

CALL NO. 335

CONTRACT ID. 244401

BOURBON COUNTY

FED/STATE PROJECT NUMBER FD04 009 0068 001-002

DESCRIPTION PARIS BYPASS (US 68)

WORK TYPE ASPHALT SURFACE WITH GRADE & DRAIN

PRIMARY COMPLETION DATE 10/31/2024

LETTING DATE: April 25,2024

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN DAYLIGHT TIME April 25,2024. 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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ADMINISTRATIVE DISTRICT - 07

CONTRACT ID - 244401

FD04 009 0068 001-002

COUNTY - BOURBON

PCN - 0700900682401 FD04 009 0068 001-002

PARIS BYPASS (US 68) (MP 1.500) IMPROVEMENTS AT THE INTERSECTION OF US 68 AND LEGION ROAD (MP 1.700), A DISTANCE OF 0.20 MILES.ASPHALT SURFACE WITH GRADE & DRAIN SYP NO. 07-09034.00. GEOGRAPHIC COORDINATES LATITUDE 38:13:36.28 LONGITUDE 84:14:49.39 ADT 11,799

COMPLETION DATE(S):

COMPLETED BY 10/31/2024

APPLIES TO ENTIRE PROJECT

CONTRACT NOTES

PROPOSAL ADDENDA

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

BID SUBMITTAL

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

JOINT VENTURE BIDDING

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

UNDERGROUND FACILITY DAMAGE PROTECTION

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

REGISTRATION WITH THE SECRETARY OF STATE BY A FOREIGN ENTITY

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

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

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

SPECIAL NOTE FOR PROJECT QUESTIONS DURING ADVERTISEMENT

Questions about projects during the advertisement should be submitted in writing to the Division of Construction Procurement. This may be done by 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 contractor, as defined in KRS 45A.030 (9) agrees that the contracting agency, the Finance and Administration Cabinet, the Auditor of Public Accounts, and the Legislative Research Commission, or their duly authorized representatives, shall have access to any books, documents, papers, records, or other evidence, which are directly pertinent to this contract for the purpose of financial audit or program review. Records and other prequalification information confidentially disclosed as part of the bid process shall not be deemed as directly pertinent to the contract and

shall be exempt from disclosure as provided in KRS 61.878(1)(c). The contractor also recognizes that any books, documents, papers, records, or other evidence, received during a financial audit or program review shall be subject to the Kentucky Open Records Act, KRS 61.870 to 61.884.

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

BOYCOTT PROVISIONS

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

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

LOBBYING PROHIBITIONS

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

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

Revised: 2/29/2024

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

10/26/2023

1.0 BUY AMERICA REQUIREMENT.

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

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

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

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

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

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

Use foreign materials only under the following conditions:

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

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

2.0 - BUILD AMERICA, BUY AMERICA (BABA)

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

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

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

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

10/26/2023

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

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

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

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

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

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

<u>Buy America - Construction Program Guide - Contract Administration - Construction - Federal Highway</u> Administration (dot.gov)

October 26, 2023 Letting

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

10/26/2023

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.

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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

ASPHALT MIXTURE

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

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DGA BASE

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

OPTION B

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

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 from a beginning station number, which is STA 194+40 near the intersection of US 68 and Legion Rd and corresponds to Milepoint 1.500 along US 68. **NOTE**: The existing mile marker signs may not correspond to the proposed work locations.

LIDAR

All survey information was obtained from available KYTC Aerial LIDAR data and should be field verified as appropriate during construction and prior to incorporating the various project work items. Refer to the Special Note for Staking concerning staking operations required to control and construct the work.

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.

General Notes & Description of Work Page 2 of 2

DESCRIPTION OF WORK

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:

Legion Rd Turn Lane and Intersection Improvements. To accommodate increased truck traffic, a right turn lane from US 68 to Legion Road will be constructed. The existing 10' shoulder will be tapered to 4' along the length of the turn lane, with the full width shoulder to be constructed downstream of the intersection. The existing intersection of Legion Rd will be widened to 54' to provide two exit lanes and a flush striped median.

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

Guardrail. One location within the project boundary is set up for guardrail replacement. The approximate locations and estimated quantities are noted on the General Summary and Plan Sheet. Refer to the Special Note for Guardrail, Typical Sections, and Plan Sheets for more detail and information on this item of work.

Remove, Store & Reinstall Signs. A quantity of 2 each of "Remove-Store and Reinstall Sign" has been included in the contract for existing sheet signs that may obstruct or interfere with proposed construction activities. Do not remove an existing sign until just prior to working in the vicinity of the sign. Reinstall the sign as soon as possible once the construction activities in the vicinity of the sign has reached a stage that the sign will no longer be an obstruction or interfere with the work. The intent is for the sign to be "down" the minimum length of time necessary.

Permanent 6" Striping. A quantity of Pave Striping – Perm Paint – 6 in has been included in the contract to stripe the proposed turn lane and reconstructed Legion Rd entrance.

Special Note for Staking

Perform Contractor Staking according to Section 201; except, in addition to the requirements of Section 201, perform the following:

- 1. Contrary to Section 201.03.01, perform items 1 & 2 usually performed by the Engineer.
- 2. Verify the dimensions, type, and quantities of culvert pipes as listed and detailed in the proposal, and determine flow line elevations and slopes necessary to provide positive drainage. Revise as necessary to accommodate the existing site conditions; to provide proper alignment of the drainage structures with existing and/or proposed ditches, stream channels, swales, and the roadway lines and grades; and to ensure positive drainage upon completion of the work.
- 3. Using stakes, paint marks on the pavement, mag nails, and/or any other means approved by the Engineer, the Contractor shall mark and/or stake the proposed sign locations in the field. NOTE: The proposed signs are listed in the proposal by approximate location and are NOT to be taken as the exact location for the signs. During staking operations the Contractor shall review the signing layout and existing field conditions and look for potential conflicts, including but not limited to utilities, driveways, visual obstructions, etc. When conflicts are found, adjust the staked location of signs to mitigate conflicts. Because the sign locations in the proposal are approximate and the location of some signs may need to be adjusted due to conflicts, during staking operations the Contractor shall refer to and utilize the information in the Manual on Uniform on Traffic Control Devices (MUTCD), current edition. The MUTCD cover items such as: appropriate sign location, advance placement distances, and spacing requirements for signing. The intent is for the proposed signs to be consistent with, and meet the requirements of, the MUTCD. Once the proposed sign locations have been staked, notify and coordinate with the District Traffic Engineer, and perform a review of the staked locations. Adjust the staked locations, as directed by the District Traffic Engineer and obtain approval of the final staked locations. This review will also be used to determine if there are any existing signs that require removal and/or relocation. Provide the District Traffic Engineer with 2 weeks of notice when a route will be ready for a review of the staked locations.
- 4. Produce and furnish to the Engineer "As Built" information for the roadside regrading and pipe extensions. As built information will consist of a final record of the actual types, sizes, and locations of the proposed drainage structures (i.e. box inlets, headwalls, junction boxes, etc.) and culvert pipes constructed, as well as the elevations of the top and bottom of proposed rock cut slopes at 50 foot intervals.
- 5. Using paint marks on the pavement, and/or any other means approved by the Engineer, the Contractor shall layout and pre-mark the proposed striping, pavement markings, etc. Adjust as necessary to accommodate the existing site conditions and to provide proper alignment of the proposed thru and turning lanes. Obtain approval of the pre-marked layout from the Engineer and/or District Traffic Engineer prior to installing the striping and/or pavement markings.
- 6. Prior to incorporating into the work, obtain the Engineers approval of all revisions determined by the Contractor.
- 7. Perform any and all other staking operations required to control and construct the work.

Special Note for Erosion Control

I. DESCRIPTION

Perform all erosion and water pollution control work in accordance with any other notes in the Proposal, the Department's Standard and Interim Supplemental Specifications, the Special Provisions and Special Notes, and the Standard and Sepia Drawings, current editions, or 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) 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, applicable Special Provisions and Special Notes, and the 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 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, the construction phasing, methods, and the 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 these notes, the Standard Specifications, Interim Supplemental Specifications, Special Provisions 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

Erosion Control Page 2 of 3

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 steam.

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. All silt control devices shall be sized to retain a volume of 3,600 cubic feet per disturbed contributing acre. 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 the Special Provision for Waste and Borrow Sites.

As work progresses, add or remove erosion control measures as required by the BMP, applicable to the Contractor's project phasing, 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.

The required volume at each Silt Trap shall be computed based on the Up Gradient Contributing Areas that are disturbed and/or stabilized to the satisfaction of the Engineer. The required volume calculation for each Silt Trap shall be determined by the Contractor and verified by the Engineer. The required volume at each Silt Trap may be reduced by the following amounts:

- Up Gradient Areas not disturbed (acres)
- Up Gradient Areas that have been reclaimed and protected by Erosion Control Blanket or other ground protection material such as Temporary Mulch (acres)
- Up Gradient Areas that have been protected by Silt Fence (acres) Areas protected by Silt Fence shall be computed at a maximum rate of 100 square feet per linear foot of Silt Fence
- Up Gradient Areas that have been protected by Silt Traps (acres)

The use of Temporary Mulch is encouraged.

Silt Trap Type B shall always be placed at the collection point prior to discharging into a Blue Line Stream or onto an adjacent Property Owner. Where overland flow exists, a Silt Fence or other filter devices may be used.

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.

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IV. MEASUREMENT

The Department will measure the various erosion control items according to Section 212.04 and Section 213.04, as applicable.

V. Basis of Payment

The Department will make payment for the various erosion control items according to Section 212.04 and Section 213.04, as applicable.

Special Note for Pipe Replacements and Extensions

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) Constructing pipe replacements and/or pipe extensions; (3) Embankment and/or Excavation; (4) Erosion Control; and (6) Any other work as specified by this contract.

II. MATERIALS

Provide for sampling and testing of all materials in accordance with the Department's Sampling Manual. Make materials available for sampling a sufficient time in advance of the use of the materials to allow for the necessary time for testing unless otherwise specified in these notes.

- A. Maintain and Control Traffic. See Traffic Control Plan.
- **B. Culvert Pipe.** Furnish pipe meeting the requirements of Section 810. Select pipe for pH range Medium and minimum fill cover height according to the applicable Standard or Sepia Drawings, current editions. Verify maximum and minimum fill cover height required for new pipe prior to construction and obtain the Engineer's approval of the class or gauge of pipe and type of coating prior to delivering pipe to project. Furnish approved connecting bands or pipe anchors and toe walls.
- **C.** Flowable Fill. Furnish Flowable Fill for Pipe Backfill per Section 601.03.03(B).
- **D.** Erosion Control. See Special Note for Erosion Control.

III. CONSTRUCTION METHODS

- A. Maintain and Control Traffic. See Traffic Control Plan.
- **B.** Erosion Control. See Special Note for Erosion Control.
- C. Site Preparation. Be responsible for all site preparation including, but not limited to, saw cutting and removing existing pavement; clearing and grubbing; staking; incidental excavation and backfilling; common and solid rock excavation; embankment in place; removal of obstructions, or any other items; restoration of pavements, slopes, and all disturbed areas; final dressing and cleanup; and disposal of materials. Limit clearing and grubbing to the absolute minimum required to construct the drainage features. Perform all site preparation only as approved or directed by the Engineer.
- D. Removing Headwalls, Pipe, and Excavation. Remove existing headwalls and lengths of culvert

Pipe Replacements/Extensions
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and/or entrance pipes at the approximate locations noted on the summary. The Engineer will determine the exact locations and lengths of pipe to be removed at the time of construction. When any portion of pipe under the roadway, saw cut the existing asphalt pavement and base to a neat edge prior to excavation and removal of the existing pipe. NOTE: Saw cutting the pavement shall be incidental. Obtain the Engineer's approval of trench width and/or saw cutting limits prior to saw cutting the pavement. Excavate the trench and remove the pipe as directed, or approved, by the Engineer without disturbing existing underground utilities.

- E. Constructing Pipe, Headwalls, and Drainage Boxes. Construct culvert and/or entrance pipes, pipe extensions, headwalls, drainage boxes, and other drainage structures at the locations shown in the proposal or as designated by the Engineer. The Contractor will establish, with the approval of the Engineer, the final centerlines, flow lines, and skews to obtain the best fit with the existing and/or proposed ditches and other proposed improvements. (See the Special Note for Staking.) Construct pipe bedding according to Section 701 and the applicable Standard or Sepia Drawings, current editions. Use approved connecting bands or concrete anchors as required. Prior to backfilling pipe, obtain the Engineer's approval of the pipe installation. Provide positive drainage upon completion of pipe installation.
- **F. Pipe Backfill.** Backfill entrance pipes according to Section 701.03.06. Contrary to Section 701.03.06, regardless of cover height, backfill culvert pipes with flowable fill as shown on the Culvert Pipe Replacement Detail from the outside edge of shoulder or back of curb to outside edge of shoulder or back of curb. Steel plates will likely be required to maintain traffic while the flowable fill cures. Once the flowable fill has sufficiently cured, place the Asphalt Base in lifts with thicknesses of 3-4 inches, up to the surface of the existing pavement. Seal with Leveling & Wedging. Allow the asphalt base and leveling & wedging to be exposed to traffic for a minimum of 14 days to allow for settlement. During the waiting period, level & wedge any settlement as directed by the Engineer. After the waiting period has been met for the last pipe replacement constructed, the final milling and/or surfacing operations can begin, unless directed otherwise by the Engineer. For culvert pipe beyond the outside edge of shoulder or back of curb, backfill according to Section 701.03.06.
- **G. Embankments.** Backfill pipe and culvert extensions, and construct shoulder embankments as directed by the Engineer. The Contractor shall bench into the existing slope and apply proper compaction according to Section 206. For more information and details on benching, refer to Note 2 on the detail sheet titled: ROADSIDE REGRADING AND EMBANKMENT BENCHING DETAILS, found elsewhere in the Proposal. Provide positive drainage of ditches, shoulders, and slopes at all times during and upon completion of construction.
- H. Property Damage. Be responsible for all damage to public and/or private property resulting from the work. 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.
- I. 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

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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 as a result of pipe replacement and pipe extension 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.

- J. Right-of-Way Limits. The Department has not established 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 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.
- K. Clean Up, Disposal of Waste. Clean up the project area as work progresses. Dispose of all removed concrete, pipe, pavement, debris, excess and unsuitable excavation, and all other waste at approved sites off the Right of Way obtained by the Contractor at no additional cost to the Department. See the 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.
- M. Erosion Control. See the Special Note for Erosion Control.

IV. METHOD OF MEASUREMENT

- A. Maintain and Control Traffic. See the Traffic Control Plan.
- **B. Site Preparation.** Other than the bid items listed, site preparation will NOT be measured for payment, but shall be incidental to culvert and/or entrance pipe bid items, as applicable.
- **C. Remove Headwall.** The Department will measure the removal of existing headwalls as Each. Any excavation, including rock excavation, necessary to remove existing headwalls will NOT be measured for payment, but shall be incidental to the bid item "Remove Headwall".
- D. Remove Pipe. Removal of existing culvert and entrance pipe shall be measured according to Section

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701.04.14. Any excavation, including rock excavation, necessary to remove existing pipe will NOT be measured for payment, but shall be incidental to the bid item "Remove Pipe".

- **E. Culvert and Entrance Pipe.** The Department will measure the quantities according to Section 701.04. Any excavation, including rock excavation, necessary to install culvert or entrance pipe shall be incidental to the corresponding pipe bid items.
- **F. Headwalls, Drainage Boxes.** The Department will measure according to Section 710. Any excavation, including rock excavation, necessary to construct headwalls and/or drainage boxes will NOT be measured for payment, but shall be incidental to the applicable bid item.
- **G. Excavation, Pipe Backfill, Embankments.** The Department will NOT measure for payment the following items: any excavation, including rock excavation, necessary to remove the existing pipe and/or install the proposed culvert or entrance pipe, pipe backfill material, geotextile fabric, flowable fill, and re-constructing shoulder embankments, but shall considered these items incidental to the bid items for culvert and entrance pipe.
- H. 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, and Final Dressing. These activities shall be incidental to the project bid items. Seeding and Protection shall be measured according to Section 212.
- **I. Erosion Control.** See the Special Note for Erosion Control.

V. BASIS OF PAYMENT

- A. Maintain and Control Traffic. See the Traffic Control Plan.
- **B.** Remove Headwall. The Department will make payment for the completed and accepted quantities of Each headwall removed. Payment at the Contract unit price per Each shall be full compensation for furnishing all labor, materials, equipment, and incidentals for removing the existing headwall.
- **C. Remove Pipe.** The Department will make payment according to Section 701.05. Payment at the Contract unit price per linear foot shall be full compensation for furnishing all labor, materials, equipment, and incidentals for removing the existing pipe.
- **D. Culvert and Entrance Pipe.** The Department will make payment according to Section 701.05. Payment at the Contract unit price per linear foot shall be full compensation for furnishing all labor, materials, equipment, and incidentals necessary for installing and backfilling new culvert and entrance pipe.
- E. Headwalls, Drainage Boxes. The Department will make payment according to Section 710.
- **F. Erosion Control.** See the Special Note for Erosion Control.

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:

- o 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.
- o 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.
- **B.** Erosion Control. See Special Note for Erosion Control.

