



Andy Beshear
GOVERNOR

TRANSPORTATION CABINET

200 Mero Street
Frankfort, Kentucky 40601

Jim Gray
SECRETARY

December 9, 2024

CALL NO. 200
CONTRACT ID NO. 244500
ADDENDUM # 2

Subject: Henderson County, 056GR24T013-HSIP & FD05
Letting December 12, 2024

- (1) Revised - Proposal Notes - Pages 22, 60, 129, 133-134, 160-165, & 206 of 250
- (2) Added - Proposal Notes - Pages 129A, 189A-189D of 250
- (3) Revised - Plan Sheets - Posted in Project Related Information

Proposal revisions are available at <http://transportation.ky.gov/Construction-Procurement/>.

If you have any questions, please contact us at 502-564-3500.

Sincerely,

A handwritten signature in black ink that reads "Rachel Mills".

Rachel Mills, P.E.
Director
Division of Construction Procurement

RM:mr
Enclosures

General Notes & Description of Work
Page 2 of 2

Pavement Resurfacing (for FD05 resurfacing funds). The existing roadway between Milepoint 16.220 and Milepoint 20.877 is set up to be resurfaced using FD05 resurfacing funds. Other items be associated with the pavement resurfacing include: removal of 1.5 inches of existing pavement by milling and texturing, leveling & wedging, application of tack coat, and installation of edgeline rumble strips. Refer to the rumble strip Standard Drawings for recommended placement of rumble strips.

Pipe Replacements & Extensions. There are locations throughout the project where culvert pipes are being extended or replaced. Locations and estimated quantities are noted on the pipe drainage Summary. For pipe extensions where the existing pipe is RCP, remove the existing headwall and first section of existing RCP attached to the headwall (approx. 3 to 4 ft of existing pipe). Other items that may be included with the pipe extensions/replacements include culvert headwalls, sloped & mitered concrete headwalls, intermediate anchor/collar, roadside regrading, ditching, channel lining, erosion control blanket, asphalt pavement quantities, etc. Refer to the Special Note for Pipe Replacements/Extensions for more information on this item of work.

Erosion Control Blanket. A quantity of 75 square yards of Erosion Control Blanket has been included in the contract for potential use along areas of regraded shoulders, ditch lines, fills slopes and/or back slopes, inlets and outlets of pipes, and any other areas as directed by the Engineer. The Contractor and Engineer should work together to determine the location and best use of Erosion Control Blanket throughout this project. The Engineer will make the final determination as to the quantities and placement of Erosion Control Blanket.

Guardrail. Several locations within the project are set up for guardrail replacement. The approximate locations and estimated quantities are noted on the plan sheets. Refer to the Special Note for Guardrail, Typical Sections, and Plan Sheets for more detail and information on this item of work.

NOTE: When the plans call for a Type 1 or Type 4A End Treatment, a MASH eligibility letter from FHWA is required for these end terminals. When a MASH tested eligibility letter is not available for the end terminal being utilized, the most recent NCHRP 350 eligibility letter from FHWA for that terminal will apply. Acceptance of the terminal will be at the discretion of the Engineer.

PROJECT RELATED INFORMATION

11 X 17 plan sheets have been placed on the Project Related Information webpage.

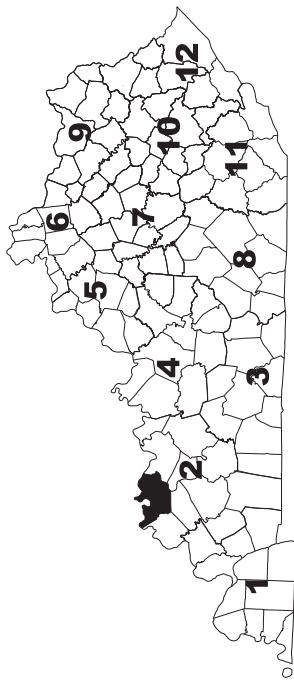
SPECIAL NOTE FOR ASPHALT MILLING AND TEXTURING

Begin paving operations immediately after the commencement of the milling operation. Continue paving operations continuously until completed. If paving operations are not begun within this time period, the Department will assess liquidated damages at the rate prescribed by Section 108.09 until such time as paving operations are begun.

Contrary to Section 408, the Department will retain possession of the material obtained from the milling operations. Deliver 3000 Tons this material to the State Maintenance facility in Henderson County. Contractor to retain the remaining 12,300 Tons.

NOTICE TO CONTRACTOR: The Department considers transfer of millings to the state maintenance facility to be a part of the construction project.

1-3530 48 hours State keeps millings
01/2/2012

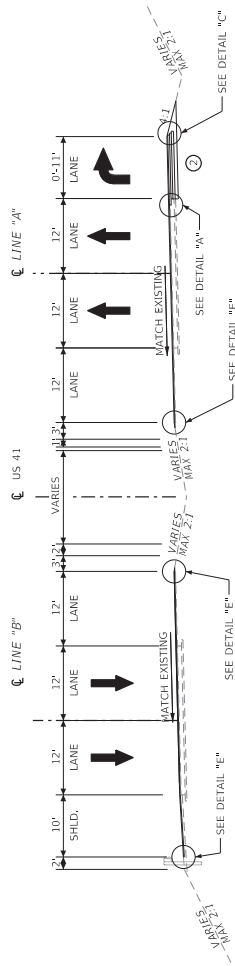


The contractor is instructed to call 1-800-752-4007 to reach KY 811, the one-call system for locating underground utilities. The contractor is instructed to call the utility companies a minimum of two (2) and no more than ten (10) business days prior to excavation. The contractor should be aware that owners of underground facilities are not required to be in contact with the KY 811 one-call Before-1-Dig (BUD) service. The contractor must coordinate excavation with the utility owners, including those who do not subscribe to KY 811. It may be necessary for the contractor to contact the County Clerk to determine what utility companies have facilities in the area.



