CALL NO. 402

CONTRACT ID. 252344

KENTON COUNTY

FED/STATE PROJECT NUMBER FD05 059 0016 015-016

DESCRIPTION DECOURSEY AVE/E. 30TH ST./JAMES AVE. (KY 16)

WORK TYPE ASPHALT RESURFACING

PRIMARY COMPLETION DATE 6/30/2026

LETTING DATE: September 25,2025

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN DAYLIGHT TIME September 25,2025. Bids will be publicly announced at 10:00 AM EASTERN DAYLIGHT TIME.

NO PLANS ASSOCIATED WITH THIS PROJECT.

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

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PART I

SCOPE OF WORK

ADMINISTRATIVE DISTRICT - 06

CONTRACT ID - 252344

FD05 059 0016 015-016

COUNTY - KENTON

PCN - MP05900162502
FD05 059 0016 015-016

DECOURSEY AVE/E. 30TH ST./JAMES AVE. (KY 16) (MP 15.000) BEGIN 0.024 MILES SOUTH OF THE RAILROAD CROSSING EXTENDING NORTH TO KY 17 (MP 15.871), A DISTANCE OF 0.87 MILES.ASPHALT RESURFACING

GEOGRAPHIC COORDINATES LATITUDE 39:03:13.60 LONGITUDE 84:30:11.79

ADT 11,083

PCN - MP05900162503
FD04 059 0016 015-016

DECOURSEY AVE/E. 30TH ST./JAMES AVE. (KY 16) (MP 15.000) BEGIN 0.024 MILES SOUTH OF THE RAILROAD CROSSING EXTENDING NORTH TO KY 17 (MP 15.871), A DISTANCE OF 0.87 MILES.SIGNS

GEOGRAPHIC COORDINATES LATITUDE 39:03:13.60 LONGITUDE 84:30:11.79

ADT 11,083

PCN - MP05900162504
FE01 059 0016 015-016

DECOURSEY AVE/E. 30TH ST./JAMES AVE. (KY 16) (MP 15.000) BEGIN 0.024 MILES SOUTH OF THE RAILROAD CROSSING EXTENDING NORTH TO KY 17 (MP 15.871), A DISTANCE OF 0.87 MILES.OPERATIONS (MAINTENANCE)

GEOGRAPHIC COORDINATES LATITUDE 39:03:13.60 LONGITUDE 84:30:11.79

ADT 11,083

COMPLETION DATE(S):

COMPLETED BY 06/30/2026 APPLIES TO ENTIRE PROJECT

CONTRACT NOTES

INSURANCE

Refer to Kentucky Standard Specifications for Road and Bridge Construction, current edition.

PROPOSAL ADDENDA

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

BID SUBMITTAL

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

JOINT VENTURE BIDDING

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

UNDERGROUND FACILITY DAMAGE PROTECTION

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

REGISTRATION WITH THE SECRETARY OF STATE BY A FOREIGN ENTITY

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

foreign entity is not required to obtain a certificate as provided in KRS 14A.9-010, the foreign entity should identify the applicable exception. Foreign entity is defined within KRS 14A.1-070.

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

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

SPECIAL NOTE FOR PROJECT QUESTIONS DURING ADVERTISEMENT

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

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

The questions and answers will be posted for each Letting under the heading "Questions & Answers" on the Construction Procurement website (www.transportation.ky.gov/construction-procurement). 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 state agency certifies that it is in compliance with the provisions of KRS 45A.150, "Access to contractor's books, documents, papers, records, or other evidence directly pertinent to the contract." The Contractor, as defined in KRS 45A.030, 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 agreement for the purpose of financial audit or program review. 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. Records and other prequalification information confidentially disclosed as part of the bid process shall not be deemed as directly pertinent to the agreement and shall be exempt from disclosure as provided in KRS 61.878(1)(c).

BOYCOTT PROVISIONS

If applicable, the contractor represents that, pursuant to KRS 45A.607, 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 KRS 11A.236 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 KRS 45A.328, 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.

SPECIAL NOTE – BUY AMERICA REQUIREMENTS AND BUILD AMERICA, BUY AMERICA (BABA) ACT 05/05/2025

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 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.

3.0 FINAL RULE – FHWA'S BUY AMERICA REGULATION TO TERMINATE GENERAL APPLICABILITY WAIVER FOR MANUFACTURED PRODUCTS

- **March 17, 2025** (effective date): For all Federal-aid projects obligated on or after March 15, 2025, all iron or steel products, as defined in § 635.410(c)(1)(iii), must comply with FHWA's Buy America requirements for steel and iron in § 635.410(b). In addition, for all Federal-aid projects obligated on or after March 15, 2025, per § 635.410(c)(2), articles, materials, and supplies should be classified as an iron or steel product, a manufactured product, or another product as specified by law or in 2 CFR part 184 (such other products specified by law or in 2 CFR part 184 include "excluded materials" and "construction materials"); an article, material, or supply must not be considered to fall into multiple categories.
- **October 1, 2025:** The final assembly requirement will become effective for Federal-aid projects obligated on or after October 1, 2025. This means that, for manufactured product to be Buy America compliant, for Federal-aid projects obligated on or after October 1, 2025, final assembly of the manufactured product must occur in the United States.
- **October 1, 2026:** The 55 percent requirement will become effective for Federal-aid projects obligated on or after October 1, 2026. This means that, for manufactured product to be Buy America-compliant, for Federal-aid projects obligated on or after October 1, 2026, all manufactured products permanently incorporated into the project must both be manufactured in the United States (satisfy the final assembly requirement) and have the cost of the components of the manufactured product that are mined, produced, or manufactured in the United States be greater than 55 percent of the total cost of all components of the manufactured product (satisfy the 55 percent requirement).

4.0 – ADDITIONAL REQUIREMENTS

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's 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)

SPECIAL NOTE – BUY AMERICA REQUIREMENTS AND BUILD AMERICA, BUY AMERICA (BABA) ACT 05/05/2025

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:_____

Title:_____

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.

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

NATIONAL HIGHWAY

Be advised this project is on the NATIONAL HIGHWAY SYSTEM.

SURFACING AREAS

The Department estimates the mainline surfacing width to be varied from 18 to 42 feet.

The Department estimates the total mainline area to be surfaced to be 15,272 square yards.

The Department estimates the shoulder width to be 0 foot on each side.

The Department estimates the total shoulder area to be surfaced to be 0 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.

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.

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.

Special Notes Applicable to Project
General Notes & Description of Work

CAUTION

The information in this proposal and the type of work listed herein are approximate only and are not to be taken as an exact evaluation of the materials and conditions to be encountered during construction; the bidder must draw his/her own conclusions when developing the Unit Bid Prices for each bid item. As such, if the conditions encountered are not in accordance with the information shown, the Department does not guarantee any changes to the Unit Bid Prices nor extension of the contract will be considered. The Department will pay for bid item quantity overruns, but only if pre-approved by the Engineer.

STATIONING

The contractor is advised that the planned locations of work were established using the Route Milepoint Log with a beginning location adjacent the northern entrance to Huntington Bank, which corresponds closely to Milepoint 15.000 along KY 16. **NOTE**: The existing mile marker signs may not correspond to the proposed work locations.

ON-SITE INSPECTION

Before submitting a bid for the work, make a thorough inspection of the site and determine existing conditions so that the work can be expeditiously performed after a contract is awarded. The Department will consider submission of a bid to be evidence of this inspection having been made. The Department will not honor any claims for money or time extension resulting from site conditions.

RIGHT OF WAY LIMITS

The Department has not established the exact limits of the Right-of-Way. Unless a consent and release form is obtained from the adjoining property owner, limit work activities to the obvious Right-of-Way and staging areas secured and environmentally cleared by the Contractor at no additional cost to the Department. In the event that private improvements (i.e., fences, buildings, etc.) encroach upon the Right-of-Way, the contractor shall notify the Engineer and limit work activities in order to NOT disturb the improvements. If they become necessary, the Department will secure consent and releases from property owners through the Engineer. Be responsible for all encroachments onto private lands.

CONTROL

Perform all work under the absolute control of the Department of Highways. Obtain the Engineer's approval of all designs required to be furnished by the Contractor prior to incorporation into the work. The Department reserves the right to have other work performed by other contractors and its own forces and to permit public utility companies and others to do work during the construction within the limits of, or adjacent to, the project. Conduct operations and cooperate with such other parties so that interference with such other work will be reduced to a minimum. The Department will not honor any claims for money or time extension created by the operations of such other parties. Should a difference of opinion arise as to the rights of the Contractor and others working within the limits of, or adjacent to, the project, the Engineer will decide as to the respective rights of the various parties involved in order to assure the completion of the Department's work in general harmony and in a satisfactory manner, and his/her decision shall be final and binding upon the Contractor.

DESCRIPTION OF WORK

This project contains work to be paid for using multiple funding sources. The Contractor shall work with the Engineer to document work and the appropriate bid items for measurement by the Engineer. The work and funding source is listed in the following sections. Except as specified herein, perform all work in accordance with the Department's Standard Specifications, Supplemental Specifications, applicable Special Notes and Special Provisions, and applicable Standard and Sepia Drawings, current editions. Furnish all materials, labor, equipment, and incidentals for the following work:

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Pavement Resurfacing. The existing roadway is to be resurfaced from the northern approach stop bar of the intersection of KY 16 and 36th St. to the end of the route at the intersection of KY 17 and 26th St. Other items that may be associated with the pavement resurfacing include: removal of inlaid pavement markers, removal of existing pavement by milling and texturing, leveling and wedging, application of asphalt material for tack, and construction of permanent pavement striping and markings.

Base Failure Repairs. Areas have been identified along the route for Base Failure Repair. The repair locations and dimensions listed on the Base Failure Repair Summary are approximate only. The Engineer will determine actual repair locations and dimensions at the time of construction. Refer to the Special Note for Base Failure Repair for more details on this item of work.

Sidewalk Ramp Reconstruction. A sidewalk ramp is identified for reconstruction. Refer to the summary and Standard Drawings for more information on reconstructing the sidewalk to ramp to be ADA-compliant.

Radar Presence Detectors. Work to include the installation and activation of Radar Detection equipment as identified in this proposal, detailed in the Special Note for Radar Presence Detection, and to the satisfaction of the District Traffic Engineer.

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Qwick Kurb Model L104 Mega Marker System. Construction of a median separator curb is planned for the approaches of KY 16 near the railroad crossing at approx. MP 15.020. The curbs are to be added within the Two-Way Left-Turn Lane in the orientation depicted in the Railroad Intersection Detail Sheet.

Inlaid Pavement Markers. The asphalt and concrete corridor surfaces are planned for inlaid pavement markers to be constructed in the appropriate locations. For asphalt applications, refer to the Standard Specifications. For concrete applications, refer to the Special Note for Removing Existing Pavement Markers on Portland Cement Pavement and Constructing Inlaid Pavement Markers.

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Saw and Seal Concrete Pavement Joints. A portion of the corridor pavement is concrete and work is to involve the sawcut, cleaning, and resealing of the joints. In addition to the longitudinal and transverse joints, there may be additional ones also in need. Engineer to make final determination of locations. Refer to the Special Note for Saw, Clean, and Reseal JPC Pavement Joints for specifics on construction and materials. Saw-Clean-Reseal work is to be completed prior to resurfacing the asphalt portion of the corridor.

Removal of Existing Signing Assemblies and Installation of Proposed Signing. A sign has been identified in the Remove Sign Summary for removal. An estimated quantity of new signing and sign post is included on the Signing Summary. The Contractor and Engineer will work with the District Traffic Section to determine the final signing layout and sign types prior to installation of the proposed signing. Refer to the Special Note for Signing and the Special Note for Signage for more details concerning the procedures for determining and staking the final layout and installation of the signing.

Reconstruction of Drainage Inlet. The top phase of an existing drainage structure is to be reconstructed. Refer to the Drainage Inlet Detail Sheet for specifics on the reconstruction work.

Reconstruct Curb. A length of existing header curb is damaged and needs to be reconstructed. The repair location listed on the General Summary is approximate only. The Engineer will determine actual repair locations at the time of construction.

Adjustment of Manhole Frame to Grade. A quantity of manhole frames with lid are within the driving pavement and in need of reconstruction to flush with the pavement surface. Refer to the Manhole Adjustment Summary for approx. location information.

SPECIAL NOTE FOR
PAVEMENT MARKING MODIFICATIONS

This Proposal may include drawings depicting anticipated pavement marking modifications along the route to be resurfaced. However, per Section 713.03.01 of the Standard Specifications, the Contractor shall still be required to submit a record of existing pavement markings prior to beginning resurfacing activities. The Department requests these records be submitted at least two weeks prior to milling or paving in order to coordinate all desired changes between the District Striping Engineer and the Contractor. All changes will be returned to the Contractor to ensure the desired modifications can be performed during final surfacing. As the Contractor is responsible for implementing any pavement marking changes, it is highly recommended any questions are addressed to the Engineer prior to striping. Any incorrect markings will be removed and replaced with the proper markings at the Contractor's expense and in a manner approved by the Engineer.

Special Note for Qwick Curb Median Separator

I. DESCRIPTION

Except as provided herein, perform all work in accordance with the Department's Standard Specifications, interim Supplemental Specifications, Standard and Sepia Drawings, and Special Notes and Special Provisions, current editions. Article references are to the Standard Specifications. This project shall consist of furnishing all labor, equipment, materials, and incidentals for the following:

(1) Maintaining and Controlling Traffic; (2) Installing Qwick Kurb® brand lane separator curb; and
(3) All other work specified in the Contract.

II. MATERIALS

All materials shall be sampled and tested in accordance with the Department's Sampling Manual and the materials shall be 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. Lane Separator Curb. Furnish Qwick Kurb® brand lane separator curb guidance system that includes modular longitudinal curb sections, transition end sections, and upright delineator posts/panels. The longitudinal units of the system shall interface with each other to form a continuous longitudinal channelizing system. The design of the system shall allow a radius or curve as needed by roadway geometry. The complete system shall be compliant with NCHRP 350 or MASH. Manufacturer's documentation validating this compliance shall be provided to the Engineer prior to installation. System color shall match the adjacent pavement marking color.

1. **Longitudinal Units.** The longitudinal units shall have a mountable design to allow for emergency vehicle crossovers. The longitudinal units shall be designed to allow for cross drainage under the units. Individual units of the system shall have a minimum length of 40 inches, maximum height of 4 inches and maximum width of 12 inches. The longitudinal base shall include retroreflective markings to match the system color. At least one upright post is required for each longitudinal curb unit.

2. **Upright Posts.** Upright posts shall be a minimum of 26 inches in height and a minimum of 2 inches in width. Upright posts are to be uniformly spaced at intervals no greater than 44 inches along the system. Post color should match the longitudinal curb unit and adjacent pavement marking color. Each post shall have retroreflective markings of color matching the post, longitudinal system, and adjacent pavement marking. Upright posts should be easily replaceable under traffic conditions and shall be fabricated to withstand repeated impacts and return to a complete upright position with minimal maintenance to the unit.

III. CONSTRUCTION METHODS

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

B. Site Preparation. Be responsible for all site preparation including, but not limited to: clearing and grubbing, staking, excavation, backfill, and removal of obstructions or any other material not covered by other items. Perform site preparation only as approved or directed by the Engineer.

C. Lane Separator Curb. Assemble and fasten the lane separator curb system to the underlying pavement or bridge deck according to the manufacturer's recommendations.

D. Property Damage. The Contractor shall be responsible for all damage to public and/or private property resulting from the Contractor's activities. Repair or replace damaged roadway features in like kind materials and design as directed by the Engineer at no additional cost to the Department. Repair or replace damaged private property in like kind materials and design to the satisfaction of the owner and the Engineer at no additional cost to the Department.

E. Caution. The information in this proposal and the type of work listed herein are approximate only and are not to be taken as an exact evaluation of the materials and conditions to be encountered during construction; the bidder must draw his/her own conclusions when developing the Unit Bid Prices for each bid item. As such, if the conditions encountered are not in accordance with the information shown, the Department does not guarantee any changes to the Unit Bid Prices nor extension of the contract will be considered. The Department will pay for bid item quantity overruns, but only if pre-approved by the Engineer.

IV. METHOD OF MEASUREMENT

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

B. Site Preparation. Other than the bid items listed, the Department will NOT measure Site Preparation for payment, but shall be incidental to the project bid items.

C. Lane Separator Curb. The Department will measure Qwick Kurb® brand lane separator curb in Linear Feet.

V. BASIS OF PAYMENT

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

B. Lane Separator Curb. The Department will make payment for the completed and accepted quantities under the bid item "Qwick Curb Median Separator." Payment at the Contract unit price per linear foot shall be full compensation for furnishing all materials, equipment, tools, hardware, labor, and incidentals necessary to properly install the Qwick Kurb® brand lane separator curb according to the manufacturer's installation instructions, these notes, and/or as directed by the Engineer.

Special Note for Signage

All sign sheeting shall be from the Cabinet's List of Approved Materials.

All permanent signs and sign components shall be fabricated using Type XI sheeting.

The following signs and sign components shall be fabricated using Type XI fluorescent yellow sheeting:

- Horizontal Alignment Signs and Plaques, including signs shown in Figure 2C-1 of the MUTCD
- All Advisory Speed (W13-1P) plaques

The following signs shall be fabricated using Type XI fluorescent yellow-green sheeting:

- School and school bus warning signs, including the fluorescent yellow-green signs shown in Figures 7B-1 and 7B-6 of the MUTCD and other school-related warning signs that are not included in the MUTCD.
- Bicycle Warning (W11-1) signs and SHARE THE ROAD (W16-1P) plaques or diagonal downward pointing arrow (W16-7P) plaques that supplement Bicycle Warning signs.
- Pedestrian Warning signs and diagonal downward pointing arrow plaques that supplement Pedestrian Warning signs.
- In-Street Pedestrian Crossing (R1-6) signs and Overhead pedestrian Crossing (R1-9) signs
- Supplemental plaques to any of the previously listed signs

Special Note for Signing

I. DESCRIPTION

Except as provided herein, this work shall be performed in accordance with the current edition of the Manual on Uniform Traffic Control Devices (MUTCD), the Department's current Standard Specifications and Interim Supplemental Specifications, applicable Standard and Sepia Drawings, and applicable Special Provisions. Article references are to the Standard Specifications. This project shall consist of furnishing all labor, equipment, materials, and incidentals for the following:

(1) Maintaining and Controlling Traffic; (2) Furnish, Fabricate, and Erect Signs; and (3) All other work specified in the Contract.

II. MATERIALS

All materials shall be sampled and tested in accordance with the Department's Sampling Manual and the materials shall be 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.

III. CONSTRUCTION METHODS

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

B. Site Preparation. Be responsible for all site preparation including, but not limited to: clearing and grubbing, staking, excavation, backfill, and removal of obstructions or any other material not covered by other items. Perform all site preparation only as approved or directed by the Engineer.

C. Staking. See Special Note for Staking.

D. Signs and Posts. Before beginning installation, the Contractor shall furnish to the Engineer drawings, descriptions, manufacturer's cuts, etc. describing and/or detailing all material to be used. Mill test reports for beams, steel panels, and each different gauge of aluminum or steel sheeting used must be submitted to the Division of Construction and approved prior to erection.

Fabricate sheet signs from .080 or .125 gauge aluminum alloy 5052-H38 or 6061-T6, in accordance with ASTM B-209, and to the size and shape specified. Prepare the side of the aluminum sheet to receive the retroreflective background material according to the recommendations of the sheeting and retroreflective material manufacturer(s). Sheeting used as background material for sign faces is to be the color specified and visually in accordance with the standard requirements of ASTM D-4956 and meet the requirements of Section 830 of the Standard Specifications. Contrary to Section 830.02.06, only the types and colors of sheeting as specified in the proposal will be accepted. All retroreflective material shall be fabricated and assembled in accordance with the specifications and/or recommendations of the manufacturer(s).

All hardware for the erection of sheeting signs shall be rust resistant: stainless steel, zinc coated, aluminum, or an Engineer approved material. All beams and sign posts shall be of sufficient lengths so that a single, continuous length of sign post extends from the top of the sign to the required embedment in the anchor. Splicing of the sign post shall NOT be allowed. For installations in soil, Type I steel posts shall be mounted on either a standard anchor, with soil stabilizer plate, or on a Type D breakaway sign support. Refer to Sheeting Sign Detail Sheet 1 of 2 for installation details for a standard anchor with soil stabilizer plate. When installing a standard anchor with soil stabilizer plate, if solid rock is encountered, the Contractor shall drill a hole to the required depth into the rock, install the anchor into the hole, and backfill the anchor post with concrete, or other method approved by the Engineer. The cost shall be incidental to Type I steel post, and a soil stabilizer plate will not be required. Refer to Standard Drawing RGX-065, current edition, for installation details of Type D breakaway sign supports. Approved manufacturers for Type D breakaway sign supports have been placed on the list of approved materials. For installations on existing concrete, such as a sidewalk, concrete median, etc., or installations on existing asphalt, such as flush medians, Type I steel posts shall be mounted on a Type D Surface Mount. For Type D Surface Mounts use only Kleen Break Model 425 by Xcessories Squared of Auburn, IL. If the Surface Mount is to be installed on sufficiently cured concrete, use part number XKBSM42520-G. If the Surface Mount is to be installed on asphalt surface, use part numbers XKB42520-G and AXT225-36-G. Prior to installation, the Contractor shall submit to the Engineer shop drawings of the Type D Surface Mount(s). Install the Type D Surface Mount(s) according to all the applicable requirements of the manufacturer (see shop drawings). All steel post shall meet the requirements of Section 832. All hardware including, but not limited to, sign post anchors, soil stabilizer plates, nuts, bolts, washers, fasteners, fittings, and bracing, or any other incidentals necessary to erect the signs shall be furnished by the Contractor and will be incidental to the work.

