

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO. 110621		1		28

2 HOG TUSK CREEK STR. & APPRS. (S)

ARKANSAS DEPARTMENT OF TRANSPORTATION
CONSTRUCTION PLANS FOR STATE HIGHWAY

HOG TUSK CREEK
STR. & APPRS. (S)

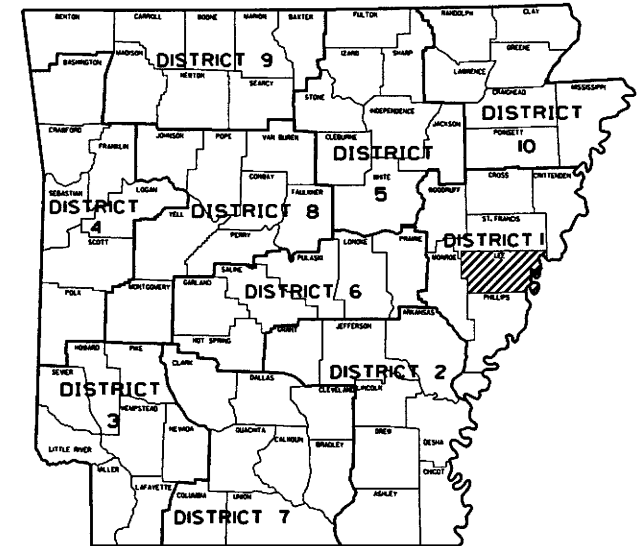
LEE COUNTY

ROUTE 238 SECTION 2

FED. AID PROJ. NHPP-0039(22)