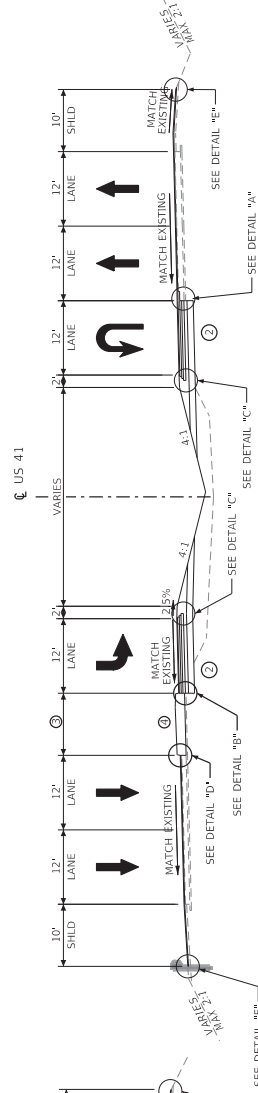
	WSP USA, Inc. 1792 AULSHEBA WAY SUITE 230 LEVINGDON, OH 44134 +1 888.777.7400		REVISED ADDENDUM
	LETTING DATE:	X	COUNTY OF HENDERSON
ITEM NO. 02-0935.00	SHEET NO. R1	CONTRACT NO. 1000000000	CONTRACT FOR

TYPICAL SECTIONS

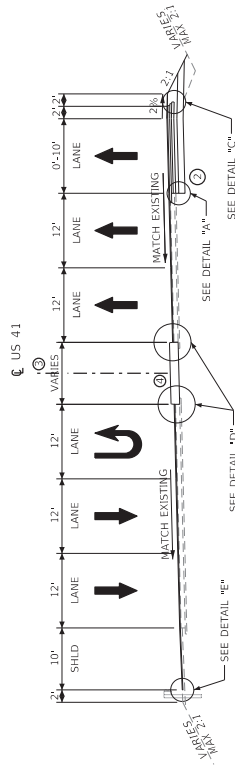


US 41

STA 107+46 TO STA 108+67
SUPERELEVATED SECTION

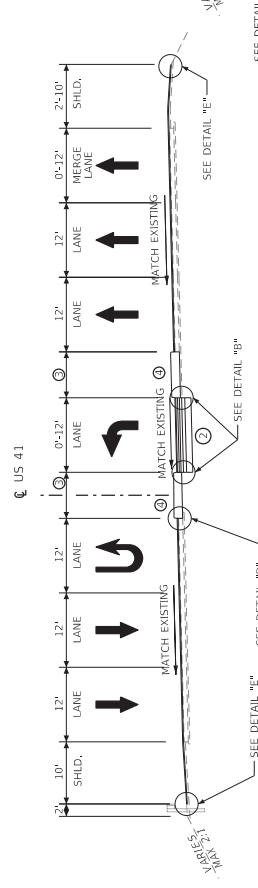


US 41

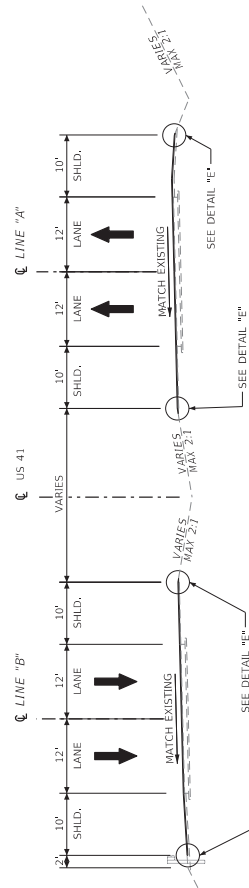
STA 108+67 TO STA 110+92
SUPERELEVATED SECTION

US 41

STA 100+40 TO STA 101+85
SUPERELEVATED SECTION



US 41

STA 101+85 TO STA 105+78
SUPERELEVATED SECTION

115 41

STA 105+78 TO STA 107+46
STA 115+03 TO STA 115+50
SUPERELEVATED SECTION

- ① FOR FULL DEPTH PAVEMENT LONGITUDINAL JOINTS, PERFORM ASPHALT PAVE MILLING & TEXTURING TO A TOTAL DEPTH OF 5.00 INCHES (AN ADDITIONAL 3.5" REQUIRED FOR MILL AND OVERLAY) AND A WIDTH OF 18.00 INCHES FROM EXISTING EDGE OF PAVEMENT FOR PAVEMENT TIE IN. SEE DETAIL "A". WILL BE PAID BY MILLING AND PAVING BID ITEMS.
- ② FULL DEPTH PAVEMENT SHALL HAVE A ROADBED OF 12.00" CRUSHED AGGREGATE SIZE NO 2 UNDERLAY WITH FABRIC - GEOTEXTILE CLASS 1A AND OVERLAY WITH FABRIC - GEOTEXTILE CLASS 1.
- ③ GORE AREA - WIDTH VARIES
- ④ MOUNTABLE MEDIAN TYPE 3 OR STANDARD BARRIER MEDIAN TYPE 4 - SEE PLANS FOR LOCATIONS
- ⑤ CONTRACTOR SHALL DAYLIGHT CRUSHED STONE BASE SHOULDERS TO MEET EXISTING SLOPES.
- ⑥ AT LOCATIONS WHERE A RAISED CONCRETE MEDIAN IS TO BE INSTALLED WITH MILLING AND OVERLAY OF EXISTING PAVEMENT, EXISTING PAVEMENT SHALL BE SAWCUT TO A DEPTH OF 8.00 INCHES, OR THE FULL DEPTH OF EXISTING PAVEMENT, WHICHEVER IS LESS.
- ⑦ ASPHALT SEAL REQUIRED FROM OUTSIDE EDGE OF PAVED SHOULDER TO A POINT 2 FEET DOWN THE FACE OF THE CURB AT THE FOLLOWING LOCATIONS:
 ASPHALT SEAL COA @ 2.00 LBS/SQ. YD.
 ASPHALT SEAL AGGREGATE @ 20 LBS/SQ. YD.

