

CALL NO. 310

CONTRACT ID. 232497

CLAY COUNTY

FED/STATE PROJECT NUMBER FD04 026 9006 013-016

DESCRIPTION HAL ROGERS PARKWAY (HR 9006)

WORK TYPE ASPHALT PAVEMENT & ROADWAY REHAB

PRIMARY COMPLETION DATE 10/15/2024

## **LETTING DATE:** <u>December 14,2023</u>

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN STANDARD TIME December 14,2023. Bids will be publicly announced at 10:00 AM EASTERN STANDARD TIME.

NO PLANS ASSOCIATED WITH THIS PROJECT.

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

## TABLE OF CONTENTS

#### PART I SCOPE OF WORK

- PROJECT(S), COMPLETION DATE(S), & LIQUIDATED DAMAGES
- CONTRACT NOTES
- STATE CONTRACT NOTES
- NATIONAL HIGHWAY
- SURFACING AREAS
- ASPHALT MIXTURE
- DGA BASE
- DGA BASE FOR SHOULDERS
- INCIDENTAL SURFACING
- FUEL AND ASPHALT PAY ADJUSTMENT
- COMPACTION OPTION A
- MATERIAL TRANSFER VEHICLE (MTV)
- SPECIAL NOTE(S) APPLICABLE TO PROJECT
- EXPERIMENTAL KYCT AND HAMBURG TESTING
- DOLOMITIC POLISH-RESISTANT AGGREGATE CLASS A 0.38-IN AND 0.50-IN NOMINAL ASPHALT MIXTURES
- ASPHALT MIXTURE FOR PAVEMENT WEDGE
- SINGLE ASPHALT SEAL (A-2) ON SHOULDERS
- BASE FAILURE REPAIR 23STONE-12IN-PAY SY
- TYPICAL SECTION DIMENSIONS
- TRAFFIC CONTROL PLAN
- TRENCHING
- EROSION CONTROL
- SKETCH MAP(S)
- SUMMARY SHEET(S)
- TYPICAL SECTION(S)
- GUARDRAIL DELIVERY VERIFICATION SHEET
- BRIDGE DETAIL FOR PAVING PROJECT

## PART II SPECIFICATIONS AND STANDARD DRAWINGS

- STANDARD AND SUPPLEMENTAL SPECIFICATIONS
- [SN-1I] PORTABLE CHANGEABLE SIGNS
- 2020 STANDARD DRAWINGS THAT APPLY
- INLAID PAVEMENT MARKER ARRANGEMENTS TWO-LANE ROADWAYS
- INLAID PAVEMENT MARKER ARRANGEMENTS TWO-LANE TO FOUR LANE TRANSITIONS
- INLAID PAVEMENT MARKER ARRANGEMENT ON-RAMP WITH TAPERED ACCELERATION LANE

## PART III EMPLOYMENT, WAGE AND RECORD REQUIREMENTS

- LABOR AND WAGE REQUIREMENTS
- EXECUTIVE BRANCH CODE OF ETHICS
- KENTUCKY EQUAL EMPLOYMENT OPPORTUNITY ACT OF 1978 LOCALITY / STATE
- PROJECT WAGE RATES / STATE FUNDED

## PART IV INSURANCE

PART V BID ITEMS

## PART I SCOPE OF WORK

## **ADMINISTRATIVE DISTRICT - 11**

CONTRACT ID - 232497 FD04 026 9006 013-016 COUNTY - CLAY

PCN - MP02690062301 FD04 026 9006 013-016

HAL ROGERS PARKWAY (HR 9006) (MP 13.926) BEGIN AT THE EAST END OF THE URBAN ROAD BRIDGE EXTENDING EAST TO 0.652 EAST OF FRONTAGE ROAD NO. 9 (MP 15.610), A DISTANCE OF 01.68 MILES.ASPHALT PAVEMENT & ROADWAY REHAB SYP NO. 11-20001.00.

GEOGRAPHIC COORDINATES LATITUDE 38:08:08.02 LONGITUDE 83:51:33.06 ADT 8,572

## **COMPLETION DATE(S):**

COMPLETED BY 10/15/2024 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 <a href="https://secure.kentucky.gov/sos/ftbr/welcome.aspx">https://secure.kentucky.gov/sos/ftbr/welcome.aspx</a> .

## 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 <a href="mailto:kytc.projectquestions@ky.gov">kytc.projectquestions@ky.gov</a>. 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 (<a href="www.transportation.ky.gov/contract">www.transportation.ky.gov/contract</a>). 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.

## **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.

October 4, 2023

SPECIAL NOTE – BUY AMERICA REQUIREMENTS AND BUILD AMERICA, BUY AMERICA (BABA) ACT

10/26/2023

## 1.0 BUY AMERICA REQUIREMENT.

Follow the "Buy America" provisions as required by 23 U.S.C. § 313 and 23 C.F.R. § 635.410. Except as expressly provided herein all manufacturing processes of steel or iron materials including but not limited to structural steel, guardrail materials, corrugated steel, culvert pipe, structural plate, prestressing strands, and steel reinforcing bars shall occur in the United States of America, including the application of:

- · Coating,
- Galvanizing,
- Painting, and
- Other coating that protects or enhances the value of steel or iron products.

The following are exempt, unless processed or refined to include substantial amounts of steel or iron material, and may be used regardless of source in the domestic manufacturing process for steel or iron material:

- Pig iron,
- Processed, pelletized, and reduced iron ore material, or
- Processed alloys.

The Contractor shall submit a certification stating that all manufacturing processes involved with the production of steel or iron materials occurred in the United States.

Produce, mill, fabricate, and manufacture in the United States of America all aluminum components of bridges, tunnels, and large sign support systems, for which either shop fabrication, shop inspection, or certified mill test reports are required as the basis of acceptance by the Department.

Use foreign materials only under the following conditions:

- 1) When the materials are not permanently incorporated into the project; or
- 2) When the delivered cost of such materials used does not exceed 0.1 percent of the total Contract amount or \$2,500.00, whichever is greater.

The Contractor shall submit to the Engineer the origin and value of any foreign material used.

## 2.0 – BUILD AMERICA, BUY AMERICA (BABA)

Contractor shall comply with the Federal Highway Administration (FHWA) Buy America Requirement in 23 C.F.R. § 635.410 and all relevant provisions of the Build America, Buy America Act (BABA), contained within the Infrastructure Investment and Jobs Act, Pub. L. No. 117-58, §§ 70901-52 enacted November 15, 2021. The BABA requires iron, steel, manufactured products, and construction materials used in infrastructure projects funded by federal financial assistance to be produced in the United States. Comply with 2 C.F.R § 184.

BABA permits FHWA participation in the Contract only if domestic steel and iron will be used on the Project. To be considered domestic, all steel and iron used, and all products manufactured from steel and iron must be produced in the United States and all manufacturing processes, including application of a coating, for these materials must occur in the United States. Coating includes all processes that protect or enhance the value of the material to which the coating is applied. This requirement does not preclude a minimal use of foreign steel and iron materials, provided the cost of such materials does not exceed 0.1% of the total contract amount under the Contract or \$2,500.00 whichever is greater.

BABA permits FHWA participation in the Contract only if all "construction materials" as defined in the Act are made in the United States. The Buy America preference applies to the following construction materials

Contract ID: 232497 Page 10 of 80

SPECIAL NOTE – BUY AMERICA REQUIREMENTS AND BUILD AMERICA, BUY AMERICA (BABA) ACT

incorporated into infrastructure projects: non-ferrous metals; plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables); glass (including optic glass); Fiber optic cable; optical fiber; lumber; engineered wood; and drywall. Contractor will be required to use construction materials produced in the United States on this Project. The Contractor shall submit a certification stating that all construction materials are certified to be BABA compliant.

Finally, BABA permits the continuation of FHWA's current general applicability waivers for manufactured products, raw materials, and ferryboat parts, but these waivers are subject to reevaluation, specifically the general applicability waiver for manufactured products.

The Contractor has completed and submitted, or shall complete and submit, to the Cabinet a Buy America/ Build America, Buy America Certificate prior to the Cabinet issuing the notice to proceed, in the format below. After submittal, the Contractor is bound by its original certification.

A false certification is a criminal act in violation of 18 U.S.C. § 1001. The Contractor has the burden of proof to establish that it is in compliance.

At the Contractor's request, the Cabinet may, but is not obligated to, seek a waiver of Buy America requirements if grounds for the waiver exist under 23 C.F.R. § 635.410(c) or will comply with the applicable Buy America requirements if a waiver of those requirements is not available or not pursued by the Cabinet.

Please refer to the Federal Highway Administration's Buy America webpage for more information.

Buy America - Construction Program Guide - Contract Administration - Construction - Federal Highway Administration (dot.gov)

October 26, 2023 Letting

Contract ID: 232497 Page 11 of 80

SPECIAL NOTE – BUY AMERICA REQUIREMENTS AND BUILD

## BUY AMERICA / BUILD AMERICA, BUY AMERICA (ACT) MATERIALS CERTIFICATE OF COMPLIANCE

The Contractor hereby certifies that it will comply with all relevant provisions of the Build America, Buy America Act, contained within the Infrastructure Investment and Jobs Act, Pub. L. NO. 117-58, §§ 70901-52, the requirements of 23 U.S.C. § 313, 23 C.F.R. § 635.410 and 2 C.F.R § 184.

Date Submitted:
Contractor:
Signature:
Printed Name:
Γitle:

NOTE: THIS CERTIFICATION IS IN ADDITION TO ANY AND ALL REQUIREMENTS OUTLINED IN THE CURRENT EDITION OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND/OR SPECIAL NOTES CONTAINED IN THE PROJECT PROPOSAL.

Contract ID: 232497 Page 12 of 80

## 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

#### Contract ID: 232497 Page 13 of 80

### NATIONAL HIGHWAY

Be advised this project is on the NATIONAL HIGHWAY SYSTEM.

#### **SURFACING AREAS**

The Department estimates the mainline surfacing width to be varies 24 to 48 feet.

The Department estimates the total mainline area to be surfaced to be 31,519 square yards.

The Department estimates the shoulder width to be 10 feet on each side.

The Department estimates the total shoulder area to be surfaced to be 17,859 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.