JOB 110621

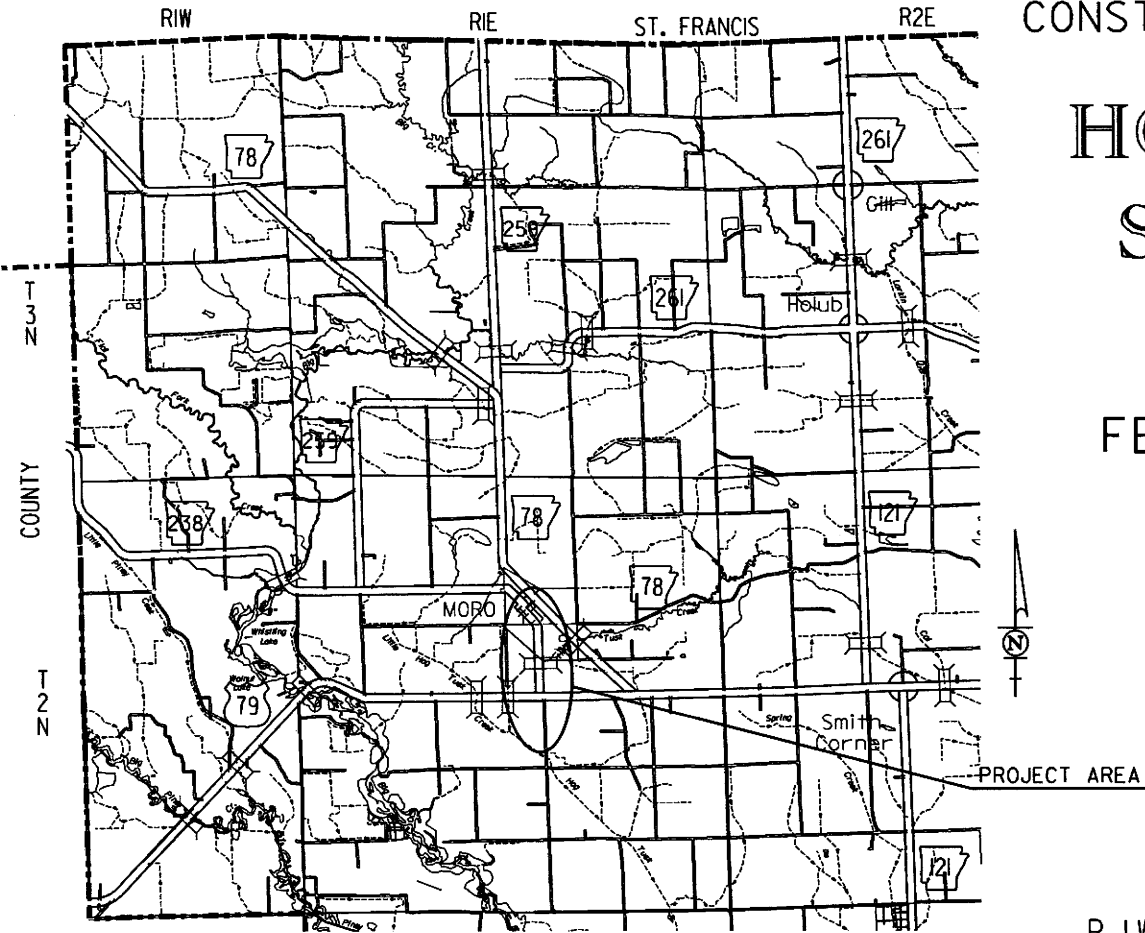
NOT TO SCALE



ARK. HWY. DIST. NO. 1

DESIGN TRAFFIC DATA

DESIGN YEAR	2038
2018 ADT	385
2038 ADT	400
2038 DHV	44
DIRECTIONAL DISTRIBUTION	0.60
TRUCKS	15%
DESIGN SPEED	55 MPH



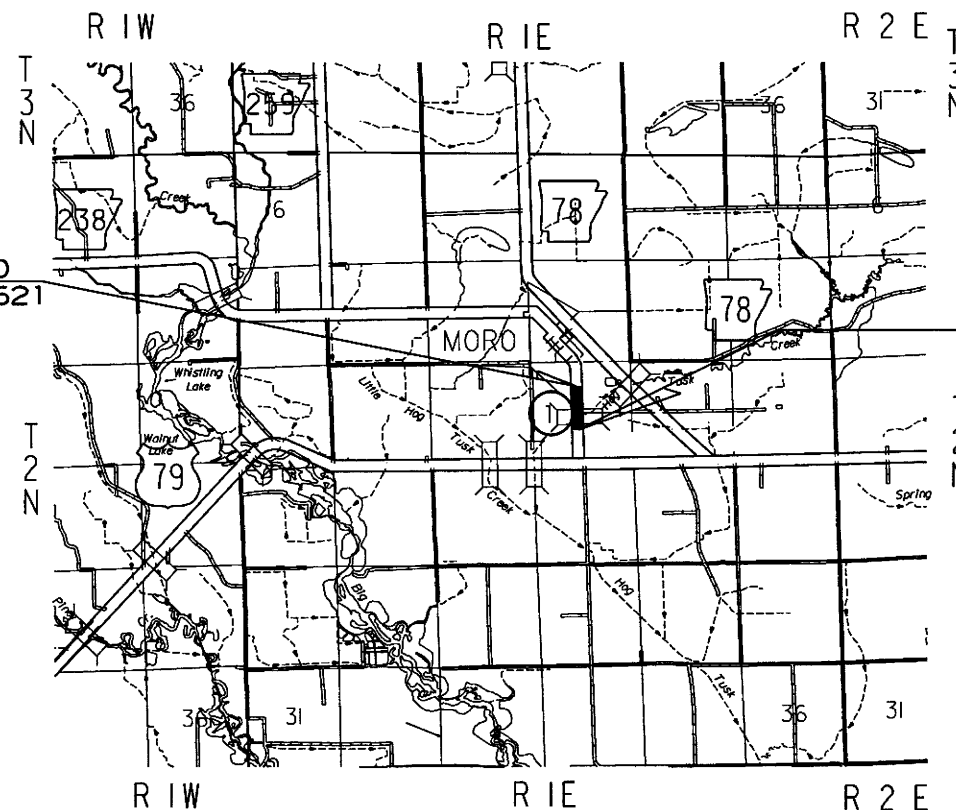
VICINITY MAP

STRUCTURES OVER 20' -0" SPAN

- 1 STA. 110+36 CONSTRUCT
QUAD. 10' x 9' x 64' R.C BOX CULVERT
20° RT. FWD. SKEW
WITH 3:1 WINGS LT. & RT.
Q25= 1210 CFS D.A. = 13.8 SQ. MILES
SPAN = 47.09'
CHANNEL CHANGE = 948 CU. YDS.

