

CALL NO. 314

CONTRACT ID. 221325

CARTER COUNTY

FED/STATE PROJECT NUMBER FD05 022 0060 030-035

DESCRIPTION US60

WORK TYPE ASPHALT PAVEMENT & ROADWAY REHAB

PRIMARY COMPLETION DATE 11/30/2022

LETTING DATE: May 26,2022

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN DAYLIGHT TIME May 26,2022. Bids will be publicly announced at 10:00 AM EASTERN DAYLIGHT TIME.

NO PLANS ASSOCIATED WITH THIS PROJECT.

REQUIRED BID PROPOSAL GUARANTY: Not less than 5% of the total bid.

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PART I SCOPE OF WORK

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ADMINISTRATIVE DISTRICT - 09

CONTRACT ID - 221325

FD05 022 0060 030-035

COUNTY - CARTER

PCN - DE02200602225 FD05 022 0060 030-035

US60 FROM MILEPOINT 30.018 TO MILEPOINT 34.847, A DISTANCE OF 04.83 MILES.ASPHALT PAVEMENT & ROADWAY REHAB SYP NO. 09-22318.00.

GEOGRAPHIC COORDINATES LATITUDE 38:21:09.00 LONGITUDE 82:48:16.00 ADT 5,612

COMPLETION DATE(S):

APPLIES TO ENTIRE CONTRACT -

COMPLETED BY 11/30/2022 SEE SPECIAL NOTE

CONTRACT NOTES

PROPOSAL ADDENDA

All addenda to this proposal must be applied when calculating bid and certified in the bid packet submitted to the Kentucky Department of Highways. Failure to use the correct and most recent addenda may result in the bid being rejected.

BID SUBMITTAL

Bidder must use the Department's electronic bidding software. The Bidder must download the bid file located on the Bid Express website (www.bidx.com) to prepare a bid packet for submission to the Department. The bidder must submit electronically using Bid Express.

JOINT VENTURE BIDDING

Joint venture bidding is permissible. All companies in the joint venture must be prequalified in one of the work types in the Qualifications for Bidders for the project. The bidders must get a vendor ID for the joint venture from the Division of Construction Procurement and register the joint venture as a bidder on the project. Also, the joint venture must obtain a digital ID from Bid Express to submit a bid. A joint bid bond of 5% may be submitted for both companies or each company may submit a separate bond of 5%.

UNDERGROUND FACILITY DAMAGE PROTECTION

The contractor shall make every effort to protect underground facilities from damage as prescribed in the Underground Facility Damage Protection Act of 1994, Kentucky Revised Statute KRS 367.4901 to 367.4917. It is the contractor's responsibility to determine and take steps necessary to be in compliance with federal and state damage prevention directives. When prescribed in said directives, the contractor shall submit Excavation Locate Requests to the Kentucky Contact Center (KY811) via web ticket entry. The submission of this request does not relieve the contractor from the responsibility of contacting non-member facility owners, whom shall be contacted through their individual Protection Notification Center. Non-compliance with these directives can result in the enforcement of penalties.

REGISTRATION WITH THE SECRETARY OF STATE BY A FOREIGN ENTITY

Pursuant to KRS 176.085(1)(b), an agency, department, office, or political subdivision of the Commonwealth of Kentucky shall not award a state contract to a person that is a foreign entity required by KRS 14A.9-010 to obtain a certificate of authority to transact business in the Commonwealth ("certificate") from the Secretary of State under KRS 14A.9-030 unless the person produces the certificate within fourteen (14) days of the bid or proposal opening. If the foreign entity is not required to obtain a certificate as provided in KRS 14A.9-010, the foreign entity should identify the applicable exception. Foreign entity is defined within KRS 14A.1-070.

For all foreign entities required to obtain a certificate of authority to transact business in the Commonwealth, if a copy of the certificate is not received by the contracting agency within the time frame identified above, the foreign entity's solicitation response shall be deemed non-responsive or the awarded contract shall be cancelled.

Businesses can register with the Secretary of State at https://secure.kentucky.gov/sos/ftbr/welcome.aspx .

SPECIAL NOTE FOR PROJECT QUESTIONS DURING ADVERTISEMENT

Questions about projects during the advertisement should be submitted in writing to the Division of Construction Procurement. This may be done by fax (502) 564-7299 or email to kytc.projectquestions@ky.gov. The Department will attempt to answer all submitted questions. The Department reserves the right not to answer if the question is not pertinent or does not aid in clarifying the project intent.

The deadline for posting answers will be 3:00 pm Eastern Daylight Time, the day preceding the Letting. Questions may be submitted until this deadline with the understanding that the later a question is submitted, the less likely an answer will be able to be provided.

The questions and answers will be posted for each Letting under the heading "Questions & Answers" on the Construction Procurement website (www.transportation.ky.gov/contract). The answers provided shall be considered part of this Special Note and, in case of a discrepancy, will govern over all other bidding documents.

HARDWOOD REMOVAL RESTRICTIONS

The US Department of Agriculture has imposed a quarantine in Kentucky and several surrounding states, to prevent the spread of an invasive insect, the emerald ash borer. Hardwood cut in conjunction with the project may not be removed from the state. Chipping or burning on site is the preferred method of disposal.

INSTRUCTIONS FOR EXCESS MATERIAL SITES AND BORROW SITES

Identification of excess material sites and borrow sites shall be the responsibility of the Contractor. The Contractor shall be responsible for compliance with all applicable state and federal laws and may wish to consult with the US Fish and Wildlife Service to seek protection under Section 10 of the Endangered Species Act for these activities.

ACCESS TO RECORDS

The contractor, as defined in KRS 45A.030 (9) agrees that the contracting agency, the Finance and Administration Cabinet, the Auditor of Public Accounts, and the Legislative Research Commission, or their duly authorized representatives, shall have access to any books, documents, papers, records, or other evidence, which are directly pertinent to this contract for the purpose of financial audit or program review. Records and other pregualification information confidentially

CARTER COUNTY FD05 022 0060 030-035

disclosed as part of the bid process shall not be deemed as directly pertinent to the contract and shall be exempt from disclosure as provided in KRS 61.878(1)(c). The contractor also recognizes that any books, documents, papers, records, or other evidence, received during a financial audit or program review shall be subject to the Kentucky Open Records Act, KRS 61.870 to 61.884.

In the event of a dispute between the contractor and the contracting agency, Attorney General, or the Auditor of Public Accounts over documents that are eligible for production and review, the Finance and Administration Cabinet shall review the dispute and issue a determination, in accordance with Secretary's Order 11-004.

April 30, 2018

SPECIAL NOTE FOR RECIPROCAL PREFERENCE

RECIPROCAL PREFERENCE TO BE GIVEN BY PUBLIC AGENCIES TO RESIDENT BIDDERS

By reference, KRS 45A.490 to 45A.494 are incorporated herein and in compliance regarding the bidders residency. Bidders who want to claim resident bidder status should complete the Affidavit for Claiming Resident Bidder Status along with their bid in the electronic bidding software. Submittal of the Affidavit should be done along the bid in Bid Express.

April 30, 2018

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ASPHALT MIXTURE

Unless otherwise noted, the Department estimates the rate of application for all asphalt mixtures to be 110 lbs/sy per inch of depth.

DGA BASE

Unless otherwise noted, the Department estimates the rate of application for DGA Base to be 115 lbs/sy per inch of depth.

FUEL AND ASPHALT PAY ADJUSTMENT

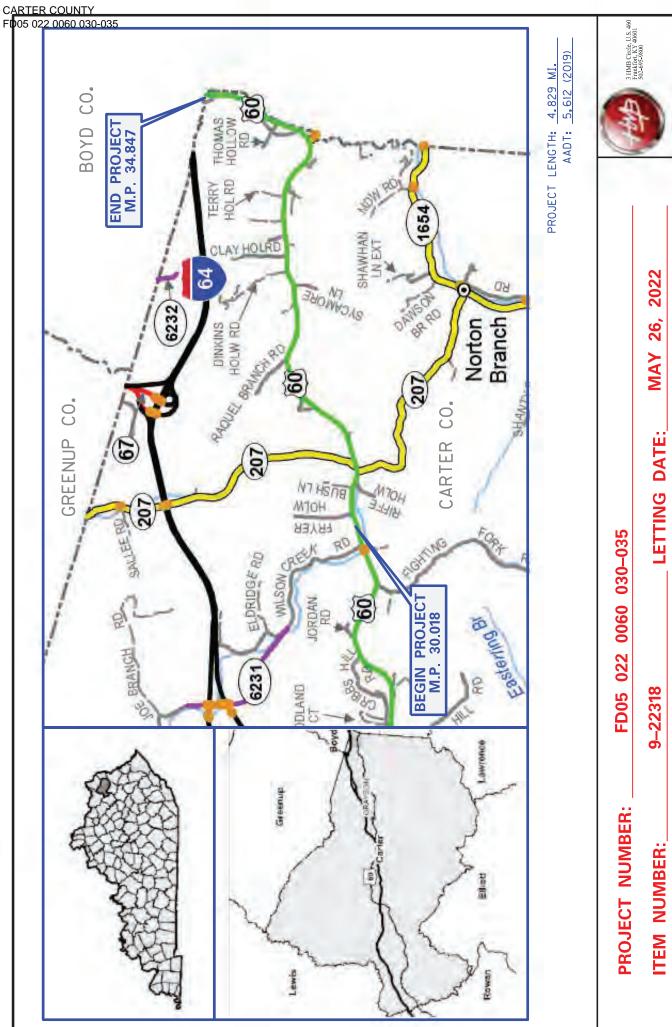
The Department has included the Contract items Asphalt Adjustment and Fuel Adjustment for possible future payments at an established Contract unit price of \$1.00. The Department will calculate actual adjustment quantities after work is completed. If existing Contract amount is insufficient to pay all items on the contract with the adjustments, the Department will establish additional monies with a change order.

ASPHALT PAVEMENT RIDE QUALITY CATEGORY A

The Department will apply Pavement Rideability Requirements on this project in accordance with Section 410, Category A.

OPTION A

Be advised that the Department will accept compaction of asphalt mixtures furnished for driving lanes and ramps, at 1 inch (25mm) or greater, on this project according to OPTION A in accordance with Section 402 and Section 403 of the current Standard Specifications. The Department will require joint cores as described in Section 402.03.02 for surface mixtures only. The Department will accept compaction of all other asphalt mixtures according to OPTION B.



RECOMMENDED BY: ANDRE JOHANNES, P.E. DATE:

Project Manager

FHWA APPROVED BY:

PLAN APPROVED BY:

State Highway Engineer

DATE

DATE:

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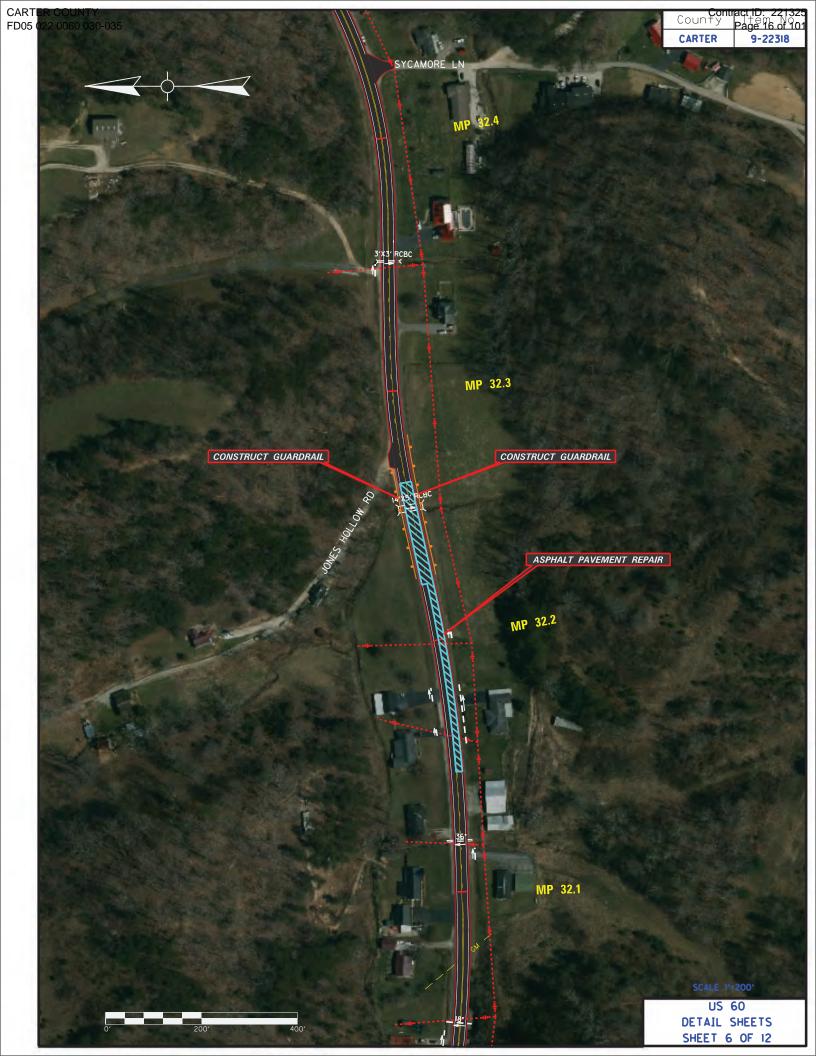


