

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	040883	2	22
BRIDGE DATA						



Digitally signed by Thomas N. Taegtmeyer
Date: 2023.09.07

BRIDGE DATA

① LOG MILE 42.103 BR. END
1512.00' BRIDGE NO. A6479
40'-0" CLEAR ROADWAY
LOG MILE 42.389 BR. END
POLYMER OVERLAY

② LOG MILE 42.103 BR. END
1512.00' BRIDGE NO. B6479
40'-0" CLEAR ROADWAY
LOG MILE 42.389 BR. END
POLYMER OVERLAY

③ LOG MILE 43.201 BR. END
1032.00' BRIDGE NO. A6480
40'-0" CLEAR ROADWAY
LOG MILE 43.396 BR. END
POLYMER OVERLAY

④ LOG MILE 43.201 BR. END
1032.00' BRIDGE NO. B6480
40'-0" CLEAR ROADWAY
LOG MILE 43.396 BR. END
POLYMER OVERLAY

⑤ LOG MILE 43.969 BR. END
1357.00' BRIDGE NO. A6481
40'-0" CLEAR ROADWAY
LOG MILE 44.226 BR. END
POLYMER OVERLAY

⑥ LOG MILE 43.969 BR. END
1357.00' BRIDGE NO. B6481
40'-0" CLEAR ROADWAY
LOG MILE 44.226 BR. END
POLYMER OVERLAY

⑦ LOG MILE 47.311 BR. END
298.00' BRIDGE NO. A6483
40'-0" CLEAR ROADWAY
LOG MILE 47.367 BR. END
POLYMER OVERLAY

⑧ LOG MILE 47.302 BR. END
403.00' BRIDGE NO. B6483
40'-0" CLEAR ROADWAY
LOG MILE 47.378 BR. END
POLYMER OVERLAY

⑨ LOG MILE 47.632 BR. END
1322.00' BRIDGE NO. A6484
40'-0" CLEAR ROADWAY
LOG MILE 47.882 BR. END
POLYMER OVERLAY

⑩ LOG MILE 47.654 BR. END
1367.00' BRIDGE NO. B6484
40'-0" CLEAR ROADWAY
LOG MILE 47.913 BR. END
POLYMER OVERLAY

⑪ LOG MILE 48.908 BR. END
842.00' BRIDGE NO. A6485
40'-0" CLEAR ROADWAY
LOG MILE 49.067 BR. END
POLYMER OVERLAY

⑫ LOG MILE 48.908 BR. END
782.00' BRIDGE NO. B6485
40'-0" CLEAR ROADWAY
LOG MILE 49.056 BR. END
POLYMER OVERLAY

⑬ LOG MILE 51.528 BR. END
882.00' BRIDGE NO. A6237
40'-0" CLEAR ROADWAY
LOG MILE 51.695 BR. END
POLYMER OVERLAY

⑭ LOG MILE 51.528 BR. END
1022.00' BRIDGE NO. B6237
40'-0" CLEAR ROADWAY
LOG MILE 51.721 BR. END
POLYMER OVERLAY

⑮ LOG MILE 53.819 BR. END
276.00' BRIDGE NO. A6239
40'-0" CLEAR ROADWAY
LOG MILE 53.871 BR. END
POLYMER OVERLAY

⑯ LOG MILE 53.832 BR. END
276.00' BRIDGE NO. B6239
40'-0" CLEAR ROADWAY
LOG MILE 53.884 BR. END
POLYMER OVERLAY

⑰ LOG MILE 57.956 BR. END
160.00' BRIDGE NO. A6242
40'-0" CLEAR ROADWAY
LOG MILE 57.986 BR. END
POLYMER OVERLAY

⑱ LOG MILE 57.953 BR. END
160.00' BRIDGE NO. B6242
40'-0" CLEAR ROADWAY
LOG MILE 57.983 BR. END
POLYMER OVERLAY

⑲ LOG MILE 60.550 BR. END
243.00' BRIDGE NO. A6243
40'-0" CLEAR ROADWAY
LOG MILE 60.596 BR. END
POLYMER OVERLAY

⑳ LOG MILE 60.563 BR. END
243.00' BRIDGE NO. B6243
40'-0" CLEAR ROADWAY
LOG MILE 60.609 BR. END
POLYMER OVERLAY

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	040883	3	22
		INDEX OF SHEETS AND STANDARD DRAWINGS				



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Date: 2023.09.07

INDEX OF SHEETS

SHEET NO.	TITLE	BRIDGE NO.	DRWG.NO.
1	TITLE SHEET		
2	BRIDGE DATA		
3	INDEX OF SHEETS AND STANDARD DRAWINGS		
4	GOVERNING SPECIFICATIONS AND GENERAL NOTES		
5 - 6	TYPICAL SECTIONS OF IMPROVEMENT		
7 - 10	SPECIAL DETAILS		
11 - 14	MAINTENANCE OF TRAFFIC DETAILS		
15	PERMANENT PAVEMENT MARKING DETAILS		
16 - 20	QUANTITIES		
21	SCHEDULE OF BRIDGE QUANTITIES	A & B 6479, A & B 6480, A & B 6481, A & B 6483, A & B 6484, A & B 6485, A & B 6237, A & B 6239, A& B 6243, A & B 6242	68405
22	SUMMARY OF QUANTITIES AND REVISIONS		

BRIDGE STANDARD DRAWINGS

DRWG.NO.	TITLE	DATE
55064	STANDARD DETAILS FOR JOINT REPAIRS & MODIFICATION	11-07-19

ROADWAY STANDARD DRAWINGS

DRWG.NO.	TITLE	DATE
PM-1	PAVEMENT MARKING DETAILS	02-27-20
PM-2	PERMANENT PAVEMENT MARKING ON ACCESS CONTROLLED ROADWAYS	05-14-20
PU-1	DETAILS OF PIPE UNDERDRAIN	12-08-16
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
TR-1A	DETAILS OF STANDARD TURNOUT FOR ENTRANCE & EXIT RAMP(S) (NON-REINFORCED)	08-22-22

DATE & TIME: 10/13/2023 9:35:25 AM
FILE: J:\25846.1\1040883 - Specifications & General Notes.dgn

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
303-1	AGGREGATE BASE COURSE
306-1	QUALITY CONTROL AND ACCEPTANCE
400-1	TACK COATS
400-4	DESIGN AND QUALITY CONTROL OF ASPHALT MIXTURES
400-5	PERCENT AIR VOIDS FOR ACHM MIX DESIGNS
400-6	LIQUID ANTI-STRIP ADDITIVE
400-7	TRACKLESS TACK
404-3	DESIGN OF ASPHALT MIXTURES
409-2	ASPHALT LABORATORY FACILITY
410-1	CONSTRUCTION REQUIREMENTS AND ACCEPTANCE OF ASPHALT CONCRETE PLANT MIX COURSES
410-2	DEVICES FOR MEASURING DENSITY FOR ROLLING PATTERNS
410-4	EVALUATION OF ACHM SUBLOT REPLACEMENT MATERIAL
416-1	RECYCLED ASPHALT PAVEMENT
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)
800-1	STRUCTURES
802-4	CEMENT
804-2	REINFORCING STEEL FOR STRUCTURES
JOB 040883	ASSESSMENT OF WORKING DAYS – MAINTENANCE OF TRAFFIC
JOB 040883	BIDDING REQUIREMENTS AND CONDITIONS
JOB 040883	BRIDGE DECK REPAIR FOR POLYMER OVERLAYS
JOB 040883	BROADBAND INTERNET SERVICE FOR ASPHALT CONCRETE PLANT
JOB 040883	BUY AMERICA - CONSTRUCTION MATERIALS
JOB 040883	CARGO PREFERENCE ACT REQUIREMENTS
JOB 040883	COLD MILLING – COUNTY PROPERTY
JOB 040883	CONSTRUCTION PROJECT INFORMATION SIGN
JOB 040883	COORDINATION OF WORK
JOB 040883	DESIGN AND QUALITY CONTROL OF ASPHALT MIXTURES
JOB 040883	DESIGN OF ASPHALT MIXTURES - AGGREGATES
JOB 040883	DISADVANTAGED BUSINESS ENTERPRISE BIDDER'S RESPONSIBILITIES
JOB 040883	ENHANCED THERMOPLASTIC PAVEMENT MARKING
JOB 040883	FLEXIBLE BEGINNING OF WORK – CALENDAR DAY CONTRACT
JOB 040883	GOALS FOR DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION
JOB 040883	LIQUIDATED DAMAGES PROCEDURE FOR BID LETTINGS
JOB 040883	LONGITUDINAL JOINT DENSITIES FOR ACHM SURFACE COURSES
JOB 040883	MAINTENANCE OF TRAFFIC
JOB 040883	MANDATORY ELECTRONIC CONTRACT
JOB 040883	MANDATORY ELECTRONIC DOCUMENT SUBMITTAL
JOB 040883	MOBILE SPEED NOTIFICATION SYSTEM (SPECIAL)
JOB 040883	PARTNERING REQUIREMENTS
JOB 040883	POLYMER OVERLAY
JOB 040883	PRICE ADJUSTMENT FOR ASPHALT BINDER
JOB 040883	PRICE ADJUSTMENT FOR FUEL
JOB 040883	PROHIBITION OF CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT
JOB 040883	REPAIR OF PARAPET RAIL
JOB 040883	RESTRICTIONS ON THE USE OF RECYCLED ASPHALT PAVEMENT MATERIAL
JOB 040883	SCARIFYING CONCRETE PAVEMENT
JOB 040883	SEQUENCE OF CONSTRUCTION
JOB 040883	SITE USE (A+C METHOD) – CALENDAR DAY CONTRACT
JOB 040883	SPALL REPAIR OF PORTLAND CEMENT CONCRETE PAVEMENT
JOB 040883	SUBMISSION OF ASPHALT CONCRETE HOT MIX ACCEPTANCE TEST RESULTS
JOB 040883	TOTAL SOLAR ECLIPSE
JOB 040883	TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES
JOB 040883	ULTRATHIN BONDED WEARING COURSE
JOB 040883	UNDERDRAIN INSPECTION AND FLUSHING
JOB 040883	UTILITY ADJUSTMENTS
JOB 040883	VALUE ENGINEERING
JOB 040883	WARM MIX ASPHALT
JOB 040883	WATER POLLUTION CONTROL

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
10/13/2023		6	ARK.	040883	4	22
GOVERNING SPECIFICATIONS AND GENERAL NOTES						



Digitally signed by Thomas N. Taegtmeyer
Date: 2023.10.13

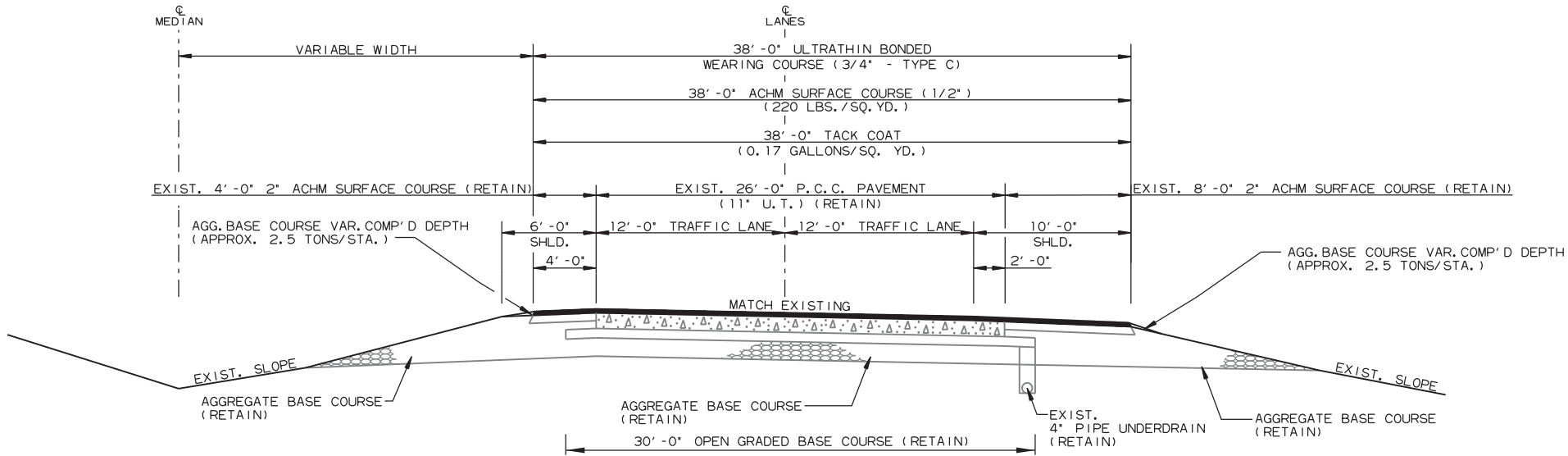
GENERAL NOTES

1. 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.
2. ALL LAND MONUMENTS LOCATED WITHIN THE CONSTRUCTION AREA SHALL BE PROTECTED IN ACCORDANCE WITH SECTION 107.12 OF THE STANDARD SPECIFICATIONS.
3. 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.
4. THE SEQUENCE AS SHOWN ON THE MAINTENANCE OF TRAFFIC PLANS IS A GENERAL OUTLINE FOR THE CONSTRUCTION OF THIS PROJECT, AND IN NO WAY IS IT INTENDED TO COVER EVERY ITEM IN THE PROJECT. ITEMS NOT CRITICAL TO THE CONSTRUCTION SEQUENCE MAY BE CONSTRUCTED IN ANY STAGE AS APPROVED BY THE RESIDENT ENGINEER.
5. AGGREGATE BASE COURSE OUTSIDE THE EXISTING SHOULDERS SHALL BE UNIFORMLY COMPACTED, STABLE, AND FREE OF SEGREGATION. THE DENSITY REQUIREMENTS OF SECTION 303 ARE HEREBY WAIVED.
6. BRIDGE ANALYSIS SHALL BE REQUIRED PER SECTION 105.14 OF THE STANDARD SPECIFICATIONS.

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	040883	5	22
TYPICAL SECTIONS OF IMPROVEMENT						

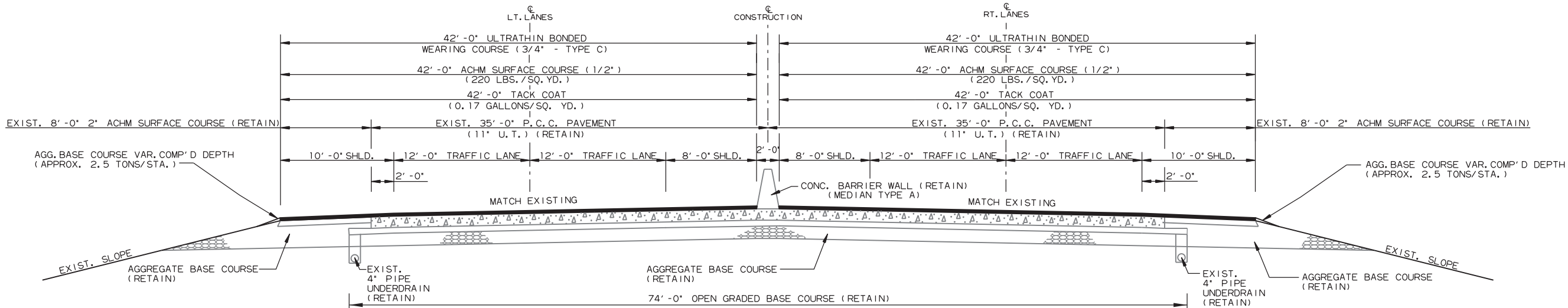


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Date: 2023.07.07



NOTE: THE LONGITUDINAL JOINTS SHALL BE AT LANE LINES.

LEFT MAIN LANES		RIGHT MAIN LANES	
LOG MILE 40.217 TO LOG MILE 41.243	LOG MILE 40.217 TO LOG MILE 41.243	LOG MILE 40.217 TO LOG MILE 41.243	LOG MILE 40.217 TO LOG MILE 41.243
LOG MILE 45.835 TO LOG MILE 47.304	LOG MILE 45.835 TO LOG MILE 47.295	LOG MILE 45.835 TO LOG MILE 47.295	LOG MILE 45.835 TO LOG MILE 47.295
LOG MILE 47.374 TO LOG MILE 47.625	LOG MILE 47.385 TO LOG MILE 47.647	LOG MILE 47.385 TO LOG MILE 47.647	LOG MILE 47.385 TO LOG MILE 47.647
LOG MILE 47.889 TO LOG MILE 48.901	LOG MILE 47.920 TO LOG MILE 48.901	LOG MILE 47.920 TO LOG MILE 48.901	LOG MILE 47.920 TO LOG MILE 48.901
LOG MILE 49.074 TO LOG MILE 51.521	LOG MILE 49.063 TO LOG MILE 51.521	LOG MILE 49.063 TO LOG MILE 51.521	LOG MILE 49.063 TO LOG MILE 51.521
LOG MILE 51.702 TO LOG MILE 53.812	LOG MILE 51.728 TO LOG MILE 53.825	LOG MILE 51.728 TO LOG MILE 53.825	LOG MILE 51.728 TO LOG MILE 53.825
LOG MILE 53.878 TO LOG MILE 57.949	LOG MILE 53.891 TO LOG MILE 57.946	LOG MILE 53.891 TO LOG MILE 57.946	LOG MILE 53.891 TO LOG MILE 57.946
LOG MILE 57.993 TO LOG MILE 60.543	LOG MILE 57.990 TO LOG MILE 60.556	LOG MILE 57.990 TO LOG MILE 60.556	LOG MILE 57.990 TO LOG MILE 60.556



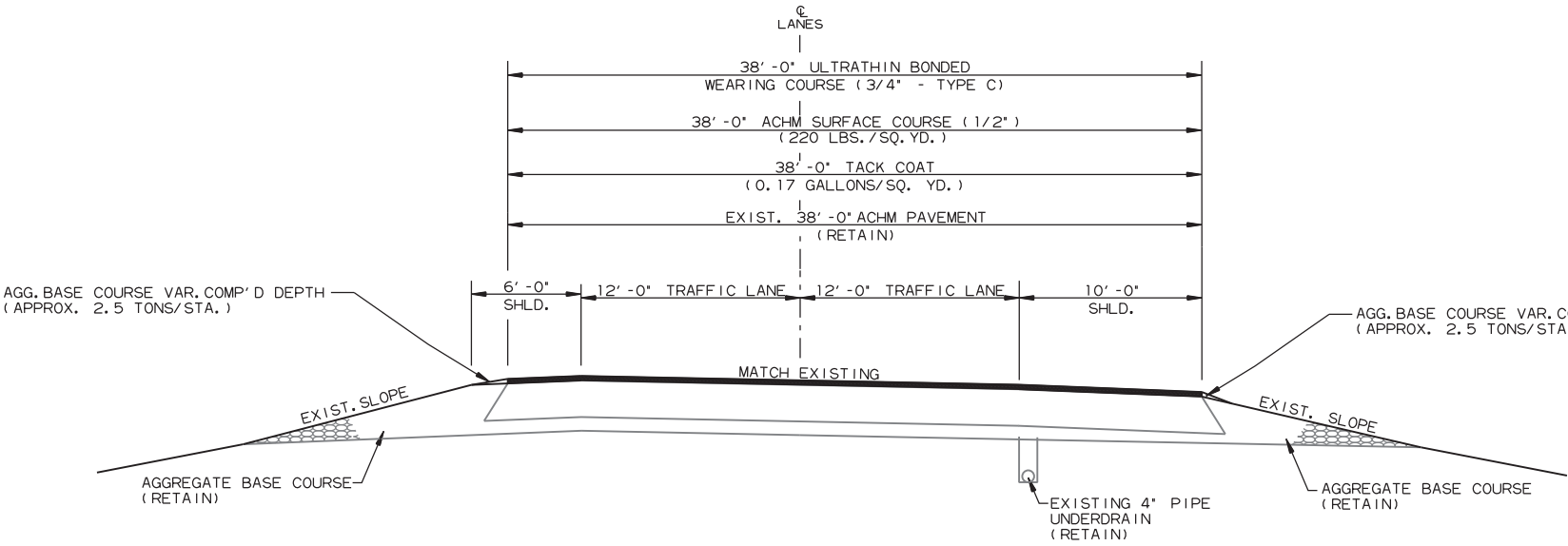
LEFT MAIN LANES		RIGHT MAIN LANES	
LOG MILE 41.882 TO LOG MILE 42.096	LOG MILE 41.882 TO LOG MILE 42.096	LOG MILE 41.882 TO LOG MILE 42.096	LOG MILE 41.882 TO LOG MILE 42.096
LOG MILE 42.396 TO LOG MILE 43.194	LOG MILE 42.396 TO LOG MILE 43.194	LOG MILE 42.396 TO LOG MILE 43.194	LOG MILE 42.396 TO LOG MILE 43.194
LOG MILE 43.403 TO LOG MILE 43.962	LOG MILE 43.403 TO LOG MILE 43.962	LOG MILE 43.403 TO LOG MILE 43.962	LOG MILE 43.403 TO LOG MILE 43.962
LOG MILE 44.233 TO LOG MILE 45.835	LOG MILE 44.233 TO LOG MILE 45.835	LOG MILE 44.233 TO LOG MILE 45.835	LOG MILE 44.233 TO LOG MILE 45.835

TYPICAL SECTIONS OF IMPROVEMENT

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	040883	6	22
TYPICAL SECTIONS OF IMPROVEMENT						

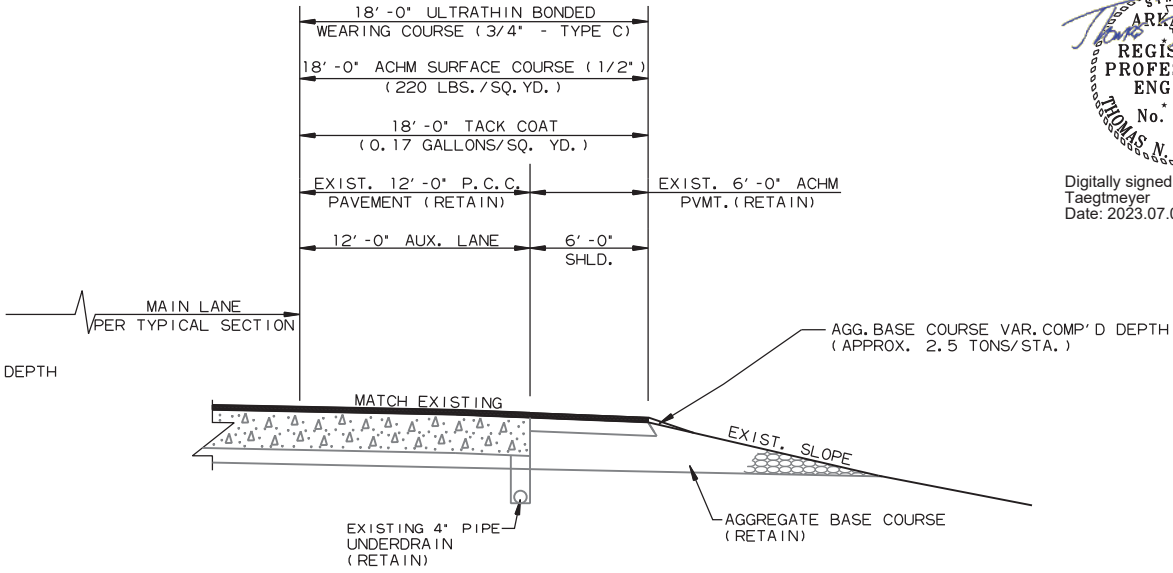


Digitally signed by Thomas N. Taegtmeyer
Date: 2023.07.07

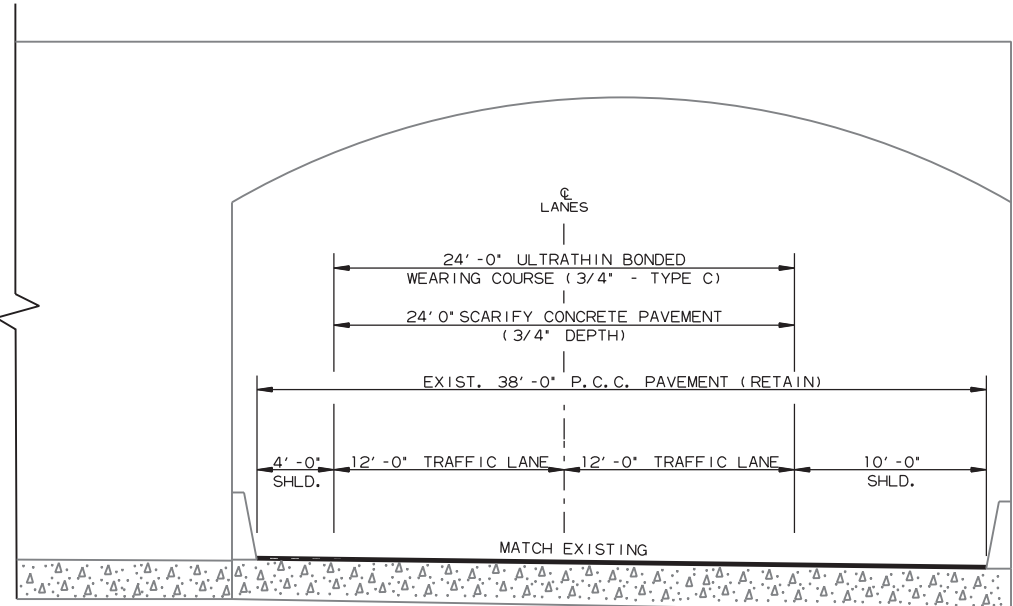


NOTE: THE LONGITUDINAL JOINTS SHALL BE AT LANE LINES.