STA. 102+90.00
BEGIN JOB 110621
LOG MILE 8.58

STA. 111+00.00
END JOB 110621



	BEGIN PROJECT	MID-POINT OF PROJECT	END PROJECT
LATITUDE	N 34°47' 07"	N 34°47' 02"	N 34°46' 57"
LONGITUDE	W 90°59' 18"	W 90°59' 18"	W 90°59' 18"

LENGTH OF PROJECT CALCULATED ALONG C.L.			
GROSS LENGTH OF PROJECT	810.00	FEET OR	0.153 MILES
NET ROADWAY	762.91		0.144 MILES
NET BRIDGES	47.09		0.009 MILES
NET PROJECT	810.00		0.153 MILES



APPROVED



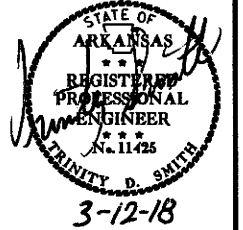
3-12-18

DEPUTY DIRECTOR
AND CHIEF ENGINEER

P.E. JOB 110621

DATE REVISED	DATE FILED	DATE REVISED	DATE FILED	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
						JOB NO. 110621	3	28

2 GOVERNING SPECIFICATIONS AND GEN. NOTES



GOVERNING SPECIFICATIONS

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

NUMBER	TITLE
ERRATA	ERRATA FOR THE BOOK OF STANDARD SPECIFICATIONS
FHWA-1273	REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS
FHWA-1273	SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - NOTICE TO CONTRACTORS
FHWA-1273	SUPPLEMENT - SPECIFIC EQUAL EMPLOYMENT OPPORTUNITY RESPONSIBILITIES (23 U.S.C. 140)
FHWA-1273	SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - GOALS AND TIMETABLES
FHWA-1273	SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - FEDERAL STANDARDS
FHWA-1273	SUPPLEMENT - POSTERS AND NOTICES REQUIRED FOR FEDERAL-AID PROJECTS
FHWA-1273	SUPPLEMENT - WAGE RATE DETERMINATION
100-3	CONTRACTOR'S LICENSE
100-4	DEPARTMENT NAME CHANGE
102-2	ISSUANCE OF PROPOSALS
108-1	LIQUIDATED DAMAGES
108-2	WORK ALLOWED PRIOR TO ISSUANCE OF WORK ORDER
303-1	AGGREGATE BASE COURSE
400-1	TACK COATS
400-4	DESIGN AND QUALITY CONTROL OF ASPHALT MIXTURES
410-1	CONSTRUCTION REQUIREMENTS AND ACCEPTANCE OF ASPHALT CONCRETE PLANT MIX COURSES
604-1	RETROREFLECTIVE SHEETING FOR TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES
606-1	PIPE CULVERTS FOR SIDE DRAINS
620-1	MULCH COVER
JOB 110621	BIDDING REQUIREMENTS AND CONDITIONS
JOB 110621	BROADBAND INTERNET SERVICE FOR ASPHALT CONCRETE PLANT
JOB 110621	BROADBAND INTERNET SERVICE FOR FIELD OFFICE
JOB 110621	CARGO PREFERENCE ACT REQUIREMENTS
JOB 110621	CONSTRUCTION IN SPECIAL FLOOD HAZARD AREAS
JOB 110621	DISADVANTAGED BUSINESS ENTERPRISE BIDDER'S RESPONSIBILITIES
JOB 110621	GOALS FOR DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION
JOB 110621	MAINTENANCE OF TRAFFIC
JOB 110621	MANDATORY ELECTRONIC CONTRACT
JOB 110621	MANDATORY ELECTRONIC DOCUMENT SUBMITTAL
JOB 110621	NESTING SITES OF MIGRATORY BIRDS
JOB 110621	PLASTIC PIPE
JOB 110621	SHORING FOR CULVERTS
JOB 110621	SOIL STABILIZATION
JOB 110621	SUBMISSION OF ASPHALT CONCRETE HOT MIX ACCEPTANCE TEST RESULTS
JOB 110621	UTILITY ADJUSTMENTS
JOB 110621	WARM MIX ASPHALT