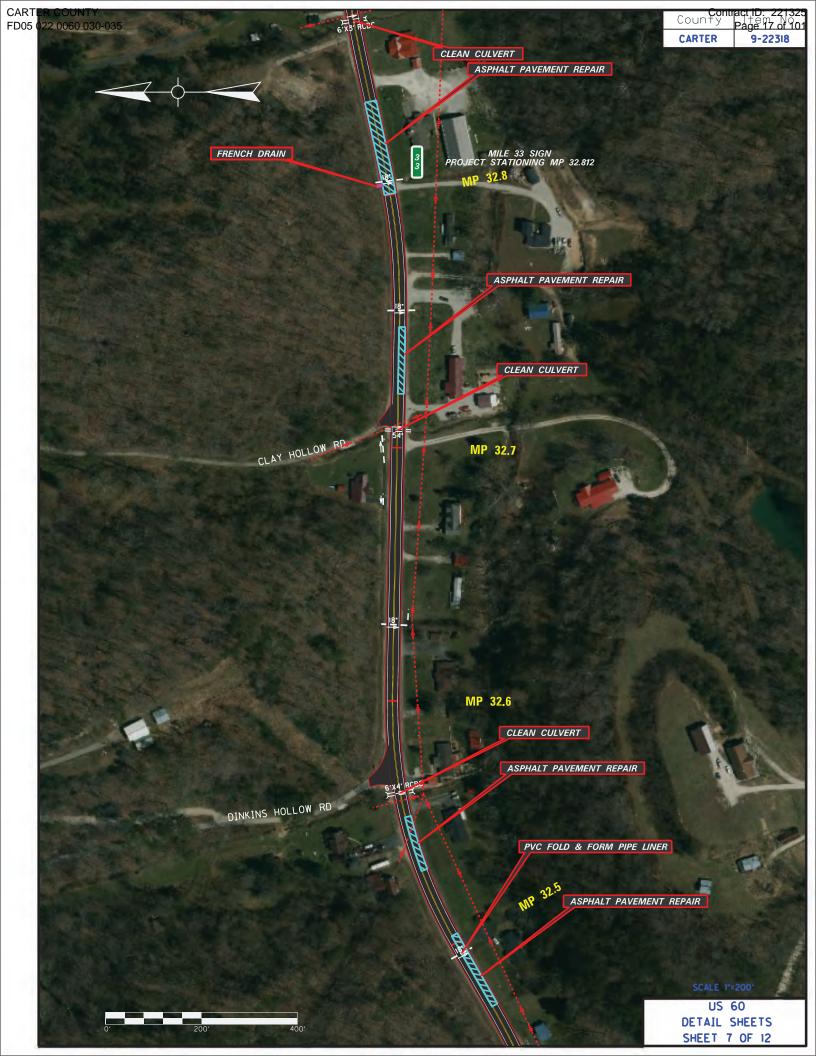






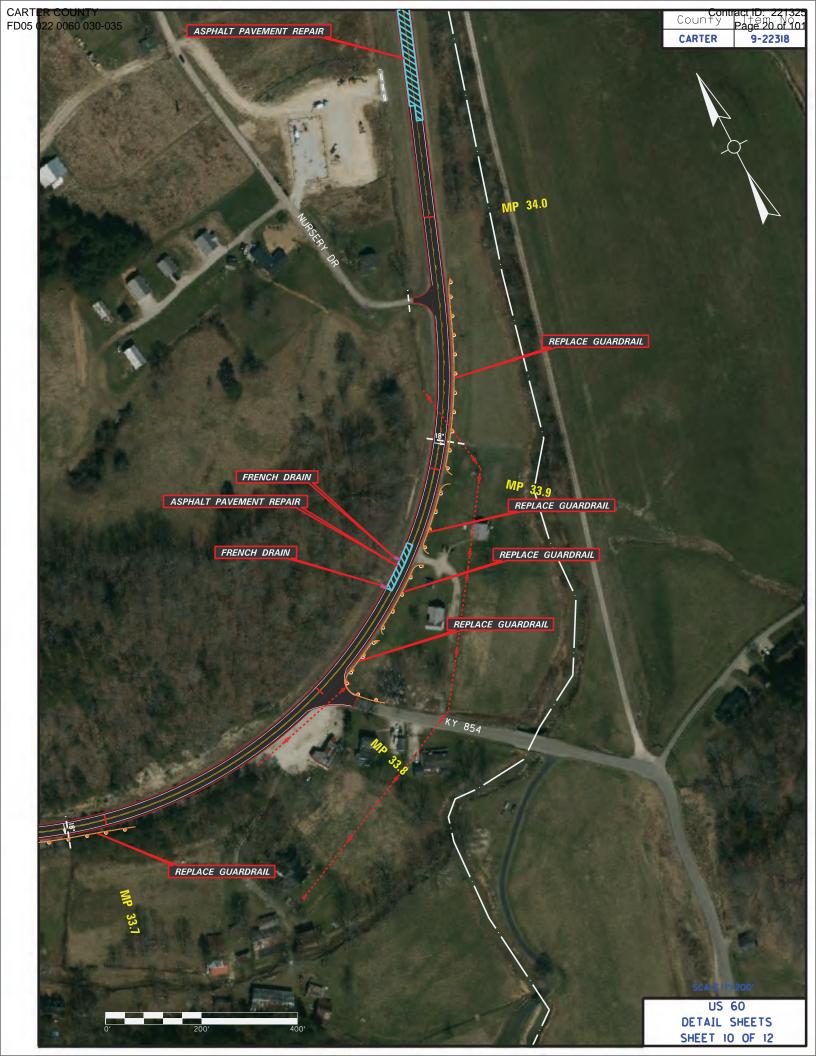


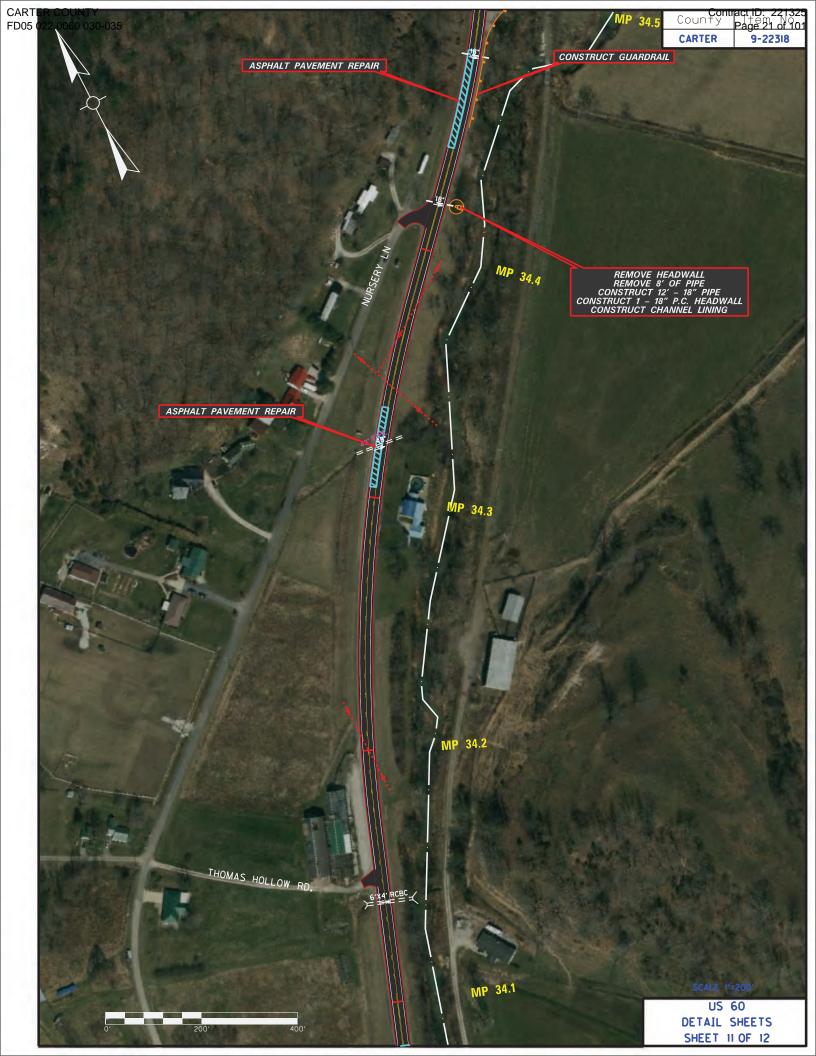


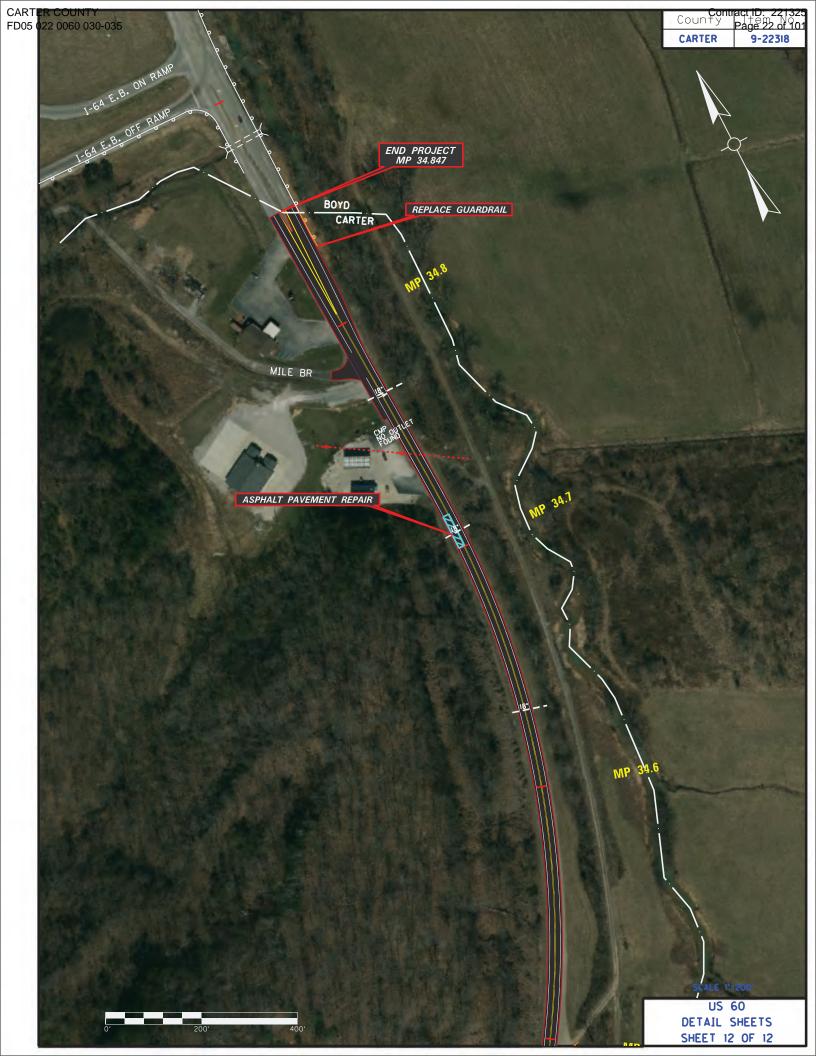










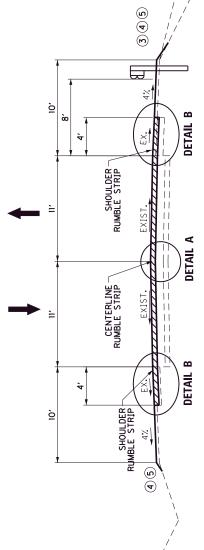


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TYPICAL SECTION

County Item No. 9-22318 CARTER

US 60 MP 30.018 T0 MP 34.847



MAINLINE NORMAL SECTION

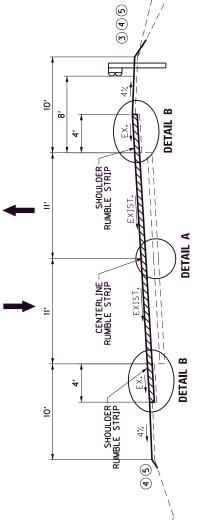
11/2" MILLING & TEXTURING 11/2" CL2 ASPH SURF 0.38B PG64-22

LANE LINE

PROP PAVE -

EXISTING MAINLINE PAVEMENT

DETAIL A



MAINLINE SUPERELEVATED SECTION

- TO BE USED AS DIRECTED BY THE ENGINEER FOR PAVEMENT IRREGULARITIES. \odot
 - APPLY ASPHALT MATERIAL FOR TACK NON-TRACKING BETWEEN EACH COURSE AT 0.7 LBS PER SY.
 - USE 7' POSTS FOR GUARDRAIL. \odot
- EXTEND DGA BASE SHOULDER OVERLAY TO THE SHOULDER BREAK MINIMUM AND EXTEND DOWN THE SLOPE TO A TIE DOWN POINT AS NEEDED, APPLY DGA BASE OVERLAY TO SHOULDERS ONLY AT LOCATIONS DESIGNATED BY THE ENGINEER, GRADE AND COMPACT THE EXISTING SHOULDER SURFACE PRIOR TO PLACEMENT.
- (D)

EXISTING MAINLINE PAVEMENT DETAIL B 11/2" MILLING & TEXTURING 11/2" CL2 ASPH SURF 0.38B PG64-22 EXISTING -SHOULDER ASPHALT VARIABLE DEPTH S ASPHALT SEAL COAT EXISTING EARTH OR STONE SHOULDER

SURFACING SCHEDULE

LEVELING AND WEDGING PG64-22.....AS DIRECTED (1) ASPHALT PAVE MILLING & TEXTURING.....11/2 DEPTH CL2 ASPH SURF 0.38B PG64-22.....11/2" DEPTH MAINLINE, SHOULDERS, & APPROACHES **⊘**

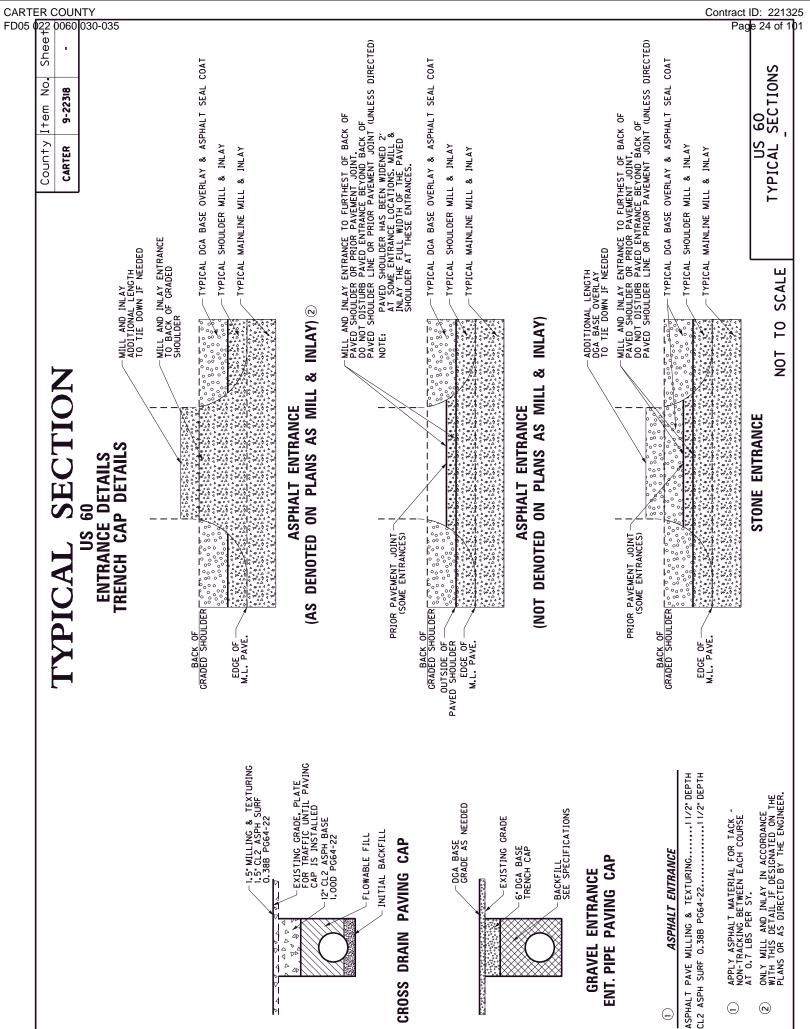
OVERLAY APPROACHES TO THE BACK OF RADIUS MINIMUM. ADDITIONAL LENGTH OF APPROACH OVERLAY TO TIE DOWN POINT MAY BE REOUIRED. NOTE:

S TYPICAL

NOT TO SCALE

60 SECTIONS

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DGA BASE GRADE AS NEEDED

12" CL2 ASPH BASE 1.00D PG64-22

INITIAL BACKFILL -FLOWABLE FILL

CROSS DRAIN PAVING CAP

EXISTING GRADE

6" DGA BASE TRENCH CAP

BACKFILL SEE SPECIFICATIONS

ENT. PIPE PAVING CAP **GRAVEL ENTRANCE**

ONLY MILL AND INLAY IN ACCORDANCE WITH THIS DETAIL IF DESIGNATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

(v)

APPLY ASPHALT MATERIAL FOR TACK NON-TRACKING BETWEEN EACH COURSE AT 0.7 LBS PER SY.

ASPHALT ENTRANCE

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CARTER COUNTY ITEM NO. 9-22318 , PAVEMENT REHABILITIATION MILEPOINT 30.018 TO 34.847

GENERAL SUMMARY

	GENERAL SUIVIIVIARY			
ITEM NUMBER	ITEM		UNIT	QUANTITY
00001	DGA BASE	1	TON	4,948
00100	ASPHALT SEAL AGGREGATE	1	TON	907
00103	ASPHALT SEAL COAT	1	TON	109
00190	LEVELING & WEDGING PG64-22	1	TON	500
00212	CL2 ASPH BASE 1.00D PG64-22	1	TON	2,571
00307	CL2 ASPH SURF 0.38B PG64-22	1	TON	7,572
02676	MOBILIZATION FOR MILL & TEXT	1	LS	1
02677	ASPHALT PAVE MILLING & TEXTURING	1	TON	10,125
24103EC	FRENCH DRAIN	1	LF	322
24970EC	ASPHALT MATERIAL FOR TACK NON-TRACKING	(1)	TON	36
00071	CRUSHED AGGREGATE SIZE NO 57	2	TON	45
00440	ENTRANCE PIPE-15 IN	(2)	LF	40
00461	CULVERT PIPE-15 IN	2	LF	8
00462	CULVERT PIPE-18 IN	2	LF	62
00466	CULVERT PIPE-30 IN	(2)	LF	20
00468	CULVERT PIPE-36 IN	(2)	LF	4
01202	PIPE CULVERT HEADWALL-15 IN	(2)	EACH	1
01204	PIPE CULVERT HEADWALL-18 IN	(2)	EACH	3
01210	PIPE CULVERT HEADWALL-30 IN	2	EACH	1
01212	PIPE CULVERT HEADWALL-36 IN	2	EACH	1
01310	REMOVE PIPE	2	LF	110
01433	SLOPED BOX OUTLET TYPE 1-18 IN	(2)	EACH	2
02484	CHANNEL LINING CLASS III	2	TON	1,415
02603	FABRIC-GEOTEXTILE CLASS 2	(2)	SQYD	1,115
02625	REMOVE HEADWALL	(2)	EACH	6
24862EC	PVC FOLD AND FORM PIPE LINER-18 IN	2	LF	50
23484EC	PIPE LINER ACCEPTANCE TESTING	(2)	LS	1
01982	DELINEATOR FOR GUARDRAIL MONO DIRECTIONAL WHITE	3	EACH	174
02360	GUARDRAIL TERMINAL SECTION NO 1	3	EACH	33
02367	GUARDRAIL END TREATMENT TYPE 1	3	EACH	10
02373	GUARDRAIL END TREATMENT TYPE 3	3	EACH	3
02381	REMOVE GUARDRAIL	(3)	LF	7,862.5
02391	GUARDRAIL END TREATMENT TYPE 4A	(3)	EACH	5
21802EN	G/R STEEL W BEAM-S FACE (7 FT POST)	(3)	LF	8,643.75
				,
02159	TEMP DITCH		LF	12,749
	FROM A DAVIANC CHAMAAA DV			, -

(1) CARRIED OVER FROM PAVING SUMMARY.

(2) CARRIED OVER FROM PIPE SUMMARY.

(3) CARRIED OVER FROM GUARDRAIL SUMMARY.

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DQS 022 0000 030-035
US 60

CARTER COUNTY

ITEM NO. 9-22318, PAVEMENT REHABILITIATION MILEPOINT 30.018 TO 34.847 GENERAL SUMMARY

ITEM NUMBER	ITEM	UNIT	QUANTITY
02160	CLEAN TEMP DITCH	LF	6,374
02703	SILT TRAP TYPE A	EACH	2
02704	SILT TRAP TYPE B	EACH	2
02705	SILT TRAP TYPE C	EACH	2
02706	CLEAN SILT TRAP TYPE A	EACH	2
02707	CLEAN SILT TRAP TYPE B	EACH	2
02708	CLEAN SILT TRAP TYPE C	EACH	2
02575	DITCHING AND SHOULDERING	LF	25,497
05950	EROSION CONTROL BLANKET	SQYD	9,680
05952	TEMP MULCH	SQYD	6,453
05953	TEMP SEEDING AND PROTECTION	SQYD	4,840
05963	INITIAL FERTILIZER	TON	0.5
05964	MAINTENANCE FERTILIZER	TON	0.3
05992	AGRICULTURAL LIMESTONE	TON	6
40030	TEMPORARY SILT FENCE	LF	12,749
			,
02562	TEMPORARY SIGNS	SQFT	800
02650	MAINTAIN & CONTROL TRAFFIC	LS	1
02671	PORTABLE CHANGEABLE MESSAGE SIGN	EACH	2
06511	PAVE STRIPING-TEMP PAINT-6 IN	LF	101,568
02696	SHOULDER RUMBLE STRIPS	LF	50,784
06568	PAVE MARKING-THERMO STOP BAR-24IN	LF	238
20458ES403	CENTERLINE RUMBLE STRIPS	LF	25,392
24189ER	DURABLE WATERBORNE MARKING-6 IN W	LF	50,784
24190ER	DURABLE WATERBORNE MARKING-6 IN Y	LF	46,934
02726	STAKING	LS	1
24891EC	PAVE MOUNT INFRARED TEMP EQUIPMENT	SQFT	560,934
08100	CONCRETE-CLASS A 4	CUYD	9.3
08150	STEEL REINFORCEMENT 4	LB	352
08003	FOUNDATION PREPARATION 4	LS	1
02403	REMOVE CONCRETE MASONRY 4	CUYD	11.8
20465EC	CLEAN CULVERT 5	LS	1
20465EC	CLEAN CULVERT 6	LS	1
20465EC	CLEAN CULVERT 7	LS	1
20465EC	CLEAN CULVERT 8	LS	1
20465EC	CLEAN CULVERT 9	LS	1
20465EC	CLEAN CULVERT 10	LS	1
20465EC	CLEAN CULVERT (1)	LS	1
02568	MOBILIZATION	LS	1

- (4) CARRIED OVER FROM CULVERT REPAIR DETAIL.
- (5) MP 30.077 6'X4' RCBC
- 6 MP 30.337 6'X4' RCBC
- (7) MP 30.465 8'X6' RCBC
- (8) MP 32.563 6'X4' RCBC
- (9) MP 32.707 54" PIPE CULVERT

- (10) MP 32.870 6'X3' RCBC
- (1) MP 33.040 54" PIPE CULVERT

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CARTER COUNTY ITEM NO. 9-22318 , PAVEMENT REHABILITIATION

MILEPOINT 30.018 TO 34.847

GENERAL SUMMARY													
ITEM NUMBER	ITEM	UNIT	QUANTITY										
02569	DEMOBILIZATION	LS	1										
10020NS	FUEL ADJUSTMENT	DOLL	16,566										
10030NS	ASPHALT ADJUSTMENT	DOLL	41,610										
	 		1										

US 60 CARTER COUNTY

ITEM NO. 9-22318, PAVEMENT REHABILITIATION MILEPOINT 30.018 TO 34.847

PAVING SUMMARY

		7 11 127 10 (0.1)	
ITEM	TOTAL	ITEM	TOTAL
MAINLINE, SHOULDERS, ENTR. & APPR.		SHOULDERS	
1" ASPHALT PAVE MILLING & TEXTURING	91,775	ASPHALT SEAL AGGREGATE	45,328
1.5" CL2 ASPH SURF 0.38B PG64-22	91,775	ASPHALT SEAL COAT	45,328
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PAVING SUMMARY

ITEM CODE	ITEM	UNIT	QUANTITY
00001	DGA BASE ①	TON	4,948
00100	ASPHALT SEAL AGGREGATE 2	TON	907
00103	ASPHALT SEAL COAT 3	TON	109
00190	LEVELING & WEDGING PG64-22 (4)	TON	500
00212	CL2 ASPH BASE 1.00D PG64-22 5	TON	2,571
00307	CL2 ASPH SURF 0.38B PG64-22	TON	7,572
			-
02676	MOBILIZATION FOR MILL & TEXT	LS	1
02677	ASPHALT PAVE MILLING & TEXTURING 6	TON	10,125
			-
24103EC	FRENCH DRAIN	LF	322
24970EC	ASPHALT MATERIAL FOR TACK NON-TRACKING	TON	36
			-
			-
			-

- (1) FOR OVERLAY OF EARTH/STONE SHOULDER AND FOR PREPARATION OF SHOULDER FOR GUARDRAIL. INCLUDES 282 TONS FROM STREAM BANK STAB. DETAIL AND 25 TONS FROM FRENCH DRAIN DETAIL.
- 2 BASED ON COVERAGE OF 50% OF SHOULDERS AND BASED ON 2 APPLICATIONS OF 20 LBS/SY.
- 3 BASED ON COVERAGE OF 50% OF SHOULDERS AND BASED ON 2 APPLICATIONS OF 2.4 LBS/SY. ALL ITEMS CARRIED OVER TO GENERAL SUMMARY
- (4) TO BE USED AS DIRECTED FOR PAVEMENT IRREGULARITIES.
- (5) INCLUDES 2,553 TONS FROM ASPH PAVEMENT REPAIR DETAIL AND 18 TONS FROM FRENCH DRAIN DETAIL.
- 6 INCLUDES 2,553 TONS FROM ASPH PAVEMENT REPAIR DETAIL.
- (7) BASED ON APPLICATION RATE OF 0.7 LBS/SY.

ASPHALT MIXES CALC. BASED ON 110 LBS/SY/IN

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ALL ITEMS CARRIED OVER TO THE GENERAL SUMMARY.

		REMARKS			ENTRANCE LEFT	6'X4' RCBC	6'X4' RCBC	8'X6' RCBC	DITCH LT	OUTLET RT, S&F O DEG SKEW	STABILIZE DITCH FOR GR END TREAT TY3 RT.	OUTLET RT, S&F O DEG SKEW	EROSION RIGHT	OUTLET RT, S&F O DEG SKEW	OUTLET RT, S&F O DEG SKEW	SEE BANK STABILIZATION DETAIL.		6'X4' RCBC	54" PIPE CULVERT	6'X3' RCBC	APPROACH LT.	54" PIPE CULVERT, OUTLET EROSION RT.	OUTLET RT, S&F 0 DEG SKEW	OUTLET CULVERT REPAIR SLOPE ARMOR	OUTLET RT, S&F 0 DEG SKEW				החסורת	PROJECT	
		PIPE LINER ACCEPTANCE TESTING	23484EC	LS																										T	7
		FINEE-18 IN	24862EC	Ŧ,													20													C	20
	NO	СГЕРИ СОГЛЕВТ	20465EC	LS		1	1	1										1	1	1		1									
	US 60 CARTER COUNTY 9-22318, PAVEMENT REHABILITIATION MILEPOINT 30.018 TO 34.847 PIPE SUMMARY	REMOVE HEADWALL	02625	EACH						1		1		1	1								1		1	Ш				y	٥
	ABILIT	FABRIC-GEOTEXTILE CLASS 2	02603	SQYD												1,115												\perp	_	-	1,115
T	US 60 ER COUNTY AVEMENT REHABI 30.018 TO 34.847 SUMMARY	CHANNEL LINING CLASS III	02484	TON					43	16	31	16	83	24	20	1,048						32	11	80	11	Ш		_	_	7 7 7	1,415
of	OUNT IENT 18 TC	SLOPED BOX OUTLET TYPE 1- 18 IN		EACH																	2						\perp	\perp	\perp	,	7
τ.	US 60 CARTER COUNTY 18, PAVEMENT F OINT 30.018 TO PIPE SUMMARY	REMOVE PIPE	01310	Ŧ.	40					4		4		20	4						22		∞		8	Ш		\perp	_	,	TIO
Sheet	ARTE 8, PA SINT	PIPE CULVERT HEADWALL- 36 IN	01212	EACH											1															,	4
	CARTI 9-22318, PA MILEPOINT PIPE	PIPE CULVERT HEADWALL-	01210	EACH										1																-	4
		PIPE CULVERT HEADWALL- 18 IN	-	-								1											1		1					c	n
	ITEM NO.	PIPE CULVERT HEADWALL- 15 IN	01202	EACH						1																				,	4
	Ħ	СПГЛЕВТ РІРЕ-36 ІИ	00468	5											4															_	4
		СПГЛЕВТ РІРЕ-30 ІИ	00466	느										20																7	07
		СПГЛЕВТ РІРЕ-18 ІИ	00462	5								8									30		12		12					C	79
	СПГЛЕВТ РІРЕ-15 ІИ	00461	-F						8																				٥	×	
		ENTRANCE PIPE-15 IN	00440	Ŧ	40																									Ç	04
		CRUSHED AGGREGATE SIZE	00071	TON												45														45	42
		MILEPOINT	ITEM CODE	TINO	10.075	30.077	30.337	30.465	30.832	0.855	0.957	1.149	31.359	1.386	1.473	1.700	12.495	12.563	12.707	2.870	13.033	3.040	13.629	14.140	14.420					LATOT TOTION	PROJECT TOTAL

CARTER COUNTY Contract ID: 221325 FD05 022 DESCRIPTION W.B. QTY INCL. 1.3XRADIUS LENGTH E.B. QTY INCL. 1.3XRADIUS LENGTH W.B. QTY INCL. 1.3XRADIUS LENGTH E.B. QTY INCL. 1.3XRADIUS LENGTH W.B. QTY INCL. 1.3XRADIUS LENGTH E.B. ITEM NO. 9-22318, PAVEMENT REHABILITIATION **MILEPOINT 30.018 TO 34.847 GUARDRAIL SUMMARY** CARTER COUNTY 21802EN 8,643.75 516.25 153.75 623.75 578.75 393.75 203.75 148.75 257.5 261.25 293.75 607.5 277.5 452.5 382.5 232.5 202.5 (T FT POST) 445 200 470 390 190 115 of 9 25 G/R STEEL W BEAM-S FACE 02391 EACH **AP 39YT TN3MTA38T** 2 **GUARDRAIL END** Sheet 7,862.5 02381 562.5 1,025 662.5 512.5 437.5 187.5 300 425 150 600 175 300 575 275 375 375 72 REMOVE GUARDRAIL 4 02373 EACH **TREATMENT TYPE 3 GUARDRAIL END** ALL ITEMS CARRIED OVER TO GENERAL SUMMARY. 02367 EACH TREATMENT TYPE 1 10 **GUARDRAIL END** 02360 EACH SECTION NO 1 GUARDRAIL TERMINAL DIRECTIONAL WHITE 01982 EACH 10 20 12 12 12 6 ∞ ∞ 4 ∞ **GUARDRAIL MONO** 6 DELINEATOR FOR 31.588 32.282 32.270 33.344 31.373 31.642 31.805 33.442 33.975 34.500 30.832 31.479 33.516 33.597 33.863 34.846 30.753 31.722 31.735 33.245 33.242 33.710 33.830 33.896 31.152 **TO MILEPOST** PROJECT TOTA ITEM CODE 30.649 34.832 32.225 33.236 31.319 31.483 31.645 31.739 32.225 33.298 33.348 33.520 33.813 33.833 31.353 31.592 31.711 33.222 33.446 33.868 33.899 34.451 30.794 31.099 33.601 LNO **FROM MILEPOST** POINT NUMBERS

0 of 101

2677 210 * *

• Only items listed will be considered for payment and will considered full compensation for the work required. Any other items of work not listed for payment will be considered incidental to other items of work. ASPHALT PAVE WILLING AND TEXTURING CL2 ASPH BASE 1.000 PG64-22

BID ITEM

TONS TONS

2,553 1 2,553 1

- Asph base course class and binder grade to be chosen by designer based on current asphalt warrants and/or to remain consistent with mainline asphalt surface used on the project.