New concrete bases, posts, support anchors, signs, etc. are to be installed prior to dismantling any existing sign(s). The removal of existing signs, posts, and support anchors is to be performed concurrently with the installation of new signs, posts, and support anchors, under the same lane closure during the same work shift. Completely remove existing sign support anchors or remove them to a minimum depth of six (6) inches below existing ground line and backfill the disturbed area to the existing ground line.

When listed on the plans and/or summaries, fabricate Reflective Sign Post Panels from .080 gauge aluminum alloy 5052-H38 or 6061-T6, in accordance with ASTM B-209 and to the size(s) specified. Prepare the side of the aluminum sheet to receive the retroreflective background material according to the recommendations of the sheeting and retroreflective material manufacturer(s). Sheeting for the Reflective Sign Post Panels shall be the same Type and color as the sign installed on the post. Examples include:

- Red, fluorescent yellow, and fluorescent yellow-green (Type XI Sheeting)
- White and yellow (Type XI Sheeting)

Reflective Sign Post Panels shall be 2 inches wide and will typically have a height of 60 inches for rural installations and typically have a height of 84 inches for urban installations. There will be certain instances where a proposed Reflective Sign Post Panel will have a height dimension less than 60 inches; typically, this will be when the bottom of the bottom-most sign is mounted lower than the standard 5 ft minimum mounting height (e.g. 3 ft or 4 ft mount heights). In those cases, the height

of the Reflective Sign Post Panel is expected to closely match (within 1-2 inches) the distance between the top of the anchor or support to the bottom edge of the bottom-most sign. Reflective Sign Post Panels shall have three 3/8" holes (one hole in the top 3", one hole near the center, and one hole in the bottom 3") that align with the holes on the Type I steel post.

All manufactured sheeting signs shall be free of visual defects including, but not limited to: cracks, tears, ridges, humps, discoloration, etc., and defective signs shall be replaced at no additional cost to the Department.

All sign blanks shall be hole punched by the manufacturer for either horizontal or vertical installation. Attach all aluminum sheeting signs to square post with 3/8" all steel rivets and nylon washers. Use bracing as indicated on the plans, summaries, and/or standard signing detail sheets, and/or when directed by the Engineer and/or District Traffic Engineer.

All sign posts shall be attached to anchors with 5/16" corner bolts and 5/16" flanged nuts, and all post and anchor cuts shall be treated with a Cold Galvanizing Compound spray.

Sign posts shall be erected vertically by using a bubble level. The tolerance shall be a two (2) degree angle in any direction. For locations where more than one sign is mounted beside each other, the posts shall be spaced to provide approximately six inches (6") of spacing between signs.

E. Remove & Relocate Sheet Signs. When listed on the plans and/or summaries, and/or as directed by the Engineer and/or District Traffic Engineer, remove the specified existing sheet sign(s) from the existing post(s) and reinstall on a new sign post. Once the specified existing sheet sign(s) have been removed and relocated, and if the existing sign post(s) are no longer needed to support other existing signs, removal of the existing sign post(s) will be paid under the bid item REMOVE SIGN. If any of the existing hardware components (bracing, brackets, bolts, rivets, etc.) are found to have pre-existing damage or are damaged during the Contractor's removal and reinstallation efforts, the Contractor shall provide the necessary replacement hardware for proper re-installation of the sheet sign. These components shall be incidental to the bid item REMOVE AND RELOCATE SHEET SIGNS.

Prior to removing and reinstalling a sheet sign, the Contractor shall first review the existing sheet sign for damage. It is the Contractor's responsibility to notify the Engineer of any existing sheet sign damage prior to removal and relocation of the sheet sign, so that it can be documented that the existing sheet sign had pre-existing damage. If the Contractor does not make the Engineer aware of pre-existing damage prior to detaching the sheet sign from its existing post, the Department will assume the damage was the result of the Contractor's removal and reinstallation efforts. The Contractor shall replace any sheet signs that are damaged during the removal and reinstallation efforts. Replacement of sheet signs damaged by the Contractor shall be incidental to the bid item REMOVE AND RELOCATE SHEET SIGNS.

If the existing sheet sign is found to have pre-existing damage, the Department will provide the Contractor with a new sheet sign to replace the sheet sign with pre-existing damage. Detaching the existing, damaged sheet sign from the existing post and attaching the new, Department-provided sheet sign to the new sign post shall be incidental the bid item REMOVE AND RELOCATE SHEET SIGNS.

F. Remove & Relocate Sign Assemblies. When listed on the plans and/or summaries, and/or as directed by the Engineer and/or District Traffic Engineer, remove the specified existing sign assemblies from the existing location and reinstall in a new location. The Department will consider all signs attached to one or more connected posts as a single sign assembly, no matter how many signs are attached to the existing sign assembly. If any of the existing hardware components (bracing, brackets, bolts, rivets, etc.) are found to have pre-existing damage or are damaged during the Contractor's removal and reinstallation efforts, the Contractor shall provide the necessary replacement hardware for proper re-installation of the sign assembly. These components shall be incidental to the bid item REMOVE AND RELOCATE SIGN ASSEMBLY.

Prior to removing and relocating a sign assembly, the Contractor shall review the existing sign(s) and sign post(s) for damage. It is the Contractor's responsibility to notify the Engineer of any sign or sign post damage prior to removal and relocation of the sign assembly, so that it can be documented that the existing sign and/or sign post had pre-existing damage. If the Contractor does not make the Department aware of pre-existing damage prior to removing a sign assembly from its existing location, the Department will assume the damage was the result of the Contractor's removal and reinstallation efforts. The Contractor shall replace any components of a sign assembly that are damaged during removal and relocation. Replacement of any components damaged by the Contractor shall be incidental to the bid item REMOVE AND RELOCATE SIGN ASSEMBLY.

If an existing sign that is part of a sign assembly to be removed and relocated is found to have pre-existing damage, the Department will provide the Contractor with a new sign to replace the sign with pre-existing damage. Detaching the existing, damaged sign from the existing post and attaching the new, Department-provided sign to the relocated existing post shall be incidental to the bid item REMOVE AND RELOCATE SIGN ASSEMBLY.

If an existing sign assembly that is to be removed and relocated is found to not have an existing soil stabilizer plate, or if the soil stabilizer plate and/or anchor is damaged during removal, then a new soil stabilizer plate and/or anchor shall be provided by the Contractor and shall be incidental to the bid item REMOVE AND RELOCATE SIGN ASSEMBLY.

If an existing sign assembly that is being relocated is not currently mounted on a Type D breakaway sign support, but the plans and/or summaries indicate, or wind load standards dictate, a Type D breakaway sign support or a Type D Surface Mount is required, provide and install the specified Type D support as part of the removal and reinstallation efforts. Type D breakaway sign supports shall be paid under the bid item GMSS TYPE D and Type D Surface Mount supports shall be paid under the bid item GMSS TYPE D (SURFACE MOUNT).

If an existing sign that is being relocated is found to have pre-existing damage to one or more of the sign post, the Department will <u>NOT</u> utilize the bid item REMOVE AND RELOCATE SIGN ASSEMBLY for removing and relocating such a sign assembly. Instead, the Department will require the Contractor to install a new sign post(s) at the new location, and pay for the new post(s) under the bid item STEEL POST TYPE I. Detaching the existing sign(s) from the existing, damaged post(s) and attaching the existing sign(s) to the new sign post(s) shall be incidental to the bid item STEEL POST TYPE I. Any hardware that is needed to complete the installation shall also be incidental to the bid item STEEL

POST TYPE I. Removal of the existing damaged post(s) and any other sign components not needed will be paid under the bid item REMOVE SIGN.

G. Property Damage. The Contractor shall be responsible for all damage to public and/or private property resulting from the Contractor's activities. Repair or replace damaged roadway features in like kind materials and design as directed by the Engineer at no additional cost to the Department. Repair or replace damaged private property in like kind materials and design to the satisfaction of the owner and the Engineer at no additional cost to the Department.

H. Coordination with Utility Companies. Locate all underground, above ground, and overhead utilities prior to beginning construction. Be responsible for contacting and maintaining liaison with all utility companies that have utilities located within the project limits. Do not disturb existing overhead or underground utilities. It is not anticipated that any 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. Be responsible for repairing all utility damage that occurs due to the Contractor's operations at no additional cost to the Department. NOTIFY THE ENGINEER AND THE UTILITY OWNER(S) IMMEDIATELY WHEN IT IS DISCOVERED OR ANTICIPATED THAT ANY UTILITY CONFLICT COULD DELAY THE CONTRACTOR'S OPERATIONS. If the total delay exceeds ten working days, an extension of the specified completion date will be negotiated with the Contractor for delay to the Contractor's work; however, no extension will be granted for any delay caused by the Contractor's failure to notify the Engineer and/or the utility company as specified above when a conflict is discovered or anticipated as specified.

I. Caution. The information in this proposal and the type of work listed herein are approximate only and are not to be taken as an exact evaluation of the materials and conditions to be encountered during construction; the bidder must draw his/her own conclusions when developing the Unit Bid Prices for each bid item. As such, if the conditions encountered are not in accordance with the information shown, the Department does not guarantee any changes to the Unit Bid Prices nor extension of the contract will be considered. The Department will pay for bid item quantity overruns, but only if pre-approved by the Engineer.

J. Control. Perform all work under the absolute control of the Department. Obtain the Engineer's approval of all designs required to be furnished by the Contractor prior to incorporation into the work. The Department reserves the right to have other work performed by other contractors and its own forces, and to permit public utility companies and others to do work during the construction within the limits of, or adjacent to, the project. Conduct operations and cooperate with such other parties so that interference with such other work will be reduced to a minimum. The Department will not honor any claims for money or time extension created by the operations of such other parties.

Should a difference of opinion arise as to the rights of the Contractor and others working within the limits of, or adjacent to, the project, the Engineer will decide as to the respective rights of the various parties involved in order to assure the completion of the Department's work in general harmony and in a satisfactory manner, and the Engineer's decision shall be final and binding upon the Contractor.

K. Clean Up, Disposal of Waste. Clean up the project area as work progresses. Dispose of all removed concrete, debris, and other waste as per Section 204.03.08. The Department will incur no cost to obtain the disposal sites. The Department will NOT make direct payment for disposal of waste and debris from the project. Existing anchors, signs, posts, and any other hardware or material removed from the site are to become the property of the Contractor. See Special Provision for Waste and Borrow Sites.

L. Final Dressing, Seeding and Protection. Grade all disturbed areas to blend with the adjacent roadways features and to provide a suitable seed bed. Apply Class A Final Dressing to all disturbed areas, both on and off the Right-of-Way. Sow all disturbed earthen areas with the applicable seed mixture(s) according to Section 212.03.03.

IV. METHOD OF MEASUREMENT

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

B. Site Preparation. Other than the bid items listed, the Department will NOT measure Site Preparation for payment, but shall be incidental to the project bid items.

C. Signs and Reflective Sign Post Panels. The Department will measure the finished in-place area of signs and Reflective Sign Post Panels in Square Feet.

D. Sign Posts. The Department will measure the finished in-place length of sign posts in Linear Feet, from the top of the anchor, or top of the sign support, to the top of the sign post. Laps, cutoffs, excess, and waste will NOT be measured for payment.

E. Type D Breakaway Sign Supports. The Department will measure Type D breakaway sign supports as Each support installed.

F. Type D Surface Mounts. The Department will measure Type D Surface Mounts as Each surface mount installed.

G. Class A Concrete for Signs. The Department will measure the Class A Concrete used in conjunction with Type D breakaway sign support installations in Cubic Yards. Any concrete that is required as backfill due to hitting rock during a standard installation shall be incidental to the bid item STEEL POST TYPE I, and soil stabilizers will not be required.

H. Remove Sign. The Department will consider all signs attached to one or more connected posts as a single sign. The Department will measure as Each sign assembly removed and NOT each individual sign removed.

I. Remove & Relocate Sheet Signs. The Department will measure sheet signs removed from an existing sign post and reinstalled on a new sign post as Each sheet sign removed and reinstalled. as indicated in the contract documents, or as directed by the Engineer. The new sign post shall be measured as indicated in paragraph D. of this section.

J. Remove & Relocate Sign Assemblies. The Department will consider all signs attached to one or more connected posts as a single sign assembly. When the contract documents indicate that an existing sign assembly is to be removed from its existing location and reinstalled in a new location, the Department will measure and pay for "Remove and Relocate Sign Assembly" as each sign assembly removed and relocated; NOT each individual sign removed and relocated.

K. Items Provided by KYTC. The Department will NOT measure for payment the installation of signs and/or surface mounts provided by KYTC. These activities shall be incidental to the bid item STEEL POST TYPE I.

L. Clean Up, Disposal of Waste, Final Dressing, Seeding and Protection. The Department will NOT measure for payment the following activities: Clean Up, Disposal of Waste, Final Dressing and Seeding and Protection.

V. BASIS OF PAYMENT

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

B. Signs and Reflective Sign Post Panels. The Department will make payment for the completed and accepted quantities under the bid item SBM ALUM SHEET SIGNS .125 IN or .080 IN. The Department will consider payment full compensation for all work and incidentals necessary to install the signs and any Reflective Sign Post Panels, as required by these notes and the details found elsewhere in the plans/proposal, at the locations indicated on the summary sheets, plans, and/or as directed by the Engineer.

C. Sign Posts. The Department will make payment for the completed and accepted quantities under the bid item STEEL POST TYPE I. The Department will consider payment full compensation for all work and incidentals necessary to install the sign posts as required by these notes and the details found elsewhere in the plans/proposal.

D. Type D Breakaway Sign Supports. The Department will make payment for the completed and accepted quantities under the bid item GMSS TYPE D. The Department will consider payment full compensation for all work and incidentals necessary to install the Type D breakaway sign supports as required by Standard Drawing RGX-065, current edition.

E. Type D Surface Mounts. The Department will make payment for the completed and accepted quantities under the bid item GMSS TYPE D (SURFACE MOUNT). The Department will consider payment full compensation for all work and incidentals necessary to install the Type D surface mounts according to all applicable manufacturer requirements.
NOTE: The permissible Type D Surface Mount alternative is: Kleen Break Model 425 for Surface Mount Concrete Installations by Xcessories Squared of Auburn, IL

F. Class A Concrete for Signs. The Department will make payment for the completed and accepted quantities, used in conjunction with Type D breakaway sign support installations, under the bid item

CLASS A CONCRETE FOR SIGNS. The Department will consider payment full compensation for all work and incidentals necessary to install the concrete as required by Standard Drawing RGX-065, current edition.

G. Remove Sign. The Department will make payment for the completed and accepted quantities under the bid item REMOVE SIGN. The Department will consider payment full compensation for all work and incidentals necessary to remove the existing signs, posts, anchors, and any other sign material or hardware, from the locations indicated on the summary sheets, plans, and/or as directed by the Engineer.

H. Remove & Relocate Sheet Signs. The Department will make payment for the completed and accepted quantities under the bid item REMOVE AND RELOCATE SHEET SIGNS. Any hardware that is needed to complete the removal and reinstallation shall be incidental. The Department will consider payment full compensation for all work and incidentals necessary to remove and reinstall the existing sheet signs as indicated on the plans, summaries, and/or as directed by the Engineer.

I. Remove & Relocate Sign Assemblies. The Department will make payment for the completed and accepted quantities under the bid item REMOVE AND RELOCATE SIGN ASSEMBLY. Any hardware that is needed to complete the removal and reinstallation shall be incidental. The Department will consider payment full compensation for all work and incidentals necessary to remove and reinstall the existing sign assembly as indicated on the plans, summaries, and/or as directed by the Engineer

SPECIAL NOTE FOR SAW, CLEAN, AND RESEAL JPC PAVEMENT JOINTS

Except as provided herein, conform to all requirements of the latest version of the Kentucky Transportation Cabinet's Standard Specifications for Road and Bridge Construction. The contractor shall resaw, clean and seal joints and random cracks in JPC pavement as directed by the Engineer. All joints and cracks shall be sealed using hot applied modified crack sealant.

The transverse and longitudinal joints in JPC pavements shall be re-sawed and cleaned to the minimum width required to expose clean and intact vertical faces of the joint. Saw and clean out existing old sealant and slurry debris to a minimum 1 ½ inches in depth.

After re-sawing joints and removing existing old sealant, clean sidewalls of joints by water blasting with minimum 3,000 pounds per square inch (psi). Sandblast joint sidewall then blow out any residual dust and debris using an air compressor with a minimum rating of 125 psi/100 cfm and equipped with a water filter. If any moisture remains after use of compressed air, utilize a heat lance to dry joints. The heat lance shall be a LAB Model B or approved equal, capable of producing air temperatures up to 2,500 degrees Fahrenheit.

Clean joints before resealing according to the requirements for new seals. Fill joints with hot-poured elastic joint sealer from the bottom to the top of the cleaned joint with a recess of no more than ¼ inch and no less than 1/8 inch from the pavement surface. Use a Random Crack Saw to cut random cracks to a ¾ inch depth. Clean with above air and heat lance process. Shoulder joints shall be sealed in the same manner as above on JPC roadways with JPC shoulders. In cases where the JPC roadway has been constructed with asphalt shoulders, the asphalt shoulder pavement shall be sawed or routed adjacent to the JPC roadway to at least ½ inch to ¾ inch wide and at least 1 inch deep to remove existing sealant and/or debris and to remove any unsound pavement. If old sealant residual has remained after the rout process, the sidewalls shall be sand blasted.

Heat lance as specified shall be used for final cleaning. Sealant placed in the shoulder joint shall be struck down with the use of a 3-4 inch disk attachment not to exceed an over band 3 inches wide and less than 1/8 inch thick in height above the surrounding pavement. All slurry and debris from the work must be removed prior to opening to traffic.

Payment for work as described in this note will be per linear foot as SAW-CLEAN-RESEAL TVERSE JOINT, SAW-CLEAN-RESEAL LONGIT JOINT, and SAW-CLEAN-RESEAL RANDOM CRACKS.

Special Note for Completion Date & Liquidated Damages

I. COMPLETION DATE

All work in this Contract is to be completed by June 30, 2026 or before. The Contractor will have the option of selecting the starting date for the work proposed within this Contract. Once a starting date is selected, notify the Department in writing of the date selected at least two weeks prior to beginning work. Once work begins, all work shall be completed and all traffic control devices removed within a maximum of 45 calendar days. Contrary to Section 108.07.03, the Engineer will begin charging calendar days for this project on the day the Contractor starts work or sets up traffic control.

II. LIQUIDATED DAMAGES

In addition to the requirements of Section 108.09, the Department will assess Liquidated Damages in the amount of **$1000** per day for each day, or fraction of a day, if either the 45 calendar days or the June 30, 2026 date is exceeded. All construction must be completed in accordance with any and all applicable weather limitations listed in the Standard Specifications. As such, the Contractor is advised to select a starting date based on a favorable weather forecast.

NOTE: At the sole discretion of the Engineer, all, or part, of these Liquidated Damages may be waived due to unforeseen circumstances, such as unexpected weather.

Contrary to Section 108.09, Liquidated Damages will be assessed for the months of December through March.

All liquidated damages will be applied accumulatively.

All other applicable portions of Section 108 apply.

SPECIAL PROVISION FOR WASTE AND BORROW SITES

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

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

SPECIAL NOTE FOR ELECTRONIC DELIVERY MANAGEMENT SYSTEM (e-Ticketing) ASPHALT

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

1.0 DESCRIPTION. Incorporate an e-Ticketing Delivery Software for weighed asphalt material delivered to the project to report loads and provide daily running totals of weighed asphalt material for pay items and incidental work during the construction processes from the point of measurement and loading to the point of incorporation to the project.

2.0 MATERIALS AND EQUIPMENT. Contractor shall supply material data in JavaScript Object Notation (JSON) documents to the KYTC e-Ticketing Delivery Software (KYTC e-Ticketing Portal) via Application Programming Interface (API) or direct connection. Test and verify that ticket data can be shared from the original source no fewer than 30 days prior to material placement activities. An e-Ticketing Delivery Software supplier can provide a qualified representative for on-site technical assistance during the initial setup, pre-construction verifications, and data management and processing as needed during the Project to maintain material data delivery capabilities. Virtual meetings may be hosted in lieu of on-site meetings when deemed appropriate by the Engineer.

Provide e-Ticketing Delivery Software that will meet the following:

1. The e-Ticketing Delivery Software shall be fully integrated with the Contractor's Load Read-Out scale system at the material source location.

2. The e-Ticketing Delivery Software shall provide real-time delivery to KYTC e-Ticketing Portal.

3. Transmit any updates to the ticket data within 5 minutes of a change.

3.0 CONSTRUCTION. Provide the Engineer with the manufacturer's specifications and all required documentation for data access at the pre-construction conference.

A. Construction Requirements

1. Install and operate software in accordance with the manufacturer's specifications.

2. Verify that all pertinent information is provided by the software within the requirements of this Special Note.

B. Data Deliverables

Provide to the Engineer a means in which to gather report summaries by way of iOS apps, web pages, or any other method at the disposal of the Engineer. The Engineer may request data at any time during the project.

1. Asphalt Material

a. **Real-time Continuous Data Items**

Provide the Engineer access to JSON documents capable of being transmitted through the KYTC's e-Ticketing Portal that displays the following information in real-time with a web-based system compatible with iOS and Windows environments.

- Each Truck
  - Supplier Name
  - Supplier Address
  - Supplier Phone
  - Plant location
  - Date
  - Time at source
  - Project Location

- Contract ID#
- Carrier Name
- Unique Truck ID
- Description of Material
- Mix Design Number
- Gross, Tare and Net Weight
- Weighmaster

4.0 MEASUREMENT. The Department will not measure the electronic delivery management system.

5.0 PAYMENT. The Department will not measure this work for payment and will consider all items contained in this note to be incidental to the asphalt mixtures on the project, as applicable.

May 5, 2025

SPECIAL NOTE FOR RECYCLED ASPHALT PAVEMENT (RAP) STOCKPILE MANAGEMENT

I. GENERAL

The use of reclaimed asphalt pavement (RAP) from Department projects or other approved sources in hot mix asphalt (HMA) or warm mix asphalt (WMA) shall be subject to stockpile management and handling of material as described in this section.