GENERAL NOTES

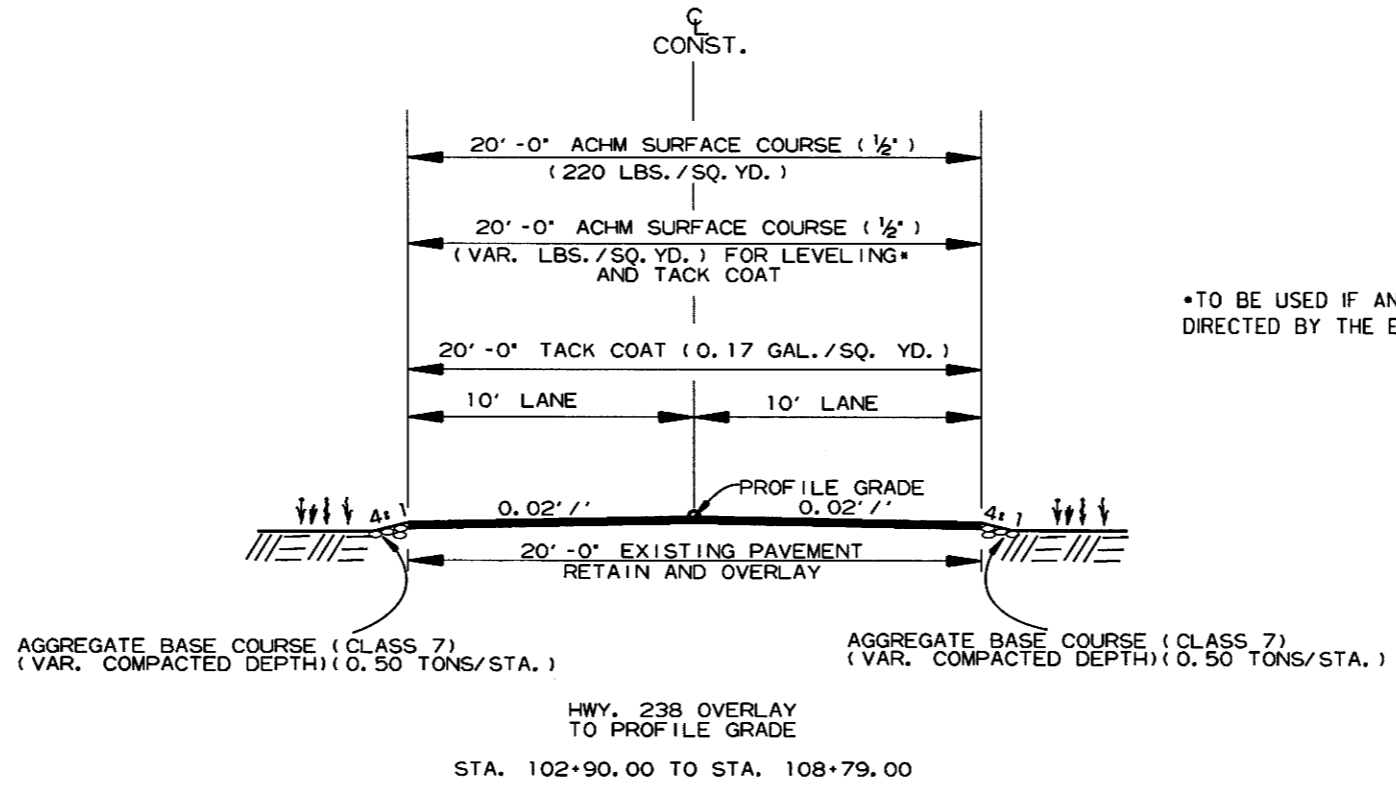
- GRADE LINE DENOTES FINISHED GRADE WHERE SHOWN ON PLANS.
- ALL PIPE LINES, POWER, TELEPHONE, AND TELEGRAPH LINES TO BE MOVED OR LOWERED BY THE RESPECTIVE OWNERS AS PER AGREEMENT WITH SUCH OWNERS.
- ANY EQUIPMENT OR APPURTENANCE THAT INTERFERES WITH THE PROPOSED CONSTRUCTION AND WHICH MAY BE THE PROPERTY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

2/13/2018

R110621.DGN

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				6	ARK.		4	28
						JOB NO. 110621	4	28