* (CARRIED ON PAVING SUMMARY)

SEPAIN 191 PAVEMENT 9 **ASPHALT**

221325

Contract ID:

TO SCALE

Page

- 1.5" MILLING & TEXTURING 1.5" CL2 ASPH SURF 0.38B PG64-22 (SEE TYPICAL SECTIONS) TEXTURING EXISTING PAVEMENT County Item No. -4.5' ASPH PAVE MILLING & TEXTUF 4.5' CL2 ASPH BASE 1.0D PG64-22 EXISTING SHOULDER OR ADJACENT LANE JOINT LENGTH AS SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER 12' MIN **DETAIL A** PROP GRADE EXIST GRADE **ASPHALT PAVEMENT REPAIR DETAIL** EXISTING SURFACE GRADE 1.5" CL2 ASPH SURF 0.38B PG64-22 (SEE TYPICAL SECTIONS) 4.5" ASPH PAVE MILLING & TEXTURING 4.5" CL2 ASPH, BASE 1.00D PG64-22 EXISTING MAINLINE PAVEMENT EXISTING PAVEMENT 1.5" CL2 ASPH SURF 0.38B PG64-22 This cross section assumes both lanes of a 2 lane highway will be repaired, Adjust width to match actual cross section and number of lanes to be repaired. **CROSS SECTION** DETAIL A 12' MINIMUM MILL AND INLAY LIMITS for Pavement Repair PLAN VARIES MAINLINE MAINLINE

NOTES

Pavement repairs shall be performed at locations selected by and as directed by the Engineer. The Engineer will assess, select, and mark areas for treatment. The full lane width will be removed and replaced. The Engineer may elect to perform repairs on one lane or multiple lanes. An edge key 12 into the adjacent lane/shoulder is required for the milling and asphalt base. For estimate purposes, quantities were estimated to a substitution of 3.5 thicknesses with additional quantity of 200 tons added to be used as directed by the engineer for additional locations.

Complete pavement repair operations in one continuous operation or protect with barrier wall. Do not leave an unprotected hole with no workers present. If barrier wall must be used for pavement repairs, it will be considered incidental to other Items of work and not be considered for payment.

The item ASPHALT PAVE MILLING AND TEXTURING includes removal of all asphalt to the required dimensions including keying into the adjacent lane or shoulder.

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Perform typical milling and overlay operations with resurfacing items subject to payment as part of the resurfacing operation after completion of the asphalt pavement repairs. Allow froffic to run on the asphalt pavement repairs a minimum of 14 days prior to initiation of the typical overlay operations. The top 1.5 of asphalt base will be sacrificial.

Contract ID: 221325

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Page 32

US 60 PAVEMENT **ASPHALT**

ALL QUANTITIES CARRIED OVER TO THE GENERAL SUMMARY AND PAVING SUMMARY

NOTE:

NOT TO SCALE

CARTER COUNTY FD05 022 0060 030-035

County Item No.

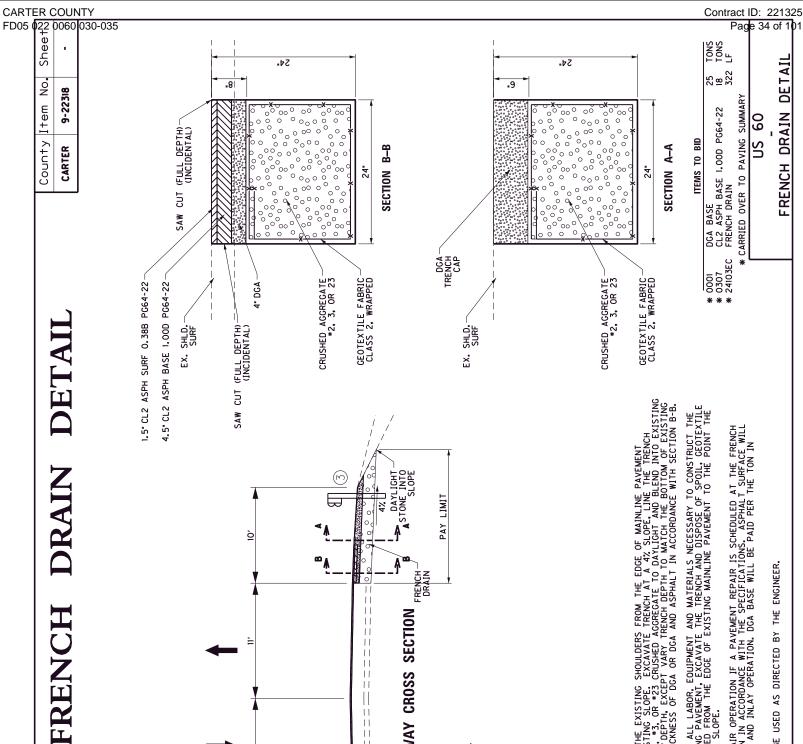
9-22318

CARTER

QUANITY (TONS)	147	86	79	50	49	23	16	345	76	107	30	32	35	7.1	106	22	19	56	6	142	142	09	42	20	130	40	38	11	133	09	74	26				200	2552
AREA (SY)	592	397	321	202	197	94	49	1392	308	432	121	130	141	285	429	231	77	228	35	575	573	244	169	202	525	162	152	46	536	241	299	105				SINEER	TOTAL
THICKNESS (IN)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				TO BE USED AS DIRECTED BY ENGINEER	
WIDTH (FT)	13	24	13	13	24	13	13	24	13	13	13	13	24	13	24	13	13	13	13	13	24	13	13	13	24	13	13	13	24	13	13	13				SED AS DIR	
LENGTH (FT)	410	149	222	140	74	65	44	522	213	299	84	06	53	197	191	160	53	158	24	398	215	169	117	140	197	112	105	32	201	167	207	73				TO BE US	
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WESTBOUND	×	×	×	×	×	×		×	×	×			×		×						×				×		×		×	×	×	×					
END MP	30.111	30.159	30.201	30.259	30.273	30.285	30.305	30.404	30.444	30.520	30.859	30.947	30.957	30.994	31.190	31.266	31.338	31.434	31.601	32.223	32.263	32.503	32.554	32.748	32.838	33.591	33.869	34.045	34.083	34.336	34.481	34.714					
BEGIN MP	30.034	30.130	30.159	30.232	30.259	30.273	30.297	30.305	30.404	30.464	30.843	30.930	30.947	30.957	31.159	31.235	31.328	31.404	31.597	32.147	32.223	32.471	32.531	32.721	32.800	33.570	33.849	34.038	34.045	34.304	34.442	34.700					

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FD05



LIMIT PΑΥ

FRENCH-DRAIN

ROADWAY CROSS SECTION

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FRENCH-DRAIN

DAYLIGHT -STONE INTO SLOPE

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0 4%

0

LENGTH (LF)

LOCATIONS

P 31.264 P 31.264 P 31.408 P 31.419 P 31.536 P 31.536 P 32.804 P 33.881 OIRECTED

7.8. MP 30.95 E.B. MP 31.23 E.B. MP 31.37 E.B. MP 31.4 E.B. MP 31.4 W.B. MP 31.4 W.

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NOTE:

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CONSTRUCT FRENCH DRAINS ACROSS THE ENTIRE WIDTH OF THE EXISTING SHOULDERS FROM THE EDGE OF MAINLINE PAVEMENT TO A POINT THAT THE TRENCH DAYLIGHTS OUT IN THE EXISTING SLOPE, EXCAVATE TRENCH AT A 4% SLOPE, LINE THE TRENCH WITH GEOTEXTLE FABRIC CLASS 2, AND PLACE WRAPPED **3, OR *23 FUNSHED AGGREGATE TO DAYLIGHT AND BLEND INTO EXISTING SLOPES, CONSTRUCT TRENCH DEPTH TO APPROXIMATELY 24' DEPTH, EXCEPT VARY TRENCH DEPTH TO MATCH THE BOTTOM OF EXISTING SLOPES, CAP THE TRENCH DEPTH TO APPROXIMATELY 6' THICKNESS OF DGA OND GA AND ASPHALT IN ACCORDANCE WITH SECTION B-B.

THE ITEM "FRENCH DRAIN" WILL BE FULL COMPENSATION FOR ALL LABOR, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT THE DETAILS UNDERFORAIN AND BACKFILL, SAW CUT THE EXISTING PAVEWENT, EXCAVATE THE TRENCH AND DISPOSE OF SPOIL, GEOTEXTILI FABRIC, AND "22, "3 OR "22 BACKFILL, AND WILL BE MEASURED FROM THE EDGE OF EXISTING MAINLINE PAVEMENT TO THE POINT THE PROPOSED TRENCH DAYLIGHTS INTO THE EXISTING ROADSIDE SLOPE.

ASPHALT BASE MAY BE PLACED DURING THE PAVEMENT REPAIR OPERATION IF A PAVEMENT REPAIR IS SCHEDULED AT THE FRENCH
DRAIN LOCATION, ASPHALT BASE WILL BE PAID BY THE TON IN ACCORDANCE WITH THE SPECIFICATIONS, ASPHALT SURFACE WILL
BE CONSTRUCTED AND PAID AS PART OF THE TYPICAL MILL AND INLAY OPERATION, DGA BASE WILL BE PAID PER THE TON IN
ACCORDANCE WITH THE SPECIFICATIONS.

AN ADDITIONAL OUANTITY OF 140 LF HAS BEEN ADDED TO BE USED AS DIRECTED BY THE ENGINEER,

FRENCH DRAIN DETAIL

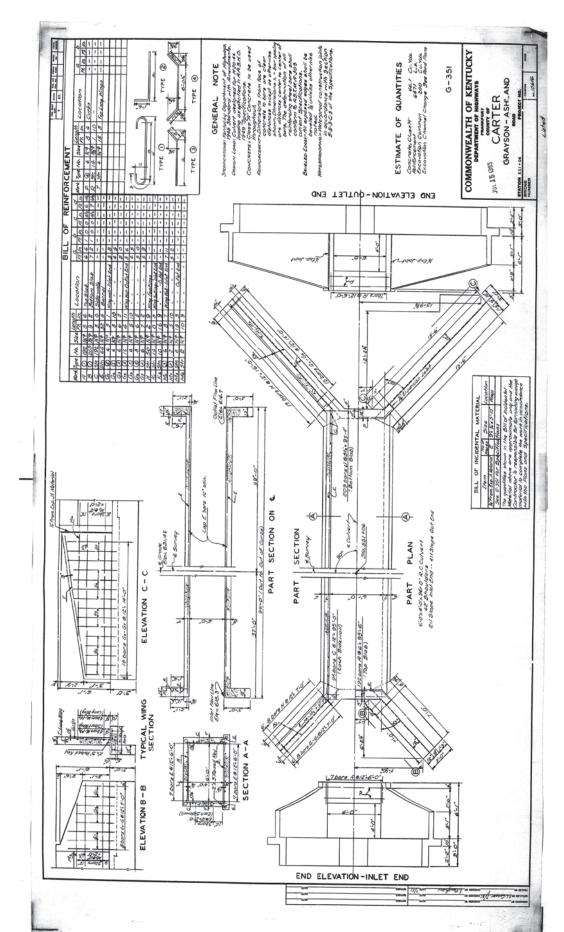
CARTER COUNT)
FD05 022 0060 030-030

HT REPAIR DETAIL US 60 MP 34.140 (01171 7-CULVERT

9-22318

CARTER

County Item



NOT TO SCALE

Contract ID: 221325
Page 35 of 101 US 60 REPAIR D MP 34.140 CULVERT

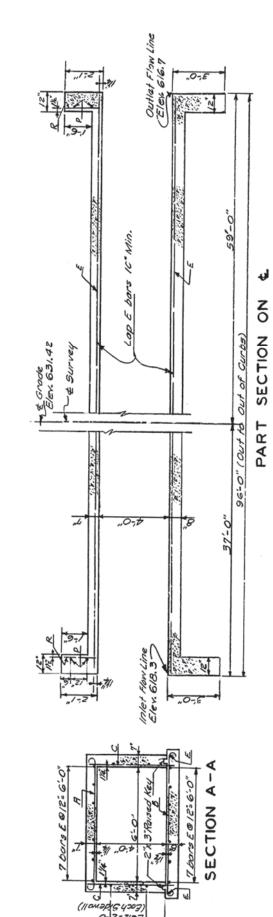
CARTER COUNTY
FD05 022 0060 030-035 Contract ID: 221325
Page 36 of 101 END ELEVATION - QUTLET END US 60 F REPAIR D MP 34.140 9-22318 County Item CARTER 10,9 :2/ 0 y 520/ CULVERT EXISTING PLAN AND EXISTING END ELEVATION I REPAIR DETAIL
US 60
MP 34.140 (QUTLET)
ORIGINAL PI ANC 2'-0" REMOVAL 6:0%4:0%.96:0" R.C. Culvert 42' Shoulders 2:1 Slope Met End -- 4:1 Slope Out End SECTION PART PART CULVERT END ELEVATION -INLET END

CULVERT REPAIR DETAIL
US 60
MP 34.140 (QUTLET)
ORIGINAL PLANS

CARTER COUNTY
Loanty Item No.Sheet S. 2000 030-035

S. 2000 030-035

S. 2000 030-035



EXISTING PROFILE AND BARREL SECTION

US 60 CULVERT REPAIR MP 34.140

Contract ID: 221325
Page 37 of 101

CARTER COUNTY
FD05 022 0060 030-035

CULVERT REPAIR DETAII

9-22318 CARTER

County Item

MATERIALS: Fy - 60,000 PSI Fr. - 3,500 PSI CLASS "A" CONCRETE SHALL BE USED THROUGHOUT

SPECIFICATIONS: KENTUCKY DEPARTMENT OF HIGHWAYS STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

GENERAL NOTES

BONDING NEW CONCRETE:
ALL NEW FOOVERETE WITH A
ALL NEW FOOVERETE STAIL BE BONDED TO THE OLD CONCRETE WITH A
AND SECOND STAIL SECRETION STAIL
AND BESO OF THE SPECIFICATIONS THE COST OF THIS WORK.

INCLUDING ALL ABOR, TOOLS AND MATERIALS IS
TO BE INCIDENTAL. A CONCRETE.

TO BE INCIDENTAL.

DRAWING NUMBER: EXISTING CULVERT DRAWING . 10616

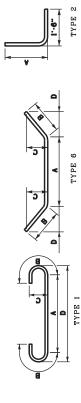
		SEE EXISTING SECTION A-A 4034" 4034"	× <	< < -
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NTITIE	08003	FOUNDATION NOITAЯA93Я9	rS	1
QUA	08120	STEEL REINFORCEMENT	ГВ	352
TE OF	08100	CONCRETE-CLASS A	CUYD	9.3
ESTIMATE OF QUANTITIES	BID ITEM CODE	BID ITEM	TINO	RCBC TOTALS

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BAR BENDING DETAILS



6" LAP

TYPE 14

. 3 ~ P1

8 IS" = 3'-0"

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<u>,</u>

e.-o., CLEAR BARREL

ABOUT

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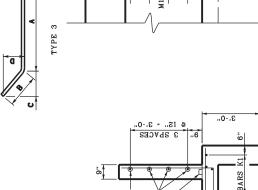
EXISTING BARS E TO REMAIN. CLEAN AND STRAIGHTEN AFTER CONCRETE REMOVAL.

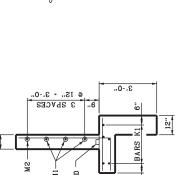
CUT LINE & BEGINNING-OF RECONSTRUCTION

(2) 4 ~ BARS C @ 12" - 3'-0"

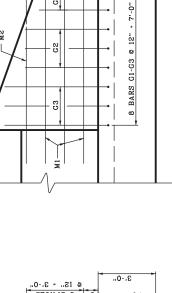
(1) A (TOP SLAB) B (BOTTOM SLAB)

M2





S 30.	[0]	30	1
M2 M2	2"X3" KEYED CONSTR. JT.	6" BARS KI	12"



© 15..=S.-0..

5

G2

9" 3 BARS

6"

CULVERT RECONSTRUCTION PLAN

TYPICAL WING SECTION

TYPICAL WING

Contract ID: 221325
Page 38 of 101

REPAIR DETAILS

A. 34.140

M 34.140

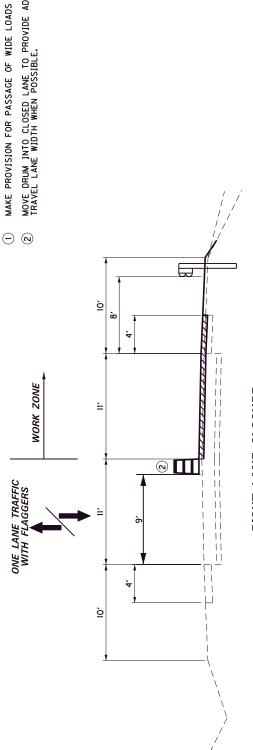
M 34.140 CULVERT

MAINTENANCE OF TRAFFIC

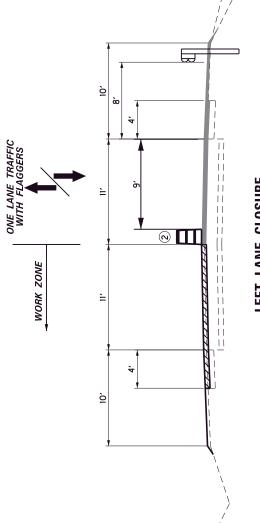
County Item No. 9-22318 CARTER

TYPICAL SECTIONS ALL PHASES

- ONE LANE TRAFFIC WITH FLAGGERS
- MOVE DRUM INTO CLOSED LANE TO PROVIDE ADDITIONAL TRAVEL LANE WIDTH WHEN POSSIBLE.



RIGHT LANE CLOSURE



LEFT LANE CLOSURE

LEGEND

PREVIOUSLY CONSTRUCTED

MINIZED ASPHALT

Contract ID: 221325 Page 39 of 101 MAINTENANCE OF TRAFFIC TYPICAL SECTIONS

NOT TO SCALE

TRAFFIC CONTROL PLAN CARTER COUNTY US 60 FD05 022 0060 030-035 Item No. 9-22318

THE CONTROL OF ACCESS ON THIS PROJECT IS BY PERMIT

TRAFFIC CONTROL GENERAL

Except as provided herein, "Maintain and Control Traffic" shall be in accordance with the Standard Specifications and the Standard Drawings, and the Manual on Uniform Traffic Control Devices (MUTCD), current editions at the time of letting. Except for the roadway and traffic control bid items listed, all items of work necessary to maintain and control traffic will be paid at the lump sum bid price to "Maintain and Control Traffic". All lane closures used on the project will be in compliance with the appropriate Standard Drawings.

Contrary to Section 106.01, traffic control devices used on this project may be new or used, in like new condition, at the beginning of the work and maintained in like new condition until completion of the work. Traffic control devices will conform to current MUTCD.

Night work will be allowed on this project. Obtain approval from the Engineer for the method of lighting prior to use. No additional payment shall be made for night work operations.

TRAFFIC PHASING OVERVIEW

Access to all private and public entrances on the project shall be maintained at all times unless otherwise directed by the Engineer.