The Department approves RAP on a stockpile basis, following the process set forth in this method. The contractor's responsibilities in the process are as follows:

- To obtain the Department's approval of all RAP prior to its use on a Department project and to deliver test data and samples as required
- To monitor and preserve the quality and uniformity of the approved material during storage and handling, adding no unapproved material to the existing stockpile
- To comply with the Department's requirements regarding replenishment of approved stockpiles

The Department will approve RAP based on its composition and variability in gradation and asphalt content, and on visual inspections of the stockpile, which the Department may conduct at its discretion. The Department may withdraw approval of a stockpile if the requirements of this specification are not followed in good faith.

The Maximum Percentage Allowed in a mix design will be based on these criteria and on the category of RAP source, as defined in this document.

II. APPROVAL PROCESS

Qualified asphalt producers (listed in List of Approved Materials-Asphalt Mixing Plants) may submit requests for RAP stockpile approval to the Asphalt Branch, Division of Materials, in the Annual Certification for Previously Approved Asphalt Mixing Plants and Related Equipment. The requester shall provide test results as prescribed in Part IID. The Division of Materials may, at their discretion, collect samples or inspect a RAP stockpile consistent with Section IIE.

Upon completion of the review of testing results and, if applicable, visual inspection, the Division of Materials, Asphalt Branch will approve or disapprove the material by letter and will assign a Stockpile Identification Number for each approved RAP stockpile. Note: The contractor's average gradation and asphalt content, as listed in the approval letter, shall be the gradation used in subsequent mix designs. The approval letter will state the applicable limits on the use of the material in mix designs and will summarize the Department's findings, listing the average gradation and asphalt content from the contractor's tests and the corresponding values found by the Department. Where the Maximum Percentage Allowed is low due to variability, the contractor may elect to improve the uniformity of the material by further processing and may again sample, test, and request approval for the material.

No material shall be added to a stockpile after it has been approved, except as provided in Parts V, VI, and VII below.

IIA. RAP Quality Management Plan

For a contractor to receive approval to use RAP on any department project, a RAP Quality Management Plan must first be approved by the department. The RAP Quality Management Plan shall be submitted to the

Division of Materials annually for approval as part of the Contractor's Quality Control Plan/Checklist. The Quality Management Plan is required to demonstrate how the Contractor will provide consistency and quality of material utilized in all asphalt mixes produced for use on Department projects. The Quality Management Plan shall include:

- Unprocessed RAP Stockpiles
  - Designation of stockpile(s) as single or multiple source
  - Designation of stockpile(s) as classified or unclassified
  - Designation of stockpile(s) as captive or continuously replenishing
  - Plan for how stockpile(s) is built (layers, slope, etc.)
  - Plan to minimize stockpile(s) contamination
- Processing and Crushing
  - Equipment used to feed screener or crusher
  - Excavation process based on equipment type
- Processing Millings
  - Single Project or Source
    - Screening, Fractionation, or Crushing plan
  - Multiple Source
    - Process to achieve uniform material from stockpile
    - Screening, Fractionation, or Crushing plan
- Processed RAP Stockpiles
  - Minimization of segregation
  - Minimization of moisture

IIB. RAP Stockpile Placement

All processed RAP stockpiles shall be placed on a sloped, paved surface. The requirement for a paved surface may be waived by the Cabinet if the Contractor's RAP Quality Management Plan demonstrates effective material handling that will minimize deleterious material from beneath the processed stockpile entering the plant. *No processed stockpile will be placed directly on grass or dirt.*

IIC. Stockpile Identification Signs

RAP stockpiles shall be identified with posted signs displaying the gradation of material in the stockpile (course, intermediate, or fine). These signs shall be made of weatherproof material and shall be highly visible. Numerals shall be easily readable from outside the stockpile area. If a stockpile exists in two or more parts, each part must have its own sign.

IID. Standard Approval Procedure

The Contractor shall obtain random samples representative of the entire stockpile and shall have each sample tested for gradation and asphalt content according to KM 64-426, KM 64-427, and AASHTO T308. The material samples must be in its final condition after all crushing and screening. At least one sample shall be obtained for each 1,000 tons of processed RAP, with a minimum of five samples per stockpile. Sampling shall be performed according to the method prescribed for asphalt mix aggregates in the Department's Materials Field Testing and Sampling Manual and KM 64-601. The minimum sampling size (after quartering) for tests of RAP samples is 1,500 g. except for samples containing particles more than one inch in diameter, for which the minimum is 2,000 g.

To request approval of a RAP stockpile, submit the following documents to the Division of Materials. It is the requester's responsibility to correctly address, label, and deliver these submittals:

• Submit request for approval at beginning of the paving season as part of the Annual Certification for Previously Approved Asphalt Mixing Plants and Related Equipment.

• If requesting approval after paving season begins, submit memo, including stockpile portion of the inspection list for Annual Certification for Previously Approved Asphalt Mixing Plants and Related Equipment, to Division of Materials.

• Reports of the tests prescribed above using the Stockpile <INSERT NAME> document.

• A drawing of the plant site showing the location of the stockpile to be approved *and all other stockpiles on the premises*

Mail, deliver or email the request form, with test reports and site drawing, to:

Kentucky Transportation Cabinet
Division of Materials
ATTN: Asphalt Branch Manager
1227 Wilkinson Boulevard
Frankfort, Kentucky 40601

Robert.Semones@ky.gov

IIE. Tests and inspections by the Department

The Department shall have the right to observe the collection of samples, or to perform the sampling and testing as a verification of contractor submittal. As a condition of approval, the Department may at any time inspect and sample RAP stockpiles for which approval has been requested and may perform additional quality control tests to determine the consistency and quality of the material.

The approval letter issued by the Department will include any results of verification testing performed by the Cabinet. The approved contractor results should be used by mix design technicians in the design calculations.

III. RAP STOCKPILE TIERED MANAGEMENT AND EFFECTIVE BINDER CONTENT

The stockpile management and approval requirements will be tiered based on the maximum cold feed percentages as defined in this section and Table 1. below.

Table 1. Tiered Testing Requirements

Mix Type	0-≤12%	12-≤20%	20-≤35%
Surface	Tier 1	Tier 2	Tier 3
Base	Tier 1	Tier 2	Tier 3

NOTE: All asphalt mixes and binder selection will be subject to Section 409 of the current Standard Specifications.

The following requirements will apply based on the percentage of RAP in the mix.

Tier 1

Tier 1 mixes (less than or equal to 12% RAP) will be subject to the requirements of sections IIA, IIB, and IIC.

Tier 2

Tier 2 mixes (12% to less than 20% RAP) will be subject to the requirements of Section II in its entirety and Table 2 requirements.

Tier 3

Tier 3 Asphalt Base mixes with 20% to less than 35% RAP, Tier 3 Asphalt Surface mixes with 20% to less than 30% RAP will be subject to Section II in its entirety and Table 2 requirements.

IV. MAXIMUM PERCENTAGE OF RAP ALLOWED

The Maximum Percent of RAP allowed in mix designs shall be the lowest percentage determined by the gradation and asphalt content of the RAP, as established under the criteria below, and requirements listed in Section III.

Limits according to range in gradation and bitumen content

The Maximum Percent of RAP Allowed, based on gradation and asphalt content, shall be determined by the Department using the standard deviation of these values. This standard deviation will be calculated using data provided by the contractor from at least five samples. While the contractor is required to provide the data from these tested samples, the Department retains the discretion to perform its own sampling and testing to support or verify its findings. An apparent outlier shall not be considered in determining these ranges. Where one result appears to be unrepresentative of the whole, two or more additional samples shall be tested. The outlying value of all tests shall then be excluded from the range. The maximum percentage of RAP allowable shall be the lowest percentage determined according to Table 2 below.

Table 2. Maximum Percent RAP According to Variability in Test Results

	Standard Deviation as calculated above:		
Surface			
% asphalt content	< 0.4	< 0.5	
% passing No. 200 sieve	< 1.25	< 1.5	
% passing Median Sieve	< 4.0	< 5.0	
	Allowable RAP Cold Feed %		
	Tier 3 - 20%-30%	Tier 2 - 12%-20%	Tier 1 - 0%-12%
Base			
% asphalt content	< 0.5	< 0.75	
% passing No. 200 sieve	< 1.5	< 2.25	
% passing Median sieve	< 5.0	< 7.0	
	Allowable RAP Cold Feed %		
	Tier 3 - 20%-35%	Tier 2 - 12%-20%	Tier 1 - 0%-12%

NOTE: These allowances notwithstanding, the Contractor is required to maintain the mixture within the Mixture Control Tolerances of Kentucky Method 443.
The percentage allowable in mix designs shall be limited to meet the design criteria for viscosity established in the Standard Specifications.

V. GENERAL STOCKPILE REQUIREMENTS AND REPLENISHMENT

V.A. Single Pavement Source

Early approval of material from a single pavement source. When a new stockpile is to consist entirely of millings removed from a single existing pavement, the stockpile may be approved based on samples taken during the milling and processing operations, prior to completion of milling. The initial stockpile may be approved as either a new stockpile or a new stockpile in continual replenishment status.

For continual replenishment status, samples shall be taken from the processed stockpile after it reaches 1,000 tons. A total of five initial samples, plus one additional sample for every 1,000 tons, is required. As prescribed in Part II above, the contractor shall test all samples and deliver the test results, together with a letter request for approval in Continual Replenishment status, to the address indicated. The stockpile shall be subject to initial approval as prescribed above in Part II. Once approved, it may be replenished without further approvals as provided in Part VII below.

V.B. Heterogeneous or contaminated material

Asphalt pavement millings containing traffic detection loops, raised pavement markers, or other debris must be separated and excluded before stockpiling RAP for approval for use in KYTC asphaltic concrete mixtures.

No material other than RAP from an approved stockpile shall be included in mixtures for State projects. The following materials are specifically excluded:

• Material contaminated with foreign matter such as liquids, soil, concrete, or debris

• Plant waste, especially waste containing abnormal concentrations of bitumen, drum build-up, or material from spills or plant clean-up operations

The following materials shall not be added to or placed in proximity to an approved stockpile but may be accumulated in a separate stockpile and submitted for approval according to Part III:

- Production mixtures returned to the plant for any reason.
- Mis-proportioned mixtures, especially those generated at start-up.

VI. REPLENISHMENT OF STOCKPILES

An approved RAP stockpile may be replenished with Department approval, provided the replenishment material meets all necessary requirements for approval and maintains uniformity in gradation and asphalt content as outlined in this document.

VI.A. Procedure and approval criteria

The procedure for requesting approval of a stockpile replenishment, that is not in continual replenishment status, shall be the same as for approval of an original stockpile, and the material for the replenishment shall meet all criteria for approval as a new stockpile. RAP proposed for replenishment shall be sampled and tested by the Contractor for gradation and asphalt cement as prescribed in Section II above. The Laboratory shall

review these results and provide approval for use in Department asphalt mix designs, according to Table 2 above.

VI.B. Effect of replenishment on existing approved mix designs

Replenishment of a stockpile may render certain mix designs invalid, depending on the percent RAP allowed in the design and on the difference in average properties between the old and new stockpiles. A replenished stockpile may be used as the RAP ingredient in an existing approved design provided that:

1. The Maximum Percent Allowed for the replenishment stockpile equals or exceeds the percent RAP called for in the mix design. In no case may the Maximum Percent Allowed be exceeded.

However, if a mix design calls for up to 5.0 percent more than the Maximum Percent Allowed for the replenishment, the *design* may be adjusted, with approval, to use the lower percent allowed, provided that the production mixture continues to meet all acceptance criteria. For example, a design which calls for 20 percent RAP may be adjusted and produced with 15 percent if it continues to meet for acceptance.

VII. CONTINUAL REPLENISHMENT WITHOUT RE-APPROVAL

At the request of the contractor, a previously approved stockpile may be placed in Continual Replenishment Status and may be replenished any number of times without re-approval provided that:

1. Replenishment is within six months of the last stockpile addition.
2. The contractor shall continue to monitor and test the materials added to the stockpile and shall forward these results to the Division of Materials for every 1,000 tons of RAP added to the stockpile.
3. The contractor must certify that replenishment materials are free of contaminants.
4. The Department shall be notified by letter to the Director of the Division of Materials that the stockpile is being replenished on a continual basis.
5. The RAP Maximum Percent Allowed for continual replenishment shall be limited by Sections III and IV.

Note: Upon request, one 20-pound sample bag of RAP for each Continual Replenishment Stockpile shall be submitted to the Division of Materials for petrographic analysis every 12 months.

The Department may inspect, sample, and test such stockpiles at its discretion and may, upon determining that the stockpile is unsuitable, withdraw approval of the material and all mix designs which include it. Approval of the stockpile may be withdrawn at any time based upon extreme or erratic ingredient proportions, unsuitable ingredients, or poor performance, as determined by the Division of Materials, Asphalt Branch. The Department will conduct periodic comparison testing on the opposite quarters of samples submitted by the Contractor for special replenishment approval category. The approval of the stockpile may be withdrawn if

erroneous information was found on the contractor's testing and/or improper sampling procedures were involved after a thorough investigation.

VIII. DEPLETION OF STOCKPILE AND EXPIRATION OF APPROVAL

When a stockpile has been fully depleted, the Contractor may replenish it within 24 months after the date of depletion; a depleted stockpile not replenished after 24 months will be removed from the approved list and may not be replenished.

Approval of a stockpile may be withdrawn if, in the finding of the Division of Materials, Asphalt Branch, the total amount of material used in new mixtures equals the total tonnage of the original stockpile plus all approved replenishments. Six years from the original approval of a stockpile or from its most recent replenishment, a stockpile shall be presumed to be depleted, and its approval shall expire. This shall apply to all stockpiles, regardless of status or history of use.

IX. RECORDS

The Contractor shall maintain records at the plant site on all RAP stockpiles. These records shall be available for inspection by representatives of the Department and shall include the following:

- All test results.
- The Department's approval letter for each stockpile and replenishment, together with the Contractor's requests for approval and all data submitted therewith.
- A current drawing of all stockpile locations at the plant site, including unapproved stockpiles, showing stockpile numbers of all stockpiles approved for State work.

X. RELOCATION OF STOCKPILE

If material from an approved RAP stockpile is to be moved to another location, the contractor shall seek approval from the Department prior to its further use on State projects. A letter request shall be submitted to the Division of Materials indicating the current stockpile location, the total quantity of material to be moved, and the amount, if any, to remain in the current location. The Division of Materials will issue an approval letter applicable to the new location.

June 18, 2025

COORDINATION OF WORK WITH OTHER CONTRACTS

Be advised, there may be an active project(s) adjacent to or within this project. The Engineer will coordinate the work of the Contractors. See Section 105.06.

1-3193 Coordination Contracts
01/02/2012

SPECIAL NOTE FOR
ASPHALT MILLING AND TEXTURING

Begin paving operations within **48 hours** of commencement of the milling operation. Continue paving operations continuously until completed. If paving operations are not begun within this time period, the Department will assess liquidated damages at the rate prescribed by Section 108.09 until such time as paving operations are begun.

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

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

SPECIAL NOTES FOR BASE FAILURE REPAIR (ASPHALT)

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 4 inches below the bottom of asphalt. 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 Class 3 Asphalt Base 1.00D PG64-22, in 4-inch maximum courses, up to the existing pavement surface. Compact the asphalt base to the proper compaction as required by Section 403. 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 to allow further compaction by traffic. Do not mill or place new asphalt surface over repaired base failure areas until a minimum of 14 calendar days have elapsed after placement of the final course of asphalt base. After the 14-calendar day waiting period, and/or 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.

Perform all base failure repairs in such a manner that removal and replacement are completed on the same day.

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 as full compensation for all labor, materials, equipment, and incidentals for saw cutting pavement and excavating and disposing of all materials; 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 basefailurerepairpaybysy
01/02/2012

SPECIAL NOTES FOR BASE FAILURE REPAIR (CONCRETE)

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 4 inches below the bottom of asphalt. 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, construct Geogrid Reinforcement across the trench bottom and backfill the excavated area with 4 inches of compacted DGA. Backfill the remaining area with JPC Pavement to flush with the existing pavement surface. Concrete mix for the JPC Pavement shall be a 24-hour curing, 3,500-psi compression strength design. Refer to Section 501 for all other requirements and constructability details pertaining to JPC Pavement.

Perform all base failure repairs in such a manner that removal and replacement are completed on the same day.

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 as full compensation for all labor, materials, equipment, and incidentals for saw cutting pavement and excavating and disposing of all materials; furnishing and placing geogrid reinforcement and dense graded aggregate; JPC pavement up to the pavement boundary; and all other items necessary to complete the work according to these notes to the satisfaction of the Engineer.

1-3616 basefailurerepairpaybysy
01/02/2012

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

SPECIAL NOTE FOR SIDEWALK RAMPS & DETECTABLE WARNINGS

GENERAL

Unless otherwise stated in the contract, or as directed by or with prior approval from the Engineer, construct Sidewalk Ramps and Detectable Warnings in accordance with Sections 505 and 720; Supplemental Specifications; Standard Drawings RGX-040-03, RPM-150-08, RPM-152-08, RPM-170-09, and RPM-172-07; current editions, as applicable. In lieu of the Detectable Warnings shown on Standard Drawing RGX-040-03, the Department will also allow the use of any Detectable Warnings listed as Phase XI on the Kentucky Product Evaluation List (http://www.ktc.uky.edu/kytc/kypel/allevaluations.php). For Detectable Warnings as shown on Standard Drawing RGX-040-03, saw cut existing sidewalks, curb and gutter, and pavement, if present, as shown on the detail and reconstruct sidewalk ramps with detectable warnings as directed or approved by the Engineer. For Detectable Warnings from the Kentucky Product Evaluation List, install according to the manufacturer's recommendations. Unless specified otherwise in the Contract, construct sidewalk with 4" nominal minimum required thickness; however, if the existing sidewalk thickness is found to be greater or less than the thickness specified, transition the thickness as directed by the Engineer.

Except as required by the work, do not disturb drainage pipe, catch basins, and other roadway features, appurtenances and installations. Restore any roadway features, appurtenances, and installations damaged by the work in like kind materials and design at no additional cost to the Department. Dispose of all waste 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).

MEASUREMENT & PAYMENT

SIDEWALK RAMPS – The Department will measure Sidewalk Ramps in accordance with Section 505.04.01 and Standard Drawing RPM-170-09, current editions; however, contrary to Sections 505.04.05 and 505.04.06, the Department will not measure Roadway Excavation or Embankment in Place, but shall be incidental to the Sidewalk. Accept payment at the Contract unit price per square yard as full compensation for all labor, materials, equipment, and incidentals required for removal and disposal of existing sidewalk and curb and gutter, excavation and embankment, construction of the sidewalk ramps, reconstruction of the adjacent curb and/or sidewalk as necessary to install the sidewalk ramps, and restoration of disturbed features in accordance with these notes or as directed by the Engineer.

DETECTABLE WARNINGS – The Department will measure Detectable Warnings in accordance with Section 505.04.04 and Standard Drawings RGX-040-03 and RPM-170-09, current editions. The Department will make payment according to Section 505.05.

HANDRAIL – The Department will measure and make payment for Handrail in accordance with Section 720.05 and Standard Drawing RPM-172-07, current editions.

TRAFFIC CONTROL PLAN

TRAFFIC CONTROL GENERAL

Except as provided herein, traffic shall be maintained in accordance with the current editions of the Manual on Uniform Traffic Control Devices (MUTCD), Standard Specifications, Supplemental Specifications, and the Standard and Sepia Drawings. Except for the roadway and traffic control bid items listed, all items of work necessary to maintain and control traffic shall be paid at the lump sum bid price to "Maintain and Control Traffic".

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. Any temporary traffic control items, devices, materials, and incidentals shall remain the property of the contractor unless otherwise addressed, when no longer needed.

PROJECT PHASING & CONSTRUCTION PROCEDURES

At locations with three or more lanes, maintain one lane of traffic in each direction at all times during construction. At locations with two lanes, maintain alternating one-way traffic during construction and provide a minimum clear lane width of 10 feet; however, provide for passage of vehicles of up to 16 feet in width. If traffic should be stopped due to construction operations, and a school bus or emergency vehicle on an official run arrives on the scene, make provisions for the passage of the school bus or emergency vehicle as quickly as possible..

The Department will allow night work on this project. Obtain the Engineer's approval of the method of lighting prior to performing night work.

Take these restrictions into account in submitting bid. The Department will not consider any claims for money or grant contract time extensions for any delays to the Contractor as a result of these restrictions.

Unless otherwise approved by the Engineer, no lane closures will be allowed during the following times:

Memorial Day Weekend 3 pm Friday, May 23, 2025 – 8 pm Monday, May 26, 2025

Do NOT erect lane closures during the following days and/or hours:
Normal Workday Rush Hours
Monday-Friday 6:00 AM – 9:00 AM, and 3:00 PM – 6:00 PM, daily

At the discretion of the Engineer, additional days and hours may be specified when lane closures will not be allowed.

The Department will provide public notification regarding lane closures. The Contractor shall submit proposed lane closure days and times to the Engineer at least 14 calendar days in advance for approval. Liquidated Damages will be assessed for each hour or fraction of an hour that a lane closure is in place outside of an approved time period. See the Special Notes for Completion Dates & Liquidated Damages for details on the Liquidated Damages amount.

LANE CLOSURES

Long term lane closures shall not be allowed; therefore, lane closures will not be measured for payment. Do not leave lane closures in place during non-working hours and prohibited periods.

TEMPORARY SIGNS

Temporary signposts and splices shall be compliant with NCHRP 350 or MASH. Manufacturer's documentation validating this compliance shall be provided to the Engineer prior to installation. Temporary signs, including any splices, shall be installed according to manufacturer's specifications and installation recommendations. Contrary to section 112.04.02, only long-term temporary signs (temporary signs intended to be continuously in place for more than 3 days) will be measured for payment. Short-term temporary signs (temporary 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.