#### **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 A**

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

## Contract ID: 232497 Page 14 of 80

## MATERIAL TRANSFER VEHICLE (MTV)

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

## HR 9006 Clay County MP 13.926 - 15.610

## THIS PROJECT IS A PARTIALLY CONTROLLED ACCESS HIGHWAY

## I. DESCRIPTION

Perform all work in accordance with the Department's 2019 Standard Specifications, Supplemental Specifications, Applicable Special Provisions, and Applicable Standard and Sepia Drawings, 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) Drainage structure work; (3) Guardrail Replacement; (4) Shoulder Trenching and Asphalt Base (5) Asphalt Pavement and Milling and Texturing; (6) Pavement Markers and Markings; (7) Erosion Repairs and Grading Slopes and (8) 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. **Pavement Markings -6 inch.** Permanent striping will be extruded thermoplastic markings and Durable Type I Tape on bridge decks in accordance with Section 714 of the Specifications.

- C. **Guardrail Posts.** Contrary to the Standard Drawings, use 7' posts for all new guardrail posts to be installed on the project.
- D. Asphalt Material for Tack. Use conventional SS1H for Tack Oil applications.

#### III. CONSTRUCTION METHODS

- A. **Maintain and Control Traffic.** See Traffic Control Plan. Use waterblasting methods only for striping removal when necessary in lieu of abrasive or other methods. Take all necessary precautions to avoid permanent damage to final asphalt surfacing courses when removing temporary striping and adjust waterblasting process if necessary.
- 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; and all incidentals. Site preparation will be only as approved or directed by the Engineer.
- C. **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. Temporary openings in the right of way fence for direct access to waste sites off the right of way or for access to other public roads will not be allowed. 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 Specifications.
- 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 Mixtures No. I & III and use erosion control blanket in lieu of "Seeding and Protection" in all seeding applications except as directed by the engineer. Install erosion control blanket in all ditching areas not receiving aggregate channel lining.
- E. **Guardrail.** See Traffic Control Plan for construction methods, phasing, and duration that guardrail may be removed prior to installation of the new guardrail. Verify type of end treatments to be installed prior to ordering of materials.

Fill all post holes resulting from the removal of existing guardrail posts with compacted DGA. Offset post location of new posts at approximately the midpoint of existing posts.

- F. Guardrail Bridge End Connector Type A. Construct Guardrail Bridge End Connector Type A's in accordance with the applicable Standard Drawings to the fullest extent possible. Minor adjustment to the vertical location of the end shoe may be required. If adjustments in the location of the end shoe, and/or any other elements of the end treatment are required, provide a smooth transition to the standard installation as soon as is practical. New Island Header Curb will be installed as part of this installation. Remove any existing curb prior to installation of the new curb and transition Island header curb shape to match the existing wing walls and existing curb box shapes over a distance of approximately 1'.
- G. **Pavement Striping and Inlaid Pavement Markers.** Permanent striping will be in accordance with Section 112 for temporary striping, and Section 714 for Thermoplastic Markings and Durable Type 1 Tape, 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). Permanent Pavement Markers shall be installed per Sepia 009. Use monodirectional white markers for truck climbing lanes.
- H. **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.
- I. 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.
- J. **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.

- K. **Weighing of Materials.** See "Construction Memo 20-01". Produce contactless ticketing in accordance with the guidelines outlined in "Construction Memo 20-01".
- L. **Asphalt Pave Milling & Texturing.** See Special Note for Asphalt Milling and Texturing.
- M. **Trenching.** Trenching will consist of removal of existing shoulder materials, to the dimensions and cross slopes shown on the typical sections. Consult with the engineer and obtain approval for trenching methods. The nominal depth of trenching will be measured adjacent the existing mainline pavement. Depths of trenching will vary across the width of the trenching to correct cross slopes of the proposed shoulder.
- N. **DGA Shoulder Wedge.** If shoulder trenching cross slope corrections result in the existing DGA shoulder being higher than the newly placed shoulder pavement, regrade the existing shoulder wedge material to match the adjacent new shoulder pavement and restore typical cross slope. Clip back sod from the existing shoulder, and remove any sod or debris from the project. Place additional DGA wedge on the DGA shoulder and shape to restore typical cross slopes and to eliminate pavement edge drop-offs.

## 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 or removal or covering of existing pavement marker lenses 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. **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.
- D. **Remove Existing Paved Ditch.** Removal of paved ditches will be measured by the square yard and will include the measured quantity that are broken, reshaped, supplemented by channel lining, and allowed to remain on the project as approved by the engineer. Channel Lining added will be measured separately.
- E. **Clearing and Grubbing.** No direct measurement of "Clearing and Grubbing" will be made as clearing of vegetation and debris, sod, or obstructions will be considered as part of "Site Preparation".
- F. **Pavement Markers Removal.** No direct payment will be made for the removal of the existing pavement markers prior to the milling operation and shall be considered incidental to milling and texturing.
- G. **Weighing of Materials.** No direct payment will be made for requirements of "Construction Memo 20-01" for requirements of contactless ticketing.
- H. **Temporary Striping.** In accordance with the Specifications, temporary striping placed on final asphalt surface courses used as an interim marking and prior to placement of the final pavement markings will not be measured for payment.
- I. **Trenching.** Trenching will be measured longitudinally along the centerline of the roadway and will be measured for each side of the roadway trenched.

## 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 with supplemental specifications and current Standard Drawings unless otherwise specified herein.

A. **Maintain and Control Traffic.** See Traffic Control Plan. A pilot car is required for this project for use any time a lane closure requiring flagger is in place and will be considered incidental to Maintain and Control Traffic.

- 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. Clearing and Grubbing. No direct payment of "Clearing and Grubbing" will be made as clearing of vegetation and debris, sod, or obstructions will be considered as part of "Site Preparation".
- D. **Pavement Marker Removal.** No direct payment will be made for the removal of the existing pavement markers prior to the milling operation and shall be considered incidental to milling and texturing.
- E. 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". Arrow boards, portable message boards, and signs shall be paid for one time regardless of how many times they are moved. Only signs intended to be left in place for more than 3 days will be measured for payment.
- F. **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.
- G. **Remove Existing Paved Ditch.** The removal of the existing paved ditch shall be paid for as "square yards" and shall include the breaking and reshaping of the existing concrete, placement of Geotextile Fabric Class 2, and preparation for installation of the Class III Channel Lining.
- H. Waterblasting Striping Removal. Waterblasting Striping Removal will be required for all striping removal applications and will be considered incidental to "Maintain and Control Traffic".
- I. **Fabric-Geotextile Class 2.** No direct measurement or payment will be made for Fabric-Geotextile Class 2 used in conjunction with the placement of channel lining in channel lined ditches. Only applications of Fabric-Geotextile Class 2 with established contract quantities will be measured and paid in accordance with the Standard Specifications.
- J. **Weighing of Materials.** No direct payment will be made for requirements of "Construction Memo 20-01" for requirements of contactless ticketing.
- K. **Temporary Striping.** In accordance with the Specifications, temporary striping placed on final asphalt surface courses used as an interim marking and prior to placement of the final pavement markings will not be measured for payment.

- L. Roadway Excavation, Borrow Excavation and Embankment in Place. All excavation, borrow, embankment or grading and dressing necessary to complete the work, such as excavating or dressing slopes around culverts and headwalls and undercutting in shoulders, will be considered incidental to the item of work requiring the excavation.
- M. **Clearing and Grubbing.** No direct payment will be made for "Clearing and Grubbing.
- N. Foundation Preparation. See "Culvert Wing Repair Detail".
- O. **Guardrail.** The Department will only measure and pay for the removal of guardrail and placement of new guardrail for items one time for the purposes of replacement of all guardrail on the project. Temporary removal and reinstallation of guardrail may be allowed for access to a work area, however the removal and reinstallation of guardrail for these applications will be at the contractor's expense.
- P. **DGA Wedge.** Removal of sod or debris, removal of excess DGA shoulder material if necessary, and preparation of the existing shoulder for additional DGA or for Asphalt Seal Coat, will be considered incidental to the Asphalt Seal Coat. DGA required to fill existing guardrail post holes will be measured for payment.
- Q. **Guardrail Bridge End Connector Type A.** Payment for the end connector, curb removal, placement of new curb and all other items required to complete this work will be made in accordance with the specifications. No additional payment will be made for minor modifications or transitions required to fit the existing barrier or drainage structures.
- R. **Edge Keys.** Edge keys at project ends and at bridge ends will be paid by the tons of milling and texturing measured.
- S. **Trenching.** Trenching will be paid as "Trenching" regardless of whether a milling machine or other methods are used.
- T. **Barricade-Type III.** Contrary to the Specifications, no direct payment will be made for Barricade-Type III and will be considered incidental to Maintain and Control Traffic.

## HR 9006 Clay County MP 13.926 - 15.610

This project is intended to provide an thin mill and inlay to provide a new mainline riding surface through the length of the project and to trench shoulders to remove failing material on shoulders and replace with new asphalt pavement.

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.

1. Unless otherwise directed by the engineer, the contractor is to use extreme care to ensure that cross slopes of mainline pavements are not altered from the original cross slope. Conduct operations and monitor results to ensure the original cross slope is restored unless otherwise directed by the engineer. The engineer reserves the right to direct the contractor to monitor cross slopes to restore crown in tangent sections, and/or restore original design cross slopes in curves.

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

- 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.
- 3. Quantities of guardrail removal and installation of new guardrail have been established for replacement of all guardrail on the project. The contractor will place traffic drums on 40' spacing in the areas removed. Complete the removal of an entire string of guardrail by the end of the day's shift if practical. For temporary conditions in which only a portion of the string of guardrail is removed or a portion of new guardrail is constructed, remove additional posts and pin down exposed blunt ends and cover with DGA or soil until such time that the remainder of the guardrail is removed. Hang guardrail daily on all new posts driven. Do not leave exposed posts, either existing or new.

Either a lane closure or shoulder closure shall be in place at any time that a section of guardrail is not in place. If the contractor chooses to remove guardrail for access to other areas of work, such as drainage structure work, etc., removal and reinstallation of guardrail for those access points will be at the contractor's expense and all temporary measures required for removal and replacement will be met.

- 4. The Contractor shall deliver existing guardrail system materials, except for rail, to 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. All Rail will be delivered to the KYTC Clay Maintenance Lot. Contact Section Engineer: Colby Nicholson (606) 391-5108 to schedule delivery.
- 5. Flexible Delineators shall meet the requirements of Section 830 and 838 of the Standard Specifications, and be placed in accordance with Section 3D of the M.U.T.C.D., current edition and current Standard Drawing.
- 6. This project requires the use of a Material Transfer Vehicle. In accordance with Section A of 403.03.05.
- 7. The speed limit on the project will be reduced to 45 mph while lane closures are in place. Any time work is suspended (i.e. winter shutdown) the speed limit will revert back to 55 mph. Also, double fine signs are set up in the project to be installed while workers are present in the work zone.