② TYPICAL SECTIONS OF IMPROVEMENT



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

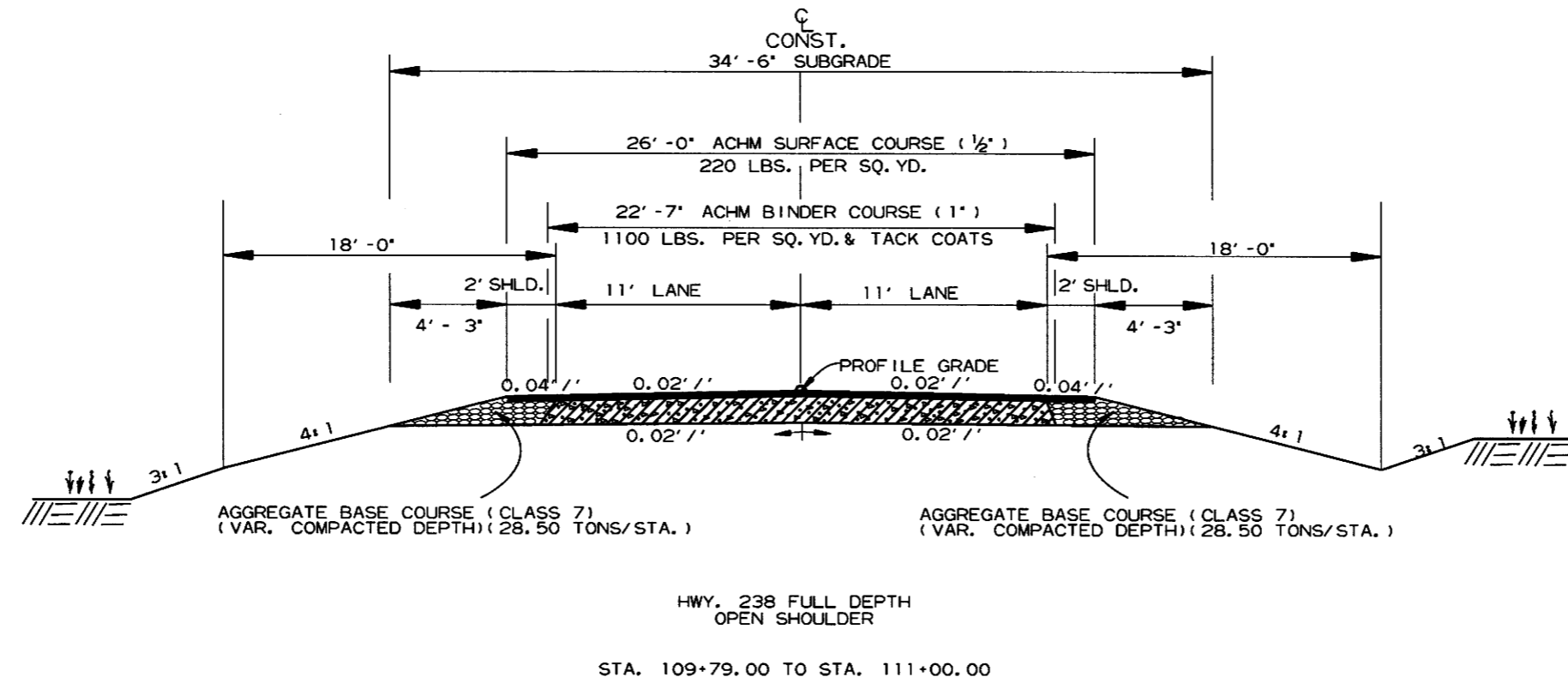
NOTES:
THE FINAL 2" OF SURFACE COURSE IS TO BE PLACED AFTER ALL OTHER COURSES HAVE BEEN LAID. LONGITUDINAL JOINTS SHALL BE AT LANE LINES.

