

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	012397	1	23
I-40 CABLE MEDIAN BARRIER IMPVTS. (S)						

"THIS IS A FULLY CONTROLLED ACCESS FACILITY"
ARKANSAS DEPARTMENT OF TRANSPORTATION
CONSTRUCTION PLANS FOR STATE HIGHWAY

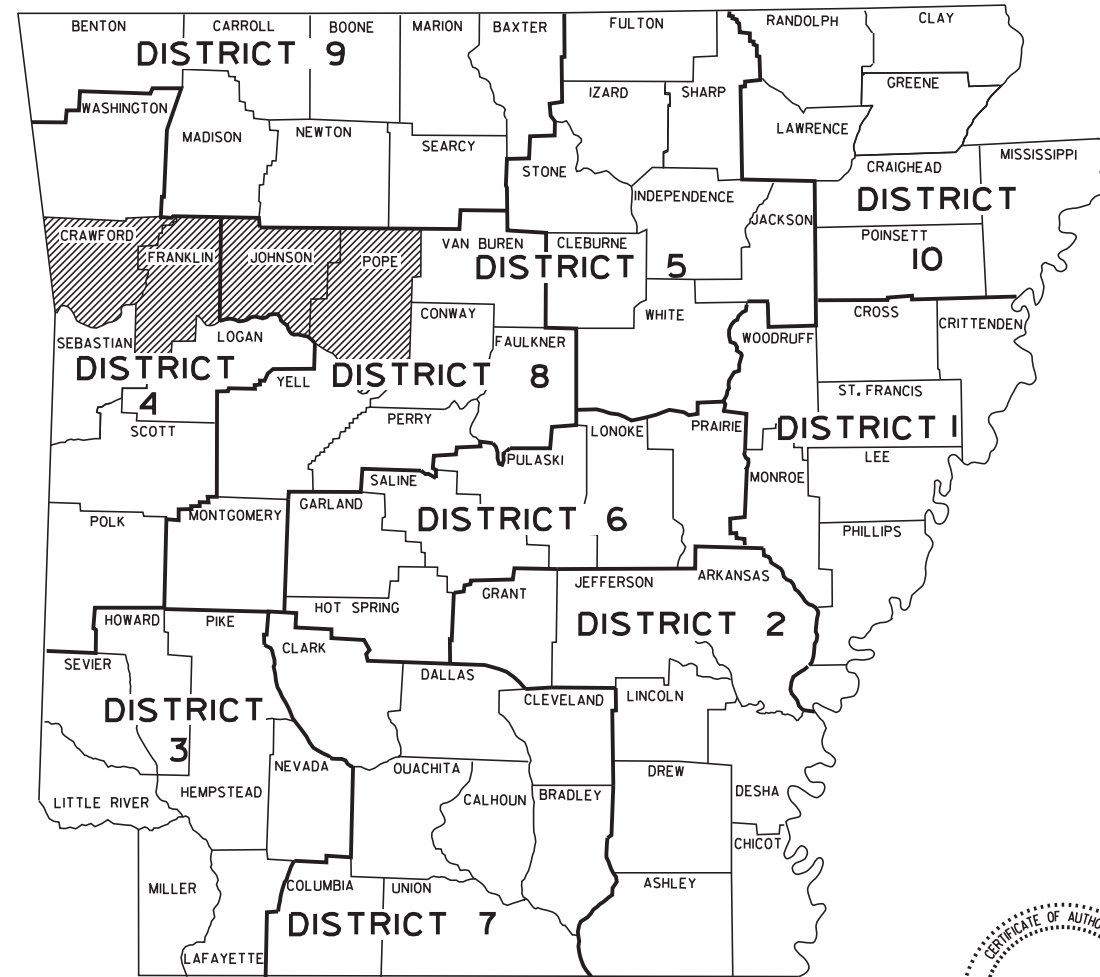


**I-40 CABLE MEDIAN
BARRIER IMPVTS. (S)**

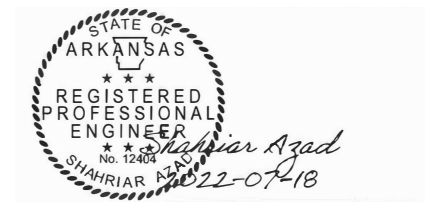
VARIOUS COUNTIES

JOB 012397

FED. AID PROJ. HSIP-0076(255)



ARK. HWY. DIST. NOS. 4 & 8



P.E. JOB 012397

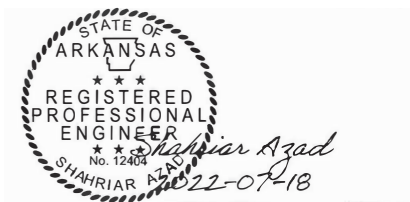
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 Robert.Dorrington
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9:36:35 AM

7/18/2022

Robert.L.Dorr@ington

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DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	012397	2	23
INDEX OF SHEETS, STANDARD DRAWINGS, GOVERNING SPECS, AND GENERAL NOTES						

INDEX OF SHEETS

SHEET NO.	TITLE
1	TITLE SHEET
2	INDEX OF SHEETS, STANDARD DRAWINGS, GOVERNING SPECIFICATIONS, AND GENERAL NOTES
3	TYPICAL SECTIONS OF IMPROVEMENT
4-10	SPECIAL DETAILS
11-13	MAINTENANCE OF TRAFFIC DETAILS
14-18	QUANTITIES
19	SUMMARY OF QUANTITIES AND REVISIONS
20	CRAWFORD COUNTY PLAN
21	FRANKLIN COUNTY PLAN
22	JOHNSON COUNTY PLAN
23	POPE COUNTY PLAN

GENERAL NOTES

- ALL PIPE LINES, POWER, TELEPHONE, AND TELEGRAPH LINES TO BE MOVED OR LOWERED BY THE RESPECTIVE OWNERS AS PER AGREEMENT WITH SUCH OWNERS.
- ANY EQUIPMENT OR APPURTENANCE THAT INTERFERES WITH THE PROPOSED CONSTRUCTION AND WHICH MAY BE THE PROPERTY OF UTILITY SERVICE ORGANIZATIONS SHALL BE MOVED BY THE OWNERS UNLESS OTHERWISE PROVIDED.
- ALL LAND MONUMENTS LOCATED WITHIN THE CONSTRUCTION AREA SHALL BE PROTECTED IN ACCORDANCE WITH SECTION 107.12 OF THE STANDARD SPECIFICATIONS.
- ALL TREES THAT DO NOT DIRECTLY INTERFERE WITH THE PROPOSED CONSTRUCTION SHALL BE SPARED AS DIRECTED BY THE ENGINEER. CARE AND DISCRETION SHALL BE USED TO INSURE THAT ALL TREES NOT TO BE REMOVED SHALL BE HARMED AS LITTLE AS POSSIBLE DURING THE CONSTRUCTION OPERATIONS.
- ALL FLEXIBLE BASE AND ASPHALTIC PAVEMENT MATERIALS REMOVED SHALL BE PAID FOR UNDER THE ITEM NO. 210 - UNCLASSIFIED EXCAVATION.
- THE EXISTING PAVEMENT TO BE REMOVED 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 PAVEMENT THAT IS TO REMAIN IN PLACE SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

ROADWAY STANDARD DRAWINGS

DRWG.NO.	TITLE	DATE
CDP-1	CONCRETE DITCH PAVING	12-08-16
GR-6	GUARDRAIL DETAILS	05-19-22
GR-7	GUARDRAIL DETAILS	11-07-19
GR-8	GUARDRAIL DETAILS	11-07-19
GR-9	GUARDRAIL DETAILS	11-07-19
GR-10	GUARDRAIL DETAILS	11-07-19
GR-11	GUARDRAIL DETAILS	11-07-19
GR-12	GUARDRAIL DETAILS	05-14-20
TC-1	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION	11-07-19
TC-2	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION	05-20-21
TC-3	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION	08-12-21
TEC-1	TEMPORARY EROSION CONTROL DEVICES	11-16-17
TEC-2	TEMPORARY EROSION CONTROL DEVICES	06-02-94
TEC-3	TEMPORARY EROSION CONTROL DEVICES	11-03-94
TEC-4	TEMPORARY EROSION CONTROL DEVICES	07-26-12

GOVERNING SPECIFICATIONS

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

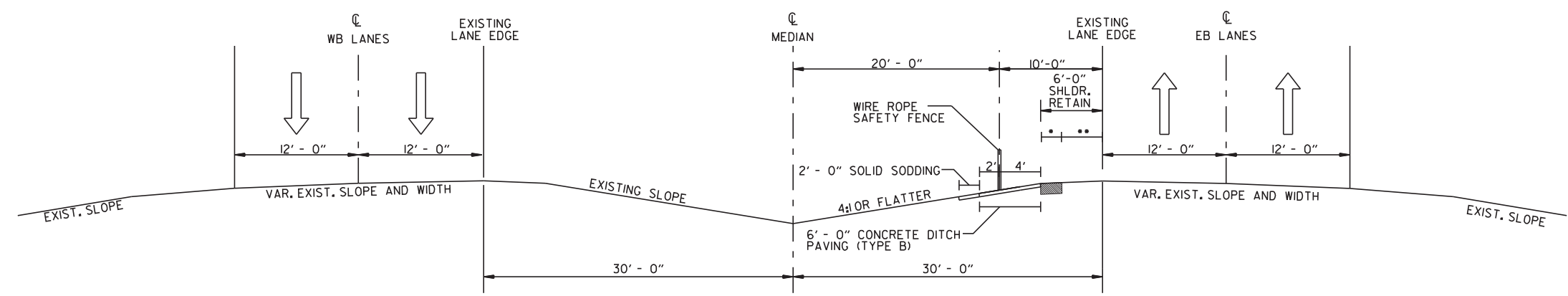
NUMBER	TITLE
ERRATA	ERRATA FOR THE BOOK OF STANDARD SPECIFICATIONS
FHWA-1273	REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS
FHWA-1273	SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - NOTICE TO CONTRACTORS
FHWA-1273	SUPPLEMENT - SPECIFIC EQUAL EMPLOYMENT OPPORTUNITY RESPONSIBILITIES (23 U.S.C. 140)
FHWA-1273	SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - GOALS AND TIMETABLES
FHWA-1273	SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - FEDERAL STANDARDS
FHWA-1273	SUPPLEMENT - POSTERS AND NOTICES REQUIRED FOR FEDERAL-AID PROJECTS
FHWA-1273	SUPPLEMENT - WAGE RATE DETERMINATION
100-3	CONTRACTOR'S LICENSE
100-4	DEPARTMENT NAME CHANGE
102-2	ISSUANCE OF PROPOSALS
105-4	MAINTENANCE DURING CONSTRUCTION
107-2	RESTRAINING CONDITIONS
108-1	LIQUIDATED DAMAGES
108-2	WORK ALLOWED PRIOR TO ISSUANCE OF WORK ORDER
110-1	PROTECTION OF WATER QUALITY AND WETLANDS
210-1	UNCLASSIFIED EXCAVATION
303-1	AGGREGATE BASE COURSE
306-1	QUALITY CONTROL AND ACCEPTANCE
400-4	DESIGN AND QUALITY CONTROL OF ASPHALT MIXTURES
400-5	PERCENT AIR VOIDS FOR ACHM MIX DESIGNS
400-6	LIQUID ANTI-STRIP ADDITIVE
404-3	DESIGN OF ASPHALT MIXTURES
410-1	CONSTRUCTION REQUIREMENTS AND ACCEPTANCE OF ASPHALT CONCRETE PLANT MIX COURSES
410-2	DEVICES FOR MEASURING DENSITY FOR ROLLING PATTERNS
410-4	EVALUATION OF ACHM SUBLOT REPLACEMENT MATERIAL
600-2	INCIDENTAL CONSTRUCTION
603-1	LANE CLOSURE NOTIFICATION
604-1	RETROREFLECTIVE SHEETING FOR TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES
604-3	TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES (MASH)
605-1	CONCRETE DITCH PAVING
617-1	GUARDRAIL TERMINAL (TYPE 2)
620-1	MULCH COVER
621-1	FILTER SOCKS
802-4	CEMENT
JOB 012397	ASSESSMENT OF WORKING DAYS-MAINTENANCE OF TRAFFIC
JOB 012397	BIDDING REQUIREMENTS AND CONDITIONS
JOB 012397	BROADBAND INTERNET SERVICE FOR ASPHALT CONCRETE PLANT
JOB 012397	CARGO PREFERENCE ACT REQUIREMENTS
JOB 012397	CONCRETE DITCH PAVING
JOB 012397	DISADVANTAGED BUSINESS ENTERPRISE BIDDER'S RESPONSIBILITIES
JOB 012397	ESTABLISHING CONTRACT TIME-WORKING DAY CONTRACT
JOB 012397	GOALS FOR DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION
JOB 012397	LIQUIDATED DAMAGES PROCEDURE FOR BID LETTINGS
JOB 012397	LONGITUDINAL JOINT DENSITIES FOR ACHM SURFACE COURSES
JOB 012397	MAINTENANCE OF TRAFFIC
JOB 012397	MANDATORY ELECTRONIC CONTRACT
JOB 012397	MANDATORY ELECTRONIC DOCUMENT SUBMITTAL
JOB 012397	PARTNERING REQUIREMENTS
JOB 012397	PRICE ADJUSTMENT FOR ASPHALT BINDER
JOB 012397	PRICE ADJUSTMENT FOR FUEL
JOB 012397	PROHIBITION OF CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT
JOB 012397	REMOVAL AND DISPOSAL OF IMPACT ATTENUATION BARRIERS
JOB 012397	REMOVAL AND DISPOSAL OF WIRE ROPE SAFETY FENCE
JOB 012397	STORMWATER POLLUTION PREVENTION PLAN - DISTRICT 4
JOB 012397	STORMWATER POLLUTION PREVENTION PLAN - DISTRICT 8
JOB 012397	SUBMISSION OF ASPHALT CONCRETE HOT MIX ACCEPTANCE TEST RESULTS
JOB 012397	TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES
JOB 012397	UTILITY ADJUSTMENTS
JOB 012397	VALUE ENGINEERING
JOB 012397	WARM MIX ASPHALT
JOB 012397	WIRE ROPE SAFETY FENCE MAINTENANCE MATERIALS - DISTRICT 4
JOB 012397	WIRE ROPE SAFETY FENCE MAINTENANCE MATERIALS - DISTRICT 8
JOB 012397	WIRE ROPE SAFETY FENCE (POST REPAIR)
JOB 012397	WIRE ROPE SAFETY FENCE (WRSF) SPECIFICATIONS
JOB 012397	WRSF TRAINING WORKSHOP

INDEX OF SHEETS, STANDARD DRAWINGS, GOVERNING SPECIFICATIONS, AND GENERAL NOTES

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9/8/2022
ROBERT.DARRINGTON

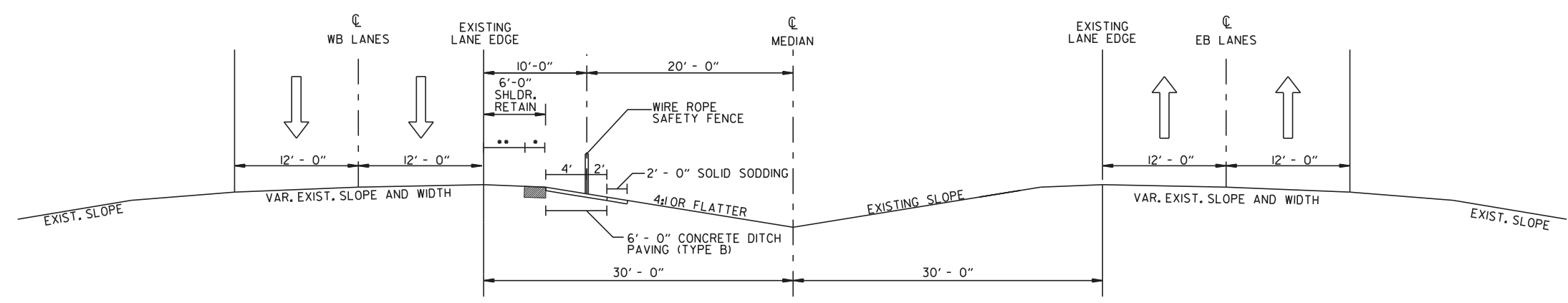
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DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
09-08-22		6	ARK.	012397	3	23
TYPICAL SECTIONS OF IMPROVEMENT						



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

- 2'-0" ACHM SURFACE COURSE (1/2")
220 LBS. PER SQ. YD. &
TRENCHING AND SHOULDER PREPARATION (8" DEPTH)
- 4'-0" EXISTING PAVED SHOULDER TO REMAIN



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

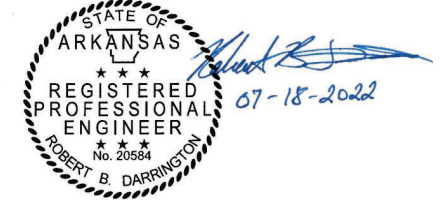
TYPICAL SECTIONS OF IMPROVEMENT

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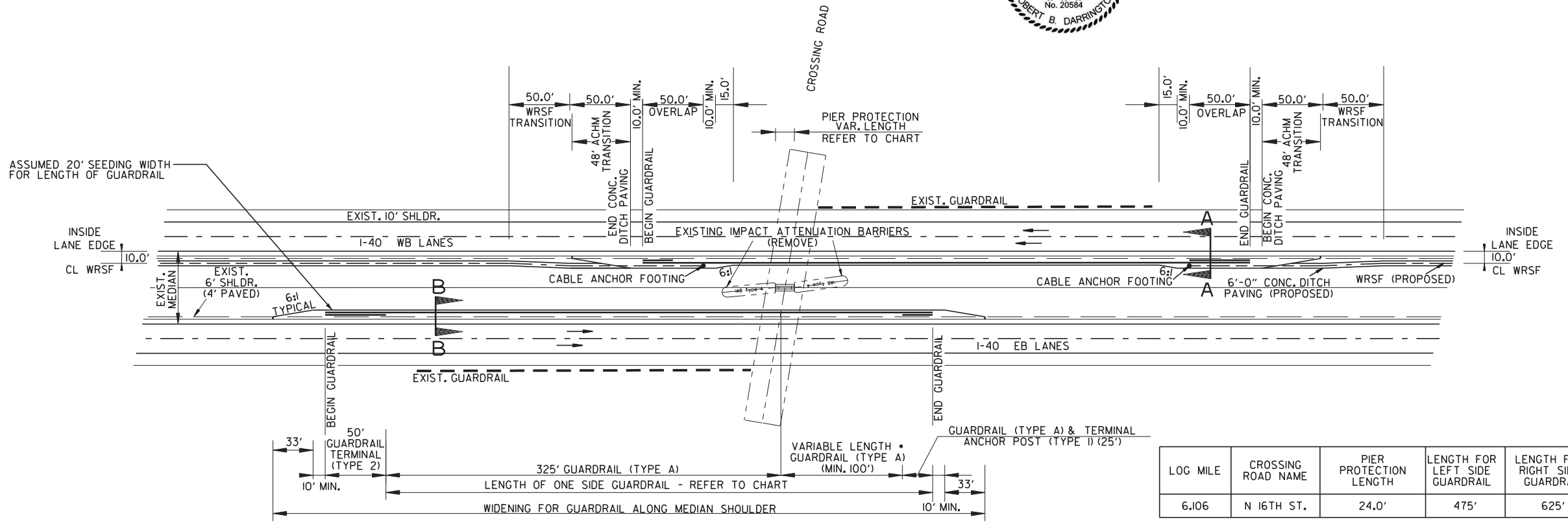
7/18/2022

Robert.Darrington

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DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	012397	4	23
SPECIAL DETAILS						

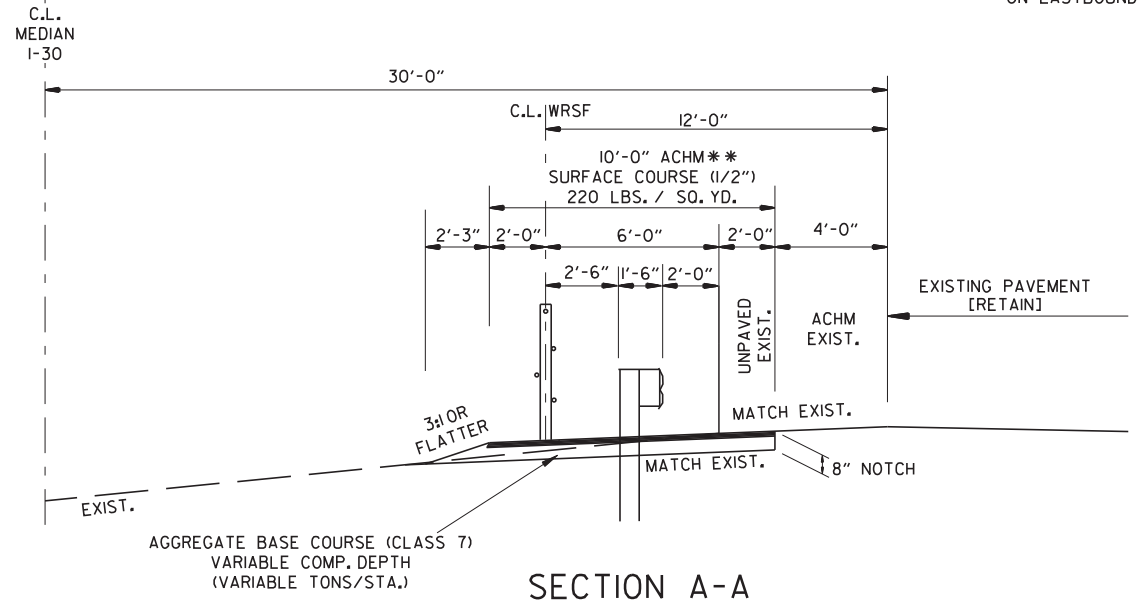


LOG MILE	CROSSING ROAD NAME	PIER PROTECTION LENGTH	LENGTH FOR LEFT SIDE GUARDRAIL	LENGTH FOR RIGHT SIDE GUARDRAIL
6.106	N 16TH ST.	24.0'	475'	625'

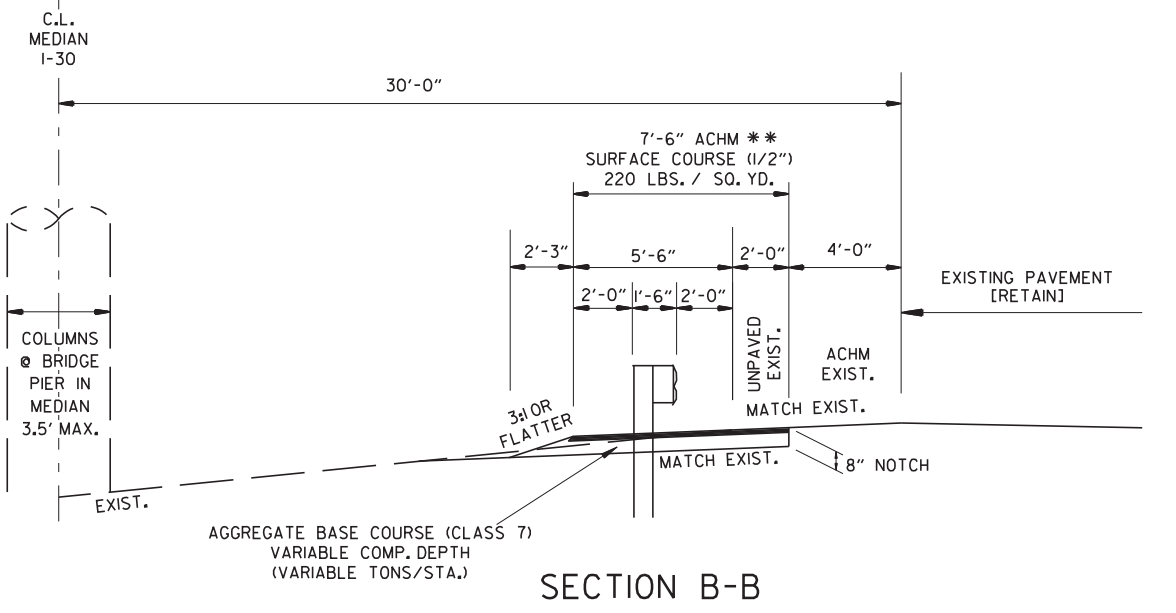
* GUARDRAIL LENGTH IS ROUNDED UP BASED ON GUARDRAIL STOCK LENGTH OF 25.0'

DETAIL AT OVERPASSES

NOTE: REFER TO QUANTITY 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

9:35:48 AM

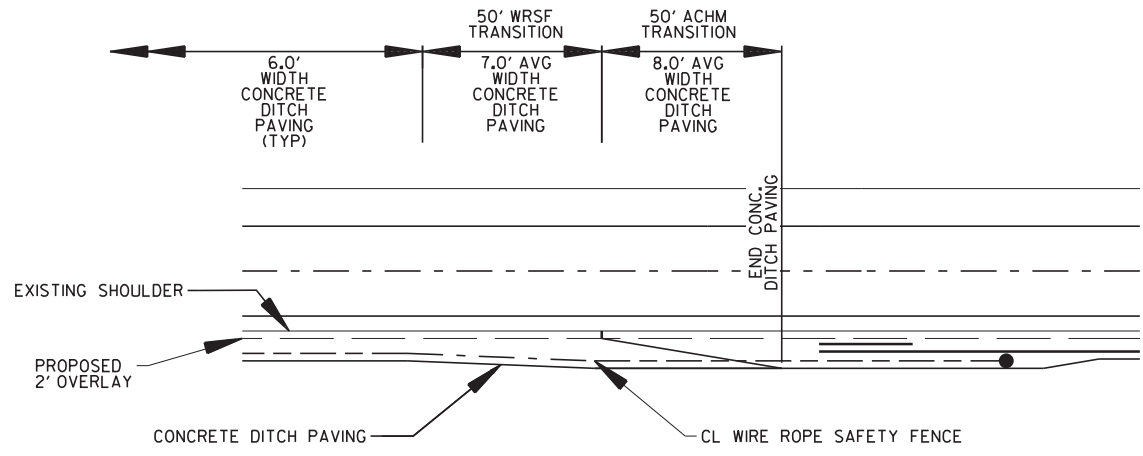
7/18/2022

Robert.Darrington

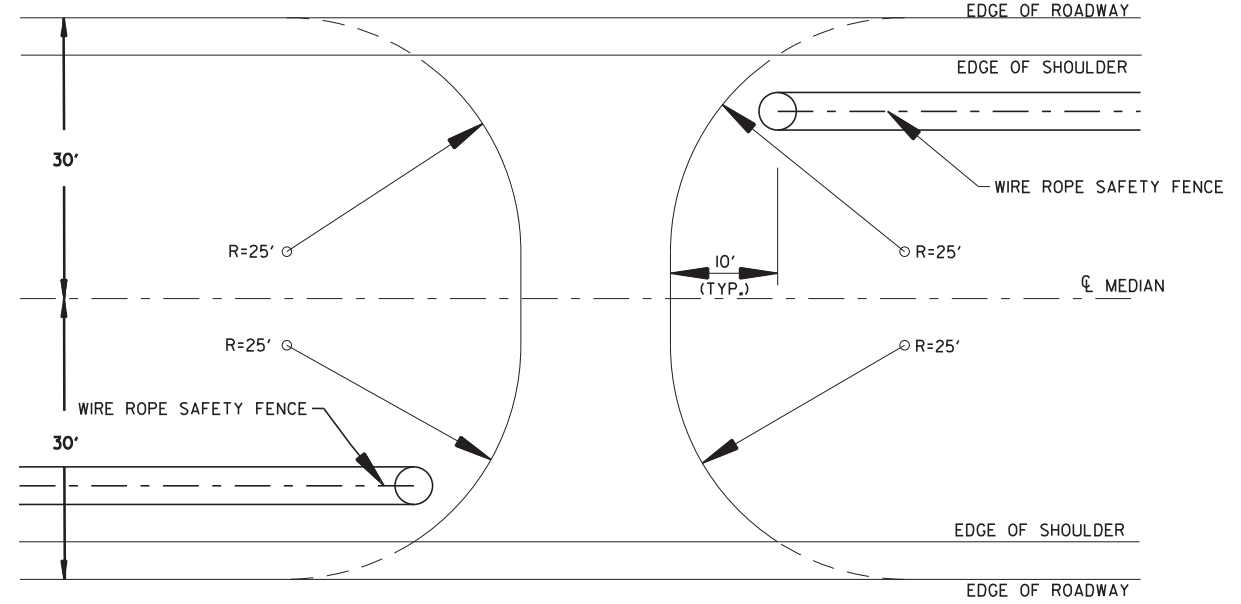
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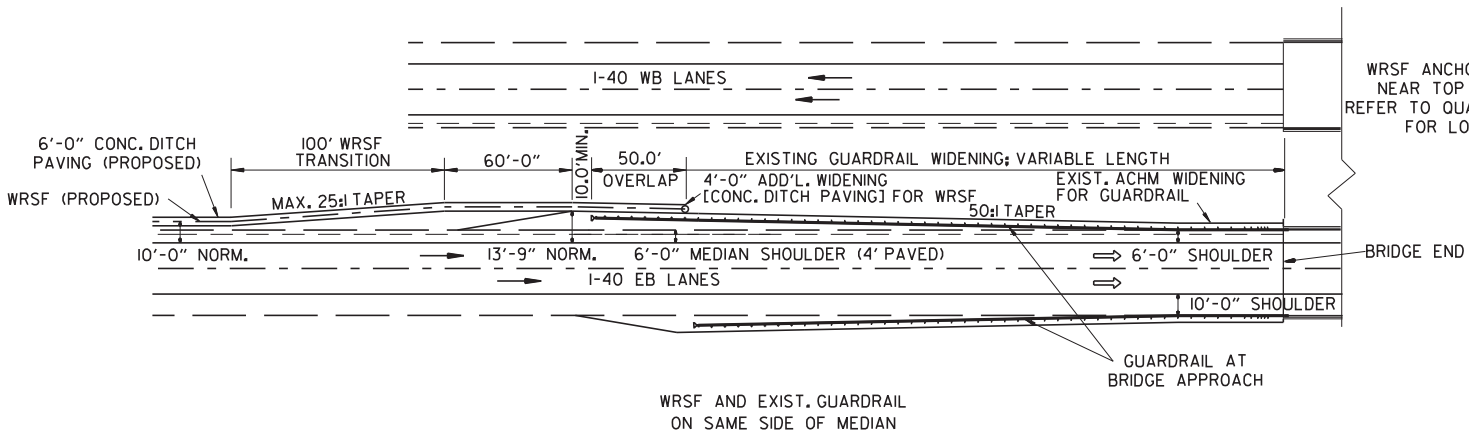
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	012397	5	23
SPECIAL DETAILS						