COUNTY OF
HENDERSON
ITEM NO.
02-0935.00
SHEET NO.
87

STRIPING TABLE					UNIT	QUANTITY	NOTES
ALIGNMENT	BEGIN STATION	BEGIN OFFSET	END STATION	END OFFSET			
US 41	100+40.00	14.42' RT	100+72.42	14.30	6" SOLID YELLOW	LF	32
US 41	101+01.41	14.20' RT	105+17.43	0.00	6" SOLID YELLOW	LF	434
US 41	101+01.41	18.56' RT	108+83.74	28.85	6" SOLID YELLOW	LF	385
US 41	109+02.23	0.00'	114+17.30	0.00	6" SOLID YELLOW	LF	576
US 41	109+06.71	61.09' RT	115+50	65.00	6" SOLID YELLOW	LF	239
US 41	114+05.25	61.09' RT	115+50	-15.53	6" SOLID YELLOW	LF	64
US 41	109+40	14.71' LT	101+04	105+42.72	6" SOLID YELLOW	LF	467
US 41	101+08.66	0.00'	105+42.72	-19.24	6" SOLID YELLOW	LF	389
US 41	105+59.91	19.28' LT	109+52.27	-44.25	6" SOLID YELLOW	LF	561
US 41	109+06.71	0.00'	114+17.54	0.00	6" SOLID YELLOW	LF	105
US 41	114+45.05	61.80' LT	115+50.00	-61.41	6" SOLID YELLOW	LF	2586
US 41	100+40.00	39.40' RT	108+72.59	69.87	6" SOLID WHITE	LF	852
US 41	103+04.44	15.09' RT	105+49.95	0.00	6" SOLID WHITE	LF	458
US 41	109+35.85	53.32' RT	115+50.00	88.00	6" SOLID WHITE	LF	678
US 41	108+83.32	0.00'	108+83.32	28.85	6" SOLID WHITE	LF	29
US 41	109+56.91	30.76' RT	114+05.75	61.09	6" SOLID WHITE	LF	456
US 41	100+40.00	37.71' LT	105+26.17	-60.00	6" SOLID WHITE	LF	487
US 41	100+76.91	0.00'	103+92.70	-17.40	6" SOLID WHITE	LF	320
US 41	105+76.86	73.11' LT	115+50.00	-84.10	6" SOLID WHITE	LF	976
US 41	108+83.08	0.00'	112+52.28	-61.77	6" SOLID WHITE	LF	383
US 41	114+42.85	1.65' LT	114+45.05	-61.80	6" SOLID WHITE	LF	60
WOLF HILLS RD	300+70.00	13.11' RT	301+78.45	40.25	6" SOLID WHITE	LF	116
WOLF HILLS RD	300+70.00	12.25' LT	301+64.71	-25.00	6" SOLID WHITE	LF	109
STRATMAN RD	201+39.10	12.00' RT	202+23.14	22.55	6" SOLID WHITE	LF	75
STRATMAN RD	201+39.10	12.00' LT	202+28.87	-24.31	6" SOLID WHITE	LF	160
TOTAL						4924	
STRATMAN RD	201+39.10	0.00	202+35.18	0.00	6" DOUBLE SOLID YELLOW	LF	147
WOLF HILLS RD	300+70.00	0.00	301+80.83	0.00	6" DOUBLE SOLID YELLOW	LF	134
TOTAL						281	
US 41	100+40.00	26.16' RT	115+50.00	72.00	6" DASHED WHITE 10X30	LF	1528
US 41	100+40.00	26.10' LT	115+50.00	-72.60	6" DASHED WHITE 10X30	LF	1491
TOTAL						3020	

STRIPING SUMMARY					UNIT	QUANTITY	NOTES
ITEM CODE	DESCRIPTION	PAVEMENT	PAVEMENT	PAVEMENT			
06541	PAVE STRIPING-THERMO 6 IN Y	PAVE STRIPING-THERMO 6 IN Y	PAVE STRIPING-THERMO 6 IN Y	PAVE STRIPING-THERMO 6 IN Y	LF	8520	PAID FOR BY FDOT
06543	PAVE STRIPING-THERMO 6 IN Y	PAVE STRIPING-THERMO 6 IN Y	PAVE STRIPING-THERMO 6 IN Y	PAVE STRIPING-THERMO 6 IN Y	LF	3148	PAID FOR BY FDOT
06568	PAVE MARKING-THERMO STOP BAR 24 IN	PAVE MARKING-THERMO STOP BAR 24 IN	PAVE MARKING-THERMO STOP BAR 24 IN	PAVE MARKING-THERMO STOP BAR 24 IN	LF	46	
06569	PAVE MARKING-THERMO CROSS-HATCH	PAVE MARKING-THERMO CROSS-HATCH	PAVE MARKING-THERMO CROSS-HATCH	PAVE MARKING-THERMO CROSS-HATCH	SOFT	6737	
06574	PAVE MARKING-THERMO CURB ARROW	PAVE MARKING-THERMO CURB ARROW	PAVE MARKING-THERMO CURB ARROW	PAVE MARKING-THERMO CURB ARROW	EACH	17	
06576	PAVE MARKING-THERMO U-TURN	PAVE MARKING-THERMO U-TURN	PAVE MARKING-THERMO U-TURN	PAVE MARKING-THERMO U-TURN	EACH	3	
24885FC	PAVE MARKING-THERMO U-TURN	PAVE MARKING-THERMO U-TURN	PAVE MARKING-THERMO U-TURN	PAVE MARKING-THERMO U-TURN	EACH	9	

DRAWING TITLE: US 41 STRIPING TABLE AND SUMMARY SHEET



FILE NAME: C:\BMS\WSP-US\PAV420\083589\F07 - STRIPING TABLE AND SUMMARY.DGN

USER: uap72580

OpenRoads Designer v10.16.2.287

COUNTY OF HENDERSON											
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY OF HENDERSON							
COUNTY OF		ITEM NO.		COUNTY							

SPECIAL NOTES:
1. SIGN ASSEMBLIES ARE DESIGNATED IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AND "STANDARD HIGHWAY SIGNS".
2. SHEETING SIGNS SHALL BE FABRICATED FROM 0.125 GAUGE MATERIAL IF ANY DIMENSION IS GREATER THAN 36" (THIRTY-SIX INCHES), OTHERWISE 0.080 GAUGE MATERIAL SHALL BE USED.

* D1-1 AND D1-1d SIGN SIZES SHOWN IN FEET AND INCHES.