INTERSTATE 49 - OVERLAY & U.T.B.W.C.
(SHOWN IN DIRECTION OF TRAFFIC)
LEFT MAIN LANES LOG MILE 60.603 TO LOG MILE 61.200
RIGHT MAIN LANES LOG MILE 60.616 TO LOG MILE 61.200

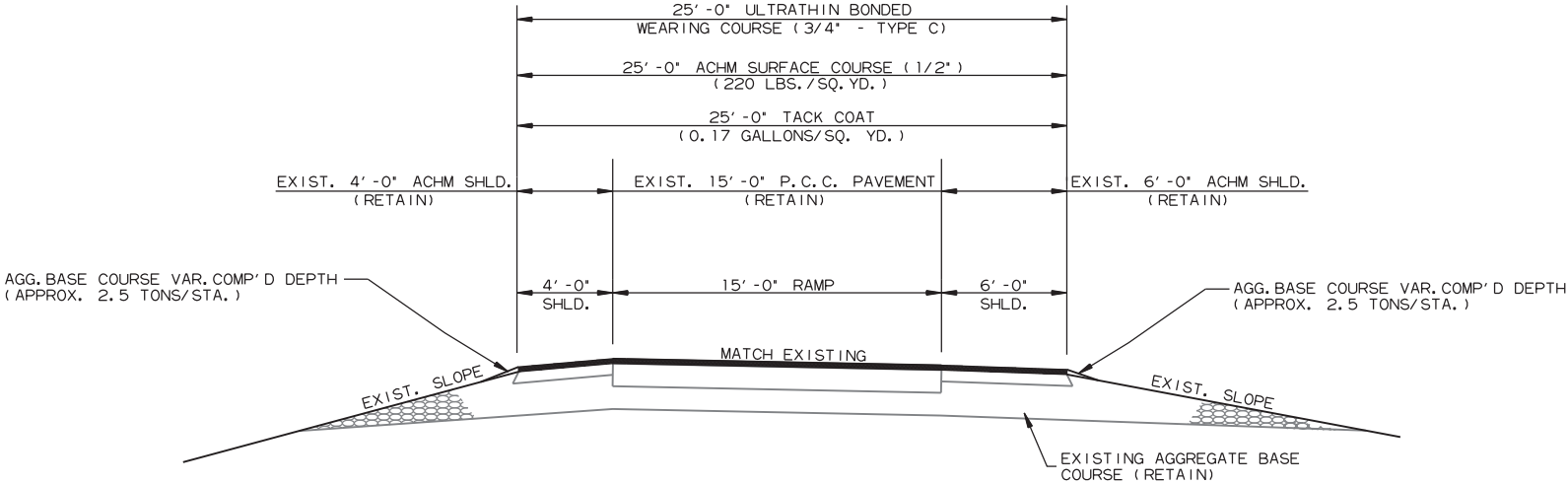


INTERSTATE 49 - OVERLAY & U.T.B.W.C.
W/AUXILIARY LANE
(SHOWN IN DIRECTION OF TRAFFIC)



BOBBY HOPPER TUNNEL - U.T.B.W.C.
(SHOWN IN DIRECTION OF TRAFFIC)

LEFT MAIN LANES
LOG MILE 41.507 TO LOG MILE 41.545

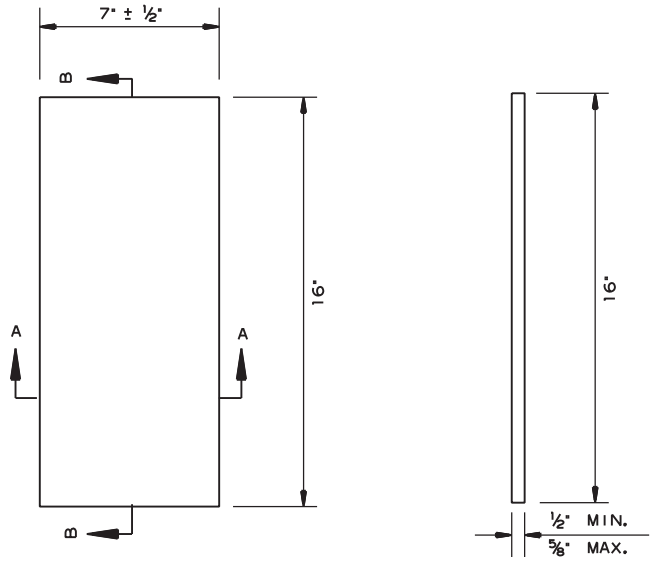


ENTRANCE AND EXIT RAMPS - OVERLAY & U.T.B.W.C.
(SHOWN IN DIRECTION OF TRAFFIC)

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	040883	7	22
SPECIAL DETAILS						

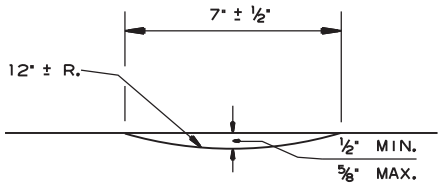


Digitally signed by Thomas N. Taegtmeier
Date: 2023.07.07

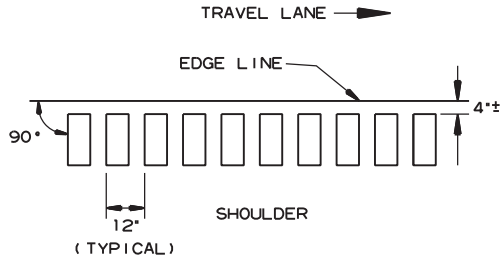


PLAN

SECTION B-B

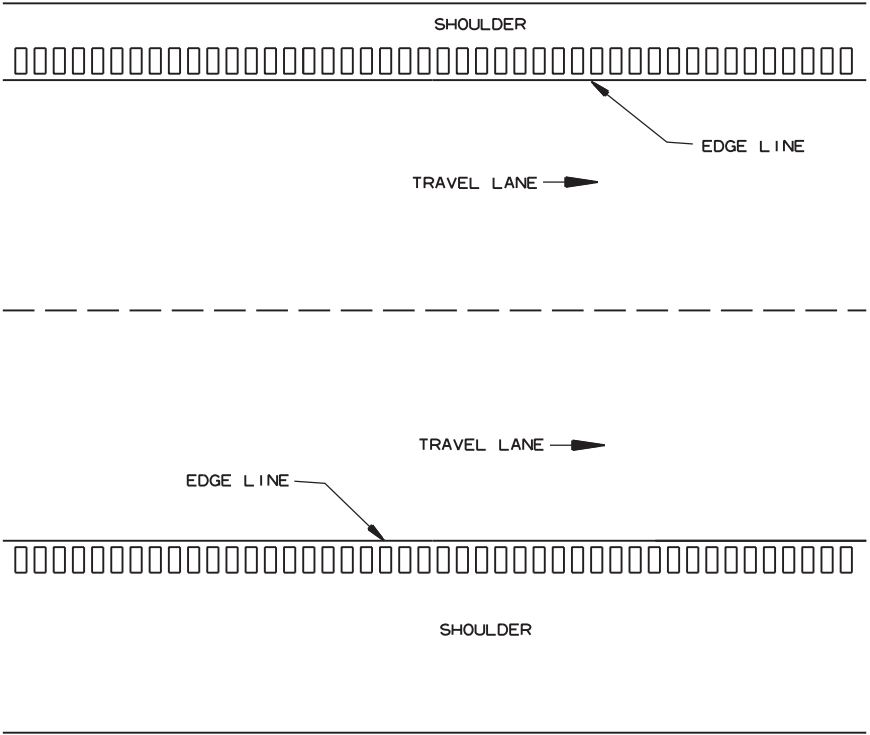


SECTION A-A



LOCATION PLAN OF RUMBLE STRIPS
LEFT OR RIGHT SHOULDER

DETAILS OF RUMBLE STRIPS



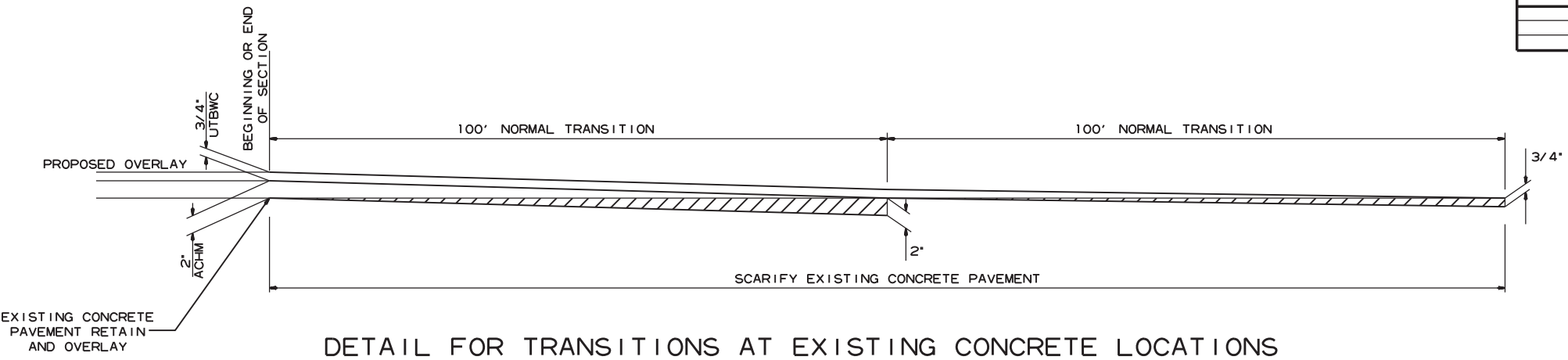
PLAN VIEW

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

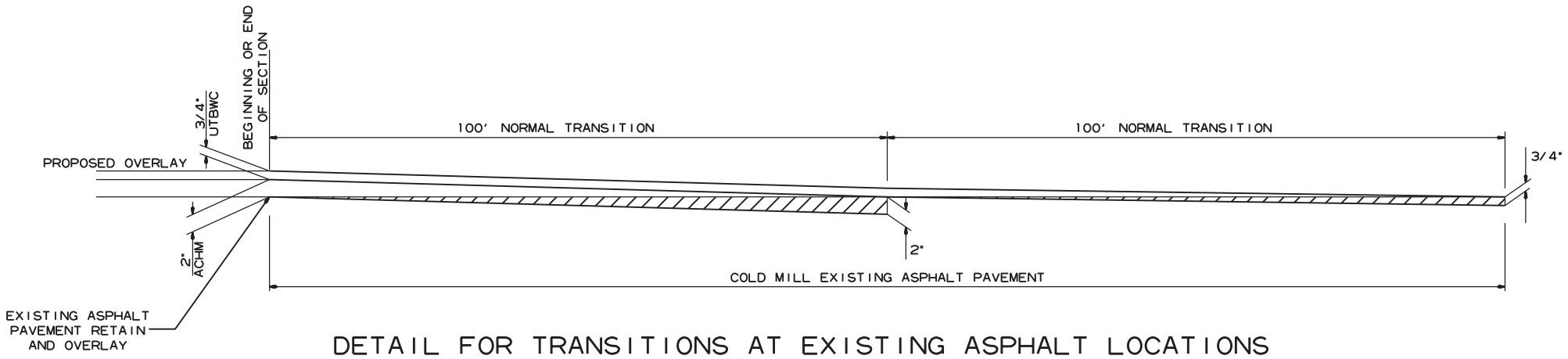
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	040883	8	22
SPECIAL DETAILS						



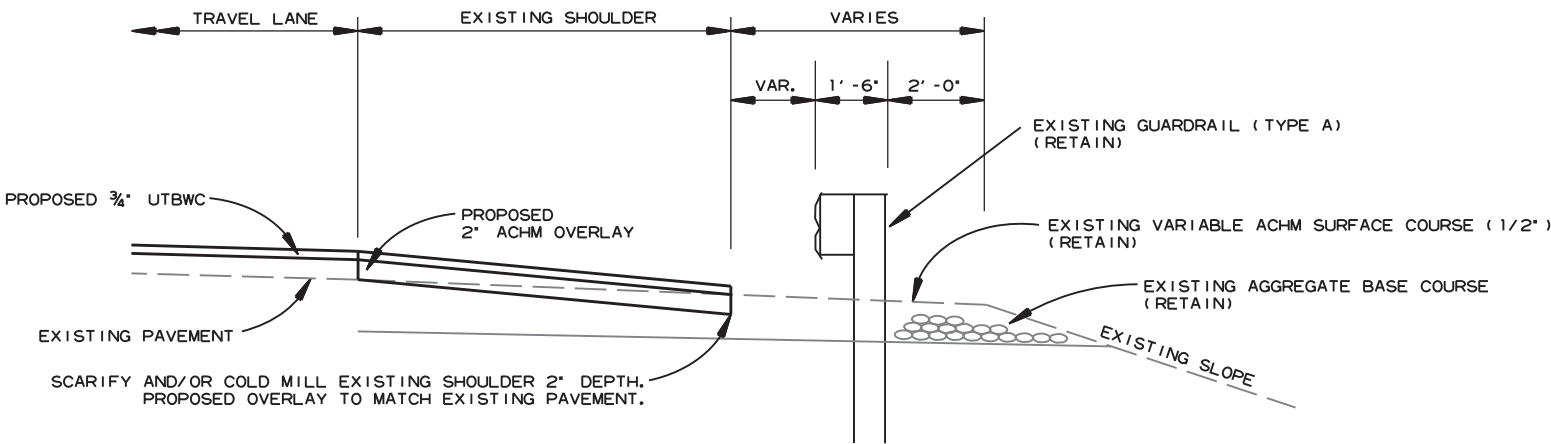
Digitally signed by Thomas N. Taegtmeyer
Date: 2023.07.07



DETAIL FOR TRANSITIONS AT EXISTING CONCRETE LOCATIONS



DETAIL FOR TRANSITIONS AT EXISTING ASPHALT LOCATIONS



DETAIL FOR TRANSITION AT EXISTING GUARDRAIL

Job 040883
Start Date Mo Year
Est Completion Mo Year
IDRIVE
ARKANSAS.COM

27.9		11.1		6		23.1		27.9									
14.3		14.4		6		13.2		6		8		6.1		13.8		14.2	
6.4		8.5		6		34.9		6		8		6		13.8		6.4	
15.4		25.5		55.1		16.2											
16.4		63.4		16.2													
96																	

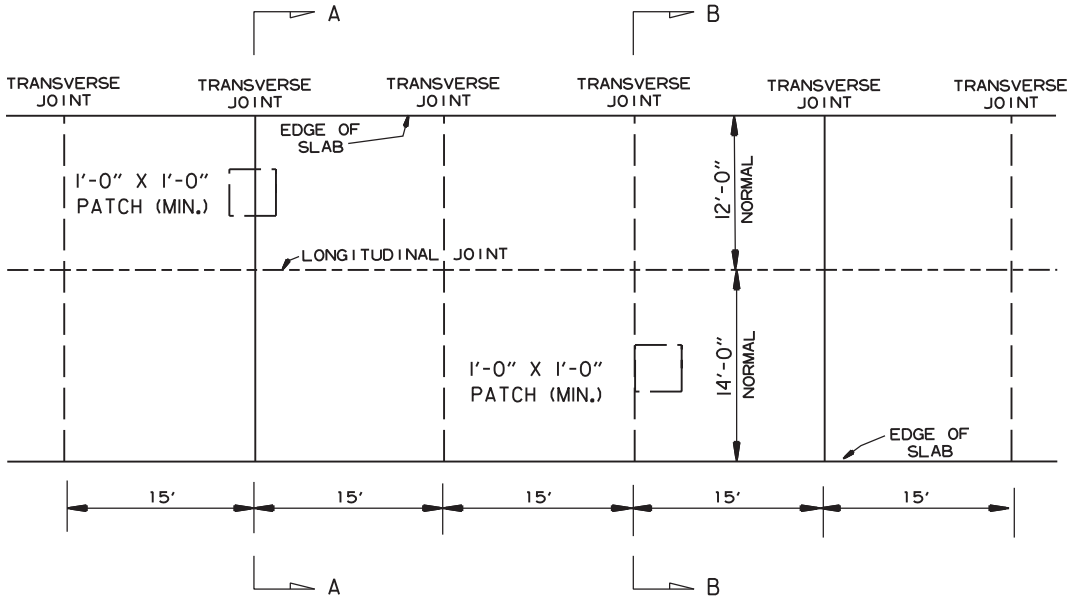
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"Job XXXXXX" C 2K; "Start Date Mo Year" C 2K;
"Est Completion Mo Year" C 2K; "IDRIVE" Arial;
"ARKANSAS.COM" Arial;

CONSTRUCTION PROJECT INFORMATION SIGN

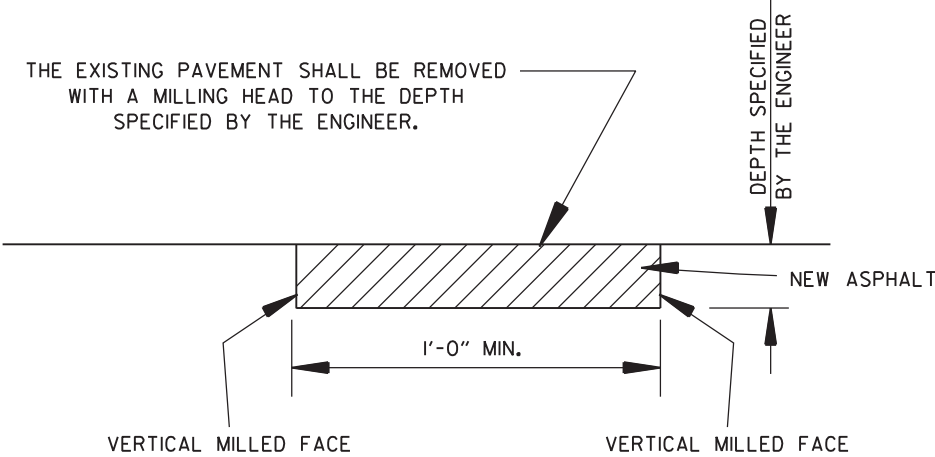
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		6	ARK.	040883	10	22
SPECIAL DETAILS						



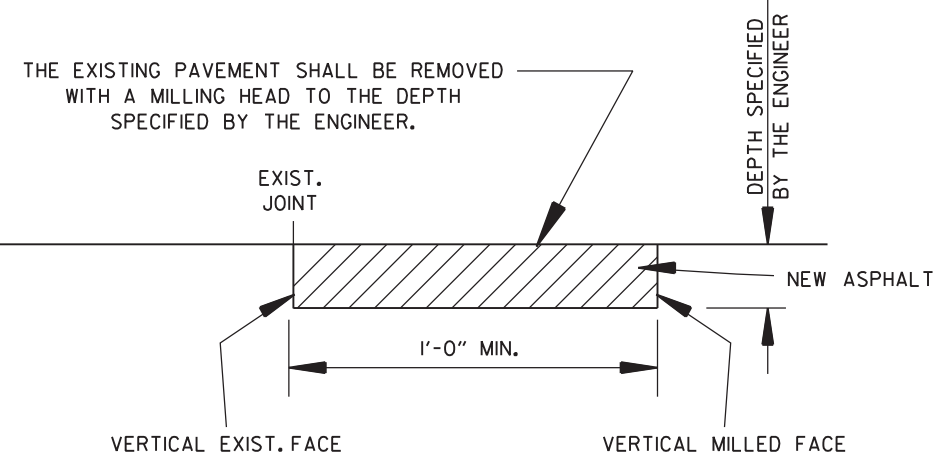
Digitally signed by Thomas N. Taegtmeier
Date: 2023.07.07



PLAN VIEW OF SPALL
REPAIR OF P.C.C. PAV'T



DETAIL OF SPALL REPAIR
SECTION A-A



DETAIL OF SPALL REPAIR
SECTION B-B

DETAILS OF SPALL
REPAIR OF P.C.C. PAV'T

NOTE: THE EXACT SIZE AND LOCATION OF AREA TO BE REPAIRED SHALL BE
DETERMINED BY THE ENGINEER.

YELLOW BKG
BLACK LEGEND

WHITE BKG
BLACK LEGEND

ORANGE BKG
BLACK LEGEND

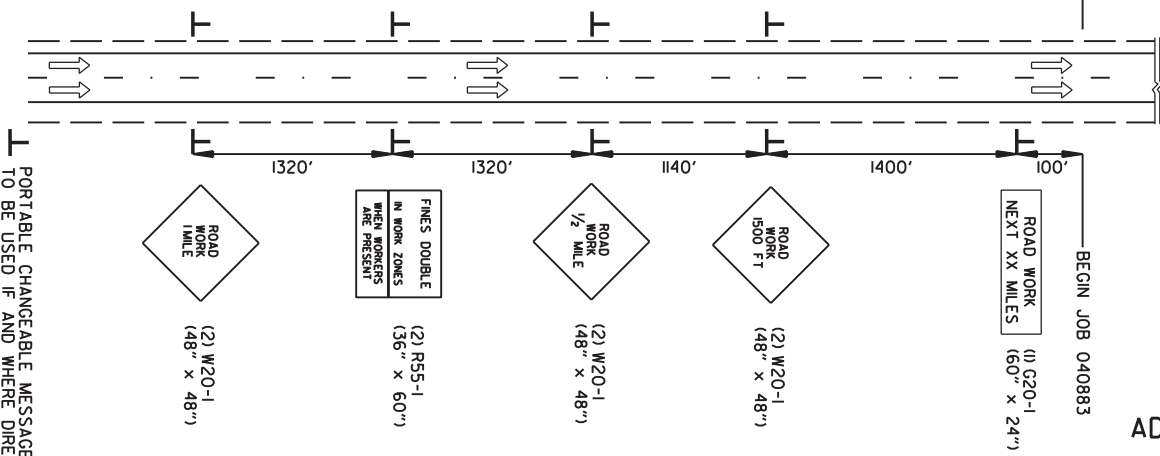
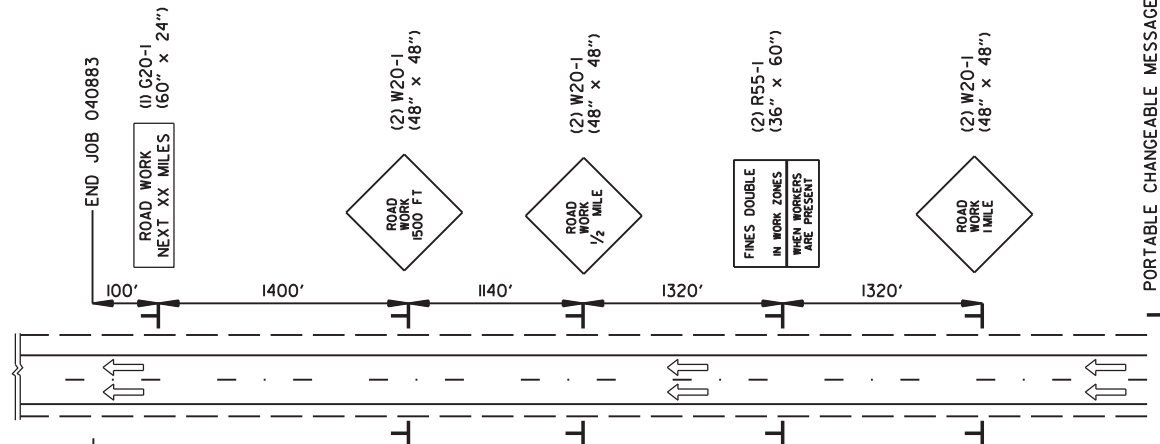
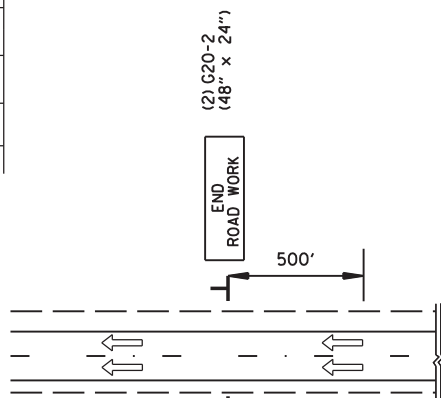
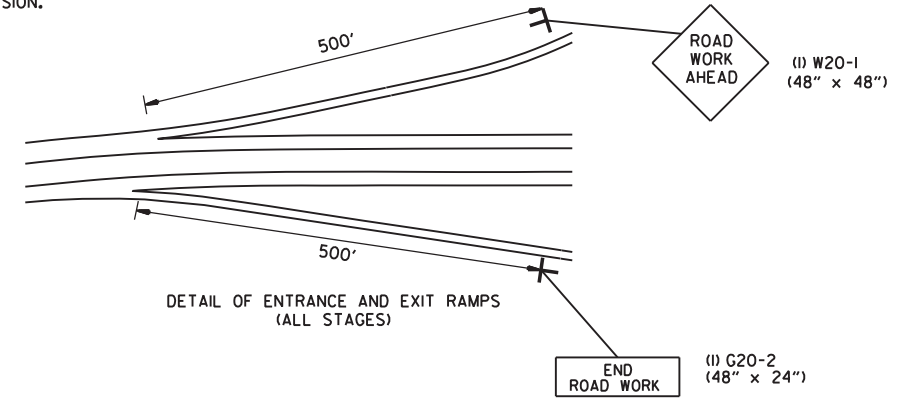


WZ-1 (INTERSTATE) SIGN

4"	8" E-SERIES
4"	
12"	
1.5"	6" C-SERIES
2.5"	6" C-SERIES
5.5"	6" D-SERIES
4"	

CONSTRUCTION SEQUENCE:

PAVING OPERATIONS SHALL UTILIZE A SINGLE FOUR (4) MILE LANE CLOSURE IN ONE DIRECTION. NO LANE CLOSURE MAY EXCEED THE ACTIVE WORK AREA BY MORE THAN ONE QUARTER (1/4) MILE. REFER TO MAINTENANCE OF TRAFFIC SPECIAL PROVISION.