DETAIL OF CONCRETE DITCH PAVING AT GUARDRAIL WIDENING

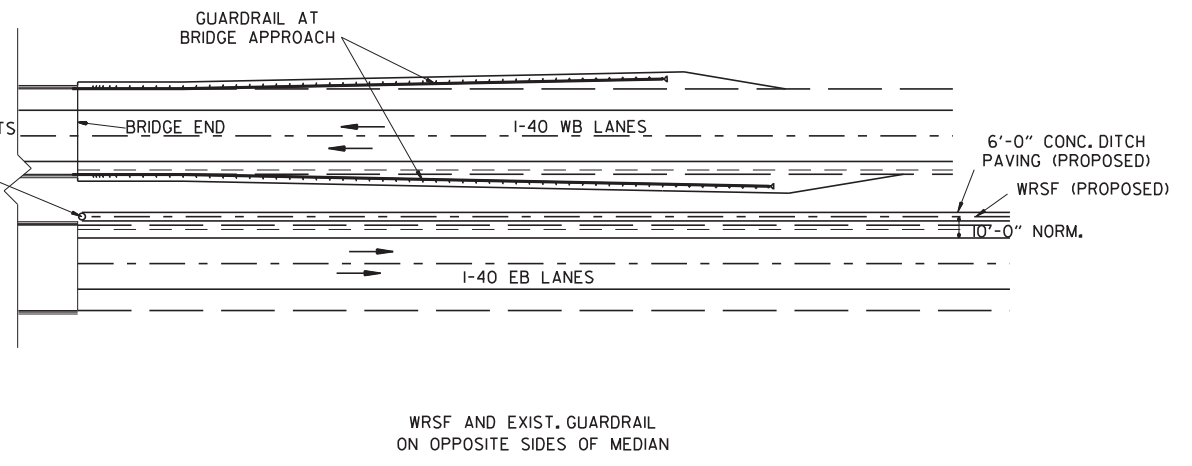


DETAIL OF EXISTING MEDIAN CROSSING



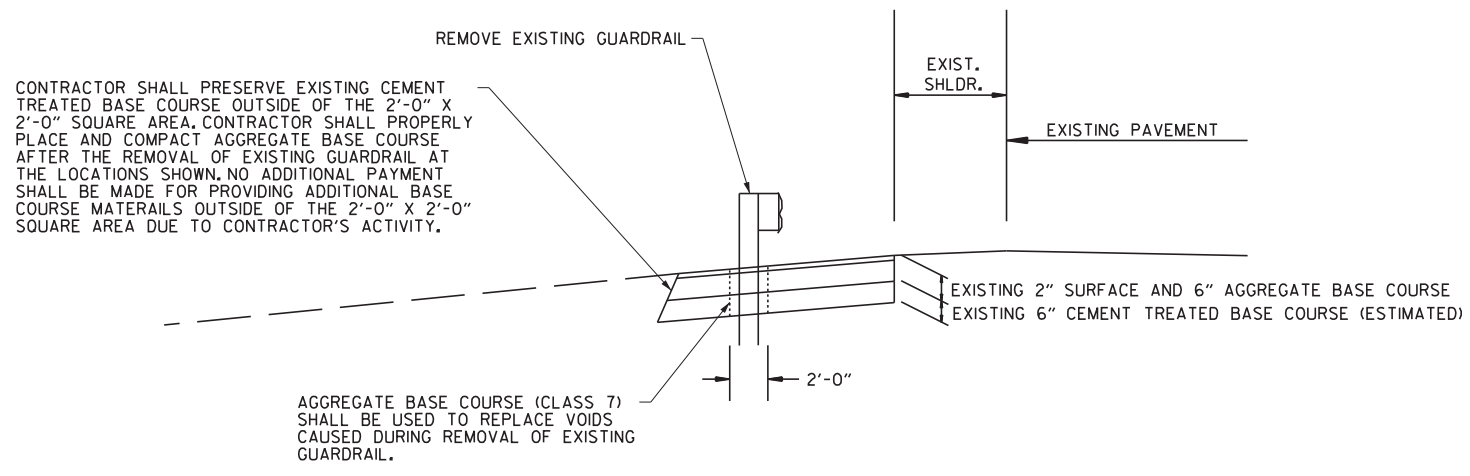
DETAIL OF WIRE ROPE SAFETY FENCE AT EXISTING BRIDGE ENDS

REFER TO QUANTITY SHEETS FOR RELATIVE PLACEMENT OF GUARDRAIL AND WIRE ROPE SAFETY FENCE AT EACH BRIDGE END

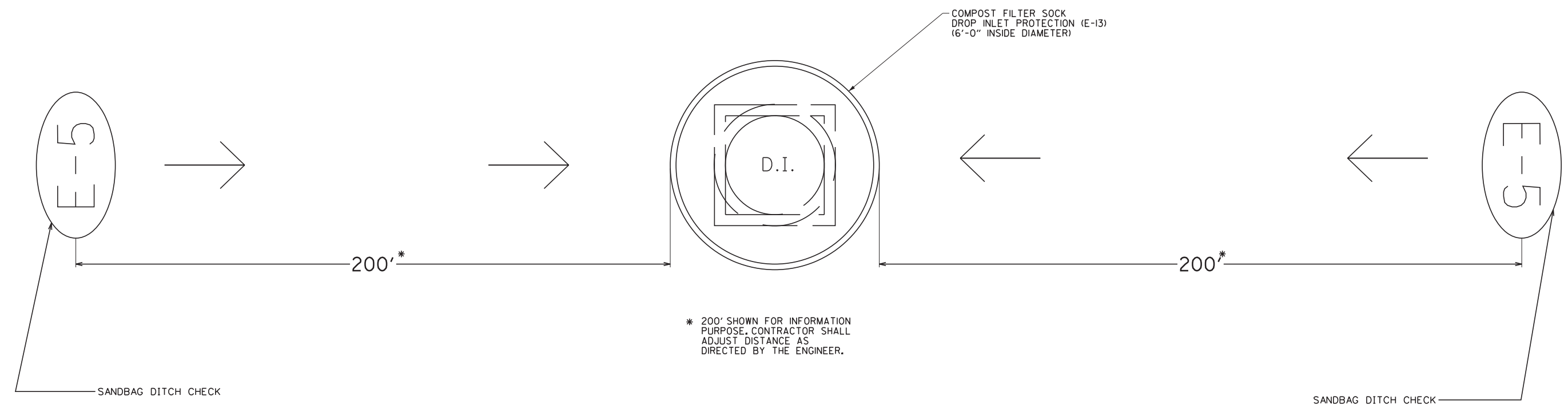


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SPECIAL DETAILS						



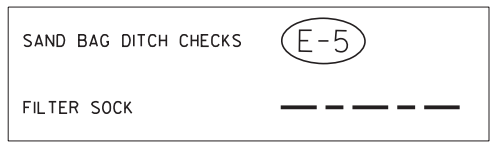
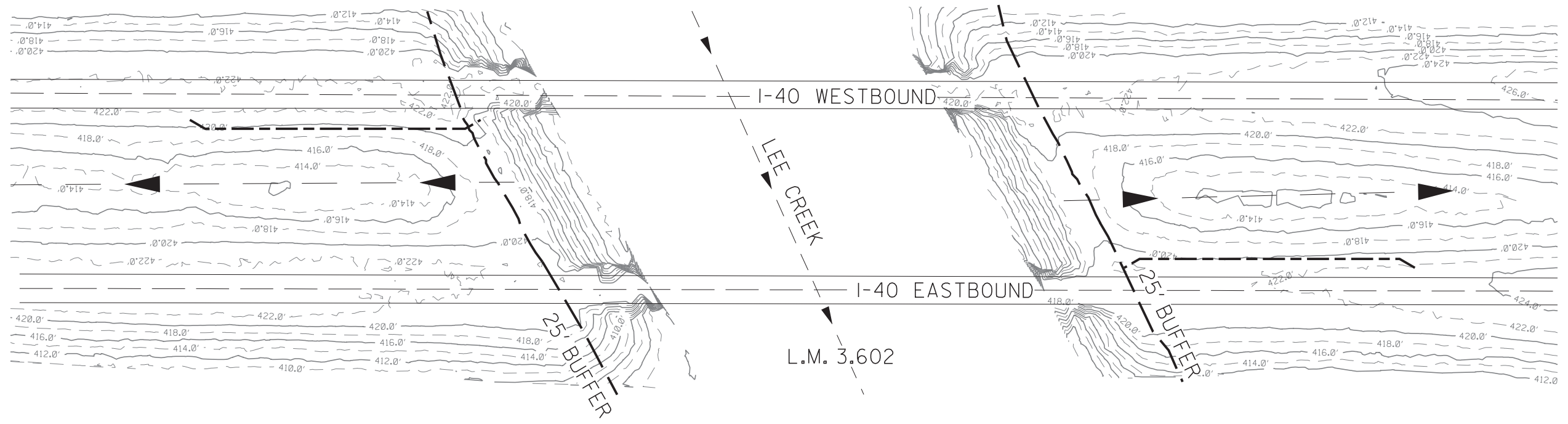
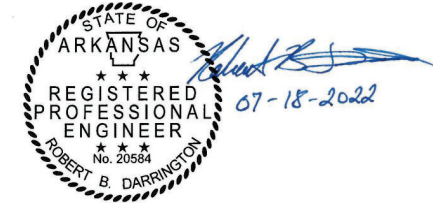
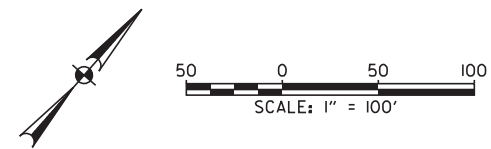
DETAIL OF GUARDRAIL REMOVAL
N.T.S.



TEMPORARY EROSION CONTROL DETAIL AT
MEDIAN INLET

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7/18/2022
Robert.Darrington
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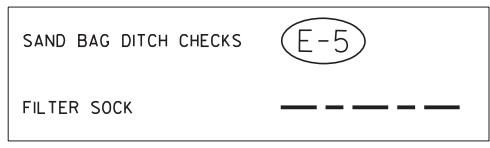
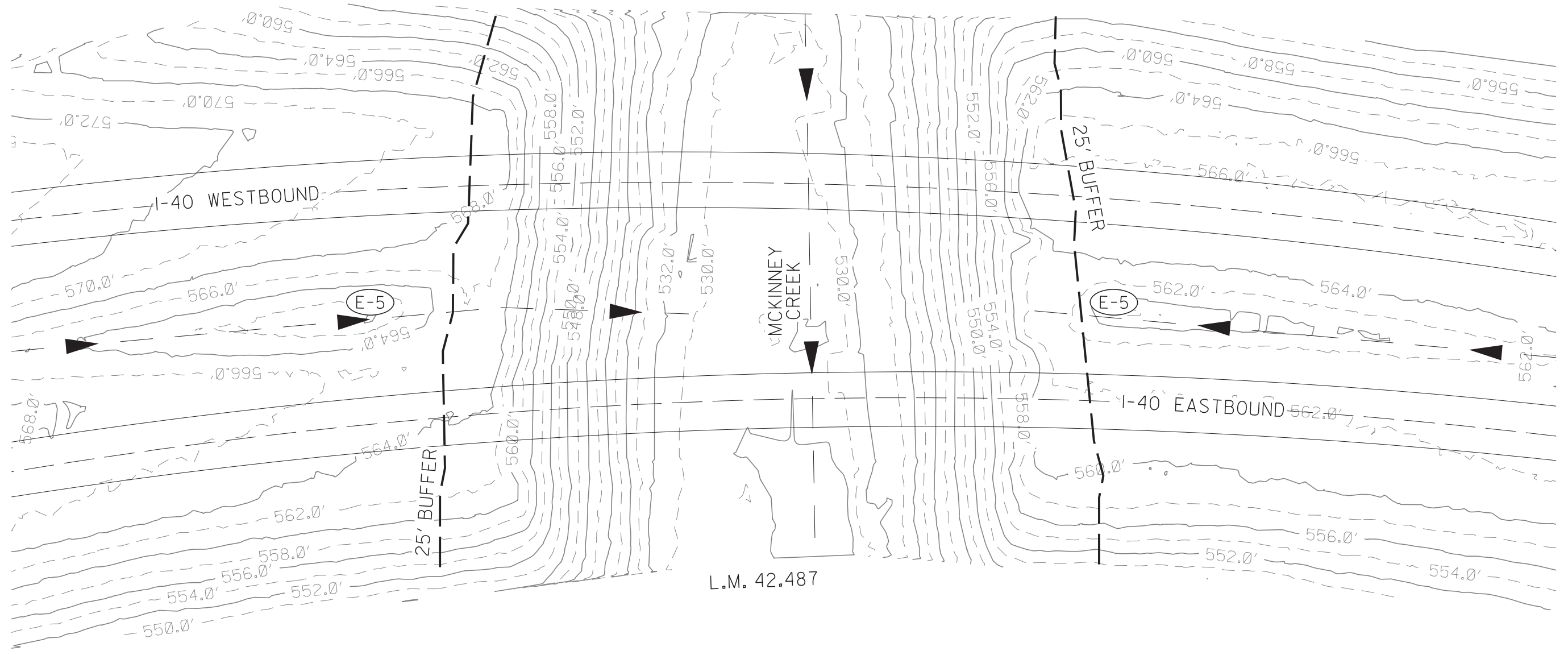
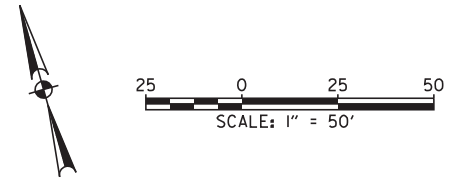
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	012397	7	23
CRAWFORD COUNTY SPECIAL DETAILS						



SITE I
CRAWFORD COUNTY SPECIAL DETAILS

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Robert.Darrington
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DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
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FRANKLIN COUNTY SPECIAL DETAILS						



SITE 6
FRANKLIN COUNTY SPECIAL DETAILS

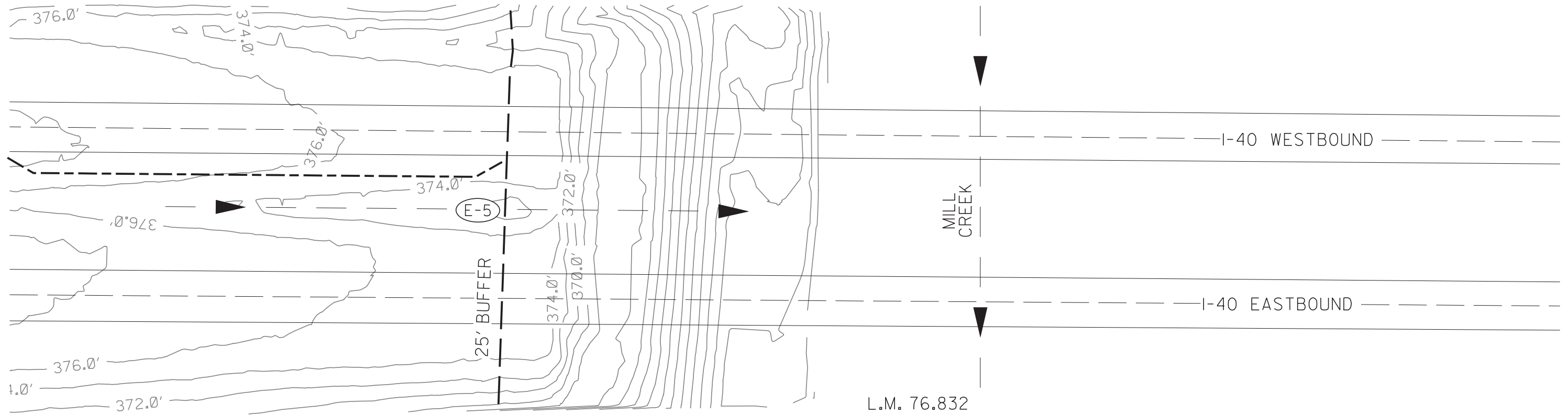
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DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
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POPE COUNTY SPECIAL DETAILS						



SITE 10
POPE COUNTY SPECIAL DETAILS

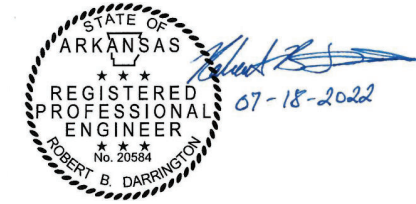
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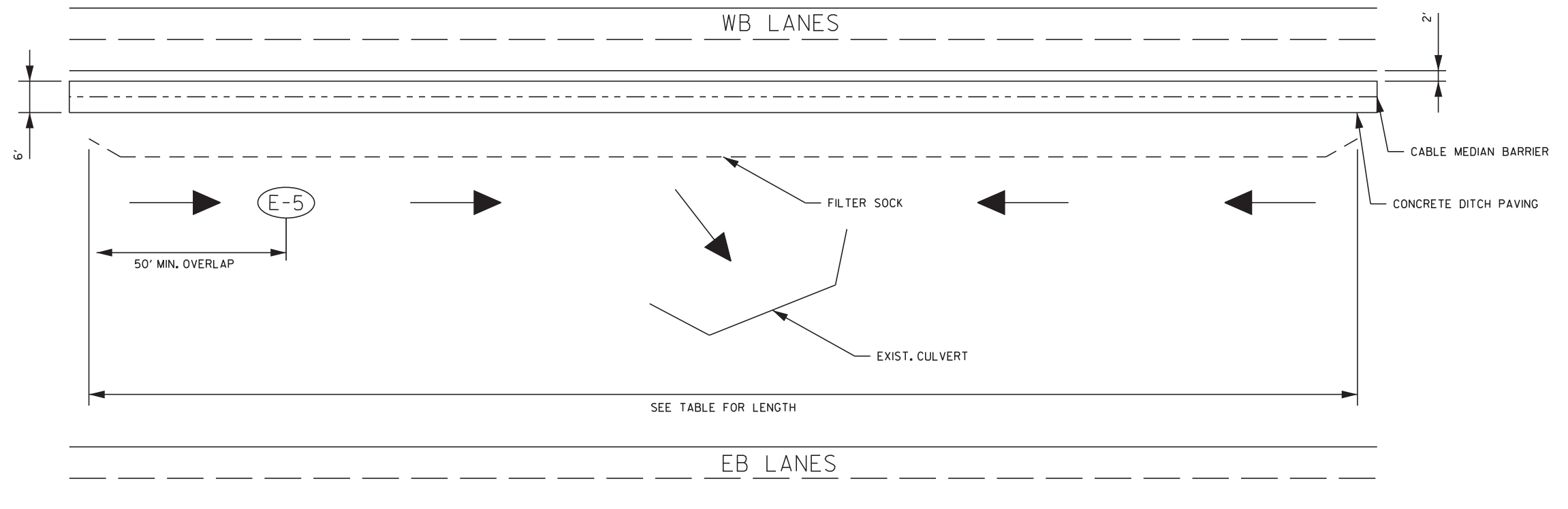
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DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	012397	10	23
FILTER SOCK SPECIAL DETAILS						

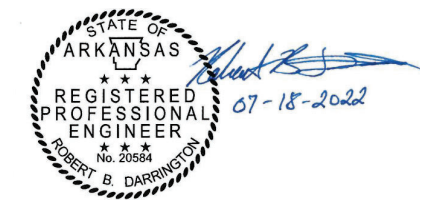


FILTER SOCK LOCATIONS					
BEGIN LM	END LM	SITE	COUNTY	DESCRIPTION	LENGTH
1.315	1.382	I	CRAWFORD	EXIST. CULVERT	350'
1.538	1.605	I	CRAWFORD	EXIST. CULVERT	350'
1.903	1.969	I	CRAWFORD	EXIST. CULVERT	350'
2.730	2.778	I	CRAWFORD	EXIST. CULVERT	250'
3.506	3.554	I	CRAWFORD	BRIDGE END	250'
3.650	3.717	I	CRAWFORD	BRIDGE END	350'
4.147	4.214	I	CRAWFORD	EXIST. CULVERT	350'
4.251	4.318	I	CRAWFORD	EXIST. CULVERT	350'
4.529	4.596	I	CRAWFORD	EXIST. CULVERT	350'
4.769	4.817	I	CRAWFORD	EXIST. CULVERT	250'
4.876	4.943	I	CRAWFORD	EXIST. CULVERT	350'
5.295	5.343	I	CRAWFORD	BRIDGE END	250'
5.427	5.494	I	CRAWFORD	EXIST. CULVERT	350'
29.218	29.313	2	FRANKLIN	EXIST. CULVERT	500'
30.145	30.193	2	FRANKLIN	EXIST. CULVERT	250'
31.800	31.848	3	FRANKLIN	CONCRETE DITCH PAVING	250'
32.954	33.002	3	FRANKLIN	EXIST. CULVERT	250'
33.270	33.337	4	FRANKLIN	EXIST. CULVERT	350'
34.025	34.091	4	FRANKLIN	EXIST. CULVERT	350'
37.709	37.757	5	FRANKLIN	EXIST. CULVERT	250'
37.935	37.983	5	FRANKLIN	EXIST. CULVERT	250'
38.068	38.116	5	FRANKLIN	EXIST. CULVERT	250'
40.534	40.601	6	FRANKLIN	EXIST. CULVERT	350'
40.989	41.122	6	FRANKLIN	EXIST. CULVERT	700'
41.198	41.265	6	FRANKLIN	EXIST. CULVERT	350'
41.383	41.449	6	FRANKLIN	EXIST. CULVERT	350'
41.518	41.613	6	FRANKLIN	EXIST. CULVERT	500'
41.651	41.699	6	FRANKLIN	EXIST. CULVERT	250'
41.784	41.832	6	FRANKLIN	EXIST. CULVERT	250'
70.454	70.502	8	POPE	BRIDGE END	250'
73.824	73.871	9	POPE	EXIST. CULVERT	250'
74.327	74.422	9	POPE	EXIST. CULVERT	500'
75.429	75.496	10	POPE	EXIST. CULVERT	350'
76.747	76.794	11	POPE	BRIDGE END	250'



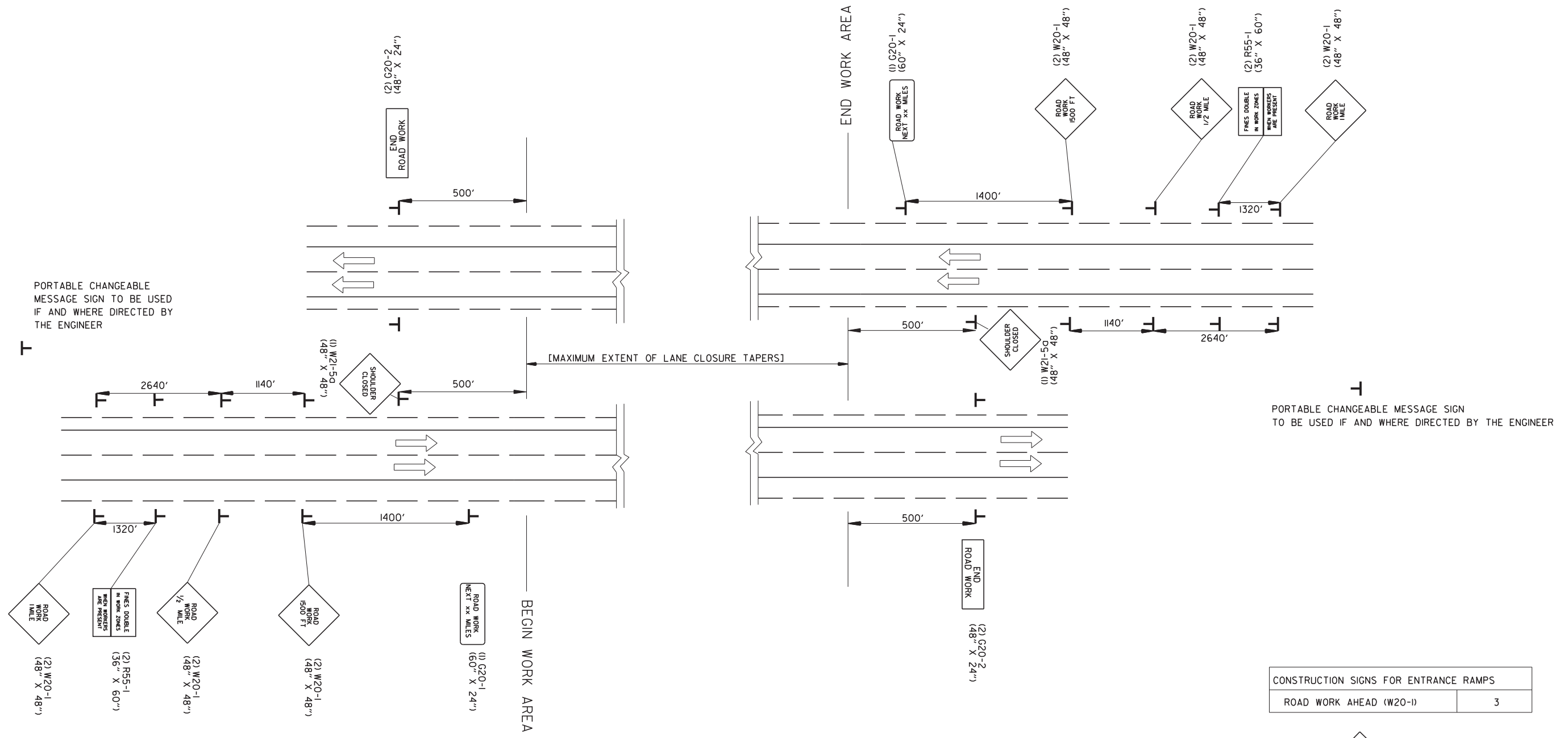
FILTER SOCK DETAIL
N.T.S.

SAND BAG DITCH CHECK (E-5)



DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	012397	II	23
MAINTENANCE OF TRAFFIC DETAILS						

NOTE :
 W20-1 (VARIOUS DISTANCE) ADVANCE SIGNS
 TO BE REPLACED AS NEEDED BY EQUIVALENT W20-5 SIGNS
 AS WORKING AREA SHIFTS.

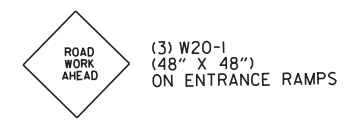


PORTABLE CHANGEABLE MESSAGE SIGN TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER

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

NOTE :
 W20-1 (VARIOUS DISTANCE) ADVANCE SIGNS
 TO BE REPLACED AS NEEDED BY EQUIVALENT W20-5 SIGNS
 AS WORKING AREA SHIFTS.

