

CALL NO. 307
CONTRACT ID. 232308
CARTER COUNTY
FED/STATE PROJECT NUMBER FD04 022 0060 026-031
DESCRIPTION GRAYSON - COALTON ROAD (US 60)
WORK TYPE ASPHALT PAVEMENT & ROADWAY REHAB
PRIMARY COMPLETION DATE 11/15/2023

LETTING DATE: <u>June</u> 22,2023

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN DAYLIGHT TIME June 22,2023. 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

ADMINISTRATIVE DISTRICT - 09

CONTRACT ID - 232308

FD04 022 0060 026-031

COUNTY - CARTER

PCN - MP02200602302 FD04 022 0060 026-031

GRAYSON - COALTON ROAD (US 60) (MP 26.131) FROM UPPER STINSON CREEK BRIDGE EXTENDING EAST TO 1,000 FEET EAST OF WILSON CREEK ROAD (MP 30.018), A DISTANCE OF 03.88 MILES.ASPHALT PAVEMENT & ROADWAY REHAB

GEOGRAPHIC COORDINATES LATITUDE 38:20:17.00 LONGITUDE 82:53:21.00 ADT 3,315

COMPLETION DATE(S):

COMPLETED BY 11/15/2023 APPLIES TO ENTIRE CONTRACT

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 prequalification information confidentially

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.

BUILD AMERICA, BUY AMERICA ACT (BABA)

On November 15, 2021, President Biden signed into law the Infrastructure Investment and Jobs Act (IIJA), Pub. L. No. 117-58, includes the Build America, Buy America Act ("the Act"). Pub. L. No. 117-58, §§70901-52. The Act strengthens the Buy America preference to include "construction materials." The current temporary waiver for "construction materials" will expire on November 10, 2022.

The Act will apply to construction materials as outlined in the guidance issued in OMB M-22-11.

Construction Materials – Includes an article, material, or supply – other than an item of primarily iron or steel; a manufactured product; cement and cementitious materials; aggregates such as stone, sand, or gravel; or aggregate binding agents or additives – that is or consists primarily of:

- Non-ferrous metals
- Plastic/polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables);
- Glass (including optic glass);
- Lumber; or
- Drywall.

Construction Materials only applies to items, materials, and supplies that are consumed in, incorporated into, or affixed to an infrastructure project.

Construction Materials does not apply to tools, equipment or supplies brought to the jobsite and removed before completion.

BOYCOTT PROVISIONS

If applicable, the contractor represents that, pursuant to <u>KRS 45A.607</u>, they are not currently engaged in, and will not for the duration of the contract engage in, the boycott of a person or an entity based in or doing business with a jurisdiction with which Kentucky can enjoy open trade. **Note:** The term Boycott does not include actions taken for bona fide business or economic reasons, or actions specifically required by federal or state law.

If applicable, the contractor verifies that, pursuant to KRS 41.480, they do not engage in, and will not for the duration of the contract engage in, in energy company boycotts as defined by KRS 41.472.

LOBBYING PROHIBITIONS

The contractor represents that they, and any subcontractor performing work under the contract, have not violated the agency restrictions contained in <u>KRS 11A.236</u> during the previous ten (10) years, and pledges to abide by the restrictions set forth in such statute for the duration of the contract awarded.

The contractor further represents that, pursuant to <u>KRS 45A.328</u>, they have not procured an original, subsequent, or similar contract while employing an executive agency lobbyist who was convicted of a crime related to the original, subsequent, or similar contract within five (5) years of the conviction of the lobbyist.

February 1, 2023

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

SURFACING AREAS

The Department estimates the mainline surfacing width to be 22 feet.

The Department estimates the total mainline area to be surfaced to be 55,184 square yards.

The Department estimates the shoulder width to be 4 feet on each side.

The Department estimates the total shoulder area to be surfaced to be 18,243 square yards.

The Department estimates the shoulder width to receive DGA to be 6 feet on each side.

The Department estimates the total shoulder area to receive DGA to be 27,364 square yards.

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.

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DGA BASE

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

DGA BASE FOR SHOULDERS

Unless otherwise noted, the Department estimates the rate of application for DGA Base for Shoulders to be 115 lbs/sy per inch of depth. The Department will not measure necessary grading and/or shaping of existing shoulders prior to placing of DGA Base, but shall be incidental to the Contract unit price per ton for DGA Base.

Accept payment at the Contract unit price per ton as full compensation for all labor, materials, equipment, and incidentals for grading and/or shaping of existing shoulders and furnishing, placing, and compacting the DGA Base.

INCIDENTAL SURFACING

The Department has included in the quantities of asphalt mixtures established in the proposal estimated quantities required for resurfacing or surfacing mailbox turnouts, farm field entrances, residential and commercial entrances, curve widening, ramp gores and tapers, and road and street approaches, as applicable. Pave these areas to the limits as shown on Standard Drawing RPM-110-06 or as directed by the Engineer. In the event signal detectors are present in the intersecting streets or roads, pave the crossroads to the right of way limit or back of the signal detector, whichever is the farthest back of the mainline. Surface or resurface these areas as directed by the Engineer. The Department will not measure placing and compacting for separate payment but shall be incidental to the Contract unit price for the asphalt mixtures.

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.

OPTION B

Be advised that the Department will control and accept compaction of asphalt mixtures furnished on this project under OPTION B in accordance with Sections 402 and 403.

MATERIAL TRANSFER VEHICLE (MTV)

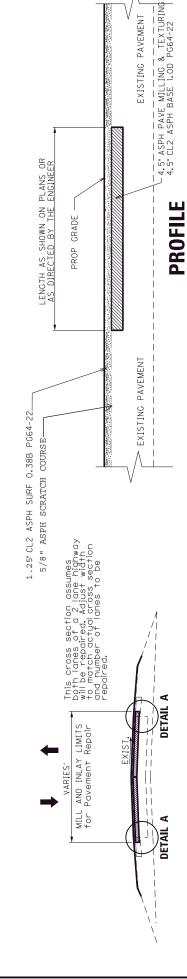
Provide and use a MTV in accordance with Sections 403.02.10 and 403.03.05.

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County Item

ASPHALT PAVEMENT REPAIR DETAIL

CARTER



CROSS SECTION

1.25" CL2 ASPH SURF 0.38D PG64-22

SHOULDER OR LANE JOINT

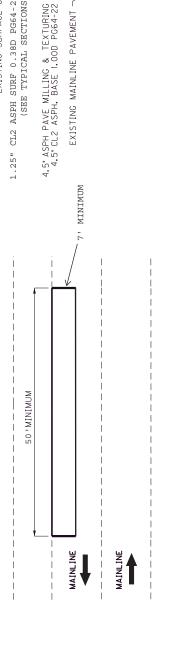
- EXISTING S ADJACENT 1

EXISTING SURFACE GRADE

ASPH SURF 0.38D PG64-22 (SEE TYPICAL SECTIONS)

(SEE TYPICAL SECTIONS)

EXISTING PAVEMENT



PLAN

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 1.5 thicknesses with additional quantity of 100 tons added to be used as directed by the engineer for additional locations.