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

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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 to be installed on sufficiently cured existing concrete, such as a sidewalk, concrete median, etc., Type I steel posts shall be mounted on a Type D Surface Mount. For Type D Surface Mounts use only Redi-Torque Model 280 Surface Mount Slip Base Assembly (part number SMSB) by Xcessories Squared of Auburn, IL. Prior to installation, the Contractor shall submit to the Engineer shop drawings of the Type D Surface Mount. Install the Type D Surface Mount according to all the applicable requirements of the manufacturer (see shop drawings). During installation of the Type D Surface Mount, if the existing concrete surface is not flat (i.e. has a slope), galvanized metal shims may be required to ensure the surface mount base is level and plumb. If a Type D breakaway sign support is specified for a location that has an asphalt surface, the Contractor shall install the Type D breakaway sign support detailed on Standard Drawing RGX-065, current edition. 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, shims, 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)

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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.

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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 preexisting 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

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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.
- 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.

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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.
- M. Erosion Control. See Special Note for Erosion Control.

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 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.

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- **H.** 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, and Final Dressing. These activities shall be incidental. Seeding and Protection shall be measured according to Section 212.
- **I. Erosion Control.** See Special Note for Erosion Control.
- J. 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.
- **K. 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.
- L. 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.
- **M.** 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.

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, 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.

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- **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: Redi-Torque Model 280 Surface Mount
 - NOTE: The permissible Type D Surface Mount alternative is: Redi-Torque Model 280 Surface Mount Slip Base Assembly (part number SMSB) 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
- J. Erosion Control. See Special Note for Erosion Control.

Special Note for Completion Date & Liquidated Damages

I. COMPLETION DATE

The ultimate fixed completion date for this project will be **October 31, 2024**. Liquidated Damages for failure to complete the project on time will be assessed following Section 108.09.

II. LIQUIDATED DAMAGES

In addition to the requirements of Section 108.09, the Department will assess Liquidated Damages in the amount of **\$1,000** per hour for each hour, or fraction of an hour, for any and all lane closures that are in place beyond the time frame(s) noted in the Traffic Control Plan and approved by the Engineer.

Contrary to Section 108.09, Liquidated Damages will be assessed regardless of whether seasonal limitations prohibit the Contractor from performing work on the controlling operation.

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.

BOURBON COUNTY FD04 009 0068 001-002

SPECIAL PROVISION FOR WASTE AND BORROW SITES

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

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

SPECIAL NOTE FOR NON-TRACKING TACK COAT

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

Property	Specification	Test Procedure
Viscosity, SFS, 77 ° F	20 - 100	AASHTO T 72
Sieve, %	0.3 max.	AASHTO T 59
Asphalt Residue ¹ , %	50 min.	AASHTO T 59
Oil Distillate, %	1.0 max.	AASHTO T 59
Residue Penetration, 77 ° F	0 - 30	AASHTO T 49
Original Dynamic Shear (G*/sin δ), 82 ° C	1.0 min.	AASHTO T 315
Softening Point, ° F	149 min.	AASHTO T 53
Solubility, %	97.5 min.	AASHTO T 44

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

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

3. CONSTRUCTION.

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

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

Non-Tracking Tack Price Adjustment Schedule								
Test	Specification	100% Pay	90% Pay	80% Pay	50% Pay	0% Pay		
Viscosity, SFS, 77 ° F	20 – 100	19 - 102	17 - 18	15 - 16	14	≤13		
			103 - 105	106 - 107	108 - 109	≥ 110		
Sieve, %	0.30 max.	≤ 0.40	0.41 - 0.50	0.51 - 0.60	0.61 - 0.70	≥ 0.71		
Asphalt Residue, %	50 min.	≥49.0	48.5 – 48.9	48.0 - 48.4	47.5-47.9	≤ 47.4		
Oil Distillate, %	1.0 max.	≤1.0	1.1-1.5	1.6 - 1.7	1.8-1.9	>2.0		
Residue Penetration, 77 ° F.	30 max.	≤ 31	32 - 33	34 - 35	36 - 37	≥ 38		
Original Dynamic Shear (G*/sin δ), 82 ° C	1.0 min.	≥0.95	0.92 - 0.94	0.90 - 0.91	0.85 - 0.89	≤ 0.84		
Softening Point, ° F	149 min.	≥145	142 - 144	140 - 141	138 - 139	≤ 137		
Solubility, %	97.5 min.	≥ 97.0	96.8 – 96.9	96.6 – 96.7	96.4 – 96.5	≤ 96.3		

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

Revised: May 23, 2022

COORDINATION OF WORK WITH OTHER CONTRACTS

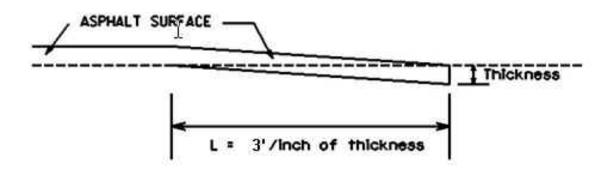
Be advised, there may be an active project(s) adjacent to or within this project. The Engineer will coordinate the work of the Contractors. See Section 105.06.

1-3193 Coordination Contracts 01/02/2012

SPECIAL NOTE FOR EDGE KEY

Construct Edge Keys at the beginning of project, end of project, at railroad crossings, and at intersections with ramps, as applicable. Unless specified in the Contract or directed by the Engineer, do not construct edge keys at intersecting streets, roads, alleys, or entrances. Cut out the existing asphalt surface to the required depth and width shown on the drawing and heel the new surface into the existing surface. The Department will measure the Edge Key at the joint as the width of the pavement perpendicular to the centerline in linear feet. The Department will pay for this work at the Contract unit price per linear foot, which shall be full compensation for all labor, materials, equipment, and incidentals for removal and disposal of the existing asphalt surface required to construct the edge key.

EDGE KEY



Thickness = 1.5 Inches

L = 4.5 LF

L = Length of Edge Key

Special Note for Guardrail

I. DESCRIPTION

Except as specified herein, perform all work in accordance with the Department's Standard and Supplemental Specifications, Special Notes and Special Provisions, and the Standard and Sepia Drawings, current editions. Article references are to the Standard Specifications. Furnish all equipment, labor, materials, and incidentals for the following work items:

(1) Site preparation; (2) Remove existing guardrail systems; (3) Construct Guardrail, End Treatments, Bridge End Connectors, and Terminal Sections, as applicable; (4) Delineators for guardrail; (5) Maintain and Control Traffic; and (6) all other work specified as part of this contract.

II. MATERIALS

Except as specified herein, provide for all materials to be sampled and tested in accordance with the Department's Sampling Manual and 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.

- A. Maintain and Control Traffic. See Traffic Control Plan.
- **B. Guardrail.** Furnish guardrail system components according to Section 814 and the Standard and Sepia Drawings; except use steel posts only, no alternates.
- **C. Delineators for Guardrail.** Furnish white and/or yellow Delineators for Guardrail according to Standard Drawing RBR-055 Delineators for Guardrail, current edition.
- **D. Erosion Control.** See the Special Note for Erosion Control.

III. CONSTRUCTION METHODS

- A. Maintain and Control Traffic. See Traffic Control Plan.
- **B. Site Preparation.** Remove existing guardrail system, including the guardrail end treatments, Bridge End connectors and all other elements of the existing guardrail system as per Section 719, except that the Contractor will take possession of all concrete posts and all concrete associated with the existing bridge and/or guardrail end treatments. Locate all disposal areas off the Right of Way. Be responsible for all site preparation, including but not limited to, clearing and grubbing, excavation, embankment, and removal of all obstructions or any other items; regrading, reshaping, adding and compacting of suitable materials on the existing shoulders to provide proper template or foundation for the guardrail; filling voids left as the result of removing existing guardrail and guard posts with dry sand; temporary pollution and erosion control; disposal of excess, waste materials, and debris; and final dressing, cleanup, and seeding and protection. Perform all site preparation as

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approved or directed by the engineer.

C. Guardrail. Except as specified herein, construct guardrail system according to Section 719 and the Standard and Sepia Drawings, current editions. Locations listed on the summary and/or shown on the drawings are approximate only. The Engineer will determine the exact termini for individual guardrail installations at the time of construction. Unless directed otherwise by the Engineer, provide a minimum two (2) foot shoulder width. Construct radii at entrances and road intersections as directed by the Engineer.

Erect guardrail to the lines and grades shown on the current Standard and Sepia Drawings, or as directed by the Engineer by any method approved by the Engineer which allows construction of the guardrail to the true grade without apparent sags.

When removing existing guardrail and installing new guardrail, do not leave the blunt end exposed where it would be hazardous to the public. When it is not practical to complete the construction of the guardrail and the permanent end treatments and terminal sections first, provide a temporary end by connecting at least 25 feet of rail to the last post, and by slightly flaring, and burying the end of the rail completely into the existing shoulder. If left overnight, place a drum with bridge panel in advance of the guardrail end and maintain during use.

- **D. Delineators for Guardrail.** Construct Delineators for Guardrail according to Standard Drawing RBR-055 Delineators for Guardrail, current edition.
- **E. Property Damage.** Be responsible for all damage to public and/or private property resulting from the work. Restore damaged roadway features and private property at no additional cost to the Department.
- F. 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 utilities to 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 as a result of guardrail operations at no additional cost to the Department.
- **G. Right of Way Limits**. The Department has not established the exact limits of the Right-of-Way. Limit work activities to obvious Right-of-Way, permanent or temporary easements, and work areas secured by the Department through consent and release of the adjacent property owners. Be responsible for all encroachments onto private lands.
- **H.** Clean Up, Disposal of Waste. Dispose of all removed concrete, debris, and other waste and debris off the Right-of-Way at sites obtained by the Contractor at no additional cost to the Department. See the Special Provision for Waste and Borrow Sites.

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- I. Final Dressing, Seeding and Protection. 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.
- **J. Erosion Control.** See the Special Note for Erosion Control.

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 separate payment but shall be incidental to the Guardrail, End Treatments, Bridge End Connectors, and Terminal Sections, as applicable.
- **C. Guardrail, End Treatments, Bridge End Connectors, Terminal Sections, and Remove Guardrail.** The Department will measure according to Section 719.04.
- D. Delineators for Guardrail. See Standard Drawing RBR-055 Delineators for Guardrail.
- E. Clean Up, Disposal of Waste, Final Dressing, and Seeding and Protection. The Department will NOT measure for payment the operations of: Clean Up, Disposal of Waste, and Final Dressing. These activities shall be incidental. Seeding and Protection will be measured according to Section 212.
- **F. Erosion Control.** See the Special Note for Erosion Control.

V. BASIS OF PAYMENT

- A. Maintain and Control Traffic. See Traffic Control Plan.
- **B.** Guardrail, End Treatments, Bridge End Connectors, Terminal Sections, and Remove Guardrail. The Department will make payment according to Section 719.05.
- **C. Delineators for Guardrail.** See Standard Drawing RBR-055 Delineators for Guardrail.
- **D. Erosion Control.** See the Special Note for Erosion Control.

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SPECIAL NOTE FOR TYPICAL SECTION DIMENSIONS

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

1-3725 Typical Section Dimensions 01/02/2012

TRAFFIC CONTROL PLAN

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 11 feet. At locations with one lane, such as at exit and entrance ramps, a partial lane closure is permitted during construction, as long as a minimum clear lane width of 10 feet is maintained. NOTE: During any lane closure, make provisions for the 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.

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 and/or road closures will be allowed during the following times:

Easter Weekend 3 pm Friday, March 29, 2024 – 8 pm Sunday, March 31, 2024

Memorial Day Weekend 3 pm Friday, May 24, 2024 – 8 pm Monday, May 27, 2024

Independence Day 3 pm Wednesday, July 3, 2024 – 11 pm Thursday, July 4, 2024

Labor Day Weekend 3 pm Friday, August 30, 2024 – 8 pm Monday, September 2, 2024

Thanksgiving Holiday 3 pm Wednesday, November 27, 2024 – 8 pm Sunday, December 1, 2024

Christmas Holiday 3 pm Monday, December 23, 2024 – 8 pm Wednesday December 25, 2024

New Year's Day Holiday 3 pm Tuesday, December 31, 2023 – 8 pm Wednesday, January 1, 2025

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

The Contractor shall submit proposed lane and/or road 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 and/or road 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.

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LANE CLOSURES

Do not leave lane closures in place during prohibited periods. Contrary to Section 112.04.17, long-term lane closures will not be measured for payment, but shall be incidental to Maintain and Control Traffic.

The Contractor shall be required to remove all long-term lane closures after three consecutive calendar days of inactivity on the project, unless approved otherwise by the Engineer. Once notified by the Engineer that a long-term lane closure must be removed due to inactivity, the Contractor shall have 12 hours to remove the long-term lane closure. The Department will not make any payment to the Contractor for the removal or the reinstallation of a long-term lane closure other than the initial payment of the initial lane closure installation. If the Contractor is required to remove a long-term lane closure, the roadway must be returned to a condition that satisfies the Pavement Edge Drop-Off requirements noted below.

TRUCK MOUNTED ATTENUATORS

If traffic lanes are closed without the use of temporary barrier wall, use Truck Mounted Attenuators. Furnish and install Truck Mounted Attenuators in advance of work areas when workers will be within 20 feet from traffic. If there is less than 500 feet between work sites, only a single TMA will be required. The TMAs shall be located at the individual work sites and shall be moved as the work zone moves within the project limits. All details of the TMA installations are to follow manufacture recommendations and approved by the Engineer. Truck Mounted Attenuators shall be incidental to Maintain and Control Traffic.

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

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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.

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

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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.

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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)

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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

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Standard Abbreviations

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

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<u>Word</u>	<u>Abbrev</u>	<u>Example</u>
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 175 CLOSED/ DETOUR EXIT 30
Center	CNTR	CNTR LANE CLOSED/ MERGE LEFT
Commercial	COMM	OVRSZ COMM VEH/ USE 1275
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	1	E-BND 164 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 175/ 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 175 CLOSED/ DETOUR EXIT 50
Oversized	OVRSZ	OVRSZ COMM VEH/ USE 1275 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 175/ USE ALT RTE
Shoulder	SHLDR	SHLDR CLOSED NEXT 5 MI
Slippery	SLIP	SLIP COND POSSIBLE/ SLOW SPD
Southbound	S-BND	S-BND 175 CLOSED/ DETOUR EXIT 50
Speed	SPD	SLIP COND POSSIBLE/ SLOW SPD

Traffic Control Plan Page 8 of 9

Standard Abbreviations (cont.)

<u>Word</u>	<u>Abbrev</u>	<u>Example</u>
Street	ST	MAIN ST CLOSED/ USE ALT RTE
Traffic	TRAF	CUM PKWAY TRAF/ DETOUR EXIT 60
Vehicle	VEH	OVRSZ COMM VEH/ USE 1275 NEXT RIGHT
Westbound	W-BND	W-BND 164 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:

<u>Abbrev</u>	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	<u>Action</u>
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

Traffic Control Plan Page 9 of 9

Typical Messages (cont.)

Reason/Problem FOG XX MILES FREEWAY CLOSED FRESH OIL **HAZMAT SPILL** ICE **INCIDENT AHEAD** LANES (NARROW, SHIFT, MERGE, ETC.) LEFT LANE CLOSED **LEFT LANE NARROWS LEFT 2 LANES CLOSED** LEFT SHOULDER CLOSED

MEDIAN WORK XX MILES

LOOSE GRAVEL

MOVING WORK ZONE, WORKERS IN ROADWAY

NEXT EXIT CLOSED NO OVERSIZED LOADS

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 WORKERS AHEAD

Action

PASS TO RIGHT PREPARE TO STOP **REDUCE SPEED**

SLOW

SLOW DOWN STAY IN LANE STOP AHEAD STOP XX MILES

TUNE RADIO 1610 AM

USE NN ROAD USE CENTER LANE USE DETOUR ROUTE USE LEFT TURN LANE USE NEXT EXIT USE RIGHT LANE

WATCH FOR FLAGGER

Contract ID: 244401 Page 52 of 124



KENTUCKY TRANSPORTATION CABINET Department of Highways

DIVISION OF RIGHT OF WAY & UTILITIES

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

RIGHT OF WAY CERTIFICATION

\boxtimes	Original		Re-Ce	ertificatio	n	RIGHT OF WAY CERTIFICATION			
	ITEM	#			COUNTY	PROJE	ECT # (STATE)	PROJECT # (FEDERAL)	
7-90	7-9034.00 Bourbon 1100 FD04 009 068 001-002 N/A				N/A				
PRO.	PROJECT DESCRIPTION								
Cons	Construct right turn lane on US 68 Bypass and reconstruct turn radiuses on Legion Road in Bourbon County								
X	No Additi							,	
Cons				-		The right of way v	vas acquired in accorda	ance to FHWA regulations	
						isitions Policy Act	of 1970, as amended. N	lo additional right of way or	
	relocation assistance were required for this project. Condition # 1 (Additional Right of Way Required and Cleared)								
All ne					ol of access rights when		peen acquired including	g legal and physical	
			-	_	_		-	e may be some improvements	
rema	ining on the	e right-	of-way,	but all occ	upants have vacated the	e lands and improv	ements, and KYTC has	physical possession and the	
								n paid or deposited with the	
						-		ilable to displaced persons	
adeq	-				ance with the provisions		WA directive.		
					of Way Required with				
				-		_		he proper execution of the	
		-		-		•		n has not been obtained, but	
								s physical possession and right	
		_		-	be paid or deposited wi	•		e court for most parcels. Just	
					of Way Required witl	•	to AWARD of construct	ion contract	
The a							mplete and/or some pa	rcels still have occupants. All	
	-	_			ent housing made availal		·	-	
				-	_			necessary right of way will not	
								paid or deposited with the	
								35.309(c)(3) and 49 CFR	
24.10	02(j) and wi	l expec	lite com	pletion of	all acquisitions, relocati	ons, and full paym	ents after bid letting a	nd prior to	
AWA	RD of the co	onstruc	tion co	ntract or fo	rce account construction	n.			
	Number of Par			0	EXCEPTION (S) Parcel #	ANTIC	IPATED DATE OF POSSESSIO	N WITH EXPLANATION	
	er of Parcels T	hat Have	Been Ac	quired					
Signed				0					
Signed	mnation			0					
		(Text is	limited	. Use additi	onal sheet if necessary.)				
					•				
LPA RW Project Manager Right of Way Supervisor									
Prin	ted Name					Printed Name		Digitally signed by Cecil D.	
Si	gnature					Signature	and	Smith Date: 2024.03.05 15:03:47	
	Date Date -05'00'								
		Rig	nt of W	ay Direct	or		FHWA		
Print	ted Name	1			20240205	Printed Name			
Sig	gnature	11	1, 1	11 1	2024.03.06	Signature			
	Date	Ch	me	thele	07:52:59 -05'00'	Date			

UTILITIES AND RAIL CERTIFICATION NOTE

Bourbon County
FD04 009 0068 008-011
Installation of a Right Turn Lane on U.S. 68 at Legion Rd
Item No. 7-9034.00

GENERAL PROJECT NOTES ON UTILITIES

For all projects over 2000 linear feet, which are defined as a "Large Project" in KRS 367.4903(18), the awarded contractor shall initially mark the first 2000 linear feet minimally of proposed excavation or construction boundaries of the project to be worked using the procedure set forth in KRS 367.4909(9)(k). This temporary field locating of the project excavation boundary shall take place prior to submitting an excavation location request to the underground utility protection Kentucky Contact Center. For large projects, the awarded contractor shall work with the impacted utilities to determine when additional white lining of the remainder of the project site will take place. This provision shall not alter or relieve the awarded contractor from complying with requirements of KRS 367.4905 to 367.4917 in their entirety.