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

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

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

NOTE:
TRANSITION FROM 11' LANE TO 10' LANE
STA. 108+79.00 TO STA. 109+79.00
STA. 111+00.00 TO STA. 112+00.00

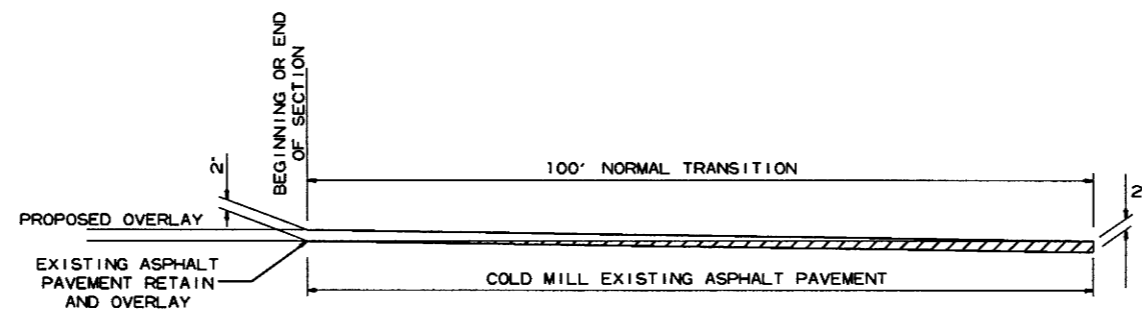


2/21/2018
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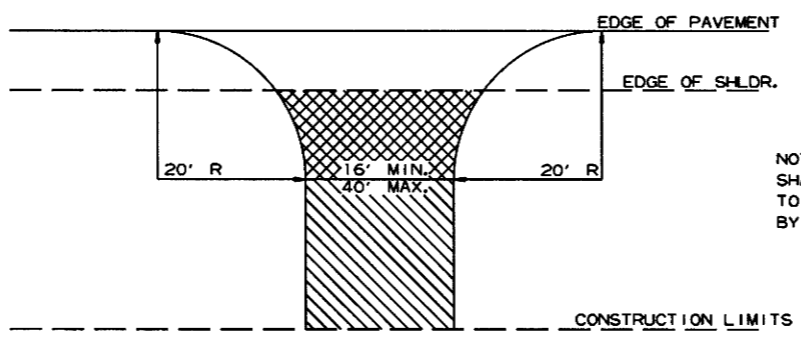
TYPICAL SECTIONS OF IMPROVEMENT

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				6	ARK.			
JOB NO. 110621							5	28



② SPECIAL DETAILS



DETAIL FOR TRANSITIONS



NOTE: TURNOUTS AND PRIVATE DRIVES SHALL BE MODIFIED WHERE NECESSARY TO MEET LOCAL CONDITIONS AS DIRECTED BY THE ENGINEER.

-  ASPHALT CONCRETE HOT MIX SURFACE COURSE (220 LBS. PER SQ. YD.)
AGGREGATE BASE COURSE (CLASS 7)
7" COMP. DEPTH IF ASPHALT DRIVE EXIST OR
6" CONCRETE IF CONCRETE DRIVE EXIST.
-  AGGREGATE BASE COURSE (CLASS 7)
9" COMP. DEPTH OR CONFORM
TO EXISTING DRIVEWAY

DETAIL FOR DRIVEWAY TURNOUTS
(COLLECTORS)

2/14/2018
R110621.DGN

MID-SECTION

Table with columns for R.C. BOX SECTION, DESIGN FILL DEPTH, CLEAR SPAN, CLEAR HEIGHT, TOP SLAB THK., BOTTOM SLAB THK., SIDE WALL THK., INTERIOR WALL THK., OVER ALL WIDTH, OVER ALL HEIGHT, SECTION LENGTH, TOP SLAB REINFORCING STEEL, BOTTOM SLAB REINFORCING STEEL, SIDE WALL REINFORCING STEEL, INTERIOR WALL REINFORCING STEEL, TOP SLAB DISTRIBUTION REINF. STEEL, BOTTOM SLAB DISTRIBUTION REINF. STEEL, SIDE WALL DISTRIBUTION REINF. STEEL, INTERIOR WALL DISTRIBUTION REINF. STEEL, CLASS "S" CONCRETE, REINFORCING STEEL (GR. 60).

INLET SLOPE SECTIONS(S)

Table with columns for R.C. BOX SECTION, DESIGN FILL DEPTH, CLEAR SPAN, CLEAR HEIGHT, TOP SLAB THK., BOTTOM SLAB THK., SIDE WALL THK., INTERIOR WALL THK., OVER ALL WIDTH, OVER ALL HEIGHT, SECTION LENGTH, TOP SLAB REINFORCING STEEL, BOTTOM SLAB REINFORCING STEEL, SIDE WALL REINFORCING STEEL, INTERIOR WALL REINFORCING STEEL, TOP SLAB DISTRIBUTION REINF. STEEL, BOTTOM SLAB DISTRIBUTION REINF. STEEL, SIDE WALL DISTRIBUTION REINF. STEEL, INTERIOR WALL DISTRIBUTION REINF. STEEL, CLASS "S" CONCRETE, REINFORCING STEEL (GR. 60).

INLET SKEWED END SECTION

Table with columns for SKEW (DEGREE), SLOPE, DESIGN FILL DEPTH, CLEAR SPAN, CLEAR HEIGHT, SECTION LENGTH, TOP SLAB THK., HDWL DEPTH, BOTTOM SLAB THK., SIDE WALL THK., INTERIOR WALL THK., OVER ALL WIDTH, OVER ALL HEIGHT, TOP SLAB REINFORCING STEEL, BOTTOM SLAB REINFORCING STEEL, SIDE WALL REINFORCING STEEL, INTERIOR WALL REINFORCING STEEL, TOP SLAB DISTRIBUTION REINFORCING STEEL, BOTTOM SLAB DISTRIBUTION REINFORCING STEEL, SIDE WALL DISTRIBUTION REINFORCING STEEL, INTERIOR WALL DISTRIBUTION REINFORCING STEEL, CLASS "S" CONCRETE, REINFORCING STEEL (GR. 60).