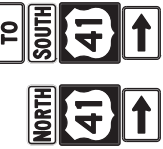
[illegible]

SPECIAL NOTES:

1. COLORS FOR SIGN ASSEMBLIES ARE DESIGNATED IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AND "STANDARD HIGHWAY SIGNS".
2. SHEETING SIGNS SHALL BE FABRICATED FROM 0.125 GAUGE MATERIAL IF ANY DIMENSION IS GREATER THAN 36" (THIRTY-SIX INCHES). OTHERWISE 0.080 GAUGE MATERIAL SHALL BE USED.

* D1-1 AND D1-1d SIGN SIZES SHOWN IN FEET AND INCHES.

SHEETING SIGNS DETAIL SHEET

SHEETING SIGNS DETAIL SHEET									
COUNTY OF		ITEM NO.		SHEET NO.					
HENDERSON		02-0935.00		1					
SIGN/SIGN ASSEMBLY NUMBER	SIZES IN INCHES HORIZ. VERT.	MESSAGES	SPECIFICATION	SIDE OF ROAD	FACING TRAFFIC TRAVELING	SIGN LOCATION		SIGN/SIGN ASSEMBLY NUMBER	SIZES IN INCHES HORIZ. VERT.
						ON ROAD	AT STATION (APPROXIMATE)		
S-31	36 36		W3-1	RIGHT	WESTBOUND	WOLF HILLS RD	SEE SIGNING PLANS FOR LOCATION		
S-32	24 12		M3-1	RIGHT	WESTBOUND	WOLF HILLS RD	SEE SIGNING PLANS FOR LOCATION		
	24 24		M1-4	RIGHT	WESTBOUND	WOLF HILLS RD			
	21 15		M5-1R	RIGHT	WESTBOUND	WOLF HILLS RD			
	24 12		M4-5	RIGHT	WESTBOUND	WOLF HILLS RD			
	24 12		M3-3	RIGHT	WESTBOUND	WOLF HILLS RD			
S-33	24 24		M1-4	RIGHT	WESTBOUND	WOLF HILLS RD	SEE SIGNING PLANS FOR LOCATION		
	21 15		M2-1	RIGHT	WESTBOUND	WOLF HILLS RD			
S-34	24 12		M3-3	MEDIAN	NORTHBOUND	US 41 NORTH	110+80.00		
	24 24		M1-4	MEDIAN	NORTHBOUND	US 41 NORTH			
	21 15		M6-2L	MEDIAN	NORTHBOUND	US 41 NORTH			
S-35	6'-3" 1'-6"		D1-1d	MEDIAN	SOUTHBOUND	US 41 SOUTH	112+89.00		
S-36	6'-3" 1'-6"		D1-1d	LEFT	SOUTHBOUND	US 41 SOUTH	112+89.00		
S-25	36 36		R5-1	RIGHT	SOUTHBOUND	WOLF HILLS RD	108+44.00		
S-26	36 36		R3-2	MEDIAN	NORTHBOUND	US 41 NORTH	108+65.00		
S-27	36 36		R3-4	MEDIAN	SOUTHBOUND	US 41 SOUTH	109+30.00		
	36 36		R5-1	MEDIAN	NORTHBOUND	US 41 NORTH			
S-28	24 12		M3-1	US 41 MEDIAN	WESTBOUND	WOLF HILLS RD	109+38.00		
	24 24		M1-4						
	21 15		M6-1R						
	24 12		M4-5						
	24 12		M3-3						
S-29	24 24		M1-4						
	21 15		M6-1R						
	36 12		R6-1R						
	36 12		R6-1R	RIGHT	WESTBOUND	WOLF HILLS RD	109+60.00		
	36 36		R1-1	RIGHT	WESTBOUND	WOLF HILLS RD			
S-30									
S-30	30 36		R3-5R	RIGHT	WESTBOUND	WOLF HILLS RD	SEE SIGNING PLANS FOR LOCATION		

SPECIAL NOTES:
1. SIGN ASSEMBLIES ARE DESIGNATED IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AND "STANDARD HIGHWAY SIGNS".
2. SHEETING SIGNS SHALL BE FABRICATED FROM 0.125 GAUGE MATERIAL IF ANY DIMENSION IS GREATER THAN 36" (THIRTY-SIX INCHES), OTHERWISE 0.080 GAUGE MATERIAL SHALL BE USED.
* D1-1 AND D1-1d SIGN SIZES SHOWN IN FEET AND INCHES.

SHEETING SIGNS DETAIL SHEET

[illegible]

SPECIAL NOTES:

1. COLORS FOR SIGN ASSEMBLIES ARE DESIGNATED IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AND "STANDARD HIGHWAY SIGNS".
2. SHEETING SIGNS SHALL BE FABRICATED FROM 0.125 GAUGE MATERIAL IF ANY DIMENSION IS GREATER THAN 36" (THIRTY-SIX INCHES). OTHERWISE 0.080 GAUGE MATERIAL SHALL BE USED.

* D1-1 AND D1-1d SIGN SIZES SHOWN IN FEET AND INCHES.

SHEETING SIGNS DETAIL SHEET

N.T.S.



****NOTE: SEE SIGNING PLANS FOR LOCATION**

SYMBOL	ROT	X	Y	WID	HT
AR ₁ type D	30	15	16	8	12
M ₁ 4	0	42	15	10	10
AR ₁ type D	270	45	7	8	12
M ₁ 4	0	56	6	10	10

Letter locations are paneled edge to lower left corner

[illegible]

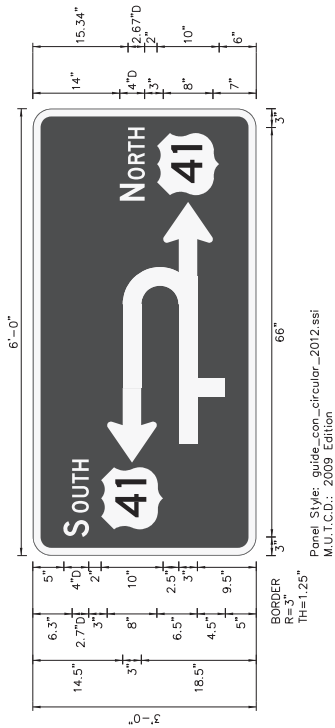
SIGN LOCATION & MOUNTING INFORMATION				
SIDE OF ROAD	TRAFFIC DIRECTION	ROAD	MILE POINT	
RIGHT	WESTBOUND	WOLF HILLS DRIVE	**	
GROUND				
MOUNTING STYLE		TYPE 1 POST		
POST TYPE		HORIZONTAL CLEARANCE		
POST 1 LENGTH =		15'		
POST 2 LENGTH =		15'		
POST 3 LENGTH =		15'		
TYPE "D" BREAK-AWAY SIGN SUPPORT		3 EACH		
CONCRETE BASE DIMENSIONS				
a = 1'-6" DIA.	b = 3'-6"	0.25' Cu. Yds./Post		