ADVANCE WARNING SIGNS (ALL STAGES)

Arkansas
REGISTERED
PROFESSIONAL
ENGINEER
No. 19605
Thomas N. Taegtmeyer
Digitally signed by Thomas N. Taegtmeyer
Date: 2023.07.07



Digitally signed by Thomas N. Taegtmeier
Date: 2023.07.07

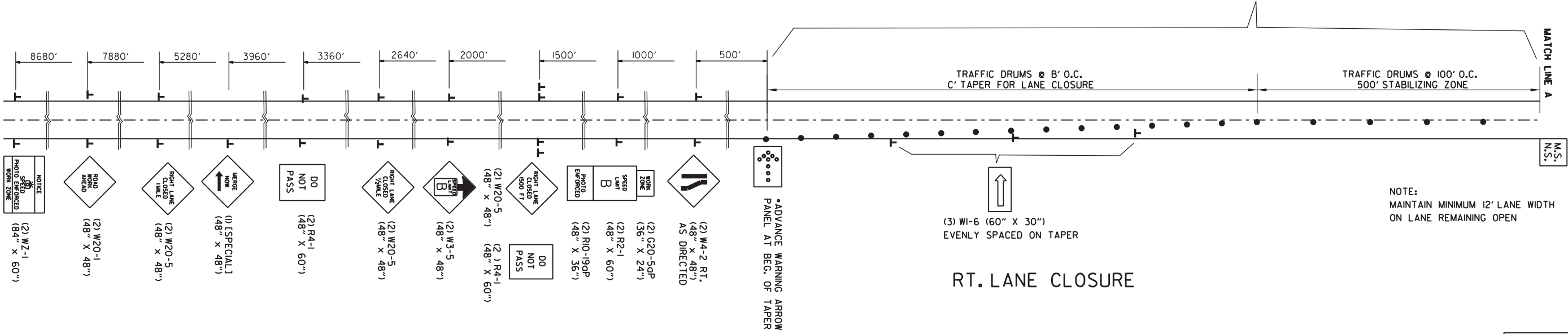
TABLE OF VARIABLES				
DESIGN SPEED "A"	B	C	D	E
60	50	720	1100	600
65	55	780	1210	660
70	60	840	1320	720
75	65	900	1430	780

M.S. = MOBILE SPEED
N.S. = NOTIFICATION SYSTEM

P.R. = PHOTO RADAR
T.S. = TRAILER SYSTEM

•NOTE: THE PHOTO
RADAR TRAILER SYSTEM
TO BE FURNISHED AND
PLACED BY STATE FORCES.

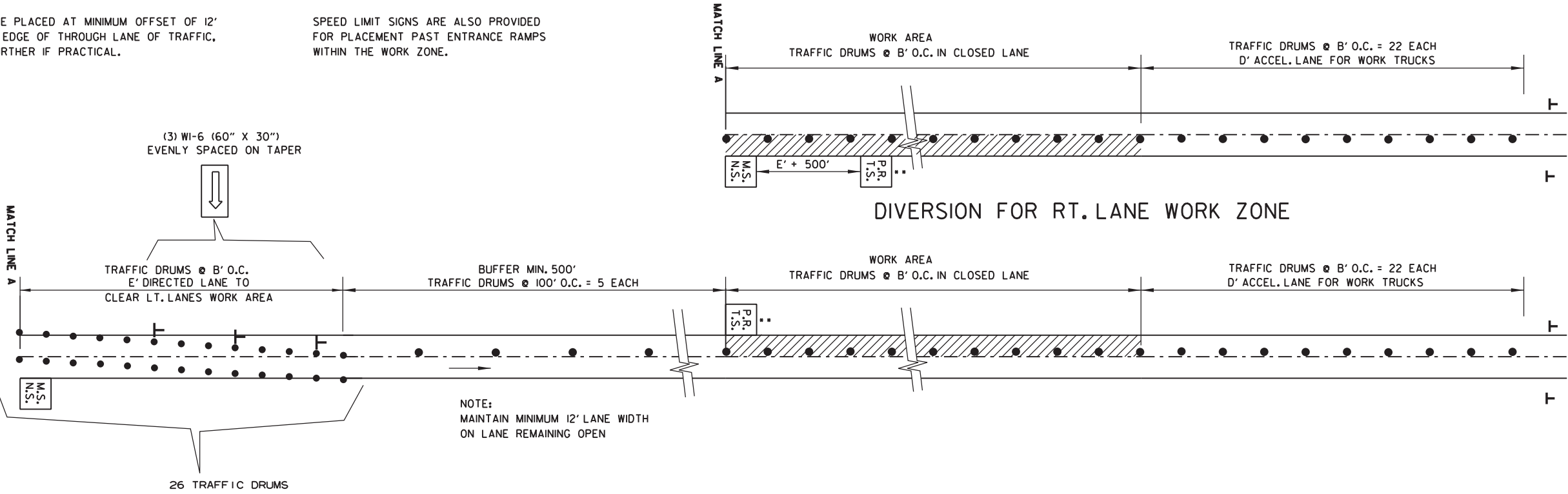
•PORTABLE CHANGEABLE MESSAGE SIGN
TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER



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

•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.



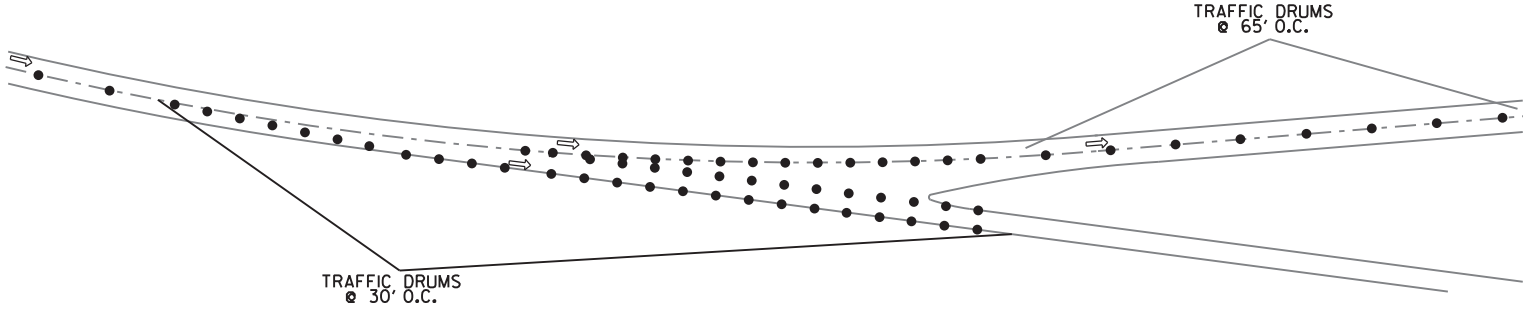
SPEED
LIMIT
A
(2) R2-1
(48" X 60")

SPEED
LIMIT
A
(2) R2-1
(48" X 60")

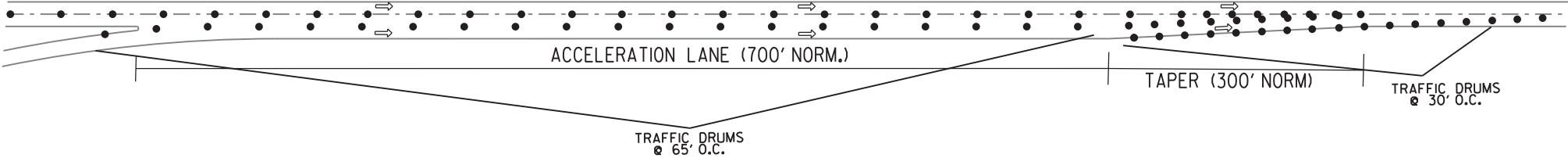
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	040883	13	22
MAINTENANCE OF TRAFFIC DETAILS						



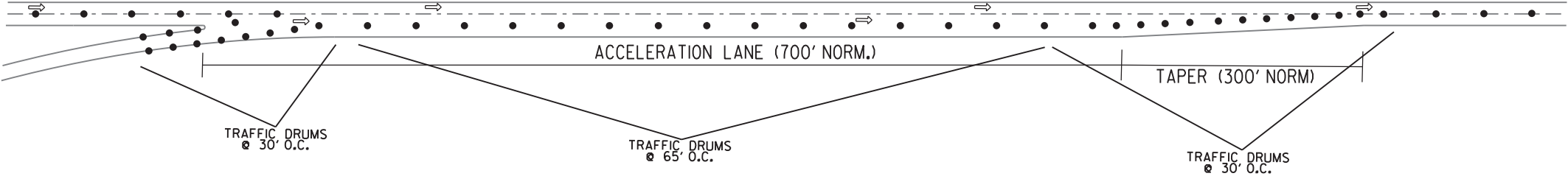
Digitally signed by Thomas N. Taegtmeier
Date: 2023.07.07



EXIT RAMP - TYPICAL TRAFFIC DRUM LAYOUT
OUTSIDE LANE CLOSURE



ENTRANCE RAMP - TYPICAL TRAFFIC DRUM LAYOUT
OUTSIDE LANE CLOSURE

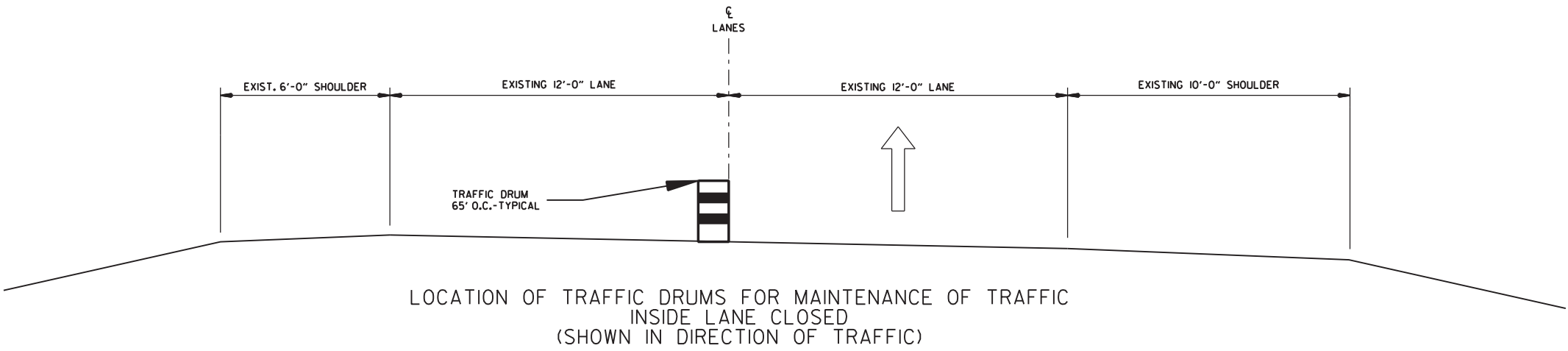
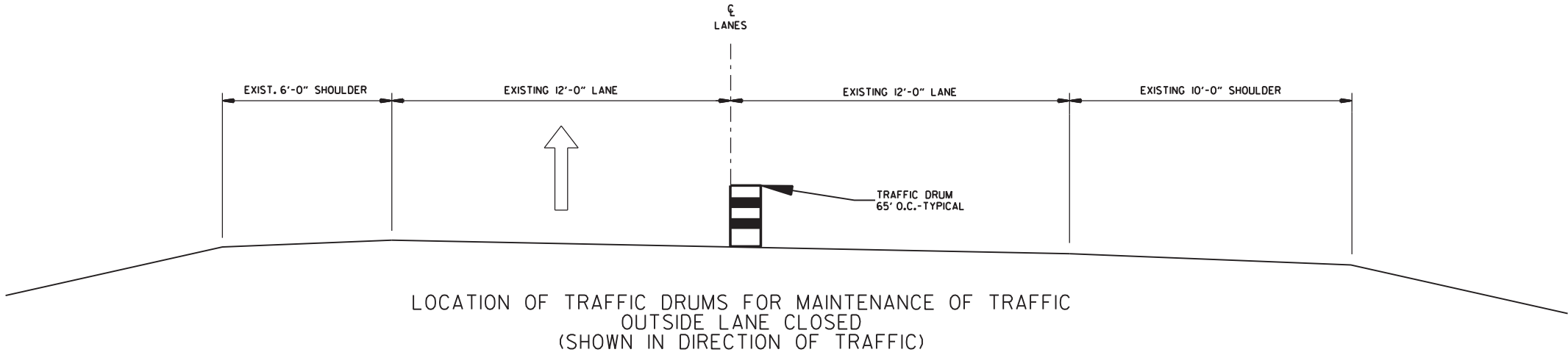


ENTRANCE RAMP - TYPICAL TRAFFIC DRUM LAYOUT
ACCELERATION LANE CLOSURE

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	040883	14	22
MAINTENANCE OF TRAFFIC DETAILS						



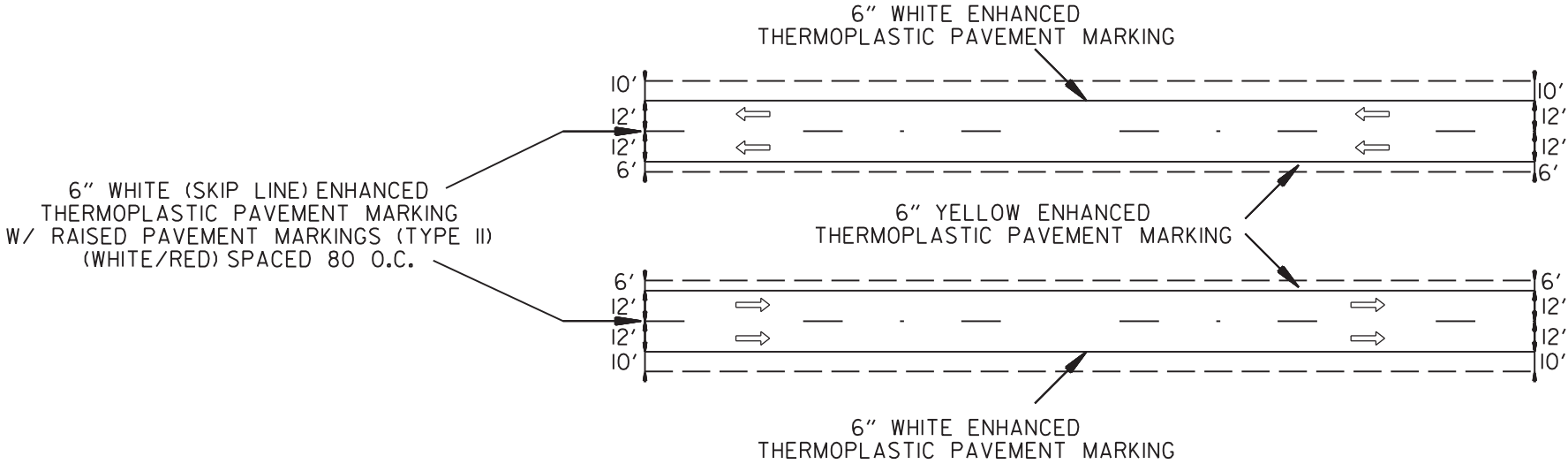
Digitally signed by Thomas N. Taegtmeier
Date: 2023.07.07



DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	040883	15	22
PERMANENT PAVEMENT MARKING DETAILS						



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Date: 2023.07.07



NOTE: SEE PM-1 AND PM-2 FOR ADDITIONAL STRIPING DETAILS.

FINAL STRIPING DETAIL

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	040883	16	22
QUANTITIES						



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Date: 2023.07.07

ADVANCE WARNING SIGNS AND DEVICES									
SIGN NUMBER	DESCRIPTION	SIGN SIZE	TOTAL SIGNS REQUIRED		CONSTRUCTION PROJECT INFORMATION SIGN UPDATE	TRAFFIC DRUMS	*ADVANCE WARNING ARROW PANEL	*PORTABLE CHANGEABLE MESSAGE SIGN	MOBILE SPEED NOTIFICATION SYSTEM (SPECIAL)
			NO	SQ. FT.					
					EACH		DAY	WEEK	EACH
W20-1	ROAD WORK 1 MILE	48"x48"	4	64.00					
W20-1	ROAD WORK 1/2 MILE	48"x48"	4	64.00					
W20-1	ROAD WORK 1500 FT.	48"x48"	4	64.00					
W20-1	ROAD WORK AHEAD	48"x48"	12	192.00					
G20-2	END ROAD WORK	48"x24"	13	104.00					
G20-1	ROAD WORK NEXT xx MILES	60"x24"	2	20.00					
G20-5aP	WORK ZONE	36"x24"	2	12.00					
W20-5	RIGHT LANE CLOSED 1 MILE	48"x48"	2	32.00					
W20-5	RIGHT LANE CLOSED 1/2 MILE	48"x48"	2	32.00					
W20-5	RIGHT LANE CLOSED 1500 FT	48"x48"	2	32.00					
* R2-1	SPEED LIMIT	48"x60"	6	120.00					
W1-6	LARGE ARROW	60"x30"	6	75.00					
W3-5	REDUCED SPEED LIMIT AHEAD	48"x48"	2	32.00					
* W4-2	RIGHT LANE ENDS	48"x48"	2	32.00					
R4-1	DO NOT PASS	48"x60"	4	80.00					
R10-19aP	PHOTO ENFORCED	48"x36"	2	24.00					
R55-1	FINES DOUBLE IN WORK ZONES WHEN WORKERS ARE PRESENT	36"x60"	4	60.00					
WZ-1	NOTICE SPEED PHOTO ENFORCED WORK ZONE	84"x60"	2	70.00					
SPECIAL	MERGE NOW ARROW	48"x48"	1	16.00					
SPECIAL	CONSTRUCTION PROJECT INFORMATION SIGN	96"x48"	2	64.00					
* SPECIAL	CONSTRUCTION PROJECT INFORMATION SIGN UPDATE				2				
	VERTICAL PANELS								
	TRAFFIC DRUMS		569			569			
	TRAFFIC CONES								
	TYPE III BARRICADE-RT. (8')								
	TYPE III BARRICADE-LT. (8')								
	TYPE III BARRICADE-RT. (16')								
	TYPE III BARRICADE-LT. (16')								
	FURNISHING AND INSTALLING PRECAST CONCRETE BARRIER								
	RELOCATING PRECAST CONCRETE BARRIER								
	TEMPORARY IMPACT ATTENUATION BARRIER								
	TEMPORARY IMPACT ATTENUATION BARRIER (REPAIR)								
	ADVANCE WARNING ARROW PANEL		1				250		
	PORTABLE CHANGEABLE MESSAGE SIGN		1					50	
	MOBILE SPEED NOTIFICATION SYSTEM (SPECIAL)		1						1
TOTALS:				1189.00	2	569	250	50	1

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.

