

CALL NO. 320
CONTRACT ID. 192127
KENTON COUNTY
FED/STATE PROJECT NUMBER FD05 059 0025 009-011
DESCRIPTION DIXIE HIGHWAY (US 25)
WORK TYPE ASPHALT RESURFACING
PRIMARY COMPLETION DATE 11/15/2019

LETTING DATE: March 22,2019

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN DAYLIGHT TIME March 22,2019. Bids will be publicly announced at 10:00 AM EASTERN DAYLIGHT TIME.

NO PLANS ASSOCIATED WITH THIS PROJECT.

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

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PART I SCOPE OF WORK

ADMINISTRATIVE DISTRICT - 06

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COUNTY - KENTON

PCN - MP05900251901 FD05 059 0025 009-011

DIXIE HIGHWAY (US 25) (MP 9.802) BEGIN AT THE I-75 RAMPS EXTENDING NORTH TO KY 1072 (MP 10.995), A DISTANCE OF 01.19 MILES.ASPHALT RESURFACING

GEOGRAPHIC COORDINATES LATITUDE 39:03:25.00 LONGITUDE 84:32:40.00

COMPLETION DATE(S):

COMPLETED BY 11/15/2019

APPLIES TO ENTIRE CONTRACT

CONTRACT NOTES

PROPOSAL ADDENDA

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

BID SUBMITTAL

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

JOINT VENTURE BIDDING

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

UNDERGROUND FACILITY DAMAGE PROTECTION

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

REGISTRATION WITH THE SECRETARY OF STATE BY A FOREIGN ENTITY

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

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

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

SPECIAL NOTE FOR PROJECT QUESTIONS DURING ADVERTISEMENT

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

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

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

HARDWOOD REMOVAL RESTRICTIONS

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

INSTRUCTIONS FOR EXCESS MATERIAL SITES AND BORROW SITES

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

ACCESS TO RECORDS

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

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

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

April 30, 2018

SPECIAL NOTE FOR RECIPROCAL PREFERENCE

RECIPROCAL PREFERENCE TO BE GIVEN BY PUBLIC AGENCIES TO RESIDENT BIDDERS

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

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SURFACING AREAS

The Department estimates the mainline surfacing width to be varied 42 to 72 feet.

The Department estimates the total mainline area to be surfaced to be 37,965 square yards.

The Department estimates the shoulder width to be N/A foot on each side.

The Department estimates the total shoulder area to be surfaced to be N/A square yards.

ASPHALT MIXTURE

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

INCIDENTAL SURFACING

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

OPTION A

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

SPECIAL NOTE FOR NON-TRACKING TACK COAT

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

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

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

2.2. Equipment. Provide a distributor truck capable of heating, circulating, and spraying the tack between 170 °F and 180 °F. Do not exceed 180 °F. Circulate the material while heating. As required by the manufacturer, ensure the spray bar is equipped with #1 or #2 ¼" V-slot Etnyre nozzles. Other nozzles are not acceptable. Arrange the nozzles in the following patterns from left to right:

| Nozzle number(s) | Activity | Orientation | | | | | | | | |
|-------------------------|-------------------------|----------------------|--|--|--|--|--|--|--|--|
| 1 | On | Vertical | | | | | | | | |
| 2 | 2 Off - | | | | | | | | | |
| 3 | On | Horizontal | | | | | | | | |
| 4 & 5 Off - | | | | | | | | | | |
| 6 | 6 On Horizontal | | | | | | | | | |
| | | | | | | | | | | |
| Continue 2 off and 1 of | on pattern through rest | of spray bar system. | | | | | | | | |

