str.
B405	27	-	-	6'-2"	2"
B406	-	4	4	32'-10"	Str.
B407	-	16	8	33'-11"	Str.
B408	-	3	3	4'-5"	Str.
B409	-	-	8	31'-10"	2"
B501	64	76	75	11'-6"	2 1/2"
B502	15	18	18	7'-5"	2 1/2"
B503	-	4	4	11'-1"	2 1/2"
B601	32	48	48	3'-4"	Str.
B602	8	12	12	11'-8"	4 1/2"
B603	24	-	-	32'-10"	Str.
B604	-	18	18	33'-9"	Str.
B605	-	6	6	34'-5"	4 1/2"
B606	-	5	-	7'-6"	Str.
B607	-	-	5	5'-11"	4 1/2"
D501E	-	10	8	6'-4"	3 3/4"
D601E	54	63	62	6'-0"	4 1/2"
R401	-	8	8	11'-8"	Str.
W401	-	13	13	9'-3"	2"
W402	-	13	13	9'-2"	Str.
W701	-	14	14	11'-8"	Str.

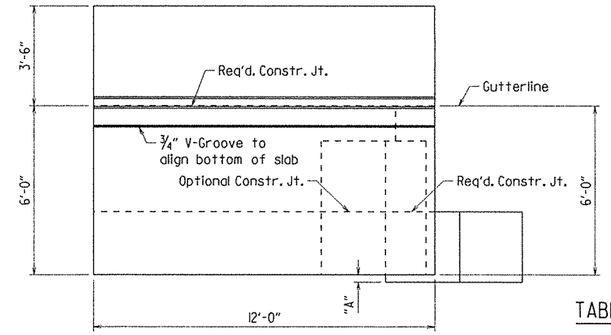
BENDING DIAGRAMS



(Dimensions are out to out of bars)

NOTES:
Bars with an "E" suffix are to be epoxy coated.

Bar lengths may need to be adjusted if mechanical couplers are used to minimize interference with Stage 2 or 3 pile driving.

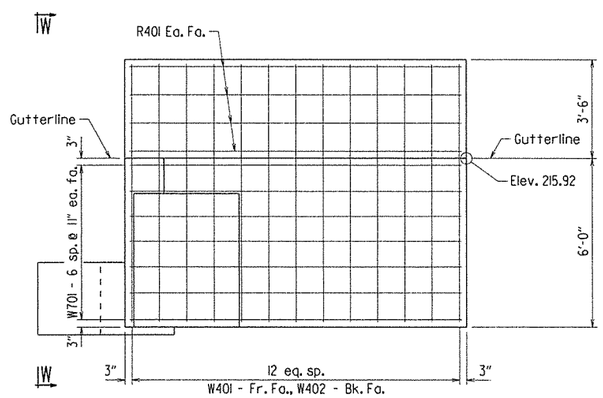


VIEW T-T

3/8" = 1'-0"

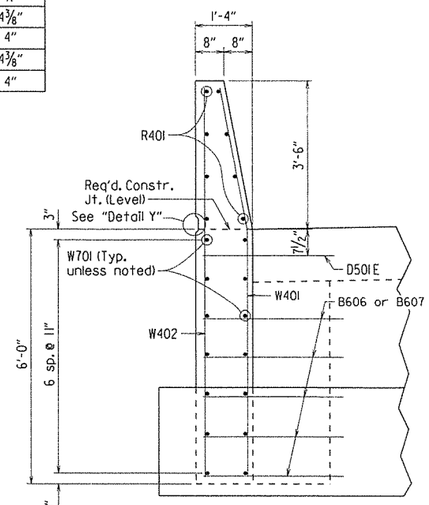
TABLE OF VARIABLES

Bent	Wing	"A"
1	A	4 3/8"
	B	4"
4	A	4 3/8"
	B	4"



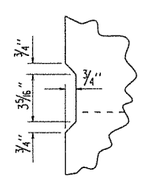
VIEW V-V

3/8" = 1'-0"



VIEW W-W

No Scale



DETAIL Y

No Scale

GENERAL NOTES
All concrete shall be Class "S" with a minimum 28 day compressive strength f'c = 3,500 psi. Concrete shall be poured in the dry and all exposed corners to be chamfered 3/4" unless otherwise noted.

All reinforcing steel shall be Grade 60 (yield strength = 60,000 psi) conforming to AASHTO M 31 or M 322, Type A, with mill test reports.

Top reinforcing bars and pile anchorage in cap shall be properly placed to avoid interference with anchor bolts.

Structural steel in end bents shall be AASHTO M 270, Gr. 50W and shall be paid for as "Structural Steel in Beam Spans (M 270, Gr. 50W)".

For additional information, see Layout.

STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
5-14-15
CHARLES R. ELLIS

BRIDGE ENGINEER

SHEET 5 OF 5
DETAILS OF END BENTS 1 AND 4
FIFTEEN MILE BAYOU

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

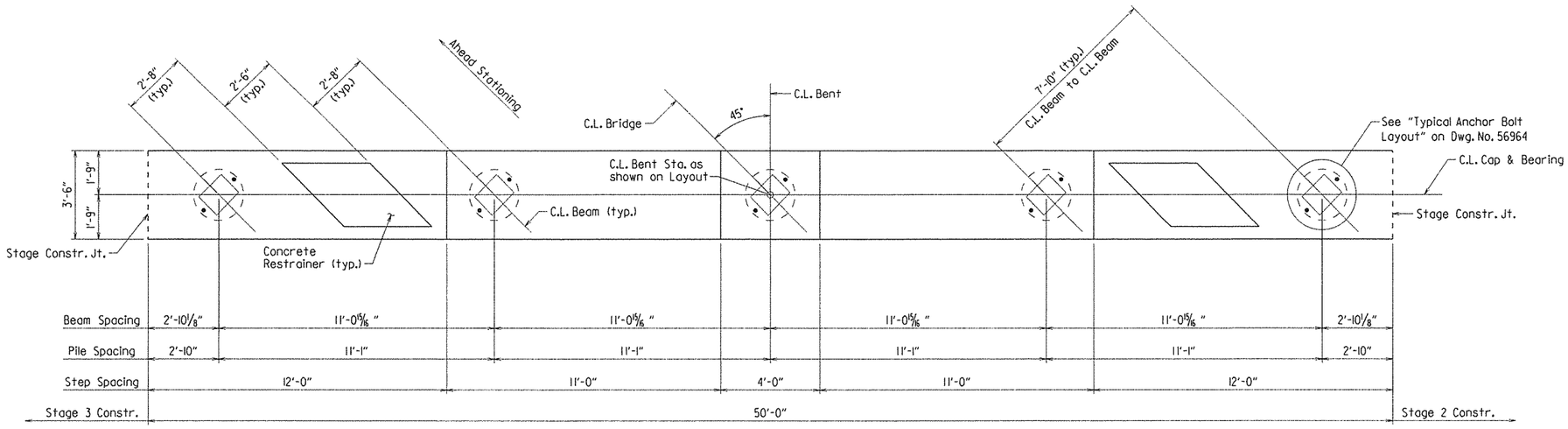
LITTLE ROCK, ARK.

DRAWN BY: JYP DATE: 2-19-15
CHECKED BY: AMS DATE: 3/22/15
DESIGNED BY: JYP DATE: 2-15
FILENAME: bbb0107xl_bl.dgn
SCALE: As Noted

BRIDGE NO. A7025 DRAWING NO. 56960

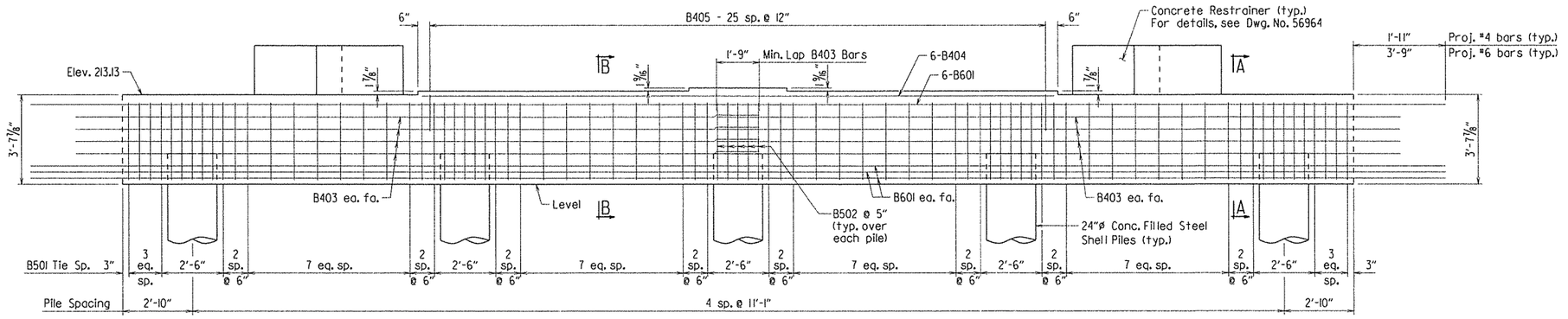
PRINT DATE: 5/13/2015

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	180	263
				(1)	A7025 -	INT. BENTS	- 56961	



PLAN - STAGE I CONSTRUCTION

3/8" = 1'-0"



ELEVATION - STAGE I CONSTRUCTION

Looking Ahead
3/8" = 1'-0"

For Sections "A-A" & "B-B" and Bar List, see Dwg. No. 56964.

NOTE: Longitudinal reinforcing bars in the cap may require threaded type mechanical rebar splices to minimize interference with Stage 2 or 3 pile driving. Mechanical couplers may be used in the regions of conflict only, shall be a OPL approved type and shall maintain a minimum concrete cover of 2". Mechanical couplers shall develop at least 125% of the specified yield strength of the reinforcing steel. Mechanical couplers, if required, shall be considered subsidiary to the item "Reinforcing Steel-Bridge (Grade 60)".

STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
5-14-15
CHARLES R. ELLIS

BRIDGE ENGINEER

SHEET 1 OF 4
DETAILS OF BENTS 2 AND 3
FIFTEEN MILE BAYOU

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

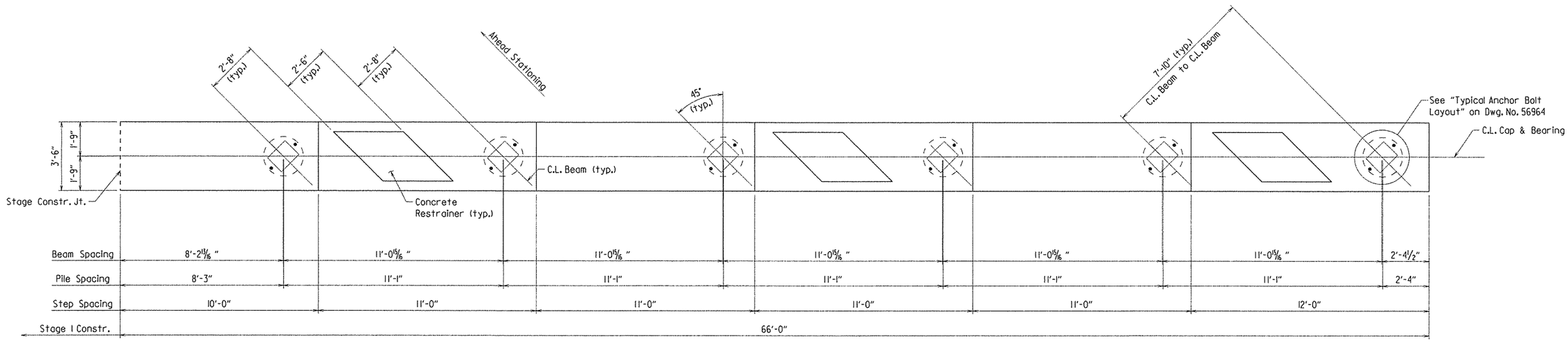
LITTLE ROCK, ARK.

DRAWN BY: JYP DATE: 2-20-15
CHECKED BY: AMS DATE: 3/3/15
DESIGNED BY: JYP DATE: 2-15
FILENAME: bbb0107x1_b2.dgn
SCALE: As Noted

BRIDGE NO. A7025 DRAWING NO. 56961

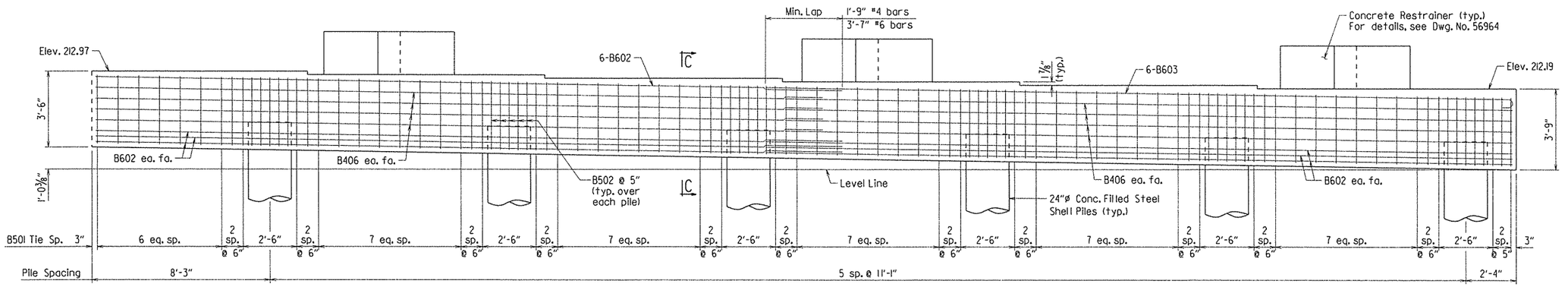
PRINT DATE: 5/13/2015

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	161	263
				(1) A7025 -		INT. BENTS	- 56962	



PLAN - STAGE 2 CONSTRUCTION

3/8" = 1'-0"



ELEVATION - STAGE 2 CONSTRUCTION

Looking Ahead
3/8" = 1'-0"

For "Section C-C" and Bar List, see Dwg. No. 56964.

STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
5-14-15
CHARLES R. ELLIS
BRIDGE ENGINEER

SHEET 2 OF 4
DETAILS OF BENTS 2 AND 3
FIFTEEN MILE BAYOU

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

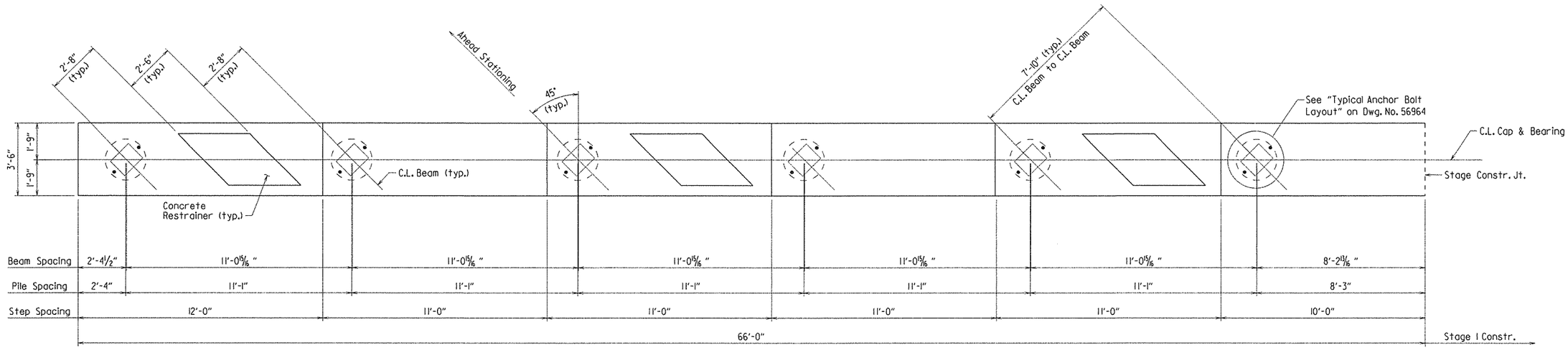
DRAWN BY: JYP DATE: 2-20-15
CHECKED BY: AMS DATE: 3/3/15
DESIGNED BY: JYP DATE: 2-15
FILENAME: bbb0107x1_b2.dgn
SCALE: As Noted

BRIDGE NO. A7025 DRAWING NO. 56962

PRINT DATE: 5/13/2015

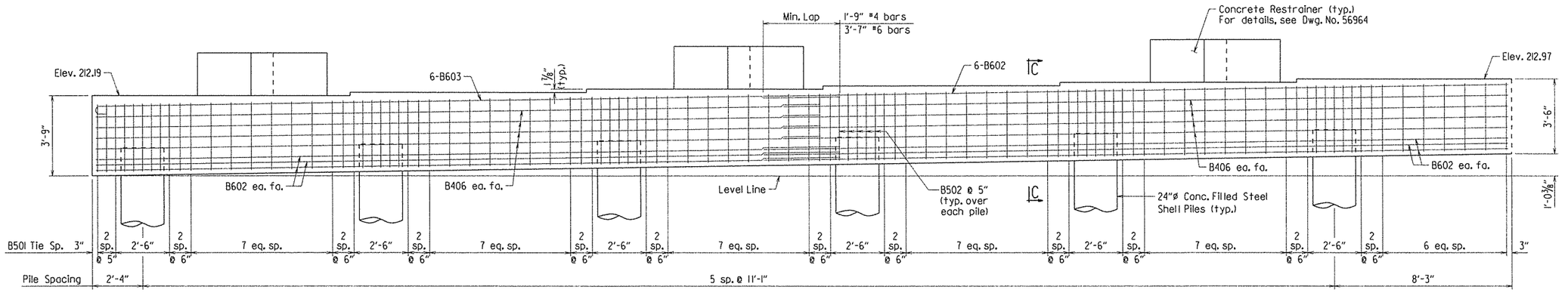
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		BB0107	162	263
(1) A7025 -		INT. BENTS	- 56963	



PLAN - STAGE 3 CONSTRUCTION

3/8" = 1'-0"



ELEVATION - STAGE 3 CONSTRUCTION

Looking Ahead
3/8" = 1'-0"

For "Section C-C" and Bar List, see Dwg. No. 56964.

STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
5-14-15
CHARLES R. ELLIS

BRIDGE ENGINEER

SHEET 3 OF 4
DETAILS OF BENTS 2 AND 3
FIFTEEN MILE BAYOU

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

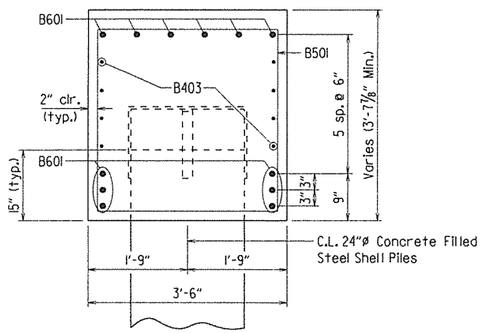
LITTLE ROCK, ARK.

DRAWN BY: JYP DATE: 2-20-15 FILENAME: bbb0107x1_b2.dgn
CHECKED BY: AMS DATE: 3/3/15 SCALE: As Noted
DESIGNED BY: JYP DATE: 2-15

BRIDGE NO. A7025 DRAWING NO. 56963

PRINT DATE: 5/13/2015

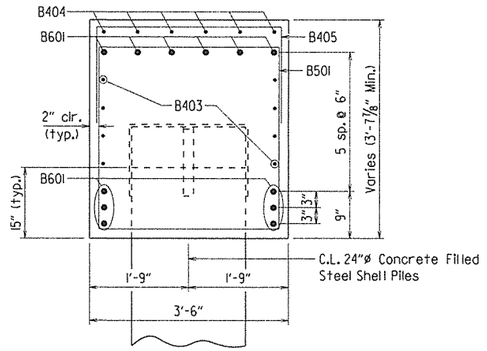
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	183	263
				①	A7025 -	INT. BENTS	- 56964	



Note: For details of piles and pile anchorage, see Std. Dwg. No. 55021.

SECTION A-A

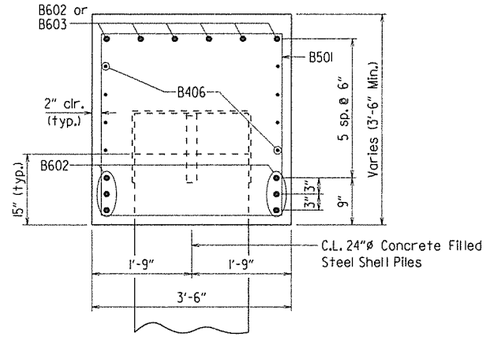
Stage 1 Construction
¾" = 1'-0"



Note: For details of piles and pile anchorage, see Std. Dwg. No. 55021.

SECTION B-B

Stage 1 Construction
¾" = 1'-0"



Note: For details of piles and pile anchorage, see Std. Dwg. No. 55021.

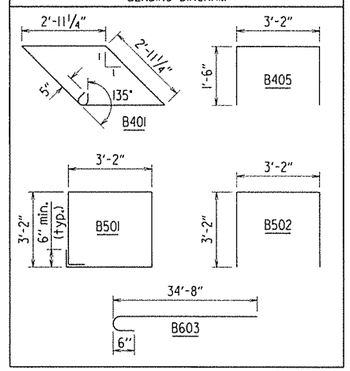
SECTION C-C

Stage 2 or 3 Construction
¾" = 1'-0"

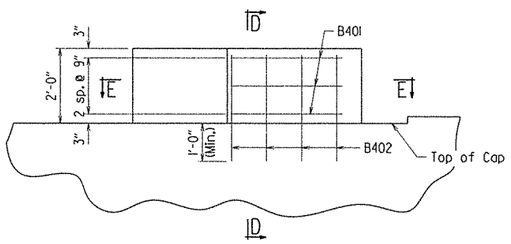
BAR LIST - PER BENT

MARK	NO. REQ'D. STAGE 1	NO. REQ'D. STAGE 2 OR STAGE 3	LENGTH	P.D.
B401	6	9	12'-3"	3"
B402	24	36	2'-10"	Str.
B403	16	-	27'-10"	Str.
B404	6	-	25'-8"	Str.
B405	26	-	6'-0"	2"
B406	-	16	33'-9"	Str.
B501	56	72	13'-2"	2½"
B502	25	30	9'-3"	2½"
B601	12	-	57'-6"	Str.
B602	-	18	34'-8"	Str.
B603	-	6	35'-4"	4½"

BENDING DIAGRAM

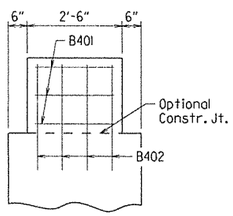


Note: Bar lengths may need to be adjusted if mechanical couplers are used to minimize interference with Stage 2 or 3 pile driving.



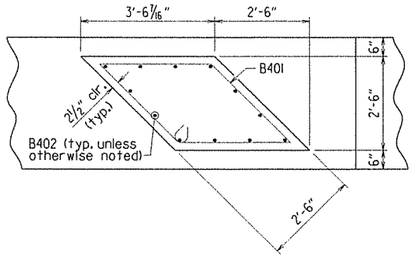
ELEVATION - CONCRETE RESTRAINER

½" = 1'-0"



SECTION D-D

½" = 1'-0"



SECTION E-E

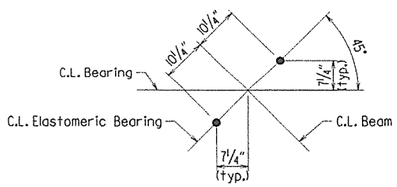
½" = 1'-0"

GENERAL NOTES:
All concrete shall be Class "S" with a minimum 28 day compressive strength f'c = 3,500 psi. Concrete shall be poured in the dry and all exposed corners to be chamfered ¾" unless otherwise noted.

All reinforcing steel shall be Grade 60 (yield strength = 60,000 psi) conforming to AASHTO M 31 or M 322, Type A, with mill test reports.

Top reinforcing bars in cap shall be properly placed to avoid interference with anchor bolts or sheet metal sleeves.

For additional information, see Layout.



Note: For details of elastomeric bearings, see Dwg. No. 56965.

TYPICAL ANCHOR BOLT LAYOUT

No Scale

STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
5-14-15
CHARLES R. ELLIS

BRIDGE ENGINEER

SHEET 4 OF 4
DETAILS OF BENTS 2 AND 3
FIFTEEN MILE BAYOU

ROUTE SEC.

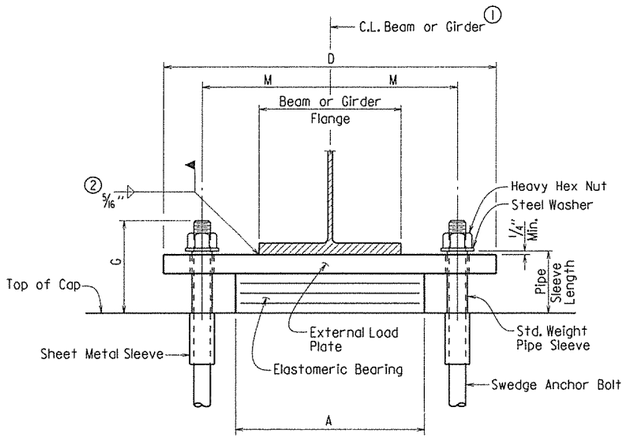
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: JYP DATE: 2-20-15 FILENAME: bbb0107x1_b2.dgn
CHECKED BY: AMS DATE: 3/3/15 SCALE: As Noted
DESIGNED BY: JYP DATE: 2-15

BRIDGE NO. A7025 DRAWING NO. 56964

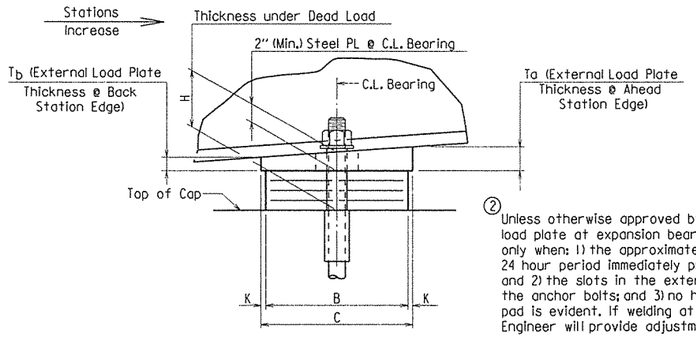
PRINT DATE: 5/13/2015

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	164	263
				①	A7025, 07344	ELASTO BRGS.		56965



FRONT VIEW

① C.L Elastomeric Pad shall be aligned with C.L. Beam or Girder.

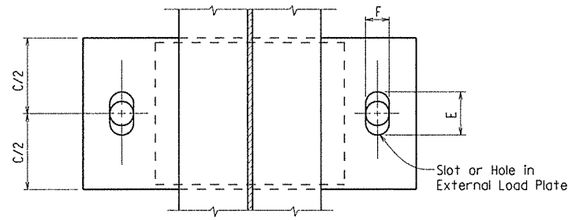


SIDE VIEW

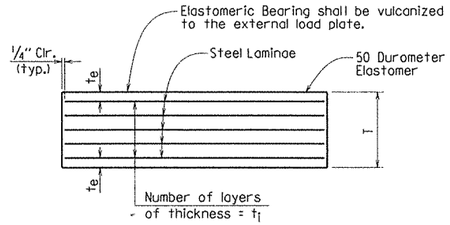
The direction of bevel of the external load plate may not be accurately depicted with respect to Ta and Tb values shown in the "Table of Fabricator Variables".

② Unless otherwise approved by the Engineer, welding of the external load plate at expansion bearings to the beam or girder will be allowed only when: 1) the approximate average air temperature during the 24 hour period immediately preceding welding is between 40° F and 80° F; and 2) the slots in the external load plate are positioned to center on the anchor bolts; and 3) no horizontal deformation of the elastomeric pad is evident. If welding at other temperatures is required, the Engineer will provide adjustment data.

Care shall be taken to ensure that the external load plate is in full and complete contact with the beam or girder flange before welding begins.



PLAN VIEW

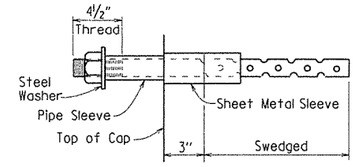


t_e = Thickness of elastomer cover on top and bottom of pad

t_i = Thickness of elastomer between steel laminae

N = Number of elastomer layers of thickness t_i

ELASTOMERIC BEARING



ANCHOR BOLT DETAIL

Anchor Bolts may be cast in place or drilled and grouted into place. If Anchor Bolts are to be cast in place, the Galvanized Sheet Metal Sleeves will not be required.

If Anchor Bolts are to be drilled and grouted in place, the Galvanized Sheet Metal Sleeves shall be cast in place as shown. Sleeves shall be dry packed with styrofoam, urethane foam or approved equal prior to pouring of concrete. After pouring of the cap and prior to erection of Structural Steel, the dry pack shall be removed and holes for the anchor bolts shall be accurately drilled into the concrete. Bolts placed in drilled holes shall be accurately set and fixed using a QPL approved epoxy or non-shrink grout that completely fills the holes. Galvanized Sheet Metal Sleeves will not be paid for directly, but will be considered subsidiary to the item "Structural Steel in Beam Spans (M 270, Gr. 50W)"

TABLE OF FABRICATOR VARIABLES

*Maximum Design Load = Service I Limit State

BRIDGE NO.	LOCATION BENT NO(S).	LOCATION BEAM OR GIRDER NO.	BEARING TYPE	NO. of BEARINGS EACH BENT	*MAXIMUM DESIGN LOAD (KIPS)	G	H	ELASTOMERIC PAD A	B	N	t_i	t_e	NO. & THICKNESS OF STEEL LAMINAE	T	EXTERNAL LOAD PLATE C	D	E	F	K	M	T_a	T_b	ANCHOR BOLT ANCHOR BOLT (ø x L)	GRADE	PIPE SLEEVE SIZE (ø x L)	SHEET METAL SLEEVE SIZE (ø x L)	STEEL WASHER SIZE (O.D.)
A7025	1 & 4	All	Exp.	17	101	7 1/8"	4 3/8"	13"	8"	3	1/2"	1/4"	4 @ 12 Ga.	2 7/16"	9"	23"	3 3/4"	2 1/4"	1/2"	8 3/4"	2"	2"	1 1/2" x 24"	55	1 1/2" x 4 5/8"	3" x 9"	3"
	2 & 3	All	Fix.	17	212	7 1/8"	3 13/16"	15"	12"	2	1/2"	1/4"	3 @ 12 Ga.	1 13/16"	13"	27"	3 1/8"	3 1/8"	1/2"	10 1/4"	2"	2"	2" x 29"	55	2 1/2" x 4 1/8"	4" x 9"	3 3/4"
07344	1 & 4	All	Exp.	17	101	7 1/8"	4 3/8"	13"	8"	3	1/2"	1/4"	4 @ 12 Ga.	2 7/16"	9"	23"	3 3/4"	2 1/4"	1/2"	8 3/4"	2"	2"	1 1/2" x 24"	55	1 1/2" x 4 5/8"	3" x 9"	3"
	2 & 3	All	Fix.	17	212	7 1/8"	3 13/16"	15"	12"	2	1/2"	1/4"	3 @ 12 Ga.	1 13/16"	13"	27"	3 1/8"	3 1/8"	1/2"	10 1/4"	2"	2"	2" x 29"	55	2 1/2" x 4 1/8"	4" x 9"	3 3/4"

GENERAL NOTES

Elastomeric Bearings shall conform to Section 808 and shall be paid for at the unit price bid for "Elastomeric Bearings".

External load plates shall conform to AASHTO M 270, Grade 50W. Pipe sleeves shall be ASTM A500, Grade B, and shall be galvanized to conform to AASHTO M 232, Class C or ASTM B695, Class 50.

External load plates shall be completely fabricated (including bevel and bolt holes) and shall be cleaned before vulcanizing to the elastomeric bearing. The surface in contact with the elastomeric bearing shall be cleaned in accordance with Subsection 808.03. Other surfaces shall be blast cleaned in accordance with Subsection 807.84(b) for painted steel and 807.84(e) for unpainted Grade 50W steel.

Anchor Bolts, Washers and Nuts shall conform to Subsection 807.07. The anchor bolt grade of steel shall be as specified in the "Table of Fabricator Variables". Indentations shall be circular with rounded bottoms and staggered as shown in the details.

Pipe Sleeves, Anchor Bolts, Washers and Nuts shall be paid for at the unit price bid for "Structural Steel in Beam Spans (M 270, Gr. 50W)". External load plates will not be measured and paid for separately, but will be considered incidental to the unit price bid for "Elastomeric Bearings".

Bearings shall be seated in accordance with Subsection 808.08. This work and materials are considered subsidiary to the item "Elastomeric Bearings" and will not be paid for directly.

STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
5-14-15
CHARLES R. ELLIS

BRIDGE ENGINEER

DETAILS OF ELASTOMERIC BEARINGS

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: A.M.S. DATE: 2/18/15 FILENAME: bbb0107_ebl.dgn

CHECKED BY: J.Y.P. DATE: 5-13-15 SCALE: None

DESIGNED BY: J.Y.P. DATE: 1-15

BRIDGE NO. A7025, 07344 DRAWING NO. 56965

PRINT DATE: 5/11/2015

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	185	263
				(1) A7025, 07344		W-BEAM UNIT		56966

SLAB REINFORCING:

LONGITUDINAL: S401E in Top & Bottom (Placed as Shown)
S601E placed as shown (Over Interior Bents)

TRANSVERSE: S501E @ 6" o.c. in top and bottom

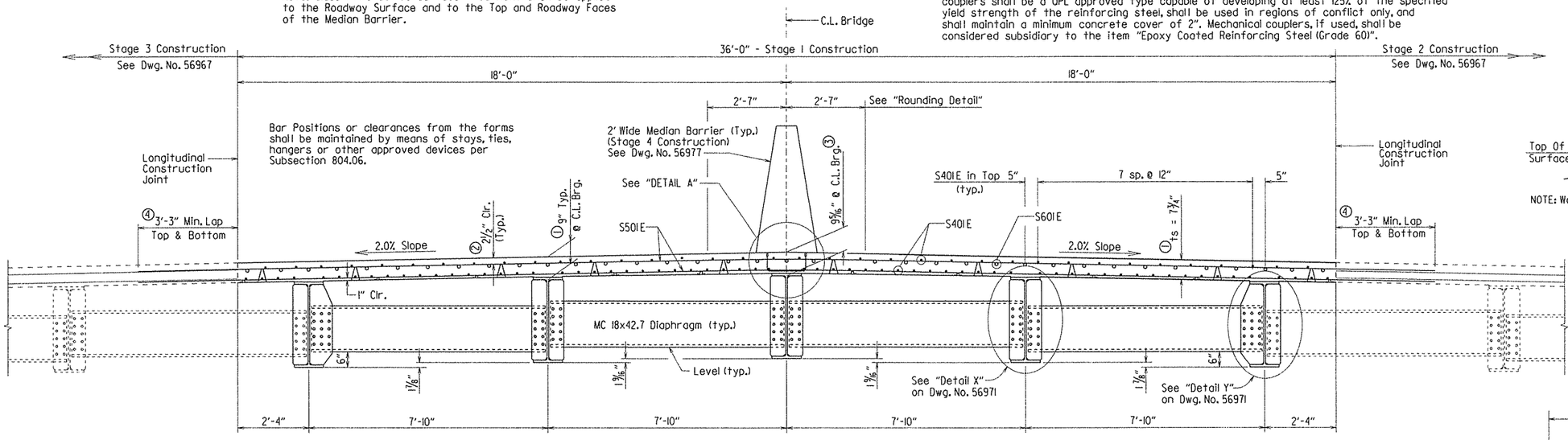
Note: Class 1 Protective Surface Treatment shall be applied to the Roadway Surface and to the Top and Roadway Faces of the Median Barrier.

(1) See "Adjustment for Slab Thickness Tolerance" on Dwg. No. 56971.

(2) Tolerance: Minus = 1/4";
Plus equal to the amount of slab thickening used to meet slab thickness tolerance. See "Adjustment for Slab Thickness Tolerance" on Dwg. No. 56971.

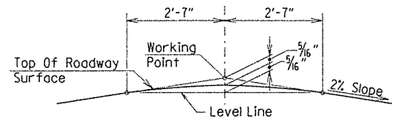
(3) Measured to Working Point at C.L. Bearing. See "Rounding Detail".

(4) Transverse reinforcing bars in deck and concrete diaphragms may require threaded type mechanical rebar splices to minimize interference with Stage 2 or 3 pile driving. Mechanical couplers shall be a OPL approved type capable of developing at least 125% of the specified yield strength of the reinforcing steel, shall be used in regions of conflict only, and shall maintain a minimum concrete cover of 2". Mechanical couplers, if used, shall be considered subsidiary to the item "Epoxy Coated Reinforcing Steel (Grade 60)".



PARTIAL ROADWAY SECTION

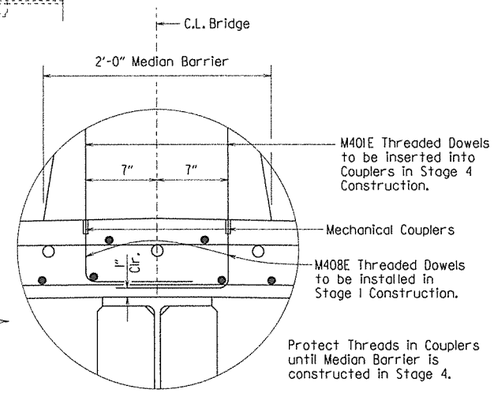
(Looking Forward - Stage 1 & 4 Construction
1/2" = 1'-0"



NOTE: Working Point Matches Theoretical Roadway Grade.

ROUNDING DETAIL

No Scale



DETAIL A

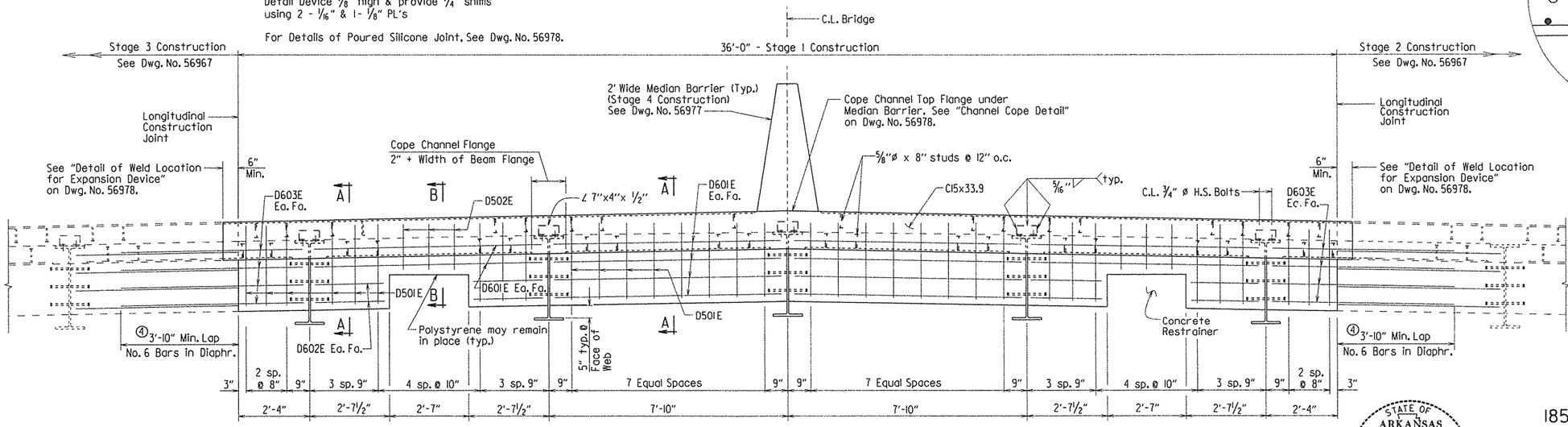
1 1/2" = 1'-0"

Threaded inserts are required for Temporary Precast Barriers. Inserts shall be cast in place in the new slab during Stage 1 Construction. Refer to Dwg. No. 56954 and Std. Dwg. TC-4.

EXPANSION DEVICE:

Rdwy. Channel - C15x33.9
Conn. Angle - ∠ 7x4x1/2"
Detail Device 1/8" high & provide 1/4" shims using 2 - 1/16" & 1 - 1/8" PL's

For Details of Poured Silicone Joint, See Dwg. No. 56978.



PARTIAL ROADWAY SECTION NEAR JOINT

(Looking Forward - Stage 1 & 4 Construction
1/2" = 1'-0"

For "Section A-A" and "Section B-B", see Dwg. No. 56968.

Note: 1/2" polystyrene shall be used as a bond breaker between the concrete restrainer and the concrete diaphragm and may remain in place. Polystyrene will not be paid for directly, but will be considered subsidiary to Class S(AE) Concrete-Bridge.

STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
5-14-15
CHARLES R. ELLIS
BRIDGE ENGINEER

SHEET 1 OF 13
DETAILS OF
185'-0" CONTINUOUS W-BEAM UNITS

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: AMS. DATE: 1/28/15
CHECKED BY: JYP DATE: 5-13-15
DESIGNED BY: JYP DATE: 1-15

FILENAME: bbb0107_sl.dgn
SCALE: 1/2" = 1'-0" or As Noted

BRIDGE NO. A7025, 07344 DRAWING NO. 56966

PRINT DATE: 5/12/2015

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	186	263
				(1) A7025, 07344		W-BEAM UNIT		56967

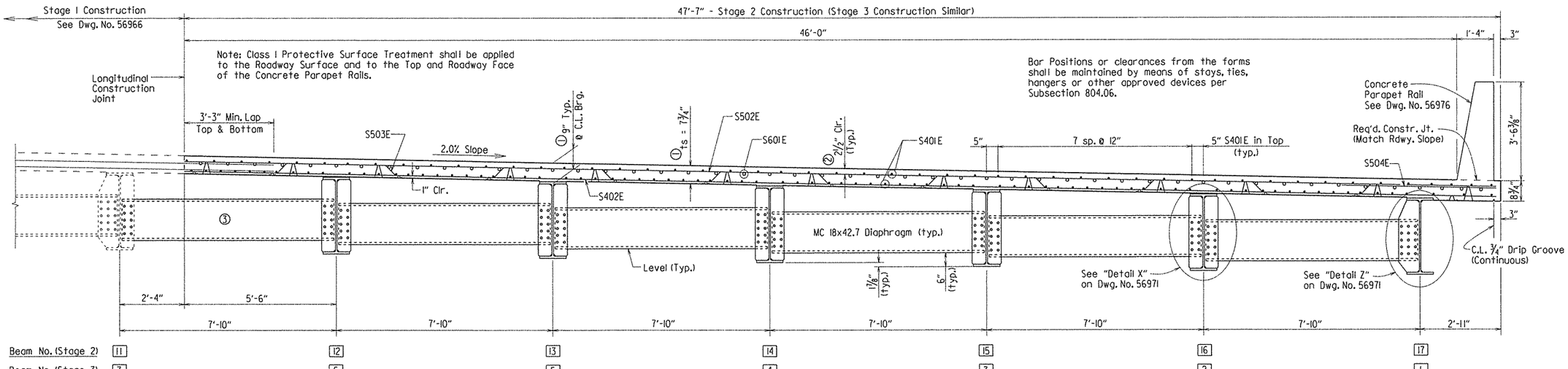
SLAB REINFORCING:

LONGITUDINAL: S401E in Top & Bottom (Placed as Shown)
S601E placed as shown (Over Interior Bents)

TRANSVERSE: S502E @ 12" o.c. in top, S402E @ 12" o.c. in bottom — Alternate
S503E @ 12" o.c. bent up over beams
S504E @ 6" in top of overhangs (bundled with #5 bars)

① See "Adjustment for Slab Thickness Tolerance" on Dwg. No. 56971.

② Tolerance: Minus = 1/4";
Plus equal to the amount of slab thickening used to meet slab thickness tolerance. See "Adjustment for Slab Thickness Tolerance" on Dwg. No. 56971.



③ Prior to pouring the adjacent deck for Stage 2 and 3, the Contractor shall loosely install as many bolts as possible in the diaphragms between Beams 11 and 12 and Beams 6 and 7 in Stage 2 and Stage 3 respectively to the satisfaction of the Engineer. Install remaining bolts and fully tighten all bolts as soon as practical after completion of the Stage 2 and Stage 3 deck pours.

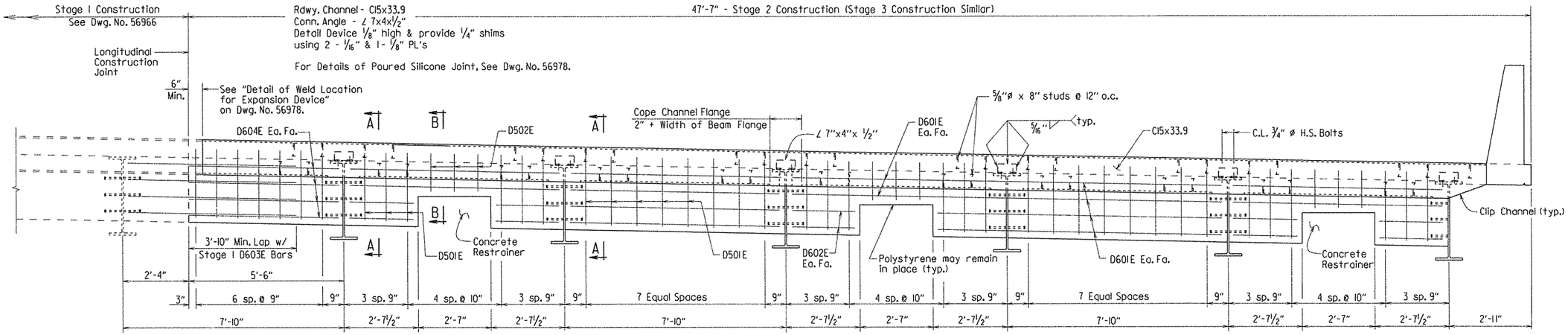
See Dwg. No. 56975 for "Deck Support at Longitudinal Construction Joint".

PARTIAL ROADWAY SECTION

(Looking Forward - Stage 2 Construction; Stage 3 Construction Similar)
½" = 1'-0"

EXPANSION DEVICE:
Rdwy. Channel - C15x33.9
Conn. Angle - ∠ 7x4x½"
Detail Device ⅛" high & provide ¼" shims using 2 - 1/16" & 1 - ⅛" PL's

For Details of Poured Silicone Joint, See Dwg. No. 56978.



PARTIAL ROADWAY SECTION NEAR JOINT

(Looking Forward - Stage 2 Construction; Stage 3 Construction Similar)
½" = 1'-0"

For "Section A-A" and "Section B-B", see Dwg. No. 56968.

Note: ½" polystyrene shall be used as a bond breaker between the concrete restrainer and the concrete diaphragm and may remain in place. Polystyrene will not be paid for directly, but will be considered subsidiary to Class S(AE) Concrete-Bridge.

STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
5-14-15
CHARLES R. ELLIS
BRIDGE ENGINEER

SHEET 2 OF 13
DETAILS OF
185'-0" CONTINUOUS W-BEAM UNITS

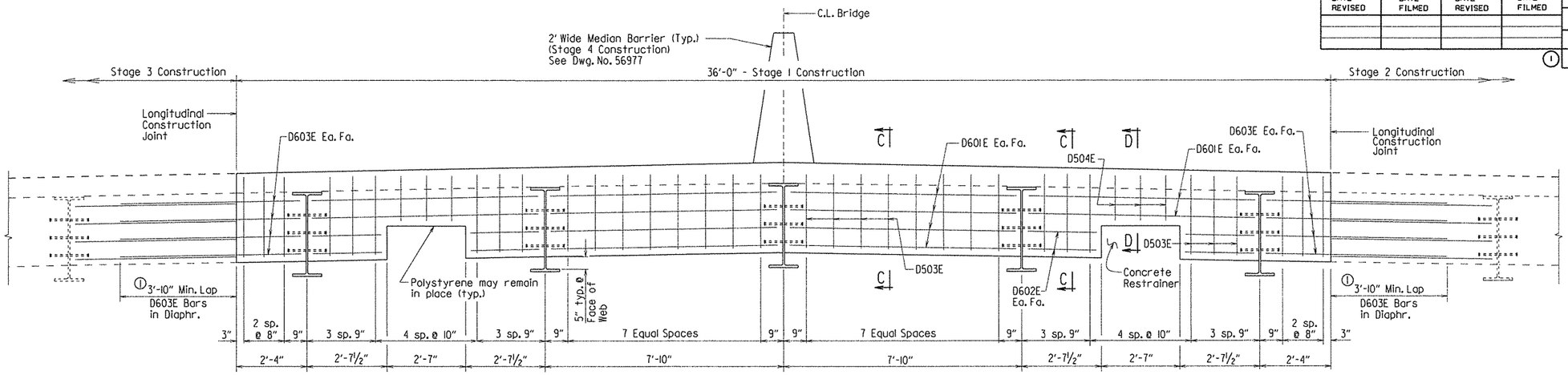
ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: A.M.S. DATE: 1/28/15
CHECKED BY: J.N.P. DATE: 5-13-15
DESIGNED BY: J.N.P. DATE: 1-15
FILENAME: bbb0107_sl.dgn
SCALE: ½" = 1'-0"

BRIDGE NO. A7025, 07344 DRAWING NO. 56967

PRINT DATE: 5/12/2015

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	187	263
				(1) A7025, 07344		W-BEAM UNIT		56968

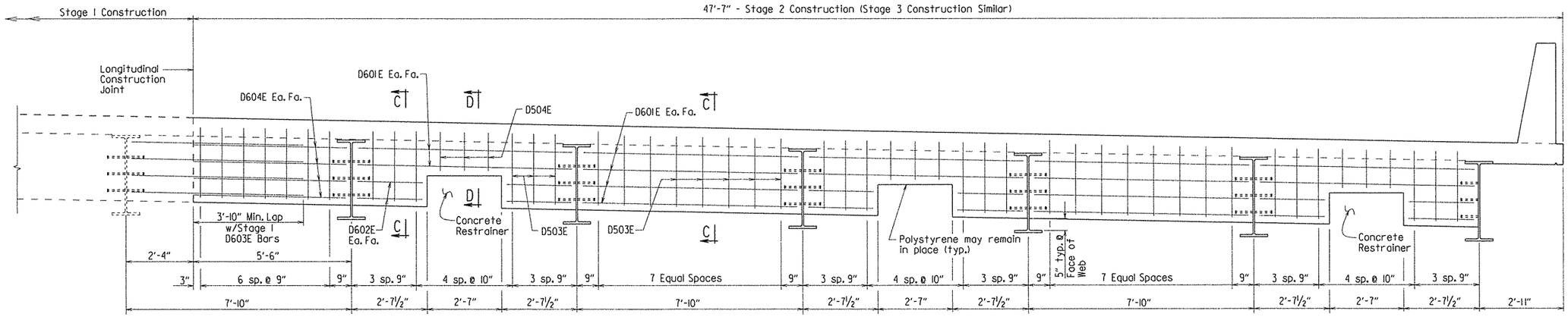


PARTIAL ROADWAY SECTION AT INTERIOR BENTS

(Looking Forward - Stage 1 & 4 Construction
½" = 1'-0"

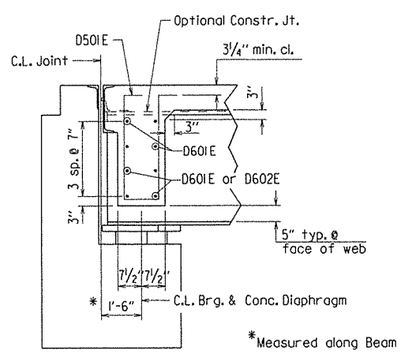
Note: For details and reinforcing not shown, See "Partial Roadway Section" on Dwg. Nos. 56966 & 56967.

(1) Transverse reinforcing bars in deck and concrete diaphragms may require threaded type mechanical rebar splices to minimize interference with Stage 2 or 3 pile driving. Mechanical couplers shall be a QPL approved type capable of developing at least 125% of the specified yield strength of the reinforcing steel, shall be used in regions of conflict only, and shall maintain a minimum concrete cover of 2". Mechanical couplers, if used, shall be considered subsidiary to the item "Epoxy Coated Reinforcing Steel (Grade 60)".



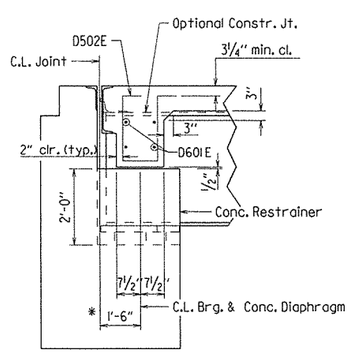
PARTIAL ROADWAY SECTION AT INTERIOR BENTS

(Looking Forward - Stage 2 Construction;
Stage 3 Construction Similar)
½" = 1'-0"



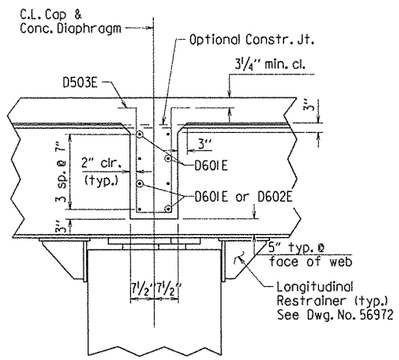
SECTION A-A

Section normal to conc. diaphragm
½" = 1'-0"



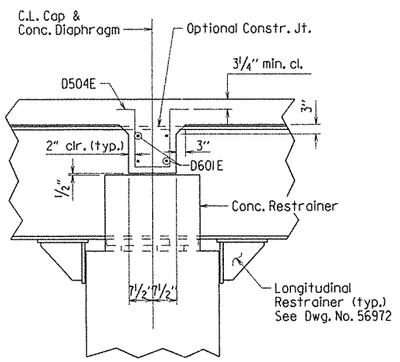
SECTION B-B

Section normal to conc. diaphragm
½" = 1'-0"



SECTION C-C

Section normal to conc. diaphragm
½" = 1'-0"



SECTION D-D

Section normal to conc. diaphragm
½" = 1'-0"

Notes: ½" polystyrene shall be used as a bond breaker between the concrete restrainer and the concrete diaphragm and may remain in place. Polystyrene will not be paid for directly, but will be considered subsidiary to Class S(AE) Concrete-Bridge.

Forms for concrete diaphragms shall be removable.

Concrete Diaphragms shall be vertical.

STATE OF ARKANSAS
Charles R. Ellis
No. 9235
5-14-15
REGISTERED PROFESSIONAL ENGINEER
CHARLES R. ELLIS

BRIDGE ENGINEER

SHEET 3 OF 13
DETAILS OF
185'-0" CONTINUOUS W-BEAM UNITS

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

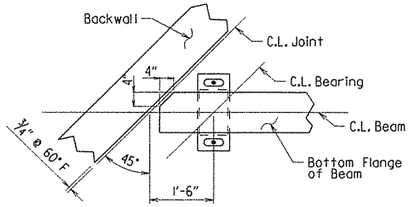
LITTLE ROCK, ARK.

DRAWN BY: A.M.S. DATE: 1/28/15 FILENAME: bbb0107_sl.dgn
CHECKED BY: JWP DATE: 5-13-15 SCALE: ½" = 1'-0"
DESIGNED BY: JWP DATE: 1-15

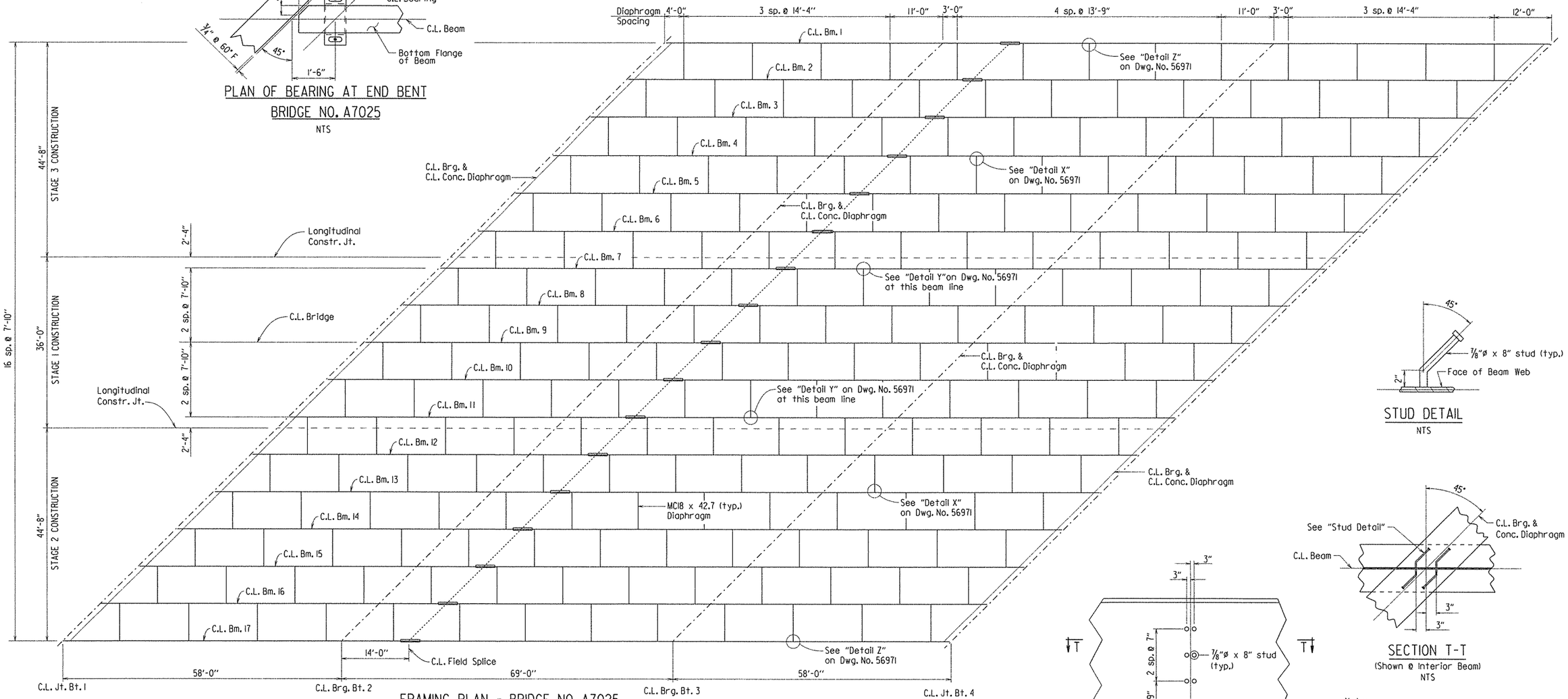
BRIDGE NO. A7025, 07344 DRAWING NO. 56968

PRINT DATE: 5/12/2015

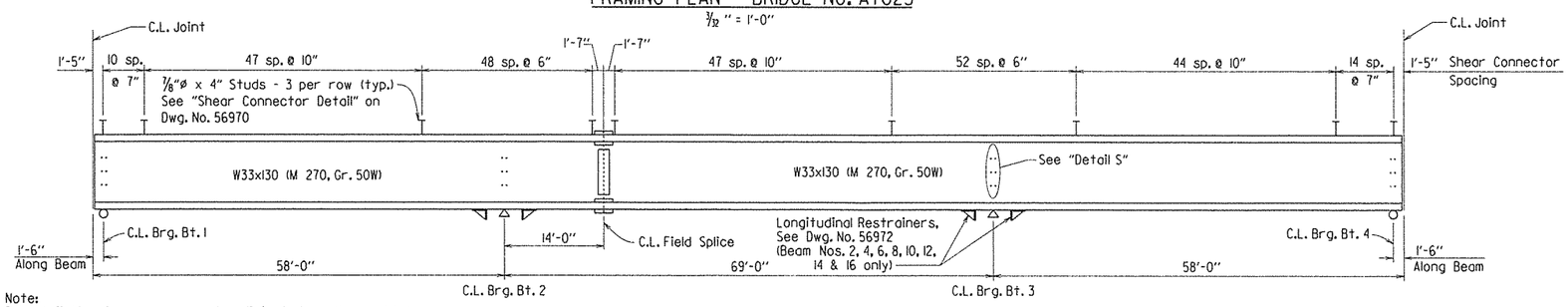
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	165	263
				(1) A7025, 07344		W-BEAM UNIT		56969



PLAN OF BEARING AT END BENT
BRIDGE NO. A7025
NTS



FRAMING PLAN - BRIDGE NO. A7025
3/32" = 1'-0"

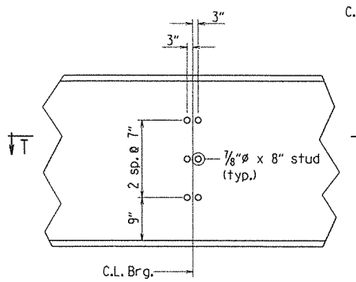


Note:
Bolted field splices shown may be eliminated or shop welded splices may be substituted with approval of the Engineer. Payment will be made on the basis of the plan quantities.

BEAM ELEVATION - BRIDGE NO. A7025
NTS

STUD DETAIL
NTS

SECTION T-T
(Shown @ Interior Beam)
NTS



Stud placement at Interior Bents shown, placement at End Bents is similar.

DETAIL S
NTS

Note:
"Section T-T" and "Stud Detail" shown for Bridge No. A7025; Bridge No. 07344 similar.

STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
5-14-15
CHARLES R. ELLIS

BRIDGE ENGINEER

SHEET 4 OF 13
DETAILS OF
185'-0" CONTINUOUS W-BEAM UNITS

ROUTE SEC.

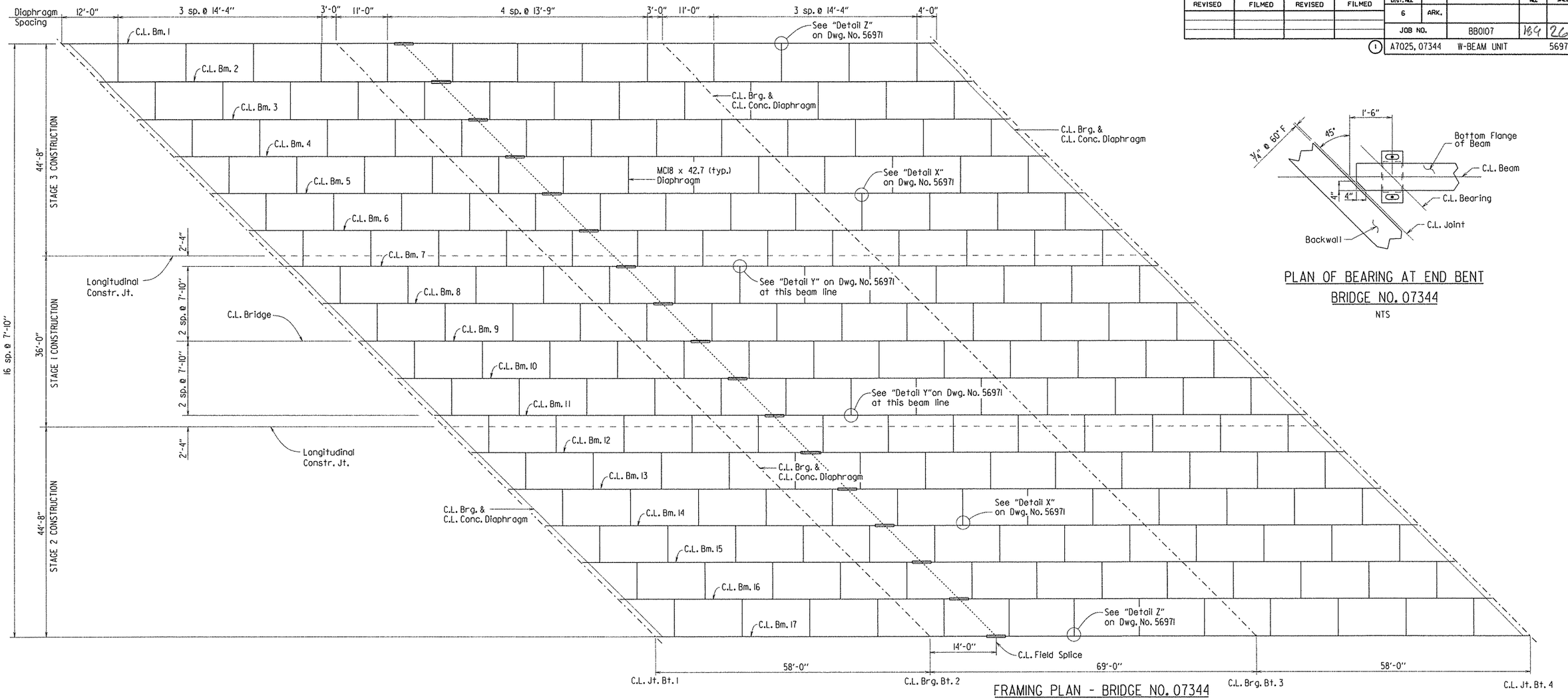
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: A.M.S. DATE: 1/28/15 FILENAME: bbb0107_sl.dgn
CHECKED BY: J.W.P. DATE: 5-13-16 SCALE: As Noted
DESIGNED BY: J.W.P. DATE: 1-15

BRIDGE NO. A7025, 07344 DRAWING NO. 56969

PRINT DATE: 5/12/2015

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	184	263
				(1) A7025, 07344		W-BEAM UNIT		56970

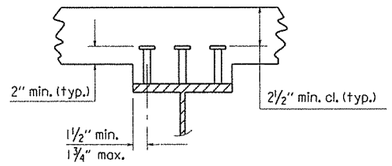


FRAMING PLAN - BRIDGE NO. 07344

3/32 " = 1'-0"

PLAN OF BEARING AT END BENT
BRIDGE NO. 07344

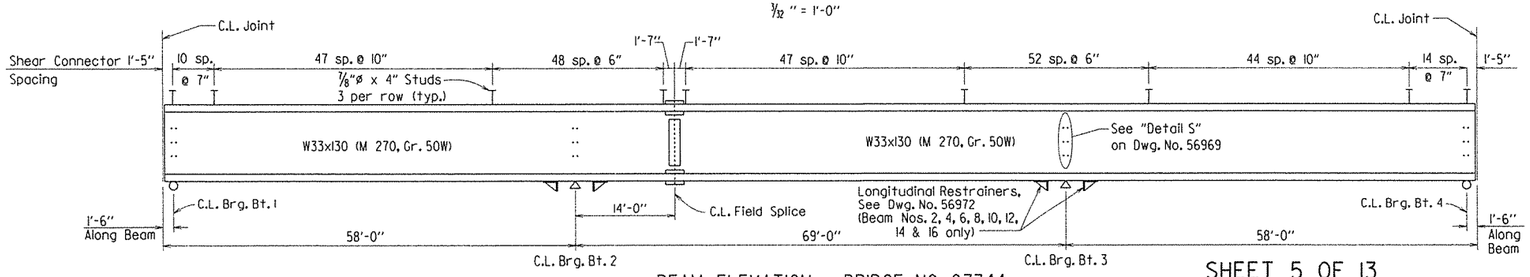
NTS



Stud Shear Connectors shown shall be 7/8"ø x 4" long, granular flux filled, solid fluxed or equal, and automatically end welded to the beam flange in accordance with the recommendations of the Manufacturer. 3/4"ø studs may be used in place of the 7/8"ø studs shown at the ratio of 1.361- 3/4"ø studs in place of one 7/8"ø stud. 7/8"ø studs will be used as a basis for measurement of structural steel in shear connectors.

SHEAR CONNECTOR DETAIL

NTS



BEAM ELEVATION - BRIDGE NO. 07344

NTS

Note:
Bolted field splices shown may be eliminated or shop welded splices may be substituted with approval of the Engineer. Payment will be made on the basis of the plan quantities.

STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
5-14-15
CHARLES R. ELLIS
BRIDGE ENGINEER

SHEET 5 OF 13
DETAILS OF
185'-0" CONTINUOUS W-BEAM UNITS

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: A.M.S. DATE: 1/28/15
CHECKED BY: J.N.P. DATE: 5-13-15
DESIGNED BY: J.N.P. DATE: 1-15

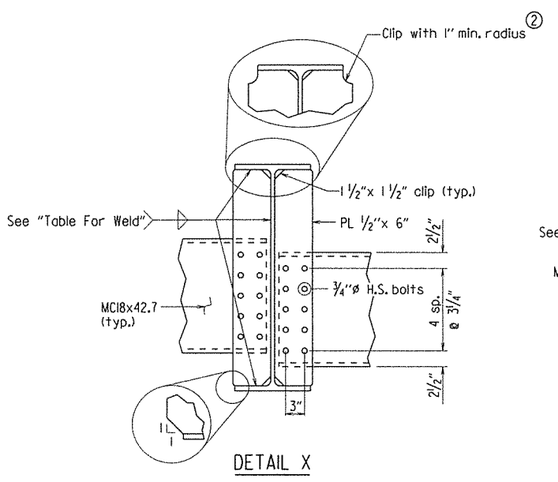
FILENAME: bbb0107_sl.dgn
SCALE: As Noted

BRIDGE NO. A7025, 07344 DRAWING NO. 56970

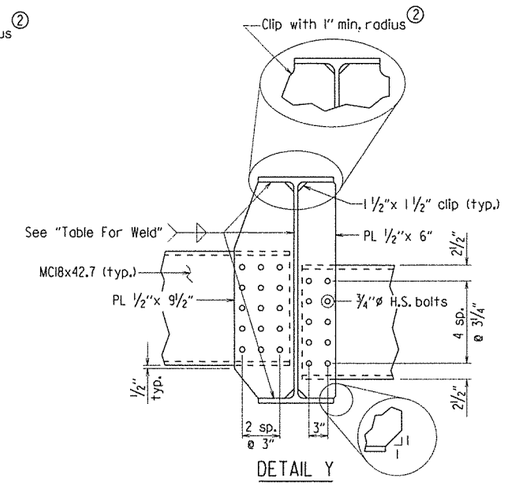
PRINT DATE: 5/12/2015

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	190	263
				① A7025, 07344		W-BEAM UNIT		56971

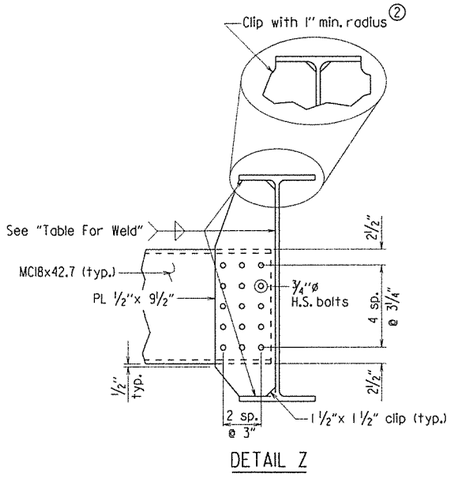
② If permanent steel bridge deck forms are used, the Fabricator shall clip plates as necessary to accomodate the deck form supports.



DETAIL X



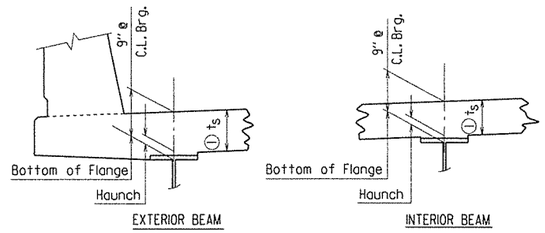
DETAIL Y



DETAIL Z

Notes: Stop welds ¼" to 1" from end of clip (typ.)

Bolts in diaphragm connections shall be properly installed and tightened in accordance with Subsection 807.71.



t_s = slab thickness as shown in "Partial Roadway Section"

① Tolerance when removable deck forming is used is + ½" , - ¼". Haunch forming is required and shall be adjusted to maintain slab thickness tolerance.

Notes:
Haunch dimension may vary within the following limits to maintain the grade and slab thickness tolerance : Minimum - occurs when top flange contacts bottom reinforcing steel; Maximum - top flange thickness plus 1¾". No increase in concrete and structural steel quantities will be made to maintain tolerances.

Tolerances shown are applicable only when removable deck forming is used. See Std. Dwg. No. 55005 for tolerances when permanent steel deck forms are used. Payment for concrete shall be based on removable deck forming.

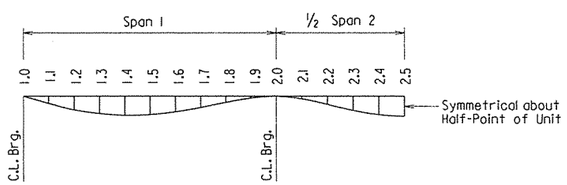
ADJUSTMENT FOR SLAB THICKNESS TOLERANCE

TABLE OF DEAD LOAD DEFLECTIONS - INCHES

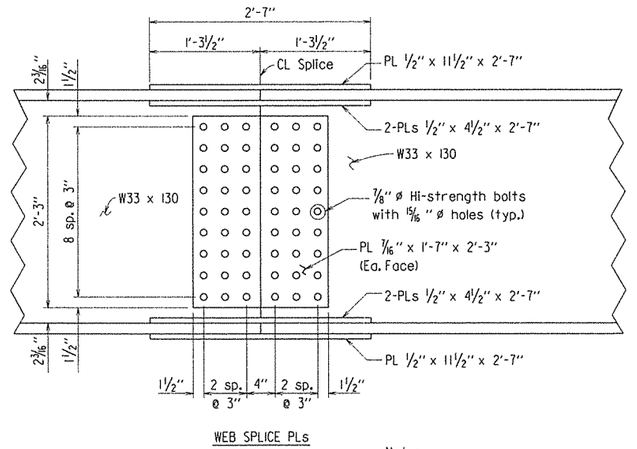
Span	Point of Deflection	Structural Steel		Structural Steel + Slab		Structural Steel + Slab + Parapet + Median Barrier	
		Exterior	Interior	Exterior	Interior	Exterior	Interior
1	1.0	0	0	0	0	0	0
	1.1	0.027	0.029	0.165	0.192	0.189	0.215
	1.2	.050	.054	0.304	0.354	0.349	0.397
	1.3	.065	.071	0.399	0.464	0.458	0.520
	1.4	.072	.078	0.440	0.512	0.505	0.574
	1.5	.070	.075	0.425	0.494	0.487	0.554
	1.6	.059	.064	0.359	0.418	0.412	0.469
	1.7	.042	.046	0.258	0.300	0.296	0.336
	1.8	.023	.025	0.143	0.166	0.164	0.186
	1.9	.007	.008	0.044	0.051	0.050	0.057
2	2.0	0	0	0	0	0	0
	2.1	0.010	0.011	0.059	0.069	0.068	0.077
	2.2	0.031	0.034	0.189	0.220	0.217	0.247
	2.3	0.054	0.058	0.327	0.381	0.375	0.427
	2.4	0.070	0.076	0.428	0.498	0.491	0.558
	2.5	0.076	0.082	0.465	0.540	0.533	0.605

Symmetrical about Half-Point of Unit

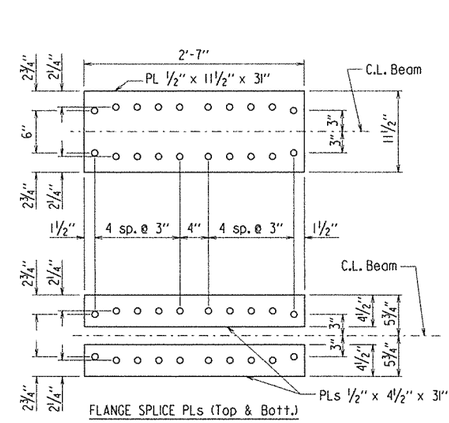
NOTE: Camber for Dead Load Deflection ± ¼" tolerance. Deflections shown are along C.L. Beam from a chord from C.L. Bearing to C.L. Bearing.



DEAD LOAD DEFLECTION DIAGRAM



WEB SPLICE PLs



FLANGE SPLICE PLs (Top & Bott.)

Note:
All field splice bolts shall be ⅞"ø Hi-str. bolts.
All holes for splice bolts shall be 15/16 "ø.
All field splice plates shall be AASHTO M 270, Gr. 50W.

FIELD SPLICE DETAILS

TABLE FOR WELD

Material Thickness of Thicker Part Joined (Inches)	Minimum Size of Fillet Weld (Inches)	Single Pass Weld Must Be Used
To ¾" Inclusive	¼"	
Over ¾"	5/16"	

NOTE: When a fillet weld size, as shown on the plans, is larger than the minimum, the first pass shall be that specified for minimum size of fillet weld.

STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
5-14-15
CHARLES R. ELLIS

BRIDGE ENGINEER

SHEET 6 OF 13
DETAILS OF
185'-0" CONTINUOUS W-BEAM UNITS

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

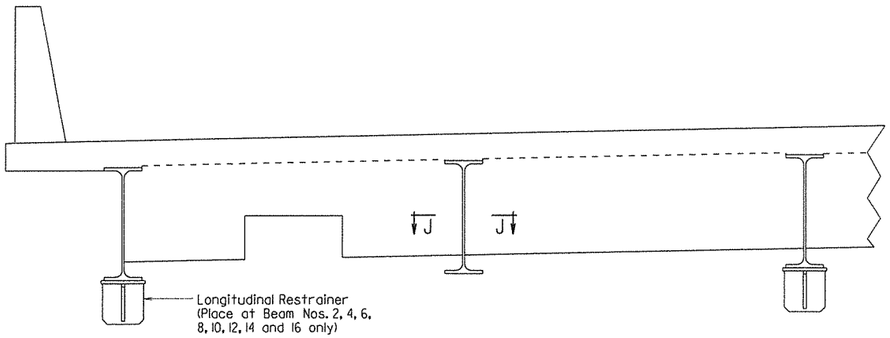
LITTLE ROCK, ARK.

DRAWN BY: A.M.S. DATE: 1/28/15 FILENAME: bbb0107_si.dgn
CHECKED BY: JNP DATE: 5-13-15 SCALE: No Scale
DESIGNED BY: JNP DATE: 1-15

BRIDGE NO. A7025, 07344 DRAWING NO. 56971

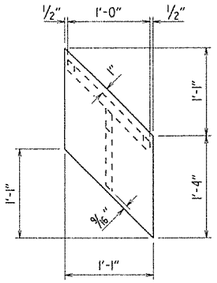
PRINT DATE: 5/12/2015

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	191	263
				(1) A7025, 07344		W-BEAM UNIT		56972



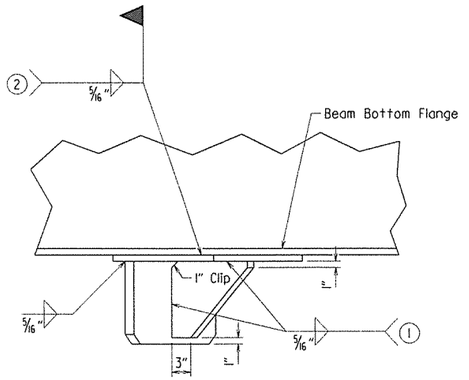
SKETCH OF LONGITUDINAL RESTRAINER DEVICES AT INTERMEDIATE BENTS

NTS



PLAN OF LONGITUDINAL RESTRAINER

NTS

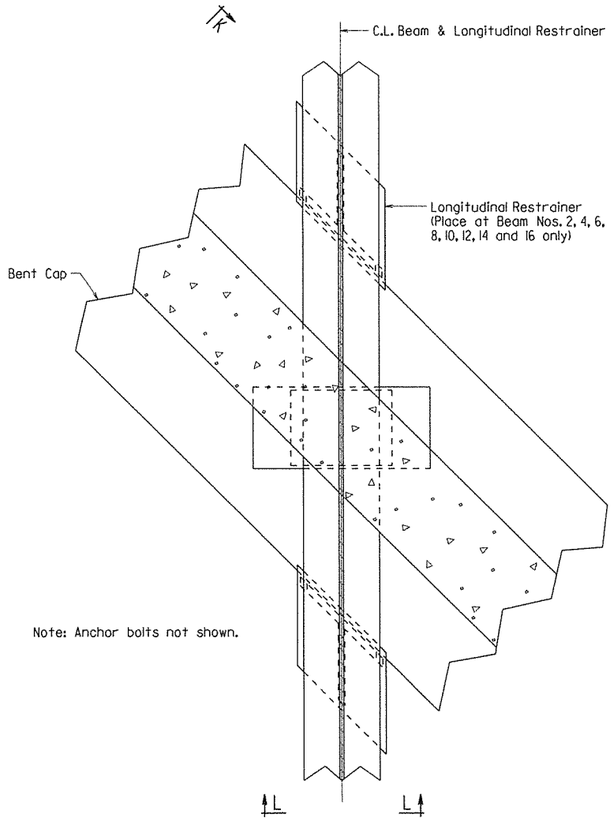


VIEW M-M

NTS

(1) Stop weld ½" from end of clip.

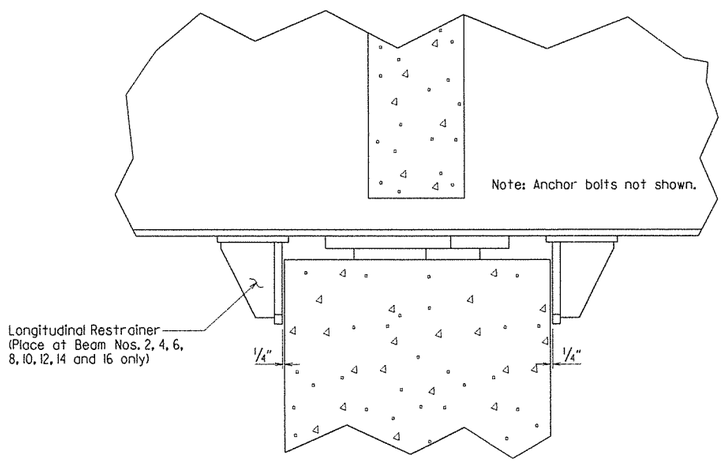
(2) Longitudinal restrainer shall not be welded to beam until deck has been poured.



VIEW J-J

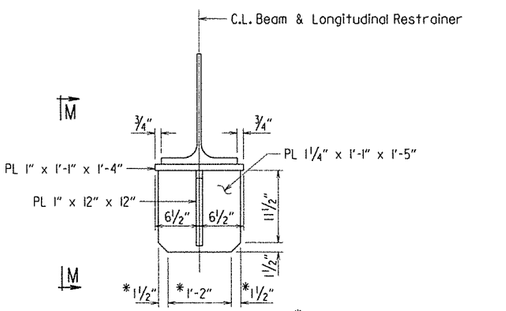
1" = 1'-0"

NOTES: DETAILS SHOWN FOR BRIDGE NO. A7025, SIMILAR FOR BRIDGE NO. 07344.



VIEW K-K

1" = 1'-0"



*Measured along face of plate

VIEW L-L

NTS

Note: All Plates shall be Grade 50W.

STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
5-14-15
CHARLES R. ELLIS

BRIDGE ENGINEER

SHEET 7 OF 13
DETAILS OF
185' CONTINUOUS W-BEAM UNITS

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

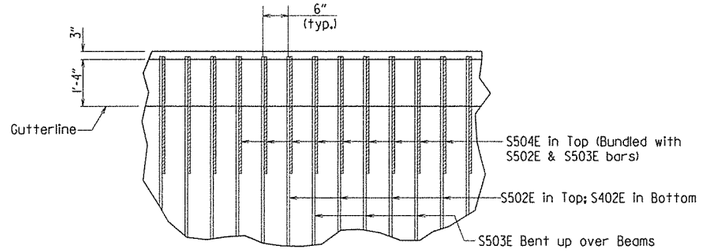
LITTLE ROCK, ARK.