CONSTRUCTION PAVEMENT MARKINGS AND PERMANENT PAVEMENT MARKINGS						
DESCRIPTION	ENTIRE JOB	CONSTRUCTION PAVEMENT MARKINGS	RAISED PAVEMENT MARKERS	ENHANCED THERMOPLASTIC PAVEMENT MARKING		
			TYPE II	6"		12"
			(WHITE/RED) EACH	WHITE	YELLOW	WHITE
	LIN. FT.	LIN. FT.		LIN. FT.		
CONSTRUCTION PAVEMENT MARKINGS	1102252	1102252				
RAISED PAVEMENT MARKERS TYPE II (WHITE/RED)	4307		4307			
ENHANCED THERMOPLASTIC PAVEMENT MARKING WHITE (6")	298953			298953		
ENHANCED THERMOPLASTIC PAVEMENT MARKING YELLOW (6")	241878				241878	
ENHANCED THERMOPLASTIC PAVEMENT MARKING WHITE (12")	10295					10295
TOTALS:		1102252	4307	298953	241878	10295

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

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	040883	17	22
QUANTITIES						



Digitally signed by Thomas N. Taegtmeyer
Date: 2023.07.07

COLD MILLING ASPHALT PAVEMENT (BOX 1 OF 3)

LOG MILE	LOG MILE	LOCATION	AVG. WIDTH	TOTAL LENGTH	COLD MILLING ASPHALT PAVEMENT
			FEET	FEET	SQ. YD.
I-49 MAIN LANES					
40.217	40.255	LT. & RT. SHLD. OF L.M.L. - DEPTH TRANS.	12.00	200.00	266.67
41.205	41.243	LT. & RT. SHLD. OF L.M.L. - DEPTH TRANS.	12.00	200.00	266.67
41.882	41.920	LT. SHLD. OF L.M.L. - DEPTH TRANS.	8.00	200.00	177.78
42.058	42.096	LT. SHLD. OF L.M.L. - DEPTH TRANS.	8.00	200.00	177.78
42.396	42.434	LT. SHLD. OF L.M.L. - DEPTH TRANS.	8.00	200.00	177.78
43.156	43.194	LT. SHLD. OF L.M.L. - DEPTH TRANS.	8.00	200.00	177.78
43.403	43.441	LT. SHLD. OF L.M.L. - DEPTH TRANS.	8.00	200.00	177.78
43.924	43.962	LT. SHLD. OF L.M.L. - DEPTH TRANS.	8.00	200.00	177.78
44.233	44.271	LT. SHLD. OF L.M.L. - DEPTH TRANS.	8.00	200.00	177.78
47.266	47.304	LT. & RT. SHLD. OF L.M.L. - DEPTH TRANS.	12.00	200.00	266.67
47.374	47.412	LT. & RT. SHLD. OF L.M.L. - DEPTH TRANS.	12.00	200.00	266.67
47.587	47.625	LT. & RT. SHLD. OF L.M.L. - DEPTH TRANS.	12.00	200.00	266.67
47.889	47.927	LT. & RT. SHLD. OF L.M.L. - DEPTH TRANS.	12.00	200.00	266.67
48.863	48.901	LT. & RT. SHLD. OF L.M.L. - DEPTH TRANS.	12.00	200.00	266.67
49.074	49.112	LT. & RT. SHLD. OF L.M.L. - DEPTH TRANS.	12.00	200.00	266.67
51.483	51.521	LT. & RT. SHLD. OF L.M.L. - DEPTH TRANS.	12.00	200.00	266.67
51.702	51.740	LT. & RT. SHLD. OF L.M.L. - DEPTH TRANS.	12.00	200.00	266.67
53.774	53.812	LT. & RT. SHLD. OF L.M.L. - DEPTH TRANS.	12.00	200.00	266.67
53.878	53.916	LT. & RT. SHLD. OF L.M.L. - DEPTH TRANS.	12.00	200.00	266.67
57.911	57.949	LT. & RT. SHLD. OF L.M.L. - DEPTH TRANS.	12.00	200.00	266.67
57.993	58.031	LT. & RT. SHLD. OF L.M.L. - DEPTH TRANS.	12.00	200.00	266.67
60.505	60.543	LT. & RT. SHLD. OF L.M.L. - DEPTH TRANS.	12.00	200.00	266.67
60.603	60.641	L.M.L. FULL WIDTH - DEPTH TRANS.	38.00	200.00	844.44
61.162	61.200	L.M.L. FULL WIDTH - DEPTH TRANS.	38.00	200.00	844.44
40.217	40.255	LT. & RT. SHLD. OF R.M.L. - DEPTH TRANS.	12.00	200.00	266.67
41.205	41.243	LT. & RT. SHLD. OF R.M.L. - DEPTH TRANS.	12.00	200.00	266.67
41.882	41.920	RT. SHLD. OF R.M.L. - DEPTH TRANS.	8.00	200.00	177.78
42.058	42.096	RT. SHLD. OF R.M.L. - DEPTH TRANS.	8.00	200.00	177.78
42.396	42.434	RT. SHLD. OF R.M.L. - DEPTH TRANS.	8.00	200.00	177.78
43.156	43.194	RT. SHLD. OF R.M.L. - DEPTH TRANS.	8.00	200.00	177.78
43.403	43.441	RT. SHLD. OF R.M.L. - DEPTH TRANS.	8.00	200.00	177.78
43.924	43.962	RT. SHLD. OF R.M.L. - DEPTH TRANS.	8.00	200.00	177.78
44.233	44.271	RT. SHLD. OF R.M.L. - DEPTH TRANS.	8.00	200.00	177.78
47.257	47.295	LT. & RT. SHLD. OF R.M.L. - DEPTH TRANS.	12.00	200.00	266.67
47.385	47.423	LT. & RT. SHLD. OF R.M.L. - DEPTH TRANS.	12.00	200.00	266.67
47.609	47.647	LT. & RT. SHLD. OF R.M.L. - DEPTH TRANS.	12.00	200.00	266.67
47.920	47.958	LT. & RT. SHLD. OF R.M.L. - DEPTH TRANS.	12.00	200.00	266.67
48.863	48.901	LT. & RT. SHLD. OF R.M.L. - DEPTH TRANS.	12.00	200.00	266.67
49.063	49.101	LT. & RT. SHLD. OF R.M.L. - DEPTH TRANS.	12.00	200.00	266.67
51.483	51.521	LT. & RT. SHLD. OF R.M.L. - DEPTH TRANS.	12.00	200.00	266.67
51.728	51.766	LT. & RT. SHLD. OF R.M.L. - DEPTH TRANS.	12.00	200.00	266.67
53.787	53.825	LT. & RT. SHLD. OF R.M.L. - DEPTH TRANS.	12.00	200.00	266.67
53.891	53.929	LT. & RT. SHLD. OF R.M.L. - DEPTH TRANS.	12.00	200.00	266.67
57.908	57.946	LT. & RT. SHLD. OF R.M.L. - DEPTH TRANS.	12.00	200.00	266.67
57.990	58.028	LT. & RT. SHLD. OF R.M.L. - DEPTH TRANS.	12.00	200.00	266.67
60.518	60.556	LT. & RT. SHLD. OF R.M.L. - DEPTH TRANS.	12.00	200.00	266.67
60.616	60.654	R.M.L. FULL WIDTH - DEPTH TRANS.	38.00	200.00	844.44
61.162	61.200	R.M.L. FULL WIDTH - DEPTH TRANS.	38.00	200.00	844.44
SUBTOTAL (BOX 1 OF 3)					13866.78

NOTE: COORDNATE COLD MILLING STOCKPILE LOCATIONS WITH DISTRICT ENGINEER.
STOCKPILE LOCATIONS SHALL BE NO FURTHER THAN FIVE MILES FROM EACH SITE.

COLD MILLING ASPHALT PAVEMENT (BOX 2 OF 3)

LOG MILE	LOG MILE	LOCATION	AVG. WIDTH	TOTAL LENGTH	COLD MILLING ASPHALT PAVEMENT
			FEET	FEET	SQ. YD.
I-49 GUARDRAIL LOCATIONS					
41.178	41.230	RT. OF R.M.L. GUARDRAIL	10.00	274.56	305.07
41.179	41.241	LT. OF R.M.L. GUARDRAIL	6.00	327.36	218.24
42.062	42.096	LT. OF L.M.L. GUARDRAIL	10.00	179.52	199.47
42.396	42.456	LT. OF L.M.L. GUARDRAIL	10.00	316.80	352.00
43.403	43.460	LT. OF L.M.L. GUARDRAIL	10.00	300.96	334.40
44.233	44.293	LT. OF L.M.L. GUARDRAIL	10.00	316.80	352.00
46.896	47.304	LT. OF L.M.L. GUARDRAIL	10.00	2154.24	2393.60
47.374	47.434	LT. OF L.M.L. GUARDRAIL	10.00	316.80	352.00
47.381	47.450	RT. OF L.M.L. GUARDRAIL	6.00	364.32	242.88
47.889	47.949	LT. OF L.M.L. GUARDRAIL	10.00	316.80	352.00
47.889	47.956	RT. OF L.M.L. GUARDRAIL	6.00	353.76	235.84
49.074	49.136	LT. OF L.M.L. GUARDRAIL	10.00	327.36	363.73
49.074	49.142	RT. OF L.M.L. GUARDRAIL	6.00	359.04	239.36
51.702	51.760	LT. OF L.M.L. GUARDRAIL	10.00	306.24	340.27
51.702	51.774	RT. OF L.M.L. GUARDRAIL	6.00	380.16	253.44
53.878	53.935	LT. OF L.M.L. GUARDRAIL	10.00	300.96	334.40
53.878	53.952	RT. OF L.M.L. GUARDRAIL	6.00	390.72	260.48
56.451	56.691	LT. OF L.M.L. GUARDRAIL	10.00	1267.20	1408.00
57.993	58.050	LT. OF L.M.L. GUARDRAIL	10.00	300.96	334.40
57.993	58.061	RT. OF L.M.L. GUARDRAIL	6.00	359.04	239.36
60.119	60.229	RT. OF L.M.L. GUARDRAIL	6.00	580.80	367.20
60.603	60.676	RT. OF L.M.L. GUARDRAIL	6.00	385.44	256.96
60.603	60.661	LT. OF L.M.L. GUARDRAIL	10.00	306.24	340.27
60.781	60.892	RT. OF L.M.L. GUARDRAIL	6.00	586.08	390.72
42.038	42.096	RT. OF R.M.L. GUARDRAIL	10.00	306.24	340.27
43.135	43.194	RT. OF R.M.L. GUARDRAIL	10.00	311.52	346.13
43.906	43.962	RT. OF R.M.L. GUARDRAIL	10.00	295.68	328.53
46.900	47.295	LT. OF R.M.L. GUARDRAIL	6.00	2085.60	1390.40
47.233	47.295	RT. OF R.M.L. GUARDRAIL	10.00	327.36	363.73
47.576	47.647	LT. OF R.M.L. GUARDRAIL	6.00	374.88	249.92
47.586	47.647	RT. OF R.M.L. GUARDRAIL	10.00	322.08	357.87
48.830	48.901	LT. OF R.M.L. GUARDRAIL	6.00	374.88	249.92
48.839	48.901	RT. OF R.M.L. GUARDRAIL	10.00	327.36	363.73
51.450	51.521	LT. OF R.M.L. GUARDRAIL	6.00	374.88	249.92
51.457	51.521	RT. OF R.M.L. GUARDRAIL	10.00	337.92	375.47
53.747	53.825	LT. OF R.M.L. GUARDRAIL	6.00	411.84	274.56
53.770	53.825	RT. OF R.M.L. GUARDRAIL	10.00	290.40	322.67
54.337	54.550	RT. OF R.M.L. GUARDRAIL	10.00	1124.64	1249.60
57.870	57.946	LT. OF R.M.L. GUARDRAIL	6.00	401.28	267.52
57.879	57.946	RT. OF R.M.L. GUARDRAIL	10.00	353.76	393.07
60.068	60.179	LT. OF R.M.L. GUARDRAIL	6.00	586.08	390.72
60.099	60.172	RT. OF R.M.L. GUARDRAIL	10.00	385.44	428.27
60.484	60.553	LT. OF R.M.L. GUARDRAIL	6.00	364.32	242.88
60.501	60.556	RT. OF R.M.L. GUARDRAIL	10.00	290.40	322.67
60.750	60.861	LT. OF R.M.L. GUARDRAIL	6.00	586.08	390.72
SUBTOTAL (BOX 2 OF 3)					19384.66

NOTE: COORDINATE COLD MILLING STOCKPILE LOCATIONS WITH DISTRICT ENGINEER.
STOCKPILE LOCATIONS SHALL BE NO FURTHER THAN FIVE MILES FROM EACH SITE.

COLD MILLING ASPHALT PAVEMENT (BOX 3 OF 3)

LOG MILE	LOG MILE	LOCATION	AVG. WIDTH	TOTAL LENGTH	COLD MILLING ASPHALT PAVEMENT
			FEET	FEET	SQ. YD.
I-49 RAMPS *					
45.032	45.070	L.M.L. ENTRANCE RAMP	10.00	200.00	222.22
45.104	45.142	L.M.L. EXIT RAMP	10.00	200.00	222.22
52.753	52.791	L.M.L. ENTRANCE RAMP	10.00	200.00	222.22
52.823	52.861	L.M.L. EXIT RAMP	10.00	200.00	222.22
57.907	57.945	L.M.L. ENTRANCE RAMP	10.00	200.00	222.22
57.987	58.025	L.M.L. EXIT RAMP	10.00	200.00	222.22
60.443	60.481	L.M.L. ENTRANCE RAMP	10.00	200.00	222.22
60.531	60.569	L.M.L. EXIT RAMP	10.00	200.00	222.22
61.127	61.165	L.M.L. EXIT RAMP	10.00	200.00	222.22
45.019	45.057	R.M.L. EXIT RAMP	10.00	200.00	222.22
45.096	45.134	R.M.L. ENTRANCE RAMP	10.00	200.00	222.22
52.867	52.905	R.M.L. EXIT RAMP	10.00	200.00	222.22
52.938	52.976	R.M.L. ENTRANCE RAMP	10.00	200.00	222.22
57.901	57.939	R.M.L. EXIT RAMP	10.00	200.00	222.22
57.977	58.015	R.M.L. ENTRANCE RAMP	10.00	200.00	222.22
60.566	60.604	R.M.L. EXIT RAMP	10.00	200.00	222.22
60.829	60.867	R.M.L. ENTRANCE RAMP	10.00	200.00	222.22
SUBTOTAL (BOX 3 OF 3)					3777.74
SUBTOTAL (BOX 2 OF 3)					19384.66
SUBTOTAL (BOX 1 OF 3)					13866.78
TOTAL:					37029.18

NOTE: COORDINATE COLD MILLING STOCKPILE LOCATIONS WITH DISTRICT ENGINEER.
STOCKPILE LOCATIONS SHALL BE NO FURTHER THAN FIVE MILES FROM EACH SITE.
* LOG MILES BASED ON MAIN LANES

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	040883	18	22
QUANTITIES						



Digitally signed by Thomas N. Taegtmeyer
Date: 2023.07.07

SCARIFYING CONCRETE PAVEMENT (1 OF 2)

LOG MILE	LOG MILE	LOCATION	LENGTH	AVG. WIDTH	SCARIFYING CONCRETE PAVEMENT
			FEET	FEET	SQ. YD.
I-49 MAIN LANES					
40.217	40.255	L.M.L.	200.00	26.00	577.78
41.205	41.243	L.M.L.	200.00	26.00	577.78
41.507	41.545	L.M.L. BOBBY HOPPER TUNNEL	200.00	24.00	533.33
41.882	41.920	L.M.L.	200.00	34.00	755.56
42.058	42.096	L.M.L.	200.00	34.00	755.56
42.396	42.434	L.M.L.	200.00	34.00	755.56
43.156	43.194	L.M.L.	200.00	34.00	755.56
43.403	43.441	L.M.L.	200.00	34.00	755.56
43.924	43.962	L.M.L.	200.00	34.00	755.56
44.233	44.271	L.M.L.	200.00	34.00	755.56
47.266	47.304	L.M.L.	200.00	26.00	577.78
47.374	47.412	L.M.L.	200.00	26.00	577.78
47.587	47.625	L.M.L.	200.00	26.00	577.78
47.889	47.927	L.M.L.	200.00	26.00	577.78
48.863	48.901	L.M.L.	200.00	26.00	577.78
49.074	49.112	L.M.L.	200.00	26.00	577.78
51.483	51.521	L.M.L.	200.00	26.00	577.78
51.702	51.740	L.M.L.	200.00	26.00	577.78
53.774	53.812	L.M.L.	200.00	26.00	577.78
53.878	53.916	L.M.L.	200.00	26.00	577.78
57.911	57.949	L.M.L.	200.00	26.00	577.78
57.993	58.031	L.M.L.	200.00	26.00	577.78
60.505	60.543	L.M.L.	200.00	26.00	577.78
40.217	40.255	R.M.L.	200.00	26.00	577.78
41.205	41.243	R.M.L.	200.00	26.00	577.78
41.882	41.920	R.M.L.	200.00	34.00	755.56
42.058	42.096	R.M.L.	200.00	34.00	755.56
42.396	42.434	R.M.L.	200.00	34.00	755.56
43.156	43.194	R.M.L.	200.00	34.00	755.56
43.403	43.441	R.M.L.	200.00	34.00	755.56
43.924	43.962	R.M.L.	200.00	34.00	755.56
44.233	44.271	R.M.L.	200.00	34.00	755.56
47.257	47.295	R.M.L.	200.00	26.00	577.78
47.385	47.423	R.M.L.	200.00	26.00	577.78
47.609	47.647	R.M.L.	200.00	26.00	577.78
47.920	47.958	R.M.L.	200.00	26.00	577.78
48.863	48.901	R.M.L.	200.00	26.00	577.78
49.063	49.101	R.M.L.	200.00	26.00	577.78
51.483	51.521	R.M.L.	200.00	26.00	577.78
51.728	51.766	R.M.L.	200.00	26.00	577.78
53.787	53.825	R.M.L.	200.00	26.00	577.78
53.891	53.929	R.M.L.	200.00	26.00	577.78
57.908	57.946	R.M.L.	200.00	26.00	577.78
57.990	58.028	R.M.L.	200.00	26.00	577.78
60.518	60.556	R.M.L.	200.00	26.00	577.78
SUBTOTAL (1 OF 2):					28444.57

SPALL REPAIR OF PORTLAND CEMENT CONCRETE PAVEMENT

LOG MILE	LOG MILE	LOCATION	ESTIMATED NUMBER OF LOACTIONS TO BE REPAIRED			TON
			1'x1'	2'x4'	2'x6'	
41.882	60.603	L.M.L.	315	330	120	
41.882	60.603	R.M.L.	357	510	240	
ENTIRE	PROJECT	TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER				450.00
TOTAL:						450.00

LOCATIONS AND NUMBER OF AREAS TO BE REPAIRED ARE ESTIMATED AND FOR INFORMATIONAL PURPOSES ONLY
BASIS OF ESTIMATE:
AVERAGE DEPTH OF REPAIR.....6"

SCARIFY CONCRETE PAVEMENT (2 OF 2)

LOG MILE	LOG MILE	LOCATION	LENGTH	AVG. WIDTH	SCARIFYING CONCRETE PAVEMENT
			FEET	FEET	SQ. YD.
I-49 RAMPS *					
45.032	45.070	L.M.L. ENTRANCE RAMP	200.00	15.00	333.33
45.104	45.142	L.M.L. EXIT RAMP	200.00	15.00	333.33
52.753	52.791	L.M.L. ENTRANCE RAMP	200.00	15.00	333.33
52.823	52.861	L.M.L. EXIT RAMP	200.00	15.00	333.33
57.907	57.945	L.M.L. ENTRANCE RAMP	200.00	15.00	333.33
57.987	58.025	L.M.L. EXIT RAMP	200.00	15.00	333.33
60.443	60.481	L.M.L. ENTRANCE RAMP	200.00	15.00	333.33
60.531	60.569	L.M.L. EXIT RAMP	200.00	15.00	333.33
61.127	61.165	L.M.L. EXIT RAMP	200.00	15.00	333.33
45.019	45.057	R.M.L. EXIT RAMP	200.00	15.00	333.33
45.096	45.134	R.M.L. ENTRANCE RAMP	200.00	15.00	333.33
52.867	52.905	R.M.L. EXIT RAMP	200.00	15.00	333.33
52.938	52.976	R.M.L. ENTRANCE RAMP	200.00	15.00	333.33
57.901	57.939	R.M.L. EXIT RAMP	200.00	15.00	333.33
57.977	58.015	R.M.L. ENTRANCE RAMP	200.00	15.00	333.33
60.566	60.604	R.M.L. EXIT RAMP	200.00	15.00	333.33
60.829	60.867	R.M.L. ENTRANCE RAMP	200.00	15.00	333.33
SUBTOTAL (2 OF 2):					5666.61
SUBTOTAL (1 OF 2):					28444.57
TOTAL:					34111.18

* LOG MILES BASED ON MAIN LANES

RUMBLE STRIPS

LOG MILE	LOG MILE	LOCATION	* RUMBLE STRIPS IN ASPHALT SHOULDERS
			LIN.FT.
40.217	41.243	L.M.L.	10834
41.882	42.096	L.M.L.	2260
42.396	43.194	L.M.L.	8426
43.403	43.962	L.M.L.	5904
44.233	45.835	L.M.L.	16918
45.835	47.304	L.M.L.	15512
47.374	47.625	L.M.L.	2650
47.889	48.901	L.M.L.	10686
49.074	51.521	L.M.L.	25840
51.702	53.812	L.M.L.	22282
53.878	57.949	L.M.L.	42990
57.993	60.543	L.M.L.	26928
60.603	61.200	L.M.L.	6304
40.217	41.243	R.M.L.	10834
41.882	42.096	R.M.L.	2260
42.396	43.194	R.M.L.	8426
43.403	43.962	R.M.L.	5904
44.233	45.835	R.M.L.	16918
45.835	47.295	R.M.L.	15418
47.385	47.647	R.M.L.	2766
47.920	48.901	R.M.L.	10360
49.063	51.521	R.M.L.	25956
51.728	53.825	R.M.L.	22144
53.891	57.946	R.M.L.	42820
57.990	60.556	R.M.L.	27096
60.616	61.200	R.M.L.	6168
TOTAL:			394604

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

FLUSHING UNDERDRAIN

LOG MILE	LOG MILE	LOCATIONS	FLUSHING UNDERDRAINS	UNDERDRAIN VIDEO INSPECTION
			LIN. FT.	
40.217	41.243	L.M.L.	6517	6517
41.882	42.096	L.M.L.	1380	1380
42.396	43.194	L.M.L.	5063	5063
43.403	43.962	L.M.L.	3552	3552
44.233	45.835	L.M.L.	10159	10159
45.835	47.304	L.M.L.	9356	9356
47.374	47.625	L.M.L.	1625	1625
47.889	48.901	L.M.L.	6443	6443
49.074	51.521	L.M.L.	15520	15520
51.702	53.812	L.M.L.	13391	13391
53.878	57.949	L.M.L.	21495	21495
57.993	60.543	L.M.L.	16164	16164
60.603	61.200	L.M.L.	3802	3802
40.217	41.243	R.M.L.	6517	6517
41.882	42.096	R.M.L.	1380	1380
42.396	43.194	R.M.L.	5063	5063
43.403	43.962	R.M.L.	3552	3552
44.233	45.835	R.M.L.	10159	10159
45.835	47.295	R.M.L.	9259	9259
47.385	47.647	R.M.L.	1683	1683
47.920	48.901	R.M.L.	6230	6230
49.063	51.521	R.M.L.	15578	15578
51.728	53.825	R.M.L.	13322	13322
53.891	57.946	R.M.L.	25710	25710
57.990	60.556	R.M.L.	16298	16298
60.616	61.200	R.M.L.	3734	3734
* ENTIRE PROJECT		TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER		11600
TOTALS:			232952	244552

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

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	040883	19	22
QUANTITIES						



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Date: 2023.07.07

ULTRATHIN BONDED WEARING COURSE (BOX 1 OF 2)

LOG MILE	LOG MILE	LOCATION	LENGTH	AVG. WIDTH	ULTRATHIN BONDED WEARING COURSE (3/4" - TYPE C) SQ. YD.
			FEET	FEET	
I-49 MAIN LANES					
40.217	41.243	L.M.L.	5417.28	38.00	22872.96
41.507	41.545	L.M.L. BOBBY HOPPER TUNNEL	200.64	24.00	535.04
41.882	42.096	L.M.L.	1129.92	42.00	5272.96
42.396	43.194	L.M.L.	4213.44	42.00	19662.72
43.403	43.962	L.M.L.	2951.52	42.00	13773.76
44.233	45.835	L.M.L.	8458.56	42.00	39473.28
45.835	47.304	L.M.L.	7756.32	38.00	32748.91
47.374	47.625	L.M.L.	1325.28	38.00	5595.63
47.889	48.901	L.M.L.	5343.36	38.00	22560.85
49.074	51.521	L.M.L.	12920.16	38.00	54557.79
51.702	53.812	L.M.L.	11140.80	38.00	47038.93
53.878	57.949	L.M.L.	21494.88	38.00	90756.16
57.993	60.543	L.M.L.	13464.00	38.00	56848.00
60.603	61.200	L.M.L.	3152.16	38.00	13309.12
40.217	41.243	R.M.L.	5417.28	38.00	22872.96
41.882	42.096	R.M.L.	1129.92	42.00	5272.96
42.396	43.194	R.M.L.	4213.44	42.00	19662.72
43.403	43.962	R.M.L.	2951.52	42.00	13773.76
44.233	45.835	R.M.L.	8458.56	42.00	39473.28
45.835	47.295	R.M.L.	7708.80	38.00	32548.27
47.385	47.647	R.M.L.	1383.36	38.00	5840.85
47.920	48.901	R.M.L.	5179.68	38.00	21869.76
49.063	51.521	R.M.L.	12978.24	38.00	54797.01
51.728	53.825	R.M.L.	11072.16	38.00	46749.12
53.891	57.946	R.M.L.	21410.40	38.00	90399.47
57.990	60.556	R.M.L.	13548.48	38.00	57204.69
60.616	61.200	R.M.L.	3083.52	38.00	13019.31
I-49 AUXILIARY LANES					
44.473	44.677	L.M.L. AUXILIARY LANE	1077.12	VAR.	1874.00
45.356	45.440	L.M.L. AUXILIARY LANE	443.52	VAR.	787.00
52.381	52.583	L.M.L. AUXILIARY LANE	1068.56	VAR.	1101.00
53.228	53.300	L.M.L. AUXILIARY LANE	380.16	VAR.	788.00
57.530	57.733	L.M.L. AUXILIARY LANE	1071.84	VAR.	1034.00
58.169	58.265	L.M.L. AUXILIARY LANE	506.88	VAR.	990.00
60.064	60.282	L.M.L. AUXILIARY LANE	1151.04	VAR.	1129.00
60.748	60.854	L.M.L. AUXILIARY LANE	559.68	VAR.	1049.00
61.186	61.279	L.M.L. AUXILIARY LANE	491.04	VAR.	954.00
44.512	44.628	R.M.L. AUXILIARY LANE	612.48	VAR.	2127.00
45.384	45.559	R.M.L. AUXILIARY LANE	924.00	VAR.	1033.00
52.507	52.579	R.M.L. AUXILIARY LANE	380.16	VAR.	591.00
53.105	53.293	R.M.L. AUXILIARY LANE	992.64	VAR.	964.00
57.646	57.725	R.M.L. AUXILIARY LANE	417.12	VAR.	718.00
58.220	58.428	R.M.L. AUXILIARY LANE	1098.24	VAR.	1251.00
60.156	60.272	R.M.L. AUXILIARY LANE	612.48	VAR.	713.00
60.963	61.177	R.M.L. AUXILIARY LANE	1129.92	VAR.	2017.00
SUBTOTAL (BOX 1 OF 2):					867604.27

* LOG MILES BASED ON MAIN LANES

ACHM PATCHING OF EXISTING ROADWAY

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

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

REPAIR OF PARAPET RAIL

LOG MILE	LOG MILE	LOCATION	PARAPET RAIL
			LIN. FT.
47.69	47.69	I-49 MAIN LANES	10.00
ENTIRE	PROJECT	TO BE USED IF AND WHERE DIRECTED BY ENGINEER	10.00
TOTAL:			20.00