SIGN NUMBER	P-2
WIDTH x HIGHT.	6'-0" x 3'-0"
BORDER WIDTH	1.25"
CORNER RADIUS	3"
MOUNTING	GROUND
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND/BORDER	TYPE: Reflective
	COLOR: White/White

SYMBOL	ROT	X	Y	WID	HT
AR ₁ Type D	90	15	16	8	12
WR ₁	0	4.2	15	10	10
AR ₁ Type D	270	45	7	8	12
WR ₁	0	58.1	6	10	10

****NOTE: SEE SIGNING PLANS FOR LOCATION**

Letter locations are paneled to lower left corner



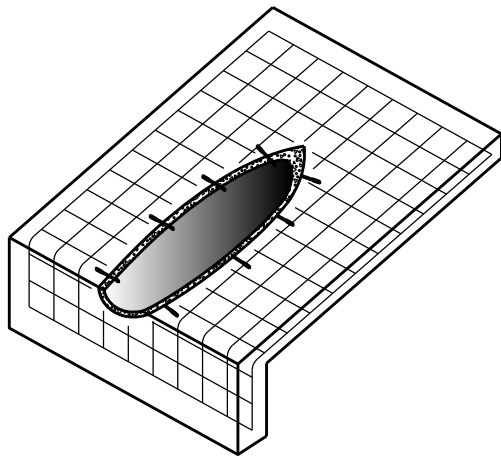
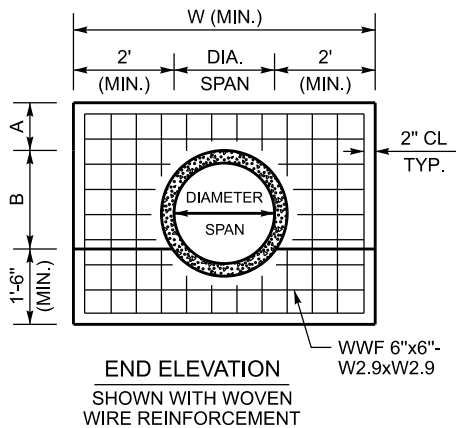
Panel Style: guide_con_circular_2012.ssi
Dimensions are in inches.tenths

SIGN DETAIL

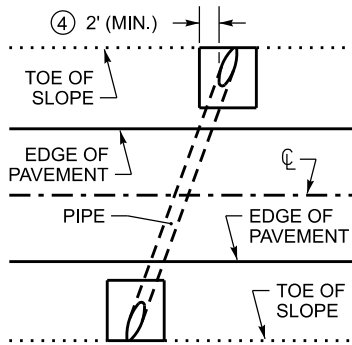
N.T.S.

[illegible]