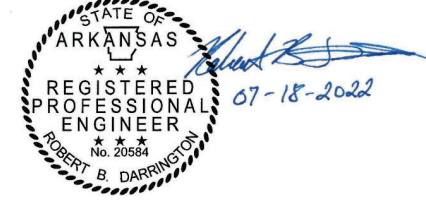
CONSTRUCTION SIGNS FOR ENTRANCE RAMP	
ROAD WORK AHEAD (W20-1)	3



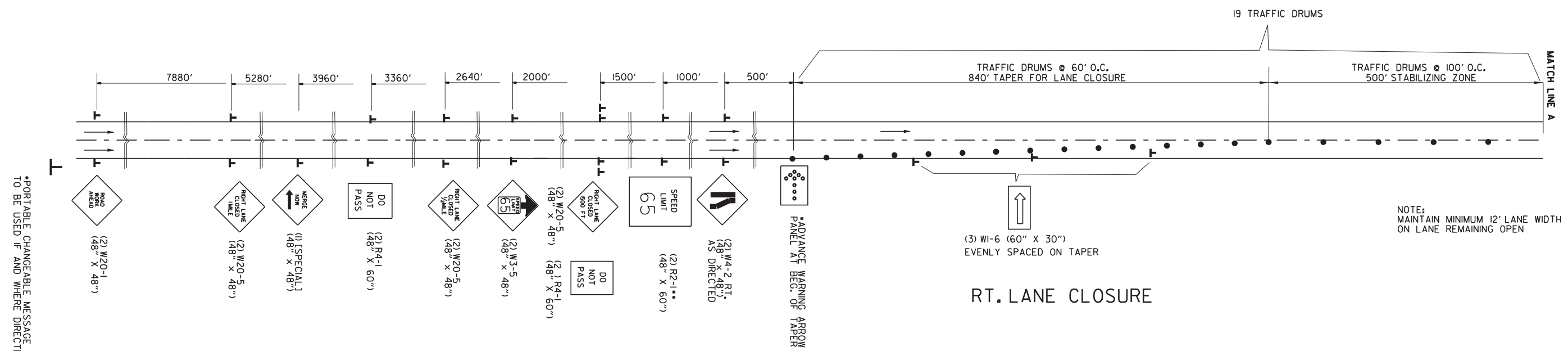
ADVANCE SIGNS AT BEGINNING AND END OF JOB
 ALL STAGES

MAINTENANCE OF TRAFFIC DETAILS
 ADVANCE SIGNS AT SITE ENDS

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 Robert.Darrington
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DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	012397	12	23
MAINTENANCE OF TRAFFIC DETAILS						



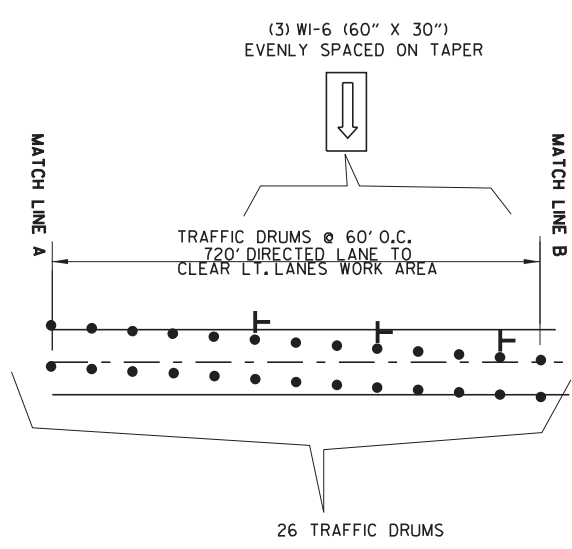
NOTE: MAINTAIN MINIMUM 12' LANE WIDTH ON LANE REMAINING OPEN

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

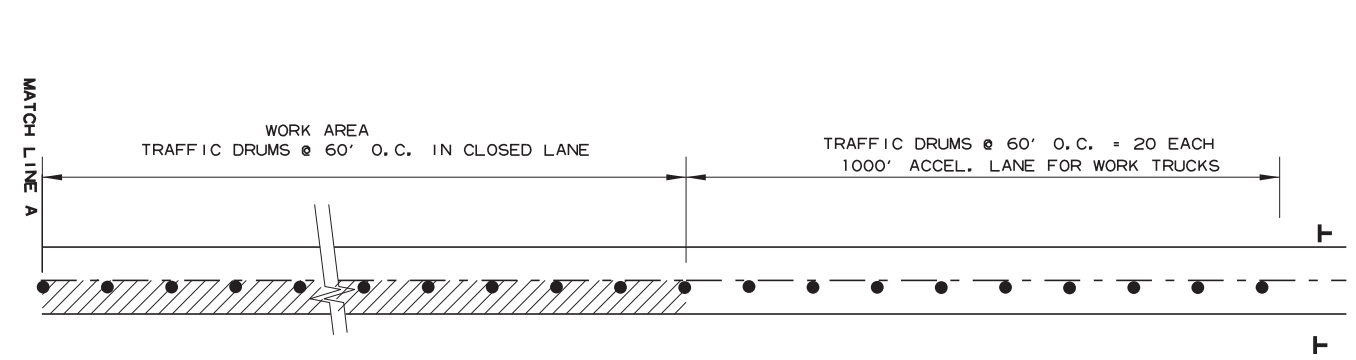
*TO BE PLACED AT MINIMUM OFFSET OF 12' FROM EDGE OF THROUGH LANE OF TRAFFIC, OR FURTHER IF PRACTICAL.

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

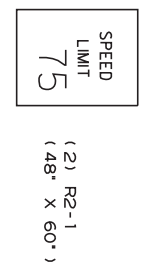
** SPEED LIMIT SIGNS SHALL MATCH PERMANENT SPEED LIMIT.



DIVERSION FOR LT. LANE WORK ZONE



DIVERSION FOR RT. LANE WORK ZONE

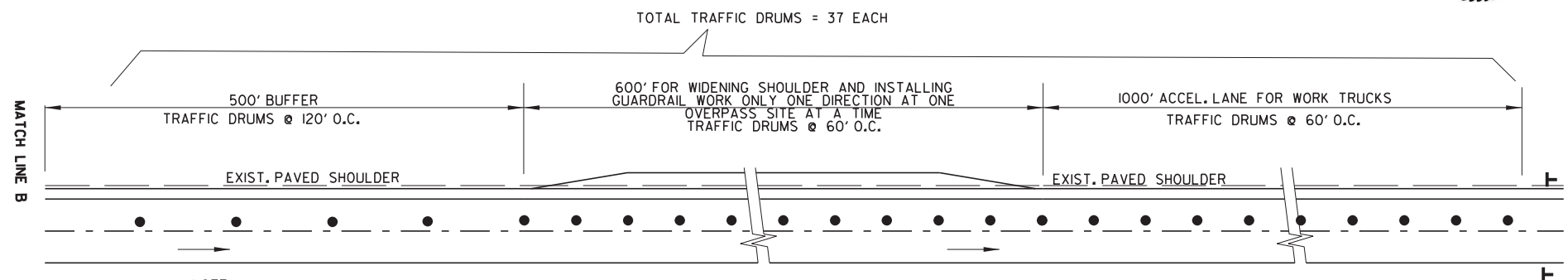


MAINTENANCE OF TRAFFIC DETAILS LANE CLOSURE

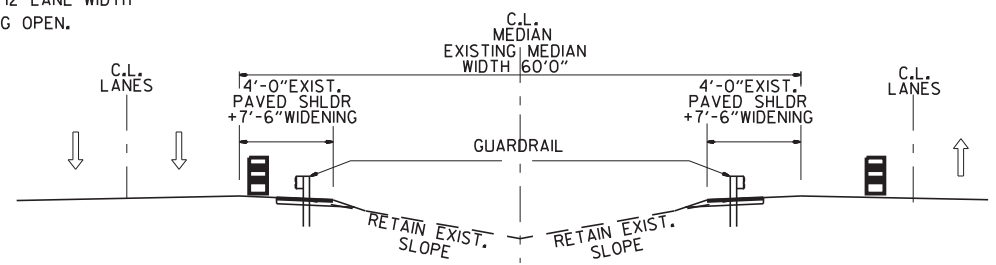
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DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	012397	13	23
MAINTENANCE OF TRAFFIC DETAILS						



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

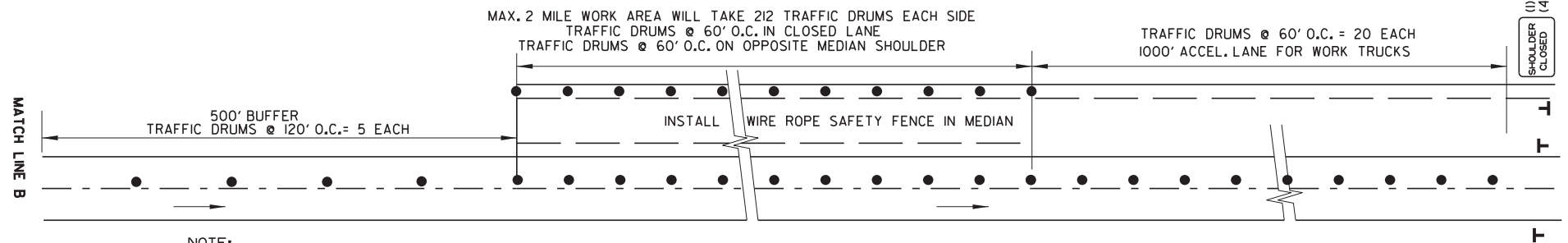


MOVABLE WORK ZONE FOR GUARDRAIL INSTALLATION

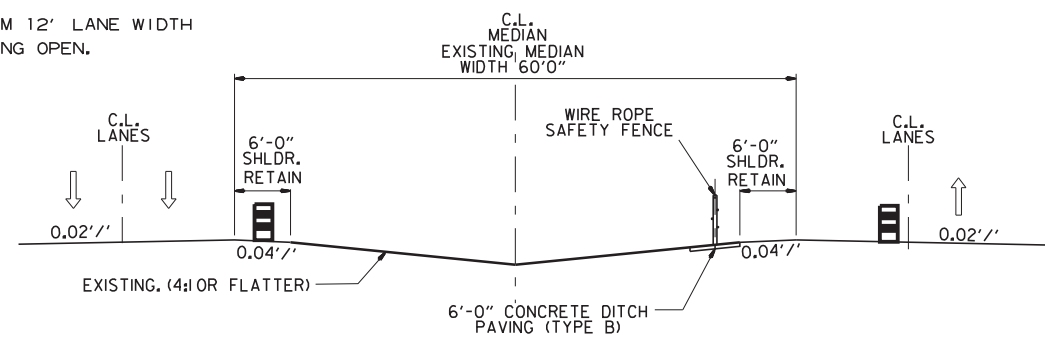
SPEED
 LIMIT
 75

•(2) R2-1
 (48" X 60")

NOTE: REFER TO SP-MAINTENANCE OF TRAFFIC FOR LANE CLOSURE LIMITATIONS AND RESTRICTIONS.
 QUANTITY OF TRAFFIC DRUMS PROVIDED IN THE CONTRACT IS THE MAXIMUM NUMBER REQUIRED
 FOR ONE LANE CLOSURE.



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



MOVABLE WORK ZONE FOR WRSF INSTALLATION

(1) RSP-1
 (48" X 30")
 SHOULDER
 CLOSED

SPEED
 LIMIT
 75

•(2) R2-1
 (48" X 60")

•SPEED LIMIT SIGNS SHALL MATCH
 PERMANENT SPEED LIMIT.

NOTE: CONTRACTOR MUST UTILIZE ENTRY/EXIT LOCATION AS SHOWN ON THE PLANS.

ADVANCE WARNING SIGNS AND DEVICES

Table with columns: SIGN NUMBER, DESCRIPTION, SIGN SIZE, STAGE I, MAXIMUM NUMBER REQUIRED, TOTAL SIGNS REQUIRED, TRAFFIC DRUMS, ADVANCE WARNING ARROW PANEL, PORTABLE CHANGEABLE MESSAGE SIGN. Includes sub-totals for CRAWFORD, FRANKLIN, and POPE counties.

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

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

EARTHWORK

Table with columns: LOG MILE, LOCATION / DESCRIPTION, UNCLASSIFIED EXCAVATION, COMPACTED EMBANKMENT. Includes sub-totals for CRAWFORD, FRANKLIN, and POPE counties.

NOTE: EARTHWORK QUANTITIES SHALL BE PAID AS PLAN QUANTITY.

REMOVAL AND DISPOSAL OF ITEMS

Table with columns: LOG MILE, LOCATION, IMPACT ATTENUATION BARRIER, TERMINAL ANCHOR POST, WRSF. Includes sub-totals for CRAWFORD, FRANKLIN, and POPE counties.

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

* EXISTING TYPE I TERMINAL TO BE REMOVED AND EXISTING GUARDRAIL TO BE MAINTAINED AND EXTENDED.

Summary table with columns: DATE REVISED, STATE, JOB NO., SHEET NO., TOTAL SHEETS. Values: 6, ARK., 012397, 14, 23.



GUARDRAIL

Table with columns: LOG MILE, COUNTY, LOCATION, GUARDRAIL (TYPE A), GUARDRAIL TERMINAL (TYPE 2), TERMINAL ANCHOR POST (TYPE 1). Includes sub-totals for CRAWFORD, FRANKLIN, and POPE counties.

TRENCHING AND SHOULDER PREPARATION

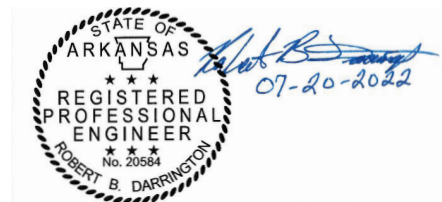
Table with columns: LOG MILE, COUNTY, LOCATION, TRENCHING AND SHOULDER PREPARATION STATION. Includes sub-totals for CRAWFORD, FRANKLIN, and POPE counties.

QUANTITIES

Vertical text on the left margin: 4:49:17 PM, 7/20/2022, Robert.L.Darrington, c:\bms\bridge\for-mer-pw\Robert.L.Darrington\bridge\for-mer.com\dms\031\AR-012397_Quantities_01.dgn

4:43:01 PM
 7/20/2022
 Robert.L.Darrington
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DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	012397	15	23
QUANTITIES						



EROSION CONTROL

LOG MILE	LOG MILE	SITE NUMBER	COUNTY	LOCATION	PERMANENT EROSION CONTROL					TEMPORARY EROSION CONTROL								
					SEEDING	LIME	MULCH COVER	WATER	SECOND SEEDING APPLICATION	TEMPORARY SEEDING	MULCH COVER	WATER	FILTER SOCK (18")	SAND BAG DITCH CHECKS	DROP INLET FILTER SOCK (18")	• SEDIMENT REMOVAL & DISPOSAL		
					ACRE	TON	ACRE	M.GAL.	ACRE	ACRE	ACRE	M.GAL.	(E-3) LIN. FT.	(E-5) BAG	(E-13)	CU. YD.		
1.174	6.594	SITE 1	CRAWFORD	C.L. I-40, SEC. II, NORTH OF FORT SMITH														
1.334	1.348			LT (WB) OF C.L. I-40, SEC. II, NORTH OF FORT SMITH	0.03	0.06	0.03	3.1	0.03	0.03	0.03	0.6						
1.557	1.571			LT (WB) OF C.L. I-40, SEC. II, NORTH OF FORT SMITH	0.03	0.06	0.03	3.1	0.03	0.03	0.03	0.6						
1.936	1.960			LT (WB) OF C.L. I-40, SEC. II, NORTH OF FORT SMITH	0.06	0.12	0.06	6.1	0.06	0.06	0.06	1.2						
4.185	4.199			RT (EB) OF C.L. I-40, SEC. II, NORTH OF FORT SMITH	0.03	0.06	0.03	3.1	0.03	0.03	0.03	0.6						
4.289	4.303			RT (EB) OF C.L. I-40, SEC. II, NORTH OF FORT SMITH	0.03	0.06	0.03	3.1	0.03	0.03	0.03	0.6						
4.909	4.924			RT (EB) OF C.L. I-40, SEC. II, NORTH OF FORT SMITH	0.03	0.06	0.03	3.1	0.03	0.03	0.03	0.6						
5.473	5.487			RT (EB) OF C.L. I-40, SEC. II, NORTH OF FORT SMITH	0.03	0.06	0.03	3.1	0.03	0.03	0.03	0.6						
6.015	6.134			RT (EB) OF C.L. I-40, SEC. II, N 16TH ST OVERPASS	0.29	0.58	0.29	29.6	0.29	0.29	0.29	5.9						
6.076	6.176			LT (WB) OF C.L. I-40, SEC. II, N 16TH ST OVERPASS	0.24	0.48	0.24	24.5	0.24	0.24	0.24	4.9						
ENTIRE PROJECT TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER.					0.19	0.38	0.19	19.4	0.19	0.19	3.9	1040	308	60	27			
CRAWFORD COUNTY SUBTOTALS:					0.96	1.92	0.96	98.2	0.96	0.96	19.5	5190	1518	270	132			
29.218	30.191	SITE 2	FRANKLIN	C.L. I-40, SEC. 12, WEST OF HWY. 72 TO EAST OF HWY. 72								750	352	150	30			
29.226	29.249			RT (EB) OF C.L. I-40, SEC. 12, WEST OF HWY. 72 OVERPASS	0.06	0.12	0.06	6.1	0.06	0.06	1.2							
29.291	29.329			RT OF I-40 EASTBOUND, SEC. 12, HWY. 72, OVERPASS	0.09	0.18	0.09	9.2	0.09	0.09	1.8							
30.160	30.183	SITE 3	FRANKLIN	LT (WB) OF C.L. I-40, SEC. 12, EAST OF HWY. 72 OVERPASS	0.06	0.12	0.06	6.1	0.06	0.06	1.2							
31.807	31.831			RT (EB) OF C.L. I-40, SEC. 12, WEST OF COUNTY RD 68 TO EAST OF COUNTY RD 68	0.06	0.12	0.06	6.1	0.06	0.06	1.2							
31.799	33.000	SITE 4	FRANKLIN	C.L. I-40, SEC. 12, WEST OF COUNTY RD 68 TO EAST OF COUNTY RD 68								500	352	180	28			
33.270	34.092			C.L. I-40, SEC. 12, WEST OF HWY. 23										700	374	180	31	
34.060	34.084	SITE 5	FRANKLIN	LT (WB) OF C.L. I-40, SEC. 12, WEST OF HWY. 23	0.06	0.12	0.06	6.1	0.06	0.06	1.2							
37.250	38.304			C.L. I-40, SEC. 12, WEST OF HWY. 219 TO EAST OF HWY. 219										750	330	60	25	
40.490	43.892	SITE 6	FRANKLIN	C.L. I-40, SEC. 12, WEST OF HWY. 186 TO EAST OF HWY. 186								2750	1078	330	89			
ENTIRE PROJECT TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER.					0.08	0.16	0.08	8.2	0.08	0.08	1.6	1370	638	240	52			
FRANKLIN COUNTY SUBTOTALS:					0.41	0.82	0.41	41.8	0.41	0.41	8.2	6820	3124	1140	255			
43.901	45.705	SITE 7	JOHNSON	C.L. I-40, SEC. 21, WEST OF HWY. 164									682	420	47			
70.454	70.680	SITE 8	JOHNSON	C.L. I-40, SEC. 21, EAST OF HWY. 359								250	88	60	9			
ENTIRE PROJECT TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER.												70	198	120	15			
JOHNSON COUNTY SUBTOTALS:												320	968	600	71			
73.460	74.422	SITE 9	POPE	C.L. I-40, SEC. 22, WEST OF HWY. 333 TO EAST PF HWY. 333								750	264	60	22			
74.390	74.414	SITE 10		LT (WB) OF C.L. I-40, SEC. 22, EAST OF HWY. 333	0.06	0.12	0.06	6.1	0.06	0.06	1.2							
75.310	75.496			C.L. I-40, SEC. 22, NORTH OF U.S. HWY. 333									350	66	30	8		
75.465	75.488	SITE 11		LT (WB) OF C.L. I-40, SEC. 22, EAST OF HWY. 333	0.06	0.12	0.06	6.1	0.06	0.06	1.2							
76.397	76.794			C.L. I-40, SEC. 22, WEST OF MILL CREEK RD									250	110		8		
77.772	78.359	SITE 12		C.L. I-40, SEC. 22, EAST OF DWIGHT MISSION DR OVERPASS										176	60	11		
78.349	78.372			LT (WB) OF C.L. I-40, SEC. 22, EAST OF DWIGHT MISSION DR OVERPASS	0.06	0.12	0.06	6.1	0.06	0.06	1.2							
85.942	86.652	SITE 13		C.L. I-40, SEC. 22, EAST OF OLD COVE RD										308	180	21		
89.676	92.958			C.L. I-40, SEC. 22, EAST OF HWY. 363 OVERPASS										924	360	56		
90.144	90.167	SITE 14		LT (WB) OF I-40, SEC. 22, EAST OF HWY. 363 OVERPASS	0.06	0.12	0.06	6.1	0.06	0.06	1.2							
91.914	91.937		LT (WB) OF I-40, SEC. 22, EAST OF HWY. 363 OVERPASS	0.06	0.12	0.06	6.1	0.06	0.06	1.2								
ENTIRE PROJECT TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER.					0.08	0.16	0.08	8.2	0.08	0.08	1.6	350	462	180	32			
POPE COUNTY SUBTOTALS:					0.38	0.76	0.38	38.7	0.38	0.38	7.6	1700	2310	870	158			
TOTALS:					1.75	3.50	1.75	178.7	1.75	1.75	35.3	14030	7920	2880	616			

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

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

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

CONCRETE DITCH PAVING

Main data table for CONCRETE DITCH PAVING with columns: LOG MILE, LOG MILE, SITE NUMBER, COUNTY, LOCATION, LENGTH, "W", CONC. DITCH PAVING, SOLID SODDING, WATER. Includes subtotals for CRAWFORD and FRANKLIN counties.

WIRE ROPE SAFETY FENCE (POST REPAIR)

Summary table for WIRE ROPE SAFETY FENCE (POST REPAIR) with columns: LOG MILE, LOG MILE, WRSF (POST REPAIR), ENTIRE, PROJECT, TOTAL.

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



Header table with columns: DATE REVISED, DATE REVISED, FED. RD. DIST. NO., STATE, JOB NO., SHEET NO., TOTAL SHEETS. Values: 6, ARK., 012397, 16, 23.

QUANTITIES

CONCRETE DITCH PAVING, CONT.

Continuation of CONCRETE DITCH PAVING data for JOHNSON and POPE counties, including subtotals and a basis of estimate for water: 12.6 GAL. / SQ. YD. OF SOLID SODDING.

WIRE ROPE SAFETY FENCE

Main data table for WIRE ROPE SAFETY FENCE with columns: LOG MILE, LOG MILE, SITE NUMBER, COUNTY, LOCATION, WIRE ROPE SAFETY FENCE, WRSF ANCHOR, WRSF MAINTENANCE MATERIALS LUMP SUM.

THIS ITEM SHOWN FOR INFORMATION ONLY

QUANTITIES

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	012397	18	23
QUANTITIES						



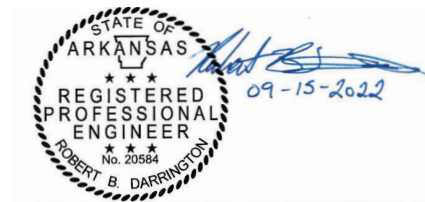
BASE AND SURFACING, CONT.

LOG MILE	LOG MILE	SITE NUMBER	COUNTY	LOCATION	LENGTH FEET	AGGREGATE BASE COURSE (CLASS 7)		ACHM SURFACE COURSE (1/2")			
						TON / STATION	TON	AVG. WID. FEET	SO.YD.	POUND / SO.YD.	PG 64-22 TON
MAIN LANES											
43.901	45.705	SITE 7	JOHNSON	LT (WB) OF C.L. I-40, SEC. 21	9525.12	8.00	762.01	2.00	2116.69	220.00	232.84
70.454	70.680	SITE 8		RT (EB) OF C.L. I-40, SEC. 21	1193.28	8.00	95.46	2.00	265.17	220.00	29.17
* ENTIRE PROJECT TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER.							43.00		120.00		14.00
JOHNSON COUNTY (DISTRICT 8) SUBTOTALS:							900.47		2501.86		276.01
MAIN LANES											
73.460	73.848	SITE 9	POPE	LT (WB) OF C.L. I-40, SEC. 22	2048.64	8.00	163.89	2.00	455.25	220.00	50.08
74.047	74.379			LT (WB) OF C.L. I-40, SEC. 22	1752.96	8.00	140.24	2.00	389.55	220.00	42.85
75.310	75.454	SITE 10	POPE	LT (WB) OF C.L. I-40, SEC. 22	760.32	8.00	60.83	2.00	168.96	220.00	18.59
76.397	76.794	SITE 11		LT (WB) OF C.L. I-40, SEC. 22	2096.16	8.00	167.69	2.00	465.81	220.00	51.24
77.801	78.338	SITE 12	POPE	LT (WB) OF C.L. I-40, SEC. 22	2835.36	8.00	226.83	2.00	630.08	220.00	69.31
85.942	86.652	SITE 13		LT (WB) OF C.L. I-40, SEC. 22	3748.80	8.00	299.90	2.00	833.07	220.00	91.64
89.676	90.133	SITE 14	POPE	LT (WB) OF C.L. I-40, SEC. 22	2412.96	8.00	193.04	2.00	536.21	220.00	58.98
90.186	91.903			LT (WB) OF C.L. I-40, SEC. 22	9065.76	8.00	725.26	2.00	2014.61	220.00	221.61
91.955	92.958			LT (WB) OF C.L. I-40, SEC. 22	5295.84	8.00	423.67	2.00	1176.85	220.00	129.45
ADDITIONAL FOR GUARDRAIL WIDENING											
74.379	74.388	SITE 9	POPE	LT (WB) OF C.L. I-40, SEC. 22, SHLDR TRANSITION	48.00	25.50	12.24	6.00	32.00	220.00	3.52
74.388	74.402			LT (WB) OF C.L. I-40, SEC. 22, OVERLAP WIDENING	70.00	35.25	24.68	10.00	77.78	220.00	8.56
74.402	74.405	SITE 10	POPE	LT (WB) OF C.L. I-40, SEC. 22, TAPER WIDENING	15.00	32.50	4.88	8.75	14.58	220.00	1.60
74.405	74.416			LT (WB) OF C.L. I-40, SEC. 22, NORMAL WIDENING	60.00	29.50	17.70	7.50	50.00	220.00	5.50
74.416	74.422	SITE 12	POPE	LT (WB) OF C.L. I-40, SEC. 22, SHLDR TRANSITION	33.00	21.75	7.18	4.75	17.42	220.00	1.92
75.454	75.463			LT (WB) OF C.L. I-40, SEC. 22, SHLDR TRANSITION	48.00	25.50	12.24	6.00	32.00	220.00	3.52
75.463	75.476	SITE 14	POPE	LT (WB) OF C.L. I-40, SEC. 22, OVERLAP WIDENING	70.00	35.25	24.68	10.00	77.78	220.00	8.56
75.476	75.479			LT (WB) OF C.L. I-40, SEC. 22, TAPER WIDENING	15.00	32.50	4.88	8.75	14.58	220.00	1.60
75.479	75.490	SITE 12	POPE	LT (WB) OF C.L. I-40, SEC. 22, NORMAL WIDENING	60.00	29.50	17.70	7.50	50.00	220.00	5.50
75.490	75.496			LT (WB) OF C.L. I-40, SEC. 22, SHLDR TRANSITION	33.00	21.75	7.18	4.75	17.42	220.00	1.92
78.338	78.347	SITE 14	POPE	LT (WB) OF C.L. I-40, SEC. 22, SHLDR TRANSITION	48.00	25.50	12.24	6.00	32.00	220.00	3.52
78.347	78.360			LT (WB) OF C.L. I-40, SEC. 22, OVERLAP WIDENING	70.00	35.25	24.68	10.00	77.78	220.00	8.56
78.360	78.363	SITE 14	POPE	LT (WB) OF C.L. I-40, SEC. 22, TAPER WIDENING	15.00	32.50	4.88	8.75	14.58	220.00	1.60
78.363	78.374			LT (WB) OF C.L. I-40, SEC. 22, NORMAL WIDENING	60.00	29.50	17.70	7.50	50.00	220.00	5.50
78.374	78.380	SITE 14	POPE	LT (WB) OF C.L. I-40, SEC. 22, SHLDR TRANSITION	33.00	21.75	7.18	4.75	17.42	220.00	1.92
90.133	90.142			LT (WB) OF C.L. I-40, SEC. 22, SHLDR TRANSITION	48.00	25.50	12.24	6.00	32.00	220.00	3.52
90.142	90.155	SITE 14	POPE	LT (WB) OF C.L. I-40, SEC. 22, OVERLAP WIDENING	70.00	35.25	24.68	10.00	77.78	220.00	8.56
90.155	90.158			LT (WB) OF C.L. I-40, SEC. 22, TAPER WIDENING	15.00	32.50	4.88	8.75	14.58	220.00	1.60
90.158	90.169	SITE 14	POPE	LT (WB) OF C.L. I-40, SEC. 22, NORMAL WIDENING	60.00	29.50	17.70	7.50	50.00	220.00	5.50
90.169	90.175			LT (WB) OF C.L. I-40, SEC. 22, SHLDR TRANSITION	33.00	21.75	7.18	4.75	17.42	220.00	1.92
91.903	91.912	SITE 14	POPE	LT (WB) OF C.L. I-40, SEC. 22, SHLDR TRANSITION	48.00	25.50	12.24	6.00	32.00	220.00	3.52
91.912	91.925			LT (WB) OF C.L. I-40, SEC. 22, OVERLAP WIDENING	70.00	35.25	24.68	10.00	77.78	220.00	8.56
91.925	91.928	SITE 14	POPE	LT (WB) OF C.L. I-40, SEC. 22, TAPER WIDENING	15.00	32.50	4.88	8.75	14.58	220.00	1.60
91.928	91.939			LT (WB) OF C.L. I-40, SEC. 22, NORMAL WIDENING	60.00	29.50	17.70	7.50	50.00	220.00	5.50
91.939	91.945	SITE 14	POPE	LT (WB) OF C.L. I-40, SEC. 22, SHLDR TRANSITION	33.00	21.75	7.18	4.75	17.42	220.00	1.92
* ENTIRE PROJECT TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER.							137.00		382.00		42.00
POPE COUNTY (DISTRICT 8) SUBTOTALS:							2871.75		8011.29		881.25
DISTRICT SUBTOTALS											
DISTRICT 4 SUBTOTALS							6293.60		17561.85		1932.78
DISTRICT 8 SUBTOTALS							3772.22		10513.15		1157.26
TOTALS:							10065.82		28075.00		3090.04