Use a lane closure adhering to the Standard Drawings when work is performed in the lane, on the shoulder, or side slopes adjacent to travel lanes. Perform any maintenance of the shoulder as deemed necessary by the Engineer in order to maintain traffic. Remove failed materials and perform additional patching as directed by the Engineer. All items of work required on the project will be performed by alternating lane closures except for the approach cross pipe replacement.

PROJECT PHASING & CONSTRUCTION PROCEDURES

No lane closures will be allowed on the project during the following days unless otherwise approved by the Engineer:

Independence Day
Labor Day Weekend
Sept 2nd, 2022 – Sept 5th, 2022
Thanksgiving Weekend
Nov 24th, 2022 – Nov 27th, 2022

CONSTRUCTION PHASING

PHASE I – Drainage Repairs, Ditching, and Roadside Improvements

Phase Ia – Cross Drain Removal & Replacement

For cross drains on approaches, during times of allowable closure, temporarily close the approach and perform pipe removal and installation and backfilling operations at approach locations indicated. Place message boards on the proposed closed route 7 days in advance of the closure to notify the public of the proposed closure. Backfill with flowable fill, plate the pipe trench, and reopen the approach to traffic within the times specified. Limit the duration of closure to the minimum required to install the new pipe, backfill, and plate the trench to restore traffic. Install 12" thickness asphalt base for trench cap as soon as practical and as soon as the flowable fill has gained enough stability. Complete ditching, headwall installation, and site grading around headwalls as a separate operation using lane closures to limit the time of road closure.

Phase Ib – Ditching and Shouldering, Headwall and Small Drainage Structure Replacement, Entrance Pipe, and Erosion Repairs

Using alternating lane closures and flaggers, complete ditching, clean pipes and culverts, and remove and replace headwalls and small drainage structures indicated or as directed by the engineer. Complete channel lining and erosion repairs and regrade slopes to tie proposed headwalls into the existing slopes.

For entrance pipe replacement notify the property owner and complete operations either half width to maintain access or complete the installation and backfill within time frames agreeable to the owner that access is not required.

PHASE II – Shoulder Preparation, Asphalt Milling, and Resurfacing

Phase IIa – French Drains, Shoulder Trenching, DGA, and Asphalt Base

Utilizing alternating lane closures, construct French Drains on the shoulders as indicated and as directed by the engineer.

Phase IIb – Asphalt Pavement Repairs

Utilizing alternating lane closures and flaggers, complete milling for asphalt pavement repairs in accordance with the Asphalt Pavement Repair Detail or as directed by the engineer. Place asphalt base in the repair area by the end of each day's production and restore 2 lanes of traffic at the end of each shift. Place a Type III Barricade in advance of pavement repair locations until the asphalt base is placed. Place temporary striping on the repair area prior to opening to traffic.

Phase IIc – Asphalt Milling and Paving

Erect signs and using alternating lane closures, complete milling and texturing of mainline, shoulders, approaches, and entrances. Complete milling and texturing for both lanes and both shoulders to a common point daily by the end of each production shift and prior to opening both lanes to traffic. A longitudinal step-up or drop-off will not be permitted except at the outside of paved shoulders. Using alternating lane closures, clip back sod from shoulder and place leveling and wedging to correct any irregularities in profile or cross slope.

Using alternating lane closures, place asphalt surface on one lane and on one shoulder for approximately ½ day's production. After final rolling, alternate lane closures to place traffic on the newly paved lane and complete paving of the other lane and shoulder to approximately even with the first half day's production. Complete both lanes of paving daily to an approximate common point.

PHASE III – Shoulder Grading and Guardrail

Utilizing alternating lane closures, remove existing guardrail on the project, lining the shoulder with drums on 20' spacing in locations of guardrail removal.

Utilizing alternating lane closures and flaggers, prepare shoulders for placement of DGA Base overlay at locations directed by the engineer. Place DGA shoulder overlay, place compacted DGA in post holes resulting from guardrail removal and grade shoulders across the width of stone shoulder to prepare for placement of guardrail. Place asphalt seal coat on shoulders treated with the DGA overlay. Install new guardrail upon completion of shoulder grading and modification of shoulder and completion of the Asphalt Seal Coat.

Once guardrail is removed or partially removed, the contractor shall not suspend operations for more than a normal weekend, or normal inclement weather days until new guardrail is installed.

PHASE IV – Final Construction Items

Using alternating lane closures, complete construction of any remaining items of work including but not limited to final pavement markings, rumble strips, final cleanup incidental seeding and removal of signs.

LANE CLOSURES

Contrary to Section 112.04.17, lane closures, whether long term or short term, will not be measured for payment and will be incidental to the bid item "Maintain and Control Traffic". Maintain a minimum lane width of 9 feet. Use traffic drums or vertical panels only for areas that guardrail has been removed.

A pilot car will be required to be used for all lane closures on the project.

SHOULDER PREPARATION AND RESTORATION

Wide loads, errant vehicles, or traffic shying away from equipment or workers may inadvertently tend to travel for short distances on the shoulders. Clean any debris from the shoulders prior to beginning any work on the project and periodically when debris accumulates throughout the duration of the project. Monitor shoulder conditions and perform repairs as necessary if damage develops. Repairs to shoulders are to be paid by the SY of milling measured, asphalt material for tack, and the measured tons of the asphalt mixture used. Use asphalt base, asphalt surface or leveling and wedging for repairs as directed by the engineer. No direct payment for these repairs will be made other than measurement and payment of established contract work items necessary to make the repairs. No additional mobilization or traffic control will be considered for payment for these potential repairs.

ROAD CLOSURE

Allowable time for approach road closures for approach cross pipe replacements shall be from 9:00am to 2:00pm. The contractor shall give the engineer a two (2) week notice prior to all road closures for approach cross pipe replacements. Use PCMS message boards, one per direction of travel, for one week prior to the dates of closure to advise the traveling public of the dates and times of proposed closure. Limit the duration of the road closure to the minimum time required to remove the existing pipe, reinstall and backfill the new culvert pipe. Reopen the road to traffic as soon as possible. Headwall construction and grading of slopes must be performed as a separate operation with one lane closed. Road closures will only be allowed for replacement of approach cross drains. Backfill with flowable fill, plate the pipe trench, and reopen to traffic as soon as possible. After the flowable fill has achieved adequate set, cap the pipe trench with asphalt base.

SIGNS

Traffic control signs in addition to normal lane closure signing detailed on the Standard Drawings may be required by the Engineer. Additional signs may be needed for lane closures.

Quantities for Road Work ½ Mile (36" x 36"), Road Work 1500 Feet (36" x 36"), Road Work 1000 Feet (36" x 36"), Road Work 500 Feet, Side Road Placards, End Road Work (36" x 18") signs, etc. have been included in the proposal. These signs shall be constructed on each end of the proposed project as directed by the Engineer. Additional quantities have been added for any additional signs required by the Engineer. One lane road and flagger signs will be required in accordance with the Standard Drawings and will be required to be moved periodically as the work progresses. Remove lane closure and flagger signage when workers are not present.

Contrary to section 112, individual signs will be measured only once for payment, regardless of how many times they are set, reset, removed and relocated during the duration of the project. Replacements for damaged signs or signs directed to be replaced by the Engineer due to poor legibility or reflectivity will not be measured for payment.

Contrary to the section 112, only post mounted signs will be measured for payment and only signs intended to be continuously in place for more than 3 consecutive days will be measured for payment.

TYPE III BARRICADES

Utilize Type III Barricades at all locations required by the traffic control plan and as required by the Standard Drawings or MUTCD. Contrary to the specifications, no direct payment will be made for Type III Barricades and will be considered incidental to "Maintain and Control Traffic".

FLASHING ARROWS

Flashing arrows will not be required for this project.

PORTABLE CHANGEABLE MESSAGE SIGNS

Provide portable changeable message signs (PCMS) in advance of and within the project at locations to be determined by the Engineer. Place PCMS on both ends of the project corridor. The locations designated may vary as the work progresses. The messages required to be provided will be designated by the Engineer. The PCMS will be in operation at all times. In the event of damage or mechanical/electrical failure, the contractor will repair or replace the PCMS immediately. PCMS will be paid for once, no matter how many times they are moved or relocated. The Department **WILL NOT** take possession of the signs upon completion of the work. See notes elsewhere in the proposal for additional requirements.

Use PCMS to advise traffic of lane closures, milled surface, and other messages as provided by the engineer.

PAVEMENT MARKINGS

Maintain temporary or permanent pavement markings any time two lanes of traffic is open without flaggers. Temporary edgelines will not be required on this project.

PAVEMENT EDGE DROP-OFFS

Pavement edge drop-offs will be protected by a lane or shoulder closure. Lane closures will be protected with plastic drums, vertical panels, or barricades as shown on the Standard Drawings. Pavement edges that traffic is not expected to cross, except accidentally, shall be treated as follows:

Less than 2" – Protect with a lane closure.

2" to 4" and less than 8' from edge of traveled way – Protect with a lane closure. Place plastic drums, vertical panels, or barricades every 50 feet. Cones may not be used in place of plastic drums, panels, and barricades at any time. Complete work in the drop-off area to eliminate the drop-if possible. In the event that planned work cannot be completed to eliminate the drop-off due to conditions beyond the contractor's control, construct a wedge with compacted cuttings from milling, trenching, DGA Base, or asphalt mixtures with a 3:1 or flatter slope, when work is not active in the drop-off area. Place Type III Barricades at the beginning of the lane closures, and place additional Type III Barricades spaced at 2,500 feet during the time the lane closure is in place.

Greater than 4" and less than 8' from edge of traveled way – If ongoing work results in a greater than 4" drop-off, work should proceed continuously so that traffic is exposed to a drop-off for the minimum amount of time necessary to bring the pavement back up to existing grade. Traffic Control Device spacing should be 40 feet and appropriate lighting should be utilized to illuminate the area during nighttime operations. Complete work in the drop-off area to eliminate the drop-if possible. In the event that planned work cannot be completed to eliminate the drop-off due to conditions beyond the contractor's control, construct a wedge with compacted cuttings from milling, trenching, DGA Base, or asphalt mixtures with a 3:1 or flatter slope, when work is not active in the drop-off area. Place Type III Barricades at the beginning of the lane closures, and place additional Type III Barricades spaced at 2,500 feet during the time the lane closure is in place.

TRAFFIC COORDINATOR

Designate an employee to be traffic coordinator. The designated Traffic Coordinator must meet the requirements of section 112.03.12 of the Standard Specifications. The Traffic Coordinator will inspect the project maintenance of traffic once every two hours during the Contractor's operations and at any time a lane closure is in place. The Traffic Coordinator will report all incidents throughout the work zone to the Engineer on the project. The Contractor will furnish the name and telephone number which the Traffic Coordinator can be contacted at all times. During any period when a lane closure is in place, the Traffic Coordinator will arrange for personnel to be present on the project at all times to inspect the traffic control, maintain the signing and devices, and relocate portable changeable message boards as queue lengths change. The personnel will have access on the project to a radio or telephone to be used in case of emergencies or accidents. The Project Traffic Coordinator will be responsible for ensuring One Lane Road and Flagger signs are maintained at appropriate locations and distance from the work zone and removed when not needed.

COORDINATION OF WORK

The Contractor is advised that other projects may be in progress within or in the near vicinity of this project. The traffic control of those projects may affect this project and the traffic control of this project may affect those projects. The Contractor will coordinate the work on this project with the work of the other contractors. In case of conflict, the Engineer will determine the relative priority to give to work phasing on the various projects.

CONTRACTOR'S AND CONTRACTOR'S EMPLOYEES' VEHICLES

Do not allow the contractor's equipment or employees to park on private property or block access to any private or public entrances at any time. Damage to private property including but not limited to mailboxes, entrance pavement, entrance pipe, sod, or other items must be repaired immediately by the contractor and at the contractor's expense.

SCHOOL BUS AND EMERGENCY VEHICLES

Provide for immediate passage of all school buses and emergency vehicles.

EMERGENCY I-64 BYPASS ROUTE

In case of an emergency closing of I-64, the contractor will immediately perform any necessary activities to restore US 60 to two lanes and suspend operations on the project until such time that the use of US 60 as a detour route for I-64 is no longer needed.

WIDE LOADS

Wide load detours will not be established on this project. Provide for passage of wide loads up to 16 feet. Wide loads may use a portion of the shoulder to allow for passage. Temporarily shift traffic drums to allow for passage of wide loads when necessary.

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THE CONTROL OF ACCESS ON THIS PROJECT IS BY PERMIT

I. DESCRIPTION

Perform all work in accordance with the Department's Standard Specifications, Supplemental Specifications, Applicable Special Provisions, and Applicable Standard and Sepia Drawings, current editions, except as hereafter specified. Article references are to the Standard Specifications. Furnish all materials, labor, equipment, and incidentals for the following work:

(1) Maintain and Control Traffic; (2) Pipe and Drainage structure work; (3) Removal and Placement of Guardrail and Guardrail End treatments; (4) Erosion Repairs; (5) Asphalt Pavement and Milling and Texturing; (6) Pavement Markings; and (7) All other work specified as part of this contract.

II. MATERIALS

Except as specified in these notes or on the drawings, all materials will be according to the Standard Specifications and applicable Special Provisions and Special Notes. The Department will sample and test all materials according to Department's Sampling Manual and the Contractor will have the materials available for sampling a sufficient time in advance of the use of the materials to allow for the necessary time for testing, unless otherwise specified in these notes.

- A. Maintain and Control Traffic. See Traffic Control Plan.
- B. **Permanent Pavement Markings 6 inch.** Use 6" Durable Waterborne Markings for permanent paint on asphalt surfaces.
- C. **Asphalt Material for Tack Non-Tracking.** See Special Note for Non-Tracking Tack Coat.
- D. Channel Lining Class III. Channel Lining Class III will be limestone.
- E. **Guardrail.** Use 7' posts for all guardrail installations.
- F. **Asphalt Seal Aggregate.** Use limestone #8 or #9m crushed aggregate.

- G. **Seeding and Protection.** Use erosion control blanket for all seeding applications.
- H. **PVC Fold and Form Pipeliner.** See Special Note for PVC Fold-and Form Pipe Liner and see Special Note for Pipe Liner Acceptance Testing.

III. CONSTRUCTION METHODS

- A. **Maintain and Control Traffic.** See Traffic Control Plan.
- B. **Site Preparation.** Be responsible for all site preparation. Do not disturb existing signs. This item will include, but is not limited to, incidental excavation and backfilling; removal of all obstructions or any other items; disposal of materials; sweeping and removal of debris; shoulder preparation and restoration, temporary and permanent erosion and pollution control; and all incidentals. Site preparation will be only as approved or directed by the Engineer.
- C. **Milling and Texturing.** See Traffic Control Plan and see Special Note for Asphalt Milling and Texturing.
- D. **Disposal of Waste.** Dispose of all cuttings, debris, and other waste off the right-of-way at approved sites obtained by the Contractor. The contractor will be responsible for obtaining any necessary permits for this work. No separate payment will be made for obtaining the necessary permits, but will be incidental to the other items of the work. Disposal of existing cuttings and brush shall adhere to Section 202 of the current Standard Drawings.
- D. **Final Dressing, Clean Up, and Seeding and Protection.** After all work is completed, completely remove all debris from the job site. Perform Class A Final Dressing on all disturbed areas. Sow disturbed earthen areas with Seed Mixture No. I or Seed Mixture No. 3 for slopes greater than 3:1 as applicable and use erosion control blanket in lieu of "Seeding and Protection" in all seeding applications. Install erosion control blanket in all ditching areas not receiving aggregate channel lining..
- E. **Guardrail.** Remove guardrail where necessary to perform drainage structure work, French Drain installation, or other activities. Turn down and pin the blunt ends and protect the opening with drums on 20' spacing until new guardrail can be installed. All guardrail is scheduled for replacement on the project. Do not remove guardrail until immediately prior to beginning work that requires the guardrail to be removed. Continually pursue all items of work on the regularly scheduled basis until all paving is completed and guardrail is reinstalled. Once guardrail is removed or partially removed, the contractor shall not suspend operations for more than a normal weekend, or normal inclement weather days. Maintain drums on 20' spacing at all locations that guardrail has been removed.

Remove all existing guardrail components as directed by the engineer. Remove all existing guardrail concrete anchors. Refill all voids resulting from removal of guardrail including post holes and concrete anchors with DGA. Offset new guardrail post installation approximately 3' to avoid driving new posts in old post holes if possible. Payment for DGA used to refill voids will be allowed. Compact DGA in a method approved by the engineer.

Construct grading for end treatments in accordance with the Standard Drawings or as directed by the engineer. Use DGA for grading if required and if practical.

The contractor shall submit a plan for crossing each existing Reinforced Concrete Box Culvert. Guardrail may be attached to the top slab or parapet by an approved method or may be spanned by the elimination of no more than one post and double ply nesting of at least 2 sections of guardrail.

- F. **Pavement Markings.** Permanent striping will be in accordance with Section 713 for Waterborne Markings on asphalt pavement, and Section 112 for temporary striping, except that:
 - (1). Striping will be 6" in width.
 - (2). Permanent striping or temporary striping will be in place before a lane is opened to traffic.
 - (3). Temporary edgelines will not be required.
- G. **On-Site Inspection.** In accordance with section 102.06, each Contractor submitting a bid for this work will make a thorough inspection of the site prior to submitting a bid and will thoroughly familiarize himself with existing conditions so that the work can be expeditiously performed after a contract is awarded. Submission of a bid will be considered evidence of this inspection having been made. Any claims resulting from site conditions will not be honored by the Department.
- H. Caution: Information shown on the drawings and in this proposal and the types and quantities of work listed are not to be taken as an accurate or complete evaluation of the material and conditions to be encountered during construction. The bidder must draw his own conclusions as to the conditions encountered. The Department does not give any guarantee as to the accuracy of the data and no claim will be considered for additional compensation if the conditions encountered are not in accordance with the information above.
- I. **Utility Clearance.** It is not anticipated that utility facilities will need to be relocated and/or adjusted; however, in the event that it is discovered that the work does require that utilities be relocated and/or adjusted, the utility companies will work concurrently with the Contractor while relocating their facilities. **Note:** An existing water main is within the excavation limits of the stream bank erosion repair location at mile point 31.7 (see Stream Bank Stabilization detail). The

contractor shall be required to excavate around the existing watermain to the limits shown in the detail. Some hand excavation may be required. A method for construction around the waterline and protection of the waterline is prescribed in the detail. Contact the utility owner 2 weeks prior to beginning work in this area. Any deviation to the prescribed methods in this area must be approved in writing by the utility owner. Other utilities may be present, and the contractor will be responsible for obtaining all utility locations.

- J. **French Drains.** Construct in accordance with the dimensions and locations indicated on the French Drain Detail. Dispose of waste off the project except for soil materials that may be used on the project. Soil waste may be used to flatten steeper than typical shoulder slopes, used to regrade around headwall replacements, or used for other roadside improvements, guardrail end treatment pads, or as approved or directed by the engineer. The engineer may elect to add, eliminate or relocate proposed locations of drains.
- K. **Asphalt Pavement Repairs.** See Asphalt Pavement Repair Detail.
- L. **Clean Culvert.** Remove all silt and debris to the culvert floor including all debris on culvert aprons and within the inlet and outlet ditches or stream to the right of way line. Conduct dewatering operations if necessary and in accordance with the specifications.
- **M.** Culvert Pipe. Saw cut the existing pavement at a depth to extend to the bottom of the existing pavement.
- N. **PVC Fold and Form Pipeliner.** See Special Note for PVC Fold-and Form Pipe Liner and see Special Note for Pipe Liner Acceptance Testing.
- O. **DGA Base.** Prepare shoulders for application of DGA Base at locations designated for overlay by the engineer. Conduct shoulder preparation operations at times that shoulders are dry with no standing water and when moisture content are conducive to grading and shaping. Prior to application of DGA Base on the shoulders, perform grading to remove potholes, ruts, ridges and sod if present. Flat roll the reshaped shoulder with a steel drum roller prior to application of DGA Base and compact the DGA Base prior to application of the Asphalt Seal Coat. Extend the DGA Base to the shoulder break and to a tie down point down the slope in preparation for guardrail installation. The engineer will determine locations of shoulders to receive the DGA Base overlay and reshaping for guardrail. Areas with little or no shoulder traffic and well graded with established sod will not receive DGA Base overlay. Shoulder preparation will be considered to be a "Site Preparation" item with no direct measurement or payment.
- P. **Asphalt Seal Coat.** Apply Asphalt Seal Coat only to areas of shoulders receiving DGA Base.

IV. METHOD OF MEASUREMENT

- A. **Maintain and Control Traffic.** See Traffic Control Plan. Only the bid items listed will be measured for payment. No measurement or payment for striping removal will be made and will be considered incidental to "Maintain and Control Traffic".
- B. **Site Preparation.** Other than the bid items listed, site preparation will not be measured for payment, but will be incidental to the other items of work.
- C. **Clearing and Grubbing.** No direct measurement will be made for Clearing and Grubbing and any cleaning, clearing, or removal of brush or sod will be considered to be a Site Preparation activity.
- D. **Erosion Control.** Erosion control items will be measured and paid in accordance with the Standard Specifications for Road and Bridge Construction. No direct measurement for seeding in locations that erosion control blanket is used will be made as the seeding is incidental to the erosion control blanket in accordance with the specifications.
- E. Roadway Excavation, Embankment in Place, or Borrow Excavation. No direct measurement will be made for Roadway Excavation, Embankment in Place, or Borrow Excavation. All incidental excavation, embankment, or regrading of slopes required by small drainage structure work, or other items of work will be considered incidental to the individual item requiring the work.
- F. **French Drains.** French drains will be measured by the linear foot acceptably installed, measured from the edge of mainline pavement to the location of the bottom of trench at the point the trench daylights onto the shoulder.
- G. **Asphalt Pavement Repairs.** See Asphalt Pavement Repair Detail.
- H. **Ditching and Shouldering.** Plan quantity of Ditching and Shouldering will be measured for payment upon successful completion of all items of work required.
- I. **Clean Culvert.** The item Clean Culvert will be measured by the individual culvert that debris is removed from the culvert, aprons and inlet/outlet ditches and will be full compensation for all work required including access to the site, dewatering, removal and disposal of sediment and debris.
- J. **PVC Fold and Form Pipeliner.** See Special Note for PVC Fold-and Form Pipe Liner and see Special Note for Pipe Liner Acceptance Testing.