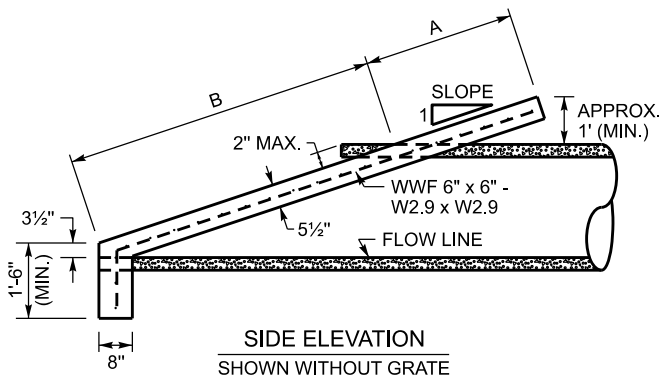
SIGN DETAIL SHEET



ISOMETRIC VIEW
SHOWN WITH WOVEN WIRE REINFORCEMENT
AND WEDGE ANCHORS



PLAN VIEW
SHOWN WHEN THE PIPE IS ON A SKEW ④



~ NOTES ~

1. FOR PIPES THAT RECEIVE THE SLOPED & MITERED CONCRETE HEADWALL, THE PIPE LENGTH SHALL BE MEASURED TO THE FURTHEST POINT ALONG THE MITERED END OF THE PIPE.
2. THE EMBANKMENT FILL MATERIAL IS TO BE PLACED, COMPACTED, AND GRADED AROUND THE PIPE BEFORE THE CONCRETE SLOPE PAVING IS PLACED. THE INTENT IS FOR THE SLOPED & MITERED HEADWALL TO MATCH THE FINAL EMBANKMENT SLOPE.
3. THE PIPE SHALL BE MITERED AFTER THE CONCRETE SLOPE PAVING HAS BEEN PLACED AND SUFFICIENTLY CURED. THE PIPE SHOULD BE MITERED AS CLOSE TO FLUSH WITH THE SLOPE PAVING AS POSSIBLE, AND NO HIGHER THAN 2" ABOVE THE SLOPE PAVING. HAND FINISHING AND/OR CUTTING MAY BE NECESSARY.
- ④ 4. WHEN THE PIPE IS ON A SKEW, INSTALL THE HEADWALL AND MITER THE PIPE SO THAT THE CONCRETE SLOPE PAVING IS PERPENDICULAR TO THE ROADWAY. FOR HEADWALLS ON SKEWED PIPES, THE HEADWALL WIDTH, W, SHALL BE WIDENED, AS NEEDED, SO THAT THE OUTSIDE EDGE OF THE CONCRETE SLOPE PAVING IS A MINIMUM OF 2' FROM THE OUTER MOST EDGE OF THE PIPE.
5. THE DIMENSION 'A' IS BASED ON THE FINAL GRADED SLOPE. THE DIMENSION 'B' IS BASED ON CIRCULAR REINFORCED CONCRETE PIPE AT 0° SKEW FOR THE LISTED SLOPE. THE DIMENSION 'W' IS BASED ON THE DIAMETER, OR SPAN, OF THE PIPE. THE FINAL HEADWALL DIMENSIONS AND CONCRETE QUANTITIES MAY VARY BASED ON THE FINAL GRADED SLOPE, PIPE SKEW, AND/OR TYPE OF PIPE.
6. WOVEN WIRE REINFORCEMENT (WWF 6"x6" - W2.9xW2.9) IS REQUIRED FOR THE SLOPE PAVING AND TOE WALL. UTILIZE 2" CLEARANCE FROM ALL EDGES.
7. DIMENSIONS AND CONCRETE QUANTITIES SHOWN ARE FOR ONE (1) HEADWALL, INSTALLED ON A PIPE WITH SKEW = 0°.
8. AFTER THE PIPE HAS BEEN MITERED, ANCHOR THE PIPE TO THE CONCRETE SLOPE PAVING BY CORE DRILLING AND INSTALLING 1/2" DIAMETER x 7" LENGTH STEEL WEDGE ANCHORS (3" MINIMUM EMBEDMENT) ON 18" CENTERS ALONG THE SIDES OF THE PIPE. HOLE SIZE & DEPTH, TORQUE, & INSTALLATION PROCEDURES PER RECOMMENDATION OF ANCHOR MANUFACTURE. NOTE: STEEL WEDGE ANCHORS ARE NOT REQUIRED FOR REINFORCED CONCRETE PIPE.
- ⑨ 9. THE FOLLOWING SITUATIONS REQUIRE A HEADWALL WITH A GRATE:
 - 24" DIAMETER PIPE ON GREATER THAN 30° SKEW
 - 30" DIAMETER PIPE ON GREATER THAN 15° SKEW
 - PIPE WITH GREATER THAN 30" DIAMETER.
 - ELLIPTICAL PIPE GREATER THAN 24" EQUIVALENT DIAMETERSEE SHEET 2 FOR GRATE DETAILS
10. ALL BOLTS AND HARDWARE SHALL BE RUST RESISTANT: ZINC PLATED, STAINLESS STEEL, OR STEEL THAT HAS BEEN GALVANIZED IN ACCORDANCE WITH AASHTO M 232.

** DIMENSIONS AND CONCRETE QUANTITIES ARE APPROXIMATE AND ARE LISTED FOR INFORMATIONAL PURPOSES ONLY **

DIMENSIONS AND CONCRETE QUANTITIES (FOR PIPE WITH SKEW = 0°) ④													
PIPE SIZE	3:1 SLOPE				4:1 SLOPE				6:1 SLOPE				GRATE REQUIRED
	A	B	W	CU. YDS. CONCRETE	A	B	W	CU. YDS. CONCRETE	A	B	W	CU. YDS. CONCRETE	
15"	3'	3'-7½"	5'-3"	0.79	4'	4'-8¾"	5'-3"	0.97	6'	6'-11¼"	5'-3"	1.35	NO
18"	3'	4'-5¾"	5'-6"	0.89	4'	5'-10"	5'-6"	1.10	6'	8'-7¼"	5'-6"	1.54	NO
24"	3'	6'-2½"	6'-0"	1.11	4'	8'-1"	6'-0"	1.38	6'	11'-11"	6'-0"	1.93	SEE ⑨
30"	3'	7'-10¾"	6'-6"	1.33	4'	10'-3¾"	6'-6"	1.67	6'	15'-2½"	6'-6"	2.35	SEE ⑨

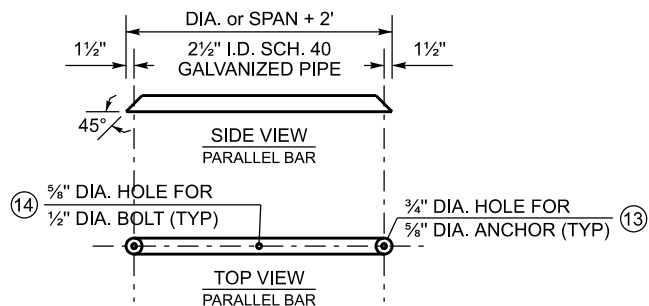
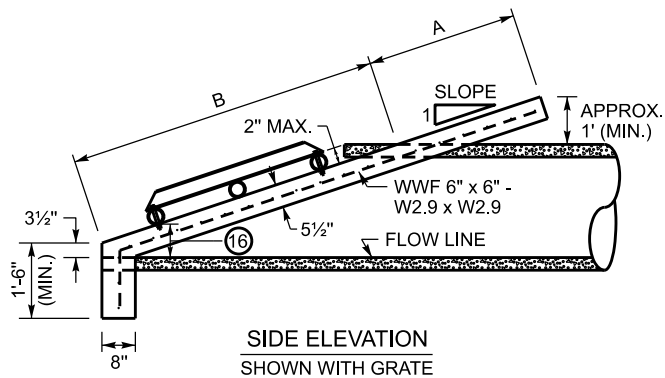
++ SEE SHEET 2 FOR DIMENSIONS OF HEADWALLS FOR PIPE OVER 30" DIAMETER ++

BID ITEM AND UNIT TO BID FOR PIPES BETWEEN 15 - 42 INCHES:
SLOPED & MITERED HEADWALL - _ IN EACH

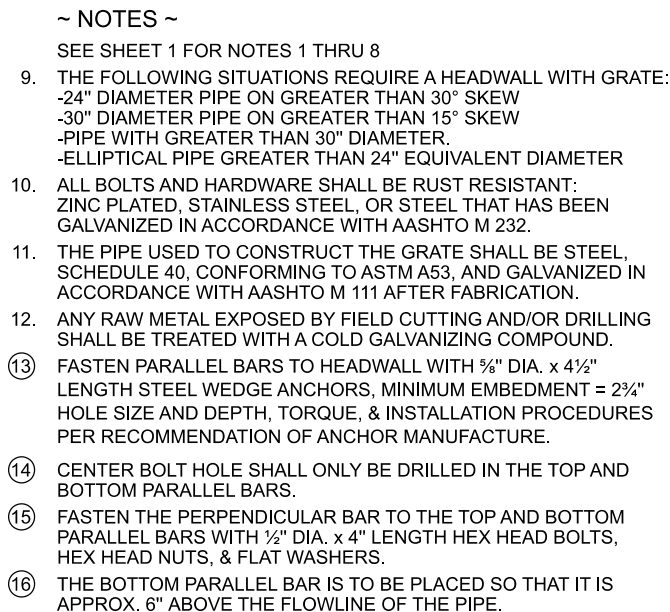
BID ITEM AND UNIT TO BID FOR PIPES LARGER THAN 42 INCHES:
HEADWALL (SLOPED & MITERED FOR _ INCH PIPE) EACH