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

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

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

BOURBON COUNTY FD04 009 0068 001-002 Contract ID: 244401 Page 54 of 124

UTILITIES AND RAIL CERTIFICATION NOTE

Bourbon County
FD04 009 0068 008-011
Installation of a Right Turn Lane on U.S. 68 at Legion Rd
Item No. 7-9034.00

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

- Underground gas facilities crossing under Legion Rd
- Underground Sanitary Sewer facilities crossing under intersection of Legion Rd and U.S. 68
- Underground water facilities running under intersection Legion Rd and U.S. 68
- Utility poles and overhead service lines along US 68 and Legion Rd

If an unknown utility is encountered, the contractor will be responsible for arranging an on-site meeting with utility representatives and the Engineer to discuss possible impacts and solutions to either avoid the utility or relocate the utility.

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

THE FOLLOWING COMPANIES ARE RELOCATING/ADJUSTING THEIR UTILITIES WITHIN THE PROJECT LIMITS
AND WILL BE COMPLETE PRIOR TO CONSTRUCTION

N/A

THE FOLLOWING COMPANIES HAVE FACILITIES TO BE RELOCATED/ADJUSTED BY THE COMPANY OR THE COMPANY'S SUBCONTRACTOR AND IS TO BE COORDINATED WITH THE ROAD CONTRACT

N/A

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

N/A

RAIL COMPANIES HAVE FACILITIES IN CONJUNCTION WITH THIS PROJECT AS NOTED

No Rail Involvement □ Rail Involved □ Rail Adjacent

UTILITIES AND RAIL CERTIFICATION NOTE

Bourbon County
FD04 009 0068 008-011
Installation of a Right Turn Lane on U.S. 68 at Legion Rd
Item No. 7-9034.00

AREA UTILITIES CONTACT LIST

<u>Uti</u>	ity Company/Agency	Contact Name	Contact Information
1.	AT&T KY	Frank Ambrose	Fa2207@att.com
2.	Spectrum	Kelly Oram	john.oram@charter.com
3.	Kentucky Utilities	Caroline Justice	caroline.justice@lge-ku.com
4.	The City of Paris Water Sewer	Pat Harney	pharney@paris.ky.gov
5.	Columbia Gas of Kentucky	David Lemons	dnlemons@nisource.com
6.	Kentucky Wired	Jonathon Young	Jonathon.young@ledcor.com
7.	MetroNet	Doug Haney	Doug.Haney@Metronet.com

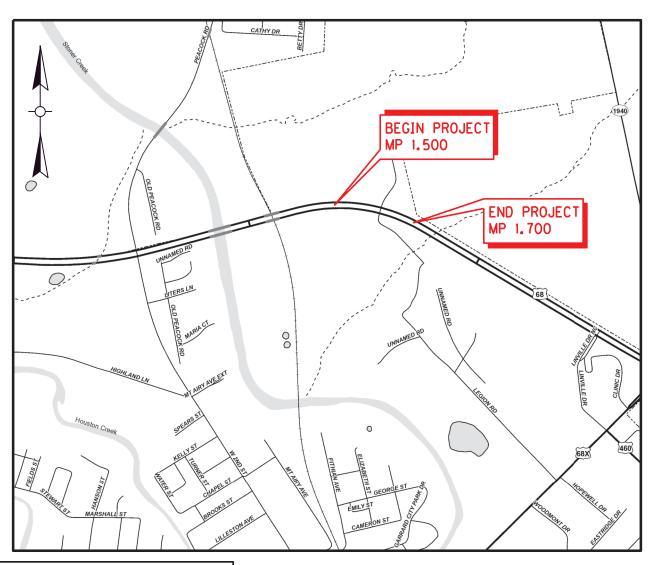
NOTE: The Utilities Contact List is provided as informational only, and may not be a complete list of all Utility Companies with facilities in the project area.

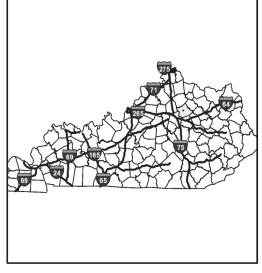
COUNTY OF ITEM NO.

BOURBON 07-9034.00

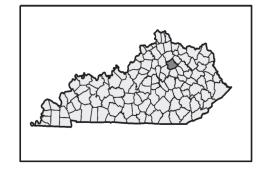
BOURBON COUNTY

CONSTRUCT RIGHT TURN LANE U.S. 68 at LEGION ROAD



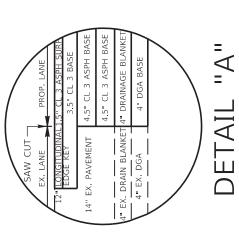


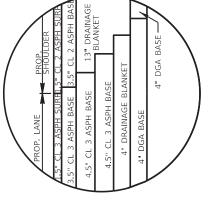




BOURBON

COUNTY OF





DETAIL "B"

US 68 PAVEMENT DESIGN

DETAIL "C" 3" CL 2 ASPH BASE 8" DGA BASE

EGION RD PAVEMENT DESIGN

1.5" CL 2 ASPH SURFACE 0.38B PG 64-22

3" CL 2 ASPH BASE 1.00D PG 64-22 8" DGA BASE

SHOULDERS

3.5" CL 3 ASPH BASE 1.00D PG 64-22 9" CL 3 ASPH BASE 1.50D PG 64-22 (4.5" & 4.5") 4" DRAINAGE BLANKET - TYPE II - ASPHALT 4" DGA BASE

1.5" CL 3 ASPH SURFACE 0.38B PG 64-22

TRAFFIC LANES

1.5" CL 2 ASPH SURFACE 0.38B PG 64-22

3.5" CL 2 ASPH BASE 1.00D PG 64-22 13" DRAINAGE BLANKET - TYPE II - ASPHALT 4" DGA BASE

SCALE: NTS

TYPICAL SECTION US 68 AT LEGION ROAD

US 68 @ LEGION RD - BOURBON COUNTY							
	ITEM NO. 7-9034.00						
	GENERAL SUMMARY						
ITEM	DESCRIPTION	UNIT	QUANTITY				
1	DGA BASE ①	TON	432				
18	DRAINAGE BLANKET-TYPE II-ASPH 1	TON	850				
205	CL3 ASPH BASE 1.50D PG64-22	TON	406				
212	CL2 ASPH BASE 1.00D PG64-22	TON	204				
214	CL3 ASPH BASE 1.00D PG64-22	TON	174				
307	CL2 ASPH SURF 0.38B PG64-22	TON	88				
388	CL3 ASPH SURF 0.38B PG64-22 1	TON	75				
521	STORM SEWER PIPE-15 IN 2	LF	21				
522	STORM SEWER PIPE-18 IN 2	LF	8				
1490	DROP BOX INLET TYPE 1	EACH	1				
1585	REMOVE DROP BOX INLET 2	EACH	1				
1982	DELINEATOR FOR GUARDRAIL MONO DIRECTIONAL WHITE 5	EACH	2				
2159	TEMPORARY DITCH	LF	408				
2160	CLEAN TEMPORARY DITCH	LF	204				
2200	ROADWAY EXCAVATION	CUYD	876				
2242	WATER	MGAL	160				
2351	GUARDRAIL-STEEL W BEAM-S FACE 5	LF	73				
2369	GUARDRAIL END TREATMENT TYPE 2A 5	EACH	1				
2381	REMOVE GUARDRAIL 5	LF	75				
2569	DEMOBILIZATION	LS	1				
2625	REMOVE HEADWALL 2	EACH	1				
2650	MAINTAIN & CONTROL TRAFFIC	LS	1				
2671	PORTABLE CHANGEABLE MESSAGE SIGN	EACH	1				
2697	EDGELINE RUMBLE STRIPS	LF	536				
2701	TEMPORARY SILT FENCE	LF	408				
2703	SILT TRAP TYPE A	EACH	1				
2704	SILT TRAP TYPE B	EACH	1				
2705	SILT TRAP TYPE C	EACH	1				
2706	CLEAN SILT TRAP TYPE A	EACH	1				
2707	CLEAN SILT TRAP TYPE B	EACH	1				
2708	CLEAN SILT TRAP TYPE C	EACH	1				
2726	STAKING	LS	1				

- 1) QUANTITY CARRIED OVER FROM PAVING SUMMARY
- 2 QUANTITY CARRIED OVER FROM DRAINAGE SUMMARY
- (3) QUANTITY CARRIED OVER FROM STRIPING AND PAVEMENT MARKING SUMMARY
- 4 QUANTITY CARRIED OVER FROM SIGN SUMMARY
- 5 QUANTITY CARRIED OVER FROM GUARDRAIL SUMMARY

	US 68 @ LEGION RD - BOURBON COUNTY ITEM NO. 7-9034.00				
	GENERAL SUMMARY				
2775	ARROW PANEL	EACH	1		
4844	CABLE-NO. 14/5C	LF	1010		
4886	MESSENGER-15400 LB	LF	195		
4932	INSTALL STEEL STRAIN POLE	EACH	2		
5952	TEMP MULCH	SQYD	2770		
5953	TEMP SEED AND PROTECT	SQYD	2078		
5963	INITIAL FERTILIZER	TON	0.21		
5964	MAINTENANCE FERTILIZER	TON	0.13		
5985	SEEDING AND PROTECTION	SQYD	4155		
5992	AGRICULTURAL LIMESTONE	TON	2.58		
6401	FLEXIBLE DELINEATOR POST-M/W	EACH	11		
6406	SMB ALUM SHEET SIGNS .080 IN	SQFT	20		
6410	STEEL POST TYPE 1	LF	62		
6542	PAVE STRIPING-THERMO-6 IN W	LF	1201		
6545	PAVE STRIPING-THERMO-8 IN Y	LF	73		
6550	PAVE STRIPING-TEMP REM TAPE-W	LF	485		
6551	PAVE STRIPING-TEMP REM TAPE-Y	LF	73		
6568	PAVE MARKING-THERMO STOP BAR-24IN	LF	50		
6569	PAVE MARKING-THERMO CROSS HATCH	SQFT	50		
6574	PAVE MARKING-THERMO CURV ARROW	EACH	7		
20408ES835	INSTALL LED BEACON-12 IN	EACH	8		
20550ND	SAWCUT PAVEMENT ①	LF	832		
21289ED	LONGITUDINAL EDGE KEY ①	LF	832		
22400NN	REMOVE AND RELOCATE SIGN ASSEMBLY	EACH	2		
23157EN	TRAFFIC SIGNAL POLE BASE	CUYD	8.2		
23274EN11F	TURF REINFORCEMENT MAT 1	SQYD	589		
24526ED	INSTALL-BEACON CONTROLLER-2 CIRCUIT	EACH	1		
24631EC	BARCODE SIGN INVENTORY	EACH	4		
24955ED	REMOVE SIGNAL EQUIPMENT	LS	1		
24970EC	ASPHALT MATERIAL FOR TACK NON-TRACKING ①	TON	2		
40023	KYTC S&F HEADWALL-18 IN	EACH	1		
40027	ROCK EXCAVATION 4	CUYD	488		

- (1) QUANTITY CARRIED OVER FROM PAVING SUMMARY
- (2) QUANTITY CARRIED OVER FROM DRAINAGE SUMMARY
- 3 QUANTITY CARRIED OVER FROM STRIPING AND PAVEMENT MARKING SUMMARY
- 4 QUANTITY CARRIED OVER FROM SIGN SUMMARY
- 5 QUANTITY CARRIED OVER FROM GUARDRAIL SUMMARY

US 6	8 @ LEGION RE	- BOURBON COUNTY	
	ITEM NO	. 7-9034.00	
	PAVING	SUMMARY	
PAVING AREAS		PAVING QUANTITIES	
ITEM	TOTAL	ITEM	TOTAL
	SQYD		TON
1.5" CL 3 ASPH SURF 0.38B PG 64-22^	900	CL 3 ASPH SURF 0.38B PG 64-22	75
1.5" CL 2 ASPH SURF 0.38B PG 64-22 (SHLD/ENTR)	1055	CL 2 ASPH SURF 0.38B PG 64-22	88
9" CL 3 ASPH BASE 1.50D PG 64-22 (2 4.5" LIFTS)	820	CL 3 ASPH BASE 1.50D PG 64-22	406
3.5" CL 3 ASPH BASE 1.00D PG 64-22^	900	CL 3 ASPH BASE 1.00D PG 64-22	174
3.5" CL 2 ASPH BASE 1.00D PG 64-22 (SHLD/ENTR)	1055	CL 2 ASPH BASE 1.00D PG 64-22	204
4" DGA BASE	820	DGA BASE	189
4" DGA BASE (SHLD/ENTR)	1055	DGA BASE	243
4" DRAINAGE BLANKET - TYPE II - ASPHALT	820	DRAINAGE BLANKET - TYPE II - ASPHALT	164
13" DRAINAGE BLANKET - TYPE II - ASPHALT	1055	DRAINAGE BLANKET - TYPE II - ASPHALT	686
ASPHALT MATERIAL FOR TACK NON-TRACKING	3514	ASPHALT MATERIAL FOR TACK NON-TRACKING	2
	LF		LF
LONGITUDINAL EDGE KEY	832	LONGITUDINAL EDGE KEY	832
SAWCUT PAVEMENT	832	SAWCUT PAVEMENT	832

BID ITEM	<u>DESCRIPTION</u>	<u>UNIT</u>	QUANTITY	
1	DGA BASE	432	TON]
18	DRAINAGE BLANKET-TYPE II-ASPH	850	TON	1
205	CL3 ASPH BASE 1.50D PG64-22	406	TON]*
212	CL2 ASPH BASE 1.00D PG64-22	204	TON]*
214	CL3 ASPH BASE 1.00D PG64-22	174	TON]*
307	CL2 ASPH SURF 0.38B PG64-22	88	TON]*
388	CL3 ASPH SURF 0.38B PG64-22	75	TON]*
20550ND	SAWCUT PAVEMENT	832	LF]
21289ED	LONGITUDINAL EDGE KEY	832	LF	
24970EC	ASPHALT MATERIAL FOR TACK NON-TRACKING	2	TON]+

^{*} Estimated at 110 lbs. per SQ. YD. per inch of depth

These numbers are for estimation purposes only. Final locations and quantities will be determined by the Engineer in the field.

⁺ Estimated at application rate of 0.70 lbs. per SQ. YD. on asphalt base courses

[^] Includes 725 sq ft of 12" longitudinal edge key

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	US 68 @ LEGION RD - BOURBON COUNTY ITEM NO. 7-9034.00 DRAINAGE SUMMARY						
Station Offset REMOVE 15" STORM DROP BOX 18" STORM REMOVE FLARED STRUCTURE SEWER PIPE INLET TYPE 1 SEWER PIPE HEADWALL						18" SLOPED & FLARED HEADWALL	
		EACH	LF	EACH	LF	EACH	EACH
196+53.55	74.3' RT	1	16	1			
200+76.00	126.8' RT		5				
200+99.77	69.1' RT				8	1	1

Note: These numbers are for estimation purposes only. Final locations and quantities will be determined by the Engineer in the field.