INLET WINGWALL TABLE

Table with columns for OVER ALL WIDTH, CLEAR HEIGHT, FOOTING THK., WING WALL THK., BOX SKEW (DEG.), SLOPE, HDWL LENGTH, HEEL, WALL HEIGHT AT HDWL, AT WING END, WING WALL ANGLE (DEGREE), WING WALL WIDTH AT FOOTING WIDTH AT WALL END, WIDTH OF WING FOOTINGS AT HDWL, FOOTING DIMENSION PARALLEL WITH HDWL, LENGTH OF WING WALLS, LENGTH OF FOOTING HEEL, CLASS "S" CONCRETE, REINFORCING STEEL.

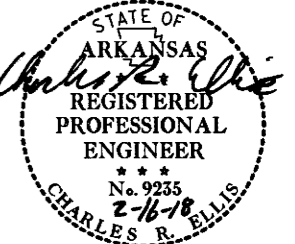
MID-SECTION BAR LAP TABLE

Table with columns for # of Long. Laps Req'd., SL = Section Length, REIN. STEEL QTY. PER WING (LBS).

Table with columns for Min. Bar Lap Length, #, length.

Table with columns for Bar Pin Dia. Table, #, size.

TABULAR DATA BY: WAC DATE: 2/12/18 CHECKED BY: SWP DATE: 2/12/18



This drawing to be used in conjunction with SHEET 1 OF 4, "GENERAL DETAILS OF R.C. BOX CULVERT", "GENERAL NOTES & LONGITUDINAL SECTION LENGTH SCHEDULE", SHEET 3 OF 4, "GENERAL DETAILS OF R.C. BOX CULVERT", "DETAILS OF MULTI-BARREL R.C. BOX CULVERT", SHEET 4 OF 4, "GENERAL DETAILS OF R.C. BOX CULVERT", "DETAILS OF WING WALLS", and STANDARD DRAWING RCB-2. For additional information and outlet sections, see Sheet 2 of 2.

Any Bar Lap Required for the Skewed End Section shall be considered subsidiary to the item "Reinforcing Steel - Roadway (GR. 60)."

Table with columns for CLASS "S" CONCRETE, REINFORCING STEEL (GR. 60), CU. YDS., LBS.

Table with columns for Design Fill Depth, Range of Actual Fill Depth.

Data shown for Mid-Section, Slope Section(s), and Skewed End Section is based on the design fill depth shown in the table, see PLAN AND PROFILE SHEETS for actual fill depth.

SHEET 1 OF 2 DETAILS OF R.C. BOX CULVERT QUADRUPLE BARREL BOX CULVERT STA. 110+36

Table with columns for CLASS "S" CONCRETE, REINFORCING STEEL (GR. 60), CU. YDS., LBS.

SPECIAL DETAILS



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				6	ARK.		7	20
				JOB NO.	110621		SPECIAL DETAILS	



TABULAR DATA BY: WAC DATE: 2/12/18
 CHECKED BY: SWP DATE: 2/12/18

Any Bar Lap Required for the Skewed End Section shall be considered subsidiary to the item "Reinforcing Steel - Roadway (Gr. 60)."

Min. Bar Lap Length

#4	1'-9"
#5	2'-2"
#6	2'-7"
#7	3'-6"
#8	4'-7"

Bar Pn Dia. Table

#4	3"
#5	3 3/4"
#6	4 1/2"
#7	5 1/4"
#8	6"

OUTLET WINGWALL TABLE

OVER ALL WIDTH	CLEAR HEIGHT	FOOTING THK.	WING WALL THK.	BOX SKEW (DEG.)	SLOPE	HDWL LENGTH	HEEL	WALL HEIGHT		WINGWALL ANGLE (DEGREE)	FOOTING WIDTH AT WALL END	WIDTH OF WING FOOTINGS AT HDWL		FOOTING DIMENSION PARALLEL WITH HDWL		LENGTH OF WINGWALLS		LENGTH OF FOOTING HEEL		CLASS "S" CONCRETE (Includes apron)	REINFORCING STEEL (Includes apron and laps if required)	
								AT HDWL	AT WING END			WING A	WING B	WING A	WING B	WING A	WING B	WING A	WING B			
OW	H	WB	CW	SK	SL	K	HL	WH1	WH2	AP1	AF2	WE	WF1	WF2	G1	G2	W1	W2	W3	W4	CU.YD	LBS.
43'-5"	9'-0"	0'-10"	0'-9"	20	3:1	44'-8 3/8"	2'-0"	9'-10"	3'-0"	10	50	3'-3"	4'-6 1/2"	5'-4 1/8"	1'-7 5/8"	2'-10 1/4"	20'-6"	31'-6"	23'-10 1/8"	34'-10 1/8"	21.75	1686