8. 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. Any signs encountered that requires removal to perform the work must be stored in a covered building, protected from damage and reinstalled after completion of the work. Removal and re-installation of the signs will be considered incidental to other items of work.

9. 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. Cleaning of all drainage structures and perforated pipe headwalls will be required whether or not they are identified on the plan sheets. Locations of existing drainage structures and perforated pipe headwalls are for informational purposes only and are not to be considered to consist of all possible structures. Reinstall any existing grates that are present but not in place on the drainage structure, incidental to "Ditching and Shouldering".

- 10. Quantities of Asphalt Seal Coat and Seal Aggregate, and DGA base have been established to wedge and eliminate greater than 1 inch drop offs. The intent is to provide a DGA wedge to eliminate dropoff situations and to re-establish the typical stone shoulder width where needed and where practical to do so.
- 11. Coordinate activities of any adjacent contracts with this contract. The engineer will decide the relative priority concerning phasing and maintenance of traffic when conflicts arise with projects in close proximity with this project.
- 12. A quantity of Crushed Aggregate #2 has been established to repair erosion of slopes below the shoulders and any undercutting in shoulders necessary.

  The engineer can increase quantities, decrease quantities, or eliminate this item of work. All work required to gain access, remove rills by reshaping the slope in preparation for placement of the stone, excavation for undercutting will be considered incidental to the payment of the item Crushed Aggregate #2.

13. A quantity of Leveling & Wedging has been established for restoration of the crown after milling to remove rumble strips, see typical sections. Obtain prior approval from the engineer for methods of placement of the leveling and wedging to ensure efficient use. Leveling & Wedging is also to be used for profile, cross slope corrections, and to eliminate any rutting as directed by the engineer, prior to placement of the final asphalt surfacing course.

Contract ID: 232497 Page 26 of 80

## SPECIAL NOTE FOR TYPICAL SECTION DIMENSIONS

## HR 9006 CLAY COUNTY MP 13.926 - 15.610

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

## SPECIAL NOTE FOR BEFORE YOU DIG

## HR 9006 CLAY COUNTY MP 13.926 - 15.610

Call 1-800-752-6007 toll free a minimum of two and no more than ten business days prior to excavation for information on the location of existing under-ground utilities which subscribe to the before-u-dig (BUD) service. Coordinate excavation with all utility owners, including those who do not subscribe to BUD.

## **Special Note for Fixed Completion Date and**

Li uidated Damages

HR 9006 CLAY COUNTY MP 13.926 - 15.610

Liquidated Damages in the amount specified in the Standard Specifications, per calendar day, will be assessed for each day work remains incomplete beyond the Specified Project Completion Date. This project has a Fixed Project Completion Date of September 30, 2022.

Additionally, a penalty will be charged for each hour that an unauthorized lane closure is in place. A penalty of 500 per hour, will be assessed for the first hour, or portion of an hour, and all successive hours that an unauthorized lane closure is in place on the project. An unauthorized lane closure is defined as an occurrence when traffic is reduced to one lane during times and dates prohibited in the Maintenance of Traffic plan or when traffic is reduced to one lane during times outside the times allowed for a specific activity.

See the Maintenance of Traffic plan for details on times and dates that lane closures that reduce traffic to one lane are prohibited and for specific times that reduction of traffic to one lane is allowed for specific respective activities.

Liquidated Damages and other penalties, including penalties for lane closures that reduce traffic to one lane during unauthorized days and times, will be applied cumulatively and concurrently.

Contrary to Section 108, liquidated damages and other penalties will be charged during the months of December through March and charged for each Calendar Day any work remains incomplete regardless of seasonal, temperature, or weather limitations.

New guardrail installation must begin within 7 days of completion of final surfacing. Guardrail installation must be actively pursue until full string completion. Failure to start or actively pursue will result in charging of Liquidated Damages per contract amount.

## SPECIAL NOTE FOR ASPHALT MILLING AND TE TURING

## HR 9006 CLAY COUNTY MP 13.926 - 15.610

Conduct milling operations to remove the centerline rumble strip and to key in asphalt surfacing at bridge ends and at each end of the project. The contractor is to minimize the duration that traffic will be required to travel on milled surfaces.

Mill to remove rumble strips and place asphalt leveling and wedging to restore the crown of the road prior to restoring traffic to two-way traffic. Plan daily production to only mill to remove rumble strips the length that can be leveled by the end of each day's shift.

Mill for edge keys a maximum of 3 days prior to beginning placement of the final surfacing course. Traffic shall not be required to travel on the milled edge keys for more than 3 days. The contractor is required to provide a temporary wedge approximately 2' in width at the step up in the keyed in milling. Obtain prior approval of the method and materials used for this wedge.

Shoulder trenching may be performed by milling at the contractor's discretion, however payment will be made as "Trenching" regardless of construction methods.

The Contractor will take possession and dispose of the millings at a location off the right of way except for quantities of millings to be retained by the Department.

Removal of the existing pavement markers prior to the milling operation is considered incidental to the bid item "Asphalt Pavement Milling and Texturing". This includes pavement markers that are not within limits of the milling such as truck climbing lane, lane lines.

#### SPECIAL NOTE FOR EXPERIMENTAL KYCT AND HAMBURG TESTING

#### 1.0 General

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

### 2.0 Equipment

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

## 3.0 Testing Requirements

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

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

Contract ID: 232497 Page 32 of 80

**3.3.3 File Name.** Save the Excel spreadsheet with the following file name; "Hamburg\_CID\_Approved Mix Number\_Lot Number\_Sublot Number\_Date" and upload the file into the AMAW.

#### 4.0 Data

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

#### **5.0 KYCT Video Demonstration**

https://www.youtube.com/watch?v=84j0bM45-hg&feature=youtu.be

## 6.0 Payment

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

June 3, 2019

Contract ID: 232497 Page 33 of 80

# SPECIAL NOTE FOR Curb Box Removal & Flume Installation

## HR 9006 CLAY COUNTY MP 13.931

Remove Curb Box at MP 13.931, west bound. This will be replaced with a Flume Inlet Type 1.

All excavation necessary needed to remove and discard existing box and pipe will be incidental to the bid item "Remove Curb & Gutter Box Inlet".

All excavation necessary to install Flume Inlet Type 1 will be incidental to that item.

Sawcutting of existing pavement shall be performed prior to removal of existing box. This will be incidental to "Remove Curb & Gutter box Inlet".

See Std. Drawing# RDD-020-07 for Flume details.

#### 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 15<sup>th</sup>, 2022

#### SPECIAL NOTE FOR DOLOMITIC POLISH-RESISTANT AGGREGATE IN CLASS A 0.38-IN. AND 0.50-IN. NOMINAL ASPHALT MIXTURES

**Contrary to Subsection 403.03.03**, when utilizing a dolomitic polish-resistant aggregate as the coarse portion of the Class A 0.38-in. or 0.50-in.-nominal asphalt surface mixture, provide an asphalt mixture conforming to the following requirements:

- 70 percent of total combined aggregate is Class A polish-resistant aggregate.
- Any coarse aggregate utilized in the mixture shall be classified as Class A polishresistant.
- Non-dolomitic substitutes from other Class A sources may be used as direct substitutes
- All mixes must have DFT testing/results submitted to Division of Materials with any supporting documentation prior to completion of the project.

Dynamic Friction Testing Procedure. Prepare samples for DFT analysis in accordance with PP 104. Friction testing shall be conducted by an AASHTO-accredited facility and data shall be provided in accordance with ASTM E1911 conforming to the following three-wheel polishing schedule. Variations to the testing frequency or methodology shall be coordinated with Division of Materials prior to testing.

Polishing Cycles
5,000
25,000
75,000
150,000

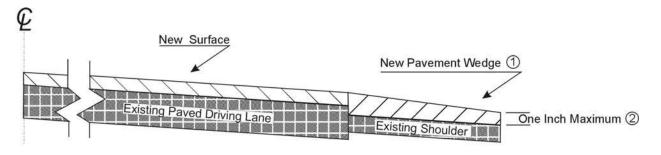
#### SPECIAL NOTE FOR PAVEMENT WEDGE AND SHOULDER SEPARATE OPERATION

- **1.0 MATERIALS.** Provide an Asphalt Mixture for Pavement Wedge conforming to Section 407 of the Standard Specifications or 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 Asphalt Mixture for Pavement Wedge or Asphalt Surface Mixture as a separate operation from the driving lane. Prime the existing shoulder with tack material as the Engineer directs before placing the wedge. Construct according to Sections 407.03 and 403.03 as applicable.

When the Engineer deems it appropriate to pave both the driving lane and the adjoining wedge monolithically, 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 driving lanes. Where existing site conditions permit, limit the outside edge thickness of the new paving limits to one inch above the existing shoulder wedge elevation. If an Asphalt Surface Mixture is furnished for the pavement wedge, texture according to Section 403.03.08.

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.



- ① Slope varies, but is down from the driving lanes except on outside of some curves where superelevation controls.
- ② Where existing site conditions permit.
- **3.0 MEASUREMENT.** The Department will measure Asphalt Mixture for Pavement Wedge or Asphalt Surface Mixture placed as the pavement wedge according to Sections 403 and 407 as applicable.
- **4.0 PAYMENT.** The Department will make payment for the completed and accepted quantities of Asphalt Surface Mixtures placed as pavement wedge according to Section 403. The Department will make payment for the completed and accepted quantities of Asphalt Mixture for Pavement Wedge according to Section 407.

Contract ID: 232497 Page 39 of 80

#### SPECIAL NOTE FOR ASPHALT SEAL (A-2)

Use RS-2 or RS-2C asphalt material that is compatible with the seal aggregate. Apply an A-2 Seal Coat around guardrail, end treatments, and other areas designated by the Engineer. Prior to sealing, prepare surface by placing approximately 2 inches of compacted DGA over the area to be sealed. Apply two coats of the A-2 Seal Coat at the rate of 2.4 lbs/sy for asphalt seal coat and 20 lbs/sy of size #9M seal coat aggregate for each application. 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.

1-3250 Single Seal Coat (A-2) 01/02/2012

#### SPECIAL NOTES 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 milling and/or resurfacing, saw cut the existing pavement, asphalt surface, base, DGA, and PCC pavement (if present). Excavate to an approximate depth of 36 inches below the existing pavement surface level. Use all possible care to avoid damaging existing culvert pipes and any existing underground utilities. Repair or restore any damaged items at no additional cost to the Department. Remove and dispose of all materials off the Right-of-way at sites obtained by the Contractor at no additional cost to the Department.