BASIS OF ESTIMATE:
DISTRICT 4 ACHM SURFACE COURSE (1/2").....94.4% MIN. AGGR.....5.6% ASPHALT BINDER
DISTRICT 8 ACHM SURFACE COURSE (1/2").....94.4% MIN. AGGR.....5.6% ASPHALT BINDER
MAXIMUM NUMBER OF GYRATIONS = 115 FOR PG 64-22

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

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
09-08-22		6	ARK.	012397	19	23
SUMMARY OF QUANTITIES AND REVISIONS						



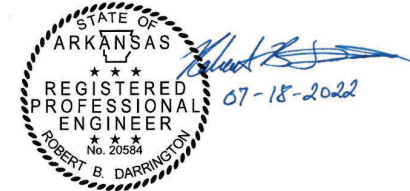
SUMMARY OF QUANTITIES

ITEM NUMBER	ITEM	QUANTITY	UNIT
SP & 202	REMOVAL AND DISPOSAL OF WIRE ROPE SAFETY FENCE	150	LIN. FT.
202	REMOVAL AND DISPOSAL OF TERMINAL ANCHOR POSTS	7	EACH
SP & 202	REMOVAL AND DISPOSAL OF IMPACT ATTENUATION BARRIER	3	EACH
SP, SS, & 210	UNCLASSIFIED EXCAVATION	1155	CU. YD.
SP & 210	COMPACTED EMBANKMENT	750	CU. YD.
SP & 215	TRENCHING AND SHOULDER PREPARATION	1065	STATION
SP, SS, & 303	AGGREGATE BASE COURSE (CLASS 7)	10066	TON
SP, SS, & 407	MINERAL AGGREGATE IN ACHM SURFACE COURSE (1/2")	2917	TON
SP, SS, & 407	ASPHALT BINDER (PG 64-22) IN ACHM SURFACE COURSE (1/2")	173	TON
601	MOBILIZATION	1.00	LUMP SUM
SP, SS, & 603	MAINTENANCE OF TRAFFIC	1.00	LUMP SUM
SS & 604	SIGNS	915	SQ. FT.
SS & 604	TRAFFIC DRUMS	494	EACH
SS & 604	ADVANCE WARNING ARROW PANEL	203	DAY
SP, SS, & 604	PORTABLE CHANGEABLE MESSAGE SIGN	87	WEEK
SP, SS, & 605	CONCRETE DITCH PAVING (TYPE B)	69997	SQ. YD.
SS & 617	GUARDRAIL (TYPE A)	1975	LIN. FT.
SS & 617	GUARDRAIL TERMINAL (TYPE 2)	12	EACH
SS & 617	TERMINAL ANCHOR POSTS (TYPE D)	19	EACH
SP	WIRE ROPE SAFETY FENCE	105951	LIN. FT.
SP	WIRE ROPE SAFETY FENCE MAINTENANCE MATERIALS	1.00	LUMP SUM
SP	WIRE ROPE SAFETY FENCE (POST REPAIR)	50	EACH
620	LIME	3.50	TON
620	SEEDING	1.75	ACRE
SS & 620	MULCH COVER	3.50	ACRE
620	WATER	505.9	M. GAL.
621	TEMPORARY SEEDING	1.75	ACRE
621	SAND BAG DITCH CHECKS	7920	BAG
621	SEDIMENT REMOVAL AND DISPOSAL	616	CU. YD.
SS & 621	FILTER SOCK (18")	16910	LIN. FT.
623	SECOND SEEDING APPLICATION	1.75	ACRE
624	SOLID SODDING	23169	SQ. YD.
635	ROADWAY CONSTRUCTION CONTROL	1.00	LUMP SUM

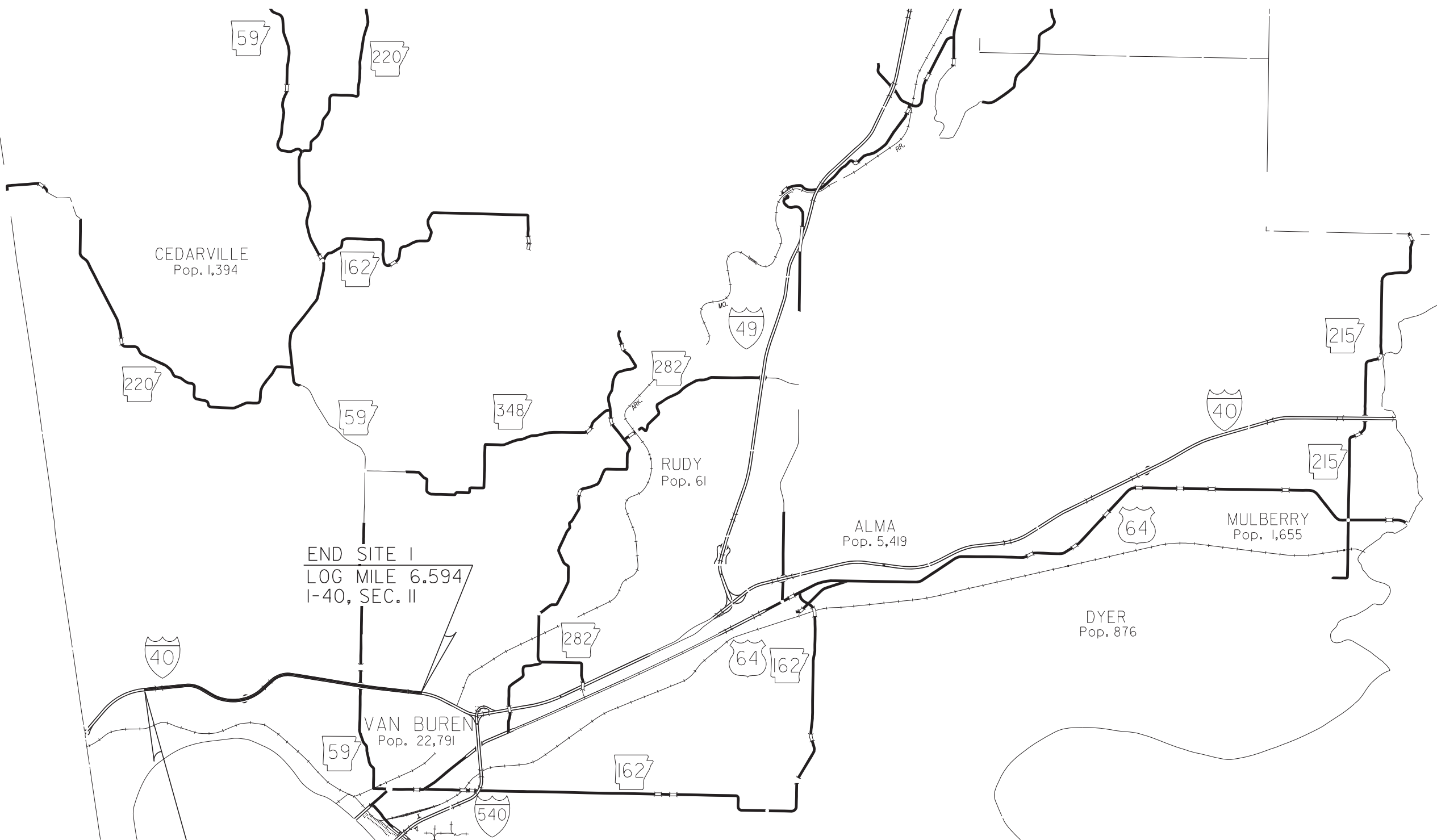
REVISIONS

DATE	REVISION	SHEET NUMBER
09/08/22	REVISED TRENCHING AND SHOULDER PREPARATION DEPTH, REVISED PRICE ADJUSTMENT FOR FUEL SPECIAL PROVISION.	3, 19

9:37:49 AM
7/18/2022
Robert.Darrington
c:\bms\bridge\farmer-pw\robert.darrington\bridge\farmer.com\dms\03\0\0\012397_SpecialDetails.dgn



DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	012397	20	23
CRAWFORD COUNTY PLAN						



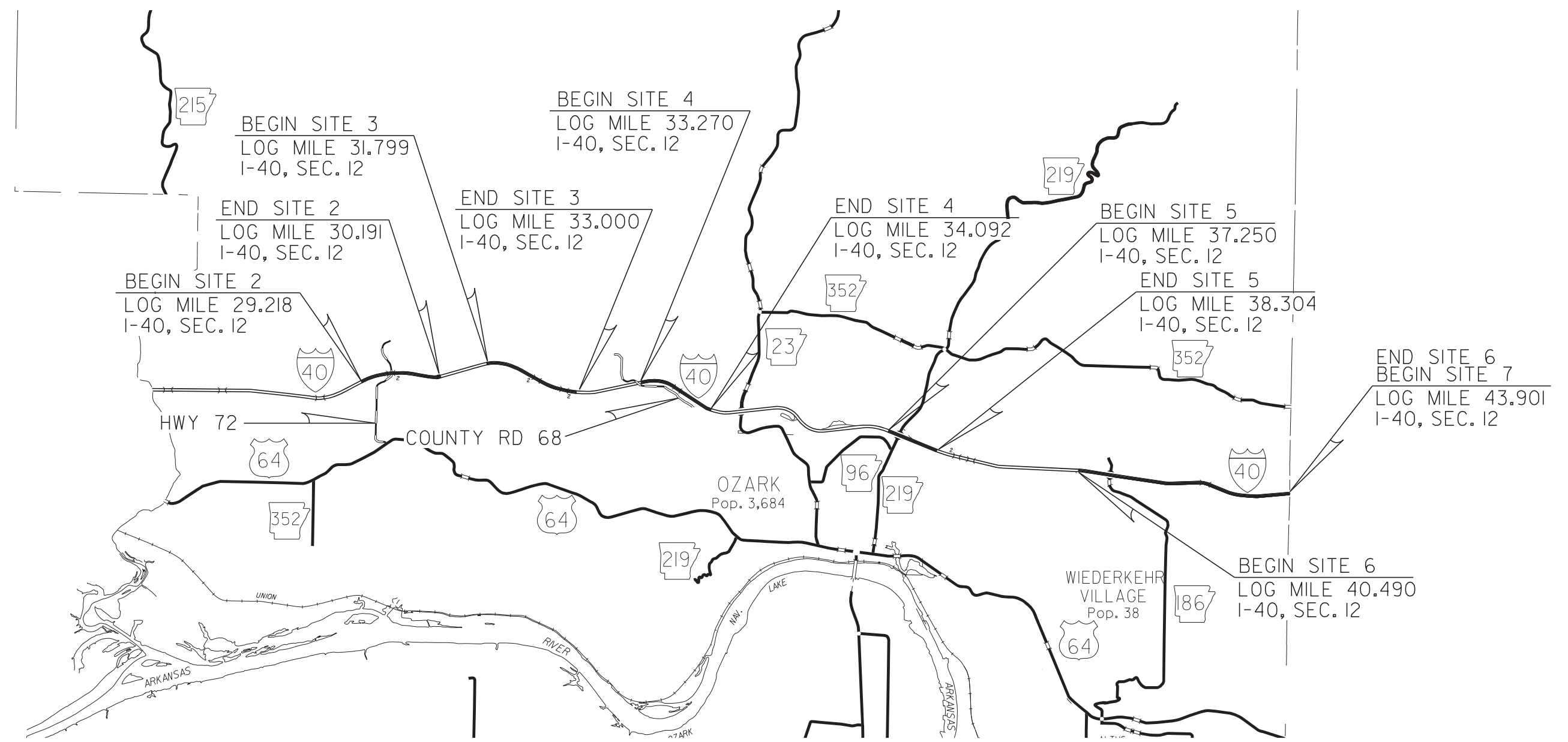
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BEGIN JOB 012397
LOG MILE 1.174
I-40, SEC. II

END SITE I
LOG MILE 6.594
I-40, SEC. II

SITE I
CRAWFORD COUNTY PLAN

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7/18/2022
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DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	012397	21	23
FRANKLIN COUNTY PLAN						

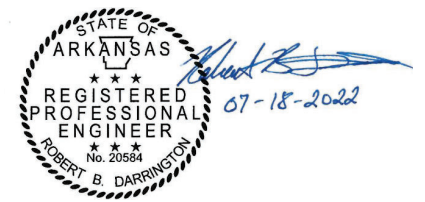


SITES 2-6
FRANKLIN COUNTY PLAN

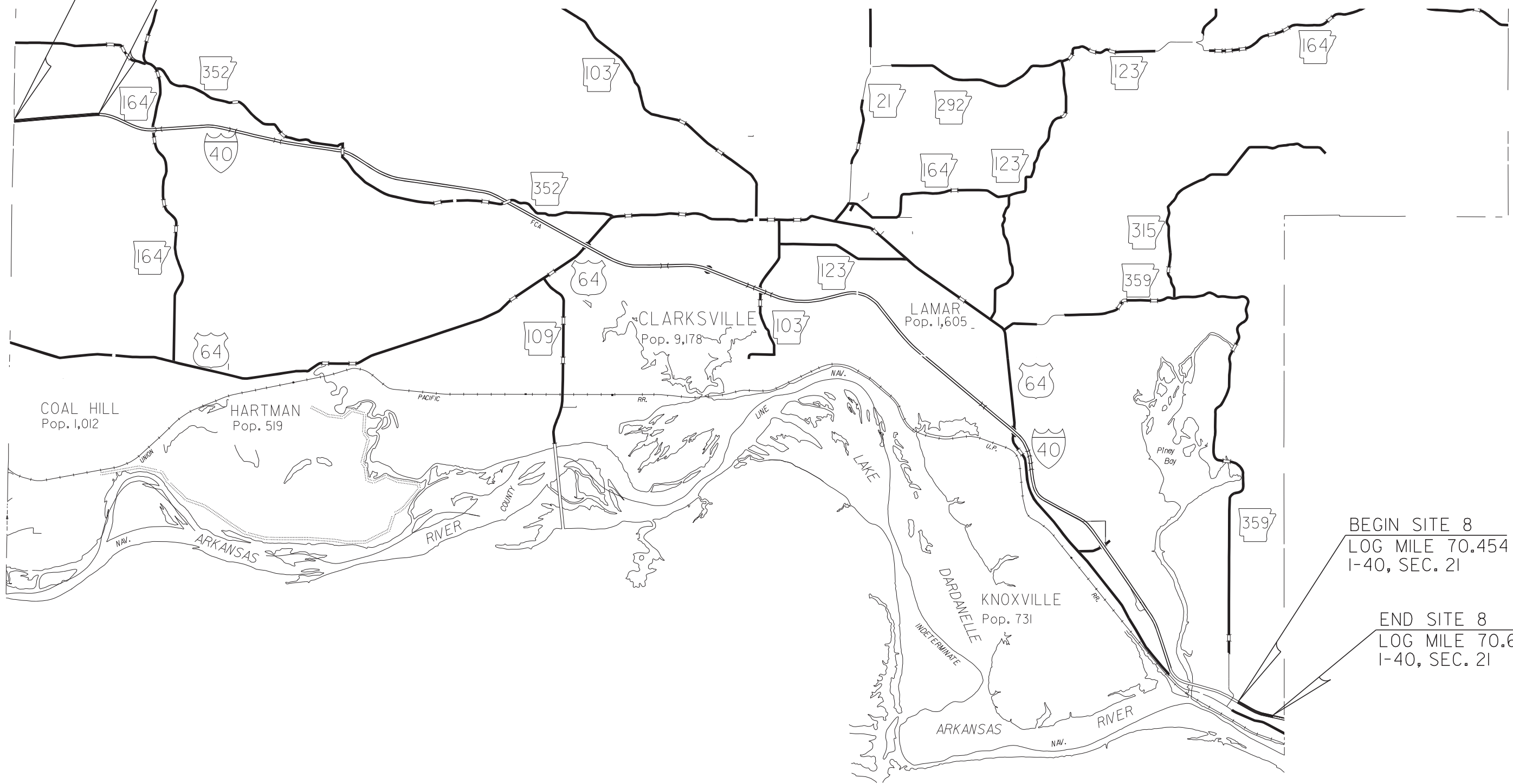
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LOG MILE 43.901
I-40, SEC. 21

END SITE 7
LOG MILE 45.705
I-40, SEC. 21



DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	012397	22	23
JOHNSON COUNTY PLAN						



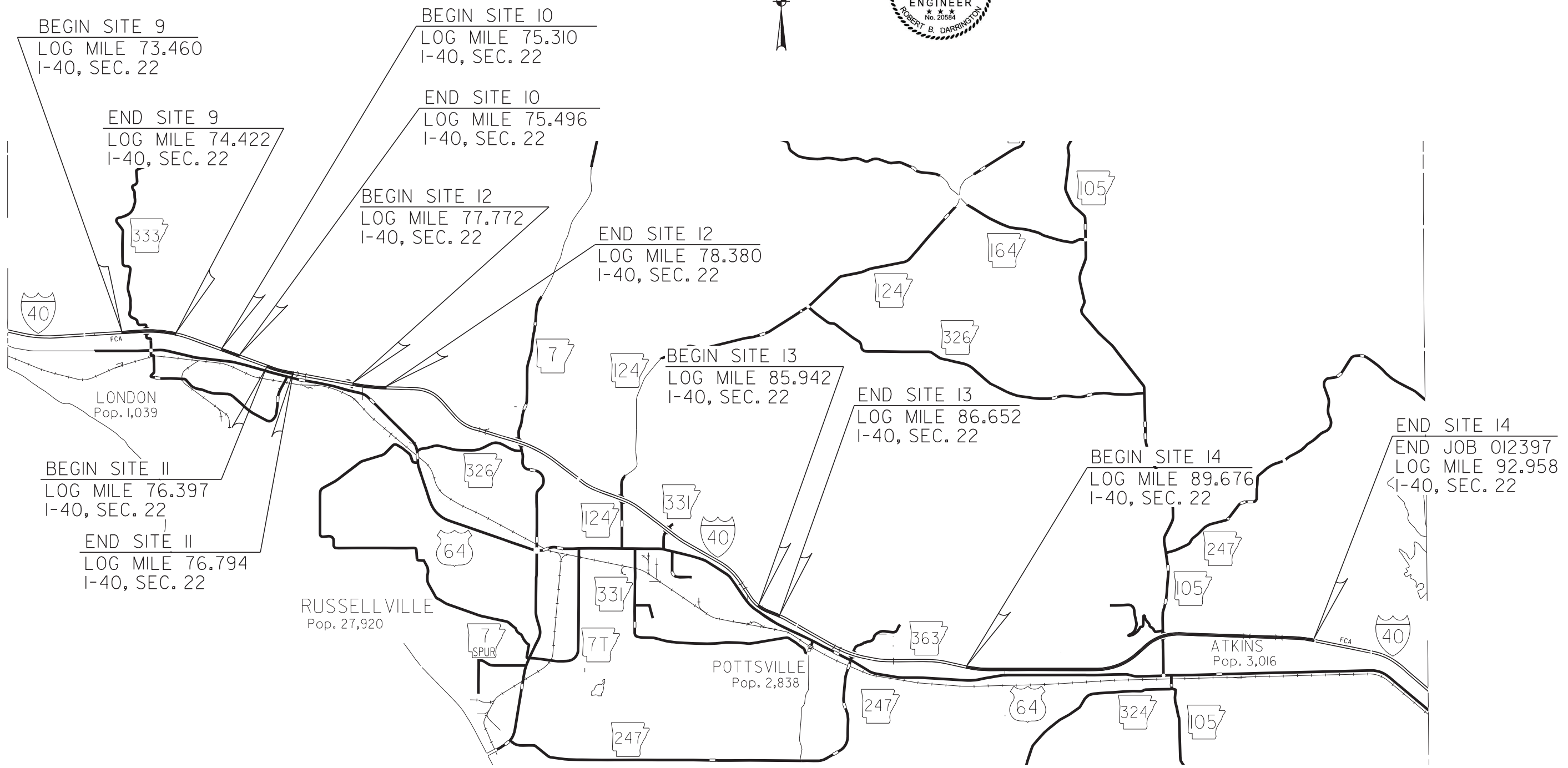
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I-40, SEC. 21

END SITE 8
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I-40, SEC. 21

SITE 7-8
JOHNSON COUNTY PLAN

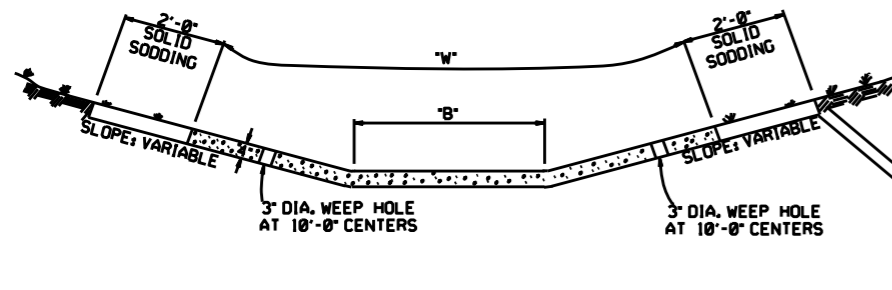
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Robert.Darrington
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DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	012397	23	23
POPE COUNTY PLAN						



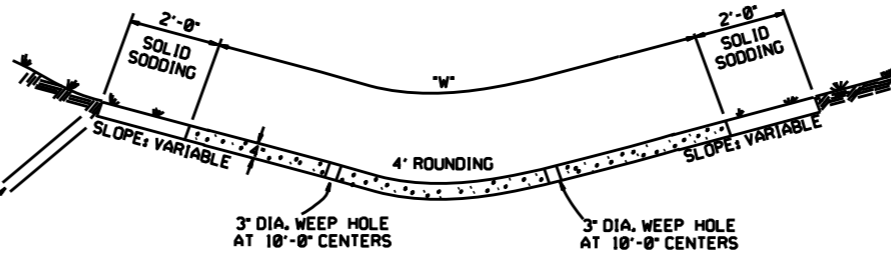
SITES 9-14
POPE COUNTY PLAN

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



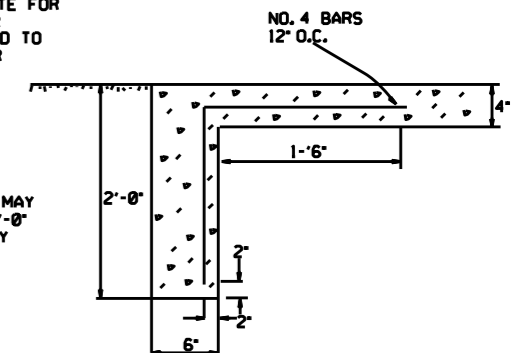
TYPE A

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."



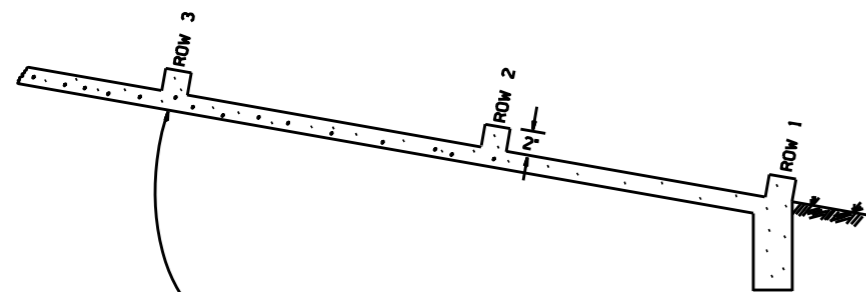
TOE WALL DETAIL FOR CONCRETE DITCH PAVING

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.

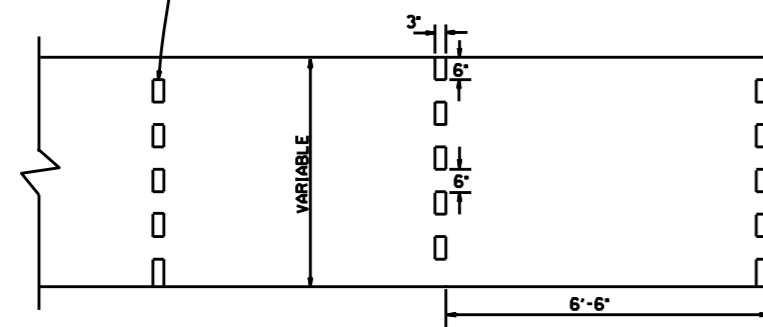
SOLID SOD ALONG DITCH PAVING TO BE PLACED WITHIN 14 DAYS OF DITCH PAVING CONSTRUCTION.

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.



NUMBER OF ELEMENTS PER ROW VARIES WITH WIDTH OF PAVING SPECIFIED

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



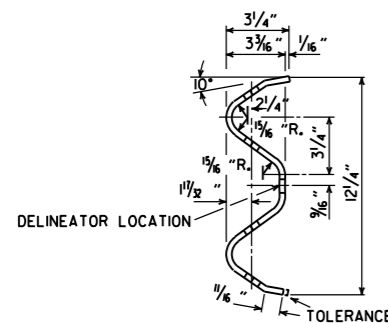
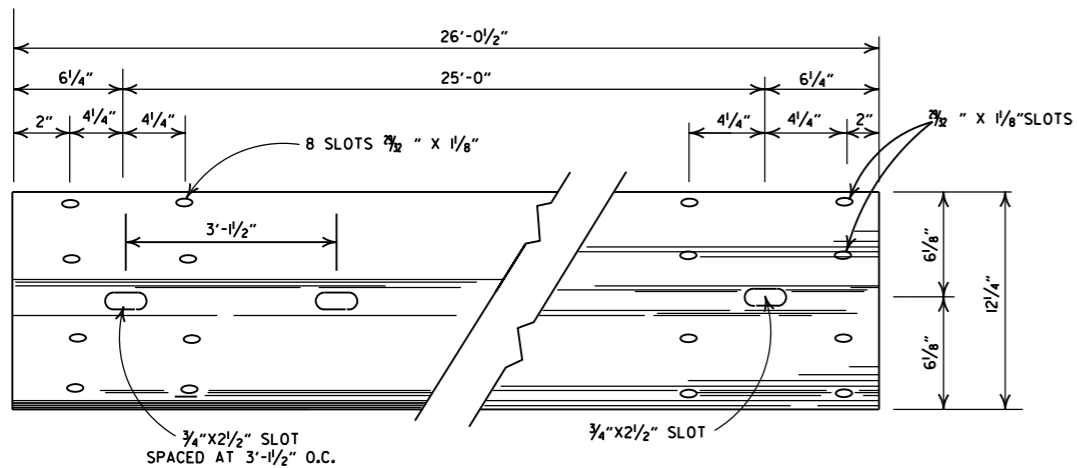
ENERGY DISSIPATORS (NO SCALE)

DATE	REVISION	DATE FILM'D
12-8-16	CORRECTED ENERGY DISSIPATOR DRAWING AND NOTE	
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.	632-1-9-87
11-3-86	ADDED NOTE TO ENERGY DISS.	639-12-1-86
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
	DATE	REVISION
		DATE FILM'D

ARKANSAS STATE HIGHWAY COMMISSION

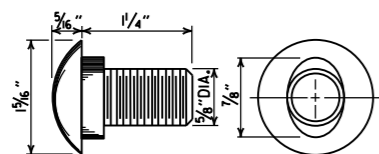
CONCRETE DITCH PAVING

STANDARD DRAWING CDP-1

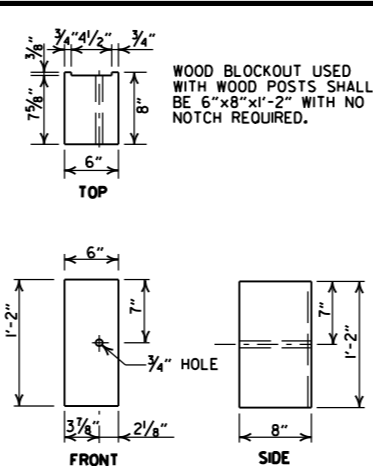
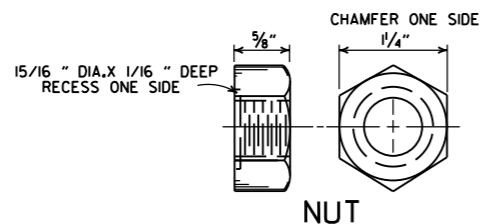
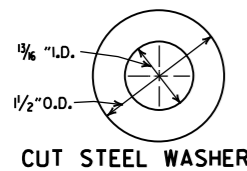


DETAILS OF W-BEAM GUARDRAIL

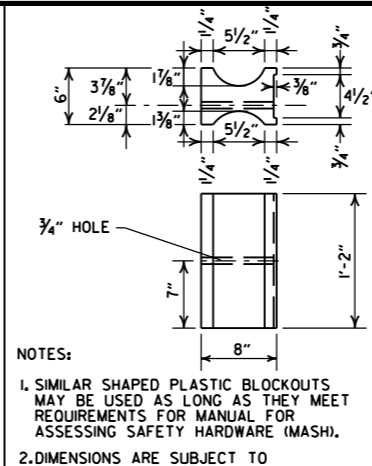
RAIL SECTION OF CLOSELY SIMILAR DIMENSIONS AND COMPARABLE STRENGTH MAY BE SUBSTITUTED IF APPROVED BY THE ENGINEER.