V. BASIS OF PAYMENT

No direct payment will be made other than for the bid items listed. All other items required to complete the construction will be incidental to the bid items listed. Existing signs damaged by the Contractor will be replaced by the Contractor at his expense. Payment will be made in accordance with the KYTC Standard Specifications, current edition in conjuncture with supplemental specifications and current Standard Drawings unless otherwise specified herein.

A. **Maintain and Control Traffic.** See Traffic Control Plan.

If the contractor chooses to obtain approval for changes to the Traffic Control Plan, any additional costs for materials, labor, or equipment necessary to implement the change will be at the contractor's expense. No payment will be considered for Temporary Concrete Barriers, Temporary Signals, or other items except the items set up in the original contract.

- B. **Site Preparation.** Other than the bid items listed, no direct payment will be allowed for site preparation, but will be incidental to the other items of work.
- C. Lane Closures. Contrary to Section 112, lane closures will not be measured for payment but will be incidental to the bid item "Maintain and Control Traffic". Portable message boards and signs shall be paid for one time regardless of how many times they are moved. No payment will be made for temporary signals if the contractor chooses to use temporary signals for lane closures.
- D. **Ditching and Shouldering.** In accordance with Section 209 of the Standard Specifications, the bid item "Ditching and shouldering" includes ditching on both sides of the roadway for the entire length of the project. Cleaning of all drainage structures, including perforated pipe headwalls and pipe structures 36 inches in diameter or less is also included in this bid item. Plan quantity of Ditching and Shouldering will be measured for payment upon successful completion of all items of work required. **ATTENTION:** Significant amounts of landslide debris exist in ditches at some locations on the project. Removal of the slide debris from the ditches will be considered incidental to Ditching and Shouldering.
- E. **Milling and Texturing.** Milling and texturing will be paid for per section 408.05 of the 2019 Standard Specifications. No direct payment will be made for transportation of milled materials to the prescribed maintenance facility.
- F. **Asphalt Material for Tack Non-Tracking.** See Special Note for Non-Tracking Tack Coat.
- G. **French Drains.** The measured linear feet of "French Drain" will include all labor, equipment and materials including trench excavation, geotextile fabric, crushed stone backfill, and all regrading.

- H. **Barricade Type III** Contrary to the specifications, no direct measurement or payment will be made for Barricade Type III.
- I. **Fabric-Geotextile Class 2.** No direct measurement or payment will be made for Fabric-Geotextile Class 2 used in conjunction with the placement of channel lining in channel lined ditches, French Drain Backfill, or other incidental applications. Only applications of Fabric-Geotextile Class 2 with established contract quantities will be measured and paid.
- J. **Guardrail.** No additional measurement or payment will be made for methods of crossing existing Reinforced Concrete Box Culverts.
- K. Saw Cut. Saw cut of existing pavement for pipe replacement will be considered incidental to pipe installation.
- L. **PVC Fold and Form Pipeliner.** See Special Note for PVC Fold-and Form Pipe Liner and see Special Note for Pipe Liner Acceptance Testing.

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This project is intended to improve drainage, replace guardrail and provide a thin overlay to provide a new mainline riding surface through the length of the project.

- 1. The dimensions shown on the typical section for pavement and shoulder widths and thickness are nominal or typical dimensions. The actual dimensions to be constructed may be varied to fit existing conditions as directed or approved by the Engineer. It is not intended that existing pavement or shoulders be widened unless otherwise specified in the Proposal.
- 2. The contractor is to be advised of the locations of overhead utility wires on the project. The following locations are approximate:

MP 30.081	MP 30.946	MP 32.547
MP 30.103 APPR. RT	MP 30.996	MP 32.560
MP 30.121	MP 31.060	MP 32.709
MP 30.224	MP 31.085	MP 32.873
MP 30.335	MP 31.147	MP 32.983
MP 30.354 APPR. LT	MP 31.365	MP 33.011
MP 30.373	MP 31.368	MP 33.034
MP 30.403 APPR. RT	MP 31.428	MP 33.075
MP 30.404	MP 31.435	MP 33.205
MP 30.411	MP 31.690	MP 33.238
MP 30.479	MP 31.766	MP 33.336
MP 30.507	MP 31.853	MP 33.803 APPR. RT
MP 30.512	MP 31.898	MP 33.921
MP 30.527	MP 31.903	MP 34.200
MP 30.558 APPR. LT	MP 31.995	MP 34.344
MP 30.569	MP 32.050	MP 34.370
MP 30.762	MP 32.119	MP 34.741
MP 30.773	MP 32.161	
MP 30.781	MP 32.198	
MP 30.785	MP 32.349	
MP 30.846	MP 32.426 APPR. RT	

CAUTION: Other overhead utility locations may exist. These and all other utilities should be avoided on this project. If any utility is impacted, it will be the contractor's responsibility to contact the affected utility owner and cover any costs associated with the impact.

3. The contractor is advised that the planned locations of work established by milepoints are referenced from the Kentucky Transportation Cabinet's Official Route Log. The existing reference markers may not correspond to the established work locations.

- 4. All guardrail is to be replaced on the project. Only remove the amount of guardrail necessary to access the work zone when performing work on drainage structures, French Drain installation, etc. requiring guardrail removal for access. The contractor will place traffic drums on 20' spacing in the areas and pin down exposed blunt ends until such time that guardrail is re-established. Either a lane closure or shoulder closure shall be in place at any time that a section of guardrail is not in place. Do not remove the remainder of the guardrail until immediately prior to the commencement of the shoulder grading and DGA Base overlay operations. Maintain a shoulder closure with drums on a 20' spacing until the paving operations are completed and guardrail is re-established.
- 5. The Contractor shall deliver existing, salvaged guardrail system materials to the Central Sign Shop and Recycle center at 1224 Wilkinson Blvd in Frankfort, KY. Contact Section Supervisor at (502) 564-8187 to schedule the delivery of material. Deliver the material between the hours of 8:00AM and 3:30PM, Monday through Friday. There is a Guardrail Delivery Verification Sheet which must be completed and signed by the Contractor, Engineer, and a representative of the Central Sign Shop and Recycle Center. A copy of this sheet is included elsewhere in the proposal.
- 6. The speed limit on the project will be reduced to 45 mph while lane closures are in place. Any time work is suspended the speed limit will revert back to 55 mph.
- 7. The contractor is to take care not to damage any existing roadway signs. Any roadway signs that are damaged during construction are to be replaced at the contractor's expense in accordance with section 105.08 of the standard specifications. Signs that may be in conflict with proposed items of work are to be removed and stored in dry environment until they can be reinstalled. The contractor will reinstall each sign at the approximate location of removal or as directed by the engineer. Removal, storage and reinstallation of signs will be considered incidental to Maintain and Control Traffic.
- 8. The cleaning of existing pipe culvert inlets and outlets 36 inches or less in diameter are incidental to the bid item for "Ditching and Shouldering" in accordance with Section 209 of the 2019 Edition of the Standard Specifications for Road and Bridge Construction. This includes the cleaning of existing perforated pipe headwalls if present.
- 9. Roadway Excavation, Borrow Excavation, or Embankment in place required to regrade slopes or grade around new headwalls will not be measured for payment. Any embankment and backfill for the culvert pipe installation or small drainage structure installation is incidental to the respective bid item installed. Minor regrading of slopes to improve the clear zone will be considered incidental to Ditching and Shouldering.

- 10. A quantity of remove pipe has been estimated for removal and replacement of small drainage structures. Remove only the amount needed for the repair unless otherwise specified. Replace pipe with the same materials as the existing pipe to be connected. Use metal bands for corrugated metal pipe tie-ins and remove concrete pipe to the nearest bell or spigot and bell up the new section if possible. If pipe cannot be connected by belling or by pipe bands, the contractor may seal the connection area and place a concrete collar a minimum 12" thickness in any direction at his own expense. Verify size, length, and type of pipe prior to ordering precast small drainage structures and replacement pipe.
- 11. Coordinate activities of any adjacent contracts with this contract. Other projects may be in progress while this project is active. The engineer will determine the relative priority of activities on projects in case of conflict.
- 12. Culvert pipe trenches across existing roadways are to be backfilled with flowable fill and plated and traffic restored as soon as practical. After the flowable fill has achieved adequate set, cap the pipe trench with asphalt base. Payment for the asphalt base for trench cap will be made as "CL2 ASPH BASE 1.00D PG64-22". No direct payment will be made for flowable fill or other work required for pipe backfill and will be considered incidental to the individual item of pipe.
- 13. Entrance pipe trenches across gravel entrances will receive a cap 6" thick cap of DGA Base. Additional DGA Base may be spread over the entrance within the existing right of way at the engineer's discretion.
- 14. A quantity of channel lining has been established for lining of inlet and outlet ditches of proposed headwalls and at eroded areas. Quantities of channel lining may be increased, decreased or eliminated at each proposed location and additional locations of channel lining installation may be identified and required by the engineer. Place Geotextile Fabric Class 2 under all channel lining applications. Geotextile Fabric Class 2 used for channel lining underlayment will be considered incidental to Channel Lining Class 3.
- 15. A detail has been provided for repairs to the slopes that have been eroded by the adjacent stream at MP 31.7.
- 16. A detail has been provided for repairs to failing culvert outlet wings at MP 34.140. Excavated materials may be used to backfill the repaired portion of the structure, or the contractor may use crushed stone as backfill at his own expense. A quantity of Cl 3 Channel Lining has been established to armor the slopes in the vicinity of the new culvert wings.

17. Asphalt milling and inlay limits on all public road approaches are to be extended to the back of radius minimum and may be extended to a prior paving joint or other tie down point as directed by the engineer.

Most private entrances are to be milled and inlaid to the edge of paved shoulder or to the pavement joint resulting from prior resurfacing projects. Some entrances were overlaid to approximately 2 feet behind the paved shoulder line. These entrances are to be milled and inlaid to this existing joint behind the paved shoulder line. Entrance asphalt paving limits may be extended beyond these limits at the discretion of the engineer if site conditions warrant the extension to provide an improved tie down point. Select entrances are to be paved to the back of paved shoulder or as detailed in the typical sections. Overlay stone entrances with DGA as needed and as directed in accordance with the typical sections.

REFERENCES

- 1. Kentucky Transportation Cabinet, Department of Highways, Standard Specifications for Road and Bridge Construction, current editions.
- 2. FHWA Manual on Uniform Traffic Control Devices 2009 Edition.
- 3. Kentucky Department of Highways Standard Drawings, Current Edition, as applicable:

DDI 001 12	TVDICAL CUADDDAH DIGTALLATIONS
RBI-001-12	TYPICAL GUARDRAIL INSTALLATIONS
RBI-002-07	TYPICAL GUARDRAIL INSTALLATIONS
RBI-004-06	INSTALLATION OF GUARDRAIL END TREATMENT TYPE 1
RBR-01-13	STEEL BEAM GUARDRAIL ("W" BEAM)
RBR-005-11	GUARDRAIL COMPONENTS
RBR-010-06	GUARDRAIL TERMINAL SECTIONS
RBR-015-06	STEEL GUARDRAIL POSTS
RBR-018	GUARDRAIL SYSTEM TRANSITION
RBR-020-07	GUARDRAIL END TREATMENT TYPE 1
RBR-030-05	GUARDRAIL END TREATMENT TYPE 3
RBR-032	GUARDRAIL END TREATMENT TYPE 3 ALTERNATE ANCHOR
RBR-035-12	GUARDRAIL END TREATMENT TYPE 4A
RBR-055-01	DELINEATORS FOR GUARDRAIL
RDB-100-05	SLOPED BOX OUTLET TYPE 1
RDB-101-05	GRATES FOR SLOPED BOX OUTLET TYPE 1
RDD-040-05	CHANNEL LINING CLASS II AND III
RDH-020-03	SLOPED & FLARED HEADWALLS FOR 12" TO 27" PIPE
RDH-110-02	PIPE CULVERT HEADWALLS 0 DEGREE SKEW
RDH-210-03	DIMENSIONS & QUANTITIES 30" – 108" HEADWALLS CIRCULAR PIPE
	0 DEGREE SKEW
RDI-001-010	CULVERT, ENTRANCE AND STORM SEWER PIPE TYPES AND
	COVER HEIGHTS
RDI-002-05	CULVERT, ENTRANCE AND STORM SEWER PIPE TYPES AND
	COVER HEIGHTS
RDI-020-10	PIPE BEDDING FOR CULVERTS ENTRANCE AND STORM SEWER PIPE
RDI-021-01	PIPE BEDDING FOR CULVERTS, ENTRANCE, AND STORM SEWER
	REINFORCED CONCRETE PIPE
RDI-025-06	PIPE BEDDING TRENCH CONDITION
RDI-026-01	PIPE BEDDING TRENCH CONDITION REINFORCED CONC. PIPE
RDI-035-02	COATING, LININGS AND PAVINGS FOR NON-STRUCTURAL PLATE
	PIPE
RDI-040-01	EROSION CONTROL BLANKET SLOPE INSTALLATION
RDI-041-01	EROSION CONTROL BLANKET CHANNEL INSTALLATION
RDX-160-06	SECURITY DEVICES FOR FRAMES GRATES AND LIDS
RDX-210-03	TEMPORARY SILT FENCE
RDX-220-05	SILT TRAP - TYPE A
RDX-225-01	SILT TRAP - TYPE B
RDX-230-01	SILT TRAP - TYPE C
RGS-001-07	CURVE WIDENING AND SUPERELEVATION TRANSITIONS
RGX-001-06	MISCELLANEOUS STANDARDS
RPM-110-07	APPROACHES, ENTRANCES AND MAIL BOX TURNOUT
TPR-100	CENTERLINE RUMBLE STRIP PLACEMENT DETAILS

TPR-110	CENTERLINE RUMBLE STRIPS 6 INCH STRIPING
TPR-115	SHOULDER & EDGELINE RUMBLE STRIP PLACEMENT DETAILS
TPR-125	SHOULDER RUMBLE STRIP DETAILS TWO LANE ROADWAYS
TTC-100-05	LANE CLOSURE TWO LANE HIGHWAY
TTC-135-03	SHOULDER CLOSURE
TTD-125-03	PAVEMENT CONDITION WARNING SIGNS
TTS-100-02	MOBILE OPERATION FOR PAINT STRIPING CASE I
TTS-105-02	MOBILE OPERATION FOR PAINT STRIPING CASE II

4. Kentucky Transportation Cabinet, Department of Highways, Standard Specifications for Road and Bridge Construction, current editions, Appendix B - Supplemental Specifications, as applicable:

Special Note	Typical Section Dimensions attached
Special Note	Before You Dig attached
Special Note	Fixed Completion Date and Liquidated Damages attached
Special Note	Asphalt Milling and Texturing attached
Special Note	Special Note for Non-Tracking Tack Coat attached
Special Note	Special Note for Experimental KYCT and Hamburg Testing attached
Special Note	Portable Changeable Message Signs attached
General Note	Asphalt Pavement Ride Quality (Category A) attached
General Note	Compaction of Asphalt Mixtures (Option A) attached
Special Note	Special Note for Paver Mounted Temperature Profiles attached

Special Note Guardrail Delivery Verification Sheet attached

Special Note Special Note for PVC Fold-and-Form Pipe Liner *attached* Special Note Special Note for Pipe Liner Acceptance Testing *attached*

SPECIAL NOTE FOR TYPICAL SECTION DIMENSIONS US 60 CARTER COUNTY ITEM NO. 9-22318

The dimensions shown on the typical sections for pavement and shoulder widths are nominal or typical dimensions. The actual dimensions to be constructed may be varied to fit existing conditions as directed or approved by the Engineer. It is not intended that existing pavement or shoulders be widened or narrowed **EXCEPT** where specified elsewhere in the Proposal.

SPECIAL NOTE FOR BEFORE YOU DIG US 60 CARTER COUNTY ITEM NO. 9-22318

The contractor is instructed to call 1-800-752-6007 to reach KY 811, the one-call system for information on the location of existing underground utilities. The call is to be placed 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 members of the KY 811 one-call Before-U-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 Court Clerk to determine what utility companies have facilities in the area.

SPECIAL NOTE FOR ASPHALT MILLING AND TEXTURING US 60 CARTER COUNTY ITEM NO. 9-22318

Begin paving operations within <u>48 hours</u> of 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 this material to the State Maintenance facility in Carter County.

NOTICE TO CONTRACTOR: The Department considers transfer of millings to the state maintenance facility to be part of the construction project and will be considered incidental to the item "Asphalt Pave Milling & Texturing".

There are no known existing pavement markers on the project, however, if existing pavement markers of any type are encountered within the project limits, removal of the existing markers will be considered incidental to "Asphalt Pave Milling and Texturing" regardless of whether they are in the milling limits or not.

SPECIAL NOTE FOR PVC FOLD-AND-FORM PIPE LINER

I. GENERAL

A. SUMMARY

- 1. Section Includes: Definition of the approved methods and materials to rehabilitate gravity pipelines by the insertion of a continuously extruded, folded, PVC Fold-and-Form Pipe Liner into a conduit (host pipe), and the "blow-molding" (thermoforming) of the pipe liner to conform to the shape of the existing pipe. The pipe liner shall:
 - a) Extend continuously from one access point to the next access point with no joints.
 - b) Provide a tightly conforming fit against the inner wall of the host pipe.
 - c) Definitions:
 - (1) PVC Fold-and-Form Pipe Liner: A continuously extruded (joint-less), polyvinyl chloride (PVC) Pipe Liner that is shaped into a reduced form to facilitate insertion into existing pipelines or conduits. The Pipe Liner shall return to its extruded, round memory upon application of heat and pressure and form tightly against the host pipe by "blow molding" (thermoforming) techniques.
 - (2) Host Pipe: An existing gravity pipeline or conduit to be internally rehabilitated by installation of the PVC Fold-and-Form Pipe Liner.

B. REFERENCES

- 1. Codes and standards referred to in this Special Note are:
 - a) ASTM D 256: Standard Test Methods for Determining the Pendulum Impact Resistance of Notched Specimens of Plastics.
 - b) ASTM D 638: Standard Test Method for Tensile Properties of Plastics
 - c) ASTM D 790: Standard Test Method for Flexural Properties of Unreinforced and Reinforced Plastics
 - d) ASTM D 1784: Standard Specification for Rigid Polyvinyl Chloride (PVC) Compounds and Chlorinated Polyvinyl Chloride (CPVC) Compounds
 - e) ASTM D 2122: Standard Test Method for Determining Dimensions of Thermoplastic Pipe and Fittings
 - f) ASTM D 2152: Standard Test Method for Extrusion Quality using Acetone Immersion
 - g) ASTM D 2444: Standard Test Method for Impact Strength
 - h) ASTM F 1057: Standard Test Method for Extrusion Quality using Heat Reversion
 - i) ASTM F 1504: Standard Specification for Folded/Formed Poly (Vinyl Chloride) Pipe for Existing Sewer and Conduit rehabilitation

C. PIPE DESIGN AND DIMENSION

1. Submittals: The Contractor shall furnish engineering data covering materials and installation procedures.

- 2. Unless otherwise specified, the Contractor shall determine the minimum and maximum length of liner to effectively span the distance from the inlet to the outlet of the respective pipelines.
- 3. The pipe liner shall have a nominal outside diameter and minimum wall thickness based upon project parameters and the condition of the host pipe.

D. SAFETY

- 1. The CONTRACTOR shall conform to all safety requirements of pertinent regulatory agencies, and shall secure the site for the working conditions in compliance with the same. The CONTRACTOR shall erect signs and devices as are necessary for the safety of the work site.
- 2. The CONTRACTOR shall also provide all of the WORK in accordance with applicable OSHA standards. Emphasis shall be placed upon the requirements for entering confined spaces and working with steam.

II. PRODUCTS

A. MATERIAL SPECIFICATIONS:

1. The PVC Fold-and-Form Pipe Liner will be manufactured from virgin PVC Fold-and-Form Pipe Liner compound, containing no fillers, and meet or exceed the following minimum physical properties:

a) COMBUSTIBILITY: Self-Extinguishing
 b) FLEXURAL MODULUS: ASTM D 790 280,000 PSI @73F
 c) FLEXURAL STRENGTH: ASTM D 790 5,000 PSI @73F
 d) IZOD IMPACT: ASTM D 256 1.5 FT-LB/IN

e) CHEMICAL RESISTANCE: suitable under general sanitary sewer conditions

- 2. CHARACTERISTICS: The PVC Fold-and-Form Pipe Liner shall be designed to meet the following installation performance requirements:
 - a) The Pipe Liner shall be capable of expanding a full pipe size larger than the nominal diameter (ex: 8" to 10") without splitting, or rupturing with the understanding that the pipe liner dimension ratio will increase when so expanded.
 - b) After being expanded by "blow-molding", the installed Pipe Liner will match the configuration of the host pipe.
 - c) The Pipe Liner shall be capable of negotiating pipe line bends in the host pipe without splitting, rupturing, or wrinkling of the pipe liner material.
 - d) The pipe liner shall be dimensionally stable after cool-down.
 - e) Processing of the pipe liner shall cause no degradation of the pipe liner physical properties.
- 3. MARKINGS: The pipe liner shall be marked at maximum five (5) foot intervals indicating ASTM D 1784 cell classification, manufacturer, and size (diameter and SDR). Each production lot will be uniquely coded.