<u>ltem</u>	<u>Description</u>	<u>Unit</u>	<u>Quantity</u>
521	STORM SEWER PIPE-15 IN	LF	21
522	STORM SEWER PIPE-18 IN	LF	8
1490	DROP BOX INLET TYPE 1	EACH	1
2625	REMOVE HEADWALL	EACH	1
1585	REMOVE STRUCTURE	EACH	1
40023	KYTC S&F HEADWALL-18 IN	EACH	1

KY 63	and the second of the second s
Bourbon County	The man is a second of the sec
Guardrail Summary	and a second of the second and the second of

Approx. END Milepoint 3.809	e Kemoved	Approx. E. END L. Milepoint 3.809	Approx. END Milepoint 3.809 0.000 0.000 0.000	Approx. END Milepoint 3.809 0.000 0.000 0.000 0.000	Approx. END Milepoint 3.809 0.000 0.000 0.000 0.000 0.000	Approx. END Milepoint 3.809 0.000 0.000 0.000 0.000 0.000 0.000 0.000	Approx. END Milepoint 3.809 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	Approx. END Milepoint 3.809 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	Approx. END Milepoint 3.809 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	Approx. END Milepoint 3.809 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	Approx. END Milepoint 3.809 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	Approx. END Milepoint 3.809 0.000	Approx. END Milepoint 3.809 0.000	## Approx. ## END ## Approx. ## Approx.	## Approx. FND Milepoint
	Existing Guardrall to be Removed														
Station 200+45	Anny	BEGIN Station 200+45	BEGIN Station 200+45	BEGIN Station 200+45	Station 200+45	BEGIN Station 200+45	BEGIN Station 200+45	BEGIN Station 200+45	BEGIN Station 200+45	BEGIN Station 200+45	BEGIN Station 200+45	BEGIN Station 200+45	BEGIN Station 200+45	BEGIN Station 200+45	BEGIN Station 200445
Road	Cido	Road	RT	RT	RT RT	ROAD	ROAD	ROAD	ROad RT RT	ROad RT RT	ROad RT RT	ROAD ROAD REPORTED TO THE PARTY OF THE PARTY	R R A	R R Road	Road Road
Follow radius of proposed entrance	-	Follow radius of proposed entrance	Follow radius of proposed entrance	Follow radius of proposed entrance	Follow radius of proposed entrance	Follow radius of proposed entrance	Follow radius of proposed entrance	Follow radius of proposed entrance	Follow radius of proposed entrance	Follow radius of proposed entrance	Follow radius of proposed entrance	Follow radius of proposed entrance	Follow radius of proposed entrance	Follow radius of proposed entrance	Follow radius of proposed entrance
	osed radinger														
	ENDING Length	0.00	0.00	0.00	0.00	0.00	0.00	00.0 00.0 00.0 00.0 00.0 00.0	00.0 00.0 00.0 00.0 00.0 00.0 00.0 00.	00.0 00.0 00.0 00.0 00.0 00.0	00.0	00.0	00.0	00.0	00.0
	END END	0.000	0.000	0.000	00000	00000	000.0	000.0 000.0 000.0 000.0 000.0 000.0	000.0 000.0 000.0 000.0 000.0 000.0 000.0 000.0	00000 00000 00000 00000 00000 00000 0000	00000 00000 00000 00000 00000 00000 0000	00000 00000 00000 00000 00000 00000 0000	00000 00000 00000 00000 00000 00000 0000	00000 00000 00000 00000 00000 00000 0000	00000 00000 00000 00000 00000 00000 0000
	Applox. Applox.	0.000	0.000	0.000	00000	00000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	ממכ הפכסלסון														

		alline	summary or items	SL		
Guardrail-Steel W Beam-S Face	73.00			GR Connector to Bridge End Type A	0	EACH
Remove Guardrail	75.00	H		GR Connector to Bridge End Type A-1	0	EACH
Delineator for Guardrail M/W	2	EACH		GR Connector to Bridge End Type C	0	EACH
End Treatment Type 1	0	EACH		GR Connector to Bridge End Type D	0	EACH
End Treatment Type 2A	1	EACH		Thrie-Beam Transition (TL-2)	0	EACH
End Treatment Type 3	0	EACH		Thrie-Beam Transition (TL-3)	0	EACH
End Treatment Type 4A	0	EACH		DGA	0	TONS
End Treatment Type 7	0	EACH		Asphalt Seal Coat	0.00	TONS
Terminal Section No. 1	0	EACH		Asphalt Seal Aggregate	0.00	TONS
Guardrail-Steel W Beam-S Face A	0	5		<select blank="" bridge="" case="" g="" leave="" or="" r=""></select>		1

				Description				NARROW KEEP RIGHT	RELOCATED STREET SIGN	STOP SIGN	ADDRESS SIGN TO REMAIN	STOP SIGN	NARROW KEEP RIGHT	
			24631EC	BARCODE	SIGN	INVENTORY	EACH	1		1		1	1	
			6410	STEEL	POST TYPE	1	LF	12	12	12		14	12	
YTNUC			6406	SMB ALUM	SHEET SIGNS	NI 080.	SQFT	3.75		6.25		6.25	3.75	
US 68 & LEGION RD - BOURBON COUNTY	ITEM NO. 7-9034.00	SIGN SUMMARY	22400NN	REMOVE &	RELOCATE SIGN	ASSEMBLY	EACH		1		1			
US 68 & LEGIOI	ITEN	SIG		FACING	TRAFFIC	TRAVELING		WB	EB/WB	SB	NB	NB	EB	
					SIZE			18x30	-	30x30		30x30	18x30	
					SPECIFICATION			R4-7c	1	R1-1	-	R1-1	R4-7c	
					OFFSET			14.0' LT	73.0' RT	71 0 10	03.0 LI	64.5' RT	13.0' RT	
					STATION			199+35.0	199+67.0	0.00+001	133+32.3	200+90.7	201+10.0	
				SIGN	ASSEMBLY	NUMBER		S-1	S-2	0	C-C	S-4	S-5	

Note: These numbers are for estimation purposes only. Final locations and quantities will be determined by the Engineer in the field.

Quantity	20	62	2	4
Unit	SQFT	- LF	EACH	EACH
Description	SMB ALUM SHEET SIGNS .080 IN	STEEL POST TYPE 1	REMOVE AND RELOCATE SIGN ASSEMBLY	BARCODE SIGN INVENTORY
ltem	9049	6410	22400NN	24631EC

Quantities carried forward to the General Summary.

			MS 68 @	LEGION RD -	US 68 @ LEGION RD - BOURBON COUNTY	YNU	
				ITEM NO. 7-9034.00	7-9034.00		
			STRIPING AI	ND PAVEMEN	STRIPING AND PAVEMENT MARKING SUMMARY	IMMARY	
Begin Station	Begin Offset	End Station	End Offset	Unit	Quantity	Bid Item	Description
194+33.2	42.4' RT	195+40.0	55.3' RT	LF	105	PAVE STRIPING-THERMO-6 IN W	White edgeline
195+40.0	55.3' RT	199+49.7	55.5' RT	J1	398	PAVE STRIPING-THERMO-6 IN W	White edgeline
199+49.7	55.5' RT	199+97.3	98.9' RT	-TE	70	PAVE STRIPING-THERMO-6 IN W	White edgeline
200+92.7	146.9' RT	200+80.5	62.9' RT	扣	111	PAVE STRIPING-THERMO-6 IN W	White edgeline
200+80.5	62.9' RT	201+61.6	43.9' RT	J1	82	PAVE STRIPING-THERMO-6 IN W	White edgeline
195+40.0	43.3' RT	199+47.9	43.3' RT	IJ	399	PAVE STRIPING-THERMO-6 IN W	Turn lane line
200+41.8	63.0' RT	200+42.1	99.0' RT	扣	36	PAVE STRIPING-THERMO-6 IN W	Turn lane line
200+21.6	56.0' RT	200+21.5	98.6' RT	扣	73	PAVE STRIPING-THERMO-8 IN Y	Median Edge
200+21.6	56.0' RT	200+21.5	98.6' RT	SQFT	50	PAVE STRIPING-THERMO-CROSS HATCH	Median Cross Hatch
200+28.9	63.0' RT	200+80.5	63.0' RT	LF	50	PAVE MARKING-THERMO STOP BAR-24 IN	24" Stop bar
195+79.3	44.7' RT	:	1	EA	1	PAVE MARKING-THERMO CURV ARROW	Right turn arrow
196+61.8	44.7' RT			EA	1	PAVE MARKING-THERMO CURV ARROW	Right turn arrow
197+43.8	44.4' RT	-		EA	1	PAVE MARKING-THERMO CURV ARROW	Right turn arrow
198+25.2	44.9' RT		-	EA	1	PAVE MARKING-THERMO CURV ARROW	Right turn arrow
199+06.7	45.2' RT		-	EA	1	PAVE MARKING-THERMO CURV ARROW	Right turn arrow
200+39.2	85.7' RT	-	-	EA	1	PAVE MARKING-THERMO CURV ARROW	Thru Left turn arrow
200+49.3	85.3' RT			EA	1	PAVE MARKING-THERMO CURV ARROW	Right turn arrow

Note: These numbers are for estimate purposes only. Final locations and quantities will be determined by the Engineer in the field.

Item	Description	Unit	Quantity
6542	PAVE STRIPING-THERMO-6 IN W	LF	1201
6545	PAVE STRIPING-THERMO-8 IN Y	LF	73
8959	PAVE MARKING-THERMO STOP BAR-24 IN	LF	20
6959	PAVE MARKING-THERMO CROSS-HATCH	SQFT	90
6574	PAVE MARKING-THERMO CURV ARROW	EACH	7

Quantities carried forward to the General Summary.

KYTC End Area Volume Report

This style sheet is set up to be used with End Area Volume Reporting.

For information about the Style Sheet, *right-click* on the style sheet in the Report Browser and select "*Style Sheet Help*".

Report Created: Sunday, February 25, 2024

Time: 2:03:35 PM

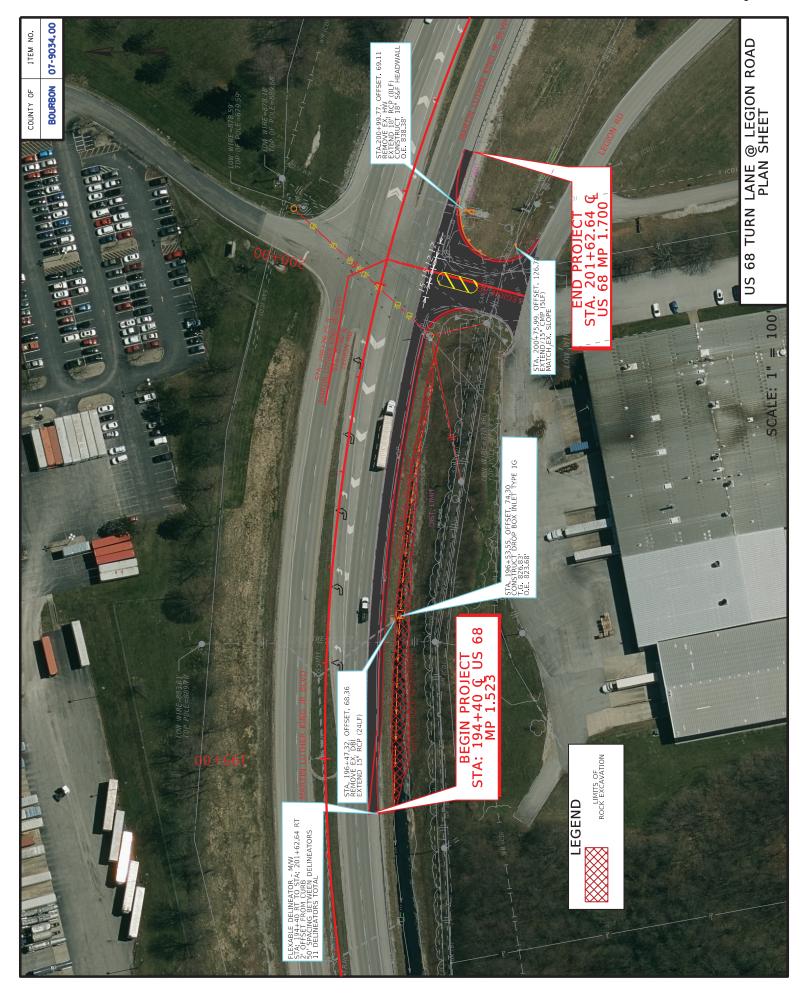
Cross Section Set Name: US 68

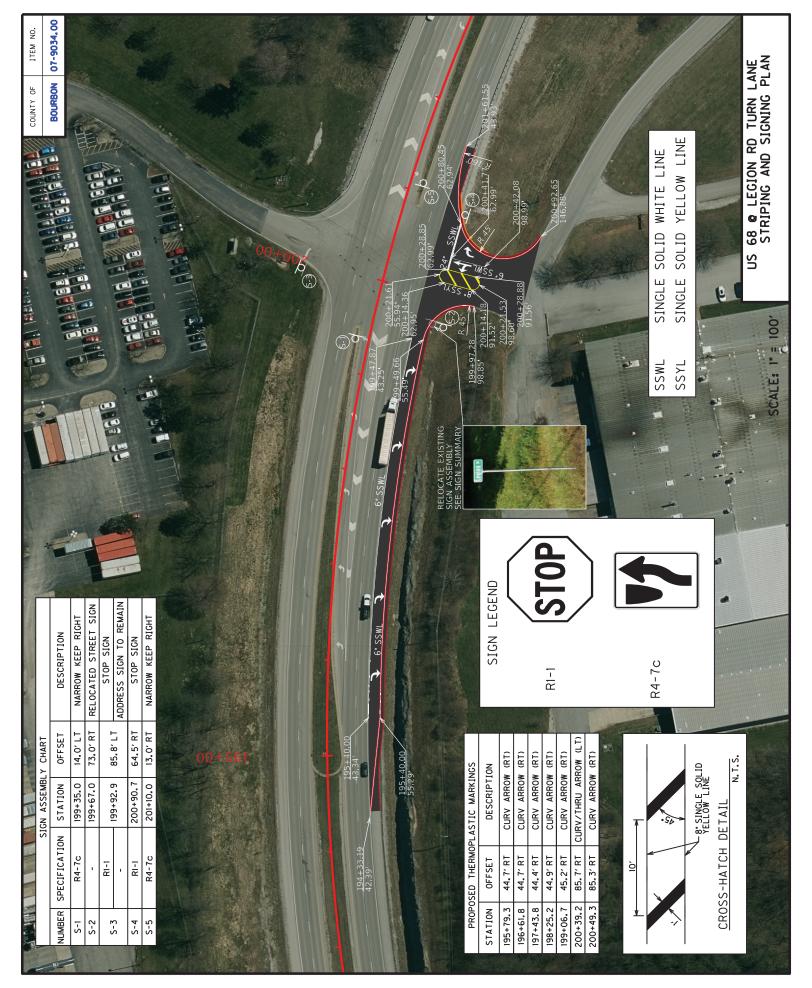
Alignment Name: US 68 EX CL

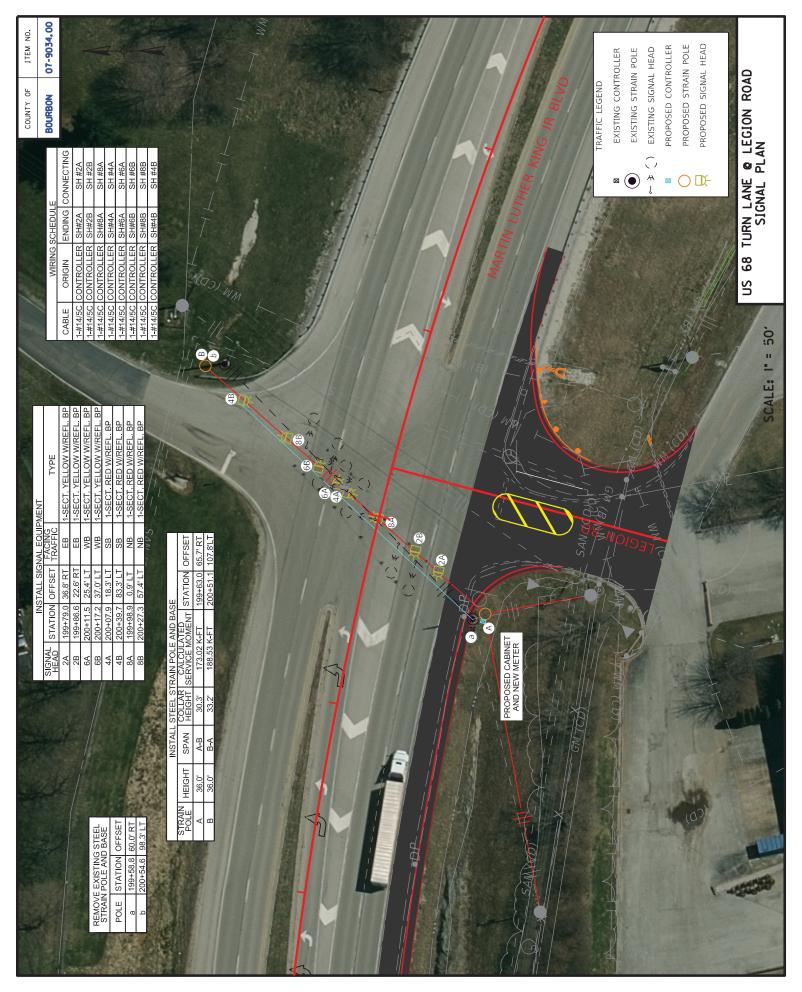
Input Grid Factor: Note: All units in this report are in feet, square feet and cubic feet unless

specified otherwise.