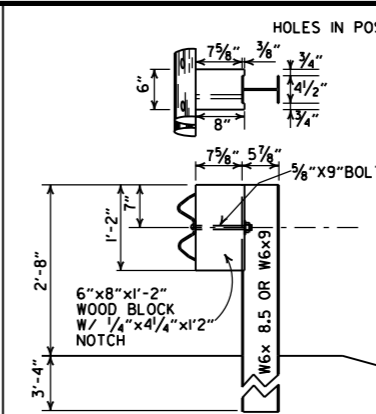
**SPLICE BOLT
POST BOLT - SAME EXCEPT LENGTH**



WOOD BLOCKOUT (W-BEAM)

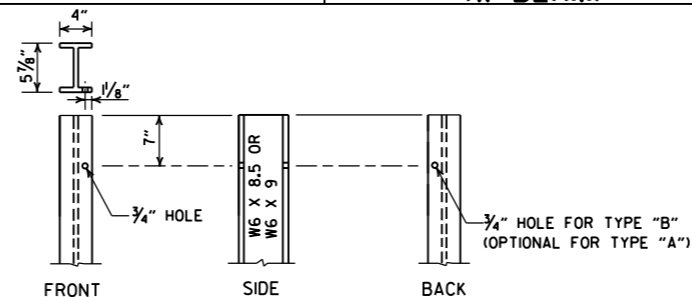
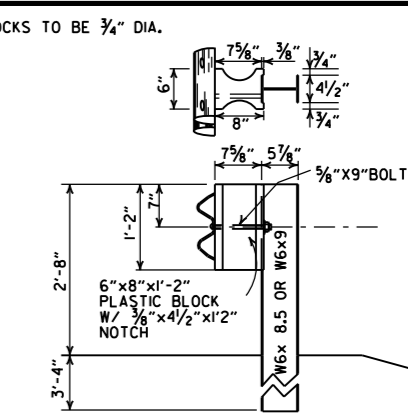


NOTES:
1. SIMILAR SHAPED PLASTIC BLOCKOUTS MAY BE USED AS LONG AS THEY MEET REQUIREMENTS FOR MANUAL FOR ASSESSING SAFETY HARDWARE (MASH).
2. DIMENSIONS ARE SUBJECT TO MANUFACTURERS TOLERANCES.

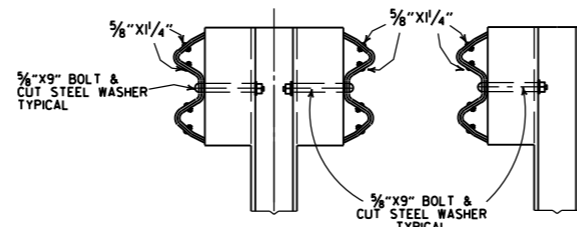


WOOD BLOCKOUT CONNECTIONS

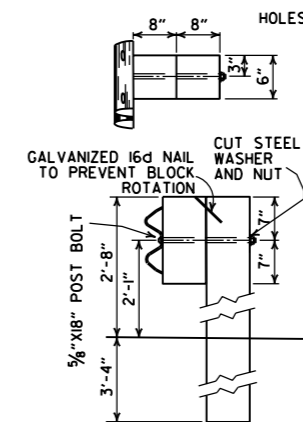
DETAILS OF STEEL LINE POST CONNECTIONS (W-BEAM)



STEEL POST

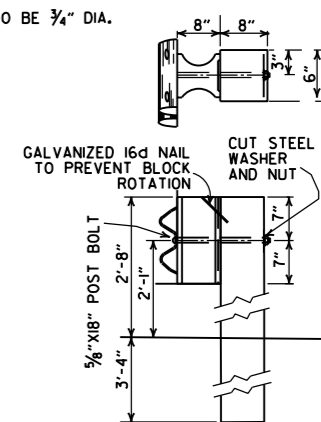


DETAILS OF STEEL LINE POST CONNECTIONS (W-BEAM)



WOOD BLOCKOUT CONNECTIONS

DETAILS OF WOOD LINE POST CONNECTIONS (W-BEAM)



PLASTIC BLOCKOUT CONNECTIONS

-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 GUARDRAIL CONTINUES, THE INTERMEDIATE SECTIONS SHALL HAVE A POST SPACING OF 6'-3" UNLESS OTHERWISE NOTED.

W-BEAM GUARDRAIL REPRESENTING INTERMEDIATE SECTIONS WILL BE MEASURED ALONG THE ROADWAY FACE FROM CENTERLINE OF POST TO CENTERLINE OF POST.

USE W-BEAM GUARDRAIL COMPONENTS OF SAME MATERIAL FOR ENTIRE JOB. FOR EXTENSIONS OR MODIFICATION OF EXISTING GUARDRAIL, W-BEAM GUARDRAIL 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 9.7f (1400 f) OR NO. 1 1350 f SOUTHERN PINE.

CONTRACTOR SHALL HAVE THE OPTION OF USING WOOD BLOCKOUTS FOR W-BEAM GUARDRAIL OR PLASTIC BLOCKOUTS, AS LONG AS BLOCKOUT USED MEETS REQUIREMENTS FOR MANUAL FOR ASSESSING SAFETY HARDWARE (MASH) FOR W-BEAM GUARDRAIL.

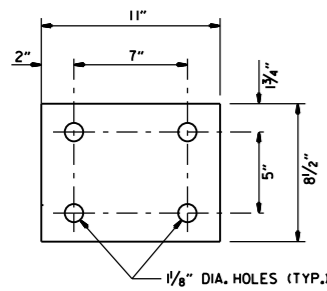
DELINEATORS SHALL BE MOUNTED AT 37.5' SPACING ON THE FRONT FACE OF THE GUARDRAIL. SPACING MAY BE REDUCED IN CURVES, AS DIRECTED BY THE ENGINEER. COLOR SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR DELINEATORS SHALL BE CONSIDERED INCLUDED IN THE PRICE BID PER LIN. FT. FOR GUARDRAIL.

05-19-22	REVISED GENERAL NOTES, ADDED DELINEATOR LOCATION.	
11-07-19	RENUMBERED AND RENAMED	
11-16-17	REVISED GENERAL NOTES AND RAISED GUARDRAIL HEIGHT 3"	
07-14-10	RAISED HEIGHT OF GUARDRAIL 1"	
10-15-09	ADDED REFERENCE TO MASH	
04-10-03	REVISED GENERAL NOTES	
08-22-02	REVISED DIMENSION ON WOOD & PLASTIC BLOCKOUT CONNECTIONS & STEEL POST	
11-16-01	REVISED WOOD BLOCKOUT & DETAILS OF WOOD LINE POST CONNECTIONS	
03-30-00	REMOVED GUARDRAIL AT BRIDGE ENDS	
01-12-00	ADDED PLASTIC BLOCKOUT	
08-12-98	REV. BLOCKOUTS TO WOOD, DELETED CONC. POST & REV. GENERAL NOTE, DELETED DET. OF GUARDRAIL REPLACE. BEHIND CURB & DET. OF POST PLACE. IN SOLID ROCK, & ADDED DETAILS OF STEEL LINE POST CONC. REMOVED BACK-UP PLATE, REVISED HOLES IN STEEL POLES	
04-03-97	REMOVED "LAP IN DIRECTION OF TRAFFIC" NOTE & PLACED ARROWS ON WASHERS	
10-18-96	REVISED WOOD POST NOTE	
06-02-94	ADDED ALT. STEEL POST SIZE	
08-05-93	REVISED STEEL POST SIZE	8-5-93
10-01-92	REDRAWN & REVISED	10-1-92
08-15-91	REVISED WASHER NOTE	8-15-91
08-02-90	REV. GEN. NOTE & DEPTH OF ANC. POST IN ROCK	8-2-90
07-15-88	REVISED SECTION 3 & GENERAL NOTES	
03-04-88	REV. ANCHOR POST ELEV. NOTES & POST IN ROCK	780-3-4-88
10-30-87	REVISED WOOD LINE POST DETAIL	546-10-30-87
10-09-87	REDRAWN & REVISED	802-10-9-87
DATE	REVISION	FILMED

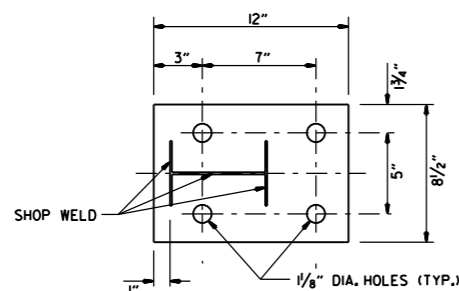
ARKANSAS STATE HIGHWAY COMMISSION

GUARDRAIL DETAILS

STANDARD DRAWING GR-6

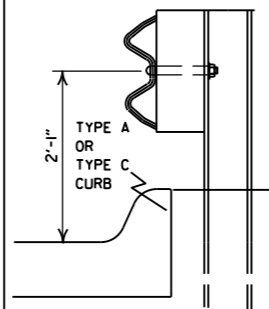


WASHER PLATE



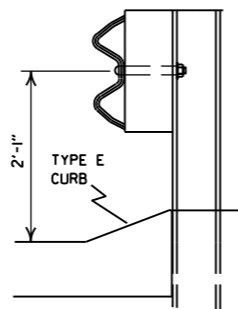
BASE PLATE

Note: Bolts, nuts, washers and plates shall be galvanized in accordance with Section 807 of the Standard Specifications.



FOR DESIGN SPEEDS OF 50 MPH OR LESS

ALIGN FACE OF GUARDRAIL WITH FACE OF CURB.

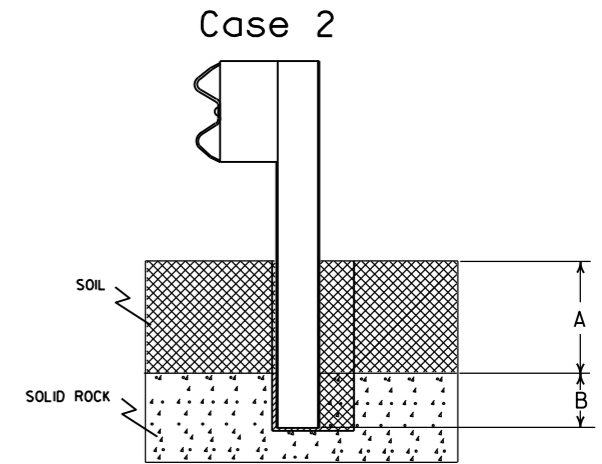
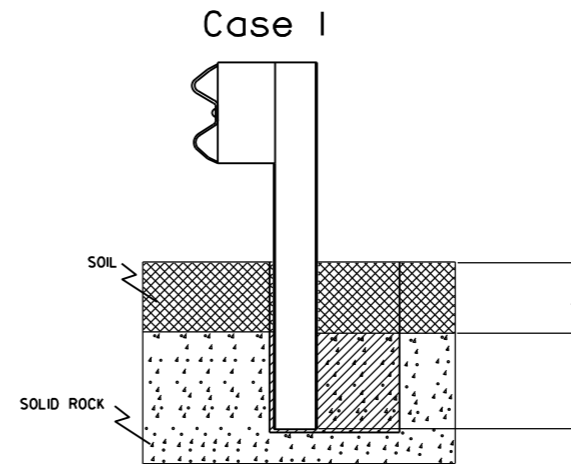


FOR DESIGN SPEEDS OF 55 MPH OR MORE

PLACE GUARDRAIL POSTS AGAINST BACK OF CURB.

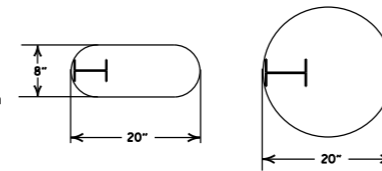
DETAIL OF GUARDRAIL PLACEMENT BEHIND CURB (W-BEAM)

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.



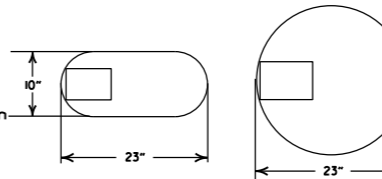
Plan View Steel Posts

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".

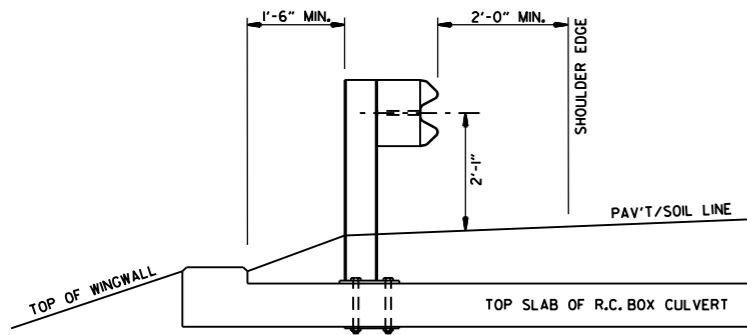
Zone A: Backfill according to Section 617.03(a).

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.

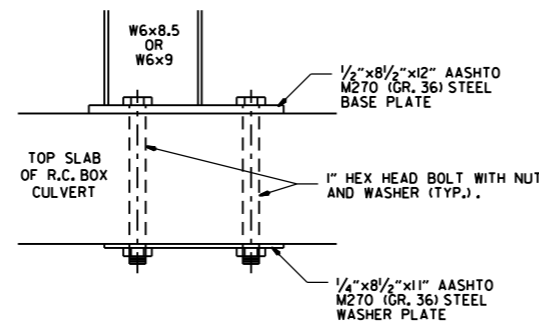
Notes: For overlying soil depths (A) ranging from 18" to 44", the depth of required drilling (B) is equal to either 12" or 44" minus the depth of soil whichever is less.

Zone A & B: Backfill according to Section 617.03(a).

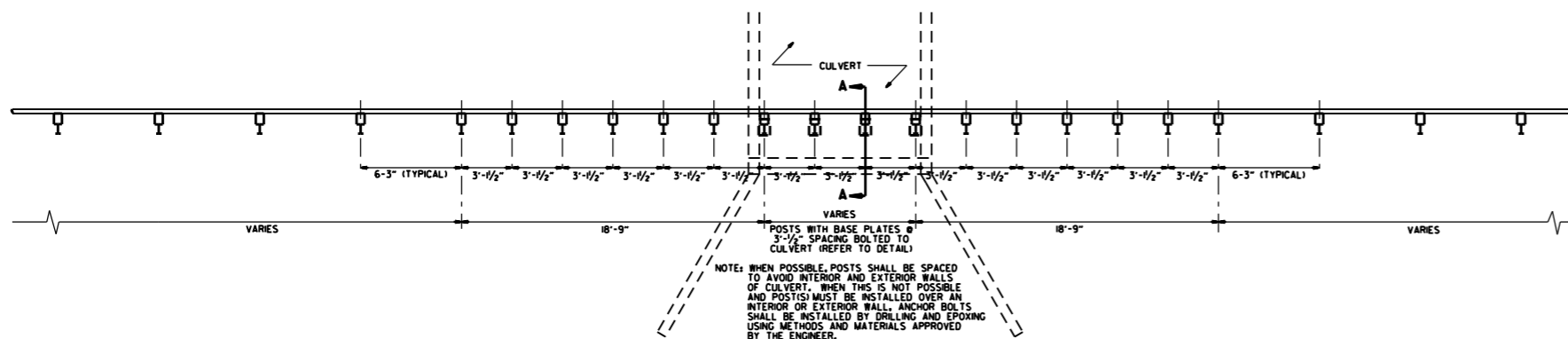
DETAIL OF POST PLACEMENT IN SOLID ROCK (W-BEAM)



SECTION A-A



DETAIL OF CONNECTION



PLAN LAYOUT OF TYPE A GUARDRAIL AT LOW-FILL CULVERTS

NOTE: THIS DETAIL IS TO BE USED ONLY WHEN THE COVER OVER THE CULVERT DOES NOT PERMIT FULL EMBEDMENT OF GUARDRAIL POSTS AS SHOWN ON STD. DRWG. GR-6.

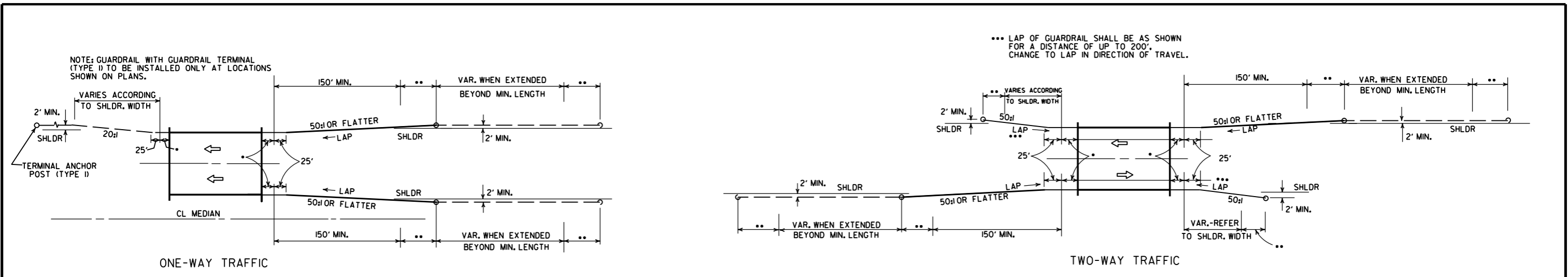
NOTE: WHEN POSSIBLE, POSTS SHALL BE SPACED TO AVOID INTERIOR AND EXTERIOR WALLS OF CULVERT. WHEN THIS IS NOT POSSIBLE AND POSTS MUST BE INSTALLED OVER AN INTERIOR OR EXTERIOR WALL, ANCHOR BOLTS SHALL BE INSTALLED BY DRILLING AND EPOXYING USING METHODS AND MATERIALS APPROVED BY THE ENGINEER.

DATE	REVISION	FILMED
11-07-19	RENUMBERED, RENAMED, REVISED REFERENCE	
11-16-17	REVISED GUARDRAIL HEIGHT	
07-14-10	RAISED HEIGHT OF GUARDRAIL 1"	
04-12-07	REVISED DETAIL OF GUARDRAIL PLACEMENT BEHIND CURB	
11-10-05	ADDED GUARDRAIL PLACEMENT BEHIND CURB; REVISED DETAIL OF CONNECTION	
11-18-04	REVISED POST PLACEMENT IN ROCK & CULVERT CONNECTION DETAILS. ADDED DETAIL FOR GUARDRAIL PLACEMENT AT LOW-FILL CULVERTS	
03-30-00	REMOVED CONCRETE INSERT ANCHOR	
08-12-98	CHANGED STEEL SPACER BLOCK TO WOOD BLOCKOUT, ADDED DET. OF GUARDRAIL CONNECTION TO R.C. BOX CULVERT, DELETED DET. OF STEEL LINE POST CONN. & ADDED DET. OF GUARDRAIL PLACE. BEHIND CURB & DET. OF POSTPLACE. IN SOLID ROCK	
04-03-96	PLACED ARROWS AT CUT STEEL WASHERS	4-3-96
10-18-96	REV. ASTM REF. TO AASHTO	
11-22-95	ADDED OPTIONAL HOLES	
06-02-94	REVISED ALTERNATE POST SIZE	
08-05-93	REVISED STEEL POST SIZE	
10-01-92	REDRAWN & REVISED	10-1-92
08-02-90	DEL. WASHER ON ANCHOR ASSEMBLY	8-2-90
07-15-88	CONFORMED TO 1988 SPECS	
03-04-88	REVISED ANCHOR NOTE	
10-30-87	REVISED ANCHOR ASSEMBLY	712-10-30-87
10-30-87	REVISED PLACEMENT BEHIND CURB	547-10-30-87
10-09-87	REDRAWN & REVISED	803-10-9-87

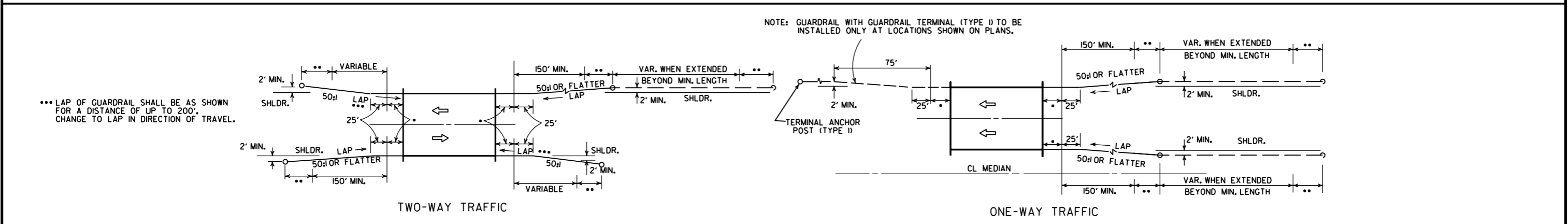
ARKANSAS STATE HIGHWAY COMMISSION

GUARDRAIL DETAILS

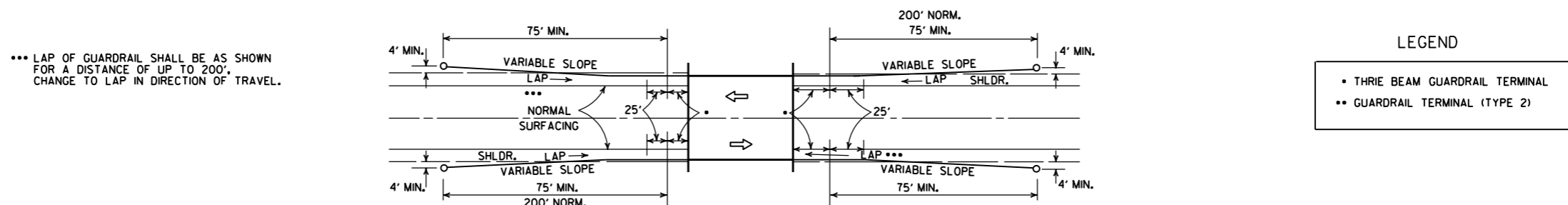
STANDARD DRAWING GR-7



METHODS OF INSTALLATION OF GUARDRAIL AT LESS THAN FULL SHOULDER WIDTH BRIDGES USING GUARDRAIL TERMINAL (TYPE 2)



METHOD OF INSTALLATION OF GUARDRAIL AT FULL SHOULDER WIDTH BRIDGES USING GUARDRAIL TERMINAL (TYPE 2)



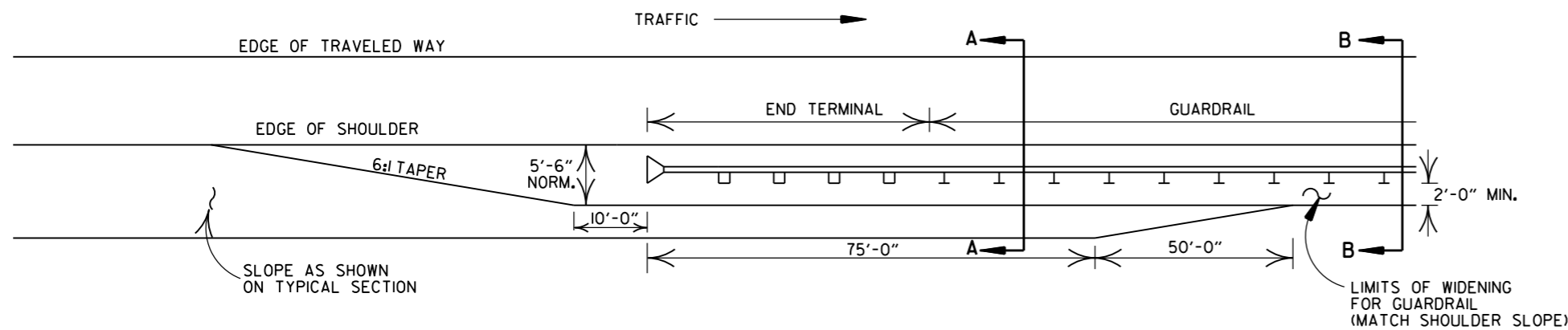
METHOD OF INSTALLATION OF GUARDRAIL USING GUARDRAIL TERMINAL (TYPE 1) (FULL SHOULDER WIDTH OR LESS BRIDGES)

DATE	REVISION	DATE	FILM
11-07-19	RENUMBERED AND RENAMED		
4-17-08	REVISED LAYOUTS		
11-10-05	REMOVED GUARDRAIL NOTES AND DETAILS		
11-16-01	DELETED NOTE-METHOD OF INSTALLATION OF GUARDRAIL USING GUARDRAIL TERM. (TY. 1)		
1-12-00	ADDED CONSTRUCTION NOTE	1-12-00	
6-26-97	REVISED LAYOUT		
10-1-92	REDRAWN & REVISED	10-1-92	
10-9-87	ADDED NOTE		
10-9-87	REDRAWN & REVISED		

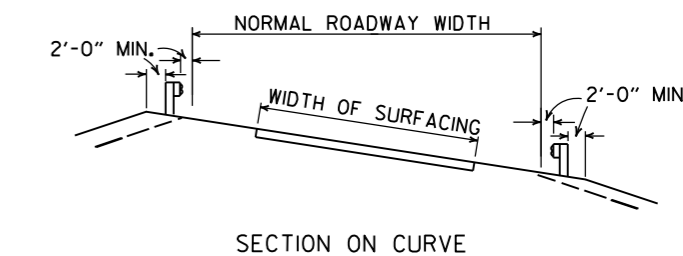
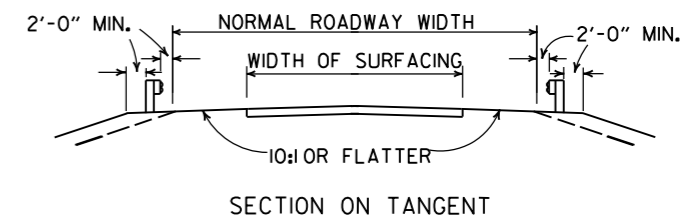
ARKANSAS STATE HIGHWAY COMMISSION

GUARDRAIL DETAILS

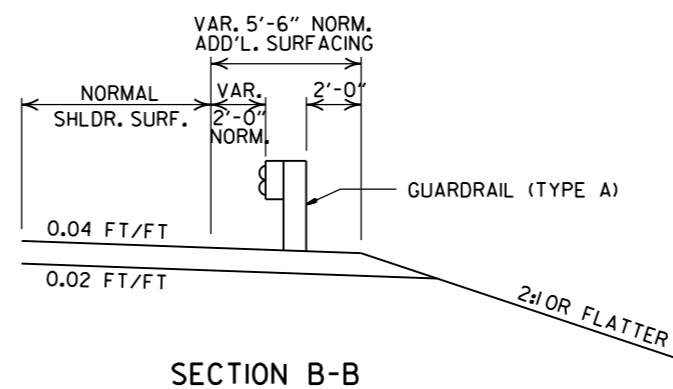
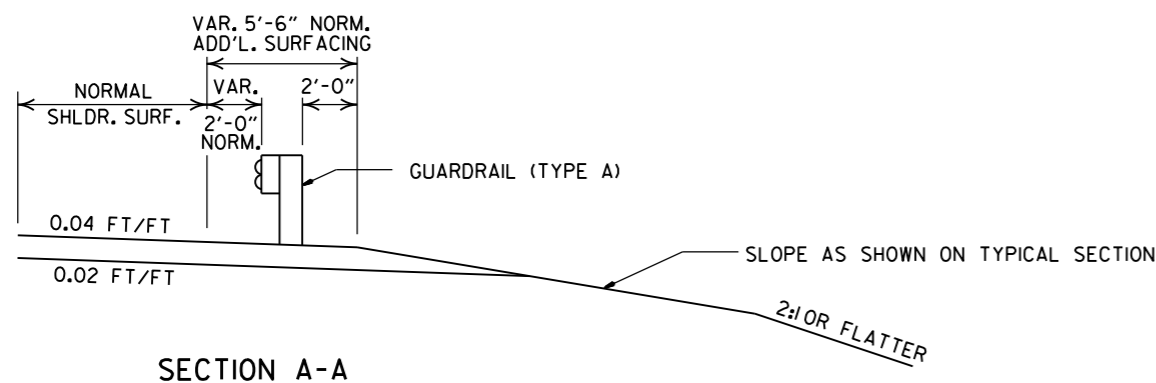
STANDARD DRAWING GR-8



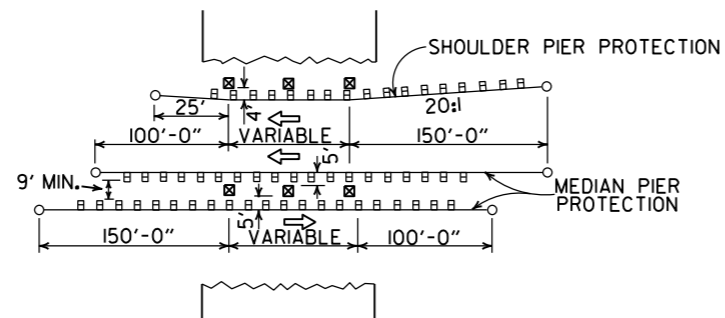
NOTE: NORMAL SECTION TO BE WIDENED APPROX. 5'-6" EACH SIDE TO SUPPORT GUARDRAIL.