NOTES

- 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. ć,
 - The item ASPHALT PAVE MILLING AND TEXTURING includes removal of all asphalt to the required dimensions including keying into the adjacent lane or shoulder. 3,
- Perform typical miling and overlay operations with resurfacing items subject to payment as part of the resurfacing operation of the completent repairs. Allow traffic to run on the asphale pavement repairs a minimum of 14 days prior to initiation of the typical overlay operations.

BID ITEM

DETAIL A

ASPHALT PAVE WILLING AND TEXTURING CL2 ASPH BASE 1.000 PG64-22 2677 210

* *

285 TONS 285 TONS

- 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.
- 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)
- PAVEMENT 9 **ASPHALT**

Contract ID:

TO SCALE

Drainage Summary

МР	ENTRANCE PIPE - 15 IN	ENTRANCE PIPE - 18 IN	CULVERT PIPE - 18 IN	CULVERT PIPE - 24 IN	REMOVE PIPE	PIPE CULVERT HEADWALL - 18 IN	PIPE CULVERT HEADWALL - 24 IN	REMOVE HEADWALL	DROP BOX INLET TYPE 10	CHANNEL LINING - CLASS	CHANNEL LINING - CLASS	CLEAN CULVERT	REMARKS	
UNIT	LF	LF	LF	LF	LF	EA	EA	EA	EA	TON	TON	EA		
26.315	30				30								EB	
26.338	40				40								EB	
26.483	36				36								EB	
26.64												1	42" PIPE	
26.887	30				30								EB	
27.03												1	4'x8' RCBC	
27.08			4		4	1		1		10			CULVERT REPAIR	
27.15	45		-		-								EB	
27.212				4	4		1	1		15			CULVERT REPAIR	
27.215	30				30								EB	
27.246	30				30								EB	
27.259	40				40								EB	
27.31	60				10								EB	
27.382	36				36								EB	
27.438	36				36								EB	
27.462	150				314				2				EB	
27.5	24				24								EB	
27.518	24				24								EB	
27.55	24				24								EB	
27.568	24				24								EB	
27.63	24				24								WB	
27.635	24				24								EB	
27.645	24				24								EB	
27.82	2-7			4	4		1	1		25	50		CULVERT REPAIR	
28.11			8		8	1		1		25	100		CULVERT REPAIR	
28.115	60		-		60					23	100		EB	
28.29	00		4		4	1		1		25			CULVERT REPAIR	
28.43	30		7		30					23			WB	
28.63	- 50		4		4	1		1			25		CULVERT REPAIR	
28.736	42				42								EB EB	
28.846	50				50								EB	
28.96	38				38								WB	
28.99		60			60								EB	
29.159	36				36								EB	
29.17	24				24								WB	
29.18	30				30								WB WB	
29.511	30												EB	
29.65	24				24								EB	
29.78												1	10'X7' RCBC	
29.85		50			50								WB	
29.87	24				24								EB	
29.883	24				24								EB	
29.89	20				20								WB	
TOTALS	1163	110	20	8	1306	4	2	6	2	100	175	3	<u>-</u>	
			_								_		Ided to be used as directed	

*An additional 100 tons of Channel Lining Class II and 100 tons of Channel Lining Class III will be included to be used as directed by the Engineer.

US 60 Entrances - Grade Corrections								
Milepoint	Direction	Area (SQ YDS)	Asphalt Surface (TONS)	Asphalt Base (TONS)	Comments			
26.46	EB	250	21	41				
27.19	EB	70	6	12				
27.234	EB	30	2	5				
28.135	EB	250	21	41				
28.808	EB	170	14	28				
28.956	EB	80	7	13	Cribb's Hill			
29.933	WB	100	8	17				
			78	157				

GENERAL NOTES

US 60 MP 26.131 – 30.018

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. Channel Lining Class II and Class III will be limestone.
- E. **Guardrail.** Use 6' 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.

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 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.
- J. Asphalt Pavement Repairs. See Asphalt Pavement Repair Detail.
- K. 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.
- L. Culvert Pipe. Saw cut the existing pavement at a depth to extend to the bottom of the existing pavement.
- M. **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.

N. **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. Asphalt Pavement Repairs. See Asphalt Pavement Repair Detail.
- G. **Ditching and Shouldering.** Plan quantity of Ditching and Shouldering will be measured for payment upon successful completion of all items of work required.
- H. 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.

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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. **Barricade Type III** Contrary to the specifications, no direct measurement or payment will be made for Barricade Type III.
- H. 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

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incidental applications.

- I. **Guardrail.** No additional measurement or payment will be made for methods of crossing existing Reinforced Concrete Box Culverts.
- J. Saw Cut. Saw cut of existing pavement for pipe replacement will be considered incidental to pipe installation.

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PROJECT SPECIFIC NOTES

US 60 MP 26.131 - 30.018

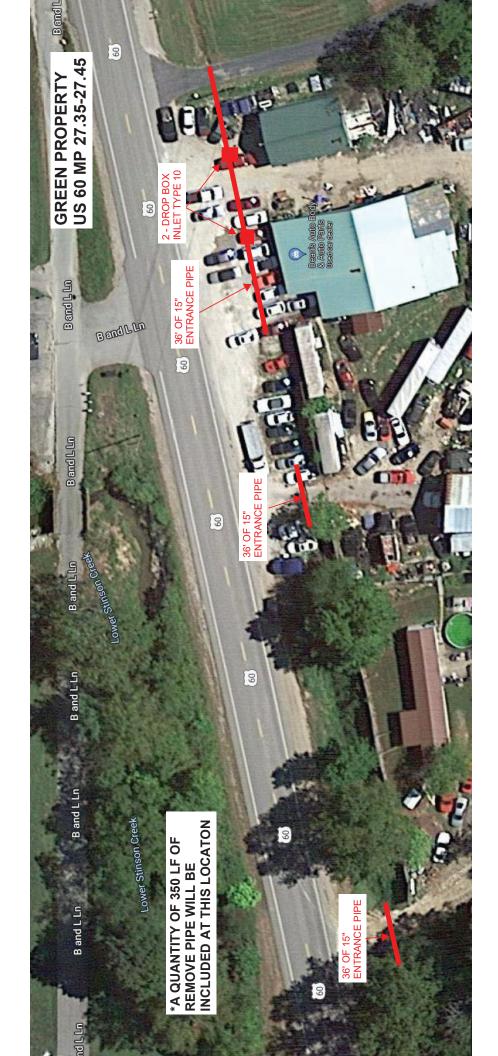
This project is intended to improve drainage, replace guardrail and provide a thin overlay to provide a new mainline riding surface through the length of the project.