On the same day trench is excavated, backfill the excavated area with 24 inches of Crushed Limestone Size No. 23 wrapped on the bottom and sides in Table III Geotextile Fabric. Backfill the remaining area with Class 2 Asphalt Base 1.00D PG64-22 in 4 inch maximum courses up to the existing pavement surface. 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 7 calendar days have elapsed after placement of the final course of asphalt base. After a minimum of 7 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 square yard for Base Failure Repair and per ton for Leveling and Wedging as full compensation for all labor, materials, equipment, and incidentals for saw cutting pavement and excavating and disposing of all materials; furnishing and placing crushed limestone stone wrapped in geotextile fabric; furnishing and placing asphalt base up to the pavement boundary; leveling and wedging until the repair areas stabilize; and all other items necessary to complete the work according to these notes to the satisfaction of the Engineer.

1-3616 basefailurerepairgeo23stonepaybysy 01/02/2012

Contract ID: 232497 Page 41 of 80

#### 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

Contract ID: 232497 Page 42 of 80

## TRAFFIC CONTROL PLAN CLAY COUNTY HR 9006 MP 13.926 - MP 15.610

#### THIS PROJECT IS A PARTIALLY CONTROLLED ACCESS HIGHWAY

#### TRAFFIC CONTROL GENERAL

Except as provided herein, "Maintain and Control Traffic" shall be in accordance with the Standard Specifications and the Standard Drawings, current editions. 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. Do NOT use cones for lane closures or shoulder closures.

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.

Reduce the speed limit in work areas to 45 miles per hour and establish double fines for work zone speeding violations. The extent of these areas within the project limits will be restricted to the proximity of actual work areas as determined by the Engineer. Notify the Engineer a minimum of 12 hours prior to using the double fine signs. At the beginning of the work zone, the "BEGIN DOUBLE FINES ZONE" signs will be dual mounted. At the end of the work zone, the "END DOUBLE FINES ZONE" signs will be dual mounted as well. Remove or cover the signs or turn off flashers when the highway work zone does not have workers present for more than a two-hour period of time. Payment for the signs will be at the unit bid price for Temporary Signs. Any relocation or covering of the signs or operation of flashers will be incidental to "Maintain and Control Traffic", lump sum.

Night work will be allowed on this project. Obtain approval from the Engineer for the method of lighting prior to its use.

#### PROJECT PHASING & CONSTRUCTION PROCEDURES

Maintain a minimum of two lanes of traffic open (one per direction of travel), except traffic may be reduced to one lane during times of expected low traffic volumes as listed for most activities. Traffic may be reduced to one lane during daytime operations, only for the operations of milling and texturing, leveling and wedging, and final asphalt surfacing of the mainline and shoulders and asphalt seal coat.

Reduction of traffic to one lane will **NOT** be allowed on the project during the following days and times, unless otherwise approved by the Engineer:

Thanksgiving Weekend	6:00 am Nov 25, 2021 – 7:00 pm Nov 28, 2021
Christmas	6:00 am Dec 24,2021 – 7:00 pm Dec 26, 2021
New Years	6:00 am Dec 31, 2021 – 7:00 pm Jan 2, 2022
Easter Weekend	6:00 am Apr 15, 2022 – 7:00 pm Apr 17, 2022
Memorial Day	6:00 am May 27, 2022 – 10:00 pm May 30, 2022
Independence Day	6:00 am Jul 1, 2022 – 10:00 pm Jul 4, 2022
Labor Day	6:00 am Sep 2, 2022 – 10:00 pm Sep 5, 2022
Thanksgiving Weekend	6:00 am Nov 24, 2022 – 7:00 pm Nov 27, 2022

Reduction of traffic to one lane will only be allowed during specific times for specific activities.

Lane reduction will be allowed between 8:00 AM to 8:00 PM during daylight hours only. All activities should be completed in this time frame. Work outside this window will require written request to the engineer for approval.

Note: In the event that traffic backups reach an unacceptable level, the days and hours of allowable single lane traffic may be modified by the Cabinet.

See Special Note for Fixed Completion Date and Liquidated Damages for penalties associated with an occurrence of reduction of traffic to one lane during unauthorized times.

#### SHOULDER PREPARATION AND RESTORATION

Traffic is not expected to be shifted onto shoulders during this project except temporarily in the immediate vicinity of milling or paving operations for centerline rumble strip eradication. Monitor shoulder conditions periodically during the life of the project. If damage to shoulders result from construction activities or due to temporary, inadvertent or errant public traffic or wide loads, repair damage by asphalt milling and replacement of the failing asphalt pavement. No direct payment for repairs to damaged shoulders will be made and will be considered incidental to Maintain and Control Traffic.

#### LANE WIDTH

The minimum clear lane width will be 12 feet except temporarily lanes may be reduced to 10 feet in the vicinity of paving operations. Restore 12 feet lane widths as soon as practical after passage of the paving operations. Make provisions for the passage of wide loads up to 16'. Use a lane closure all times when work is performed in the lane or adjacent shoulder.

#### SPEED LIMIT REDUCTIONS AND DOUBLE FINE ZONES

Reduce speed limit to 45 MPH during the project. Restore speed limits to 55 MPH during expected periods of inactivity greater than 7 days, winter shut down, etc.

Utilize double fine zone signs in strict accordance with Standard Drawing TTD-120-03.

#### **Project Phasing:**

The contractor must notify the Engineer at least seven (7) days prior to the beginning of each construction phase in either direction.

#### PHASE I

In this phase, using pilot car and flaggers when reduction of traffic to one lane is required, complete all activities possible outside the shoulders, including but not limited to, ditching and shouldering, drainage repairs, and channel lining. Conduct these operations as night shift operations if reduction of traffic to one lane is required.

#### PHASE II

In this phase, using pilot car and flaggers when reduction of traffic to one lane is required, remove the existing guardrail, trench the shoulders and place asphalt base on shoulders. Complete the placement of asphalt base to refill the entire length trenched each work shift to eliminate pavement edge drop-offs prior to opening the adjacent lane to traffic. Place DGA backfill in existing guardrail post holes. Complete shoulder erosion repairs. Conduct these operations as night shift operations if reduction of traffic to one lane is required.

#### Contract ID: 232390 Page 38 of 90

#### PHASE III

In this phase, using pilot car and flaggers when reduction of traffic to one lane is required, perform asphalt milling and leveling and wedging to remove the existing centerline rumble strips. Complete any other leveling and wedging activities as directed by the engineer. Perform milling for bridge end edge keys and for edge keys at the project termini.

Using alternating lane closures, place final surface course on the mainline pavement. All mainline lanes are required to be pulled up even daily, including truck climbing lanes.

Upon completion of mainline surfacing, place final surface course on shoulders. Clip sod and remove sod and debris from existing DGA shoulder. Place DGA wedge on shoulder edge to eliminate pavement edge drop-offs and restore slopes outside the paved shoulder. Place asphalt seal coat.

Complete activities this phase during daylight hours.

#### PHASE IV

In this phase, using pilot car and flaggers when reduction of traffic to one lane is required, construct new guardrail and appurtenances. Conduct these operations as night shift operations if reduction of traffic to one lane is required.

#### PHASE V

In this phase, using pilot car and flaggers when reduction of traffic to one lane is required, complete all remaining items of work, including but not limited to rumble strips, delineators, pavement markers and any remaining final pavement markings, and any final cleanup operations. Conduct these operations as night shift operations if reduction of traffic to one lane is required.

**NOTE – WIDE LOADS:** Make provisions for wide loads up to 16 feet wide to pass when necessary.

#### 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 considered incidental to the bid item "Maintain and Control Traffic".

A pilot car must be employed at any time a lane closure is in place that requires flagging. The pilot car will be considered incidental to Maintain and Control Traffic.

The entire length of a truck climbing lane may be blocked off with drums and closed at any time, day or night, for a period to not exceed 3 calendar days per closure. Only close truck climbing lanes when work is in progress requiring a closure.

Contract ID: 232390 Page 39 of 90

Limit the length of lane closures to the minimum length necessary to complete the amount of work scheduled. Limit lane closure lengths to less than 2 miles. Only one lane closure may be in place on the project at a time.

Do not leave lane closures in place during non-working hours or prohibited periods.

Make immediate provisions for the passage of school buses, ambulances, and other emergency vehicles on an official run.

Long term lane closures are not expected to be employed on this project. If the contractor's operations warrant the use of a long term lane closure, any cost of temporary removable lane tape, temporary striping and removal of temporary striping will be considered to be at the contractor's expense.

See "PROJECT PHASING AND CONSTRUCTION PROCEDURES" above for restrictions to times that traffic may be reduced to one lane, and lane closure requirements for specific construction activities.

#### **SIGNS**

Additional traffic control signs in addition to normal lane closure signing detailed on the Standard Drawings may be required by the Engineer. Additional signs needed for lane closures may include, but are not limited to, dual mounted LEFT/RIGHT LANE CLOSED or ONE LANE TRAFFIC 1 MILE, LEFT/RIGHT LANE CLOSED or ONE LANE TRAFFIC 2 MILE, LEFT/RIGHT LANE CLOSED 3 MILE or ONE LANE TRAFFIC, SLOWED/STOPPED TRAFFIC AHEAD, KEEP LEFT/RIGHT. Signage for reduced speed limits and double fine work zones will be furnished, relocated, and maintained by the Contractor.

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 Section 112, only long-term signs (signs intended to be continuously in place for more than 3 days) will be measured for payment. Short-term signs (signs intended to be left in place for 3 days or less) will not be measured for payment but will be incidental to Maintain and Control Traffic

#### **GUARDRAIL**

Guardrail may be removed and later reinstalled at the contractor's expense to access the work areas for Phase I activities. Reinstall guardrail that has been temporarily removed for access within 7 days of completion of the activity necessitating the guardrail removal. Guardrail removal and reinstallation for purposes of access of work sites will be at the contractor's expense.

Contract ID: 232390 Page 40 of 90

Begin reinstallation of guardrail that has been removed for replacement and shoulder trenching and paving within 7 days of completion of final surfacing and asphalt seal coat of the DGA Wedge. After removal of the guardrail scheduled for replacement, the contractor will be required to actively pursue all activities as weather permits, in effort to complete all work necessary to prepare for the new guardrail construction. Begin construction of new guardrail within 30 days of the removal of existing guardrail.

A lane closure or shoulder closure will be required at all times guardrail is not in place. All blunt ends will be eliminated by removal of additional posts and pinning the blunt end to the ground and covering the end with soil or DGA. Maintain drums at 40' spacing in any area in which guardrail has been removed until such time it is replaced.

#### FLASHING ARROWS

Flashing arrows will be paid for once, regardless of how many times they are moved or relocated. The Department **WILL NOT** take possession of the flashing arrows upon completion of the work.