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 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. Ensure the roadway temperature is a minimum of $40\,^{\circ}\text{F}$ and rising during the application of the tack. This material is not suitable for use in colder temperatures. Prior to applying the tack, demonstrate competence in applying the tack according to this note to the satisfaction of the Engineer. Heat the tack in the distributor to between $170-180\,^{\circ}\text{F}$. After initial heating to between $170-180\,^{\circ}\text{F}$, the material may be sprayed between $165\,^{\circ}\text{F}$ and $180\,^{\circ}\text{F}$. Do not apply outside this temperature range. Apply material at a rate of 0.50 pounds (0.06 gallons) per square yard. Ensure full coverage of the material on the pavement surface. Full coverage of this material is critical. If full coverage is not achieved, material application rate may be increased to ensure full coverage. Do not heat material more than twice in one day.
- 3.3 Non-tracking Tack Certification. Furnish the tacks 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 adhesive. 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. 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 | g Tack Prio | ce Adjus | stment Sc | hedule | | |
|---|---------------|----------|-------------|-------------|-------------|--------|
| Test | Specification | 100% Pay | 90% Pay | 80% Pay | 50% Pay | 0% Pay |
| Viscosity, SFS, 77 ° F | 20 – 100 | 19 - 102 | 17 - 18 | 15 - 16 | 14 | ≤13 |
| | | | 103 - 105 | 106 - 107 | 108 - 109 | ≥ 110 |
| Sieve, % | 0.30 max. | ≤ 0.40 | 0.41 - 0.50 | 0.51 - 0.60 | 0.61 - 0.70 | ≥ 0.71 |
| Asphalt Residue, % | 50 min. | ≥49.0 | 48.5 – 48.9 | 48.0 – 48.4 | 47.5-47.9 | ≤ 47.4 |
| Oil Distillate, % | 1.0 max. | ≤1.0 | 1.1-1.5 | 1.6 - 1.7 | 1.8-1.9 | >2.0 |
| Residue Penetration, 77 ° F | 20 max. | ≤ 21 | 22 - 23 | 24 - 25 | 26 - 27 | ≥ 28 |
| Original Dynamic Shear (G*/sin δ), 82 ° C | 1.0 min. | ≥0.95 | 0.92 - 0.94 | 0.90 - 0.91 | 0.85 - 0.89 | ≤ 0.84 |
| Softening Point, ° F | 149 min. | ≥145 | 142 - 144 | 140 - 141 | 138 - 139 | ≤ 137 |
| Solubility, % | 97.5 min. | ≥ 97.0 | 96.8 – 96.9 | 96.6 – 96.7 | 96.4 – 96.5 | ≤ 96.3 |

CodePay ItemPay Unit24970ECAsphalt Material for Tack Non-TrackingTon

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SPECIAL NOTE FOR MANHOLE/VALVE BOX ADJUSTMENTS

Appropriate utility companies shall be notified for manhole and valve box adjustments. Notify KYTC Engineer Cory Wilson at the Kenton County Field Office at 859-356-5300 a minimum of 45 calendar days prior to beginning any work on the project. Unless directed otherwise by the Engineer, do not begin resurfacing until the manhole/valve box adjustments are completed by utility owners. The Engineer will coordinate the work between the Contractor and utility owners.

1-3181 Manhole Adjustments 01/01/2009

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SPECIAL NOTE FOR ASPHALT MILLING AND TEXTURING

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

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

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

SPECIAL NOTE FOR BASE FAILURE REPAIR

Repair locations listed on the summary are approximate only. The Engineer will determine actual repair locations and dimensions at the time of construction. Saw cut the existing pavement, asphalt surface, base, DGA, and PCC pavement (if present). Prior to overall milling and/or leveling and wedging, excavate the designated base failure areas to a depth 3 inches below the existing asphalt pavement surface level. Dispose of the excavated materials at waste sites off the Right-of-Way obtained by the Contractor at no additional cost to the Department. See Special Note for Waste and Borrow.

Backfill the excavated areas with Class 2 Asphalt Base 1.00D PG64-22. Compact the asphalt base to the compaction required in Section 403.03.10. Seal the asphalt base with leveling and wedging. Perform all base failure repairs in such a manner that removal and replacement are completed on the same day. Do this work as one of the Contractor's first operations in order to allow further compaction by traffic. Do not mill or place new asphalt surface over repaired base failure areas until a minimum of 7 calendar days have elapsed after placement of the asphalt base. After a minimum of 7 calendar days and when the Engineer determines the base failure repair areas have sufficiently stabilized, begin milling and/or resurfacing operations. Prior to milling and/or constructing the new asphalt surface, level and wedge any settlement of the repair areas.

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

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

1-3606basefailurerepairmillinlaypaybysy 01/02/2012

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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 FD05 059 0025 009-011

TRAFFIC CONTROL GENERAL

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

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.

PROJECT PHASING & CONSTRUCTION PROCEDURES

All lanes shall be open to traffic and no work will be allowed between the hours of 6 A.M. and 6 P.M. Monday through Friday. Night work will be required on the project. Minor operations that require only a single lane closure and cause little disruption to traffic may be allowed weekdays between the hours of 9:00 A.M. to 3:00 P.M. with written permission from the engineer. The Contractor is advised to take these restrictions into account in his bid. No additional payment will be allowed for any delays to the contractor as a result of these restrictions.

No lane closures will be allowed on the following days or nights:

| May 25-27, 2019 | Memorial Day Weekend |
|-------------------|----------------------|
| July 4 & 5, 2019 | Fourth of July |
| Sept. 1 & 2, 2019 | Labor Day Weekend |

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

Maintain a minimum of one traffic lane (mainline) in each direction at all times during construction. The clear lane width shall be 10 feet where possible. If traffic should be stopped due to construction operations, and a school bus on an official run arrives on the scene, the Contractor shall make provisions for the passage of the bus as quickly as possible.

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

SIGNS

Sign posts 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. Signs, including any splices, shall be installed according to manufacturer's specifications and installation recommendations. Contrary to section 112.04.02, only long-term signs (signs

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

TEMPORARY ENTRANCES/ACCESS TO PROPERTY

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

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

Payment will be allowed at the unit price bid for all asphalt materials required to construct and maintain any temporary entrances which may be necessary to provide temporary access; however, no direct payment will be allowed for aggregates, excavation and/or embankment needed. The Engineer will determine the type of surfacing material, asphalt or aggregate, to be used at each entrance.