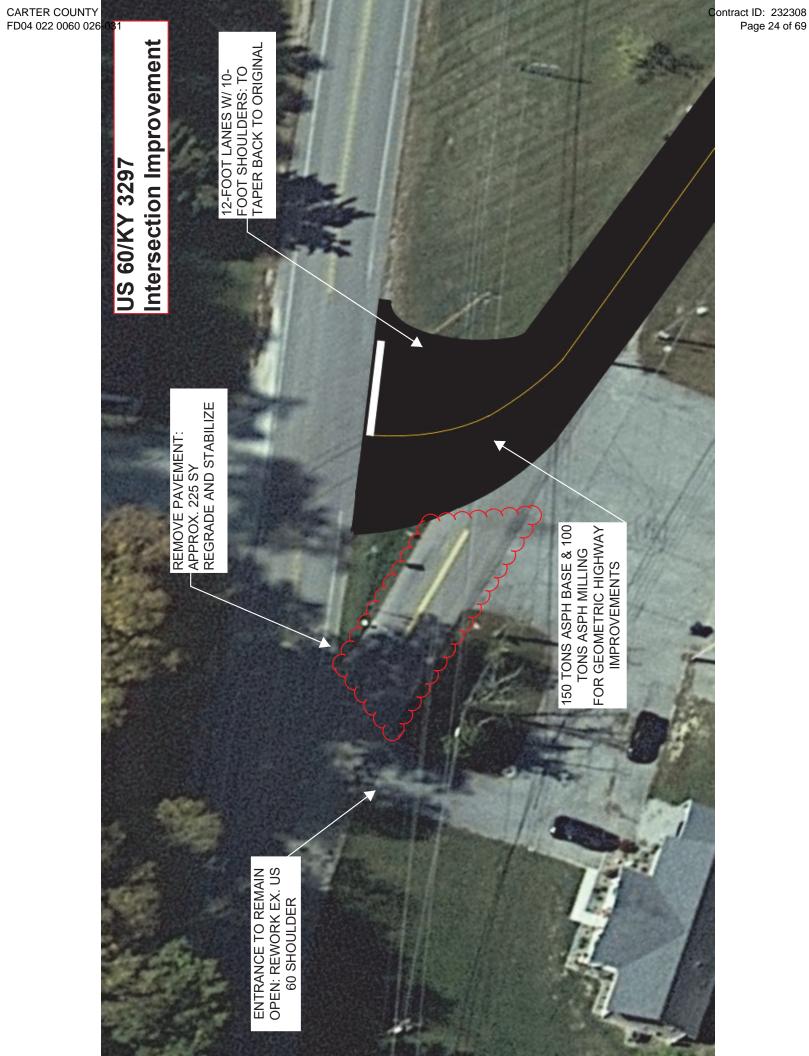
- 1. The dimensions shown on the typical section for pavement and shoulder widths and thickness are nominal or typical dimensions. The actual dimensions to be constructed may be varied to fit existing conditions as directed or approved by the Engineer. It is not intended that existing pavement or shoulders be widened unless otherwise specified in the Proposal.
- 2. The contractor is to be aware of the locations of overhead utility wires on the project. 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 approach 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 1.0D 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 paved entrances will receive a 3" thick cap of "CL2 ASPH BASE 1.0D PG64-22" and 1.25" thickness of "CL2 ASPH SURF 0.38D PG64-22" covering the pipe trench and the area between the pipe trench and the paved shoulder. Entrance pipe trenches across gravel entrances will receive a 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 summary of paved entrances, with approximate areas, that need grade corrections are included. Existing pavement is to be removed for a distance that allows the existing grade to be corrected so the entrance does not direct the flow of water onto the shoulder. A 3" thickness of "CL2 ASPH BASE 1.0 PG64-22" and 1.25" thickness of "CL2 ASPH SURF 0.38D PG64-22" will be constructed on the area that the paved entrance was removed. Pavement removal and additional gradework will be incidental to "Ditching and Shouldering".
- 15. 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 2 and Channel Lining Class 3.
- 16. Asphalt overlay 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 overlayed 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 overlayed 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.





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SPECIAL PROVISION FOR WASTE AND BORROW SITES

Obtain U.S. Army Corps of Engineer's approval before utilizing a waste or borrow site that involves "Waters of the United States". The Corps of Engineers defines "Waters of the United States" as perennial or intermittent streams, ponds or wetlands. The Corps of Engineers also considers ephemeral streams, typically dry except during rainfall but having a defined drainage channel, to be jurisdictional waters. Direct questions concerning any potential impacts to "Waters of the United States" to the attention of the appropriate District Office for the Corps of Engineers for a determination prior to disturbance. Be responsible for any fees associated with obtaining approval for waste and borrow sites from the U.S. Army Corps of Engineer or other appropriate regulatory agencies.

1-296 Waste & Borrow Sites 01/02/2012

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	0 - 30	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.

- 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. During this timeframe, 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.

Non-Tracking Tack Price Adjustment Schedule								
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.	30 max.	≤ 31	32 - 33	34 - 35	36 - 37	≥ 38		
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

Revised: May 23, 2022

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 verification.

- **3.2.1 KYCT Frequency.** Obtain an adequate sample of hot mix asphalt to ensure 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, for field specimens, fabricate a minimum of 3 and up to 6 test specimens. The specimens shall be compacted at the temperature in accordance with KM 64-411. KYCT mix design specimens shall be short-term conditioned uncovered for four hours at compaction temperature in accordance with KM 64-411. Contrary to the Kentucky Method, plant produced bituminous material shall be short-term conditioned immediately after sampling for two hours uncovered in the oven at compaction temperature in accordance with 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 ensure 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 with 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 with 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 Payment

Any additional labor and testing equipment that is required to fabricate and test the KYCT and Hamburg specimens shall be considered 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.

June 15th, 2022

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SPECIAL NOTE FOR DOUBLE ASPHALT SEAL COAT

Use RS-2 or RS-2C asphalt material that is compatible with the seal aggregate. Apply the first course of asphalt seal coat at the rate of 3.2 lbs/sy of asphalt and 30 lbs/sy of size #78 seal coat aggregate. Apply the second course at 2.8 lbs/sy of asphalt and 20 lbs/sy of size #9M seal coat aggregate. The Engineer may adjust the rate of application as conditions warrant. Use caution in applying liquid asphalt material to avoid over spray getting on curbs, gutter, barrier walls, bridges, guardrail, and other roadway appurtenances.