DRAWN BY: A.M.S. DATE: 1/28/15 FILENAME: bbb0107_sl.dgn
CHECKED BY: J.W.P. DATE: 5-13-15 SCALE: As Noted
DESIGNED BY: J.W.P. DATE: 1-15

BRIDGE NO. A7025, 07344 DRAWING NO. 56972

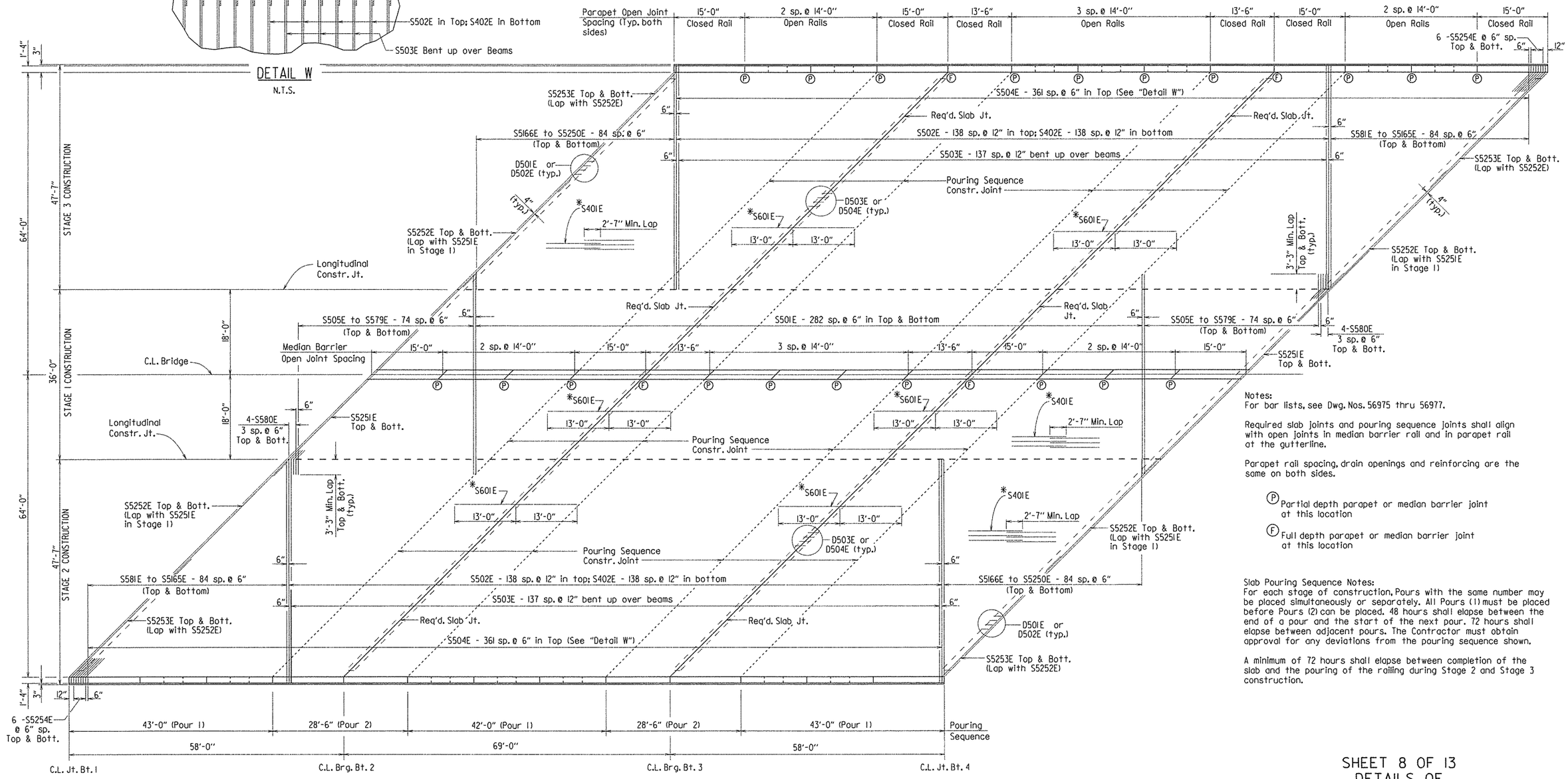
PRINT DATE: 5/12/2015

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	192	203
				(1) A7025		W-BEAM UNIT		56973



DETAIL W
N.T.S.

*Place reinforcing as shown in "Partial Roadway Section", Dwg. Nos. 56966 & 56967.



REINFORCING PLAN & SLAB POURING SEQUENCE
BRIDGE NO. A7025
3/32" = 1'-0"

Notes:
For bar lists, see Dwg. Nos. 56975 thru 56977.

Required slab joints and pouring sequence joints shall align with open joints in median barrier rail and in parapet rail at the gutterline.

Parapet rail spacing, drain openings and reinforcing are the same on both sides.

(P) Partial depth parapet or median barrier joint at this location

(F) Full depth parapet or median barrier joint at this location

Slab Pouring Sequence Notes:
For each stage of construction, Pours with the same number may be placed simultaneously or separately. All Pours (1) must be placed before Pours (2) can be placed. 48 hours shall elapse between the end of a pour and the start of the next pour. 72 hours shall elapse between adjacent pours. The Contractor must obtain approval for any deviations from the pouring sequence shown.

A minimum of 72 hours shall elapse between completion of the slab and the pouring of the railing during Stage 2 and Stage 3 construction.

STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
5-14-15
CHARLES R. ELLIS
BRIDGE ENGINEER

SHEET 8 OF 13
DETAILS OF
185'-0" CONTINUOUS W-BEAM UNITS

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

DRAWN BY: A.M.S. DATE: 1/28/15 FILENAME: bbb0107_sl.dgn
CHECKED BY: JYP DATE: 5-13-15 SCALE: As Noted
DESIGNED BY: JYP DATE: 1-15
BRIDGE NO. A7025 DRAWING NO. 56973

PRINT DATE: 5/12/2015

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	193	263
				(1) 07344		W-BEAM UNIT		56974

Notes:
Fpr bar lists, see Dwg. Nos. 56975 thru 56977.

Required slab joints and pouring sequence joints shall align with open joints in median barrier rail and in parapet rail at the gutterline.

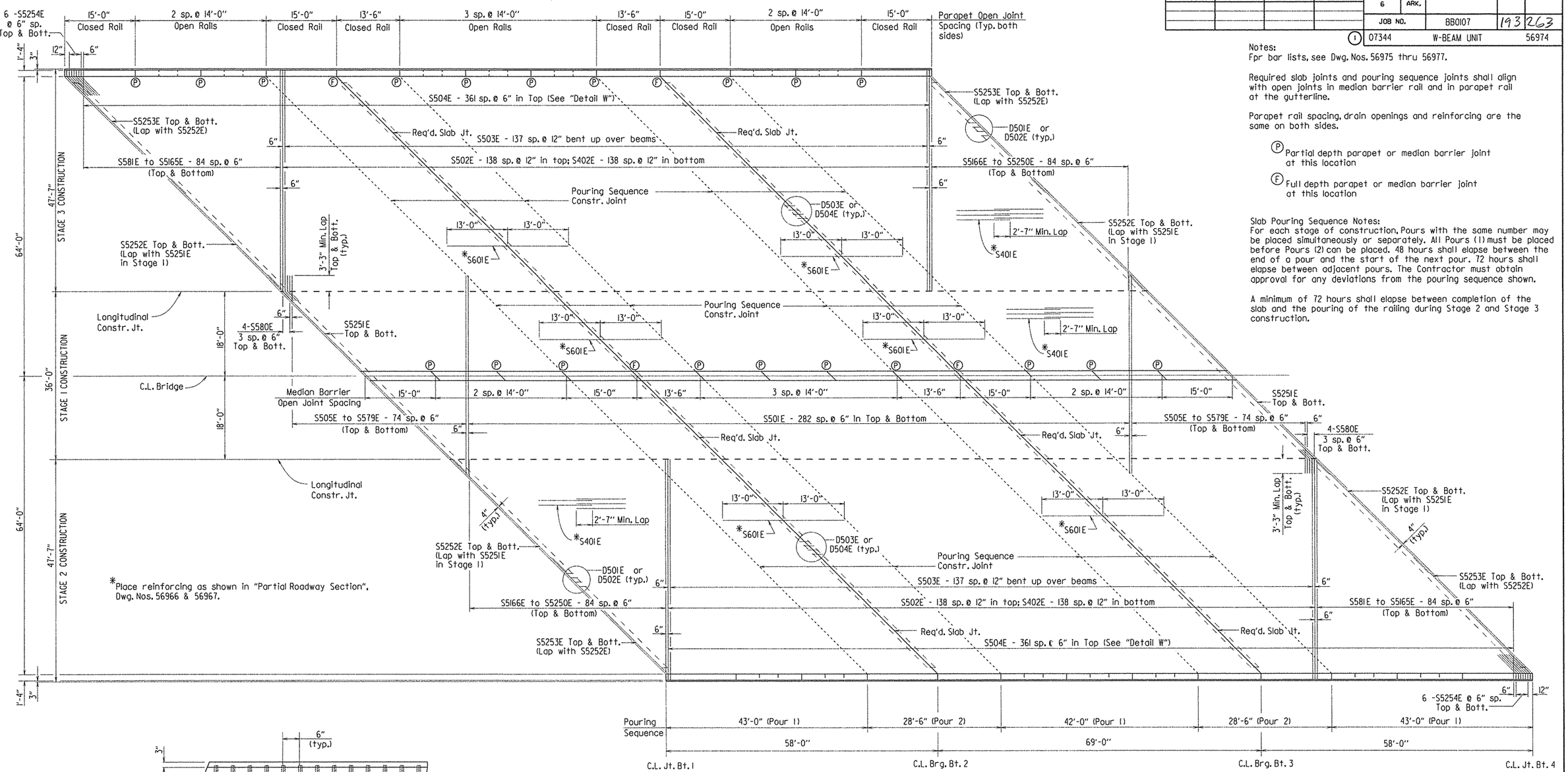
Parapet rail spacing, drain openings and reinforcing are the same on both sides.

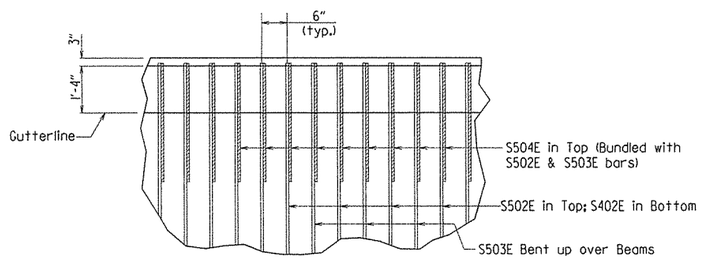
(P) Partial depth parapet or median barrier joint at this location

(F) Full depth parapet or median barrier joint at this location

Slab Pouring Sequence Notes:
For each stage of construction, Pours with the same number may be placed simultaneously or separately. All Pours (1) must be placed before Pours (2) can be placed. 48 hours shall elapse between the end of a pour and the start of the next pour. 72 hours shall elapse between adjacent pours. The Contractor must obtain approval for any deviations from the pouring sequence shown.

A minimum of 72 hours shall elapse between completion of the slab and the pouring of the railing during Stage 2 and Stage 3 construction.





DETAIL W
N.T.S.

REINFORCING PLAN & SLAB POURING SEQUENCE
BRIDGE NO. 07344
1/32" = 1'-0"

STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
5-14-15
CHARLES R. ELLIS
BRIDGE ENGINEER

SHEET 9 OF 13
DETAILS OF
185'-0" CONTINUOUS W-BEAM UNITS

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

DRAWN BY: A.M.S. DATE: 1/28/15
CHECKED BY: JVP DATE: 5-13-15
DESIGNED BY: JVP DATE: 1-15
FILENAME: bbb0107_sl.dgn
SCALE: As Noted

BRIDGE NO. 07344 DRAWING NO. 56974

PRINT DATE: 5/13/2015

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	194	263
				① A7025, 07344		W-BEAM UNIT		56975

GENERAL NOTES

CONSTRUCTION SPECIFICATIONS: Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction (2014 Edition) with applicable Supplemental Specifications and Special Provisions.

DESIGN SPECIFICATIONS: AASHTO LRFD Bridge Design Specifications, Sixth Edition with 2013 Interim Revisions.

MATERIALS AND STRENGTHS:

Class S(AE) Concrete	f'c =	4,000 psi
Reinforcing Steel (Gr. 60, AASHTO M 31 or M 322, Type A)	fy =	60,000 psi
Structural Steel (M 270, Gr. 50W)	Fy =	50,000 psi
Structural Steel (M 270, Gr. 36)	Fy =	36,000 psi

CONCRETE :
Concrete shall be poured in the dry and all exposed corners to be chamfered ¾" unless otherwise noted. All concrete shall be Class S(AE) with a minimum 28 day compressive strength f'c = 4,000 psi.

The superstructure details shown are for use when removable deck forming is used and are the basis for measurement of Class S(AE) Concrete. See Standard Drawing No. 55005 for allowable modifications and for tolerances when Permanent Steel Bridge Deck Forms are used.

Concrete in bridge superstructure shall be placed, consolidated and screeded off for the entire pour before any concrete has taken its initial set. This may require the use of a retarding agent.

The concrete deck shall be given a tine finish in accordance with Subsection 802.19 for Class 5 Tined Bridge Roadway Surface Finish. Movement of the finishing machine across new concrete shall be on planks placed on the surface and shall be prohibited for 72 hours after finishing the pour. Sufficient concrete must be placed ahead of the strike-off to fully load the beam. If a longitudinal strike-off is used, a vertical camber adjustment must be made in the strike-off to account for the future dead load deflection due to the railing. A minimum of 72 hours shall elapse between the completion of the slab and the pouring of the railing. Any railing pours made before the entire slab has been placed and cured must be approved by the Engineer.

Removable forms shall be used for concrete diaphragms. Concrete diaphragms may be poured separately from deck. If concrete diaphragms are poured separately, a minimum of 48 hours shall elapse between the diaphragm pour and the slab pour.

REINFORCING STEEL :
All reinforcing steel shall be Grade 60 (yield strength = 60,000 psi) conforming to AASHTO M 31 or M 322, Type A, with mill test reports. The reinforcing steel is to be accurately located in the forms and firmly held in place by steel wire supports, sufficient in number and size to prevent displacement during the course of construction. The wire supports will not be paid for directly, but will be considered subsidiary to the item "Epoxy Coated Reinforcing Steel (Grade 60)".

STRUCTURAL STEEL :
All structural steel shall be AASHTO M 270, Grade 50W unless otherwise noted and shall be paid for as "Structural Steel in Beam Spans (M 270, Gr. 50W)". Grade 50W steel shall not be painted. All exposed surfaces shall be cleaned in accordance with Subsection 807.84. Structural steel completely embedded in concrete may be AASHTO M 270, Grade 36 unless otherwise noted.

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

Requests for substitution of structural steel shapes shown with shapes of greater size must be submitted by the Contractor to the Engineer for approval. Steels of equal or greater strengths will be accepted only when shown on the approved shop drawings. Payment will be based on the basis of shapes shown in the plans, and no additional compensation will be made for any adjustments due to substitutions.

Beams and field splice plates are considered main load carrying members and shall meet the Longitudinal Charpy V-Notch Test specified in Subsection 807.05. This work and material will not be paid for directly, but shall be considered subsidiary to the item "Structural Steel in Beam Spans (M 270, Gr. 50W)".

All beams shall be assembled in the shop as specified in Subsection 807.54 and blocked in their true position with webs horizontal. The camber, length of sections, distance between bearings, and openings of joints shall be measured and this information shall become part of the permanent records. The component parts shall be match marked in this assembly and these marks shall be shown on the erection diagram. All beam dimensions are based on a temperature of 60 degrees F. A tolerance of ¼" +/- is allowed for camber.

Flange field splice plates for main members shall be cut and fabricated so that the primary direction of rolling is parallel to the direction of the main tensile and/or compressive stresses.

All welding that is to be done during fabrication of structural steel, including temporary welds, shall be detailed on the shop drawings and submitted for approval. If additional welds are required, whether permanent or temporary, a formal request with detailed drawings shall be submitted to the Engineer for approval; however, additional welds used for attaching falsework support devices or screed rail supports to the structural steel that do not exceed the limitations of Subsection 802.13 will not require approval prior to construction. All welding shall conform to Subsection 807.26.

Field connections shall be bolted with high-strength bolts and shall be ¾" ø bolts unless otherwise noted. Bolts shall be placed with heads on the outside face of the exterior beam webs and on the bottom of the beam flanges. Holes for ¾" ø high-strength bolts may be ⅞" ø diameter if a washer is supplied for use under both the nut and head of the bolt.

Steel diaphragms shall be installed as beams are erected. All bolts in diaphragms and field splices shall be installed and tightened in accordance with Subsection 807.71 prior to pouring the concrete deck unless otherwise noted.

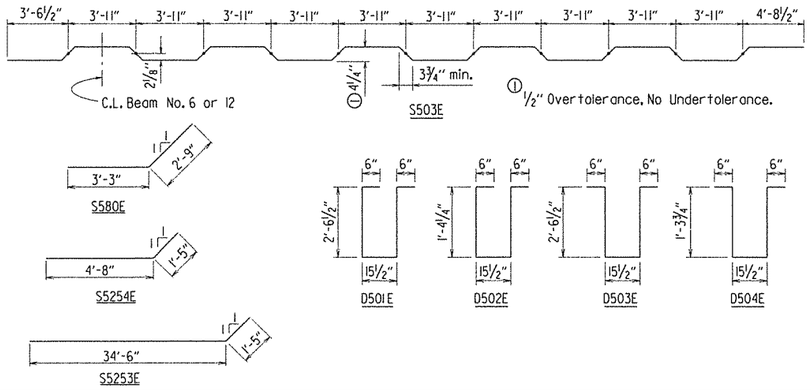
All shear connectors shall be granular flux filled, solid fluxed, or equal and shall be automatically end welded in accordance with recommendations of the Manufacturer.

BAR LIST - PER UNIT

Stage 1 Construction			
Mark	No. Req'd.	Length	Pin Dia.
S401E	500	39'-0"	Str.
S501E	566	42'-6"	Str.
S505E to S579E	4 Ea.	5'-6" to 42'-6"	Str.
S580E	16	6'-0"	2½"
S5251E	4	57'-6"	Str.
S601E	74	26'-0"	Str.
D501E	68	7'-0"	2½"
D502E	12	4'-7"	2½"
D503E	68	7'-0"	2½"
D504E	12	4'-6"	2½"
D601E	96	10'-7"	Str.
D602E	64	3'-3"	Str.
D603E	64	6'-11"	Str.

Stage 2 or 3 Construction			
Mark	No. Req'd.	Length	Pin Dia.
S401E	665	39'-0"	Str.
S402E	139	47'-5"	Str.
S502E	139	47'-5"	Str.
S503E	138	48'-7"	3"
S504E	362	4'-8"	Str.
S581E to S5165E	2 Ea.	5'-1" to 47'-1"	Str.
S5166E to S5250E	2 Ea.	3'-8" to 45'-8"	Str.
S5252E	4	33'-10"	Str.
S5253E	4	35'-11"	2½"
S5254E	12	6'-1"	2½"
S601E	98	26'-0"	Str.
D501E	82	7'-0"	2½"
D502E	18	4'-7"	2½"
D503E	82	7'-0"	2½"
D504E	18	4'-6"	2½"
D601E	112	10'-7"	Str.
D602E	96	3'-3"	Str.
D604E	32	7'-7"	Str.

Bending Diagrams
(Dimensions are out to out of bars.)

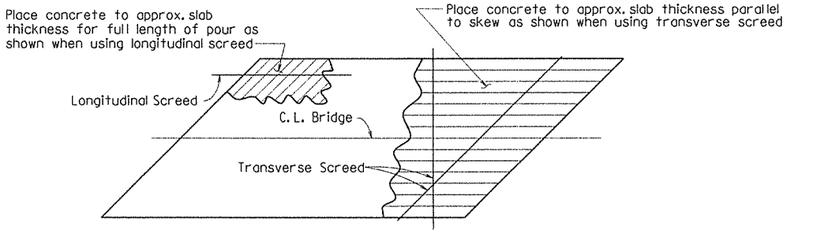


Notes: All Bars shall be epoxy-coated.

At the Contractor's option, two straight epoxy coated #5 bars, top and bottom, may be substituted for bars S503E. Payment for reinforcing will be based on the weight of bars S503E.

For details of reinforcing in parapet rail and median barrier, See Dwg. Nos. 56976 & 56977.

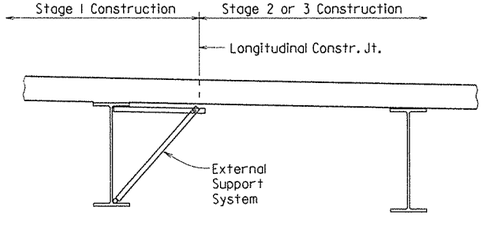
Bar lengths shown may require adjustment if mechanical couplers are used to minimize interference with Stage 2 or 3 pile driving.



Note: At the Contractor's option, the transverse screed may be placed parallel to the skew or perpendicular to C.L. Bridge.

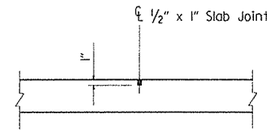
CONCRETE PLACEMENT PROCEDURE

Bridge No. A7025 Shown,
Bridge No. 07344 Similar



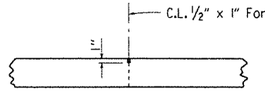
Stage 1 external supports in this bay shall remain in place until completion of Stage 2 and 3 deck pours. See Subsection 802.15 for additional information regarding their removal.

DECK SUPPORT AT LONGITUDINAL CONSTRUCTION JOINT



Use Type 3 or 4 Joint Sealer. See Subsections 501.02(h) and 501.05(j). Backer Rod filler will not be required. Joint Sealer shall be measured and paid for as Class S(AE) Concrete-Bridge. Slab Joints shall extend to the outside edge of the deck slab and shall align with open joints at the front face of the parapet. Slab joints shall be installed before the parapet railing is poured. If slab joints are to be sawed, they shall be sawed as soon as the concrete has sufficiently set to allow sawing of the joint without damage to the slab. Slab joints shall be placed at all pouring sequence construction joints and required slab joint locations. The joint sealer shall extend across the deck from gutterline to gutterline. Median Barrier joints shall align with joints in the slab.

SLAB JOINT DETAIL



Use ½" x 1" Type 3 or 4 Joint Sealer. See Subsections 501.02(h) and 501.05(j). Backer Rod filler will not be required. Joint sealer shall be measured and paid for as Class S(AE) Concrete-Bridge. This joint shall be formed. Seal must be gray in color or other color similar to concrete.

LONGITUDINAL CONSTRUCTION JOINT

STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
5-14-15
CHARLES R. ELLIS

BRIDGE ENGINEER

SHEET 10 OF 13
DETAILS OF
185'-0" CONTINUOUS W-BEAM UNITS

ROUTE SEC.

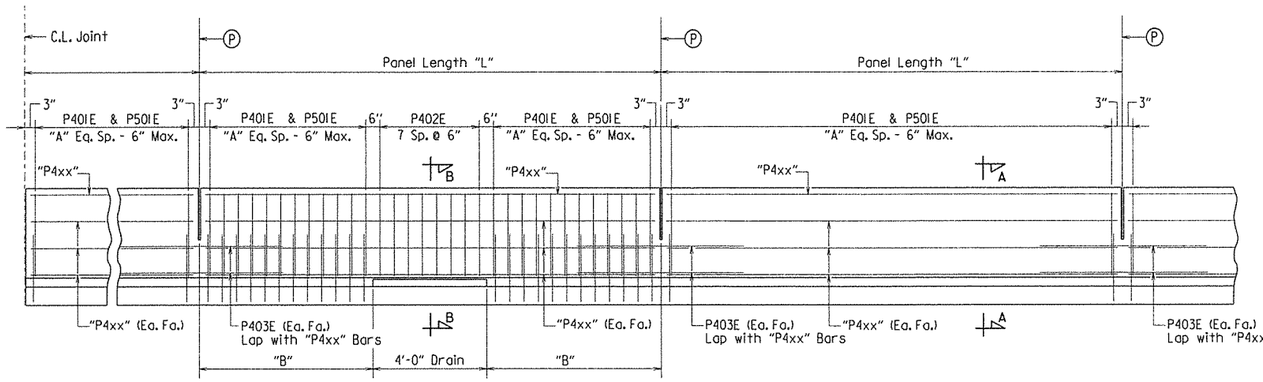
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: A.M.S. DATE: 1/28/15
CHECKED BY: J.N.P. DATE: 5-13-15
DESIGNED BY: J.N.P. DATE: 1-15
FILENAME: bbb0107_sl.dgn
SCALE: No Scale

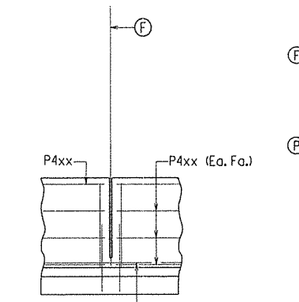
BRIDGE NO. A7025, 07344 DRAWING NO. 56975

PRINT DATE: 5/12/2015

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	195	263
				(1)	A7025, 07344	W-BEAM UNIT		56976



TYPICAL OPEN PANEL
1/8" = 1'-0"



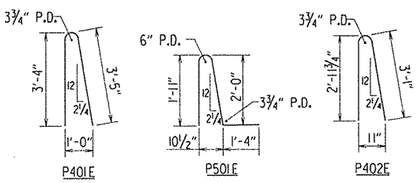
TYPICAL FULL DEPTH JOINT
1/8" = 1'-0"

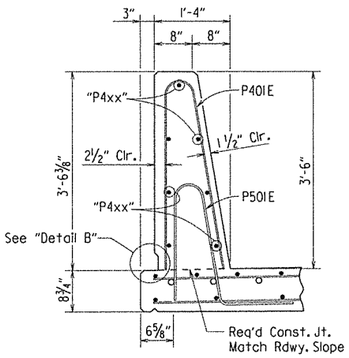
(F) C.L. Full-Depth Parapet Joint (1/4" to 1" Max.) as shown in "Reinforcing Plan & Slab Pouring Sequence" on Dwg. Nos. 56973 and 56974. Stop 4" from top of slab.

(P) C.L. Partial-Depth Parapet Joint (1/4" to 1" Max.) as shown in "Reinforcing Plan & Slab Pouring Sequence" on Dwg. Nos. 56973 and 56974. Stop 1'-6" from top of slab.

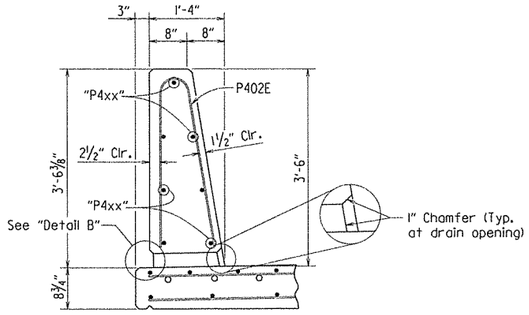
PARAPET BAR LIST - PER UNIT

STAGE 2 OR 3 CONSTRUCTION				BENDING DIAGRAMS
MARK	NO. REQ'D.	LENGTH	P.D.	Dimensions are out to out of bars.
P401E	314	6'-11"	3 3/4"	
P402E	56	6'-2"	3 3/4"	
P403E	44	5'-6"	Str.	
P404E	14	13'-2"	Str.	
P405E	49	13'-8"	Str.	
P406E	28	14'-8"	Str.	
P501E	314	5'-5"	3 3/4"	

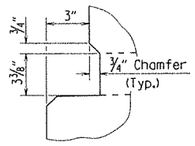




SECTION A-A
(TL-4 Design)
1/4" = 1'-0"



SECTION B-B
(TL-4 Design)
1/4" = 1'-0"

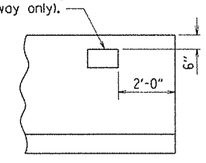


DETAIL B
No Scale

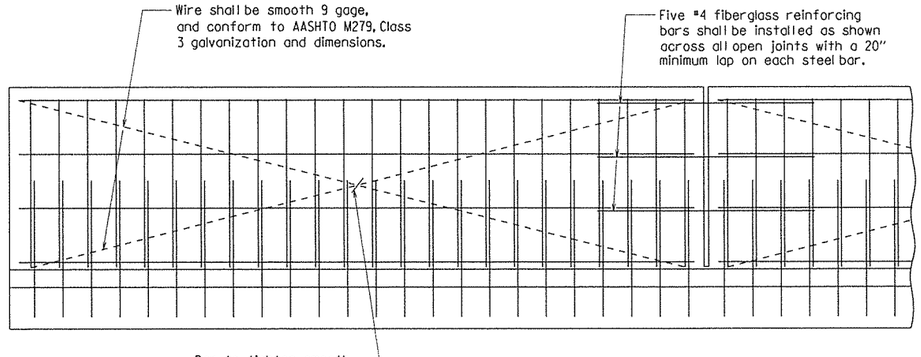
TABLE OF VARIABLES

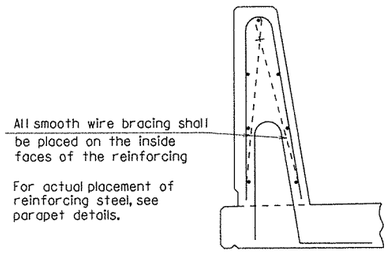
Panel Length "L"	Panel Type	"A"	"B"	"P4xx"
13'-6"	Closed	26	-	P404E
14'-0"	Open	9	5'-0"	P405E
15'-0"	Closed	29	-	P406E

Place Type D Bridge Name Plate on front face of span rail approx. 2'-0" from beginning of bridge (Right side of roadway only).



NAME PLATE DETAIL
No Scale





All panels shall be braced as required to prevent racking. All open joints shall be sawed as soon as practical to a minimum width of 1/4". To control cracking before sawing, all joints must be grooved before the concrete is set. Sawing of the joints must be controlled so it will follow the grooved joint.

The extruded parapet shall conform to the horizontal and vertical lines shown on the plans or as directed by the Engineer and shall present a smooth, uniform appearance and texture. Unless otherwise noted, exposed surfaces may be given a light brush finish or a Class 3, Textured Coating Finish, in place of the Class 2, Rubbed Finish.

DETAILS OF OPTIONAL SLIP FORMING OF CONCRETE PARAPET RAIL
No Scale

STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
5-14-15
CHARLES R. ELLIS
BRIDGE ENGINEER

SHEET 11 OF 13
DETAILS OF
185'-0" CONTINUOUS W-BEAM UNITS
ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

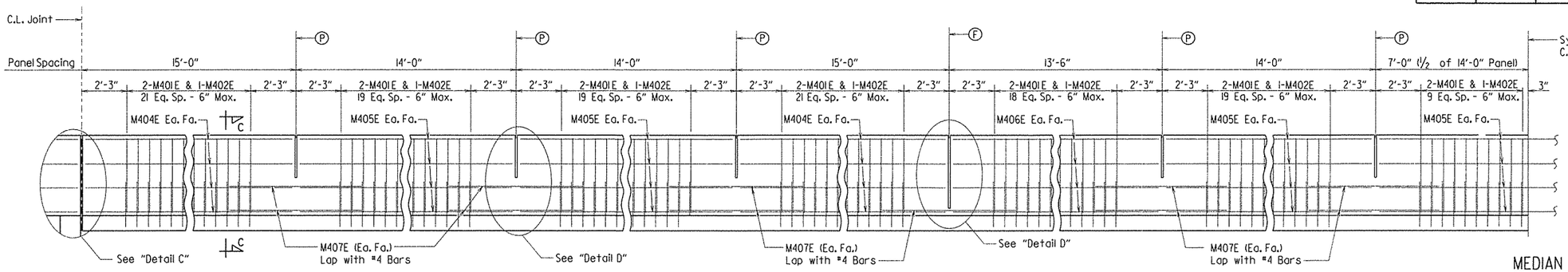
DRAWN BY: A.M.S. DATE: 1/28/15 FILENAME: bbb0107_sl.dgn
CHECKED BY: J.W.P. DATE: 5-13-15 SCALE: 1/8" = 1'-0" or As Noted
DESIGNED BY: J.W.P. DATE: 1-15

BRIDGE NO. A7025, 07344 DRAWING NO. 56976

PRINT DATE: 5/12/2015

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		BB0107	196	263
① A7025, 07344		W-BEAM UNIT		56977



MEDIAN BARRIER ELEVATION

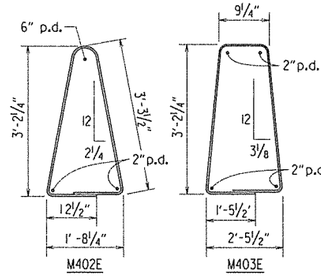
NTS

Ⓕ C.L. Full-Depth Parapet Joint parallel to skew (1/4" to 1" Max.) as shown in "Reinforcing Plan & Slab Pouring Sequence" on Dwg. Nos. 56973 and 56974. Stop 4" from top of slab.

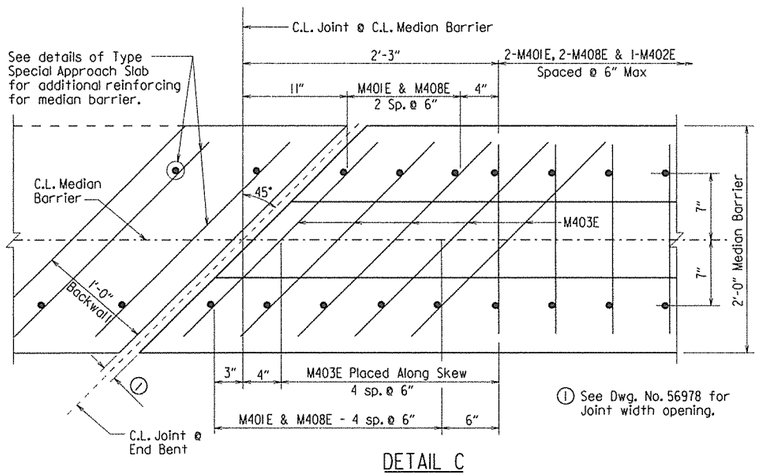
Ⓟ C.L. Partial-Depth Parapet Joint parallel to skew (1/4" to 1" Max.) as shown in "Reinforcing Plan & Slab Pouring Sequence" on Dwg. Nos. 56973 & 56974. Stop 1'-6" from top of slab.

MEDIAN BARRIER BAR LIST - PER UNIT

MARK	NO. REQ'D.	LENGTH	P.D.	BENDING DIAGRAMS
				Dimensions are out to out of bars.
② M401E	740	1'-6"	Str.	
M402E	266	8'-9"	2"	
M403E	130	10'-1"	2"	
M404E	32	14'-8"	Str.	
M405E	56	13'-8"	Str.	
M406E	16	13'-2"	Str.	
M407E	44	5'-6"	Str.	



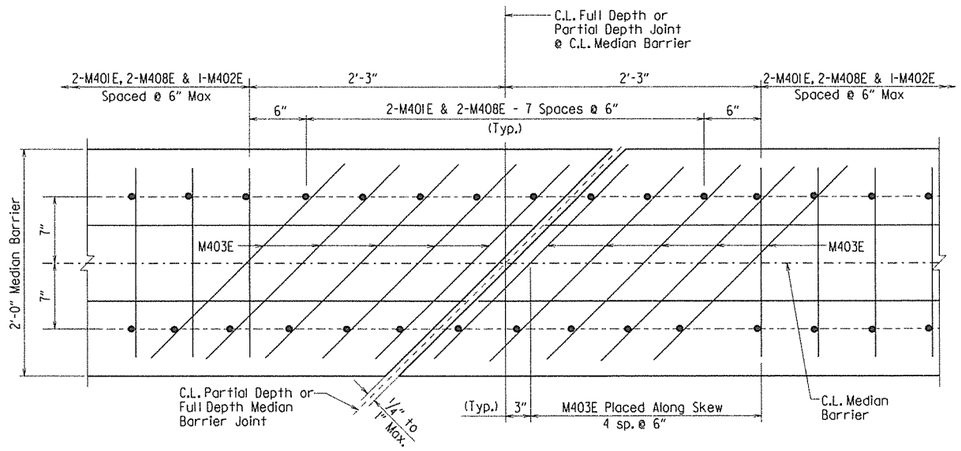
② One end threaded for Mechanical Coupler. Length of bar does not include any additional length for engagement into Mechanical Coupler. The actual length of bar engagement into the Mechanical Coupler shall be determined by the Mechanical Coupler Manufacturer, and the length of the bar shall be adjusted accordingly.



① See Dwg. No. 56978 for Joint width opening.

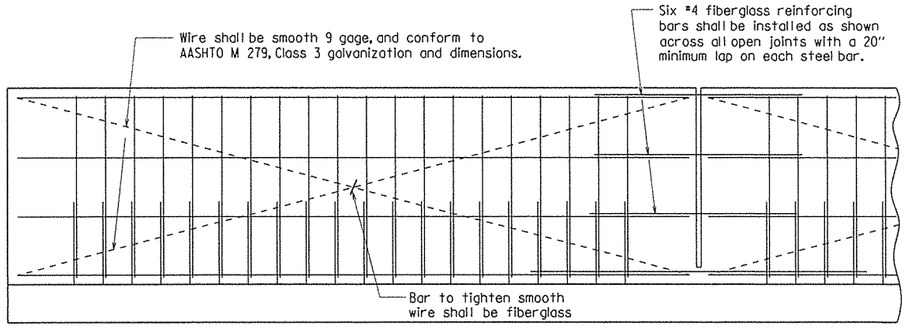
DETAIL C

(Plan - Showing Median Barrier Reinforcing @ Skewed Exp. Joints
Bridge No. A7025 Shown, Bridge No. 07344 Similar
NTS

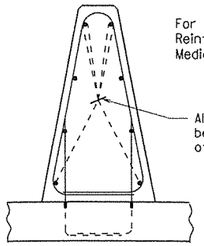


DETAIL D

(Plan - Showing Median Barrier Reinforcing @ Skewed Barrier Joints)
Bridge No. A7025 Shown, Bridge No. 07344 Similar
NTS



All panels shall be braced as required to prevent racking. All open joints shall be sawed as soon as practical to a minimum width of 1/4". To control cracking before sawing, all joints must be grooved before the concrete is set. Sawing of the joints must be controlled so it will follow the grooved joint.



For actual placement of Reinforcing Steel, see Median Barrier Details.

All Smooth Wire Bracing shall be placed on the inside faces of the reinforcing.

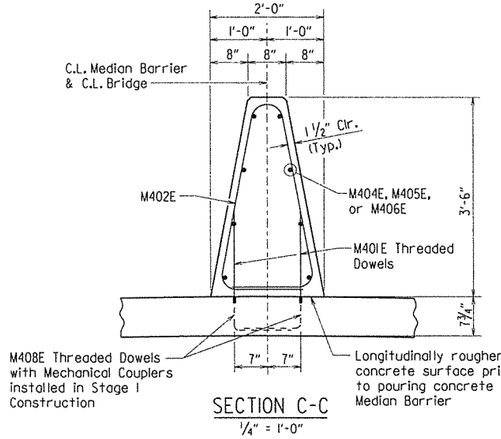
The extruded Median Barrier shall conform to the horizontal and vertical lines shown on the plans or as directed by the Engineer and shall present a smooth, uniform appearance and texture. Unless otherwise noted, exposed surfaces may be given a light brush finish or a Class 3, Textured Coating Finish, in place of the Class 2, Rubbed Finish.

DETAILS OF OPTIONAL SLIP FORMING OF CONCRETE MEDIAN BARRIER

NTS

Notes:
The Threaded Dowel and Coupler Assembly shall consist of a OPL Approved Mechanical Splice with Protective Cap and Threaded Dowel Bars (M401E and M408E) as shown and shall develop at least 125% of the yield strength of the dowel bars. The Threaded Dowel and Coupler Assembly will not be paid for separately but will be considered included in the unit bid price for "Epoxy Coated Reinforcing Steel (Grade 60)".

M401E and M408E Dowel Bars shall be a minimum 60 ksi yield strength and threaded as required. Threaded Dowel and Coupler Assembly, except mating surfaces, shall be Epoxy Coated in accordance with the requirements of Section 804.



SECTION C-C

1/4" = 1'-0"

STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
5-14-15
CHARLES R. ELLIS

BRIDGE ENGINEER

SHEET 12 OF 13
DETAILS OF
185'-0" CONTINUOUS W-BEAM UNITS

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

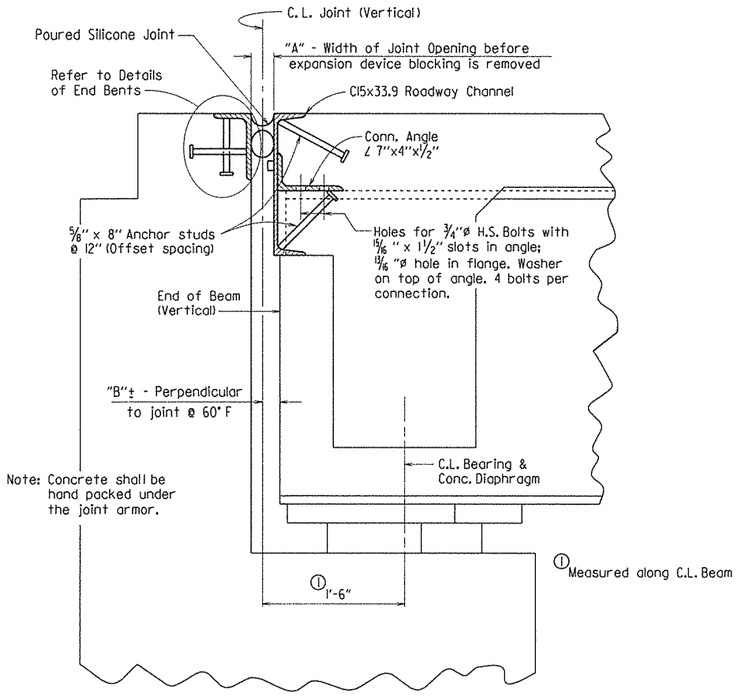
LITTLE ROCK, ARK.

DRAWN BY: AMS.	DATE: 1/28/15	FILENAME: bbb0107_sl.dgn	
CHECKED BY: JNP	DATE: 5-13-15	SCALE: As Noted	
DESIGNED BY: JNP	DATE: 1-15		

BRIDGE NO. A7025, 07344 DRAWING NO. 56977

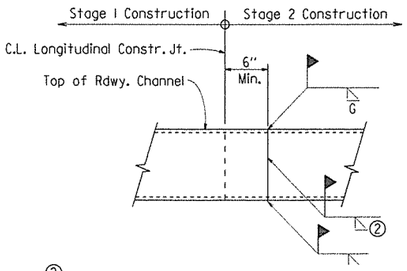
PRINT DATE: 5/12/2015

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	197	263
				①	A7025, 07344	W-BEAM UNIT		56978



Note: Section taken perpendicular to C.L. Joint, except as noted.

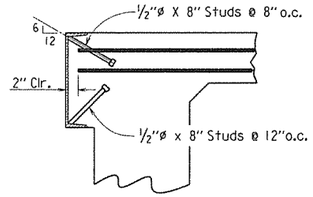
SECTION THRU JOINT AT END BENT



② Grind flush from top of deck to 4½" below top of deck.

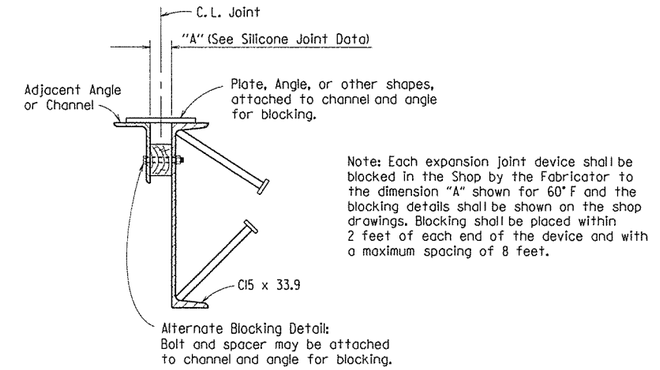
DETAIL OF WELD FOR EXPANSION DEVICE

Looking Ahead
(Stage 3 Construction Similar)



DETAILS OF ALTERNATE ANCHORS AND PLACEMENT OF LONGITUDINAL REINFORCEMENT

Note: As an alternate to ⅝"ø studs, ½"ø x 8" studs spaced as shown may be used. Use weight of ⅝"ø stud as basis of measurement of structural steel in anchors.



Note: Each expansion joint device shall be blocked in the Shop by the Fabricator to the dimension "A" shown for 60° F and the blocking details shall be shown on the shop drawings. Blocking shall be placed within 2 feet of each end of the device and with a maximum spacing of 8 feet.

DETAILS FOR BLOCKING EXPANSION JOINT DEVICE

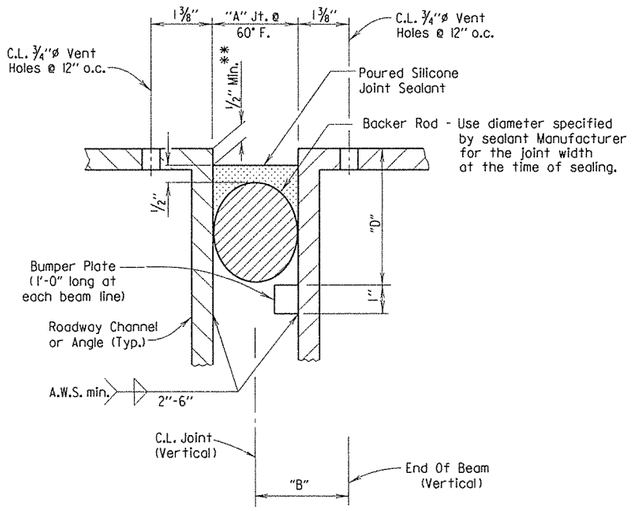
EXPANSION DEVICE INSTALLATION AT END BENTS:

The Contractor may elect to install the expansion device using one of the following two alternatives:

1) The concrete span pour adjacent to joint shall be placed before the end bent backwall is placed. After the end bent backwall forms are in place and the beams erected, the blocked expansion device shall be installed and adjusted for grade. All connection bolts shall be fully tightened prior to placing the deck concrete adjacent to the bent. Immediately prior to pouring the backwall concrete, the blocking shall be removed, and the opening adjusted for temperature and grade.

2) The backwall shall be poured to the optional construction joint after beams are erected. The blocked expansion device shall be installed and adjusted for grade. All connection bolts shall be fully tightened prior to placing the deck concrete adjacent to the bent. Immediately prior to pouring the remainder of the backwall concrete, the blocking shall be removed and the opening adjusted for temperature and grade.

** Recess depth as recommended by the sealant Manufacturer



DETAIL OF POURED SILICONE JOINT

SILICONE JOINT DATA

Bent No(s).	"A" Width Perpendicular to Joint at 24 Hour Average Temperature* Of:			"B" Perpendicular to Joint at 60°F	"D"	Bumper Plate Size
	40°F	60°F	80°F			
1 & 4	1 5/8"	1½"	1⅜"	2"±	4"	1" x ¾"

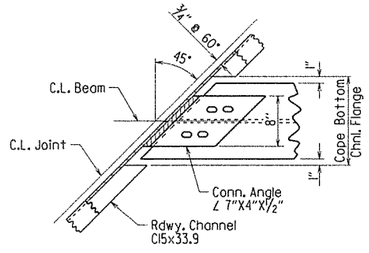
* The temperature used to set the joint opening shall be the approximate average air temperature during the 24 hour period immediately before the bolts are tightened. The Engineer shall establish the temperature. Interpolation of the table may be necessary.

Notes:
The temperature limitations recommended by the sealant Manufacturer shall be observed. The sealant shall be installed only when the average 24 hour air temperature is between 40° and 80° F.

Use an appropriately sized backer rod at the depth shown in the Manufacturer's literature based on the joint width at the time of sealing. Unless otherwise noted, do not install more backer rod than can be sealed in the same day.

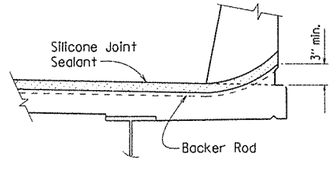
The Contractor shall verify separation of the backer rod from the joint material after the joint material has set.

Backer rods shall be extended beyond length of poured joint in Stage 1 so that the two pieces can be properly spliced together prior to installing sealant for Stages 2 and 3. Manufacturer's recommendations shall be followed to prevent sealant from "running out of joint" during stage construction.

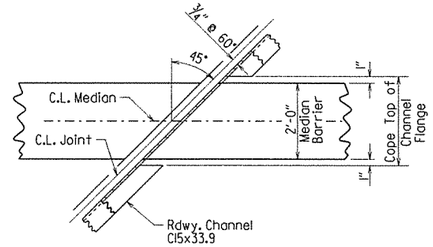


CHANNEL CONNECTION DETAIL

Bridge No. A7025 Shown,
Bridge No. 07344 Similar



JOINT SEAL PLACEMENT AT CURB



CHANNEL COPE DETAIL

Bridge No. A7025 Shown,
Bridge No. 07344 Similar

STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
5-14-15
CHARLES R. ELLIS
BRIDGE ENGINEER

SHEET 13 OF 13
DETAILS OF
185'-0" CONTINUOUS W-BEAM UNITS

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: AMS. DATE: 1/28/15 FILENAME: bbb0107_sl.dgn
CHECKED BY: JNP DATE: 5-13-15 SCALE: No Scale
DESIGNED BY: JNP DATE: 1-15

BRIDGE NO. A7025, 07344 DRAWING NO. 56978

PRINT DATE: 5/12/2015

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		BB0107	198	263
① 07344 -		LAYOUT		- 56979

Notes:
For R/W Data, See Roadway Plans.

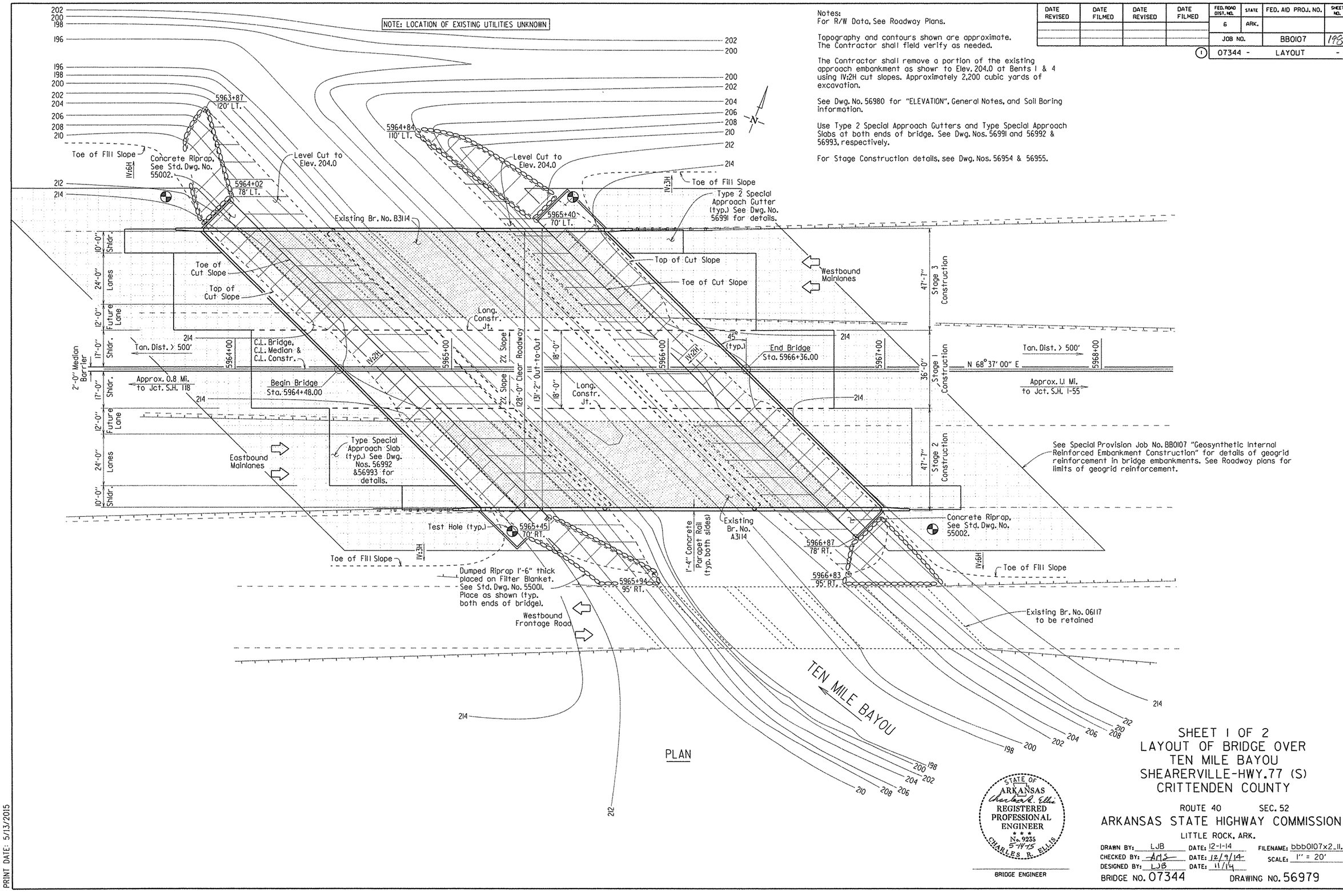
Topography and contours shown are approximate. The Contractor shall field verify as needed.

The Contractor shall remove a portion of the existing approach embankment as showr to Elev. 204.0 at Bents 1 & 4 using 1V:2H cut slopes. Approximately 2,200 cubic yards of excavation.

See Dwg. No. 56980 for "ELEVATION", General Notes, and Soil Boring information.

Use Type 2 Special Approach Gutters and Type Special Approach Slabs at both ends of bridge. See Dwg. Nos. 56991 and 56992 & 56993, respectively.

For Stage Construction details, see Dwg. Nos. 56954 & 56955.



PLAN

STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
5-14-15
CHARLES R. ELLIS

BRIDGE ENGINEER

SHEET 1 OF 2
LAYOUT OF BRIDGE OVER TEN MILE BAYOU
SHEARERVILLE-HWY.77 (S)
CRITTENDEN COUNTY

ROUTE 40 SEC. 52

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: LJB DATE: 12-1-14
CHECKED BY: ~~AMS~~ DATE: 12/9/14
DESIGNED BY: LJB DATE: 11/14

FILENAME: bbb0107x2_11.dgn
SCALE: 1" = 20'

BRIDGE NO. 07344 DRAWING NO. 56979

PRINT DATE: 5/13/2015

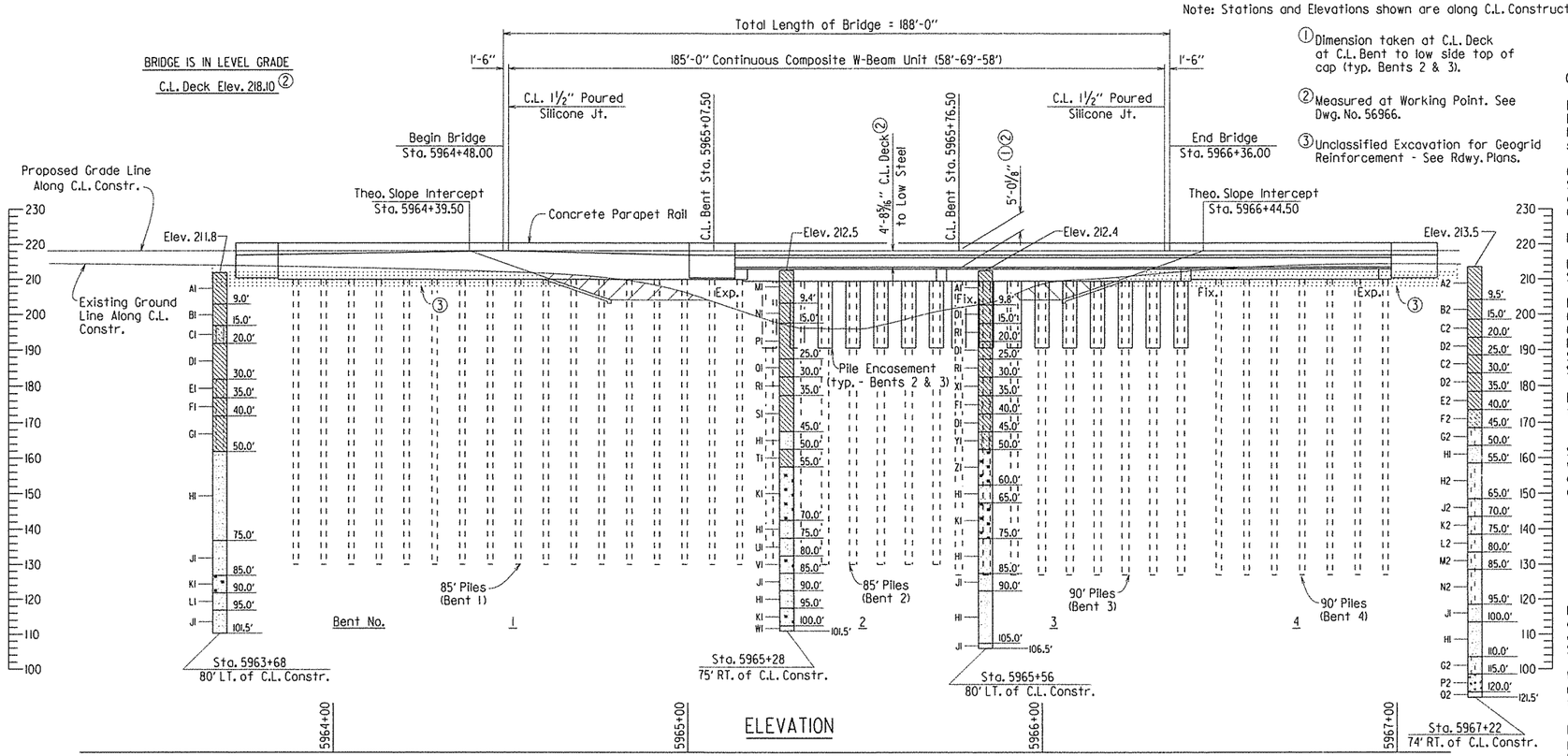
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0I07	199	263
				①	07344 -	LAYOUT	- 56980	

Note: Stations and Elevations shown are along C.L. Construction.

① Dimension taken at C.L. Deck at C.L. Bent to low side top of cap (typ. Bents 2 & 3).

② Measured at Working Point. See Dwg. No. 56966.

③ Unclassified Excavation for Geogrid Reinforcement - See Rdwy. Plans.



"N" VALUES

Sta. 5963+68 80.0' LT. of C.L. Constr.
4.5- 5.5, N=15
9.5- 10.5, N=14
15.5- 16.5, N=4
20.5- 21.5, N=6
25.5- 26.5, N=5
30.5- 31.5, N=5
35.5- 36.5, N=4
40.5- 41.5, N=7
45.5- 46.5, N=10
50.5- 51.5, N=21
55.5- 56.5, N=22
60.5- 61.5, N=21
65.5- 66.5, N=20
70.5- 71.5, N=29
75.5- 76.5, N=33
80.5- 81.5, N=32
85.5- 86.5, N=29
90.5- 91.5, N=53
95.5- 96.5, N=35
100.5-101.5, N=41

Sta. 5965+28 75.0' RT. of C.L. Constr.
4.9- 5.9, N=8
9.9- 10.9, N=7
15.5- 16.5, N=2
20.5- 21.5, N=7
25.5- 26.5, N=5
30.5- 31.5, N=3
35.5- 36.5, N=1
40.5- 41.5, N=4
45.5- 46.5, N=17
50.5- 51.5, N=2
55.5- 56.5, N=19
60.5- 61.5, N=16
65.5- 66.5, N=29
70.5- 71.5, N=25
75.5- 76.5, N=18
80.5- 81.5, N=33
85.5- 86.5, N=39
90.5- 91.5, N=29
95.5- 96.5, N=25
100.5-101.5, N=34

Sta. 5965+56 80.0' LT. of C.L. Constr.
5.3- 6.3, N=11
10.3- 11.3, N=7
15.5- 16.5, N=3
20.5- 21.5, N=6
25.5- 26.5, N=4
30.5- 31.5, N=3
35.5- 36.5, N=3
40.5- 41.5, N=6
45.5- 46.5, N=3
50.5- 51.5, N=9
55.5- 56.5, N=10
60.5- 61.5, N=19
65.5- 66.5, N=21
70.5- 71.5, N=13
75.5- 76.5, N=17
80.5- 81.5, N=22
85.5- 86.5, N=44
90.5- 91.5, N=25
95.5- 96.5, N=25
100.5-101.5, N=26
105.5-106.5, N=40

Sta. 5967+22 74.0' RT. of C.L. Constr.
5.0- 6.0, N=9
10.0- 11.0, N=7
15.5- 16.5, N=2
20.5- 21.5, N=5
25.5- 26.5, N=4
30.5- 31.5, N=6
35.5- 36.5, N=2
40.5- 41.5, N=17
45.5- 46.5, N=17
50.5- 51.5, N=20
55.5- 56.5, N=21
60.5- 61.5, N=22
65.5- 66.5, N=28
70.5- 71.5, N=37
75.5- 76.5, N=31
80.5- 81.5, N=13
85.5- 86.5, N=43
90.5- 91.5, N=36
95.5- 96.5, N=33
100.5-101.5, N=19
105.5-106.5, N=25
110.5-111.5, N=26
115.5-116.5, N=28
120.5-121.5, N=28

BORING LEGEND

AI-Moist, Stiff, Gray Clay with some Organic Matter
BI-Moist, Stiff, Gray Sandy Clay with Trace of Cemented Nodules
CI-Moist, Very Loose, Gray Sandy, Clayey Silt
DI-Moist, Medium Stiff, Gray Clay
EI-Moist, Medium Stiff, Gray Silty Clay
FI-Moist, Soft, Gray Clay with Silt
GI-Wet, Medium Stiff to Stiff, Gray Clay with Silt
HI-Wet, Medium Dense, Gray Sand
JI-Wet, Dense, Gray Sand
KI-Wet, Medium Dense, Gray Sand with Organic Matter
LI-Wet, Very Dense, Gray Sand
MI-Moist, Medium Stiff, Gray Clay with Sand, some Gravel and Organic Matter
NI-Moist, Medium Stiff, Gray Clay with some Organic Matter
PI-Moist, Soft to Medium Stiff, Gray Clay with Trace of Organic Matter
QI-Moist, Medium Stiff, Gray Clay with Trace of Sand and Organic Matter
RI-Moist, Soft, Gray Clay
SI-Wet, Very Soft to Soft, Gray Clay
TI-Wet, Soft, Gray Clay with Sand
UI-Wet, Medium Dense, Gray Sand with Trace of Organic Matter
VI-Wet, Dense, Gray Sand with Organic Matter
WI-Wet, Dense, Gray Sand with Trace of Gravel
XI-Moist, Soft, Gray Sandy Clay
YI-Moist, Very Loose, Gray Clayey Silt
ZI-Wet, Loose, Gray Sand with Organic Matter (Wood)
A2-Moist, Stiff, Gray and Brown Clay
B2-Moist, Medium Stiff, Gray and Brown Clay
C2-Wet, Soft, Gray Clay
D2-Wet, Medium Stiff, Gray Clay
E2-Wet, Soft, Gray Clay with some Sand
F2-Wet, Medium Dense, Gray Clayey Sand
G2-Wet, Medium Dense, Gray Sand with Silt
H2-Wet, Medium Dense, Gray Silty Sand
J2-Wet, Medium Dense, Gray Silty Sand with Trace of Organic Matter
K2-Wet, Dense, Gray Sand with Silt and Trace of Organic Matter
L2-Wet, Dense, Gray Sand with Silt and Trace of Gravel
M2-Wet, Medium Dense, Gray Sand with Silt and some Gravel
N2-Wet, Dense, Gray Sand with Silt
P2-Wet, Medium Dense, Gray Sand with Gravel
Q2-Wet, Medium Dense, Gray Sand with some Gravel

GENERAL NOTES:

BENCH MARK: Existing Bridge Nos. A&B3114 top of deck at outside gutterline (low side face of rail), Elev. 214.94 (Level Grade). Contractor shall field verify and use highest deck elevation, if differs between bridges and bridge ends, to establish benchmark elevation. Benchmark elevation shall be submitted for the Engineer's approval prior to construction of new bridge.

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

DESIGN SPECIFICATIONS: AASHTO LRFD Bridge Design Specifications, Sixth Edition (2012) with 2013 Interims.

LIVE LOADING: HL-93
SEISMIC PERFORMANCE ZONE: 4

MATERIALS AND STRENGTHS

Class S(AE) Concrete (superstructure)	f'c = 4,000 psi
Class S Concrete (substructure)	f'c = 3,500 psi
Reinforcing Steel (Gr. 60, AASHTO M 31 or M 322, Type A)	fy = 60,000 psi
Structural Steel (AASHTO M 270, Gr. 36)	Fy = 36,000 psi
Structural Steel (AASHTO M 270, Gr. 50W)	Fy = 50,000 psi

BORING LOGS: Boring logs may be obtained from the Construction Contract Procurement Section of the Program Management Division.

STEEL SHELL PILING: Piling for all bents shall be concrete filled steel shell piles and shall be driven with an approved air, steam, or diesel hammer to the minimum ultimate bearing capacity per pile and minimum tip elevations shown in the table below. Piling in end bents shall be driven after embankment to bottom of cap is in place.

Bent No.	Pile Diameter	Minimum Tip Elevation	Ultimate Bearing Capacity	Minimum Rated Hammer Energy
1	18"ø	132.0	200 Tons	41,000
2	24"ø	132.0	342 Tons	84,000
3	24"ø	127.0	342 Tons	84,000
4	18"ø	127.0	200 Tons	41,000

Lengths of piling shown are assumed for estimating quantities only. Actual lengths shall be determined in the field. No additional payment will be made for cut-off or build-up. Test piles are not required but may be driven for the Contractor's information in accordance with Subsection 805.08(g).

Water jetting or other methods as approved by the Engineer may be required to achieve the required tip elevation. This work shall not be paid for directly, but shall be considered incidental to the item "Steel Shell Piling".

DRIVING SYSTEM: The driving system approval and the ultimate bearing capacity determination for piling shall be based on the requirements of Subsection 805.09(b), "Method B-Wave Equation Analysis (WEAP)". The estimated minimum rated hammer energy in foot pounds per blow required to obtain the ultimate bearing capacities are as shown in the above table.

PILE ENCASEMENT: Pile encasement for Bents 2 and 3 shall extend from bottom of cap to 3' below natural ground. See Std. Dwg. No. 55021 for additional information.

BRIDGE DECK: The concrete bridge deck shall be given a tine finish as specified for final finishing in Subsection 802.19 for Class 5 Tined Bridge Roadway Surface Finish.

DETAIL DRAWINGS:	DRAWING NOS.
Stage Construction	56954 & 56955
End Bents	56981 - 56985
Intermediate Bents	56986 - 56989
Elastomeric Bearings	56965
185'-0" Continuous W-Beam Unit	56966 - 56978
Concrete Filled Steel Shell Piling	55021
Type 2 Speical Approach Gutters	56991
Type Special Approach Slabs	56992 & 56993

EXISTING BRIDGES: Existing Bridge Nos. A3114 and B3114 (Log Mile 276.05) are 42.0' wide and 150' long and consist of reinforced concrete slabs supported by concrete pile bents.

REMOVAL AND SALVAGE: Existing Bridge Nos. A3114 and B3114 shall be removed in accordance with Section 205. All material from the existing bridges shall become the property of the Contractor.

MAINTENANCE OF TRAFFIC: See Stage Construction Dwg. Nos. 56954 & 56955 and Roadway Plans for additional details.

HYDRAULICS: Bridge was designed to provide equal or greater waterway area than the existing bridges. Drainage Area = 32 sq. miles.

STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
5-14-15
CHARLES R. ELLIS

BRIDGE ENGINEER

SHEET 2 OF 2
LAYOUT OF BRIDGE OVER TEN MILE BAYOU
SHEARERVILLE-HWY.77 (S)
CRITTENDEN COUNTY

ROUTE 40 SEC. 52

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: LJB DATE: 12-1-14 FILENAME: bbb0107x2_11.dgn
CHECKED BY: ~~AMS~~ DATE: 12/9/14 SCALE: 1" = 20'
DESIGNED BY: LJB DATE: 11/14

BRIDGE NO. 07344 DRAWING NO. 56980

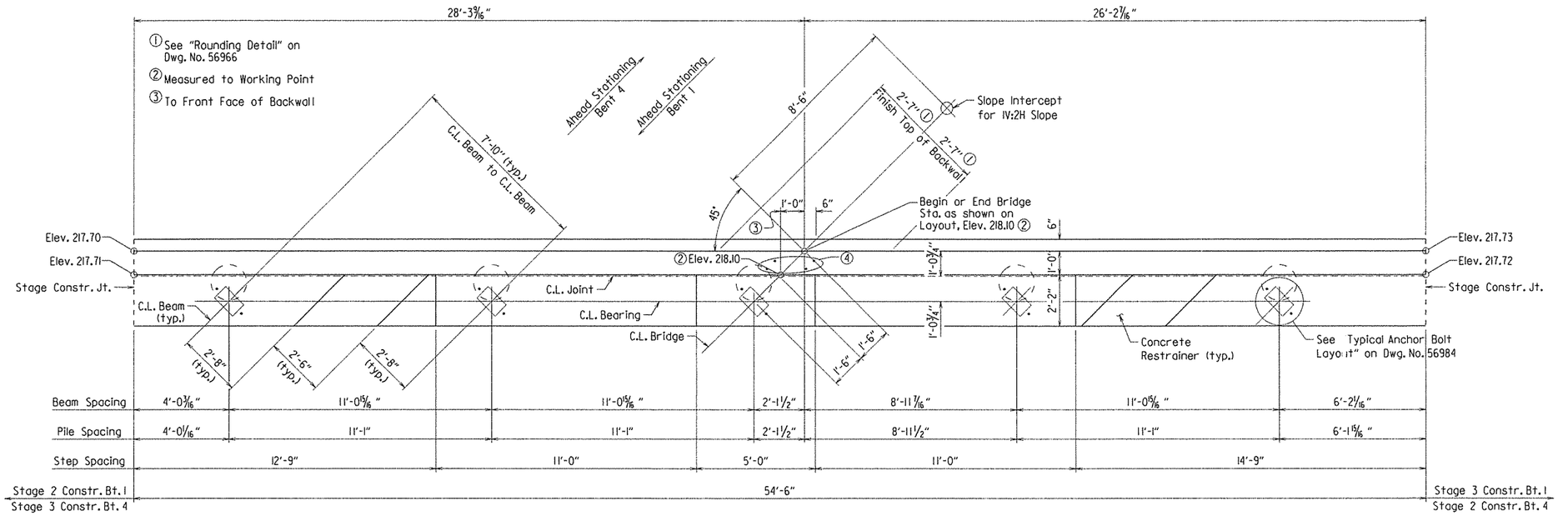
PRINT DATE: 5/13/2015

Note: Class I Protective Surface Treatment shall be applied to the top of the backwall.

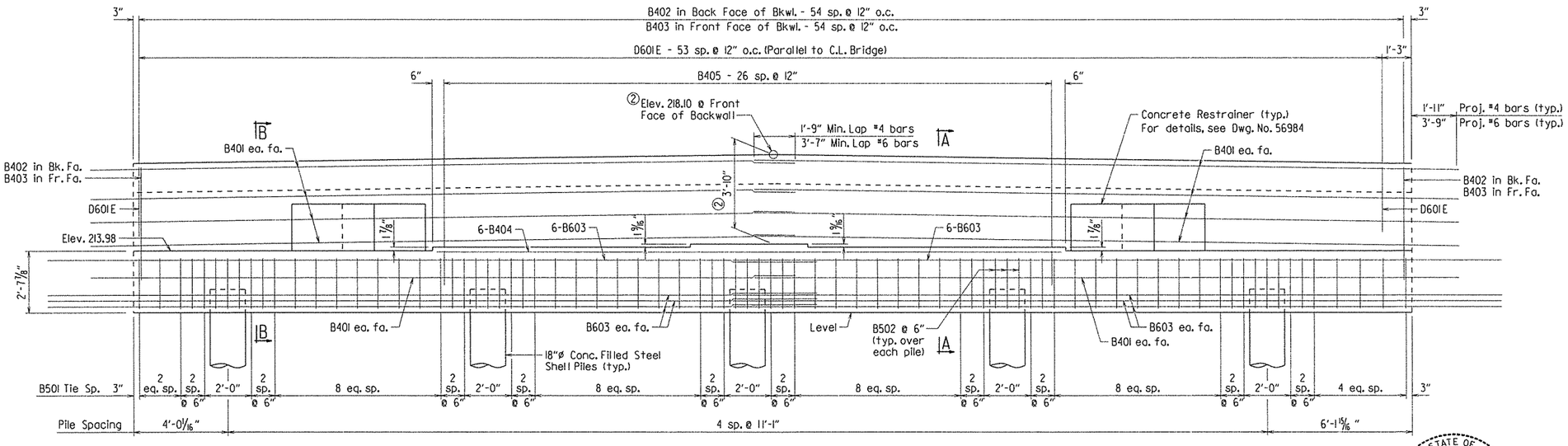
④ Insert threaded dowels with mechanical couplers in the backwall for the median barrier. For details, see Dwg. No. 56993.

For details of "Section A-A", "Section B-B", "Detail of Weld Location for Expansion Device" and General Notes, see Dwg. No. 56984. For details of Wing & Rail and Bar List, see Dwg. No. 56985.

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	263	263
				①	07344 -	END BENTS	- 56981	



PLAN - STAGE I CONSTRUCTION



ELEVATION - STAGE I CONSTRUCTION

Looking Back - Bent 1
Looking Ahead - Bent 4

NOTE: Longitudinal reinforcing bars in the cap and backwall may require threaded type mechanical rebar splices to minimize interference with Stage 2 or 3 pile driving. Mechanical couplers may be used in the regions of conflict only, shall be a OPL approved type and shall maintain a minimum concrete cover of 2". Mechanical couplers shall develop at least 125% of the specified yield strength of the reinforcing steel. Mechanical couplers, if required, shall be considered subsidiary to the item "Reinforcing Steel-Bridge (Grade 60)".

STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
5-14-15
CHARLES R. ELLIS

BRIDGE ENGINEER

SHEET 1 OF 5
DETAILS OF END BENTS 1 AND 4
TEN MILE BAYOU

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: JYP DATE: 2-23-15
CHECKED BY: AMS DATE: 4/6/15
DESIGNED BY: JYP DATE: 2-15

FILENAME: bbb0107x2_bl.dgn
SCALE: 3/8" = 1'-0"

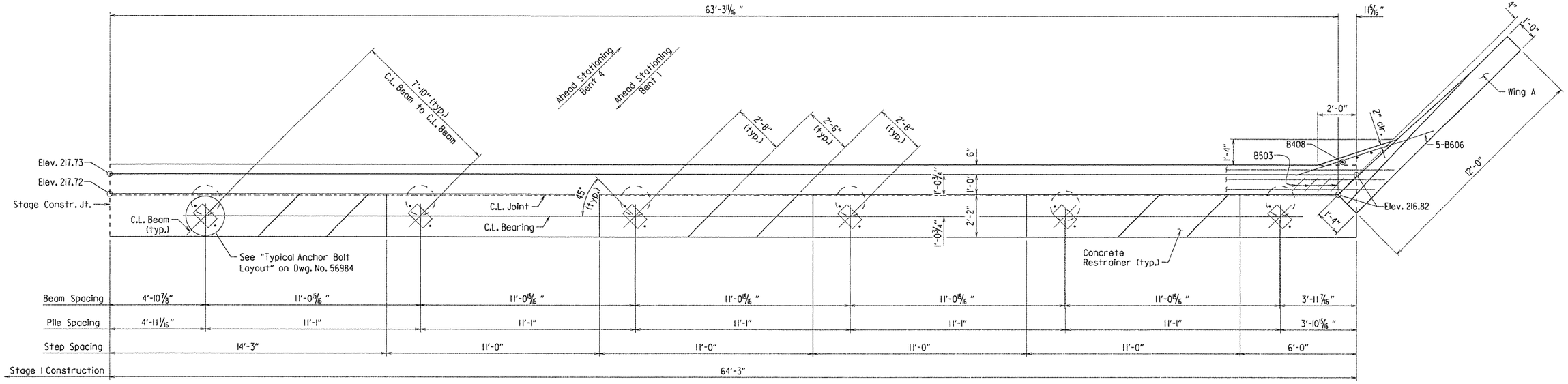
BRIDGE NO. 07344 DRAWING NO. 56981

PRINT DATE: 5/13/2015

Note: Class I Protective Surface Treatment shall be applied to the top of the backwall and to the roadway face and top of the wing rails.

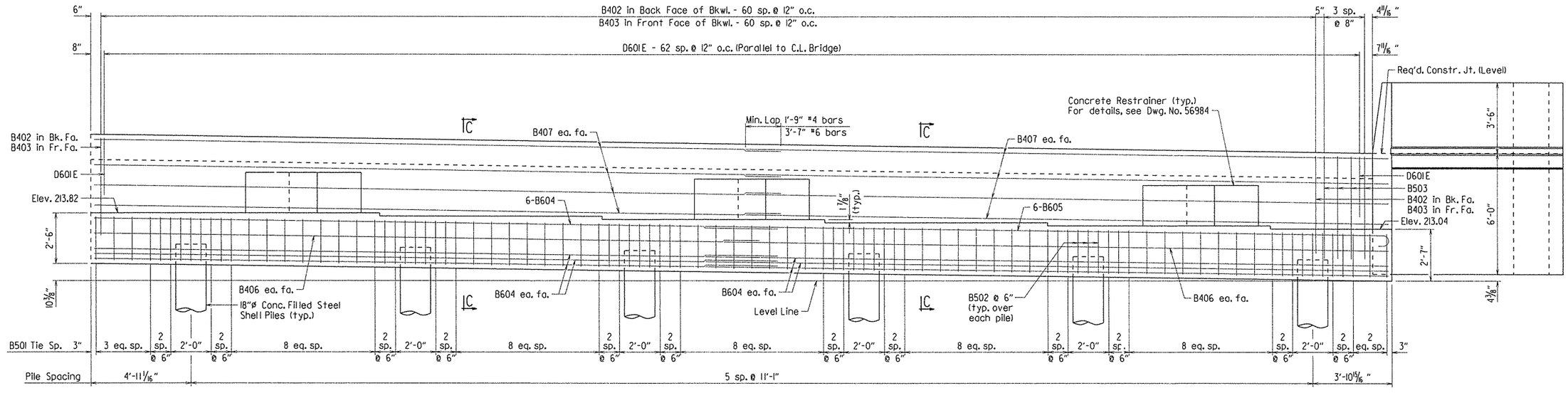
For details of "Section C-C", "Detail of Weld Location for Expansion Device", "Construction Joint Detail" and General Notes, see Dwg. No. 56984. For details of Wing & Rail and Bar List, see Dwg. No. 56985.

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	201	203
				(1) 07344 -		END BENTS		- 56982



PLAN - STAGE 2 & 3 CONSTRUCTION

Bent I Stage 3, Bent 4 Stage 2



ELEVATION - STAGE 2 & 3 CONSTRUCTION

Looking Back - Bent I Stage 3
Looking Ahead - Bent 4 Stage 2

STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
5-14-15
CHARLES R. ELLIS

BRIDGE ENGINEER

SHEET 2 OF 5
DETAILS OF END BENTS I AND 4
TEN MILE BAYOU

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: JYP DATE: 2-23-15
CHECKED BY: AMS DATE: 4/6/15
DESIGNED BY: JYP DATE: 2-15
FILENAME: bbb0107x2_bl.dgn
SCALE: 3/8" = 1'-0"

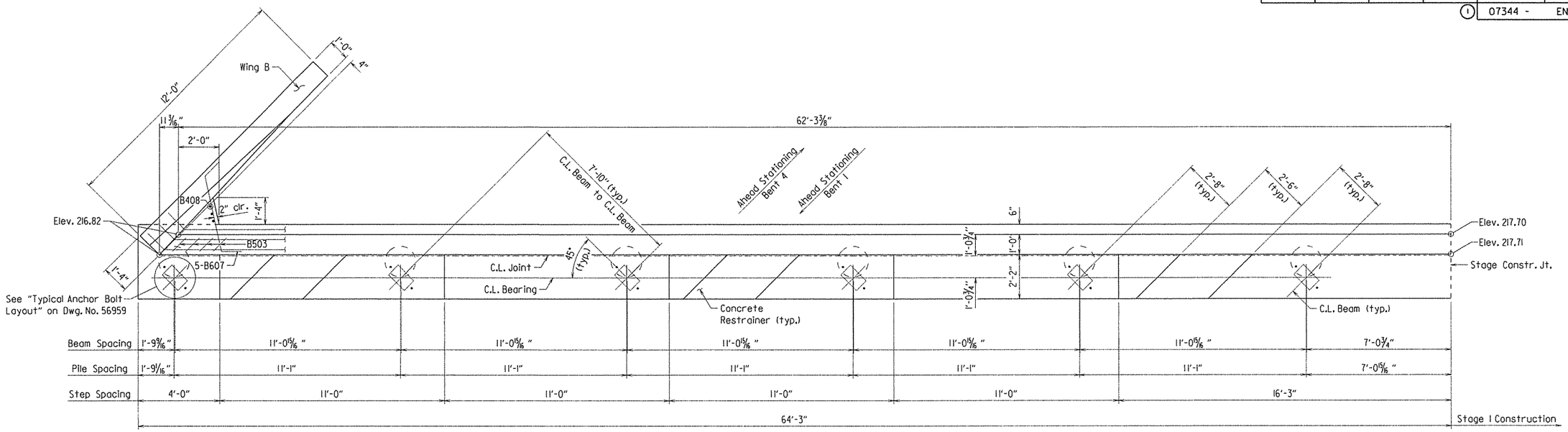
BRIDGE NO. 07344 DRAWING NO. 56982

PRINT DATE: 5/13/2015

Note: Class I Protective Surface Treatment shall be applied to the top of the backwall and to the roadway face and top of the wing rails.