DETAILS SHOWING POSITION OF GUARDRAIL ON HIGHWAY



DETAILS OF WIDENING FOR GUARDRAIL



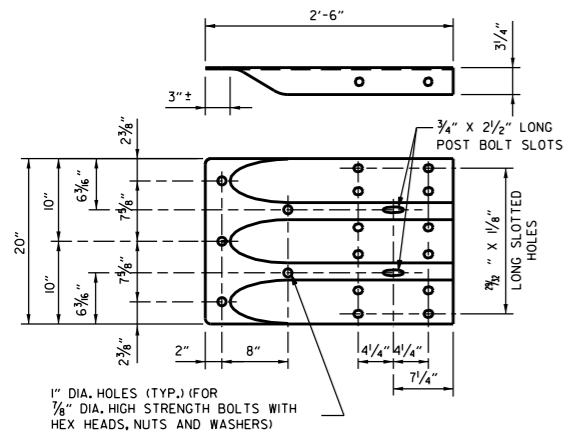
METHOD OF INSTALLATION OF GUARDRAIL AT FIXED OBSTACLE

DATE	REVISION	DATE FILM
11-07-19	RENUMBERED AND RENAMED	
4-17-08	MINOR REVISION	
11-10-05	DRAWN	

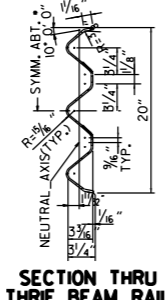
ARKANSAS STATE HIGHWAY COMMISSION

GUARDRAIL DETAILS

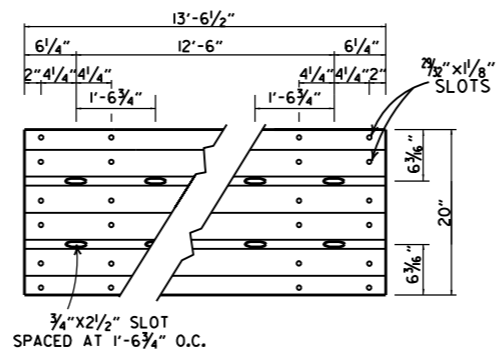
STANDARD DRAWING GR-9



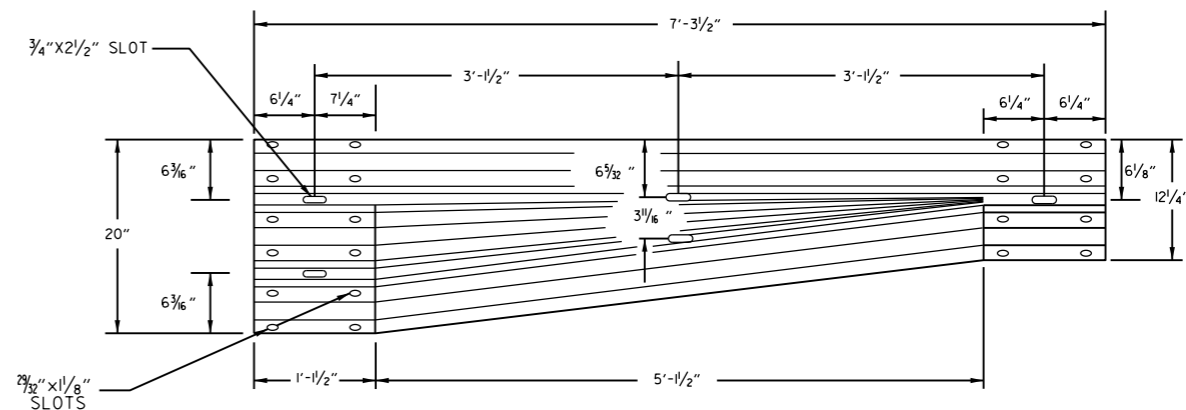
SPECIAL END SHOE



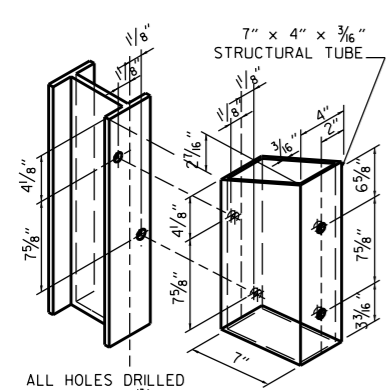
SECTION THRU THRIE BEAM RAIL



THRIE BEAM RAIL

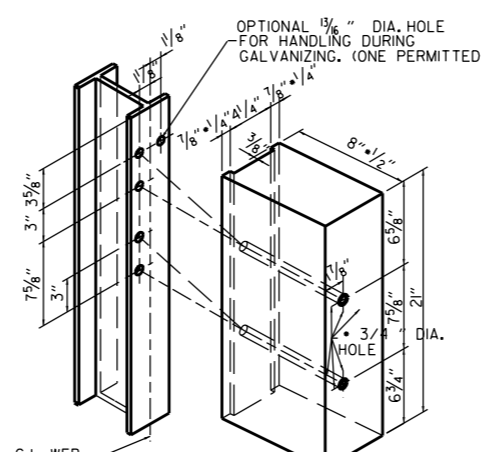


TRANSITION SECTION



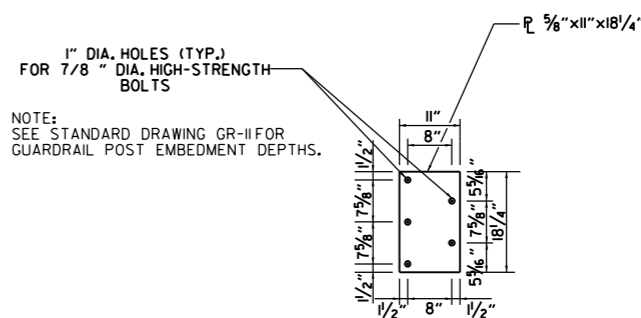
ATTACH BLOCKOUT TO POST USING 3/8" DIA. HEX HEAD BOLTS WITH 1/2" O.D. CUT STEEL WASHERS AND NUT.

STRUCTURAL STEEL TUBING BLOCKOUT DETAIL



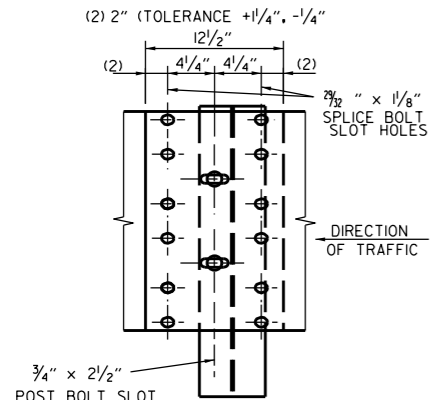
HOLE PUNCHING DETAIL FOR STEEL POST & WOOD OR PLASTIC BLOCKOUTS

NOTE: BLOCKS SHALL BE THE SAME TYPE THROUGHOUT THE PROJECT LIMITS.



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 7/8" 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.

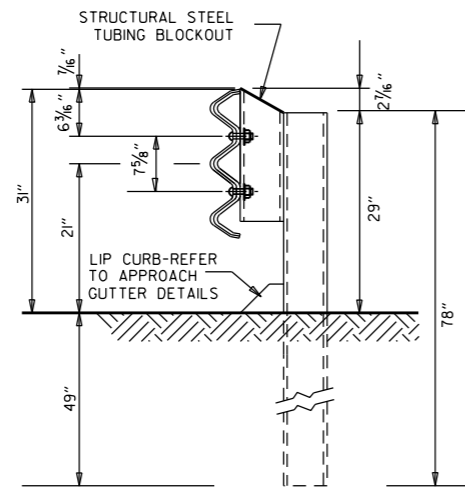


THRIE BEAM RAIL SPLICE AT POST

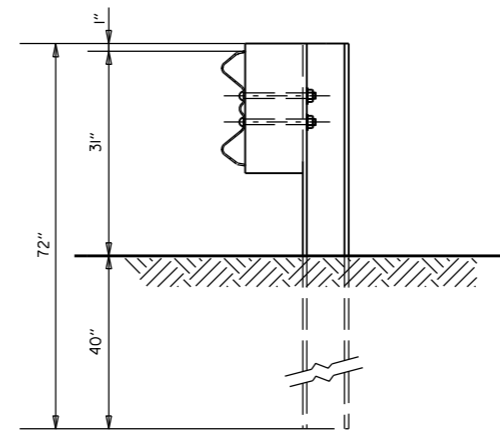
GENERAL NOTES:
 THE THRIE BEAM RAIL, SPECIAL END SHOE, AND THE TRANSITION SECTION SHALL BE MADE OF STEEL AND SHALL BE 12 GAGE. ZINC COATING SHALL BE TYPE I.
 RAIL POSTS SHALL BE SET PERPENDICULAR TO THE ROADWAY PROFILE GRADE AND VERTICALLY IN CROSS SECTION.
 ALL BOLTS SHALL BE SUFFICIENT LENGTH TO EXTEND THROUGH THE FULL THICKNESS OF THE NUT AND NO MORE THAN 3"4" BEYOND IT.
 ALL LAP SPLICES, INCLUDING SPECIAL END SHOES, SHALL BE MADE IN THE DIRECTION SHOWN ON STANDARD DRAWINGS GR-8 & GR-13.
 REFER TO STD. DRWG. GR-II FOR POST DETAILS.
 USE THRIE BEAM GUARDRAIL COMPONENTS OF SAME MATERIAL FOR ENTIRE JOB.
 THRIE BEAM POSTS SHALL BE SAME MATERIAL AS W-BEAM POSTS FOR ENTIRE JOB.
 WOOD POSTS & WOOD BLOCKS SHALL BE EITHER DENSE NO. 1 STRUCTURAL OR BETTER 9.7F (1400 F) OR NO. 1 350 F SOUTHERN PINE.

DATE	REVISION	FILMED
03-30-00	DRAWN & ISSUED	
05-18-00	ADDED NOTE	
06-29-00	MOVED DIMENSION LINES	
08-22-02	REVISED NOTE (2)	
04-10-03	REVISED GENERAL NOTES	
10-9-03	REVISED GENERAL NOTES	
11-18-04	REVISED GENERAL NOTES	
11-10-05	ADDED NOTE FOR ATTACHING STEEL BLOCKOUT	
11-29-07	ADDED PLASTIC BLOCKOUTS	
07-14-10	RAISED HEIGHT OF W-BEAM 1"	
11-16-17	REVISED TRANSITION SECTION, GUARD RAIL HEIGHT, AND GENERAL NOTES; MOVED THRIE BEAM GUARD RAIL CONNECTIONS AT BRIDGE ENDS TO STD. DRWG. GR-12	
11-07-19	RENAMED AND REVISED REFERENCES	

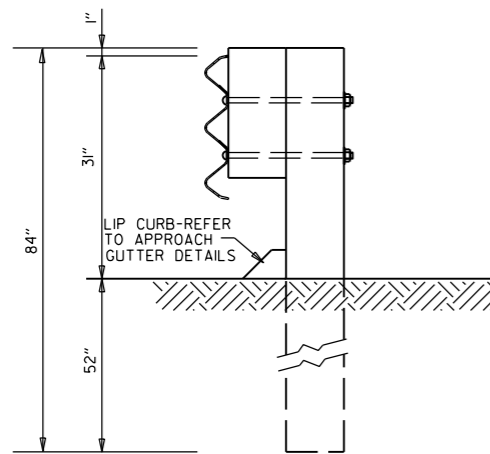
ARKANSAS STATE HIGHWAY COMMISSION
GUARDRAIL DETAILS
 STANDARD DRAWING GR-10



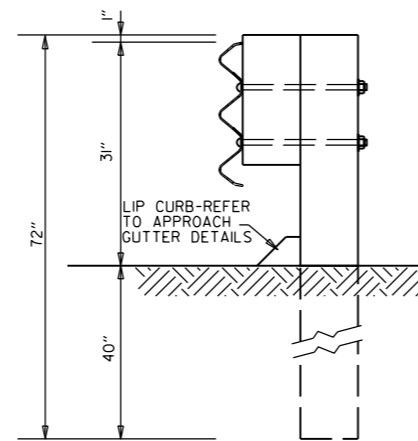
THRIE BEAM RAIL WITH STEEL TUBING BLOCKOUT
AND STEEL POST
POSTS 1-7



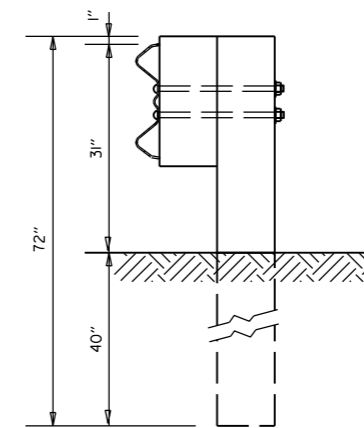
W-BEAM TO THRIE BEAM TRANSITION RAIL
WITH WOOD OR PLASTIC BLOCKOUT AND STEEL POST
POST 8



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

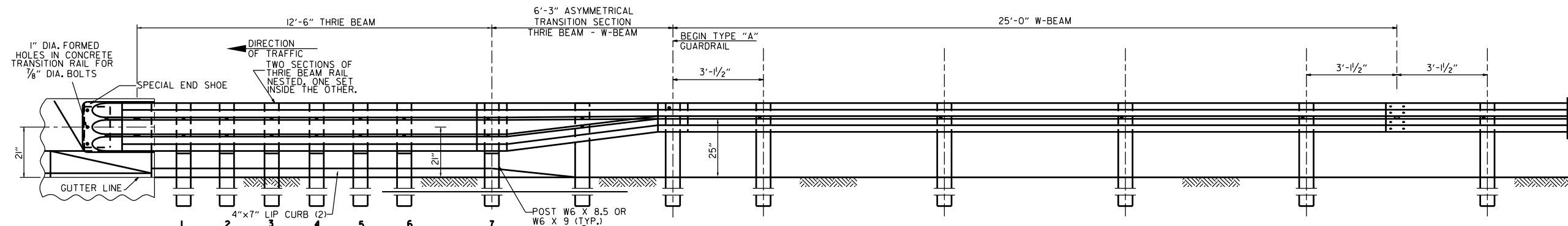


W-BEAM TO THRIE BEAM
TRANSITION RAIL WITH WOOD OR
PLASTIC BLOCKOUT & WOOD POST
POST 8

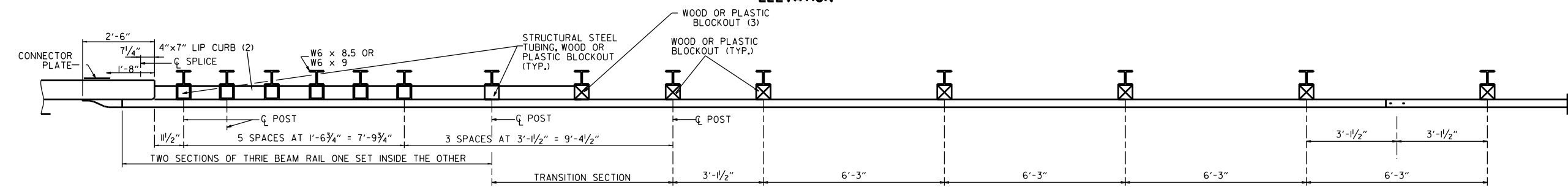
GENERAL NOTES:
RAIL POSTS SHALL BE SET PERPENDICULAR TO THE ROADWAY PROFILE GRADE AND
VERTICALLY IN CROSS SECTION.

WOOD POSTS & WOOD BLOCKS SHALL BE EITHER DENSE NO. 1 STRUCTURAL OR
BETTER 9.7f (1400 f) OR NO. 1 1350 f SOUTHERN PINE.

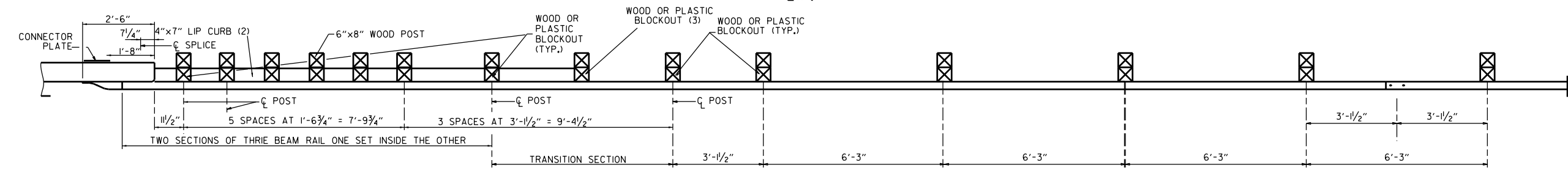
DATE	REVISION	FILMED	ARKANSAS STATE HIGHWAY COMMISSION
11-07-19	RENAMED		GUARDRAIL DETAILS
11-16-17	REVISED GUARDRAIL HEIGHT, CHANGED STD. DWG. NUMBER FROM GR-10A TO GR-II		
07-14-10	REVISED POST 8 DIMENSIONS		STANDARD DRAWING GR-II
11-29-07	ADDED PLASTIC BLOCKOUTS		
08-22-02	REVISED LIP CURB NOTE		
03-30-00	DRAWN & ISSUED		



ELEVATION



PLAN




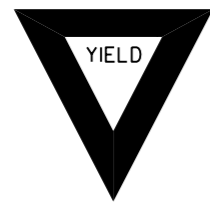







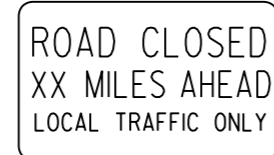
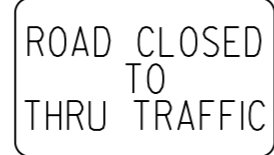

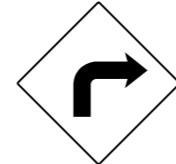



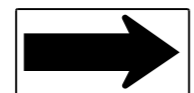

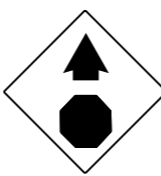
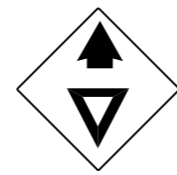
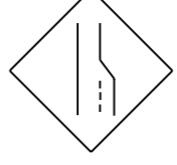

















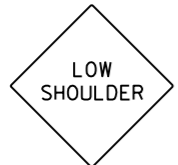
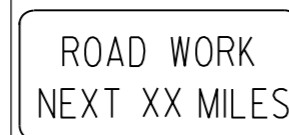
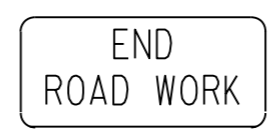
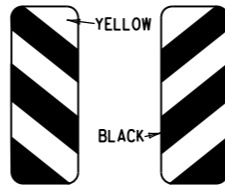


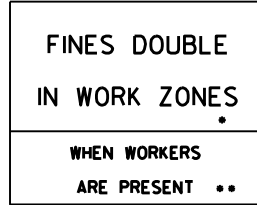
PLAN

- (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 GUARDRAIL 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 I.
 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 3/4" BEYOND IT.
 ALL LAP SPLICES, INCLUDING SPECIAL END SHOES, SHALL BE MADE IN THE DIRECTION SHOWN ON STANDARD DRAWINGS GR-8 & GR-13.
 REFER TO STD. DRWG. GR-II FOR POST DETAILS.
 USE THRIE BEAM GUARDRAIL COMPONENTS OF SAME MATERIAL FOR ENTIRE JOB.
 THRIE BEAM POSTS SHALL BE SAME MATERIAL AS W-BEAM POSTS FOR ENTIRE JOB.
 POSTS SHALL NOT BE PLACED AT SPLICE LOCATIONS ALONG W-BEAM RAILS.
 WOOD POSTS & WOOD BLOCKS SHALL BE EITHER DENSE NO. 1 STRUCTURAL OR BETTER 9.7F (1400 F) OR NO. 1 1350 F SOUTHERN PINE.

			ARKANSAS STATE HIGHWAY COMMISSION
			GUARDRAIL DETAILS
05-14-20	REVISED NOTES		STANDARD DRAWING GR-12
11-07-19	RENAMED & REVISED REFERENCES		
11-16-17	RE-DRAWN FROM STD. DWG. GR-10 & ISSUED		
DATE	REVISION	FILMED	

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

ADVANCE DISTANCES
(XXXX)

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

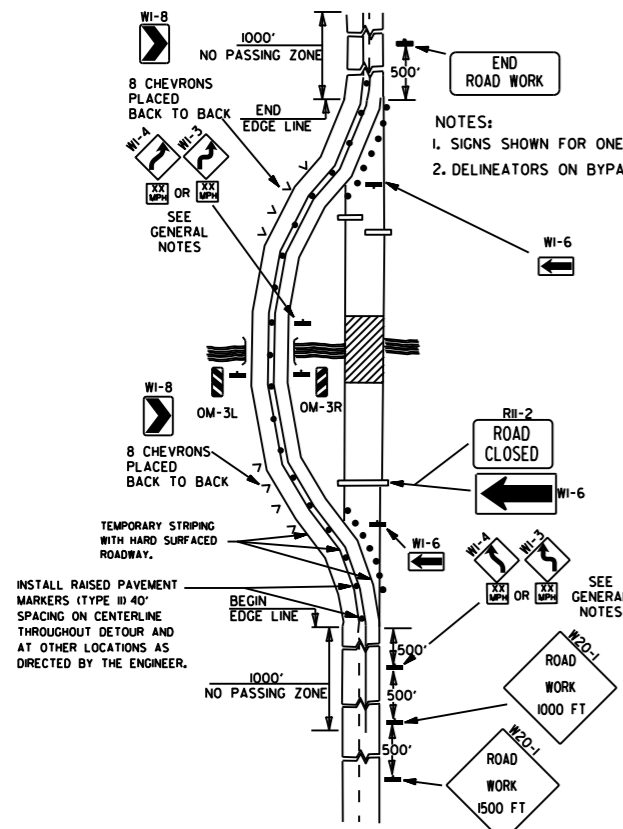
GENERAL NOTES:

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

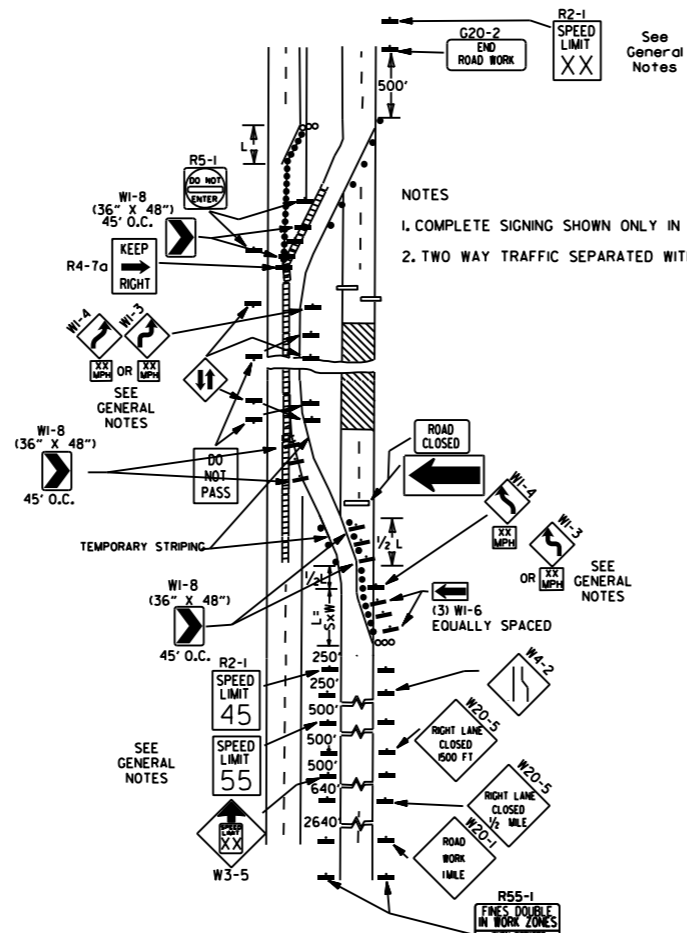
• NOTE: SUPPORTS FOR SIGNS, BARRICADES, AND VERTICAL PANELS THAT ARE DIFFERENT FROM THE REQUIREMENTS SHOWN IN NOTES 4 & 5, BUT MEET THE REQUIREMENTS OF MANUAL FOR ASSESSING SAFETY HARDWARE (MASH), WILL BE ACCEPTED. COMPLIANCE WITH THE REQUIREMENTS OF MANUAL FOR ASSESSING SAFETY HARDWARE (MASH) IS REQUIRED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

DATE	REVISION	FILMED
11-07-19	REVISED FOR MASH	
4-13-17	DELETED RSP-1 & ADDED W21-5a	
9-2-15	REVISED REDUCED SPEED LIMIT AHEAD SIGNS REVISED ROAD WORK NEXT XX MILES	
12-15-11	REVISED W24-1	
11-17-10	DELETED W8-9a & ADDED W8-9	
10-15-09	ADDED REFERENCE TO MASH & ADDED SIGN W24-1	
4-17-08	REVISED SIGN DESIGNATIONS	
11-18-04	REVISED NOTES	
10-9-03	REVISED NOTE 1	
11-16-01	REVISED NOTE 7	
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	

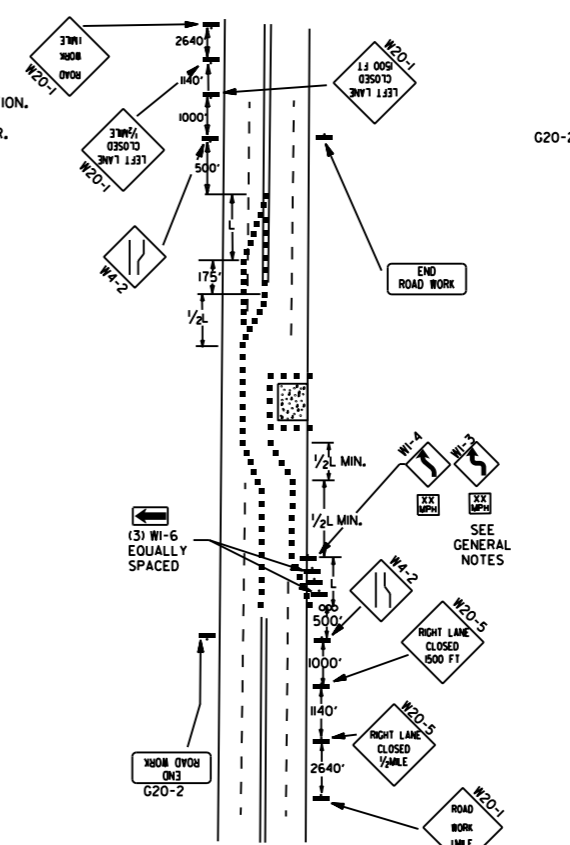
ARKANSAS STATE HIGHWAY COMMISSION
STANDARD TRAFFIC CONTROLS
FOR HIGHWAY CONSTRUCTION
STANDARD DRAWING TC-1



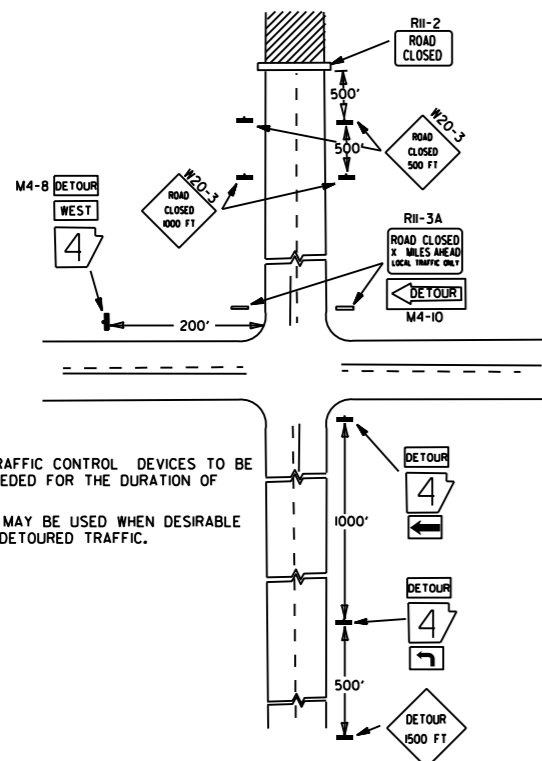
(A) TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES ON A 2-LANE HIGHWAY WHERE THE ENTIRE ROADWAY IS CLOSED AND A BYPASS DETOUR IS PROVIDED.