The Department will not measure any surface preparation required prior to applying the asphalt seal coat, but shall be incidental to "Asphalt Material for Asphalt Seal Coat".

1-3215 Double Asphalt Seal Coat 01/02/2012

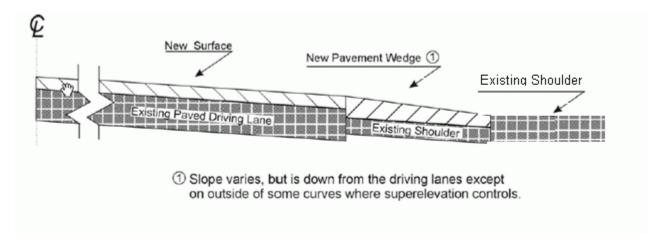
SPECIAL NOTE FOR PAVEMENT WEDGE AND SHOULDER MONOLITHIC OPERATION

- **1.0 MATERIALS.** Provide an Asphalt Surface Mixture conforming to Section 403 of the Standard Specifications, as applicable to the project, for the pavement wedge.
- **2.0 CONSTRUCTION.** Place the specified Asphalt Surface Mixture on shoulders monolithically with the driving lane. Prime the existing shoulder with tack material as the Engineer directs before placing the wedge. Construct according to Section 403.03 of the Standard Specifications.

Equip the paver with a modified screed that extends the full width of the wedge being placed and is tapered to produce a wedge. Obtain the Engineer's approval of the modified screed before placing shoulder wedge monolithically with the driving lane.

The wedge may vary in thickness at the edge of the milled area in the shoulder. If the area to receive the shoulder wedge is milled prior to placement, during rolling operations pinch the outside edge of the new inlay wedge to match the existing shoulder elevation not being resurfaced. Unless required otherwise by the Contract, construct rolled or sawed rumble strips according to Section 403.03.08, as applicable.

The following sketch is primarily for the computation of quantities; however, the wedge will result in a similar cross-section where sufficient width exists. Do not construct a shoulder for placing the wedge unless specified elsewhere in the Contract.

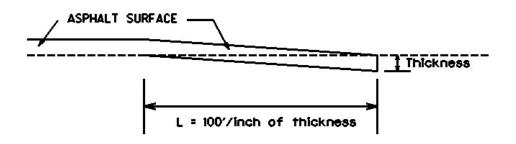


- **3.0 MEASUREMENT.** The Department will measure Asphalt Surface Mixture placed as the pavement wedge according to Section 403.
- **4.0 PAYMENT.** The Department will make payment for the completed and accepted quantities of Asphalt Surface Mixtures on pavement wedges according to Section 403.

SPECIAL NOTE FOR EDGE KEY

Construct Edge Keys at the beginning of project, end of project, at railroad crossings, and at ramps, as applicable. Unless specified in the Contract or directed by the Engineer, do not construct edge keys at intersecting streets, roads, alleys, or entrances. Cut out the existing asphalt surface to the required depth and width shown on the drawing and heel the new surface into the existing surface. The Department will make payment for this work at the Contract unit price per ton for Asphalt Pavement Milling and Texturing, which shall be full compensation for all labor, materials, equipment, and incidentals for removal and disposal of the existing asphalt surface required to construct the edge key.

EDGE KEY



Thickness = 1.25 Inches

L = 125 LF

L= Length of Edge Key

1-3309 Edge key by Ton 01/02//2012

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SPECIAL NOTE FOR ASPHALT MILLING AND TEXTURING

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.

Take possession of the millings and recycle the millings or dispose of the millings off the Right-of-Way at sites obtained by the Contractor at no additional cost to the Department.

1-3520 48 hours Contractor keeps millings 01/2/2012

SPECIAL NOTE FOR BASE FAILURE REPAIR

Repair locations listed on the summary are approximate only. The Engineer will determine actual repair locations and dimensions at the time of construction. Prior to overall milling and/or leveling and wedging, excavate the designated base failure areas by milling to a depth 4.5 inches below the existing asphalt pavement surface level. Dispose of the excavated materials at waste sites off the Right-of-Way obtained by the Contractor at no additional cost to the Department. See Special Note for Waste and Borrow.

Backfill the excavated areas with Class 2 Asphalt Base 1.00D PG64-22. Compact the asphalt base to the compaction required in Section 403.03.10. Seal the asphalt base with leveling and wedging. Perform all base failure repairs in such a manner that removal and replacement are completed on the same day. Do this work as one of the Contractor's first operations in order to allow further compaction by traffic. Do not mill or place new asphalt surface over repaired base failure areas until a minimum of 14 calendar days have elapsed after placement of the asphalt base. After a minimum of 14 calendar days and when the Engineer determines the base failure repair areas have sufficiently stabilized, begin milling and/or resurfacing operations. Prior to milling and/or constructing the new asphalt surface, level and wedge any settlement of the repair areas.

The bidder must draw conclusions as to the conditions encountered. The Department does not give any guarantee as to the accuracy of the data and will not consider any claim for additional compensation if the materials encountered that are not in accord with the classification shown.

Accept payment at the Contract unit prices per ton for Asphalt Milling and Texturing, Asphalt Base, and Leveling and Wedging as full compensation for all labor, materials, equipment, and incidentals for removing pavement and disposing of the materials, furnishing and placing asphalt base, leveling and wedging, and all other items necessary to complete the work according to these notes to the satisfaction of the Engineer.

1-3605 basefailurerepairmillinlaypayton 01/02/2012

CARTER COUNTY FD04 022 0060 026-031 Contract ID: 232308 Page 37 of 69

SPECIAL NOTE FOR TYPICAL SECTION DIMENSIONS

Consider the dimensions shown on the typical sections for pavement and shoulder widths and thickness' to be nominal or typical dimensions. The Engineer may direct or approve varying the actual dimensions to be constructed to fit existing conditions. Do not widen existing pavement or shoulders unless specified elsewhere in this proposal or directed by the engineer.

1-3725 Typical Section Dimensions 01/02/2012

TRAFFIC CONTROL PLAN CARTER COUNTY US 60 MP 26.131-30.018

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:

Memorial Day Weekend Independence Day Weekend US 60 Yard Sale Weekend Labor Day Weekend Thanksgiving Weekend May 27th, 2023 – May 29th, 2023 July 1st, 2023 – July 4th, 2023 August 4th, 2023 – August 6th, 2023 Sept 1st, 2023 – Sept 4th, 2023 Nov 23rd, 2023 – Nov 26th, 2023

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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 - 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 IIb - Asphalt Milling and Paving

Using alternating lane closures, complete milling and texturing as noted in the milling summary. Clip back sod from shoulder and place leveling and wedging to correct any irregularities in profile or cross slope. Place asphalt scratch course on one lane and on one shoulder. Temporary striping is to be placed at the end of each day in areas where the existing striping was eliminated.