		Station Qu	ıantities	-	
Baseline Station		Cut		Fill	Mass
Station	Area	Volume	Area	Volume	Ordinate
194+00.000	0.000	0.000	0.000	0.000	0.000
194+50.000	17.755	443.876	3.138	78.454	365.422
195+00.000	70.504	2206.477	5.502	216.014	2355.885
195+50.000	96.616	4178.012	7.816	332.958	6200.939
196+00.000	80.729	4433.628	5.012	320.699	10313.867
196+50.000	58.293	3475.554	11.813	420.622	13368.799
197+00.000	53.076	2784.235	9.795	540.201	15612.832
197+50.000	54.690	2694.152	11.169	524.103	17782.881
198+00.000	37.049	2293.480	13.541	617.746	19458.616
198+50.000	27.288	1608.427	14.550	702.281	20364.762
199+00.000	25.797	1327.128	18.538	827.213	20864.676
199+50.000	27.275	1326.800	1.791	508.227	21683.248
200+00.000	105.555	3320.753	0.000	44.771	24959.230
200+50.000	45.799	3783.852	49.696	1242.399	27500.684
201+00.000	19.625	1635.592	17.049	1668.622	27467.653
201+50.000	16.583	905.207	0.185	430.858	27942.002
202+00.000	0.000	414.587	0.000	4.635	28351.954
Grand To	otal:	36831.758		8479.804	







Contract ID: 244401 Page 69 of 124

Tim Tharpe - Director

Project Engineer ___

Project Engineer attests that the mentioned contractor is the actual electrical contractor on this project

Signature of Project Engineer or Designee

Division of Traffic Operations

Phone (502) 564-3020 FAX (502) 564-7759

Contact number for Project Engineer

PROJECT MATERIALS RELEASE FORM FOR SIGNALS AND LIGHTING

Note: Email form with signatures to KYTC's warehouse (kim.stamper@ky.gov) at least two (2) days prior to arrival for pickup. Ensure Contractor's delivery driver has a copy of form with signatures. Failure to do either may result in long delays or refusal to distribute materials upon arrival.

US 68 @ Legion Road	Sounty: Bourbon US 68 @ Legion Road Beacon Signal Rebuild	,		· · · · · · · · · · · · · · · · · · ·	
Description: US 68 @ Legion Road	US 68 @ Legion Road	Item Number:	7-9034.00		
Beacon Signal Rebuild	Beacon Signal Rebuild Beacon Beac	County:	Bourbon		
Cabinets Master code T-01-0000 Aluminum Cabinet (Beacon) Signals Signals T-02-0001 1 Section Beacon Backplate 8 T-02-0080 12 inch Beacon 4 T-02-0330 LED Module 12" Red Red Cabinet Cabi	T-01-0000 Aluminum Cabinet (Beacon)	Description:	US 68 @ Le	egion Road	
1 T-01-0000 Aluminum Cabinet (Beacon) Signals 8 T-02-0001 1 Section Beacon Backplate 8 T-02-0080 12 inch Beacon 4 T-02-0330 LED Module 12" Red	T-01-0000 Aluminum Cabinet (Beacon)		Beacon Sig	ınal Rebuild	
1 T-01-0000 Aluminum Cabinet (Beacon) Signals 8 T-02-0001 1 Section Beacon Backplate 8 T-02-0080 12 inch Beacon 4 T-02-0330 LED Module 12" Red	T-01-0000 Aluminum Cabinet (Beacon)				
Signals 8 T-02-0001 1 Section Beacon Backplate 8 T-02-0080 12 inch Beacon 4 T-02-0330 LED Module 12" Red	Section Beacon Backplate	Cabinets	Master code		
8 T-02-0001 1 Section Beacon Backplate 8 T-02-0080 12 inch Beacon 4 T-02-0330 LED Module 12" Red	8 T-02-0001 1 Section Beacon Backplate 8 T-02-0080 12 inch Beacon 4 T-02-0330 LED Module 12" Red 4 T-02-0340 LED Module 12" Yellow Foles 2 T-04-0051 Steel Strain Pole 36 foot REQUIRED Electrical Contractor Name	1	T-01-0000	Aluminum Cabinet (Beacon)	
8 T-02-0001 1 Section Beacon Backplate 8 T-02-0080 12 inch Beacon 4 T-02-0330 LED Module 12" Red	8 T-02-0001 1 Section Beacon Backplate 8 T-02-0080 12 inch Beacon 4 T-02-0330 LED Module 12" Red 4 T-02-0340 LED Module 12" Yellow Foles 2 T-04-0051 Steel Strain Pole 36 foot REQUIRED Electrical Contractor Name	Signals			
8 T-02-0080 12 inch Beacon 4 T-02-0330 LED Module 12" Red	8 T-02-0080 12 inch Beacon 4 T-02-0330 LED Module 12" Red 4 T-02-0340 LED Module 12" Yellow **Toles** 2 T-04-0051 Steel Strain Pole 36 foot **EQUIRED** Electrical Contractor Name*		T-02-0001	1 Section Beacon Backplate	
4 T-02-0330 LED Module 12" Red	4 T-02-0330 LED Module 12" Red 4 T-02-0340 LED Module 12" Yellow **Toles** 2 T-04-0051 Steel Strain Pole 36 foot **EQUIRED** Electrical Contractor Name*			·	
	4 T-02-0340 LED Module 12" Yellow **Toles** 2 T-04-0051 Steel Strain Pole 36 foot **REQUIRED** Electrical Contractor Name	4			
4 T-02-0340 LED Module 12" Yellow	2 T-04-0051 Steel Strain Pole 36 foot REQUIRED Electrical Contractor Name	4		LED Module 12" Yellow	
	2 T-04-0051 Steel Strain Pole 36 foot REQUIRED Electrical Contractor Name		•	·	
Poles	Electrical Contractor Name	Poles			
2 T-04-0051 Steel Strain Pole 36 foot	Electrical Contractor Name	2	T-04-0051	Steel Strain Pole 36 foot	
	Electrical Contractor Name	REQUIRED			
DECHIPED			ectrical Contractor	Name	
REQUIRED Electrical Contractor Name	Electrical Contractor Supervisor Contact nu				
		Electrica	al Contractor Supe	ervisor	Contact nur

BOURBON COUNTY Contract ID: 244401 FD04 009 0068 001-902 Page 70 of 124 Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS NOTES SPACING OR PITCH OR SPIRAL AND THE TRAFFIC SIGNAL ESTIMATE OF QUANTITIES MEASUREMENT, CONST, AND MISC JTEM NO. BOURBON COUNTY OF TIES BAR ALL COUNTY OF BOURBON 03.12 WIRING INSTALLATION.
SEE TRAFFIC OPERATIONS WEBSITE FOR WORD DOCUMENT TO REPLACE
CHARTS FOR WIRING TO SHOW CHANGES FOR EQUIPMENT GROUNDING. BARS CONSTRUCTION AND MEASUREMENT NOTES THAT ARE CONTRARY TO SECTION 723 VERTICAL ROJECT . GROUND SLOPE" SUBSECTION: 03.02 POLES AND BASES INSTALLATION. B) REVISION: REPLACE ENTIRE TABLE WITH THE FOLLOWING: SOIL | PANTA (FEET) DRILLED SHAFT DATA 20-01470-80-120 20-01470-80-120 20-01470-80-120 DIAMETER (IN.) **WWWWWWWWWWWW44** MAXIMUM SERVICE FORCES MAX SERVICE MOMENT (FT-KIPS) SUBSECTION: REVISION: SUBSECTION: REVISION: I. CONTRACTOR SHALL SECURE THE SIGNATURES OF KYTC'S PROJECT ENGINEER AND THE ELECTRICAL CONTRACTOR'S PREAM ON THE PROJECT MATERIALS FROM. IF THE RELECTRICAL CONTRACTOR'S PREAM ON THE PROJECT MATERIALS FROM. IF THE PREASE FORM. IF THE PROJECT WAS INTEREDIATED BY THE PROJECT WAS INTEREDIATED SHOWN TO CONTRACTOR SHALL EMAIL THE WISCONTRACTOR SHALL EMAIL THE PROJECT MATERIALS RELESS FORM WITH REQUIRED SIGNATURES TO THE WASFERONSE AT MAILS STAMPERWY. GOV AND SHALL NOTIFY THE WASFERONSE TO THE WASFERONSE AT MAILS STAMPERWY. GOV AND SHALL NOTIFY THE WASFERONSE SHOWN SHALL AND CONTACT THE SYSTEM OPERATIONS BY THE DIVISION OF TRAFFIC OPERATIONS BY PHONE GOZ-782-530-835) OF EMAIL KIM. STAMPERWY. GOV, LARRY, TISTIBHORY, CONTACT THE SYSTEM OPERATIONS BROWN TO THE DIVISION OF TRAFFIC OPERATIONS BY PHONE GOZ-782-55450-60-782-547) OR EMAIL AGENORALY THE PROJECT MATERIAL STAMPERWY. TO PACLILITATE PROGRAMMING OF ROUTERS.

4. CONTRACTOR SHALL ARRY OF A THE KYTC'S DIVISION OF EQUIPMENT WASFENOUSE (1239 MILKINSON BOLLEVARD, THE PROBREMANCED OATETTIME FOR MATERIAL PROGRAMMING OF ROUTERS. ADD SENTENCE TO SECTION 835.17. ALL WIRE SHALL HAVE WORDING ADDED TO THE OUTER JACKET THAT STATES : PROPERTY OF KENTUCKY TRANSPORTATION CABINET 502 564 05501; THE CONTRACTOR SHALL BE RESPONSIBLE FOR PICKING UP MATERIALS FOR INSTALL ITEMS AT VITCS DIVISION OF COURPMENT WAREHOUSE US WILLINGNOS BOULE-MORD, FRANKFORT, K. 40622. THE FOLLOWING PROCEDURES SHALL BE FOLLOWED FOR MATERIAL RELEASE. FALLORE TO FOLLOWED FOR SHALL BE FOLLOWED FOR MATERIAL RELEASE. FALLORED FOR MATERIAL RELEASE. DISTRIBUTE MATERIALS BOOK MARTVAL. THE CONTRACTOR SHALL MAKE AN INSPECTION OF THE PROJECT SITE PRIOR TO SUBMITTING A BLD AND SHALL BE THOROUGHLY FAMILLARIZED WITH EXISTING CONDITIONS, SUBMISSIONS OF A BID WILL BE CONSIDERED AN AFFIRMATION OF THIS INSPECTION HAVING BEEN COMPLETED. THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION, AND OTHER SPECIAL NOTES AND SPECIFICATIONS WILL APPLY ON THIS PROJECT. SEE SECTION 706, 723, AND 112 FOR MESSUREMENT AND OTHER DETALLS. SEE SECTION SOF PRIAL REINFORCEMENT SPLICING. CABLE-NO. 14/5C
RESENCERT-400 LB
INSTALL STELL STRAIN POLE
1 NSTALL LED BEACON-12 IN
TARFIC SIGNAL POLE BASE
INSTALL-BEACON CONTROLLER-2 CIRCUIT
RENOVE SIGNAL EQUIPMENT ESTIMATE_OF_QUANTITIES ITEM DESCRIPTION 20408ES835 23157EN 24526ED 4886 4844 TRAFFIC SIGNAL LIN FT UNITS EACH EACH CU YD EACH TOTAL 1010 195 2 8 8 8.2 2-28-2024

BOURBON COUNTY FD04 009 0068 001-002 Contract ID: 244401 72" REFLECTIVE TAPE (IF SPECIFIED). CABINET
CROUND ROD
DEPTH VARIES
SEE SECTION 723,03.02 LOUVERS (TYP.) POLE BASE/SJGNAL HEAD DETAJLS FOR EQUIPMENT GROUND SIGNAL/PED MEADS, COMECT GREEN WIRE FROM SECT LASA. CABLE TO COMMECTOR THAT WILL BE INSTALLED MANDER ONE OF THE BOLYS FOR THE TOWN ASSEMBLY THAT COMMECTS THE MEADS. BARREL FOR THIS COMMECTS THE MEADS. BARREL FOR THIS COMMECTION. OWNITY AS STEEL STRAIN POLE BASE WITH SERVICE, POLE, PRECOMENDED BY STEEL STRAIN FOLE BASE WITH SERVICE, POLE, POLE, WAS ACTUREAND POLE MOUNTED CABINET GROUNDING DETAILS. BACKPLATE DETAIL 11111 4 GREEN (YELLOW) :2₽ E CONTRACTOR SHALL
CONFORM TO "SPECIAL
NOTE IIC FOR DRILLED
SHAFTS" 'n FOR EQUIPMENT GROWD,
COWNECT SPAN NIRES WITH

"A MIC BARE COPPER AT BULL RING,
THE GROUDING LUC SHALL BE
BROWNE THE.
WESSENGER CABLE

"ITP." STRAND VISE ņ BULL OWE CONTRACTOR SHALL INSTALL SPACERS
OWE REQUEST CONTRACTOR BOTTOM, 8
EDGE OF THE POLISED CONCRETE. THE
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SHA AERIAL CORNER DETAIL POLE
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CONCET SPAN WIRE TO POLE WITH
CONCETS SPAN WIRE TO POLE WITH
A MIG BARE COPPER. TO COUNCET SPAN
LLG SAIAL BE BROWNE TYPE. GROUNDING
ENT TESTS 1.5 FOOT OF BARE COPPER.
BETTERN EACH LUG. VISE JOHNNYBALLS OR STRAIN ISOLATORS SHALL NOT BE USED ON THE ATTACHMENT OF THE SPAN WIRE TO THE POLE. JNSTALL MESSENGER THROUGH STRAND AND BEND MESSENGER AT EXIT POINT. THERE SHALL BE A SEPARATE COLLAR USED FOR EACH SPAN. CONCRETE INSTALL WESSENCER THROUGH STRAND VISE AND BEND MESSENCER AT EXIT POINT, MESSENGER SMALL EXTEND 8" TO 10" BEYOND THE STRAND VISE YOKE, MESSENGER SHALL EXTEND 8" TO 10" BEYOND THE STRAND VISE YOKE, FOR UNDERGROUND SERVICE FEEDS, USE ! RIGID STEEL CONDUIT TO METER BASE ON EXTERIOR OF POLE DROP BOX CONNECT EACH STRAND VISE TO BUIL RING AT AERIAL CORNER. EXTERIOR CONDUIT MAY BE USED FOR EITHER OR BOTH ITHE FOLLOWING CONDITIONS: SERVICE GROUND RODS-VERTICAL REINFORCING BARS EQUALLY SPACED (SIZE AND NUMBER VARY) POLE GROUND ROD -FOR EXTERIOR SERVICE GROUNDING (OPTIONAL), USE % SCHEDULE 80 PVC "4 TIE OR SPIRAL BARS TO BE 12" ON CENTER - NOTE: INSTALL TWO BOLTS TOWARD CURB SIDE. 241/2" MAX, DIAMETER BOLT CIRCLE OUTSIDE OF FOUNDATION 3- CLR MAXIMUM DIAMETER OF ANCHOR BOLTS SHALL BE 21/4" JI ANCHOR BOLTS ARE STRAIGHT NOT JE ANCHOR BEND, THE METAL TEMPLATE SHALL BE JNSTALLED FOR STRUCTURAL INTEGRITY. POLE DE LEVEL HEX NUT, WASHER, AND LOCK WASHER ABOVE BASE PLATE (TYPJCAL) CARVED LOCATION J
//DIRECTION OF SPARE CURB SIDE CONDUIT. -MESSENGER CABLE TRAND VISE SPAN WIRE DETAIL CONTRACTOR SHALL PROVIDE A MINIMUM OF 6 INCHES OF GROUND WIRE FOR TESTING PRIOR TO CONNECTING THE WIRE TO ANY DISCONNEC CABINET OR POLE. LEAVE TOP OF GROUND RODS EXPOSED FOR ELECTRICAL INSPECTION. POLE GROUND - GROUND WIRE SHALL COME FROM THE GROUND ROD THROUGH THE PVC COMOUTL, CONNECTING TO THE POLE AND THEN TO EACH RIGID STEEL GROUNDING BUSHING. PROVIDE SAG IN WIRES TO PREVENT WATER IN WEATHERHEAD SECTION OF THE PORT OF THE POR ALL GROUND RODS SHALL BE 24' FROM CONCRETE POLE BASE. BENDING DETAIL FOR TIE BARS CONCRETE GROUNDING REOUIREMENTS: NE CONTRACTOR STATE OF THE CASH I CONTRACTOR STATE OF THE CASH OF 1/4. SPARE SHEDULE 80 PVC CONDUIT, STUBBED OUT WITH END BELL BUSHING AND CAPPED AT BOTH ENDS. HEX NUT AND WASHER—UNDER BASE PLATE FOR PLUMBING OR RAKING POLE (TYP) 3. GALVANIZED CABLE
RINGS - 18 MAX, SPACING,
THE CABLE RINGS SHALL BE
INSTALLED ACROSS THE
WHOLE LENGTH OF THE SPAN, A MINIMUM OF TWO— BOLT THREADS SHALL EXTEND ABOVE THE NUT 1.-8-LAP CIAMP ASSEMBLY SPECIFCATIONS

Line Assembles was the resistence in accordance
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THE STAIN DOOR SHALL HAVE

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INSTALL 9 FROM THE TOP OF THE DOOR.