#### 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. If work is in progress concurrently in both directions, or if more than one lane closure is in place in the same direction of travel, provide additional PCMS. Place PCMS one mile in advance of the anticipated queue at each lane closure. As the actual queue lengthens and/or shortens relocate or provide additional PCMS so that traffic has warning of slowed or stopped traffic at least one mile but not more than two miles before reaching the end of the actual queue. 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.

#### TRUCK MOUNTED ATTENUATORS

Furnish and install MUTCD approved truck mounted attenuators (TMA) in advance of work areas when workers are present less than 12 feet from traffic. If there is less than 500 feet between work sites, only a single TMA will be required at a location directed by the Engineer. Locate the TMAs at the individual work sites and move them as the work zone moves within the project limits. All details of the TMA installations shall be approved by the Engineer. TMA will not be measured for payment, but are incidental to "Maintain and Control Traffic," Lump Sum. The Department WILL NOT take possession of the TMAs upon completion of the work.

#### Contract ID: 232390 Page 48 of 90

#### PAVEMENT MARKINGS

Remove or cover the lenses of pavement markers that do not conform to the traffic control scheme in use, or as directed by the Engineer. Replace or uncover lenses before a closed lane is reopened to traffic. No direct payment will be made for removing or covering and uncovering the lenses, but will be incidental to "Maintain and Control Traffic," lump sum.

Place temporary and permanent striping in accordance with Section 112 and Section 714, except that:

- 1. Temporary striping will be 6" in width.
- 2. Existing, temporary, or permanent striping will be in place before a lane is opened to traffic.
- 3. Permanent striping will be Durable Type I Tape Markings on bridge decks or other concrete and will be extruded thermoplastic markings for applications on asphalt pavement.

#### 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" – 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.

Greater than 4" - Positive separation or Wedge with 3:1 or flatter slope required. If there is 8 feet or more distance between the edge of pavement and drop-off, bridge panels or traffic drums will be placed every 50 feet throughout the drop-off area. Payment for CSB or DGA used for wedging will be allowed.

Temporary Conditions – For temporary conditions, drop-off areas greater than 4", and less than 8' from the edge of traveled way, may be protected by drums at 50' spacing provided work is pursued continually until the drop-off is eliminated, during daylight hours or with the utilization of adequate lighting to illuminate the area during nighttime operations.

#### 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 where 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.

#### **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 use or allow employees to conduct U-turns on the project. Do not allow contractor vehicles to travel against the normal flow of traffic.

In accordance with Section 112.03.03 of the Specifications, place all construction equipment and materials outside the clear zone, beyond the ditch, behind guardrail or off the existing right of way when not in use. Completely remove all equipment from the project during the winter shut down period.

#### **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.

#### SPECIAL NOTE FOR TRENCHING

Trench shoulders as shown on the typical section. Reshape and compact excavated material from the trench on the outside edge of the paved shoulder as shown on the typical section. Retain possession of excess materials and materials the Engineer deems unsuitable for reuse. Waste the excess and/or unsuitable materials off the right-of-way at sites obtained by the Contractor at no additional cost to the Department. See Special Note for Waste and Borrow.

The Department will measure "Trenching" in linear feet at the pavement/shoulder edge. Accept payment at the contract unit price per linear feet shall as full compensation for all labor, materials, equipment and incidentals for excavating the shoulder trench and reuse and/or disposal of the material.

1-3910 Trenching Shoulder Contractor Reshape 01/01/2012

#### SPECIAL NOTE FOR EROSION CONTROL

#### I. DESCRIPTION

Perform all erosion and water pollution control work in accordance with the Department's Standard and Interim Supplemental Specifications, Special Provisions and Special Notes, and Standard and Sepia Drawings, current editions, and as directed by the Engineer. Section references are to the Standard Specifications. This work shall consist of:

(1) Developing and preparing a Best Management Practices Plan (BMP) tailored to suit the specific construction phasing for each site within the project; (2) Preparing the project site for construction, including locating, furnishing, installing, and maintaining temporary and/or permanent erosion and water pollution control measures as required by the BMP prior to beginning any earth disturbing activity on the project site; (3) Clearing and grubbing and removal of all obstructions as required for construction; (4) Removing all erosion control devices when no longer needed; (5) Restoring all disturbed areas as nearly as possible to their original condition; (6) Preparing seedbeds and permanently seeding all disturbed areas; (7) Providing a Kentucky Erosion Prevention and Sediment Control Program (KEPSC-RI) qualified inspector; and (8) Performing any other work to prevent erosion and/or water pollution as specified by this contract, required by the BMP, or as directed by the Engineer.

#### II. MATERIALS

Furnish materials in accordance with these notes, the Standard Specifications and Interim Supplemental Specifications, and applicable Special Provisions and Special Notes, and Standard and Sepia Drawings, current editions. Provide for all materials to be sampled and tested in accordance with the Department's Sampling Manual. Unless directed otherwise by the Engineer, make the materials available for sampling a sufficient time in advance of the use of the materials to allow for the necessary time for testing.

#### III. CONSTRUCTION

Be advised, these Erosion Control Plan Notes do not constitute a BMP plan for the project. Jointly with the Engineer, prepare a site specific BMP plan for each drainage area within the project in accordance with Section 213. Provide a unique BMP at each project site using good engineering practices taking into account existing site conditions, the type of work to be performed, and the construction phasing, methods and techniques to be utilized to complete the work. Be responsible for all erosion prevention, sediment control, and water pollution prevention measures required by the BMP for each site. Represent and warrant compliance with the Clean Water Act (33 USC Section 1251 et seq.), the 404 Permit, the 401 Water Quality Certification, and applicable state and local government agency laws, regulations, rules, specifications, and permits. Contrary to Section 105.05, in case of discrepancy between theses notes, the Standard Specifications, Interim Supplemental Specifications, Special and Special Notes, Standard and Sepia Drawings, and such state and local government agency requirements, adhere to the most restrictive requirement.

Erosion Control Page 2 of 3

Conduct operations in such a manner as to minimize the amount of disturbed ground during each phase of the construction and limit the haul roads to the minimum required to perform the work. Preserve existing vegetation not required to be removed by the work or the contract. Seed and/or mulch disturbed areas at the earliest opportunity. Use silt fence, silt traps, temporary ditches, brush barriers, erosion control blankets, sodding, channel lining, and other erosion control measures in a timely manner as required by the BMP and as directed or approved by the Engineer. Prevent sediment laden water from leaving the project, entering an existing drainage structure, or entering a stream.

Provide for erosion control measures to be in place and functioning prior to any earth disturbance within a drainage area. Compute the volume and size of silt control devices necessary to control sediment during each phase of construction. Remove sediment from silt traps before they become a maximum of ½ full. Maintain silt fence by removing accumulated trappings and/or replacing the geotextile fabric when it becomes clogged, damaged, or deteriorated, or when directed by the Engineer. Properly dispose of all materials trapped by erosion control devices at approved sites off the right of way obtained by the Contractor at no additional cost to the Department (See Special Note for Waste and Borrow).

As work progresses, add or remove erosion control measures as required by the BMP applicable to the Contractor's project phasing and construction methods and techniques. Update the volume calculations and modify the BMP as necessary throughout the duration of the project. Ensure that an updated BMP is kept on site and available for public inspection throughout the life of the project.

After all construction is complete, restore all disturbed areas in accordance with Section 212. Completely remove all temporary erosion control devices not required as part of the permanent erosion control from the construction site. Prior to removal, obtain the Engineer's concurrence of items to be removed. Grade the remaining exposed earth (both on and off the Right of-Way) as nearly as possible to its original condition, or as directed by the Engineer. Prepare the seed bed areas and sow all exposed earthen areas with the applicable seed mixture(s) according to Section 212.03.03.

#### IV. MEASUREMENT

**Erosion Control Blanket.** If required by the BMP, the Department will measure Erosion Control Blanket according to Section 212.04.07.

**Sodding.** If required by the BMP, the Department will measure Sodding according to Section 212.04.08.

**Channel Lining.** If required by the BMP, the Department will measure Channel Lining according to Sections 703.04.04-703.04.07.

**Erosion Control.** Contrary to Sections 212.04, 213.04, and 703.04 other than Erosion Control Blankets, Sodding, and Channel Lining, the Department will measure Erosion Control as one lump sum. The Department will not measure developing, updating, and maintaining a BMP plan for each site; providing a KEPSC-RI qualified inspector; locating,

Contract ID: 232497 Page 53 of 80

Erosion Control Page 3 of 3

furnishing, installing, inspecting, maintaining, and removing erosion and water pollution control items; Roadway Excavation, Borrow Excavation, Embankment In Place, Topsoil Furnished and Placed, and Spreading Stockpiled Topsoil; Topdressing Fertilizer, Temporary and Permanent Seeding and Protection, Special Seeding Crown Vetch, and Temporary Mulch; Sedimentation Basin and Clean Sedimentation Basin, Silt Trap Type "A" and Clean Silt Trap Type "A" and Clean Silt Trap Type "B"; Silt Trap Type "C" and Clean Silt Trap Type "C"; Temporary Silt Fence and Clean Temporary Silt Fence; Plants, Vines, Shrubs, and Trees; Gabion and Dumped Stone Deflectors and Riffle Structures; Boulders; Temporary Ditches and clean Temporary Ditches; Geotextile Fabric, and all other erosion and water pollution control items required by the BMP or the Engineer, but shall be incidental to Erosion Control.