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

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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.

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".

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

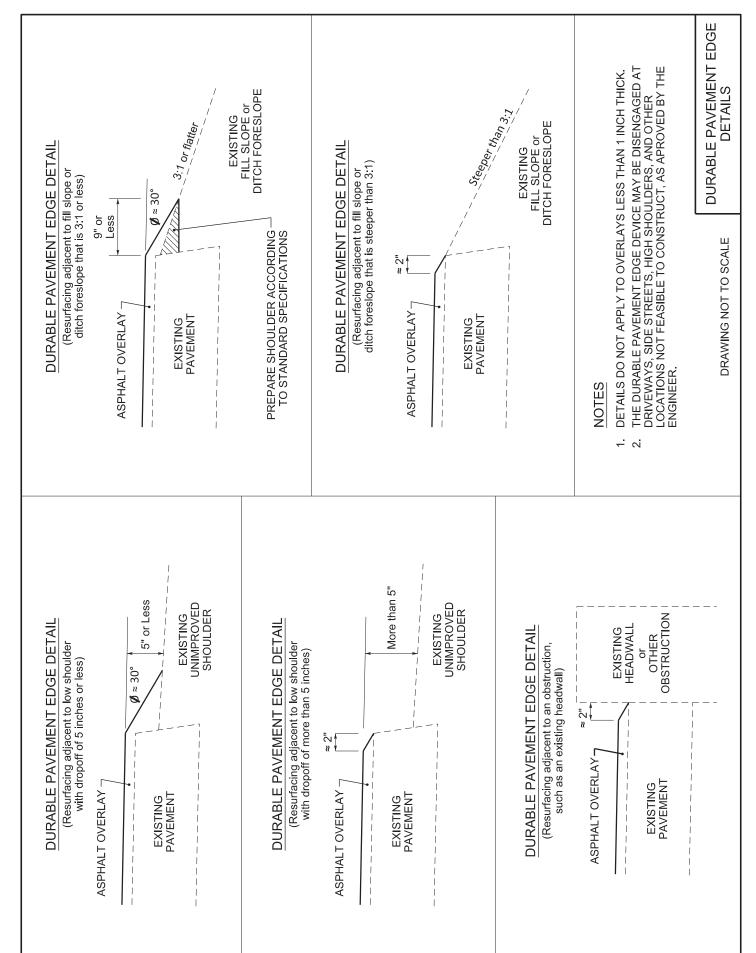
Provide for immediate passage of all school buses and emergency vehicles.

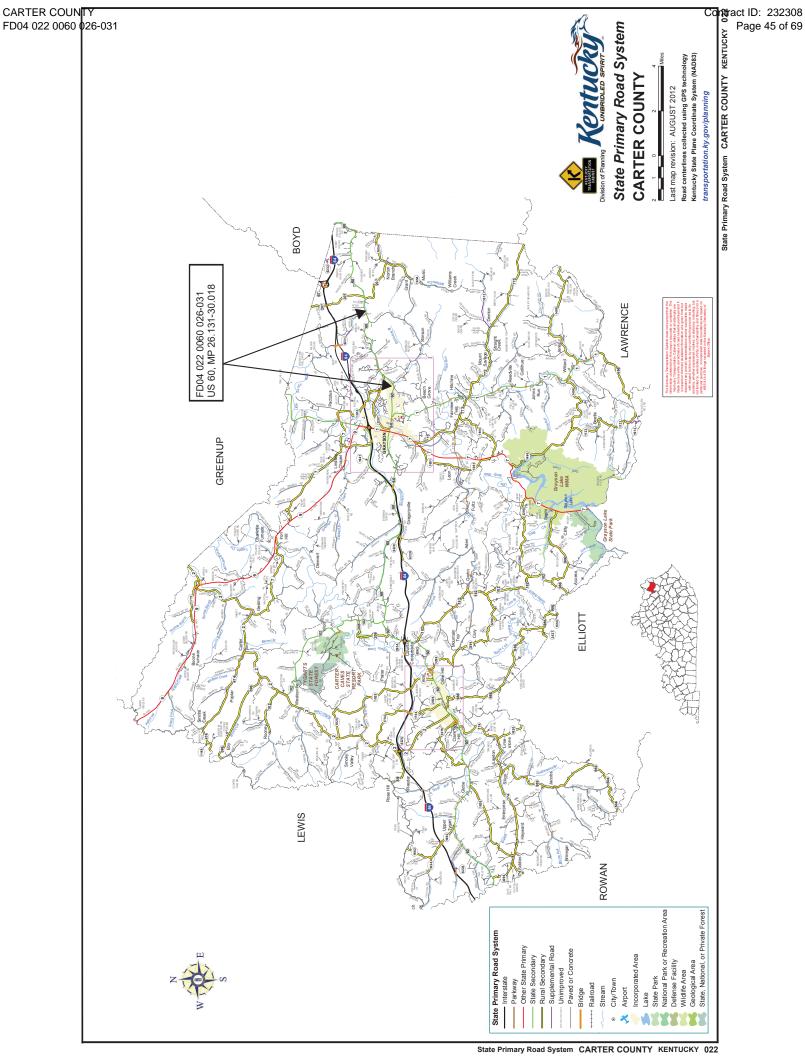
EMERGENCY I-64 BYPASS ROUTE

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.





Milling Summary FD04 022 0060 026-031

				Total	505
Milepoint	Comment	Length	Width	Avg Depth	Tons
26.131	EDGE KEY	150	30	0.625	17.1875
30.018	EDGE KEY	150	30	0.625	17.1875
26.700	KY 3297 INTERSECTI	ON			100
	BASE FAILURES				285
					0
	BRIDGE MILLING				85
					0
					0
					0
					0
					0
					0
					0
					0
					0
					0
					0
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					0
					0
					0