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

ULTRATHIN BONDED WEARING COURSE (BOX 2 OF 2)

LOG MILE	LOG MLE	LOCATION	LENGTH	AVG. WIDTH	ULTRATHIN BONDED WEARING COURSE (3/4" - TYPE C)
			FEET	FEET	SQ. YD.
I-49 RAMPS*					
44.677	45.070	L.M.L. ENTRANCE RAMP	2442.00	25.00	6783.33
45.104	45.366	L.M.L. EXIT RAMP	1454.00	25.00	4038.89
52.583	52.791	L.M.L. ENTRANCE RAMP	1265.00	25.00	3513.89
52.823	53.228	L.M.L. EXIT RAMP	2383.00	25.00	6577.78
57.733	57.945	L.M.L. ENTRANCE RAMP	1180.00	25.00	3277.78
57.987	58.169	L.M.L. EXIT RAMP	1083.00	25.00	3016.67
60.282	60.481	L.M.L. ENTRANCE RAMP	1065.00	25.00	2958.33
60.531	60.748	L.M.L. EXIT RAMP	1153.00	25.00	3216.67
61.127	61.186	L.M.L. EXIT RAMP	314.00	25.00	872.22
44.628	45.057	R.M.L. EXIT RAMP	2099.00	25.00	5830.56
45.096	45.384	R.M.L. ENTRANCE RAMP	1533.00	25.00	4266.67
52.579	52.905	R.M.L. EXIT RAMP	1667.00	25.00	4630.56
52.938	53.105	R.M.L. ENTRANCE RAMP	926.00	25.00	2572.22
57.725	57.939	R.M.L. EXIT RAMP	1119.00	25.00	3108.33
57.977	58.220	R.M.L. ENTRANCE RAMP	1372.00	25.00	3811.11
60.272	60.604	R.M.L. EXIT RAMP	1853.00	25.00	5155.56
60.829	60.963	R.M.L. ENTRANCE RAMP	749.00	25.00	2080.56
SUBTOTAL (BOX 2 OF 2):					65711.13
SUBTOTAL (BOX 1 OF 2):					867604.27
TOTAL:					933315.40

* LOG MILES BASED ON MAIN LANES

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	040883	20	22
QUANTITIES						



Digitally signed by Thomas N. Taegtmeyer
Date: 2023.07.07

BASE AND SURFACING (BOX 1 OF 2)

LOG MILE	LOG MILE	LOCATION	LENGTH	AGGREGATE BASE COURSE (CLASS 7)		TACK COAT				ACHM SURFACE COURSE (1/2")					
				TON / STATION	TON	AVG. WID. FEET	SQ.YD.	GALLONS / SQ.YD.	GALLON	AVG. WID. FEET	SQ.YD.	POUND / SQ.YD.	PG 76-22 TON		
I-49 MAIN LANES															
40.217	41.243	L.M.L.	5417.28	5.00	270.86	38.00	22872.96	0.17	3888.40	38.00	22872.96	220.00	2516.03		
41.882	42.096	L.M.L.	1129.92	2.50	28.25	42.00	5272.96	0.17	896.40	42.00	5272.96	220.00	580.03		
42.396	43.194	L.M.L.	4213.44	2.50	105.34	42.00	19662.72	0.17	3342.66	42.00	19662.72	220.00	2162.90		
43.403	43.962	L.M.L.	2951.52	2.50	73.79	42.00	13773.76	0.17	2341.54	42.00	13773.76	220.00	1515.11		
44.233	45.835	L.M.L.	8458.56	2.50	211.46	42.00	39473.28	0.17	6710.46	42.00	39473.28	220.00	4342.06		
45.835	47.304	L.M.L.	7756.32	5.00	387.82	38.00	32748.91	0.17	5567.31	38.00	32748.91	220.00	3602.38		
47.374	47.625	L.M.L.	1325.28	5.00	66.26	38.00	5595.63	0.17	951.26	38.00	5595.63	220.00	615.52		
47.889	48.901	L.M.L.	5343.36	5.00	267.17	38.00	22560.85	0.17	3835.34	38.00	22560.85	220.00	2481.69		
49.074	51.521	L.M.L.	12920.16	5.00	646.01	38.00	54551.79	0.17	9273.80	38.00	54551.79	220.00	6000.70		
51.702	53.812	L.M.L.	11140.80	5.00	557.04	38.00	47038.93	0.17	7996.62	38.00	47038.93	220.00	5174.28		
53.878	57.949	L.M.L.	21494.88	5.00	1074.74	38.00	90756.16	0.17	15428.55	38.00	90756.16	220.00	9983.18		
57.993	60.543	L.M.L.	13464.00	5.00	673.20	38.00	56848.00	0.17	9664.16	38.00	56848.00	220.00	6253.28		
60.603	61.992	L.M.L.	7333.92	5.00	366.70	38.00	30965.44	0.17	5264.12	38.00	30965.44	220.00	3406.20		
40.217	41.243	R.M.L.	5417.28	5.00	270.86	38.00	22872.96	0.17	3888.40	38.00	22872.96	220.00	2516.03		
41.882	42.096	R.M.L.	1129.92	2.50	28.25	42.00	5272.96	0.17	896.40	42.00	5272.96	220.00	580.03		
42.396	43.194	R.M.L.	4213.44	2.50	105.34	42.00	19662.72	0.17	3342.66	42.00	19662.72	220.00	2162.90		
43.403	43.962	R.M.L.	2951.52	2.50	73.79	42.00	13773.76	0.17	2341.54	42.00	13773.76	220.00	1515.11		
44.233	45.835	R.M.L.	8458.56	2.50	211.46	42.00	39473.28	0.17	6710.46	42.00	39473.28	220.00	4342.06		
45.835	47.295	R.M.L.	7708.80	5.00	385.44	38.00	32548.27	0.17	5533.21	38.00	32548.27	220.00	3580.31		
47.385	47.647	R.M.L.	1383.36	5.00	69.17	38.00	5840.85	0.17	992.94	38.00	5840.85	220.00	642.49		
47.920	48.901	R.M.L.	5179.68	5.00	258.98	38.00	21869.76	0.17	3717.86	38.00	21869.76	220.00	2405.67		
49.063	51.521	R.M.L.	12978.24	5.00	648.91	38.00	54797.01	0.17	9315.49	38.00	54797.01	220.00	6027.67		
51.728	53.825	R.M.L.	11072.16	5.00	553.61	38.00	46749.12	0.17	7947.35	38.00	46749.12	220.00	5142.40		
53.891	57.946	R.M.L.	21410.40	5.00	1070.52	38.00	90399.47	0.17	15367.91	38.00	90399.47	220.00	9943.94		
57.990	60.556	R.M.L.	13548.48	5.00	677.42	38.00	57204.69	0.17	9724.80	38.00	57204.69	220.00	6292.52		
60.616	61.990	R.M.L.	7254.72	5.00	362.74	38.00	30631.04	0.17	5207.28	38.00	30631.04	220.00	3369.41		
I-49 AUXILIARY LANES															
44.473	44.677	L.M.L. AUXILIARY LANE	1077.12	2.50	26.93	VAR.	1874.00	0.17	318.58	VAR.	1874.00	220.00	206.14		
45.356	45.440	L.M.L. AUXILIARY LANE	443.52	2.50	11.09	VAR.	787.00	0.17	133.79	VAR.	787.00	220.00	86.57		
52.381	52.583	L.M.L. AUXILIARY LANE	1066.56	2.50	26.66	VAR.	1101.00	0.17	187.17	VAR.	1101.00	220.00	121.11		
53.228	53.300	L.M.L. AUXILIARY LANE	380.16	2.50	9.50	VAR.	788.00	0.17	133.96	VAR.	788.00	220.00	86.68		
57.530	57.733	L.M.L. AUXILIARY LANE	1071.84	2.50	26.80	VAR.	1034.00	0.17	175.78	VAR.	1034.00	220.00	113.74		
58.169	58.265	L.M.L. AUXILIARY LANE	506.88	2.50	12.67	VAR.	990.00	0.17	168.30	VAR.	990.00	220.00	108.90		
60.064	60.282	L.M.L. AUXILIARY LANE	1151.04	2.50	28.78	VAR.	1129.00	0.17	191.93	VAR.	1129.00	220.00	124.19		
60.748	60.854	L.M.L. AUXILIARY LANE	559.68	2.50	13.99	VAR.	1049.00	0.17	178.33	VAR.	1049.00	220.00	115.39		
61.186	61.279	L.M.L. AUXILIARY LANE	491.04	2.50	12.28	VAR.	954.00	0.17	162.18	VAR.	954.00	220.00	104.94		
44.512	44.628	R.M.L. AUXILIARY LANE	612.48	2.50	15.31	VAR.	2127.00	0.17	361.59	VAR.	2127.00	220.00	233.97		
45.384	45.559	R.M.L. AUXILIARY LANE	924.00	2.50	23.10	VAR.	1033.00	0.17	175.61	VAR.	1033.00	220.00	113.63		
52.507	52.579	R.M.L. AUXILIARY LANE	380.16	2.50	9.50	VAR.	581.00	0.17	100.47	VAR.	591.00	220.00	65.01		
53.105	53.293	R.M.L. AUXILIARY LANE	992.64	2.50	24.82	VAR.	964.00	0.17	163.88	VAR.	964.00	220.00	106.04		
57.646	57.725	R.M.L. AUXILIARY LANE	417.12	2.50	10.43	VAR.	718.00	0.17	122.06	VAR.	718.00	220.00	78.98		
58.220	58.428	R.M.L. AUXILIARY LANE	1098.24	2.50	27.46	VAR.	1261.00	0.17	212.67	VAR.	1251.00	220.00	137.61		
60.156	60.272	R.M.L. AUXILIARY LANE	612.48	2.50	15.31	VAR.	713.00	0.17	121.21	VAR.	713.00	220.00	78.43		
60.963	61.177	R.M.L. AUXILIARY LANE	1129.92	2.50	28.25	VAR.	2017.00	0.17	342.89	VAR.	2017.00	220.00	221.87		
SUBTOTALS (BOX 1 OF 2):						9768.01		902337.28		153397.32		902337.28		99257.10	

BASIS OF ESTIMATE:
ACHM SURFACE COURSE (1/2").....94.5% MIN. AGGR.....5.5% ASPHALT BINDER
MAXIMUM NUMBER OF GYRATIONS = 205 FOR PG 76-22
TACK COAT QUANTITIES WERE CALCULATED USING THE EMULSIFIED ASPHALT RATES.
REFER TO SS-400-1 FOR THE RESIDUAL ASPHALT APPLICATION RATES.
* LOG MILES BASED ON MAIN LANES

BASE AND SURFACING (BOX 2 OF 2)

LOG MILE	LOG MILE	LOCATION	LENGTH	AGGREGATE BASE COURSE (CLASS 7)		TACK COAT				ACHM SURFACE COURSE (1/2")			
				TON / STATION	TON	AVG. WID.	SQ.YD.	GALLONS / SQ.YD.	GALLON	AVG. WID.	SQ.YD.	POUND / SQ.YD.	PG 76-22
			FEET			FEET				FEET			TON
I-49 RAMPS**													
44.877	45.070	L.M.L. ENTRANCE RAMP	2442.00	5.00	122.10	25.00	6783.33	0.17	1153.17	25.00	6783.33	220.00	746.17
45.104	45.356	L.M.L. EXIT RAMP	1454.00	5.00	72.70	25.00	4038.89	0.17	686.61	25.00	4038.89	220.00	444.28
52.583	52.791	L.M.L. ENTRANCE RAMP	1265.00	5.00	63.25	25.00	3513.89	0.17	597.36	25.00	3513.89	220.00	386.53
52.823	53.228	L.M.L. EXIT RAMP	2368.00	5.00	118.40	25.00	6577.78	0.17	1118.22	25.00	6577.78	220.00	723.56
57.733	57.945	L.M.L. ENTRANCE RAMP	1180.00	5.00	59.00	25.00	3277.78	0.17	557.22	25.00	3277.78	220.00	360.56
57.987	58.189	L.M.L. EXIT RAMP	1086.00	5.00	54.30	25.00	3016.67	0.17	512.83	25.00	3016.67	220.00	331.83
60.282	60.481	L.M.L. ENTRANCE RAMP	1065.00	5.00	53.25	25.00	2958.33	0.17	502.92	25.00	2958.33	220.00	325.42
60.531	60.748	L.M.L. EXIT RAMP	1158.00	5.00	57.90	25.00	3216.67	0.17	546.83	25.00	3216.67	220.00	353.83
61.127	61.186	L.M.L. EXIT RAMP	314.00	5.00	15.70	25.00	872.22	0.17	148.28	25.00	872.22	220.00	95.94
44.628	45.057	R.M.L. EXIT RAMP	2099.00	5.00	104.95	25.00	5830.56	0.17	991.20	25.00	5830.56	220.00	641.36
45.096	45.384	R.M.L. ENTRANCE RAMP	1536.00	5.00	76.80	25.00	4266.67	0.17	725.33	25.00	4266.67	220.00	469.33
52.579	52.905	R.M.L. EXIT RAMP	1667.00	5.00	83.35	25.00	4630.56	0.17	787.20	25.00	4630.56	220.00	509.36
52.938	53.105	R.M.L. ENTRANCE RAMP	926.00	5.00	46.30	25.00	2572.22	0.17	437.28	25.00	2572.22	220.00	282.94
57.725	57.939	R.M.L. EXIT RAMP	1119.00	5.00	55.95	25.00	3108.33	0.17	528.42	25.00	3108.33	220.00	341.92
57.977	58.220	R.M.L. ENTRANCE RAMP	1372.00	5.00	68.60	25.00	3811.11	0.17	647.89	25.00	3811.11	220.00	419.22
60.272	60.604	R.M.L. EXIT RAMP	1856.00	5.00	92.80	25.00	5155.56	0.17	876.45	25.00	5155.56	220.00	567.11
60.829	60.963	R.M.L. ENTRANCE RAMP	749.00	5.00	37.45	25.00	2080.56	0.17	353.70	25.00	2080.56	220.00	228.86
ADDITIONAL FOR LEVELING													
ENTIRE	PROJECT	TO BE USED IF AND WHERE DIRECTED BY ENGINEER											500.00
SUBTOTALS (BOX 2 OF 2):					1182.80		65711.13		11170.91		65711.13		7728.22
SUBTOTALS (BOX 1 OF 2):					9768.01		902337.28		153397.32		902337.28		99257.10
TOTALS:					10950.81		968048.41		164568.23		968048.41		106985.32

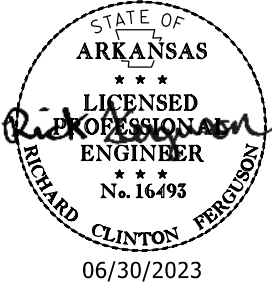
BASIS OF ESTIMATE:
ACHM SURFACE COURSE (1/2").....94.5% MIN. AGGR.....5.5% ASPHALT BINDER
MAXIMUM NUMBER OF GYRATIONS = 205 FOR PG 76-22
TACK COAT QUANTITIES WERE CALCULATED USING THE EMULSIFIED ASPHALT RATES.
REFER TO SS-400-1 FOR THE RESDUAL ASPHALT APPLICATION RATES.
** LOG MILES BASED ON MAIN LANES
* QUANTITY ESTIMATED. SEE SECTION 104.03 OF THE STD. SPECS.

SCHEDULE OF BRIDGE QUANTITIES - JOB NO. 040883

DISTRICT	COUNTY	ROUTE	SECTION	I-49 LOG MILE	BRIDGE NO.	SS & 804	SS & 804	SS & 809	SP JOB 040883	SP JOB 040883
						REINFORCING STEEL - BRIDGE (GRADE 60)	EPOXY COATED REINFORCING STEEL - BRIDGE (GRADE 60)	SILICONE JOINT SEALANT	POLYMER OVERLAY	BRIDGE DECK REPAIR FOR POLYMER OVERLAYS
						LBS.	LBS.	LIN. FT.	SQ. YD.	SQ. FT.
4	WASHINGTON	I-49	28	51.45	A6237 ①		1,496	81	3,912	1,760
		I-49	28	51.45	B6237 ①		1,734	81	4,534	2,040
		I-49	28	53.76	A6239 ①	465			1,214	546
		I-49	28	53.76	B6239 ①	465			1,214	546
		I-49	28	57.96	A6242 ①		269	81	703	316
		I-49	28	57.95	B6242 ①		269	81	703	316
		I-49	28	60.50	A6243 ①		408		1,067	480
		I-49	28	60.56	B6243 ①		408		1,067	480
		I-49	28	42.01	A6479 ①		2,664		6,963	3,134
		I-49	28	42.01	B6479 ①		2,664		6,963	3,134
		I-49	28	43.10	A6480 ①		1,817		4,750	2,138
		I-49	28	43.10	B6480 ①		1,817		4,750	2,138
		I-49	28	43.87	A6481 ①		2,390		6,249	2,812
		I-49	28	43.87	B6481 ①		2,390		6,249	2,812
		I-49	28	47.21	A6483 ①		502		1,312	590
		I-49	28	47.21	B6483 ①		680		1,778	800
		I-49	28	47.63	A6484 ①		2,244	81	5,867	2,640
		I-49	28	47.65	B6484 ①		2,321	81	6,067	2,730
		I-49	28	48.82	A6485 ①		1,428		3,734	1,680
		I-49	28	48.82	B6485 ①		1,326	81	3,467	1,560
TOTALS FOR JOB NO. 040833						930 ②	26,827 ②	567	72,563	32,652 ②

- ① EXISTING BRIDGE DECKS DO NOT HAVE ASPHALT OVERLAYS.
- ② QUANTITY SHOWN IS FOR ESTIMATING AND BIDDING PURPOSED ONLY. ACTUAL QUANTITY, IF ANY, WILL BE DETERMINED IN THE FIELD.

Bridge No.	Existing Dwg. No(s).	Applicable Std. Dwg. No(s).
A6237	29843	55064
B6237	29842	55064
A6239	29231	
B6239	29231	
A6242	29018	55064
B6242	29018	55064
A6243	29583	
B6243	29583	
A6479	33985	
B6479	33985	
A6480	34033	
B6480	34033	
A6481	33288	
B6481	33288	
A6483	32962	
B6483	32963	
A6484	32983	55064
B6484	32984	55064
A6485	33008	
B6485	33009	55064



DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
10/13/2023		6	ARK.	040883	22	22
SUMMARY OF QUANTITIES AND REVISIONS						



Digitally signed by Thomas N. Taegtmeier
Date: 2023.10.13

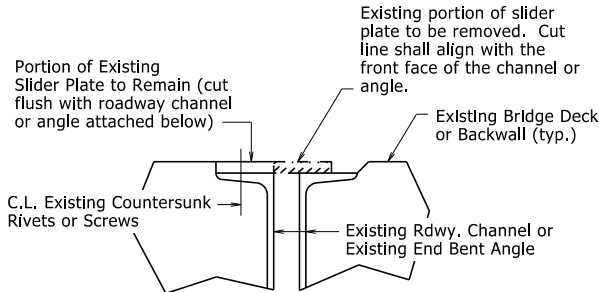
SUMMARY OF QUANTITIES

ITEM NUMBER	ITEM	QUANTITY	UNIT
SP, SS, & 303	AGGREGATE BASE COURSE (CLASS 7)	10951	TON
SS & 401	TACK COAT	164568	GAL.
SP, SS, & 407	MINERAL AGGREGATE IN ACHM SURFACE COURSE (1/2")	101101	TON
SP, SS, & 407	ASPHALT BINDER (PG 76-22) IN ACHM SURFACE COURSE (1/2")	5884	TON
SP	ULTRATHIN BONDED WEARING COURSE (3/4"-TYPE C)	933315	SQ. YD.
SP & 412	COLD MILLING ASPHALT PAVEMENT	37029	SQ. YD.
SP, SS, & 415	ACHM PATCHING OF EXISTING ROADWAY	200	TON
SP	SCARIFYING CONCRETE PAVEMENT	34111	SQ. YD.
601	MOBILIZATION	1.00	LUMP SUM
SP, SS, & 603	MAINTENANCE OF TRAFFIC	1.00	LUMP SUM
SS & 604	SIGNS	1189	SQ. FT.
SP, SS, & 604	CONSTRUCTION PROJECT INFORMATION SIGN UPDATE	2	EACH
SS & 604	TRAFFIC DRUMS	569	EACH
604	CONSTRUCTION PAVEMENT MARKINGS	1102252	LIN. FT.
SS & 604	ADVANCE WARNING ARROW PANEL	250	DAY
SP, SS, & 604	PORTABLE CHANGEABLE MESSAGE SIGN	50	WEEK
SP	MOBILE SPEED NOTIFICATION SYSTEM (SPECIAL)	1	EACH
SP, SS, & 611	UNDERDRAIN VIDEO INSPECTION	244552	LIN. FT.
SP	FLUSHING UNDERDRAIN	232952	LIN. FT.
642	RUMBLE STRIPS IN ASPHALT SHOULDERS	394604	LIN. FT.
SP	ENHANCED THERMOPLASTIC PAVEMENT MARKING WHITE (6")	298953	LIN. FT.
SP	ENHANCED THERMOPLASTIC PAVEMENT MARKING WHITE (12")	10295	LIN. FT.
SP	ENHANCED THERMOPLASTIC PAVEMENT MARKING YELLOW (6")	241878	LIN. FT.
721	RAISED PAVEMENT MARKERS (TYPE II)	4307	EACH
SP	SPALL REPAIR OF PORTLAND CEMENT CONCRETE PAVEMENT	450	TON
SP	REPAIR OF PARAPET RAIL	20	LIN. FT.
STRUCTURES OVER 20' SPAN			
SS & 804	REINFORCING STEEL-BRIDGE (GRADE 60)	930	POUND
SS & 804	EPOXY COATED REINFORCING STEEL (GRADE 60)	26827	POUND
SS & 809	SILICONE JOINT SEALANT	567	LIN. FT.
SP	BRIDGE DECK REPAIR FOR POLYMER OVERLAYS	32652	SQ. FT.
SP	POLYMER OVERLAY	72563	SQ. YD.

REVISIONS

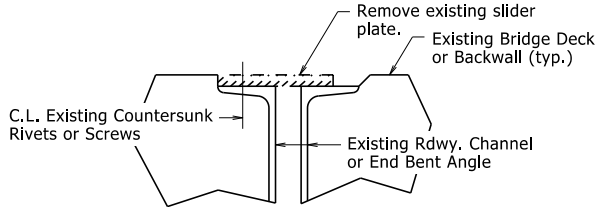
DATE	REVISION	SHEET NUMBER
10/13/2023	GOVERNING SPECIFICATIONS WERE REVISED TO REMOVE FHWA-1273 - SUPPLEMENT - TRAINING PROGRAM - 040883	4, 22

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.				
1JOINT REPAIR - 55064								



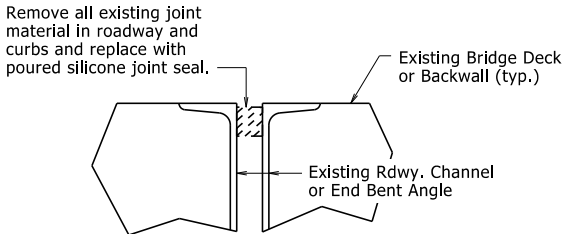
REMOVAL DETAILS AT EXISTING SLIDER PLATE JOINTS

At the direction of the Engineer, the portion of existing slider plate shown shall be removed and replaced with a new plate as shown in "SLIDER PLATE JOINT MODIFICATION". The portion of existing slider plate shall be removed and disposed of in accordance with Section 821. The cut face shall be ground square and flush with the face of the existing angle or channel. Removal and disposal of existing slider plate material will not be paid for directly, but shall be considered subsidiary to the item "Silicone Joint Sealant". Properly functioning slider plates need not be modified.



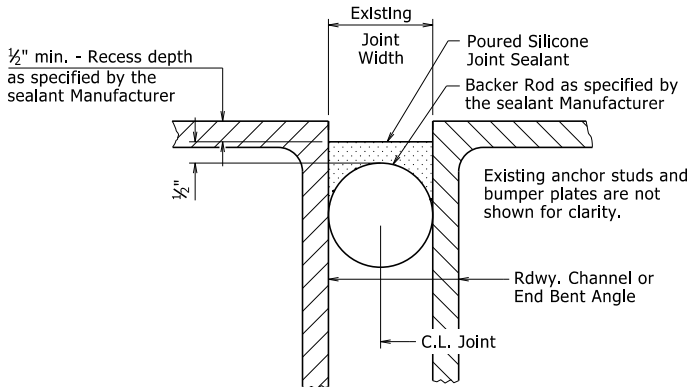
REMOVAL DETAILS AT EXISTING SLIDER PLATE JOINTS WITH GRADE RAISE

The existing slider plate shown shall be removed and replaced with new plates as shown in "JOINT MODIFICATION WITH GRADE RAISE". The existing slider plate shall be removed and disposed of in accordance with Section 821. Removal and disposal of existing slider plate material will not be paid for directly, but shall be considered subsidiary to the item "Silicone Joint Sealant".