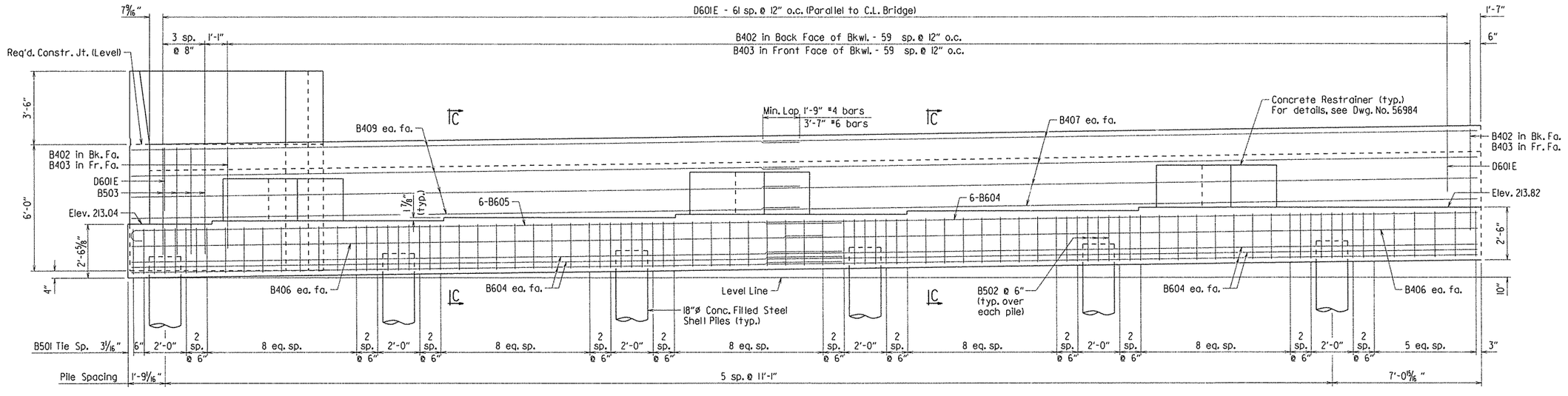
For details of "Section C-C", "Detail of Weld Location for Expansion Device", "Construction Joint Detail" and General Notes, see Dwg. No. 56984. For details of Wing & Rail and Bar List, see Dwg. No. 56985.

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	262	263
				(1) 07344 -		END BENTS	- 56983	



PLAN - STAGE 2 & 3 CONSTRUCTION

Bent 1 Stage 2, Bent 4 Stage 3



ELEVATION - STAGE 2 & 3 CONSTRUCTION

Looking Back - Bent 1 Stage 2
Looking Ahead - Bent 4 Stage 3

STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
5-14-15
CHARLES R. ELLIS
BRIDGE ENGINEER

SHEET 3 OF 5
DETAILS OF END BENTS 1 AND 4
TEN MILE BAYOU

ROUTE SEC.

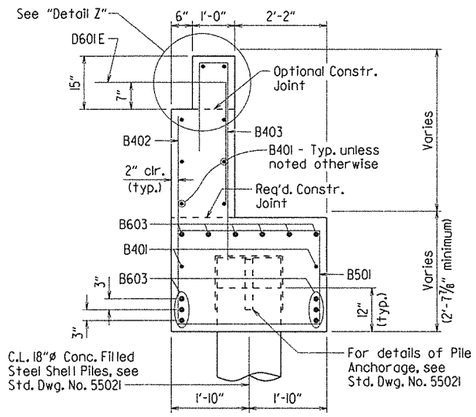
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: JYP DATE: 2-23-15
CHECKED BY: AMS DATE: 4/6/15
DESIGNED BY: JYP DATE: 2-15
FILENAME: bbb0107x2_bl.dgn
SCALE: 3/8" = 1'-0"

BRIDGE NO. 07344 DRAWING NO. 56983

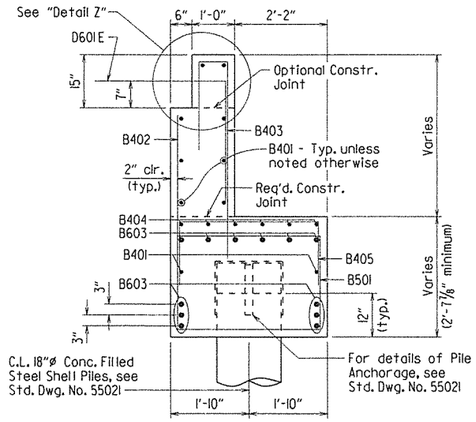
PRINT DATE: 5/13/2015

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	203	263
				(1)	07344 -	END BENTS	- 56984	



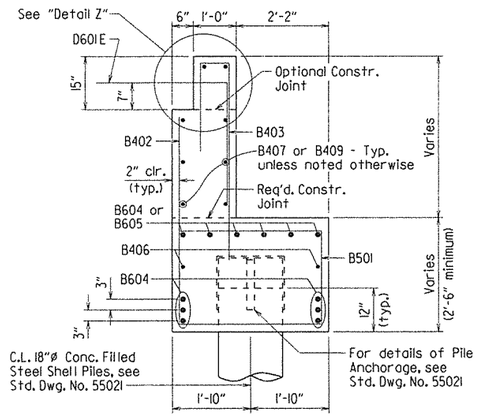
SECTION A-A

Stage 1 Construction



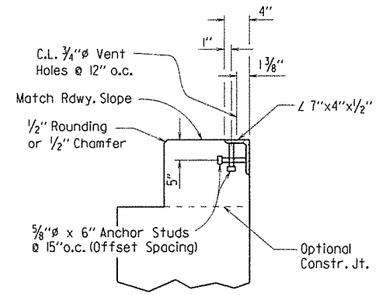
SECTION B-B

Stage 1 Construction



SECTION C-C

Stage 2 & 3 Construction

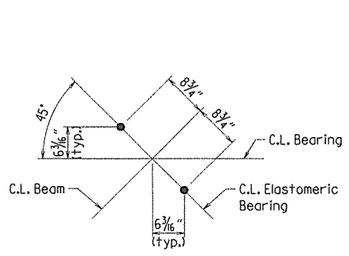


NOTE: For additional joint details, see Dwg. No. 56978.

DETAIL Z

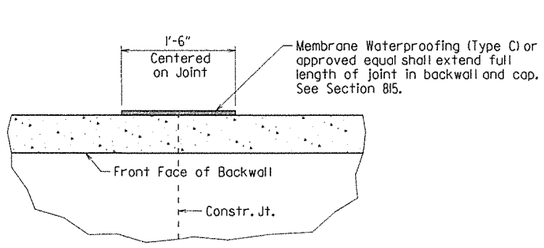
NOTE: Concrete shall be hand packed under the joint armor in the backwall.

NOTE: The Backwall above the required construction joint shall not be poured until the beams are in place. Backwall may be placed prior to placing the adjacent concrete deck only if the optional backwall construction joint is used. See Dwg. No. 56978, "Expansion Device Installation at End Bents", for additional information.



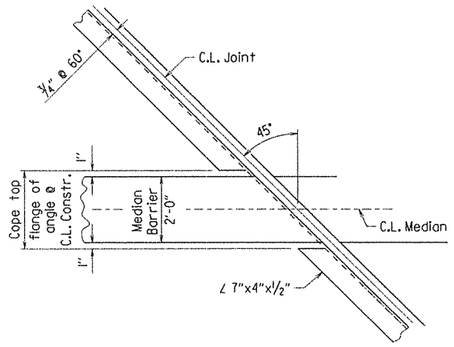
Note: For details of elastomeric bearings, see Dwg. No. 56965.

TYPICAL ANCHOR BOLT LAYOUT

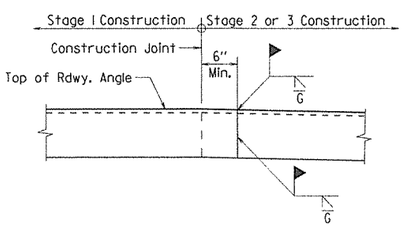


Note: Payment for membrane to be considered subsidiary to "Class S Concrete-Bridge".

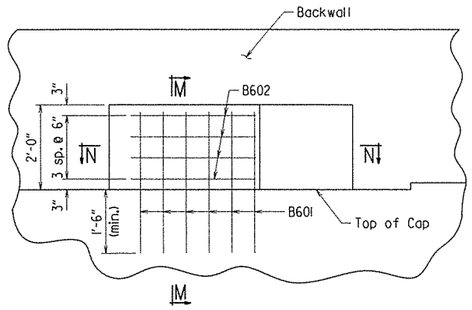
CONSTRUCTION JOINT DETAIL



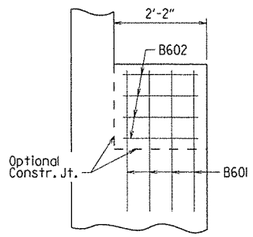
ANGLE COPE DETAIL



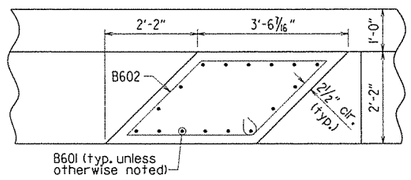
DETAIL OF WELD LOCATION FOR EXPANSION DEVICE



ELEVATION - CONCRETE RESTRAINER



SECTION M-M



SECTION N-N

GENERAL NOTES

All concrete shall be Class "S" with a minimum 28 day compressive strength f'c = 3,500 psi. Concrete shall be poured in the dry and all exposed corners to be chamfered ¾" unless otherwise noted.

All reinforcing steel shall be Grade 60 (yield strength = 60,000 psi) conforming to AASHTO M 31 or M 322, Type A, with mill test reports.

Top reinforcing bars and pile anchorage in cap shall be properly placed to avoid interference with anchor bolts.

Structural steel in end bents shall be AASHTO M 270, Gr. 50W and shall be paid for as "Structural Steel in Beam Spans (M 270, Gr. 50W)".

For additional information, see Layout.

STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
5-14-15
CHARLES R. ELLIS

BRIDGE ENGINEER

SHEET 4 OF 5
DETAILS OF END BENTS 1 AND 4
TEN MILE BAYOU

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: JYP DATE: 2-23-15 FILENAME: bbb0107x2_bl.dgn

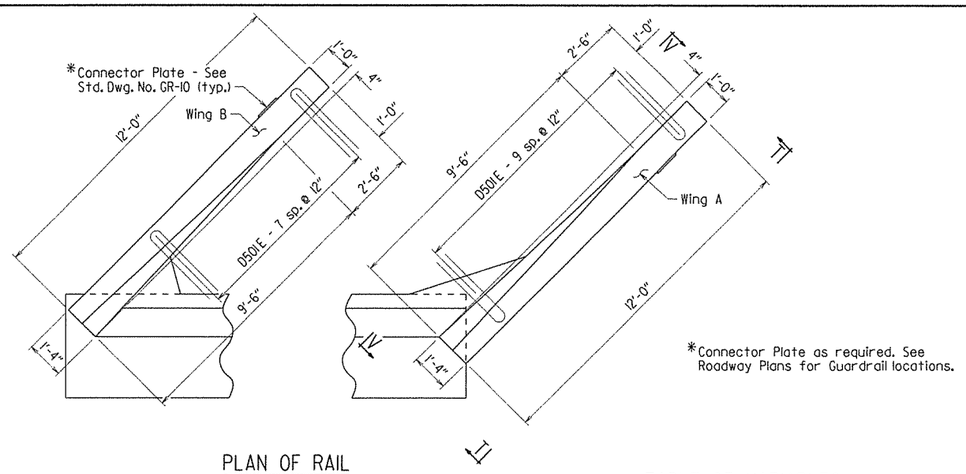
CHECKED BY: AMS DATE: 4/6/15 SCALE: ⅜" = 1'-0"

DESIGNED BY: JYP DATE: 2-15

BRIDGE NO. 07344 DRAWING NO. 56984

PRINT DATE: 5/13/2015

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	264	263
				①	07344 -	END BENTS	- 56985	



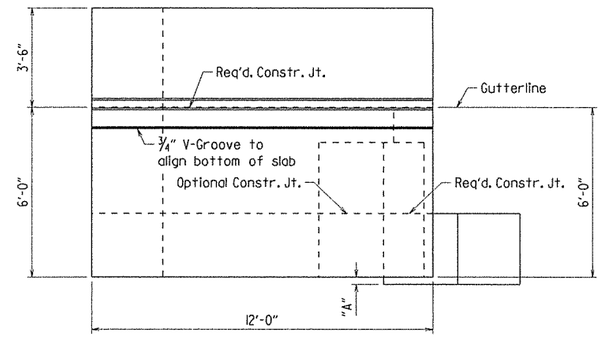
*Connector Plate as required. See Roadway Plans for Guardrail locations.

PLAN OF RAIL

3/8" = 1'-0"

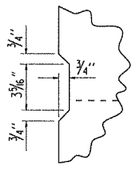
TABLE OF VARIABLES

Bent	Wing	"A"
1	A	4 3/8"
	B	4"
4	A	4 3/8"
	B	4"



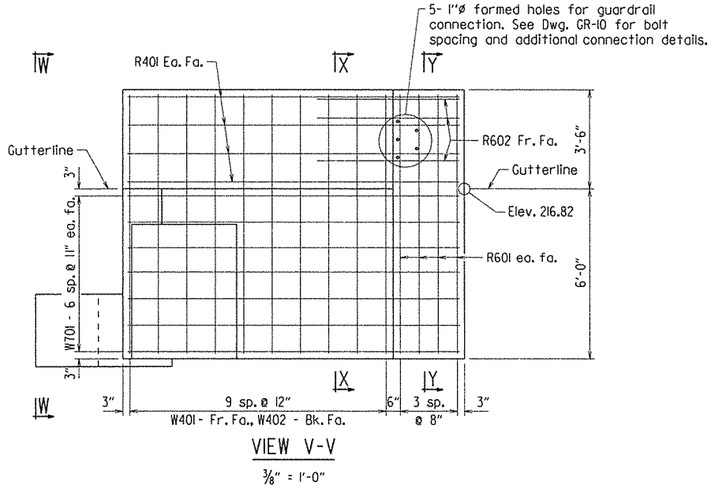
VIEW T-T

3/8" = 1'-0"



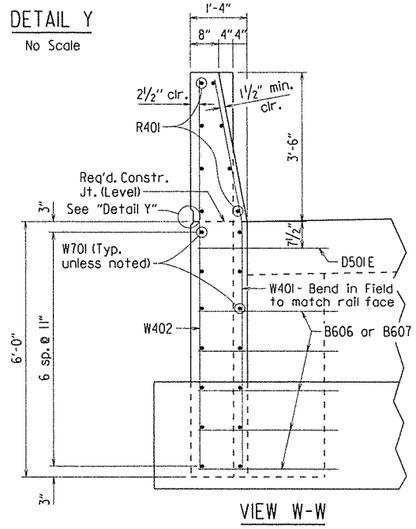
DETAIL Y

No Scale



VIEW V-V

3/8" = 1'-0"



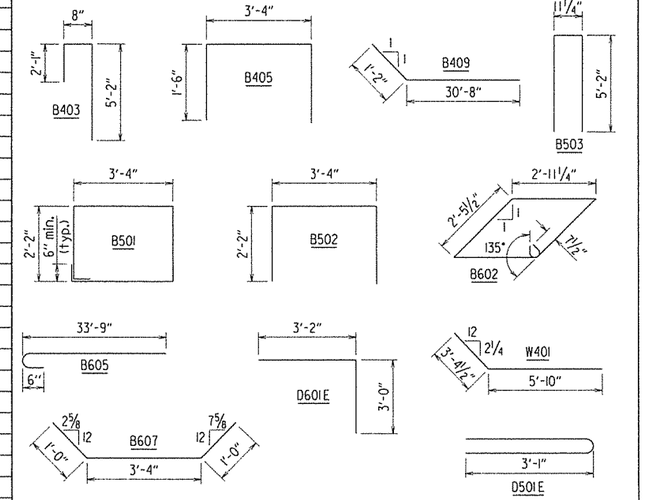
VIEW W-W

No Scale

BAR LIST - PER BENT

MARK	NO. REQ'D. STAGE 1	STAGE 2 BENT 1 OR STAGE 3 BENT 4	STAGE 3 BENT 1 OR STAGE 2 BENT 4	LENGTH	P.D.
B401	20	-	-	30'-1"	Str.
B402	55	60	61	4'-0"	Str.
B403	55	60	61	7'-9"	2"
B404	6	-	-	26'-8"	Str.
B405	27	-	-	6'-2"	2"
B406	-	4	4	32'-10"	Str.
B407	-	8	16	33'-11"	Str.
B408	-	3	3	4'-5"	Str.
B409	-	8	-	31'-10"	2"
B501	64	75	76	11'-6"	2 1/2"
B502	15	18	18	7'-5"	2 1/2"
B503	-	4	4	11'-1"	2 1/2"
B601	32	48	48	3'-4"	Str.
B602	8	12	12	11'-8"	4 1/2"
B603	24	-	-	32'-10"	Str.
B604	-	18	18	33'-9"	Str.
B605	-	6	6	34'-5"	4 1/2"
B606	-	-	5	7'-6"	Str.
B607	-	5	-	5'-4"	4 1/2"
D501E	-	8	10	6'-4"	3 3/4"
D601E	54	62	63	6'-0"	4 1/2"
R401	-	8	8	11'-8"	Str.
R601	-	8	8	9'-2"	Str.
R602	-	3	3	5'-0"	Str.
W401	-	10	10	9'-3"	2"
W402	-	10	10	9'-2"	Str.
W701	-	14	14	11'-8"	Str.

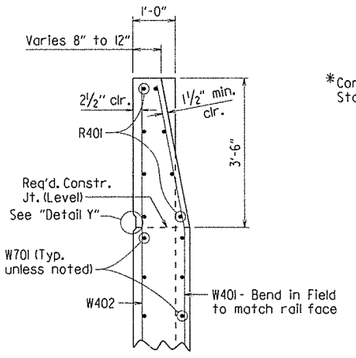
BENDING DIAGRAMS



(Dimensions are out to out of bars)

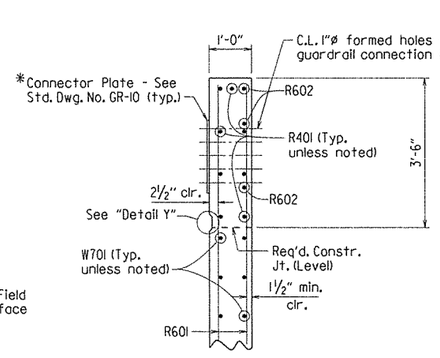
NOTES:
Bars with an "E" suffix are to be epoxy coated.

Bar lengths may need to be adjusted if mechanical couplers are used to minimize interference with Stage 2 or 3 pile driving.



SECTION X-X

No Scale



SECTION Y-Y

No Scale

STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
5-14-15
CHARLES R. ELLIS

BRIDGE ENGINEER

SHEET 5 OF 5
DETAILS OF END BENTS 1 AND 4
TEN MILE BAYOU

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

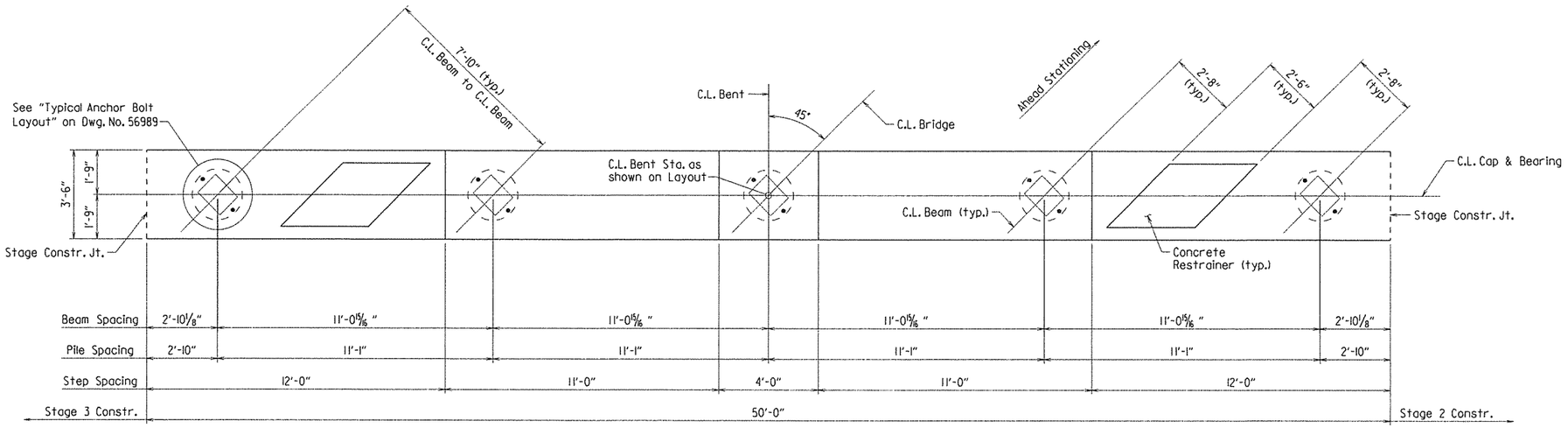
LITTLE ROCK, ARK.

DRAWN BY: JYP DATE: 2-23-15
CHECKED BY: AMS DATE: 4/6/15
DESIGNED BY: JYP DATE: 2-15
FILENAME: bbb0107x2_bl.dgn
SCALE: 3/8" = 1'-0"

BRIDGE NO. 07344 DRAWING NO. 56985

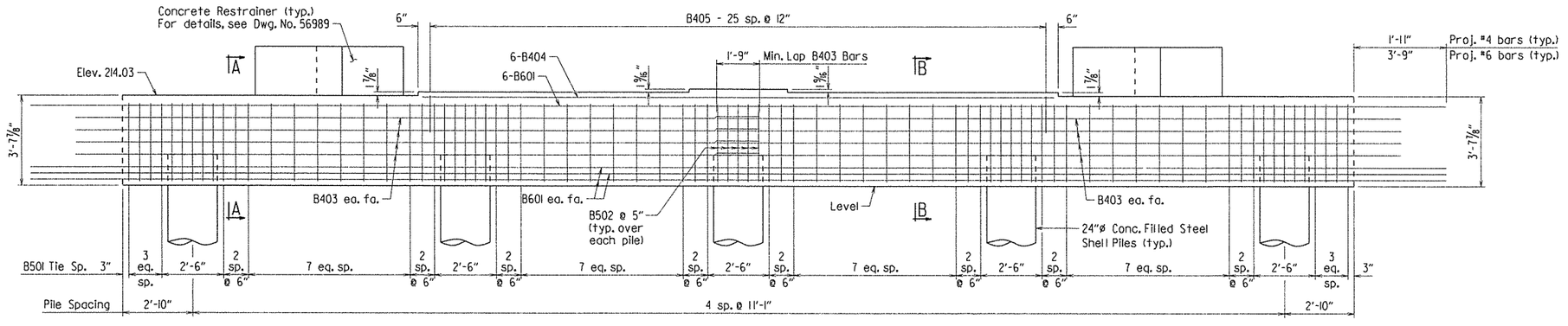
PRINT DATE: 5/13/2015

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	205	223
				(1) 07344 -		INT. BENTS	- 56986	



PLAN - STAGE I CONSTRUCTION

3/8" = 1'-0"



ELEVATION - STAGE I CONSTRUCTION

Looking Ahead
3/8" = 1'-0"

For Sections "A-A" & "B-B" and Bar List, see Dwg. No. 56989.

NOTE: Longitudinal reinforcing bars in the cap may require threaded type mechanical rebar splices to minimize interference with Stage 2 or 3 pile driving. Mechanical couplers may be used in the regions of conflict only, shall be a OPL approved type and shall maintain a minimum concrete cover of 2". Mechanical couplers shall develop at least 125% of the specified yield strength of the reinforcing steel. Mechanical couplers, if required, shall be considered subsidiary to the item "Reinforcing Steel-Bridge (Grade 60)".

STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
5-14-15
CHARLES R. ELLIS

BRIDGE ENGINEER

SHEET 1 OF 4
DETAILS OF BENTS 2 AND 3
TEN MILE BAYOU

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: JYP DATE: 2-24-15
CHECKED BY: AMS DATE: 4/6/15
DESIGNED BY: JYP DATE: 2-15

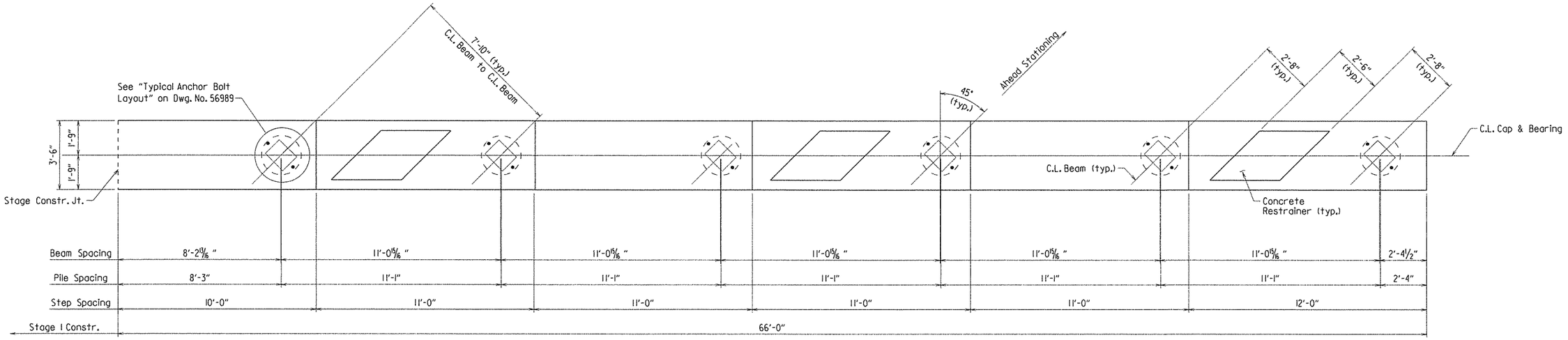
FILENAME: bbb0107x2_b2.dgn
SCALE: As Noted

BRIDGE NO. 07344 DRAWING NO. 56986

PRINT DATE: 5/13/2015

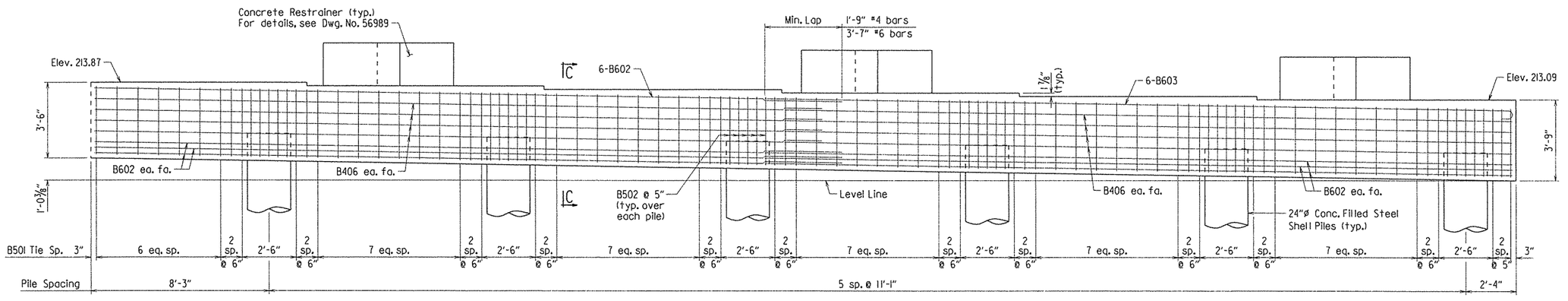
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		BB0107	26	263
①	07344 -	INT. BENTS	- 56987	



PLAN - STAGE 2 CONSTRUCTION

3/8" = 1'-0"



ELEVATION - STAGE 2 CONSTRUCTION

Looking Ahead
3/8" = 1'-0"

For Sections "A-A" & "B-B" and Bar List, see Dwg. No. 56989.

STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
5-14-15
CHARLES R. ELLIS
BRIDGE ENGINEER

SHEET 2 OF 4
DETAILS OF BENTS 2 AND 3
TEN MILE BAYOU

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

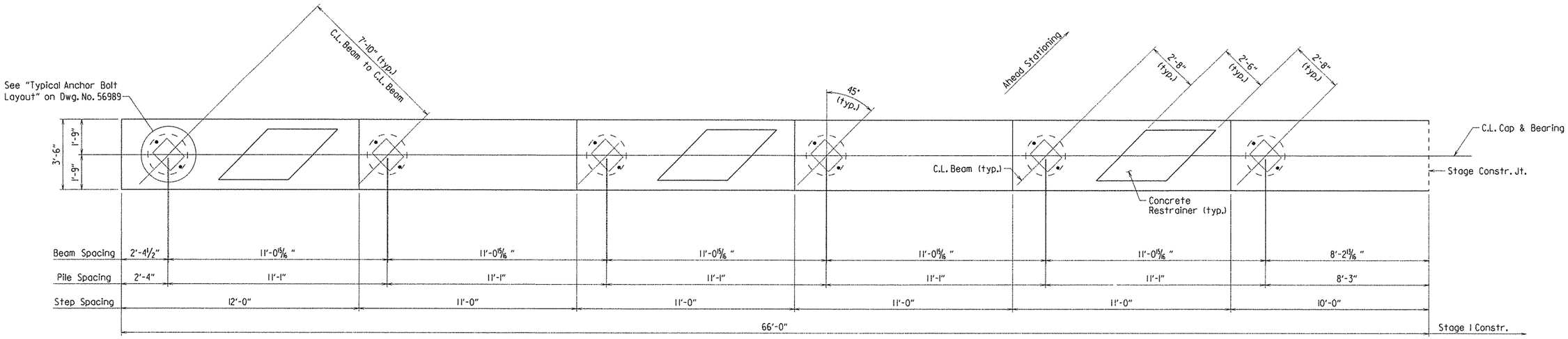
LITTLE ROCK, ARK.

DRAWN BY: JYP DATE: 2-24-15
CHECKED BY: AMS DATE: 4/6/15
DESIGNED BY: JYP DATE: 2-15
FILENAME: bbb0107x2_b2.dgn
SCALE: As Noted

BRIDGE NO. 07344 DRAWING NO. 56987

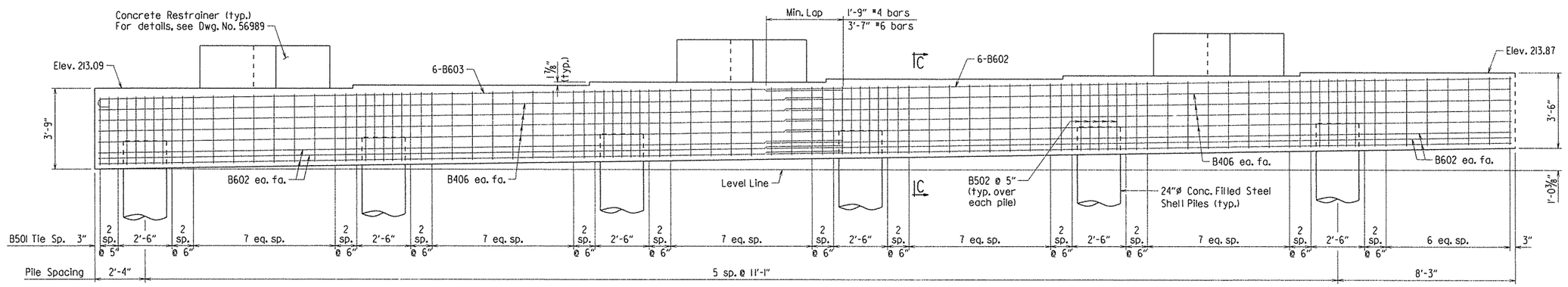
PRINT DATE: 5/13/2015

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	207	263
				①	07344 -	INT. BENTS	- 56988	



PLAN - STAGE 3 CONSTRUCTION

⅜" = 1'-0"



ELEVATION - STAGE 3 CONSTRUCTION

Looking Ahead

⅜" = 1'-0"

For Sections "A-A" & "B-B" and Bar List, see Dwg. No. 56989.

STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9035
5-14-15
CHARLES R. ELLIS

BRIDGE ENGINEER

SHEET 3 OF 4
DETAILS OF BENTS 2 AND 3
TEN MILE BAYOU

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: JYP DATE: 2-24-15 FILENAME: bbb0107x2_b2.dgn

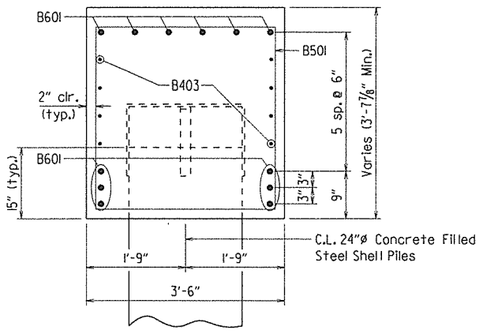
CHECKED BY: AMS DATE: 4/6/15 SCALE: As Noted

DESIGNED BY: JYP DATE: 2-15

BRIDGE NO. 07344 DRAWING NO. 56988

PRINT DATE: 5/13/2015

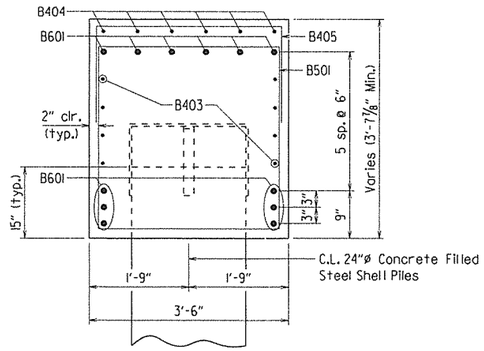
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	208	263
				①	07344 -	INT. BENTS	- 56989	



Note: For details of piles and pile anchorage, see Std. Dwg. No. 55021.

SECTION A-A

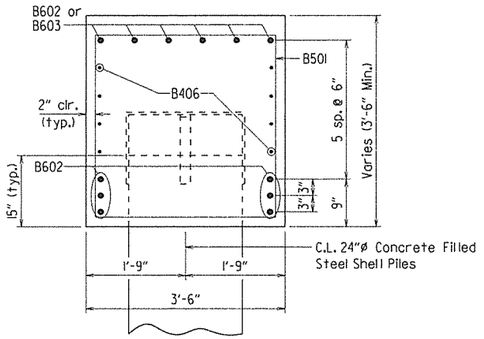
Stage 1 Construction
¾" = 1'-0"



Note: For details of piles and pile anchorage, see Std. Dwg. No. 55021.

SECTION B-B

Stage 1 Construction
¾" = 1'-0"



Note: For details of piles and pile anchorage, see Std. Dwg. No. 55021.

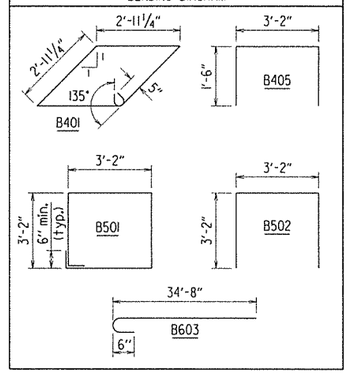
SECTION C-C

Stage 2 or 3 Construction
¾" = 1'-0"

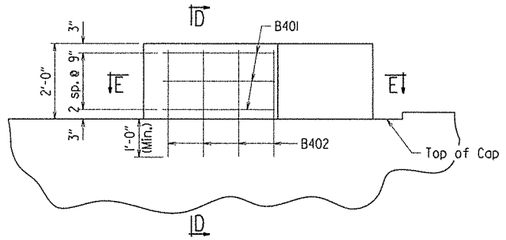
BAR LIST - PER BENT

MARK	NO. REQ'D. STAGE 1	NO. REQ'D. STAGE 2 OR STAGE 3	LENGTH	P.D.
B401	6	9	12'-3"	3"
B402	24	36	2'-10"	Str.
B403	16	-	27'-10"	Str.
B404	6	-	25'-8"	Str.
B405	26	-	6'-0"	2"
B406	-	16	33'-9"	Str.
B501	56	72	13'-2"	2½"
B502	25	30	9'-3"	2½"
B601	12	-	57'-6"	Str.
B602	-	18	34'-8"	Str.
B603	-	6	35'-4"	4½"

BENDING DIAGRAM

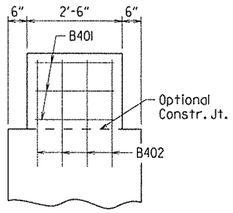


Note: Bar lengths may need to be adjusted if mechanical couplers are used to minimize interference with Stage 2 or 3 pile driving.



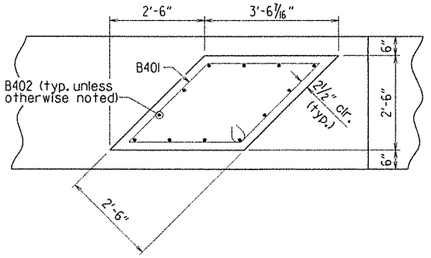
ELEVATION - CONCRETE RESTRAINER

½" = 1'-0"



SECTION D-D

½" = 1'-0"



SECTION E-E

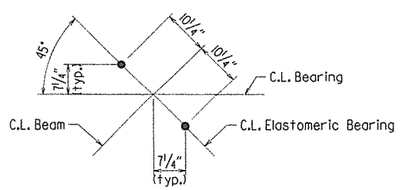
½" = 1'-0"

GENERAL NOTES:
All concrete shall be Class "S" with a minimum 28 day compressive strength f'c = 3,500 psi. Concrete shall be poured in the dry and all exposed corners to be chamfered ¾" unless otherwise noted.

All reinforcing steel shall be Grade 60 (yield strength = 60,000 psi) conforming to AASHTO M 31 or M 322, Type A, with mill test reports.

Top reinforcing bars in cap shall be properly placed to avoid interference with anchor bolts or sheet metal sleeves.

For additional information, see Layout.



Note: For details of elastomeric bearings, see Dwg. No. 56965.

TYPICAL ANCHOR BOLT LAYOUT

No Scale

STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
5-14-15
CHARLES R. ELLIS

BRIDGE ENGINEER

SHEET 4 OF 4
DETAILS OF BENTS 2 AND 3
TEN MILE BAYOU

ROUTE SEC.

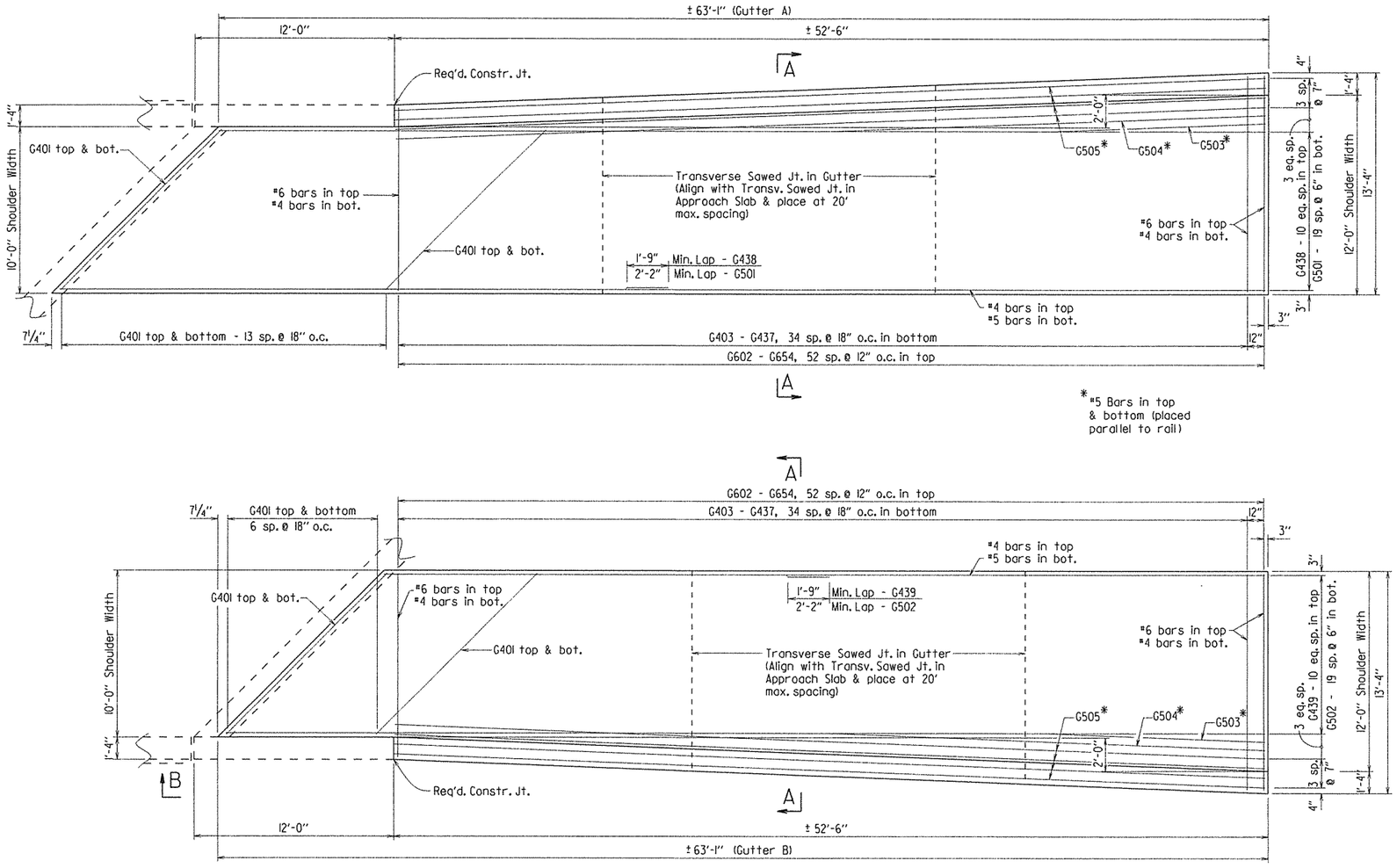
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: JYP DATE: 2-24-15 FILENAME: bbb0107x2_b2.dgn
CHECKED BY: AMS DATE: 4/6/15 SCALE: As Noted
DESIGNED BY: JYP DATE: 2-15

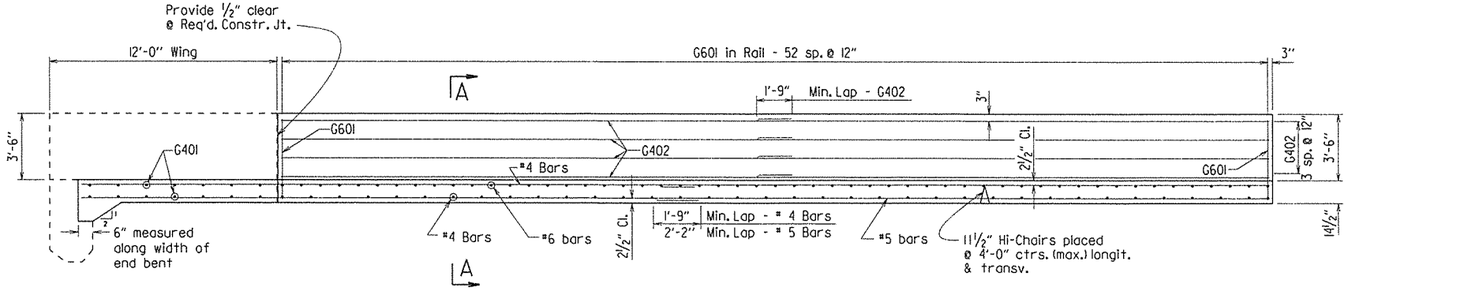
BRIDGE NO. 07344 DRAWING NO. 56989

PRINT DATE: 5/13/2015

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	264	263
				①	A7025 - APPROACH GUTTER - 56990			



PLAN - APPROACH GUTTERS
¼" = 1'-0"

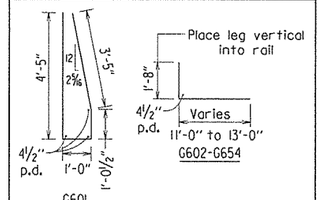


SECTION B-B
N.T.S.

BAR LIST

Bending Diagrams

Dimensions are out to out of bars.



BAR LIST FOR TYPE I SPECIAL APPROACH GUTTER

Mark	No. Req'd. Gutter A	No. Req'd. Gutter B	Length Gutter A
G401	28	14	13'-8"
G402	16	16	27'-0"
G403 - G437	1 each	1 each	11'-0" - 13'-0"
G438	22	-	37'-1"
G439	-	22	32'-1"
G501	40	-	37'-4"
G502	-	40	32'-4"
G503	2	2	13'-0"
G504	2	2	26'-1"
G505	8	8	52'-2"
G601	53	53	9'-7"
G602-G654	1 each	1 each	12'-6"-14'-6"

QUANTITIES FOR ONE TYPE I SPECIAL APPROACH GUTTER

Concrete	Reinforcing Steel
40.55 cu. yd.	5,080 lb.

Note: Refer to Roadway Plans for removal of existing approach gutters.

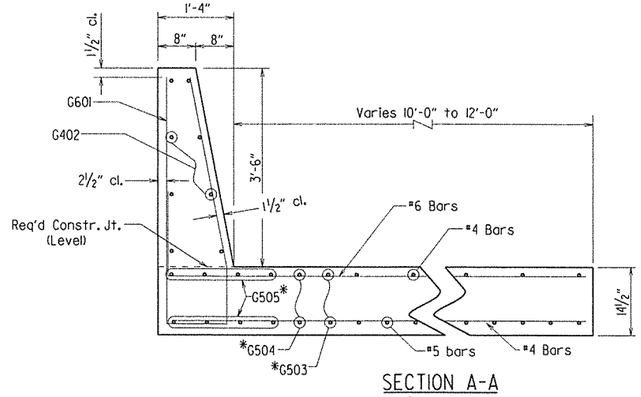
GENERAL NOTES

All concrete shall be Class S or Class S(AE) or mixture used for Portland Cement Concrete Pavement and shall be poured in the dry.

All reinforcing steel shall be Grade 60 (yield strength = 60,000 psi) conforming to AASHTO M 31 or M 322, Type A, with mill test reports.

Approach Gutters will be measured and paid for in accordance with Section 504.

Dimensons and details shown are approximate and may require adjustment to provide a smooth transition to the existing barrier wall. Prior to construction the Contractor shall verify dimensions and make adjustments as required with the approval of the Engineer.



SECTION A-A
¾" = 1'-0"

STATE OF ARKANSAS
Charles S. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
5-14-15
CHARLES S. ELLIS

BRIDGE ENGINEER

DETAILS OF TYPE I SPECIAL APPROACH GUTTERS

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: ACP DATE: 02-06-15 FILENAME: bbb0107_agl.dgn

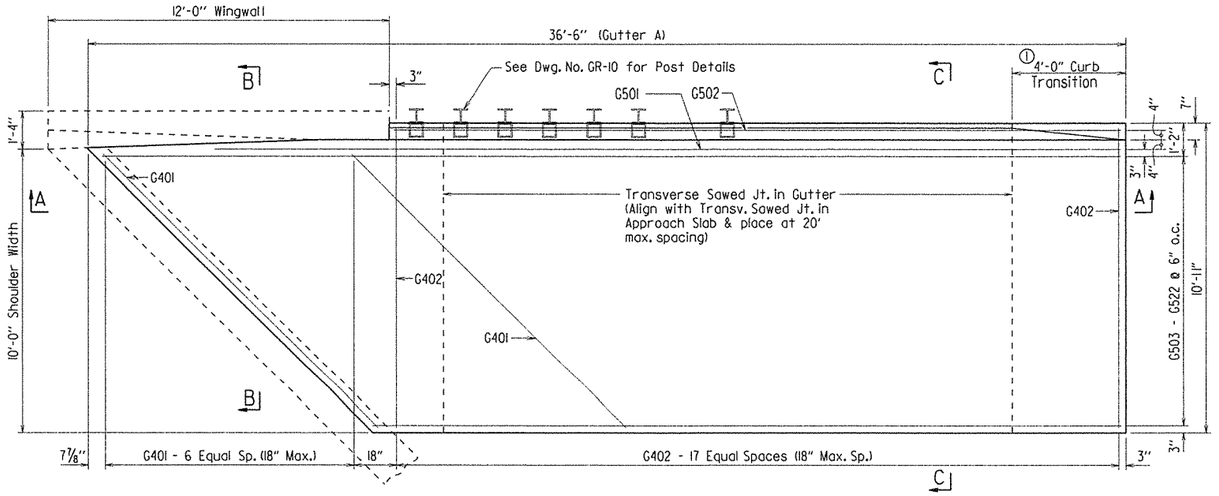
CHECKED BY: LJB DATE: 5-13-15 SCALE: As Shown

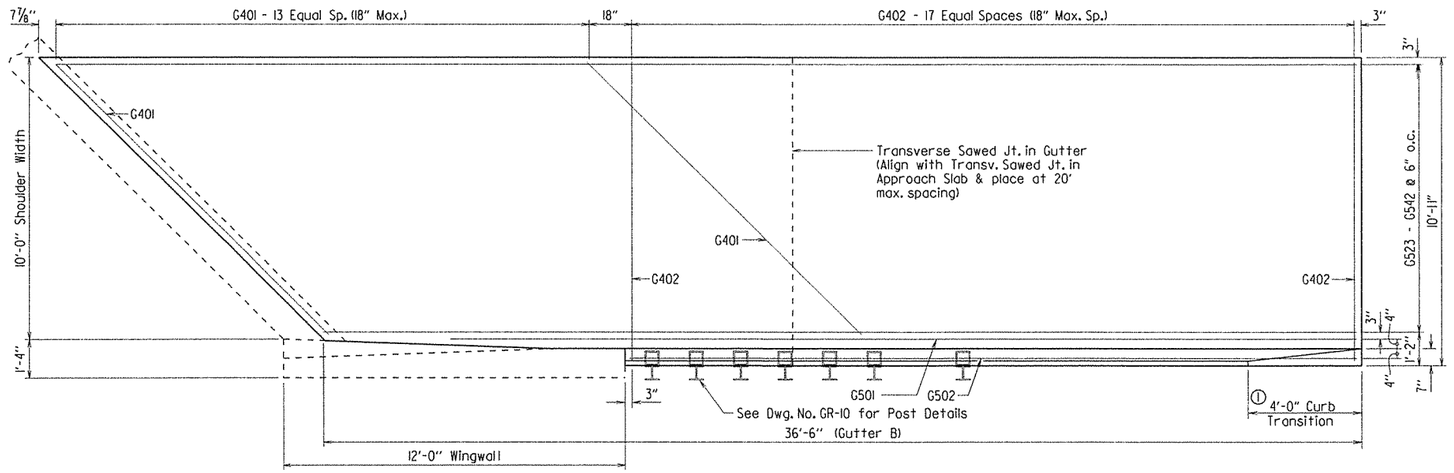
DESIGNED BY: STD DATE: —

BRIDGE NO. A7025 DRAWING NO. 56990

PRINT DATE: 5/11/2015

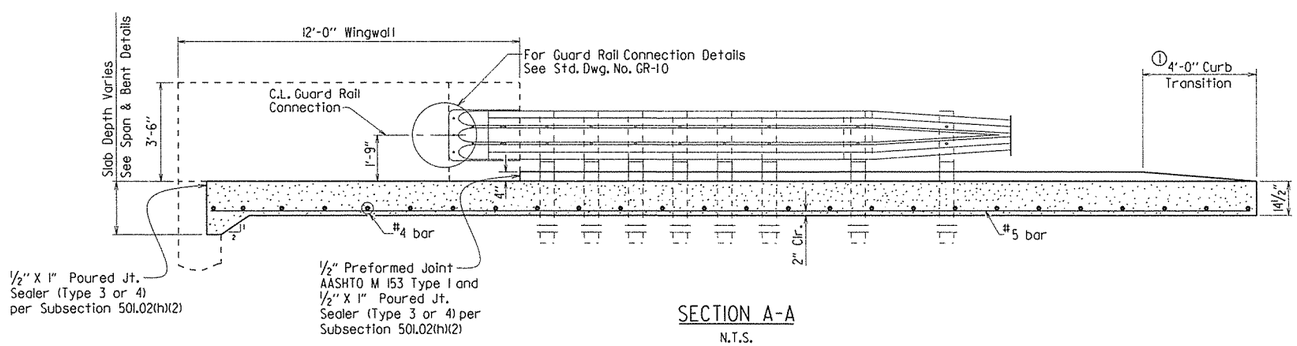
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	216	263
				①	07344 - APPROACH GUTTER - 56991			





PLAN OF APPROACH GUTTERS FOR SKEWED BRIDGE

3/8" = 1'-0"

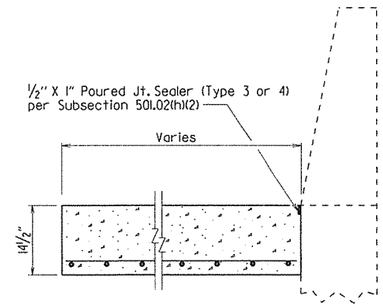


SECTION A-A

N.T.S.

① Construct gutter curb with height-transition as shown if drop inlet is not placed at end of gutter.

Construct gutter curb full height (no height-transition) if drop inlet is placed at end of gutter. Curb height transition placed on drop inlet. See drop inlet details.



SECTION B-B

¾" = 1'-0"

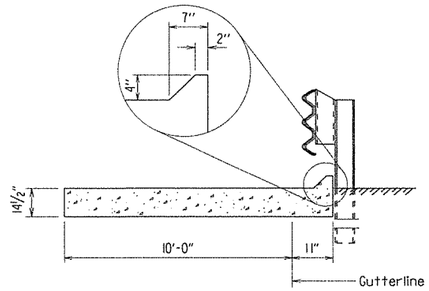
BAR LIST FOR TYPE 2 SPECIAL APPROACH GUTTER

Mark	No. Req'd. Gutter A	No. Req'd. Gutter B	Length
G401	7	14	13'-8"
G402	18	18	10'-7"
G501	1	1	31'-10"
G502	1	1	25'-7"
G503 - G522	1 each	-	26'-4" to 35'-10"
G523 - G542	-	1 each	36'-4" to 45'-8"

QUANTITIES FOR ONE TYPE 2 SPECIAL APPROACH GUTTER

(FOR INFORMATION ONLY)

Reinforcing Steel (Lbs.)	Concrete (Cu. Yds.)
1,035	17.70



SECTION C-C

N.T.S.

GENERAL NOTES

All concrete shall be Class S or Class S(AE) or mixture used for Portland Cement Concrete Pavement and shall be poured in the dry.

All reinforcing steel shall be Grade 60 (yield strength = 60,000 psi) conforming to AASHTO M 31 or M 322, Type A, with mill test reports.

Approach Gutters will be measured and paid for in accordance with Section 504.

STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
5-14-15
CHARLES R. ELLIS

BRIDGE ENGINEER

DETAILS OF TYPE 2 SPECIAL APPROACH GUTTERS

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: ACP DATE: 02-10-15 FILENAME: bbb0107_ag2.dgn

CHECKED BY: LJB DATE: 5-13-15 SCALE: As Shown

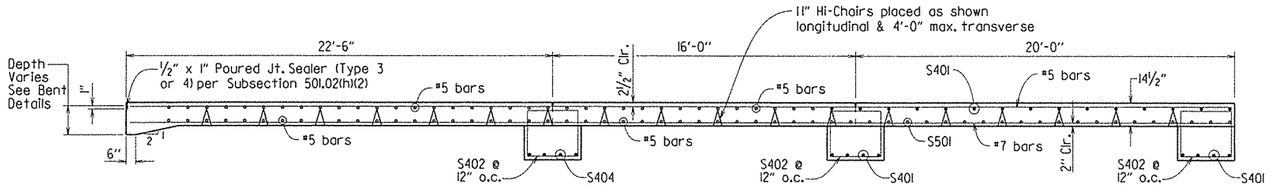
DESIGNED BY: STD DATE: —

BRIDGE NO. 07344 DRAWING NO. 56991

PRINT DATE: 5/11/2015

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	211	263

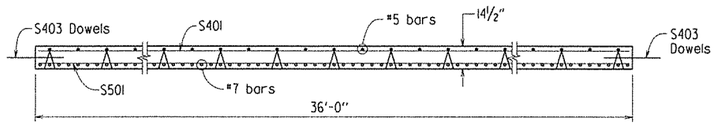
(1) A7025, 07344 - APPROACH SLAB - 56992



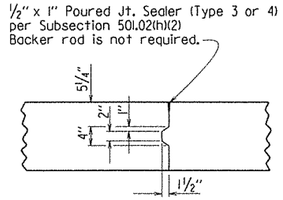
SECTION X-X
1/4" = 1'-0"

Note: The surface finish for Approach Slabs shall match that used on the bridge deck.

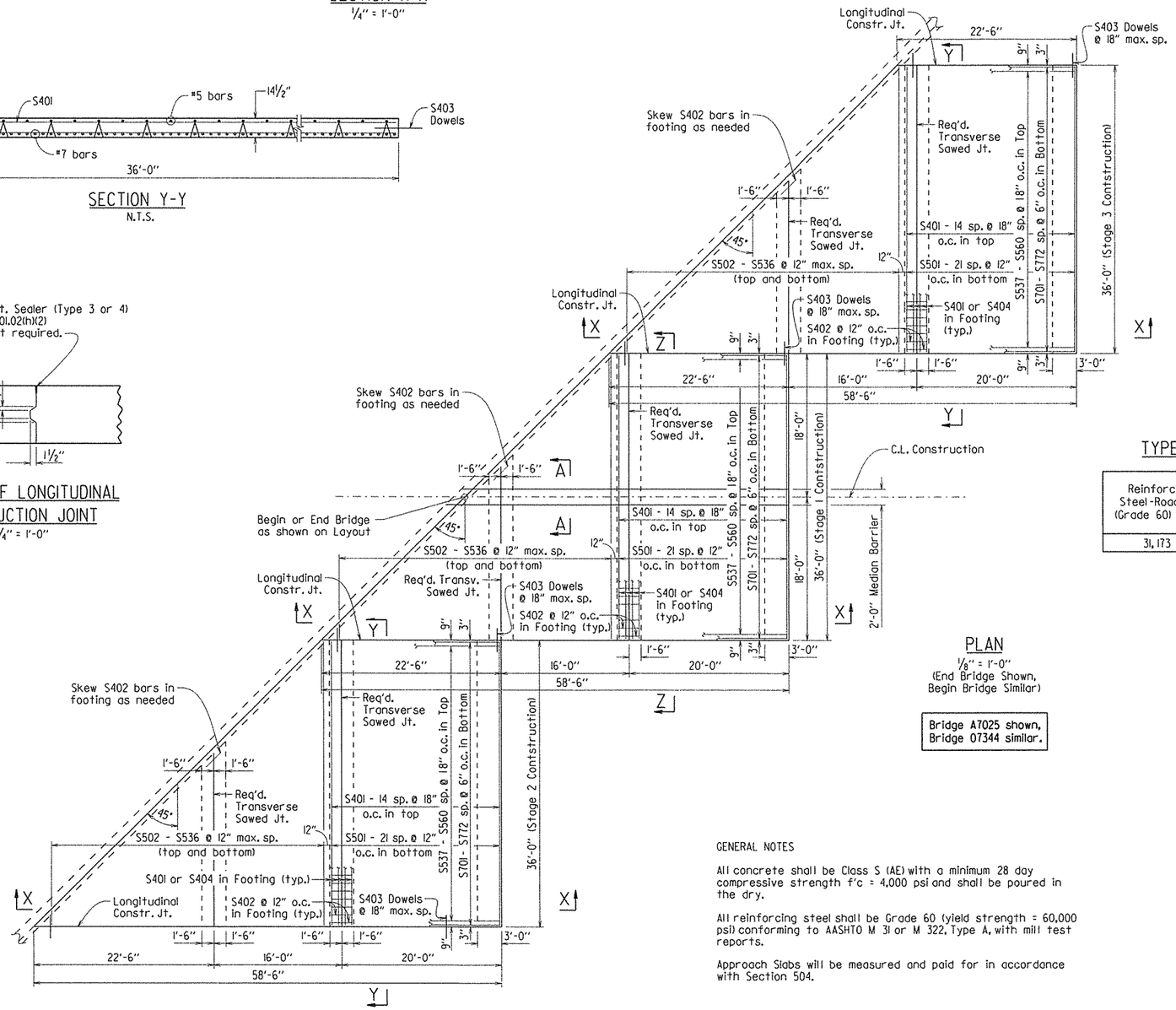
For "Section A-A", "Section Z-Z" and details of Median Barrier, see Sheet 2 of 2.



SECTION Y-Y
N.T.S.



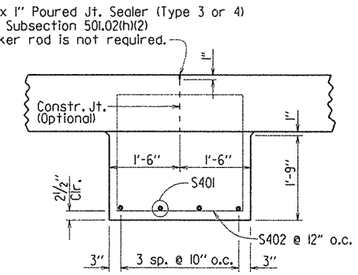
DETAILS OF LONGITUDINAL CONSTRUCTION JOINT
¾" = 1'-0"



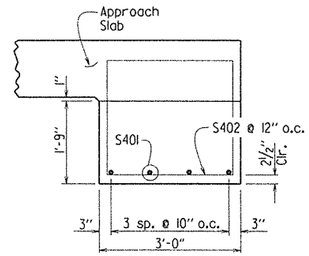
PLAN
⅛" = 1'-0"
(End Bridge Shown, Begin Bridge Similar)

Bridge A7025 shown, Bridge 07344 similar.

½" x 1" Poured Jt. Sealer (Type 3 or 4) per Subsection 501.02(h)(2) Backer rod is not required.



DETAILS OF INTERIOR SUPPORT OF SLAB
N.T.S.



DETAILS OF SUPPORT AT END OF SLAB
N.T.S.

QUANTITIES FOR ONE TYPE SPECIAL APPROACH SLAB

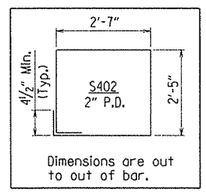
Reinforcing Steel-Roadway (Grade 60) (lbs.)	Epoxy Coated Reinforcing Steel (Grade 60) (lbs.)	Concrete (cubic yards)
31,173	887	253.70

BAR LIST FOR ONE TYPE SPECIAL APPROACH SLAB

Mark	No. Req'd.	Length
S401	69	35'-8"
S402	282	10'-4"
S403	*	3'-0"
S404	12	22'-4"
S501	66	35'-8"
S502 - S536	6 Ea.	1'-10" to 35'-8"
S537 - S560	3 Ea.	22'-10" to 57'-4"
S701 - S772	3 Ea.	22'-4" to 57'-10"

*76 for Bridge A7025
58 for Bridge A6117

BENDING DIAGRAMS



GENERAL NOTES

All concrete shall be Class S (AE) with a minimum 28 day compressive strength f'c = 4,000 psi and shall be poured in the dry.

All reinforcing steel shall be Grade 60 (yield strength = 60,000 psi) conforming to AASHTO M 31 or M 322, Type A, with mill test reports.

Approach Slabs will be measured and paid for in accordance with Section 504.

STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
5-14-15
CHARLES R. ELLIS

BRIDGE ENGINEER

SHEET 1 OF 2
DETAILS OF TYPE SPECIAL APPROACH SLAB

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: ACP DATE: 02-05-15
CHECKED BY: LJB DATE: 5-13-15
DESIGNED BY: STD DATE: ——
FILENAME: bbb0107_as.dgn
SCALE: As Shown

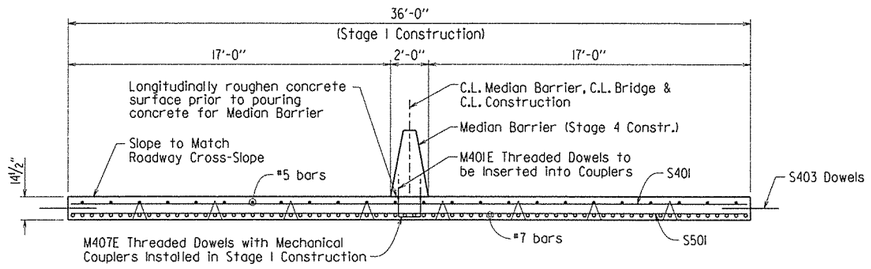
BRIDGE NO. A7025, 07344 DRAWING NO. 56992

PRINT DATE: 5/11/2015

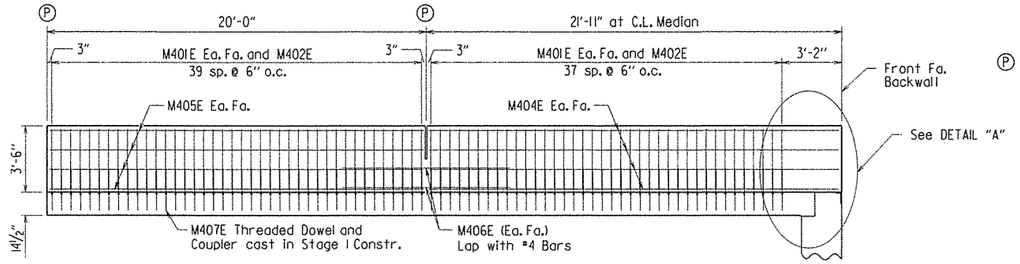
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	22	263

(1) A7025, 07344 - APPROACH SLAB - 56993

Note: Protect threads in Couplers (installed in Stage I Construction) until Median Barrier is constructed.



SECTION Z-Z
¼" = 1'-0"

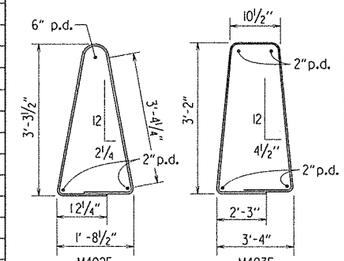


(P) Indicates partial depth joint in Median Barrier stopped 1'-6" from top of approach slab.

ELEVATION - MEDIAN BARRIER ON APPROACH SLAB
(Stage 4 Construction)
¼" = 1'-0"

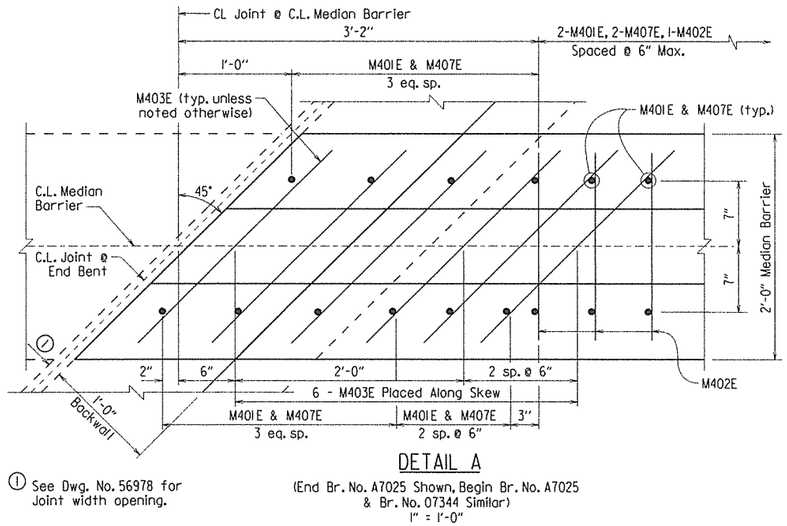
MEDIAN BARRIER BAR LIST
(FOR ONE TYPE SPECIAL APPROACH SLAB)

MARK	NO. REQ'D.	LENGTH	P.D.	BENDING DIAGRAMS
				Dimensions are out to out of bars.
(2) M401E	165	1'-6"	Str.	
M402E	78	8'-11"	2"	
M403E	6	11'-10"	2"	
M404E	8	20'-2"	Str.	
M405E	8	19'-8"	Str.	
M406E	4	5'-6"	Str.	



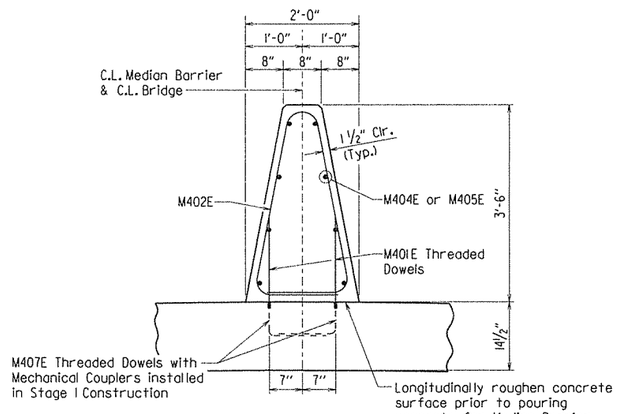
Note: Bars with an "E" suffix are to be epoxy coated.

(2) One end threaded for Mechanical Coupler. Length of bar does not include any additional length for engagement into Mechanical Coupler. The actual length of bar engagement into the Mechanical Coupler shall be determined by the Mechanical Coupler Manufacturer, and the length of the bar shall be adjusted accordingly.

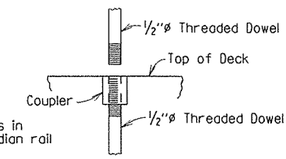


(1) See Dwg. No. 56978 for Joint width opening.

DETAIL A
(End Br. No. A7025 Shown, Begin Br. No. A7025 & Br. No. 07344 Similar)
1" = 1'-0"



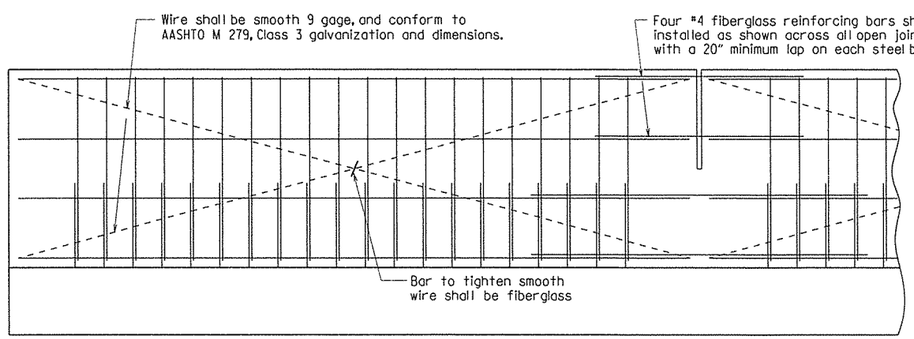
SECTION A-A
½" = 1'-0"



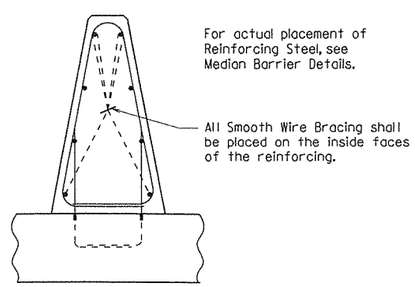
THREADED DOWEL AND COUPLER ASSEMBLY
N.T.S.

The Threaded Dowel and Coupler Assembly shall consist of a OPL approved mechanical splice with protective cap and threaded dowel bars as shown and shall develop at least 125% of the yield strength of the dowel bars. The Threaded Dowel and Coupler Assembly will not be paid for seperatley but will be considered included in the unit bid price for "Epoxy Coated Reinforcing Steel (Grade 60)".

M401E and M407E Dowel bars shall be a minimum 60 ksi yield strength and threaded as required. Threaded Dowel and Coupler Assembly, except mating surfaces, shall be epoxy coated in accordance with the requirements of Section 804.



All panels shall be braced as required to prevent racking. All open joints shall be sawed as soon as practical to a minimum width of ¼". To control cracking before sawing, all joints must be grooved before the concrete is set. Sawing of the joints must be controlled so it will follow the grooved joint.



The extruded Median Barrier shall conform to the horizontal and vertical lines shown on the plans or as directed by the Engineer and shall present a smooth, uniform appearance and texture. Unless otherwise noted, exposed surfaces shall be given the same finish as used on the bridge median barrier.

DETAILS OF OPTIONAL SLIP FORMING OF CONCRETE MEDIAN BARRIER
N.T.S.

STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
5-19-15
CHARLES R. ELLIS

BRIDGE ENGINEER

SHEET 2 OF 2
DETAILS OF
TYPE SPECIAL APPROACH SLAB

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: ACP DATE: 02-05-15 FILENAME: bbb0107_as.dgn
CHECKED BY: LJB DATE: 5-13-15 SCALE: As Shown
DESIGNED BY: STD DATE: ——

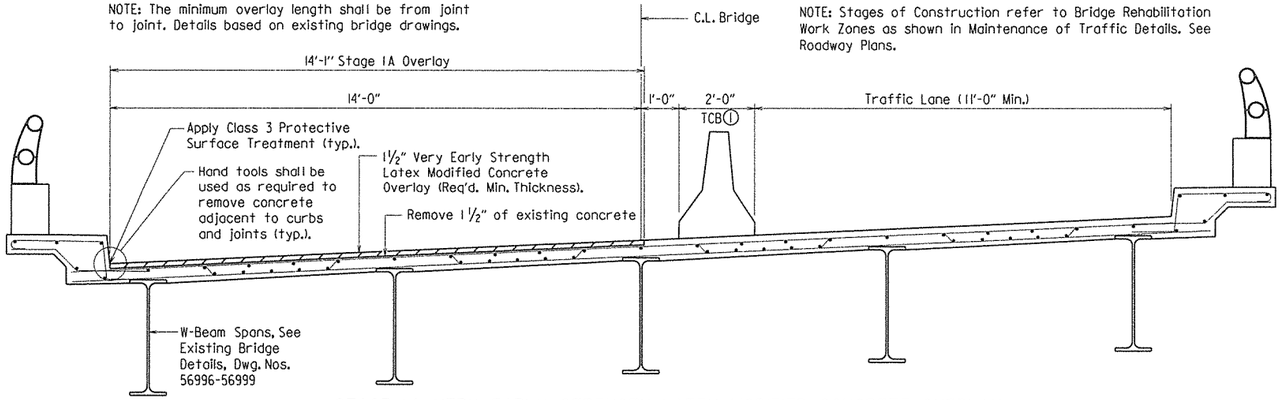
BRIDGE NO. A7025, 07344 DRAWING NO. 56993

PRINT DATE: 5/13/2015

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	213	263
				①	03123	- VESLMC OVERLAY -	56994	

NOTE: The minimum overlay length shall be from joint to joint. Details based on existing bridge drawings.

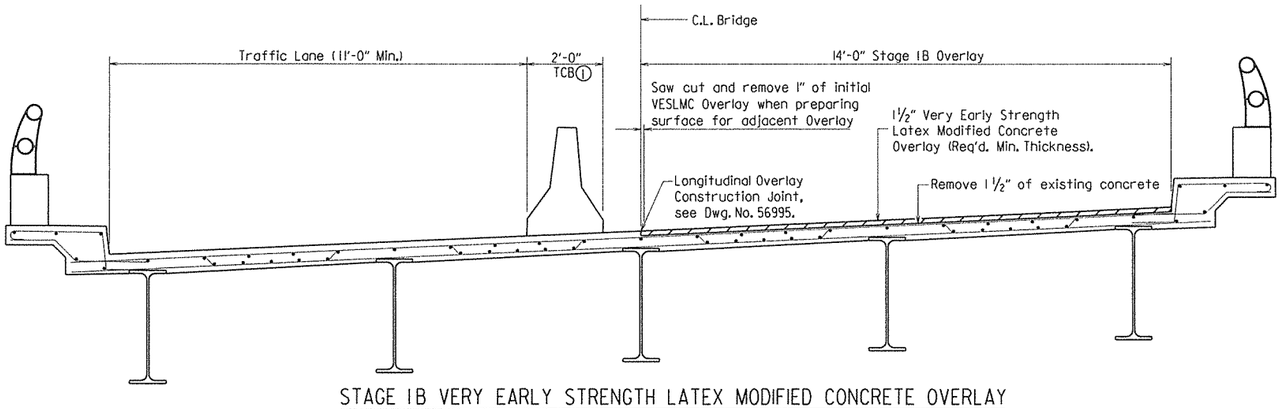
NOTE: Stages of Construction refer to Bridge Rehabilitation Work Zones as shown in Maintenance of Traffic Details. See Roadway Plans.



STAGE 1A VERY EARLY STRENGTH LATEX MODIFIED CONCRETE OVERLAY

½" = 1'-0" (Looking in direction of traffic)

Note:
The existing bridge deck has a ¼" +/- thick epoxy/slag overlay. This overlay shall be removed prior to hydrodemolition. Payment for this work shall be considered subsidiary to the other pay items.



STAGE 1B VERY EARLY STRENGTH LATEX MODIFIED CONCRETE OVERLAY

½" = 1'-0" (Looking in direction of traffic)

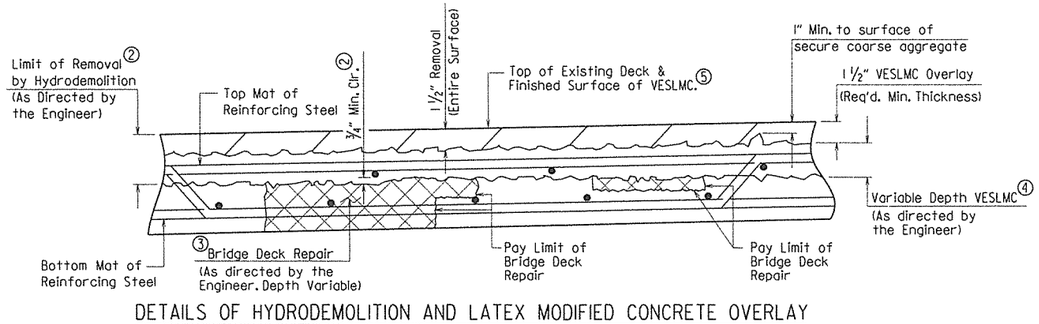
① Temporary Construction Barrier shall not be connected to the surface of the bridge deck. See Std. Dwg. TC-4.

② Removal of unsound concrete beyond 1½" below the original surface shall be at the direction of the Engineer. If the bond between existing concrete and the top mat of reinforcing steel is destroyed, then the concrete shall be removed to a minimum of ¾" clearance below the bar.

③ Areas requiring additional repair, as determined by the Engineer, shall be repaired in accordance with the Job Special Provision "Bridge Deck Repair".

④ Depth Varies to achieve minimum clearance below top mat of reinforcing steel, where required.

⑤ Finished Surface of VESLMC Overlay shall match existing concrete deck surfaces unless increase is required to maintain minimum required VESLMC Overlay thickness and a minimum of 1½" cover to reinforcing steel.



DETAILS OF HYDRODEMOLITION AND LATEX MODIFIED CONCRETE OVERLAY

No Scale

STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
5-14-15
CHARLES R. ELLIS

BRIDGE ENGINEER

SHEET 1 OF 2
DETAILS OF
VERY EARLY STRENGTH
LATEX MODIFIED CONCRETE OVERLAY

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: A.M.S. DATE: 11/19/14
CHECKED BY: LJB DATE: 5-13-15
DESIGNED BY: — DATE: —

FILENAME: bbb0107_lmc.dgn
SCALE: As Noted

BRIDGE NO. 03123 DRAWING NO. 56994

PRINT DATE: 5/11/2015

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	214	263
				(1) 03123		- VESLMC OVERLAY -		56995

GENERAL NOTES:

CONSTRUCTION SPECIFICATIONS: Arkansas State Highway Commission Standard Specifications for Highway Construction, Edition of 2014, with applicable Special Provisions and Supplemental Specifications. Unless otherwise noted in the plans Section and Subsection refer to the Standard Specifications.

Drawing shows details and dimensions of existing structure based on the original bridge plans. The Contractor shall make check measurements in the field and make any adjustments necessary to meet the required clearances and fit the new work to the existing structure.

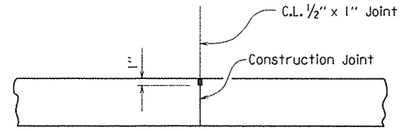
The operation or placement of equipment and, or materials on the subject bridge necessary for the completion of this work shall be subject to the provisions of Subsection 105.14. Certifications of the adequacy of all components for the anticipated loads shall address the capacity of the existing structure at all phases of this work.

HYDRODEMOLITION: The entire area of the existing bridge deck shall receive hydrodemolition in accordance with Special Provision Job BB0107 "Hydrodemolition" to a planned depth of 1½" below the existing bridge deck surface. Deteriorated concrete below this depth shall be removed up to the limits detailed and at the direction of the Engineer. These areas shall be measured by the square yard and shall be paid for at the unit price bid for the item Special Provision Job BB0107 "Hydrodemolition". Prior to hydrodemolition, cold milling of the concrete deck to a maximum depth of 1" will be allowed unless there will be a conflict with the existing reinforcing.

VERY EARLY STRENGTH LATEX MODIFIED CONCRETE OVERLAY: The entire area of the existing bridge deck shall receive a Very Early Strength Latex Modified Concrete (VESLMC) Overlay to a planned depth of 1½" below the existing bridge deck surface, in accordance with the Special Provision Job BB0107 "Very Early Strength Latex Modified Concrete Overlay". These areas shall be measured by the square yard and shallbe paid for at the unit price bid for the item SP Job BB0107 "Very Early Strength Latex Modified Concrete Overlay (1½" Thick)". Areas of the existing bridge deck removed at the direction of the Engineer to a depth greater than 1½" below the existing bridge deck surface shall be filled with VESLMC concurrent to the placement of the 1½" VESLMC Overlay. This material shall be measured and paid for in accordance with Special Provision Job BB0107 "Very Early Strength Latex Modified Concrete Overlay".

BRIDGE DECK: The VESLMC Overlay surface shall be given a grooved finish as specified for final finishing in Subsection 802.19 for Class 7 Grooved Bridge Roadway Surface Finish and in accordance with Special Provision Job BB0107 "Very Early Strength Latex Modified Concrete Overlay".

PROTECTIVE SURFACE TREATMENT: The longitudinal joint between the VESLMC Overlay and the adjacent existing concrete curb or rail shall be given a Class 3 Protective Surface Treatment as specified in Section 803 and in accordance with Special Provision Job BB0107 "Very Early Strength Latex Modified Concrete Overlay". Transverse or longitudinal construction joints separating adjacent overlay placements shall be prepared and sealed in accordance with the joint details on Dwg. No. 56995.



Use ½" X 1" Type 3 or 4 Joint Sealer. See Subsections 501.02 (h) and 501.05 (j). Backer Rod shall not be installed. Joint Sealer shall be measured and paid for as VESLMC Overlay. Sealant must be gray or other color similar to concrete.

Longitudinal construction joints shall be sawed as soon as the concrete has sufficiently set to allow sawing of the joint without damage to the Overlay.