NOT TO SCALE

SLOPED & MITERED
CONCRETE HEADWALL
(SHEET 1 OF 2)



SEE NOTE 9 TO DETERMINE IF GRATE IS REQUIRED



*** DIMENSIONS AND CONCRETE QUANTITIES ARE APPROXIMATE AND ARE LISTED FOR INFORMATIONAL PURPOSES ONLY ***

DIMENSIONS AND CONCRETE QUANTITIES (FOR PIPE WITH SKEW = 0°) ④													
PIPE SIZE	3:1 SLOPE				4:1 SLOPE				6:1 SLOPE				GRATE REQUIRED
	A	B	W	CU. YDS. CONCRETE	A	B	W	CU. YDS. CONCRETE	A	B	W	CU. YDS. CONCRETE	
36"	3'	9'-7½"	7'-0"	1.57	4'	12'-6½"	7'-0"	1.98	6'	18'-6"	7'-0"	2.80	YES
42"	3'	11'-4"	7'-6"	1.83	4'	14'-9¾"	7'-6"	2.31	6'	21'-9½"	7'-6"	3.27	YES
48"	3'	12'-11"	8'-0"	2.07	4'	16'-10"	8'-0"	2.40	6'	24'-10"	8'-0"	3.33	YES

++ SEE SHEET 1 FOR DIMENSIONS OF HEADWALLS FOR PIPE 30" DIAMETER & LESS ++

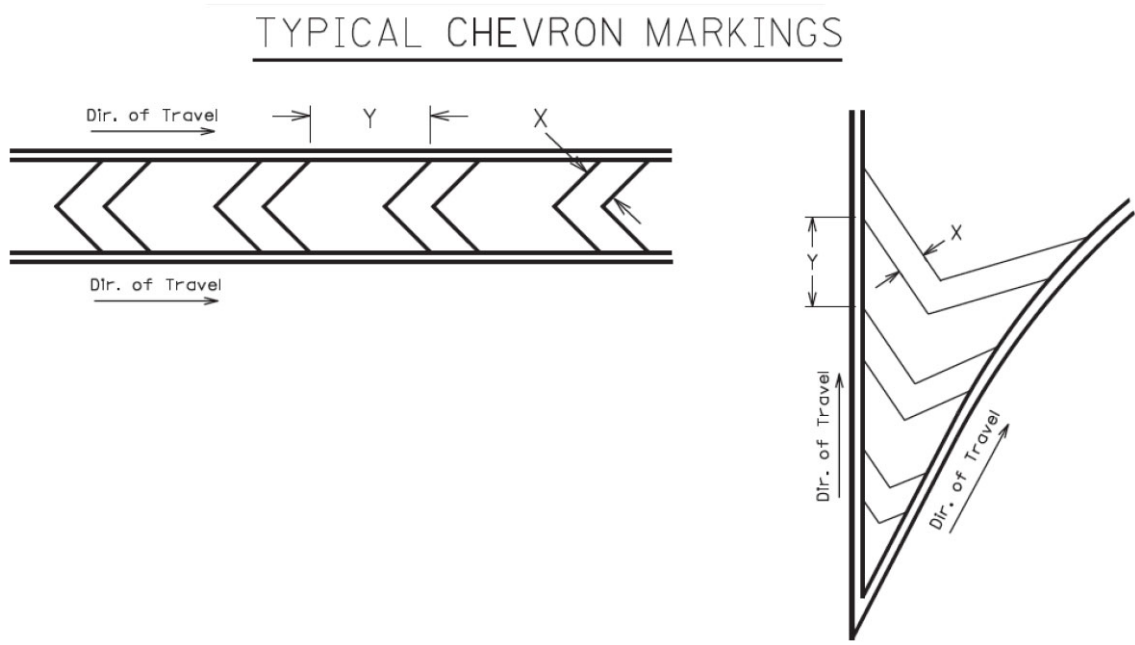
BID ITEM AND UNIT TO BID FOR PIPES BETWEEN 15 - 42 INCHES:
SLOPED & MITERED HEADWALL - _____ IN _____ EACH

BID ITEM AND UNIT TO BID FOR PIPES LARGER THAN 42 INCHES:
HEADWALL (SLOPED & MITERED FOR _ INCH PIPE) EACH

NOT TO SCALE

SLOPED & MITERED
CONCRETE HEADWALL
(SHEET 2 OF 2)

CHEVRON PAVEMENT MARKINGS DETAIL



The chevron pavement marking width (X) and spacing (Y) will usually be specified in the plans. The width to spacing values usually have a ratio of 1:10. If the plans do not specify the width (X) and spacing (Y) the Engineer will provide the contractor with the X and Y values for each chevron installation. If necessary, the Engineer may obtain guidance from the District Traffic Engineer and/or the Division of Traffic Operations.

NOTE: Adjust the width and spacing of the chevron pavement markings as necessary so that a minimum of three (3) chevron markings are placed within the area being marked. The 1:10 ratio between width and spacing values should be maintained as much as possible.

Refer to Section 717 of the Standard Specifications for Road and Bridge Construction, current edition, for more information concerning Material and Construction specifications.