REMOVAL DETAILS AT EXISTING FILLED JOINTS

The existing joint material shall be removed and disposed of in accordance with Section 821. Removal and disposal of existing joint material will not be paid for directly, but shall be considered subsidiary to the item "Silicone Joint Sealant".



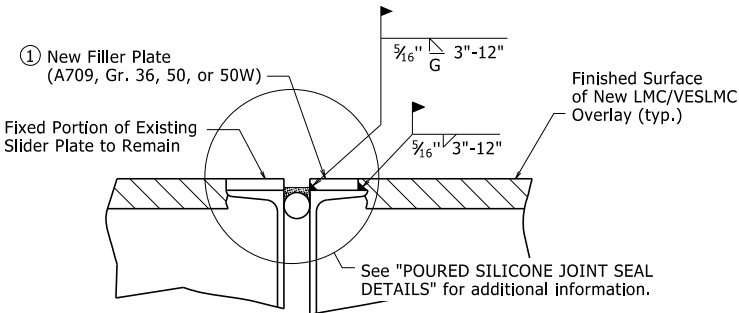
POURED SILICONE JOINT SEAL DETAILS

Existing Joint Seal shall be completely removed, backer rods placed, and Silicone Joint Sealant installed across the entire width of the bridge deck in accordance with these details, Section 809, and the Manufacturer's recommendations. Removal of existing Joint Seal will not be paid for directly, but shall be considered incidental to the item "Silicone Joint Sealant".

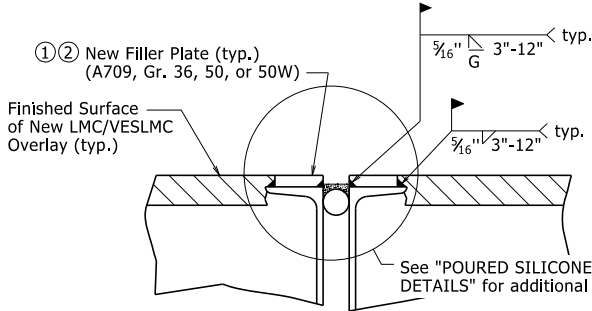
Backer rods shall be extended beyond the length of the poured joint in the initial joint repair area so that the two pieces can be properly spliced together prior to installing sealant for the adjacent joint repair. Manufacturer's recommendations shall be followed to prevent sealant leakage during repair work.

Backer rods shall be appropriately sized and set to the depth shown in the Manufacturer's literature based on the joint width at the time of sealing. Except as noted, do not install more backer rod than can be sealed in the same day. The Contractor shall verify separation of the backer rod from the joint material after joint material has set.

Backer rod shall be notched or otherwise fit around any existing seal supports or bumper plates to maintain its proper depth as defined above.



SLIDER PLATE JOINT MODIFICATION

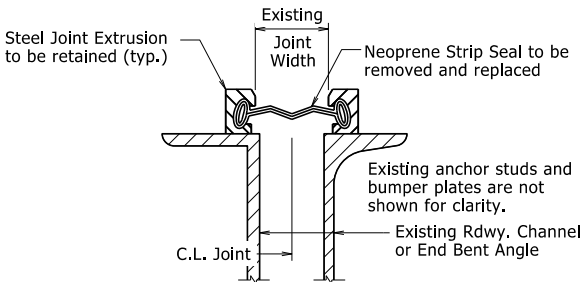


JOINT MODIFICATION WITH GRADE RAISE

- ① New field attached plates atop existing roadway channels or angles are required. The plate thickness shall be adjusted as necessary to match surface of finished surface of LMC/VESLMC Overlay and the width shall be $\frac{3}{8}$ " less than the existing channel flange or angle width to allow for fillet weld as shown.

All new Structural Steel shall be ASTM A709 (Gr. 36, 50, or 50W). The surfaces not in contact with concrete shall be cleaned and painted in accordance with Section 638. Only one coat of paint is required and shall be applied in the fabricator's shop. Grade 50W steel shall not be painted, but shall be cleaned in accordance with Subsection 807.84(e). Structural Steel and Painting will not be paid for directly, but shall be subsidiary to the item "Silicone Joint Sealant".

- ② Details shown are for an expansion joint where two bridge units meet. Eliminate filler plate on backwall and proceed with backwall repair in accordance with "BACKWALL REPAIR REMOVAL DETAIL" and "BACKWALL REPAIR INSTALLATION DETAIL" at end bents for bridge decks with grade raise, see Standard Drawing Number 55065.



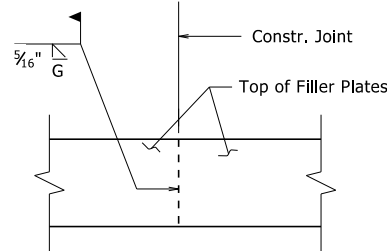
STRIP SEAL JOINT DETAILS

Existing neoprene strip seal joint material shall be completely removed and new neoprene strip seal joint material shall be installed across the entire width of the steel extrusions in accordance with these details, Section 809, and the Manufacturer's recommendations. Prior to installing the new joint material, the Contractor shall clean the steel extrusion at the Engineer's direction and in accordance with the new strip seal joint material Manufacturer's recommendations.

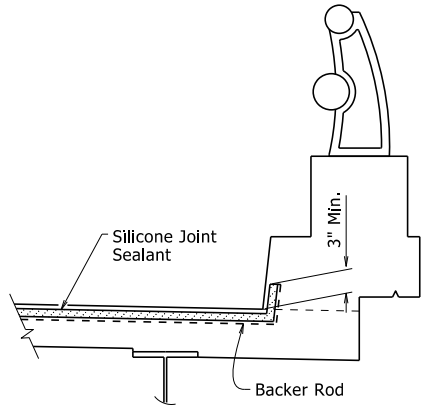
Removal and replacement of the existing neoprene strip seal joint material will require the removal of the parapet slider plates, where present. Parapet slider plates removed for this work shall be reinstalled after installation of the new neoprene strip seal joint material.

The new neoprene strip seal joint material shall provide a movement rating of four inches. The repaired expansion joint shall be capable of sealing the deck surface and parapet area to prevent moisture and other contaminants from descending through the joint.

All work and material associated with removing the existing joint material, cleaning the extrusions, removal and reinstallation of parapet slider plates, and installation of new joint material shall be paid for under the item "Modification of Existing Bridge Structure (Bridge No. _)".

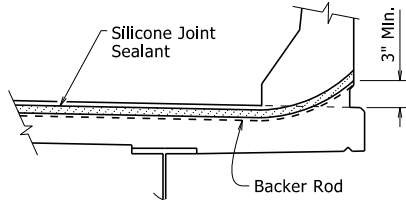


PLAN VIEW OF FILLER PLATE

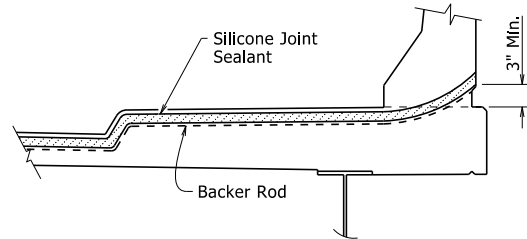


SILICONE JOINT SEAL PLACEMENT AT CURB

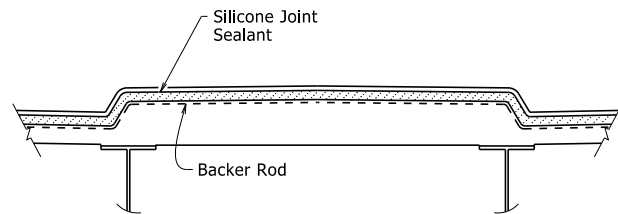
Vertical joints may require forming. The clearance from deck surface to joint material shall be maintained.



SILICONE JOINT SEAL PLACEMENT AT RAIL



SILICONE JOINT SEAL PLACEMENT AT SIDEWALK



SILICONE JOINT SEAL PLACEMENT AT MEDIAN

This document was originally issued and sealed by Charles R. Ellis, PE No. 9235, on November 7, 2019. This copy is not a signed and sealed document.

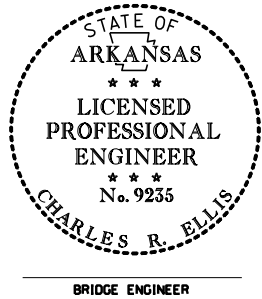
STANDARD DETAILS FOR JOINT REPAIRS & MODIFICATIONS

ARKANSAS STATE HIGHWAY COMMISSION

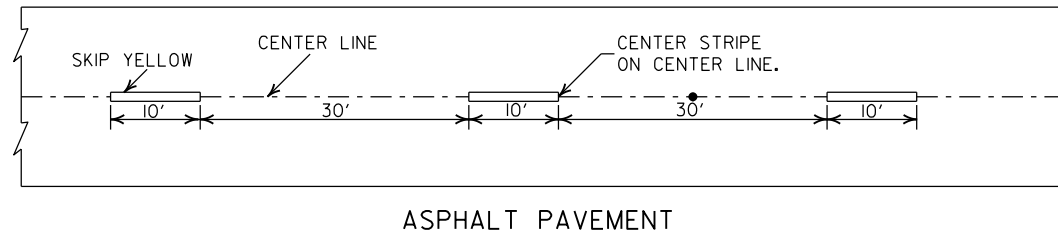
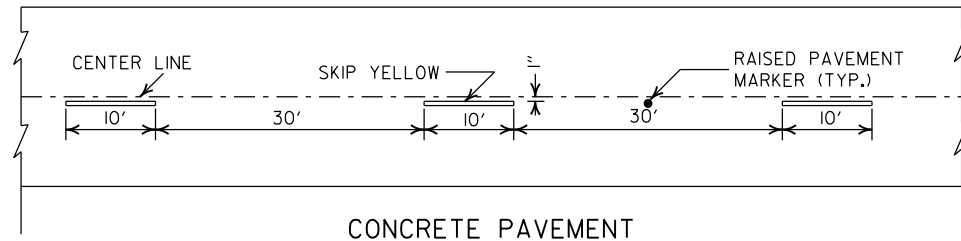
LITTLE ROCK, ARK.

DRAWN BY: KWY DATE: 11/7/2019 FILENAME: b55064.dgn
CHECKED BY: SWP DATE: 11/7/2019 SCALE: None
DESIGNED BY: STD. DATE: -----

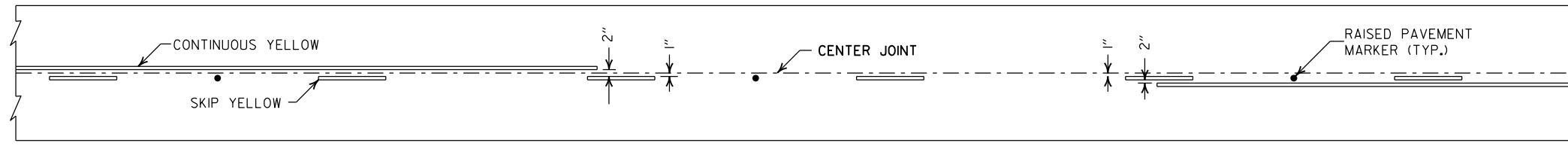
DRAWING NO. 55064



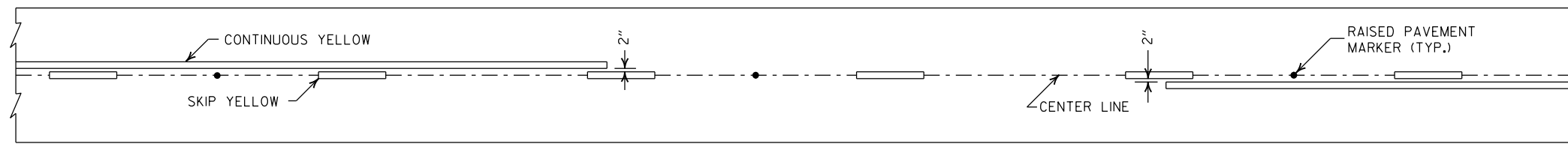
BRIDGE ENGINEER



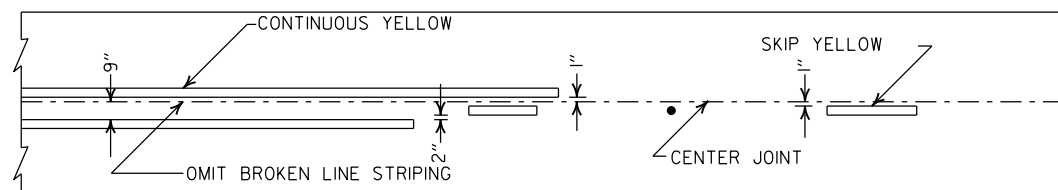
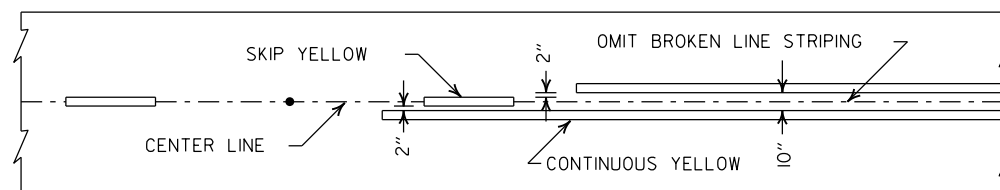
BROKEN LINE STRIPING



SOLID LINE STRIPING ON CONCRETE PAVEMENT



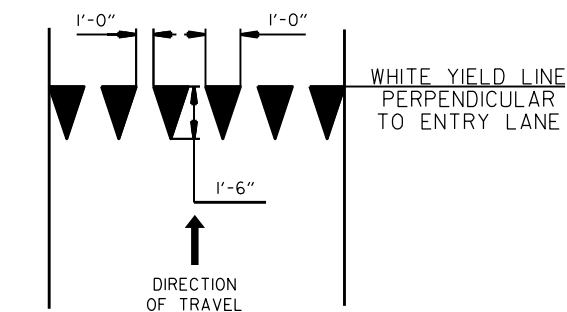
SOLID LINE STRIPING ON ASPHALT PAVEMENT



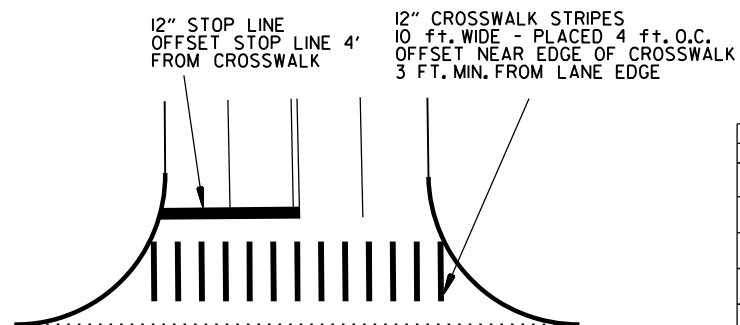
ASPHALT PAVEMENT

CONCRETE PAVEMENT

STRIPING AT ADJACENT NO PASSING LANES



YIELD LINE DETAIL

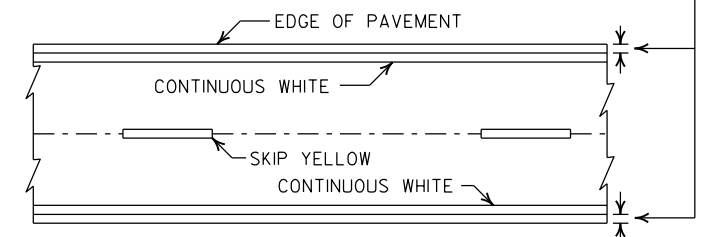


CROSSWALK AND STOP LINE DETAILS

NOTES:

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

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

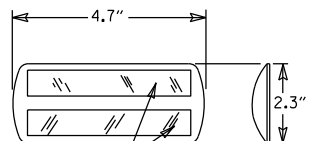


PAVEMENT EDGE LINE MARKING

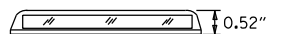
NOTE:
THE RED LENS OF THE
TYPE II R.P.M. SHALL
FACE THE INCORRECT
TRAFFIC MOVEMENT.

TYPE II
RED/CLEAR OR
YELLOW/YELLOW

PRISMATIC REFLECTOR



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



DETAIL OF STANDARD RAISED PAVEMENT MARKERS

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

ARKANSAS STATE HIGHWAY COMMISSION

PAVEMENT MARKING DETAILS

STANDARD DRAWING PM-1

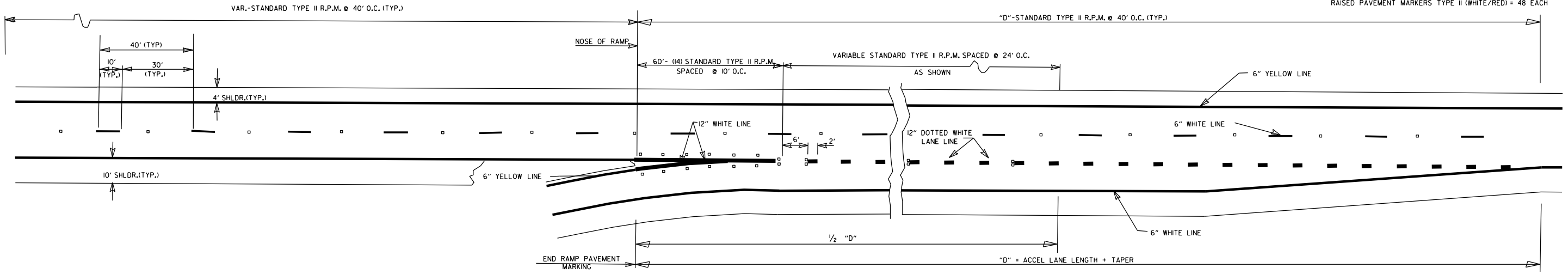
PAVEMENT MARKING QUANTITIES
(BASED ON 700' ACCEL. LANE + 300' TAPER)

ENTRANCE RAMP

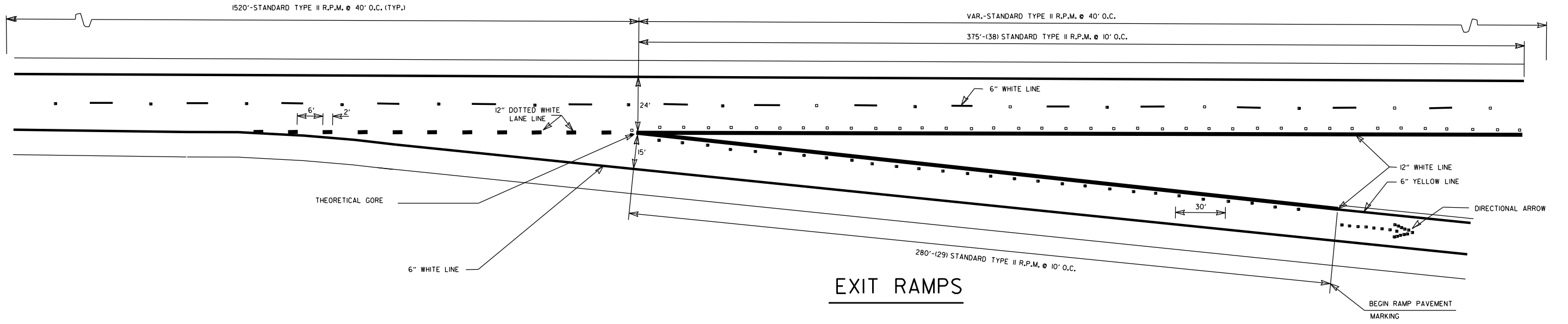
12" WHITE = 370 LIN. FT.
RAISED PAVEMENT MARKERS TYPE II (WHITE/RED) = 38 EACH

EXIT RAMP

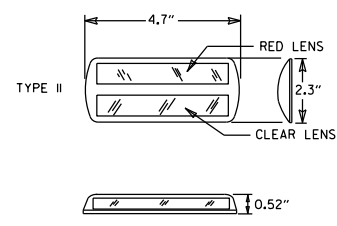
6" WHITE = 280 LIN. FT.
12" WHITE = 815 LIN. FT.
RAISED PAVEMENT MARKERS TYPE II (WHITE/RED) = 38 EACH
RAISED PAVEMENT MARKERS TYPE II (WHITE/RED) = 48 EACH



ENTRANCE RAMPS

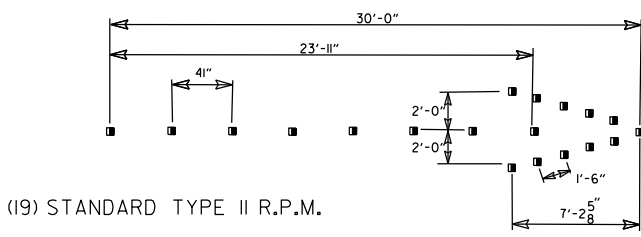


EXIT RAMPS



DETAIL OF
STANDARD
RAISED PAVEMENT MARKERS

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



(19) STANDARD TYPE II R.P.M.

DIRECTIONAL ARROWS

GENERAL NOTES:

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

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

NOTE:

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

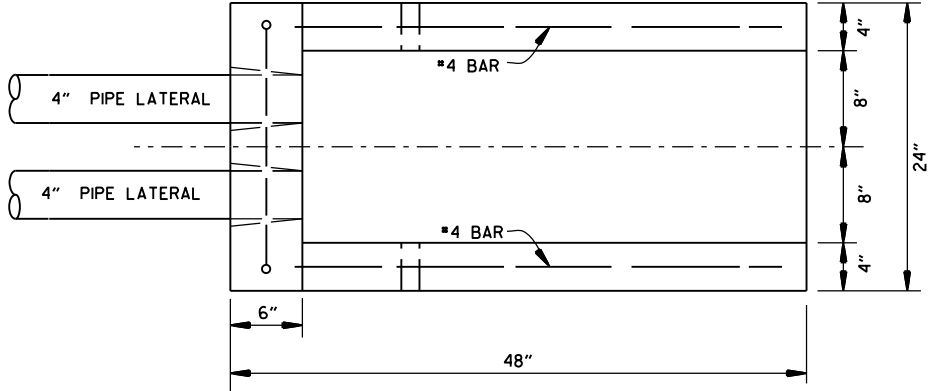
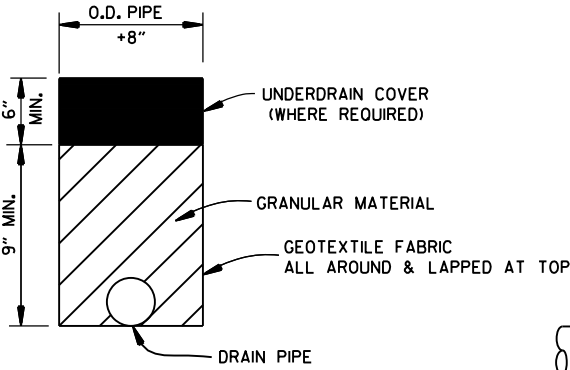
05-14-20	REMOVED CROSSHATCH MARKINGS ON EXIT RAMPS	
11-07-19	REVISED DOTTED PAV'T MARKINGS; ADDED CROSSHATCH MARKINGS ON EXIT RAMPS	
12-8-16	REVISED RAISED PAV'T MARKERS FOR 80' SPACING; REVISED WIDTH OF STRIPING	
9-12-13	REVISED DETAIL OF STANDARD RAISED PAVEMENT MARKERS	
7-26-12	REVISED RPM NOTATION	
12-15-11	REVISED RPMs ACCORDING TO LATEST POLICY	
11-17-10	REMOVED PLOWABLE PAVEMENT MARKERS	
6-3-10	REVISED PER 2009 MUTCD	
11-18-04	REVISED NOTES	
8-22-02	ADDED & REVISED NOTES; REV. ENTRANCE & EXIT RAMPS	
5-18-00	REMOVED HASHMARKS	
7-02-98	CHANGED TYPES TO ROMAN NUMERALS	
4-26-96	ADDED DIMENSIONS & QUANTITIES; REVISED LANE WIDTH ON EXIT RAMP	
2-2-95	PLACED IN USE	2-2-95
DATE	REVISION	FILMED

ARKANSAS STATE HIGHWAY COMMISSION

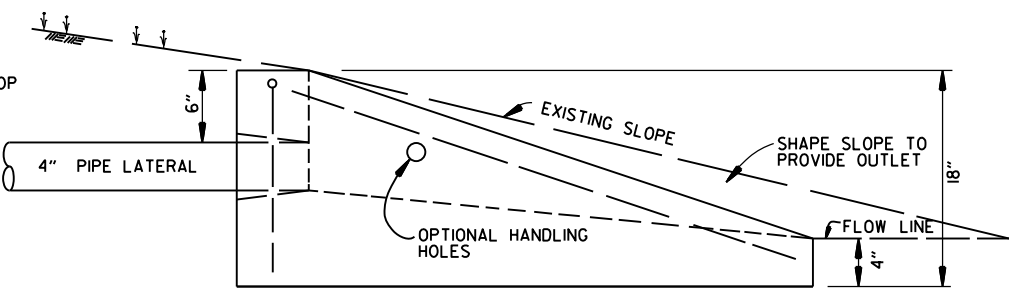
PAVEMENT MARKING DETAILS
ON
ACCESS CONTROLLED ROADWAYS

STANDARD DRAWING PM-2

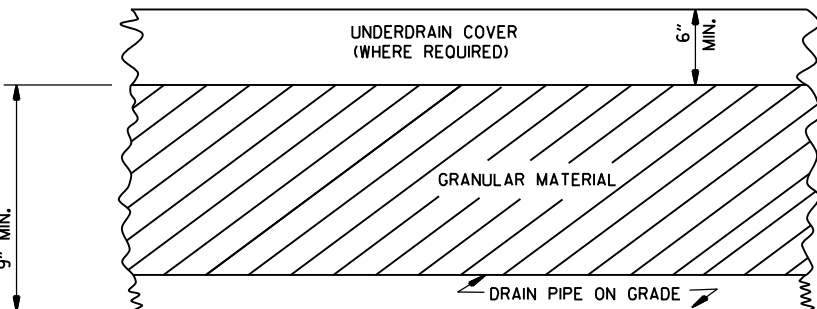
NOTE:
1. UNLESS OTHERWISE SPECIFIED ON THE PLANS, THE UNDERDRAIN COVER SHALL BE THOROUGHLY COMPACTED EARTH AND SHALL BE SUBSIDIARY TO PIPE UNDERDRAIN.
2. GRANULAR MATERIAL SHALL BE WRAPPED WITH GEOTEXTILE FABRIC, LAP FABRIC 12" OR THE WIDTH OF THE TRENCH AT THE TOP.