LONGITUDINAL OVERLAY CONSTRUCTION JOINT DETAIL

No Scale

STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
5-14-15
CHARLES R. ELLIS

BRIDGE ENGINEER

SHEET 2 OF 2
DETAILS OF
VERY EARLY STRENGTH
LATEX MODIFIED CONCRETE OVERLAY

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: A.M.S. DATE: 11/19/14
CHECKED BY: LJB DATE: 5-13-15
DESIGNED BY: — DATE: —

FILENAME: bbb0107_lmc.dgn
SCALE: As Noted

BRIDGE NO. 03123 DRAWING NO. 56995

PRINT DATE: 5/11/2015

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		BB0107	115	263
(1) 03123 -		F10-LAYOUT	- 56996	

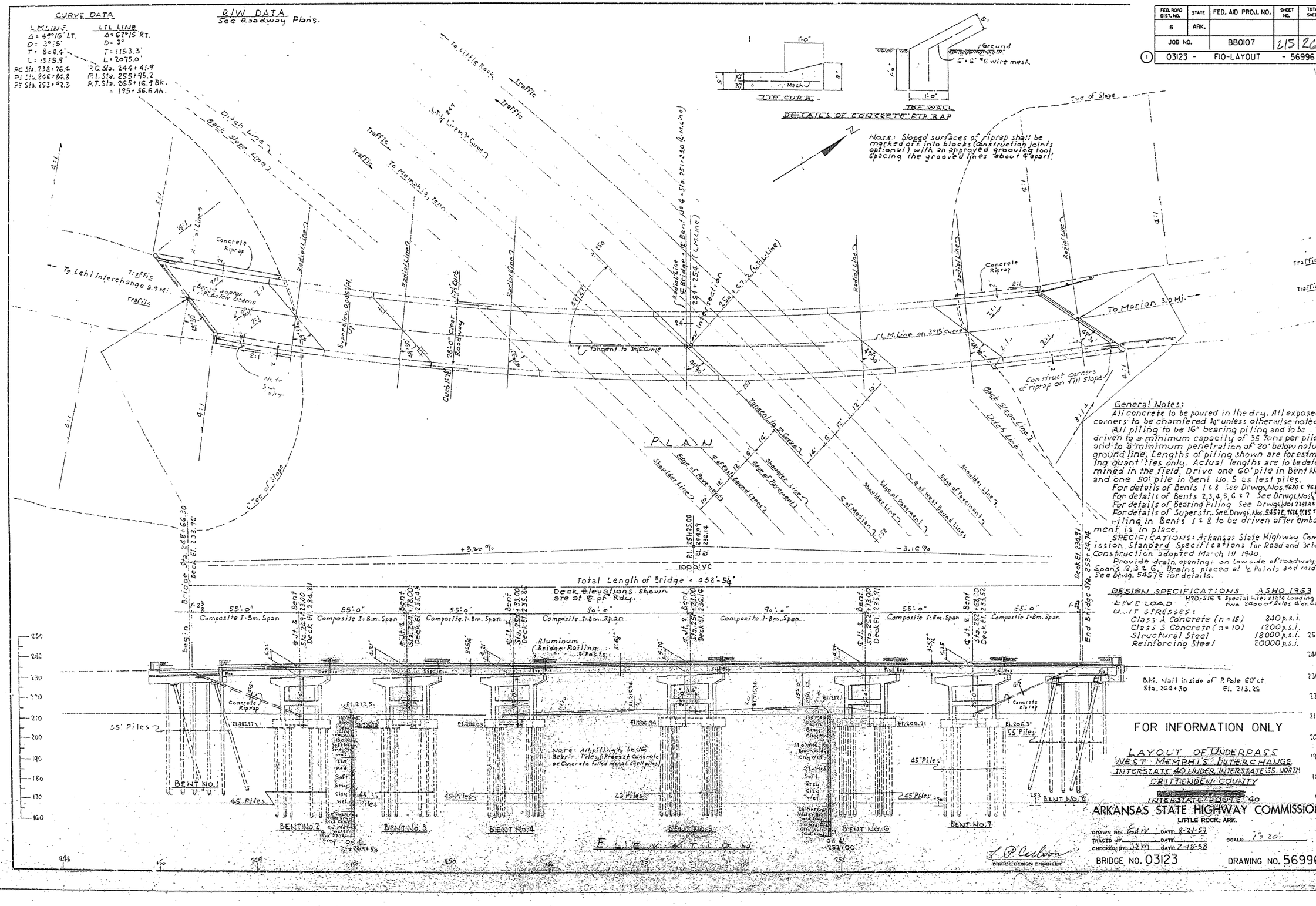
CURVE DATA

L.M.LINE
Δ = 44°16' LT.
D = 3°15'
T = 8.8.4'
L = 1515.9'
P.C. Sta. 238+76.4
P.I. Sta. 246+84.8
P.T. Sta. 253+92.3

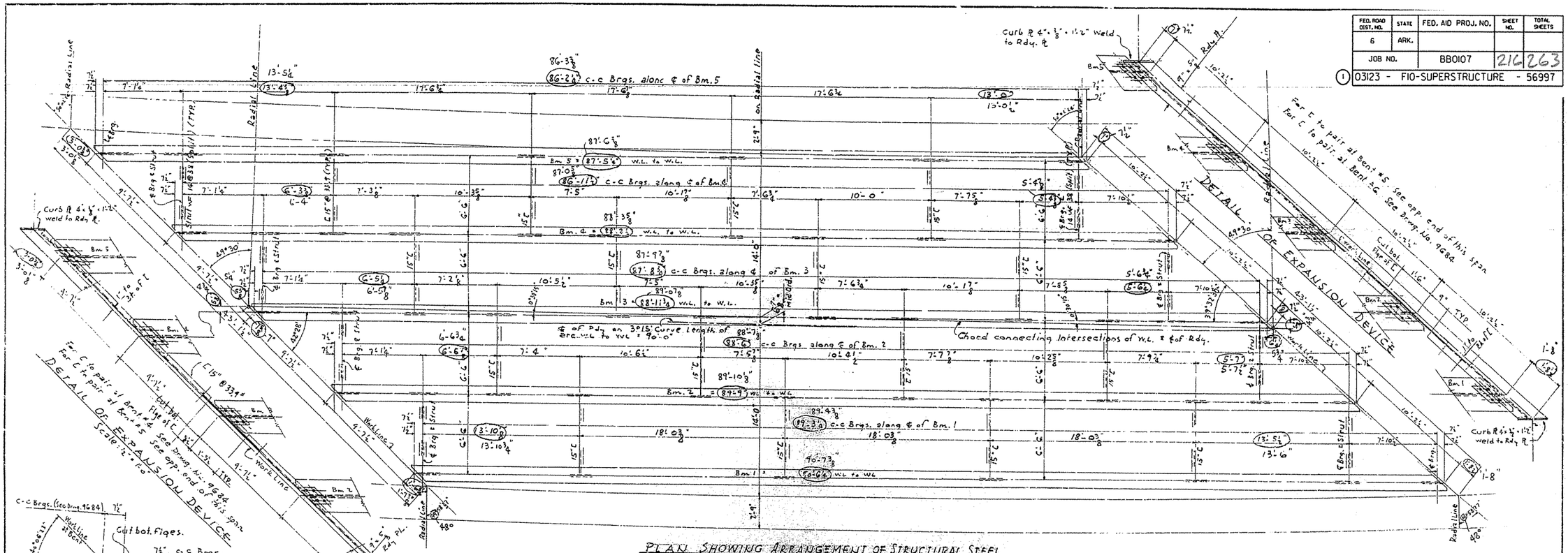
L.T.L. LINE
Δ = 62°15' RT.
D = 3°
T = 1153.3'
L = 2075.0'
P.C. Sta. 244+41.9
P.I. Sta. 255+95.2
P.T. Sta. 265+16.9 Bk.
= 195+56.6 Ah.

R/W DATA
See Roadway Plans.

DETAILS OF CONCRETE RIP RAP

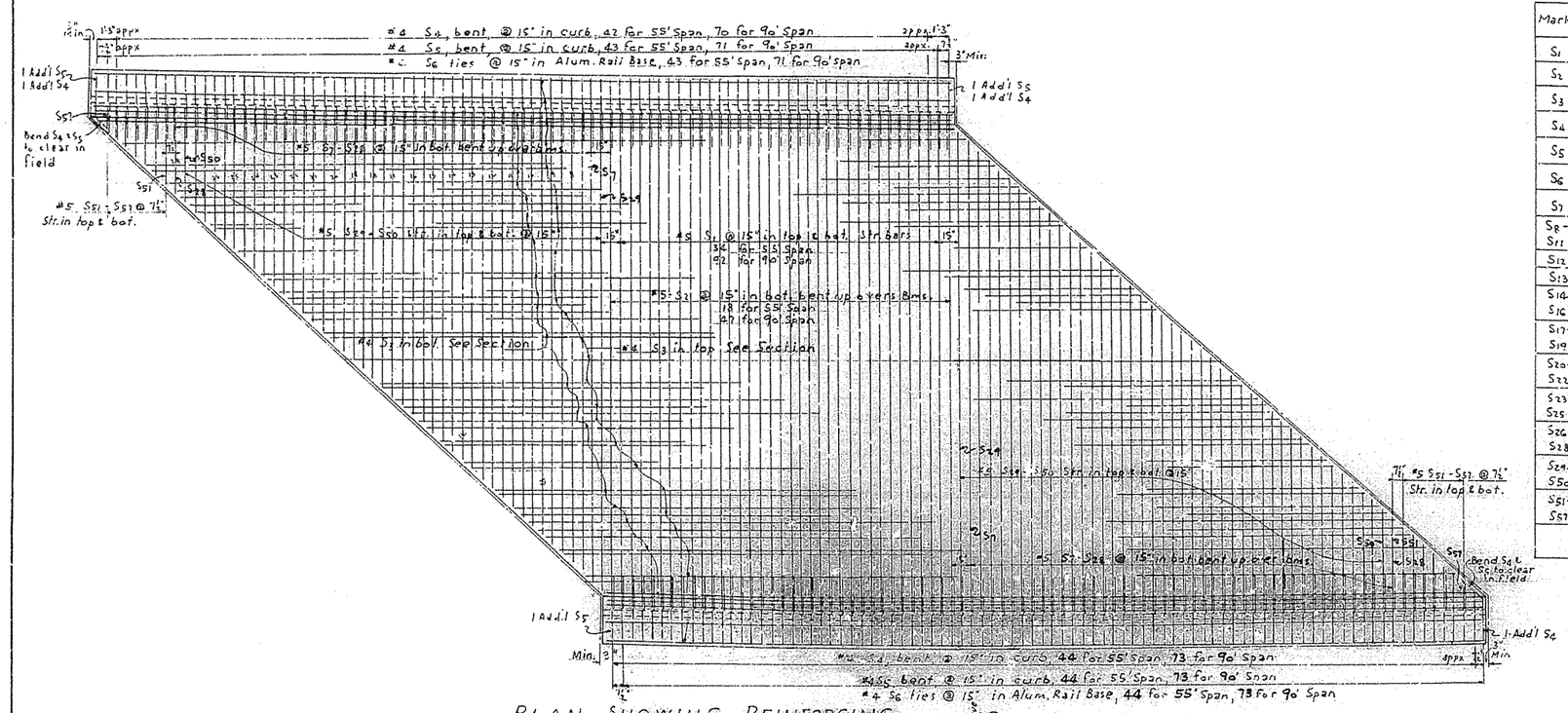

To Little Rock Traffic
Traffic
Ditch Line
Back Slope Line
L.T.L. Line
Traffic
Traffic
To Memphis, Tenn.
To Lehi Interchange 5.9 Mi.
Traffic
Traffic
Concrete Riprap
Bents 1 & 8 approx. 30 deep beam beams
Radial Line
Radial Line
Radial Line
Radial Line
Radial Line
Radial Line
Radial Line
Concrete Riprap
Concrete Riprap
Supersilow Goods Veh. Curb
Curb 1'-6"
28'-0" Clear Roadway
Curb 1'-6"
Tangent to 3°15' Curve
Tangent to 3°15' Curve
Radial Line
Bridge Sta. 248+66.30
Bent Sta. 249+23.00
Deck El. 234.81
Bent Sta. 249+78.00
Deck El. 235.43
Bent Sta. 250+33.00
Deck El. 235.86
Bent Sta. 250+88.00
Deck El. 236.14
Bent Sta. 251+43.00
Deck El. 235.91
Bent Sta. 252+98.00
Deck El. 235.52
End Bridge Sta. 253+26.74
Deck El. 234.91
Bridge Sta. 248+66.30
Deck El. 233.96
Ahead Line of Bent 4 Sta. 251+230 (L.M. Line)
Bridge Sta. 251+254 (L.M. Line)
Intersection
250+67.2 (L.T.L. Line)
42°27'
35°
24'-0"
24'-0"
24'-0"

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		BB0107	216	263
(1) 03123 - F10-SUPERSTRUCTURE - 56997				

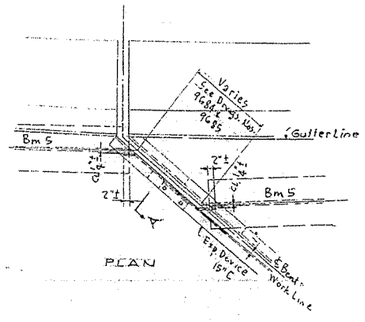

Curb R 4"x 1/8" x 1'-2" Weld to Rdy. R
Curb R 4"x 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 1/2" x 1'-2" weld to Rdy. R
Radial Line
Work Line
Cut bot. Flges.
Cut top Flges.
Chord connecting intersections of w.l. & ℄ of Rdy.
℄ of Rdy. on 3°15' Curve Length of 88'-7" Greatest w.l. to w.l. = 90'-0"
c-c Brgs. along ℄ of Bm. 5
c-c Brgs. along ℄ of Bm. 4
c-c Brgs. along ℄ of Bm. 3
c-c Brgs. along ℄ of Bm. 2
c-c Brgs. along ℄ of Bm. 1
w.l. to w.l.
Bm. 5
Bm. 4
Bm. 3
Bm. 2
Bm. 1
69°30
42°28'
For ℄ to pair at Bent #5 - See opp. end of this span
For ℄ to pair at Bent #4 - See Drwg. No. 9684
DETAIL OF EXPANSION DEVICE
Scale: 1" = 1'-0"
Cut bot. Flges.
Cut top Flges.
See Drwg. No. 9684
EXP. 55' Span
FIXED 90° Span
EXP. 90° Span
Work Line at Bent
Curb R 4"x 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 1" x 1'-2" weld to Rdy. R
Curb R 4"x 1 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 1 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 1 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 1 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 1 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 1 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 1 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 2" x 1'-2" weld to Rdy. R
Curb R 4"x 2 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 2 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 2 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 2 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 2 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 2 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 2 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 3" x 1'-2" weld to Rdy. R
Curb R 4"x 3 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 3 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 3 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 3 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 3 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 3 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 3 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 4" x 1'-2" weld to Rdy. R
Curb R 4"x 4 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 4 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 4 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 4 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 4 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 4 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 4 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 5" x 1'-2" weld to Rdy. R
Curb R 4"x 5 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 5 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 5 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 5 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 5 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 5 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 5 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 6" x 1'-2" weld to Rdy. R
Curb R 4"x 6 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 6 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 6 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 6 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 6 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 6 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 6 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 7" x 1'-2" weld to Rdy. R
Curb R 4"x 7 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 7 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 7 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 7 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 7 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 7 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 7 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 8" x 1'-2" weld to Rdy. R
Curb R 4"x 8 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 8 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 8 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 8 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 8 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 8 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 8 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 9" x 1'-2" weld to Rdy. R
Curb R 4"x 9 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 9 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 9 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 9 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 9 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 9 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 9 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 10" x 1'-2" weld to Rdy. R
Curb R 4"x 10 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 10 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 10 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 10 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 10 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 10 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 10 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 11" x 1'-2" weld to Rdy. R
Curb R 4"x 11 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 11 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 11 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 11 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 11 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 11 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 11 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 12" x 1'-2" weld to Rdy. R
Curb R 4"x 12 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 12 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 12 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 12 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 12 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 12 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 12 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 13" x 1'-2" weld to Rdy. R
Curb R 4"x 13 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 13 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 13 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 13 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 13 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 13 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 13 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 14" x 1'-2" weld to Rdy. R
Curb R 4"x 14 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 14 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 14 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 14 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 14 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 14 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 14 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 15" x 1'-2" weld to Rdy. R
Curb R 4"x 15 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 15 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 15 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 15 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 15 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 15 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 15 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 16" x 1'-2" weld to Rdy. R
Curb R 4"x 16 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 16 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 16 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 16 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 16 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 16 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 16 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 17" x 1'-2" weld to Rdy. R
Curb R 4"x 17 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 17 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 17 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 17 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 17 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 17 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 17 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 18" x 1'-2" weld to Rdy. R
Curb R 4"x 18 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 18 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 18 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 18 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 18 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 18 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 18 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 19" x 1'-2" weld to Rdy. R
Curb R 4"x 19 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 19 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 19 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 19 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 19 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 19 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 19 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 20" x 1'-2" weld to Rdy. R
Curb R 4"x 20 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 20 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 20 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 20 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 20 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 20 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 20 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 21" x 1'-2" weld to Rdy. R
Curb R 4"x 21 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 21 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 21 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 21 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 21 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 21 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 21 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 22" x 1'-2" weld to Rdy. R
Curb R 4"x 22 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 22 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 22 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 22 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 22 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 22 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 22 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 23" x 1'-2" weld to Rdy. R
Curb R 4"x 23 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 23 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 23 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 23 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 23 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 23 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 23 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 24" x 1'-2" weld to Rdy. R
Curb R 4"x 24 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 24 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 24 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 24 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 24 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 24 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 24 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 25" x 1'-2" weld to Rdy. R
Curb R 4"x 25 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 25 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 25 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 25 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 25 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 25 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 25 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 26" x 1'-2" weld to Rdy. R
Curb R 4"x 26 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 26 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 26 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 26 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 26 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 26 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 26 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 27" x 1'-2" weld to Rdy. R
Curb R 4"x 27 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 27 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 27 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 27 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 27 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 27 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 27 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 28" x 1'-2" weld to Rdy. R
Curb R 4"x 28 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 28 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 28 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 28 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 28 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 28 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 28 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 29" x 1'-2" weld to Rdy. R
Curb R 4"x 29 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 29 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 29 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 29 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 29 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 29 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 29 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 30" x 1'-2" weld to Rdy. R
Curb R 4"x 30 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 30 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 30 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 30 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 30 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 30 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 30 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 31" x 1'-2" weld to Rdy. R
Curb R 4"x 31 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 31 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 31 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 31 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 31 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 31 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 31 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 32" x 1'-2" weld to Rdy. R
Curb R 4"x 32 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 32 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 32 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 32 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 32 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 32 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 32 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 33" x 1'-2" weld to Rdy. R
Curb R 4"x 33 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 33 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 33 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 33 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 33 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 33 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 33 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 34" x 1'-2" weld to Rdy. R
Curb R 4"x 34 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 34 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 34 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 34 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 34 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 34 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 34 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 35" x 1'-2" weld to Rdy. R
Curb R 4"x 35 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 35 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 35 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 35 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 35 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 35 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 35 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 36" x 1'-2" weld to Rdy. R
Curb R 4"x 36 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 36 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 36 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 36 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 36 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 36 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 36 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 37" x 1'-2" weld to Rdy. R
Curb R 4"x 37 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 37 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 37 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 37 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 37 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 37 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 37 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 38" x 1'-2" weld to Rdy. R
Curb R 4"x 38 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 38 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 38 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 38 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 38 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 38 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 38 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 39" x 1'-2" weld to Rdy. R
Curb R 4"x 39 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 39 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 39 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 39 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 39 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 39 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 39 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 40" x 1'-2" weld to Rdy. R
Curb R 4"x 40 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 40 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 40 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 40 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 40 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 40 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 40 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 41" x 1'-2" weld to Rdy. R
Curb R 4"x 41 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 41 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 41 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 41 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 41 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 41 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 41 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 42" x 1'-2" weld to Rdy. R
Curb R 4"x 42 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 42 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 42 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 42 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 42 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 42 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 42 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 43" x 1'-2" weld to Rdy. R
Curb R 4"x 43 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 43 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 43 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 43 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 43 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 43 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 43 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 44" x 1'-2" weld to Rdy. R
Curb R 4"x 44 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 44 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 44 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 44 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 44 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 44 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 44 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 45" x 1'-2" weld to Rdy. R
Curb R 4"x 45 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 45 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 45 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 45 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 45 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 45 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 45 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 46" x 1'-2" weld to Rdy. R
Curb R 4"x 46 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 46 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 46 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 46 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 46 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 46 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 46 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 47" x 1'-2" weld to Rdy. R
Curb R 4"x 47 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 47 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 47 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 47 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 47 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 47 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 47 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 48" x 1'-2" weld to Rdy. R
Curb R 4"x 48 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 48 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 48 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 48 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 48 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 48 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 48 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 49" x 1'-2" weld to Rdy. R
Curb R 4"x 49 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 49 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 49 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 49 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 49 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 49 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 49 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 50" x 1'-2" weld to Rdy. R
Curb R 4"x 50 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 50 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 50 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 50 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 50 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 50 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 50 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 51" x 1'-2" weld to Rdy. R
Curb R 4"x 51 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 51 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 51 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 51 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 51 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 51 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 51 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 52" x 1'-2" weld to Rdy. R
Curb R 4"x 52 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 52 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 52 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 52 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 52 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 52 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 52 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 53" x 1'-2" weld to Rdy. R
Curb R 4"x 53 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 53 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 53 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 53 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 53 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 53 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 53 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 54" x 1'-2" weld to Rdy. R
Curb R 4"x 54 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 54 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 54 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 54 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 54 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 54 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 54 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 55" x 1'-2" weld to Rdy. R
Curb R 4"x 55 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 55 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 55 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 55 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 55 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 55 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 55 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 56" x 1'-2" weld to Rdy. R
Curb R 4"x 56 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 56 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 56 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 56 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 56 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 56 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 56 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 57" x 1'-2" weld to Rdy. R
Curb R 4"x 57 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 57 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 57 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 57 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 57 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 57 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 57 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 58" x 1'-2" weld to Rdy. R
Curb R 4"x 58 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 58 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 58 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 58 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 58 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 58 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 58 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 59" x 1'-2" weld to Rdy. R
Curb R 4"x 59 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 59 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 59 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 59 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 59 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 59 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 59 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 60" x 1'-2" weld to Rdy. R
Curb R 4"x 60 1/8" x 1'-2" weld to Rdy. R
Curb R 4"x 60 1/4" x 1'-2" weld to Rdy. R
Curb R 4"x 60 3/8" x 1'-2" weld to Rdy. R
Curb R 4"x 60 1/2" x 1'-2" weld to Rdy. R
Curb R 4"x 60 5/8" x 1'-2" weld to Rdy. R
Curb R 4"x 60 3/4" x 1'-2" weld to Rdy. R
Curb R 4"x 60 7/8" x 1'-2" weld to Rdy. R
Curb R 4"x 61" x 1'

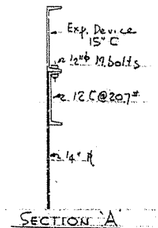
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		BB0107	217	263

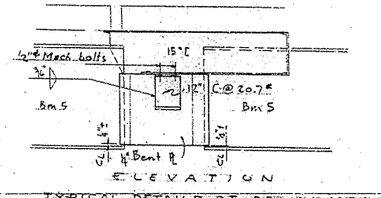
(1) 03123 - FIO-SUPERSTRUCTURE - 56998



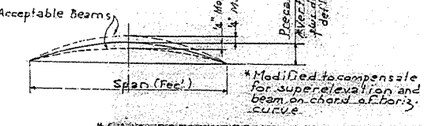
PLAN SHOWING REINFORCING
Scale: ¼" = 1'-0"







TYPICAL DETAILS OF BEAM CURTAIN FOR OUTSIDE BEAMS ON INSIDE OF CURVE AT IN'T. BENTS
Scale: 1" = 1'-0"



BEAM PRECAMBER

SPAN	PRECAMBER	
	INTERIOR	EXTERIOR
55'	11/16	7/8
90'	2 11/16	3 5/16

LIST OF REINFORCING STEEL (ONE SPAN)

Mark	Size	Lgth.	No. Reqd. 55'	No. Reqd. 90'	Bending	Pin Dia.	'A'	Diagram
S1	#5	29-2	54	72	STR			
S2		29-10	18	47	Varies	3¾	2-11¼	
S3	#4	19-4	159		STR			
		31-0		159				
S4		5-2	89	146		3"		
S5		4-3	90	147		3		
S6		5-3	87	164		1½		
S7	#5	28-1	7	7	DIAGRAM	33¾	1-2	
S8 - S11		25-3½ Av.	8 2EA	8 2EA			Vary 3-7 to 0-4	
S12		22-5	2	2			2-2	
S13		21-4	2	2			1-1	
S14 - S16		19-0 Av.	G 1EA	G 2EA			Vary 3-6 to 1-3	
S17 - S19		15-7 Av.	G 2EA	C 2EA			Vary 3-11 to 0-11	
S20 - S22		12-2 Av.	G 2EA	G 2EA			Vary 3-4 to 1-1	
S23 - S25		8-9½ Av.	G 2EA	- 2EA			Vary 3-0 to 0-10	
S26 - S28		5-5½ Av.	C 2EA	C 2EA			Vary 3-3 to 1-1	
S29 - S50		28-0 to 4-10	98 4EA	98 4EA	STRAIGHT			
S51 - S57		4-0 to 1-0	28 4EA	28 4EA				

Dimensions are to centers of bars

SPACING FOR ALUMINUM RAIL POSTS
FOR DETAILS OF RAIL & POSTS SEE DRWG. NO. 5457E

SPAN	INSIDE OF CURVE			OUTSIDE OF CURVE		
	℄ JT. TO END POST	END PANELS	INT. PANELS	℄ JT. TO END POST	END PANELS	INT. PANELS
55'	10"	2@8'-4¾"	4@9'-0"	10"	2@8'-11⅜"	4@9'-0"
90'	10"	2@8'-7¾"	9@8'-11"	10"	2@8'-10⅝"	8@8'-11"

FOR INFORMATION ONLY

This drawing to be used in conjunction with Drwgs. Nos. 5457E, 9084 & 9085

SHEET 2 OF 2 SHEETS
SUPPLEMENTAL DETAILS
℄ ON 3°15' CURVE 49°30' SKEW (RAD.) RT. FWD.
55'&90' COMPOSITE I-BEAM SPANS
28'-0" CLEAR ROADWAY 1'-7½" CURBS

INTERSTATE ROUTE 40

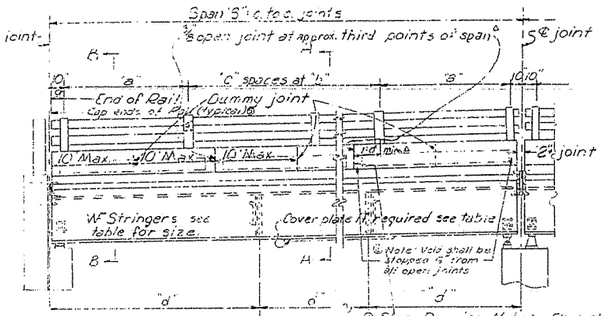
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY EAW DATE 11-15-57
TRACED BY SM DATE 7-20-58
CHECKED BY SM DATE 7-20-58
SCALE As noted

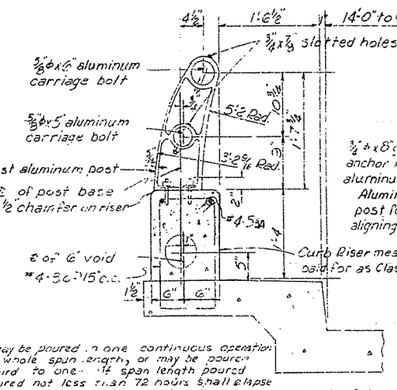
L. O. Curtson
BRIDGE DESIGN ENGINEER

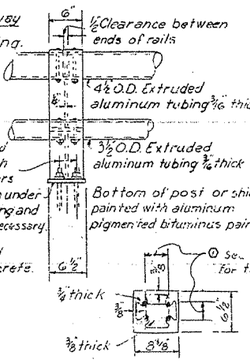
BRIDGE NO. 03123 DRAWING NO. 56998

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	ARK.			
JOB NO.		BB0107	218	263
(1) 03123 - FIO-SUPERSTRUCTURE - 56999				



ELEVATION
Scale: ½"=1'-0





DETAILS OF ALUMINUM RAILING
Scale: 1"=1'-0

Shop Pouring Note: Floor slabs may be poured in one continuous operation with a strike-off extending over the whole span length, or may be poured in increments with the center one-third to one-half span length poured first. After the center section is poured not less than 72 hours shall elapse before pouring the end sections. The end sections may be poured simultaneously; if not poured simultaneously, 48 hours shall elapse between section pours.

GENERAL NOTES

All concrete to be Class S. All exposed corners to be chamfered ¾" unless otherwise noted.
Field connections to be riveted or bolted with high strength bolts.
Rivets ⅞" ϕ. Open holes 15/16" ϕ except where noted otherwise.
Structural shapes of equal or greater strength may be substituted for shapes shown, but payment will be made on the basis of shapes shown or those actually used, whichever is less.
All welded connections to be ⅜" fillet shop welds except as noted. All welding shall conform to the American Welding Society Standard Specifications for welded Highway and Railway Bridges, 5th Edition 1956.
Shop Paint:- All structural steel except surfaces in contact with concrete shall be given one coat of red lead and raw linseed oil before shipment.
Field Paint:- 1st. Coat - Red lead tinted with lamp black. 2nd. Coat - Aluminum Paint.
All bearing plates and roadway expansion devices to be paid for as "Structural Steel in Beam Spans." Bearings shall be finally seated in a manner set forth in the Specifications. This work and material are to be considered as subsidiary to the item "Structural Steel in Beam Spans" and will not be paid for directly.
This drawing shows general features of design only. Shop drawings shall be made in accordance with the specifications, submitted and approval secured before fabrication is begun. ② ④
Reinforcing steel to be deformed bars of intermediate grade unless modified by Special Provisions. The reinforcing steel is to be accurately located in the forms and firmly held in place by means of steel wire supports sufficient in number and size to prevent displacement during the course of construction. The wire supports will not be paid for directly but will be considered subsidiary to the item of "Reinforcing Steel."
Shop lists and bending diagrams of reinforcing steel, including wire supports, shall be submitted and approval secured before fabrication is begun.
All chamfers on concrete riser for rail are to be ½".
Shop drawings showing details of railing shall be submitted and approval secured before fabrication is begun.
The aluminum bridge railing, including posts, and fasteners, shall be paid for at the unit price bid per linear foot for "Aluminum Bridge Railing" Section 805.
A rail connection utilizing set screws is an acceptable alternate and may be supplied at the contractor's option.
Outside surfaces of flanges of cast aluminum posts shall be given a No. 220 grit belt finish after which all exposed surfaces of posts shall receive one coat of clear lacquer.
SPECIFICATIONS: Arkansas State Highway Commission Standard Specifications for Highway Construction Edition of 1959.

LOADING H-20-S16 (A.A.S.H.O. 1957)
Dead Load: Interior Stringers To W Beam 520 + 105 (wt. / ft. of W) + (Cover Pl.) To Composite Beam 142 #/ft. Exterior Stringer 769 + (-1.5) (W) / ft. of W + (Cover Pl.) 142 #/ft.
Live Load: To each Comp. Beam 1.182 wheels - I 1.156 wheels + I

UNIT STRESSES
Class S Conc. (n=10) 1200 #/sq. in.
Structural Steel 18,000 #/sq. in.
Reinforcing Steel 20,000 #/sq. in.

VARIABLES - 55'-100' SPANS

SPAN 'S'	STRINGER REQUIRED	COVER PLATES INTERIOR	COVER PLATES EXTERIOR	POST SPACING "a"	POST SPACING "b"	POST SPACING "c"	STRUT SPS. No. @ "d"	"e"	DEAD & LIVE DEFLECTION INTER.	DEAD & LIVE DEFLECTION EXTER.
55'	36WF150	———	———	8'-8	9'-0	4	3@18'-0	5'-5 11/16	1/2	11/16
60'	36WF150	4"x⅞"x18'-0	6"x¾"x22'-0	7'-11	8'-6	5	3@20'-0	5'-5 11/16	11/16	13/16
65'	36WF160	6"x⅞"x30'-0	6"x¾"x32'-0	7'-8	8'-0	6	4@16'-3	3'-5 1/2	7/8	1"
70'	36WF170	10"x½"x34'	10"x⅝"x36'	7'-11	8'-9	6	4@17'-6	3'-5 1/2	1 1/16	1 3/16
75'	36WF182	11"x⅝"x40'	10"x1"x42'	7'-9½	8'-3	7	4@18'-9	3'-5 11/16	1 3/16	1 5/16
80'	36WF194	10"x1"x46'	10"x1⅛"x50'	8'-3	8'-10	7	4@20'-0	3'-5 3/4	1 3/16	1 5/16
85'	36WF210	11"x1"x42'	11"x1"x48'	8'-0	8'-5	8	5@17'-0	3'-5 3/8	1 1/16	1 3/16
90'	36WF230	12"x1"x52'	15"x1"x55'	8'-6	8'-11	8	5@18'-0	3'-5 3/8	2 1/16	2 3/16
95'	36WF230	14"x1½"x50'	15"x1⅝"x54'	8'-5	8'-6	9	5@19'-0	3'-5 3/8	2 1/16	3 3/16
100'	36 WF230 and 36WF260	15"x1½"x69'	16"x1⅞"x62'	8'-8	9'-0	9	5@20'-0	3'-5 3/8	3 1/8	3 5/16

* Steel for these beams and cover plates shall conform to the specifications for Structural Steel for Welding, ASTM Designation A 373.

BAR LIST - ONE SPAN

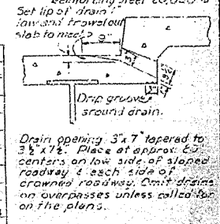
MARK	SIZE	Number Required Each Span 55'	60'	65'	70'	75'	80'	LENGTH	BEND DIA.
S1	#6	90	98	106	114	122	130	29'-2"	5 1/2"
S2	#6	44	48	52	56	60	64	29'-10"	3 3/4"
S3	#4	159						3/4"±0"	5"
S4	#4	90	98	106	114	122	130	5'-2	3"
S5	#4	88	96	104	112	120	128	4'-3	3"
S6	#4	90	98	106	114	122	130	5'-4	1½"
S3A	#4	12	12	12	12	12	12	5'-0 (-3/8")	5"

BENDING DIAGRAM

Dimensions are to centers of bars

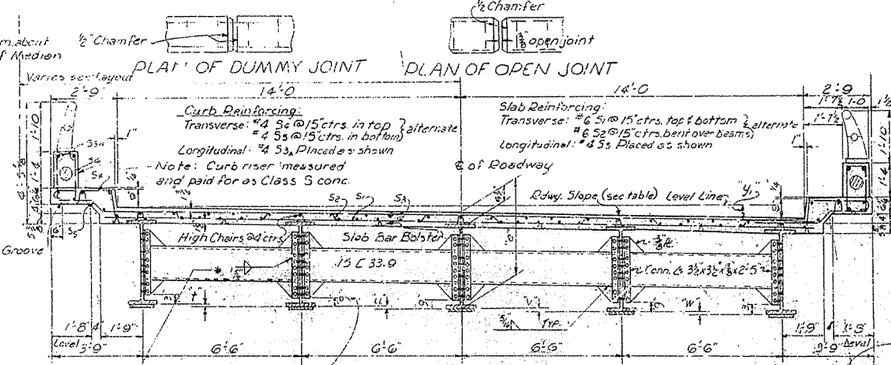
No. Reqd. Each Span 55'	60'	65'	70'
158	146	154	162
69	72	76	80
158	146	154	162
138	146	154	162
158	146	154	162
12	12	12	12

UNIT STRESSES
Class S Conc. (n=10) 1200 #/sq. in.
Structural Steel 18,000 #/sq. in.
Reinforcing Steel 20,000 #/sq. in.



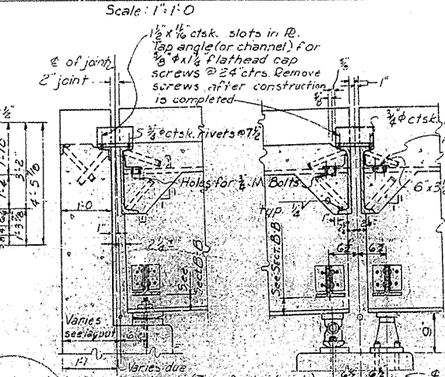
Drain opening 3"x7" tapered to 3½"x7½". Place at approx. 60' centers on low side of sloped roadway & each side of crowned roadway. Omit drains on overpasses unless called for on the plans.

SECTION THRU DRAIN
Scale: ½"=1'-0"

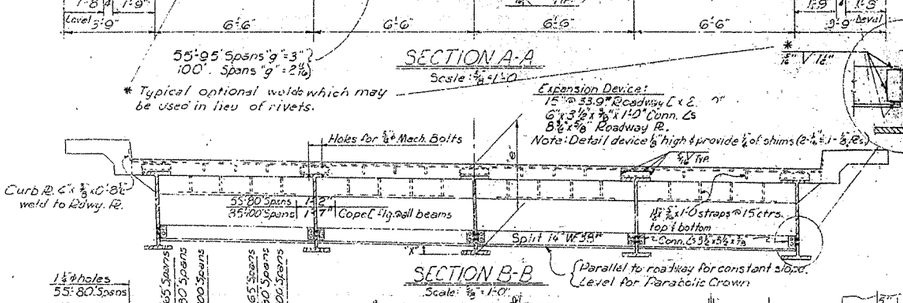


SECTION A-A
Scale: ⅜"=1'-0"

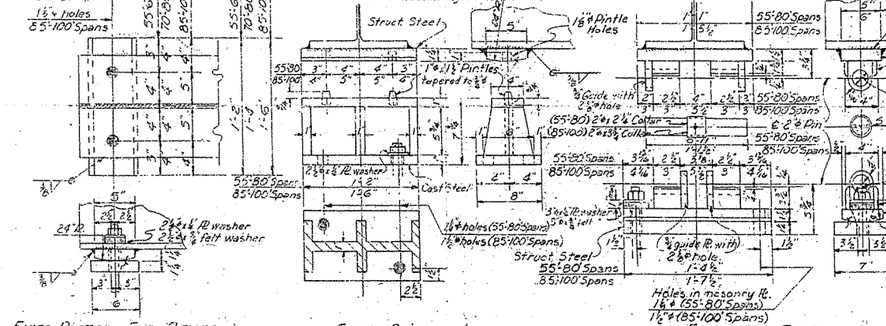
* Typical optional weld which may be used in lieu of rivets.



JOINT AT END BENT JOINT AT INTER. BENT
Scale: 3"=1'-0

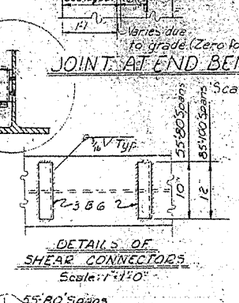


SECTION B-B
Scale: ⅜"=1'-0"

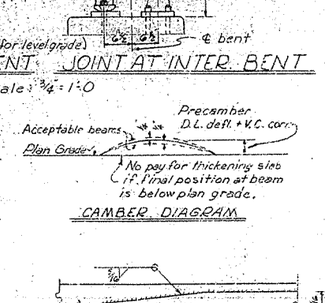


DETAILS OF BEARINGS
Scale: 1½"=1'-0"

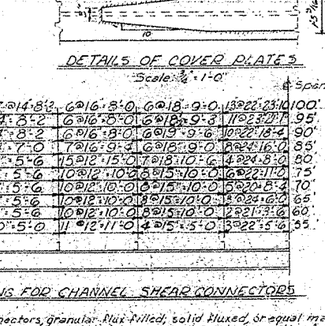
Thickness of sole plates may vary due to grade. See table on layout or on intermediate bent drawing.



DETAILS OF SHEAR CONNECTORS
Scale: 1"=1'-0"



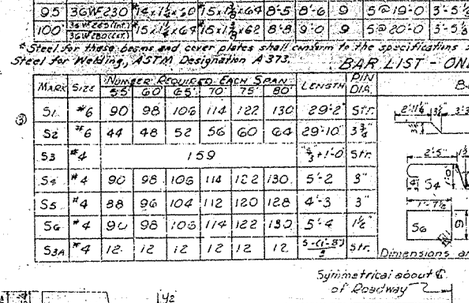
CAMBER DIAGRAM

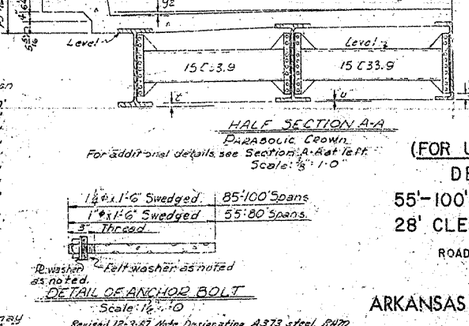


SPACING FOR CHANNEL SHEAR CONNECTORS

Joint	T @ 14'-8½"	6 @ 16'-8'-0	6 @ 18'-9'-0	13 @ 22'-2"	10 @ 100'
	7 @ 14'-8½"	6 @ 16'-8'-0	6 @ 18'-9'-0	10 @ 22'-1"	8 @ 90'
	7 @ 14'-7'-0	7 @ 16'-9'-3	6 @ 18'-9'-0	10 @ 22'-1"	6 @ 85'
Varies	6 @ 11'-5'-6	15 @ 12'-1"	7 @ 18'-10'-6	4 @ 24'-8'-0	6 @ 80'
	6 @ 11'-5'-6	10 @ 12'-10'-0	6 @ 15'-10'-0	6 @ 22'-11'-0	5 @ 75'
	6 @ 11'-5'-6	10 @ 12'-10'-0	6 @ 15'-10'-0	5 @ 20'-8'-2	5 @ 70'
	6 @ 11'-5'-6	10 @ 12'-10'-0	6 @ 15'-10'-0	4 @ 24'-6'-0	5 @ 65'
	6 @ 11'-5'-6	10 @ 12'-10'-0	6 @ 15'-10'-0	2 @ 21'-3'-6	6 @ 60'
	6 @ 10'-5'-0	11 @ 12'-11'-0	4 @ 15'-5'-0	5 @ 22'-5'-6	5 @ 55'

Note: Stud shear connectors, granular flux filled, solid fluxed, or equal may be used in place of the channels shown at the following ratios: ¾" diameter stud in place of 7 lbs. channel, ⅞" diameter stud in place of 9.2 lbs. channel. The studs shall be 4" long and automatically welded to the beam flanges in accordance with recommendations of the manufacturer. Channel sections will be used as basis for measurement of steel in shear connectors.





SPAN	SLOPE OF CROWN	"t"	"u"	"v"	"w"	Sec. B-B "x"	"y"
55' THRU 95'	½ Parabolic 0.0104	1"	1 1/16	1 1/16	1 1/16	4"	1½" 3½"
100'	½ Parabolic 0.0104	1 1/16	1 1/16	1 1/16	1 1/16	4"	1½" 3½"

VARIABLES FOR SLOPED OR CROWNED RDWY

SPAN	STRINGER REQUIRED	COVER PLATES INTERIOR	COVER PLATES EXTERIOR	POST SPACING "a"	POST SPACING "b"	POST SPACING "c"	STRUT SPS. No. @ "d"	"e"	DEAD & LIVE DEFLECTION INTER.	DEAD & LIVE DEFLECTION EXTER.
55'	36WF150	———	———	8'-8	9'-0	4	3@18'-0	5'-5 11/16	1/2	11/16
60'	36WF150	4"x⅞"x18'-0	6"x¾"x22'-0	7'-11	8'-6	5	3@20'-0	5'-5 11/16	11/16	13/16
65'	36WF160	6"x⅞"x30'-0	6"x¾"x32'-0	7'-8	8'-0	6	4@16'-3	3'-5 1/2	7/8	1"
70'	36WF170	10"x½"x34'	10"x⅝"x36'	7'-11	8'-9	6	4@17'-6	3'-5 1/2	1 1/16	1 3/16
75'	36WF182	11"x⅝"x40'	10"x1"x42'	7'-9½	8'-3	7	4@18'-9	3'-5 11/16	1 3/16	1 5/16
80'	36WF194	10"x1"x46'	10"x1⅛"x50'	8'-3	8'-10	7	4@20'-0	3'-5 3/4	1 3/16	1 5/16
85'	36WF210	11"x1"x42'	11"x1"x48'	8'-0	8'-5	8	5@17'-0	3'-5 3/8	1 1/16	1 3/16
90'	36WF230	12"x1"x52'	15"x1"x55'	8'-6	8'-11	8	5@18'-0	3'-5 3/8	2 1/16	2 3/16
95'	36WF230	14"x1½"x50'	15"x1⅝"x54'	8'-5	8'-6	9	5@19'-0	3'-5 3/8	2 1/16	3 3/16
100'	36 WF230 and 36WF260	15"x1½"x69'	16"x1⅞"x62'	8'-8	9'-0	9	5@20'-0	3'-5 3/8	3 1/8	3 5/16

* Steel for these beams and cover plates shall conform to the specifications for Structural Steel for Welding, ASTM Designation A 373.

Revised General Notes "e" to conform with new S.P. FDN 19-15-60
② Added Sta. & Pouring Note & revised Gen. Notes. 5-5-59 J.S.U.A.
③ Revised Web 12-12-59 L.H.T.
④ Revised Bar Sizes for S1 & S2. DEV 5-24-60.
⑤ Revised General Notes & Sta. & Pouring Note. 6-24-60 C.E.V.
⑥ Added Cap Note. Added. 6-22-60. C.E.V.
Revised 12-3-67 Note Designation A 373 Steel. R.W.D.
Revised 3-10-58 Expansion Device Detail Revised 6-3-58 Strut Welding Bar Note F.E.B.
Revised 6-23-58 Curb Riser Sl. Notes F.E.B.
Bm. cover pl. 10 / 20 F.E.B.
⑦ Revised All Post Seat Dimensions 3-13-61 F.E.B.

FOR INFORMATION ONLY
(FOR USE WITH ALUMINUM RAIL)
DETAILS OF STANDARD
55'-100' COMPOSITE I-BEAM SPANS
28' CLEAR ROADWAY 1'-7½" CURBS

ROADWAY: 1½" Parabolic Crown, 0.0104 ½ Slope
ROUTE SEC.

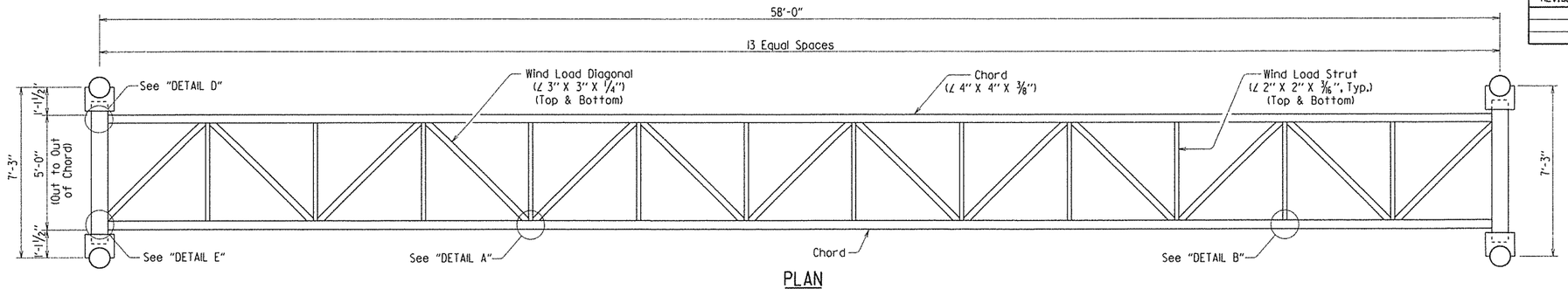
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: K.E.C. DATE: 10-11-57
TRACED BY: DATE:
CHECKED BY: ERD / WEN DATE: 10-15-57
SCALE: AS SHOWN

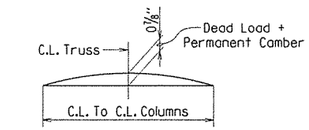
E. P. Clarkson
BRIDGE DESIGN ENGINEER

BRIDGE NO. 03123 DRAWING NO. 56999

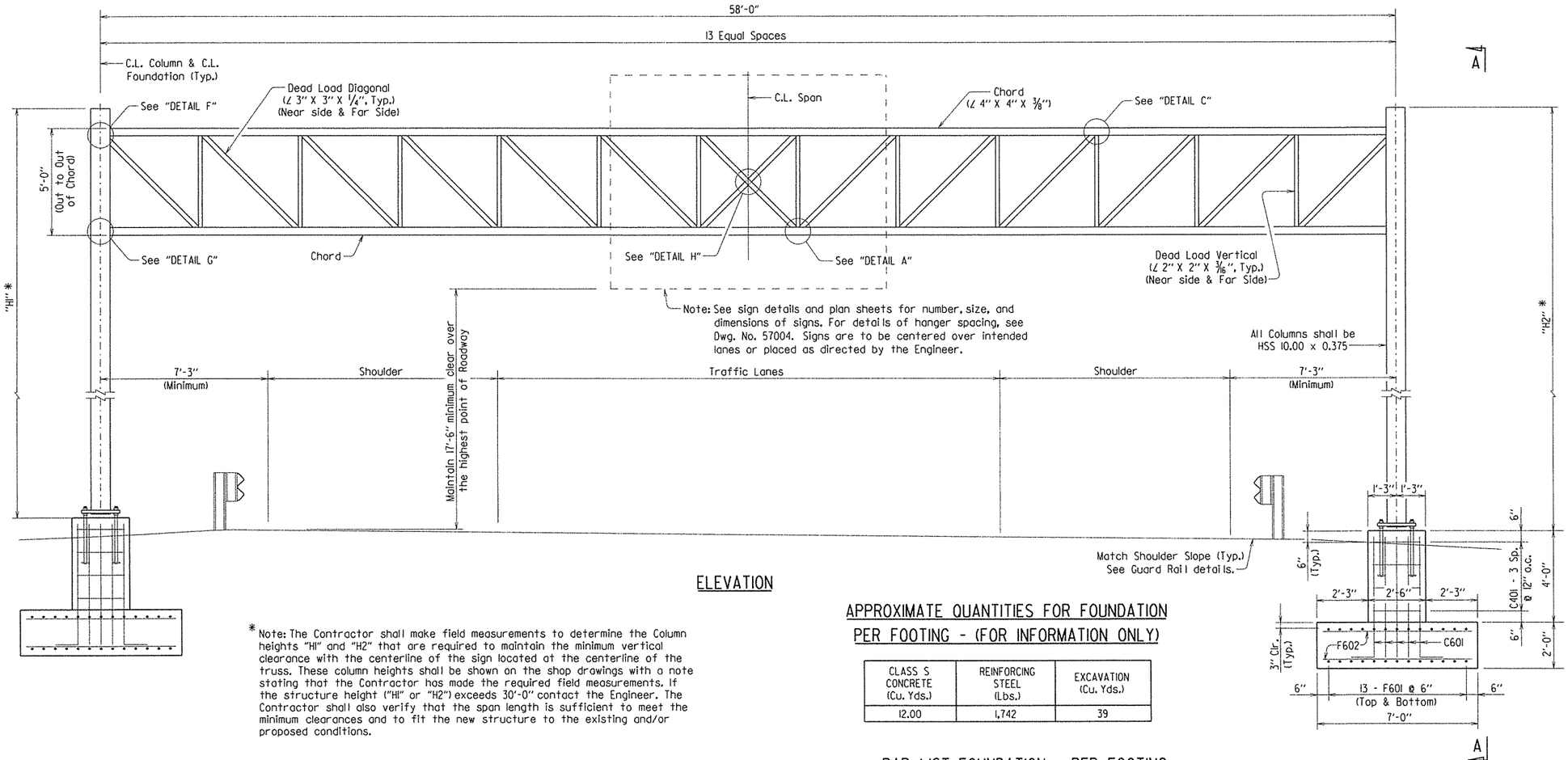
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	219	263
				① OH-040-18-31 OH-040-18-32 OH-040-18-33		SIGN STRUCTURE		57000



PLAN



TRUSS CAMBER DIAGRAM



ELEVATION

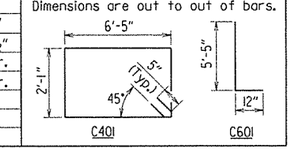
* Note: The Contractor shall make field measurements to determine the Column heights "H1" and "H2" that are required to maintain the minimum vertical clearance with the centerline of the sign located at the centerline of the truss. These column heights shall be shown on the shop drawings with a note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

APPROXIMATE QUANTITIES FOR FOUNDATION PER FOOTING - (FOR INFORMATION ONLY)

CLASS S CONCRETE (Cu. Yds.)	REINFORCING STEEL (Lbs.)	EXCAVATION (Cu. Yds.)
12.00	1,742	39

BAR LIST-FOUNDATION - PER FOOTING

MARK	NO. REQ'D	LENGTH	P.D.	BENDING DIAGRAMS
				Dimensions are out to out of bars.
C401	8	17'-6"	2"	
C601	46	6'-4"	4½"	
F601	26	15'-6"	Str.	
F602	62	6'-6"	Str.	



STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
5-14-15
CHARLES R. ELLIS
BRIDGE ENGINEER

SHEET 1 OF 5
DETAILS FOR
58' STEEL OVERHEAD SIGN STRUCTURES

ROUTE 40 SEC. 52

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

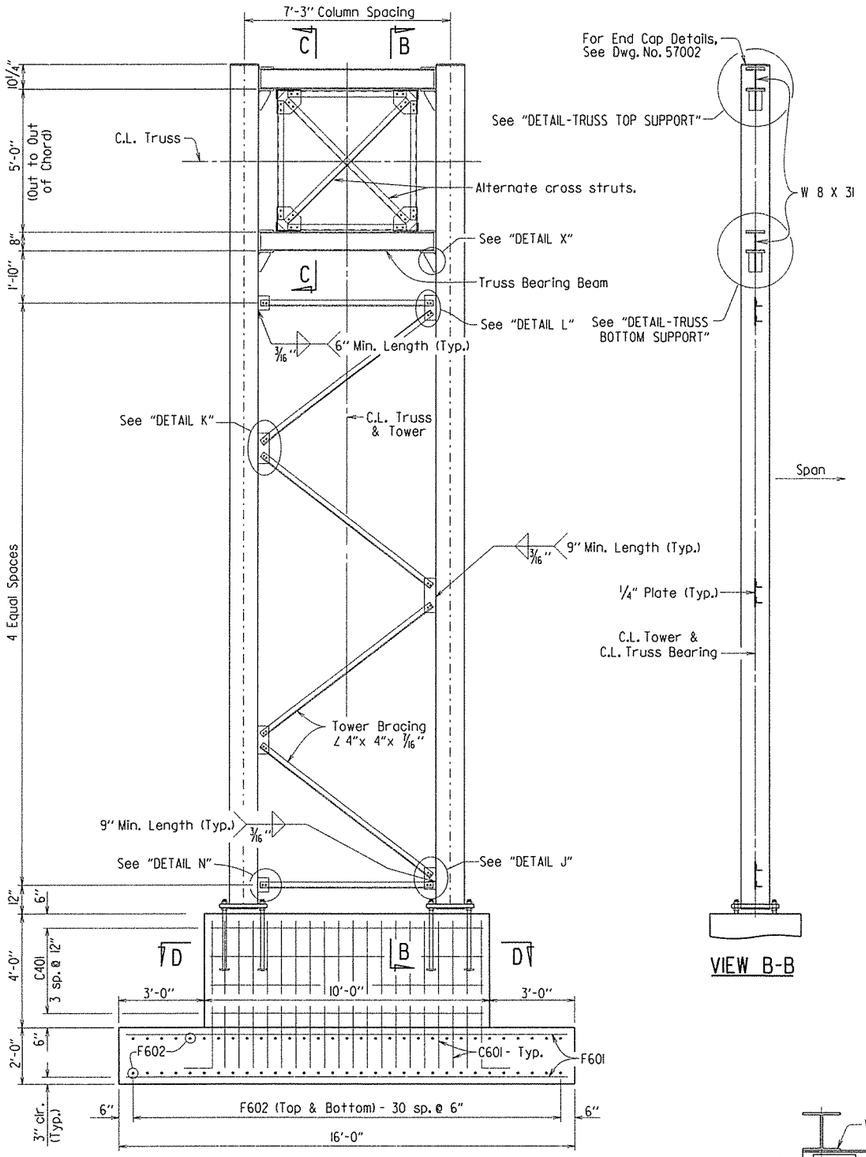
DRAWN BY: A.M.S. DATE: 1/7/15
CHECKED BY: JYP DATE: 5-14-15
DESIGNED BY: STD. DATE: —

FILENAME: bbb0107_ohsignl.dgn
SCALE: NOT TO SCALE

STR. NO. OH-040-18-31, OH-040-18-32, OH-040-18-33

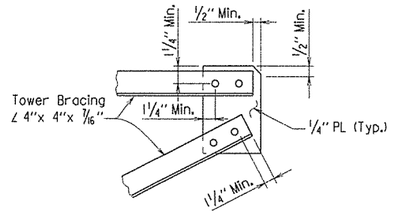
DRAWING NO. 57000

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	220	263
				① OH-040-18-31, OH-040-18-32, OH-040-18-33		OVERHEAD SIGN STR.		57001

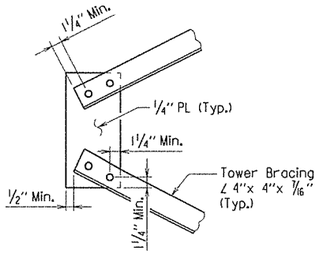


VIEW A-A

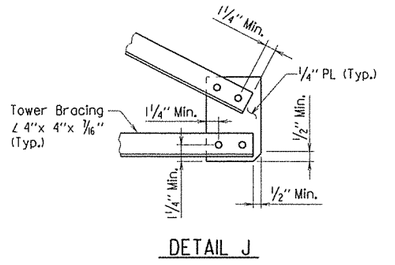
VIEW B-B



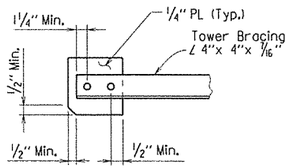
DETAIL L



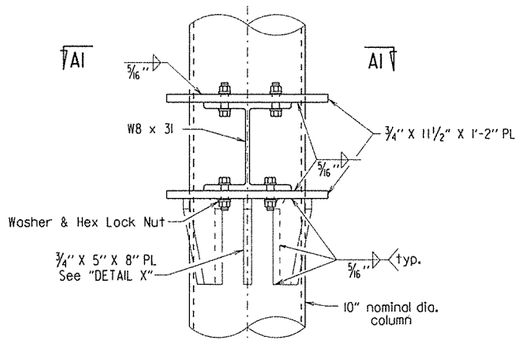
DETAIL K



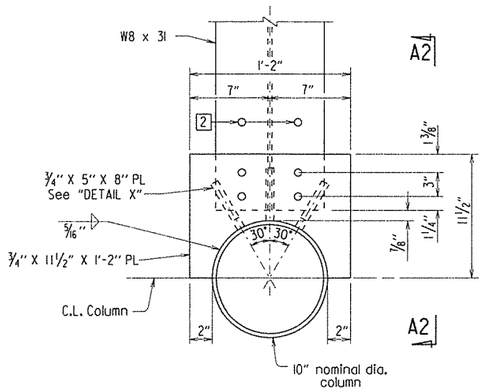
DETAIL J



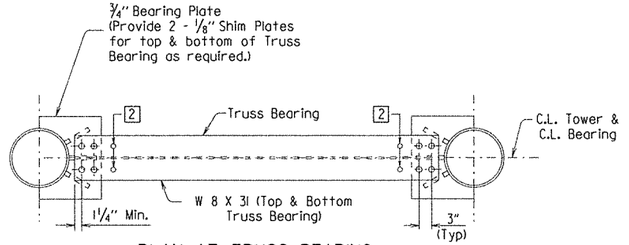
DETAIL N



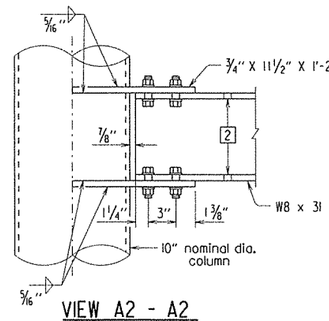
DETAIL - TRUSS BEARING SUPPORT



VIEW A1 - A1

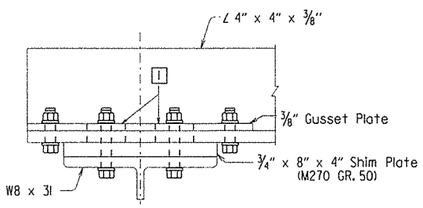


PLAN AT TRUSS BEARING



VIEW A2 - A2

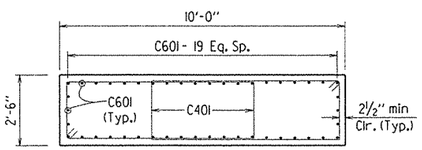
¾" X 5" X 8" Plate not shown for clarity



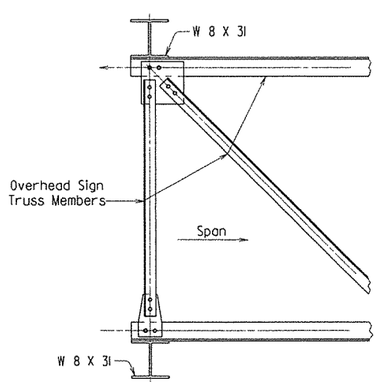
DETAIL - TRUSS CONNECTION

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

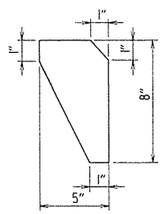
[2] 11/16" Dia. holes at top or bottom flanges as required.



SECTION D-D



SECTION C-C



DETAIL X

STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
5-14-15
CHARLES R. ELLIS

BRIDGE ENGINEER

SHEET 2 OF 5
DETAILS FOR
58' STEEL OVERHEAD SIGN STRUCTURES

ROUTE 40 SEC. 52

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: A.M.S. DATE: 1/7/15 FILENAME: bbb0107_ohsignl.dgn

CHECKED BY: JHP DATE: 5-14-15 SCALE: Not to Scale

DESIGNED BY: STD. DATE: —

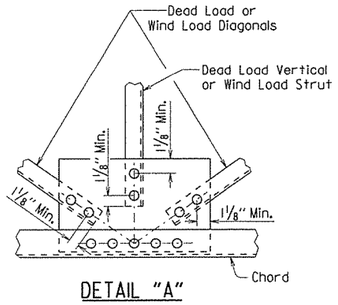
STR. NO. OH-040-18-31, OH-040-18-32, OH-040-18-33 DRAWING NO. 57001

PRINT DATE: 5/11/2015

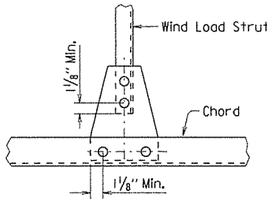
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	221	263
				(1) OH-040-18-31, OH-040-18-32, OH-040-18-33		OVERHEAD SIGN STR.		57002

Note: Thickness of all Gusset Plates shall be 3/8".

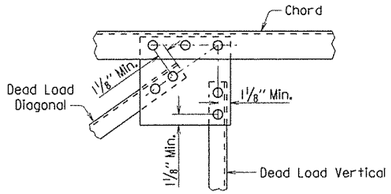
[1] 11/16" x 2" Slotted Holes in Gusset Plate and Chord Angle Use plate washer on Gusset Plate side. 11/16" ø holes in 3/4" shim plate and beam flange.



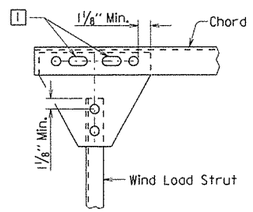
DETAIL "A"



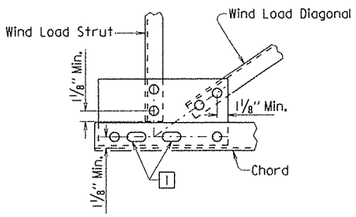
DETAIL "B"



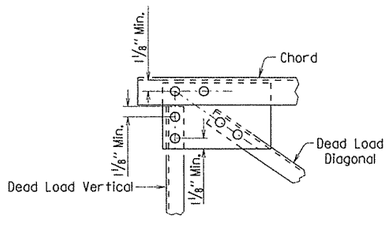
DETAIL "C"



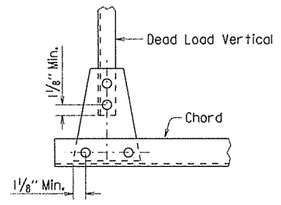
DETAIL "D"



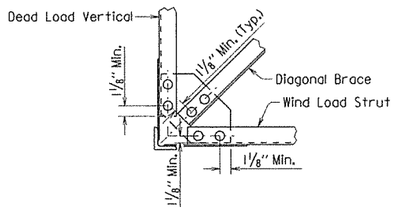
DETAIL "E"



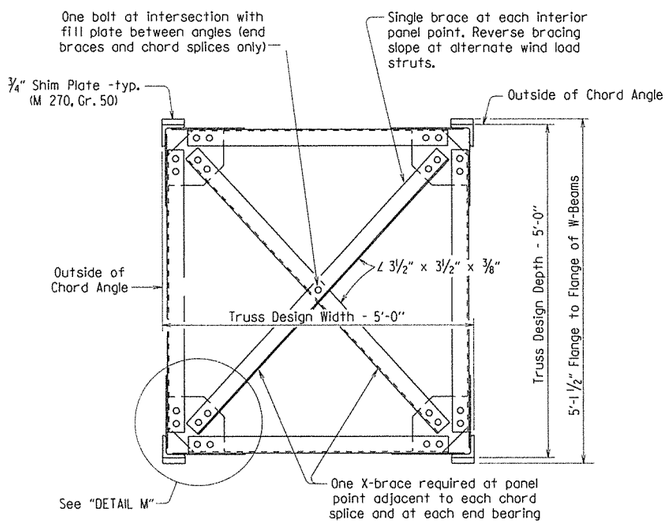
DETAIL "F"



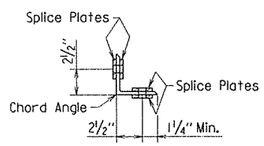
DETAIL "G"



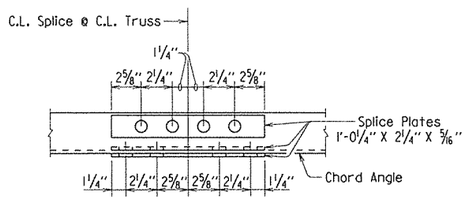
DETAIL "M"



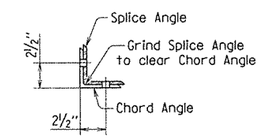
TRUSS SECTION



SECTION ON C.L. SPLICE

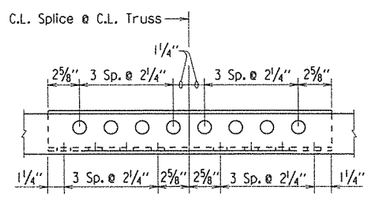


CHORD SPLICE USING PLATES



SECTION ON C.L. SPLICE

(4" ∠ Shown)

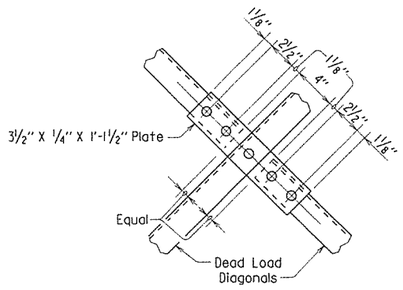


OPTIONAL CHORD SPLICE USING ANGLES

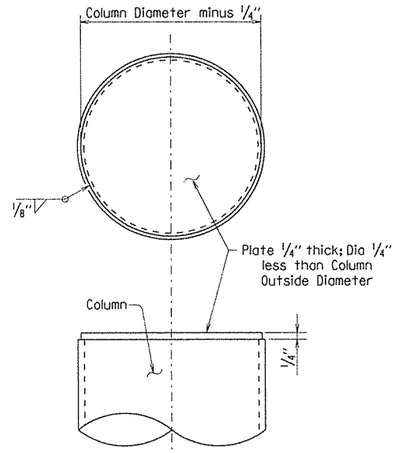
Place Splice Angle on inside of Truss

(4" ∠ Shown)

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



DETAIL "H"



END CAP DETAILS

STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
5-14-15
CHARLES R. ELLIS

BRIDGE ENGINEER

SHEET 3 OF 5
DETAILS FOR
58' STEEL OVERHEAD SIGN STRUCTURES

ROUTE 40 SEC. 52

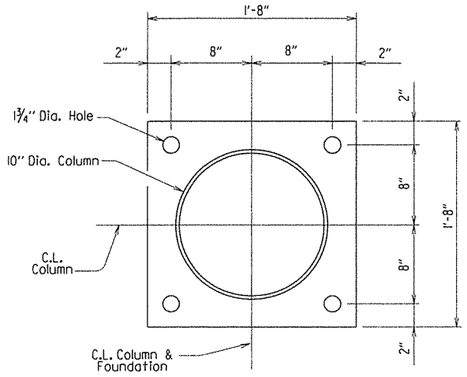
ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

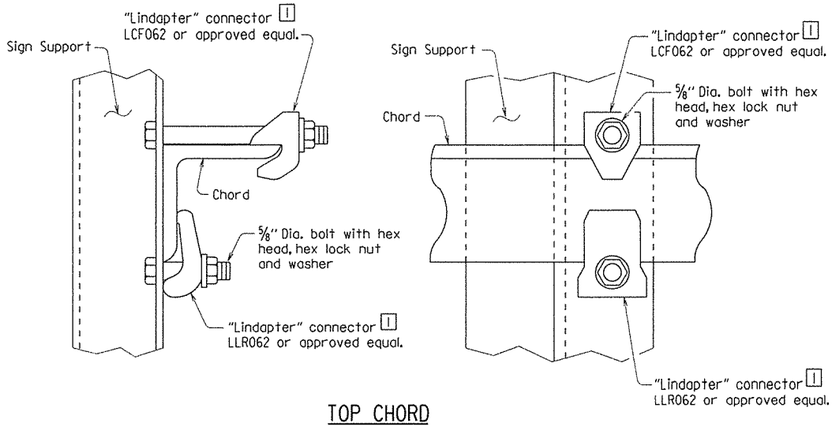
DRAWN BY: A.M.S. DATE: 1/7/15 FILENAME: bbb0107_ohsignl.dgn
CHECKED BY: JYP DATE: 5-14-15 SCALE: Not to Scale
DESIGNED BY: STD. DATE: —
STR. NO. OH-040-18-31, OH-040-18-32, OH-040-18-33 DRAWING NO. 57002

PRINT DATE: 5/11/2015

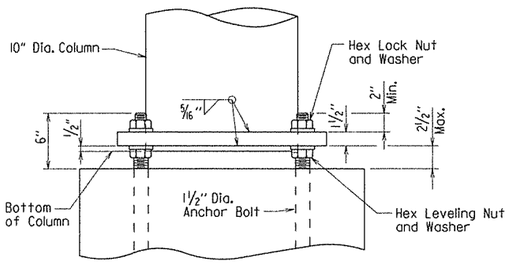
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	222	263
				① OH-040-18-31, OH-040-18-32, OH-040-18-33		OVERHEAD SIGN STR.		57003



PLAN - COLUMN BASE

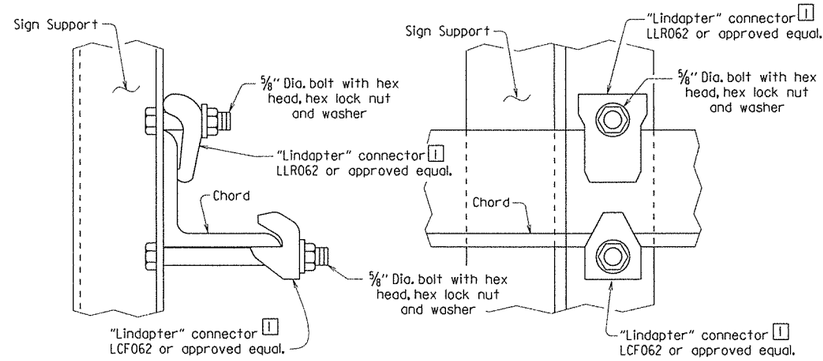


TOP CHORD



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

ELEVATION - COLUMN BASE

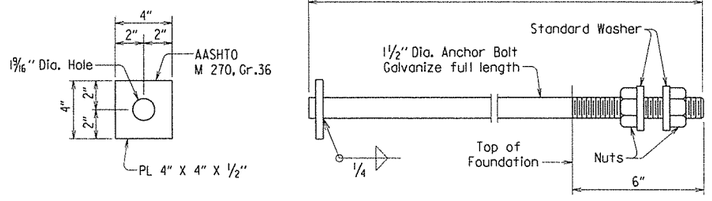


BOTTOM CHORD

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

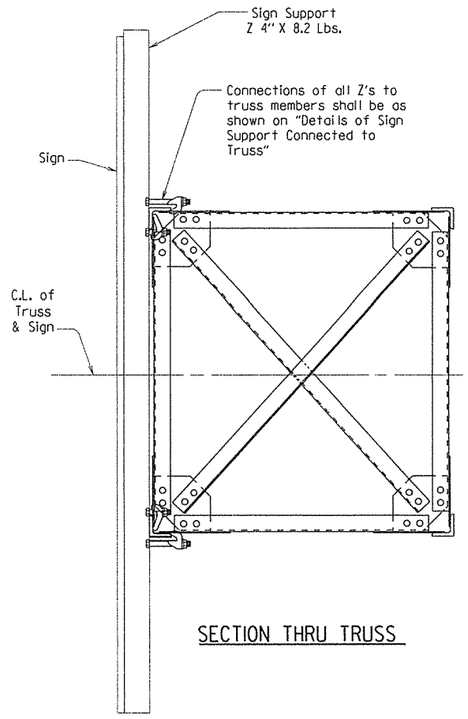
Note: Install all support connectors clear of the gusset plates and splice locations.

DETAILS OF SIGN SUPPORT CONNECTED TO TRUSS

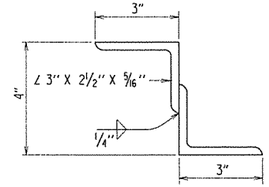


Anchor bolts shall comply with AASHTO M 314, Grade 55 with Supplementary Requirement S1, and galvanized according to Subsection 807.07. Nuts for bolts shall be as specified in Subsection 807.07.

ANCHOR BOLT DETAIL



SECTION THRU TRUSS



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

DETAILS OF ALTERNATE Z SUPPORT

STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
5-14-15
CHARLES R. ELLIS
BRIDGE ENGINEER

SHEET 4 OF 5
DETAILS FOR
58' STEEL OVERHEAD SIGN STRUCTURES

ROUTE 40 SEC. 52
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: A.M.S. DATE: 1/7/15
CHECKED BY: JAP DATE: 5-14-15
DESIGNED BY: STD. DATE: ---
FILENAME: bbb0107_ohsignl.dgn
SCALE: Not to Scale
STR. NO. OH-040-18-31, OH-040-18-32, OH-040-18-33
DRAWING NO. 57003

PRINT DATE: 5/11/2015

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	223	263

(1) OH-040-18-31, OH-040-18-32, OH-040-18-33 — SIGN STRUCTURE — 57004

GENERAL NOTES:

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

DESIGN SPECIFICATIONS: AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, Sixth Edition, 2013 with current interim revisions.

Basic Wind Speed = 90 mph.
Fatigue Category: I

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

FOUNDATION MATERIALS AND STRENGTHS:
Class S Concrete — f'c = 3,500 psi
Reinforcing Steel (Gr. 60, AASHTO M 31 or M 322, Type A) — fy = 60,000 psi

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

Angles:	AASHTO M 270, Grade 36 (Fy = 36,000 psi)
Plate, W-Section:	AASHTO M 270, Grade 50 (Fy = 50,000 psi)
[1] Pipe:	ASTM A 139, Gr. C, straight-seam welded (Fy = 42,000 psi), ASTM A 500, Gr. B (Fy = 42, 000 psi), ASTM A 501, Gr. B (Fy = 50,000 psi), ASTM A 714, Class 2, Grade II, Type E or S (Fy = 50,000 psi)
Z-Shapes:	AASHTO M 270, Grade 36 (Fy = 36,000 psi)
Shim Plates:	ASTM A 1011, SS, Grade 36, Type 2, or Grade 40
Bolts:	ASTM A 325, Type 1
Locknuts - Approved Type:	Meeting or exceeding AASHTO M 292
Washers:	ASTM F 436
Nuts:	ASTM A 563 or AASHTO M 292, Grade DH or Grade 2H

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

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

Requests for substitution of structural steel shapes shown with shapes of greater size must be submitted by the Contractor to the Engineer for approval. Steels of equal or greater strengths will be accepted only when shown on the approved shop drawings. Shapes and materials shown in the plans will be the basis of payment and no additional compensation will be made for any adjustments due to substitutions.

All steel shall be galvanized according to Subsection 807.19. Steel completely encased in concrete may not be galvanized. Galvanized coating damaged during transport, handling or erection shall be field repaired in accordance with Subsection 807.88.

All main load carrying tension members greater than ½" in thickness shall conform to the requirements of the Longitudinal Charpy V-Notch test specified for Zone 1 minimum service temperature. This work and materials shall be paid for in accordance with Job Special Provision "Steel Sign Structures".

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

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

All welding that is to be done during fabrication of structural steel, including temporary welds, shall be detailed on the shop drawings and submitted for approval. If additional welds are required, whether temporary or permanent, a formal request with detailed drawings shall be submitted to the Engineer for approval. All welding shall conform to Subsection 807.26.

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

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

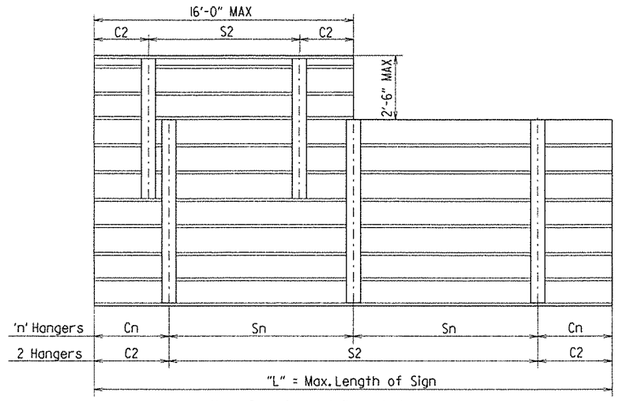
Connections shall be bolted with high-strength bolts. Unless otherwise noted, bolts shall be ⅝" diameter and open holes shall be 11/16". Bolt spacing shall be 2¼" for ⅝" diameter bolts unless otherwise noted. Bolts shall be placed with heads on the outside face of all members.

All truss frame bolts shall comply with ASTM A 325 Type 1, galvanized according to Subsection 807.06. Nuts and washers for ASTM A 325 Type 1 bolts shall be furnished and galvanized in accordance with Subsection 807.06.

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

Anchor bolts shall comply with AASHTO M 314, Grade 55 including Supplementary Requirement S1, and galvanized according to Subsection 807.07. Nuts and washers for anchor bolts shall be furnished and galvanized in accordance with Subsection 807.07.

Shoring may be required to protect existing shoulders during excavation. Any shoring required shall not be paid for directly, but shall be considered incidental to the item "Steel Sign Structure". The excavations for the footings shall be backfilled before the structure is attached to the foundations.