OUTLET SKEWED END SECTION

SKEW (DEGREE)	SLOPE	DESIGN FILL DEPTH (FT.)	CLEAR SPAN (FT.)	CLEAR HEIGHT (FT.)	SECTION LENGTH	TOP SLAB THK.	HDWL DEPTH	BOTTOM SLAB THK.	SIDE WALL THK.	INTERIOR WALL THK.	OVER ALL WIDTH	OVER ALL HEIGHT	TOP SLAB REINFORCING STEEL				BOTTOM SLAB REINFORCING STEEL				SIDE WALL REINFORCING STEEL		INTERIOR WALL REINFORCING STEEL		TOP SLAB DISTRIBUTION REINFORCING STEEL		BOTTOM SLAB DISTRIBUTION REINFORCING STEEL		SIDE WALL DISTRIBUTION REINFORCING STEEL		INTERIOR WALL DISTRIBUTION REINFORCING STEEL		CLASS "S" CONCRETE (Includes HDWL)	REINFORCING STEEL (GR. 60) (Includes HDWL)												
													SIZE	SPACING	LENGTHS VARY	NO. REQ'D	SIZE	SPACING	LENGTHS VARY	NO. REQ'D	SIZE	SPACING	LENGTH	NO. REQ'D	SIZE	SPACING	LENGTH	NO. REQ'D	SIZE	SPACING	LENGTH	NO. REQ'D			SIZE	SPACING	LENGTH	NO. REQ'D	SIZE	SPACING	LENGTH	NO. REQ'D	SIZE	SPACING	LENGTH	NO. REQ'D
20	3:1	5	10	9	9'-11"	12	3	12	8.5	8	43'-5"	11'-0"	5	6	Max 43'-1"	28	4	4.5	Max 43'-1"	38	4	5.5	Max 43'-1"	31	4	7.5	Max 43'-1"	23	6	6	40	10'-8"	4	12	66	10'-8"	4	9	119	Max 17'-8"	9	LONG	18	LONG	44.05	6348

OUTLET SLOPE SECTION(S)

R.C. BOX SECTION	DESIGN FILL DEPTH (FT.)	CLEAR SPAN (FT.)	CLEAR HEIGHT (FT.)	TOP SLAB THK.	BOTTOM SLAB THK.	SIDE WALL THK.	INTERIOR WALL THK.	OVER ALL WIDTH	OVER ALL HEIGHT	SECTION LENGTH (FT.)	TOP SLAB REINFORCING STEEL				BOTTOM SLAB REINFORCING STEEL				SIDE WALL REINFORCING STEEL		INTERIOR WALL REINFORCING STEEL		TOP SLAB DISTRIBUTION REINF. STEEL		BOTTOM SLAB DISTRIBUTION REINF. STEEL		SIDE WALL DISTRIBUTION REINF. STEEL		INTERIOR WALL DISTRIBUTION REINF. STEEL		CLASS "S" CONCRETE	REINFORCING STEEL (GR. 60)			
											SIZE	SPACING	LENGTH	NO. REQ'D	SIZE	SPACING	LENGTH	NO. REQ'D	SIZE	SPACING	LENGTH	NO. REQ'D	SIZE	SPACING	LENGTH	NO. REQ'D	SIZE	SPACING	LENGTH	NO. REQ'D			SIZE	SPACING	LENGTH
												LENGTH = OW - 4" + BENDS				LENGTH = OW - 4" + BENDS				LENGTH = OH - 4"		LENGTH = OH - 4"		LENGTH = SL		LENGTH = SL		LENGTH = SL		LENGTH = SL					
HDWL DEPTH		ADDITIONAL REINF. FOR HDWL				"h" HDWL BARS																													
HD		LBS.				SIZE				Y		LENGTH		NO. REQ'D																					

SHEET 2 OF 2
 DETAILS OF R.C. BOX CULVERT
 QUADRUPLE BARREL BOX CULVERT
 STA. 110+36

The required number of bars and lengths shown are for estimating purpose only. The actual number and length required shall be determined in field.
 Unless otherwise noted, all dimensions are in inches.

SPECIAL DETAILS