Asphalt Pavement Repair Summary FD04 022 0060 026-031

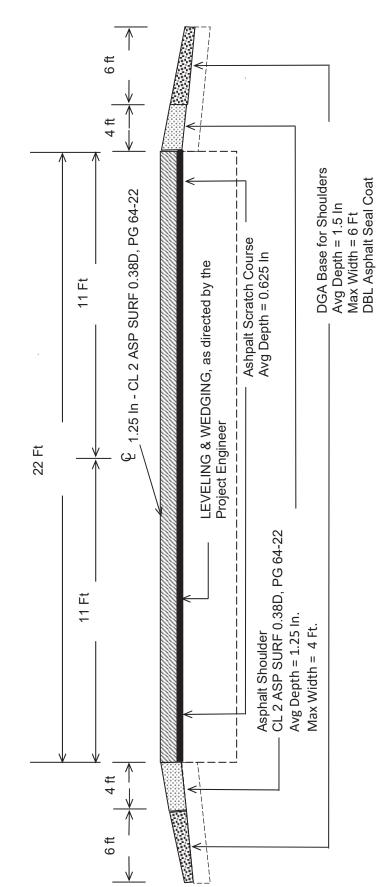
		Total	1150	285
Milepoint	Length	Width	SQYD	TONS
27.265 RT	200	7	155.555556	38.5
27.95 RT	200	7	155.55556	38.5
28.02 LT	200	7	155.55556	38.5
28.145 RT	400	7	311.111111	77
29.000	100	30	333.333333	82.5
29.290 RT	50	7	38.8888889	9.625
			0	0
			0	0
			0	0
			0	0
			0	0
			0	0
			0	0
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			0	0
			0	0
			0	0

FE01 068 (FE01 068 0010 013-014	4									
		INS	INSTALL GUARDR	RDRAIL				RE	REMOVE GUARDRAIL	RDRAIL	
LANE	END TREAT.	BEGIN	END MILEPOINT	END TREAT.	LIN FEET	REMARKS	LANE	BEGIN MILEPOINT	END MILEPOINT	LIN FEET	REMARKS
LT	RADIUS W/ TS#1	26.156	26.230	RADIUS W/ TS #1	400.0			26.156	26.228	387.5	
LT	RADIUS W/ TS#1	26.235	26.260	RADIUS W/ TS #1	137.5			26.235	26.257	125.0	
LT	RADIUS W/ TS#1	26.260	26.412	RADIUS W/ TS #1	812.5			26.260	26.410	800.0	
LT	RADIUS W/ TS#1	27.622	27.773	RADIUS W/ TS #1	0.008			27.622	177.72	787.5	
LT	RADIUS W/ TS#1	27.900	28.418	RADIUS W/ TS #1	2737.5			27.900	28.415	2725.0	
RT	Type 4A	28.337	28.728	RADIUS W/ TS #1	2075.0			28.337	28.725	2050.0	
LT	RADIUS W/ TS#1	28.810	28.885	Type 4A	400.0	EXTEND 100'		28.810	28.862	275.0	
RT	RADIUS W/ TS#1	28.990	29.123	RADIUS W/ TS #1	712.5			28.990	29.120	687.5	
RT	Type 4A	29.160	29.442	RADIUS W/ TS #1	1500.0	EXTEND 100'		29.180	29.441	1387.5	
RT	RADIUS W/ TS#1	29.445	29.500	Type I	0.008			29.445	29.497	275.0	
RT	TY 7 W/ RADIUS	29.505	29.560	RADIUS W/ TS #1	300.0	TYPE 7 ON SIDE ROAD		29.506	29.556	275.0	
Totals					10175.0					9775.0	
- H											
l ype l		1.000									
Type 2A		0.000									
Type 3		0.000									
Type 4A		3.000									
Type 7		0.000									
Terminal		0.000									

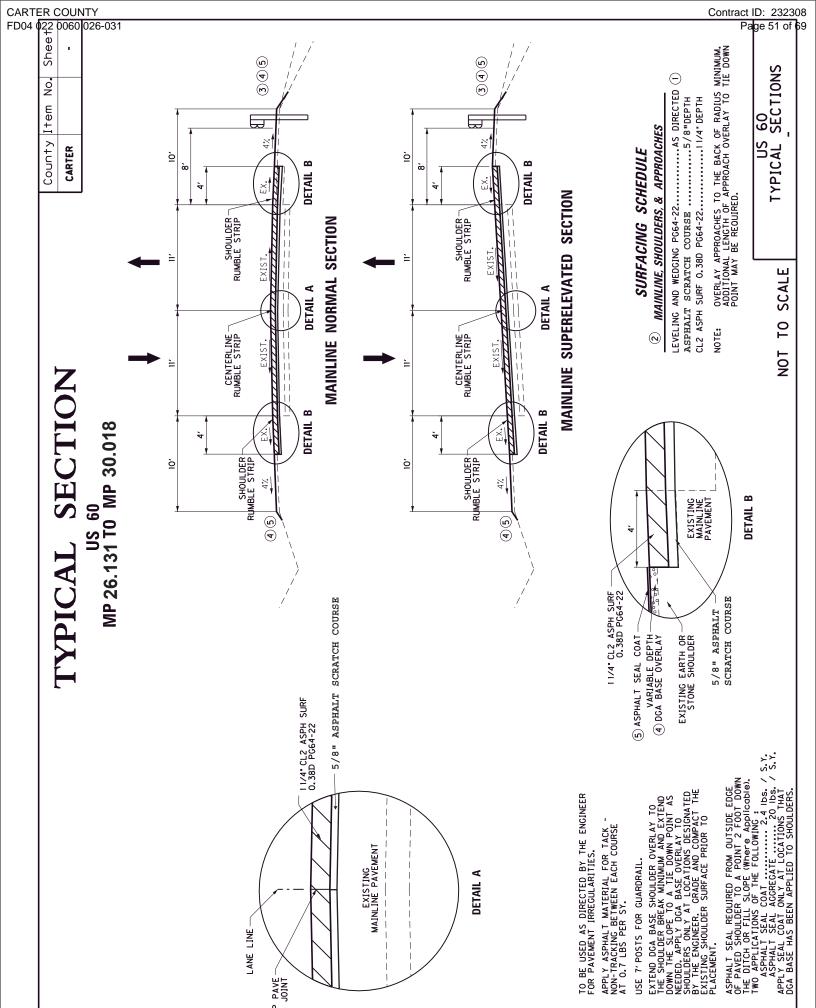
Carter County THERMOPLASTIC INTERSECTION PAVEMENT MARKINGS SUMMARY FD04 022 0060 026-031

	OSS BUCK LF											0
AD												
RAILROAD	"R" 6 FOOT EA											0
CONE	CAP - YELLOW SQ FT											0
MERGE	ARROW EA											0
CROSS	COMB HATCH ARROW EA SQFT EA											0
	COMB											0
RROWS	STR EA											0
₹	CURVE EA											0
STP BARS	24 INCH LF	16	20	16	20	24	12	16	16	12	20	172
X-WALKS	6 INCH LF											0
INTERSECTION		STINSON RD	KY 3297	BECKWORTH BR	B AND L LN	B AND L LN	TARK HILL RD	CRIBBS HILL RD	CRIBBS HILL RD	JORDAN RD	WILSON CREEK RD	
MPT.		26.150	26.717	26.971	27.001	27.487	27.739	27.888	28.752	28.937	29.829	TOTAL