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

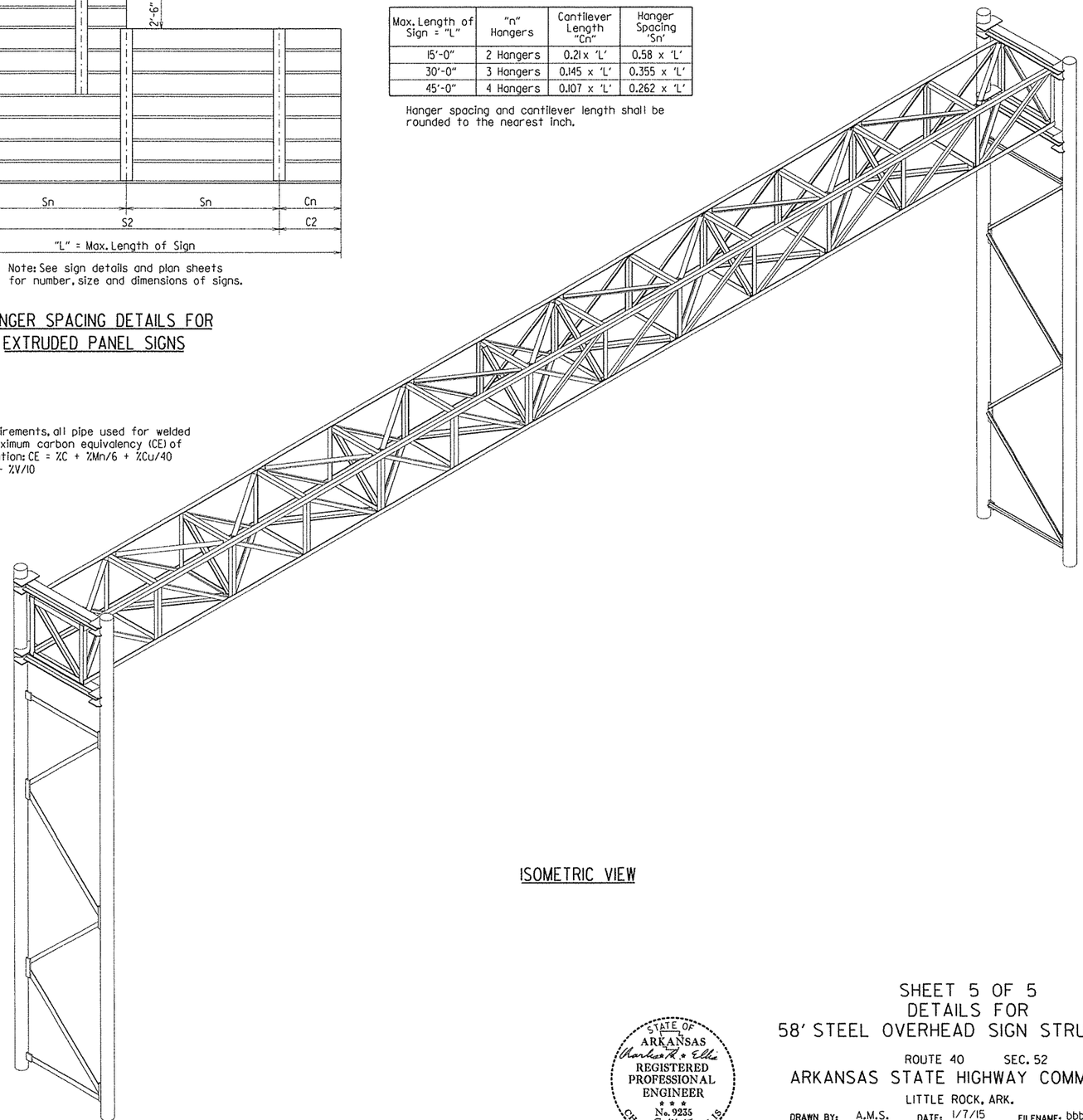
HANGER SPACING DETAILS FOR EXTRUDED PANEL SIGNS

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

HANGER VARIABLES

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

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



ISOMETRIC VIEW

STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
5-14-15
CHARLES R. ELLIS
BRIDGE ENGINEER

SHEET 5 OF 5
DETAILS FOR 58' STEEL OVERHEAD SIGN STRUCTURES

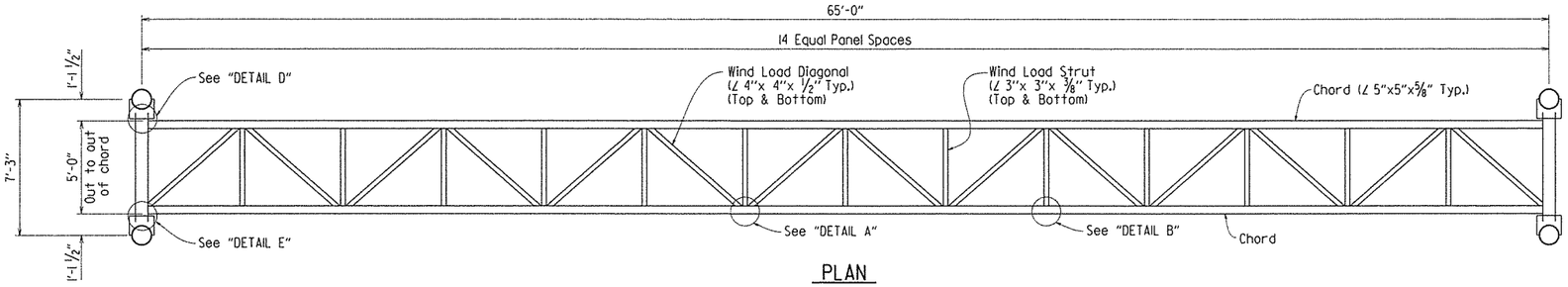
ROUTE 40 SEC. 52

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: A.M.S. DATE: 1/7/15
CHECKED BY: JVP DATE: 5-14-15
DESIGNED BY: STD. DATE: —
FILENAME: bbb0107_ohsignl.dgn
SCALE: NOT TO SCALE

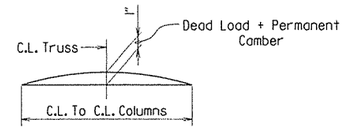
STR. NO. OH-040-18-31, OH-040-18-32, OH-040-18-33
DRAWING NO. 57004

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	224	263
				(1) OH-040-18-34 OH-040-18-35		SIGN STRUCTURE		57005

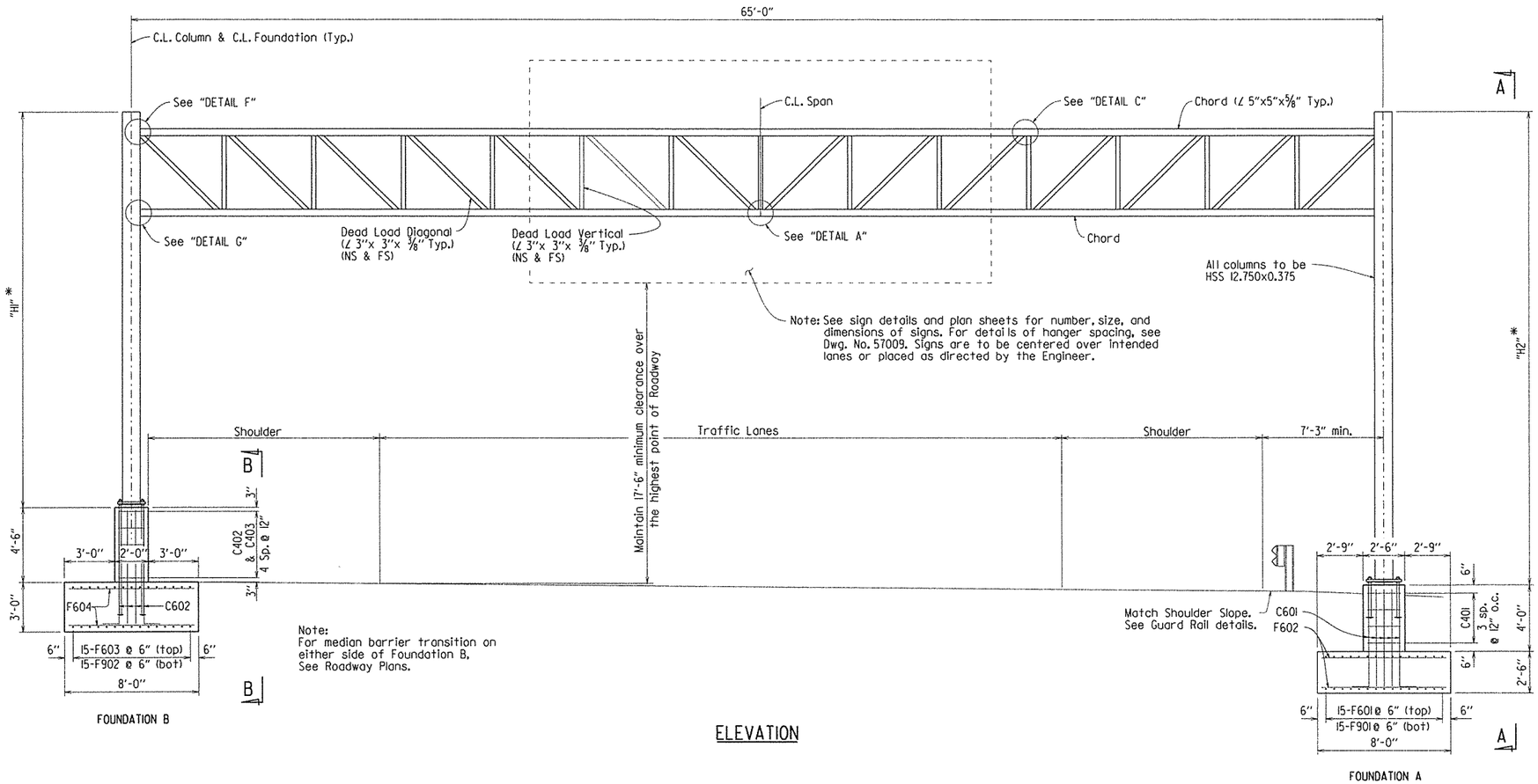


PLAN

* Note: The Contractor shall make field measurements to determine the Column heights "H1" and "H2" that are required to maintain the minimum vertical clearance with the centerline of the sign located at the centerline of the truss. These column heights shall be shown on the shop drawings with a note stating that the Contractor has made the required field measurements. If the structure height ("H1" or "H2") exceeds 30'-0" contact the Engineer. The Contractor shall also verify that the variable span length (65'-0" to 75'-0") is sufficient to meet the minimum clearances and to fit the new structure to the existing and/or proposed conditions.



TRUSS CAMBER DIAGRAM



ELEVATION

APPROXIMATE QUANTITIES FOR FOUNDATION (FOR INFORMATION ONLY)

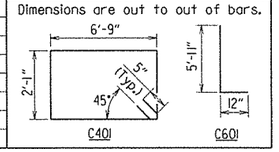
FOUNDATION	CLASS S CONCRETE (Cu. Yds.)	REINFORCING STEEL (Lbs.)	EXCAVATION (Cu. Yds.)
A	17.2	2659	51
B	22.0	3137	26

TABLE OF FOUNDATIONS

FOUNDATION		SIGN STRUCTURE
MEDIAN	OUTSIDE SHOULDER	
A	A	OH-40-18-34
B	A	OH-40-18-35

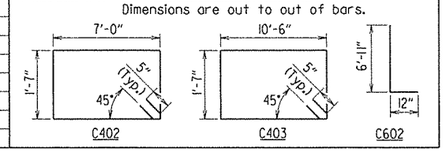
BAR LIST-FOUNDATION 'A'

MARK	NO. REQ'D	LENGTH	P.D.	BENDING DIAGRAMS
C401	8	18'-2"	3"	Dimensions are out to out of bars.
C601	48	6'-9"	4½"	
F601	15	17'-6"	Str.	
F602	70	7'-6"	Str.	
F901	15	17'-6"	Str.	



BAR LIST-FOUNDATION 'B'

MARK	NO. REQ'D	LENGTH	P.D.	BENDING DIAGRAMS
C402	10	17'-8"	3"	Dimensions are out to out of bars.
C403	5	24'-8"	3"	
C602	74	7'-9"	4½"	
F603	15	17'-6"	Str.	
F604	70	7'-6"	Str.	
F902	15	17'-6"	Str.	



STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
5-14-15
CHARLES R. ELLIS
BRIDGE ENGINEER

SHEET 1 OF 5
DETAILS FOR
65' STEEL OVERHEAD SIGN STRUCTURES

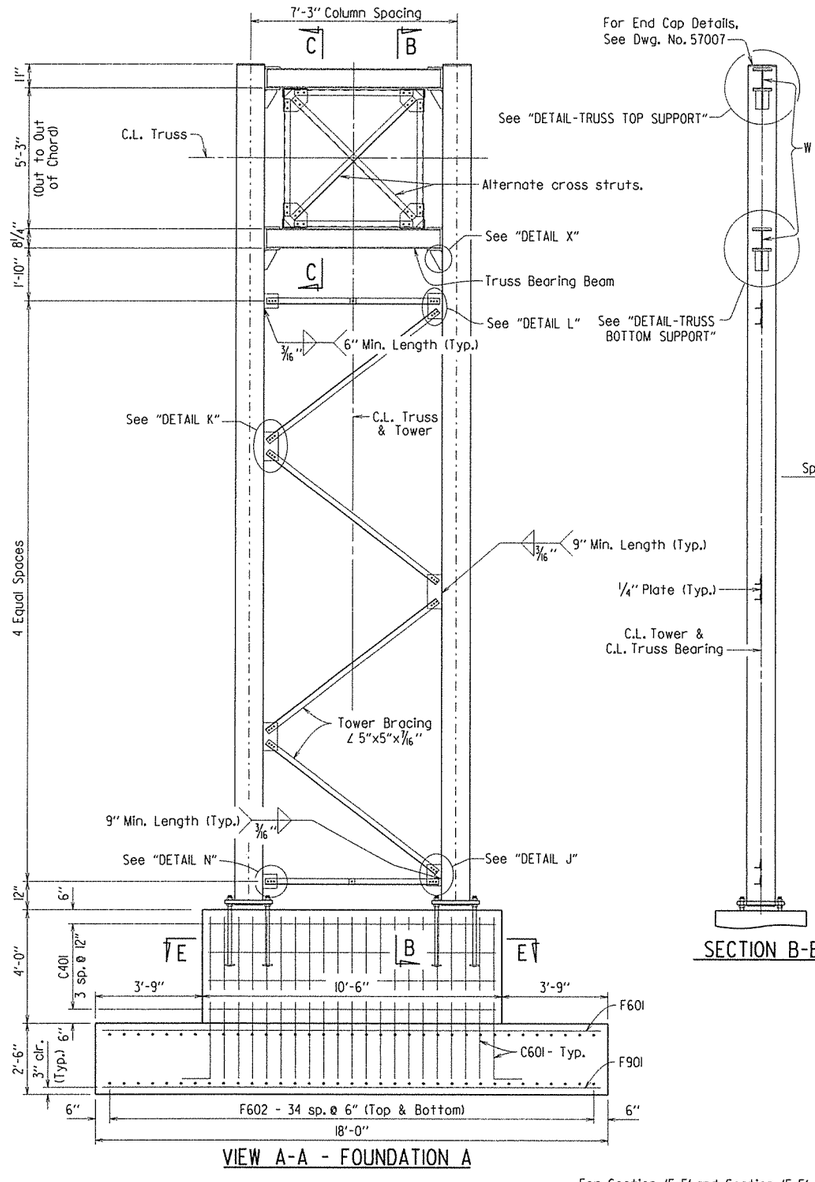
ROUTE 40 SEC. 52
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: A.M.S. DATE: 1/9/15
CHECKED BY: JNP DATE: 5-14-15
DESIGNED BY: STD. DATE: —
FILENAME: bbb0107_ohsign2.dgn
SCALE: NOT TO SCALE

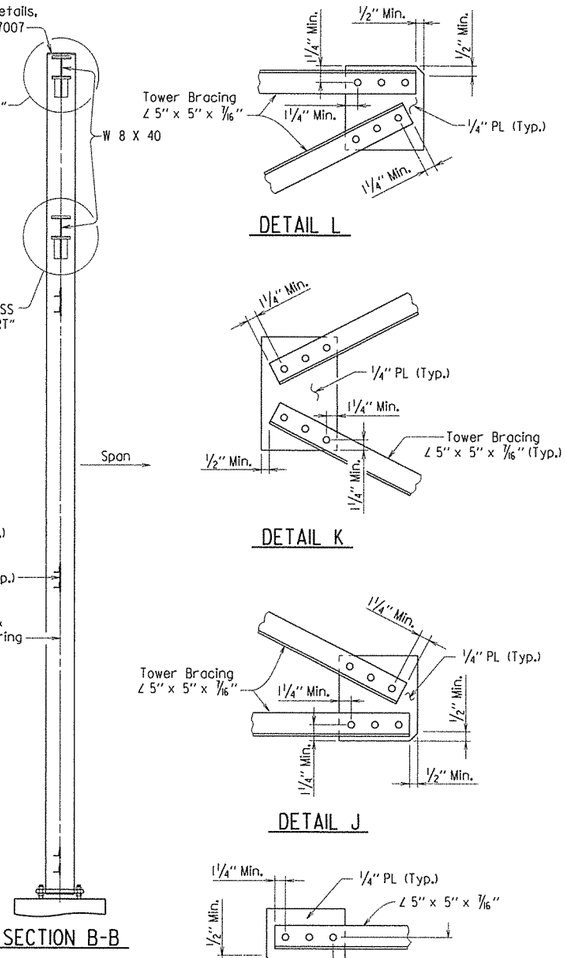
STR. NO. OH-040-18-34, OH-040-18-35 DRAWING NO. 57005

PRINT DATE: 5/11/2015

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	225	263
				1 OH-040-18-34, OH-040-18-35		SIGN STRUCTURE		57006



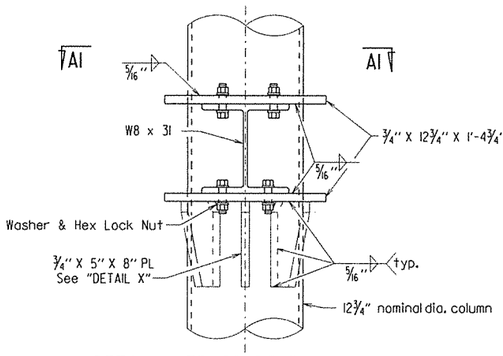
VIEW A-A - FOUNDATION A



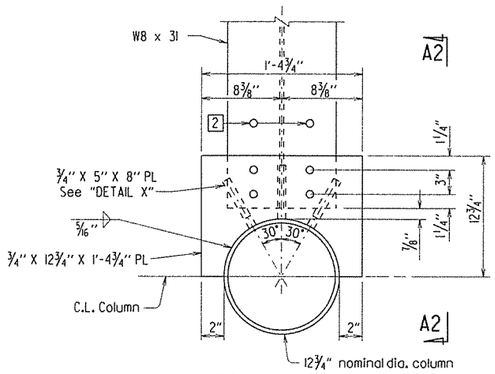
SECTION B-B

DETAIL L

DETAIL K

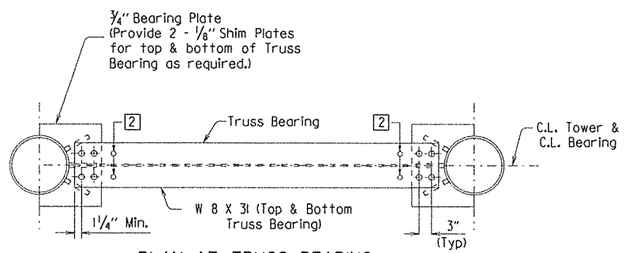


DETAIL - TRUSS BEARING SUPPORT

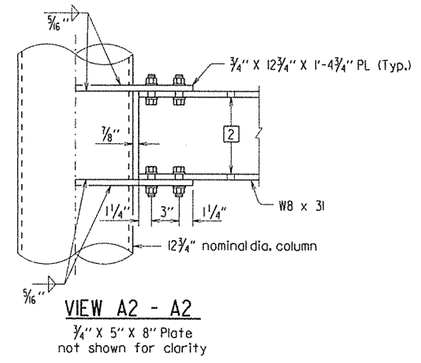


VIEW Al - Al

DETAIL J

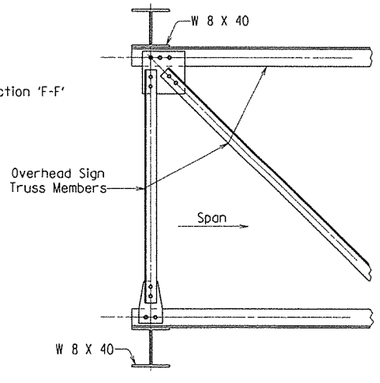


PLAN AT TRUSS BEARING

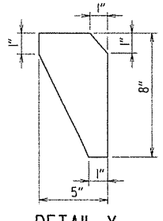


VIEW A2 - A2

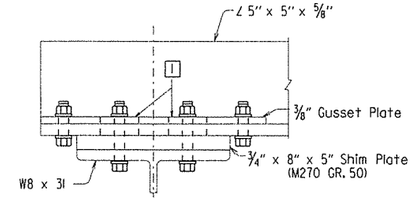
3/4" X 5" X 8" Plate not shown for clarity



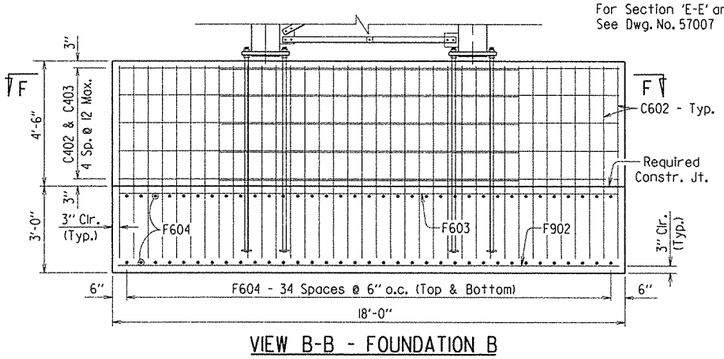
SECTION C-C



DETAIL X



DETAIL - TRUSS CONNECTION



VIEW B-B - FOUNDATION B

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

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

STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
5-14-15
CHARLES R. ELLIS
BRIDGE ENGINEER

SHEET 2 OF 5
DETAILS FOR 65' STEEL OVERHEAD SIGN STRUCTURES

ROUTE 40 SEC. 52

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: A.M.S. DATE: 1/9/15
CHECKED BY: JVP DATE: 5-14-15
DESIGNED BY: STD. DATE: —

FILENAME: bbb0107_ohsign2.dgn
SCALE: NOT TO SCALE

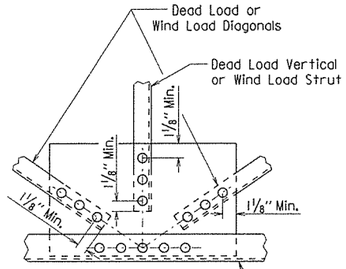
STR. NO. OH-040-18-34, OH-040-18-35 DRAWING NO. 57006

PRINT DATE: 5/11/2015

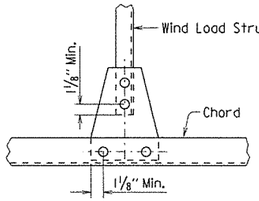
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	226	2C3
				(1) OH-040-18-34, OH-040-18-35		SIGN STRUCTURE		57007

Note: All Gusset Plate thicknesses shall be $\frac{3}{8}$".

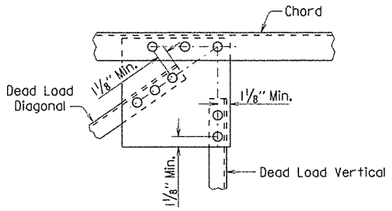
[1] Slotted Hole in Gusset Plate and Chord Angle $\frac{11}{16}$" X 2". Use plate washer on Gusset plate side. $\frac{11}{16}$" ø holes in $\frac{3}{4}$" shim plate and beam flange.



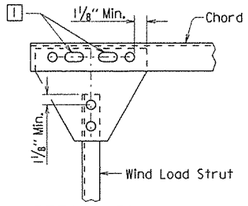
DETAIL "A"



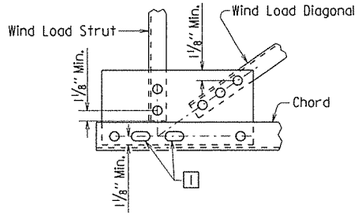
DETAIL "B"



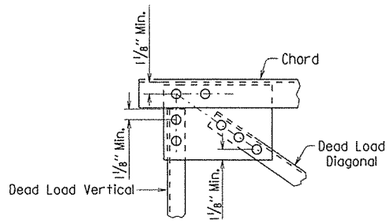
DETAIL "C"



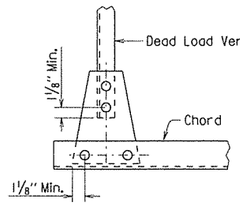
DETAIL "D"



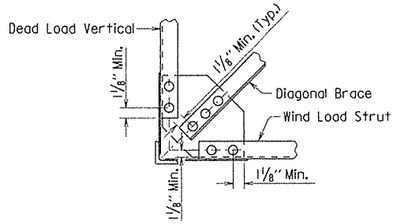
DETAIL E



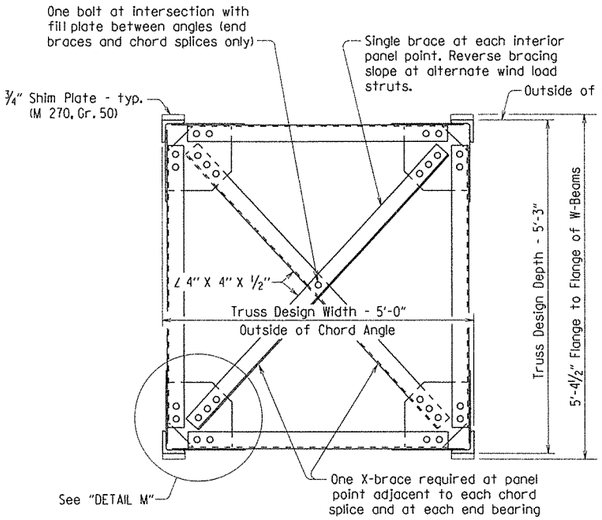
DETAIL "F"



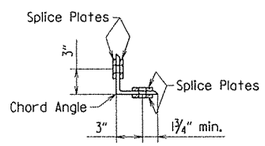
DETAIL "G"



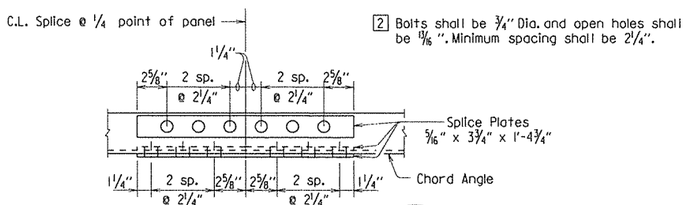
DETAIL "M"



TRUSS SECTION

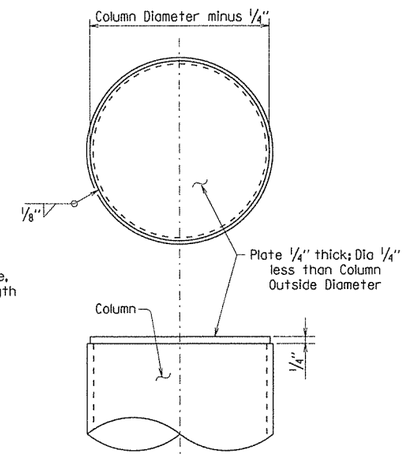


SECTION ON C.L. SPLICE

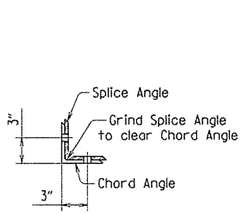


[2] Bolts shall be ¾" Dia. and open holes shall be $\frac{13}{16}$". Minimum spacing shall be 2¼".

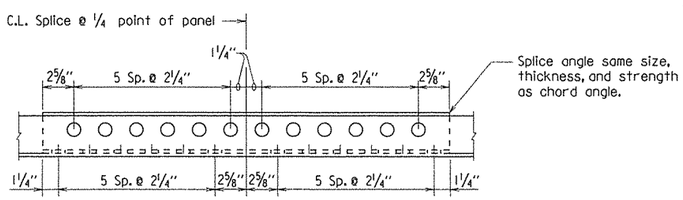
CHORD SPLICE USING PLATES [2]



END CAP DETAILS

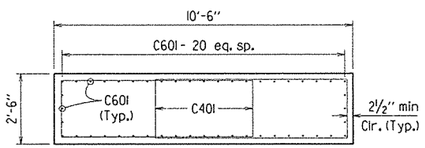


SECTION ON C.L. SPLICE

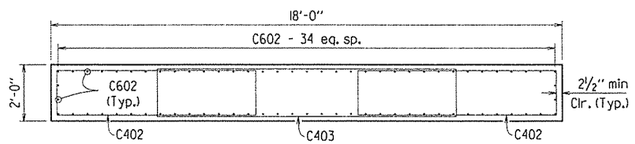


OPTIONAL CHORD SPLICE USING ANGLES [2]
Place Splice Angle on Inside of Truss

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



SECTION "E-E"
Foundation A



SECTION "F-F"
Foundation B

PRINT DATE: 5/11/2015

STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
5-14-15
CHARLES R. ELLIS
BRIDGE ENGINEER

SHEET 3 OF 5
DETAILS FOR
65' STEEL OVERHEAD SIGN STRUCTURES

ROUTE 40 SEC. 52

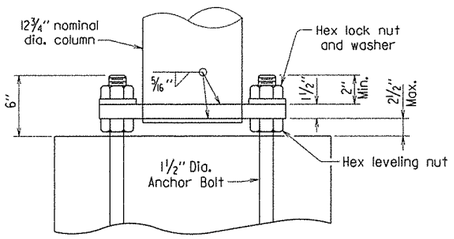
ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

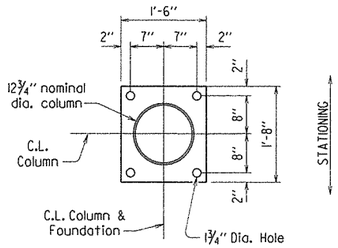
DRAWN BY: A.M.S. DATE: 1/9/15
CHECKED BY: JNP DATE: 5-14-15
DESIGNED BY: STD. DATE: —
FILENAME: bbb0107_ohsign2.dgn
SCALE: NOT TO SCALE

STR. NO. OH-040-18-34, OH-040-18-35 DRAWING NO. 57007

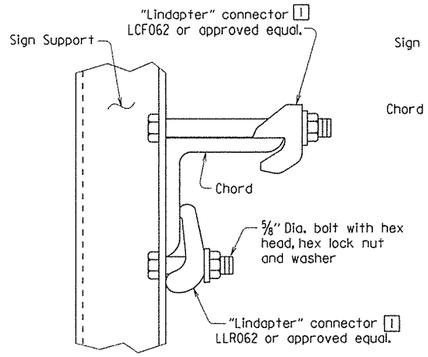
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	227	2c3
				① OH-040-18-34, OH-040-18-35		SIGN STRUCTURE		57008

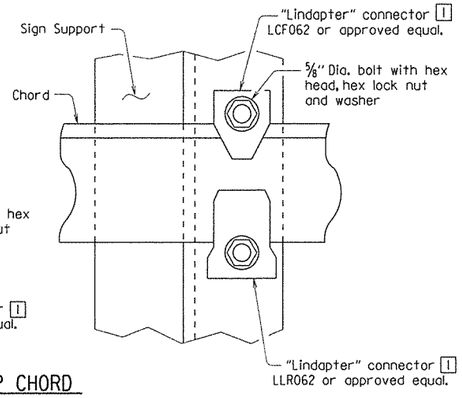


ELEVATION - COLUMN BASE

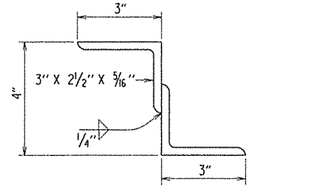


PLAN - COLUMN BASE



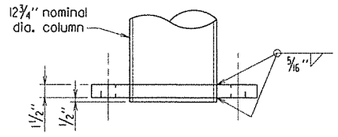


TOP CHORD



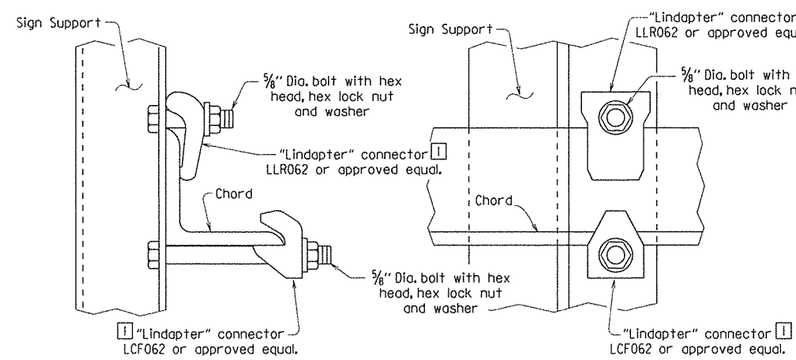
NOTE: Structural Z support may be fabricated from angles as shown.

DETAILS OF ALTERNATE Z SUPPORT



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

DETAIL OF COLUMN CONNECTION TO BASE PLATE

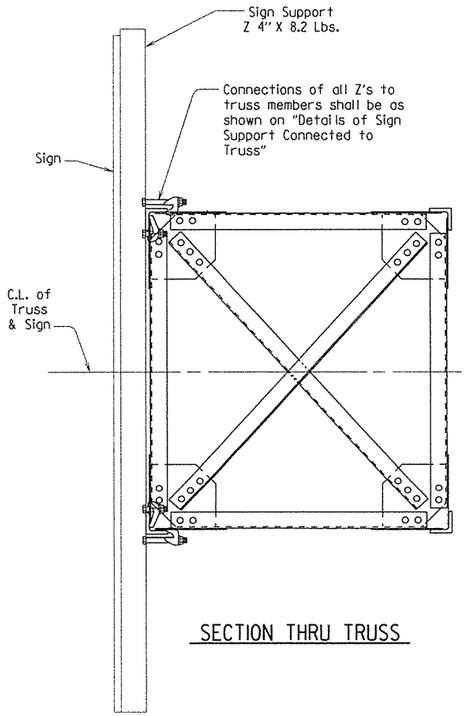


BOTTOM CHORD

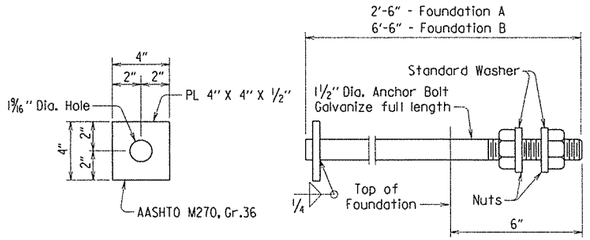
[1] Note: All "Lindapter" connectors or approved equal shall be installed according to manufacturer's recommendations. All connectors, bolts, nuts and washers shall be galvanized.

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

DETAIL OF SIGN SUPPORT CONNECTED TO TRUSS



SECTION THRU TRUSS



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

ANCHOR BOLT DETAIL

STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9255
5-14-15
CHARLES R. ELLIS

BRIDGE ENGINEER

SHEET 4 OF 5
DETAILS FOR
65' STEEL OVERHEAD SIGN STRUCTURES

ROUTE 40 SEC. 52

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: A.M.S. DATE: 1/9/15
CHECKED BY: JNP DATE: 5-14-15
DESIGNED BY: STD. DATE: —

FILENAME: bbb0107_ohsign2.dgn
SCALE: NOT TO SCALE

STR. NO. OH-040-18-34, OH-040-18-35 DRAWING NO. 57008

PRINT DATE: 5/14/2015

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	228	263
				(1) OH-040-18-34, OH-040-18-35		SIGN STRUCTURE		57009

GENERAL NOTES:

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

DESIGN SPECIFICATIONS: AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, Sixth Edition, 2013 with current interim revisions.

Basic Wind Speed = 90 mph.
Fatigue Category: I

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

FOUNDATION MATERIALS AND STRENGTHS:
Class S Concrete — f'c = 3,500 psi
Reinforcing Steel (Grade 60, AASHTO M 31 or M 322, Type A) — fy = 60,000 psi

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

Angles:	AASHTO M 270, Grade 36 (Fy = 36,000 psi)
Plate, W-Section:	AASHTO M 270, Grade 50 (Fy = 50,000 psi)
[1] Pipe:	ASTM A 139, Gr. C, straight-seam welded (Fy = 42,000 psi), ASTM A 500, Gr. B (Fy = 42, 000 psi), ASTM A 501, Gr. B (Fy = 50,000 psi), ASTM A 714, Class 2, Grade II, Type E or S (Fy = 50,000 psi)
Z-Shapes:	AASHTO M 270, Grade 36 (Fy = 36,000 psi)
Shim Plates:	ASTM A 1011, SS, Grade 36, Type 2, or Grade 40
Bolts:	ASTM A 325, Type 1
Locknuts - Approved Type:	Meeting or exceeding AASHTO M 292
Washers:	ASTM F 436
Nuts:	ASTM A 563 or AASHTO M 292, Grade DH or Grade 2H

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

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

Requests for substitution of structural steel shapes shown with shapes of greater size must be submitted by the Contractor to the Engineer for approval. Steels of equal or greater strengths will be accepted only when shown on the approved shop drawings. Shapes and materials shown in the plans will be the basis of payment and no additional compensation will be made for any adjustments due to substitutions.

All steel shall be galvanized according to Subsection 807.19. Steel completely encased in concrete may not be galvanized. Galvanized coating damaged during transport, handling or erection shall be field repaired in accordance with Subsection 807.88.

All main load carrying tension members greater than ½" in thickness shall conform to the requirements of the Longitudinal Charpy V-Notch test specified for Zone 1 minimum service temperature. This work and materials shall be paid for in accordance with Job Special Provision "Steel Overhead Sign Structures".

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

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

All welding that is to be done during fabrication of structural steel, including temporary welds, shall be detailed on the shop drawings and submitted for approval. If additional welds are required, whether temporary or permanent, a formal request with detailed drawings shall be submitted to the Engineer for approval. All welding shall conform to Subsection 807.26.

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

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

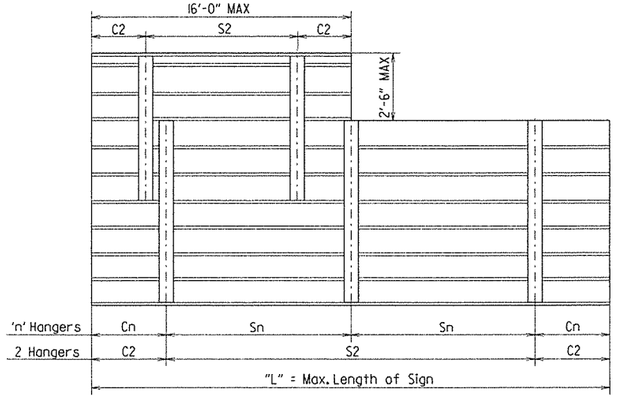
Connections shall be bolted with high-strength bolts. Unless otherwise noted, bolts shall be ⅝" diameter and open holes shall be 11/16 ". Bolt spacing shall be 2¼" for ⅝" diameter bolts unless otherwise noted. Bolts shall be placed with heads on the outside face of all members.

All truss frame bolts shall comply with ASTM A 325 Type 1, galvanized according to Subsection 807.06. Nuts and washers for ASTM A 325 Type 1 bolts shall be furnished and galvanized in accordance with Subsection 807.06.

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

Anchor bolts shall comply with AASHTO M 314, Grade 55 including Supplementary Requirement S1, and galvanized according to Subsection 807.07. Nuts and washers for anchor bolts shall be furnished and galvanized in accordance with Subsection 807.07.

Shoring may be required to protect existing shoulders during excavation. Any shoring required shall not be paid for directly, but shall be considered incidental to the item "Steel Overhead Sign Structure". The excavations for the footings shall be backfilled before the structure is attached to the foundations.



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

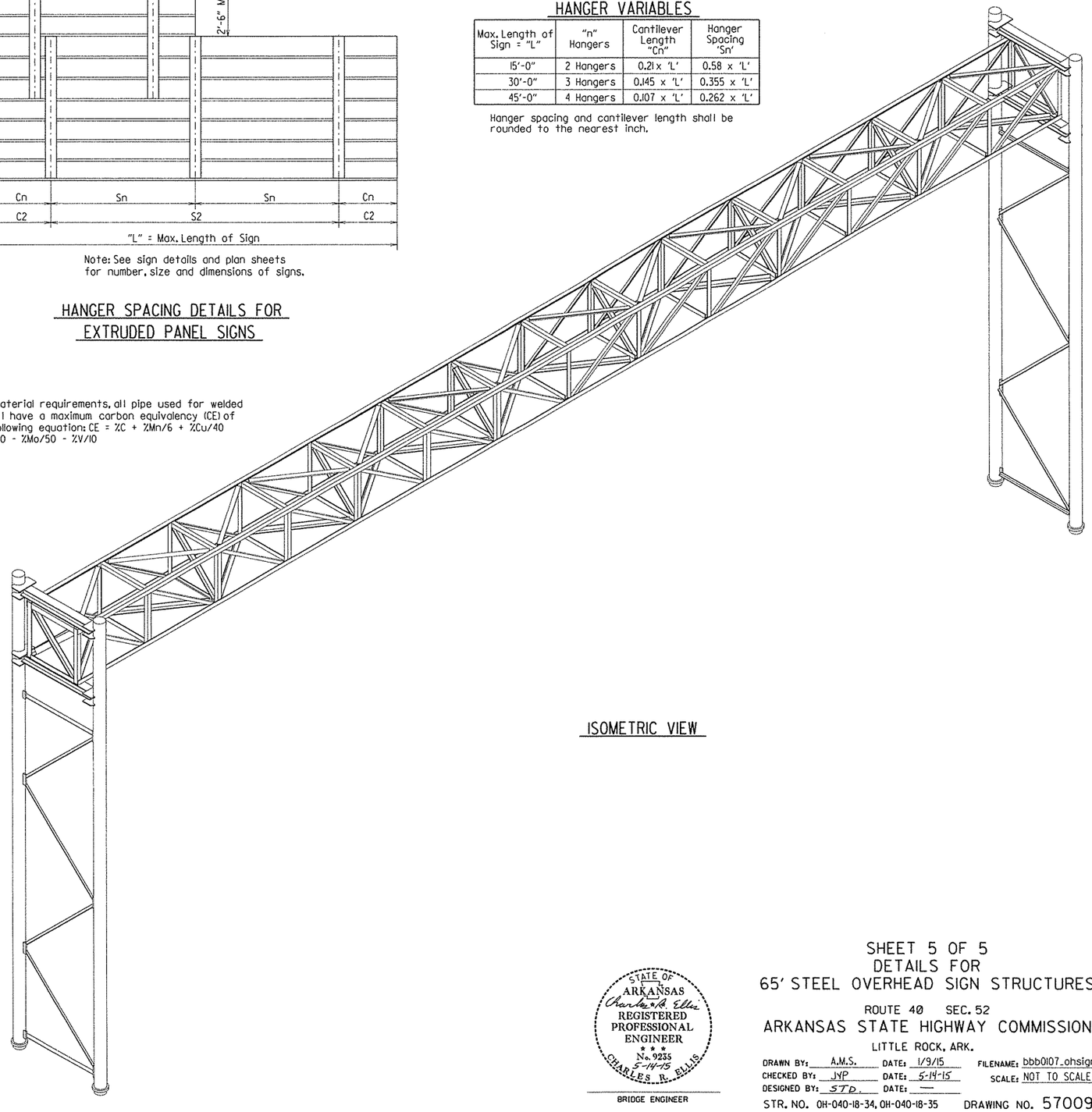
HANGER SPACING DETAILS FOR EXTRUDED PANEL SIGNS

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

HANGER VARIABLES

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

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



ISOMETRIC VIEW

STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
5-14-15
CHARLES R. ELLIS
BRIDGE ENGINEER

SHEET 5 OF 5
DETAILS FOR 65' STEEL OVERHEAD SIGN STRUCTURES

ROUTE 40 SEC. 52

ARKANSAS STATE HIGHWAY COMMISSION

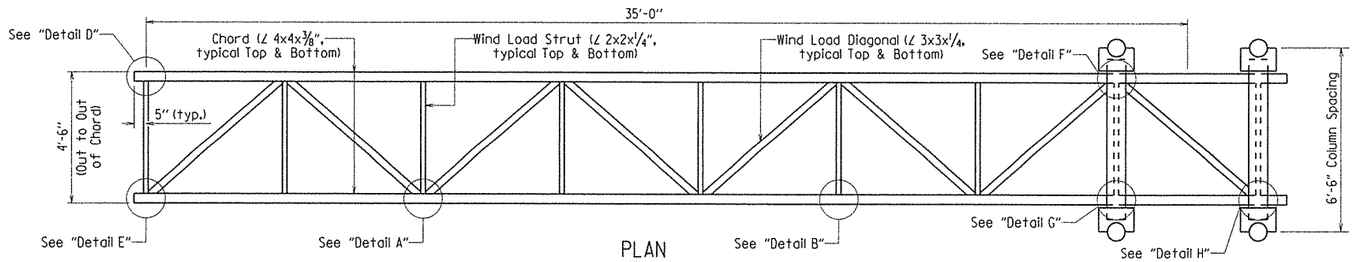
LITTLE ROCK, ARK.

DRAWN BY: A.M.S. DATE: 1/9/15 FILENAME: bbb0107_ohsign2.dgn
CHECKED BY: JYP DATE: 5-14-15 SCALE: NOT TO SCALE
DESIGNED BY: STD. DATE: —

STR. NO. OH-040-18-34, OH-040-18-35 DRAWING NO. 57009

PRINT DATE: 5/11/2015

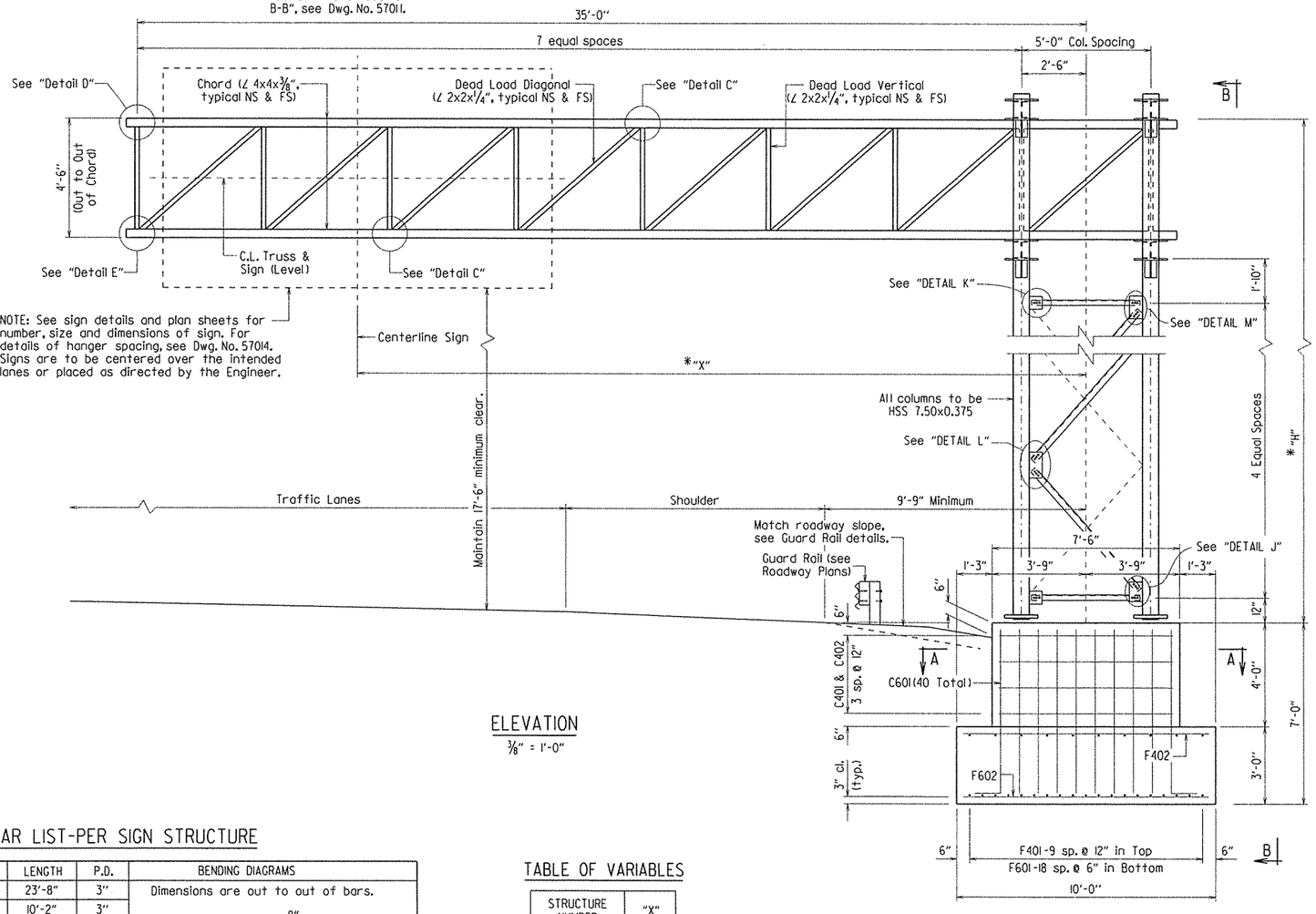
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	229	263
				① OC-040-18-36 OC-040-18-37		SIGN STRUCTURE		57010



PLAN

3/8" = 1'-0"

NOTE: For "Detail A" thru "Detail M" and "Section B-B", see Dwg. No. 57011.



ELEVATION

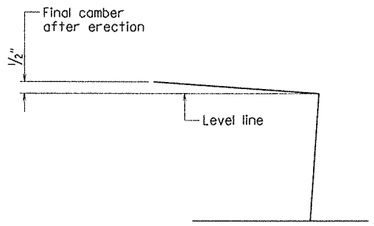
3/8" = 1'-0"

*NOTE: The Contractor shall make field measurements to determine the following:

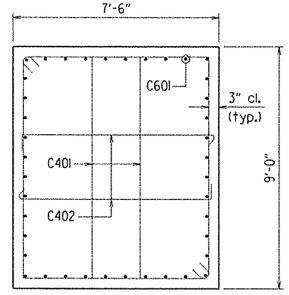
1) To verify that dimension "X" is sufficient to center the sign over the intended lane while maintaining minimum horizontal clearances.

2) To determine the column height "H" required to maintain the minimum vertical clearance with the centerline of the sign located at the C.L. of the truss. If the structure height "H" exceeds 30'-0" contact the Engineer.

These verifications and measurements are required prior to submittal of the shop drawings. The column height "H" shall be shown on the shop drawings with a note stating that the Contractor has made the required field measurements.



TRUSS CAMBER DIAGRAM



SECTION A-A

1/2" = 1'-0"

BAR LIST-PER SIGN STRUCTURE

MARK	NO. REQ'D.	LENGTH	P.D.	BENDING DIAGRAMS
C401	8	23'-8"	3"	Dimensions are out to out of bars.
C402	8	10'-2"	3"	
C601	40	7'-2"	4½"	
F401	10	14'-6"	Str.	
F402	15	9'-6"	Str.	
F601	19	14'-6"	Str.	
F602	29	9'-6"	Str.	

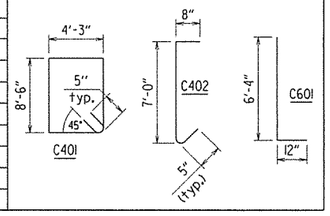


TABLE OF VARIABLES

STRUCTURE NUMBER	"X"
OC-040-18-36	25'-9"
OC-040-18-37	25'-9"

APPROXIMATE QUANTITIES (FOR INFORMATION ONLY)

STRUCTURE NUMBER	CLASS S CONCRETE (cu. yd.)	REINFORCING STEEL (pounds)	EXCAVATION (cu. yd.)
EACH STRUCTURE	26.67	1,630	56

STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
5-14-15
CHARLES R. ELLIS

BRIDGE ENGINEER

SHEET 1 OF 5
DETAILS OF
35' STEEL CANTILEVER SIGN STRUCTURE

ROUTE 40 SEC. 52

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: CMW DATE: 2/10/2015
CHECKED BY: JNP DATE: 5-14-15
DESIGNED BY: STD DATE: —

FILENAME: bbb0107_ohsign3.dgn
SCALE: As Noted

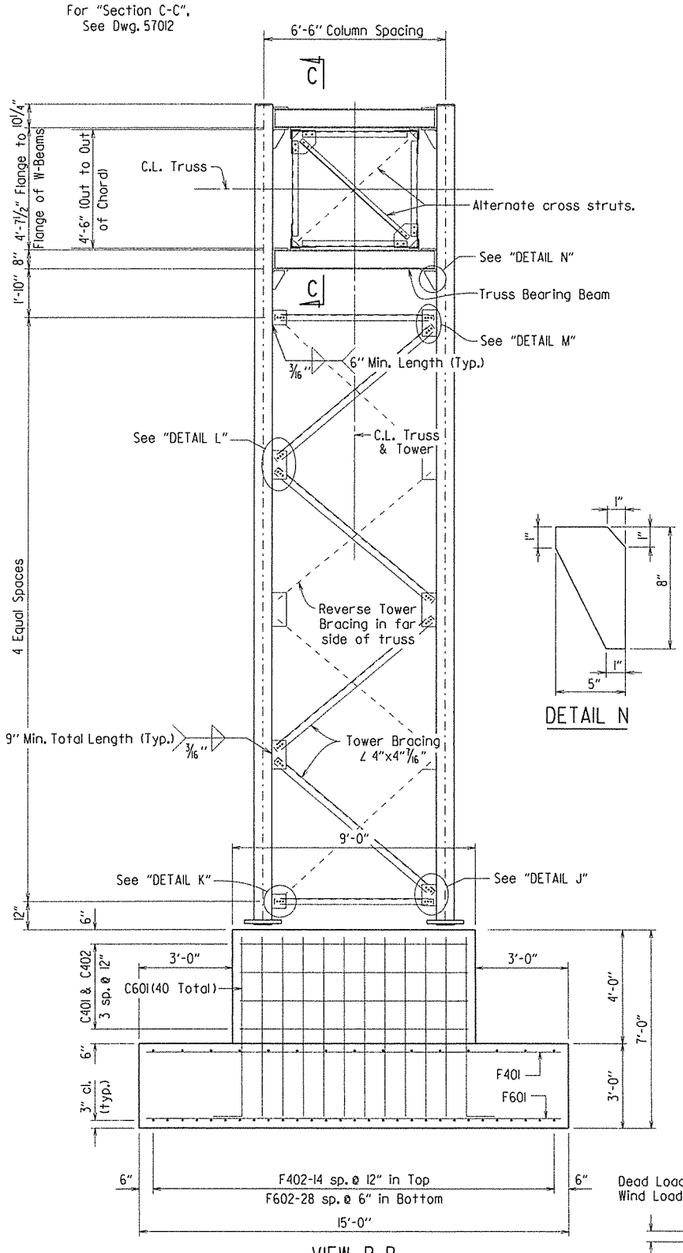
STR. NO. OC-040-18-36 OC-040-18-37

DRAWING NO. 57010

PRINT DATE: 5/13/2015

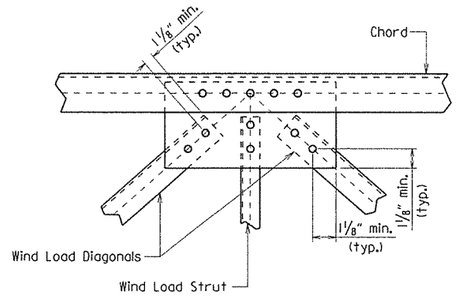
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	23	263
				1 OC-040-18-36 OC-040-18-37		SIGN STRUCTURE		57011

NOTE: All gussets shall be 3/8" thick Unless otherwise shown

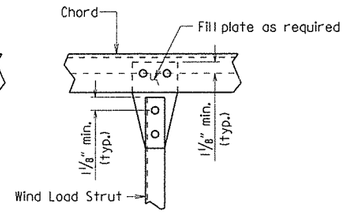


VIEW B-B
3/8" = 1'-0"

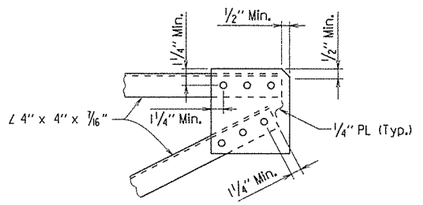
DETAIL N



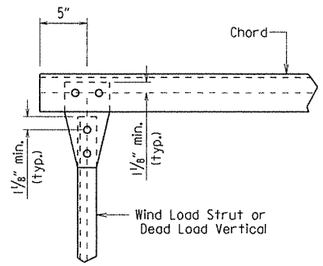
DETAIL A
1 1/2" = 1'-0"



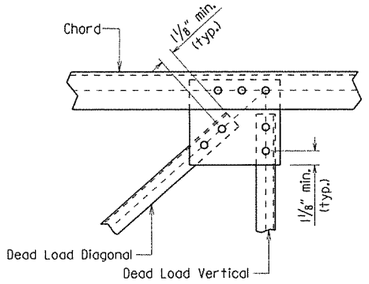
DETAIL B
1 1/2" = 1'-0"



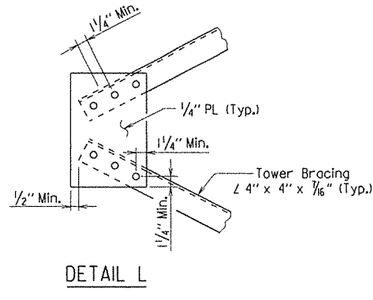
DETAIL M



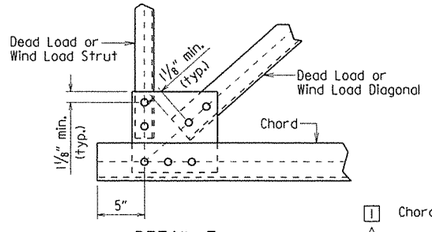
DETAIL D
1 1/2" = 1'-0"



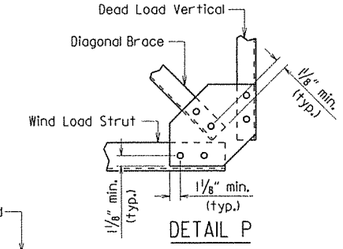
DETAIL C
1 1/2" = 1'-0"



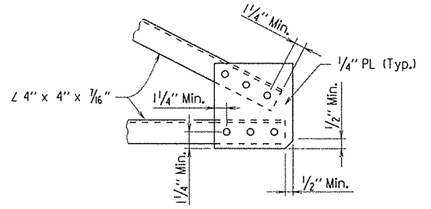
DETAIL L



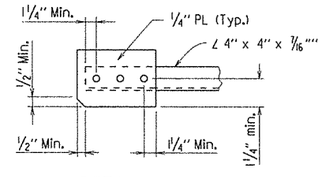
DETAIL E
1 1/2" = 1'-0"



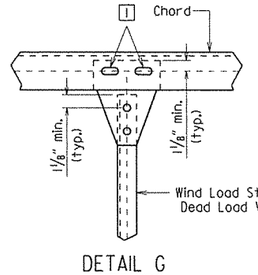
DETAIL P
1 1/2" = 1'-0"



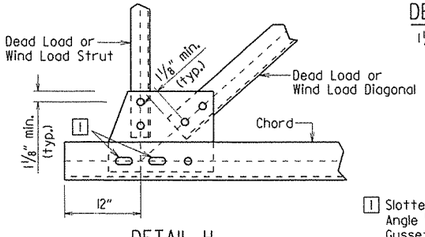
DETAIL J



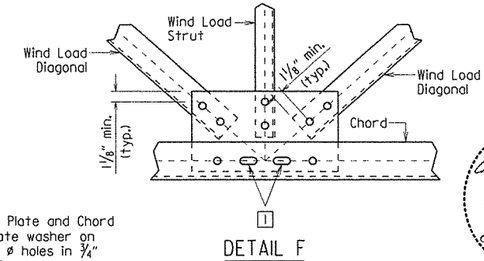
DETAIL K



DETAIL G
1 1/2" = 1'-0"



DETAIL H
1 1/2" = 1'-0"



DETAIL F
1 1/2" = 1'-0"

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

STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
5-14-15
CHARLES R. ELLIS
BRIDGE ENGINEER

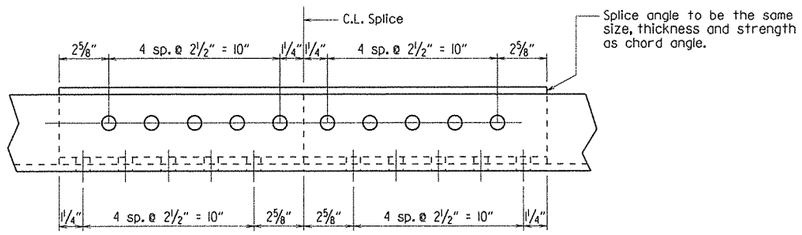
SHEET 2 OF 5
DETAILS OF
35' STEEL CANTILEVER SIGN STRUCTURE

ROUTE 40 SEC. 52
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: CMW DATE: 2/10/2015
CHECKED BY: JNP DATE: 5-14-15
DESIGNED BY: STO. DATE: ---
FILENAME: bbb0107_ohsign3.dgn
SCALE: As Noted
STR. NO. OC-040-18-36 OC-040-18-37
DRAWING NO. 57011

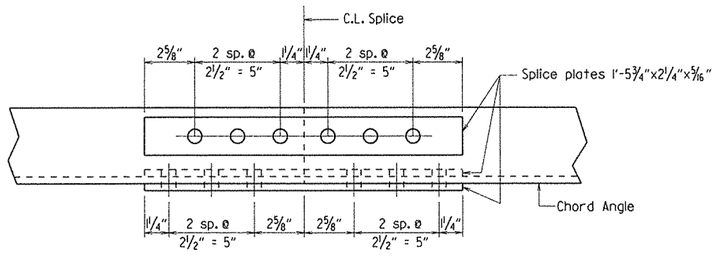
PRINT DATE: 5/12/2015

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	231	263
				(1) OC-040-18-36 OC-040-18-37		SIGN STRUCTURE		57012



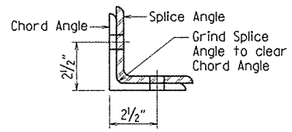
NOTE: Place splice angles on inside of truss. Bolts shall be ¾" ø and open holes shall be 13/16" ø. Minimum center to center of bolt spacing shall be 2½".

OPTIONAL CHORD SPLICE USING ANGLES

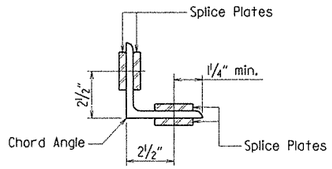


NOTE: Bolts shall be ¾" ø and open holes shall be 13/16" ø. Minimum center to center of bolt spacing shall be 2½".

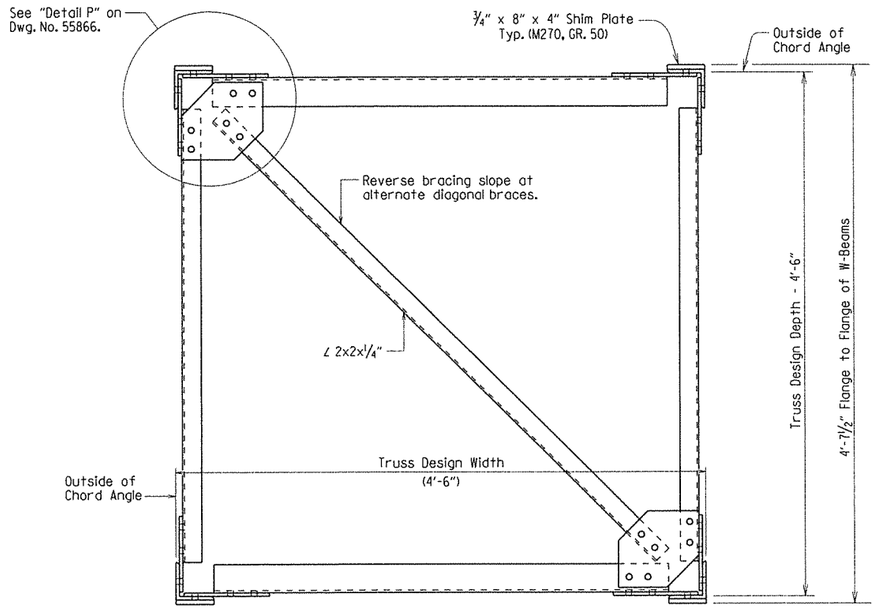
OPTIONAL CHORD SPLICE USING PLATES



SECTION AT C.L. SPLICE



SECTION AT C.L. SPLICE



TRUSS SECTION

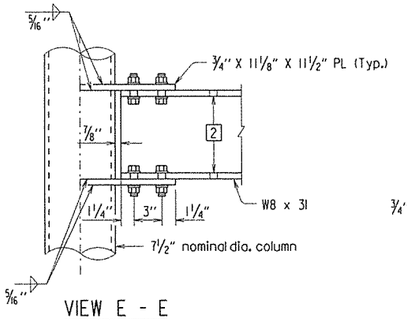
1½" = 1'-0"

SPLICE DETAILS

No Scale

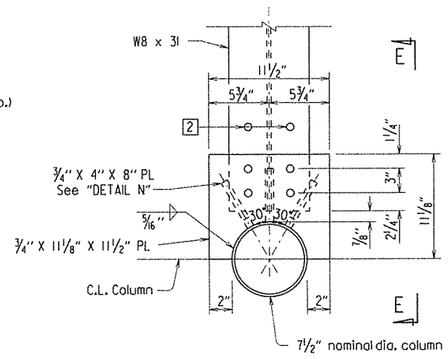
[1] Slotted Hole in Gusset Plate and Chord Angle 11/16" X 2". Use plate washer on Gusset plate side. 11/16" ø holes in ¾" shim plate and beam flange.

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

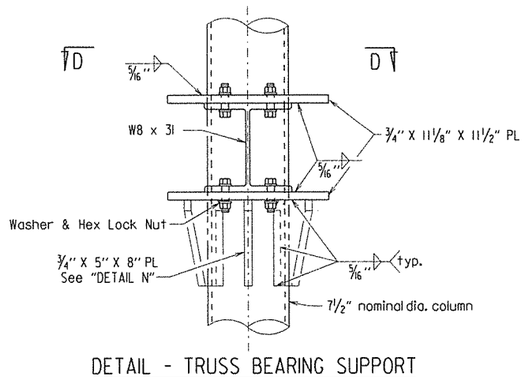


VIEW E - E

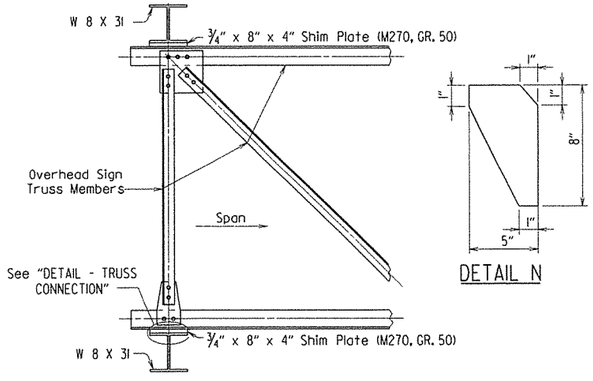
¾" X 5" X 8" Plate not shown for clarity



VIEW D - D

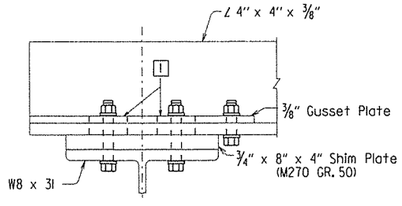


DETAIL - TRUSS BEARING SUPPORT



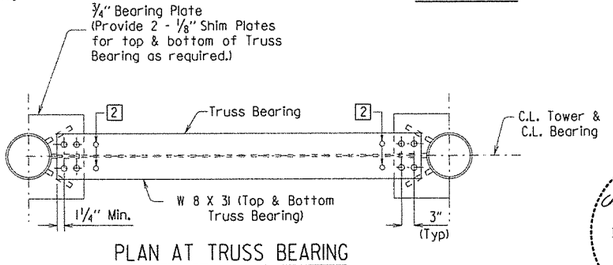
SECTION C-C

DETAIL N



DETAIL - TRUSS CONNECTION

Shown for bottom connection, top connection similar.



PLAN AT TRUSS BEARING

STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
5-14-15
CHARLES R. ELLIS

BRIDGE ENGINEER

SHEET 3 OF 5
DETAILS OF
35' STEEL CANTILEVER SIGN STRUCTURE

ROUTE 40 SEC. 52

ARKANSAS STATE HIGHWAY COMMISSION

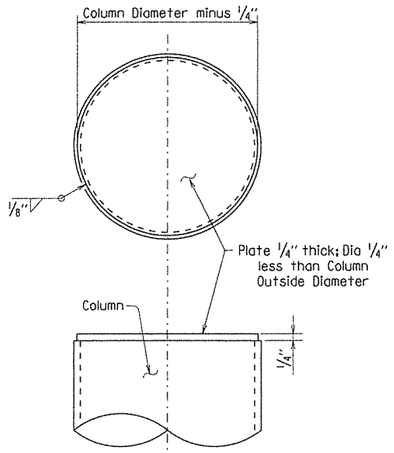
LITTLE ROCK, ARK.

DRAWN BY: CMW DATE: 2/10/2015 FILENAME: bbb0107_ohsign3.dgn
CHECKED BY: JNP DATE: 5-14-15 SCALE: As Noted
DESIGNED BY: STD. DATE: ---

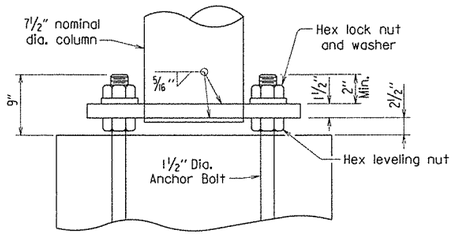
STR. NO. OC-040-18-36 OC-040-18-37 DRAWING NO. 57012

PRINT DATE: 5/12/2015

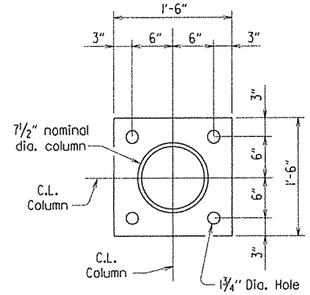
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	232	263
				(1) OC-040-18-36 OC-040-18-37		SIGN STRUCTURE		57013



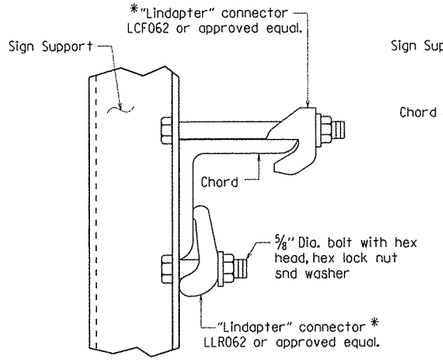
END CAP DETAILS

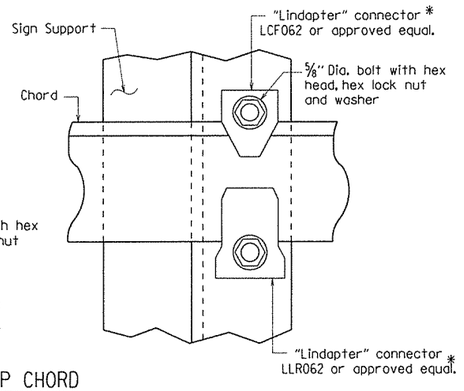


ELEVATION - COLUMN BASE

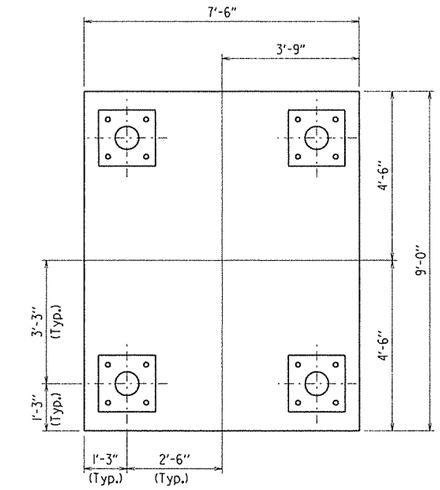


PLAN - COLUMN BASE

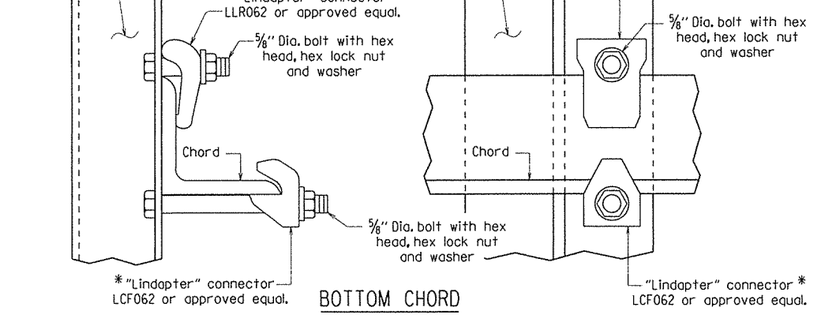




TOP CHORD



PLAN - TOWER BASE



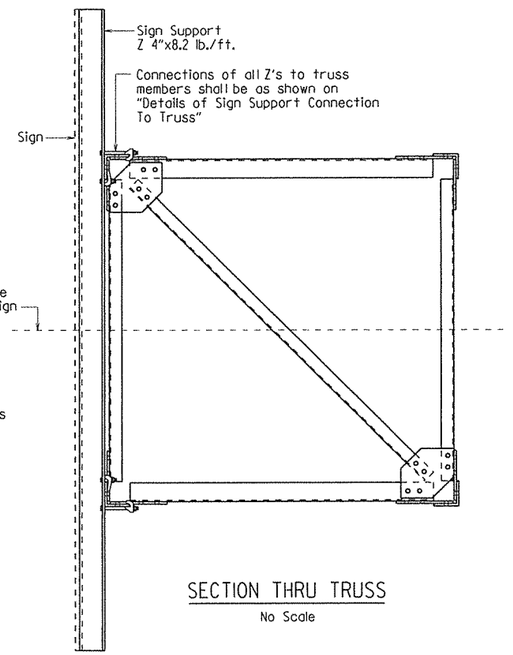
BOTTOM CHORD

*All "Lindapter" connectors or approved equal shall be installed according to manufacturer's recommendations. All connectors, bolts, nuts and washers shall be galvanized.

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

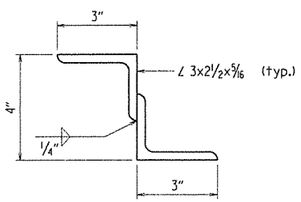
DETAILS OF SIGN SUPPORT CONNECTION TO TRUSS

No Scale



SECTION THRU TRUSS

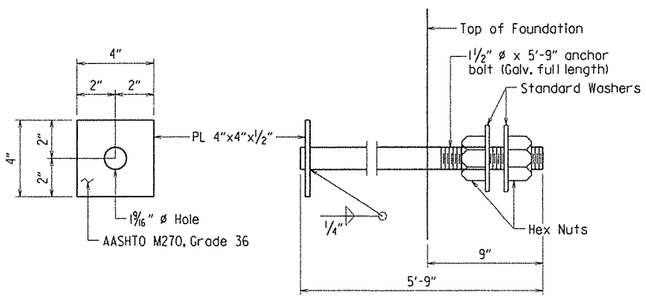
No Scale



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

DETAILS OF ALTERNATE Z SUPPORT

No Scale



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

ANCHOR BOLT DETAIL

No Scale

STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
5-14-15
CHARLES R. ELLIS

BRIDGE ENGINEER

SHEET 4 OF 5
DETAILS OF
35' STEEL CANTILEVER SIGN STRUCTURE

ROUTE 40 SEC. 52

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: CMW DATE: 2/10/2015 FILENAME: bbb0107_ohsign3.dgn
CHECKED BY: JYP DATE: 5-14-15 SCALE: As Noted
DESIGNED BY: STD. DATE: —
STR. NO. OC-040-18-36 OC-040-18-37 DRAWING NO. 57013

PRINT DATE: 5/12/2015

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0107	233	263
				① OC-040-18-36 OC-040-18-37		SIGN STRUCTURE		57014

GENERAL NOTES

CONSTRUCTION SPECIFICATIONS:

Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction, 2014 edition, with applicable supplemental specifications and Special Provisions. Section and Subsection refer to the Standard Construction Specifications unless otherwise noted in the plans.

DESIGN SPECIFICATIONS:

Standard Specifications for Structural Supports for Highway Signs, Luminaries and Traffic Signals, AASHTO 2013 (Sixth Edition) with current interim Revisions.

Basic Wind Speed = 90 m.p.h.

Fatigue Category: I

This structure is approved for 235 square feet of sign area. Use of additional area must be approved by the Engineer.

If the structure height ("H") exceeds 30'-0" contact the Engineer.

FOUNDATION MATERIALS AND STRENGTHS:

Class S Concrete	f'c = 3,500 psi
Reinforcing Steel (Grade 60, AASHTO M 31 or M 322, Type A)	fy = 60,000 psi

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

Angles:	AASHTO M270, Grade 36 (Fy = 36,000 psi)
Plate:	AASHTO M270, Grade 50 (Fy = 50,000 psi)
*Pipe:	ASTM A139, Grade C (Fy = 42,000 psi), ASTM A500, Grade B (Fy = 42,000 psi), ASTM A501, Grade B (Fy = 50,000 psi) or ASTM A714, Class 2, Grade II, Type E or S (Fy = 50,000 psi)
Z-shapes:	AASHTO M270, Grade 36 (Fy = 36,000 psi)
Bolts:	ASTM A325, Type 1
Locknuts:	Approved Type - Meeting or exceeding AASHTO M292
Washers:	ASTM F436
Nuts:	ASTM A563 or AASHTO M 292, Grade DH or Grade 2H

All steel shall be galvanized according to Subsection 807.19. Steel completely encased in concrete may not be galvanized.

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

Requests for substitution of structural steel shapes shown with shapes of greater size must be submitted by the Contractor to the Engineer for approval. Steels of equal or greater strengths will be accepted only when shown on the approved shop drawings. Shapes and materials shown in the plans will be the basis of payment and no additional compensation will be made for any adjustments due to substitutions.

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

All welding that is to be done during fabrication of structural steel, including temporary welds, shall be detailed on the shop drawings and submitted for approval. If additional welds are required, whether temporary or permanent, a formal request with detailed drawings shall be submitted to the Engineer for approval. All welding shall conform to Subsection 807.26.

Anchor bolts shall comply with AASHTO M314, Grade 55, with Supplementary Requirement S1, and galvanized according to Subsection 807.07. Nuts and washers for anchor bolts shall be furnished and galvanized in accordance with Subsection 807.07.

All truss frame bolts shall comply with ASTM A325, Type 1, and galvanized according to Subsection 807.06. Nuts and washers for ASTM A325, Type 1, bolts shall be furnished and galvanized in accordance with Subsection 807.06.

Field splices shall be located in order to avoid sign panel connections. Only one chord splice is permitted with a minimum section length of 15 feet.

All main load carrying tension members greater than 1/2" in thickness shall conform to the requirements of the Longitudinal Charpy V-notch test specified for Zone 1 minimum service temperature. This work and materials shall be paid for in accordance with Job Special Provision "Steel Sign Structures".

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

Truss field sections shall be shop assembled. Entire truss shall be fully assembled and lifted into place as one unit onto the support. All truss member connections shall be bolted connections.

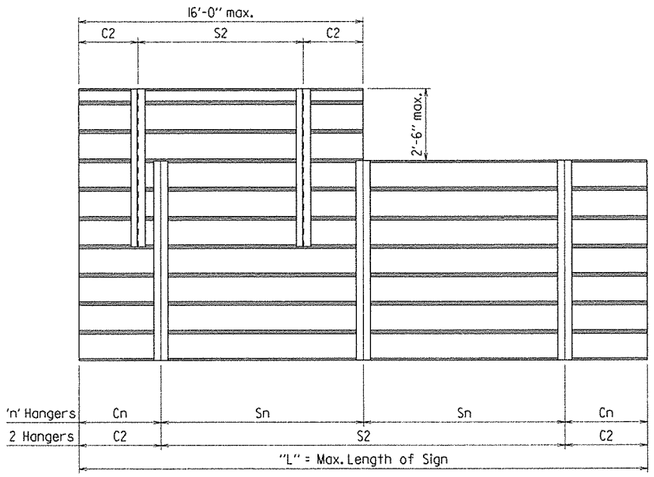
All truss member connections shall be bolted.

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

Shoring may be required to protect existing shoulders during excavation. Any shoring required shall not be paid for directly, but shall be considered incidental to the item "Steel Cantilever Sign Structure". The excavations for the footings shall be backfilled before the structure is attached to the foundation.

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

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



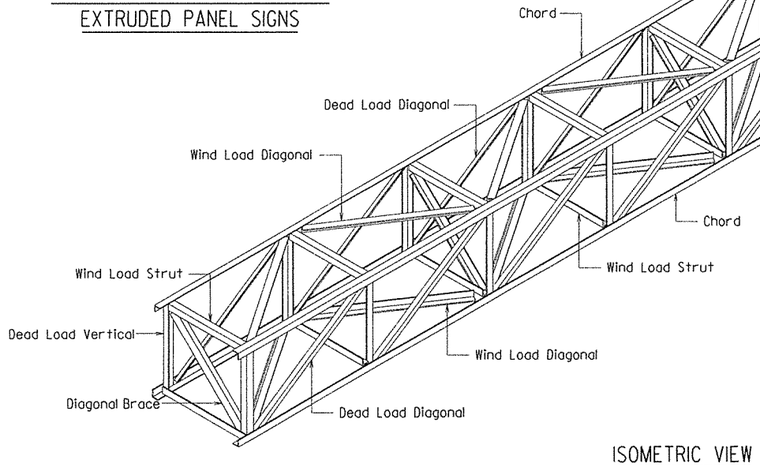
NOTE: See sign details and plan sheets for number, size and dimensions of signs.

HANGER SPACING DETAILS FOR EXTRUDED PANEL SIGNS

HANGER VARIABLES

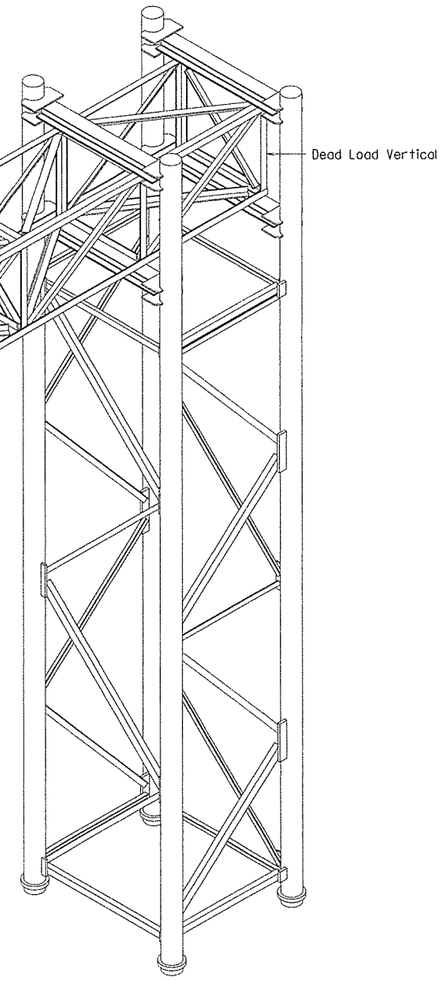
Max. Length of Sign = "L"	"n" Hangers	Cantilever Length "Cn"	Hanger Spacing "Sn"
15'-0"	2 Hangers	0.21 x "L"	0.58 x "L"
30'-0"	3 Hangers	0.145 x "L"	0.355 x "L"

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



ISOMETRIC VIEW

No Scale



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

STATE OF ARKANSAS
Charles R. Ellis
REGISTERED PROFESSIONAL ENGINEER
No. 9235
5-14-15
CHARLES R. ELLIS

BRIDGE ENGINEER

SHEET 5 OF 5
DETAILS OF 35' STEEL CANTILEVER SIGN STRUCTURE

ROUTE 40 SEC. 52

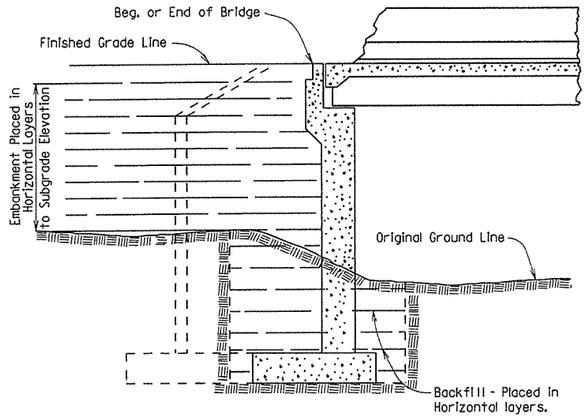
ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

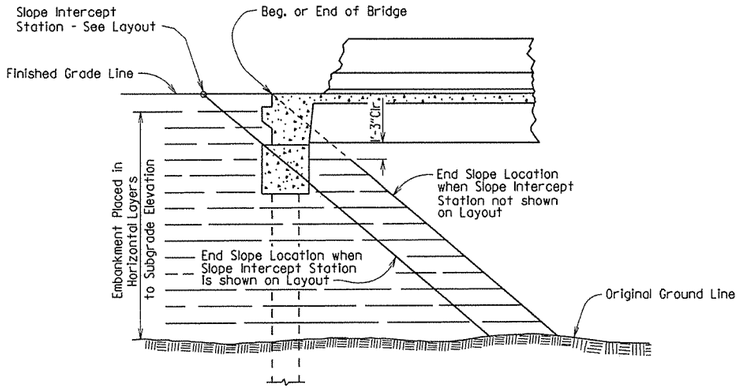
DRAWN BY: CMW DATE: 2/10/2015 FILENAME: bbb0107_ohsign3.dgn
CHECKED BY: JNP DATE: 5-14-15 SCALE: As Noted
DESIGNED BY: STD. DATE: —
STR. NO. OC-040-18-36 OC-040-18-37 DRAWING NO. 57014

PRINT DATE: 5/12/2015

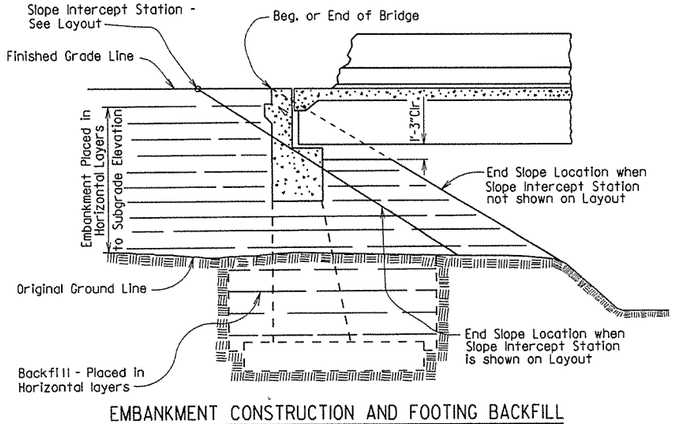
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		234	
				JOB NO.				
				1	EMBANKMENT & BACKFILL		55000	



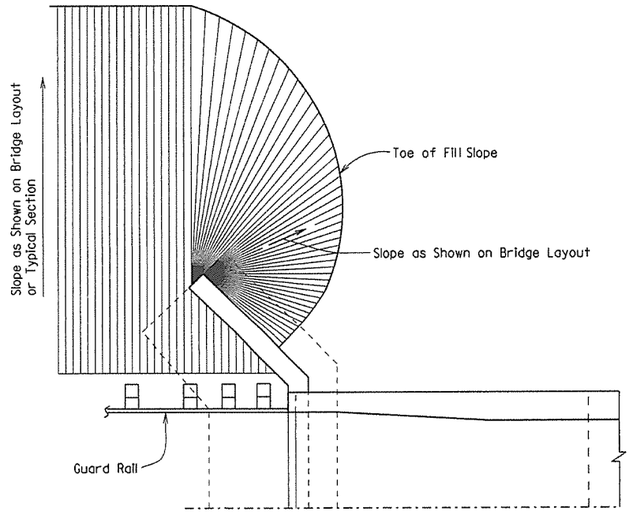
EMBANKMENT CONSTRUCTION AND FOOTING BACKFILL AT VERTICAL WALL ABUTMENTS



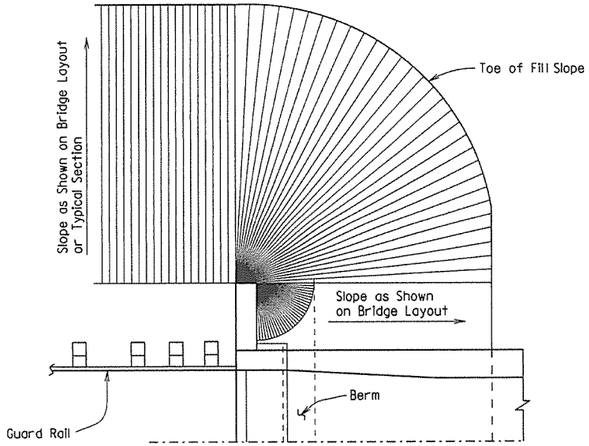
EMBANKMENT CONSTRUCTION AT SPILL-THROUGH PILE END BENTS



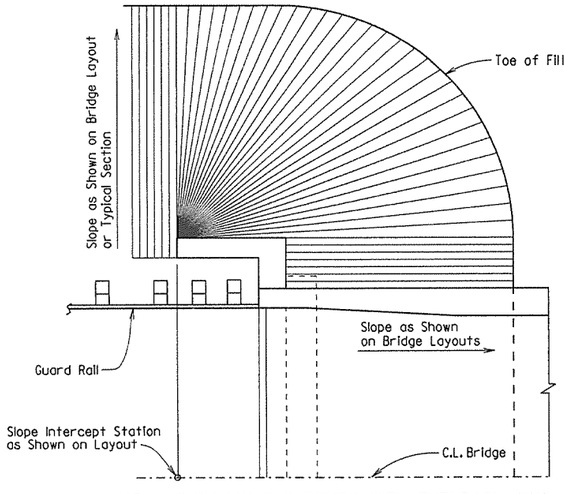
EMBANKMENT CONSTRUCTION AND FOOTING BACKFILL AT SPILL-THROUGH END BENTS



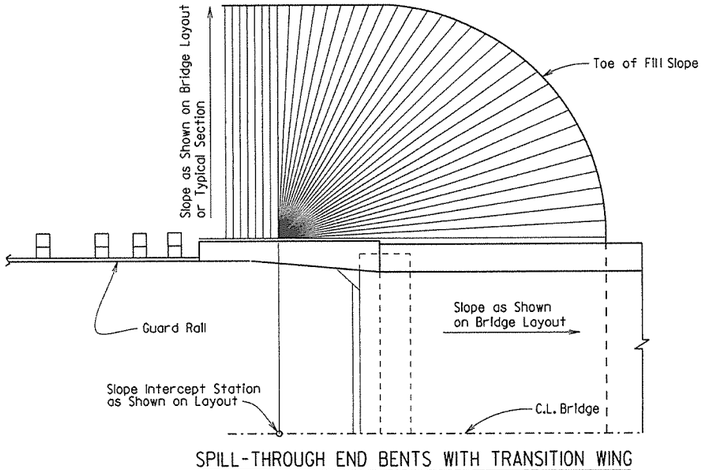
VERTICAL WALL ABUTMENTS



SPILL-THROUGH END BENTS WITH STUB WING



SPILL-THROUGH END BENTS WITH TURNBACK WING



SPILL-THROUGH END BENTS WITH TRANSITION WING

METHOD OF DETERMINING FILL SLOPE LOCATION AT BRIDGE ENDS

GENERAL NOTES

The Bridge End Embankment shall be defined as a section of embankment, not less than 20 feet long adjacent to the bridge end, together with the side slopes and slopes under the bridge end including around the end of wingwalls. Embankment adjacent to structures shall be constructed in 6 inch horizontal layers (loose measure) and compacted by the use of mechanical equipment to the satisfaction of the Engineer. Refer to Subsections 210.09, 210.10 and 801.08 for construction requirements.