PLES STREET STALL BE WELCARATOR

PLES STREET STALL BE WELCARATOR

PLES STREET STALL BE WELL WITH

POLYCAMBONIE MATERIAL, AND WITH

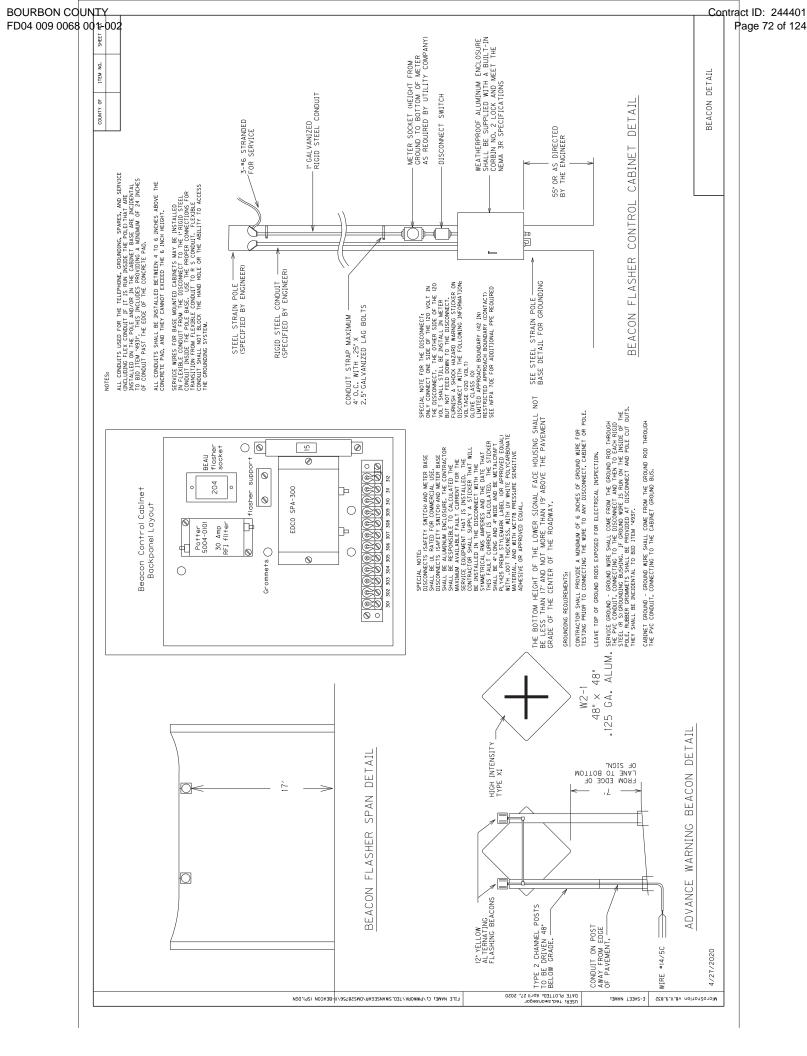
POLYCAMBONIE MATERIAL, AND WITH

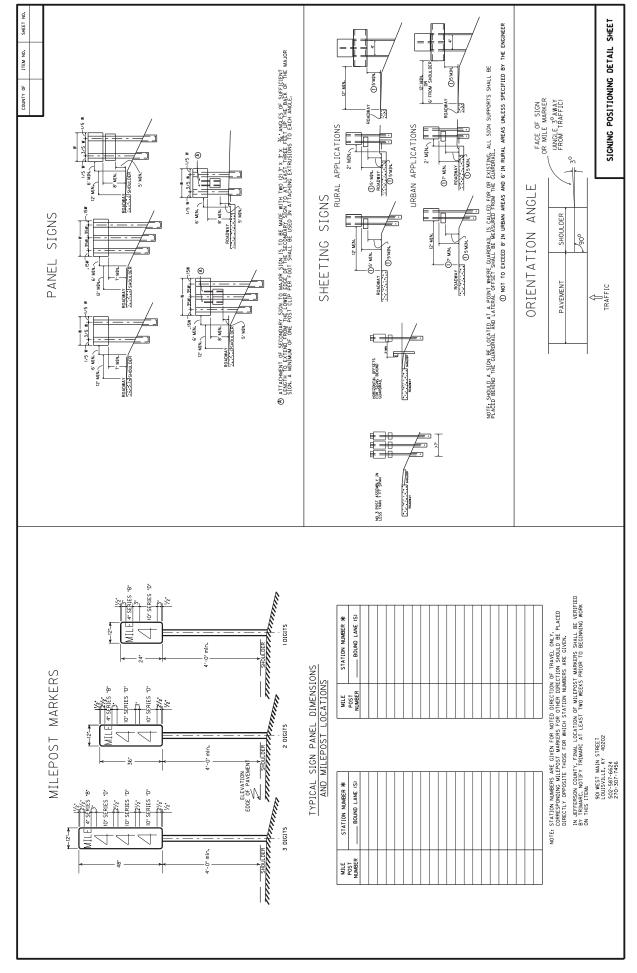
WINDERT AT ONE PROJECT

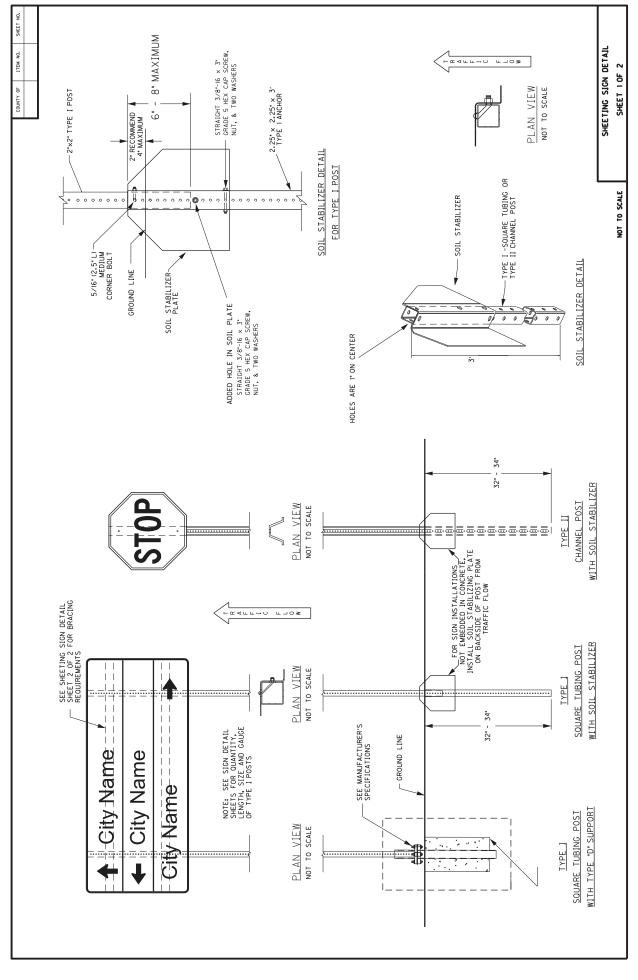
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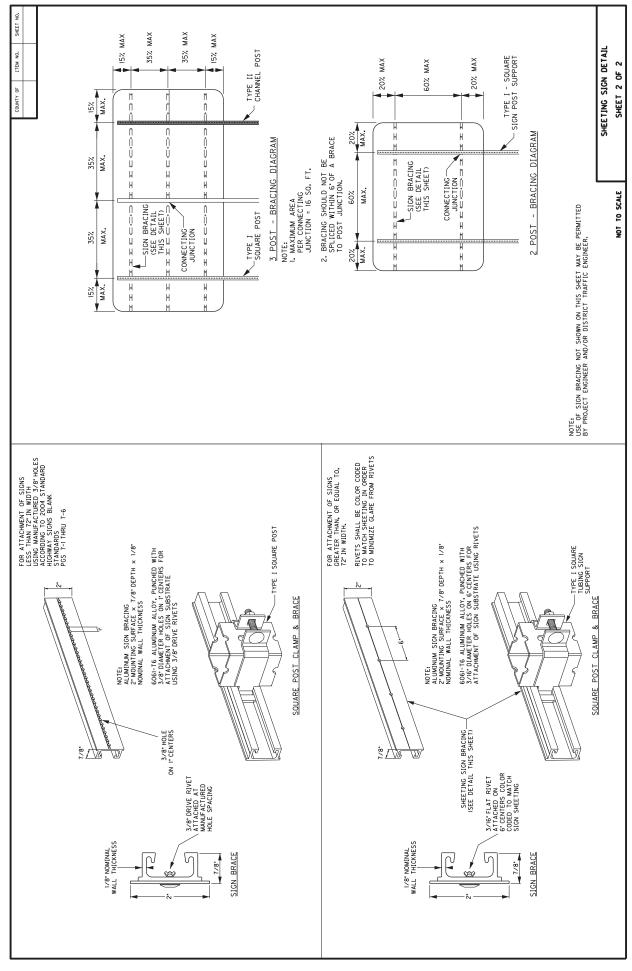
WI STEEL STRAIN POLE BASE WITH POLE GROUND DETAIL CLAMP/CLEVIS- ASTM A36 (GRADE 36)/ASTM A572 (GRADE 50) BOLTS (EXCEPT U- BOLTS)- HIGH STRENCTH ASTM A325, ASTM A449, OR ASTM A490 J- BOLTS- MINIMUM ASTM A36 Detoil 2 GALVANIZING- ASTM A153 STEEL Detail 3 -(Typical) % SCHEDULE 80 PVC CONDUIT WITH END BELL BUSHING FOR POLE GROUNDING CONDUCTOR Clomp Assembly Alt. 3 3-CLR GROUND ROD -FOR POLE ROUNDING -Threaded Boit Corter Pin-Lock Wother-Detoil 3 all comouis used for the telemone, grounding, spare, and service that are Installed in the pole base are incliental to bid item "2315fem" this includes Providing a winibulm of 24 inches of conduit past the edge of the concrete pole OVERHEAD SERVICE WIRES SHALL BE INSTALLED ON THE EXTERIOR OF THE POLE IN A I' RIGID STEEL COMBUIT WITH WEATHERHEAD, OR ON THE INSIDE THE STEEL STRAIN POLE IN FLEXIBLE COMBUIT. Threaded Bott Detail 1 FOR POLE BASE DEPTH SEE CHART IN SECTION 723 OF THE KENTUCKY STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION. PROVIDE 2 FOOT COIL IN SIGNAL CABLES TO PREVENT WATER ACCESS TO WEATHERHEADS FOR EACH SIGNAL HEAD. UNDERCROUND SERVICE WIRES SHALL BE INSTALLED IN 1º RIGID STEEL CONDUIT SHOWN ON THE CONTROLLER CABINET DETAIL SHEET. Detoil 2 Mosher -Lock Wosher -Nut -Cotter Pin -Threaded Boit -ALL CONDUITS SHALL BE INSTALLED BETWEEN 4 TO 6 INCHES ABOVE THE CONCRETE PAD, AND THEY CANNOT EXCEED THE 6 INCH HEIGHT. 000 17' - 19' & CONFORM TO FIGURE 4D-1 MUTCD LATEST EDITION SPAN DETAIL Clamp Assembly Alt. Clamp Assembly Alt. 5% MIN. SAG FOR ALL SPANS OR OTHERWISE NOTED 6/21/2023 USER: Jessica, goodwin DATE PLOTTED: June 21, 2023 Power InRoads v8.11.9.397 FILE NAME: C:/PWWORK/JESSICA,GOODWIN/DMS28756/07-POLES (PO),DGN E-SHEET NAME:

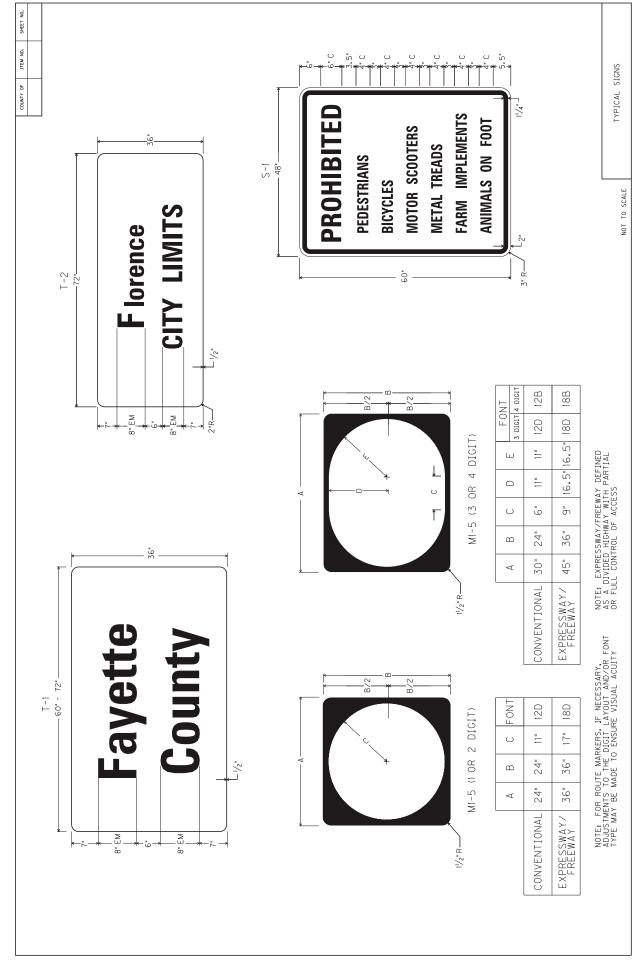
Page 71 of 124





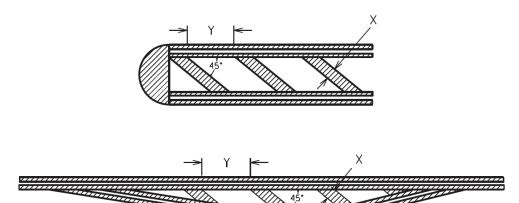






CROSS-HATCH PAVEMENT MARKINGS DETAIL

TYPICAL CROSS-HATCH MARKINGS



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

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

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

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

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

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

BOURBON COUNTY FD04 009 0068 001-002 Contract ID: 244401 Page 95 of 124



KENTUCKY TRANSPORTATION CABINET Department of Highways DIVISION OF CONSTRUCTION

TC 63-72 Rev. 08/2015 Page 1 of 1

GUARDRAIL DELIVERY VERIFICATION SHEET

SECTION 1: CONTRACT INFORMATION					
CONTRACT ID		CONTRACTOR			
SECTION ENGINEER		DISTRICT & COUNTY			
SECTION 2: GUARDRAIL DESCRIPTIONS & QUA	NTITIES				
DESCRIPTION	UNIT	QTY. LEAVING PROJECT	QTY. RECEIVED @ BB YARD		
Guardrail (includes end treatments & crash cushions)	LF				
Steel Posts	EACH				
Steel Blocks	EACH				
Wood Offset Blocks	EACH				
Back Up Plates	EACH				
Crash Cushion	EACH				
Nuts, Bolts, Washers	Bag/Bckt				
Damaged rail to maintenance facility	LF				
Damaged posts to maintenance facility	EACH				
SECTION 3: REQUIRED SIGNATURES PART 1 (re		fore leaving project site)			
SECTION ENGINEER'S REPRESENTATIVE NAME ((Pr	int.)				
SECTION ENGINEER'S REPRESENTATIVE SIGNATURE			DATE		
CONTRACTOR'S REPRESENTATIVE NAME (Print.)					
CONTRACTOR'S REPRESENTATIVE SIGNATURE			DATE		
SECTION 4: REQUIRED SIGNATURES PART 2 (re		, ,	-		
Note: All material on the truck must be counted & t	•	ity received column complet	ed before signatures.		
BAILEY BRIDGE YARD REPRESENTATIVE NAME (Print.)					
BAILEY BRIDGE YARD REPRESENTATIVE SIGNATURE			DATE		
CONTRACTOR'S REPRESENTATIVE NAME (Print.)					
CONTRACTOR'S REPRESENTATIVE SIGNATURE			DATE		
Note: Payment for the bid item, remove guardrail,					
received column. Payment will not be made for guassibmitted to the Section Engineer by the Bailey Bri		•	fication sheets are electronically		
			DATE		

PART II

SPECIFICATIONS AND STANDARD DRAWINGS

STANDARD SPECIFICATIONS

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

SUPPLEMENTAL SPECIFICATIONS

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

SPECIAL NOTE FOR PORTABLE CHANGEABLE MESSAGE SIGNS

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

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

2.0 MATERIALS.

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

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

2.2 Sign and Controls. All signs must:

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

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

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

> *Insert numerals as directed by the Engineer. Add other messages during the project when required by the Engineer.

2.3 Power.

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

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

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

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

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

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

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

CodePay ItemPay Unit02671Portable Changeable Message SignEach

Effective June 15, 2012

SPECIAL NOTE FOR TURF REINFORCING MAT

1.0 DESCRIPTION. Install turf reinforcement mat at locations specified in the Contract or as the Engineer directs. Section references herein are to the Department's Current Standard Specifications for Road and Bridge Construction.