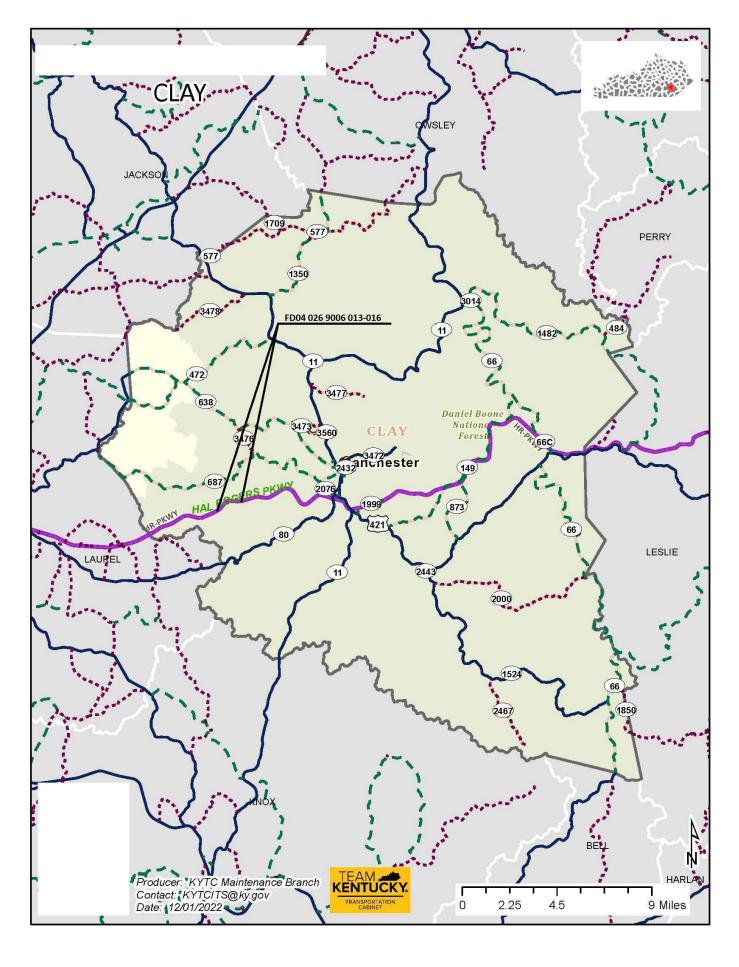
#### V. Basis of Payment

**Erosion Control Blanket.** If not listed as a bid item, but required by the BMP, the Department will pay for Erosion Control Blankets as Extra Work according to Sections 104.03 and 109.04.

**Sodding.** If not listed as a bid item, but required by the BMP, the Department will pay for Sodding as Extra Work according to Sections 104.03 and 109.04.

**Channel Lining.** If not listed as a bid item, but required by the BMP, the Department will pay for Channel Lining as Extra Work according to Sections 104.03 and 109.04.

Erosion Control. Contrary to Sections 212.05 and 213.05, other than Erosion Control Blanket, Sodding, and Channel Lining, payment at the Contract lump sum price for Erosion Control, shall be full compensation for all materials, equipment, labor and incidentals necessary to complete the erosion and water pollution control work as specified in these notes, Sections 212 and 213, the Supplemental Specifications, applicable Special Provisions and Special Notes, and Standard and Sepia Drawings, including but not limited to developing, updating, and maintaining a BMP plan for each site; providing a KEPSC-RI qualified inspector; locating, furnishing, installing, inspecting, maintaining, and removing erosion and water pollution control items; Roadway Excavation, Borrow Excavation, Embankment In Place, Topsoil Furnished and Placed, and Spreading Stockpiled Topsoil; Topdressing Fertilizer, Temporary and Permanent Seeding and Protection, Special Seeding Crown Vetch, and Temporary Mulch; Sedimentation Basin and Clean Sedimentation Basin, Silt Trap Type "A" and Clean Silt Trap Type "A"; Silt Trap Type "B" and Clean Silt Trap Type "B"; Silt Trap Type "C" and Clean Silt Trap Type "C"; Temporary Silt Fence and Clean Temporary Silt Fence; Plants, Vines, Shrubs, and Trees; Gabion and Dumped Stone Deflectors and Riffle Structures; Boulders; Temporary Ditches and clean Temporary Ditches; Geotextile Fabric and all other erosion and water pollution control items required by the BMP or the Engineer.



	AIL	REMARKS														
	SUARDR	LIN FEET	900.0	1062.5	1375.0	962.5	587.5	875.0	675.0	312.5	1712.5	1087.5	9550.0			
	REMOVE GUARDRAIL	END   LIN FEET	14.096	14.396	14.786	15.096	15.376	14.090	14.290	14.543	15.002	15.542	Total			
		BEGIN MILEPOINT	13.926	14.196	14.526	14.916	15.266	13.926	14.240	14.485	14.680	15.338				
		LANE	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB				
		REMARKS														
		LIN FEET	900.0	1062.5	1375.0	962.5	587.5	875.0	675.0	312.5	1712.5	1087.5	9550.0			
	RDRAIL	END TREAT.	Type 4A	Type 4A	Type 4A	Type 4A	Type 4A	BR. Ty. A	Type 4A	Type 4A	Type 4A	Type 4A	Total			
	<b>NEW GUARDRAIL</b>	END MILEPOINT	14.096	14.396	14.786	15.096	15.376	13.926	14.290	14.543	15.002	15.542				
HR-9006 MP 13.926 - MP 15.610	Z	BEGIN	13.926	14.196	14.526	14.916	15.266	14.090	14.240	14.485	14.680	15.338				
MP 13.926 -		END TREAT.	BR. Ty. A	Type I	Type I	Type I	Type I	Type I								
HR-9006 N		LANE	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB				

Base Failure Summary Sheet

Project: FD05 026 CLAY00000UNTY016 FD04 026 9006 013-016

County: Clay

District: D11 - Mano**Geste**act ID: 2324 Page 56 of

Direction	Milepoint	Length (ft)	Width (ft)	Assumed Depth (in)	Total Sq. Yards	BASE FAILURE REPAIR
East Bound	13.951	1,400	8	36	1,245	1,245
				Total:	1,245	1,245

Thermo Summary Sheet

Project: FD05 026 CLA90660N4v016 FD04 026 9006 013-016

CLA 9096 041 4016 County: Clay District:

District: D11 - Mancheste Page 57 of

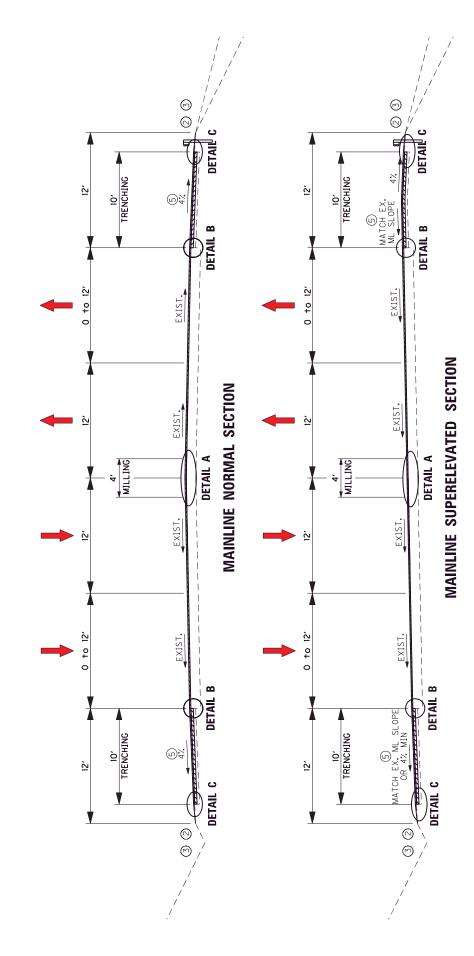
Milepoint	Location	Notes	PAVE MARKIN G- THERMO CURV ARROW	PAVE MARKIN G- THERMO MERGE ARROW	PAVE MARKIN G- THERMO ONLY	PAVE MARKIN G- THERMO STOP BAR-24IN
14.125	HR-9006 & Urban Creek Road		7	3	2	40
		Total:	7	3	2	40

#### Milling Summary FD05 026 9006 013-016

				Total	145
Milepoint	Comment	Length	Width	Avg Depth	Tons
13.926	Beginning Edge Key	150	56	0.75	38.500
15.61	Ending Edge Key	150	44	0.75	30.250
					0.000
14.958	Culvert Edge Keys	300	44	0.75	60.500
14.958	Culvert	29	44	1.5	11.697
					0
					0
					0
					0
					0
					0
					0
					0
					0
					0
					0
					0
					0
					0
					0
					0
					0
					0
					0
					0
					0

# TYPICAL SECTION KY 9006 - HAL ROGERS PARKWAY MP 13.926 - MP 15.610





APPLY ASPHALT MATERIAL FOR TACK AT A RATE OF 0.84 LBS/SY BETWEEN EACH LAYER OF ASPH, CONCRETE.

 $\Theta$ 

 $\bigcirc$ 

- EX. DGA SHOULDER 2' WHERE GUARDRAIL IS PRESENT, USE 7' POSTS. GRADE EXISTING DGA SHOULDER WHEN HIGHER HANA ADJACENT TRENCHED (CORRECTED) SHOULDER AND CORRECT CROSS SLOPE. ADD DGA WEDGE WHERE NECESSARY TO CORRECT CROSS SLOPE AND ELIMINATE PAVEMENT EDGE DROP OFF. GRADING OF SHOULDER AND REMOVAL OF EXCESS IS INCIDENTAL 10 ASPHALT SEAL COAT.
  - 6
- TO BE USED AS DIRECTED BY THE ENGINEER FOR PAVEMENT IRREGULARITIES. 4
- TRENCH 3' DEPTH ADJACENT EDGE OF MAINLINE
  PAVEMENT. VARY TRENCH DEPTH TO ACHIEVE
  4' SHOULDER CROSS SLOPE ON TANGENT SECTIONS
  AND MATCH ADJACENT MAINLINE CROSS SLOPE IN
  CURVES, EXCEPT MINIMUM OF 4' SHOULDER SLOPE ON
  LOW SIDE OF SUPERELEVATION AND CONSTRUCT 4' SLOPE
  ON OUTSIDE SHOULDER BREAK ON HIGH SIDE OF
  SUPERELEVATED SHOULDER. (2)

# SURFACING SCHEDULE

4 LEVELING AND WEDGING PG76-22.....AS DIRECTED CL3 ASPH SURF 0.38A PG76-22......11/2" DEPTH MAINLINE TRAFFIC LANES  $\Theta$ 

### SHOULDERS

TRENCHING.....3" DEPTH

HAL ROGERS PARKWAY TYPICAL SECTIONS

NOT TO SCALE

Contract ID: 232497 Page 59 of 90

#### **GUARDRAIL DELIVERY VERIFICATION SHEET**

Contract ID: 232497 Page 60 of 80

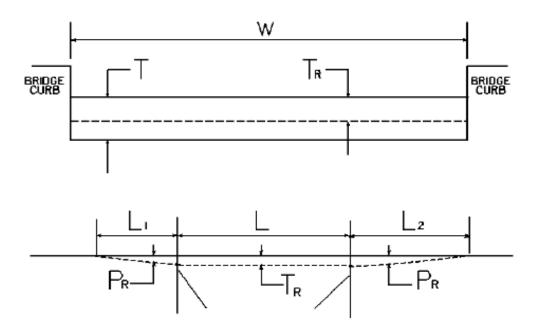
Contract Id:		Con	tractor:
Section Engineer:		District & County:	
<u>DESCRIPTION</u>	<u>UNIT</u>	QTY LEAVING PROJECT	QTY RECEIVED@BB YARD
GUARDRAIL (Includes End treatments & crash cushions) STEEL POSTS	LF EACH		
STEEL BLOCKS	EACH		
WOOD OFFSET BLOCKS	EACH		
BACK UP PLATES	EACH		
CRASH CUSHION	EACH		
NUTS, BOLTS, WASHERS	BAG/BCKT		
DAMAGED RAIL TO MAINT. FACILIT	ΓY LF		
DAMAGED POSTS TO MAINT. FACIL	LITY EACH		
*Required Signatures before	Leaving Proje	<u>ct Site</u>	
Printed Section Engineer's Re	epresentative_		& Date
Signature Section Engineer's	Representative	2	_& Date
Printed Contractor's Represe	entative		_& Date
Signature Contractor's Repre	esentative		_& Date
*Required Signatures after A	Arrival at Baile	y Bridge Yard (All material c	on truck must be counted & the
quantity received column co			
Printed Bailey Bridge Yard Re	epresentative		& Date
Signature Bailey Bridge Yard	Representative		_& Date
Printed Contractor's Represe	entative		_& Date
Signature Contractor's Repre	esentative		_& Date
•	ent will not be	made for guardrail removal	antities shown in the Bailey Bridge until the guardrail verification sheets e Yard Representative.