STANDARD DETAILS FOR EMBANKMENT CONSTRUCTION AND BACKFILL AT BRIDGE ENDS

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

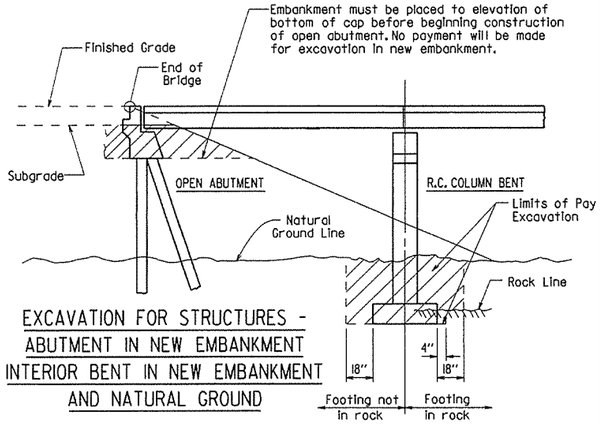
DRAWN BY: KDH DATE: 2-27-2014 FILENAME: b55000.dgn

CHECKED BY: BEF DATE: 2-27-2014 SCALE: NO SCALE

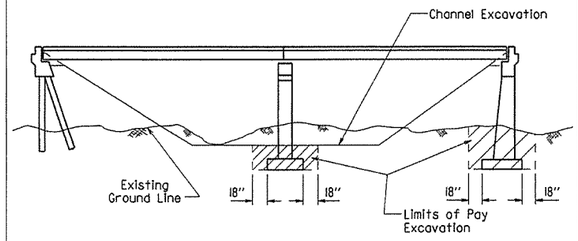
DESIGNED BY: STD. DATE: -

DRAWING NO. 55000

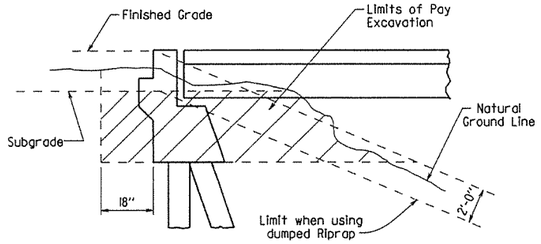
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		23	
				JOB NO.				
				① RIPRAP & EXCAV. 55001				



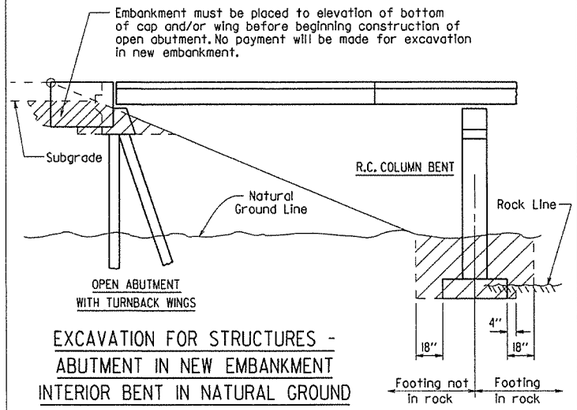
EXCAVATION FOR STRUCTURES - ABUTMENT IN NEW EMBANKMENT INTERIOR BENT IN NEW EMBANKMENT AND NATURAL GROUND



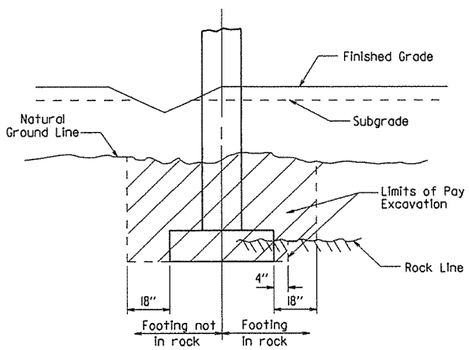
EXCAVATION FOR STRUCTURES - BRIDGE LOCATION WITH DESIGNATED CHANNEL CHANGE



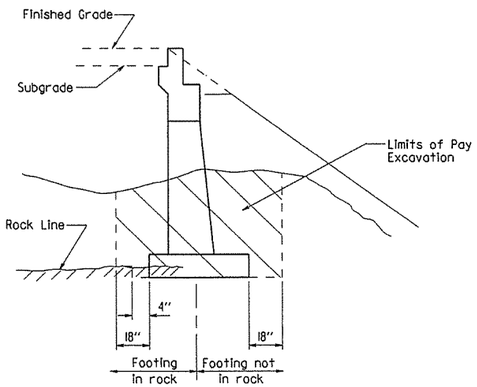
EXCAVATION FOR STRUCTURES - ABUTMENT IN NATURAL GROUND



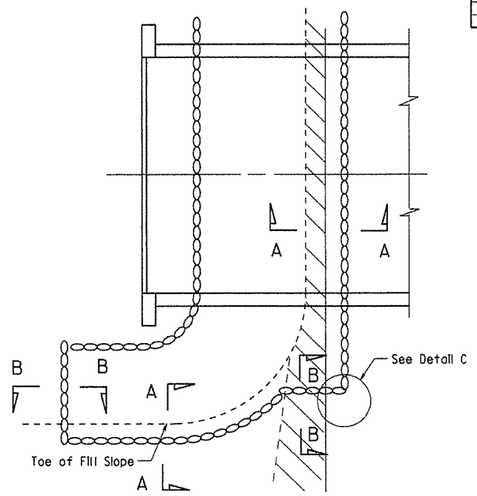
EXCAVATION FOR STRUCTURES - ABUTMENT IN NEW EMBANKMENT INTERIOR BENT IN NATURAL GROUND



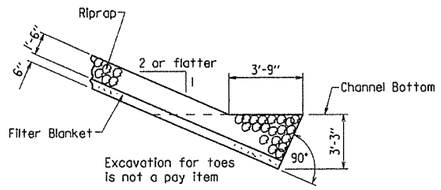
EXCAVATION FOR STRUCTURES - BENT IN ROADWAY FILL SECTION AND NATURAL GROUND



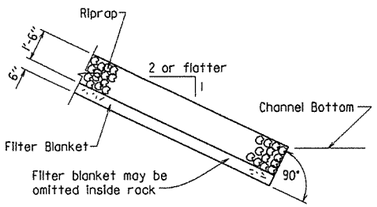
EXCAVATION FOR STRUCTURES - ABUTMENT IN NATURAL GROUND AND NEW EMBANKMENT



PLAN OF DUMPED RIPRAP



SECTION A-A
(Toe Excavation in Soil)

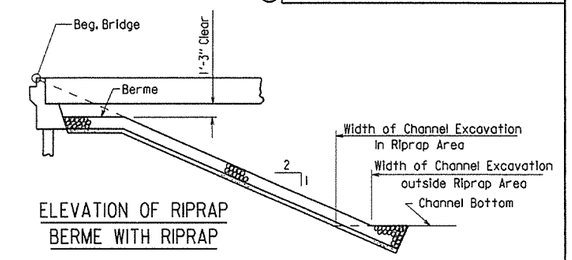


SECTION A-A
(Toe Excavation in Rock)

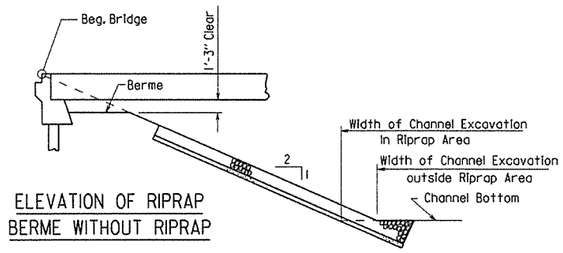
Note : Use this type of toe when rock is encountered which is in a stable condition.

Note : In lieu of an aggregate filter blanket, a synthetic fiber geotextile fabric complying with the requirements of Subsection 816.02(e) may be used.

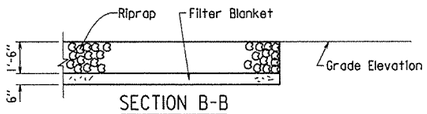
Note : Details for computing excavation for structures are included for information as to how plan quantities were calculated and for use when adjusting quantities when changing footing elevation.



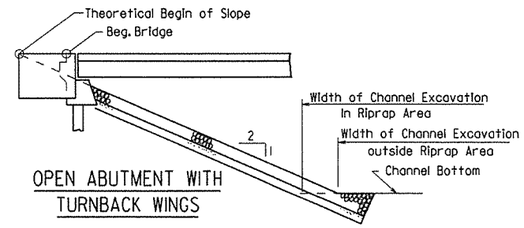
ELEVATION OF RIPRAP BERME WITH RIPRAP



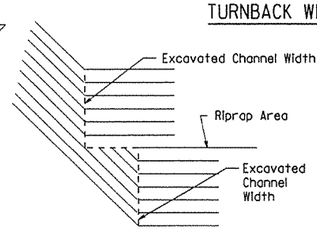
ELEVATION OF RIPRAP BERME WITHOUT RIPRAP



SECTION B-B



OPEN ABUTMENT WITH TURNBACK WINGS



DETAIL C

STANDARD DETAILS FOR DUMPED RIPRAP AND FILTER BLANKET AND COMPUTING EXCAVATION FOR STRUCTURES

ARKANSAS STATE HIGHWAY COMMISSION

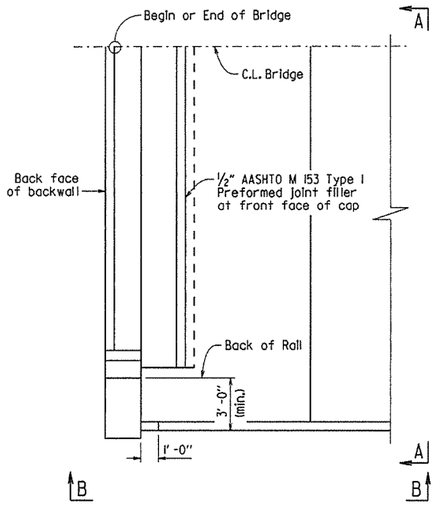
LITTLE ROCK, ARK.

DRAWN BY: KDH DATE: 2-27-2014 FILENAME: b55001.dgn
CHECKED BY: BEF DATE: 2-27-2014 SCALE: NO SCALE
DESIGNED BY: STD. DATE:

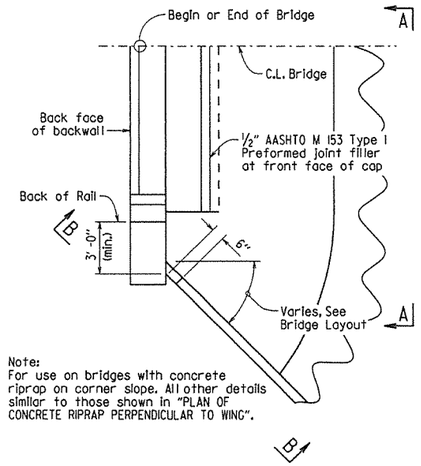
DRAWING NO. 55001

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		236	
				JOB NO.				
				①	CONCRETE RIPRAP 55002			

Note:
Sloped surfaces of concrete riprap to be marked off into blocks (construction joints optional) with an approved grooving tool, spacing the grooved lines about 5' apart.



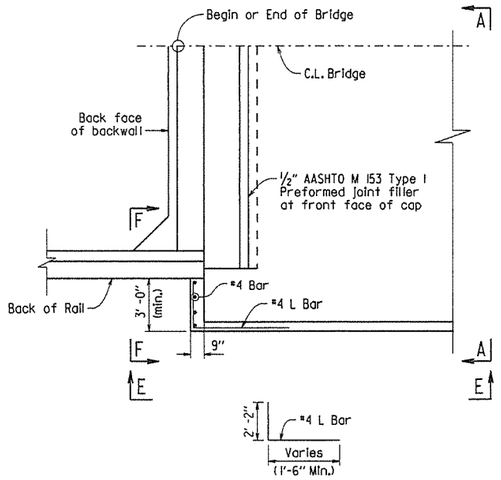
PLAN OF CONCRETE RIPRAP
PERPENDICULAR TO WING
¼" = 1'-0"



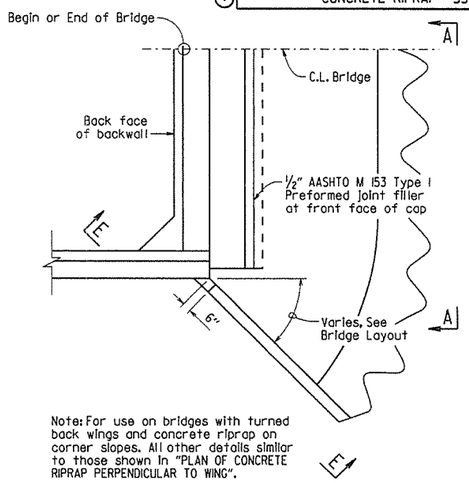
Note:
For use on bridges with concrete riprap on corner slope. All other details similar to those shown in "PLAN OF CONCRETE RIPRAP PERPENDICULAR TO WING".

PLAN OF CONCRETE RIPRAP
AT ANGLE TO WING
¼" = 1'-0"

Note:
For use on bridges with turned back wings. All other details similar to those shown in "PLAN OF CONCRETE RIPRAP PERPENDICULAR TO WING".



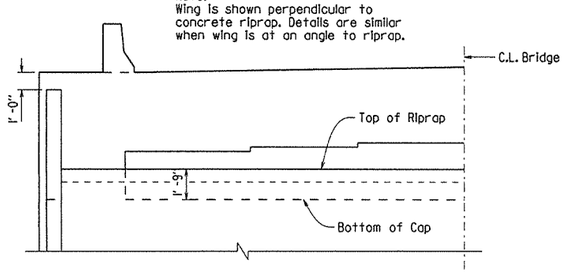
PLAN OF CONCRETE RIPRAP
PERPENDICULAR TO TURNED BACK WING
¼" = 1'-0"



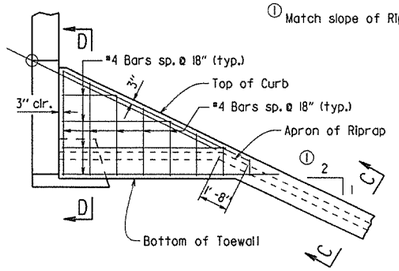
Note: For use on bridges with turned back wings and concrete riprap on corner slopes. All other details similar to those shown in "PLAN OF CONCRETE RIPRAP PERPENDICULAR TO WING".

PLAN OF CONCRETE RIPRAP
AT ANGLE FROM TURNED BACK WING
¼" = 1'-0"

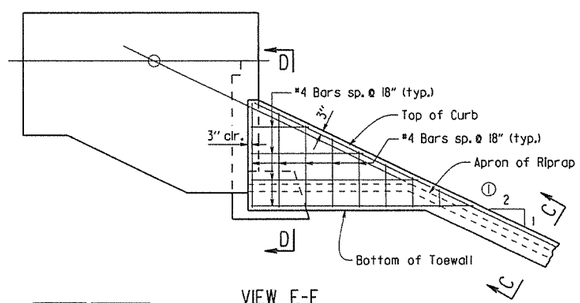
Note:
Wing is shown perpendicular to concrete riprap. Details are similar when wing is at an angle to riprap.



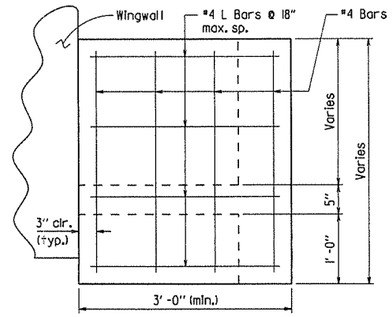
VIEW A-A
¼" = 1'-0"



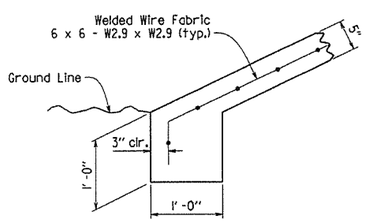
VIEW B-B
¼" = 1'-0"



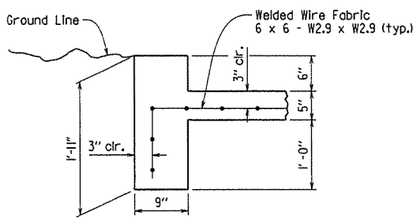
VIEW E-E
¼" = 1'-0"



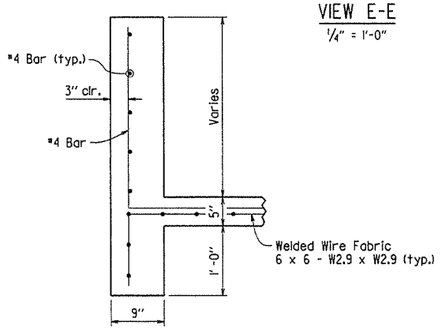
VIEW F-F
1" = 1'-0"



TOE OF CONCRETE RIPRAP
1" = 1'-0"



SECTION C-C
1" = 1'-0"



SECTION D-D
1" = 1'-0"

GENERAL NOTES

All concrete shall be Class A with a minimum compressive strength, f'c = 2,100 psi.

Welded wire fabric shall conform to AASHTO M55 or M221.

STANDARD DETAILS FOR CONCRETE RIPRAP

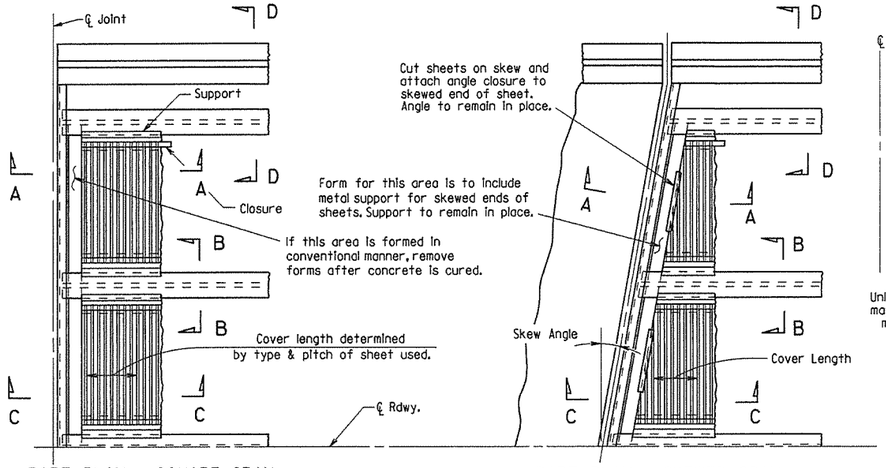
ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: ACP DATE: 2/27/2014
CHECKED BY: BEF DATE: 2/27/2014
DESIGNED BY: Std. DATE: ---
FILENAME: b55002.dgn
SCALE: AS SHOWN

DRAWING NO. 55002

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		237	
				JOB NO.				
				①	BRIDGE DECK FORMS		55005	

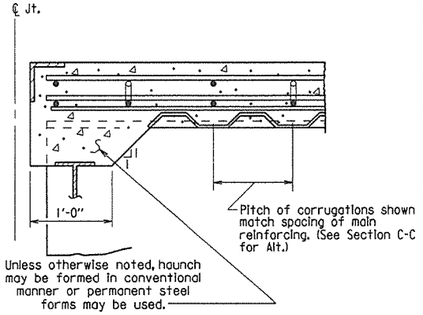


PART PLAN - SQUARE SPAN

3/8" = 1'-0"

PART PLAN - SKEWED SPAN

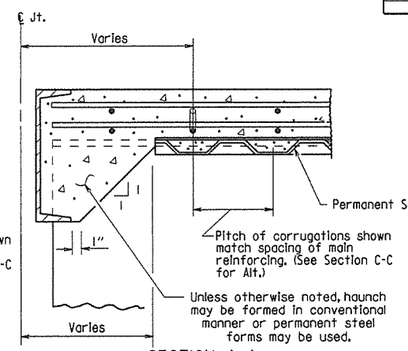
3/8" = 1'-0"



SECTION A-A

N.T.S.

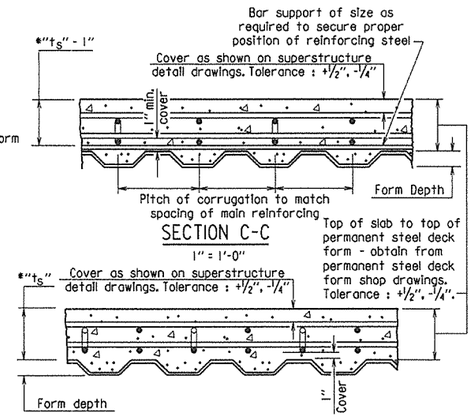
(Angle at end of span)



SECTION A-A

N.T.S.

(Channel at end of span)



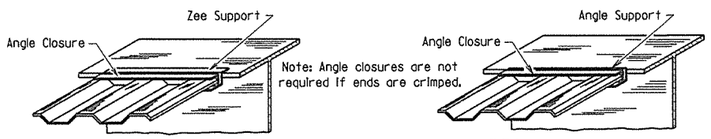
SECTION C-C

1" = 1'-0"

SECTION C-C - ALTERNATE

1" = 1'-0"

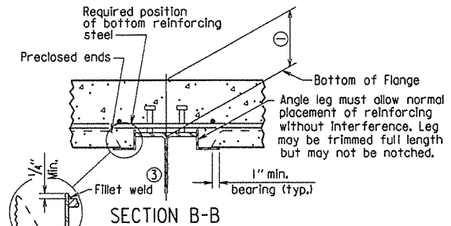
(Applicable when corrugations do not match spacing of main reinforcement)



Note: Angle closures are not required if ends are crimped.

SKETCH OF PERMISSIBLE SUPPORTS

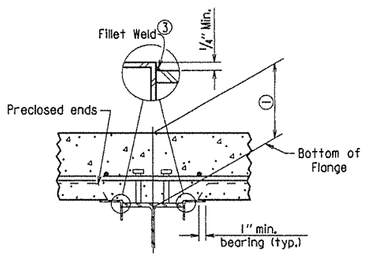
N.T.S.



SECTION B-B

1" = 1'-0"

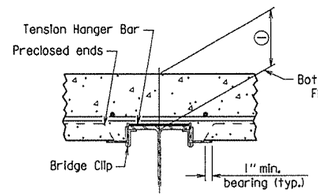
(Showing permissible support for tension flange where shear connectors are used, and for all compression flanges)



SECTION B-B

1" = 1'-0"

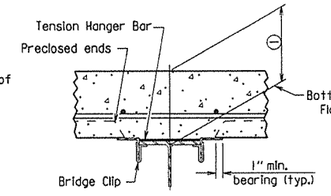
(Showing permissible support for tension flange where shear connectors are used and for all compression flanges)



SECTION B-B

1" = 1'-0"

(Showing permissible support for tension flange where shear connectors are not used)

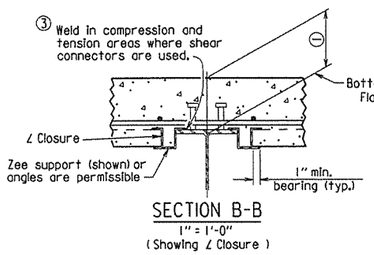


SECTION B-B

1" = 1'-0"

(Showing permissible support for tension flange where shear connectors are not used)

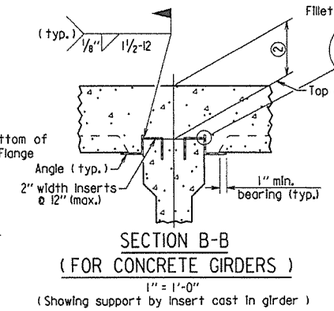
③ Minimum weld: 1/8" x 1' ℄ 18". More weld may be required; maximum length per weld = 1 1/2" (typ.)



SECTION B-B

1" = 1'-0"

(Showing ∠ Closure)

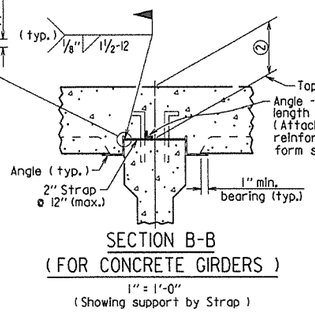


SECTION B-B

(FOR CONCRETE GIRDERS)

1" = 1'-0"

(Showing support by insert cast in girder)

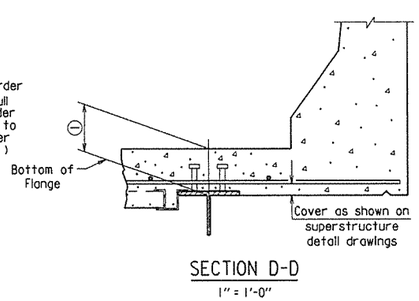


SECTION B-B

(FOR CONCRETE GIRDERS)

1" = 1'-0"

(Showing support by Strap)



SECTION D-D

1" = 1'-0"

Note: Only Bottom Reinforcing is shown.

① Distance from top of slab to bottom of top flange as measured at centerline girder and as shown on superstructure detail drawings. This dimension may vary within the following limits to maintain the grade and slab thickness tolerances : Minimum - occurs when either the top flange or the support angle leg contacts the bottom reinforcing steel; Maximum = t_s + 1 3/4" + flange thickness. See Section C-C for slab thickness tolerance between adjacent girder flanges.

② Distance from top of slab to top of girder as measured at centerline girder and as shown on superstructure detail drawings. This dimension may vary within the following limits to maintain the grade and slab thickness tolerances : Minimum - occurs when either the top of girder or the support angle leg contacts the bottom reinforcing steel; Maximum - value shown on the superstructure detail drawings when removable forms are used. See Section C-C for slab thickness tolerance between adjacent girder flanges.

*t_s = slab thickness as shown on superstructure detail drawings.

GENERAL NOTES

Permanent steel deck forms may be used at the Contractor's option and shall be at no additional cost to the Department. Such use may result in changes to the dead load deflection of the girder. Any cost for adjustments due to a change in the dead load deflection will be borne by the Contractor. Payment for deck concrete and structural steel will not be increased due to use of permanent steel deck forms.

Permanent steel deck forms shall conform to Subsection 802.14(b). Detailed plans, including detailed calculations and manufacturer's technical brochure, shall be submitted to and approved by the Engineer before work of forming the bridge deck is started.

Welding of form supports to the tension flange of steel girders will be permitted only in areas where shear connectors are used. When welding is not allowed, the method of fastening Z or ∠ supports to the flange must be approved by the Engineer.

Form sheets shall be fastened to supporting members and to each other with galvanized metal screws sufficient in size and number to provide a secure attachment. Alternate methods of attachment must be approved by the Engineer.

When the pitch of form corrugations match the reinforcing spacing, transversely align form sheets across the bridge to maintain the correct orientation of continuous reinforcing bars in the corrugations.

Bar support rods, when used, shall be sized and spaced to adequately support the bottom reinforcing mat at the required position.

High chairs shall be sized to support the top mat of reinforcing at the proper position. High chairs shall be placed at locations shown on the detail drawings.

Specifications: Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction (2014 Edition), with applicable Supplemental Specifications and Special Provisions.

STANDARD DETAILS FOR PERMANENT STEEL BRIDGE DECK FORMS FOR STEEL & CONCRETE GIRDER SPANS

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: KDH DATE: 2-27-2014 FILENAME: b55005.dgn

CHECKED BY: BEF DATE: 2-27-2014 SCALE: NONE

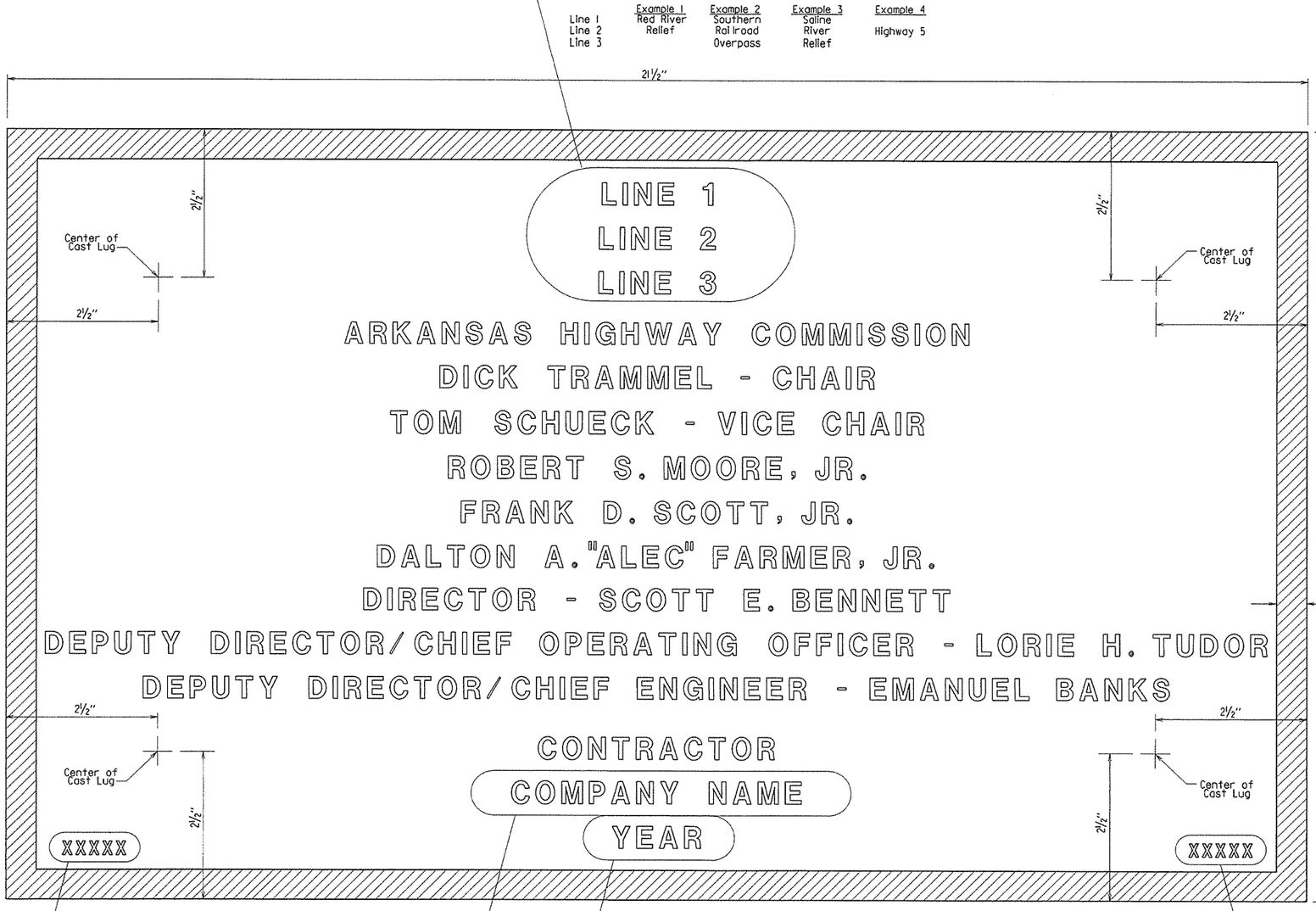
DESIGNED BY: STD. DATE: —

DRAWING NO. 55005

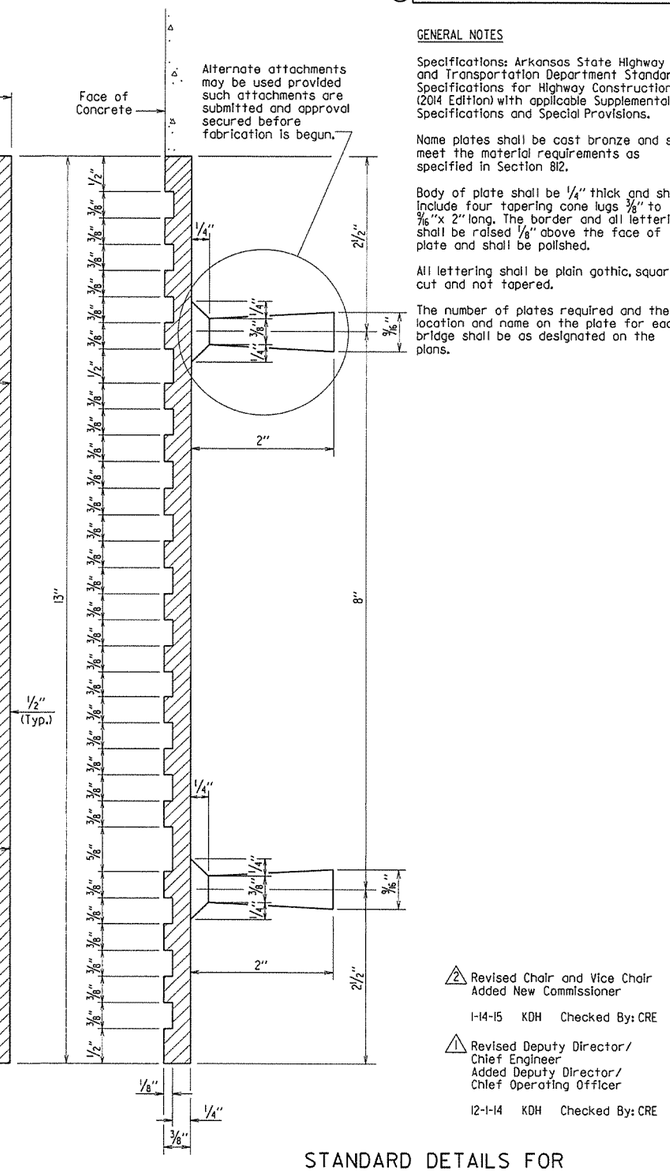
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
12-1-14				6	ARK.		238	
1-14-15				JOB NO.				
				① TYPE D NAME PLATE			55010	

The name of the bridge as shown on the plans shall be placed on Lines 1 - 3 using 1/8" raised letters and numerals 3/8" high.

	Example 1	Example 2	Example 3	Example 4
Line 1	Red River	Southern	Saline	
Line 2	Relief	Railroad	River	Highway 5
Line 3		Overpass	Relief	



TYPICAL BRIDGE NAME PLATE



GENERAL NOTES

Specifications: Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction, (2014 Edition) with applicable Supplemental Specifications and Special Provisions.

Name plates shall be cast bronze and shall meet the material requirements as specified in Section 812.

Body of plate shall be 1/4" thick and shall include four tapering cone lugs 3/8" to 9/16" x 2" long. The border and all lettering shall be raised 1/8" above the face of plate and shall be polished.

All lettering shall be plain gothic, square cut and not tapered.

The number of plates required and the location and name on the plate for each bridge shall be as designated on the plans.

② Revised Chair and Vice Chair Added New Commissioner
1-14-15 KDH Checked By: CRE

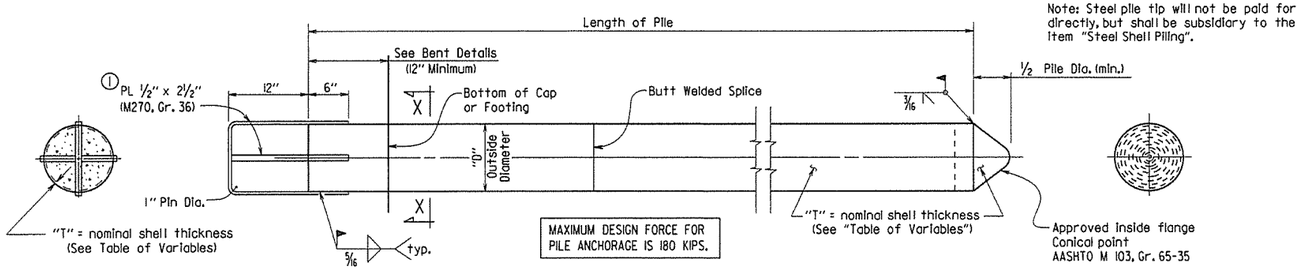
① Revised Deputy Director/ Chief Engineer Added Deputy Director/ Chief Operating Officer
12-1-14 KDH Checked By: CRE

STANDARD DETAILS FOR TYPE D BRIDGE NAME PLATE

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: KDH DATE: 2-27-2014 FILENAME: b55010.dgn
CHECKED BY: BEF DATE: 2-27-2014 SCALE: NO SCALE
DESIGNED BY: STD. DATE: —

DRAWING NO. 55010

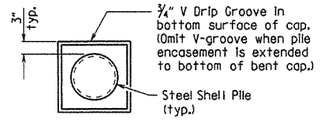


Note: Steel pile tip will not be paid for directly, but shall be subsidiary to the item "Steel Shell Piling".

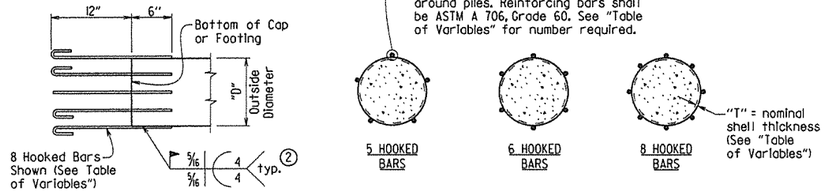
CONCRETE FILLED STEEL SHELL PILE

① Pile anchorage shall be placed to minimize interference with anchor bolts and reinforcing in cap or footing.

② Welding shall comply with ANSI/AWS D1.4 Structural Welding Code-Reinforcing Steel and applicable portions of ANSI/AWS D1.5 Bridge Welding Code.

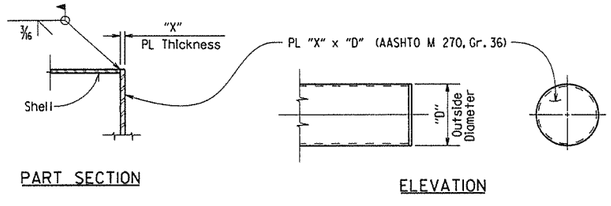


VIEW X-X



ALTERNATE PILE ANCHORAGE DETAIL

Note: Hooked bars shall be oriented to provide the required concrete clearances shown in the plans.

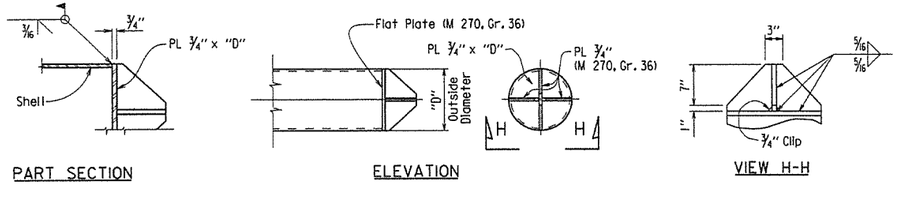


PART SECTION

ELEVATION

ALTERNATE FLAT TIP DETAIL

Note: The alternate flat tip detail shall not be used on steel shell piling to be driven through embankments constructed with internal geosynthetic reinforcement.



PART SECTION

ELEVATION

VIEW H-H

ALTERNATE VANED TIP DETAIL

GENERAL NOTES FOR CONCRETE FILLED STEEL SHEEL PILES:

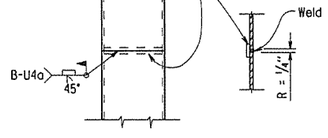
Steel shells shall conform ASTM A252, Grade 3 (Fy = 45,000 psi.)

Concrete used for filling of steel shell shall be Class S with a minimum 28-day compressive strength, f'c = 3,500 psi. and shall be poured in the dry.

Steel shell piling that extends above the ground and is not protected by pile encasement shall be painted in accordance with Subsection 805.02.

See Bridge Layout for size and estimated length of steel shell piles and for driving information.

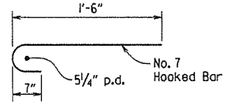
Concrete, structural steel, reinforcing steel (including welding), and painting shall not be paid for directly, but shall be considered subsidiary to the item "Steel Shell Piling".



TYPICAL SPLICE DETAILS

TABLE OF VARIABLES

OUTSIDE DIAMETER "D"	NOMINAL SHELL THICKNESS "T"	PLATE THICKNESS "X"	NO. OF HOOKED BARS FOR ALTERNATE PILE ANCHORAGE
14"	0.50"	¾"	5
16"	0.50"	1"	5
18"	0.50"	1¼"	6
20"	0.50"	1½"	6
24"	0.50"	1¾"	8



HOOKED BAR DETAIL

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		239	
				JOB NO.				
				①	STEEL SHELL PILES		55021	

GENERAL NOTES FOR PILE ENCASEMENTS:

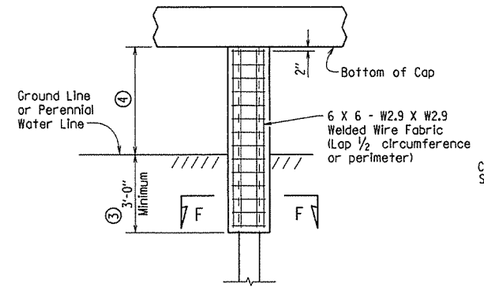
See Bridge Layout for additional notes and required location of pile encasements.

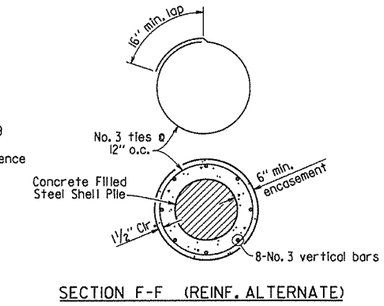
Concrete shall be Class S with a minimum 28-day compressive strength, f'c = 3,500 psi. If concrete cannot be placed in the dry, Seal Concrete may be used from top to bottom of encasement.

Reinforcing steel shall be Grade 60 conforming to AASHTO M 31 or M 322, Type A.

Welded wire fabric shall conform to AASHTO M 55 or M 221.

Concrete, welded wire fabric or reinforcing steel, and galvanized pipe shall not be paid for directly, but shall be considered subsidiary to the item "Pile Encasement".





SECTION F-F (REINF. ALTERNATE)

PILE ENCASEMENT DETAIL FOR STEEL SHELL PILES

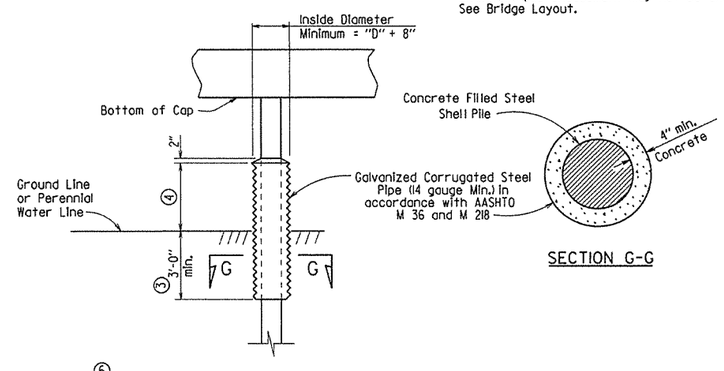
⑤ (Shown with Encasement to Bottom of Cap)

③ Unless otherwise noted on Bridge Layout.

④ See Bridge Layout for height of pile encasement (3'-0" Minimum).

⑤ Pile encasement, when not extended to bottom of cap, shall have 2" concrete taper for water runoff as shown in the detail for partial height encasement.

⑥ Alternate pile encasement may not be allowed. See Bridge Layout.



SECTION G-G

⑥ ALTERNATE PILE ENCASEMENT DETAIL FOR STEEL SHELL PILES

(Shown with Partial Height Encasement)

This document was originally issued and sealed by Carl J. Fuselier, PE No. 7510, on February 27, 2014. This copy is not a signed and sealed document.

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7510
CARL J. FUSELIER

BRIDGE ENGINEER

STANDARD DETAILS FOR CONCRETE FILLED STEEL SHELL PILES AND PILE ENCASEMENTS

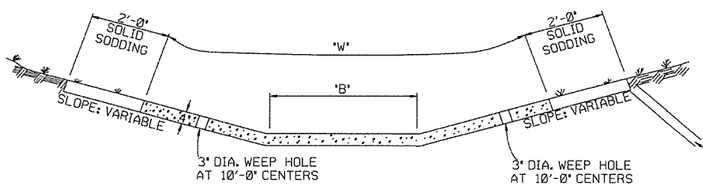
ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: A.M.S. DATE: 2/27/2014 FILENAME: b55021.dgn
CHECKED BY: B.E.F. DATE: 2/27/2014 SCALE: NO SCALE
DESIGNED BY: STD. DATE: —

DRAWING NO. 55021

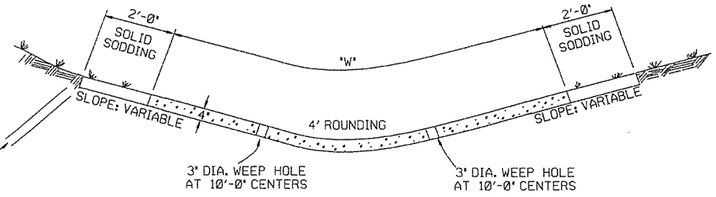
REFER TO TABULATION OF QUANTITIES FOR 'W' & 'B' DIMENSIONS



TYPE A

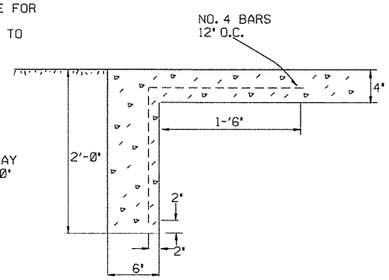
EXCAVATE TO NEAT LINES TO CONSTRUCT DITCH PAVING AND SOLID SODDING.

REFER TO TABULATION OF QUANTITIES FOR 'W' DIMENSIONS



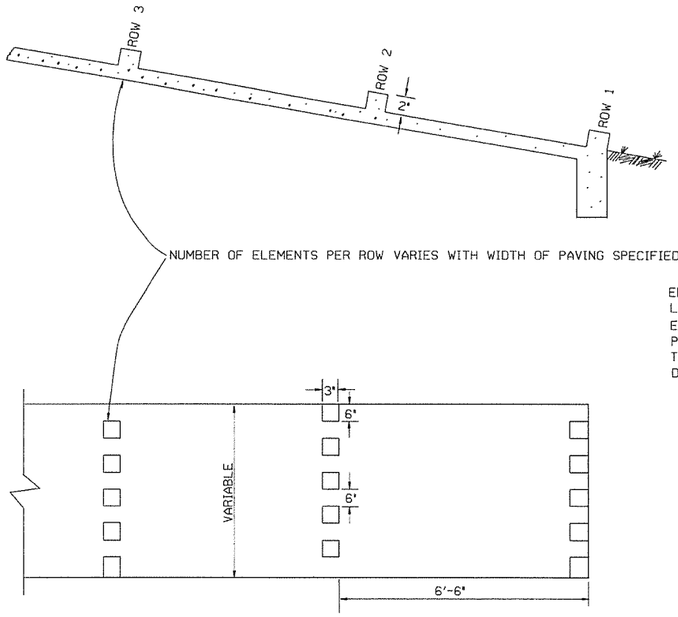
TYPE B

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



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

TOE WALL DETAIL FOR CONCRETE DITCH PAVING



ENERGY DISSIPATORS
(NO SCALE)

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

GENERAL NOTES:

THE FULL WIDTH OF EACH SECTION SHALL BE POURED MONOLITHICALLY.

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

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

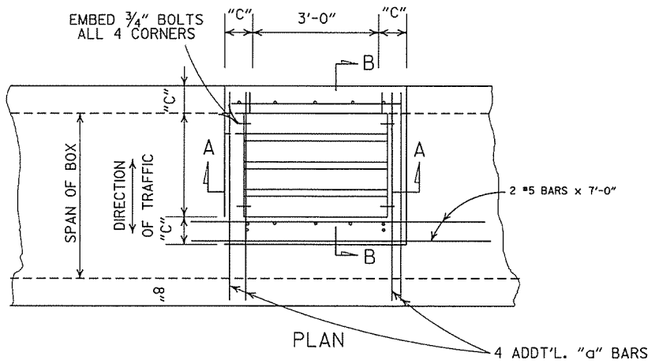
1" WIDE TRANSVERSE EXPANSION JOINTS SHALL BE PLACED IN CONCRETE DITCH PAVING AT 45' INTERVALS. THE SPACE SHALL BE FILLED WITH APPROVED JOINT FILLER COMPLYING WITH AASHTO M213.

DATE	REVISION	DATE FILM'D
11-17-10	ADDED GENERAL NOTE	
6-2-94	ADDED GENERAL NOTE ABOUT SOLID SODDING	
11-30-8	ELIMINATED MIN. ROWS OF ELEMENTS	111-30-89
7-15-88	REVISED DISSIPATOR NOTE	653-7-15-88
4-3-87	REVISED ENERGY DISSIPATOR	671-4-3-87
1-9-87	MODIFIED NOTE ON ENERGY DISS.	532-1-9-87
11-3-86	ADDED NOTE TO ENERGY DISS.	599-12-1-86
11-1-84	ENERGY DISSIPATOR DETAILS ADDED	508-11-1-84
11-1-84	EXCAVATION DETAILS ADDED TYPED A & B	
10-2-72	REVISED AND REDRAWN	508-10-2-72

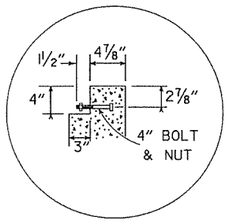
ARKANSAS STATE HIGHWAY COMMISSION

CONCRETE DITCH PAVING

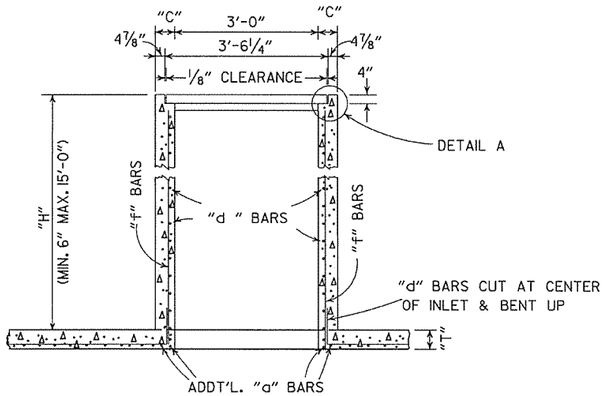
STANDARD DRAWING CDP-1



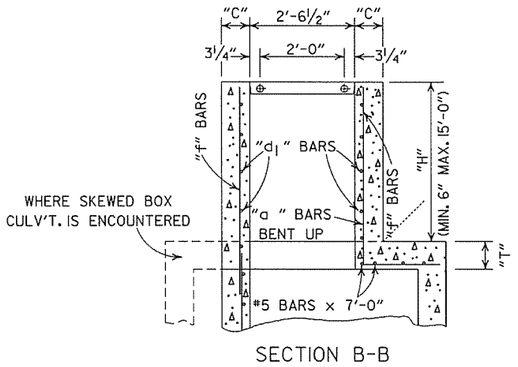
PLAN



DETAIL A



SECTION A-A

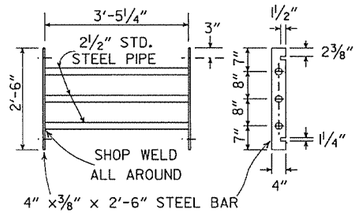


SECTION B-B

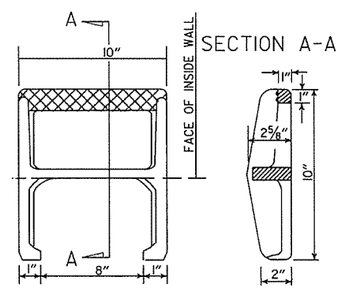
NOTE: ADDT'L.REINF. STEEL TO BE INCLUDED IN UNIT PRICE BID PER TYPE "TM" D.I.

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

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



GRATE DETAIL



APPROX. WEIGHT = 11 LBS. (CAST IRON)

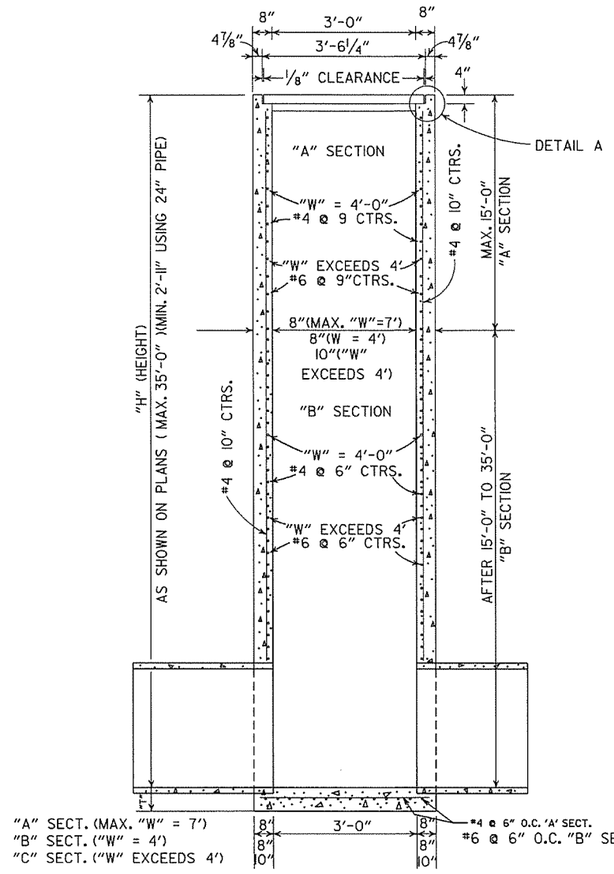
PLAN

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

DETAIL OF STEP FOR DROP INLET

GENERAL NOTES:

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



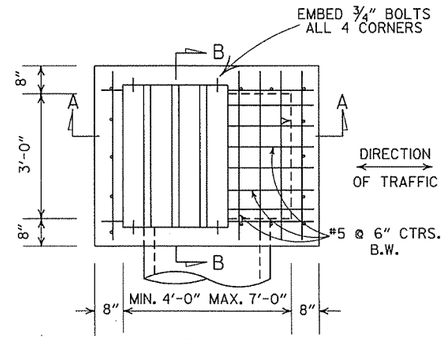
SECTION B-B

TABLE OF "W" DIMENSIONS

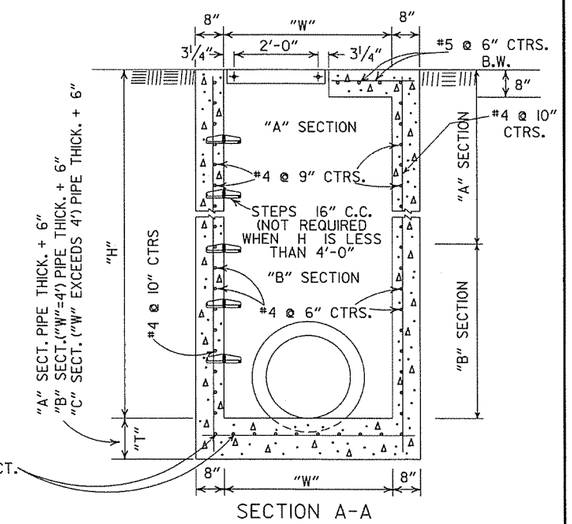
241

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

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



PLAN



SECTION A-A

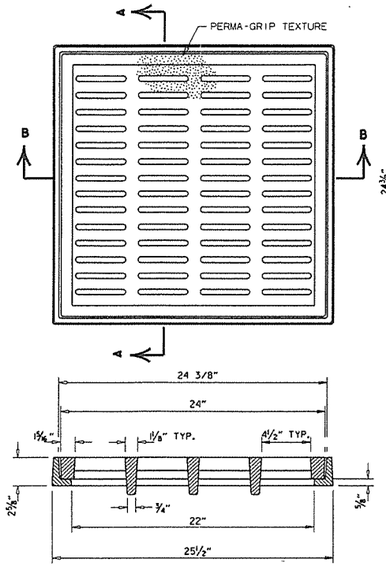
DROP INLET(TYPE RM)

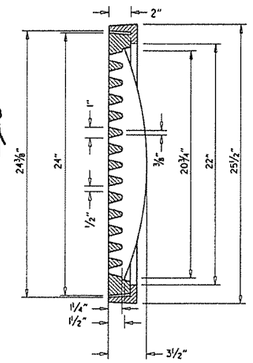
8-22-02	ADDED & REVISED DIMENSION TO SECTION A-A	
1-12-00	CORRECTED DIMENSION ON SECTION B-B	
11-06-97	ADDED DIMENSION TO SECTION A-A	
10-18-96	REVISED ASTM REF. TO AASHTO AND ADDED NOTE TO TABLE OF "W" DIMENSIONS	
10-1-92	ADDED DIRECTION OF TRAFFIC	10-1-92
8-15-91	ADDED NOTE ABOUT PAINTING OF GRATE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

ARKANSAS STATE HIGHWAY COMMISSION

DETAILS OF DROP INLETS

STANDARD DRAWING FPC-9D





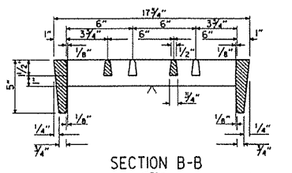
SECTION A-A

SECTION B-B

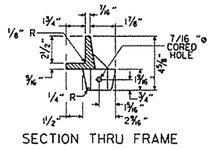
DETAILS OF PEDESTRIAN GRATE AND FRAME

GENERAL NOTES (PEDESTRIAN GRATE & FRAME)

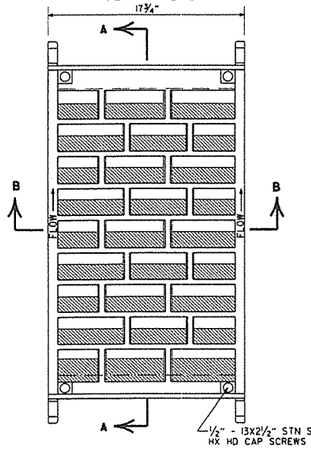
1. THE PEDESTRIAN GRATE SHALL BE ORIENTED IN THE TOP OF THE DROP INLET SO THAT THE ½" OPENINGS ARE PERPENDICULAR TO THE PATH OF PEDESTRIAN TRAVEL.
2. THE PEDESTRIAN GRATE AND FRAME SHALL BE CONSTRUCTED OF CAST IRON AND SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR GRAY IRON CASTINGS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

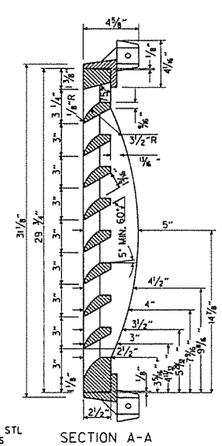


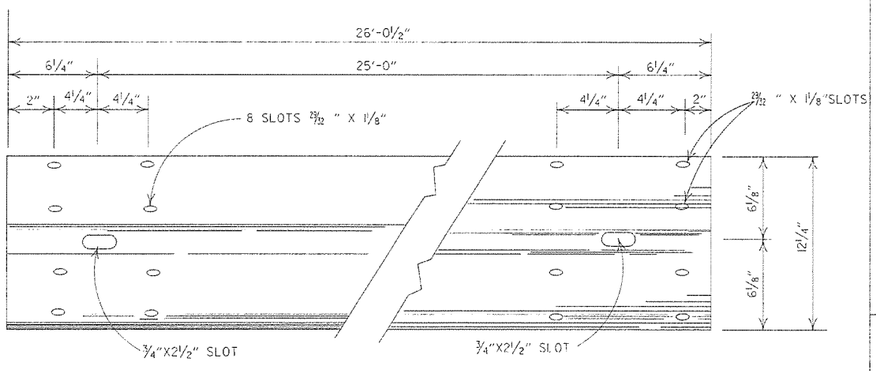
SECTION B-B

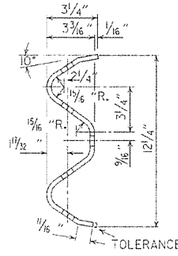


SECTION THRU FRAME



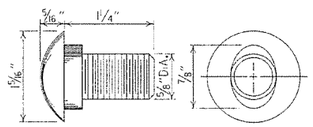

4⅝"
⅛"
4⅛"
1¾"
¼" R
3 ½"
3"
3"
3



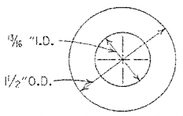


DETAILS OF W-BEAM GUARD RAIL

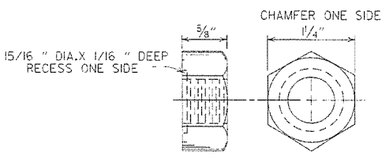
RAIL SECTION OF CLOSELY SIMILAR DIMENSIONS AND COMPARABLE STRENGTH MAY BE SUBSTITUTED IF APPROVED BY THE ENGINEER.



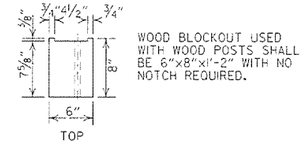
SPLICE BOLT
POST BOLT - SAME EXCEPT LENGTH



CUT STEEL WASHER

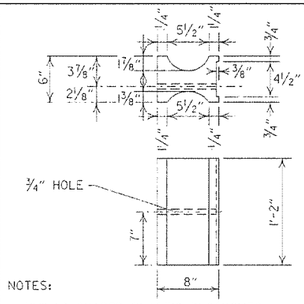


NUT



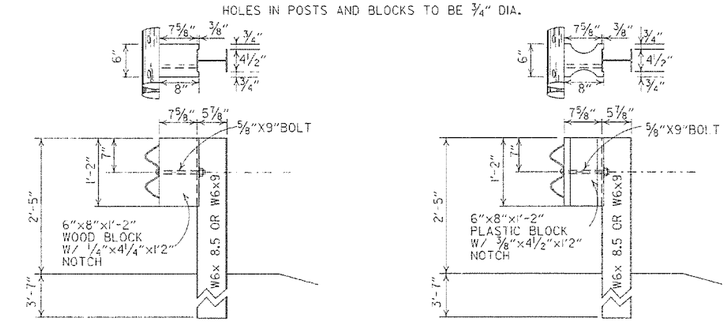
WOOD BLOCKOUT USED WITH WOOD POSTS SHALL BE 6"x8"x1'-2" WITH NO NOTCH REQUIRED.

WOOD BLOCKOUT (W-BEAM)



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

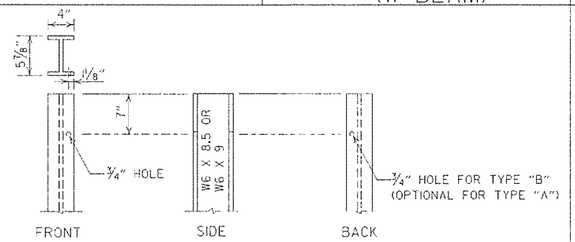
PLASTIC BLOCKOUT (W-BEAM)



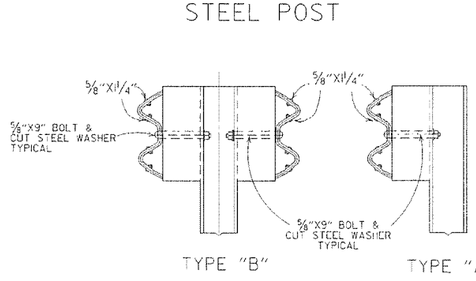
WOOD BLOCKOUT CONNECTIONS

PLASTIC BLOCKOUT CONNECTIONS

DETAILS OF STEEL LINE POST CONNECTIONS (W-BEAM)

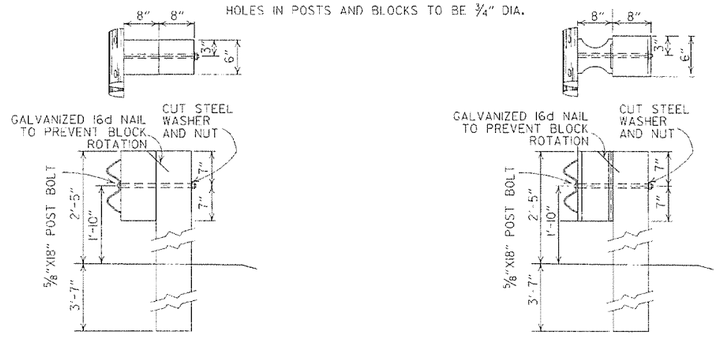


STEEL POST



TYPE "B" TYPE "A"

DETAILS OF STEEL LINE POST CONNECTIONS (W-BEAM)



WOOD BLOCKOUT CONNECTIONS

PLASTIC BLOCKOUT CONNECTIONS

DETAILS OF WOOD LINE POST CONNECTIONS (W-BEAM)

-GENERAL NOTES-

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

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

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

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

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

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

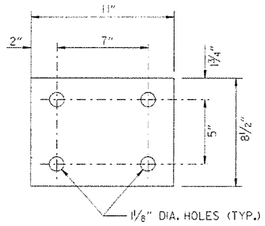
CONTRACTOR SHALL HAVE THE OPTION OF USING WOOD BLOCKOUTS FOR W-BEAM GUARD RAIL OR PLASTIC BLOCKOUTS, AS LONG AS BLOCKOUT USED MEETS NCHRP-350 TEST LEVEL 3 SPECIFICATIONS OR REQUIREMENTS FOR MANUAL FOR ASSESSING SAFETY HARDWARE (MASH) FOR W-BEAM GUARD RAIL.

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

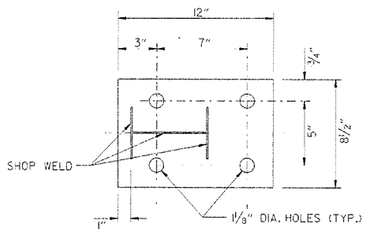
ARKANSAS STATE HIGHWAY COMMISSION

GUARD RAIL DETAILS

STANDARD DRAWING GR-8

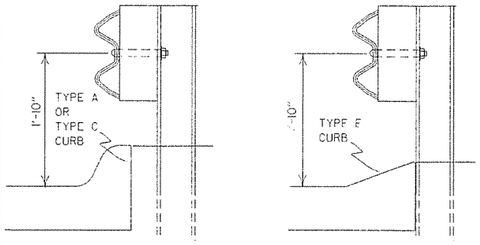


WASHER PLATE



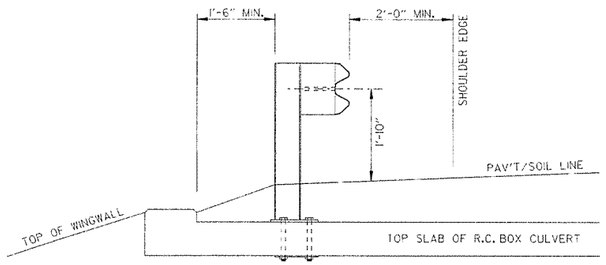
BASE PLATE

Note: Bolts, nuts, washers and plates shall be galvanized in accordance with Section 807 of the Standard Specifications.

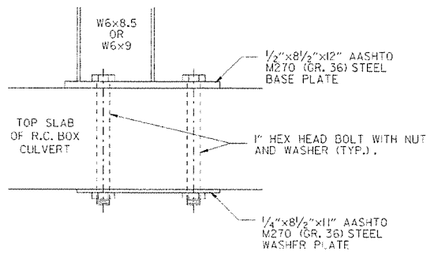


DETAIL OF GUARD RAIL PLACEMENT BEHIND CURB (W-BEAM)

FOR DESIGN SPEEDS OF 50 MPH OR LESS ALL CURB FACES, AS SHOWN ON STD. DRWG. CG-1, MAY BE USED. FOR DESIGN SPEEDS OF 55 MPH OR MORE TYPE "E" CURB FACE SHALL BE USED.

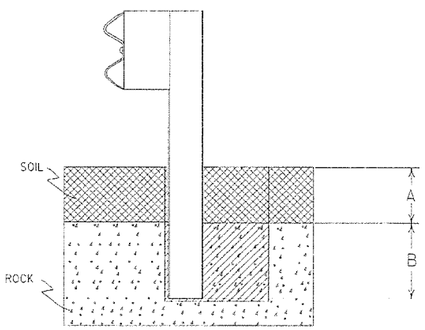


SECTION A-A

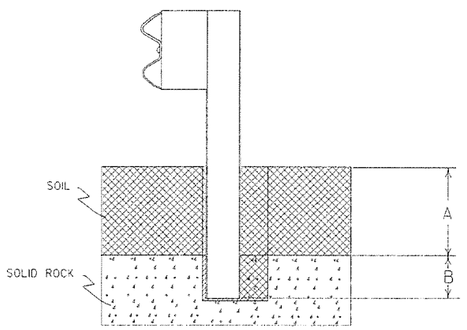


DETAIL OF CONNECTION

Case 1

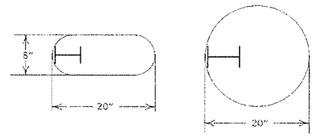


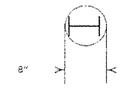
Case 2



Plan View Steel Posts

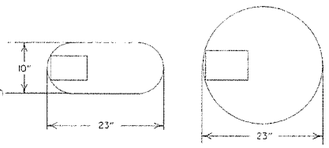
Either hole configuration acceptable

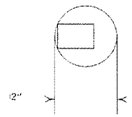




Plan View Wood Posts

Either hole configuration acceptable





Notes: For overlying soil depths (A) ranging from 0 to 18", the depth of required drilling (B) is equal to 24".

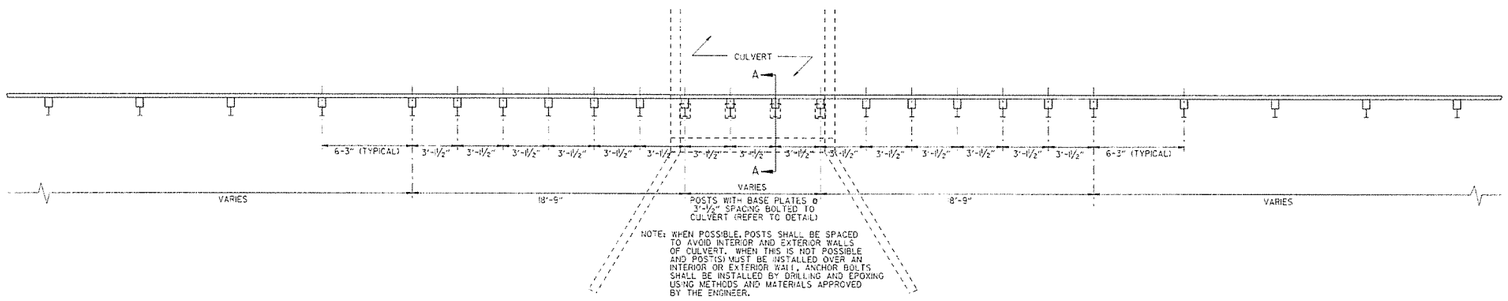
Zone A:
Backfill according to Section 617.03(a).

Zone B:
Backfill hole in 6" lifts with material meeting the requirements of Section 802.02(c) - Alternate gradation. Compact to 95% maximum dry density per ASTM D-698.

Notes: For overlying soil depths (A) ranging from 18" to 44", the depth of required drilling (B) is equal to either 12" or 44" minus the depth of soil whichever is less.

Zone A & B:
Backfill according to Section 617.03(a).

DETAIL OF POST PLACEMENT IN SOLID ROCK (W-BEAM)



PLAN LAYOUT OF TYPE A GUARD RAIL AT LOW-FILL CULVERTS

NOTE: THIS DETAIL IS TO BE USED ONLY WHEN THE COVER OVER THE CULVERT DOES NOT PERMIT FULL EMBEDMENT OF GUARD RAIL POSTS AS SHOWN ON STD. DWG. GR-8.

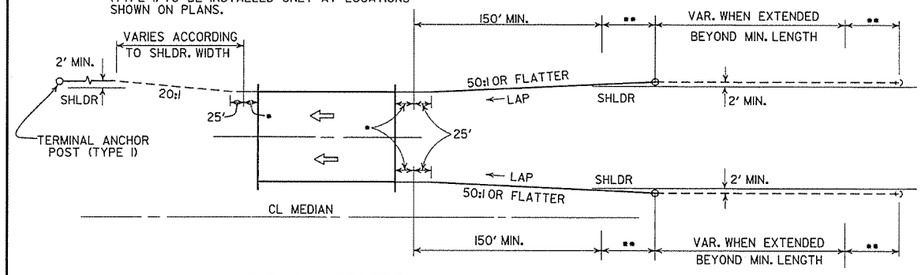
DATE	REVISION	DATE FILM
7-14-10	RAISED HEIGHT OF GUARD RAIL 1"	
4-12-07	REVISED DETAIL OF GUARD RAIL PLACEMENT BEHIND CURB	
11-10-05	ADDED GUARD RAIL PLACEMENT BEHIND CURB; REVISED DETAIL OF CONNECTION	
4-18-04	REVISED POST PLACEMENT IN ROCK & CULVERT CONNECTION DETAILS. ADDED DETAIL FOR GUARD RAIL PLACEMENT AT LOW-FILL CULVERTS	
3-30-00	REMOVED CONCRETE INSERT ANCHOR	
6-12-98	CHANGED STEEL SPACER BLOCK TO WOOD BLOCKOUT, ADD. DET. OF GUARD RAIL CONNECTION TO R.C. BOX CULV'T. DELETED DET. OF STEEL LINE POST CONN.& ADDED DET. OF GUARD RAIL PLACE. BEHIND CURB & DET. OF POST PLACE. IN SOLID ROCK	
4-3-96	PLACED ARROWS AT CUT STEEL WASHERS	4-3-96
10-18-96	REV. ASTM REF. TO AASHTO	
11-22-95	ADDED OPTIONAL HOLES	
6-2-94	REVISED ALTERNATE POST SIZE	
8-5-93	REVISED STEEL POST SIZE	
10-1-92	REDRAWN & REVISED	10-1-92
8-2-90	DEL. WASHER ON ANCHOR ASSEMBLY	8-2-90
7-15-88	CONFORMED TO 1988 SPECS	
3-4-88	REVISED ANCHOR NOTE	
10-30-87	REVISED ANCHOR ASSEMBLY	712-10-30-87
10-30-87	REVISED PLACEMENT BEHIND CURB	547-10-30-87
10-9-87	REDRAWN & REVISED	803-10-9-87

ARKANSAS STATE HIGHWAY COMMISSION

GUARD RAIL DETAILS

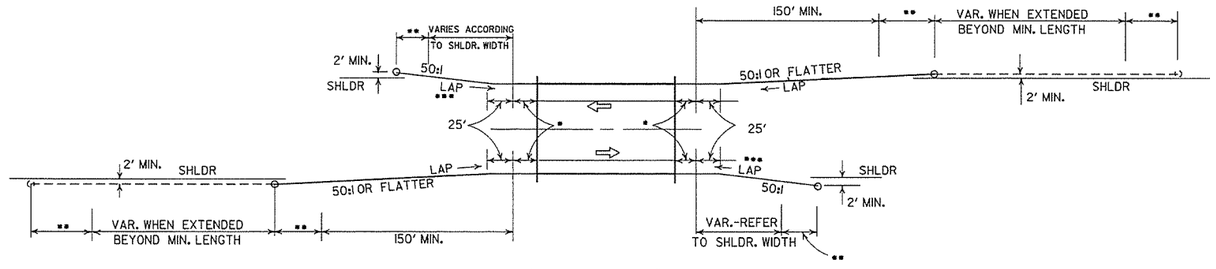
STANDARD DRAWING GR-8A

NOTE: GUARD RAIL WITH GUARD RAIL TERMINAL (TYPE I) TO BE INSTALLED ONLY AT LOCATIONS SHOWN ON PLANS.



ONE-WAY TRAFFIC

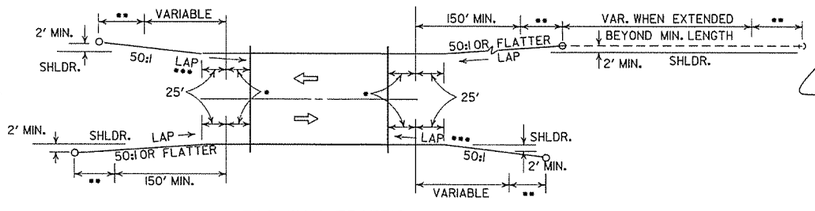
••• LAP OF GUARD RAIL SHALL BE AS SHOWN FOR A DISTANCE OF UP TO 200', CHANGE TO LAP IN DIRECTION OF TRAVEL.



TWO-WAY TRAFFIC

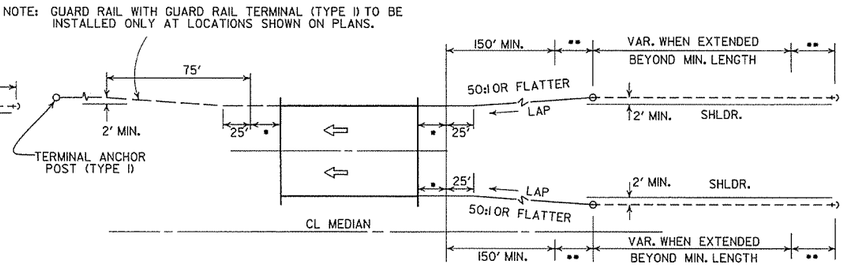
METHODS OF INSTALLATION OF GUARD RAIL AT LESS THAN FULL SHOULDER WIDTH BRIDGES USING GUARD RAIL TERMINAL (TYPE 2)

••• LAP OF GUARD RAIL SHALL BE AS SHOWN FOR A DISTANCE OF UP TO 200', CHANGE TO LAP IN DIRECTION OF TRAVEL.



TWO-WAY TRAFFIC

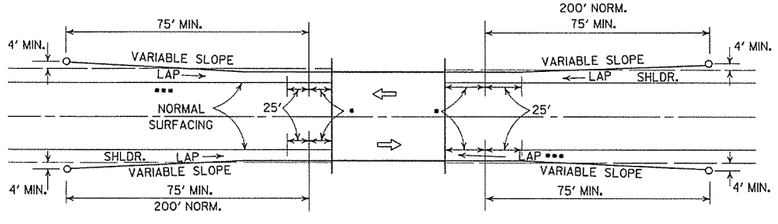
NOTE: GUARD RAIL WITH GUARD RAIL TERMINAL (TYPE I) TO BE INSTALLED ONLY AT LOCATIONS SHOWN ON PLANS.



ONE-WAY TRAFFIC

METHOD OF INSTALLATION OF GUARD RAIL AT FULL SHOULDER WIDTH BRIDGES USING GUARD RAIL TERMINAL (TYPE 2)

••• LAP OF GUARD RAIL SHALL BE AS SHOWN FOR A DISTANCE OF UP TO 200', CHANGE TO LAP IN DIRECTION OF TRAVEL.