CHANGEABLE MESSAGE SIGNS

Provide changeable message signs in advance of and within the project at locations 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 changeable message signs as directed by the Engineer. Place changeable message signs approximately one mile in advance of the anticipated queue at each lane closure. As the actual queue lengthens and/or shortens, relocate or provide additional changeable message signs 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 Engineer may vary the designated locations as the work progresses. The Engineer will determine the messages to be displayed. In the event of damage or mechanical/electrical failure, repair or replace the Changeable Message Sign. If the damage or mechanical/electrical failure is identified during active work operations, repair or replace the Changeable Message Sign within 6 hours. If the damage or mechanical/electrical failure is identified when there are no active work operations on the project, repair or replace the Changeable Message Sign within 12 hours. The Department will measure for payment the maximum number of Changeable Message Signs in concurrent use at the same time on a single day on all sections of the contract. The Department will measure individual Changeable Message Signs only once for payment, regardless of how many times they are set, reset, removed, and/or relocated during the duration of the project. The Department will not measure for payment any replacements for damaged Changeable Message Signs or any changeable message signs the Engineer directs to be replaced due to poor condition or readability. Retain possession of the Changeable Message Signs upon completion of the work.

ARROW PANELS

Use arrow panels as shown on the Standard Drawings or as directed by the Engineer. The Department will measure for payment the maximum number of arrow panels in concurrent use at the same time on a single day on all sections of the contract. The Department will measure individual Arrow Panels only once for payment, regardless of how many times they are set, reset, removed, and relocated during the duration of the project. The Department will not measure replacements for damaged Arrow Panels or for panels signs the Engineer directs be replaced due to poor condition or readability for payment. Retain possession of the Arrow Panels upon completion of the work.

BARRICADES

The Department will not measure barricades used in lieu of barrels and cones for channelization or delineation but shall be incidental to Maintain and Control Traffic according to Section 112.04.01.

TEMPORARY ENTRANCES

The Engineer will not require the Contractor to provide continuous access to farms, single family, duplex, or triplex residential properties during working hours; however, provide reasonable egress and ingress to each such property when actual operations are not in progress at that location. Limit the time during which a farm or residential entrance is blocked to the minimum length of time required for actual operations, not extended for the Contractor's convenience, and in no case exceeding six (6) hours. Notify all residents twenty-four hours in advance of any driveway or entrance closings and make any accommodations necessary to meet the access needs of disabled residents.

Except as allowed by the Phasing as specified above, maintain direct access to all side streets and roads, schools, churches, commercial properties, and apartments or apartment complexes of four or more units at all times. Access to fire hydrants must also be maintained at all times

THERMOPLASTIC INTERSECTION MARKINGS

Consider the locations listed on the summary and/or shown on the plan sheets as approximate only. Prior to milling and/or resurfacing, locate and document the locations of the existing markings. After final surfacing operations, replace the markings at their approximate existing locations, as shown on the plan sheets, or as directed by the Engineer. Place markings not existing prior to resurfacing as shown on the plan sheets or as directed by the Engineer.

PAVEMENT MARKINGS

If there is to be a deviation from the existing striping plan, the Engineer will furnish the Contractor a striping plan prior to placement of the final surface course. Install Temporary Striping according to Section 112 with the following exception:

> If the Contractor’s operations or phasing requires temporary markings that must subsequently be removed from the final surface course, use an approved removable lane tape; however, the Department will not measure removable lane tape for separate payment, but will measure and pay for removable lane tape as temporary striping.

PAVEMENT EDGE DROP-OFFS

Do not allow a pavement edge between opposing directions of traffic or lanes that traffic is expected to cross in a lane change situation with an elevation difference greater than 1½”. Place Warning signs (MUTCD W8-11 or W8-9A) in advance of and at 1500’ intervals throughout the drop-off area. Dual post the signs on both sides of the traveled way. Wedge all transverse transitions between resurfaced and un-resurfaced areas which traffic may cross with asphalt mixture for leveling and wedging. Remove the wedges prior to placement of the final surface course.

Protect pavement edges that traffic is not expected to cross, except accidentally, as follows:

Less than 2" - No protection required.

2" to 4" - Place plastic drums, vertical panels, or barricades every 50 feet. During daylight working hours only, the Engineer will allow the Contractor to use cones in lieu of plastic drums, panels, and barricades. Wedge the drop-off with DGA or asphalt mixture for leveling and wedging with a 1:1 or flatter slope in daylight hours, or 3:1 or flatter slope during nighttime hours, when work is not active in the drop-off area.

Greater than 4" - Protect drop-offs greater than 4 inches within 10 feet of traffic by placing drums, vertical panels, or barricades every 25 feet. The Engineer will not allow the use of cones in lieu of drums, vertical panels, or barricades for drop-offs greater than 4". Place Type III Barricades directly in front of the drop-off facing oncoming traffic in both directions of travel. Provide warning signs as shown on the Standard Drawings or as directed by the Engineer

Pedestrians & Bicycles - Protect pedestrian and bicycle traffic as directed by the Engineer.

USE AND PLACEMENT OF CHANGEABLE MESSAGE SIGNS

The following policy is based upon current Changeable Message Signs (CMS) standards and practice from many sources, including the Federal Highway Administration (FHWA), other State Departments of Transportation, and Traffic Safety Associations. It is understood that each CMS installation or use requires individual consideration due to the specific location or purpose. However, there will be elements that are constant in nearly all applications. Accordingly, these recommended guidelines bring a level of uniformity, while still being open to regional experience and engineering judgment.

Application

The primary purpose of CMS is to advise the driver of unexpected traffic and routing situations. Examples of applications where CMS can be effective include:

- Closures (road, lane, bridge, ramp, shoulder, interstate)
- Changes in alignment or surface conditions
- Significant delays, congestion
- Construction/maintenance activities (delays, future activities)
- Detours/alternative routes
- Special events with traffic and safety implications
- Crash/incidents
- Vehicle restrictions (width, height, weight, flammable)
- Advance notice of new traffic control devices
- Real-time traffic conditions (must be kept up to date)
- Weather /driving conditions, environmental conditions, Roadway Weather Information Systems
- Emergency Situations
- Referral to Highway Advisory Radio (if available)
- Messages as approved by the County Engineer's Office

CMS should not be used for:

- Replacement of static signs (e.g. ROAD WORK AHEAD), regulatory signage (e.g. speed limits), pavement markings, standard traffic control devices, conventional warning or guide signs.
- Replacement of lighted arrow board
- Advertising (Don't advertise the event unless clarifying "action" to be taken by driver – e.g. Speedway traffic next exit)
- Generic messages
- Test messages (portable signs only)
- Describe recurrent congestion (e.g. rush hour)
- Public service announcements (not traffic related)

Messages

Basic principles that are important to providing proper messages and ensuring the proper operation of a CMS are:

- Visible for at least ½ mile under ideal daytime and nighttime conditions
- Legible from all lanes a minimum of 650 feet
- Entire message readable twice while traveling at the posted speed
- No more than two message panels should be used (three panels may be used on roadways where vehicles are traveling less than 45 mph). A panel is the message that fits on the face of the sign without flipping or scrolling.
- Each panel should convey a single thought; short and concise
- Do not use two unrelated panels on a sign
- Do not use the sign for two unrelated messages
- Should not scroll text horizontally or vertically
- Should not contain both the words left and right
- Use standardized abbreviations and messages
- Should be accurate and timely
- Avoid filler/unnecessary words and periods (hazardous, a, an, the)
- Avoid use of speed limits
- Use words (not numbers) for dates

Placement

Placement of the CMS is important to ensure that the sign is visible to the driver and provides ample time to take any necessary action. Some of the following principles may only be applicable to controlled access roadways. The basic principles of placement for a CMS are:

- When 2 signs are needed, place on same side of roadway and at least 1,000 feet apart
- Place behind semi-rigid/rigid protection (guardrail, barrier) or outside of the clear zone
- Place 1,000 feet in advance of work zone; at least one mile ahead of decision point
- Normally place on right side of roadway; but should be placed closest to the affected lane so that either side is acceptable
- Signs should not be dual mounted (one on each side of roadway facing same direction)
- Point trailer hitch downstream
- Secure to immovable object to prevent theft (if necessary)
- Do not place in sags or just beyond crest
- Check for reflection of sun to prevent the blinding of motorist
- Should be turned ~3 degrees outward from perpendicular to the edge of pavement
- Bottom of sign should be 7 feet above the elevation of edge of roadway
- Should be removed when not in use

Traffic Control Plan
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Standard Abbreviations

The following is a list of standard abbreviations to be used on CMS:

Word	Abbrev	Example
Access	ACCS	CRASH AHEAD/ USE ACCS RD NEXT RIGHT
Alternate	ALT	CRASH AHEAD/ USE ALT RTE NEXT RIGHT
Avenue	AVE	FIFTH AVE CLOSED/ DETOUR NEXT LEFT
Blocked	BLKD	FIFTH AVE BLKD/ MERGE LEFT
Boulevard	BLVD	MAIN BLVD CLOSED/ USE ALT RTE
Bridge	BRDG	SMITH BRDG CLOSED/ USE ALT RTE
Cardinal Directions	N, S, E, W	N I75 CLOSED/ DETOUR EXIT 30
Center	CNTR	CNTR LANE CLOSED/ MERGE LEFT
Commercial	COMM	OVRSZ COMM VEH/ USE I275
Condition	COND	ICY COND POSSIBLE
Congested	CONG	HVY CONG NEXT 3 MI
Construction	CONST	CONST WORK AHEAD/ EXPECT DELAYS
Downtown	DWNTN	DWNTN TRAF USE EX 40
Eastbound	E-BND	E-BND I64 CLOSED/ DETOUR EXIT 20
Emergency	EMER	EMER VEH AHEAD/ PREPARE TO STOP
Entrance, Enter	EX, EXT	DWNTN TRAF USE EX 40
Expressway	EXPWY	WTRSN EXPWY CLOSED/ DETOUR EXIT 10
Freeway	FRWY, FWY	GN SYNDR FWY CLOSED/ DETOUR EXIT 15
Hazardous Materials	HAZMAT	HAZMAT IN ROADWAY/ ALL TRAF EXIT 25
Highway	HWY	CRASH ON AA HWY/ EXPECT DELAYS
Hour	HR	CRASH ON AA HWY/ 2 HR DELAY
Information	INFO	TRAF INFO TUNE TO 1240 AM
Interstate	I	E-BND I64 CLOSED/ DETOUR EXIT 20
Lane	LN	LN CLOSED MERGE LEFT
Left	LFT	LANE CLOSED MERGE LFT
Local	LOC	LOC TRAF USE ALT RTE
Maintenance	MAINT	MAINT WRK ON BRDG/ SLOW
Major	MAJ	MAJ DELAYS I75/ USE ALT RTE
Mile	MI	CRASH 3 MI AHEAD/ USE ALT RTE
Minor	MNR	CRASH 3 MI MNR DELAY
Minutes	MIN	CRASH 3 MI/ 30 MIN DELAY
Northbound	N-BND	N-BND I75 CLOSED/ DETOUR EXIT 50
Oversized	OVRSZ	OVRSZ COMM VEH/ USE I275 NEXT RIGHT
Parking	PKING	EVENT PKING NEXT RGT
Parkway	PKWY	CUM PKWAY TRAF/ DETOUR EXIT 60
Prepare	PREP	CRASH 3 MI/ PREP TO STOP
Right	RGT	EVENT PKING NEXT RGT
Road	RD	HAZMAT IN RD/ ALL TRAF EXIT 25
Roadwork	RDWK	RDWK NEXT 4 MI/ POSSIBLE DELAYS
Route	RTE	MAJ DELAYS I75/ USE ALT RTE
Shoulder	SHLDR	SHLDR CLOSED NEXT 5 MI
Slippery	SLIP	SLIP COND POSSIBLE/ SLOW SPD
Southbound	S-BND	S-BND I75 CLOSED/ DETOUR EXIT 50
Speed	SPD	SLIP COND POSSIBLE/ SLOW SPD

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Standard Abbreviations (cont.)

Word	Abbrev	Example
Street	ST	MAIN ST CLOSED/ USE ALT RTE
Traffic	TRAF	CUM PKWAY TRAF/ DETOUR EXIT 60
Vehicle	VEH	OVRSZ COMM VEH/ USE I275 NEXT RIGHT
Westbound	W-BND	W-BND I64 CLOSED/ DETOUR EXIT 50
Work	WRK	CONST WRK 2MI/ POSSIBLE DELAYS

Certain abbreviations are prone to inviting confusion because another word is abbreviated or could be abbreviated in the same way. DO NOT USE THESE ABBREVIATIONS:

Abbrev	Intended Word	Word Erroneously Given
ACC	Accident	Access (Road)
CLRS	Clears	Colors
DLY	Delay	Daily
FDR	Feeder	Federal
L	Left	Lane (merge)
LOC	Local	Location
LT	Light (traffic)	Left
PARK	Parking	Park
POLL	Pollution (index)	Poll
RED	Reduce	Red
STAD	Stadium	Standard
TEMP	Temporary	Temperature
WRNG	Warning	Wrong

Typical Messages

The following is a list of typical messages used on CMS. The list consists of the reason or problem that you want the driver to be aware of and the action that you want the driver to take.

Reason/Problem	Action
CRASH AHEAD	ALL TRAFFIC EXIT RT
CRASH/XX MILES	AVOID DELAY USE XX
XX ROAD CLOSED	CONSIDER ALT ROUTE
XX EXIT CLOSED	DETOUR
BRIDGE CLOSED	DETOUR XX MILES
BRIDGE/(SLIPPERY, ICE, ETC.)	DO NOT PASS
CENTER/LANE/CLOSED	EXPECT DELAYS
DELAY(S), MAJOR/DELAYS	FOLLOW ALT ROUTE
DEBRIS AHEAD	KEEP LEFT
DENSE FOG	KEEP RIGHT
DISABLED/VEHICLE	MERGE XX MILES
EMER/VEHICLES/ONLY	MERGE LEFT
EVENT PARKING	MERGE RIGHT
EXIT XX CLOSED	ONE-WAY TRAFFIC
FLAGGER XX MILES	PASS TO LEFT

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Typical Messages (cont.)

Reason/Problem	Action
FOG XX MILES	PASS TO RIGHT
FREEWAY CLOSED	PREPARE TO STOP
FRESH OIL	REDUCE SPEED
HAZMAT SPILL	SLOW
ICE	SLOW DOWN
INCIDENT AHEAD	STAY IN LANE
LANES (NARROW, SHIFT, MERGE, ETC.)	STOP AHEAD
LEFT LANE CLOSED	STOP XX MILES
LEFT LANE NARROWS	TUNE RADIO 1610 AM
LEFT 2 LANES CLOSED	USE NN ROAD
LEFT SHOULDER CLOSED	USE CENTER LANE
LOOSE GRAVEL	USE DETOUR ROUTE
MEDIAN WORK XX MILES	USE LEFT TURN LANE
MOVING WORK ZONE, WORKERS IN ROADWAY	USE NEXT EXIT
NEXT EXIT CLOSED	USE RIGHT LANE
NO OVERSIZED LOADS	WATCH FOR FLAGGER
NO PASSING	
NO SHOULDER	
ONE LANE BRIDGE	
PEOPLE CROSSING	
RAMP CLOSED	
RAMP (SLIPPERY, ICE, ETC.)	
RIGHT LANE CLOSED	
RIGHT LANE NARROWS	
RIGHT SHOULDER CLOSED	
ROAD CLOSED	
ROAD CLOSED XX MILES	
ROAD (SLIPPERY, ICE, ETC.)	
ROAD WORK	
ROAD WORK (OR CONSTRUCTION) (TONIGHT, TODAY, TOMORROW, DATE)	
ROAD WORK XX MILES	
SHOULDER (SLIPPERY, ICE, SOFT, BLOCKED, ETC.)	
NEW SIGNAL XX MILES	
SLOW 1 (OR 2) - WAY TRAFFIC	
SOFT SHOULDER	
STALLED VEHICLES AHEAD	
TRAFFIC BACKUP	
TRAFFIC SLOWS	
TRUCK CROSSING	
TRUCKS ENTERING	
TOW TRUCK AHEAD	
UNEVEN LANES	
WATER ON ROAD	
WET PAINT	
WORK ZONE XX MILES	

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WORKERS AHEAD

SPECIAL NOTE FOR REMOVING EXISTING PAVEMENT MARKERS ON PORTLAND CEMENT PAVEMENT AND CONSTRUCTING INLAID PAVEMENT MARKERS

I. DESCRIPTION

Except as provided herein, perform all work in accordance with the Department's Standard and Supplemental Specifications and applicable Standard and Sepia Drawings, current editions. Article references are to the Standard Specifications. This work shall consist of:

(1) Maintain and Control Traffic; and (2) Saw cut and remove existing pavement markers; and (3) Repair the divot with Latex PCC partial depth patching material; and (4) Furnish and install Inlaid Pavement Markers (IPMs) in recessed grooves; and (5) Any other work as specified by these notes and the Contract.

II. MATERIALS

The Department will sample all materials in accordance with the Department's Sampling Manual. 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 unless otherwise specified in these Notes.

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

B. Latex PCC Patching. Refer to Sections 606.02, 606.03.02, 606.03.08, 606.03.09, and 606.03.17.

C. Markers. Provide reflective lenses with depth control breakaway positioning tabs. Before furnishing the markers, provide to the Engineer the manufacturer's current recommendations for adhesives and installation procedures. Use one brand and design throughout the project. Use markers meeting the specifications in the table below.

SPECIFICATIONS FOR HOUSING AND REFLECTOR	
Material:	Polycarbonate Plastic
Weight:	Housing 2.00 oz.
	Reflector 2.00oz.
Housing Size:	5.00" x 3.00" x 0.70" high
Specific Intensity of Reflectivity at 0.2° Observation Angle	
White:	3.0 at 0°entrance angle
	1.2 at 20°entrance angle
Yellow:	60% of white values
Red:	25% of white values

D. Adhesives. Use adhesives that conform to the manufacturer's recommendations.

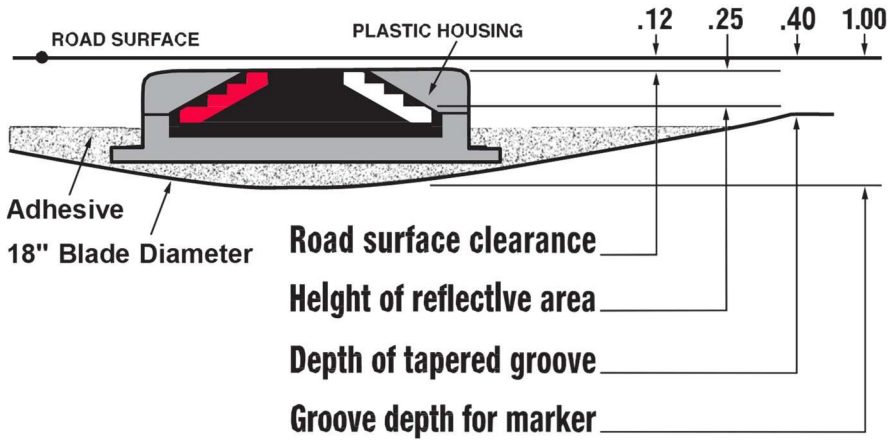
III. CONSTRUCTION

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

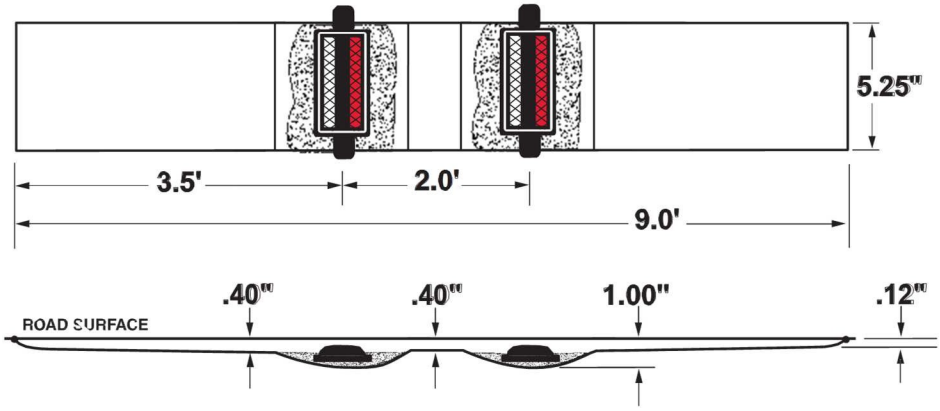
B. Pavement Marker Removal. Saw the hole for removing the existing pavement marker with a vertical face and to a depth and configuration that configures the patching necessary for the IPM construction or as the Engineer directs. After sawing, keep exposure to traffic to a minimum until patching. Keep overcutting beyond the limits of the removed and proposed IPM area to a minimum. Prevent saw slurry from entering existing joints and cracks. Clean all saw slurry and other contaminants from overcutting. Repair the overcut area with a low viscosity epoxy compound. Prepare the patch area by sandblasting and apply a latex grout bond coat. Furnish, place, and cure the latex concrete according to Sections 606.02, 606.03.02, 606.03.08, 606.03.09, and 606.03.17. Ensure the curing materials required by Subsection 606.03.17 A) 4) remain in place for the specified time. Remove and replace all areas of the patches that display cracks or that are not bonded to the underlying pavement.

C. Installation. Install IPMs in recessed grooves in the Latex PCC patching according to the manufacturer's recommendations. Cut installation grooves using diamond blades on saws that accurately control groove dimensions. Remove all dirt, grease, oil, loose or unsound layers, and any other material from the marker area which would reduce the bond of the adhesive. Maintain pavement surfaces in a clean condition until placing markers.