PLAN VIEW



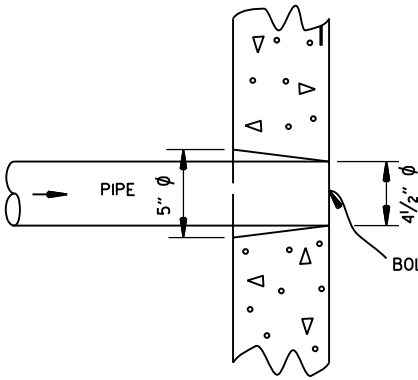
SIDE VIEW



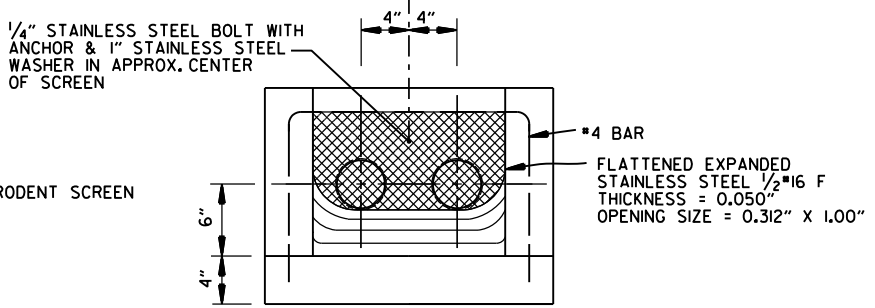
DETAILS OF PIPE UNDERDRAIN

NOTES FOR PIPE UNDERDRAINS

1. GEOTEXTILE FABRIC SHALL MEET THE REQUIREMENTS OF SECTION 625 FOR TYPE I. PAYMENT FOR GEOTEXTILE FABRIC AND GRANULAR FILTER MATERIAL SHALL BE INCLUDED IN THE PRICE BID PER LIN. FT. FOR "4" PIPE UNDERDRAINS" IN ACCORDANCE WITH SECTION 611 OF THE STANDARD SPECIFICATIONS.
2. 4" NON-PERFORATED SCHEDULE 40 PVC PIPE LATERALS WITH OUTLET PROTECTORS SHALL BE INSTALLED AS SHOWN HEREON. LATERALS WILL BE MEASURED AND PAID FOR AS "4" PIPE UNDERDRAINS." UNDERDRAIN OUTLET PROTECTORS WILL BE MEASURED AND PAID FOR BY THE UNIT IN ACCORDANCE WITH SECTION 611 OF THE STANDARD SPECIFICATIONS.
3. EXISTING 4" PIPE UNDERDRAINS MAY BE CONNECTED TO PROPOSED DROP INLETS OR EXTENDED WHERE DIRECTED BY THE ENGINEER. PAYMENT FOR CONNECTING TO DROP INLETS SHALL BE CONSIDERED INCLUDED IN THE PRICE BID FOR "4" PIPE UNDERDRAINS."
4. THE LOCATION OF ALL LATERALS SHALL BE MARKED WITH 4" X 12" PERMANENT PAVEMENT MARKING TAPE (TYPE III WHITE) AT THE OUTSIDE EDGE OF THE SHOULDER, PLACED TRANSVERSE TO TRAFFIC. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR THE VARIOUS CONTRACT ITEMS.
5. PAYMENT FOR THE RODENT SCREEN SHALL BE INCLUDED IN THE PRICE BID PER EACH FOR "UNDERDRAIN OUTLET PROTECTORS."
6. ANY EXISTING UNDERDRAINS THAT INTERFERE WITH INSTALLATION OF THE NEW UNDERDRAIN SYSTEM SHALL BE REMOVED AND DISPOSED OF AS DIRECTED BY THE ENGINEER. PAYMENT WILL BE CONSIDERED INCLUDED IN THE PRICE BID FOR THE VARIOUS CONTRACT ITEMS. EXISTING UNDERDRAIN OUTLET PROTECTORS SHALL BE REMOVED UNDER THE ITEM "REMOVAL AND DISPOSAL OF UNDERDRAIN OUTLET PROTECTORS."
7. AT LOCATIONS WHERE A SINGLE LATERAL IS USED THE CONTRACTOR SHALL HAVE THE FOLLOWING OPTIONS: 1. INSTALL OUTLET PROTECTOR AS SHOWN ON STANDARD DRAWING PU-1 AND GROUT THE UNUSED HOLE OR 2. INSTALL AN OUTLET PROTECTOR WITH A SINGLE HOLE.



DETAIL OF HOLE FOR 4" PIPE

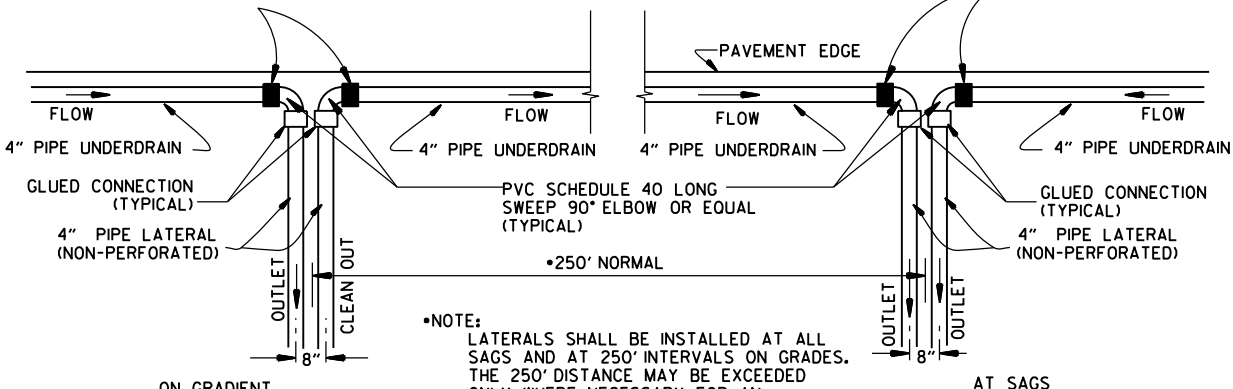


FRONT VIEW (DETAIL OF RODENT SCREEN)

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

UNDERDRAIN OUTLET PROTECTORS

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



NOTE: LATERALS SHALL BE INSTALLED AT ALL SAGS AND AT 250' INTERVALS ON GRADES. THE 250' DISTANCE MAY BE EXCEEDED ONLY WHERE NECESSARY FOR AN ACCEPTABLE OUTLET.

DETAIL OF PIPE UNDERDRAIN LATERALS WHEN PLACED ALONG PAVEMENT EDGE


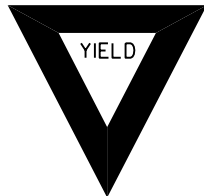

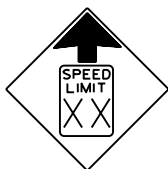

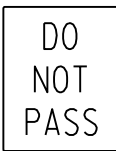



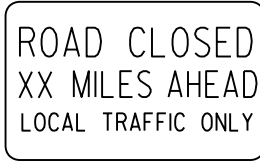


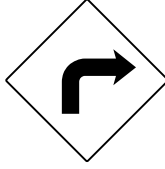




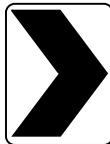
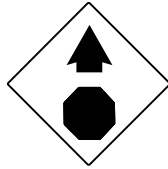
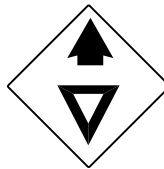
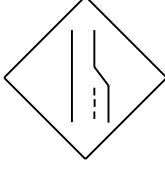

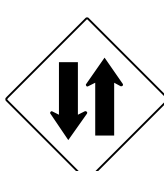




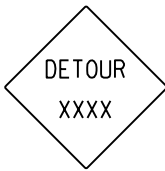






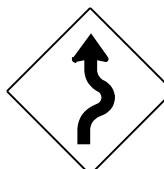
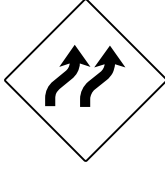




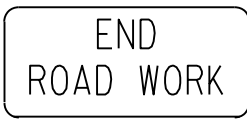
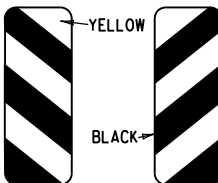


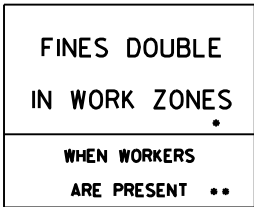
NOTE: PVC PIPE FOR LATERALS SHALL MEET THE REQUIREMENTS OF ASTM D 1785 (LATEST REVISION) FOR SCHEDULE 40 PIPE.

12-8-16	ADDED NOTES FOR PIPE UNDERDRAINS, REVISED RODENT SCREEN DETAIL AND NOTES, REMOVED NOTE 1 FOR GRANULAR MATERIAL, ADDED NOTE FOR GEOTEXTILE FABRIC	
4-10-03	REVISED NOTE 3	
1-12-00	REVISED DETAIL OF UNDERDRAIN LATERALS	
11-18-98	REVISED NOTE	
10-18-96	REVISED MIN. DEPTH & GEOTEXTILE FABRIC	
4-26-96	ADDED LATERAL NOTE: 5 1/2" TO 5"	
11-22-95	REVISED LATERALS	
7-20-95	REVISED LATERALS & ADDED NOTE	
11- 3-94	REVISED FOR DUAL LATERALS	11- 3-94
10- 1-92	SUBSTITUTED GEOTEXTILE	10- 1-92
8-15-91	ADDED POLYETHYLENE PIPE	8-15-91
11- 8-90	DELETED ALTERNATE NOTE	11- 8-90
1-25-90	ADDED 4" SNAP ADAPTER	1-25-90
11-30-89	DEL. (SUBGRADE); ADDED (WHERE REQUIRED)	11-30-89
7-15-88	ISSUED P.L.M.	647-7-15-88
DATE	REVISION	DATE FILMED

ARKANSAS STATE HIGHWAY COMMISSION

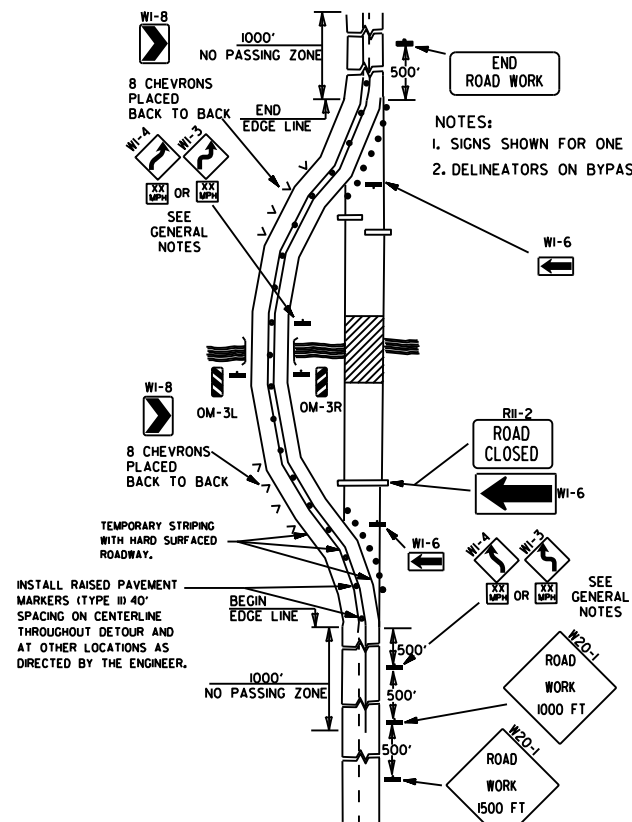
DETAILS OF PIPE UNDERDRAIN

STANDARD DRAWING PU-1

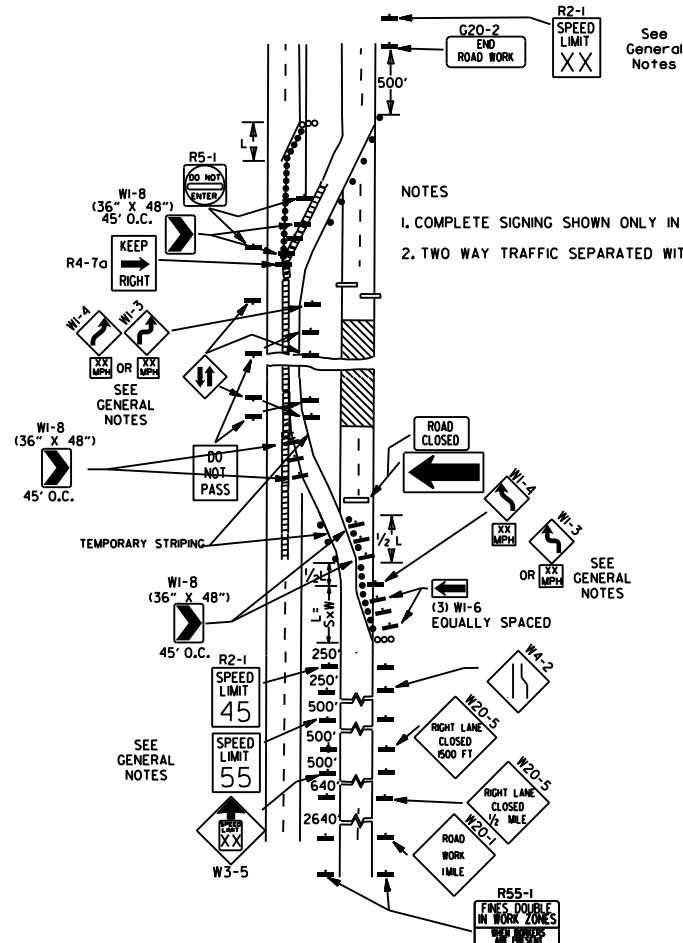
<div>RI-I</div> <div></div> <div>STANDARD 30"x30" EXPRESSWAY 36"x36" SPECIAL 48"x48"</div>	<div>RI-2</div> <div></div> <div>STD. 36"x36"x36" EXPWY. 48"x48"x48" FWY. 60"x60"x60"</div>	<div>R2-I</div> <div></div> <div>STD. 24"x30" EXPWY. 36"x48" FWY. 48"x60"</div>	<div>W3-5</div> <div></div> <div>STD. 36"x36" EXPWY. 48"x48" FWY. 48"x48"</div>	<div>W3-5a</div> <div></div> <div>STD. 36"x36" EXPWY. 48"x48" FWY. 48"x48"</div>	<div>R4-I</div> <div></div> <div>STD. 24"x30" EXPWY. 36"x48" FWY. 48"x60"</div>	<div>R4-2</div> <div></div> <div>STD. 24"x30" EXPWY. 36"x48" FWY. 48"x60"</div>	<div>ADVANCE DISTANCES (XXXX)</div> <div>500 FT 1/2 MILE 1000 FT 3/4 MILE 1500 FT 1 MILE AHEAD</div> <div>GENERAL NOTES: 1. ALL TRAFFIC CONTROL DEVICES USED ON ROAD CONSTRUCTION SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION, AND TO THE STANDARD HIGHWAY SIGNS, LATEST EDITION, OR AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION. 2. TRAFFIC CONTROL DEVICES SHALL BE SET UP JUST BEFORE THE START OF CONSTRUCTION OPERATIONS AND SHALL BE PROPERLY MAINTAINED DURING THE TIME SUCH CONDITIONS EXIST. THEY SHALL REMAIN IN PLACE ONLY AS LONG AS NEEDED AND REMOVED THEREAFTER. 3. EXISTING SIGNS AND CONSTRUCTION SIGNS SHALL BE KEPT IN PROPER POSITION, AND BE CLEAN AND LEGIBLE AT ALL TIMES. SIGNS THAT DO NOT APPLY TO EXISTING CONDITIONS SHALL BE REMOVED. SIGNS THAT ARE DAMAGED, DEFACED, OR THAT ACCUMULATE DIRT DURING CONSTRUCTION SHALL BE CLEANED, REPAIRED, OR REPLACED. 4. SIGNS ARE USUALLY MOUNTED ON A SINGLE POST, ALTHOUGH THOSE WIDER THAN 36" OR LARGER THAN 10 SQ. FT. SHALL BE MOUNTED ON TWO POSTS OR ABOVE A TYPE III BARRICADE. 5. SIGN POSTS DIRECT BURIED IN SOIL SHALL BE 2 LB. MINIMUM CHANNEL POST OR 4"x4" WOOD POSTS. CHANNEL POSTS SHALL BE PAINTED GREEN. WOOD POSTS SHALL BE PAINTED WHITE. ALL POSTS SHALL BE NEATLY CONSTRUCTED, AND SHALL BE REPLUMBED, CLEANED, OR REPAIRED AS NEEDED FOR THE DURATION OF THE JOB. THERE SHALL NOT BE MORE THAN 2 POSTS IN A 7' PATH FOR WOOD OR CHANNEL POSTS. ANY CHANNEL POST SPLICE SHALL BE IN ACCORDANCE WITH STANDARD DRAWING TC-3. 6. POST MOUNTED SIGNS IN RURAL AREAS SHALL BE CONSTRUCTED WITH THE NEAR EDGE OF THE SIGN FROM 6 TO 12 FEET FROM THE PAVEMENT EDGE. SIGNS IN URBAN AREAS AND BARRICADE MOUNTED SIGNS SHALL BE MOUNTED A MINIMUM OF 2 FEET FROM THE PAVEMENT EDGE. 7. ALL POST AND BARRICADE MOUNTED SIGNS MOUNTED IN URBAN AREAS SHALL BE MOUNTED A MINIMUM DISTANCE OF 7' FROM THE BOTTOM OF THE SIGN TO THE ROADWAY SURFACE. ALL POST AND BARRICADE MOUNTED SIGNS MOUNTED IN RURAL AREAS SHALL BE MOUNTED A MINIMUM DISTANCE OF 7' FROM THE BOTTOM OF THE SIGN TO THE ROADWAY SURFACE, EXCEPT A MINIMUM OF 6' SHALL BE USED WHEN MOUNTING AN ADVISORY SIGN BELOW A WARNING SIGN. TEMPORARY SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS FOR INTERMEDIATE TERM STATIONARY WORK CONDITIONS. THE SIGNS MINIMUM MOUNTING HEIGHT SHALL BE 5'. RETROREFLECTIVE DEVICES SHALL BE USED. TEMPORARY SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS FOR SHORT-TERM, SHORT DURATION, AND MOBILE CONDITIONS. THEY SHALL BE NO LESS THAN ONE (1) FOOT ABOVE THE TRAVELED WAY. LONG-TERM STATIONARY SIGNS SHALL BE DIRECT BURIED IN SOIL, UNLESS CONDITIONS NECESSITATE THE USE OF PORTABLE SIGNS, OR AS APPROVED BY THE ENGINEER. CONCRETE PADS, CONCRETE OR ROCK BALLAST, OR OTHER SOLID MATERIALS SHALL NOT BE UTILIZED WITH PORTABLE SIGN SUPPORTS. 8. FLAGGERS SHALL USE REFLECTORIZED STOP-SLOW PADDLES. FLAGS MAY BE USED ONLY FOR EMERGENCY SITUATIONS. 9. MOST OF THE SIGNS SHOWN ARE ORIENTED TO THE RIGHT. HOWEVER, THIS DOES NOT PRECLUDE THE USE OF MIRROR IMAGES OF THESE SIGNS WHERE THE REVERSE ORIENTATION MIGHT BETTER CONVEY TO MOTORISTS THE PROPER DIRECTION OF MOVEMENT. 10. R55-1 SIGNS SHALL BE PLACED AT LEAST 1500' BUT NOT MORE THAN 1 MILE IN ADVANCE OF THE WORK ZONE. IF A SPEED LIMIT REDUCTION IS IN EFFECT, THE SIGN SHALL BE PLACED A MINIMUM OF 500' IN ADVANCE OF THE "REDUCED SPEED AHEAD" SIGN. • NOTE: SUPPORTS FOR SIGNS, BARRICADES, AND VERTICAL PANELS THAT ARE DIFFERENT FROM THE REQUIREMENTS SHOWN IN NOTES 4 & 5, BUT MEET THE REQUIREMENTS OF 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.</div>
<div>R5-I</div> <div></div> <div>STD. 30"x30" EXPWY. 36"x36" SPECIAL 48"x48"</div>	<div>R1I-2</div> <div></div> <div>48"x30"</div>	<div>R1I-3A</div> <div></div> <div>60"x30"</div>	<div>R1I-4</div> <div></div> <div>60"x30"</div>	<div>W2I-5a</div> <div></div> <div>STD. 36"x36" FWY. 48"x48"</div>	<div>WI-I</div> <div></div> <div>STD. 36"x36" FWY. 48"x48"</div>	<div>WI-2</div> <div></div> <div>STD. 36"x36" FWY. 48"x48"</div>	
<div>WI-3</div> <div></div> <div>STD. 48"x48"</div>	<div>WI-4</div> <div></div> <div>STD. 48"x48"</div>	<div>WI-6</div> <div></div> <div>STD. 48"x24" SPECIAL 60"x30"</div>	<div>WI-8</div> <div></div> <div>STD. 18"x24" SPECIAL 24"x30" EXPWY. 30"x36" FWY. 36"x48"</div>	<div>W3-I</div> <div></div> <div>STD. 36"x36" SPECIAL 48"x48"</div>	<div>W3-2</div> <div></div> <div>STD. 36"x36" SPECIAL 48"x48"</div>	<div>W4-2</div> <div></div> <div>STD. 36"x36" FWY. 48"x48"</div>	
<div>W5-I</div> <div></div> <div>STD. 36"x36" SPECIAL 48"x48"</div>	<div>W6-3</div> <div></div> <div>EXPWY. 36"x36" SPECIAL 48"x48"</div>	<div>W8-7</div> <div></div> <div>EXPWY. 36"x36" FWY. 48"x48"</div>	<div>W9-2</div> <div></div> <div>STD. 36"x36" FWY. 48"x48"</div>	<div>W13-I</div> <div></div> <div>STD. 24"x24"</div>	<div>W20-I</div> <div></div> <div>STD. 48"x48"</div>	<div>W20-2</div> <div></div> <div>STD. 48"x48"</div>	<div>W20-3</div> <div></div> <div>STD. 48"x48"</div>
<div>W20-4</div> <div></div> <div>STD. 48"x48"</div>	<div>W20-5</div> <div></div> <div>STD. 48"x48"</div>	<div>W20-7a</div> <div><div>18" 500 FEET 24" W16-2</div></div> <div>STD. 36"x36" FWY. 48"x48"</div>	<div>W2I-2</div> <div></div> <div>STD. 30"x30" SPECIAL 36"x36"</div>	<div>W2I-5</div> <div></div> <div>STD. 30"x30" SPECIAL 36"x36"</div>	<div>W24-I</div> <div></div> <div>STD. 36"x36"</div>	<div>WI-4b</div> <div></div> <div>STD. 48"x48"</div>	<div>R56-I</div> <div></div> <div>STD. 18"x18"</div>
<div>W8-II</div> <div></div> <div>STD. 36"x36" FWY. 48"x48"</div>	<div>W8-9</div> <div></div> <div>STD. 36"x36" FWY. 48"x48"</div>	<div>G20-I</div> <div></div> <div>60"x24"</div>	<div>G20-2</div> <div></div> <div>48"x24"</div>	<div>OM-3L OM-3R</div> <div></div> <div>12"x36"</div>	<div>M4-9</div> <div></div> <div>STD. 30"x24" SPECIAL 48"x36" SPECIAL 60"x48"</div>	<div>M4-10</div> <div></div> <div>48"x18"</div>	<div>R55-I</div> <div></div> <div>36"x60" • USE 6" C LETTERS •• USE 4" D LETTERS</div>