CARTER COUNTY FD04 022 0060 026-031 TYPICAL SECTION MILEPOINTS 26.131 - 30.018



Page 1

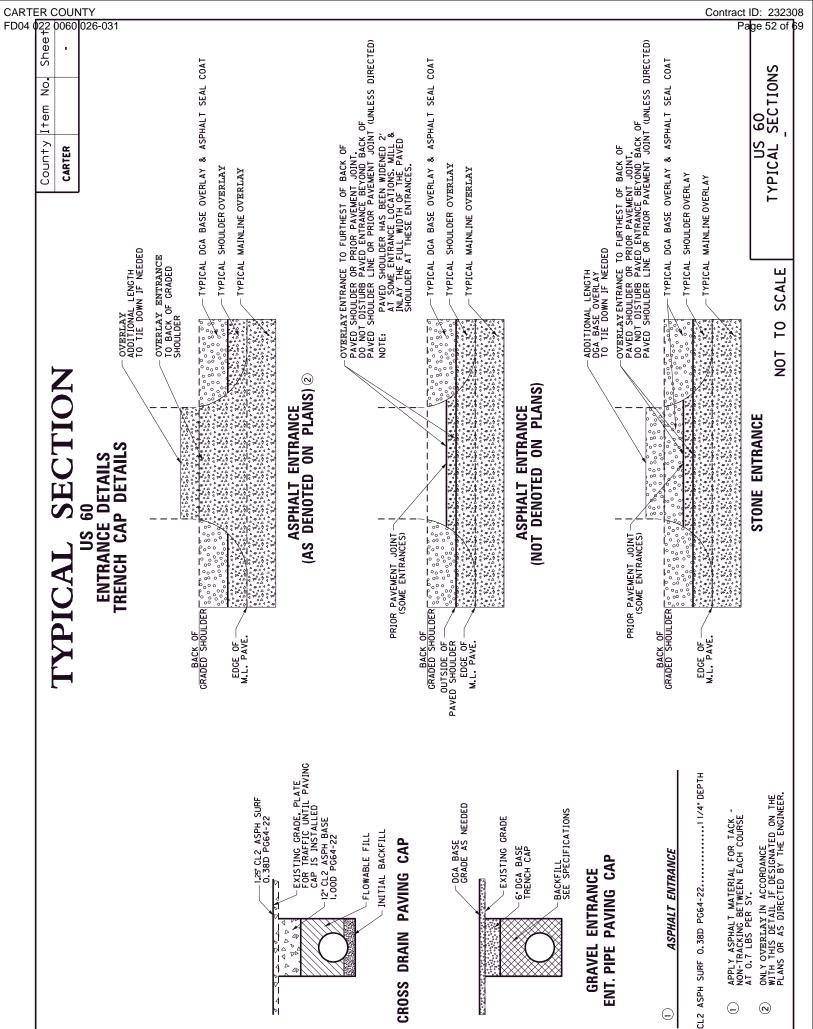


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(D)

LANE LINE

PROP PAVE -



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**

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

(v)

ASPHALT ENTRANCE

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CARTER COUNTY FD04 022 0060 026-031

GUARDRAIL DELIVERY VERIFICATION SHEET

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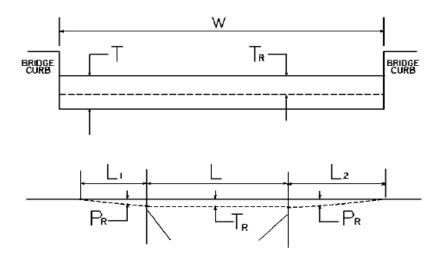
Contract Id:		_ Con	tractor:
Section Engineer:		_ District & County:	
<u>DESCRIPTION</u>	<u>UNIT</u>	QTY LEAVING PROJECT	QTY RECEIVED@BB YARD
GUARDRAIL (Includes	LF		
End treatments & crash cushions) STEEL POSTS	EACH		
STEEL BLOCKS	EACH		
WOOD OFFSET BLOCKS	EACH		
BACK UP PLATES	EACH		
CRASH CUSHION	EACH		
NUTS, BOLTS, WASHERS	BAG/BCKT		
DAMAGED RAIL TO MAINT. FACILIT	TY LF		
DAMAGED POSTS TO MAINT. FACII	LITY EACH		
*Required Signatures before			9 Doto
Printed Section Engineer's Re			
Signature Section Engineer's			
Printed Contractor's Represe	ntative		& Date
Signature Contractor's Repre	sentative		_& Date
			on truck must be counted & the
<i>quantity received column co</i> Printed Bailey Bridge Yard Re			& Date
Signature Bailey Bridge Yard			
Signature Contractor's Repre			
stst Payment for the bid item r	emove guard	rail will be based upon the qu	uantities shown in the Bailey Bridge

Date: _____

By: _____

Completed Form Submitted to Section Engineer

CONSTRUCTION DETAIL FOR BRIDGE WITHIN LIMITS OF PAVING PROJECT FD04 022 0060 026-031



W = bridge width curb to curb

T = thickness of existing bituminous overlay

L = length of bridge

 L_1 & L_2 = length of approach pavement to be removed

 T_R = thickness to be removed and replaced on bridge

 P_R = thickness to be removed and replaced on pavement

Note: L₁ & L₂ lengths shall be determined by using a transition rate of 100 ft / inch of thickness

BRIDGE NO	MP	W (ft)	T (in)	L ₁ (ft)	L ₂ (ft)	T _R (in)	L (ft)	P _R (in)
B00004N	29.781	30.00	12.00	200.00	200.00	2.00	27.00	2.00

PART II SPECIFICATIONS AND STANDARD DRAWINGS

STANDARD SPECIFICATIONS

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

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.
 - b) 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.
- 6) 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