4. DIMENSIONS:

- a) The Pipe Liner outside diameter will be manufactured substantially smaller than the inside diameter of the host pipe. The pipe liner shall be manufactured with sufficient excess wall thickness to allow the pipe liner to meet or exceed the DR requirements after being expanded by "blow-molding" within the host pipe.
- b) Unless otherwise specified, the Standard Dimension Ration (SDR) of 4" to 15" diameter Pipe Liner will be SDR 35. 18" to 36" Pipe Liner will be specified by wall thickness. The Pipe Liner will be continuously extruded (no joints) at the factory to the minimum length required to effectively span the distance between access points, in accordance with actual distances which shall be field verified by the Contractor prior to manufacturing.
- B. MATERIAL TESTING: Each production lot of Pipe Liner will be inspected and tested at the time of manufacture for defects is accordance with ASTM D 2444, and ASTM D 2152. All pipe liners shall conform to the specified dimensions. Material design properties shall be confirmed in accordance with ASTM D 790.

III. EXECUTION

A. HOST PIPE PREPARATION

- 1. The existing pipeline shall be cleaned of any obstructions and televised using CCTV immediately prior to installation of the pipe liner. The host pipe condition shall be acceptable to the ENGINEER as appropriate for lining prior to the insertion of the pipe Liner.
- 2. Prior to beginning the insertion of the pipe liner, the CONTRACTOR shall confirm that the host pipe is adequately cleaned.

B. INSTALLATION PROCEDURES:

1. The pipe liner manufacturer's installation instructions and procedures shall be followed during installation.

2. Point Repairs

a) Point repairs and obstruction removals shall be completed, as necessary, in order to enable lining.

3. Liner Insertion

- a) The entrance to the host pipe shall be covered so as to provide a smooth surface to prevent damage to the Pipe Liner.
- b) The Pipe Liner shall be positioned to enable it to naturally curve into the access point and the host pipe.
- c) The insertion end of the Pipe Liner shall be sealed to inhibit fluids and solids form entering the lumen of the Pipe Liner.
- d) Insert the Pipe Liner into the entry access point. Slowly feed the Pipe Liner from the supply reel, while simultaneously pulling the Pipe Liner at the exit access point, to minimize tension on the Pipe Liner. Maintain two-way communication between personnel at entry and exit access points to coordinate the rate of Pipe Liner supply and pulling operations.
- e) Use a power winch and a steel cable connected to the pulling head as recommended by the manufacturer to advance the Pipe Liner.

- 4. Pipe Liner Processing and "Blow-Molding":
 - a) Process and "blow-mold" the PVC Fold and-Form Pipe Liner in accordance with the manufacturer's instructions for heating and expanding the Pipe Liner. Upon completion of processing and "blow-molding", the Pipe Liner shall fit tightly against the inside wall of the host pipe and be locked into the joints of the host pipe, if possible.
 - b) Temperature and pressure gauges shall be used at the insertion and termination access points to monitor internal conditions during Pipe Liner processing and "blow-molding".
 - c) Introduce pressurized steam to heat and relax the Pipe Liner in strict accordance with the recommendations of the Pipe Liner manufacturer.
 - d) Continue the application of steam while introducing compressed air to increase internal pressure on the Pipe Liner as recommended by the manufacturer. DO NOT ALLOW PRESSURE TO EXCEED 12 PSI, AS DAMAGE MAY OCCUR TO HOST PIPE.
 - e) Discontinue the use of steam while continuing the use of compressed air to maintain the internal pressure. Allow the Pipe Liner to cool below 100 F before releasing pressure.
- 5. Liner Termination:
 - a) During the pulling in place and "blow-molding" process, the PVC liner shall form a bell shape at each end effectively locking the liner in place.

IV. PAYMENT

- A. Payment for PVC Fold and Form Pipe Liners will be made per linear foot as
 - 1. PVC FOLD AND FORM PIPE LINER 12 IN ITEM 24860EC
 - 2. PVC FOLD AND FORM PIPE LINER 15 IN ITEM 24861EC
 - 3. PVC FOLD AND FORM PIPE LINER 18 IN ITEM 24862EC
 - 4. PVC FOLD AND FORM PIPE LINER 24 IN ITEM 24863EC
 - 5. PVC FOLD AND FORM PIPE LINER 30 IN ITEM 24864EC
 - 6. PVC FOLD AND FORM PIPE LINER 36 IN ITEM 24865EC
- B. Payment will be considered full compensation for all work, equipment, and incidentals necessary to install the pipe liners in accordance with this note.

SPECIAL NOTE FOR PIPE LINER ACCEPTANCE TESTING

PART 1 -- GENERAL

1.01 SCOPE OF WORK

- A. Furnish all necessary labor, materials, equipment, services and incidentals required to visually inspect by means of closed-circuit television (CCTV) designated pipe sections including, but not limited to, recording and playback equipment, materials and supplies.
- B. The inspection shall be performed on one section (i.e. curb box inlet to curb box inlet) at a time. The section being inspected shall be suitably isolated from the remainder of the system.
- C. Video recordings shall be made of the television inspections and copies of both the recordings and printed inspection logs shall be supplied to the Engineer.
- D. Contractor may have to perform point repairs, remove obstructions or remove protruding service connections to complete pre-rehabilitation TV inspection.

PART 2 -- PRODUCTS

2.01 EQUIPMENT

A. The television camera used for inspection shall be one specifically designed and constructed for such inspection. Lighting for the camera shall be suitable to allow a clear picture for the entire periphery of the pipe. The camera shall be operative in 100 percent humidity conditions. The camera, television monitor and other components of the video system shall be capable of producing a minimum 500-line resolution color video picture. Picture quality and definition shall be to the satisfaction of the Engineer and if unsatisfactory, inspection shall be performed again with the appropriate changes made as designated by the Engineer at no additional cost to the Engineer. The television inspection equipment shall have an accurate footage counter that shall display on the monitor, the exact distance of the camera from the centerline of the starting manhole.

PART 3 -- EXECUTION

3.01 PROCEDURE

- A. The camera shall be moved through the pipe in either direction at a uniform rate, stopping when necessary to ensure proper documentation of the pipe's condition but in no case will the television camera be pulled at a speed greater than 30 fpm. Manual winches, power winches, TV cable and powered rewinds or other devices that do not obstruct the camera view or interfere with proper documentation of the pipe conditions shall be used to move the camera through the line. If, during the inspection operation, the television camera will not pass through the entire section, the equipment shall be removed and repositioned in a manner so that the inspection can be performed from the opposite opening. All set-up costs for the inspection shall be included in the unit prices bid. If the camera fails to pass through the entire section, the Contractor shall perform point repairs as required or approved by the Engineer. Point repairs will be paid as each at the bid price for "PIPE REPAIR". The Contractor shall re-clean or further remove blockage after the point repairs at no additional cost to the Engineer.
- B. Whenever non-remote powered and controlled winches are used to pull the television camera

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through the line, telephones, radios, or other suitable means of communication shall be set up between the two openings of the line being inspected to ensure that good communications exist between members of the crew.

The camera height shall be adjusted such that the camera lens is always centered in the pipe being televised. Flow shall be controlled such that depth of flow shall not exceed 20% of pipe's diameter.

Lighting system shall be adequate for quality pictures.

3.02 RECORDING OF FIELD OBSERVATIONS

A. Television Inspection logs

Printed location records shall be kept which shall clearly show the location. In addition, other data of significance including joints, unusual conditions, roots, collapsed sections, or presence of scale and corrosion that the camera failed to pass through and reasons for the failure and other discernible features shall be recorded and annotated using the PACP system and a copy of such records shall be supplied to the Engineer.

B. Digital Recordings

- 1. The purpose of digital recording shall be to supply a visual and audio record of areas of interests of the pipe segments that may be replayed by the Engineer. Digital recording playback shall be at the same speed that it was recorded and shall be made in color. The Contractor shall be required to have all digital media and necessary playback equipment readily accessible for review by the Engineer during the project.
- 2. The Contractor shall perform CCTV inspection of each newly installed or rehabilitated pipe segment after testing and before re-introducing any flow into the pipe. Each test shall be witnessed by the Engineer.
- 3. The Contractor shall record each CCTV inspection on a DVD and submit such recordings to the Engineer as a prerequisite for Partial Utilization/Substantial Completion.
- 4. CCTV inspections shall be performed by a PACP certified and trained person.
- 5. Inspections shall include narration that notes the location and type of defects, if any.
- 6. At the completion of the project, the Contractor shall furnish all of the original digital recordings to the Engineer. Each disc shall be labeled as to its contents. Labels shall include the disc number, date televised, sewer segment reach designation, street location, and structure numbers on the disc. The Contractor shall keep a copy of the discs for 30 days after the final payment for the project, at which time the discs may be erased at the Contractor's option.

PART 4 - PAYMENT

Payment for both the video inspection prior to and after the Pipe Liners have been installed will be made as one lump sum payment as PIPE LINER ACCEPTANCE TESTING. Payment for PIPE LINER ACCEPTANCE TESTING will be considered full compensation for all work, equipment, and incidentals necessary to perform the video inspection in accordance with this note.

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Payment for pipe point repairs will be made as each at the bid price for PIPE REPAIR. Payment for PIPE REPAIR will be considered full compensation for all work, equipment, and incidentals necessary to make point repairs as required and approved by the Engineer.

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SPECIAL NOTE FOR PAVER MOUNTED TEMPERATURE PROFILES

This Special Note will apply when indicated on the plans or in the proposal. Section references herein are to the Department's Standard Specifications for Road and Bridge Construction current edition.

- **1.0 DESCRIPTION.** Provide a paver mounted infrared temperature equipment to continually monitor the temperature of the asphalt mat immediately behind all paver(s) during the placement operations for all mainline pavements (including ramps for Interstates and Parkways) within the project limits. Provide thermal profiles that include material temperature and measurement locations.
- 2.0 MATERIALS AND EQUIPMENT. In addition to the equipment specified in Subsection 403.02 Utilize a thermal equipment supplier that can provide a qualified representative for on-site technical assistance during the initial setup, pre-construction verification, and data management and processing as needed during the Project to maintain equipment within specifications and requirements.

Provide operator settings, user manuals, required viewing/export software for analysis. Ensure the temperature equipment will meet the following:

- (A) A device with one or more infrared sensors that is capable of measuring in at least 1 foot intervals across the paving width, with a minimum width of 12 feet, or extending to the recording limits of the equipment, whichever is greater. A **Maximum of two (2)** brackets are allowed in the influence area under the sensors. A temperature profile must be made on at least 1 foot intervals longitudinally down the road:
- (B) Infrared sensor(s):
 - (1) Measuring from 32°F to 400°F with an accuracy of \pm 2.0% of the sensor reading.
- (C) Ability to measure the following:
- (1) The placement distance using a Global Positioning System (GPS) or a Distance Measuring Instrument (DMI) and a Global Positioning System (GPS).
 - (2) Stationing
- (D) GPS: Accuracy ± 4 feet in the X and Y Direction
- (E) Latest version of software to collect, display, retain and analyze the mat temperature readings during placement. The software must have the ability to create and analyze:
 - (1) Full collected width of the thermal profiles,
 - (2) Paver speed and
 - (3) Paver stops and duration for the entire Project.
- (F) Ability to export data automatically to a remote data server ("the cloud").

At the preconstruction meeting, provide the Cabinet with rights to allow for web access to the data file location. Access to the data is not to be hindered in any way. The Contractor will provide the Cabinet with any vendor specific software, user id, passwords, etc. needed to access the data through this service, cost of this access is incidental to the thermal profile bid item. The Cabinet is to have access to all data as it is being collected. If a third party is used for collecting and distributing the data the Cabinet is to have the same access rights and time as the Contractor.

This web-based software must also provide the Department with the ability to download the raw files and software and to convert them into the correct format.

- (G) The thermal profile data files must provide the following data in a neat easy to read table format.
 - (1) Project information including Road Name and Number, PCN, Beginning and Ending MPs.
 - (2) IR Bar Manufacturer and Model number
 - (3) Number of Temperature Sensors (N)
 - (4) Spacing between sensors and height of sensors above the asphalt mat
 - (5) Total number of individual records taken each day (DATA BLOCK)

- (a) Date and Time reading taken
- (b) Latitude and Longitude
- (c) Distance paver has moved from last test location
- (d) Direction and speed of the paver
- (e) Surface temperature of each of the sensors
- 3.0 CONSTRUCTION. Provide the Engineer with all required documentation at the pre-construction conference.
 - (A) Install and operate equipment in accordance with the manufacturer's specifications.
 - (B) Verify that the temperature sensors are within \pm 2.0% using an independent temperature device on a material of known temperature. Collect and compare the GPS coordinates from the equipment with an independent measuring device.
 - (1) Ensure the independent survey grade GPS measurement device is calibrated to the correct coordinate system (using a control point), prior to using these coordinates to validate the equipment GPS.
 - (2) The comparison is considered acceptable if the coordinates are within 4 feet of each other in the X and Y direction.
 - (C) Collect thermal profiles on all Driving Lanes during the paving operation and transfer the data to the "cloud" network or if automatic data transmission is not available, transfer the data to the Engineer at the end of daily paving.
 - (D) Contact the Department immediately when System Failure occurs. Daily Percent Coverage will be considered zero when the repairs are not completed within two (2) working days of System Failure. The start of this two (2) working day period begins the next working day after System Failure.
 - (E) Evaluate thermal profile segments, every 150 feet, and summarize the segregation of temperature results. Results are to be labeled as Minimal 0°-25°F, Moderate 25.1°-50°F and Severe >50°. Severe readings over 3 consecutive segments or over 4 or more segments in a day warrant investigation on the cause of the differential temperature distribution.
- **4.0 MEASUREMENT.** The Department will measure the total area of the pavement lanes mapped by the infrared scanners. Full payment will be provided for all lanes with greater than 85% coverage. Partial payment will be made for all areas covered from 50% coverage to 85% coverage at the following rate Coverage area percentage X Total bid amount. And area with less than 50% coverage will not be measured for payment.
- **5.0 PAYMENT.** The Department will make payment for the completed and accepted quantities under the following:
 - 1. Payment is full compensation for all work associated with providing all required equipment, training, and documentation.
 - 2. Delays due to GPS satellite reception of signals or equipment breakdowns will not be considered justification for contract modifications or contract extensions.

<u>Code</u>	Pay Item	Pay Unit
24891EC	PAVE MOUNT INFRARED TEMP EQUIPMENT	SQFT

October 2021

SPECIAL NOTE FOR NON-TRACKING TACK COAT

- 1. DESCRIPTION AND USEAGE. This specification covers the requirements and practices for applying a non-tracking tack asphalt coating. Place this material on the existing pavement course, prior to placement of a new asphalt pavement layer. Use when expedited paving is necessary or when asphalt tracking would negatively impact the surrounding area. This material is not suitable for other uses. Ensure material can "break" within 15 minutes under conditions listed in 3.2.
- 2. MATERIALS, EQUIPMENT, AND PERSONNEL.
 - 2.1 Non-Tracking Tack. Provide material conforming to Subsection 2.1.1.
 - 2.1.1 Provide a tack conforming to the following material requirements:

Property	Specification	Test Procedure
Viscosity, SFS, 77 ° F	20 - 100	AASHTO T 72
Sieve, %	0.3 max.	AASHTO T 59
Asphalt Residue ¹ , %	50 min.	AASHTO T 59
Oil Distillate, %	1.0 max.	AASHTO T 59
Residue Penetration, 77 ° F	20 max.	AASHTO T 49
Original Dynamic Shear (G*/sin δ), 82 ° C	1.0 min.	AASHTO T 315
Softening Point, ° F	149 min.	AASHTO T 53
Solubility, %	97.5 min.	AASHTO T 44

¹ Bring sample to 212 °F over a 10-15 minute period. Maintain 212 °F for 15-20 minutes or until 30-40 mL of water has distilled. Continue distillation as specified in T59.

- 2.2. Equipment. Provide a distributor truck capable of heating, circulating, and spraying the tack between 170 °F and 180 °F. Do not exceed 180 °F. Circulate the material while heating. Provide the correct nozzles that is recommend by the producer to ensure proper coverage of tack is obtained. Ensure the bar can be raised to between 14" and 18" from the roadway.
- 2.3. Personnel. Ensure the tack supplier has provided training to the contractor on the installation procedures for this product. Make a technical representative from the supplier available at the request of the Engineer.

3. CONSTRUCTION.

3.1 Surface Preparation. Prior to the application of the non-tracking tack, ensure the pavement surface is thoroughly dry and free from dust or any other debris that would inhibit adhesion. Clean the surface by scraping, sweeping, and the use of compressed air. Ensure this preparation process occurs shortly before application to prevent the return of debris on to the pavement. If rain is expected within one hour after application, do not apply material. Apply material only when the surface is dry, and no precipitation is expected.

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- 3.2 Non-tracking Tack Application. Placement of non-tracking tack is not permitted from October 1st to May 15th. When applying material, ensure the roadway temperature is a minimum of 40°F and rising. Prior to application, demonstrate competence in applying the tack according to this note to the satisfaction of the Engineer. Heat the tack in the distributor to between 170 180 °F. After the initial heating, between 170 180 °F, the material may be sprayed between 165 °F and 180 °F. Do not apply outside this temperature range. Apply material at a minimum rate of 0.70 pounds (0.08 gallons) per square yard. Ensure full coverage of the material on the pavement surface. Full coverage of this material is critical. Increase material application rate if needed to achieve full coverage. Schedule the work so that, at the end of the day's production, all non-tracking tack is covered with the asphalt mixture. If for some reason the non-tracking tack cannot be covered by an asphalt mixture, ensure the non-tracking tack material is clean and reapply the non-tracking tack prior to placing the asphalt mixture. Do not heat material more than twice in one day.
- 3.3 Non-tracking Tack Certification. Furnish the tack certification to the Engineer stating the material conforms to all requirements herein prior to use.
- 3.4 Sampling and Testing. The Department will require a sample of non-tracking tack be taken from the distributor at a rate of one sample per 15,000 tons of mix. Take two 1 gallon samples of the heated material and forward the sample to the Division of Materials for testing within 7 days. Ensure the product temperature is between 170 and 180 °F at the time of sampling.
- 4. MEASUREMENT. The Department will measure the quantity of non-tracking tack in tons. The Department will not measure for payment any extra materials, labor, methods, equipment, or construction techniques used to satisfy the requirements of this note. The Department will not measure for payment any trial applications of non-tracking tack, the cleaning of the pavement surface, or furnishing and placing the non-tracking tack. The Department will consider all such items incidental to the non-tracking tack.
- 5. PAYMENT. The Department will pay for the non-tracking tack at the Contract unit bid price and apply an adjustment for each manufacturer's lot of material based on the degree of compliance as defined in the following schedule. Non-tracking tack will not be permitted for use from October 1st to May 15th. From September 1st to June 1st, the department will allow the use of an approved asphalt emulsion in lieu of a non-tracking tack product but will not adjust the unit bid price of the material. When a sample fails on two or more tests, the Department may add the deductions, but the total deduction will not exceed 100 percent.

October 2021

Non-Tracking	g Tack Pri	ce Adjus	stment Sc	hedule		
Test	Specification	100% Pay	90% Pay	80% Pay	50% Pay	0% Pay
Viscosity, SFS, 77 ° F	20 - 100	19 - 102	17 - 18	15 - 16	14	≤13
			103 - 105	106 - 107	108 - 109	≥ 110
Sieve, %	0.30 max.	≤ 0.40	0.41 - 0.50	0.51 - 0.60	0.61 - 0.70	≥ 0.71
Asphalt Residue, %	50 min.	≥49.0	48.5 – 48.9	48.0 - 48.4	47.5-47.9	≤ 47.4
Oil Distillate, %	1.0 max.	≤1.0	1.1-1.5	1.6 - 1.7	1.8-1.9	>2.0
Residue Penetration, 77 ° F	20 max.	≤ 21	22 - 23	24 - 25	26 - 27	≥ 28
Original Dynamic Shear (G*/sin δ), 82 ° C	1.0 min.	≥0.95	0.92 - 0.94	0.90 - 0.91	0.85 - 0.89	≤ 0.84
Softening Point, ° F	149 min.	≥145	142 - 144	140 - 141	138 - 139	≤ 137
Solubility, %	97.5 min.	≥ 97.0	96.8 – 96.9	96.6 – 96.7	96.4 – 96.5	≤ 96.3

Code
24970ECPay Item
Asphalt Material for Tack Non-TrackingPay Unit
Ton

SPECIAL NOTE FOR EXPERIMENTAL KYCT AND HAMBURG TESTING

1.0 General

1.1 Description. The KYCT (Kentucky Method for Cracking Test) and the Hamburg test results will help determine if the mixture is susceptible to cracking and rutting. During the experimental phase, data will be gathered and analyzed by the Department to determine the durability of the bituminous mixes. Additionally, the data will help the Department to create future performance based specifications which will include the KYCT and Hamburg test methods.

2.0 Equipment

- **2.1 KYCT Testing Equipment.** The Department will require a Marshall Test Press with digital recordation capabilities. Other CT testing equipment may be used for testing with prior approval by the Department.
- **2.2 Water Baths.** One or more water baths will be required that can maintain a temperature of 77° +/- 1.8° F with a digital thermometer showing the water bath temperature. Also, one water bath shall have the ability to suspend gyratory specimen fully submerged in water in accordance with AASHTO T-166, current edition.
- **2.3 Hamburg Wheel Track Testing.** The department encourages the use of the PTI APA/Hamburg Jr. test equipment to perform the loaded wheel testing. The Department will allow different equipment for the Hamburg testing, but the testing device must be approved by the Department prior to testing.
- **2.4 Gyratory Molds.** Gyratory molds will be required to assist in the production of gyratory specimens in accordance with AASHTO T-312, current edition.
- **2.5 Ovens.** Adequate (minimum of two ovens) will be required to accommodate the additional molds and asphalt mixture necessary to perform the acceptance testing as outlined in Section 402 of the Kentucky Standard Specifications for Road and Bridge Construction, current edition.
- **2.6 Department Equipment.** The Department will provide gyratory molds, PINE 850 Test Press with digital recordation, and CT testing equipment to assist during this experimental phase so data can be gathered. Hamburg test specimens will be submitted to the Division of Materials for testing on the PTI APA/Hamburg Jr if the asphalt contractor or district materials office does not have an approved Hamburg testing device.