METHOD OF INSTALLATION OF GUARD RAIL USING GUARD RAIL TERMINAL (TYPE I) (FULL SHOULDER WIDTH OR LESS BRIDGES)

LEGEND

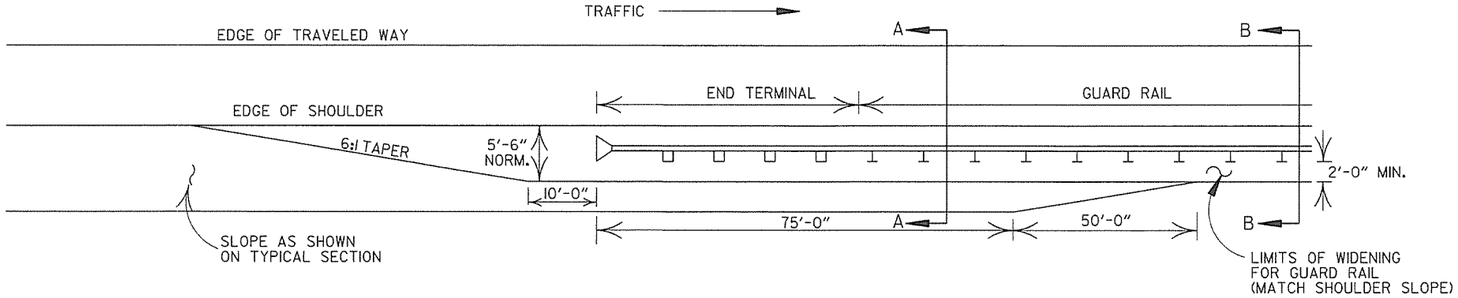
- ▪ THRIE BEAM GUARD RAIL TERMINAL
- ▪▪ GUARD RAIL TERMINAL (TYPE 2)

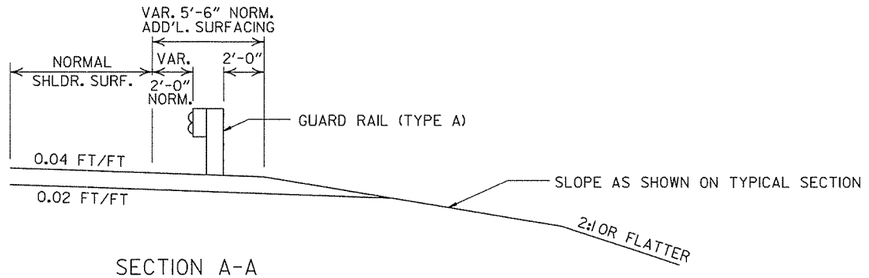
DATE	REVISION	DATE FILM
4-17-08	REVISED LAYOUTS	
11-10-05	REMOVED GUARD RAIL NOTES AND DETAILS	
11-16-01	DELETED NOTE-METHOD OF INSTALLATION OF GUARD RAIL USING GUARD RAIL TERM. (TY. I)	
1-12-00	ADDED CONSTRUCTION NOTE	1-12-00
6-26-97	REVISED LAYOUT	
10-1-92	REDRAWN & REVISED	10-1-92
	ADDED NOTE	
10-9-87	REDRAWN & REVISED	

ARKANSAS STATE HIGHWAY COMMISSION

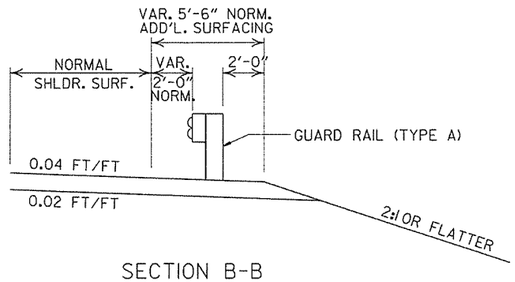
GUARD RAIL DETAILS

STANDARD DRAWING GR-9





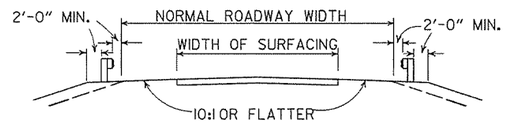
SECTION A-A



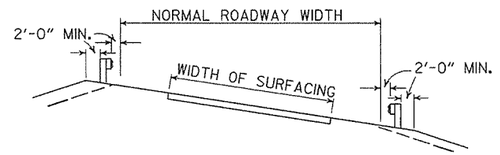
SECTION B-B

DETAILS OF WIDENING FOR GUARD RAIL

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

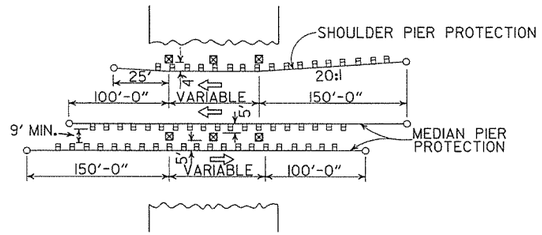


SECTION ON TANGENT



SECTION ON CURVE

DETAILS SHOWING POSITION OF GUARD RAIL ON HIGHWAY



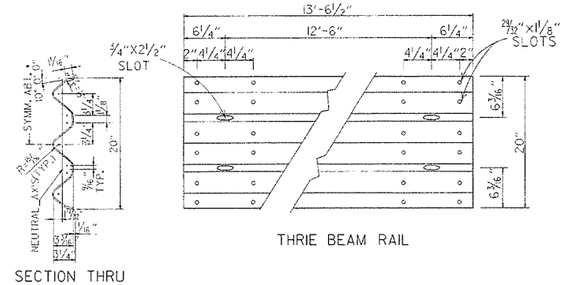
METHOD OF INSTALLATION OF GUARD RAIL AT FIXED OBSTACLE

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

ARKANSAS STATE HIGHWAY COMMISSION

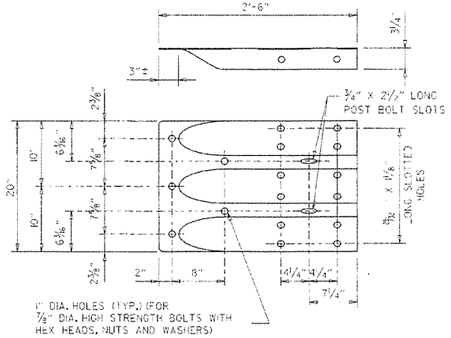
GUARD RAIL DETAILS

STANDARD DRAWING GR-9A



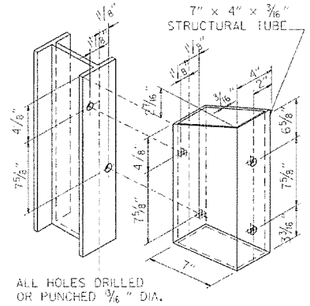
THRIE BEAM RAIL

SECTION THRU
THRIE BEAM RAIL



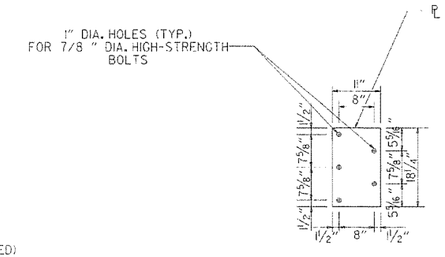
1" DIA. HOLES (TYP.) (FOR ⅞" DIA. HIGH STRENGTH BOLTS WITH HEX HEADS, NUTS AND WASHERS)

SPECIAL END SHOE



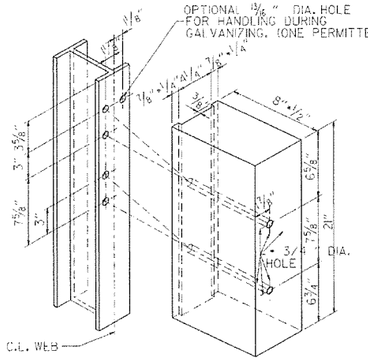
ATTACH BLOCKOUT TO POST USING ⅝" DIA. HEX HEAD BOLTS WITH 1½" O.D. CUT STEEL WASHERS AND NUT.

STRUCTURAL STEEL TUBING BLOCKOUT DETAIL



CONNECTOR PLATE

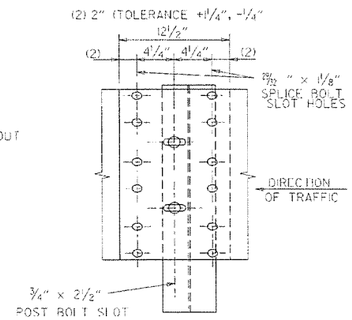
CONNECTOR PLATE SHALL BE AASHTO M270, GR. 36 AND SHALL BE GALVANIZED AFTER FABRICATION. GALVANIZING SHALL CONFORM TO SUBSECTION 807.19 OF THE STANDARD SPECIFICATIONS. CONNECTOR PLATE TO BE BOLTED TO SPECIAL END SHOE USING ⅞" DIA. HIGH STRENGTH BOLTS, WITH THE HEADS PLACED ON THE TRAFFIC FACE. WASHERS SHALL BE USED UNDER THE HEAD AND NUT. BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED AND SHALL CONFORM TO SUBSECTION 807.06.



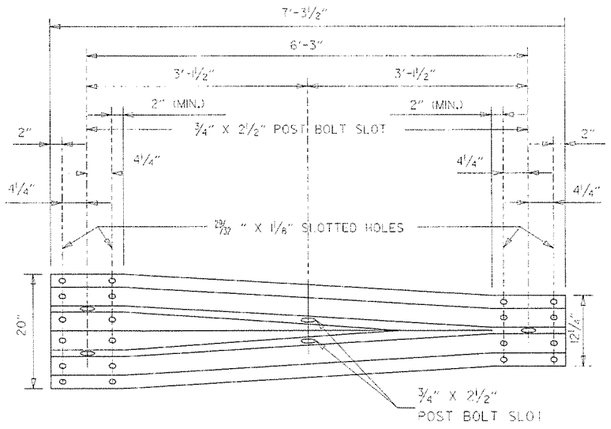
ALL HOLES 13/16 " DIAMETER EXCEPT AS NOTED

HOLE PUNCHING DETAIL
FOR STEEL POST & WOOD
OR PLASTIC BLOCKOUTS

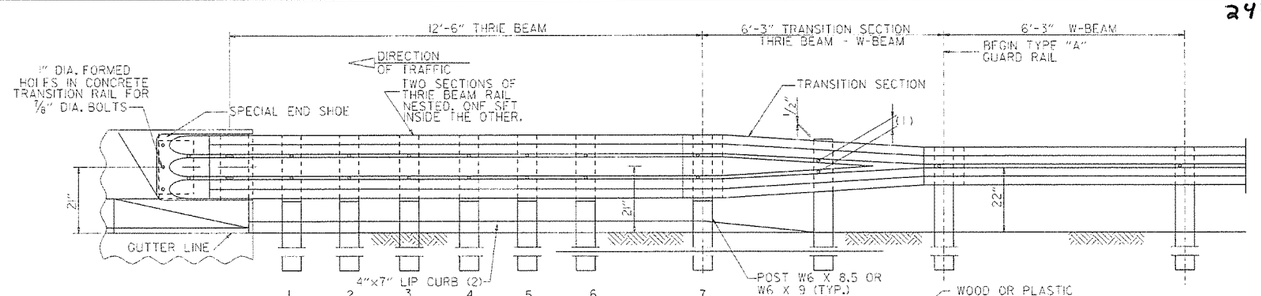
NOTE: BLOCKS SHALL BE THE SAME TYPE THROUGHOUT THE PROJECT LIMITS.



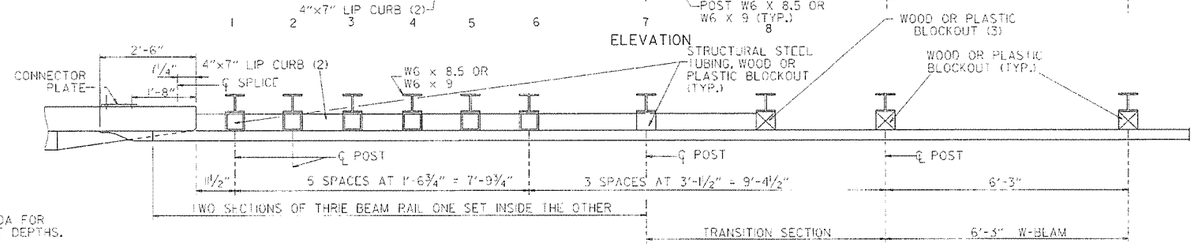
THRIE BEAM RAIL
SPLICE AT POST



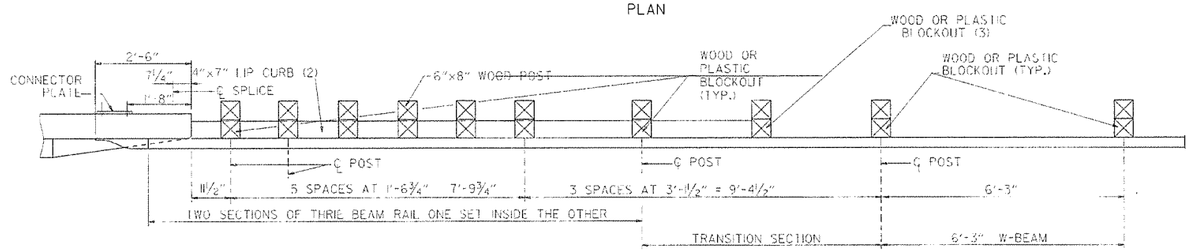
TRANSITION SECTION



ELEVATION



PLAN



PLAN

(1) VERIFY BOLT SPACING FROM RAIL TRANSITION PRODUCER.
(2) REFER TO APPROACH GUTTER DETAILS.
(3) LENGTH OF BLOCKOUT ON POST 8 TO BE MODIFIED TO FIT RAIL WIDTH.

THRIE BEAM GUARD RAIL CONNECTION AT BRIDGE ENDS

GENERAL NOTES:

THE THRIE BEAM RAIL, SPECIAL END SHOE, AND THE TRANSITION SECTION SHALL BE MADE OF STEEL AND SHALL BE 12 GAGE. ZINC COATING SHALL BE TYPE II.

RAIL POSTS SHALL BE SET PERPENDICULAR TO THE ROADWAY PROFILE GRADE AND VERTICALLY IN CROSS SECTION.

ALL BOLTS SHALL BE SUFFICIENT LENGTH TO EXTEND THROUGH THE FULL THICKNESS OF THE NUT AND NO MORE THAN ¾" BEYOND IT.

ALL LAP SPLICES, INCLUDING SPECIAL END SHOES, SHALL BE MADE IN THE DIRECTION SHOWN ON STANDARD DRAWINGS GR-9 & GR-11.

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

REFER TO STD. DRWG. GR-10A FOR POST DETAILS.

USE THRIE BEAM GUARD RAIL COMPONENTS OF SAME MATERIAL FOR ENTIRE JOB.

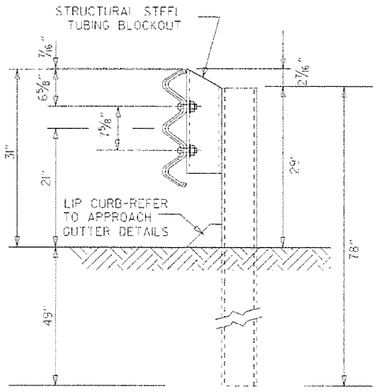
THRIE BEAM POSTS SHALL BE SAME MATERIAL AS W BEAM POSTS FOR ENTIRE JOB.

DATE	REVISION	DATE FILM
7-14-10	RAISED HEIGHT OF W-BEAM 1"	
11-29-07	ADDED PLASTIC BLOCKOUTS	
11-10-05	ADDED NOTE FOR ATTACHING STEEL BLOCKOUT	
11-18-04	REVISED GENERAL NOTES	
10-9-03	REVISED GENERAL NOTES	
4-10-03	REVISED GENERAL NOTES	
8-22-02	REVISED NOTE (2)	
6-29-00	MOVED DIMENSION LINES	
5-18-00	ADDED NOTE	
3-30-00	DRAWN & ISSUED	

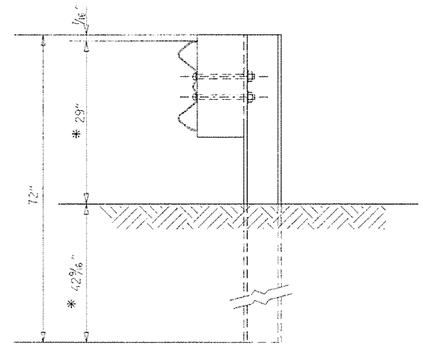
ARKANSAS STATE HIGHWAY COMMISSION

GUARD RAIL DETAILS

STANDARD DRAWING GR-10

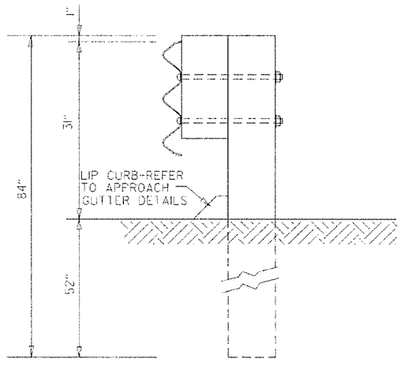


THRIE BEAM RAIL WITH STEEL TUBING BLOCKOUT
AND STEEL POST
POSTS 1-7

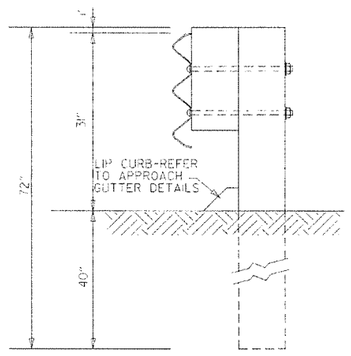


W-BEAM TO THRIE BEAM TRANSITION RAIL
WITH WOOD OR PLASTIC BLOCKOUT AND STEEL POST
POST 8

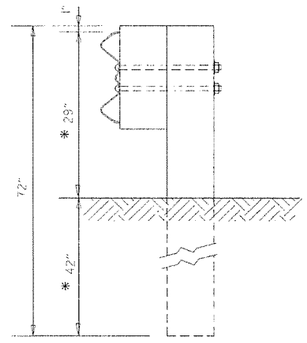
* NOTE:
THESE DIMENSIONS WILL NEED TO BE ADJUSTED IN THE FIELD TO MAKE THE TRANSITION FROM 21" MID POINT OF THRIE BEAM TO 22" MID POINT OF W-BEAM.



THRIE BEAM RAIL
WITH WOOD OR PLASTIC
BLOCKOUTS & WOOD POSTS
POSTS 1-6



THRIE BEAM RAIL
WITH WOOD OR PLASTIC
BLOCKOUT & WOOD POST
POST 7



W-BEAM TO THRIE BEAM
TRANSITION RAIL WITH WOOD OR
PLASTIC BLOCKOUT & WOOD POST
POST 8

GENERAL NOTES:

RAIL POSTS SHALL BE SET PERPENDICULAR TO THE ROADWAY PROFILE GRADE AND VERTICALLY IN CROSS SECTION.

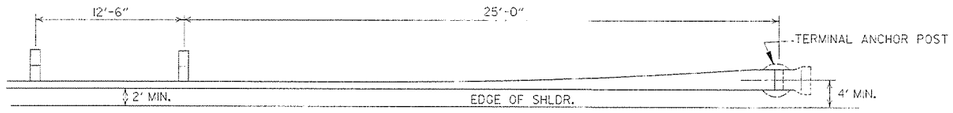
WOOD POSTS & WOOD BLOCKS SHALL BE EITHER DENSE NO. 1STRUCTURAL OR BETTER 9.7f (1400 f) OR NO. 1 1350 f SOUTHERN PINE.

DATE	REVISION	DATE FILM
7-14-10	REVISED POST 8 DIMENSIONS	
11-29-07	ADDED PLASTIC BLOCKOUTS	
8-22-02	REVISED LIP CURB NOTE	
3-30-00	DRAWN & ISSUED	

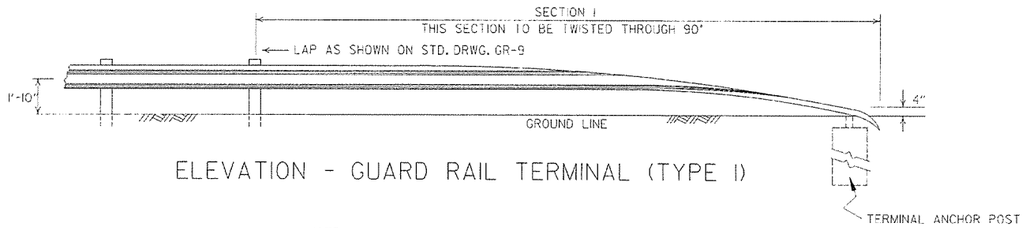
ARKANSAS STATE HIGHWAY COMMISSION

GUARD RAIL DETAILS

STANDARD DRAWING GR-10A

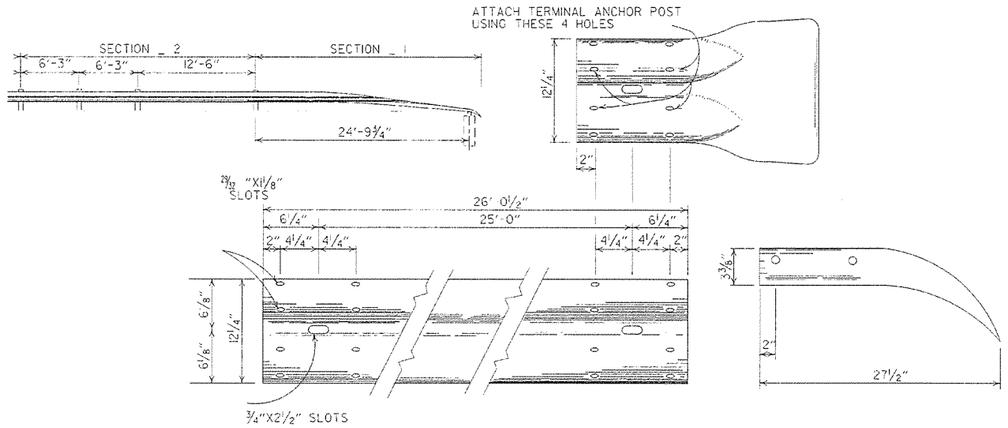


PLAN - GUARD RAIL TERMINAL (TYPE I)



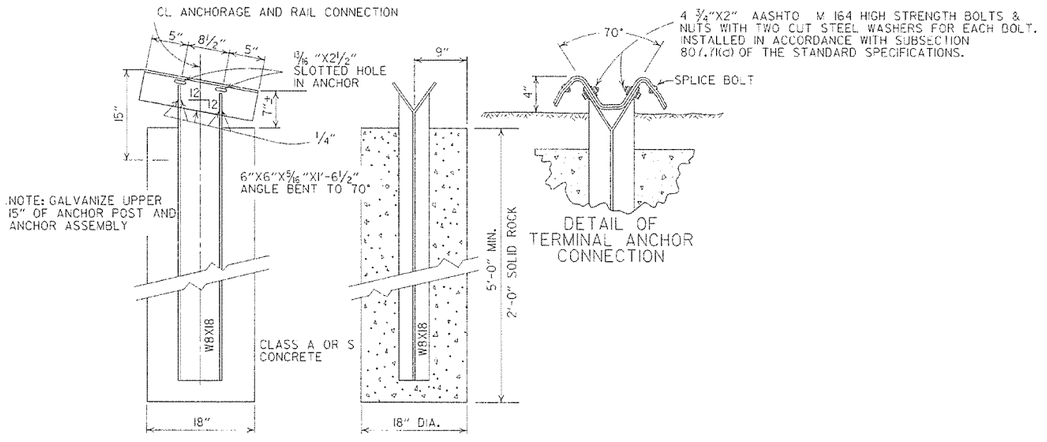
ELEVATION - GUARD RAIL TERMINAL (TYPE I)

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



SECTION 1

TERMINAL SECTION



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

DETAIL OF TERMINAL ANCHOR POST (TYPE I)

DATE	REVISION	DATE FILM
7-14-10	RAISED HEIGHT OF GUARD RAIL 1"	
6-26-97	REVISED LAP NOTE	
10-18-96	REVISED ASTM REF. TO AASHTO	
11-5-92	DIMENSION TERMINAL DETAIL	
11-11-92	ADDED NOTE FOR PAYMENT	11-11-92
10-1-92	DRAWN & ISSUED	10-1-92

ARKANSAS STATE HIGHWAY COMMISSION

GUARD RAIL DETAILS

STANDARD DRAWING GRT-1

REINFORCED CONCRETE ARCH PIPE DIMENSIONS

EQUIV. DIA.	SPAN		RISE	
	AASHTO M 206	AHTD NOMINAL	AASHTO M 206	AHTD NOMINAL
INCHES	INCHES			
15	18	18	11	11
18	22	22	13½	14
21	26	26	15½	16
24	28½	29	18	18
30	36¼	36	22½	23
36	43⅜	44	26⅝	27
42	51⅛	51	31⅞	31
48	58½	59	36	36
54	65	65	40	40
60	73	73	45	45
72	88	88	54	54
84	102	102	62	62
90	115	115	72	72
96	122	122	77½	77
108	138	138	87⅛	87
120	154	154	96⅞	97
132	168¾	169	106½	107

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

REINFORCED CONCRETE HORIZONTAL ELLIPTICAL PIPE DIMENSIONS

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

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

CONSTRUCTION SEQUENCE

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

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

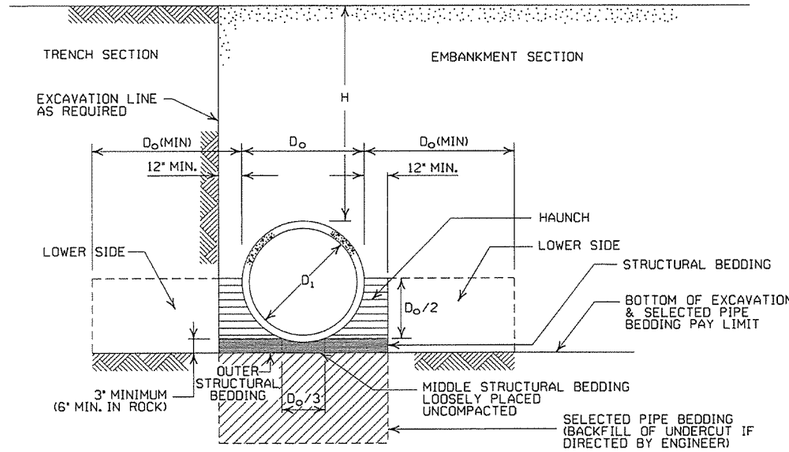
- LEGEND -

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

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

*SM-3 WILL NOT BE ALLOWED.

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



EMBANKMENT AND TRENCH INSTALLATIONS

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

GENERAL NOTES

1. CONCRETE PIPE CULVERT CONSTRUCTION SHALL CONFORM TO ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (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	

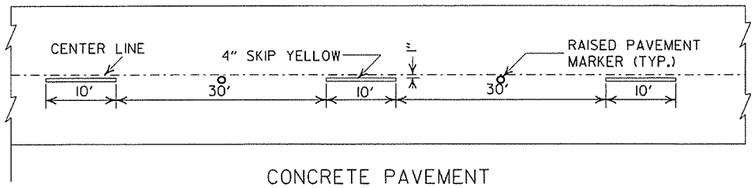
ARKANSAS STATE HIGHWAY COMMISSION

CONCRETE PIPE CULVERT FILL HEIGHTS & BEDDING

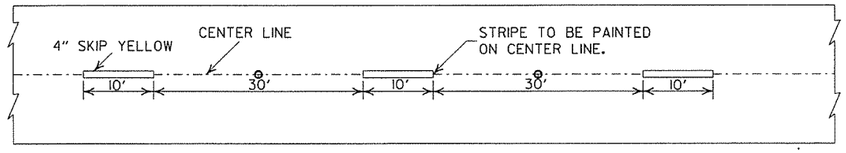
STANDARD DRAWING PCC-1

NOTES:

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

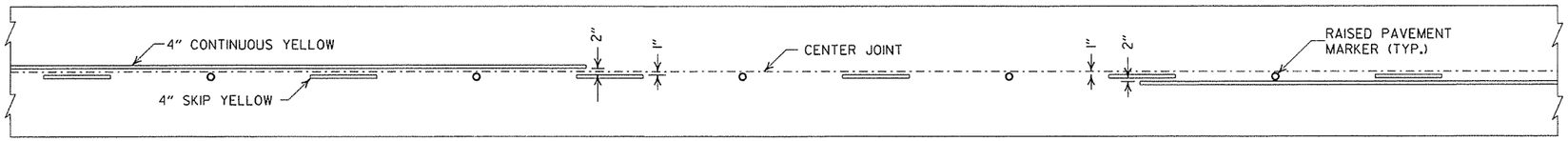


CONCRETE PAVEMENT

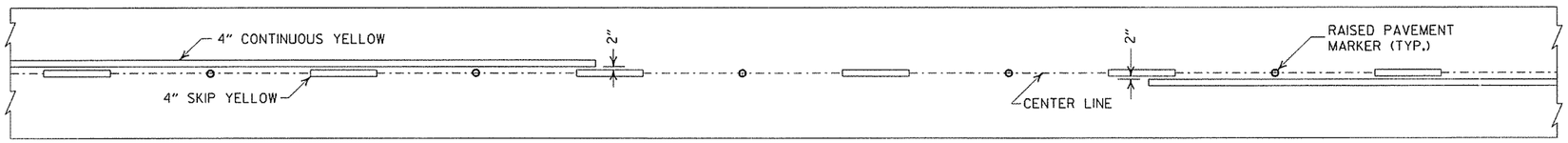


ASPHALT PAVEMENT

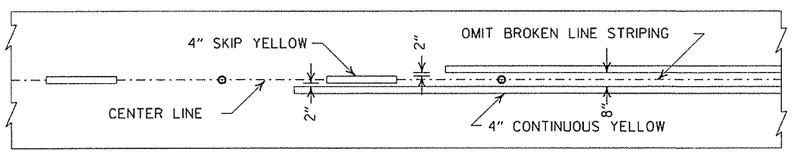
BROKEN LINE STRIPING



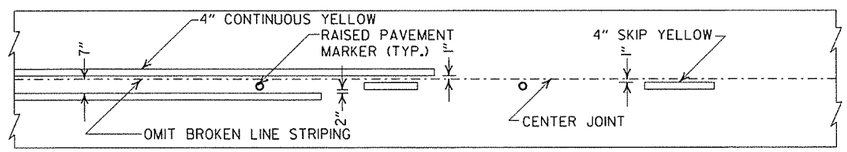
SOLID LINE STRIPING ON CONCRETE PAVEMENT



SOLID LINE STRIPING ON ASPHALT PAVEMENT

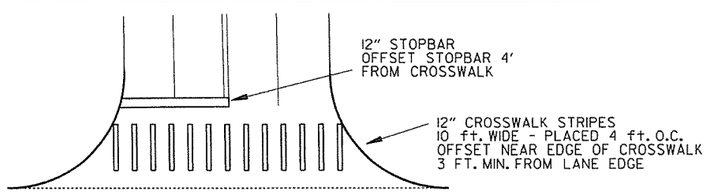


ASPHALT PAVEMENT

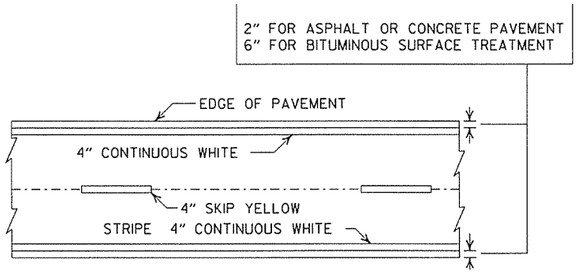


CONCRETE PAVEMENT

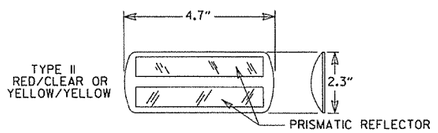
STRIPING AT ADJACENT NO PASSING LANES



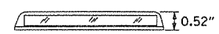
CROSSWALK AND STOPBAR DETAILS



PAVEMENT EDGE LINE MARKING



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



DETAIL OF STANDARD RAISED PAVEMENT MARKERS

GENERAL NOTES:

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

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

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

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

ARKANSAS STATE HIGHWAY COMMISSION

PAVEMENT MARKING DETAILS

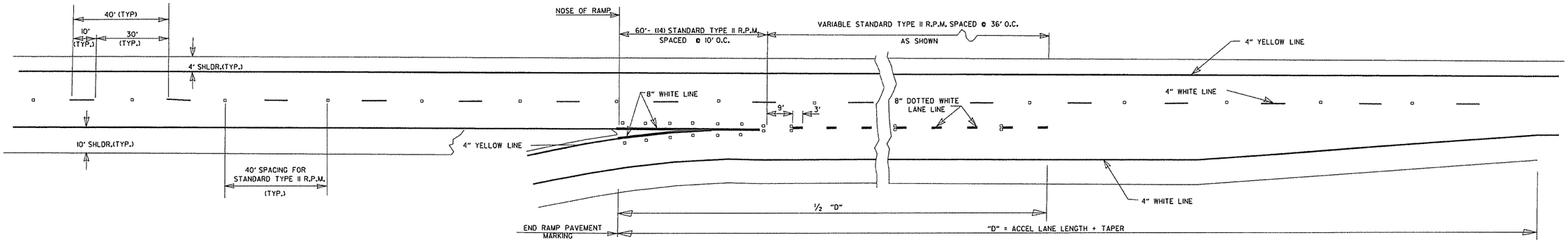
STANDARD DRAWING PM-1

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

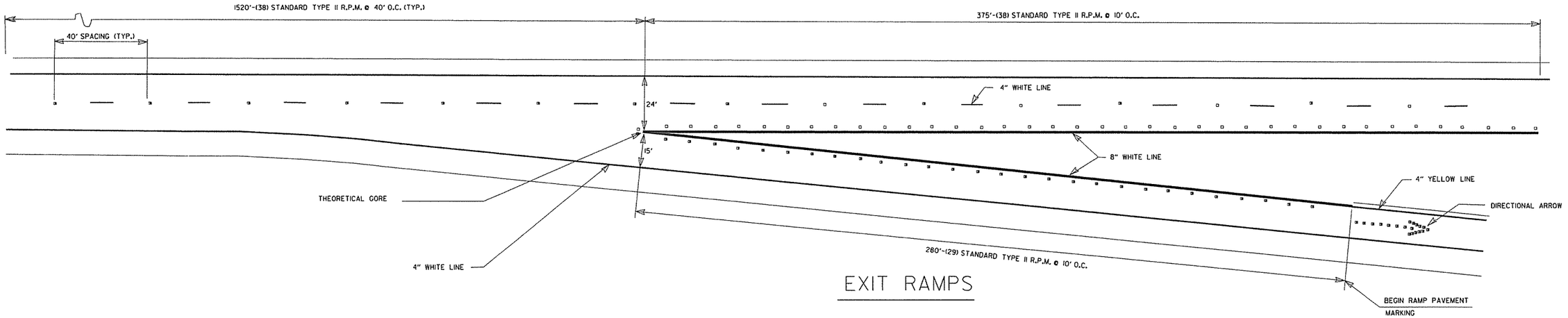
ENTRANCE RAMP

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

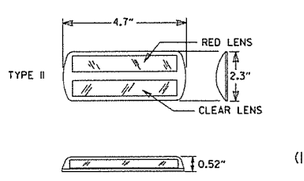
EXIT RAMP
4" WHITE = 280 LIN. FT.
8" WHITE = 655 LIN. FT.
RAISED PAVEMENT MARKERS TYPE II (WHITE/RED) = 38 EACH
RAISED PAVEMENT MARKERS TYPE II (WHITE/RED) = 48 EACH
RAISED PAVEMENT MARKERS TYPE II (WHITE/RED) = 38 EACH



ENTRANCE RAMPS

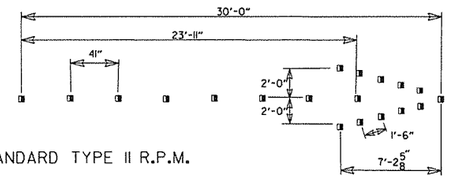


EXIT RAMPS



DETAIL OF
STANDARD
RAISED PAVEMENT MARKERS

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



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

DIRECTIONAL ARROWS

GENERAL NOTES:

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

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

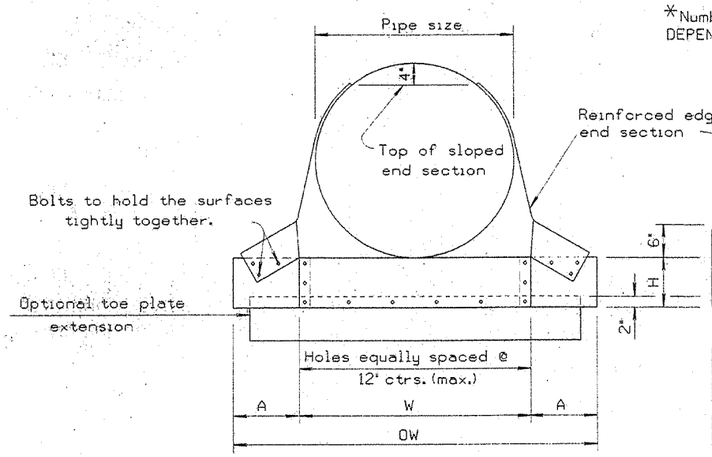
NOTE:
DIMENSIONS SHOWN FOR RAISED PAVEMENT MARKERS ARE TYPICAL. THE CONTRACTOR MAY SUBSTITUTE SIMILAR MARKERS WITH THE APPROVAL OF THE ENGINEER. REQUESTING APPROVAL FOR SIMILAR MARKERS MAY BE MADE BY REFERRING TO THE AHTD QUALIFIED PRODUCTS LIST.

DATE	REVISION	FILMED
9-12-13	REVISED DETAIL OF STANDARD RAISED PAVEMENT MARKERS	
7-26-12	REVISED RPM NOTATION	
12-15-11	REVISED RPMs ACCORDING TO LATEST POLICY	
11-17-10	REMOVED PLOWABLE PAVEMENT MARKERS	
6-3-10	REVISED PER 2009 MUTCD	
11-18-04	REVISED NOTES	
8-22-02	ADDED & REVISED NOTES; REV. ENTRANCE & EXIT RAMPS	
5-18-00	REMOVED HASHMARKS	
7-02-98	CHANGED TYPES TO ROMAN NUMERALS	
4-26-96	ADDED DIMENSIONS & QUANTITIES; REVISED LANE WIDTH ON EXIT RAMP	
2-2-95	PLACED IN USE	2-2-95

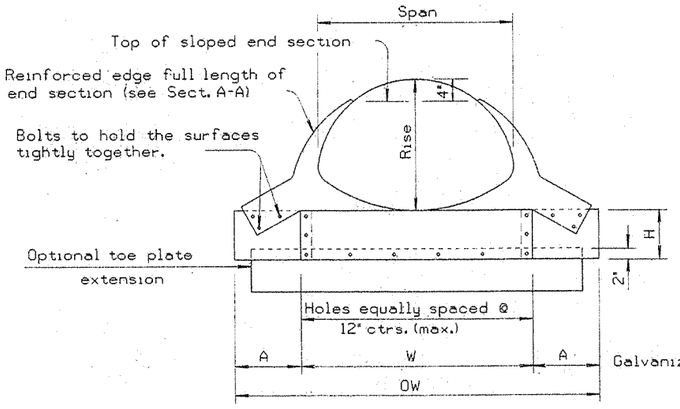
ARKANSAS STATE HIGHWAY COMMISSION

PERMANENT PAVEMENT MARKING ON ACCESS CONTROLLED ROADWAYS

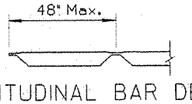
STANDARD DRAWING PM-2



FRONT VIEW CIRCULAR PIPE

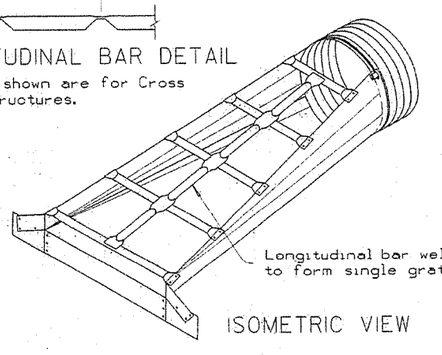


FRONT VIEW ARCH PIPE



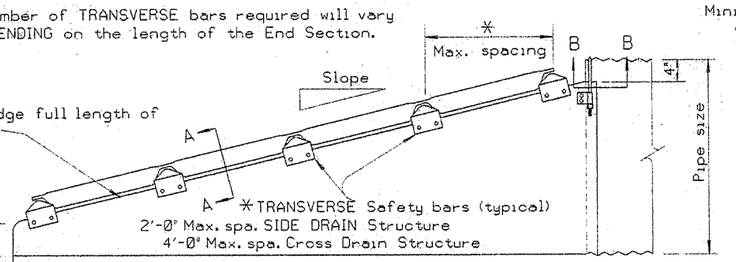
LONGITUDINAL BAR DETAIL

Note: Bars shown are for Cross Drain Structures.

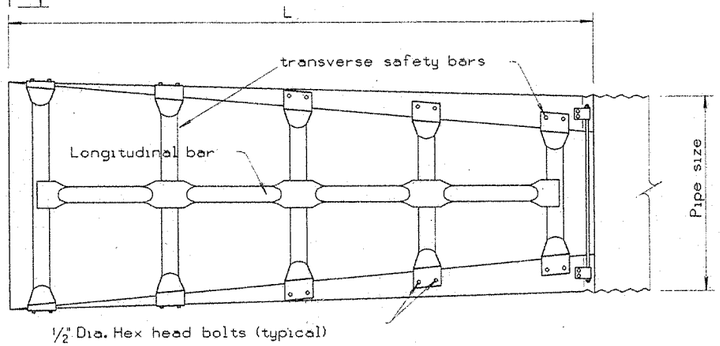


ISOMETRIC VIEW

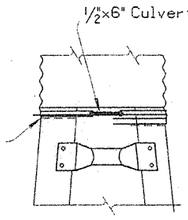
*Number of TRANSVERSE bars required will vary DEPENDING on the length of the End Section.



SIDE ELEVATION CIRCULAR OR ARCH SECTION

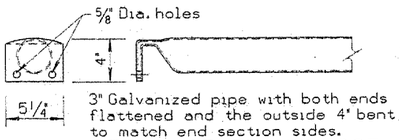


TOP VIEW CIRCULAR OR ARCH SECTION



TYPE #1 CONNECTOR DETAIL

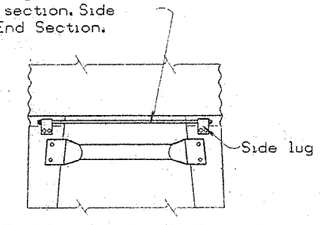
For 15" thru 24" pipe



3" Galvanized pipe with both ends flattened and the outside 4" bent to match end section sides.

DETAIL OF TRANSVERSE SAFETY BAR

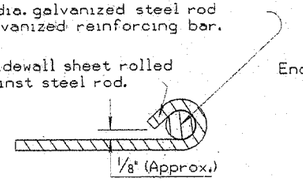
½" Threaded rod with flanged nuts. Form over top of end section. Side lugs to be bolted to End Section.



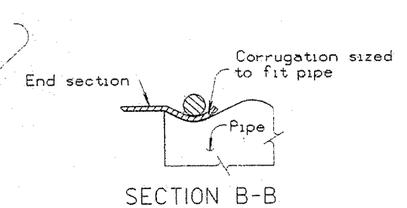
TYPE #2 CONNECTOR DETAIL

For 30" and larger round pipes & 21"x15" thru 64"x43" arch pipes

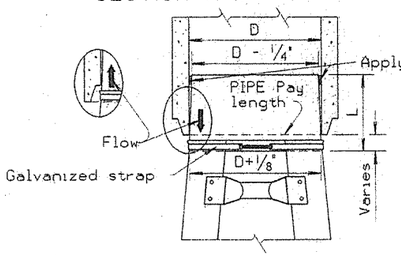
Minimum 7/16" dia. galvanized steel rod or No.4 galvanized reinforcing bar.



SECTION A-A



SECTION B-B



D - 12" to 24" L = 12"
D - 30" & Larger L = 16"

Note: Metal end section to be firmly wedged INTO PIPE END BEFORE BACKFILLING PIPE.

(Tapered sleeve to be 12 Ga. smooth galvanized steel in accordance with AASHTO M 218.)

STEEL END SECTION FOR CONCRETE PIPE
(Alternate for Concrete End Section)

GENERAL NOTES

End sections shall be fabricated from galvanzied steel meeting the requirements of SUBSECTION 606.02(c)(1) OF THE STANDARD SPECIFICATIONS.
When specified optional toe plate extension shall be punched and bolted to end section apron lip with ⅜" diameter galvanized bolts.
Steel for toe plate extension shall be same gauge as end section.
Dimensions shall be overall width less 6" by 8" high.
Attachment to circular pipes 15" through 24" diameter shall be made with Type #1 straps. All other sizes shall be attached with Type #2 rods and lugs.
Safety bars shall be fabricated from steel pipe meeting the requirements of ASTM A-53 Schedule 40 Specifications. Safety bars shall be hot dipped galvanized after fabrication.

All work and materials required for construction and installation of safety end section shall be included in the PRICE BID EACH FOR SAFETY END SECTIONS FOR PIPE CULVERTS.
Longitudinal and transverse bars will be required for cross drain structures when span is greater than 30", no safety bars will be REQUIRED FOR 30" SPAN OR LESS WHEN USED ON CROSS DRAIN STRUCTURES.
Transverse bars will be required for all sizes of side drain structures.
Class 1 safety end sections shall be end sections with a 4:1 slope.
Class 2 safety end sections shall be end sections with a 6:1 slope.

SAFETY END SECTIONS FOR ARCH PIPES

Equv. Dia.	Nom. W.W. Area Sq Ft	Pipe Arch Span (In.)	Pipe Arch Rise (In.)	Min. Gauge End Sect.	Dimensions in Inches A	H	W	OW	Slope	L (In)	Slope	L (In)
18"	1.6	21	15	16	8	6	27	43	4:1	20	6:1	30
21"	2.2	24	18	16	8	6	30	46	4:1	32	6:1	48
24"	2.9	28	20	16	8	6	34	50	4:1	40	6:1	60
30"	4.5	35	24	14	12	9	41	65	4:1	56	6:1	84
36"	6.5	42	29	12	12	9	48	72	4:1	76	6:1	114
42"	8.9	49	33	12	16	12	55	87	4:1	92	6:1	138
48"	11.6	57	38	12	16	12	63	95	4:1	112	6:1	168
54"	14.7	64	43	12	16	12	70	102	4:1	132	6:1	198
60"	18.1	71	47	12	16	12	77	109	4:1	148	6:1	222
72"	26.0	83	57	12	16	12	89	121	4:1	188	6:1	282

SAFETY END SECTIONS FOR CIRCULAR PIPES

Pipe Dia.	Min. Gauge Ends	Dimensions in Inches A 1"Tol	H 1"Tol	W 2"Tol	OW	L Dimensions in Inches Slope	L	Slope	L
15"	16	8	6	21	37	4:1	20	6:1	30
18"	16	8	6	24	40	4:1	32	6:1	48
21"	16	8	6	27	43	4:1	44	6:1	66
24"	16	8	6	30	46	4:1	56	6:1	84
30"	12	12	9	36	60	4:1	80	6:1	120
36"	12	12	9	42	66	4:1	104	6:1	156
42"	12	16	12	48	80	4:1	128	6:1	192
48"	12	16	12	54	86	4:1	152	6:1	228
54"	12	16	12	60	92	4:1	176	6:1	264
60"	12	16	12	66	98	4:1	200	6:1	300

DATE	REVISION	DATE FILMED
10-18-96	REVISED ASTM REF. TO AASHTO	10-18-96
8-15-91	DRAWN & ISSUED	

ARKANSAS STATE HIGHWAY COMMISSION

SAFETY END SECTION FOR CIRCULAR AND ARCH PIPES

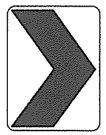
STANDARD DRAWING SES-1

FILE stdses1.dgn

253A

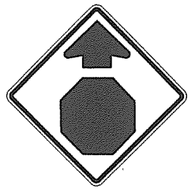
R1-1
30"X30"

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



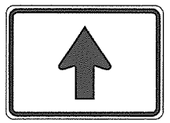
W1-8
18"X24"

W2-5
30"X30"



W3-1
36"X36"

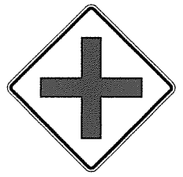
W5-1
36"X36"



M6-3
21"X15"

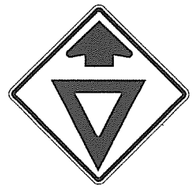
R1-2
36"X36"X36"

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



W2-1
30"X30"

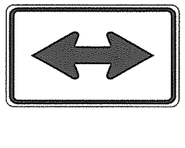
S1-1
36"X36"



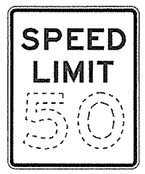
W3-2
36"X36"

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"

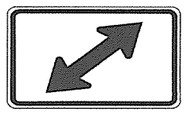
W1-5
30"X30"
(LT. or RT.)

W2-2
30"X30"

W5-2
36"X36"

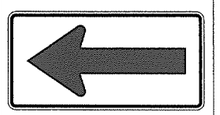
W8-3
36"X36"

R1-3P
18"X6"

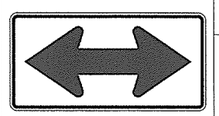


M6-5
21"X15"

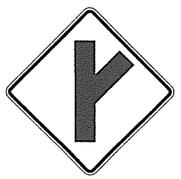
W1-1
30"X30"
(LT. or RT.)



W1-6
48"X24"

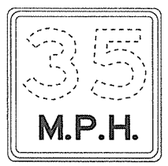


W1-7
48"X24"

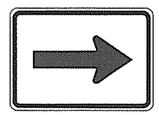


W2-3
30"X30"
(LT. or RT.)

W5-3
36"X36"

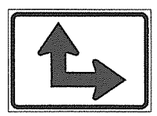


W13-1P
18"X18"

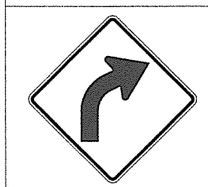


M6-1
21"X15"

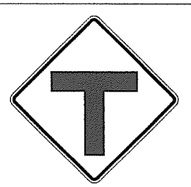
NOTE: ALL M6 SIGNS TO BE MADE WITH REFLECTORIZED YELLOW ARROW & BORDER WITH BLUE BACKGROUND.



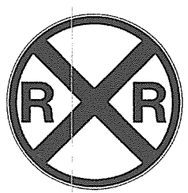
M6-6
21"X15"



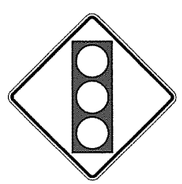
W1-2
30"X30"
(LT. or RT.)



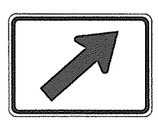
W2-4
30"X30"



W10-1
36" DIAMETER



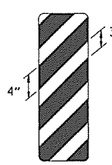
W3-3
36"X36"



M6-2
21"X15"

S4-3P
24"X8"

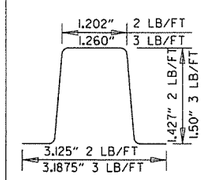
S4-2P
24"X10"



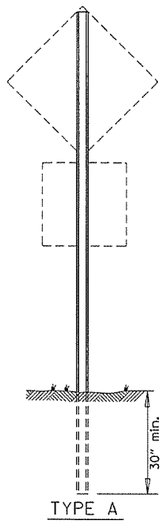
OM-3
12"X36"
(LT. or RT.)

MINIMUM DIMENSIONS SHOWN

SUPPORT SECTION

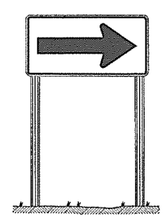


(U-CHANNEL)
STANDARD SUPPORT
ASSEMBLIES

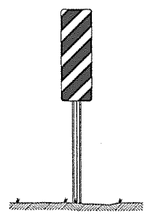


TYPE A

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

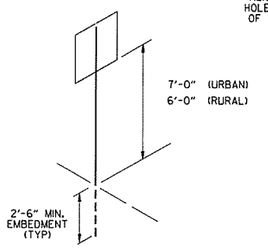
DATE	REVISION	DATE FILMED
9-12-13	DELETED JOB NO. BLOCK; REVISED R1-3 TO R1-3P	
4-17-08	REVISED SIGN DESIGNATION - W3-1& W3-2	
4-10-03	REVISED W5-2, W8-3, OM-3; ADDED W1-8	
1-5-81	REDRAWN	960-1-15-81
9-15-78	ADDED W14-3	877-9-15-78
9-2-76	POST WT.	622-9-1-76
5-3-76	STEEL POST WT. FROM 2"-3"; ADDED S4-2 & S4-3	504-5-1-76
8-12-74	REV. HT. TYPE "C" ASSEMBLY	500-8-21-74
12-21-72	ADDED W6-2,3,4,5,6	500-12-21-72
12-1-72	ISSUED	562-12-1-72

SUPPORT ASSEMBLIES

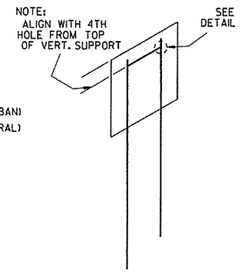
ARKANSAS STATE HIGHWAY COMMISSION

STANDARD HIGHWAY SIGNS
AND SUPPORT ASSEMBLIES

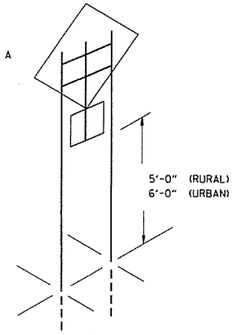
STANDARD DRAWING SHS-1



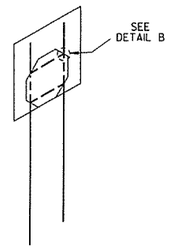
U-1



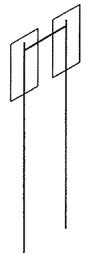
U-2



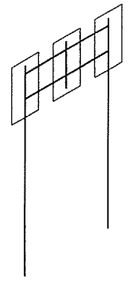
U-2 (A)



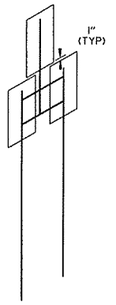
U-2 (B)



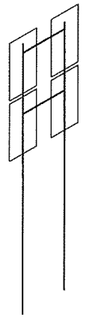
U-2 (1)



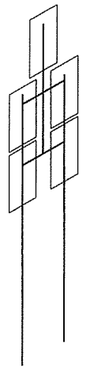
U-2 (2)



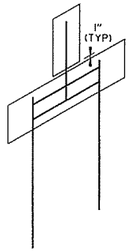
U-2 (3)



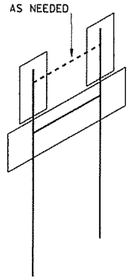
U-2 (4)



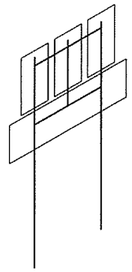
U-2 (5)



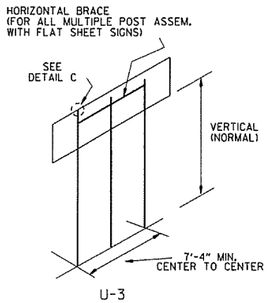
U-2 (6)



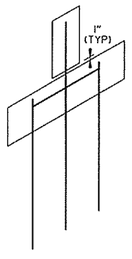
U-2 (7)



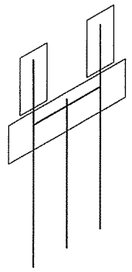
U-2 (8)



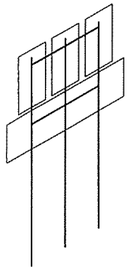
U-3



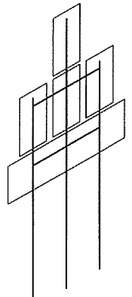
U-3 (1)



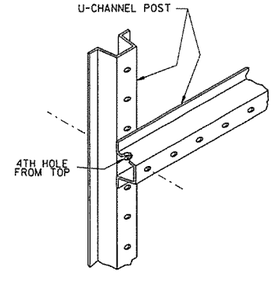
U-3 (2)



U-3 (3)

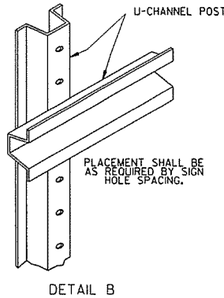


U-3 (4)



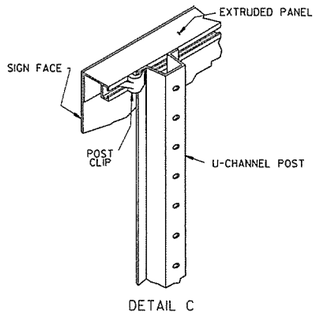
DETAIL A

SHOWING HORIZONTAL BRACE



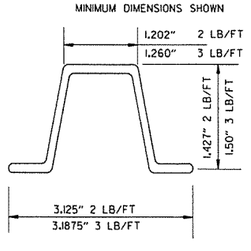
DETAIL B

SHOWING BACK-TO-BACK INSTALLATION



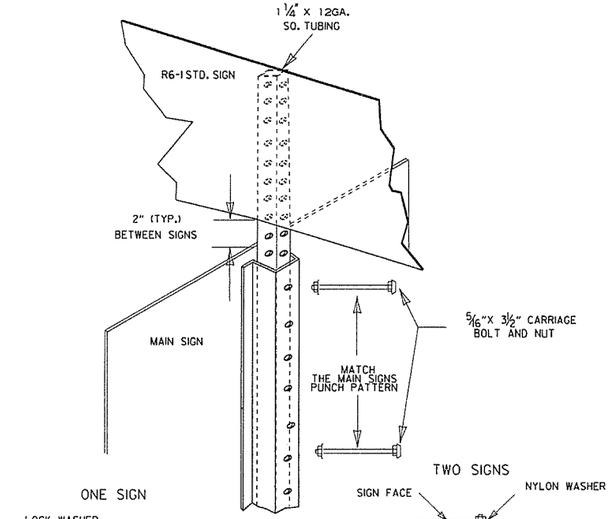
DETAIL C

SHOWING GUIDE SIGN MOUNTING WITH EXTRUDED PANELS



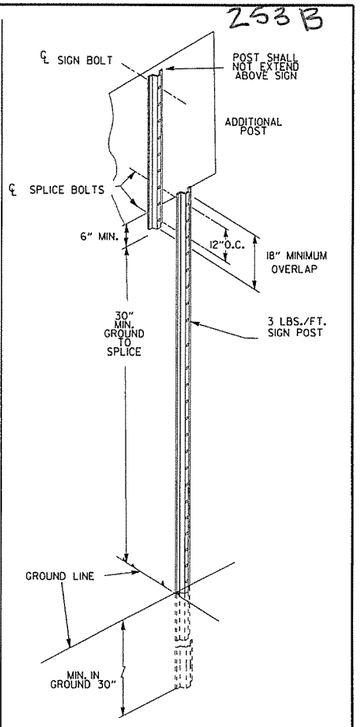
DETAIL C

U-CHANNEL POST



DETAIL E

R6-1 EXTENSION FOR U-CHANNEL POST



DETAIL F

DETAIL OF SPLICES

NOTES:

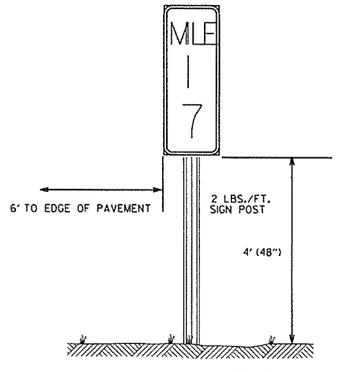
SIGNS AT LEAST 8' IN LENGTH MAY BE INSTALLED ON THREE 3 LB. POST. IN NO CASE SHALL THERE BE MORE THAN TWO 3 LB. POSTS WITHIN A 7' PATH.

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

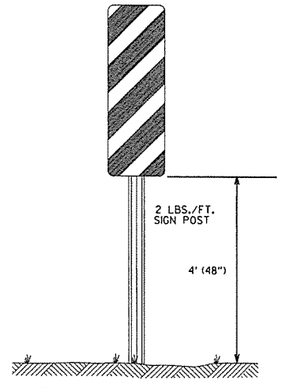
NORMAL INSTALLATIONS WILL REQUIRE 5/16 " DIA. CARRIAGE BOLTS TO MOUNT SIGNS TO POST AND TO ASSEMBLE THE VARIOUS POST SUPPORTS.

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
9-12-13	REVISED U-2(3), U-2(6), U-3(11), 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

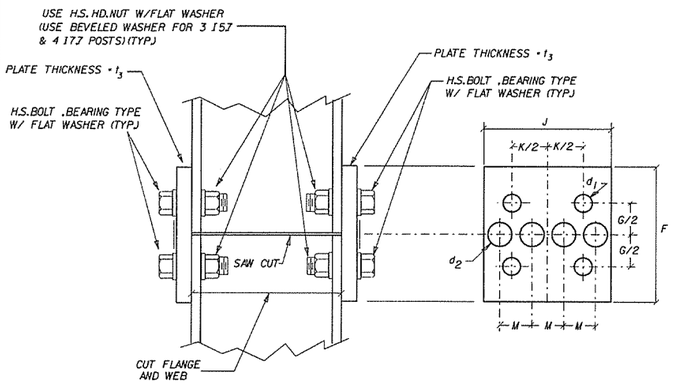
ARKANSAS STATE HIGHWAY COMMISSION

U-CHANNEL POST ASSEMBLIES

STANDARD DRAWING SHS-2

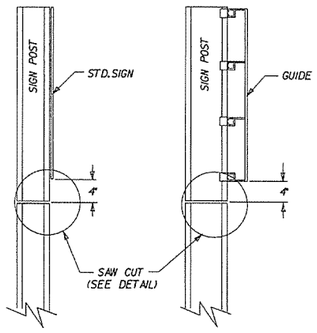
253 C

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	$\frac{5}{8}$" x 2¾"	450"-660"	5"	2"	1¼"	2¾"	1⅛"	¾"	½"	¼"	1/32"	4¼"	2"	4"	2¼"	1"	9/16"	¾"	¼"	½" x 1½"	1.01
W 6X12												5"	2½"	6"	3½"	1½"	11/16"	1¼"	⅜"	⅝" x 2¼"	2.51
W 6X15												5"	2½"	5¼"	2¾"	1¼"	13/16"	1¼"	⅜"	¾" x 2¼"	2.26
W 8X18	¾" x 3½"	750"-1050"	6"	2¼"	1⅞"	3½"	1¼"	r	¾"	5/16"	1/32"	5½"	2½"	5¼"	2¾"	1¼"	13/16"	r	½"	¾" x 2¼"	3.35
W 8X21												6"	3"	5¾"	2¾"	1⅜"	13/16"	1⅛"	½"	¾" x 2¼"	4.03
W 10X22																					
W 10X26																					
W 12X26												6"	3"	6½"	3½"	1⅝"	13/16"	1⅝"	½"	¾" x 2¼"	4.47



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.

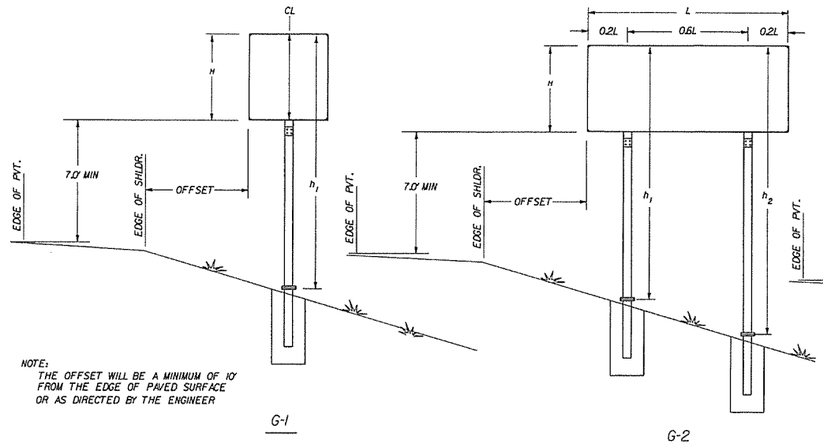
NOTE: BOLT HOLES, USED IN THE MOUNTING OF STANDARD SIGNS SHALL BE LOCATED IN THE FLANGE ADJACENT TO THE NEAR EDGE OF PAVEMENT FOR SINGLE POST ASSEMBLIES AND IN THE OUTSIDE FLANGES FOR MULTIPLE POST ASSEMBLIES.



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

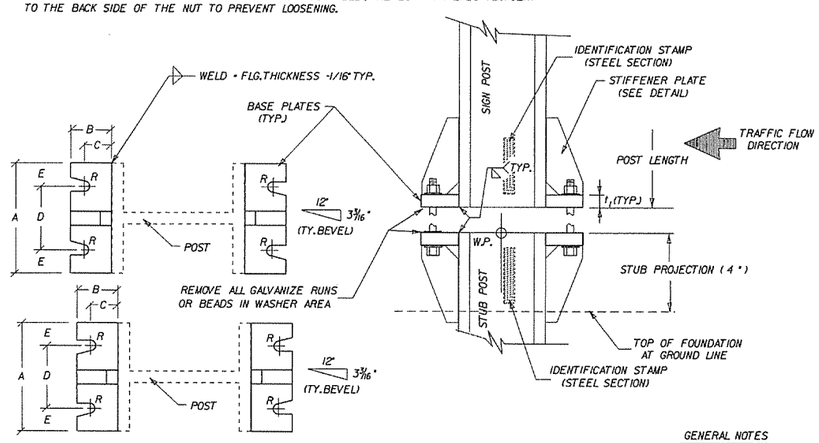
STANDARD SIGNS GUIDE SIGNS

FUSE PLATE DETAILS

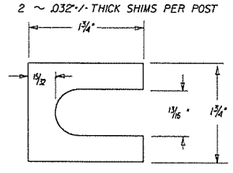


NOTE:
THE OFFSET WILL BE A MINIMUM OF 10' FROM THE EDGE OF PAVED SURFACE OR AS DIRECTED BY THE ENGINEER

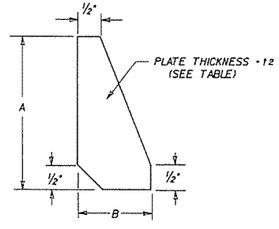
NOTE: SECTIONS SHOWN ARE FOR INSTALLATION ON THE RIGHT SHOULDER AND IN THE GORE. BOLT HOLES IN BASE PLATE ARE SLOTTED AND BEVELED AS SHOWN. USE H.S. BOLTS WITH HEX HD., HEX NUT AND THREE FLAT WASHERS FOR EACH BOLT. SEE TABLE FOR BOLT DIA. AND TORQUE.
NOTE: ASSEMBLE SIGN POST TO STUB POST USING THE BOLTS 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.



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



SHIM DETAIL

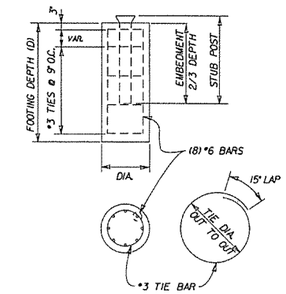


STIFFENER PLATE DETAIL

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

FOOTINIG 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

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.

SIGN POST AND STUB POST

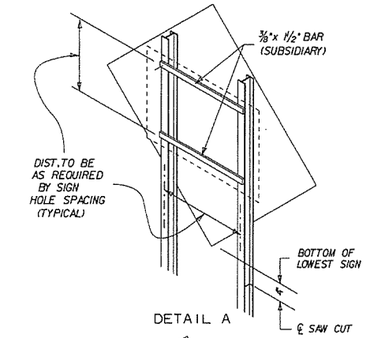
DATE	REVISION	FILMED
9-12-13	ISSUED	

ARKANSAS STATE HIGHWAY COMMISSION

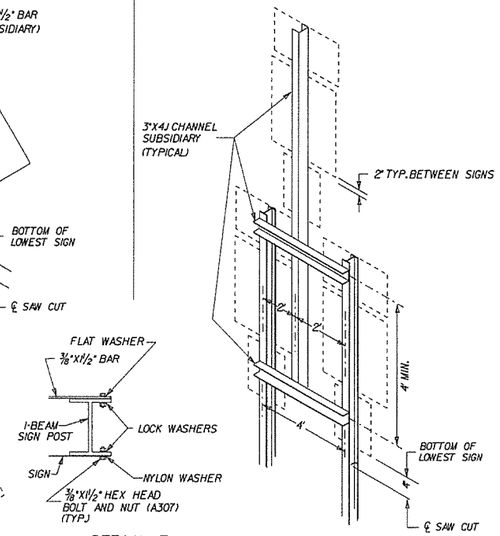
DETAIL OF BREAKAWAY SIGN SUPPORTS FOR GUIDE SIGNS

STANDARD DRAWING SHS-3

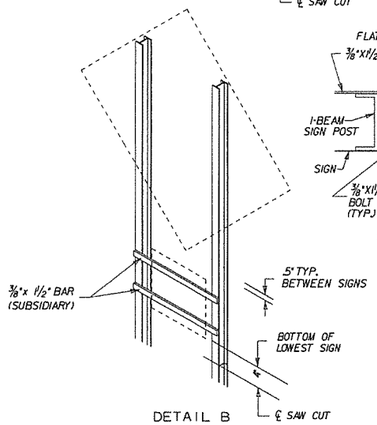
253D



DETAIL A

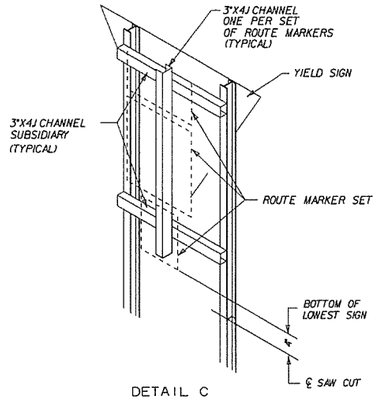


DETAIL D

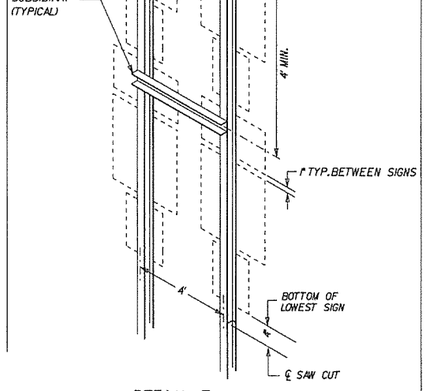


DETAIL B

DETAIL F



DETAIL C



DETAIL E

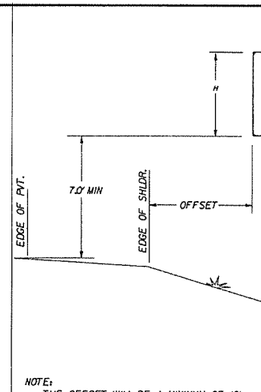
NOTE

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.

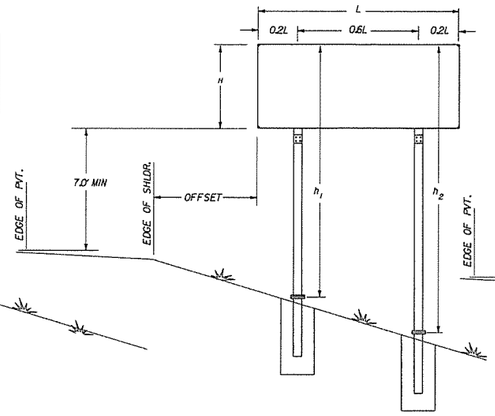
REFER TO THE P.C. RUTLEDGE FORMULA ON PAGE 58 OF THE AASHTO PUBLICATION "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS.

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

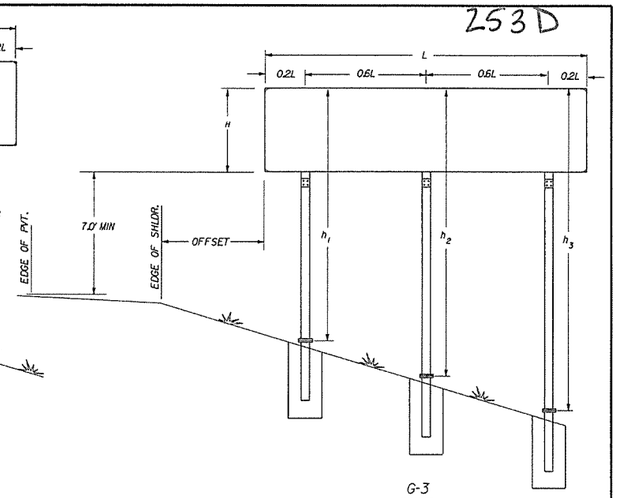


NOTE:
THE OFFSET WILL BE A MINIMUM OF 10' FROM THE EDGE OF PAVED SURFACE OR AS DIRECTED BY THE ENGINEER.

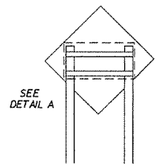
G-1



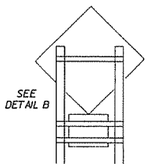
G-2



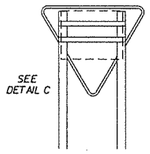
G-3



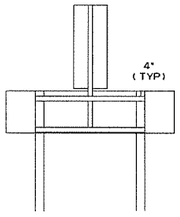
G2-1



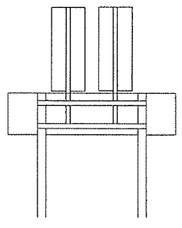
G2-2



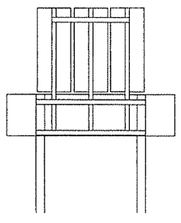
G2-3



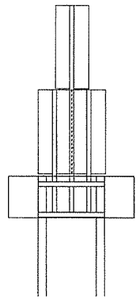
G2-4



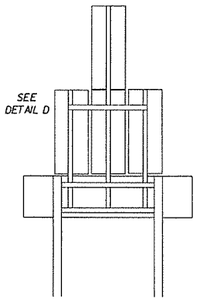
G2-5



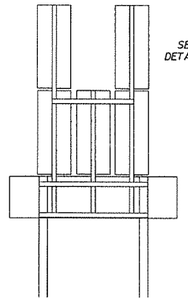
G2-6



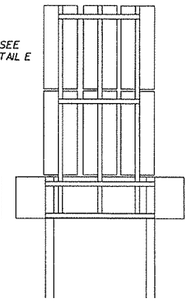
G2-7



G2-8

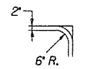


G2-9



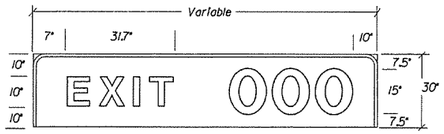
G2-10

			ARKANSAS STATE HIGHWAY COMMISSION
			DETAIL OF BREAKAWAY SIGN SUPPORTS FOR STANDARD SIGNS
9-12-13	ISSUED		STANDARD DRAWING SHS-4
DATE	REVISION	FILMED	



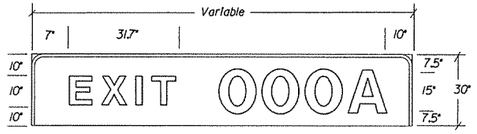
TYPICAL DETAIL

TYPE A



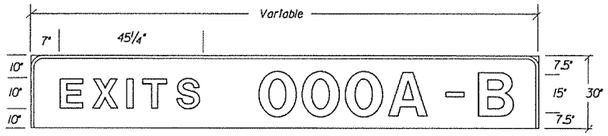
EXIT WITH 1 DIGIT 84"X30"=17.50 SF
EXIT WITH 2 DIGITS 96"X30"=20.0 SF
EXIT WITH 3 DIGITS 114"X30"=23.57 SF

TYPE B



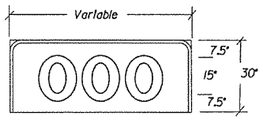
EXIT WITH 1 DIGIT PLUS "A"OR"B" 96"X30"=20.0 SF
EXIT WITH 2 DIGITS PLUS "A"OR"B" 114"X30"=23.57 SF
EXIT WITH 3 DIGITS PLUS "A"OR"B" 126"X30"=26.25 SF

TYPE C



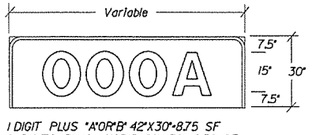
EXITS WITH 1 DIGIT PLUS "A"&"B" 132"X30"=27.50 SF
EXITS WITH 2 DIGITS PLUS "A"&"B" 150"X30"=31.25 SF
EXITS WITH 3 DIGITS PLUS "A"&"B" 168"X30"=35.00 SF

TYPE D



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

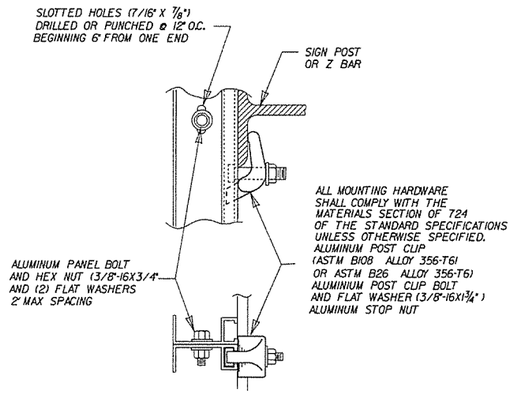
TYPE E

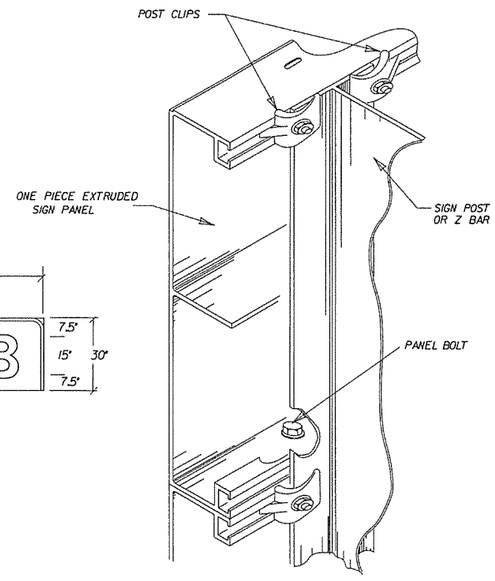


1 DIGIT PLUS "A"OR"B" 42"X30"=8.75 SF
2 DIGITS PLUS "A"OR"B" 60"X30"=12.50 SF
3 DIGITS PLUS "A"OR"B" 78"X30"=16.25 SF

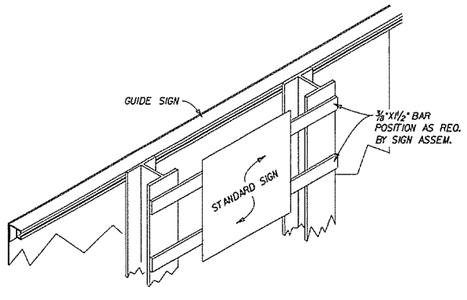
EXIT PANEL DETAILS

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

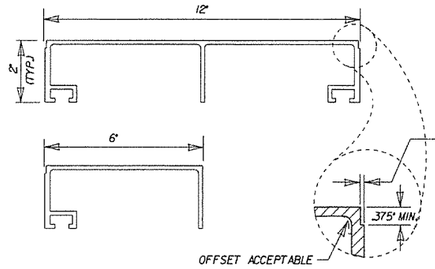




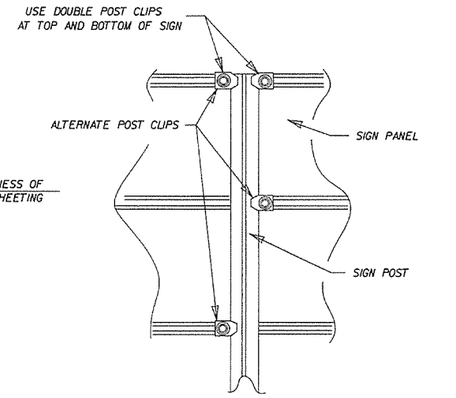
MOUNTING HARDWARE



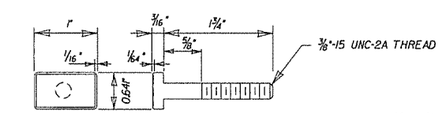
SECONDARY SIGN INSTALLATION ON BACKSIDE OF GUIDE SIGN



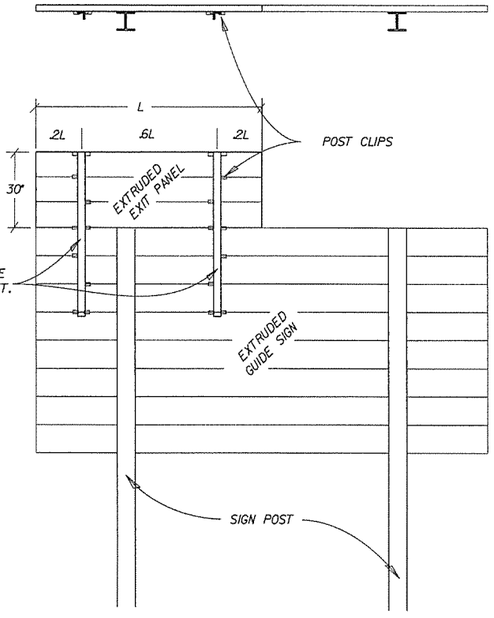
ONE PIECE EXTRUDED SIGN PANELS



POST CLIP PLACEMENT



POST CLIP BOLT

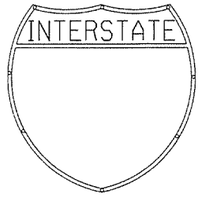


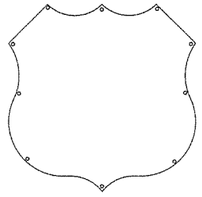
			ARKANSAS STATE HIGHWAY COMMISSION
			DETAILS OF GUIDE SIGN PANELS
9-12-13	ISSUED		STANDARD DRAWING SHS-5
DATE	REVISION	FILMED	

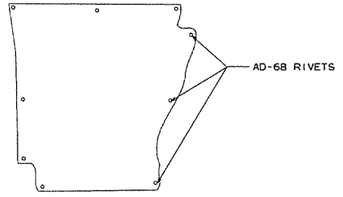
THE CONTRACTOR SHALL DRILL AND POP-RIVET LEGEND, SHIELDS, ARROWS, OR OTHER COPY AS SHOWN.

MOUNTING DETAILS FOR DEMOUNTABLE LEGEND ON GUIDE SIGNS

DIRECT APPLIED BORDER







DIRECT APPLIED BORDER

AD-68 RIVETS

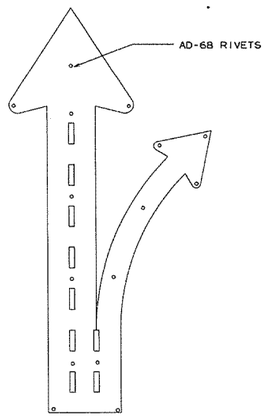
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

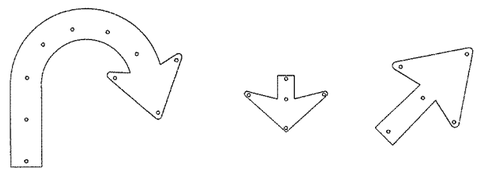
AD-68 RIVETS

a b c d e f g h i j k l m n o p q r s t u v w x y z

AD-68 RIVETS

0 1 2 3 4 5 6 7 8 9 1/4 1/2 3/4





NOTES:

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

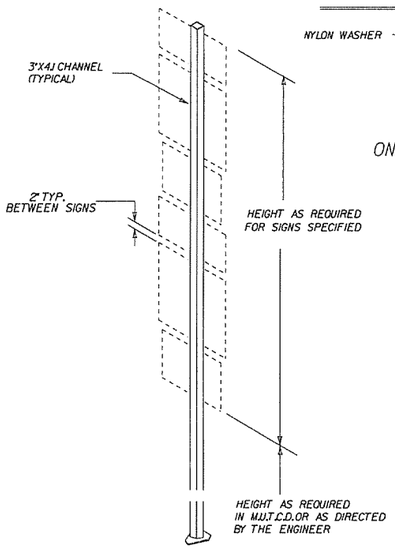
THE BACKGROUND ON ALL GUIDE SIGNS AND STANDARD SIGNS SHALL BE CONSTRUCTED USING TYPE III SHEETING.