Prepare the pavement surfaces, and install the markers in the recessed groove according to the drawing below. Ensure that the adhesive bed area is equal to the bottom area of the marker, and apply adhesive in sufficient quantity to force excess out around the entire perimeter of the marker. Use materials, equipment, and construction procedures that ensure proper adhesion of the markers to the pavement surface according to the manufacturer's recommendations. Remove all excess adhesive from in front of the reflective faces. If any adhesive or foreign matter cannot be removed from the reflective faces, or if any marker fails to properly adhere to the pavement surface, remove and replace the marker at no additional cost to the Department.



D. IPM Location and Spacing. Install the markers in the pattern for high reflectivity with two (2) IPMs per groove. Locate and space markers as shown in the current Standard Drawings or Sepias. Do not install markers on bridge decks. Do not install a marker on top of a pavement joint or crack. Offset the recessed groove a minimum of 2 inches from any longitudinal pavement joint or crack and at least one inch from the painted stripe, ensuring that the finished line of markers is straight with minimal lateral deviation. Give preference to maintaining the 2-inch offset between recessed groove and joint as opposed to keeping the line of markers straight.



Place inlaid markers as much in line with existing pavement striping as possible. Place markers installed along an edge line or channelizing line so that the near edge of the plastic housing is no more than one inch from the near edge of the line. Place markers installed along a lane line between and in line with the dashes. Do not place markers over the lines except where the lines deviate visibly from their correct alignment, and then only after obtaining the Engineer's prior approval of the location.

If conflicts between recessed groove placement in relation to pavement joint and striping cannot be resolved, obtain the Engineer's approval to eliminate the marker or revise the alignment.

E. Disposal of Waste. Dispose of all removed markers, concrete, debris, and other waste at sites off the right of way obtained by the Contractor at no additional cost to the Department.

F. Restoration. Be responsible for all damage to public and/or private property resulting from the work. Restore all damaged features in like kind materials and design at no additional cost to the Department.

G. On-Site Inspection. Make a thorough inspection of the site prior to submitting a bid and be thoroughly familiar with existing conditions so that the work can be expeditiously performed after a contract is awarded. The Department will consider submission of a bid as evidence of this inspection having been made and will not honor any claims for money or grant Contract time extensions resulting from site conditions.

H. Caution. The information in this proposal and the type of work listed herein are approximate only and are not to be taken as an exact evaluation of the materials and conditions to be encountered during construction; the bidder must draw his/her own conclusions when developing the Unit Bid Prices for each bid item. As such, if the conditions encountered are not in accordance with the information shown, the Department does not guarantee any changes to the Unit Bid Prices nor extension of the contract will be considered. The Department will pay for bid item quantity overruns, but only if pre-approved by the Engineer

IV. MEASUREMENT

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

B. Removal of Pavement Markers. The Department will measure removal of Type V markers in individual units, Each, determined by dividing the length of each run of markers by their average spacing, plus one.

C. Inlaid Pavement Markers. The Department shall measure as Each. One (1) installation of "INLAID PAVEMENT MARKER" will consist of grooving the pavement, removing cuttings and debris, preheating pavement to remove moisture, adhesives, and installation of two (2) markers with all lenses in accordance with this note.

Note: Each pay item of Inlaid Pavement Marker will require two markers.

V. PAYMENT

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

B. Removal of Pavement Markers. The Department will make payment for the complete removal of existing markers at the Contract unit price, Each. Accept payment as full compensation for removing and disposing of the markers, placing Latex PCC patching material in the resulting recess, and disposing of waste and debris.

C. Inlaid Pavement Markers. The Department will make payment for the completed and accepted quantities of completely installed "INLAID PAVEMENT MARKERS" at the Contract unit price, Each. Accept payment as full compensation for all labor, equipment, materials, and incidentals necessary to accomplish this work to the satisfaction of the Engineer. A system of one (1) groove and two (2) markers shall be paid as one "INLAID PAVEMENT MARKER".

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.

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,

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, but shall be incidental to Erosion Control.

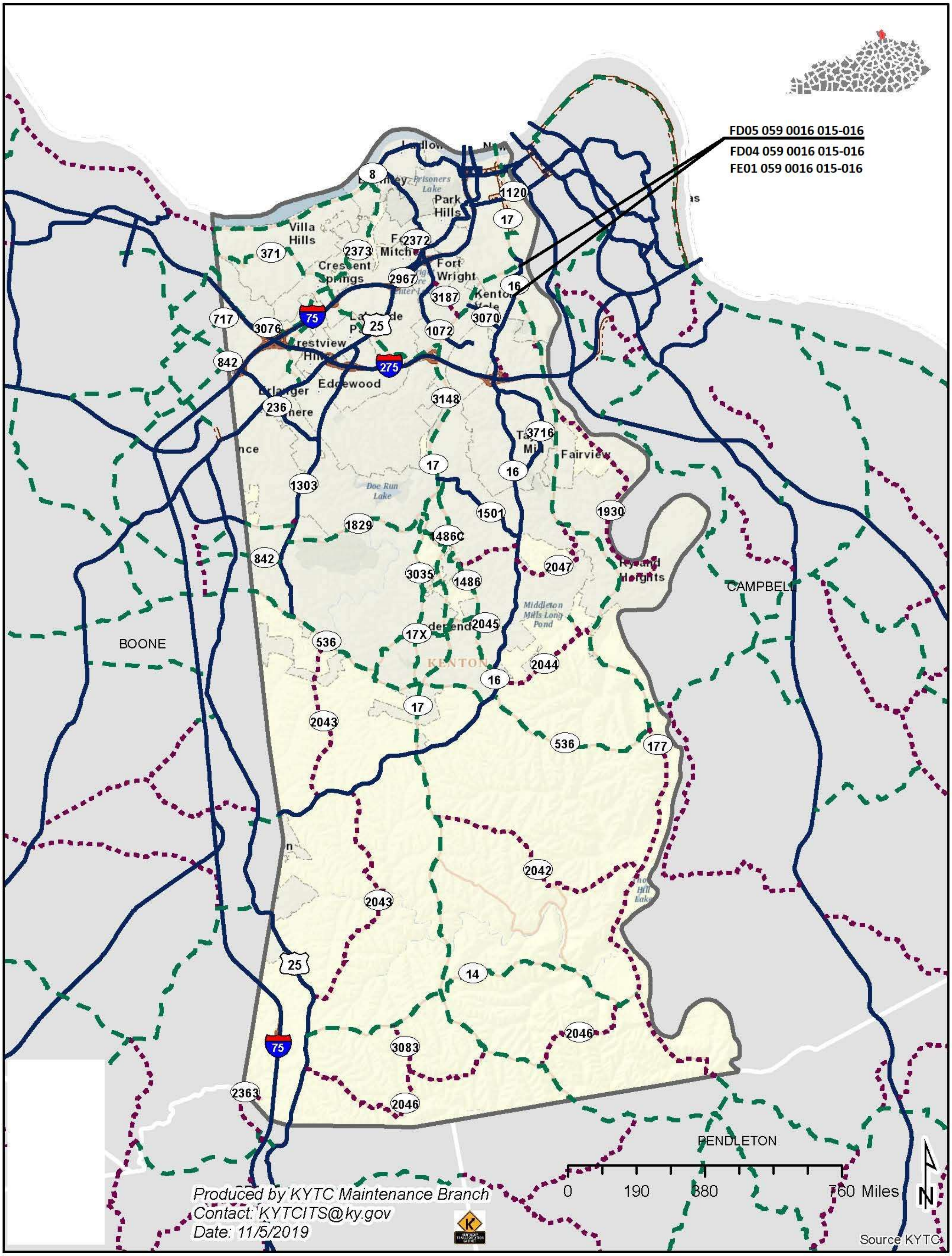
V. Basis of Payment

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.


FD05 059 0016 015-016
FD04 059 0016 015-016
FE01 059 0016 015-016
BOONE
CAMPBELL
PENDLETON
KENTON
Villa Hills
Park Hills
Fort Wright
Crescent Springs
Edgewood
Fairview
Doe Run Lake
Middleton Mills Long Pond
0
190
380
760 Miles
Produced by KYTC Maintenance Branch
Contact: KYTCITS@ky.gov
Date: 11/5/2019
Source KYTC

MATERIAL SUMMARY

CONTRACT ID: 252344 **FD05 059 0016 015-016** **MP05900162502**

DECOURSEY AVE/E. 30TH ST./JAMES AVE. (KY 16) BEGIN 0.024 MILES SOUTH OF THE RAILROAD CROSSING EXTENDING NORTH TO KY 17 ASPHALT RESURFACING, A DISTANCE OF .87 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0005	00190	LEVELING & WEDGING PG64-22	114.00	TON
0010	00356	ASPHALT MATERIAL FOR TACK	8.00	TON
0015	00388	CL3 ASPH SURF 0.38B PG64-22	1,144.00	TON
0020	02676	MOBILIZATION FOR MILL & TEXT - (FD05)	1.00	LS
0025	02677	ASPHALT PAVE MILLING & TEXTURING	1,144.00	TON
0030	03240	BASE FAILURE REPAIR - (ASPHALT)	355.00	SQYD
0035	03240	BASE FAILURE REPAIR - (CONCRETE)	105.00	SQYD
0040	02562	TEMPORARY SIGNS	390.00	SQFT
0045	02650	MAINTAIN & CONTROL TRAFFIC - (FD05)	1.00	LS
0050	02671	PORTABLE CHANGEABLE MESSAGE SIGN	3.00	EACH
0055	02720	SIDEWALK-4 IN CONCRETE	18.00	SQYD
0060	02775	ARROW PANEL	2.00	EACH
0065	06511	PAVE STRIPING-TEMP PAINT-6 IN	9,504.00	LF
0070	06542	PAVE STRIPING-THERMO-6 IN W	3,758.00	LF
0075	06543	PAVE STRIPING-THERMO-6 IN Y	6,735.00	LF
0080	06556	PAVE STRIPING-DUR TY 1-6 IN W	1,927.00	LF
0085	06557	PAVE STRIPING-DUR TY 1-6 IN Y	2,769.00	LF
0090	06562	PAVE MARKING-THERMO R 6 FT	8.00	EACH
0095	06563	PAVE MARKING-R/R XBUCKS 16 IN	80.00	LF
0100	06565	PAVE MARKING-THERMO X-WALK-6 IN	1,532.00	LF
0105	06568	PAVE MARKING-THERMO STOP BAR-24IN	491.00	LF
0110	06574	PAVE MARKING-THERMO CURV ARROW	18.00	EACH
0115	06575	PAVE MARKING-THERMO COMB ARROW	6.00	EACH
0120	06598	PAVEMENT MARKING REMOVAL	20.00	SQFT
0125	06600	REMOVE PAVEMENT MARKER TYPE V	62.00	EACH
0130	20099ES842	PAVE MARK TEMP PAINT STOP BAR	499.00	LF
0135	20100ES842	PAVE MARK TEMP PAINT LINE ARROW	9.00	EACH
0140	22664EN	WATER BLASTING EXISTING STRIPE	4,696.00	LF
0145	23158ES505	DETECTABLE WARNINGS - (NEW)	12.00	SQFT
0150	23265ES717	PAVE MARK TY 1 TAPE STOP BAR-24 IN	20.00	LF
0155	26119EC	INSTALL RADAR PRESENCE DETECTOR TYPE A	17.00	EACH
0160	02569	DEMOBILIZATION	1.00	LS

MATERIAL SUMMARY

CONTRACT ID: 252344 **FD05 059 0016 015-016** **MP05900162503**

DECOURSEY AVE/E. 30TH ST./JAMES AVE. (KY 16) BEGIN 0.024 MILES SOUTH OF THE RAILROAD CROSSING EXTENDING NORTH TO KY 17 SIGNS, A DISTANCE OF .87 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0165	02562	TEMPORARY SIGNS	390.00	SQFT
0170	02650	MAINTAIN & CONTROL TRAFFIC - (FD04)	1.00	LS
0175	06610	INLAID PAVEMENT MARKER-MW	18.00	EACH
0180	06612	INLAID PAVEMENT MARKER-BY	217.00	EACH
0185	22680EN	QWICK CURB MEDIAN SEPARATOR	135.00	LF
0190	02569	DEMOBILIZATION	1.00	LS

CONTRACT ID: 252344 **FD05 059 0016 015-016** **MP05900162504**

DECOURSEY AVE/E. 30TH ST./JAMES AVE. (KY 16) BEGIN 0.024 MILES SOUTH OF THE RAILROAD CROSSING EXTENDING NORTH TO KY 17 MAINTENANCE, A DISTANCE OF .87 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0195	01875	STANDARD HEADER CURB	100.00	LF
0200	02115	SAW-CLEAN-RESEAL TVERSE JOINT	2,181.00	LF
0205	02116	SAW-CLEAN-RESEAL LONGIT JOINT	5,356.00	LF
0210	02562	TEMPORARY SIGNS	390.00	SQFT
0215	02650	MAINTAIN & CONTROL TRAFFIC - (FE01)	1.00	LS
0220	21173EC	SAW-CLEAN-RESEAL RANDOM CRACKS	754.00	LF
0225	21415ND	EROSION CONTROL - (FE01)	1.00	LS
0230	01720	RECONSTRUCT INLET	1.00	EACH
0235	01791	ADJUST MANHOLE FRAME TO GRADE	4.00	EACH
0240	06406	SBM ALUM SHEET SIGNS .080 IN	44.00	SQFT
0245	06407	SBM ALUM SHEET SIGNS .125 IN	57.00	SQFT
0250	06410	STEEL POST TYPE 1	100.00	LF
0255	21373ND	REMOVE SIGN	1.00	EACH
0260	24631EC	BARCODE SIGN INVENTORY	14.00	EACH
0265	02569	DEMOBILIZATION	1.00	LS

Milling & Surfacing Summary
Kenton County
FD05 059 0016 015-016

Begin MP	End MP	Length (LF)	Avg Width (FT)	Area (SQYD)	Avg Depth (IN)	Quantity (TON)
15.000	15.021	111	38	468	1.25	32
15.030	15.333	1,600	38	6,755	1.25	464
15.333	15.411	412	19	869	1.25	60
15.411	15.520	576	38	2,430	1.25	167
15.520	15.577	301	20	669	1.25	46
15.597	15.820	1,177	20	2,617	1.25	180
15.820	15.848	148	38	624	1.25	43
15.848	15.871	148	38	624	1.25	43
					Sub-Total	**1,040**
					Additional Milling & Surfacing at Sideroads (Estimated at 10%)	**104**
					Total	**1,144**

Notes:
1) Leveling & Wedging estimated at 10% of the Asphalt Surface quantity. The Engineer will determine the actual locations and lift thickness at the time of construction.
2) The quantity of Asphalt Material for Tack was estimated based on 120% of the milling & resurfacing area to account for use in leveling & wedging and final surfacing.

Base Failure
Repair Summary
FD05 059 0016 015-016

			Total	460
Milepoint	**PR Pavement Material**	**Length**	**Width**	**SQYD**
15.490	**Asphalt**	**20**	**14**	31
15.412	**Asphalt**	**20**	**6**	13
15.325	**Asphalt**	**10**	**6**	7
15.308	**Asphalt**	**50**	**12**	67
15.239	**Asphalt**	**40**	**14**	62
15.159	**Asphalt**	**60**	**6**	40
15.129	**Asphalt**	**30**	**25**	83
15.093	**Asphalt**	**30**	**6**	20
15.011	**Asphalt**	**42**	**6**	28
15.335	**Concrete***	**63**	**15**	105
				0

*** Begin repair at EX concrete joint near stop bar in SB lane. Extend concrete section through intersection terminating before EX X-walk.**

Kenton County
SIDEWALK RAMP AND DETECTABLE WARNING SUMMARY
FD05 059 0016 015-016

MP	INTERSECTION	RAMP TYPE	RAMP SY	DETECTABLE WARNING QUANTITY	DETECTABLE WARNING SF	NOTES
15.33	30TH ST.	2	18		12	NW CORNER @ EB X-WALK
TOTAL			18	0	12	

Kenton County
FD05 059 0016 015-016
PAVEMENT STRIPING SUMMARY

Milepoint		Side	Length (LF)	Width/Style/Color	Material	Comments
Begin	End					
15.000	15.021	LT	139	6" Solid-Dash Yellow	Thermo	
15.000	15.021	RT	139	6" Dash-Solid Yellow	Thermo	
15.030	15.059	LT	191	6" Solid-Dash Yellow	Thermo	
15.030	15.059	RT	191	6" Dash-Solid Yellow	Thermo	
15.069	15.098	LT	191	6" Solid-Dash Yellow	Thermo	
15.069	15.098	RT	191	6" Dash-Solid Yellow	Thermo	
15.127	15.138	LT	73	6" Solid-Dash Yellow	Thermo	
15.127	15.138	RT	73	6" Dash-Solid Yellow	Thermo	
15.150	15.192	LT	277	6" Solid-Dash Yellow	Thermo	
15.150	15.192	RT	277	6" Dash-Solid Yellow	Thermo	
15.192	15.216	LT	253	6" Double Solid Yellow	Thermo	
15.200	15.216	RT	84	6" Single Solid White	Thermo	
15.239	15.250	LT	58	6" Single Solid White	Thermo	
15.239	15.279	RT/LT	422	6" Double Solid Yellow	Thermo	
15.263	15.279	RT	84	6" Single Solid White	Thermo	
15.289	15.302	LT	69	6" Single Solid White	Thermo	
15.289	15.324	RT/LT	370	6" Double Solid Yellow	Thermo	
15.317	15.328	RT	58	6" Single Solid White	Thermo	Turn lane edge of island
15.317	15.328	RT	58	6" Single Solid White	Thermo	Radial edge of island
15.328	15.328	LT/RT	20	6" Single Solid White	Thermo	Lateral edge of island
15.333	15.343	LT	106	6" Double Solid Yellow	TY 1 Tape	
15.333	15.343	LT/RT	106	6" Double Solid Yellow	Thermo	
15.342	15.355	LT	69	6" Single Solid White	TY 1 Tape	
15.342	15.378	RT	190	6" Single Solid White	Thermo	
15.343	15.378	LT	231	6" Solid-Dash Yellow	TY 1 Tape	
15.343	15.378	RT	231	6" Dash-Solid Yellow	Thermo	
15.364	15.368	LT	21	6" Single Solid White	TY 1 Tape	
15.375	15.381	LT	32	6" Single Solid White	TY 1 Tape	
15.388	15.411	LT	152	6" Solid-Dash Yellow	TY 1 Tape	
15.388	15.469	RT	535	6" Dash-Solid Yellow	Thermo	
15.388	15.469	RT	428	6" Single Solid White	Thermo	
15.393	15.411	LT	95	6" Single Solid White	TY 1 Tape	
15.411	15.520	LT	576	6" Single Solid White	Thermo	
15.411	15.469	LT	383	6" Solid-Dash Yellow	Thermo	
15.476	15.577	LT	667	6" Solid-Dash Yellow	Thermo	Striping TYP through curve to transition to: 15' Lane | 12' TWLTL | 15' Lane
15.476	15.520	RT	290	6" Dash-Solid Yellow	Thermo	
15.476	15.520	RT	232	6" Single Solid White	Thermo	
15.520	15.597	LT	407	6" Single Solid White	TY 1 Tape	
15.520	15.663	RT	944	6" Dash-Solid Yellow	TY 1 Tape	
15.520	15.588	RT	359	6" Single Solid White	TY 1 Tape	
15.577	15.597	LT	132	6" Solid-Dash Yellow	TY 1 Tape	
15.597	15.849	LT	1331	6" Single Solid White	Thermo	
15.597	15.663	LT	436	6" Solid-Dash Yellow	Thermo	
15.597	15.611	RT	74	6" Single Solid White	Thermo	
15.621	15.680	RT	312	6" Single Solid White	Thermo	
15.663	15.680	LT/RT	180	6" Double Solid Yellow	Thermo	
15.663	15.680	RT	180	6" Double Solid Yellow	TY 1 Tape	
15.697	15.720	LT	121	6" Single Solid White	Thermo	
15.697	15.729	RT	338	6" Double Solid Yellow	TY 1 Tape	
15.698	15.865	RT	882	6" Single Solid White	TY 1 Tape	
15.729	15.806	LT	508	6" Solid-Dash Yellow	Thermo	
15.729	15.806	RT	508	6" Dash-Solid Yellow	TY 1 Tape	

Kenton County
FD05 059 0016 015-016
PAVEMENT STRIPING SUMMARY

Milepoint		Side	Length (LF)	Width/Style/Color	Material	Comments
Begin	End					
15.806	15.854	LT	507	6" Double Solid Yellow	Thermo	
15.806	15.823	RT	180	6" Double Solid Yellow	TY 1 Tape	
15.823	15.833	RT/LT	106	6" Double Solid Yellow	Thermo	
15.842	15.854	CL	63	6" Single Solid White	Thermo	
15.842	15.854	RT	63	6" Single Solid White	TY 1 Tape	

Summary	Totals
PAVE STRIPING - THERMO - 6 IN W	3,758 LF
PAVE STRIPING - THERMO - 6 IN Y	6,735 LF
PAVE STRIPING - DUR TY 1 - 6 IN W	1,927 LF
PAVE STRIPING - DUR TY 1 - 6 IN Y	2,769 LF

Kenton County
THERMOPLASTIC INTERSECTION PAVEMENT MARKINGS SUMMARY
FD05 059 0016 015-016

MPT.	INTERSECTION	X-WALKS	STOP BARS THERMO	DUR. TAPE	ARROWS		RAILROAD		NOTES
		6 INCH LF	24 INCH LF	24 INCH LF	CURVE EA	COMB EA	"R" 6 FOOT EA	CROSS BUCK 16" LF	
15.000	RR XING		90				4	40	
15.034	E 35TH ST.	61	12						
15.063	W 35TH ST.	66							
15.094	RR XING		78				4	40	
15.111	W 34TH ST.	212	52		4				
15.144	W 33RD ST. / DANIELS ST.	134	31						
15.227	32ND ST. / UNION ST.	419	119		3	3			
15.283	31ST ST.	266	15		2	2			
15.328	30TH ST.	172	37	10	2	1			
15.384	FRAZIER ST.	82	15						
15.398	N/A				2				
15.600	N/A				2				
15.691	EASTERN AVE.	120	18						
15.796	N/A				2				
15.871	26TH ST.		24	10	1				
TOTAL		1532	491	20	18	6	8	80	

Kenton County - KY 16
RADAR PRESENCE DETECTOR SUMMARY
FD05 059 0016 015-016

MP.	INTERSECTION	RADAR PRESENCE DETECTOR TYPE A EA	RADAR PRESENCE DETECTOR TYPE B EA	NOTES
15.113	34th St.	4		Refer to Signal Detail Sheet and Special Note for Radar Detection for more information.
15.229	32nd St. / Union St.	5		Refer to Signal Detail Sheet and Special Note for Radar Detection for more information.
15.688	Eastern Ave.	3		Refer to Signal Detail Sheet and Special Note for Radar Detection for more information.
15.871	26th St. / KY 17	5		Refer to Signal Detail Sheet and Special Note for Radar Detection for more information.
TOTAL		17	0	

NOTES:

GENERAL SUMMARY

COUNTY OF	FUNDING NO.
KENTON	FD04

	ITEM	DESCRIPTION	UNIT	TOTAL PROJECT
①	22680EN	QWICK CURB MEDIAN SEPARATOR	LF	135

① SYSTEM TO BE MODEL L104 MEGA MARKER™.