3.0 Testing Requirements

- **3.1 Acceptance Testing.** Perform all acceptance testing and aggregate gradation as according with Section 402 and Section 403 of the Kentucky Standard Specifications for Road and Bridge Construction, current edition.
- **3.2 KYCT Testing.** Perform crack resistance analysis (KYCT) in accordance with the current Kentucky Method for KYCT Index Testing during the mix design phase and during the plant production of all surface mixtures. For mix design approvals, submit KYCT results on the Department MixPack. For Class 4 mixtures, submit ingredient materials to the Division of Materials for informational verification.

- **3.2.1 KYCT Frequency.** Obtain an adequate sample of hot mix asphalt to insure the acceptance testing, gradation, and KYCT gyratory samples can be fabricated and is representative of the bituminous mixture. Acceptance specimens shall be fabricated first, then immediately after, fabricate the KYCT samples with the gyratory compactor in accordance with Section 2.4 of this Special Note. Analysis of the KYCT specimens and gradation will be required one per sublot produced from the same asphalt material and at the same time as the acceptance specimen is sampled and tested.
- **3.2.2 Number of Specimens and Conditioning.** Fabricate specimens in accordance with the Kentucky Method for KYCT Index Testing. Contrary to the method, fabricate a minimum of 3 and up to 6 test specimens. The specimens shall be compacted at the temperature in accordance to KM 64-411. KYCT mix design specimens shall be short-term conditioned for four hours at compaction temperature in accordance to KM 64-411. Contrary to the Kentucky Method, plant produced bituminous material shall be short-term conditioned immediately after sampling for two hours at compaction temperature in accordance to KM 64-411. Additionally, fabricated specimens shall be allowed to cool in air (fan is permissible) for 30 minutes +/- 5 minutes and conditioned in a 77 °F water bath for 30 minutes +/- 5 minutes. To insure confidence and reliability of the test results provided by KYCT testing and Hamburg testing, reheating of the asphalt mixture is prohibited.
- **3.2.3 Record Times.** For each sublot, record the time required between drying aggregates in the plant to KYCT specimen fabrication. The production time may vary due to the time that the bituminous material is held in the silo. Record the preconditioning time when the time exceeds the one hour specimen cool down time as required in accordance to The Kentucky Method for KYCT Index Testing. The preconditioning time may exceed an hour if the technician is unable to complete the test on the same day or within the specified times as outlined in The Kentucky Method for KYCT Index Testing. The production time and the preconditioning time shall be recorded on the AMAW.
- **3.2.4 File Name.** As according to section 7.12 of The Kentucky Method for KYCT Index Testing, save the filename with the following format; "CID_Approved Mix Number_Lot Number_Sublot Number_Date"
- **3.3 Hamburg Testing.** Perform the rut resistance analysis (Hamburg) in accordance to AASTHO T-324, not to exceed 20,000 passes for all bituminous mixtures during the mix design phase and production. For mix design approvals, submit Hamburg results on the Department MixPack. For Class 4 mixtures, submit ingredient materials to the Division of Materials for informational verification.
- **3.3.1 Hamburg Testing Frequency.** Perform testing and analysis per lot of material. The plant produced bituminous material sampled for the Hamburg test does not have to be obtained at the same time as the acceptance and KYCT sample. If the Hamburg test sample is not obtained at the same time as the KYCT sample, determine the Maximum Specific Gravity of the KYCT sample in accordance with AASHTO T-209 coinciding with the Hamburg specimens.
- **3.3.2 Record Times.** Record the production time as according to section 3.2.3 in this special note. Also record the time that the specimens were fabricated and the time the Hamburg testing was started. All times shall be recorded on the AMAW.

3.3.3 File Name. Save the Excel spreadsheet with the following file name; "Hamburg_CID_Approved Mix Number_Lot Number_Sublot Number_Date" and upload the file into the AMAW.

4.0 Data

Submit the AMAW and all test data that was obtained for acceptance, gradation, KYCT, and Hamburg testing within five working days once all testing has been completed for a lot to Central Materials Lab and the District Materials Engineer. Also, any data and or comments that the asphalt contractor or district personnel deem informational during this experimental phase, shall also be submitted to the Central Materials Lab and the District Materials Engineer. Any questions or comments regarding any item in this Special Note can be directed to the Central Office, Division of Materials, Asphalt Branch.

5.0 KYCT Video Demonstration

https://youtu.be/84j0bM45-hg

6.0 Payment

Any additional labor and testing equipment that is required to fabricate and test the KYCT and Hamburg specimens shall be considered to be incidental to the asphalt surface line item. The Department will perform the testing for the KYCT and Hamburg specimens if a producer does not possess the proper equipment.

October 8, 2020

SPECIAL NOTE FOR FIXED COMPLETION DATE AND LIQUIDATED DAMAGES US 60 CARTER COUNTY ITEM NO. 9-22318

In accordance with Section 108.09, Liquidated Damages at the specified rate per calendar day will be assessed for each day work remains incomplete beyond the Specified Project Completion Date. This project has a Fixed Project Completion Date of November 30, 2022.

Also contrary to Section 108, liquidated damages will be charged during the months of December through March.

Contract ID: 221325 Page 79 of 101



KENTUCKY TRANSPORTATION CABINET Department of Highways DIVISION OF RIGHT OF WAY & UTILITIES

TC 62-226 Rev. 01/2016 Page 1 of 1

RIGHT OF WAY CERTIFICATION

Original Re-Certification	RI	GHT OF WAY CERTIFICATION	ON							
	JNTY	PROJECT # (STATE)	PROJECT # (FEDERAL)							
09-22318.00 Carter	FD05 (022 0060 030-035								
PROJECT DESCRIPTION										
ADDRESS CONDITION OF US-60 FROM MILEP	OINT 30.018 TO MILEPOI	NT 35.036								
No Additional Right of Way Required										
Construction will be within the limits of the existi	ng right of way. The right of	way was acquired in accorda	ance to FHWA regulations							
under the Uniform Relocation Assistance and Rea	al Property Acquisitions Police	y Act of 1970, as amended. N	No additional right of way or							
relocation assistance were required for this proje	ct.									
Condition # 1 (Additional Right of Way	•									
All necessary right of way, including control of ac	_	· · · · · · · · · · · · · · · · · · ·								
possession. Trial or appeal of cases may be pendi										
remaining on the right-of-way, but all occupants rights to remove, salvage, or demolish all improve		-								
court. All relocations have been relocated to dece										
adequate replacement housing in accordance wit			made to displaced persons							
Condition # 2 (Additional Right of Way										
The right of way has not been fully acquired, the	right to occupy and to use a	l rights-of-way required for t	he proper execution of the							
project has been acquired. Some parcels may be	pending in court and on oth	er parcels full legal possessio	n has not been obtained, but							
right of entry has been obtained, the occupants of all lands and improvements have vacated, and KYTC has physical possession and right										
to remove, salvage, or demolish all improvements. Just Compensation has been paid or deposited with the court for most parcels. Just										
Compensation for all pending parcels will be paid or deposited with the court prior to AWARD of construction contract										
Condition # 3 (Additional Right of Way		•								
The acquisition or right of occupancy and use of a	= -									
remaining occupants have had replacement hous requesting authorization to advertise this project	_									
be fully acquired, and/or some occupants will not										
court for some parcels until after bid letting. KYTO										
24.102(j) and will expedite completion of all acqu	-									
AWARD of the construction contract or force according	ount construction.									
0	ION (S) Parcel #	ANTICIPATED DATE OF POSSESSIO	N WITH EXPLANATION							
Number of Parcels That Have Been Acquired										
Signed Deed Condemnation										
Signed ROE										
Notes/ Comments (Use Additional Sheet if necessary)	•									
LPA RW Project Manager		Right of Way Su	pervisor							
Printed Name	Printed N	ame Jan	nes R. Mason							
Signature	Signatu	re ZBZ	Digitally signed by James Mason							
Date	Date	71101	Date: 2022.04.06 12:03:21 -04'00'							
Right of Way Director		FHWA								
Printed Name 2022	.04.07 Printed N	ame								
Signature / / 4 11:26		re								
Date Mule Dale	Date									

UTILITIES AND RAIL CERTIFICATION NOTE

Carter County
FD05 022 0060 030-035
Mile point: 30.018 to 35.036
ADDRESS CONDITION OF US-60 FROM MILEPOINT 30.018 TO MILEPOINT 35.036
ITEM NUMBER: 09-22318.00

PROJECT NOTES ON UTILITIES

Please Note: The information presented in this Utility Note is informational in nature and the information contained herein is not guaranteed.

The contractor will be responsible for contacting all utility facility owners on the subject project to coordinate his activities. The contractor will coordinate his activities to minimize and, where possible, avoid conflicts with utility facilities. Due to the nature of the work proposed, it is unlikely to conflict with the existing utilities beyond minor facility adjustments. Where conflicts with utility facilities are unavoidable, the contractor will coordinate any necessary relocation work with the facility owner and Resident Engineer. The Kentucky Transportation Cabinet maintains the right to remove or alter portions of this contract if a utility conflict occurs. The utility facilities as noted in the previous section(s) have been determined using data garnered by varied means and with varying degrees of accuracy: from the facility owners, a result of S.U.E., field inspections, and/or reviews of record drawings. The facilities defined may not be inclusive of all utilities in the project scope and are not Level A quality, unless specified as such. It is the contractor's responsibility to verify all utilities and their respective locations before excavating.

The contractor shall make every effort to protect underground facilities from damage as prescribed in the Underground Facility Damage Protection Act of 1994, Kentucky Revised Statute KRS 367.4901 to 367.4917. It is the contractor's responsibility to determine and take steps necessary to be in compliance with federal and state damage prevention directives. The contractor is instructed to contact KY 811 for the location of existing underground utilities. Contact shall be made a minimum of two (2) and no more than ten (10) business days prior to excavation. The contractor shall submit Excavation Locate Requests to the Kentucky Contact Center (KY 811) via web ticket entry. The submission of this request does not relieve the contractor from the responsibility of contacting non-member facility owners, whom are to be contacted through their individual Protection Notification Center. It may be necessary for the contractor to contact the County Court Clerk to determine what utility companies have facilities in the area. Non-compliance with these directives can result in the enforcement of penalties.

CARTER COUNTY FD05 022 0060 030-035 Contract ID: 221325 Page 81 of 101

UTILITIES AND RAIL CERTIFICATION NOTE

Carter County
FD05 022 0060 030-035
Mile point: 30.018 to 35.036
ADDRESS CONDITION OF US-60 FROM MILEPOINT 30.018 TO MILEPOINT 35.036
ITEM NUMBER: 09-22318.00

NOTE: DO NOT DISTURB THE FOLLOWING FACILITIES LOCATED WITHIN THE PROJECT DISTURB LIMITS

AT&T Transmission – Fiber Optic

Kentucky Power/AEP - Electric

Columbia Gulf Transmission - Natural Gas Pipeline

Windstream Communications - Telephone

Big Sandy Water District - Water

Spectrum - CATV

Natural Energy Utility Corporation - Natural Gas

Sanitation District #4 - Sewer

Kentucky Wired – Fiber Optic

Cannonsburg Water - Water

The Contractor is fully responsible for protection of all utilities listed above

THE FOLLOWING FACILITY OWNERS ARE RELOCATING/ADJUSTING THEIR FACILITIES WITHIN THE PROJECT LIMITS AND WILL BE COMPLETE PRIOR TO CONSTRUCTION

Not Applicable

CARTER COUNTY FD05 022 0060 030-035 Contract ID: 221325 Page 82 of 101

UTILITIES AND RAIL CERTIFICATION NOTE

Carter County
FD05 022 0060 030-035
Mile point: 30.018 to 35.036
ADDRESS CONDITION OF US-60 FROM MILEPOINT 30.018 TO MILEPOINT 35.036
ITEM NUMBER: 09-22318.00

THE FOLLOWING FACILITY OWNERS HAVE FACILITIES TO BE RELOCATED/ADJUSTED BY THE OWNER OR THEIR SUBCONTRACTOR AND IS TO BE COORDINATED WITH THE ROAD CONTRACT

Not Applicable

THE FOLLOWING FACILITY OWNERS HAVE FACILITIES TO BE RELOCATED/ADJUSTED BY THE ROAD CONTRACTOR AS INCLUDED IN THIS CONTRACT

Not Applicable

RAIL COMPANIES HAVE FACILITIES IN CONJUNCTION WITH THIS PROJECT AS NOTED

oxdots No Rail Involvement oxdots Rail Involved oxdots Rail Adjacent

Contract ID: 221325 Page 83 of 101

UTILITIES AND RAIL CERTIFICATION NOTE

Carter County
FD05 022 0060 030-035
Mile point: 30.018 to 35.036
ADDRESS CONDITION OF US-60 FROM MILEPOINT 30.018 TO MILEPOINT 35.036
ITEM NUMBER: 09-22318.00

AREA FACILITY OWNER CONTACT LIST

Facility Owner	Address	Contact Name	Phone	Email
AT&T Transmission	7555 E Pleasant Valley Rd,	Diederich, Mike	216-750-0135	md4145@att.com
	Suite 140			
	Independence, OH 44131			
Kentucky Power/AEP	12333 Kevin Ave	Martin, Steve	606-929-1458	sgmartin@aep.com
	Ashland, KY 41101			
Columbia Gulf	485 Industrial Road	Donnally,	304-368-3804	michael_donnally@tcenergy.com
Transmission	St. Albans, WV 25177	Michael		
Windstream	130 West New Circle Road	Johnson, Steve	859-357-6209	Steve.Johnson@windstream.com
Communications	Suite 170			
	Lexington, KY 40505			
Big Sandy Water	18200 State Route 3	Blanton, Jimmy	606-928-2075	bdistrict@windstream.net
District	Catlettsburg, KY 41129			
Spectrum	1617 Foxhaven Dr	Smith, Steven	859-626-4809	rsteven.smith@charter.com
	Richmond, KY 40475			
Natural Energy Utility	2560 Hoods Creek Pike	Freeman,	606-324-3920	preston.freeman@kyneuc.com
Corporation	Ashland, KY 41102	Preston		
Sanitation District #4	239 W. Little Garner Rd.	Helton, Gary	606-232-0610	ghelton@bcsd4.com
	Ashland, KY 41102			
Kentucky Wired	2008 Mercer Road	Castle, Roger	859-229-5403	roger.castle@ledcor.com
	Lexington, KY 40511			
Cannonsburg Water	1606 Cannonsburg Rd.	Webb, Tim	606-928-9808	tim@cannonsburgwater.com
	Ashland, KY 41102			

CARTER COUNTY FD05 022 0060 030-035

GUARDRAIL DELIVERY VERIFICATION SHEET

Contract ID: 221325 Page 84 of 101

Contract Id:		Cor	tractor:
Section Engineer:		_ District & County: _	
<u>DESCRIPTION</u>	<u>UNIT</u>	OTY LEAVING PROJECT	QTY RECEIVED@BB YARD
GUARDRAIL (Includes End treatments & crash cushions) STEEL POSTS	LF EACH		
STEEL BLOCKS	EACH		
WOOD OFFSET BLOCKS	EACH		
BACK UP PLATES	EACH		
CRASH CUSHION	EACH		
NUTS, BOLTS, WASHERS	BAG/BCKT		
DAMAGED RAIL TO MAINT. FACILIT	ΓY LF		
DAMAGED POSTS TO MAINT. FACI	LITY EACH		
* <u>Required Signatures before</u>	Leaving Proje	ect Site	
Printed Section Engineer's Re	epresentative_		_ & Date
Signature Section Engineer's	Representativ	e	_& Date
Printed Contractor's Represe	ntative		& Date
Signature Contractor's Repre	esentative		& Date
	<u>Arrival at Baile</u>	y Bridge Yard (All material	on truck must be counted & the
Printed Bailey Bridge Yard Re			& Date
Signature Bailey Bridge Yard	Representative	e	_& Date
Printed Contractor's Represe	ntative		& Date
Signature Contractor's Repre	esentative		_& Date
•	ent will not be	made for guardrail removal	uantities shown in the Bailey Bridge until the guardrail verification sheets ge Yard Representative.

Completed Form Submitted to Section Engineer

Date: ______ By: _____

PART II

SPECIFICATIONS AND STANDARD DRAWINGS

SPECIFICATIONS REFERENCE

Any reference in the plans or proposal to previous editions of the Standard Specifications for Road and Bridge Construction and Standard Drawings are superseded by Standard Specifications for Road and Bridge Construction, Edition of 2019 and Standard Drawings, Edition of 2020.

SUPPLEMENTAL SPECIFICATIONS

The contractor shall use the Supplemental Specifications that are effective at the time of letting. The Supplemental Specifications can be found at the following link:

http://transportation.ky.gov/Construction/Pages/Kentucky-Standard-Specifications.aspx

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SPECIAL NOTE FOR PORTABLE CHANGEABLE MESSAGE SIGNS

This Special Note will apply when indicated on the plans or in the proposal.

1.0 DESCRIPTION. Furnish, install, operate, and maintain variable message signs at the locations shown on the plans or designated by the Engineer. Remove and retain possession of variable message signs when they are no longer needed on the project.

2.0 MATERIALS.

2.1 General. Use LED Variable Message Signs Class I, II, or III, as appropriate, from the Department's List of Approved Materials.

Unclassified signs may be submitted for approval by the Engineer. The Engineer may require a daytime and nighttime demonstration. The Engineer will make a final decision within 30 days after all required information is received.

2.2 Sign and Controls. All signs must:

- Provide 3-line messages with each line being 8 characters long and at least 18 inches tall. Each character comprises 35 pixels.
- Provide at least 40 preprogrammed messages available for use at any time.
 Provide for quick and easy change of the displayed message; editing of the message; and additions of new messages.
- 3) Provide a controller consisting of:
 - a) Keyboard or keypad.
 - Readout that mimics the actual sign display. (When LCD or LCD type readout is used, include backlighting and heating or otherwise arrange for viewing in cold temperatures.)
 - c) Non-volatile memory or suitable memory with battery backup for storing pre-programmed messages.
 - d) Logic circuitry to control the sequence of messages and flash rate.
- 4) Provide a serial interface that is capable of supporting complete remote control ability through land line and cellular telephone operation. Include communication software capable of immediately updating the message, providing complete sign status, and allowing message library queries and updates.
- 5) Allow a single person easily to raise the sign to a satisfactory height above the pavement during use, and lower the sign during travel.
- Be Highway Orange on all exterior surfaces of the trailer, supports, and controller cabinet.
- 7) Provide operation in ambient temperatures from -30 to + 120 degrees Fahrenheit during snow, rain and other inclement weather.
- 8) Provide the driver board as part of a module. All modules are interchangeable, and have plug and socket arrangements for disconnection and reconnection. Printed circuit boards associated with driver boards have a conformable coating to protect against moisture.
- Provide a sign case sealed against rain, snow, dust, insects, etc. The lens is UV stabilized clear plastic (polycarbonate, acrylic, or other approved material) angled to prevent glare.
- 10) Provide a flat black UV protected coating on the sign hardware, character PCB, and appropriate lens areas.
- 11) Provide a photocell control to provide automatic dimming.

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- 12) Allow an on-off flashing sequence at an adjustable rate.
- 13) Provide a sight to aim the message.
- 14) Provide a LED display color of approximately 590 nm amber.
- 15) Provide a controller that is password protected.
- 16) Provide a security device that prevents unauthorized individuals from accessing the controller.
- 17) Provide the following 3-line messages preprogrammed and available for use when the sign unit begins operation:

 $/KEEP/RIGHT/\Rightarrow\Rightarrow\Rightarrow/$ /MIN/SPEED/**MPH/ /ICY/BRIDGE/AHEAD/ /ONE /KEEP/LEFT/< LANE/BRIDGE/AHEAD/ /LOOSE/GRAVEL/AHEAD/ /ROUGH/ROAD/AHEAD/ /RD WORK/NEXT/**MILES/ /MERGING/TRAFFIC/AHEAD/ /TWO WAY/TRAFFIC/AHEAD/ /NEXT/***/MILES/ /PAINT/CREW/AHEAD/ /HEAVY/TRAFFIC/AHEAD/ /REDUCE/SPEED/**MPH/ /SPEED/LIMIT/**MPH/ /BRIDGE/WORK/***0 FT/ /BUMP/AHEAD/ /MAX/SPEED/**MPH/ /TWO/WAY/TRAFFIC/ /SURVEY/PARTY/AHEAD/

*Insert numerals as directed by the Engineer.

Add other messages during the project when required by the Engineer.

2.3 Power.

- Design solar panels to yield 10 percent or greater additional charge than sign consumption. Provide direct wiring for operation of the sign or arrow board from an external power source to provide energy backup for 21 days without sunlight and an on-board system charger with the ability to recharge completely discharged batteries in 24 hours.
- **3.0 CONSTRUCTION.** Furnish and operate the variable message signs as designated on the plans or by the Engineer. Ensure the bottom of the message panel is a minimum of 7 feet above the roadway in urban areas and 5 feet above in rural areas when operating. Use Class I, II, or III signs on roads with a speed limit less than 55 mph. Use Class I or II signs on roads with speed limits 55 mph or greater.