Date: \_\_\_\_\_

By: \_\_\_\_\_

Completed Form Submitted to Section Engineer

#### BRIDGE DETAIL FOR PAVING PROJECT



W = bridge width curb to curb

T =thickness of existing asphalt overlay

L = length of bridge

 $L_1 \& L_2 = \text{length of approach pavement to be removed}$ 

 $T_R$  = thickness to be removed and replaced on bridge  $P_R$  = thickness to be removed and replaced on pavement Note:  $L_1$  &  $L_2$  lengths shall be determined by using a transition rate of 100 ft/in of thickness

Route	Bridge	MP	W (ft)	T (in)	$L_1$ (ft)	$L_{2}$ (ft)	$T_R$	L (ft)	$P_{R}$ (in)
	No.						(in)		
HR 9006	B00065N	13.926	56.00			150.00	0.000	146.00	1.50
HR 9006	B00066N	14.958	44.00		150.00	150.00	1.50	28.30	1.50

01/01/2009

#### 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: <a href="http://transportation.ky.gov/Construction/Pages/Kentucky-Standard-Specifications.aspx">http://transportation.ky.gov/Construction/Pages/Kentucky-Standard-Specifications.aspx</a>

1I

#### SPECIAL NOTE FOR PORTABLE CHANGEABLE MESSAGE SIGNS

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

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

#### 2.0 MATERIALS.

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

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

#### **2.2 Sign and Controls.** All signs must:

- Provide 3-line messages with each line being 8 characters long and at least 18 inches tall. Each character comprises 35 pixels.
- Provide at least 40 preprogrammed messages available for use at any time.
   Provide for quick and easy change of the displayed message; editing of the message; and additions of new messages.
- 3) Provide a controller consisting of:
  - a) Keyboard or keypad.
  - Readout that mimics the actual sign display. (When LCD or LCD type readout is used, include backlighting and heating or otherwise arrange for viewing in cold temperatures.)
  - c) Non-volatile memory or suitable memory with battery backup for storing pre-programmed messages.
  - d) Logic circuitry to control the sequence of messages and flash rate.
- 4) Provide a serial interface that is capable of supporting complete remote control ability through land line and cellular telephone operation. Include communication software capable of immediately updating the message, providing complete sign status, and allowing message library queries and updates.
- 5) Allow a single person easily to raise the sign to a satisfactory height above the pavement during use, and lower the sign during travel.
- 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.

1I

- 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

1I the actual number of individual signs acceptably furnished and operated during the project. The Department will not measure signs replaced due to damage or

**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

rejection.

Effective June 15, 2012

#### **REFERENCES**

- 1. Kentucky Transportation Cabinet, Department of Highways, Standard Specifications for Road and Bridge Construction, Edition of 2019.
- 2. FHWA Manual on Uniform Traffic Control Devices 2009 Edition.
- 3. Kentucky Department of Highways Standard Drawings, Current Edition, as applicable:

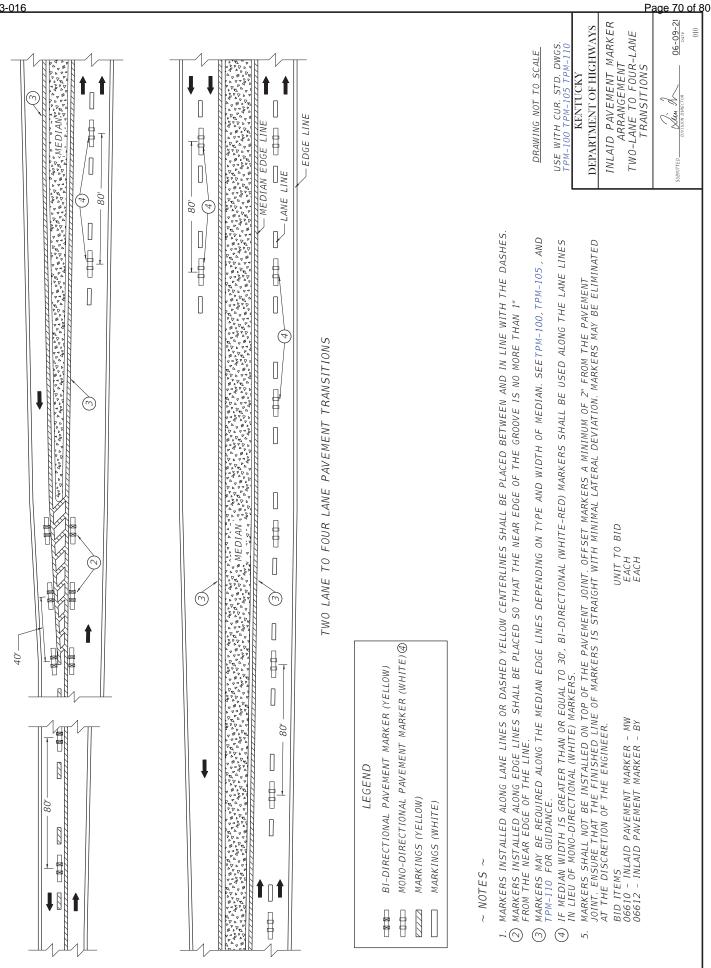
RBB-001-09	GUARDRAIL AND BRIDGE END DRAINAGE FOR SINGLE STRUCTURES
RBC-002-04	GUARDRAIL CONNECTOR TO BRIDGE END TYPE A COMPONENTS
RBC -003-09	GUARDRAIL CONNECTOR TO BRIDGE END TYPA A AND A-1
	COMPONENTS
RBC-005-01	GUARDRAIL CONNECTOR TO BRIDGE END TYPE A
RBC-005N	GUARDRAIL CONNECTOR TO BRIDGE END TYPE A NOTES
RBI-001-12	TYPICAL GUARDRAIL INSTALLATIONS
RBI-002-07	TYPICAL GUARDRAIL INSTALLATIONS
RBI-003-09	TYPICAL INSTALLATION FOR GUARDRAIL END TREATMENT TYPE
	2A
RBI-004-06	INSTALLATION OF GUARDRAIL END TREATMENT 1
RBR-001-13	STEEL BEAM GUARDRAIL ("W' BEAM)
RBR-005-11	GUARDRAIL COMPONENTS
RBR-010-06	GUARDRAIL TERMINAL SECTIONS
RBR-015-06	STEEL GUARDRAIL POSTS
RBR-020-07	GUARDRAIL END TREATMENT TYPE 1
RBR-025-06	GUARDRAIL END TREATMENT TYPE 2A
RBR-035-12	GUARDRAIL END TREATMENT TYPE 4A
RBR-055-01	DELINEATORS FOR GUARDRAIL
RDD-040-05	CHANNEL LINING CLASS II AND III
RDH-020-03	SLOPED & FLARED HEADWALLS FOR 12" TO 27" PIPE
RDH-110-02	PIPE CULVERT HEADWALLS 0 DEGREE SKEW
RDH-120-02	PIPE CULVERT HEADWALLS 15 – 30 – 45 DEGREE SKEW
RDH-210-03	DIMENSIONS & QUANTITIES 30" – 108" HEADWALLS CIRCULAR PIPE
	0 DEGREE SKEW
RDH-214-03	DIMENSIONS & QUANTITIES 30" – 108" HEADWALLS CIRCULAR PIPE
	30 DEGREE SKEW
RDH-310-04	BILL OF REINFORCEMENT 30" – 90" DIAMETER CIRCULAR PIPE
	HEADWALLS 0 DEGREE SKEW
RDH-030-03	SLOPED AND PARALLEL HEADWALLS 12" TO 21" PIPE
RDI-002-05	CULVERT AND STORM SEWER PIPE TYPES AND COVER HEIGHTS
RDI-020-10	PIPE BEDDING FOR CULVERTS, ENTRANCE, AND STORM SEWER PIPE
RDI-021-01	PIPE BEDDING FOR CULVERTS, ENTRANCE, AND STORM SEWER
	REINFORCED CONC. PIPE
RDI-025-06	PIPE BEDDING TRENCH CONDITION
RDI-026-01	PIPE BEDDING TRENCH CONDITION REINFORCED CONC. PIPE
RDI-035-02	COATINGS, LININGS AND PAVINGS FOR NON-STRUCTURAL PLATE
	PIPE
RDI-040-01	EROSION CONTROL BLANKET SLOPE INSTALLATION
RDI-041-01	EROSION CONTROL BLANKET CHANNEL INSTALLATION
RD <b>-</b> 210 <b>-</b> 03	TEMPORARY SILT FENCE

RD -220-05	SILT TRAP - TYPE A
RD -225-01	SILT TRAP - TYPE B
RD -230-01	SILT TRAP - TYPE C
RGS-001-07	CURVE WIDENING AND SUPERELEVATION TRANSITIONS
RG -001-06	MISCELLANEOUS STANDARDS
RG -050-02	GABION RETAINING WALLS
RPM-100-11	CURB AND GUTTER CURBS AND VALLEY GUTTER
TPM-170-01	FLE IBLE DELINEATOR POST ARRANGEMENTS FOR HORI ONTAL
	CURVES
TPM-175	PAVEMENT STRIPING DETAILS FOR TWO LANE TWO WAY
	ROADWAYS
TPR-100	CENTERLINE RUMBLE STRIPS PLACEMENT DETAILS
TPR-110	CENTERLINE RUMBLE STRIPS 6 INCH STRIPING
TPR-115	SHOULDER & EDGELINE RUMBLE STRIP PLACEMENT DETAILS
TPR-125	SHOULDER RUMBLE STRIP DETAILS TWO LANE ROADWAYS
TTC-100-05	LANE CLOSURE TWO LANE HIGHWAY
TTC-135-03	SHOULDER CLOSURE
TTD-120-03	DOUBLE FINE ONE SIGNS
TTD-125-03	PAVEMENT CONDITION WARNING SIGNS
TTD-130	SPEED ONE SIGNING FOR WORK ONES
TTS-100-02	MOBILE OPERATION FOR PAINT STRIPING CASE I
TTS-105-02	MOBILE OPERATION FOR PAINT STRIPING CASE II
TTS-130-02	MOBILE OPERATION FOR DURABLE STRIPING CASE III
TTS-135-02	MOBILE OPERATION FOR DURABLE STRIPING CASE IV

4. Kentucky Transportation Cabinet, Department of Highways, Standard Specifications for Road and Bridge Construction, Edition of 2019, Including - Supplemental Specifications, as applicable:

Typical Section Dimensions attached
Portable Changeable Message Signs attached
Before You Dig attached
Fixed Completion Date and Liquidated Damages attached
Asphalt Pavement Ride Quality (Cat A) attached
Compaction of Asphalt Mixtures (Option A) attached
Asphalt Milling and Texturing attached
Guardrail Delivery Verification Sheet attached
Special Note for Experimental KYCT and Hamburg Testing attached
Special Note for PVC Fold and Form Pipe Liner attached
Special Note for Pipe Liner Acceptance Testing attached
Construction Memo 20-01 attached

1. 2. 2.