GENERAL SUMMARY

COUNTY OF	FUNDING NO.
KENTON	FE01 059 0016 015-016

	ITEM	DESCRIPTION	UNIT	TOTAL PROJECT
	1720	RECONSTRUCT INLET	EACH	1
	1791	ADJUST MANHOLE FRAME TO GRADE	EACH	4
①	1875	STANDARD HEADER CURB	LF	100
②	2115	SAW-CLEAN-RESEAL TVERSE JOINT	LF	2,181
②	2116	SAW-CLEAN-RESEAL LONGIT JOINT	LF	5,356
	6406	SBM ALUM SHEET SIGNS .080 IN	SQFT	44.00
	6407	SBM ALUM SHEET SIGNS .125 IN	SQFT	57.00
	6410	STEEL POST TYPE 1	LF	100
②	21173EC	SAW-CLEAN-RESEAL RANDOM CRACKS	LF	754
	21373ND	REMOVE SIGN	EACH	1
	21415ND	EROSION CONTROL	LS	1
	24631EC	BARCODE SIGN INVENTORY	EACH	14

① REMOVE AND RECONSTRUCT DAMAGED EXISTING STANDARD HEADER CURB NEAR MP 15.069 - 15.100 (SB).

② REFER TO THE SPECIAL NOTE FOR SAW, CLEAN, AND RESEAL JPC PAVEMENT JOINTS FOR SPECIFICATIONS AND DETAILS ABOUT THE WORK.

Manhole
Adjustment Summary
FE01 059 0016 015-016

Total	4

Milepoint	Location	EACH
15.597	SB	1
15.293	SB	2
15.161	SB	1
		0

Remove Sign Summary

FE01 059 0016 015-016

Approx. Location		Sign Details
Station	LT / RT	
831+00	LT	W2-2 (currently installed upside down)

Sign Summary — Kenton County — KY 16 — FE01 059 0016 015-016

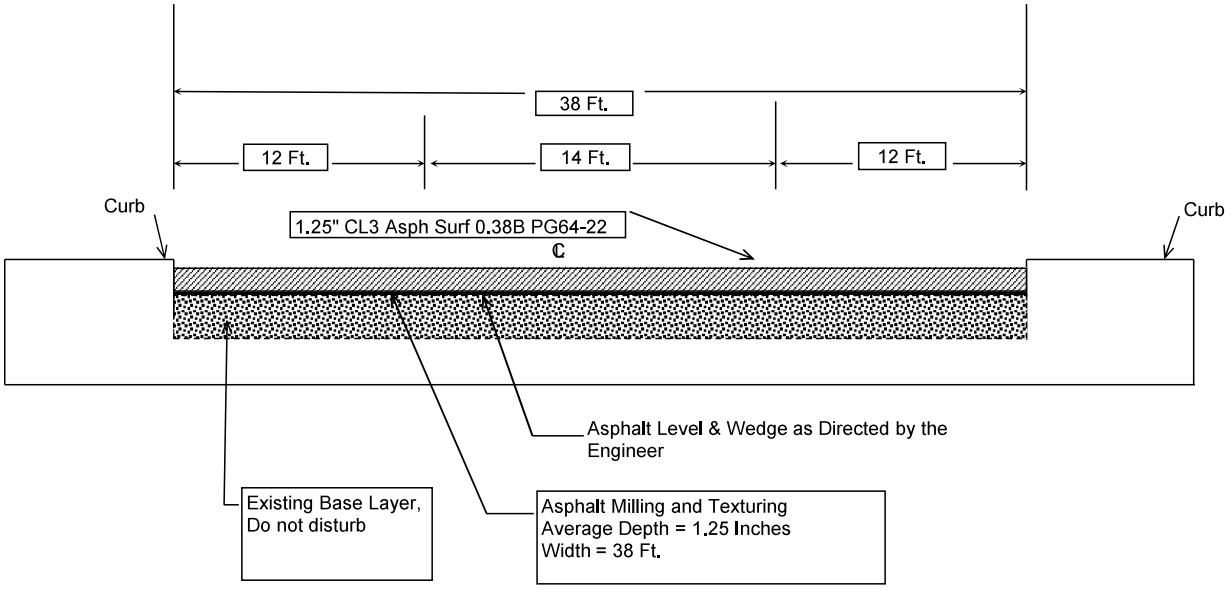
SIGN LOCATION						MUTCD Code	Sign Description	Sign Text / Remarks	Sign Dimensions (in x in)	SHEETING			SBM Alum Sheet Signs 0.080 IN (SQ FT)	SBM Alum Sheet Signs 0.125 IN (SQ FT)	Installation Type	Bracing Req'd	# of Sign Posts	Estimated Length of 2" Post (ft)	Estimated Length of 2-1/2" Post (ft)	2-1/4'' Stiffener Req'd (incdntl to post)	TOTAL Estimated Sign Post Length (LF)	Barcode Sign Inv. (EACH)
Assembly ID	Side of Road	Approx Offset (ft)	Approx Station	Approx. Mile Point	Facing Traffic Traveling					Text/ Symbol Color	Background Color	Sheeting Type										
1	L	32	Stop Sign Assembly for W 35th St.		EB	R3-2	No Left Turn	Install on existing stop sign assembly (below stop sign)	24 x 24	Red & Black	White	III or IV	4.00				0	13			0	1
2	L	34	Utility Pole in NW Corner of Intersection with W 35th St.		NB	R3-2	No Left Turn	Install on existing utility pole approx. 7' from top of sidewalk to bottom of sign.	24 x 24	Red & Black	White	III or IV	4.00				0	13			0	1
3	R	25	816+95	15.473	C	W1-10L	Left Curve & Side Road	Use W1-1L sign with the truck entrance shown in roughly the correct geometry as in the field. Get approval from Engineer before ordering the sign.	48 x 48	Black	FL Yellow	IX		16.00	Stnd w/ Soil Plate		1	17			17	1
					C	W13-1p	XX MPH (Advisory Speed)	20	18 x 18	Black	FL Yellow	IX	2.25									1
4	R	30	818+05	15.493	C	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	IX	3.00		Stnd w/ Soil Plate		1	13			13	1
					NC	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	IX	3.00									1
5	R	35	818+85	15.509	C	W1-6L	Left One-Direction Lrg Arrow		60 x 30	Black	FL Yellow	IX		12.50	Stnd w/ Soil Plate	Yes	2	14			28	1
					NC	W1-6R	Right One-Direction Lrg Arrow		60 x 30	Black	FL Yellow	IX		12.50								1
6	R	28	819+65	15.524	C	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	IX	3.00		Stnd w/ Soil Plate		1	13			13	1
					NC	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	IX	3.00									1
7	L	20	820+76	15.545	NC	W1-1R	Right Turn		48 x 48	Black	FL Yellow	IX		16.00	Stnd w/ Soil Plate		1	15			15	1
					NC	W13-1p	XX MPH (Advisory Speed)	20	18 x 18	Black	FL Yellow	IX	2.25									1
8	R	20	822+50	15.578	C	W1-3R	Right Reverse Turn	Install on existing utility pole	30 x 30	Black	FL Yellow	IX	6.25				0	14			0	1
9	L	28	825+46	15.634	C	OM2-2V	Object Marker Type 2	Install on existing utility pole	6 x 12	n/a	Yellow	III or IV	0.50				0	12			0	
					NC	OM2-2V	Object Marker Type 2	Install on existing utility pole	6 x 12	n/a	Yellow	III or IV	0.50									
10	R	28	828+10	15.684	C	OM2-2V	Object Marker Type 2	Install on existing utility pole	6 x 12	n/a	Yellow	III or IV	0.50				0	12			0	
					NC	OM2-2V	Object Marker Type 2	Install on existing utility pole	6 x 12	n/a	Yellow	III or IV	0.50									
11	R	22	828+93	15.699	C	OM2-2V	Object Marker Type 2	Install on existing utility pole	6 x 12	n/a	Yellow	III or IV	0.50				0	12			0	
					NC	OM2-2V	Object Marker Type 2	Install on existing utility pole	6 x 12	n/a	Yellow	III or IV	0.50									
12	R	22	830+27	15.725	C	OM2-2V	Object Marker Type 2	Install on existing utility pole	6 x 12	n/a	Yellow	III or IV	0.50				0	12			0	
					NC	OM2-2V	Object Marker Type 2	Install on existing utility pole	6 x 12	n/a	Yellow	III or IV	0.50									
13	L	20	831+00	15.739	NC	W3-3	Signal Ahead		30 x 30	Red, Green & Black	Yellow	III or IV	6.25		Stnd w/ Soil Plate		1	14			14	1
14	R	22	831+05	15.740	C	OM2-2V	Object Marker Type 2	Install on existing utility pole	6 x 12	n/a	Yellow	III or IV	0.50				0	12			0	
					NC	OM2-2V	Object Marker Type 2	Install on existing utility pole	6 x 12	n/a	Yellow	III or IV	0.50									
15	R	22	832+22	15.762	C	OM2-2V	Object Marker Type 2	Install on existing utility pole	6 x 12	n/a	Yellow	III or IV	0.50				0	12			0	
					NC	OM2-2V	Object Marker Type 2	Install on existing utility pole	6 x 12	n/a	Yellow	III or IV	0.50									
16	R	22	833+40	15.784	C	OM2-2V	Object Marker Type 2	Install on existing utility pole	6 x 12	n/a	Yellow	III or IV	0.50				0	12			0	
					NC	OM2-2V	Object Marker Type 2	Install on existing utility pole	6 x 12	n/a	Yellow	III or IV	0.50									

Summary of Items		
SBM Alum Sheet Signs 0.080 INCH	44.00	SQ FT
SBM Alum Sheet Signs 0.125 INCH	57.00	SQ FT
Barcode Sign Inventory	14	EACH

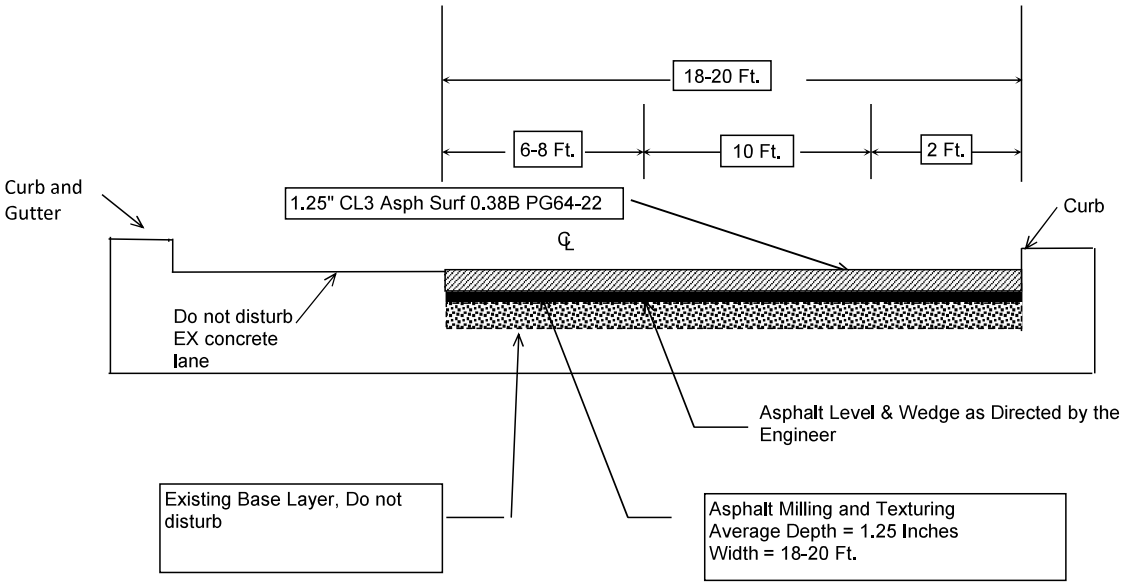
Summary of Items		
Steel Post - Type 1	100	LF
GMSS Type D	0	EACH
GMSS Type D (Surface Mount)	0	EACH
Class A Concrete for Signs	0.00	CU YD

*** Advisory Speed to be determined by Engineer by Ball Banking.

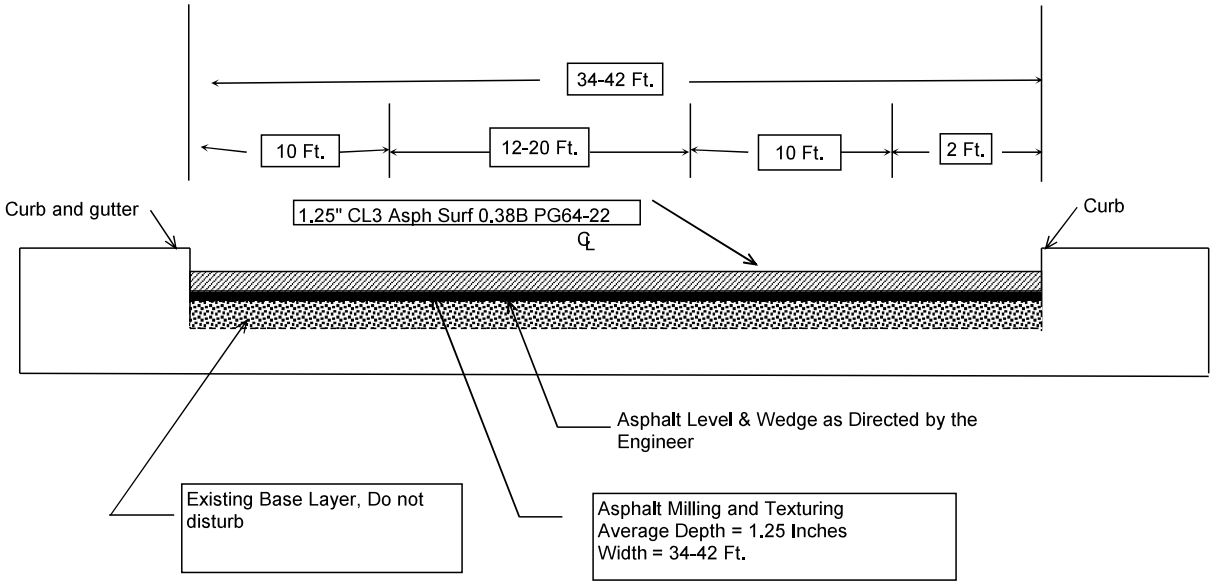
Typical Section
FD05 059 0016 015-016
Kenton County
MP 15.000-15.021
MP 15.030-15.333



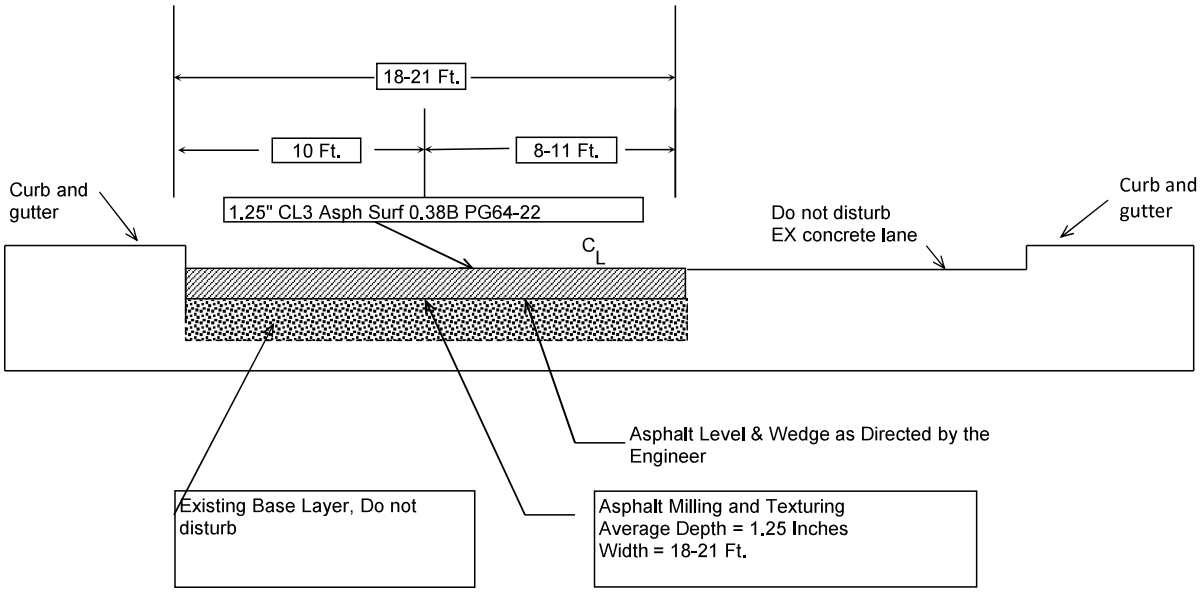
KENTON County
TYPICAL SECTION
FD05 059 0016 015-016
MP's 15.333 to 15.411



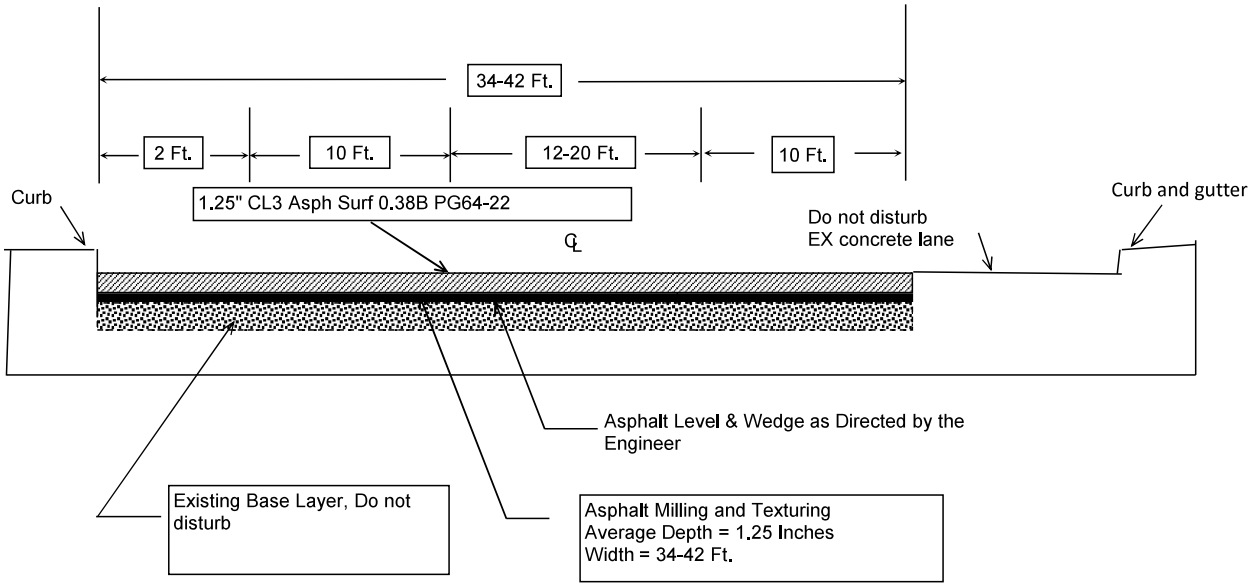
KENTON County
TYPICAL SECTION
FD05 059 0016 015-016
MP's 15.411 to 15.520



Typical Section
FD05 059 0016 015-016
Kenton County
MP 15.520-15.577
MP 15.597-15.820



Typical Section
FD05 059 0016 015-016
Kenton County
MP 15.820-15.848
MP 15.848-15.871



PART II

SPECIFICATIONS AND STANDARD DRAWINGS

STANDARD SPECIFICATIONS

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

SUPPLEMENTAL SPECIFICATIONS

The contractor shall use the Supplemental Specifications that are effective at the time of letting. The Supplemental Specifications can be found at the following link:
http://transportation.ky.gov/Construction/Pages/Kentucky-Standard-Specifications.aspx

2020 STANDARD DRAWINGS THAT APPLY

ROADWAY

~ DRAINAGE ~

BOX INLETS AND OUTLETS

CURB BOXES

CURB BOX INLET TYPE A (DETAIL DRAWING) RDB-270-09
CURB BOX INLET TYPE A (STEEL DRAWING) RDB-271-05
CURB BOX INLET TYPE A (TOP PHASE TABLES) RDB-272-07
CURB BOX INLET TYPE A (DETAIL & BAR CHART FOR 8" LID) RDB-273-06
BOX INLET RISER RDB-400-05
BOX INLET PIPE CHAMBER RDB-410-06
BOX INLET PIPE CHAMBER (ADDITIONAL STEEL) RDB-420-05

MANHOLES

MANHOLE TYPE A RDM-001-07
MANHOLE TYPE B RDM-005-06
MANHOLE TYPE C (CHAMBER LAYOUT) RDM-010-06
MANHOLE TYPE C (TOWER APPLICATION) RDM-011-05
MANHOLE TYPE C (STEEL PATTERN) RDM-012-03
MANHOLE TYPE C (TABLE OF QUANTITIES) RDM-013-04
FRAME AND LID TYPE 2 ..... RDM-105-03

MISCELLANEOUS DRAINAGE

TEMPORARY SILT FENCE RDX-210-03
SILT TRAP - TYPE C ..... Sepia 025

~ GENERAL ~

MISCELLANEOUS STANDARDS

MISCELLANEOUS STANDARDS RGX-001-06
DETECTABLE WARNINGS RGX-040-03

~ PAVEMENT ~

MEDIANS, CURBS, APPROACHES, ENTRANCES, ETC.