II-07-19	REVISED FOR MASH	
4-13-17	DELETED RSP-1 & ADDED W2I-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	
DATE	REVISION	FILMED

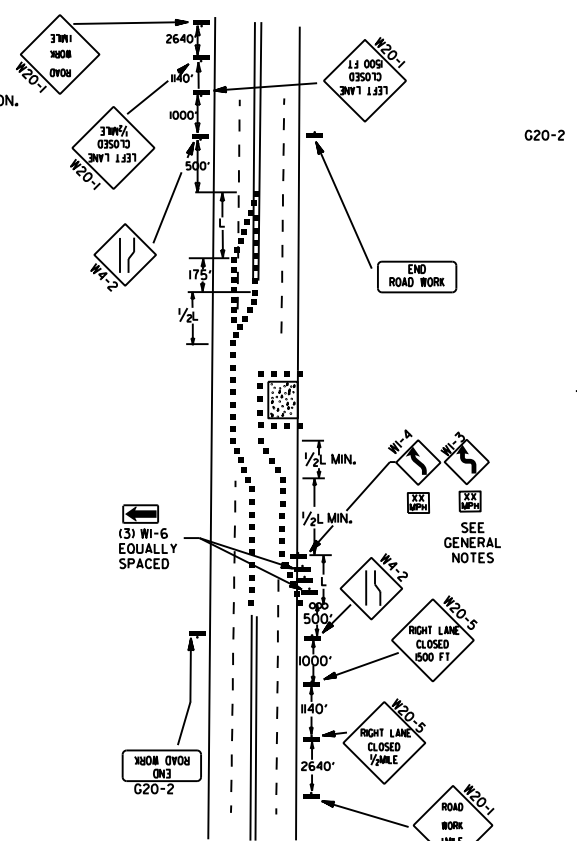
ARKANSAS STATE HIGHWAY COMMISSION
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FOR HIGHWAY CONSTRUCTION
STANDARD DRAWING TC-1



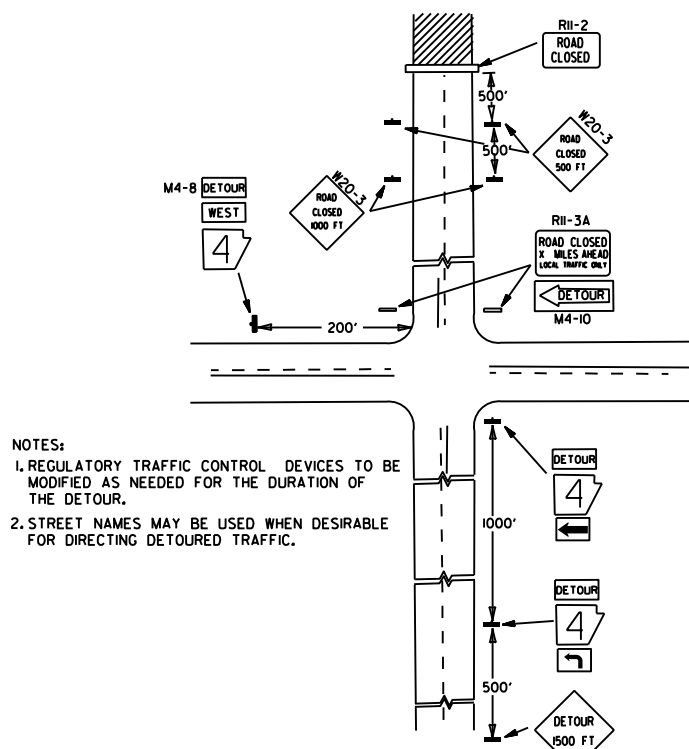
(A) TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES ON A 2-LANE HIGHWAY WHERE THE ENTIRE ROADWAY IS CLOSED AND A BYPASS DETOUR IS PROVIDED.



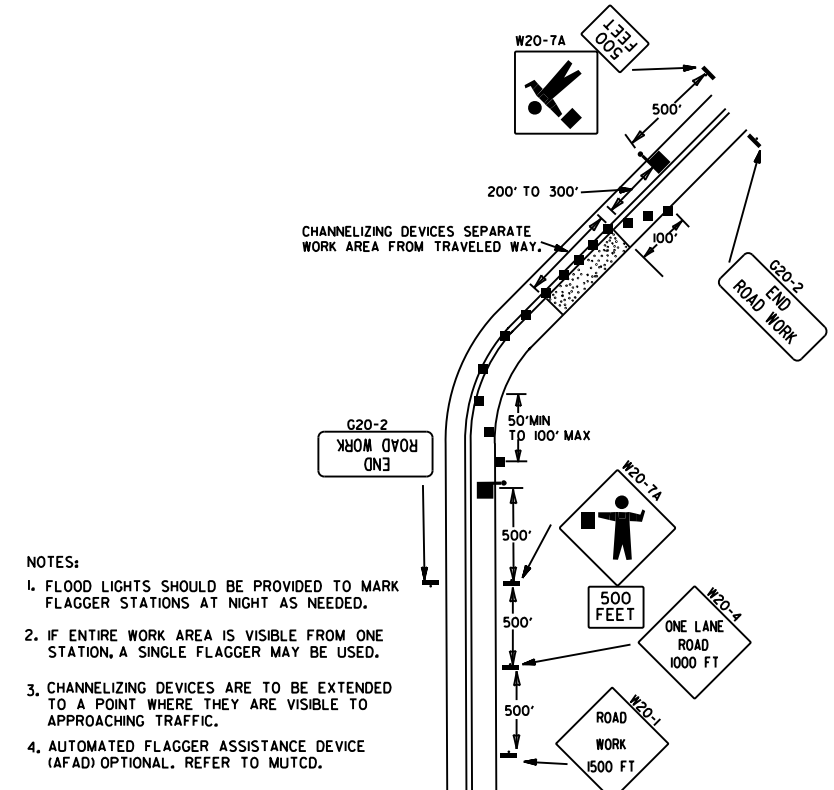
(B) TYPICAL APPLICATION - 4-LANE DIVIDED ROADWAY WHERE ONE ROADWAY IS CLOSED.



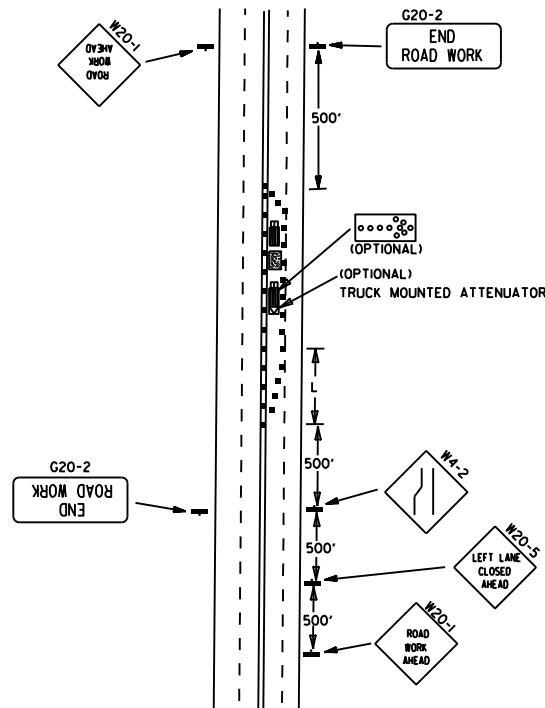
(C) TYPICAL APPLICATION - 4-LANE UNDIVIDED ROADWAY WHERE HALF OF THE ROADWAY IS CLOSED.



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

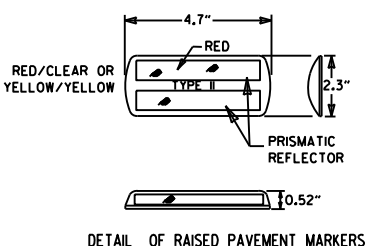


(E) TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES ON 2-LANE HIGHWAY WHERE ONE LANE IS CLOSED AND FLAGGING IS PROVIDED.



(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



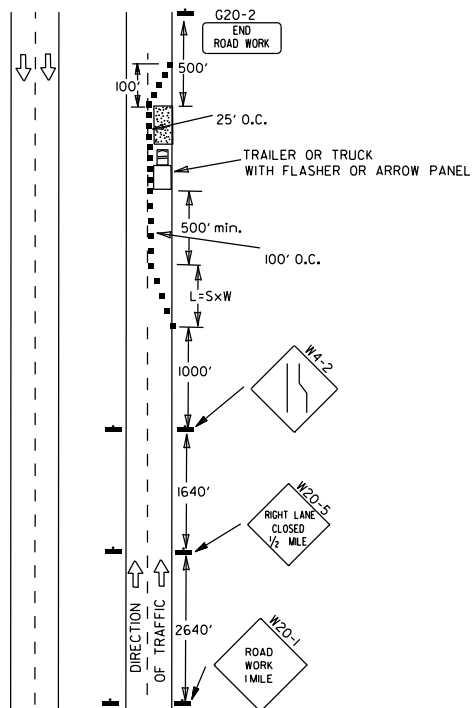
TYPICAL ADVANCE WARNING SIGN PLACEMENT

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:
- 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.
 - 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 1 MILE INTERVALS. AT THE END OF THE WORK AREA A R2-1(XX) SHALL BE INSTALLED TO MATCH ORIGINAL SPEED LIMIT.
 - WHEN THE EXISTING SPEED LIMIT IS 65MPH AND THE PLANS REQUIRE A SPEED LIMIT OF 55MPH, THE R2-1(65) SHALL BE OMITTED. ADDITIONAL R2-1(55)MPH SPEED LIMIT SIGNS SHALL BE INSTALLED AT A MAXIMUM OF 1 MILE INTERVALS. AT THE END OF THE WORK AREA A R2-1(XX) SHALL BE INSTALLED TO MATCH ORIGINAL SPEED LIMIT.
 - THE MAXIMUM SPACING BETWEEN CHANNELIZING DEVICES IN A TAPER SHOULD BE APPROXIMATELY EQUAL IN FEET TO THE SPEED LIMIT. BEYOND THE TAPER, MAXIMUM SPACING SHALL BE TWO TIMES THE SPEED LIMIT, OR AS DIRECTED BY THE ENGINEER.
 - WARNING LIGHTS AND/OR FLAGS MAY BE MOUNTED TO SIGNS OR CHANNELIZING DEVICES AT NIGHT AS NEEDED.
 - PAVEMENT MARKINGS NO LONGER APPLICABLE WHICH MIGHT CREATE CONFUSION IN THE MINDS OF VEHICLE OPERATORS SHALL BE REMOVED OR OBLITERATED AS SOON AS PRACTICABLE.
 - 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.
 - 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.
 - 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).

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	
DATE	REVISION	FILMED

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 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.

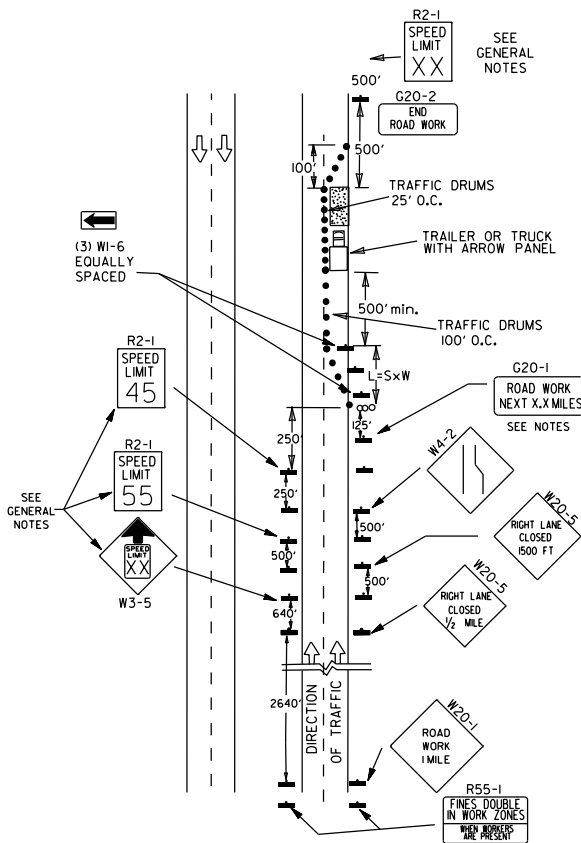
(B) TYPICAL APPLICATION - 3-LANE ONEWAY ROADWAY WHERE CENTER LANE IS CLOSED.

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 R2-1(55) SHALL BE OMITTED AND THE W3-5 SHALL BE INSTALLED AT THAT LOCATION. ADDITIONAL R2-1 45MPH SPEED LIMIT SIGNS SHALL BE INSTALLED AT A MAXIMUM OF 1/2 MILE INTERVALS. AT THE END OF THE WORK AREA A R2-1(XX) SHALL BE INSTALLED TO MATCH ORIGINAL SPEED LIMIT.
3. WHEN THE EXISTING SPEED LIMIT IS 65MPH AND THE PLANS REQUIRE A SPEED LIMIT OF 55MPH, THE R2-1(65) SHALL BE OMITTED. ADDITIONAL R2-1 55MPH SPEED LIMIT SIGNS SHALL BE INSTALLED AT A MAXIMUM OF 1/2 MILE INTERVALS. AT THE END OF THE WORK AREA A R2-1(XX) SHALL BE INSTALLED TO MATCH ORIGINAL SPEED LIMIT.
4. THE MAXIMUM SPACING BETWEEN CHANNELIZING DEVICES IN A TAPER SHOULD BE APPROXIMATELY EQUAL IN FEET TO THE SPEED LIMIT. BEYOND THE TAPER, MAXIMUM SPACING SHALL BE TWO TIMES THE SPEED LIMIT OR AS DIRECTED BY THE ENGINEER.
5. WARNING LIGHTS AND/OR FLAGS MAY BE MOUNTED TO SIGNS OR CHANNELIZING DEVICES AT NIGHT AS NEEDED.
6. PAVEMENT MARKINGS NO LONGER APPLICABLE WHICH MIGHT CREATE CONFUSION IN THE MINDS OF VEHICLE OPERATORS SHALL BE REMOVED OR OBLITERATED AS SOON AS PRACTICABLE.
7. THE G20-1 SIGN WILL BE REQUIRED ON JOBS OF OVER TWO MILES IN LENGTH. WHEN THE LANE CLOSURE IS NOT AT THE BEGINNING OF THE PROJECT, THE G20-1 SIGN SHALL BE ERECTED 125' IN ADVANCE OF THE JOB LIMIT. ADDITIONAL W20-1(1/2 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).



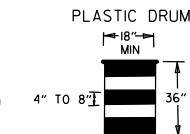
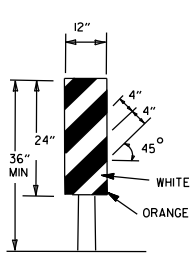
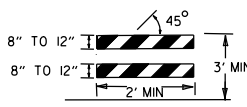
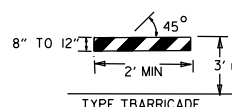
(C) TYPICAL APPLICATION - CONSTRUCTION OPERATIONS OF INTERMEDIATE TO LONG TERM DURATION ON A 4-LANE DIVIDED ROADWAY WHERE HALF OF THE ROADWAY IS CLOSED.

CHANNELIZING DEVICES

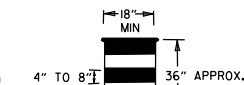


- WHEN CONES ARE USED ON FREEWAYS AND MULTI-LANE HIGHWAYS, THEY SHALL BE 28" MIN. DURING HOURS OF DARKNESS, 28" CONES SHALL BE USED ON ALL ROADWAYS, AND SHALL BE REFLECTORIZED IN ACCORDANCE WITH THE M.U.T.C.D.

CONES



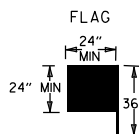
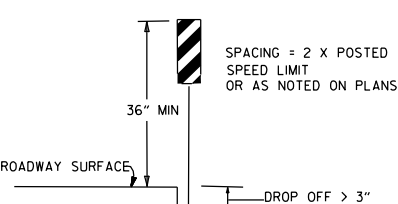
PLASTIC DRUM



TYPE III BARRICADE

NOTE:
FOR ALL ROAD CLOSURES, THE TYPE III BARRICADES SHALL BE OF SUFFICIENT LENGTH TO EXTEND ACROSS ENTIRE ROADWAY.

VERTICAL PANEL PLACEMENT



FLAG

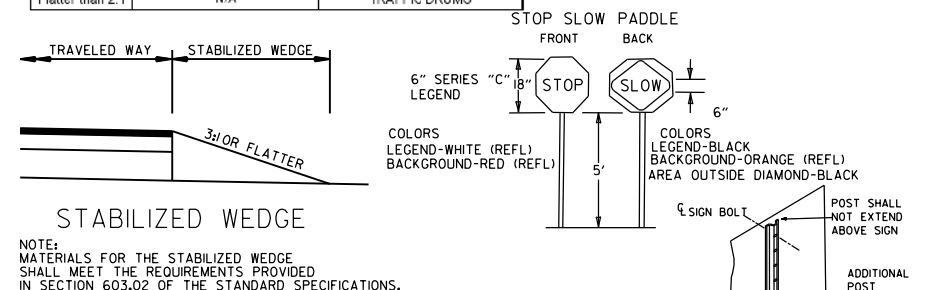
FLAG SHALL BE OF GOOD GRADE RED MATERIAL

TRAFFIC CONTROL DEVICES			
NON-INTERSTATE			
VERTICAL DIFFERENTIAL	LOCATION	TRAFFIC CONTROL	
		≤ 45 MPH	> 45 MPH
≤ 1"	CENTERLINE	W8-11	W8-11
> 1"	CENTERLINE	W8-11 AND CENTERLINE LANE STRIPING	W8-11 AND CENTERLINE LANE STRIPING
> 3"	CENTERLINE	STANDARD LANE CLOSURE ⁽¹⁾	STANDARD LANE CLOSURE ⁽¹⁾
≤ 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 ⁽¹⁾
> 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 ⁽¹⁾
> 24"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	PRECAST CONCRETE BARRIER ⁽¹⁾ & EDGE LINES	PRECAST CONCRETE BARRIER ⁽¹⁾ & 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 ⁽¹⁾
> 3"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	W8-17, EDGE LINE STRIPING, AND TRAFFIC DRUMS ⁽¹⁾
> 6"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	PRECAST CONCRETE BARRIER & EDGE LINES

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

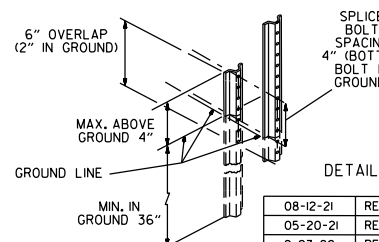
- GENERAL NOTES:
1. WHEN THE SHOULDER AREA IS USED AS PART OF THE TRAVELED LANE AND THERE IS INSUFFICIENT WIDTH TO PLACE TRAFFIC DRUMS ON THE REMAINING SHOULDER WIDTH, THEN VERTICAL PANELS SHALL BE USED.
 2. WHEN THERE IS INSUFFICIENT WIDTH TO PLACE TRAFFIC DRUMS ON THE REMAINING SHOULDER WIDTH, A STABILIZED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



STABILIZED WEDGE

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

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



DETAIL OF SPLICES

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 W6-18 & REVISED TRAFFIC CONTROL DEVICES NOTE	
10-18-96	ADDED R55-1	
10-12-95	MOVED UPPER SPLICE	
6-8-95	REVISED SPLICE DETAIL, TEXT	6-8-95
2-2-95	REVISED PER PART VI, MUTCD, SEPT. 3, 1993	
8-15-91	DRAWN AND PLACED IN USE	

ARKANSAS STATE HIGHWAY COMMISSION
STANDARD TRAFFIC CONTROLS
FOR HIGHWAY CONSTRUCTION

STANDARD DRAWING TC-3

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

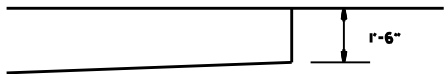


NOTE: JOINT SPACING ON THE MAIN LANES SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO THESE JOINT LAYOUTS. THE MAIN LANE JOINT SPACING MAY BE REDUCED TO A 12' MINIMUM.

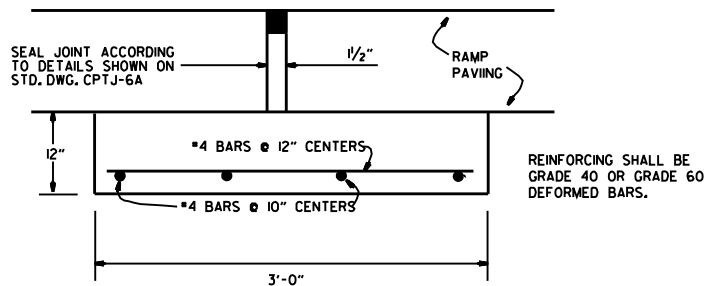


EXIT RAMP

DESIGN SPEED V	Y	NOSE OFFSET C	LENGTH NOSE TAPER Z	RETURN RADIUS R	ADDITIONAL SURFACING SQ. YDS.
40	300, 0	8, 0	96, 0	580, 0	602, 43
50	320, 0	10, 0	120, 0	725, 0	687, 29
60	340, 0	2, 0	68, 0	182, 0	790, 56
70	360, 0	4, 0	210, 0	582, 0	902, 27



DETAIL 'A'



DETAIL OF EXPANSION JOINT & JOINT SUPPORT

NOTE: THE EXPANSION JOINTS SHALL BE MEASURED AND PAID FOR AS P.C.C. PAVEMENT (RAMP THICKNESS), WHEN RAMP PAVING IS ASPHALT. EXPANSION JOINT IS NOT REQUIRED. THE JOINT SUPPORT MAY BE CONSTRUCTED WITH CLASS "A," "S," OR PAVING CONCRETE. PAYMENT FOR THE JOINT SUPPORT SHALL BE FOR THE CONTRACT UNIT PRICE BID FOR THE CLASS OF CONCRETE USED, ALL OTHER WORK AND MATERIALS REQUIRED FOR THE CONSTRUCTION OF THE JOINT SUPPORT SHALL BE INCLUDED IN THE PRICE BID FOR THE ABOVE ITEMS.

8-22-02	DELETED NOTE	
11-16-01	CORRECTED SPELLING ON ENTRANCE RAMP NOTE	
5-13-99	ADDED, EDITED AND DELETED NOTES	
11-03-94	ADDED NOTE RE: REINF. BARS	
10-1-92	ADDED DETAIL A & OTHER MINOR CHANGES	10-1-92
1-26-90	REVISED EXPANSION JOINT	1-26-90
7-15-88	CONFORM D TO 1988 SPECIFICATIONS	85C-7-15-88
3-2-81	ISSUED	511-10-2-72
DATE	REVISION	DATE FILMD

ARKANSAS STATE HIGHWAY COMMISSION

DETAILS OF STANDARD TURNOUT
FOR
ENTRANCE & EXIT RAMPS (NON-REINFORCED)

STANDARD DRAWING TR-1A