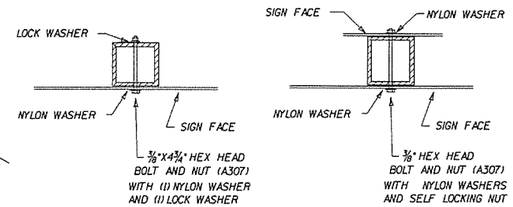
TYPE IX SHEETING FOR BORDER, LEGEND, SHIELDS, ARROWS, OR OTHER COPY SHALL BE ORIENTED VERTICALLY AS PER MANUFACTURERS' DATUM MARKS, ORIENTATION MARKS, OR OTHER RECOMMENDATIONS.

SIGN LEGEND, SHIELDS, ARROWS OR OTHER COPY SHALL BE APPLIED WITH RIVETS ONLY.

NO OTHER METHOD OF APPLYING CHARACTERS IS ALLOWED.

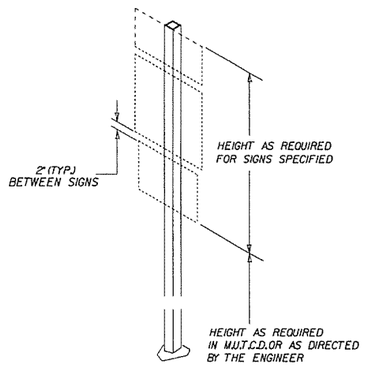
			ARKANSAS STATE HIGHWAY COMMISSION
			MOUNTING DETAILS FOR DEMOUNTABLE LEGEND ON GUIDE SIGNS
9-12-13 DATE	ISSUED REVISION	FILMED	STANDARD DRAWING SHS-6





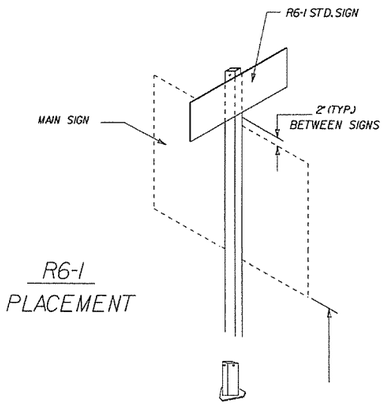
CHANNEL SHALL BE FULL LENGTH OF RECTANGULAR AND SQUARE SIGNS AND SHALL EXTEND 1 1/2" BEYOND BOLT HOLES ON DIAMOND OR IRREGULAR SHAPED SIGNS.

MOUNTING HARDWARE

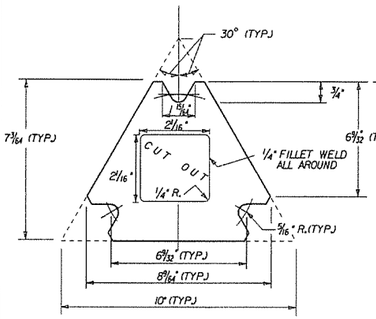


TYPE-1

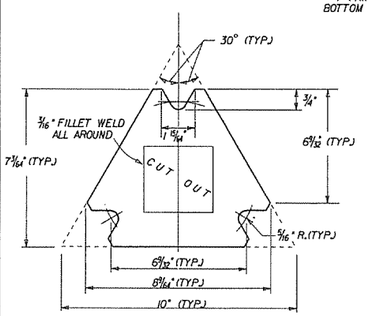
BASIS OF ESTIMATE
APPROX. 100 lbs STEEL



R6-1 PLACEMENT



TOP PLATE



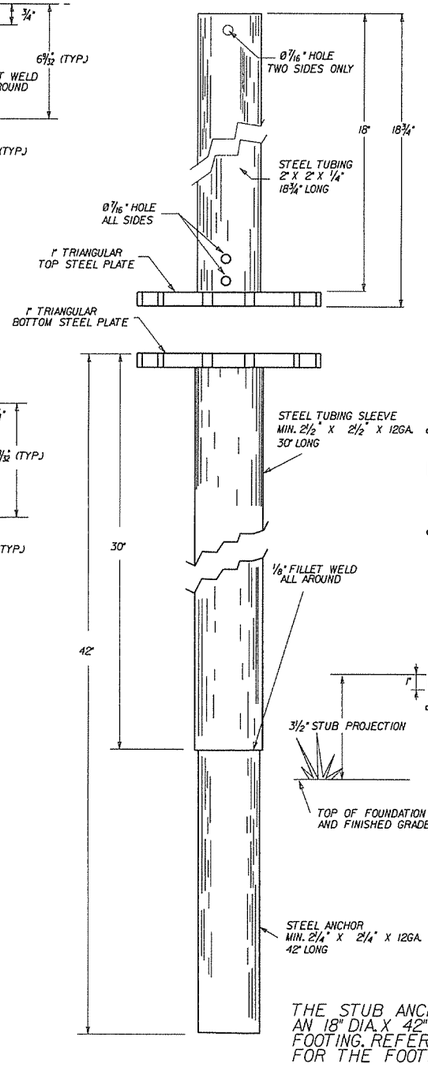
BOTTOM PLATE

GENERAL NOTES:

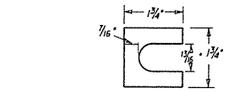
THE TOP PLATE OF TRIANGULAR SLIP BASES SHALL HAVE THE SAME EXTERIOR DIMENSIONS AS THE BOTTOM PLATE.

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 2 1/4" X 2 1/4" SQUARE TUBE SIGN POSTS MAY BE SUBSTITUTED AS APPROVED BY THE ENGINEER.

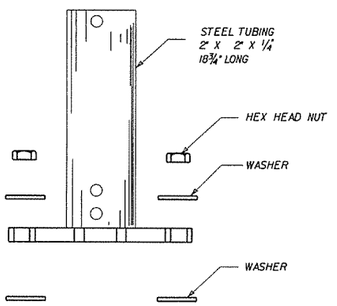


THE STUB ANCHOR SHALL BE SET IN AN 18" DIA. X 42" DEEP CONCRETE FOOTING. REFER TO STD. DRWG. SHS-3 FOR THE FOOTING DETAILS.



FURNISH (2) .012" THICK AND (2) .032" THICK SHIMS PER POST

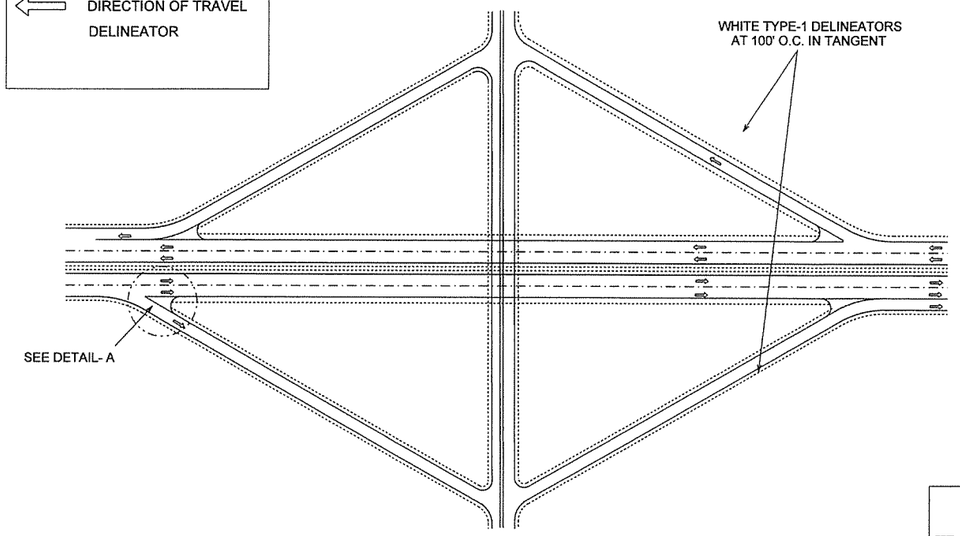
SHIM DETAIL



			ARKANSAS STATE HIGHWAY COMMISSION
			DETAIL OF OMNI-DIRECTIONAL BREAKAWAY SIGN SUPPORTS
9-12-13 DATE	ISSUED REVISION	FILMED	STANDARD DRAWING SHS-7

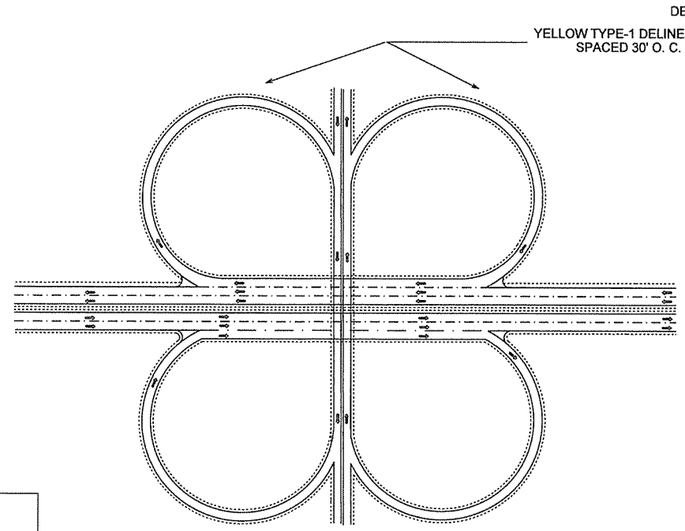
253 H

LEGEND
DIRECTION OF TRAVEL
DELINEATOR

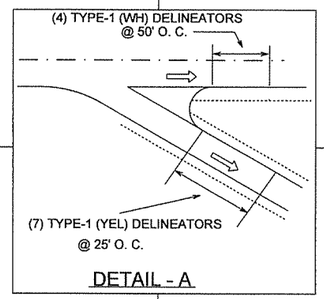


TYPICAL DIAMOND INTERCHANGE
(ALL RAMPS)

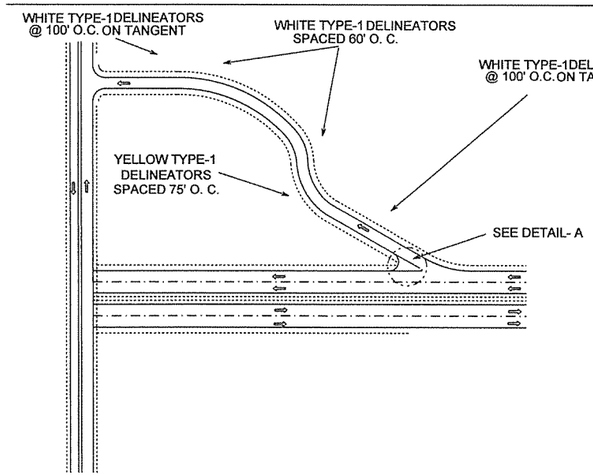
DELINEATORS PLACEMENT DETAIL



TYPICAL CLOVERLEAF INTERCHANGE
(ALL RAMPS)



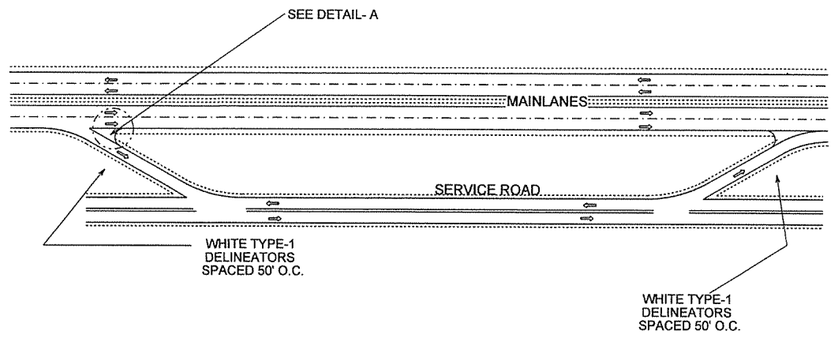
DETAIL - A



MODIFIED DIAMOND INTERCHANGE

NOTE:

DELINEATORS SHALL ONLY BE INSTALLED AS SHOWN IN DETAIL-A IF RAISED PAVEMENT MARKERS ARE NOT PRESENT IN THE GORE OF THE OFF RAMPS.



TYPICAL SLIP RAMP

GUIDANCE:

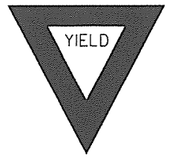
DELINEATORS SHOULD BE MOUNTED ON SUITABLE SUPPORTS SO THAT THE TOP OF THE HIGHEST RETROREFLECTOR IS 1.2 M (4 FT) ABOVE THE NEAR ROADWAY EDGE. THEY SHOULD BE PLACED 0.6 TO 2.4 M (2 TO 8 FT) OUTSIDE THE OUTER EDGE OF THE SHOULDER, OR IF APPROPRIATE, IN LINE WITH THE ROADSIDE BARRIER THAT IS 2.4 M (8 FT) OR LESS OUTSIDE THE OUTER EDGE OF THE SHOULDER.

			ARKANSAS STATE HIGHWAY COMMISSION
			TYPICAL DELINEATOR PLACEMENT ALONG THE INTERSTATE SYSTEM
9-12-13	ISSUED		STANDARD DRAWING SHS-8
DATE	REVISION	FILMED	

R1-1

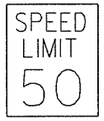
STANDARD 30"X30"
EXPRESSWAY 36"X36"
SPECIAL 48"X48"

R1-2



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

R2-1



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

R2-5A

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

R2-5C

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

R4-1

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

R4-2

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

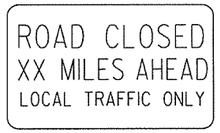
R5-1

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

RII-2

48"X30"

RII-3A



60"X30"

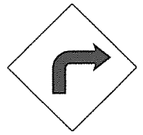
RII-4

60"X30"

RSP-1

48"X30"

WI-1



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

WI-2

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

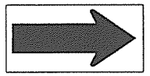
WI-3

STD. 48"X48"

WI-4

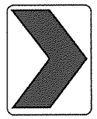
STD. 48"X48"

WI-6



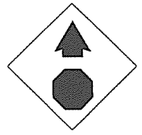
STD. 48"X24"
SPECIAL 60"X30"

WI-8



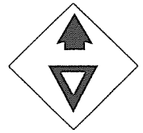
STD. 18"X24"
SPECIAL 24"X30"
EXPWY. 30"X36"
FWY. 36"X48"

W3-1



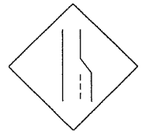
STD. 36"X36"
SPECIAL 48"X48"

W3-2



STD. 36"X36"
SPECIAL 48"X48"

W4-2



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

W5-1

STD. 36"X36"
SPECIAL 48"X48"

W6-3

EXPWY. 36"X36"
SPECIAL 48"X48"

W8-7

EXPWY. 36"X36"
FWY. 48"X48"

W9-2

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

W13-1

STD. 24"X24"

W20-1

STD. 48"X48"

W20-2

STD. 48"X48"

W20-3

STD. 48"X48"

W20-4

STD. 48"X48"

W20-5

STD. 48"X48"

W20-7a

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

W21-2

STD. 30"X30"
SPECIAL 36"X36"

W21-5

STD. 30"X30"
SPECIAL 36"X36"

W24-1

STD. 36"X36"

WI-4b

STD. 48"X48"

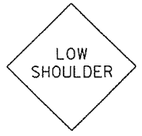
R56-1

STD. 18"X18"

W8-11

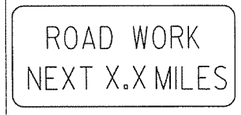
STD. 36"X36"
FWY. 48"X48"

W8-9



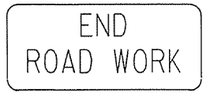
STD. 36"X36"
FWY. 48"X48"

G20-1



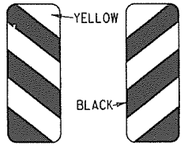
60"X24"

G20-2



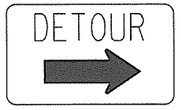
48"X24"

OM-3L OM-3R



12"X36"

M4-9



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

M4-10

48"X18"

R55-1

FINES DOUBLE
IN WORK ZONES *

WHEN WORKERS
ARE PRESENT **

36"X60"

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

ADVANCE DISTANCES
(XXXX)

500 FT	½ MILE
1000 FT	¾ MILE
1500 FT	1 MILE AHEAD

GENERAL NOTES:

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

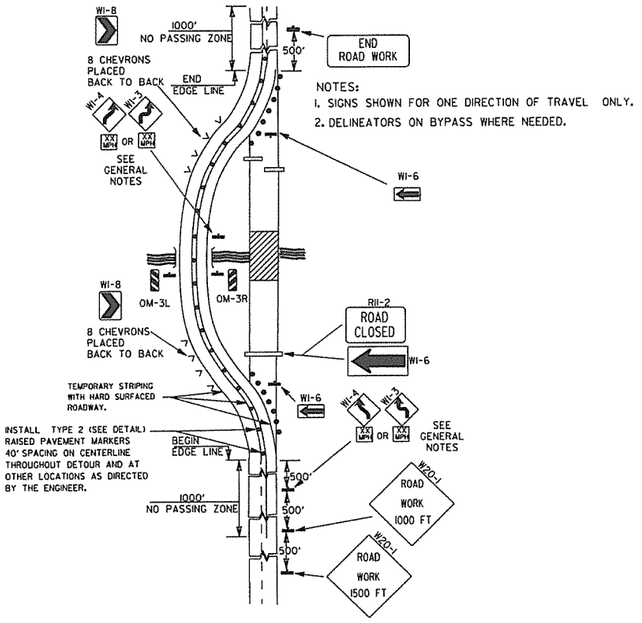
• NOTE: SUPPORTS FOR SIGNS, BARRICADES, AND VERTICAL PANELS THAT ARE DIFFERENT FROM THE REQUIREMENTS SHOWN IN NOTES 4 & 5, BUT MEET THE REQUIREMENTS OF NCHRP-350 OR MANUAL FOR ASSESSING SAFETY HARDWARE (MASH), WILL BE ACCEPTED. COMPLIANCE WITH THE REQUIREMENTS OF NCHRP-350 OR MANUAL FOR ASSESSING SAFETY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

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

ARKANSAS STATE HIGHWAY COMMISSION

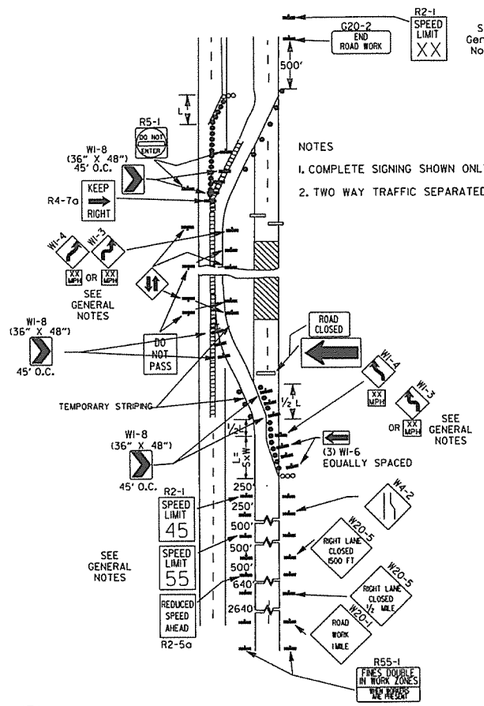
STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION

STANDARD DRAWING TC-1



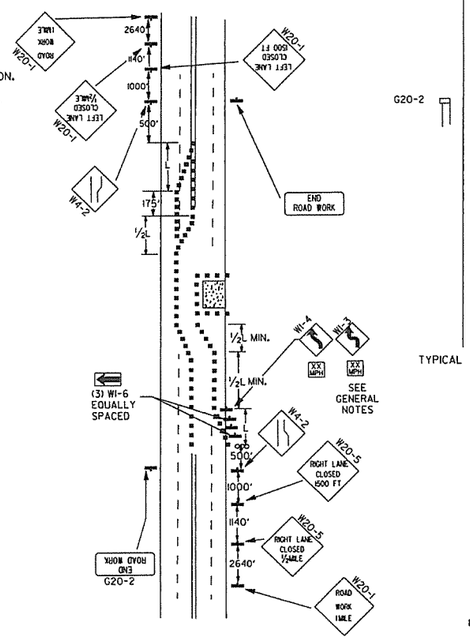
NOTES:
1. SIGNS SHOWN FOR ONE DIRECTION OF TRAVEL ONLY.
2. DELINEATORS ON BYPASS WHERE NEEDED.

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

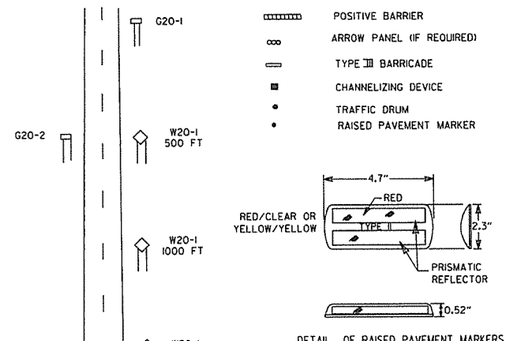


NOTES
1. COMPLETE SIGNING SHOWN ONLY IN CROSSOVER DIRECTION.
2. TWO WAY TRAFFIC SEPARATED WITH POSITIVE BARRIER.

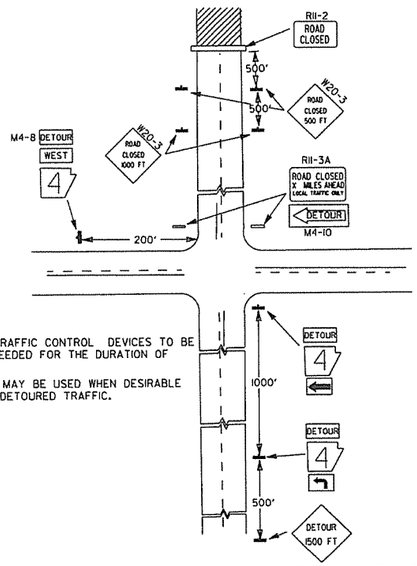
(B) TYPICAL APPLICATION - 4-LANE DIVIDED ROADWAY WHERE ONE ROADWAY IS CLOSED.



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

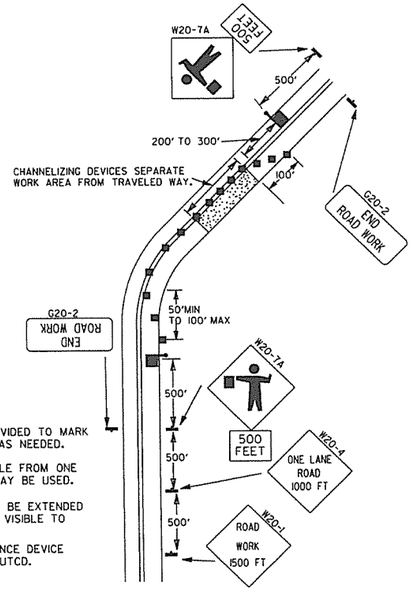


TYPICAL ADVANCE WARNING SIGN PLACEMENT



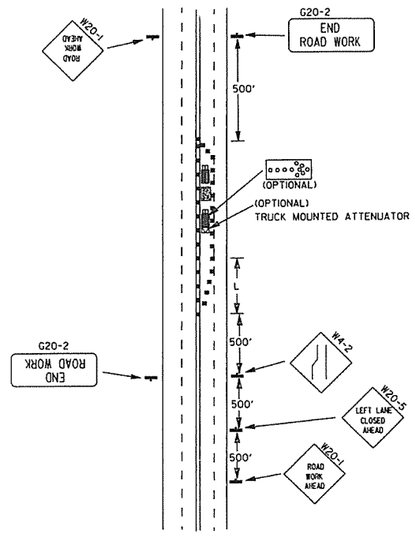
NOTES:
1. REGULATORY TRAFFIC CONTROL DEVICES TO BE MODIFIED AS NEEDED FOR THE DURATION OF THE DETOUR.
2. STREET NAMES MAY BE USED WHEN DESIRABLE FOR DIRECTING DETOURED TRAFFIC.

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



NOTES:
1. FLOOD LIGHTS SHOULD BE PROVIDED TO MARK FLAGGER STATIONS AT NIGHT AS NEEDED.
2. IF ENTIRE WORK AREA IS VISIBLE FROM ONE STATION, A SINGLE FLAGGER MAY BE USED.
3. CHANNELIZING DEVICES ARE TO BE EXTENDED TO A POINT WHERE THEY ARE VISIBLE TO APPROACHING TRAFFIC.
4. AUTOMATED FLAGGER ASSISTANCE DEVICE (AFAD) OPTIONAL. REFER TO MUTCD.

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



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

TAPER FORMULAE:

L=SXW FOR SPEEDS OF 45MPH OR MORE.

$L = \frac{WS^2}{60}$ FOR SPEEDS OF 40MPH OR LESS.

WHERE:
L= MINIMUM LENGTH OF TAPER.
S= NUMERICAL VALUE OF POSTED SPEED LIMIT PRIOR TO WORK OR 85TH PERCENTILE SPEED.
W= WIDTH OF OFFSET.

GENERAL NOTES:

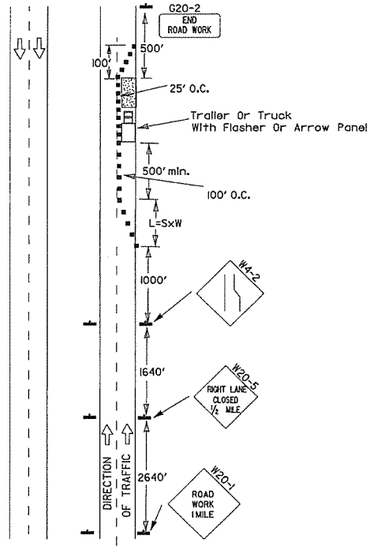
1. ADVISORY SPEED POSTED ON WI-3 OR WI-4 CURVE WARNING SIGNS TO BE DETERMINED AT SITE. USE WI-4 WHEN SPEED IS GREATER THAN 30MPH AND WI-3 WHEN 30MPH OR LESS.
2. WHEN THE EXISTING SPEED LIMIT IS 55MPH AND THE PLANS REQUIRE A SPEED LIMIT OF 45MPH, THE R2-1(55) SHALL BE OMITTED AND THE R2-5A SHALL BE INSTALLED AT THAT LOCATION. ADDITIONAL R2-1 45MPH SPEED LIMIT SIGNS SHALL BE INSTALLED AT A MAXIMUM OF 1 MILE INTERVALS. AT THE END OF THE WORK AREA A R2-1(XX) SHALL BE INSTALLED TO MATCH ORIGINAL SPEED LIMIT.
3. WHEN THE EXISTING SPEED LIMIT IS 65MPH AND THE PLANS REQUIRE A SPEED LIMIT OF 55MPH, THE R2-1(45) SHALL BE OMITTED. ADDITIONAL R2-1 55MPH SPEED LIMIT SIGNS SHALL BE INSTALLED AT A MAXIMUM OF 1 MILE INTERVALS. AT THE END OF THE WORK AREA A R2-1(XX) SHALL BE INSTALLED TO MATCH ORIGINAL SPEED LIMIT.
4. THE MAXIMUM SPACING BETWEEN CHANNELIZING DEVICES IN A TAPER SHOULD BE APPROXIMATELY EQUAL IN FEET TO THE SPEED LIMIT. BEYOND THE TAPER, MAXIMUM SPACING SHALL BE TWO TIMES THE SPEED LIMIT, OR AS DIRECTED BY THE ENGINEER.
5. WARNING LIGHTS AND/OR FLAGS MAY BE MOUNTED TO SIGNS OR CHANNELIZING DEVICES AT NIGHT AS NEEDED.
6. PAVEMENT MARKINGS NO LONGER APPLICABLE WHICH MIGHT CREATE CONFUSION IN THE MINDS OF VEHICLE OPERATORS SHALL BE REMOVED OR OBLITERATED AS SOON AS PRACTICABLE.
7. TRAILER MOUNTED DEVICES SUCH AS ARROW PANELS AND PORTABLE CHANGEABLE MESSAGE SIGNS SHALL BE DELINEATED BY AFFIXING CONSPICUITY MATERIAL IN A CONTINUOUS LINE ON THE FACE OF THE TRAILER. WHEN PLACED ON OR ADJACENT TO THE SHOULDER AND NOT BEHIND A POSITIVE BARRIER, THESE DEVICES SHALL BE DELINEATED BY PLACING FIVE (5) TRAFFIC DRUMS, EQUALLY SPACED ALONG THE TRAFFIC SIDE OF THE DEVICE.

DATE	REVISION	FILMED
9-12-13	REVISED DETAIL OF RAISED PAVEMENT MARKERS	
3-11-10	ADDED (AFAD)	
11-20-08	REVISED SIGN DESIGNATIONS	
11-18-04	ADDED GENERAL NOTE	
10-18-96	ADDED R55-1	
4-26-96	CORRECTED (a) BEHIND G20-2	
6-8-95	CORRECTED SIGN IDENT. ON WI-4A	6-8-95
2-2-95	REVISED PER PART VI, MUTCD, SEPT. 3, 1993	
8-15-91	DRAWN AND PLACED IN USE	

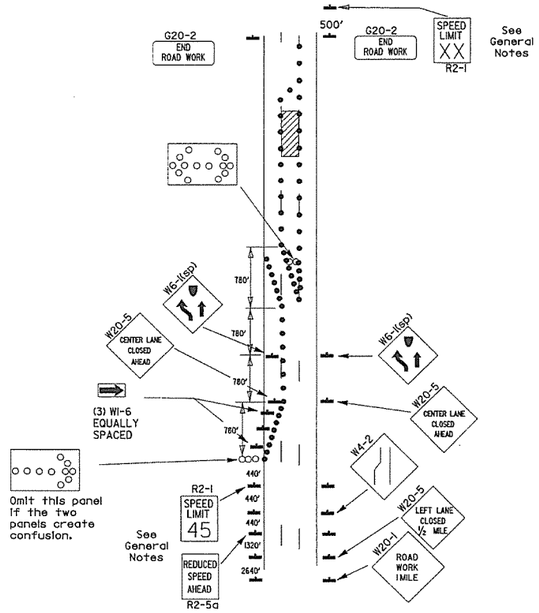
ARKANSAS STATE HIGHWAY COMMISSION

STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION

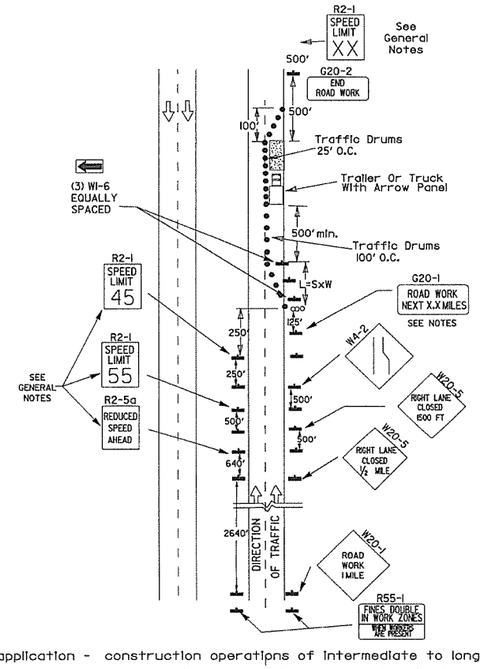
STANDARD DRAWING TC-2



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



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



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

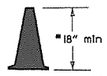
KEY:

- ○○○ Arrow Panel (If Required)
- ■ Channelizing Device
- ● Traffic drum

GENERAL NOTES:

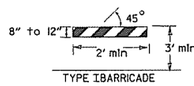
1. A speed limit reduction may be implemented ONLY when designated in the plan or when recommended by the Roadway Design Division.
2. When the existing speed limit is 55mph and the plans require a speed limit of 45mph, the R2-1(55) shall be omitted and the R2-5A shall be installed at that location. Additional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

Channelizing devices



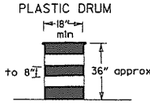
* When cones are used on freeways and multi-lane highways, they shall be 28" min. During hours of darkness, 28" cones shall be used on all roadways, and shall be reflectorized in accordance with the M.U.T.C.D.

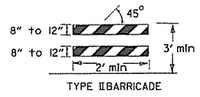
CONES



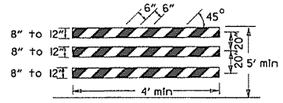
TYPE I BARRICADE

PLASTIC DRUM



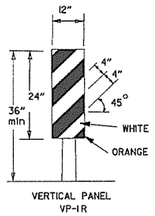


TYPE II BARRICADE



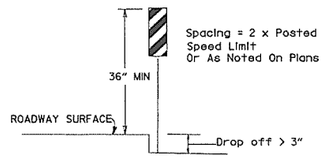
TYPE III BARRICADE

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



VERTICAL PANEL
VP-1R

VERTICAL PANEL PLACEMENT



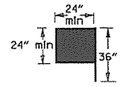
TRAFFIC CONTROL DEVICES
FOR
VERTICAL PAVEMENT DIFFERENTIALS

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

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

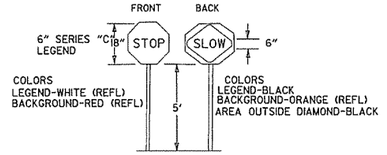
When the shoulder area is used as part of the traveled lane and there is insufficient width to place drums on the remaining shoulder width, then vertical panels shall be used.

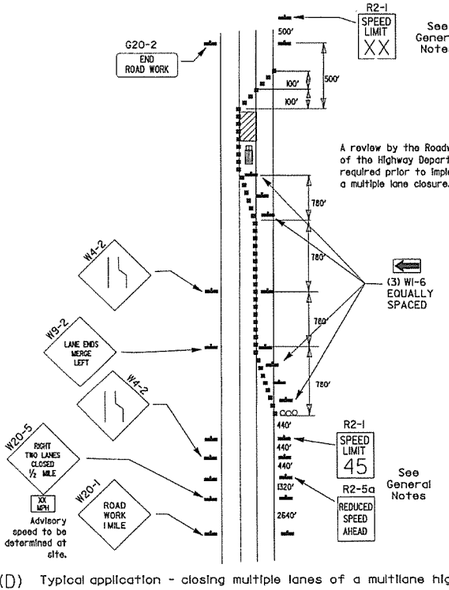
FLAG



Flag shall be of good grade red material

STOP SLOW PADDLE





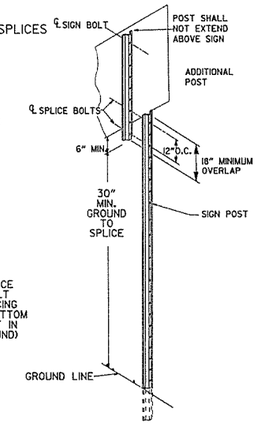
(D) Typical application - closing multiple lanes of a multilane highway.

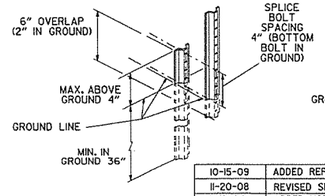
NOTES: USE SPLICES ONLY WHEN NECESSARY FOR INSTALLATION. TYPICAL INSTALLATION SHOULD HAVE NO SPLICES (SEE STD. DRAWING NO. SHS-2)

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.

DETAIL OF SPLICES





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

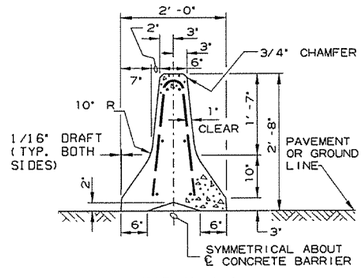
ARKANSAS STATE HIGHWAY COMMISSION

STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION

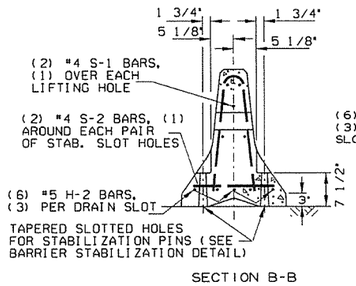
STANDARD DRAWING TC-3

REINFORCING BAR TABLE PER BARRIER UNIT

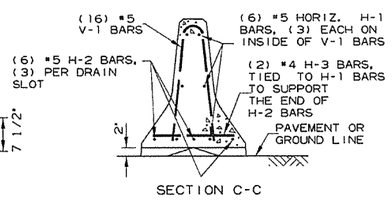
MARK	LOCATION	BAR SIZE	(NO. BARS)	SKETCH
H-1	HORIZONTAL IN BARRIER TIED INSIDE V-1 BARS	#5	(6)	19'-3"
H-2	CENTERED ABOVE DRAIN SLOTS LONG. & TRANSVERSELY	#5	(6)	6'-6"
H-3	TIED ABOVE H-1 BARS TO SUPPORT H-2, TIED TO V-1	#4	(2)	1'-6"
S-1	OVER LIFT HOLES	#4	(2)	2'-5", LIFTING HOLE, 90°, 3 3/8" R
S-2	HORIZ. AROUND SLOTS BETWEEN V-1'S @ DRAIN SLOTS	#4	(2)	1 1/2" R, SLOTS, 7", 1'-6", 1" MIN. CLEAR TO BAR; 5'-1" BAR W/(4) 1 1/2" R BENDS & MIN. 1'-0" OVERLAP; TOTAL LENGTH 4'-9"
V-1	VERTICAL IN BARRIER(3) EACH END & (2) AT EACH DRAIN SLOTS	#5	(16)	2 3/16" R, 12°, 9 1/2", 2'-1 3/8", 4 3/8"



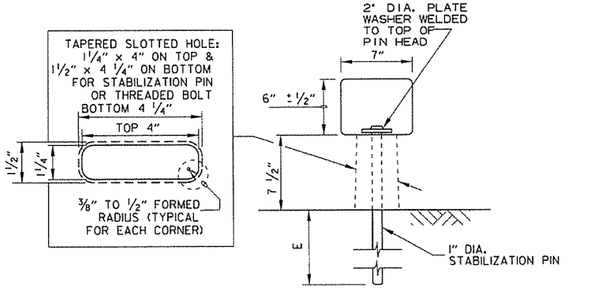
SECTION A-A



SECTION B-B



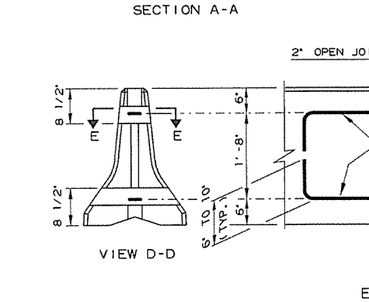
SECTION C-C



BARRIER STABILIZATION DETAIL

ROADWAY SECTION

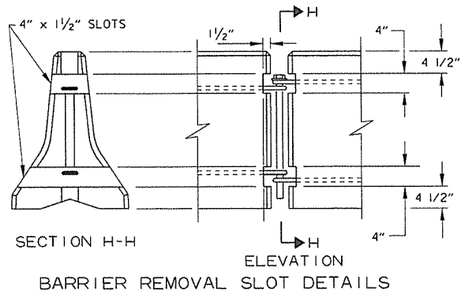
(E) 4" - Concrete Pavement
8" - Asphalt Pavement
12" - Shoulder Areas



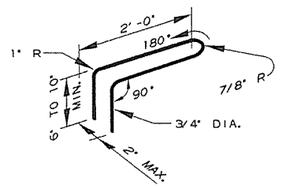
VIEW D-D

VIEW D'-D'

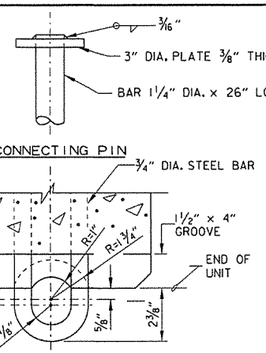
ELEVATION



BARRIER REMOVAL SLOT DETAILS

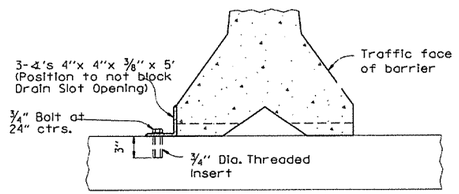


CONNECTION LOOP



SECTION E-E

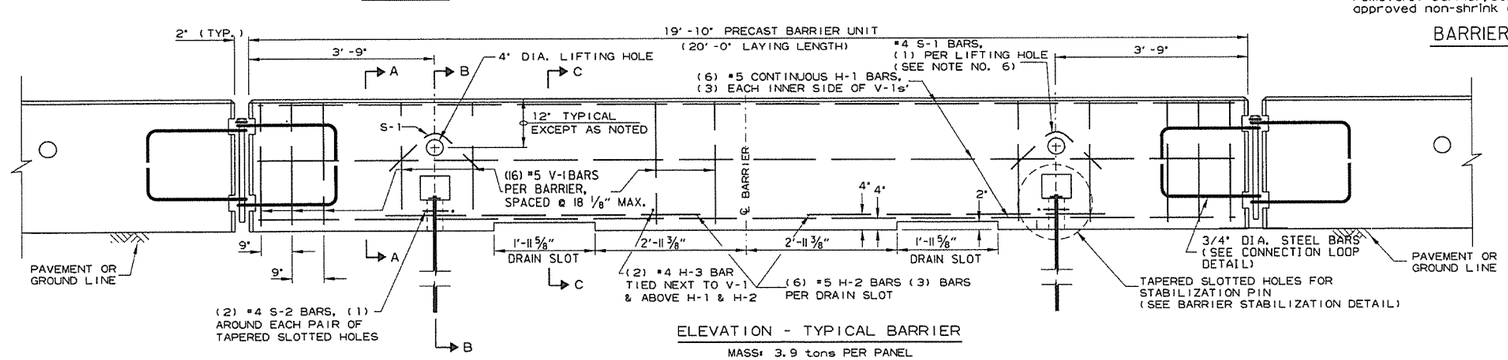
CONNECTION DETAILS



NOTE: 3/4" Threaded Inserts shall be cast in place for all new bridge decks and drilled and grouted for existing bridge decks. Inserts shall have a minimum ultimate load capacity of 8000 lbs. in tension. After removal of barrier, bolts, and angles, the inserts shall be filled with approved non-shrink epoxy.

BARRIER STABILIZATION DETAIL

BRIDGE DECKS



ELEVATION - TYPICAL BARRIER

MASS: 3.9 tons PER PANEL

General Notes

(1) The contractor shall furnish the Precast Concrete Barrier Units and shall be responsible for the manufacture, shipment, storage, placement and removal. At the completion of the project, the precast units will remain the property of the contractor.

(2) Materials shall meet the following minimum requirements:
Concrete: 2500 psi compressive strength at 28 days.
Reinforcing Steel: AASHTO M 31 or M 53, Grade 60
Structural Steel: AASHTO-M270 Grade 36 shall be used for the Connection Pin, Connection Loops, and Stabilization Pins. A One Piece Pin with a 3" rounded top may be used in place of the detailed Connection Pin.
Delineators: Delineators shall be mounted at 10' spacing on top of precast barrier.

In applications where barrier wall is within 6 feet of a traffic lane, additional delineators shall be placed on the barrier at 10' spacing approximately one (1) foot from the top of the barrier. Delineators shall be on the AHTD Qualified Products List for Construction Concrete Barrier Markers.
Delineator color shall be in accordance with the Manual on Uniform Traffic Control Devices.
Payment for delineators shall be considered included in the price bid per Lin. Ft. for "Furnishing and Installing Precast Concrete Barrier". The contractor shall certify to the Engineer that the material and the design used in the precast barrier units meets the requirements as shown on this standard drawing.

(3) Other Precast Concrete Barriers that have been crash tested and approved by the Federal Highway Administration to meet the requirements of NCHRP-350 test level 3 or Manual For Assessing Safety Hardware (MASH) will be accepted in lieu of the barrier shown. Drain slots shall be provided as needed or as directed by the Engineer. The Contractor shall furnish a certification of NCHRP Report 350 or Manual For Assessing Safety Hardware (MASH) compliance for any other types of precast barrier to be used. The certification shall state that the precast concrete barrier meets the requirements of NCHRP Report 350 or Manual For Assessing Safety Hardware (MASH) and include a copy of the Federal Highway Administration's (FHWA) approval letter with all attachments. Precast concrete barrier units shall be fabricated and installed in accordance with crash testing and documentation provided in the FHWA approval letter. Mixing of shapes will not be allowed in a continuous line of units.

(4) Dowel holes in pavement or bridge slabs that are to remain in place shall be filled. Holes in concrete pavement and bridge slabs shall be filled with an approved non-shrink epoxy grout. Holes in asphalt pavement shall be filled with an approved asphalt joint filler. Payment for drilling and filling holes to be included in the price for various barrier items.

(5) Attach Units To Roadway Surface with Stabilization Pins and to Deck Slabs using bolts when required.

(6) A 4" White PVC Sleeve may be used to form the Lifting Hole and if used the Sleeve is to be left in place.

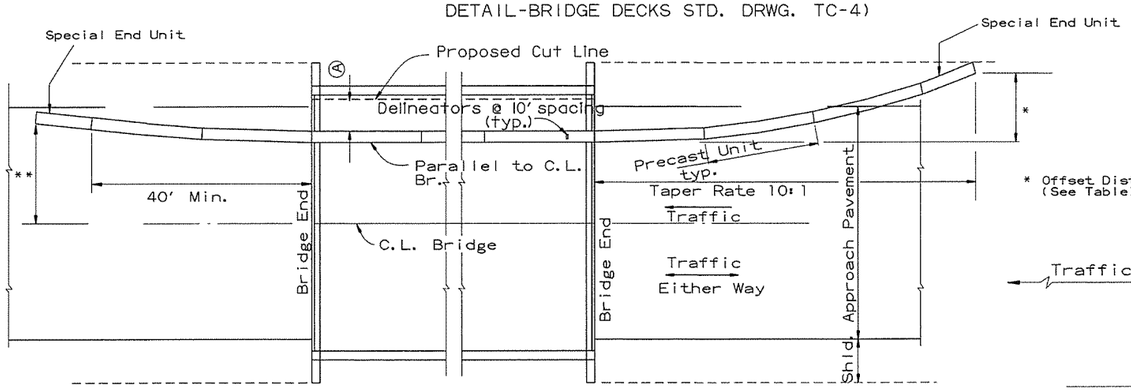
DATE	REVISION	FILMED
2-27-14	REVISED BARRIER STABILIZATION DETAIL	
10-15-09	ADDED REFERENCE TO MASH	
8-5-09	REV. NOTE 3 CONCERNING DRAIN SLOTS	
11-29-07	REVISED NOTE 3	
5-25-06	DELETED GENERAL NOTE 7	
11-18-04	REVISED BARRIER STABILIZATION DETAIL BRIDGE DECKS	
4-10-03	REVISED GENERAL NOTE 2	
8-22-02	ISSUED NEW DRAWING	

ARKANSAS STATE HIGHWAY COMMISSION

STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION - TEMPORARY PRECAST BARRIER

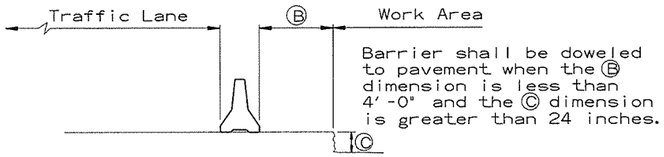
STANDARD DRAWING TC-4

Ⓐ 4 feet or greater preferred. If less than 4 feet, Precast Units shall be connected to slab (SEE BARRIER STABILIZATION DETAIL-BRIDGE DECKS STD. DRWG. TC-4)



BARRIER PLACEMENT ALONG BRIDGE WITH OFFSET

No Scale

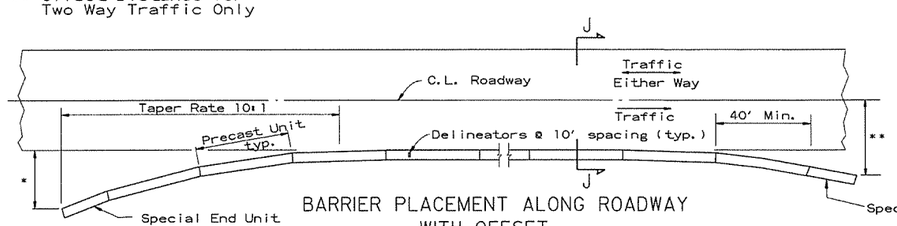


Barrier shall be doweled to pavement when the Ⓑ dimension is less than 4'-0" and the Ⓒ dimension is greater than 24 inches.

SECTION J-J

No Scale

** Offset Distance for Two Way Traffic Only



BARRIER PLACEMENT ALONG ROADWAY WITH OFFSET

No Scale

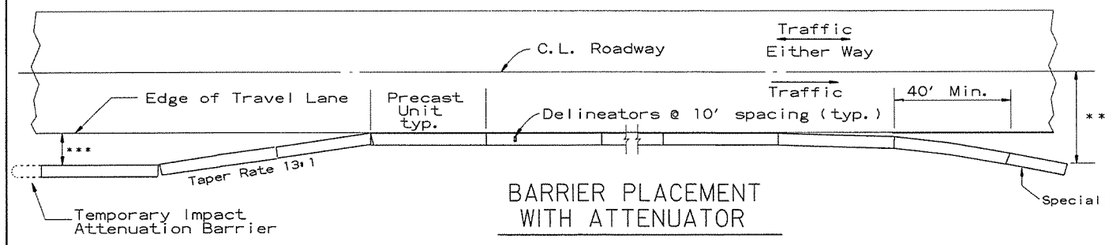
** Offset Distance For Two Way Traffic Only

* Offset Distance (See Table)

Offset Distance Table

Speed (MPH)	Offset Distance (FT.)
≤ 45	12
> 45	18

If offset distance is not attainable, then see "Barrier Placement With Attenuator" Detail shown below.

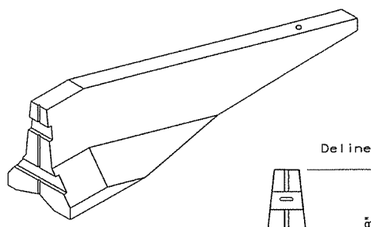


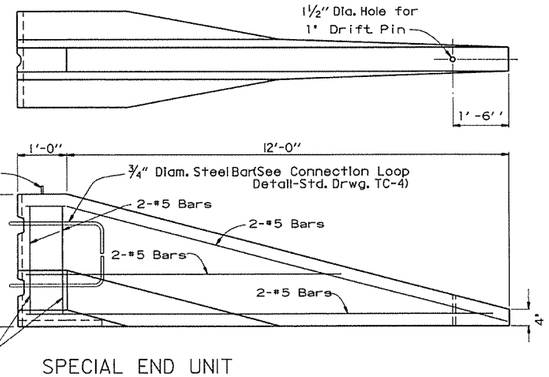
BARRIER PLACEMENT WITH ATTENUATOR

No Scale

*** Min. 3'-0" From Edge of Travel Lane to Nearest Edge of Attenuator

** Offset Distance For Two Way Traffic Only





SPECIAL END UNIT

No Scale

General Notes

When shown on the Plans, the ends of the Temporary Precast Concrete Barrier shall be protected with an NCHRP-350 or Manual For Assessing Safety Hardware (MASH) approved Crash Cushion. Payment for Crash Cushions shall be made under the item of "Temporary Impact Attenuation Barrier."

DATE	REVISION	FILMED
10-15-09	ADDED REFERENCE TO MASH	
5-25-06	REVISED BARRIER PLACEMENT	
8-22-02	ISSUED NEW DRAWING	

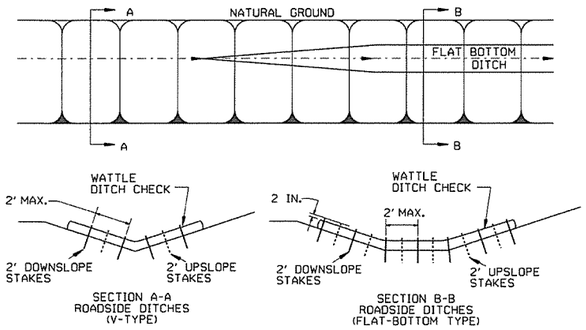
ARKANSAS STATE HIGHWAY COMMISSION

STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION - TEMPORARY PRECAST BARRIER

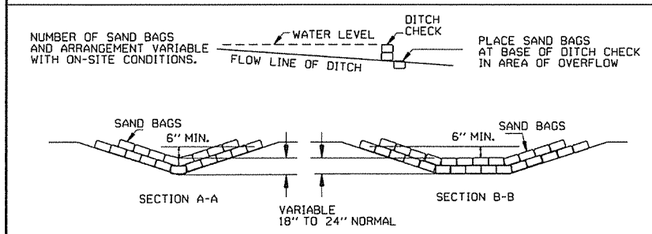
STANDARD DRAWING TC-5

GENERAL NOTES

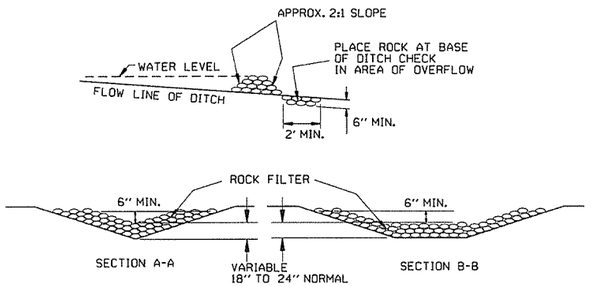
INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.



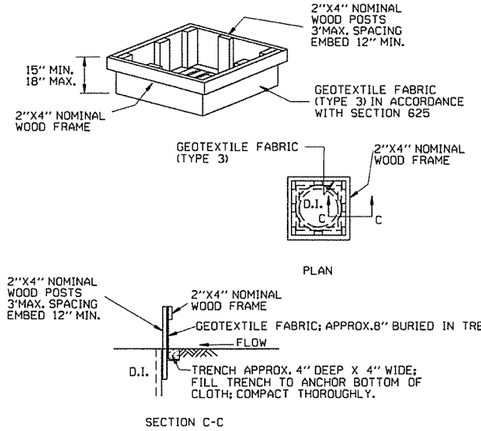
WATTLE DITCH CHECK (E-1)



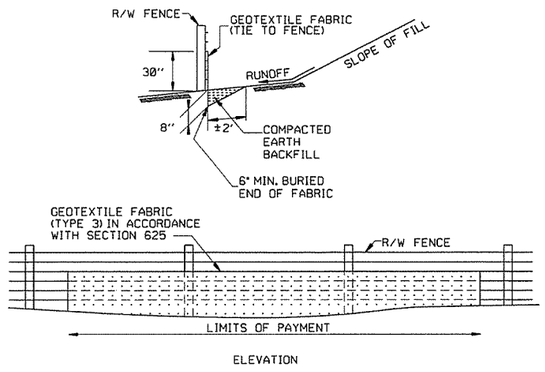
SAND BAG DITCH CHECK (E-5)



ROCK DITCH CHECK (E-6)



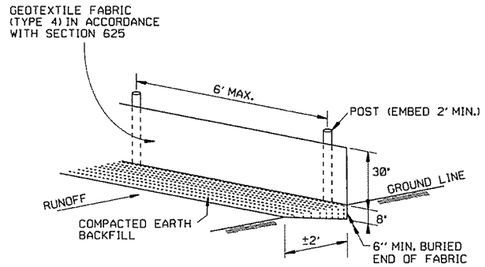
DROP INLET SILT FENCE (E-7)



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

GENERAL NOTES

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



SILT FENCE (E-11)

GENERAL NOTES

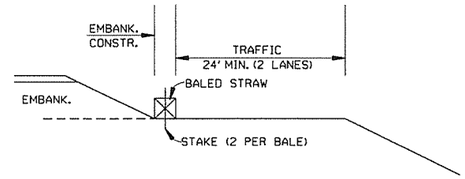
GEOTEXTILE FABRIC SHALL BE SPLICED TOGETHER WITH A SEWN SEAM ONLY AT A SUPPORT POST OR TWO SECTIONS OF FENCE MAY BE OVERLAPPED INSTEAD. PAYMENT OF ADDITIONAL MATERIAL FOR OVERLAP WILL NOT BE MADE.

GENERAL NOTES

1. STRAW BALES SHALL BE INSTALLED SO THAT THE BINDINGS ARE ORIENTED AROUND THE SIDES RATHER THAN ALONG THE TOPS AND BOTTOMS OF THE BALES. THE BALES SHALL BE A MINIMUM OF 30 INCHES IN LENGTH.

2. NO GAPS SHALL BE LEFT BETWEEN BALES.

3. BALED STRAW FILTER BARRIERS COMPLETED AND ACCEPTED WILL BE MEASURED BY THE BALE IN PLACE AS AUTHORIZED BY THE ENGINEER AND WILL BE PAID FOR AT THE CONTRACT UNIT PRICE BID PER BALE FOR BALED STRAW DITCH CHECKS.



BALED STRAW FILTER BARRIER (E-2)

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

ARKANSAS STATE HIGHWAY COMMISSION

TEMPORARY EROSION CONTROL DEVICES

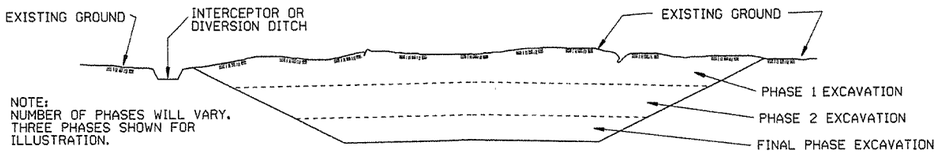
STANDARD DRAWING TEC-1

CLEARING AND GRUBBING

CONSTRUCTION SEQUENCE

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

EXCAVATION



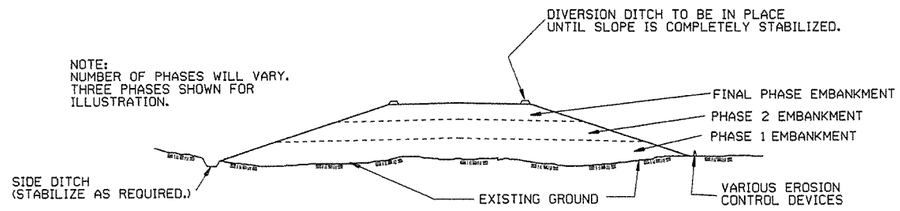
GENERAL NOTE

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

CONSTRUCTION SEQUENCE

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

EMBANKMENT



GENERAL NOTE

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

CONSTRUCTION SEQUENCE

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

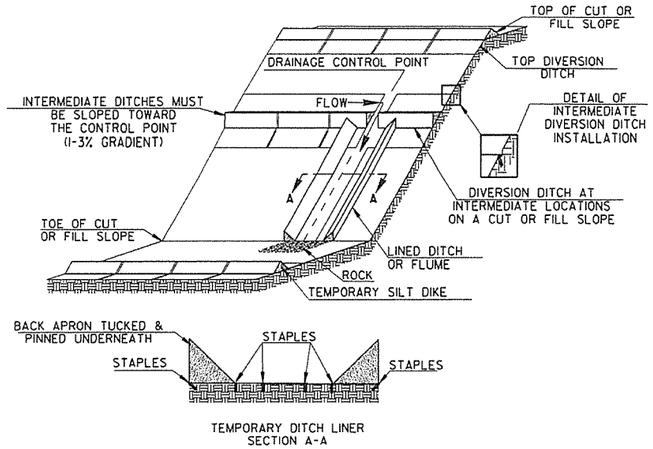
DATE	REVISION	FILMED
11-03-94	CORRECTED SPELLING	
6-2-94	Drawn & Issued	6-2-94

ARKANSAS STATE HIGHWAY COMMISSION

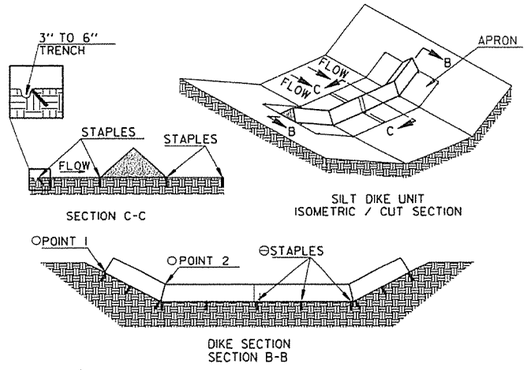
TEMPORARY EROSION CONTROL DEVICES

STANDARD DRAWING TEC-3

stdtec3.dgn



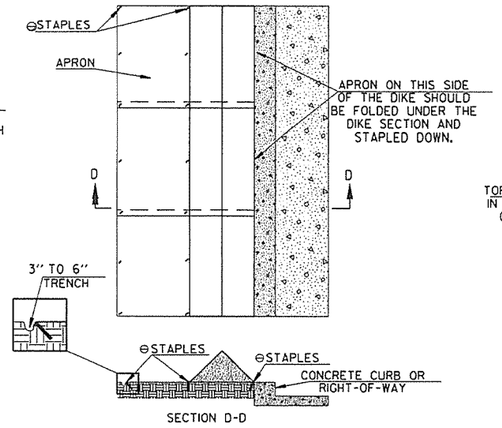
TRIANGULAR SILT DIKE INSTALLATION
FOR
DIVERSION DITCH AND/OR DITCH LINER



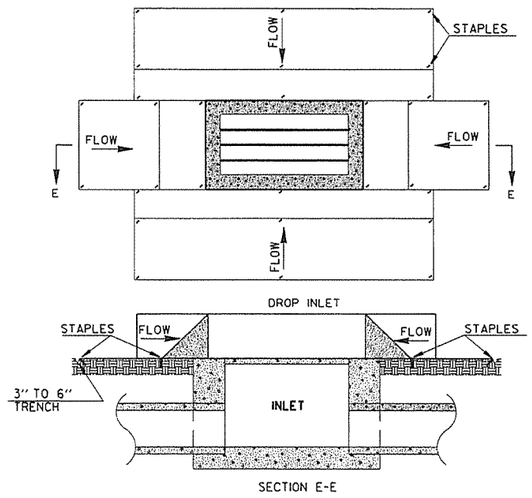
TRIANGULAR SILT DIKE INSTALLATION
FOR
ROADWAY DITCH OR DRAINAGE DITCH

○ POINT "1" MUST BE HIGHER THAN POINT "2" TO ENSURE THAT WATER FLOWS OVER THE DIKE AND NOT AROUND THE ENDS.

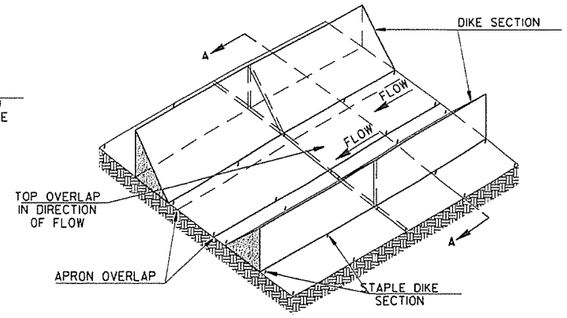
⊖ STAPLES SHALL BE PLACED WHERE THE UNITS OVERLAP AND IN THE CENTER OF THE UNIT AS SHOWN ON THE DIAGRAM.



TRIANGULAR SILT DIKE INSTALLATION
FOR
CONTINUOUS BARRIER



TRIANGULAR SILT DIKE INSTALLATION
FOR
DROP INLETS



TRIANGULAR SILT DIKE INSTALLATION
FOR
TEMPORARY DITCH LINER

SYMBOLOGY
SYMBOL TO BE USED TO DENOTE DEVICE ON PLANS

NOTE: SILT DIKE SHOULD ONLY BE USED FOR DROP INLETS IN SUMP LOCATIONS.

GENERAL NOTES

1. THIS WORK SHALL CONSIST OF FURNISHING, INSTALLING, AND MAINTAINING THE TRIANGULAR SILT DIKE. THE DIKES SHALL BE USED AS A CONTINUOUS LINE BARRIER AT THE TOE OF SLOPE OR ACROSS THE ROADWAY DITCH TO CONTAIN SEDIMENT AND MINIMIZE EROSION, OR AS DIRECTED BY THE ENGINEER. THESE DIKES SHALL BE INSTALLED AND LOCATED AS SOON AS CONSTRUCTION WILL ALLOW OR AS DIRECTED BY THE ENGINEER.

2. TRIANGULAR SILT DIKE SHALL BE TRIANGULAR SHAPED HAVING A HEIGHT OF AT LEAST 8" TO 10" IN THE CENTER WITH EQUAL SIDES AND A 16" TO 20" BASE. THE TRIANGULAR SHAPED INNER MATERIAL SHALL BE URETHANE FOAM. THE OUTER COVER SHALL BE A WOVEN GEOTEXTILE FABRIC PLACED AROUND THE INNER MATERIAL & ALLOWED TO EXTEND BEYOND BOTH SIDES OF THE TRIANGLE 24" TO 36". THIS FABRIC SHOULD BE MILDEW RESISTANT, ROT-PROOF AND RESISTANT TO HEAT AND ULTRAVIOLET RADIATION MEETING REQUIREMENTS FOR SEDIMENT CONTROL IN AASHTO M288. THE DIKES SHALL BE ATTACHED TO THE GROUND WITH WIRE STAPLES. THE STAPLES SHALL BE NO. 11 GAUGE WIRE AND BE AT LEAST 6" TO 8" LONG. STAPLES SHALL BE PLACED AS SHOWN ON THESE DETAILS.

   THE CONTRACTOR SHALL INSPECT ALL DIKES AFTER EACH RAINFALL EVENT OF AT LEAST 0.5" OR GREATER. ANY DEFICIENCIES OR DAMAGE SHALL BE REPAIRED BY THE CONTRACTOR. ACCUMULATED SILT OR DEBRIS SHALL BE REMOVED AND RELOCATED AS DIRECTED BY THE ENGINEER. IF THE DIKES ARE DAMAGED OR INADVERTENTLY MOVED DURING THE SILT REMOVAL PROCESS, THE CONTRACTOR SHALL IMMEDIATELY REPLACE AFTER DAMAGE OCCURS.

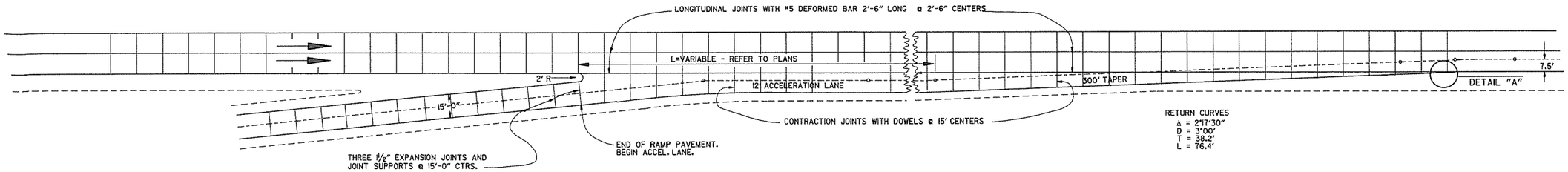
3. ACCEPTED TRIANGULAR SILT DIKE, MEASURED AS PROVIDED ABOVE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE BID FOR TRIANGULAR SILT DIKE. PRICE BID WILL INCLUDE THE COST OF FURNISHING THE DIKES, INSTALLING, MAINTAINING AND REMOVAL WHEN DIRECTED BY THE ENGINEER.

DATE	REVISION	FILMED
7-26-12	REVISED GENERAL NOTE 2.	
12-15-11	ISSUED	

ARKANSAS STATE HIGHWAY COMMISSION

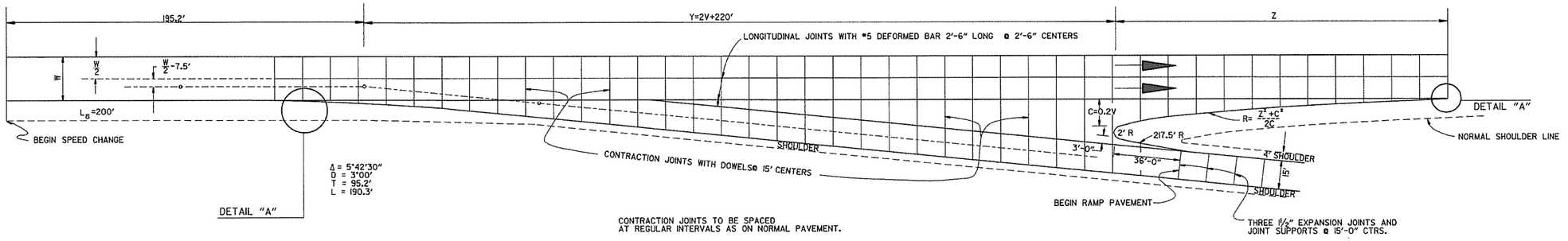
TEMPORARY EROSION CONTROL DEVICES

STANDARD DRAWING TEC-4



ENTRANCE RAMP

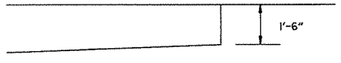
NOTE: JOINT SPACING ON THE MAIN LANES SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO THESE JOINT LAYOUTS. THE MAIN LANE JOINT SPACING MAY BE REDUCED TO A 12' MINIMUM.



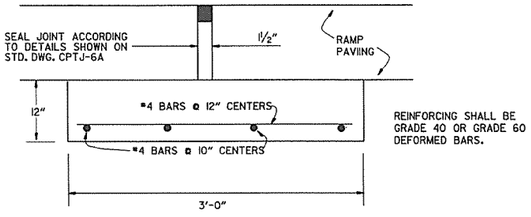
EXIT RAMP

EXIT RAMP

DESIGN SPEED V	Y	NOSE OFFSET C	LENGTH NOSE TAPER Z	RETURN RADIUS R	ADDITIONAL SURFACING SQ. YDS.
40	300.0	8.0	96.0	580.0	602.43
50	320.0	10.0	120.0	725.0	687.29
60	340.0	12.0	168.0	1182.0	790.55
70	360.0	14.0	210.0	1582.0	902.27



DETAIL "A"



DETAIL OF EXPANSION JOINT & JOINT SUPPORT

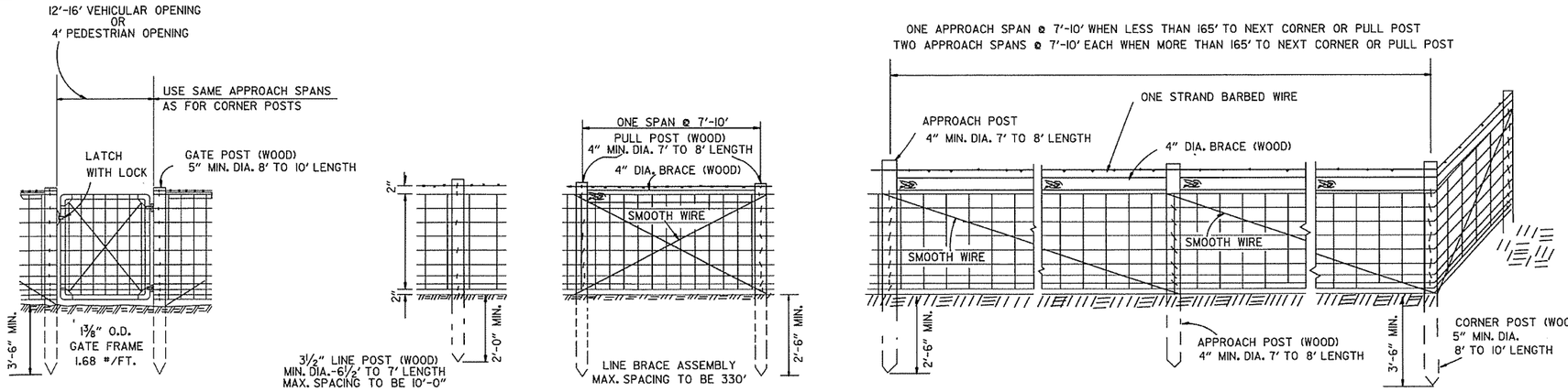
NOTE: THE EXPANSION JOINTS SHALL BE MEASURED AND PAID FOR AS P.C.C. PAVEMENT (RAMP THICKNESS). WHEN RAMP PAVING IS ASPHALT, EXPANSION JOINT IS NOT REQUIRED.
THE JOINT SUPPORT MAY BE CONSTRUCTED WITH CLASS "A", "S", OR PAVING CONCRETE. PAYMENT FOR THE JOINT SUPPORT SHALL BE FOR THE CONTRACT UNIT PRICE BID FOR THE CLASS OF CONCRETE USED. ALL OTHER WORK AND MATERIALS REQUIRED FOR THE CONSTRUCTION OF THE JOINT SUPPORT SHALL BE INCLUDED IN THE PRICE BID FOR THE ABOVE ITEMS.

DATE	REVISION	DATE FILM'D
8-22-02	DELETED NOTE	
11-16-01	CORRECTED SPELLING ON ENTRANCE RAMP NOTE	
5-13-99	ADDED, EDITED AND DELETED NOTES	
11-03-94	ADDED NOTE RE: REINF. BARS	
10-1-92	ADDED DETAIL A & OTHER MINOR CHANGES	10-1-92
1-25-90	REVISED EXPANSION JOINT	1-25-90
7-15-88	CONFORM'D TO 1988 SPECIFICATIONS	65C-7-15-88
3-2-81	ISSUED	511-10-2-72

ARKANSAS STATE HIGHWAY COMMISSION

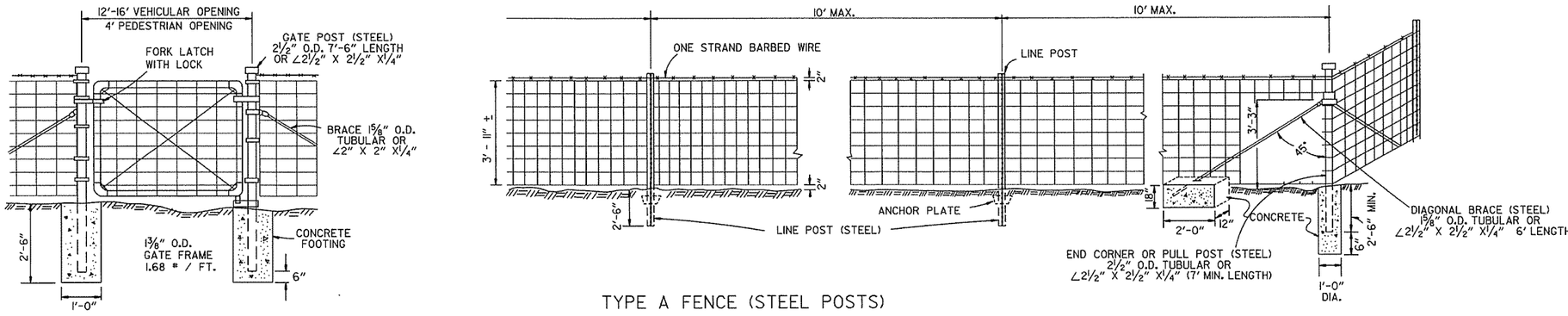
DETAILS OF STANDARD TURNOUT FOR ENTRANCE & EXIT RAMPS (NON-REINFORCED)

STANDARD DRAWING TR-1A

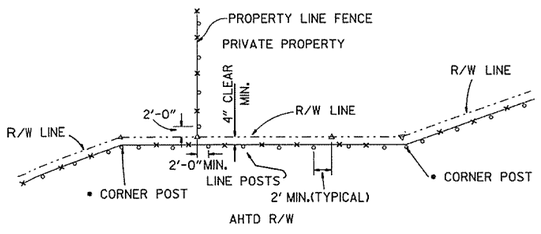


NOTE: STAPLE AT LEAST TOP, BOTTOM AND ALTERNATE WIRES OF WOVEN FABRIC FOR WOOD LINE POSTS.

TYPE A FENCE (WOOD POSTS)



TYPE A FENCE (STEEL POSTS)

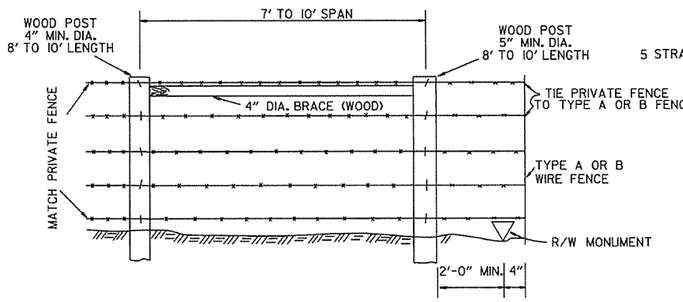


•NOTE: RIGHT-OF-WAY MONUMENTS SHALL NOT BE DISTURBED BY FENCE CONSTRUCTION. CORNER POSTS SHALL BE CONSTRUCTED 2' FROM THE RIGHT-OF-WAY MONUMENT OR AS DIRECTED BY THE ENGINEER.

△ - R/W MONUMENTS

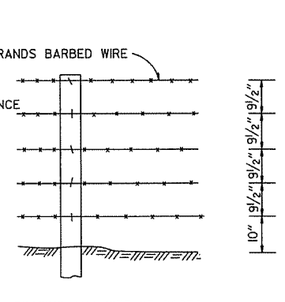
○ - FENCE POSTS

RIGHT-OF-WAY FENCE LOCATION



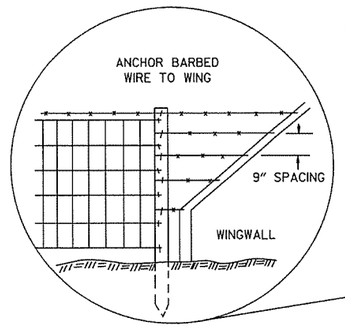
WHERE EXISTING PRIVATE FENCE CONSISTS OF STEEL POSTS, USE END POST ASSEMBLY AS SHOWN WITH TYPE A FENCE OR OTHER END POST ASSEMBLY AS APPROVED BY THE ENGINEER.

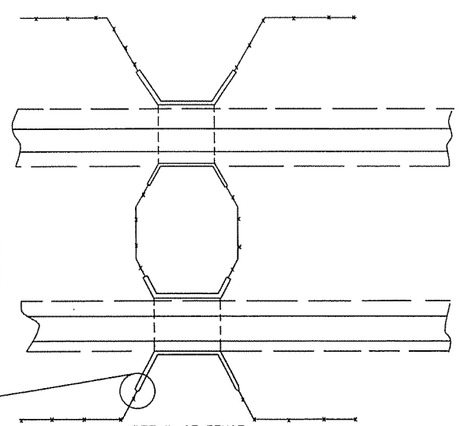
PRIVATE FENCE TERMINAL INSTALLATION



SPACING AND SIZE OF POSTS FOR TYPE B FENCE SHALL BE THE SAME AS TYPE A FENCE.

TYPE B FENCE





DETAIL OF FENCE CONSTRUCTION AT LARGE CULVERTS (5' IN HEIGHT AND OVER)

GENERAL NOTES:

STEEL LINE POSTS SHALL BE GALVANIZED, 7 FT. IN LENGTH.

TUBULAR END, CORNER, PULL, OR DIAGONAL BRACES MUST CONFORM TO THE DIMENSIONS AND WEIGHTS SPECIFIED ON STANDARD DRAWING WF-3 (CHAIN LINK).

THE CONTRACTOR SHALL FURNISH AT LEAST 25% OF WOOD LINE POSTS OF 7' LENGTHS IN ORDER TO PROVIDE SUFFICIENT SET IN SOFT GROUND OR SMALL DEPRESSIONS.

GATE HINGES AND LATCHES WITH LOCKS TO BE OF A TYPE APPROVED BY THE ENGINEER. DRIVEWAY GATES, EITHER SINGLE 12' OR 16' OR DOUBLE 6' TO 8' OPENINGS OF THE SAME TYPE AS THE PEDESTRIAN GATE, SHALL BE INSTALLED ON THE RIGHT SIDE OF EACH THROUGH LANE ROAD AT LARGE CULVERTS OR BRIDGE CROSS FENCE FOR USE BY MAINTENANCE EQUIPMENT. LOCATION OF GATES TO BE SHOWN ON THE PLANS OR AS DESIGNATED BY THE ENGINEER.

AT STREAM CROSSINGS THE FENCE SHALL NOT BE CONSTRUCTED ACROSS LARGE STREAMS. WHERE CLEARANCE IS SUFFICIENT FROM THE TOP OF BANK TO THE BRIDGE STRUCTURE, A CROSS CONNECTION SHALL BE CONSTRUCTED BETWEEN THE FENCE ON EACH SIDE OF THE ROAD. WHERE THE CLEARANCE IS NOT SUFFIEICNT, THE FENCE SHALL BE TERMINATED WITH CROSS CONNECTIONS AND END POSTS ADJACENT TO THE BRIDGE ABUTMENTS OR CULVERT WINGWALLS.

SPLICE FOR WOVEN WIRE BETWEEN PULL POST SHALL BE BY THE "WESTERN UNION METHOD" AS DESCRIBED AS FOLLOWS: THE VERTICAL WIRES FOR EACH END OF THE FENCE FABRIC SHALL BE PLACED SIDE BY SIDE AND THE PROJECTING HORIZONTAL WIRES SHALL BE WRAPPED A MINIMUM OF 4 TIMES AROUND THE HORIZONTAL WIRES OF THE FIRST WEB.

SPLICE FOR BARBED WIRE BETWEEN PULL POST ASSEMBLY SHALL BE BY THE "EYE METHOD": AS DESCRIBED AS FOLLOWS: THE ENDS OF THE BARBED WIRE SHALL BE BENT TO FORM A LOOP. THE LOOPS SHALL BE CONNECTED. AFTER THE LOOPS ARE CONNECTED THE ENDS OF THE WIRE SHALL BE WRAPPED AROUND THE PROJECTING WIRE A MINIMUM OF 4 TIMES FOR EACH WIRE LOOP.

DATE	REVISION	DATE FILMED
8-22-02	REVISED GENERAL NOTES	
10-18-96	REVISED ASTM REF. TO AASHTO	
11-22-95	REVISED R-O-W LOCATION DETAIL	
6-2-94	ADDED CORNER POST NOTE	6-2-94
8-5-93	REVISED R-O-W LOCATION DETAIL	8-5-93
10-1-92	ADDED STAPLE NOTE	
8-2-90	REV'D PULL POST LENGTH	
11-30-89	DELETED CLASS CONC.	
7-15-88	ADDED SPLICE NOTES	
7-15-88	ADDED HEIGHT DIMENSION	
4-3-87	REVISED VARIOUS NOTES	
	AND GENERAL NOTES	
11-1-84	MAX. POST SPACING	
1-4-83	MIN. DIA. LINE POST	
10-2-72	REVISED & REDRAWN	

ARKANSAS STATE HIGHWAY COMMISSION

WIRE FENCE
TYPE A AND B

STANDARD DRAWING WF-1