Contract ID: 232497

EDGE OF ROADWAY

80'

~ NOTES

MARKERS INSTALLED ALONG LANE LINES SHALL BE PLACED BETWEEN AND IN LINE WITH THE SKIPS.  $\vec{-}$   $\bigcirc$ 

MARKERS INSTALLED ALONG EDGE LINES SHALL BE PLACED SO THAT THE NEAR EDGE OF THE GROOVE IS NO MORE THAN 1" FROM THE NEAR EDGE OF THE LINE.

BI-DIRECTIONAL (YELLOW-RED) MARKERS ARE TO BE PLACED ALONG THE ENTIRE LENGTH OF THE YELLOW EDGE LINE FROM THE INTERSECTION OF THE CROSS-STREET TO THE BEGINNING OF THE GORE AREA.  $\odot$ 

IF DOTTED EXTENSIONS ARE USED IN THE TAPERED ACCELERATION LANE, MARKERS SHALL BE INSTALLED AS DEPICTED. ON TWO-LANE, TWO-WAY HIGHWAYS, MARKERS INSTALLED ALONG GORE MARKINGS SHALL BE MONO-DIRECTIONAL (WHITE).

MARKERS SHALL NOT BE INSTALLED ON TOP OF THE PAVEMENT JOINT. OFFSET MARKERS A MINIMUM OF 2" FROM THE PAVEMENT JOINT. ENSURE THAT THE FINISHED LINE OF MARKERS IS STRAIGHT WITH MINIMAL LATERAL DEVIATION. MARKERS MAY BE ELIMINATED OR PLACEMENT ADJUSTED AT THE DISCRETION OF THE ENGINEER. 4 (5) 6

BID ITEMS 06613 - INLAID PAVEMENT MARKER - B-W/R 06614 - INLAID PAVEMENT MARKER - B-Y/R

UNIT TO BID EACH EACH

DRAWING NOT TO SCALE USE WITH CUR. STD. DWG. KENTUCKY PM-200

INLAID PAVEMENT MARKER ARRANGEMENT ON-RAMP WITH TAPERED ACCELERATION LANE DEPARTMENT OF HIGHWAYS

Page 71 of 80 06-09-21

Contract ID: 232497

#### Contract ID: 232497 Page 72 of 80

#### **PART III**

#### EMPLOYMENT, WAGE AND RECORD REQUIREMENTS

#### 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

Contract ID: 232497

Page 73 of 80

#### Contract ID: 232497 Page 74 of 80

#### **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: <a href="https://www.eProcurement.ky.gov">https://www.eProcurement.ky.gov</a>.

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** 

PER HOUR

**BEGINNING JULY 24, 2009** 

#### **OVERTIME PAY**

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

#### **CHILD LABOR**

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

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

#### No more than

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

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

#### **TIP CREDIT**

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

#### **ENFORCEMENT**

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

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

#### ADDITIONAL INFORMATION

- Certain occupations and establishments are exempt from the minimum wage and/or overtime pay provisions.
- Special provisions apply to workers in American Samoa and the Commonwealth of the Northern Mariana Islands.
- $\bullet$  Some state laws provide greater employee protections; employers must comply with both.
- 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.



Contract ID: 232497

Page 76 of 80

Contract ID: 232497 Page 77 of 80

#### **PART IV**

#### **INSURANCE**

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

current edition

#### **PART V**

#### **BID ITEMS**

Contract ID: 232497 Page 79 of 80 **PROPOSAL BID ITEMS** 

232497

#### Page 1 of 2

Report Date 11/9/23

Section: 0001 - PAVING

LINE	BID CODE	ALT	DESCRIPTION	(	YTITNAUÇ	UNIT	<b>UNIT PRIC</b>	FP	AMOUNT
0010	00100		ASPHALT SEAL AGGREGATE		80.00	TON		\$	
0020	00103		ASPHALT SEAL COAT		10.00	TON		\$	
0030	00190		LEVELING & WEDGING PG64-22		300.00	TON		\$	
0040	00212		<b>CL2 ASPH BASE 1.00D PG64-22</b>		3,180.00	TON		\$	
0050	00301		CL2 ASPH SURF 0.38D PG64-22		1,475.00	TON		\$	
0060	00336		CL3 ASPH SURF 0.38A PG76-22		2,605.00	TON		\$	
0070	00356		ASPHALT MATERIAL FOR TACK		55.00	TON		\$	
0800	02676		MOBILIZATION FOR MILL & TEXT		1.00	LS		\$	
0090	02677		ASPHALT PAVE MILLING & TEXTURING		145.00	TON		\$	
0100	02696		SHOULDER RUMBLE STRIPS		17,921.00	LF		\$	
0110	10020NS		FUEL ADJUSTMENT		12,709.00	DOLL	\$1.00	\$	\$12,709.00
0120	10030NS		ASPHALT ADJUSTMENT		31,922.00	DOLL	\$1.00	\$	\$31,922.00

Section: 0002 - ROADWAY

LINE BID	CODE ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0130 0000	1	DGA BASE	1,500.00	TON		\$	
0140 0007	8	CRUSHED AGGREGATE SIZE NO 2	300.00	TON		\$	
0150 0169	0	FLUME INLET TYPE 1	1.00	EACH		\$	
0160 0170	5	REMOVE CURB & GUTTER BOX INLET	1.00	EACH		\$	
0170 0189	2	ISLAND HEADER CURB TYPE 1 - MODIFIED	50.00	LF		\$	
0180 0190	4	REMOVE CURB	25.00	LF		\$	
0190 0256	2	TEMPORARY SIGNS	500.00	SQFT		\$	
0200 0256	8	MOBILIZATION	1.00	LS		\$	
0210 0257	5	DITCHING AND SHOULDERING	8,961.00	LF		\$	
0220 0265	0	MAINTAIN & CONTROL TRAFFIC	1.00	LS		\$	
0230 0267	1	PORTABLE CHANGEABLE MESSAGE SIGN	2.00	EACH		\$	
0240 0272	16	STAKING	1.00	LS		\$	
0250 0277	5	ARROW PANEL	2.00	EACH		\$	
0260 0493	3	TEMP SIGNAL 2 PHASE	2.00	EACH		\$	
0270 0595	0	EROSION CONTROL BLANKET	11,615.00	SQYD		\$	
0280 0595	3	TEMP SEEDING AND PROTECTION	5,000.00	SQYD		\$	
0290 0598	5	SEEDING AND PROTECTION	2,000.00	SQYD		\$	
0300 0640	3	FLEXIBLE DELINEATOR POST-B/W	205.00	EACH		\$	
0310 0642	27	TRENCHING	18,000.00	LF		\$	
0320 0651	1	PAVE STRIPING-TEMP PAINT-6 IN	22,813.00	LF		\$	
0330 0654	2	PAVE STRIPING-THERMO-6 IN W	20,367.00	LF		\$	
0340 0654	3	PAVE STRIPING-THERMO-6 IN Y	22,813.00	LF		\$	
0350 0654	.9	PAVE STRIPING-TEMP REM TAPE-B	500.00	LF		\$	
0360 0655	0	PAVE STRIPING-TEMP REM TAPE-W	500.00	LF		\$	
0370 0655	31	PAVE STRIPING-TEMP REM TAPE-Y	500.00	LF		\$	
0380 0656	8	PAVE MARKING-THERMO STOP BAR-24IN	40.00	LF		\$	
0390 0657	4	PAVE MARKING-THERMO CURV ARROW	7.00	EACH		\$	
0400 0657	'6	PAVE MARKING-THERMO ONLY	2.00	EACH		\$	
0410 0657	8	PAVE MARKING-THERMO MERGE ARROW	3.00	EACH		\$	
0420 0661	0	INLAID PAVEMENT MARKER-MW	25.00	EACH		\$	

Contract ID: 232497 Page 80 of 80

#### **PROPOSAL BID ITEMS**

232497

Report Date 11/9/23

Page 2 of 2

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	<b>UNIT PRIC</b>	FP	AMOUNT
0430	06612		INLAID PAVEMENT MARKER-BY	225.00	EACH		\$	
0440	20191ED		OBJECT MARKER TY 3	20.00	EACH		\$	
0450	23821EC		CENTERLINE RUMBLE STRIPS-12 IN	9,000.00	LF		\$	

Section: 0003 - GUARDRAIL

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	<b>UNIT PRIC</b>	FP	<b>AMOUNT</b>
0460	01987		DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	185.00	EACH		\$	
0470	02367		<b>GUARDRAIL END TREATMENT TYPE 1</b>	10.00	EACH		\$	
0480	02381		REMOVE GUARDRAIL	9,550.00	LF		\$	
0490	02391		<b>GUARDRAIL END TREATMENT TYPE 4A</b>	10.00	EACH		\$	
0500	21802EN		G/R STEEL W BEAM-S FACE (7 FT POST)	9,550.00	LF		\$	
0510	24976EC		GUARDRAIL CONNECTOR TO BR END TY A CR	2.00	EACH		\$	

Section: 0004 - DEMOBILIZATION

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	<b>UNIT PRIC</b>	FP	AMOUNT
0520	02569		DEMOBILIZATION	1.00	LS	3	\$	