BARRICADES

Barricades used in lieu of barrels and cones for channelization or delineation will be incidental to Maintain and Control Traffic according to Section 112.04.01. Barricades used to protect pavement removal areas will be bid as each according to Section 112.04.04.

TRAFFIC COORDINATOR

Furnish a Traffic Coordinator as per Section 112 for unclassified project.

TRAFFIC LOOP INSTALLATION

All items required for lane closures related to this item of work shall be considered incidental to bid item "Maintain and Control Traffic". Install Traffic signal loops as per special notes. The Contractor shall coordinate the placement of the traffic loops with the Traffic Engineer.

CHANGEABLE MESSAGE SIGNS

Provide changeable message signs in advance of and within the project at locations to be determined by the Engineer. If work is in progress concurrently in both directions or if more than one lane closure is in place in the same direction of travel, provide additional changeable message signs as directed by the Engineer. Place changeable message signs 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 locations designated may vary as the work progresses. The messages required to be provided shall be designated by the Engineer. In the event of damage or mechanical/electrical failure, the Contractor shall repair or replace the Changeable Message Sign within 24 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. Individual changeable message signs will be measured only once for payment, regardless of how many times they are set, reset, removed, and relocated during the duration of the project. Replacements for damaged changeable message signs directed by the Engineer to be replaced due to poor condition or readability will not be measured for payment.

ARROW PANEL

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. Individual arrow panels will be measured only once for payment, regardless of how many times they are set, reset, removed, and relocated during the duration of the project. Replacements for damaged arrow panels directed by the Engineer to be replaced due to poor condition or readability will not be measured for payment. Arrow panels will remain the property of the Contractor after construction is complete.

PAVEMENT MARKINGS

Coordinate the installation of all temporary and permanent striping with the Resident Engineer, and the TEBM for Traffic in the District. If there is a deviation from the existing striping plan, a striping plan for the pavement shall be provided to the Contractor prior to the installation of any temporary or permanent markings.

Do not install temporary pavement striping, permanent pavement striping, and/or thermoplastic or Durable Pavement markings without written permission from the Engineer.

Temporary Striping will be installed as per Section 112 with the following exceptions:

Temporary striping shall include striping of the edgelines.

Temporary or Permanent striping shall be in place before a lane is opened to traffic

If the Contractor's operations or phasing requires temporary markings that must be subsequently removed from the final surface course, an approved "Removable Lane Tape" shall be used. This removable lane tape will not be measured separately. The "removable lane tape", if used, will be measured and paid as temporary striping.

PAVEMENT EDGE DROP-OFFS

A pavement edge between opposing directions of traffic or lanes that traffic is expected to cross in a lane change situation shall not have an elevation difference greater than 1½". Warning signs (MUTCD W8-9 or W8-9A, or W8-11) shall be placed in advance of and at 1500' intervals throughout the drop-off area. Dual posting on both sides of the traveled way shall be required. All transverse transitions between the newly surfaced area and the existing surface areas that traffic may cross shall be wedged with asphalt mixture for leveling and wedging. The wedges shall be removed prior to placement of the final surface course.

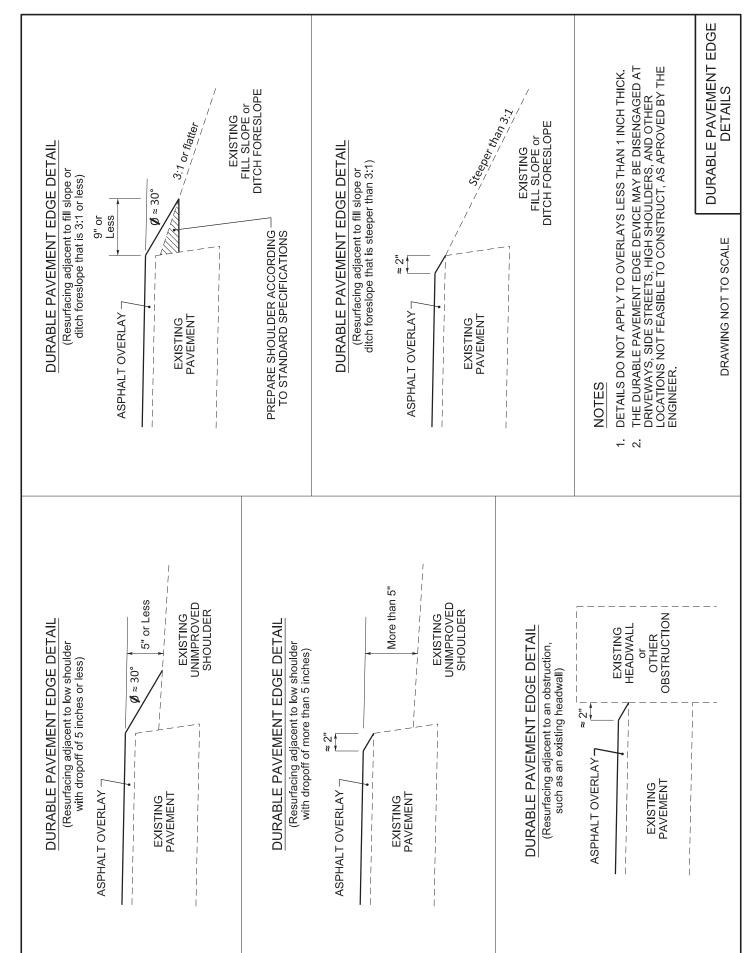
Pavement edges that traffic is not expected to cross, except accidentally, shall be treated as follows:

Less than 2" - No protection required.

2" to 4" - Place plastic drums, vertical panels, or barricades every 50 feet. Cones may be used in place of plastic drums, panels, and barricades during daylight working hours only. Wedge with 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 inches - Drop-offs exceeding 4 inches will be allowed only during active operations during the interval between removal of shoulder/traffic islands/medians and the placement of the asphalt base courses in these areas. Place plastic drums, vertical panels or barricades every 40 feet. Drop-offs less than eight feet behind a lane or shoulder closure shall be protected by a asphalt wedge with 3:1 or flatter slope; the wedge shall be removed and the base course placed in the drop-off area as soon as possible.

In lieu of a wedge, drop-offs at lateral trenches may be covered by a 1" thick steel plate when work is not actively in progress at the pavement removal area; the plate shall be anchored to the pavement by any method approved by the Engineer that will prevent it being dislodged by accidental impact. If for any reason, it is necessary to excavate small areas, any holes adjacent to traffic where there exists a possibility that a vehicle may drop a wheel into the holes shall be filled with asphalt or plated. No direct payment will be made for the wedge or steel plates, but shall be incidental to other items of work.



SPECIAL NOTE FOR TRAFFIC SIGNAL LOOP DETECTORS

- **1.0 DESCRIPTION.** Be advised that there are existing traffic signal loop detectors within the construction limits of this project. Except as specified herein, perform traffic signal loop replacement in accordance with the Department's Standard/Supplemental Specifications, Special Provisions, Special Notes, and Standard/Sepia Drawings, current editions and as directed by the Engineer. Article references are to the Standard Specifications. Furnish all materials, labor, equipment, and incidentals for replacement of traffic signal loop installation(s) and all other work specified as part of this contract.
- 1.1 Pre-bid Requirements. Each Contractor submitting a bid for this work shall make a thorough inspection of the site prior to submitting his bid and shall thoroughly familiarize himself with existing conditions so that the work can be expeditiously performed after a Contract is awarded. Information provided in the Plans regarding types and quantities of work is not to be taken as an accurate or complete evaluation of the materials and conditions to be encountered during construction. The bidder must make his own determinations as to the conditions encountered.
- **2.0 MATERIALS.** Except as specified herein, furnish materials in accordance with Subsection 732.02 and Section 835. Provide for materials to be sampled and tested 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 this Special Note.
 - **2.1 Maintain and Control Traffic.** See Traffic Control Plan.
 - **2.2 Sand.** Furnish natural sand meeting the requirements of Subsection 804.04.01.
 - **2.3 Seeding.** Furnish Seed Mix Type I.
- **2.4** Loop Saw Slot and Fill. Furnish loop sealant, backer rod, and non-shrink grout according to the Saw Slot Detail.
- **2.5 Junction Boxes.** Furnish junction box type B, #57 aggregate, and geotextile filter type IV according to junction box detail.
- **2.6** Cable No. 14/1 Pair (Lead-in). Furnish cable that is specified in Section 835. Cable shall be ran splice free. This shall include splice kits to connect to the loop wire.
- **2.7 Conduit.** Furnish and install appropriate conduit from transitions to the roadway, junction boxes and poles. See details below.
- **3.0 CONSTRUCTION.** Except as specified herein, install and test Traffic Signal Loop Detectors in accordance with Section 723 and the drawings.
- **3.1 Testing.** The Contractor shall test all loops and cable no. 14/1 pair (lead-in) according to Subsection 723.03.17 before and after milling the roadway. The Contractor may have to separate the loop from the lead-in to perform this test. If the loop/lead-in meets the requirement in Section 723 at the controller cabinet, the loop/lead-in shall not be replaced. If existing loops do not meet the requirements in Subsection 723.03.17, the loops shall be replaced. Replacement loops may be installed either before or after the milling process.