CURB AND GUTTER, CURBS AND VALLEY GUTTER RPM-100-11
CONCRETE ENTRANCE PAVEMENT AND SIDEWALK ..... Sepia 040
SIDEWALK RAMPS ..... Sepia 041

STANDARD REINFORCED CONCRETE PAVEMENT

CONCRETE PAVEMENT JOINT DETAILS RPS-010-11
EXPANSION AND CONTRACTION JOINT LOAD TRANSFER ASSEMBLIES RPS-020-14
CONCRETE PAVEMENT JOINTS - TYPES AND SPACING RPS-031-06
CONCRETE PAVEMENT JOINTS - TYPES AND SPACING RPS-033-07
CONCRETE PAVEMENT JOINTS - TYPES AND SPACING RPS-034-07

MISCELLANEOUS PAVING

STATION MARKINGS, CONCRETE PAVEMENT RPX-001-04
PREFORMED COMPRESSION JOINT SEAL FOR CONCRETE PAVEMENT RPX-010-05
HOT POURED ELASTIC JOINT SEALS FOR CONCRETE PAVEMENT RPX-015-04
SILICONE RUBBER SEALS USED IN PORTLAND CONCRETE PAVEMENT RPX-020-06

Standard Drawings That Apply
Page 2 of 2

TRAFFIC

~ PERMANENT ~

MARKERS

INLAID PAVEMENT MARKER ARRANGEMENTS TWO-WAY LEFT TURN LANE .....Sepia 015
TYPICAL MARKINGS AT SIGNALIZED INTERSECTIONS TPM-203
TYPICAL MARKINGS FOR TURN LANES PAGE 1 .....TPM-206
TYPICAL MARKINGS FOR TURN LANES PAGE 2 .....TPM-207

~ TEMPORARY ~

TRAFFIC CONTROL

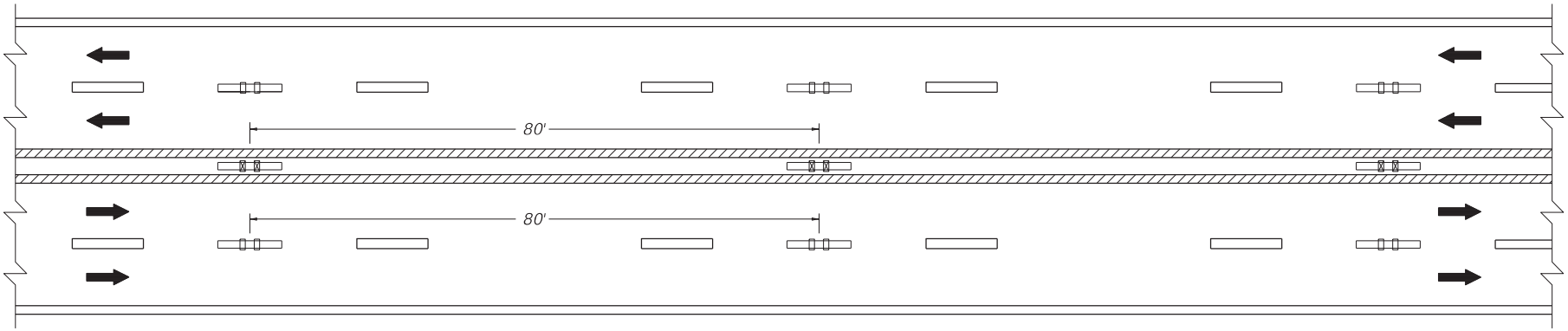
LANE CLOSURE MULTI-LANE HIGHWAY CASE I TTC-115-04
LANE CLOSURE MULTI-LANE HIGHWAY CASE II TTC-120-04

DEVICES

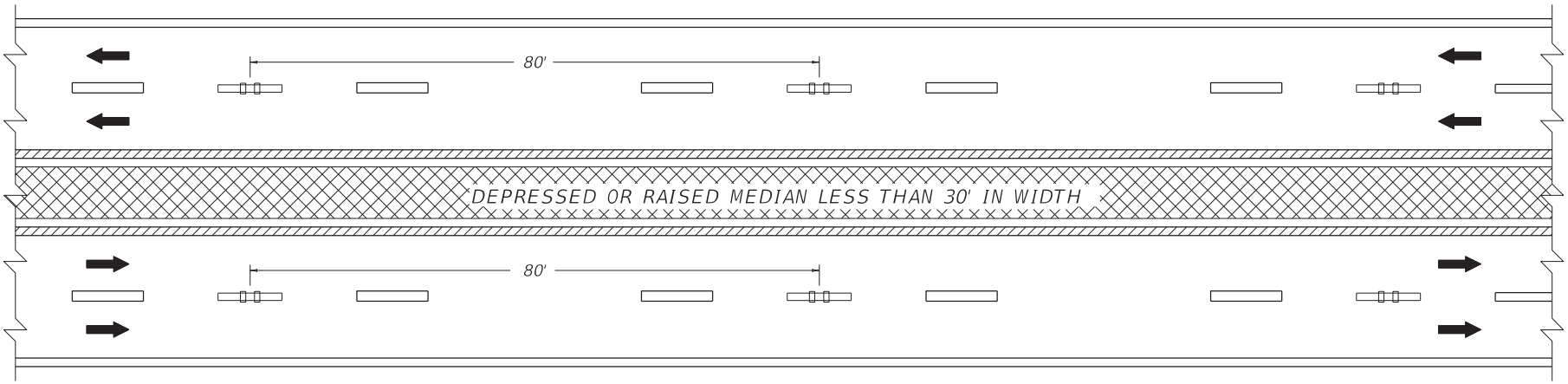
DOUBLE FINES ZONE SIGNS TTD-120-03
PAVEMENT CONDITION WARNING SIGNS TTD-125-03
SPEED ZONE SIGNING FOR WORK ZONES TTD-130

STRIPING OPERATIONS

MOBILE OPERATION FOR PAINT STRIPING CASE IV.....TTS-115-02
MOBILE OPERATION FOR DURABLE STRIPING CASE I.....TTS-120-02
MOBILE OPERATION FOR DURABLE STRIPING CASE II.....TTS-125-02
MOBILE OPERATION FOR DURABLE STRIPING CASE III.....TTS-130-02
MOBILE OPERATION FOR DURABLE STRIPING CASE IV TTS-135-02



ARRANGEMENT "A" (UNDIVIDED HIGHWAY)



ARRANGEMENT "B" (DIVIDED HIGHWAY WITH DEPRESSED OR RAISED MEDIAN LESS THAN 30' IN WIDTH)

~ NOTES ~

1. MARKERS INSTALLED WITH DOUBLE YELLOW CENTERLINES SHOULD BE PLACED BETWEEN THE TWO LINES.
2. MARKERS INSTALLED ALONG LANE LINES SHOULD BE PLACED BETWEEN AND IN LINE WITH THE SKIPS.
3. 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. MARKERS SHALL BE INSTALLED AT 40' SPACING ALONG SOLID WHITE AUXILIARY LANES. MARKER COLOR SHALL MATCH THE MARKERS INSTALLED ALONG THE WHITE LANE LINES.

BID ITEMS	UNIT TO BID
06610 - INLAID PAVEMENT MARKER - MW	EACH
06612 - INLAID PAVEMENT MARKER - BY	EACH

LEGEND

- BI-DIRECTIONAL PAVEMENT MARKER (YELLOW)
- MONO-DIRECTIONAL PAVEMENT MARKER (WHITE)
- MARKINGS (YELLOW)
- MARKINGS (WHITE)
- DEPRESSED OR RAISED MEDIAN

DRAWING NOT TO SCALE

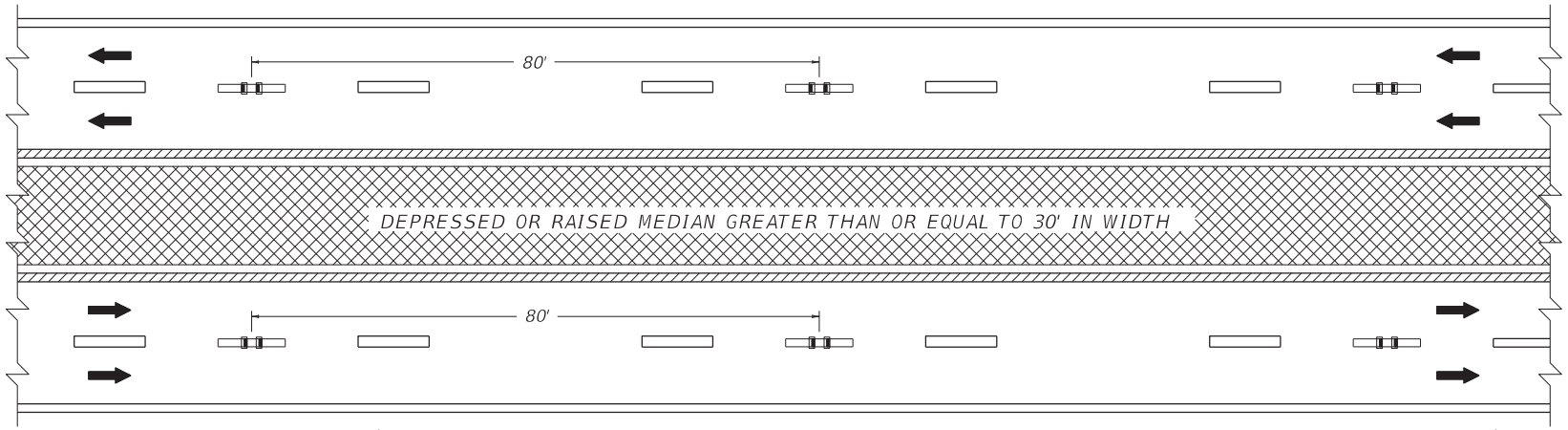
KENTUCKY
DEPARTMENT OF HIGHWAYS

INLAID PAVEMENT MARKER
ARRANGEMENTS
MULTI-LANE ROADWAYS

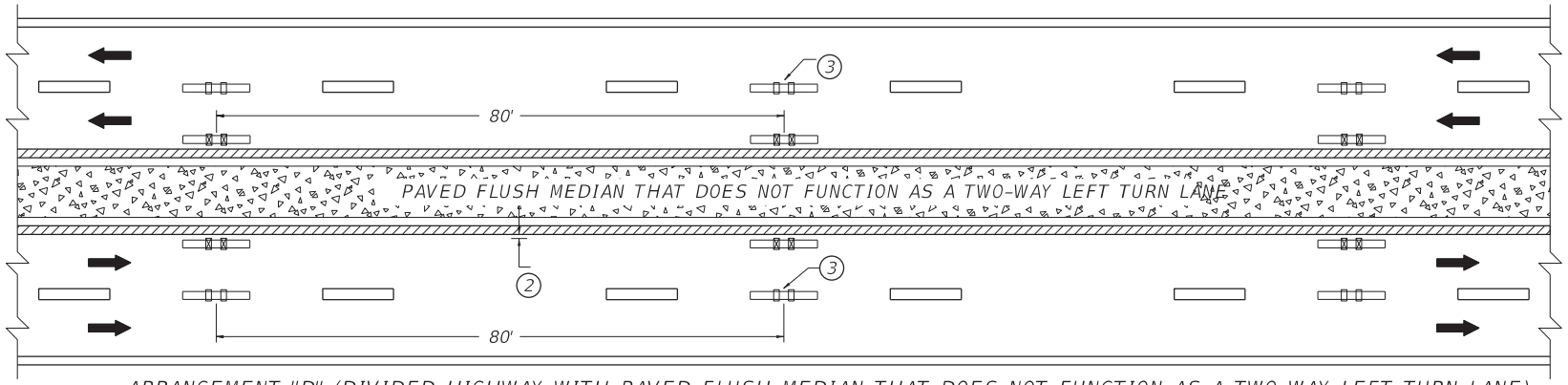
SUBMITTED _____ DIVISION DIRECTOR

06-09-21
DATE

006



ARRANGEMENT "C" (DIVIDED HIGHWAY WITH DEPRESSED OR RAISED MEDIAN GREATER THAN OR EQUAL TO 30' IN WIDTH)



ARRANGEMENT "D" (DIVIDED HIGHWAY WITH PAVED FLUSH MEDIAN THAT DOES NOT FUNCTION AS A TWO-WAY LEFT TURN LANE)

~ NOTES ~

1. MARKERS INSTALLED ALONG LANE LINES SHOULD BE PLACED BETWEEN AND IN LINE WITH THE SKIPS.
2. MARKERS INSTALLED ALONG EDGE LINES SHOULD BE PLACED SO THAT THE NEAR EDGE OF THE GROOVE IS NO MORE THAN 1" FROM THE NEAR EDGE OF THE LINE.
3. IF WIDTH OF PAVED FLUSH MEDIAN IS GREATER THAN OR EQUAL TO 30', BI-DIRECTIONAL (WHITE-RED) MARKERS SHALL BE USED ALONG THE LANE LINES IN LIEU OF MONO-DIRECTIONAL (WHITE) MARKERS.
4. 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.
5. MARKERS SHALL BE INSTALLED AT 40' SPACING ALONG SOLID WHITE AUXILIARY LANES. MARKER COLOR SHALL MATCH THE MARKERS INSTALLED ALONG THE WHITE LANE LINES.

BID ITEMS	UNIT TO BID
06610 - INLAID PAVEMENT MARKER - MW	EACH
06612 - INLAID PAVEMENT MARKER - BY	EACH
06613 - INLAID PAVEMENT MARKER - B W/R	EACH

LEGEND

- BI-DIRECTIONAL PAVEMENT MARKER (YELLOW)
- BI-DIRECTIONAL PAVEMENT MARKER (WHITE-RED)
- MONO-DIRECTIONAL PAVEMENT MARKER (WHITE)
- MARKINGS (YELLOW)
- MARKINGS (WHITE)
- FLUSH MEDIAN
- DEPRESSED OR RAISED MEDIAN

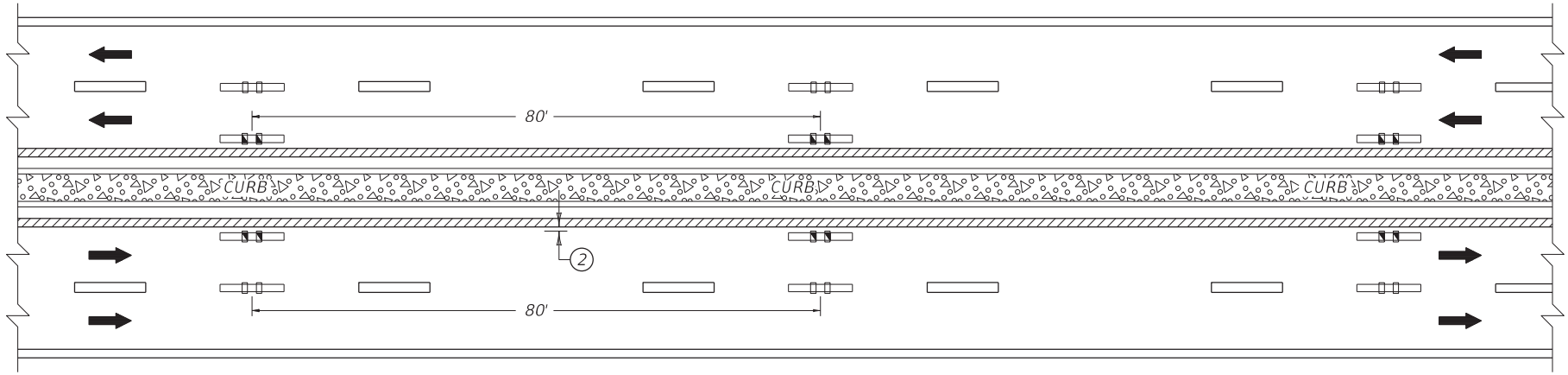
DRAWING NOT TO SCALE

KENTUCKY
DEPARTMENT OF HIGHWAYS

INLAID PAVEMENT MARKER
ARRANGEMENTS
MULTI-LANE ROADWAYS

SUBMITTED _____ DIVISION DIRECTOR 06-09-21 DATE

007



ARRANGEMENT "E" (DIVIDED HIGHWAY WITH CURB WITHIN 8' OF DRIVING LANE)

~ NOTES ~

1. MARKERS INSTALLED ALONG LANE LINES SHALL BE PLACED BETWEEN AND IN LINE WITH THE SKIPS.
2. 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.
3. 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. MARKERS SHALL BE INSTALLED AT 40' SPACING ALONG SOLID WHITE AUXILIARY LANES. MARKER COLOR SHALL MATCH THE MARKERS INSTALLED ALONG THE WHITE LANE LINES.

BID ITEMS	UNIT TO BID
06610 - INLAID PAVEMENT MARKER - MW	EACH
06611 - INLAID PAVEMENT MARKER - MY	EACH

LEGEND

- MONO-DIRECTIONAL PAVEMENT MARKER (YELLOW)
- MONO-DIRECTIONAL PAVEMENT MARKER (WHITE)
- MARKINGS (YELLOW)
- MARKINGS (WHITE)

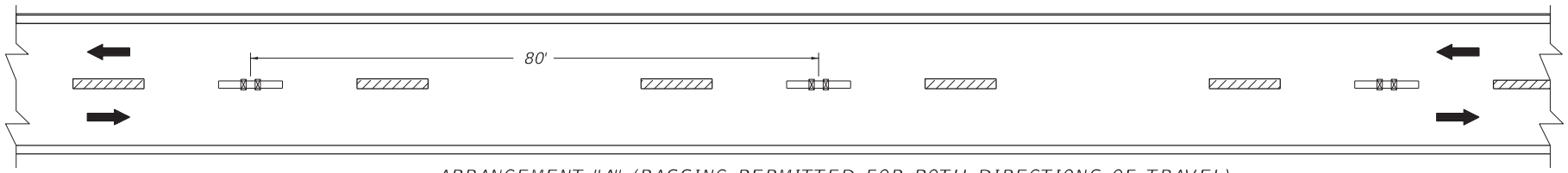
DRAWING NOT TO SCALE

KENTUCKY
DEPARTMENT OF HIGHWAYS

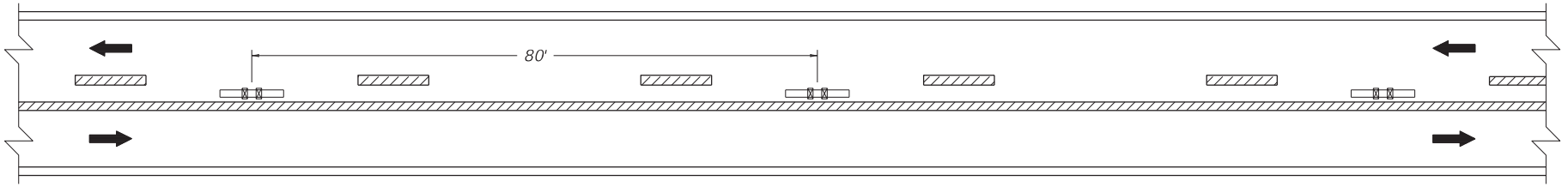
INLAID PAVEMENT MARKER
ARRANGEMENTS
MULTI-LANE ROADWAYS

SUBMITTED _____ DIVISION DIRECTOR 06-09-21 DATE

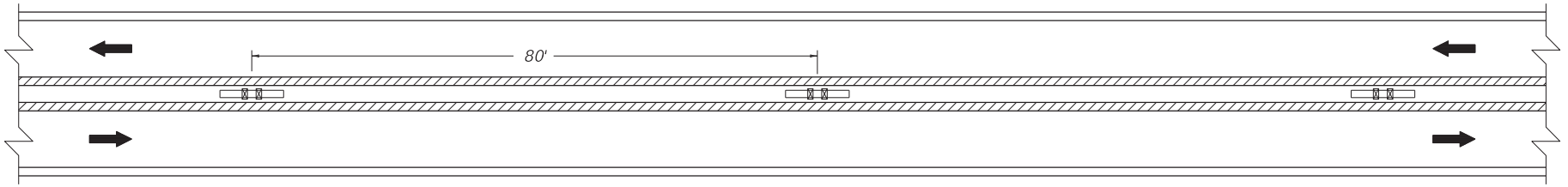
008



ARRANGEMENT "A" (PASSING PERMITTED FOR BOTH DIRECTIONS OF TRAVEL)



ARRANGEMENT "B" (PASSING PERMITTED FOR ONE DIRECTION OF TRAVEL)



ARRANGEMENT "C" (PASSING PROHIBITED FOR BOTH DIRECTIONS OF TRAVEL)

~ NOTES ~

1. MARKERS INSTALLED ALONG DASHED YELLOW CENTERLINES SHALL BE PLACED BETWEEN AND IN LINE WITH THE DASHES.
2. MARKERS INSTALLED WITH DOUBLE YELLOW CENTERLINES SHALL BE PLACED BETWEEN THE TWO LINES.
3. 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.