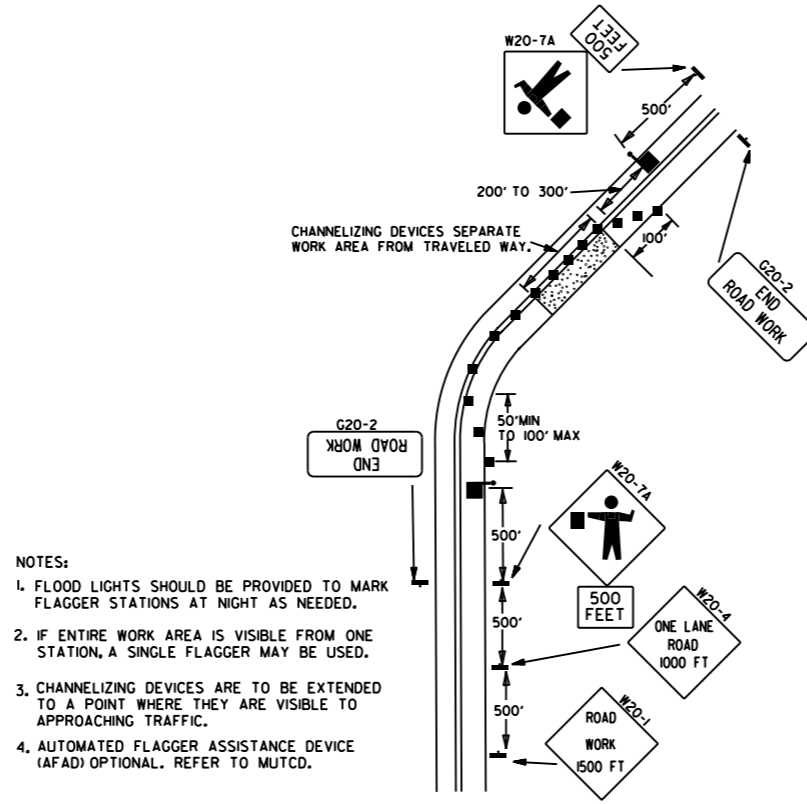
(B) TYPICAL APPLICATION - 4-LANE DIVIDED ROADWAY WHERE ONE ROADWAY IS CLOSED.



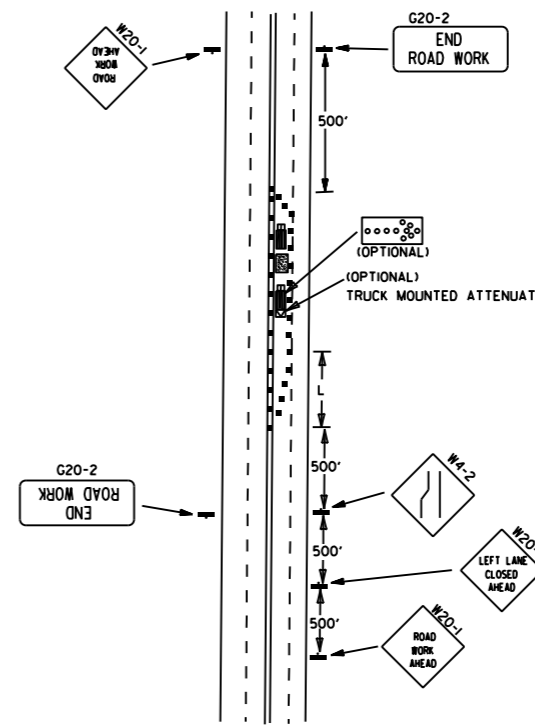
(C) TYPICAL APPLICATION - 4-LANE UNDIVIDED ROADWAY WHERE HALF OF THE ROADWAY IS CLOSED.



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

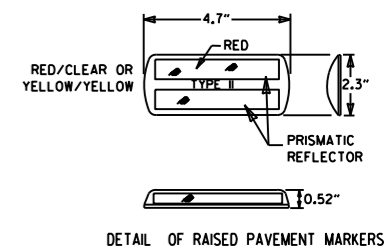


(E) TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES ON 2-LANE HIGHWAY WHERE ONE LANE IS CLOSED AND FLAGGING IS PROVIDED.



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

- KEY:
- FLAGGER
 - ▬ POSITIVE BARRIER
 - ∞ ARROW PANEL (IF REQUIRED)
 - ▬ TYPE III BARRICADE
 - CHANNELIZING DEVICE
 - TRAFFIC DRUM
 - RAISED PAVEMENT MARKER



TYPICAL ADVANCE WARNING SIGN PLACEMENT

TAPER FORMULAE:

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

$L = \frac{WS^2}{60}$ FOR SPEEDS OF 40MPH OR LESS.

WHERE:

L = MINIMUM LENGTH OF TAPER.

S = NUMERICAL VALUE OF POSTED SPEED LIMIT PRIOR TO WORK OR 85TH PERCENTILE SPEED.

W = WIDTH OF OFFSET.

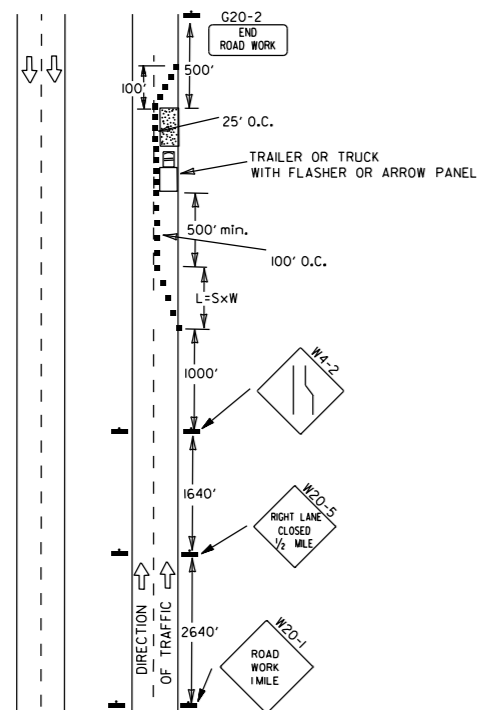
GENERAL NOTES:

1. THE MAINTENANCE DIVISION SHALL CONDUCT A BALL BANK STUDY TO DETERMINE THE ADVISORY SPEED LIMIT PRIOR TO OPENING TO TRAFFIC. THE ADVISORY SPEED WILL BE POSTED ON W1-3 OR W1-4 CURVE WARNING SIGNS. USE W1-4 WHEN SPEED IS GREATER THAN 30MPH AND W1-3 WHEN 30MPH OR LESS.
2. WHEN THE EXISTING SPEED LIMIT IS 55MPH AND THE PLANS REQUIRE A SPEED LIMIT OF 45MPH, THE R2-1(55) SHALL BE OMITTED AND THE W3-5 SHALL BE INSTALLED AT THAT LOCATION. ADDITIONAL R2-1(45)MPH SPEED LIMIT SIGNS SHALL BE INSTALLED AT A MAXIMUM OF 1MILE INTERVALS. AT THE END OF THE WORK AREA A R2-1(XX) SHALL BE INSTALLED TO MATCH ORIGINAL SPEED LIMIT.
3. WHEN THE EXISTING SPEED LIMIT IS 65MPH AND THE PLANS REQUIRE A SPEED LIMIT OF 55MPH, THE R2-1(65) SHALL BE OMITTED. ADDITIONAL R2-1(55)MPH SPEED LIMIT SIGNS SHALL BE INSTALLED AT A MAXIMUM OF 1MILE INTERVALS. AT THE END OF THE WORK AREA A R2-1(XX) SHALL BE INSTALLED TO MATCH ORIGINAL SPEED LIMIT.
4. THE MAXIMUM SPACING BETWEEN CHANNELIZING DEVICES IN A TAPER SHOULD BE APPROXIMATELY EQUAL IN FEET TO THE SPEED LIMIT. BEYOND THE TAPER, MAXIMUM SPACING SHALL BE TWO TIMES THE SPEED LIMIT, OR AS DIRECTED BY THE ENGINEER.
5. WARNING LIGHTS AND/OR FLAGS MAY BE MOUNTED TO SIGNS OR CHANNELIZING DEVICES AT NIGHT AS NEEDED.
6. PAVEMENT MARKINGS NO LONGER APPLICABLE WHICH MIGHT CREATE CONFUSION IN THE MINDS OF VEHICLE OPERATORS SHALL BE REMOVED OR OBLITERATED AS SOON AS PRACTICABLE.
7. TRAILER MOUNTED DEVICES SUCH AS ARROW PANELS AND PORTABLE CHANGEABLE MESSAGE SIGNS SHALL BE DELINEATED BY AFFIXING CONSPICUITY MATERIAL IN A CONTINUOUS LINE ON THE FACE OF THE TRAILER, WHEN PLACED ON OR ADJACENT TO THE SHOULDER AND NOT BEHIND A POSITIVE BARRIER, THESE DEVICES SHALL BE DELINEATED BY PLACING FIVE (5) TRAFFIC DRUMS, EQUALLY SPACED ALONG THE TRAFFIC SIDE OF THE DEVICE. PAYMENT FOR TRAFFIC DRUMS SHALL BE CONSIDERED INCLUDED IN THE PRICE BID FOR VARIOUS TRAILER MOUNTED DEVICES.
8. DIMENSIONS SHOWN FOR RAISED PAVEMENT MARKERS ARE TYPICAL. THE CONTRACTOR MAY SUBSTITUTE SIMILAR MARKERS WITH THE APPROVAL OF THE ENGINEER. REQUESTING APPROVAL FOR SIMILAR MARKERS MAY BE MADE BY REFERRING TO THE ARDOT QUALIFIED PRODUCTS LIST.
9. ALL TRAILER MOUNTED DEVICES SUCH AS ARROW PANELS AND PORTABLE CHANGEABLE MESSAGE SIGNS SHALL MEET THE REQUIREMENTS OF THE MANUAL FOR ASSESSING SAFETY HARDWARE (MASH).

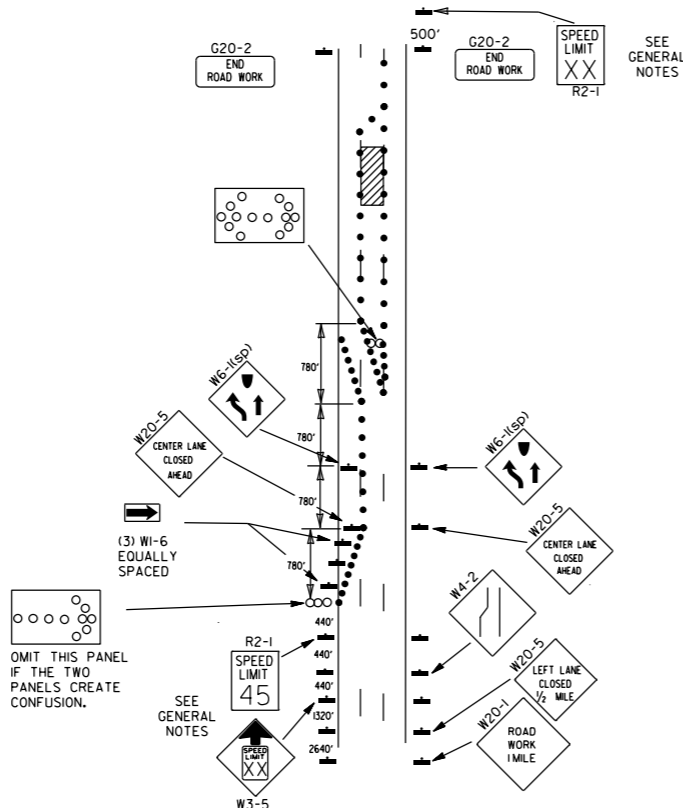
DATE	REVISION	FILED
05-20-21	REVISED NOTE 7	
11-07-19	REVISED NOTE 1, ADDED NOTE 9	
9-2-15	REVISED NOTE 2, ADDED NOTE 8, REVISED DRAWING (A) & REPLACED R2-5A WITH W3-5	
9-12-13	REVISED DETAIL OF RAISED PAVEMENT MARKERS	
3-11-10	ADDED (AFAD)	
11-20-08	REVISED SIGN DESIGNATIONS	
11-18-04	ADDED GENERAL NOTE	
10-18-96	ADDED R55-1	
4-26-96	CORRECTED (a) BEHIND G20-2	
6-8-95	CORRECTED SIGN IDENT. ON W1-4A	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.

KEY:

- ○ ○ ARROW PANEL (IF REQUIRED)
- CHANNELIZING DEVICE
- TRAFFIC DRUM

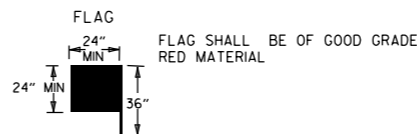
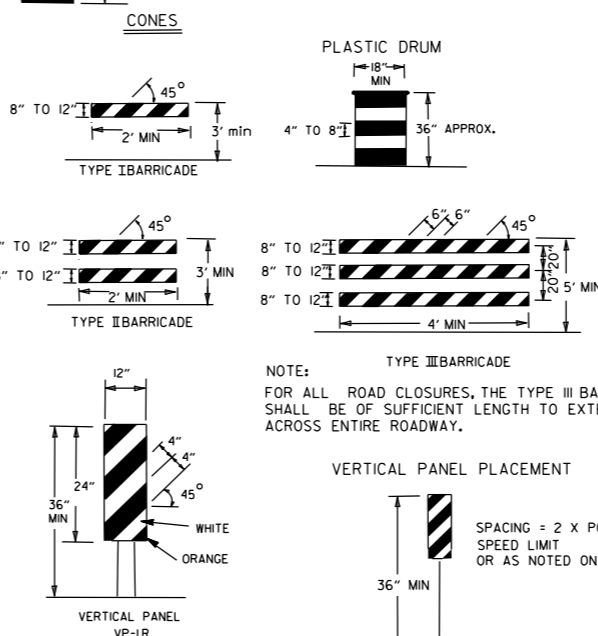
GENERAL NOTES:

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-(55) SHALL BE OMITTED AND THE W3-5 SHALL BE INSTALLED AT THAT LOCATION. ADDITIONAL R2-1(45)MPH SPEED LIMIT SIGNS SHALL BE INSTALLED AT A MAXIMUM OF 1/2 MILE INTERVALS. AT THE END OF THE WORK AREA A R2-(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-(65) SHALL BE OMITTED. ADDITIONAL R2-1(55)MPH SPEED LIMIT SIGNS SHALL BE INSTALLED AT A MAXIMUM OF 1/2 MILE INTERVALS. AT THE END OF THE WORK AREA A R2-(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 SHOULD BE REMOVED OR OBLITERATED AS SOON AS PRACTICABLE.
7. THE G20-1 SIGN WILL BE REQUIRED ON JOBS OF OVER TWO MILES IN LENGTH. WHEN THE LANE CLOSURE IS NOT AT THE BEGINNING OF THE PROJECT, THE G20-1 SIGN SHALL BE ERECTED 125' IN ADVANCE OF THE JOB LIMIT. ADDITIONAL W20-1(1/2 MILE) SIGNS ARE NOT REQUIRED IN ADVANCE OF LANE CLOSURES THAT BEGIN INSIDE THE PROJECT LIMITS.
8. FLAGGERS SHALL USE STOP/SLOW PADDLES FOR CONTROLLING TRAFFIC THROUGH WORK ZONES. FLAGS MAY BE USED ONLY FOR EMERGENCY SITUATIONS.
9. ALL PLASTIC DRUMS AND CONES SHALL MEET THE REQUIREMENTS OF MANUAL FOR ASSESSING SAFETY HARDWARE (MASH).
10. TRAILER MOUNTED DEVICES SUCH AS ARROW PANELS AND PORTABLE CHANGEABLE MESSAGE SIGNS SHALL BE DELINEATED BY AFFIXING CONSPICUITY MATERIAL IN A CONTINUOUS LINE ON THE FACE OF THE TRAILER. WHEN PLACED ON OR ADJACENT TO THE SHOULDER AND NOT BEHIND A POSITIVE BARRIER, THESE DEVICES SHALL BE DELINEATED BY PLACING FIVE (5) TRAFFIC DRUMS, EQUALLY SPACED ALONG THE TRAFFIC SIDE OF THE DEVICE. PAYMENT FOR TRAFFIC DRUMS SHALL BE CONSIDERED INCLUDED IN THE PRICE BID FOR VARIOUS TRAILER MOUNTED DEVICES.
11. ALL TRAILER MOUNTED DEVICES SUCH AS ARROW PANELS AND PORTABLE CHANGEABLE MESSAGE SIGNS SHALL MEET THE REQUIREMENTS OF THE MANUAL FOR ASSESSING SAFETY HARDWARE (MASH).

(C) TYPICAL APPLICATION - CONSTRUCTION OPERATIONS OF INTERMEDIATE TO LONG TERM DURATION ON A 4-LANE DIVIDED ROADWAY WHERE HALF OF THE ROADWAY IS CLOSED.

CHANNELIZING DEVICES

WHEN CONES ARE USED ON FREEWAYS AND MULTI-LANE HIGHWAYS, THEY SHALL BE 28" MIN. DURING HOURS OF DARKNESS, 28" CONES SHALL BE USED ON ALL ROADWAYS, AND SHALL BE REFLECTORIZED IN ACCORDANCE WITH THE M.U.T.C.D.



(D) TYPICAL APPLICATION - CLOSING MULTIPLE LANES OF A MULTILANE HIGHWAY.

TRAFFIC CONTROL DEVICES

VERTICAL DIFFERENTIAL	LOCATION	TRAFFIC CONTROL	
		≤ 45 MPH	> 45 MPH
≤ 1"	CENTERLINE	W8-11	W8-11
> 1" ≤ 3"	CENTERLINE	W8-11 AND CENTERLINE LANE STRIPING	W8-11 AND CENTERLINE LANE STRIPING
> 3"	CENTERLINE	STANDARD LANE CLOSURE ⁽⁶⁾	STANDARD LANE CLOSURE ⁽⁶⁾
≤ 3"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	W8-9 AND TRAFFIC DRUMS ⁽¹⁾	W8-9 AND TRAFFIC DRUMS ⁽¹⁾
> 3"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	W8-17, EDGE LINE STRIPING, AND TRAFFIC DRUMS ⁽¹⁾	W8-17, EDGE LINE STRIPING, AND TRAFFIC DRUMS ⁽¹⁾
> 6"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	W8-17, EDGE LINE STRIPING, AND TRAFFIC DRUMS ⁽¹⁾	W8-17, EDGE LINE STRIPING, AND TRAFFIC DRUMS ⁽²⁾
> 18"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	W8-17, EDGE LINE STRIPING, AND TRAFFIC DRUMS ⁽¹⁾	A STABILIZED WEDGE, W8-17, EDGE LINE STRIPING AND TRAFFIC DRUMS ⁽³⁾
> 24"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	PRECAST CONCRETE BARRIER ⁽⁴⁾ & EDGE LINES	PRECAST CONCRETE BARRIER ⁽⁴⁾ & EDGE LINES

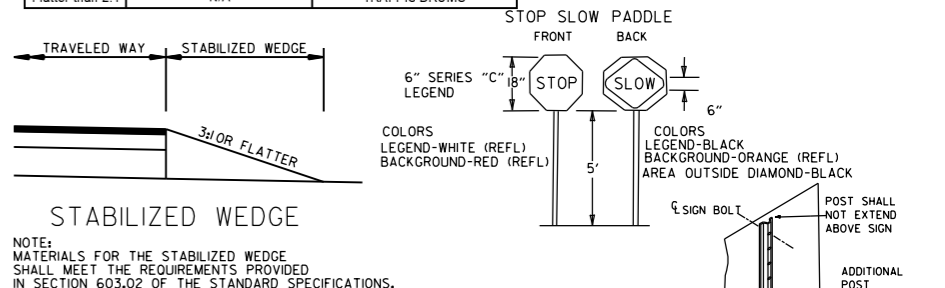
INTERSTATE

VERTICAL DIFFERENTIAL	LOCATION	TRAFFIC CONTROL
≤ 3"	CENTERLINE	W8-11 AND LANE STRIPING
≤ 3"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	W8-9, EDGE LINE STRIPING, AND TRAFFIC DRUMS ⁽²⁾
> 3"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	W8-17, EDGE LINE STRIPING, AND TRAFFIC DRUMS ⁽²⁾
> 6"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	PRECAST CONCRETE BARRIER & EDGE LINES

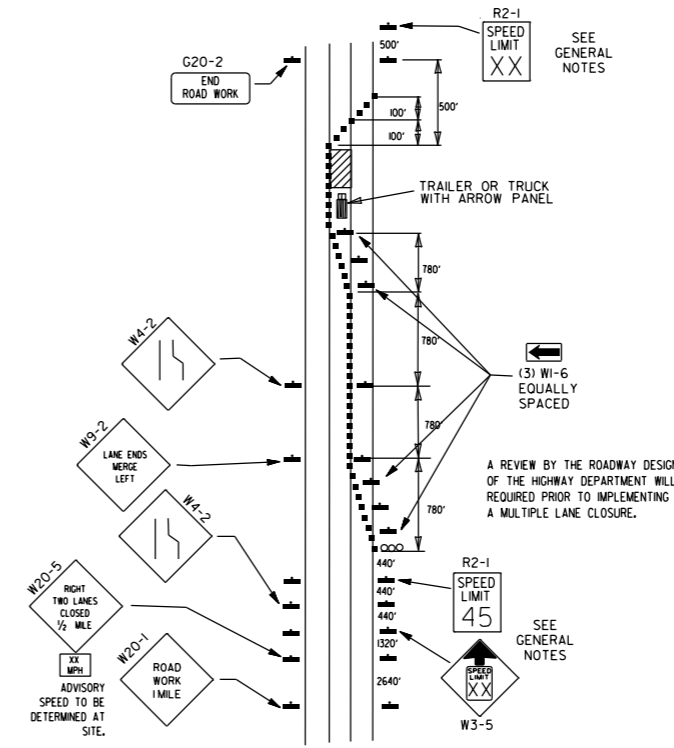
INTERSTATE AND NON-INTERSTATE

FORESLOPE	HEIGHT	TRAFFIC CONTROL
1:1	> 2 FT	PRECAST CONCRETE BARRIER
2:1	≤ 5 FT	TRAFFIC DRUMS
2:1	> 5 FT	PRECAST CONCRETE BARRIER
Flatter than 2:1	N/A	TRAFFIC DRUMS

- GENERAL NOTES:
1. WHEN THE SHOULDER AREA IS USED AS PART OF THE TRAVELED LANE AND THERE IS INSUFFICIENT WIDTH TO PLACE TRAFFIC DRUMS ON THE REMAINING SHOULDER WIDTH, THEN VERTICAL PANELS SHALL BE USED.
 2. WHEN THERE IS INSUFFICIENT WIDTH TO PLACE TRAFFIC DRUMS ON THE REMAINING SHOULDER WIDTH, A STABILIZED WEDGE SHALL BE USED. PRECAST CONCRETE BARRIER WALL CAN BE USED IN LIEU OF A STABILIZED WEDGE, W8-17 SIGN, EDGE LINE STRIPING, AND TRAFFIC DRUMS, IF AND WHERE DIRECTED BY THE ENGINEER.
 3. A STABILIZED WEDGE, W8-17 SIGN, EDGE LINE STRIPING, AND TRAFFIC DRUMS CAN BE USED IN LIEU OF PRECAST CONCRETE BARRIER WALL, IF AND WHERE DIRECTED BY THE ENGINEER.
 4. W21-5, W21-50, AND/OR W21-5b SIGNS SHALL BE USED WHERE THE ROADWAY IS UNOBSTRUCTED IF AND WHERE DIRECTED BY THE ENGINEER. TIME LIMITATIONS MUST CONFORM TO SECTION 603 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION).



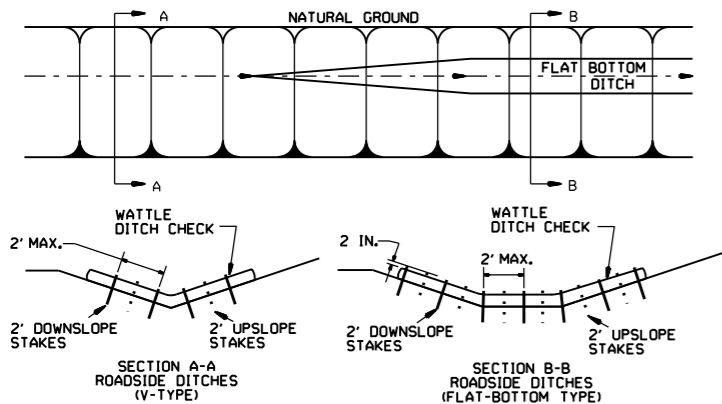
NOTE: MATERIALS FOR THE STABILIZED WEDGE SHALL MEET THE REQUIREMENTS PROVIDED IN SECTION 603.02 OF THE STANDARD SPECIFICATIONS.



DATE	REVISION	FILED
08-12-21	REVISED TRAFFIC CONTROL DEVICES AND NOTES	
05-20-21	REVISED NOTE 10	
2-27-20	REVISED TRAFFIC CONTROL DEVICES DETAILS	
11-07-19	REVISED NOTE 9, ADDED NOTE 11	
7-25-19	REVISED TRAFFIC CONTROL DEVICES DETAILS	
9-2-15	REVISED NOTE 2 & REPLACED R2-5A WITH W3-5	
10-15-09	ADDED REFERENCE TO MASH	
11-20-08	REVISED SIGN DESIGNATIONS	
11-18-04	ADDED NOTE	
10-1-98	ADDED NOTE	
4-03-97	ADDED (SP) TO W6-1 & REVISED TRAFFIC CONTROL DEVICES NOTE	
10-18-96	ADDED R55-1	
10-12-95	MOVED UPPER SPLICE	
6-8-95	REVISED SPLICE DETAIL, TEXT	6-8-95
2-2-95	REVISED PER PART VI, MUTCD, SEPT. 3, 1993	
8-15-91	DRAWN AND PLACED IN USE	

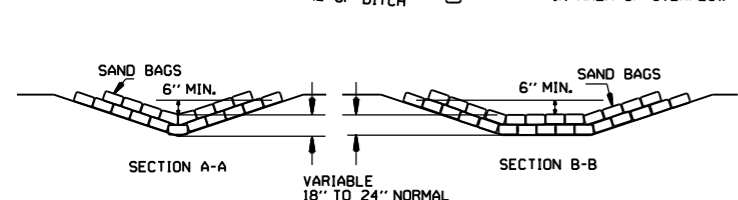
GENERAL NOTES

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

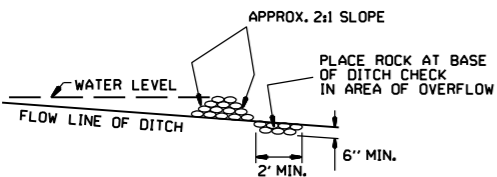


WATTLE DITCH CHECK (E-1)

NUMBER OF SAND BAGS AND ARRANGEMENT VARIABLE WITH ON-SITE CONDITIONS. PLACE SAND BAGS AT BASE OF DITCH CHECK IN AREA OF OVERFLOW.