Traffic Signal Loop Detectors Page 2 of 8

The Contractor shall verify that loops (both existing and replacement loops) meet the requirements per Subsection 723.03.17 before the final surface is laid. If loops do not meet conditions of Subsection 723.03.17, the Contractor shall replace them before the resurfacing activities begin. If replacement loops have to be reinstalled, the costs of reinstallation shall be incidental to the milling bid item. The Contractor shall re-splice loops to the lead-in with the proper splice as noted in the spec book.

- **3.2** Coordination. Notify the Engineer in writing, two (2) weeks prior to beginning any work. The Engineer will contact the District Traffic Engineer to coordinate the Department's operations with the Contractor's work.
- **3.3** Connection. The Contractor shall schedule all signal loop installation to ensure the new loops are connected to the lead-in and operational within 5 calendar days of the old loops being damaged and/or disconnected. This requirement includes damage caused by any work activity associated with the project. If the new signal loops are not functioning as intended following 5 calendar days, the Department may assess Liquidated Damages at a rate of \$500 per calendar day per signal location until the loops are operating at pre-construction conditions. All liquidated damages will be applied cumulatively.
 - **3.4 Maintain and Control Traffic.** See Traffic Control Plan.
- **3.5 Milling.** On projects involving milling and texturing of the existing pavement, install loops in the existing pavement before or after performing the milling and texturing. After milling, the remnant contents of the existing saw slot (grout, loop wires, backer rod, and/or loop sealant) may not be flush with the top of the milled portion of the surface. In such cases, clear the saw slot of loose remnant contents and refill the saw slot with natural sand. Obtain the Engineer's approval of the stabilized saw slot prior to resurfacing. The Department will not measure for separate payment clearing and stabilizing the saw slot and shall consider this work incidental to milling.
- **3.6 Loop Saw Slot and Fill.** The following is a typical step by step procedure for the installation of a loop.
 - 1) Carefully mark the slot to be cut, perpendicular to the flow of traffic and centered in the lane.
 - 2) Make each saw-cut 3/8-inch wide and at a depth such that the top of the backer rod is a minimum of 4 inches below the surface of asphalt pavement.
 - 3) Drill a 1½ inch core hole at each corner and use a chisel to smooth corners to prevent sharp bends in the wire.
 - 4) Clean all foreign and loose matter out of the slots and drilled cores and within 1 foot on all sides of the slots using a high pressure washer.
 - 5) Completely dry the slots and drilled cores and within 1 foot on all sides of the slots.
 - 6) Measure 9-12 inches from the edge of the paved surface (shoulder break or face of curb) and drill a 1½ inch hole on a 45° angle to the conduit adjacent to the roadway.
 - 7) Closely inspect all cuts, cores, and slots for jagged edges or protrusions prior to the placement of the wire. All jagged edges and protrusions shall be ground or re-cut and cleaned again.

Traffic Signal Loop Detectors Page 3 of 8

- 8) Place the loop wire splice-free from the termination point (cabinet or junction box) to the loop, continue around the loop for two turns (6'x30' loop) or three turns (6'x6' loop), and return to the termination point.
- 9) Push the wire into the saw slot with a blunt object such as a wooden stick. Make sure that the loop wire is pushed fully to the bottom of the saw slot. Screwdrivers shall not be used.
- 10) Install duct sealant to a minimum of 1 inch deep into the cored 1½ inch hole.
- 11) Apply loop sealant from the bottom up and fully encapsulate the loop wires in the saw slot. The wire should not be able to move when the sealant has set.
- 12) Cover the encapsulated loop wire with a continuous layer of backer rod along the entire loop and home run saw slots such that no voids are present between the loop sealant and backer rod.
- 13) Finish filling the saw cut with non-shrinkable grout per manufacturer's instructions. Alleviate all air pockets and refill low spaces. There shall be no concave portion to the grout in the saw slot. Any excess grout shall be cleaned from the roadway to alleviate tracking.
- 14) Clean up the site and dispose of all waste off the project.
- 15) Ensure that the grout has completely cured prior to subjecting the loop to traffic. Curing time varies with temperature and humidity.
- **3.7 Final Dressing, Clean Up, and Seeding.** After all work is completed, clean work sites and all disturbed areas. Dispose of all waste and debris off the right of way at sites obtained by the Contractor at no additional cost to the Department. Sow all disturbed earthen areas with Seed Mix Type I.
- **3.8 Removal.** The Contractor shall remove all existing junction boxes, wire from spans/poles/junction boxes/conduits, and conduits. The removal will be incidental to the project.
- **3.9 Property/Roadway Damage.** The Contractor shall be responsible for all damage to public and/or private property resulting from the work. Upon completion of the work, restore all disturbed highway features and private property in like kind design and materials at no additional cost to the Department.
- **3.10 Right-of-Way Limits.** The Department has not established exact limits of Right-of-Way. Limit work activities to obvious Right-of-Way and work areas secured by the Department through Consent and Release of the adjacent property owners. Contractor is responsible for all encroachments onto private lands.
- **3.11 Utility Clearance.** Work around and do not disturb existing utilities. The Department does not anticipate any utility impacts for loop installation. If utilities are impacted, work with associated utility companies to resolve issues.
- **3.12** Control. 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 permit other contractors, state forces, 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 each other's work will be reduced to a minimum. The Contractor agrees to make no claims against the Department for additional compensation due to delays or other conditions created by