BID ITEMS	UNIT TO BID
06612 - INLAID PAVEMENT MARKER - BY	EACH

LEGEND

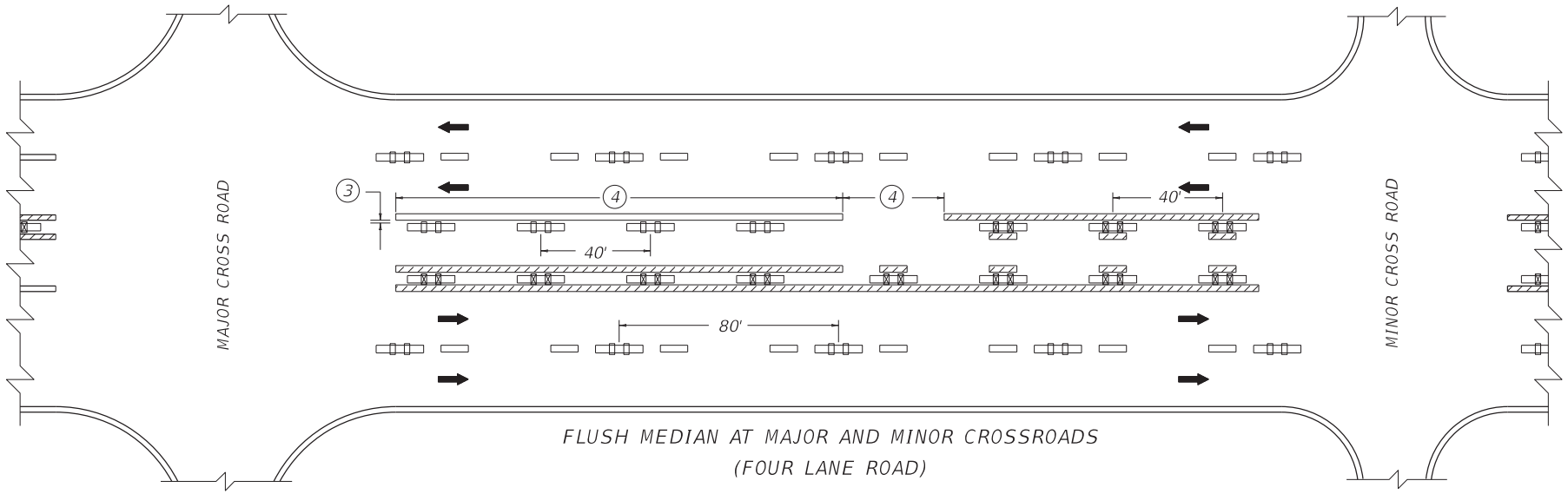
- BI-DIRECTIONAL PAVEMENT MARKER (YELLOW)
- MARKINGS (YELLOW)
- MARKINGS (WHITE)

KENTUCKY
DEPARTMENT OF HIGHWAYS

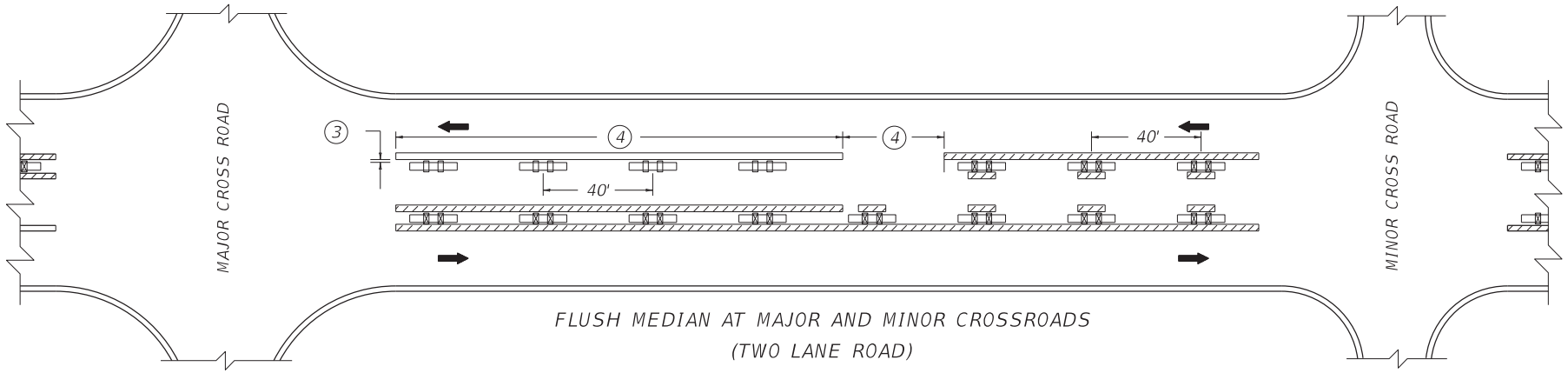
INLAID PAVEMENT MARKER
ARRANGEMENTs
TWO-LANE, TWO-WAY
ROADWAYS

SUBMITTED _____ DIVISION DIRECTOR 06-09-21 DATE

009



FLUSH MEDIAN AT MAJOR AND MINOR CROSSROADS
(FOUR LANE ROAD)



FLUSH MEDIAN AT MAJOR AND MINOR CROSSROADS
(TWO LANE ROAD)

~ NOTES ~

1. MARKERS INSTALLED AT DOUBLE YELLOW CENTERLINES SHALL BE PLACED BETWEEN THE TWO LINES.
2. MARKERS INSTALLED ALONG LANE LINES OR DASHED YELLOW CENTERLINES SHALL BE PLACED BETWEEN AND IN LINE WITH THE SKIPS.

(3) 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.

(4) LENGTH TO BE DETERMINED ON A PROJECT BY PROJECT BASIS.

5. 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.

BID ITEMS	UNIT TO BID
06610 - INLAID PAVEMENT MARKER - MW	EACH
06612 - INLAID PAVEMENT MARKER - BY	EACH

LEGEND

- BI-DIRECTIONAL PAVEMENT MARKER (YELLOW)
- MONO-DIRECTIONAL PAVEMENT MARKER (WHITE)
- MARKINGS (YELLOW)
- MARKINGS (WHITE)

DRAWING NOT TO SCALE

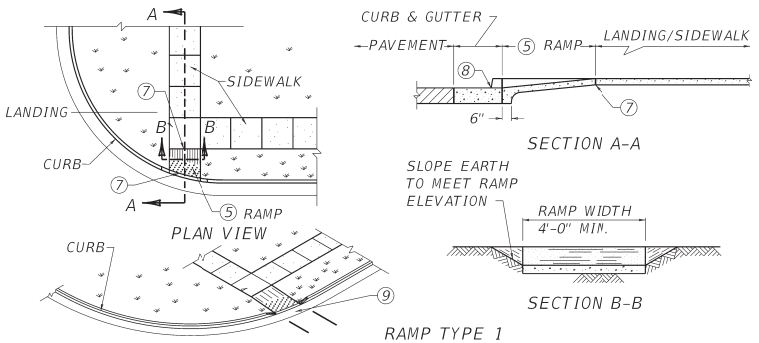
USE WITH CUR. STD. DWG.
TPM-207

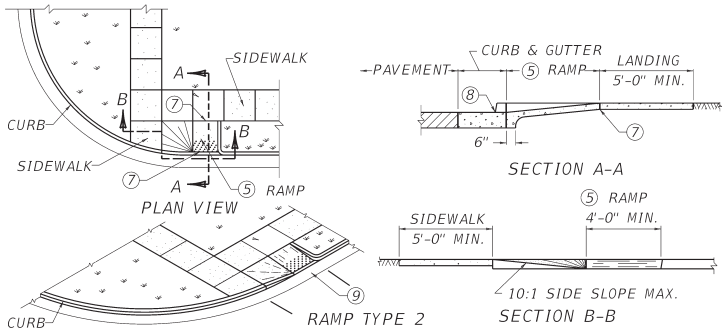
KENTUCKY
DEPARTMENT OF HIGHWAYS

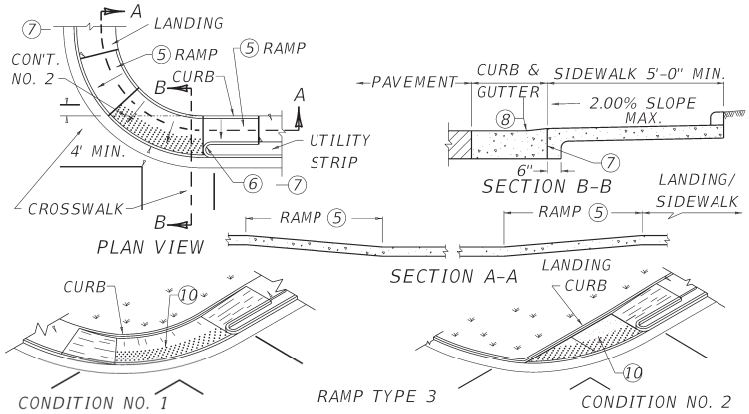
INLAID PAVEMENT MARKER
ARRANGEMENTS
TWO-WAY, LEFT-TURN LANE

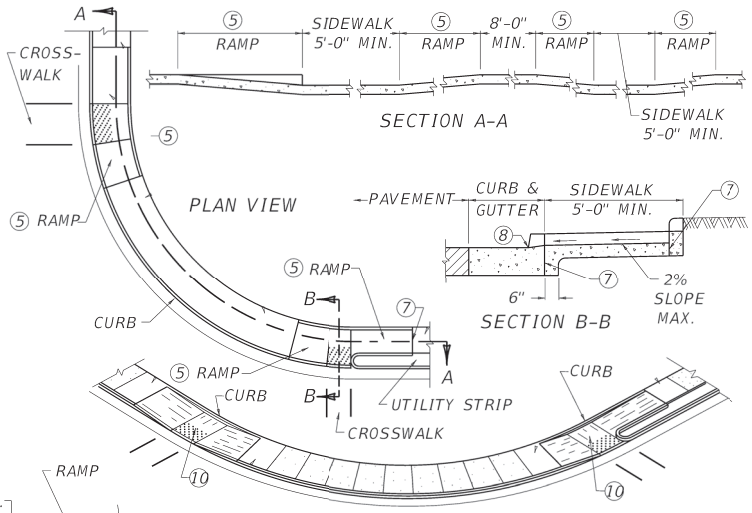
SUBMITTED _____ 06-09-21
DIVISION DIRECTOR DATE

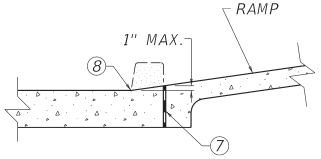
015











~ NOTES ~

1. THE RAMP SHALL BE CONSTRUCTED OF CLASS "A" CONCRETE. A BROOM FINISH OR EQUAL NON-SKID FINISH IS REQUIRED. DETECTABLE WARNINGS SHALL BE A SEPARATE BID ITEM.
2. RAMPS SHALL BE PAID PER SQ. YD. OF 4" CONCRETE SIDEWALK AND THE UNIT PRICE SHALL INCLUDE ALL MATERIALS, FORMS, CURB BEHIND RAMP AND LANDING. AND INCIDENTALS NECESSARY FOR CONSTRUCTION.
3. THE NORMAL GUTTER LINE SHALL BE MAINTAINED THROUGH THE AREA OF THE RAMP.
4. RAMP TYPE 3 SHOULD BE USED PRIMARILY IN A RETROFIT TYPE CONDITION.
5. CURB RAMP GRADE SHALL NOT EXCEED 12:1, CROSS SLOPE SHALL NOT EXCEED 2.00%. ON RETROFIT CURB RAMPS, GRADES OF 12.5% for 2'-0" OR 10% FOR 5'-0" ARE PERMISSABLE.
6. CURB RETURN REQUIRED WHEN UTILITY STRIP IS 4' OR GREATER. FOR UTILITY STRIPS LESS THAN 4', THE AREA IS TO BE SURFACED WITH SIDEWALK WITHIN THE RAMP.
7. ½" EXPANSION JOINT AT BACK OF CURB LINE AND AT SIDEWALK LINE.
8. NO BUMP PERMITTED. SAME SLOPE AS RAMP AND NOT TO EXCEED 1" IN HEIGHT. RAMPS SHALL BE CONSTRUCTED SO THAT WATER WILL NOT ACCUMULATE ON WALKING SURFACES.
9. LANDINGS WILL PROVIDE A LEVEL AREA (MAX. 5% GRADE OR CROSS SLOPE) AT APPROXIMATE STREET ELEVATION. A 4' SQUARE LEVEL LANDING IS THE REQUIRED MINIMUM.
10. LANDINGS WILL PROVIDE A LEVEL AREA (MAX. 2.00% GRADE OR CROSS SLOPE) AT APPROXIMATE STREET ELEVATION. A 4' SQUARE LEVEL LANDING IS THE REQUIRED MINIMUM.

BID ITEMS AND UNIT TO BID

SIDEWALK-4 IN CONCRETE	SQYD
DETECTABLE WARNINGS	SQFT

USE WITH CUR. STD. DWG.RGX-040

SUBMITTED W.T. Layson DIVISION DIRECTOR 05-03-2024 DATE

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

DRAWING TITLE: SEPIA 041 - SIDEWALK RAMPS

ITEM NO. COUNTY OF
SHEET NO.

OpenRoads Designer v10.12.02.4 USER: corinne.schurman FILE NAME: C:\PWWORK\CORRINE.SCHURMAN\D2341931\SEPIA041.DGN

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

1. These contract provisions shall apply to all work performed on the contract by the contractor with his own organization and with the assistance of workmen under his immediate superintendence and to all work performed on the contract by piecework, station work or by subcontract. The contractor's organization shall be construed to include only workmen employed and paid directly by the contractor and equipment owned or rented by him, with or without operators.

2. The contractor shall insert in each of his subcontracts all of the stipulations contained in these Required Provisions and such other stipulations as may be required.

3. A breach of any of the stipulations contained in these Required Provisions may be grounds for termination of the contract.

II. NONDISCRIMINATION OF EMPLOYEES

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

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

1. The contractor shall not fail or refuse to hire, or shall not discharge any individual, or otherwise discriminate against an individual with respect to his compensation, terms, conditions, or privileges of employment, because of such individual's race, color, religion, national origin, sex, disability or age (forty and above); or limit, segregate, or classify his employees in any way which would deprive or tend to deprive an individual of employment opportunities or otherwise adversely affect his status as an employee, because of such individual's race, color, religion, national origin, sex, disability or age forty (40) and over. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

2. The contractor shall not print or publish or cause to be printed or published a notice or advertisement relating to employment by such an employer or membership in or any classification or referral for employment by the employment agency, indicating any preference, limitation, specification, or discrimination, based on race, color, religion, national origin, sex, or age forty (40) and over, or because the person is a qualified individual with a disability, except that such a notice or advertisement may indicate a preference, limitation, or specification based on religion, national origin, sex, or age forty (40) and over, or because the person is a qualified individual with a disability, when religion, national origin, sex, or age forty (40) and over, or because the person is a qualified individual with a disability, is a bona fide occupational qualification for employment.

3. If the contractor is in control of apprenticeship or other training or retraining, including on-the-job training programs, he shall not discriminate against an individual because of his race, color, religion, national origin, sex, disability or age forty (40) and over, in admission to, or employment in any program established to provide apprenticeship or other training.

4. The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representative of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment. The contractor will take such action with respect to any subcontract or purchase order as the administrating agency may direct as a means of enforcing such provisions, including sanctions for non-compliance.

Revised: January 25, 2017

EXECUTIVE BRANCH CODE OF ETHICS

The Executive Branch Code of Ethics created by Kentucky Revised Statutes (KRS) Chapter 11A, effective July 14, 1992, establishes the ethical standards that govern the conduct of all executive branch employees. The Executive Branch Code of Ethics, which states, in part:

> KRS 11A.040 (7) provides:
>
> A present or former public servant listed in KRS 11A.010(9)(a) to (g) shall not, within one (1) year following termination of his or her 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 one (1) year, he or she personally refrains from working on any matter in which he was directly involved during the last thirty-six (36) months of his or her 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 to obtain private benefits.

If you have worked for the executive branch of state government within the past year, 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 105, Frankfort, Kentucky 40601; telephone (502) 564-7954.

Revised: March 11, 2025

Kentucky Equal Employment Opportunity Act of 1978

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

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

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

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

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

EMPLOYEE RIGHTS
UNDER THE FAIR LABOR STANDARDS ACT

THE UNITED STATES DEPARTMENT OF LABOR WAGE AND HOUR DIVISION

FEDERAL MINIMUM WAGE
$7.25 PER HOUR
BEGINNING JULY 24, 2009

OVERTIME PAY

At least 1½ times your regular rate of pay for all hours worked over 40 in a workweek.

CHILD LABOR

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

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

No more than
- **3** hours on a school day or **18** hours in a school week;
- **8** hours on a non-school day or **40** hours in a non-school week.

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

TIP CREDIT

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

ENFORCEMENT

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

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

ADDITIONAL INFORMATION

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

For additional information:

1-866-4-USWAGE
(1-866-487-9243) TTY: 1-877-889-5627

WHD U.S. Wage and Hour Division

WWW.WAGEHOUR.DOL.GOV

U.S. Department of Labor | Wage and Hour Division

WHD Publication 1088 (Revised July 2009)

PART IV

BID ITEMS

252344

PROPOSAL BID ITEMS

Report Date 8/21/25

252344

Section: 0001 - PAVING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0010	00190		LEVELING & WEDGING PG64-22	114.00	TON		$	
0020	00356		ASPHALT MATERIAL FOR TACK	8.00	TON		$	
0030	00388		CL3 ASPH SURF 0.38B PG64-22	1,144.00	TON		$	
0040	02676		MOBILIZATION FOR MILL & TEXT (FD05)	1.00	LS		$	
0050	02677		ASPHALT PAVE MILLING & TEXTURING	1,144.00	TON		$	
0060	03240		BASE FAILURE REPAIR (ASPHALT)	355.00	SQYD		$	
0070	03240		BASE FAILURE REPAIR (CONCRETE)	105.00	SQYD		$	

Section: 0002 - ROADWAY

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0080	01875		STANDARD HEADER CURB	100.00	LF		$	
0090	02115		SAW-CLEAN-RESEAL TVERSE JOINT	2,181.00	LF		$	
0100	02116		SAW-CLEAN-RESEAL LONGIT JOINT	5,356.00	LF		$	
0110	02562		TEMPORARY SIGNS	1,170.00	SQFT		$	
0120	02650		MAINTAIN & CONTROL TRAFFIC (FD04)	1.00	LS		$	
0130	02650		MAINTAIN & CONTROL TRAFFIC (FD05)	1.00	LS		$	
0140	02650		MAINTAIN & CONTROL TRAFFIC (FE01)	1.00	LS		$	
0150	02671		PORTABLE CHANGEABLE MESSAGE SIGN	3.00	EACH		$	
0160	02720		SIDEWALK-4 IN CONCRETE	18.00	SQYD		$	
0170	02775		ARROW PANEL	2.00	EACH		$	
0180	06511		PAVE STRIPING-TEMP PAINT-6 IN	9,504.00	LF		$	
0190	06542		PAVE STRIPING-THERMO-6 IN W	3,758.00	LF		$	
0200	06543		PAVE STRIPING-THERMO-6 IN Y	6,735.00	LF		$	
0210	06556		PAVE STRIPING-DUR TY 1-6 IN W	1,927.00	LF		$	
0220	06557		PAVE STRIPING-DUR TY 1-6 IN Y	2,769.00	LF		$	
0230	06562		PAVE MARKING-THERMO R 6 FT	8.00	EACH		$	
0240	06563		PAVE MARKING-R/R XBUCKS 16 IN	80.00	LF		$	
0250	06565		PAVE MARKING-THERMO X-WALK-6 IN	1,532.00	LF		$	
0260	06568		PAVE MARKING-THERMO STOP BAR-24IN	491.00	LF		$	
0270	06574		PAVE MARKING-THERMO CURV ARROW	18.00	EACH		$	
0280	06575		PAVE MARKING-THERMO COMB ARROW	6.00	EACH		$	
0290	06598		PAVEMENT MARKING REMOVAL	20.00	SQFT		$	
0300	06600		REMOVE PAVEMENT MARKER TYPE V	62.00	EACH		$	
0310	06610		INLAID PAVEMENT MARKER-MW	18.00	EACH		$	
0320	06612		INLAID PAVEMENT MARKER-BY	217.00	EACH		$	
0330	20099ES842		PAVE MARK TEMP PAINT STOP BAR	499.00	LF		$	
0340	20100ES842		PAVE MARK TEMP PAINT LINE ARROW	9.00	EACH		$	
0350	21173EC		SAW-CLEAN-RESEAL RANDOM CRACKS	754.00	LF		$	

PROPOSAL BID ITEMS

252344

Report Date 8/21/25

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0360	21415ND		EROSION CONTROL (FE01)	1.00	LS		$	
0370	22664EN		WATER BLASTING EXISTING STRIPE	4,696.00	LF		$	
0380	22680EN		QWICK CURB MEDIAN SEPARATOR	135.00	LF		$	
0390	23158ES505		DETECTABLE WARNINGS (NEW)	12.00	SQFT		$	
0400	23265ES717		PAVE MARK TY 1 TAPE STOP BAR-24 IN	20.00	LF		$	

Section: 0003 - DRAINAGE

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0410	01720		RECONSTRUCT INLET	1.00	EACH		$	
0420	01791		ADJUST MANHOLE FRAME TO GRADE	4.00	EACH		$	

Section: 0004 - SIGNING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0430	06406		SBM ALUM SHEET SIGNS .080 IN	44.00	SQFT		$	
0440	06407		SBM ALUM SHEET SIGNS .125 IN	57.00	SQFT		$	
0450	06410		STEEL POST TYPE 1	100.00	LF		$	
0460	21373ND		REMOVE SIGN	1.00	EACH		$	
0470	24631EC		BARCODE SIGN INVENTORY	14.00	EACH		$	

Section: 0005 - SIGNALIZATION

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0480	26119EC		INSTALL RADAR PRESENCE DETECTOR TYPE A	17.00	EACH		$	

Section: 0006 - DEMOBILIZATION

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0490	02569		DEMOBILIZATION	1.00	LS		$	