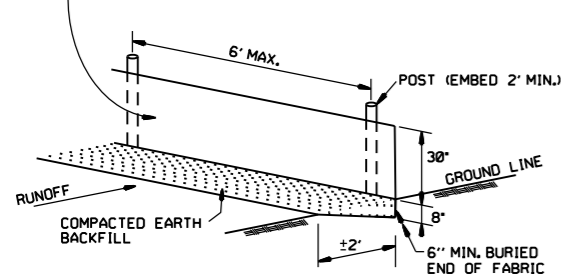


SAND BAG DITCH CHECK (E-5)

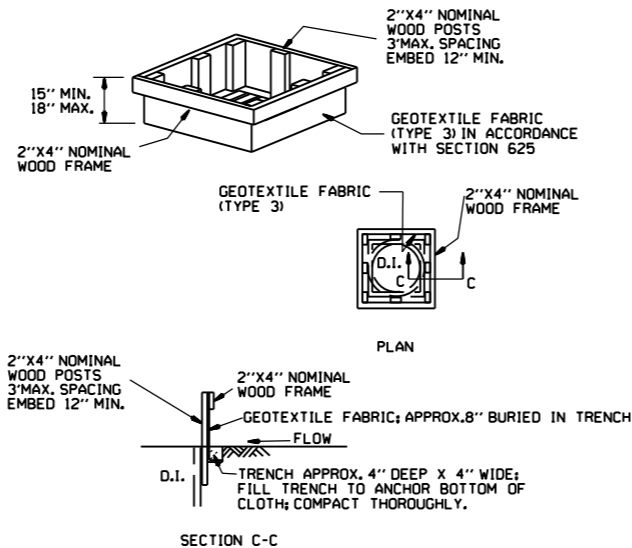


ROCK DITCH CHECK (E-6)

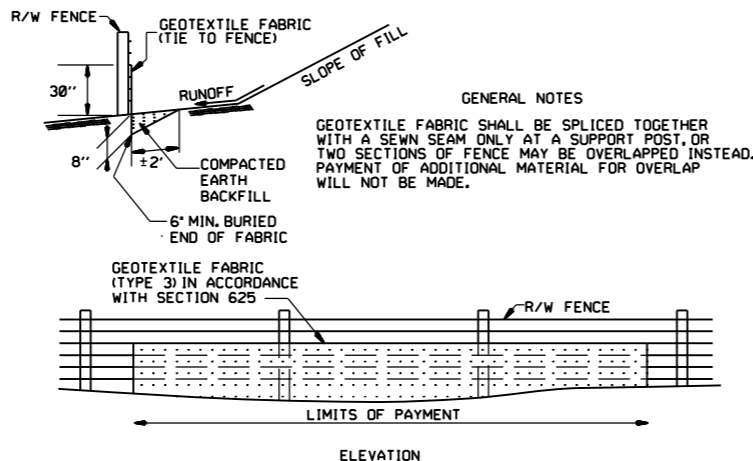
GENERAL NOTES
 GEOTEXTILE FABRIC (TYPE 4) IN ACCORDANCE WITH SECTION 625
 GEOTEXTILE FABRIC SHALL BE SPLICED TOGETHER WITH A SEWN SEAM ONLY AT A SUPPORT POST OR TWO SECTIONS OF FENCE MAY BE OVERLAPPED INSTEAD. PAYMENT OF ADDITIONAL MATERIAL FOR OVERLAP WILL NOT BE MADE.



SILTS FENCE (E-11)

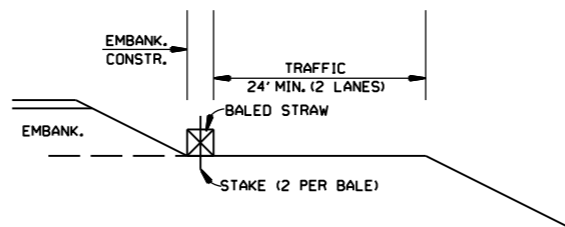


DROP INLET SILTS FENCE (E-7)

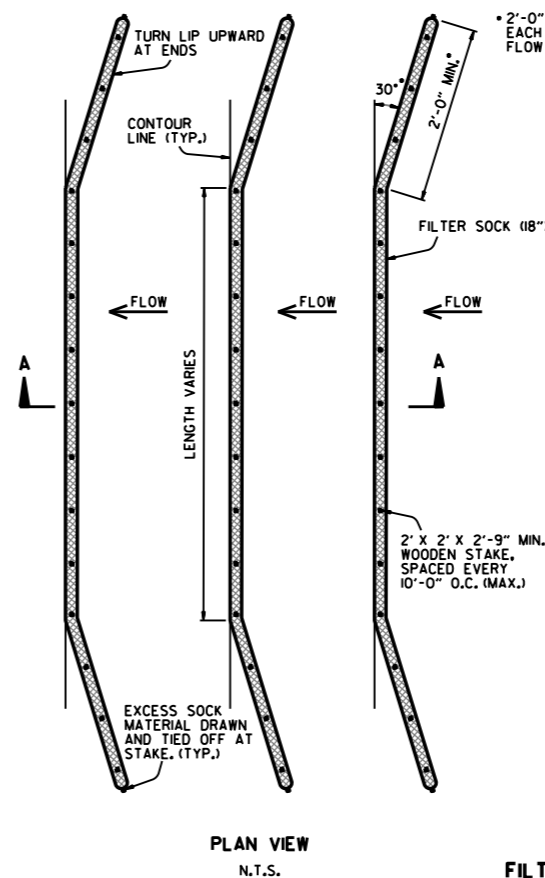


SILTS FENCE ON R/W FENCE (E-4)

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

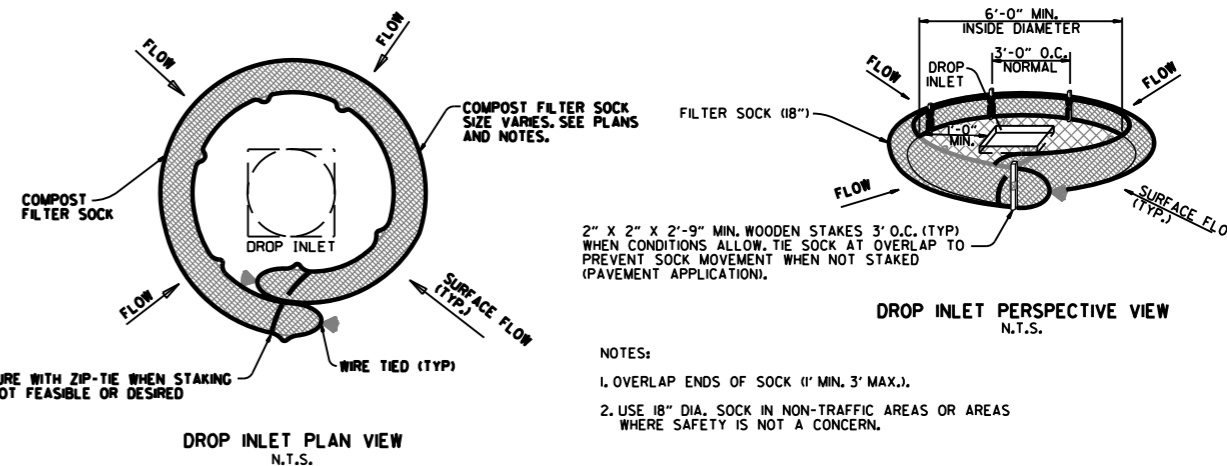


BALED STRAW FILTER BARRIER (E-2)



FILTER SOCK ALONG SLOPE (E-3)

NOTES:
 1. FILTER SOCKS CAN BE PLACED AT THE TOP, ON THE FACE, AND AT THE TOE OF SLOPES AS SEDIMENT-TRAPPING DEVICES FOR SHEET FLOW RUNOFF.
 2. FILTER SOCKS ARE TYPICALLY SUPPLIED AND INSTALLED WITH 18 INCH DIAMETERS. DIAMETER TOLERANCE IS 2 INCHES, AS FILTER SOCKS TEND TO FLATTEN OUT WHEN PLACED.
 3. STEEL POSTS MAY BE USED AND SHALL BE ROLLED FROM HIGH CARBON STEEL AND HAVE A MINIMUM OF 1.25 LB./FT. POSTS SHALL BE HOT-DIPPED GALVANIZED OR PAINTED WITH HIGH-GRADE WEATHER RESISTANT BROWN OR BLACK STEEL PAINT. STEEL POSTS SHALL BE EQUIPPED WITH ANCHOR PLATE HAVING A MINIMUM AREA OF 14 SQUARE INCHES. POSTS SHALL BE STUDDED, EMBOSSED, OR PUNCHED. POSTS AND ANCHOR PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A702. NO ADDITIONAL PAYMENT WILL BE PROVIDED FOR STEEL POSTS, BUT PRICE WILL BE CONSIDERED SUBSIDIARY TO "FILTER SOCK (18\"/>

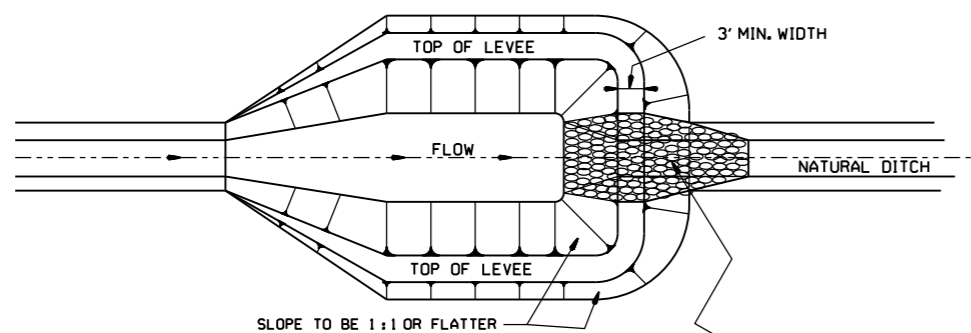


COMPOST FILTER SOCK DROP INLET PROTECTION (E-13)

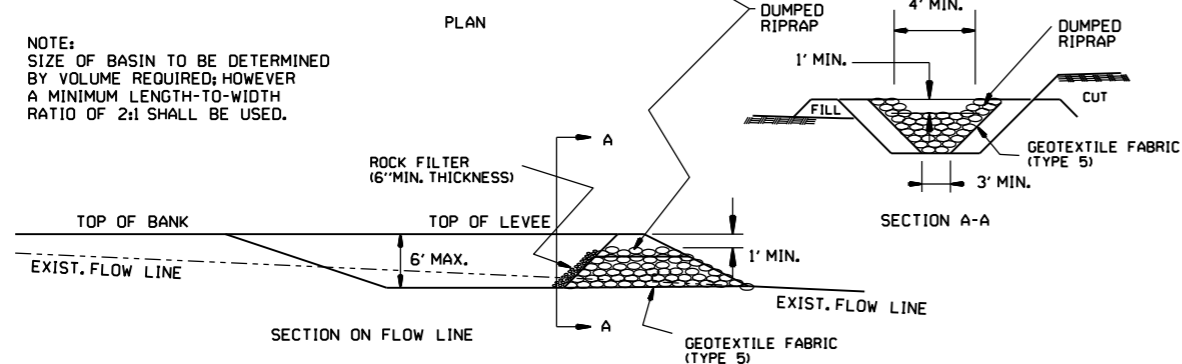
NOTES:
 1. OVERLAP ENDS OF SOCK (1' MIN. 3' MAX.).
 2. USE 18" DIA. SOCK IN NON-TRAFFIC AREAS OR AREAS WHERE SAFETY IS NOT A CONCERN.

DATE	REVISION
11-16-17	ADDED FILTER SOCK E-3 AND E-13
12-15-11	DELETED BALED STRAW DITCH CHECK & ADDED WATTLE DITCH CHECK
11-18-98	ADDED NOTES
07-02-98	ADDED BALED STRAW FILTER BARRIER (E-2)
07-20-95	REVISED SILTS FENCE E-4 AND E-11
07-15-94	REV. E-4 & E-11 MIN. 13" BURIED END OF FABRIC
06-02-94	REVISED E-1, 4, 7 & 11; DELETED E-2 & 3
04-01-93	REDRAWN
10-01-92	REDRAWN
08-02-76	ISSUED R.D.M.

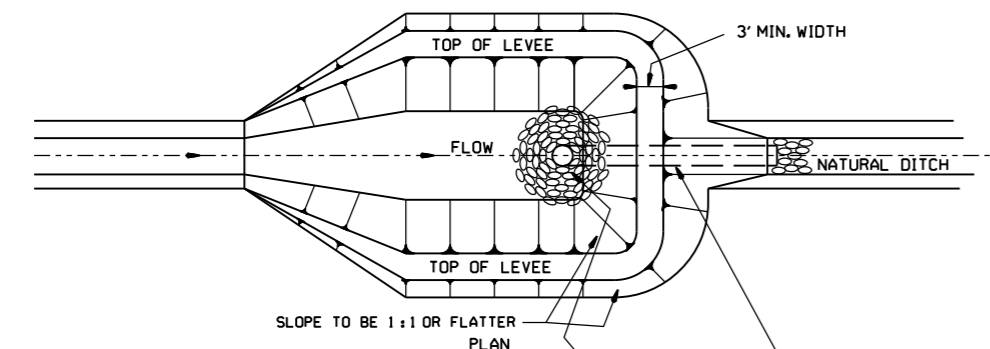
ARKANSAS STATE HIGHWAY COMMISSION
 TEMPORARY EROSION CONTROL DEVICES
 STANDARD DRAWING TEC-1



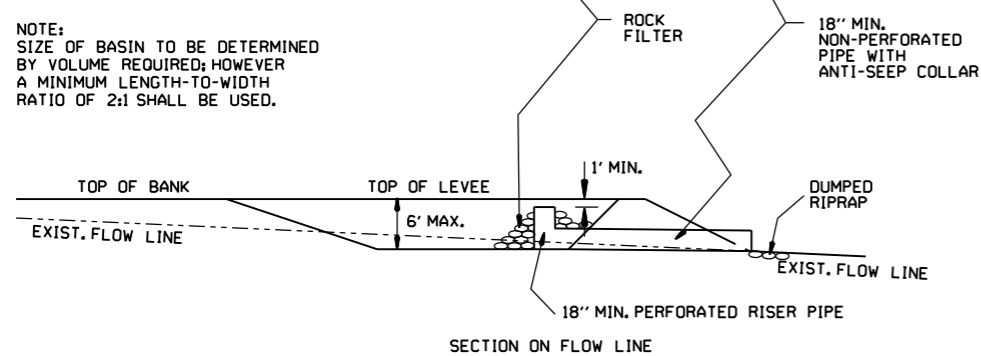
NOTE:
SIZE OF BASIN TO BE DETERMINED
BY VOLUME REQUIRED; HOWEVER
A MINIMUM LENGTH-TO-WIDTH
RATIO OF 2:1 SHALL BE USED.



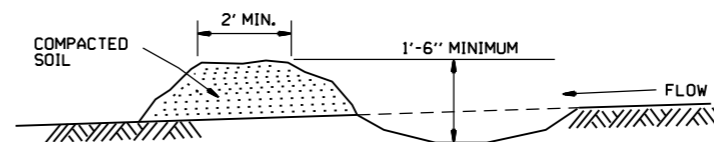
SEDIMENT BASIN WITH RIPRAP OUTLET (E-9)



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

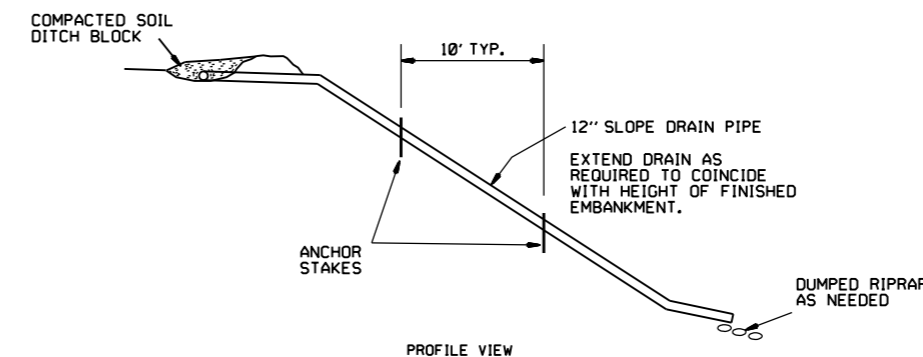
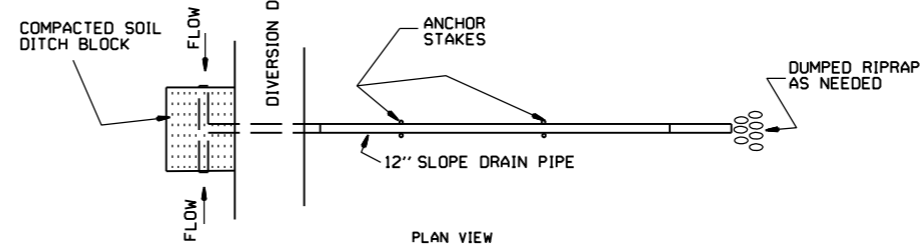


SEDIMENT BASIN WITH PIPE OUTLET (E-10)

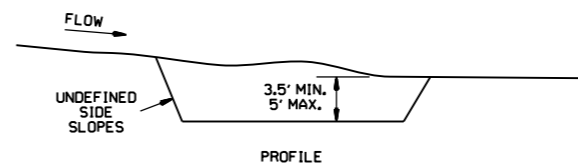
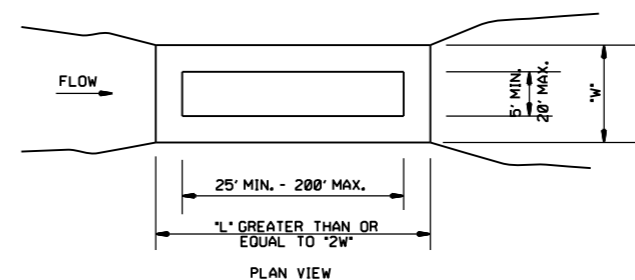


DIVERSION DITCH (E-8)

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



SLOPE DRAIN (E-12)



SEDIMENT BASIN (E-14)

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

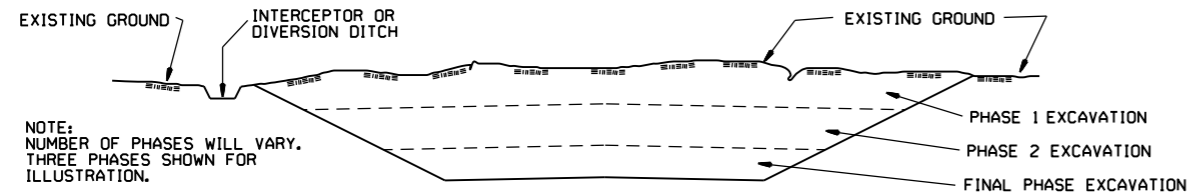
ARKANSAS STATE HIGHWAY COMMISSION
TEMPORARY EROSION
CONTROL DEVICES
STANDARD DRAWING TEC-2

CLEARING AND GRUBBING

CONSTRUCTION SEQUENCE

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

EXCAVATION



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

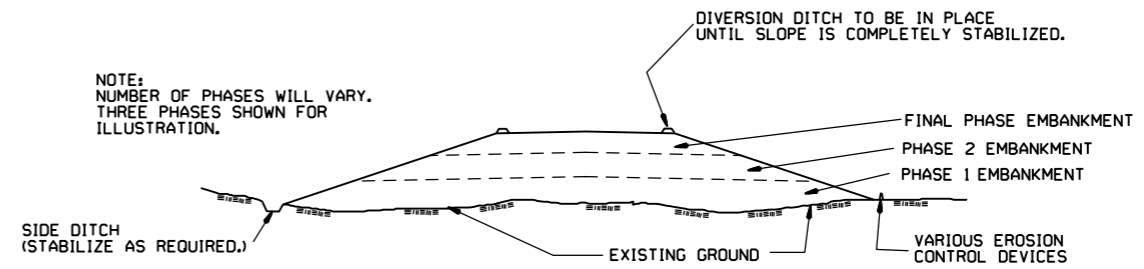
GENERAL NOTE

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

CONSTRUCTION SEQUENCE

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

EMBANKMENT



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

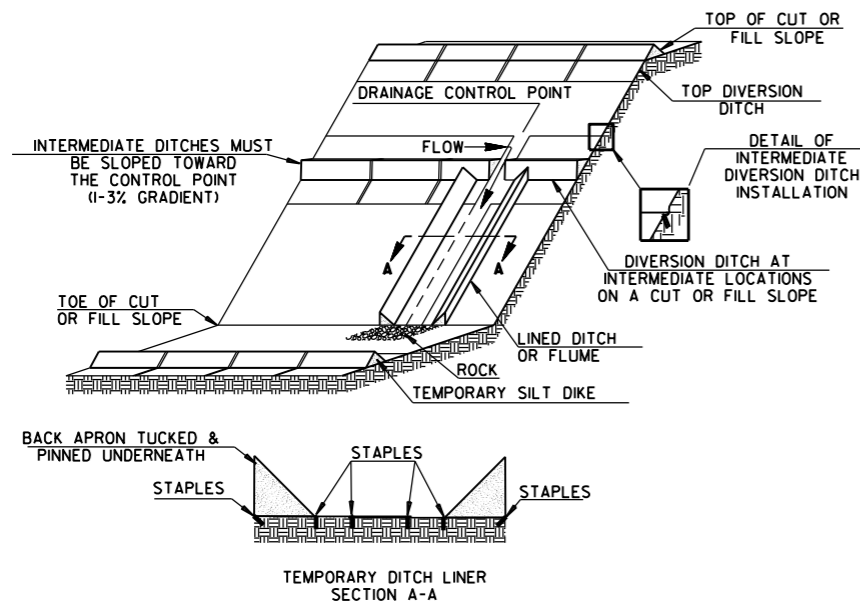
GENERAL NOTE

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

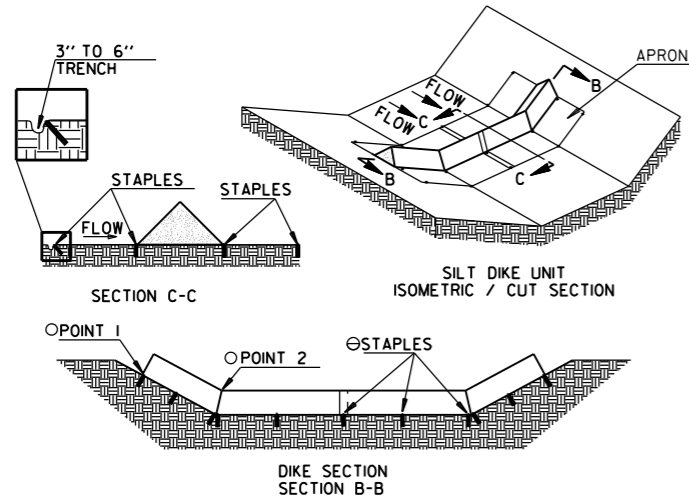
CONSTRUCTION SEQUENCE

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

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

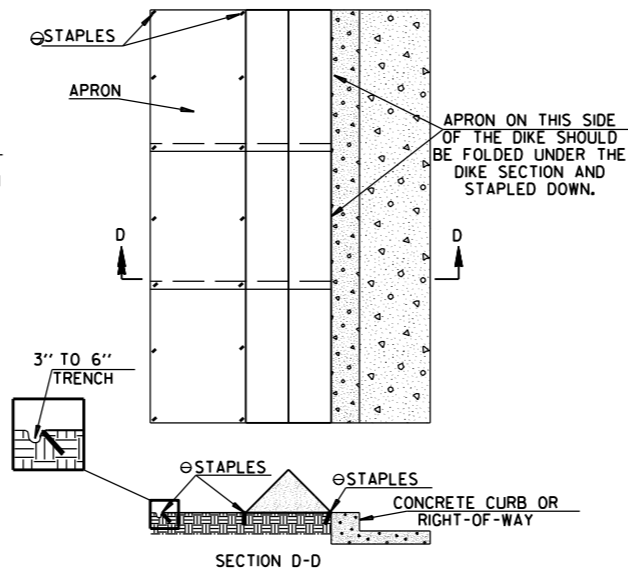


TRIANGULAR SILT DIKE INSTALLATION FOR DIVERSION DITCH AND/OR DITCH LINER

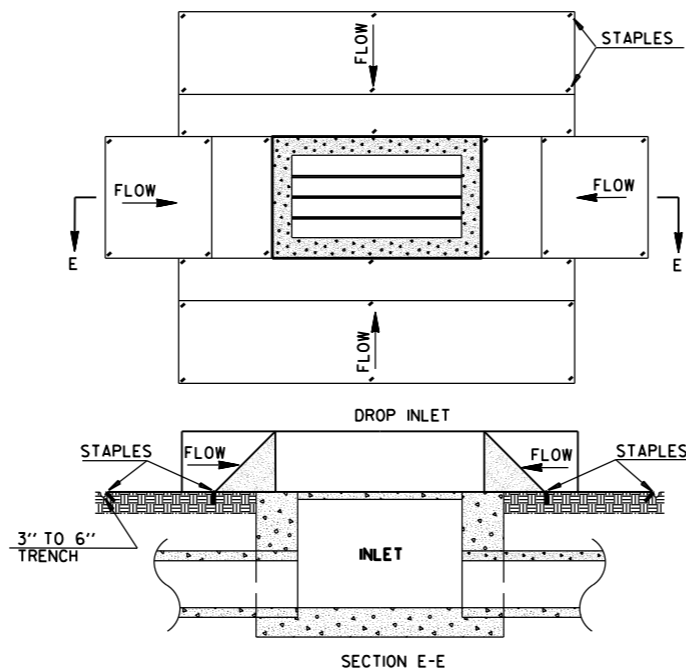


TRIANGULAR SILT DIKE INSTALLATION FOR ROADWAY DITCH OR DRAINAGE DITCH

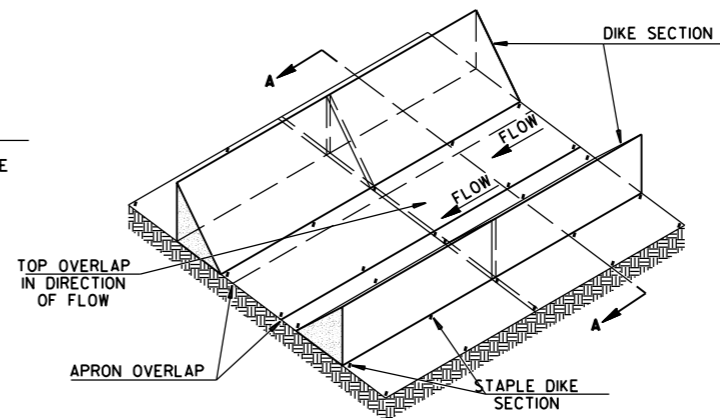
○ POINT "1" MUST BE HIGHER THAN POINT "2" TO ENSURE THAT WATER FLOWS OVER THE DIKE AND NOT AROUND THE ENDS.
 ⊙ STAPLES SHALL BE PLACED WHERE THE UNITS OVERLAP AND IN THE CENTER OF THE UNIT AS SHOWN ON THE DIAGRAM.



TRIANGULAR SILT DIKE INSTALLATION FOR CONTINUOUS BARRIER



TRIANGULAR SILT DIKE INSTALLATION FOR DROP INLETS



TRIANGULAR SILT DIKE INSTALLATION FOR TEMPORARY DITCH LINER

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.
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.

SYMBOLY
 SYMBOL TO BE USED TO DENOTE
 DEVICE ON PLANS



NOTE: SILT DIKE SHOULD ONLY BE USED FOR DROP INLETS IN SUMP LOCATIONS.

		ARKANSAS STATE HIGHWAY COMMISSION	
		TEMPORARY EROSION CONTROL DEVICES	
7-26-12	REVISED GENERAL NOTE 2.		
12-15-11	ISSUED		
DATE	REVISION		FILMED
		STANDARD DRAWING TEC-4	