Traffic Signal Loop Detectors Page 4 of 8

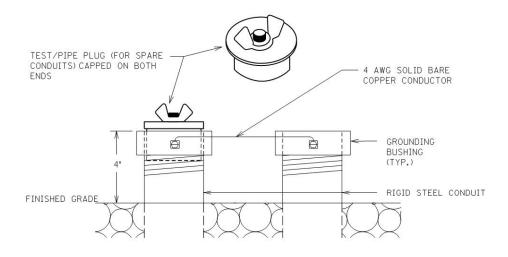
the operations of such other parties. Should a difference of opinion arise as to the rights of the Contractor and others working within the limits of, or adjacent to, the project, the Engineer will decide as to the respective rights of the various parties involved in order to ensure the completion of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

- **3.13 Bore and Jack**. Except for situations outlined in 3.15, bore and jack will be used if conduit is under pavement of any kind. The conduit shall be 2" rigid steel conduit under all pavement areas except for the area where the loop transitions from the saw slot. The installation of conduit should follow the below detail.
- **3.14 Open Cut Roadway.** With permission of the Engineer, roadway may be open cut if the conduit is under pavement. The conduit shall be 2" rigid steel conduit under all pavement areas except for the area that the loop transition from the saw slot. The installation of conduit should follow requirements per Section 723.
- **4.0 MEASUREMENT.** See Subsection 723.04 for bid item notes. Additional bid items include the following:
- **4.1 Loop Test.** The Department will measure the quantity as each individual unit loop tested. The Department will not measure disconnection, reconnection, traffic control, re-splicing per specifications, before and after testing per note above, and any associated hardware for payment and will consider them incidental to this item of work.
- **5.0 PAYMENT**. The Department will make payment for the completed and accepted quantities of listed items according to Subsection 723.05 in addition to the following:

| Code | Pay Item | Pay Unit |
|---------------------------------|----------|--------------------------|
| Conduit 1" | 4792 | Linear Foot |
| PVC Conduit – 1 ¼ inch – sch 80 | 24900EC | Linear Foot |
| PVC Conduit – 2 inch – sch 80 | 24901EC | Linear Foot |
| Conduit 2" | 4795 | Linear Foot |
| Electrical Junction Box type B | 4811 | Each |
| Loop Test | 24963ED | Each |
| Trenching and Backfilling | 4820 | Linear Foot |
| Loop Wire | 4830 | Linear Foot |
| Cable-No. 14/1 Pair | 4850 | Linear Foot ¹ |
| Loop Saw Slot and Fill | 4895 | Linear Foot ¹ |
| Bore and Jack Conduit | 21543EN | Linear Foot ³ |
| Open Cut Roadway | 4821 | Linear Foot ³ |

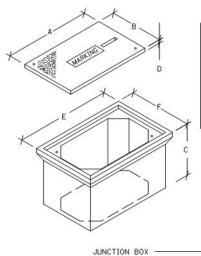
The Department will consider payment as full compensation for all work required under these notes and the Standard Specifications.

Traffic Signal Loop Detectors Page 5 of 8



TEST/PIPE PLUG(FOR SPARE CONDUITS) AND GROUNDING DETAIL

Traffic Signal Loop Detectors Page 6 of 8



| | JUNC | TION BOX [| DIMENSION: | S (NOMINAL) | | |
|--------|------|------------|------------|-------------|-----|-----|
| | А | В | С | D | Ε | F |
| TYPE A | 23* | 14" | 27' | 2" | 25" | 15' |
| TYPE B | 18" | 111* | 12" | 13/4" • | 20" | 13* |
| TYPE C | 36" | 24" | 30" | 3. | 38" | 26" |

* MINIMUM
NOTE: STACKABLE BOXES ARE PERMITTED

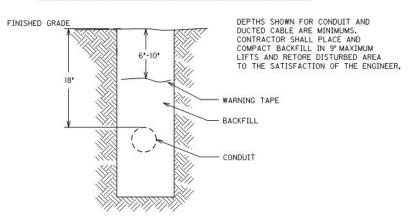
BEFORE THE INSTALLATION OF THE "57 AGGREGATE AND JUNCTION BOX, THE CONTRACTOR SHALL INSTALL GEOTEXTILE FILTER FABRIC TYPE IV IN THE HOLE. THE FABRIC SHALL EXTEND TO JUST BELOW THE LIP OF THE JUNCTION BOX AND SHALL BE CONTINUOUSLY ADHERED TO THE EXTERIOR OF THE BOX WITH ADHESIVE. ANY LOCATIONS WHERE CONDUITS ENTER THE BOX, THE FABRIC SHALL BE "X CUT" ONLY AS MUCH AS NECESSARY TO ALLOW PASSAGE OF EACH INDIVIDUAL CONDUIT THROUGH THE FABRIC. THE FABRIC SHALL BE INCIDENTAL TO BID ITEMS 4811, 2039INS835, OR 20392NS835.