2020 KENTUCKY STANDARD DRAWINGS

MISCELLANEOUS STANDARDS	DCV 001 06
APPROACHES, ENTRANCES, AND MAIL BOX TURNOUT	KGA-001-00
PAVEMENT STRIPING DETAILS FOR TWO LANE TWO WAY ROADWAYS	
CENTERLINE RUMBLE STRIPS PLACEMENT DETAILS	
CENTERLINE RUMBLE STRIPS 6 INCH STRIPING	
SHOULDER & EDGELINE RUMBLE STRIPS PLACEMENT DETAILS	
SHOULDER RUMBLE STRIP DETAILS TWO LANE ROADWAYS	
LANE CLOSURE TWO-LANE HIGHWAY	
SHOULDER CLOSURE	
PAVEMENT CONDITION WARNING SIGNS	
MOBILE OPERATION FOR PAINT STRIPING CASE I	
MOBILE OPERATION FOR PAINT STRIPING CASE II	
MOBILE OPERATION FOR DURABLE STRIPING CASE III	
MOBILE OPERATION FOR DURABLE STRIPING CASE IV	
	115 133 02
TYPICAL BARRIER INSTALLATIONS	
TYPICAL GUARDRAIL INSTALLATIONS	RBI-001-12
TYPICAL GUARDRAIL INSTALLATIONS	
INSTALLATION OF GUARDRAIL END TREATMENT TYPE 1	RBI-004-06
<u>GUARDRAIL HARDWARE</u>	
STEEL BEAM GUARDRAIL ("W"-BEAM)	RBR-001-13
GUARDRAIL COMPONENTS	
GUARDRAIL TERMINAL SECTIONS	
STEEL GUARDRAIL POSTS	
GUARDRAIL SYSTEM TRANSITION	
GUARDRAIL END TREATMENT TYPE 1	
GUARDRAIL END TREATMENT TYPE 4A	
GUARDRAIL END TREATMENT TYPE 7	
GUARDRAIL END TREATMENT TYPE 7 ALTERNATE ANCHOR	
DELINEATORS FOR GUARDRAIL	RBR-055-01

PART III

EMPLOYMENT, WAGE AND RECORD REQUIREMENTS

Contract ID: 232308 Page 62 of 69

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

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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, 1025 Capital Center Drive, Suite 104, Frankfort, Kentucky 40601; telephone (502) 564-7954.

Revised: May 23, 2022

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.

EMPLOYEE RIGHTS UNDER THE FAIR LABOR STANDARDS ACT

THE UNITED STATES DEPARTMENT OF LABOR WAGE AND HOUR DIVISION

FEDERAL MINIMUM WAGE

\$7.25

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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.
- Some state laws provide greater employee protections; employers must comply with both.
- 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.



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PART IV

INSURANCE

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

current edition

PART V

BID ITEMS

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232308

PROPOSAL BID ITEMS

Report Date 5/18/23

Section: 0001 - ROADWAY

LINE	BID CODE	ALT DESCRIPTION	QUANTITY	_	UNIT PRIC	AMOUNT
010	00001	DGA BASE	3,600.00	TON		\$
020	00100	ASPHALT SEAL AGGREGATE	690.00	TON		\$
030	00103	ASPHALT SEAL COAT	82.00	TON		\$
040	00190	LEVELING & WEDGING PG64-22	500.00	TON		\$
050	00191	ASPHALT SCRATCH COURSE PG64-22	2,350.00	TON		\$
060	00212	CL2 ASPH BASE 1.00D PG64-22	692.00	TON		\$
070	00301	CL2 ASPH SURF 0.38D PG64-22	5,300.00	TON		\$
080	00440	ENTRANCE PIPE-15 IN	1,163.00	LF		\$
090	00441	ENTRANCE PIPE-18 IN	110.00	LF		\$
100	00462	CULVERT PIPE-18 IN	20.00	LF		\$
)110	00464	CULVERT PIPE-24 IN	8.00	LF		\$
0120	01204	PIPE CULVERT HEADWALL-18 IN		EACH		\$
0130	01208	PIPE CULVERT HEADWALL-24 IN		EACH		\$
0140	01310	REMOVE PIPE	1,306.00	LF		\$
0150	01541	DROP BOX INLET TYPE 10	2.00	EACH		\$
0160	01987	DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	250.00	EACH		\$
170	02091	REMOVE PAVEMENT	225.00	SQYD		\$
0180	02351	GUARDRAIL-STEEL W BEAM-S FACE	10,175.00	LF		\$
190	02360	GUARDRAIL TERMINAL SECTION NO 1	17.00	EACH		\$
0200	02367	GUARDRAIL END TREATMENT TYPE 1	1.00	EACH		\$
210	02371	GUARDRAIL END TREATMENT TYPE 7	1.00	EACH		\$
220	02381	REMOVE GUARDRAIL	9,775.00	LF		\$
0230	02391	GUARDRAIL END TREATMENT TYPE 4A	3.00	EACH		\$
240	02396	REMOVE GUARDRAIL END TREATMENT	4.00	EACH		\$
0250	02483	CHANNEL LINING CLASS II	200.00	TON		\$
260	02484	CHANNEL LINING CLASS III	275.00	TON		\$
270	02562	TEMPORARY SIGNS	310.00	SQFT		\$
280	02568	MOBILIZATION	1.00	LS		\$
0290	02575	DITCHING AND SHOULDERING	20,523.00	LF		\$
0300	02625	REMOVE HEADWALL	6.00	EACH		\$
0310	02650	MAINTAIN & CONTROL TRAFFIC	1.00	LS		\$
0320	02671	PORTABLE CHANGEABLE MESSAGE SIGN	2.00	EACH		\$
0330	02676	MOBILIZATION FOR MILL & TEXT	1.00	LS		\$
0340	02677	ASPHALT PAVE MILLING & TEXTURING	505.00	TON		\$
0350	02696	SHOULDER RUMBLE STRIPS	41,046.00	LF		\$
0360	02703	SILT TRAP TYPE A	10.00	EACH		\$
370	02706	CLEAN SILT TRAP TYPE A	10.00	EACH		\$
0380	02775	ARROW PANEL	2.00	EACH		\$
0390	05950	EROSION CONTROL BLANKET	27,000.00	SQYD		\$
0400	05953	TEMP SEEDING AND PROTECTION	10,000.00	SQYD		\$
)410	05963	INITIAL FERTILIZER	1.00	TON		\$
0420	05964	MAINTENANCE FERTILIZER	1.00	TON		\$
0430	05992	AGRICULTURAL LIMESTONE	10.00	TON		\$
0440	06510	PAVE STRIPING-TEMP PAINT-4 IN	125,000.00	LF		\$
0450	06568	PAVE MARKING-THERMO STOP BAR-24IN	172.00	LF		\$
0460	10020NS	FUEL ADJUSTMENT	19,496.00	DOLL	\$1.00	\$ \$19,496.00

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Report Date 5/18/23

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0470	10030NS		ASPHALT ADJUSTMENT	48,968.00	DOLL	\$1.00	\$	\$48,968.00
0480	20458ES403		CENTERLINE RUMBLE STRIPS	20,353.00	LF		\$	
0490	20465EC		CLEAN CULVERT (3 SITES)	1.00	LS		\$	
0500	23140EN		DURABLE WATERBORNE MARKING-6 IN W	7.77	MILE		\$	
0510	23141EN		DURABLE WATERBORNE MARKING-6 IN Y	7.77	MILE		\$	
0520	24970EC		ASPHALT MATERIAL FOR TACK NON- TRACKING	29.00	TON		\$	

Section: 0002 - DEMOBILIZATION

LINE	BID CODE	ALT DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0530	02569	DEMOBILIZATION	1.00	LS	3	\$	