2.0 MATERIALS.

2.1 Turf Reinforcement Mat (TRM). Use a Turf Reinforcement Mat defined as permanent rolled erosion control product composed of non-degradable synthetic fibers, filaments, nets, wire mesh and/or other elements, processed into a three-dimensional matrix of sufficient thickness and from the Department's List of Approved Materials. Mats must be 100% UV stabilized materials. For TRMs containing degradable components, all physical property values must be obtained on the non-degradable portion of the matting exclusively. Ensure product labels clearly show the manufacturer or supplier name, style name, and roll number. Ensure labeling, shipment and storage follows ASTM D-4873. The Department will require manufacturer to provide TRMs that are machine constructed web of mechanically or melt bonded nondegradable fibers entangled to form a three dimensional matrix. The Department will require all long term performance property values in table below to be based on non degradable portion of the matting alone. Approved methods include polymer welding, thermal or polymer fusion, or placement of fibers between two high strength biaxially oriented nets mechanically bound by parallel stitching with polyolefin thread. Ensure that mats designated in the plans as Type 4 mats, are not to be manufactured from discontinuous or loosely held together by stitching or glued netting or composites. Type 4 mats shall be composed of geosynthetic matrix that exhibits a very high interlock and reinforcement capacities with both soil and root systems and with high tensile modulus. The Department will require manufacturer to use materials chemically and biologically inert to the natural soil environments conditions. Ensure the blanket is smolder resistant without the use of chemical additives. When stored, maintain the protective wrapping and elevate the mats off the ground to protect them from damage. The Department will not specify these materials for use in heavily acidic coal seam areas or other areas with soil problems that would severally limit vegetation growth.

2.2 Classifications

The basis for selection of the type of mat required will be based on the long term shear stress level of the mat of the channel in question or the degree of slope to protect and will be designated in the contract. The Type 4 mats are to be used at structural backfills protecting critical structures, utility cuts, areas where vehicles may be expected to traverse the mat, channels with large heavy drift, channels with high shear stresses, and where higher factors of safety, very steep slopes and/or durability concerns are needed as determined by project team and designer and will be specified in the plans by designer.

Properties	Type 1	Type 2	Type 3	Type 4
Maximum Slope	1:1	1:1	0.5:1	0.5:1
(H:V)				
Un-vegetated Shear	$\geq 2.0 \text{ lbs/ft}^2$	≥ 2.0 lb/ft2	$\geq 2.0 \text{ lb/ft2}$	\geq 2.0 lb/ft2
	(≥ 96 Pa)	(≥ 96 Pa)"	(≥ 96 Pa)	(≥ 96 Pa)

Stress ^{b, c, d} ASTM D6460				
Vegetated Shear Stress	$\geq 6.0 \text{ lbs/ft}^2$	$\geq 8.0 \text{ lb/ft2}$	≥ 10.0 lb/ft2	≥ 12.0 lb/ft2
ASTM D6460	(≥ 287 Pa)	(≥ 383 Pa)	(≥ 479 Pa)	(≥ 575 Pa)
Seedling Emergence d ASTM D7322	≥ 250%	≥ 250%	≥ 250%	≥ 250%
MD Material Tensile Strength ^{d, f} ASTM D6818	≥ 150 lbs/ft (≥ 2.2 kN/m)	≥ 175 lbs/ft (≥ 2.6 kN/m)	≥ 200 lbs/ft (≥ 2.9 kN/m)	≥ 1,500 lbs/ft (≥ 21.9 kN/m)
TD Material Tensile Strength ^{d, f} ASTM D6818	\geq 150 lbs/ft (\geq 2.2 kN/m)	≥ 175 lbs/ft (≥ 2.6 kN/m)	≥ 200 lbs/ft (≥ 2.9 kN/m)	≥ 1,500 lbs/ft (≥ 21.9 kN/m)
Mass Per Unit Area ^d ASTM D6566	$\ge 8.0 \text{ oz/yd}^2$ ($\ge 271 \text{ g/m}^2$))	$\geq 8.0 \text{ oz/yd}^2$ ($\geq 271 \text{ g/m2}$)	$\geq 8.0 \text{ oz/yd}^2$ ($\geq 271 \text{ g/m2}$)	≥ 8.0 oz/yd2 (≥ 271 g/m2)
Material Thickness ^d ASTM D6525	$\geq 0.25 \text{ in}$ ($\geq 6.35 \text{ mm}$)	$\geq 0.25 \text{ in}$ ($\geq 6.35 \text{ mm}$)	\geq 0.25 in (\geq 6.35 mm)	≥ 0.25 in (≥ 6.35 mm)
UV Stability ^{c, e} ASTM D4355	≥ 80% @ 500 hrs	≥ 80% @ 500 hrs	≥ 80% @ 1,000 hrs	≥ 90% @ 1,000 hrs

- a. For Type 4 mats, property values tested per ASTM D6818 and D6525 are reported as minimum average roll values (MARVs). MARVs are calculated as the typical minus two standard deviations. Statistically, it yields a 97.7% degree of confidence that any samples taken from quality assurance testing will exceed the value reported.
- b. Required minimum shear stress TRM (un-vegetated) can sustain without physical damage or excess erosion (> 12.7 mm (0.5 in.) soil loss during successive, minimum 30 minute flow events in large scale testing.
- c. Acceptable large-scale testing protocol may include ASTM D6460, or other independent testing deemed acceptable by the engineer. Large-scale performance testing typically involves limited soil types and vegetative stands, therefore it is recommended that an appropriate factor of safety be used in design and product selection (see Guidance Document for further information).
- d. Typical values are calculated as the average value, it yields a 50% degree of confidence that any samples taken from quality assurance testing will exceed the value reported.
- e. Required minimum shear stress TRM (fully vegetated) can sustain without physical damage or excess erosion (> 12.7 mm (0.5 in.) soil loss during successive, minimum 30 minute flow events in large scale testing.
- f. For TRMs containing degradable components, property values must be obtained on the non-degradable portion of the matting alone.

NOTE: TRMs are typically used in hydraulic applications, such as high flow ditches and channels, steep slopes, stream banks, and shorelines, where erosive forcers may exceed the limits of natural, unreinforced vegetation or in areas where limited vegetation establishment is anticipated.

2.3 Quality Assurance Sampling, Testing, and Acceptance

A) Performance Testing: The Department will require AASHTO's NTPEP index testing. The Department will also require the manufacturer to perform internal MARV testing at a Geosynthetic Accreditation Institute – Laboratory Accreditation Program (GAI-LAP) accredited laboratory for tensile strength, tensile elongation, mass per unit area, and thickness once every 24,000 yds of production or whatever rate is required to ensure

- 97.7% confidence under ASTM D4439& 4354. The Department will require Full scale testing for slope and channel applications shear stress shall be done under ASTM D 6459, ASTM D 6460-07 procedures.
- B) Provide TRM listed on the Department's List of Approved Materials. Prior to inclusion on the LAM, the manufacturer of TRM must meet the physical and performance criteria as outlined in the specification and submit a Letter Certifying compliance of the product under the above ASTM testing procedures and including a copy of report from Full Scale Independent Hydraulics Facility that Fully Vegetated Shear Stress meets shear stress requirements tested under D6459 and D6460-07.
- C) Contractors will provide a Letter of Certification from Manufacturer stating the product name, manufacturer, and that the product MARV product unit testing results meets Department criteria. Provide Letters once per project and for each product.
- D) Acceptance shall be in accordance with ASTM D-4759 based on testing performed by a Geosynthetic Accreditation Institute Laboratory Accreditation Program (GAI-LAP) accredited laboratory using Procedure A of ASTM D-4354.

Current mats meeting the above criteria are shown on the Department's List of Approved Materials. Mats that exceed the criteria for KYTC Types 1-4 are available. Contact an erosion control material supplier for more information.

- **2.4 Fasteners.** When the mat manufacturer does not specify a specific fastener, use steel wire U-shaped staples with a minimum diameter of 0.09 inches (11 gauge), a minimum width of one inch and a minimum length of 12 inches. Use a heavier gauge when working in rocky or clay soils and longer lengths in sandy soils as directed by Engineer or Manufacturer's Representative. Provide staples with colored tops when requested by the Engineer.
- **3.0 CONSTRUCTION.**, Provide a Manufacturer's Representative on-site to oversee and approve the initial installation of the mat. When requested by the Engineer, provide a letter from the Manufacturer approving the installation. When there is a conflict between the Department's criteria and the Manufacturer's criteria, construct using the more restrictive. The Engineer and Manufacturer's Representative must approve all alternate installation methods prior to execution. Construct according to the Manufacturer's recommendations and the following as minimum installation technique:
- **3.1 Site Preparation.** Smoothly grade areas to be treated with matting and compact. Remove large

rocks, soil clods, vegetation, roots, and other sharp objects that could keep the mat from intimate contact with subgrade. Prepare seedbed by loosening the top 2 to 3 inch of soil.

3.2 Installation. Install mats according to Standard Drawing Sepias "Turf Mat Channel Installation" and "Turf Mat Slope Installation." Install mats at the specified elevation and alignment. Anchor the mats with staples with a minimum length of 12 inches. Use longer anchors for installations in sandy, loose, or wet soils as directed by the Engineer or Manufacturer's Representative. The mat should be in direct contact with the soil surface. Infill and overfill the mat with a minimum of ½" of soil as directed by the Manufacturer.

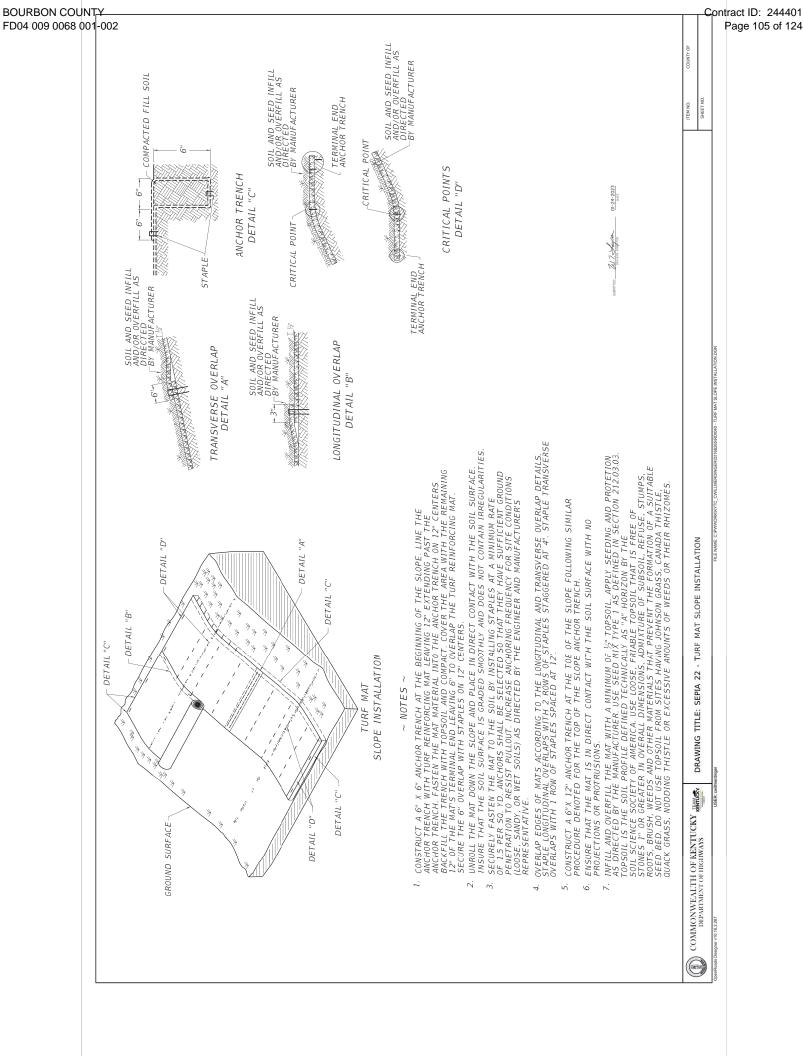
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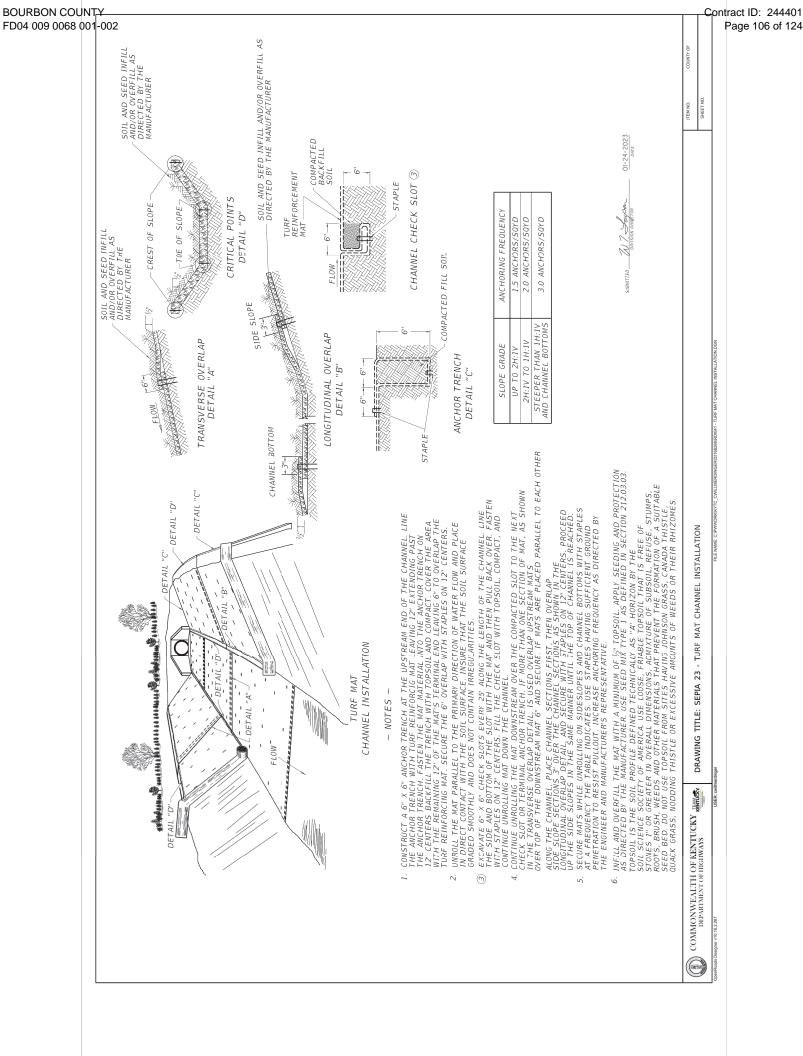
4.0 MEASUREMENT. The Department will measure the quantity of Turf Reinforcement Mat by the square yard of surface covered. The Department will not measure preparation of the bed, providing a Manufacturer's Representative, topsoil, or seeding for payment and will consider them incidental to the Turf Reinforcement Mat. The Department will not measure any reworking of slopes or channels for payment as it is considered corrective work and incidental to the Turf Reinforcement Mat. Seeding and protection will be an incidental item.

5.0 PAYMENT. The Department will make payment for the completed and accepted quantities under the following:

<u>Code</u>	Pay Item	Pay Unit
23274EN11F	Turf Reinforcement Mat 1	Square Yard
23275EN11F	Turf Reinforcement Mat 2	Square Yard
23276EN11F	Turf Reinforcement Mat 3	Square Yard
23277EN11F	Turf Reinforcement Mat 4	Square Yard

June 29, 2023





SPECIAL NOTE FOR BARCODE LABEL ON PERMANENT SIGNS

- **1.0 DESCRIPTION.** Install barcode label on sheeting signs. Section references herein are to the Department's Standard Specifications for Road and Bridge Construction, current edition.
- **2.0 MATERIALS.** The Department will provide the Contractor with a 2 inch x 1 inch foil barcode label for each permanent sheeting sign. A unique number will be assigned to each barcode label.

The Contractor shall contact the Operations and Pavement Management Branch in the Division of Maintenance at (502) 564-4556 to obtain the barcode labels.

3.0 CONSTRUCTION. Apply foil barcode label in the lower right quadrant of the sign back. Signs where the bottom edge is not parallel to the ground, the lowest corner of the sign shall serve as the location to place the barcode label. The barcode label shall be placed no less than one-inch and no more than three inches from any edge of the sign. The barcode must be placed so that the sign post does not cover the barcode label.

Barcodes shall be applied in an indoor setting with a minimum air temperature of 50°F or higher. Prior to application of the barcode label, the back of the sign must be clean and free of dust, oil, etc. If the sign is not clean, an alcohol swab shall be used to clean the area. The area must be allowed to dry prior to placement of the barcode label.

Data for each sign shall include the barcode number, MUTCD reference number, sheeting manufacturer, sheeting type, manufacture date, color of primary reflective surface, installation date, latitude and longitude using the North American Datum of 1983 (NAD83) or the State Plane Coordinates using an x and y ordinate of the installed location.

Data should be provided electronically on the TC 71-229 Sign Details Information and TC 71-230 Sign Assembly Information forms. The Contractor may choose to present the data in a different format provided that the information submitted to the Department is equivalent to the information required on the Department TC forms. The forms must be submitted in electronic format regardless of which type of form is used. The Department will not accept PDF or handwritten forms. These completed forms must be submitted to the Department prior to final inspection of the signs. The Department will not issue formal acceptance for the project until the TC 71-229 and TC-230 electronic forms are completed for all signs and sign assemblies on the project.

4.0 MEASUREMENT. The Department will measure all work required for the installation of the barcode label and all work associated with completion and submission of the sign inventory data (TC 71-229 and TC 71-230).