CONDUCTOR INSTALLATIONSCONDUIT SHALL BE EXPOSED
4" FROM BOTTOM OF BOX

EARTH

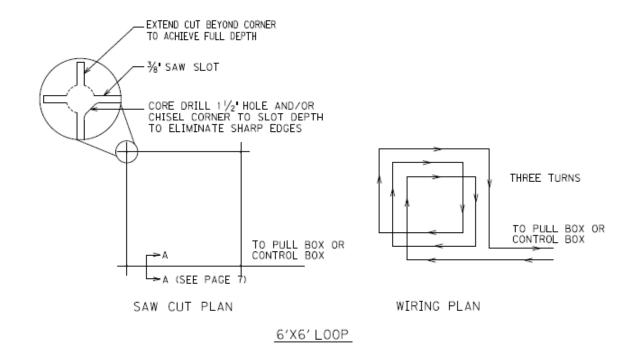
GRADATION SIZE
NO. 57 AGGREGATE
FIBER FABRIC TYPE IV

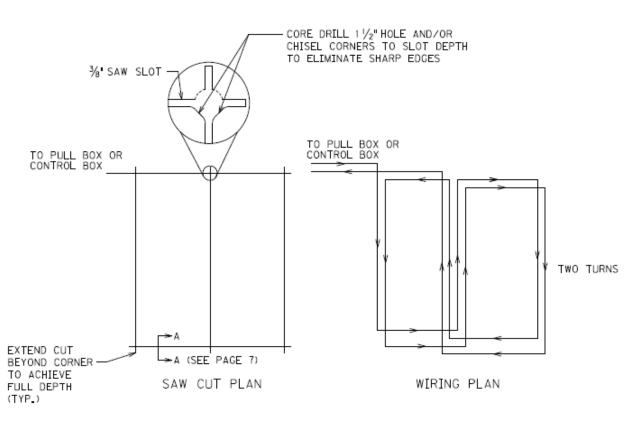
JUNCTION BOX INSTALLATION FOR
CONVENTIONAL LIGHTING OR TRAFFIC SIGNALS



CONDUIT AND WARNING TAPE TRENCH

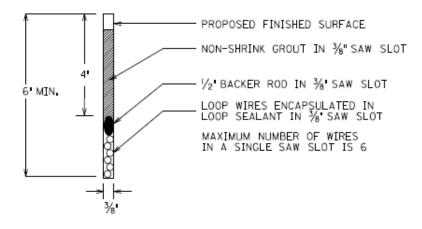
Traffic Signal Loop Detectors Page 7 of 8



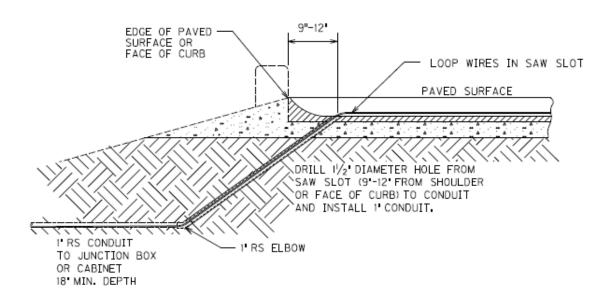


6'X30' QUADRAPOLE LOOP

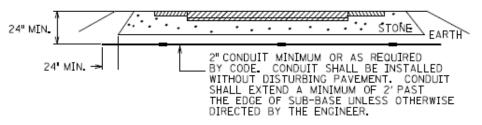
Traffic Signal Loop Detectors Page 8 of 8