Maintain the sign in proper working order, including repair of any damage done by others, until completion of the project. When the sign becomes inoperative, immediately repair or replace the sign. Repetitive problems with the same unit will be cause for rejection and replacement.

Use only project related messages and messages directed by the Engineer, unnecessary messages lessen the impact of the sign. Ensure the message is displayed in either one or 2 phases with each phase having no more than 3 lines of text. When no message is needed, but it is necessary to know if the sign is operable, flash only a pixel.

When the sign is not needed, move it outside the clear zone or where the Engineer directs. Variable Message Signs are the property of the Contractor and shall be removed from the project when no longer needed. The Department will not assume ownership of these signs.

4.0 MEASUREMENT. The final quantity of Variable Message Sign will be

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the actual number of individual signs acceptably furnished and operated during the project. The Department will not measure signs replaced due to damage or rejection.

5.0 PAYMENT. The Department will pay for the Variable Message Signs at the unit price each. The Department will not pay for signs replaced due to damage or rejection. Payment is full compensation for furnishing all materials, labor, equipment, and service necessary to, operate, move, repair, and maintain or replace the variable message signs. The Department will make payment for the completed and accepted quantities under the following:

CodePay ItemPay Unit02671Portable Changeable Message SignEach

Effective June 15, 2012

PAVEMENT CROSS-SECTION TWO LANE ROADWAY

0010000	TYPE OF	NOV	NON-STATE PRIMARY ROUTES	IMARY RO	UTES	STA	STATE PRIMARY ROUTES
WAY	PAVEMENT STRIPING	< 10	< 1000 ADT	>= 1(>= 1000 ADT		ANY ADT
0		WIDTH	MATERIAL	WIDTH	WIDTH MATERIAL WIDTH MATERIAL WIDTH	WIDTH	MATERIAL*
< 16' @	< 16' @ EDGELINE STRIPES ONLY	4".	PAINT	4"	PAINT	9	THERMO (ASHPALT) TYPE I TAPE (CONCRETE)
$16' \ TO < 20' \ E$	EDGELINE STRIPES ONLY OR CENTERLINE STRIPE ONLY	4"	PAINT	4"	PAINT	9	THERMO (ASHPALT) TYPE I TAPE (CONCRETE)
>=20' ③	CENTERLINE AND EDGELINE STRIPES	4" 5	4" S PAINT	6"	PAINT	9	THERMO (ASHPALT) TYPE I TAPE (CONCRETE)

OTHER DURABLE NON-WATERBORNE MARKINGS MAY BE USED WITH APPROVAL FROM THE DIVISION OF TRAFFIC OPERATIONS.

INSTALL PAVEMENT STRIPING ON TWO LANE, TWO WAY ROADWAYS AS DETAILED IN THE ABOVE TABLE AND IN ACCORDANCE WITH THE PAVEMENT MARKINGS AND DELINEATION CHAPTER OF THE TRAFFIC OPERATIONS GUIDANCE MANUAL. CONTACT THE DIVISION OF TRAFFIC OPERATIONS FOR ADDITIONAL GUIDANCE IF NECESSARY.

THE TRAVELED WAY IS THE PORTION OF ROADWAY FOR THE MOVEMENT OF VEHICLES, EXCLUSIVE OF THE SHOULDERS \bigcirc

IS ON TWO LANE, TWO WAY ROADWAYS THAT HAVE A TOTAL PAVEMENT WIDTH (W) THAT IS 20 FT OR GREATER, BUT LESS THAN 22 FT, EDGELINE RUMBLE STRIPS ARE NOT A STANDARD APPLICATION, BUT THEY MAY BE INSTALLED. THE DIVISION OF TRAFFIC OPERATIONS AVAILABLE TO ASSIST WITH THE DETERMINATION OF WHETHER OR NOT TO INSTALL EDGELINE RUMBLE STRIPS ON PAVEMENT WIDTHS LESS THAN 22 FT, AS WELL AS THE DIMENSION AND PLACEMENT DETAILS OF THE RUMBLE STRIPS AND PAVEMENT STRIPING. \odot

STRIPS ON TWO LANE, TWO WAY ROADWAYS THAT HAVE A TOTAL PAVEMENT WIDTH (W) THAT IS 22 FT OR GREATER, BUT LESS THAN 34 FT, INSTALL PAVEMENT STRIPING AS DETAILED IN THE ABOVE TABLE AND IN CONJUNCTION WITH CENTERLINE AND EDGELINE RUMBLE AS DETAILED ON TPR-120

EDGELINES MAY BE OMITTED FROM ROADWAYS WITH A TRAVELED WAY WIDTH LESS THAN 16 FEET WITH THE APPROVAL OF THE DIVISION ON TWO LANE, TWO WAY ROADWAYS THAT HAVE A TOTAL PAVEMENT WIDTH (W) THAT IS 34 FT OR GREATER, INSTALL PAVEMENT STRIPING AS DETAILED IN THE ABOVE TABLE AND IN CONJUCTION WITH CENTERLINE AND SHOULDER RUMBLE STRIPS AS DETAILED ON TPR-125.

(4)

- OF TRAFFIC OPERATIONS. (2)
- EDGELINES MAY BE OMITTED ON NON-STATE PRIMARY ROUTES WITH A TRAVELED WAY WIDTH GREATER THAN OR EQUAL TO 20 FEET AND AN ADT LESS THAN 1,000.
- EDGELINES MAY BE OMITTED, BASED ON ENGINEERING JUDGMENT, IN AREAS WHERE THE PAVEMENT EDGE IS DELINEATED BY PHYSICAL OBJECTS SUCH AS CURBS, PARKING SPACES, OR OTHER MARKINGS. EDGELINES SHOULD BE INSTALLED ON ROADWAYS WITH CURB AND GUTTER IF THE POSTED SPEED LIMIT IS 45 MPH OR GREATER. 9

USE WITH CUR. STD. DRAWING NOT TO

rPR-120 & TPR-175 KENTUCKY

DEPARTMENT OF HIGHWAYS DETAILS FOR TWO LANE PAVEMENT STRIPING TWO WAY ROADWAYS



PART III

EMPLOYMENT, WAGE AND RECORD REQUIREMENTS

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TRANSPORTATION CABINET DEPARTMENT OF HIGHWAYS

LABOR AND WAGE REQUIREMENTS APPLICABLE TO OTHER THAN FEDERAL-AID SYSTEM PROJECTS

- I. Application
- II. Nondiscrimination of Employees (KRS 344)

I. APPLICATION

- 1. These contract provisions shall apply to all work performed on the contract by the contractor with his own organization and with the assistance of workmen under his immediate superintendence and to all work performed on the contract by piecework, station work or by subcontract. The contractor's organization shall be construed to include only workmen employed and paid directly by the contractor and equipment owned or rented by him, with or without operators.
- 2. The contractor shall insert in each of his subcontracts all of the stipulations contained in these Required Provisions and such other stipulations as may be required.
- 3. A breach of any of the stipulations contained in these Required Provisions may be grounds for termination of the contract.

II. NONDISCRIMINATION OF EMPLOYEES

AN ACT OF THE KENTUCKY GENERAL ASSEMBLY TO PREVENT DISCRIMINATION IN EMPLOYMENT KRS CHAPTER 344 EFFECTIVE JUNE 16, 1972

The contract on this project, in accordance with KRS Chapter 344, provides that during the performance of this contract, the contractor agrees as follows:

- 1. The contractor shall not fail or refuse to hire, or shall not discharge any individual, or otherwise discriminate against an individual with respect to his compensation, terms, conditions, or privileges of employment, because of such individual's race, color, religion, national origin, sex, disability or age (forty and above); or limit, segregate, or classify his employees in any way which would deprive or tend to deprive an individual of employment opportunities or otherwise adversely affect his status as an employee, because of such individual's race, color, religion, national origin, sex, disability or age forty (40) and over. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
- 2. The contractor shall not print or publish or cause to be printed or published a notice or advertisement relating to employment by such an employer or membership in or any classification or referral for employment by the employment agency, indicating any preference, limitation, specification, or discrimination, based on race, color, religion, national origin, sex, or age forty (40) and over, or because the person is a qualified individual with a disability, except that such a notice or advertisement may indicate a preference, limitation, or specification based on religion, national origin, sex, or age forty (40) and over, or because the person is a qualified individual with a disability, when religion, national origin, sex, or age forty (40) and over, or because the person is a qualified individual with a disability, is a bona fide occupational qualification for employment.

- 3. If the contractor is in control of apprenticeship or other training or retraining, including on-the-job training programs, he shall not discriminate against an individual because of his race, color, religion, national origin, sex, disability or age forty (40) and over, in admission to, or employment in any program established to provide apprenticeship or other training.
- 4. The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representative of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment. The contractor will take such action with respect to any subcontract or purchase order as the administrating agency may direct as a means of enforcing such provisions, including sanctions for non-compliance.

Revised: January 25, 2017

EXECUTIVE BRANCH CODE OF ETHICS

In the 1992 regular legislative session, the General Assembly passed and Governor Brereton Jones signed Senate Bill 63 (codified as KRS 11A), the Executive Branch Code of Ethics, which states, in part:

KRS 11A.040 (7) provides:

No present or former public servant shall, within six (6) months following termination of his office or employment, accept employment, compensation, or other economic benefit from any person or business that contracts or does business with, or is regulated by, the state in matters in which he was directly involved during the last thirty-six (36) months of his tenure. This provision shall not prohibit an individual from returning to the same business, firm, occupation, or profession in which he was involved prior to taking office or beginning his term of employment, or for which he received, prior to his state employment, a professional degree or license, provided that, for a period of six (6) months, he personally refrains from working on any matter in which he was directly involved during the last thirty-six (36) months of his tenure in state government. This subsection shall not prohibit the performance of ministerial functions, including but not limited to filing tax returns, filing applications for permits or licenses, or filing incorporation papers, nor shall it prohibit the former officer or public servant from receiving public funds disbursed through entitlement programs.

KRS 11A.040 (9) states:

A former public servant shall not represent a person or business before a state agency in a matter in which the former public servant was directly involved during the last thirty-six (36) months of his tenure, for a period of one (1) year after the latter of:

- a) The date of leaving office or termination of employment; or
- b) The date the term of office expires to which the public servant was elected.

This law is intended to promote public confidence in the integrity of state government and to declare as public policy the idea that state employees should view their work as a public trust and not as a way to obtain private benefits.

If you have worked for the executive branch of state government within the past six months, you may be subject to the law's prohibitions. The law's applicability may be different if you hold elected office or are contemplating representation of another before a state agency.

Also, if you are affiliated with a firm which does business with the state and which employs former state executive-branch employees, you should be aware that the law may apply to them.

In case of doubt, the law permits you to request an advisory opinion from the Executive Branch Ethics Commission, 3 Fountain Place, Frankfort, Kentucky 40601; telephone (502) 564-7954.

Revised: January 27, 2017

Kentucky Equal Employment Opportunity Act of 1978

The requirements of the Kentucky Equal Employment Opportunity Act of 1978 (KRS 45.560-45.640) shall apply to this Contract. The apparent low Bidder will be required to submit EEO forms to the Division of Construction Procurement, which will then forward to the Finance and Administration Cabinet for review and approval. No award will become effective until all forms are submitted and EEO/CC has certified compliance. The required EEO forms are as follows:

- EEO-1: Employer Information Report
- Affidavit of Intent to Comply
- Employee Data Sheet
- Subcontractor Report

These forms are available on the Finance and Administration's web page under *Vendor Information*, *Standard Attachments and General Terms* at the following address: https://www.eProcurement.ky.gov.

Bidders currently certified as being in compliance by the Finance and Administration Cabinet may submit a copy of their approval letter in lieu of the referenced EEO forms.

For questions or assistance please contact the Finance and Administration Cabinet by email at **finance.contractcompliance@ky.gov** or by phone at 502-564-2874.

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EMPLOYEE RIGHTS UNDER THE FAIR LABOR STANDARDS ACT

THE UNITED STATES DEPARTMENT OF LABOR WAGE AND HOUR DIVISION

FEDERAL MINIMUM WAGE

\$7.25

BEGINNING JULY 24, 2009

OVERTIME PAY

At least $1\frac{1}{2}$ times your regular rate of pay for all hours worked over 40 in a workweek.

CHILD LABOR

An employee must be at least **16** years old to work in most non-farm jobs and at least **18** to work in non-farm jobs declared hazardous by the Secretary of Labor.

Youths **14** and **15** years old may work outside school hours in various non-manufacturing, non-mining, non-hazardous jobs under the following conditions:

No more than

- 3 hours on a school day or 18 hours in a school week;
- 8 hours on a non-school day or 40 hours in a non-school week.

Also, work may not begin before **7 a.m.** or end after **7 p.m.**, except from June 1 through Labor Day, when evening hours are extended to **9 p.m.** Different rules apply in agricultural employment.

TIP CREDIT

Employers of "tipped employees" must pay a cash wage of at least \$2.13 per hour if they claim a tip credit against their minimum wage obligation. If an employee's tips combined with the employer's cash wage of at least \$2.13 per hour do not equal the minimum hourly wage, the employer must make up the difference. Certain other conditions must also be met.

ENFORCEMENT

The Department of Labor may recover back wages either administratively or through court action, for the employees that have been underpaid in violation of the law. Violations may result in civil or criminal action.

Employers may be assessed civil money penalties of up to \$1,100 for each willful or repeated violation of the minimum wage or overtime pay provisions of the law and up to \$11,000 for each employee who is the subject of a violation of the Act's child labor provisions. In addition, a civil money penalty of up to \$50,000 may be assessed for each child labor violation that causes the death or serious injury of any minor employee, and such assessments may be doubled, up to \$100,000, when the violations are determined to be willful or repeated. The law also prohibits discriminating against or discharging workers who file a complaint or participate in any proceeding under the Act.

ADDITIONAL INFORMATION

- Certain occupations and establishments are exempt from the minimum wage and/or overtime pay provisions.
- Special provisions apply to workers in American Samoa and the Commonwealth of the Northern Mariana Islands.
- \bullet Some state laws provide greater employee protections; employers must comply with both.
- \bullet The law requires employers to display this poster where employees can readily see it.
- Employees under 20 years of age may be paid \$4.25 per hour during their first 90 consecutive calendar days of employment with an employer.
- Certain full-time students, student learners, apprentices, and workers with disabilities may be paid less than the minimum wage under special certificates issued by the Department of Labor.



PART IV

INSURANCE

Refer to *Kentucky Standard Specifications for Road and Bridge Construction*,

current edition

PART V

BID ITEMS

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221325

PROPOSAL BID ITEMS

Report Date 4/21/22

Section: 0001 - PAVING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0010	00001		DGA BASE	4,948.00	TON		\$	
0020	00100		ASPHALT SEAL AGGREGATE	907.00	TON		\$	
0030	00103		ASPHALT SEAL COAT	109.00	TON		\$	
0040	00190		LEVELING & WEDGING PG64-22	500.00	TON		\$	
0050	00212		CL2 ASPH BASE 1.00D PG64-22	2,571.00	TON		\$	
0060	00307		CL2 ASPH SURF 0.38B PG64-22	7,572.00	TON		\$	
0070	02676		MOBILIZATION FOR MILL & TEXT	1.00	LS		\$	
0800	02677		ASPHALT PAVE MILLING & TEXTURING	10,125.00	TON		\$	
0090	24103EC		FRENCH DRAIN	322.00	LF		\$	
0100	24970EC		ASPHALT MATERIAL FOR TACK NON- TRACKING	36.00	TON		\$	

Section: 0002 - ROADWAY

LINE	BID CODE	ALT DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0110	01982	DELINEATOR FOR GUARDRAIL MONO DIRECTIONAL WHITE	174.00	EACH		\$	
0120	02159	TEMP DITCH	12,749.00	LF		\$	
0130	02160	CLEAN TEMP DITCH	6,374.00	LF		\$	
0140	02360	GUARDRAIL TERMINAL SECTION NO 1	33.00	EACH		\$	
0150	02367	GUARDRAIL END TREATMENT TYPE 1	10.00	EACH		\$	
0160	02373	GUARDRAIL END TREATMENT TYPE 3	3.00	EACH		\$	
0170	02381	REMOVE GUARDRAIL	7,862.50	LF		\$	
0180	02391	GUARDRAIL END TREATMENT TYPE 4A	5.00	EACH		\$	
0190	02562	TEMPORARY SIGNS	800.00	SQFT		\$	
0200	02575	DITCHING AND SHOULDERING	25,497.00	LF		\$	
0210	02650	MAINTAIN & CONTROL TRAFFIC	1.00	LS		\$	
0220	02671	PORTABLE CHANGEABLE MESSAGE SIGN	2.00	EACH		\$	
0230	02696	SHOULDER RUMBLE STRIPS	50,784.00	LF		\$	
0240	02703	SILT TRAP TYPE A	2.00	EACH		\$	
0250	02704	SILT TRAP TYPE B	2.00	EACH		\$	
0260	02705	SILT TRAP TYPE C	2.00	EACH		\$	
0270	02706	CLEAN SILT TRAP TYPE A	2.00	EACH		\$	
0280	02707	CLEAN SILT TRAP TYPE B	2.00	EACH		\$	
0290	02708	CLEAN SILT TRAP TYPE C	2.00	EACH		\$	
0300	02726	STAKING	1.00	LS		\$	
0310	05950	EROSION CONTROL BLANKET	9,680.00	SQYD		\$	
0320	05952	TEMP MULCH	6,453.00	SQYD		\$	
0330	05953	TEMP SEEDING AND PROTECTION	4,840.00	SQYD		\$	
0340	05963	INITIAL FERTILIZER	.50	TON		\$	
0350	05964	MAINTENANCE FERTILIZER	.30	TON		\$	
0360	05992	AGRICULTURAL LIMESTONE	6.00	TON		\$	
0370	06511	PAVE STRIPING-TEMP PAINT-6 IN	101,658.00	LF		\$	
0380	06568	PAVE MARKING-THERMO STOP BAR-24IN	238.00	LF		\$	
0390	10020NS	FUEL ADJUSTMENT	16,566.00	DOLL	\$1.00	\$	\$16,566.00
0400	10030NS	ASPHALT ADJUSTMENT	41,610.00	DOLL	\$1.00	\$	\$41,610.00

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PROPOSAL BID ITEMS

Report Date 4/21/22

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0410	20458ES403		CENTERLINE RUMBLE STRIPS	25,392.00	LF		\$	
0420	21802EN		G/R STEEL W BEAM-S FACE (7 FT POST)	8,643.75	LF		\$	
0430	24189ER		DURABLE WATERBORNE MARKING-6 IN W	50,784.00	LF		\$	
0440	24190ER		DURABLE WATERBORNE MARKING-6 IN Y	46,934.00	LF		\$	
0450	24891EC		PAVE MOUNT INFRARED TEMP EQUIPMENT	560,934.00	SF		\$	
0460	40030		TEMPORARY SILT FENCE	12,749.00	LF		\$	

Section: 0003 - DRAINAGE

LINE	BID CODE	ALT DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0470	00071	CRUSHED AGGREGATE SIZE NO 57	45.00	TON		\$	
0480	00440	ENTRANCE PIPE-15 IN	40.00	LF		\$	
0490	00461	CULVERT PIPE-15 IN	8.00	LF		\$	
0500	00462	CULVERT PIPE-18 IN	62.00	LF		\$	
0510	00466	CULVERT PIPE-30 IN	20.00	LF		\$	
0520	00468	CULVERT PIPE-36 IN	4.00	LF		\$	
0530	01202	PIPE CULVERT HEADWALL-15 IN	1.00	EACH		\$	
0540	01204	PIPE CULVERT HEADWALL-18 IN	3.00	EACH		\$	
0550	01210	PIPE CULVERT HEADWALL-30 IN	1.00	EACH		\$	
0560	01212	PIPE CULVERT HEADWALL-36 IN	1.00	EACH		\$	
0570	01310	REMOVE PIPE	110.00	LF		\$	
0580	01433	SLOPED BOX OUTLET TYPE 1-18 IN	2.00	EACH		\$	
0590	02484	CHANNEL LINING CLASS III	1,415.00	TON		\$	
0600	02603	FABRIC-GEOTEXTILE CLASS 2	1,115.00	SQYD		\$	
0610	02625	REMOVE HEADWALL	6.00	EACH		\$	
0620	20465EC	CLEAN CULVERT (MP 30.077)	1.00	LS		\$	
0630	20465EC	CLEAN CULVERT (MP 30.337)	1.00	LS		\$	
0640	20465EC	CLEAN CULVERT (MP 30.465)	1.00	LS		\$	
0650	20465EC	CLEAN CULVERT (MP 32.563)	1.00	LS		\$	
0660	20465EC	CLEAN CULVERT (MP 32.707)	1.00	LS		\$	
0670	20465EC	CLEAN CULVERT (MP 32.870)	1.00	LS		\$	
0680	20465EC	CLEAN CULVERT (MP 33.040)	1.00	LS		\$	
0690	23484EC	PIPE LINER ACCEPTANCE TESTING	1.00	LS		\$	
0700	24862EC	PVC FOLD AND FORM PIPE LINER-18 IN	50.00	LF		\$	

Section: 0004 - BRIDGE

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0710	02403		REMOVE CONCRETE MASONRY	11.80	CUYD		\$	
0720	08003		FOUNDATION PREPARATION	1.00	LS		\$	
0730	08100		CONCRETE-CLASS A	9.30	CUYD		\$	
0740	08150		STEEL REINFORCEMENT	352.00	LB		\$	

D05 022 0060 030-035

PROPOSAL BID ITEMS

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Report Date 4/21/22

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Section: 0005 - DEMOBILIZATION &/OR MOBILIZATION

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0750	02568		MOBILIZATION	1.00	LS		\$	
0760	02569		DEMOBILIZATION	1.00	LS		\$	