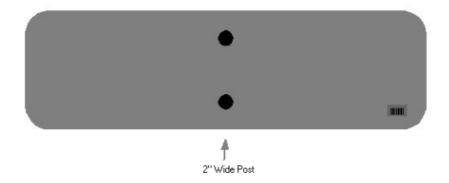
The installation of the permanent sign will be measured in accordance to Section 715.

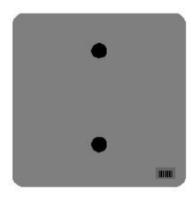
5.0 PAYMENT. The Department will make payment for the completed and accepted quantities under the following:

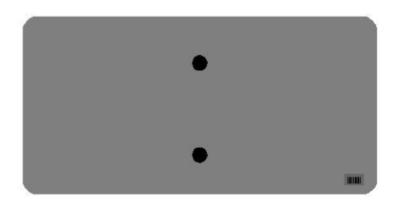
CodePay ItemPay Unit24631ECBarcode Sign InventoryEach

The Department will not make payment for this item until all barcodes are installed and sign inventory is complete on every permanent sign installed on the project. The Department will make payment for installation of the permanent sign in accordance to Section 715. The Department will consider payment as full compensation for all work required under this special note.

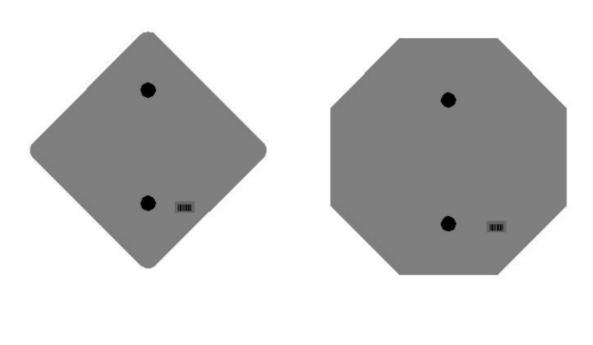
One Sign Post

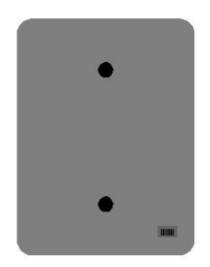


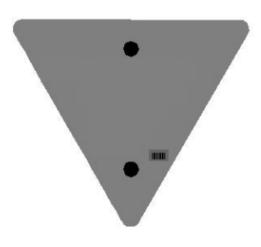




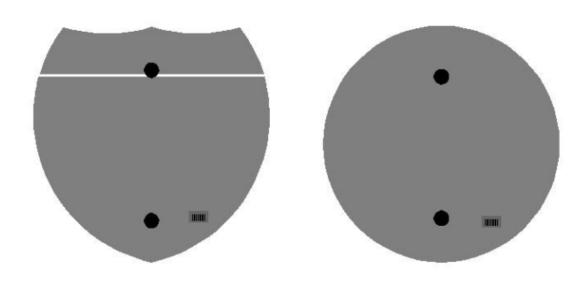
One Sign Post

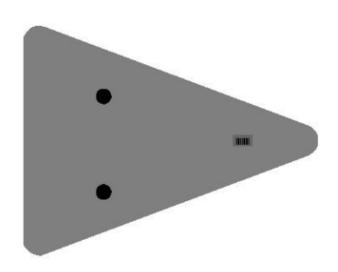






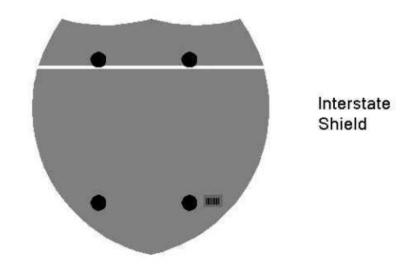
One Sign Post

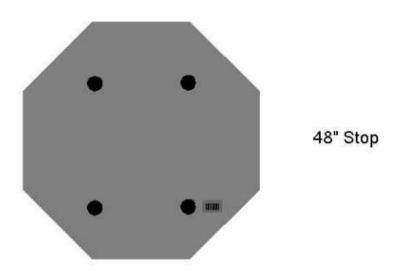




BOURBON COUNTY FD04 009 0068 001-002

Double Sign Post

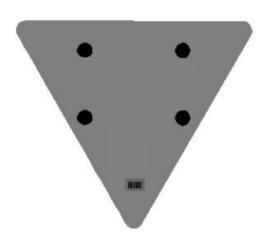




2 Post Signs







2020 STANDARD DRAWINGS THAT APPLY

ROADWAY ~ BARRIERS ~

TYPICAL BARRIER INSTALLATIONS	
TYPICAL GUARDRAIL INSTALLATIONS	RBI-001-12
TYPICAL GUARDRAIL INSTALLATIONS	RBI-002-07
TYPICAL INSTALLATION FOR GUARDRAIL END TREATMENT TYPE 2A	RBI-003-09
<u>GUARDRAIL HARDWARE</u>	
STEEL BEAM GUARDRAIL (W-BEAM)	RBR-001-13
GUARDRAIL COMPONENTS	
GUARDRAIL TERMINAL SECTIONS	RBR-010-06
STEEL GUARDRAIL POSTS	
GUARDRAIL END TREATMENT TYPE 2A	RBR-025-06
~ DRAINAGE ~	
BOX INLETS AND OUTLETS	
DROP BOXES	
DROP BOX INLET TYPE 1	RDB-001-12
PIPE AND BOX CULVERT HEADWALLS	
SLOPED AND FLARED HEADWALLS FOR 12" TO 27" PIPE	RDH-020-03
TYPICAL DRAINAGE INSTALLATIONS	
CULVERT, ENTRANCE & STORM SEWER PIPE TYPES & COVER HEIGHTS (12" – 24" PIPE)	RDI-001-10
PIPE BEDDING FOR CULVERTS, ENTRANCE, AND STORM SEWER PIPE	RDI-020-10
PIPE BEDDING FOR CULVERTS, ENTRANCE, AND STORM SEWER, REINFORCED CONC. PIPE	RDI-021-01
PIPE BEDDING, TRENCH CONDITION	RDI-025-06
PIPE BEDDING, TRENCH CONDITION, REINFORCED CONC. PIPE	RDI-026-01
EROSION CONTROL BLANKET SLOPE INSTALLATION	RDI-040-01
MISCELLANEOUS DRAINAGE	DDV 240 02
TEMPORARY SILT FENCE	
SILT TRAP - TYPE A	
SILT TRAP - TYPE B	
SILT TRAP - TYPE C	RDX-230-01
~ GENERAL ~	
MISCELLANEOUS STANDARDS	
MISCELLANEOUS STANDARDS	RGX-001-06

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Standard Drawings That Apply Page 2 of 2

TRAFFIC ~ PERMANENT ~

<u>MARKERS</u>	
FLEXIBLE DELINEATOR POST ARRANGEMENTS FOR HORIZONTAL CURVES	TPM-170-01
PAVEMENT STRIPING DETAILS FOR TWO LANE TWO WAY ROADWAYS	Sepia 017
TYPICAL MARKINGS FOR ISLANDS AND MEDIANS	TPM-205
TYPICAL MARKINGS FOR TURN LANES PAGE 1	TPM-206
TYPICAL MARKINGS FOR TURN LANES PAGE 2	TPM-207
RUMBLE STRIPS	
SHOULDER & EDGELINE RUMBLE STRIPS PLACEMENT DETAILS	TPR-115
RUMBLE STRIP DETAILS MULTI-LANE ROADWAYS AND RAMPS	TPR-130
~ TEMPORARY ~	
TRAFFIC CONTROL	
LANE CLOSURE MULTI-LANE HIGHWAY CASE I	TTC-115-04
TEMPORARY PAVEMENT MARKER ARRANGEMENTS FOR CONSTRUCTION ZONES	TTC-155-02
TEMPORARY PAVEMENT MARKER ARRANGEMENTS FOR LANE CLOSURES	TTC-160-02
<u>DEVICES</u>	
DOUBLE FINES ZONE SIGNS	TTD-120-03
SPEED ZONE SIGNING FOR WORK ZONES	TTD-130

PAVEMENT CROSS-SECTION TWO LANE ROADWAY

011111111111111111111111111111111111111	TYPE OF	NON	NON-STATE PRIMARY ROUTES	IMARY RO	UTES	STA	STATE PRIMARY ROUTES
WAY	PAVEMENT STRIPING	< 10	< 1000 ADT	>= 10	>= 1000 ADT		ANY ADT
0		WIDTH	MATERIAL	WIDTH	WIDTH MATERIAL WIDTH MATERIAL WIDTH	WIDTH	MATERIAL*
< 16' @	< 16' (d) EDGELINE STRIPES ONLY	4"	PAINT	4"	PAINT	9	TYPE I TAPE (CONCRETE)
16' 70 < 20'	16' TO < 20' EDGELINE STRIPES ONLY OR CENTERLINE STRIPE ONLY	4"	PAINT	4"	PAINT	9	THERMO (ASHPALT) TYPE I TAPE (CONCRETE)
>=20' ③	CENTERLINE AND EDGELINE STRIPES	4" 5	4" S PAINT	6"	PAINT	9	THERMO (ASHPALT) TYPE I TAPE (CONCRETE)

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

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

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

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

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

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

EDGELINES MAY BE OMITTED ON NON-STATE PRIMARY ROUTES WITH A TRAVELED WAY WIDTH GREATER THAN OR EQUAL TO 20 FEET AND AN ADT LESS THAN 1,000. (2)

OF TRAFFIC OPERATIONS.

(4)

EDGELINES MAY BE OMITTED, BASED ON ENGINEERING JUDGMENT, IN AREAS WHERE THE PAVEMENT EDGE IS DELINEATED BY PHYSICAL OBJECTS SUCH AS CURBS, PARKING SPACES, OR OTHER MARKINGS. EDGELINES SHOULD BE INSTALLED ON ROADWAYS WITH CURB AND GUTTER IF THE POSTED SPEED LIMIT IS 45 MPH OR GREATER. 9

USE WITH CUR. STD. DRAWING NOT TO

rPR-120 & TPR-175 KENTUCKY

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



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PART III

EMPLOYMENT, WAGE AND RECORD REQUIREMENTS

TRANSPORTATION CABINET DEPARTMENT OF HIGHWAYS

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

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

I. APPLICATION

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

II. NONDISCRIMINATION OF EMPLOYEES

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

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

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

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

Revised: January 25, 2017

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EXECUTIVE BRANCH CODE OF ETHICS

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

KRS 11A.040 (7) provides:

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

KRS 11A.040 (9) states:

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

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

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

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

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

In case of doubt, the law permits you to request an advisory opinion from the Executive Branch Ethics Commission, 1025 Capital Center Drive, Suite 104, Frankfort, Kentucky 40601; telephone (502) 564-7954.

Revised: May 23, 2022

Kentucky Equal Employment Opportunity Act of 1978

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

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

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

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

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

EMPLOYEE RIGHTS UNDER THE FAIR LABOR STANDARDS ACT

THE UNITED STATES DEPARTMENT OF LABOR WAGE AND HOUR DIVISION

FEDERAL MINIMUM WAGE

\$7.25

BEGINNING JULY 24, 2009

OVERTIME PAY

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

CHILD LABOR

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

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

No more than

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

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

TIP CREDIT

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

ENFORCEMENT

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

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

ADDITIONAL INFORMATION

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



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PART IV

INSURANCE

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

current edition

PART V

BID ITEMS

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PROPOSAL BID ITEMS

Report Date 3/21/24

Section: 0001 - PAVING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0010	00001		DGA BASE	432.00	TON		\$	
0020	00018		DRAINAGE BLANKET-TYPE II-ASPH	850.00	TON		\$	
0030	00205		CL3 ASPH BASE 1.50D PG64-22	406.00	TON		\$	
0040	00212		CL2 ASPH BASE 1.00D PG64-22	204.00	TON		\$	
0050	00214		CL3 ASPH BASE 1.00D PG64-22	174.00	TON		\$	
0060	00307		CL2 ASPH SURF 0.38B PG64-22	88.00	TON		\$	
0070	00388		CL3 ASPH SURF 0.38B PG64-22	75.00	TON		\$	
0800	20550ND		SAWCUT PAVEMENT	832.00	LF		\$	
0090	21289ED		LONGITUDINAL EDGE KEY	832.00	LF		\$	
0100	24970EC		ASPHALT MATERIAL FOR TACK NON- TRACKING	2.00	TON		\$	

Section: 0002 - ROADWAY

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0110	01982		DELINEATOR FOR GUARDRAIL MONO DIRECTIONAL WHITE	2.00	EACH		\$	
0120	02159		TEMP DITCH	408.00	LF		\$	
0130	02160		CLEAN TEMP DITCH	204.00	LF		\$	
0140	02200		ROADWAY EXCAVATION	876.00	CUYD		\$	
0150	02242		WATER	160.00	MGAL		\$	
0160	02351		GUARDRAIL-STEEL W BEAM-S FACE	73.00	LF		\$	
0170	02369		GUARDRAIL END TREATMENT TYPE 2A	1.00	EACH		\$	
0180	02381		REMOVE GUARDRAIL	75.00	LF		\$	
0190	02650		MAINTAIN & CONTROL TRAFFIC BOURBON US 68	1.00	LS		\$	
0200	02671		PORTABLE CHANGEABLE MESSAGE SIGN	1.00	EACH		\$	
0210	02697		EDGELINE RUMBLE STRIPS	536.00	LF		\$	
0220	02701		TEMP SILT FENCE	408.00	LF		\$	
0230	02703		SILT TRAP TYPE A	1.00	EACH		\$	
0240	02704		SILT TRAP TYPE B	1.00	EACH		\$	
0250	02705		SILT TRAP TYPE C	1.00	EACH		\$	
0260	02706		CLEAN SILT TRAP TYPE A	1.00	EACH		\$	
0270	02707		CLEAN SILT TRAP TYPE B	1.00	EACH		\$	
0280	02708		CLEAN SILT TRAP TYPE C	1.00	EACH		\$	
0290	02726		STAKING BOURBON US 68	1.00	LS		\$	
0300	02775		ARROW PANEL	1.00	EACH		\$	
0310	05952		TEMP MULCH	2,770.00	SQYD		\$	
0320	05953		TEMP SEEDING AND PROTECTION	2,078.00	SQYD		\$	
0330	05963		INITIAL FERTILIZER	.21	TON		\$	
0340	05964		MAINTENANCE FERTILIZER	.13	TON		\$	
0350	05985		SEEDING AND PROTECTION	4,155.00	SQYD		\$	
0360	05992		AGRICULTURAL LIMESTONE	2.58	TON		\$	
0370	06401		FLEXIBLE DELINEATOR POST-M/W	11.00	EACH		\$	
0380	06406		SBM ALUM SHEET SIGNS .080 IN	20.00	SQFT		\$	
0390	06410		STEEL POST TYPE 1	62.00	LF		\$	

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PROPOSAL BID ITEMS

Report Date 3/21/24

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LINE	BID CODE	ALT DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0400	06542	PAVE STRIPING-THERMO-6 IN W	1,201.00	LF		\$	
0410	06545	PAVE STRIPING-THERMO-8 IN Y	73.00	LF		\$	
0420	06550	PAVE STRIPING-TEMP REM TAPE-W	485.00	LF		\$	
0430	06551	PAVE STRIPING-TEMP REM TAPE-Y	73.00	LF		\$	
0440	06568	PAVE MARKING-THERMO STOP BAR-24IN	50.00	LF		\$	
0450	06569	PAVE MARKING-THERMO CROSS-HATCH	50.00	SQFT		\$	
0460	06574	PAVE MARKING-THERMO CURV ARROW	7.00	EACH		\$	
0470	22400NN	REMOVE AND RELOCATE SIGN ASSEMBLY	2.00	EACH		\$	
0480	23274EN11F	TURF REINFORCEMENT MAT 1	589.00	SQYD		\$	
0490	24631EC	BARCODE SIGN INVENTORY	4.00	EACH		\$	
0500	40027	ROCK EXCAVATION	488.00	CUYD		\$	

Section: 0003 - DRAINAGE

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0510	00521		STORM SEWER PIPE-15 IN	21.00	LF		\$	
0520	00522		STORM SEWER PIPE-18 IN	8.00	LF		\$	
0530	01490		DROP BOX INLET TYPE 1	1.00	EACH		\$	
0540	01585		REMOVE DROP BOX INLET	1.00	EACH		\$	
0550	02625		REMOVE HEADWALL	1.00	EACH		\$	
0560	40023		KYTC S&F HEADWALL-18 IN	1.00	EACH		\$	

Section: 0004 - SIGNALIZATION

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0570	04844		CABLE-NO. 14/5C	1,010.00	LF		\$	
0580	04886		MESSENGER-15400 LB	195.00	LF		\$	
0590	04932		INSTALL STEEL STRAIN POLE	2.00	EACH		\$	
0600	20408ES835		INSTALL LED BEACON-12 IN	8.00	EACH		\$	
0610	23157EN		TRAFFIC SIGNAL POLE BASE	8.20	CUYD		\$	
0620	24526ED		INSTALL-BEACON CONTROLLER-2 CIRCUIT	1.00	EACH		\$	
0630	24955ED		REMOVE SIGNAL EQUIPMENT	1.00	EACH		\$	

Section: 0005 - DEMOBILIZATION

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0640	02569		DEMOBILIZATION	1.00	LS		\$	