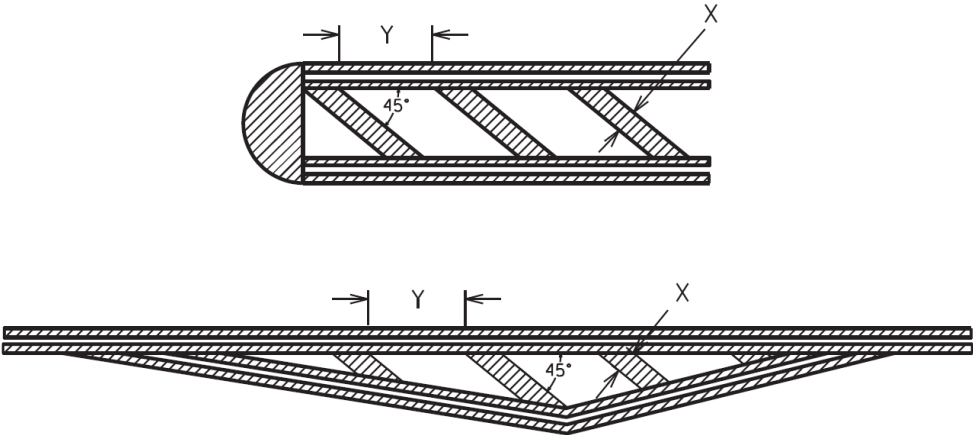
The Department will measure the finished in-place area of Chevron Pavement Markings in Square Feet. The Department will NOT measure overlaps or the void space between the chevrons. See Section 717.04 for additional measurement information.

When listed as a bid item, the Department will make payment for the completed and accepted quantities of Chevron Pavement Markings under the following:

Code	Pay Item	Pay Unit
24679ED	Pave Mark Thermo Chevron	Square Foot
26166ES717	Pave Mark TY 1 Tape Chevron	Square Foot

CROSS-HATCH PAVEMENT MARKINGS DETAIL

TYPICAL CROSS-HATCH MARKINGS



The cross-hatch pavement marking width (X) and spacing (Y) will usually be specified in the plans. The width to spacing values usually have a ratio of 1:10. If the plans do not specify the width (X) and spacing (Y) the Engineer will provide the contractor with the X and Y values for each cross-hatch installation. If necessary, the Engineer may obtain guidance from the District Traffic Engineer and/or the Division of Traffic Operations.

NOTE: Adjust the width and spacing of the cross-hatch pavement markings as necessary so that a minimum of three (3) cross-hatch markings are placed within the area being marked. The 1:10 ratio between width and spacing values should be maintained as much as possible.

Refer to Section 717 of the Standard Specifications for Road and Bridge Construction, current edition, for more information concerning Material and Construction specifications.

The Department will measure the finished in-place area of Cross-Hatch Pavement Markings in Square Feet. The Department will NOT measure overlaps or the void space between cross-hatching. See Section 717.04 for additional measurement information.

When listed in the bid items, the Department will make payment for the completed and accepted quantities of Cross-Hatch Pavement Markings under the following:

<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
06569	Pave Marking-Thermo Cross-Hatch	Square Foot
23253ES717	Pave Mark TY 1 Tape Cross Hatch	Square Foot

PIPE AND BOX CULVERT HEADWALLS

Concrete Headwalls for 12"-27" Circular Pipe Culverts	RDH-050-02
Sloped and Flared Headwalls for 12"-27" Pipe	RDH-020-03
Pipe Culvert Headwalls, 0° Skew (Layout and Steel Pattern)	RDH-110-02
Sloped and Flared Headwalls for 12"-27" Pipe	RDH-020-03

TYPICAL DRAINAGE INSTALLATIONS

CULVERT, ENTRANCE & STORM SEWER PIPE TYPES & COVER HEIGHTS (12" – 24" PIPE)	RDI-001-10
CULVERT, ENTRANCE & STORM SEWER PIPE TYPES & COVER HEIGHTS (27" – 42" PIPE)	RDI-002-05
PIPE BEDDING FOR CULVERTS, ENTRANCE, AND STORM SEWER PIPE	RDI-020-10
PIPE BEDDING FOR CULVERTS, ENTRANCE, AND STORM SEWER, REINFORCED CONC. PIPE	RDI-021-01
PIPE BEDDING, TRENCH CONDITION	RDI-025-06
PIPE BEDDING, TRENCH CONDITION, REINFORCED CONC. PIPE	RDI-026-01
COATINGS, LININGS AND PAVINGS FOR NON-STRUCTURAL PLATE PIPE	RDI-035-02
EROSION CONTROL BLANKET SLOPE INSTALLATION	RDI-040-01
EROSION CONTROL BLANKET CHANNEL INSTALLATION	RDI-041-01
TYPICAL MEDIAN DRAIN INSTALLATIONS	RDI-045-02

MISCELLANEOUS DRAINAGE

TRAP FOR BOX INLETS	RDX-020-05
INTERMEDIATE AND END ANCHORS FOR CIRCULAR PIPE	RDX-060-04
SECURITY DEVICES FOR FRAMES, GRATES AND LIDS	RDX-160-06
SECURITY PLATE ASSEMBLY	Sepia 020
TEMPORARY SILT FENCE	RDX-210-03
TEMPORARY SILT FENCE WITH WOVEN WIRE FENCE FABRIC	RDX-215-01
SILT TRAP - TYPE A	RDX-220-05
SILT TRAP - TYPE B	RDX-225-01
SILT TRAP - TYPE C	Sepia 025

~ GENERAL ~

CURVE WIDENING AND SUPERELEVATION

CURVE WIDENING AND SUPERELEVATION TRANSITIONS	RGS-001-07
SUPERELEVATION FOR MULTILANE PAVEMENTS	RGS-002-06

MISCELLANEOUS STANDARDS

MISCELLANEOUS STANDARDS	RGX-001-06
DETECTABLE WARNINGS	RGX-040-03
TYPE D BREAKAWAY SIGN SUPPORT	RGX-065-02

~ PAVEMENT ~

MEDIANS, CURBS, APPROACHES, ENTRANCES, ETC.

PERMANENT U-TURN MEDIAN OPENING	RPM-001-04
STANDARD BARRIER MEDIAN	RPM-010-06
MOUNTABLE MEDIAN	RPM-011-06
CURB AND GUTTER, CURBS AND VALLEY GUTTER	RPM-100-11
APPROACHES, ENTRANCES, AND MAIL BOX TURNOUT	RPM-110-07