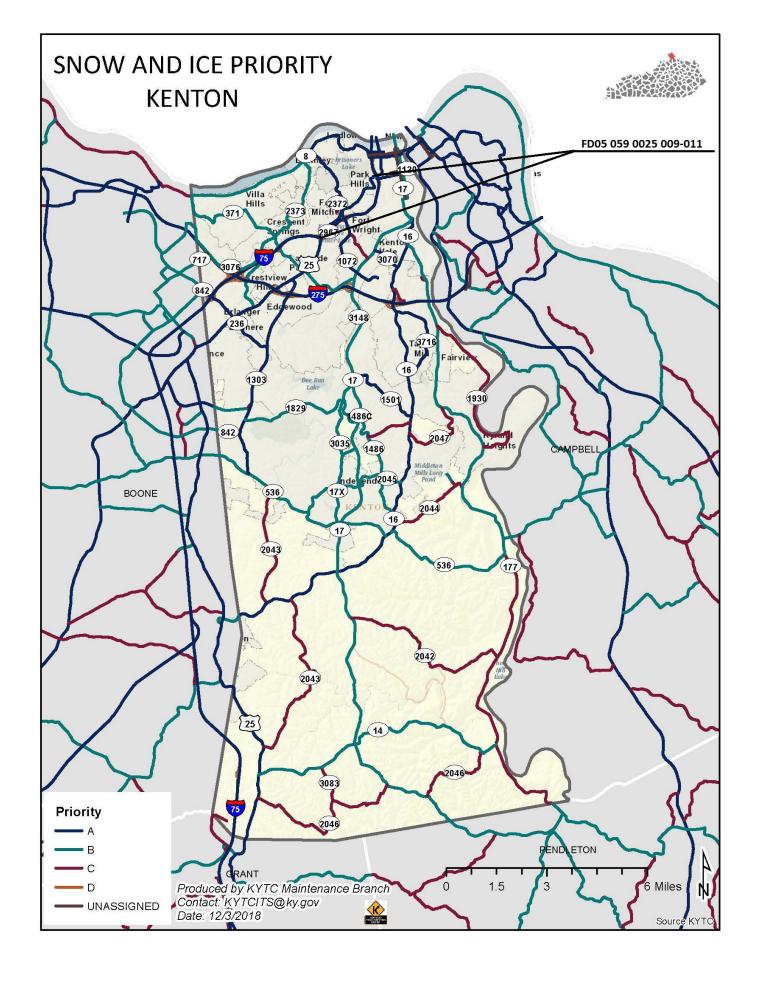
SECTION A-A (SAW SLOT DETAIL)



SAW SLOT EDGE OF PAVEMENT TRANSITION



CONDUIT UNDER EXISTING PAVEMENT DETAIL



Kenton County THERMOPLASTIC INTERSECTION PAVEMENT MARKINGS SUMMARY FD05 059 0025 009-011

| NOTES | | | | | | | | | | | | | | | |
|--------------|---------------------------|----|------------------|------------------|--------------|-------------|-----------------|----------------|---------------|-------------|---------------|--|--|--|--|
| DAD | "R" 6 FOOT CROSS BUCK 16" | LF | | | | | | | | | | | | | |
| RAILROAD | "R" 6 FOOT | EA | | | | | | | | | | | | | |
| CATRAXX | 6 INCH | LF | | | | | | | | | | | | | |
| "STOP" | | EA | | | | | | | | | | | | | |
| "ONLY" | | EA | | | | | | | | | | | | | |
| စ္ | CURVE STR COMB | EA | | | | | | | | | | | | | |
| ARROWS | STR | EA | | | | | | | | | | | | | |
| ` | CURVE | EA | 2 | 4 | 2 | | | | 2 | | 2 | | | | |
| STP BARS | 24 INCH | LF | 29 | 80 | | 40 | 42 | 40 | 92 | 42 | 38 | | | | |
| X-WALKS | 9 INCH | LF | | | | 172 | 192 | 80 | 260 | | 140 | | | | |
| INTERSECTION | | | I-75 North Ramps | I-75 South Ramps | W. Maple Ave | Orchard Ave | St. John's Road | Fortside Drive | Ashwood Drive | Kyle's Lane | Sleepy Hollow | | | | |
| MPT. | | | 9.802 | 9.931 | 9.994 | 10.157 | 10.22 | 10.344 | 10.738 | 10.84 | 10.995 | | | | |

TRAFFIC LOOP SUMMARY **Kenton County**

LOOP SUMMARY FOR ASPHALT PAVEMENT BID ALTERNATE FD05 059 0025 009-011

| | | | | PVC | | | | | |
|--------------------------|-----------|------|----------|------------|-------|----------|------------------------------|------|-------------|
| INTERSECTION | SAW, SLOT | LOOP | CONDUIT | CONDUIT | CABLE | JUNCTION | CABLE JUNCTION Trenching and | Loop | NOTES |
| | AND FILL | WIRE | 1 INCH | 1 1/4 INCH | | TYPE B | Backfilling | Test | |
| | 5 | 5 | 5 | 님 | 5 | EA | 5 | Æ | |
| US 25 Kenton Co | | | | | | | | | |
| I 75 N Ramps mp 9.802 | 130 | 400 | 10 | 20 | 200 | 1 | 50 | - | 1-6X30 Loop |
| I 75 S Ramps mp 9.931 | 130 | 400 | 10 | 20 | 200 | 1 | 20 | 1 | 1-6X30 Loop |
| Kyle Lane mp 10.84 | 130 | 400 | 10 | 20 | 200 | 1 | 20 | 1 | 1-6X30 Loop |
| Sleeepy Hollow mp 10.995 | 130 | 400 | 10 | 20 | 200 | 1 | 20 | 1 | 1-6X30 Loop |
| | | | | | | | | | |
| Total | 520 | 1600 | 40 | 200 | 800 | 4 | 200 | 4 | |

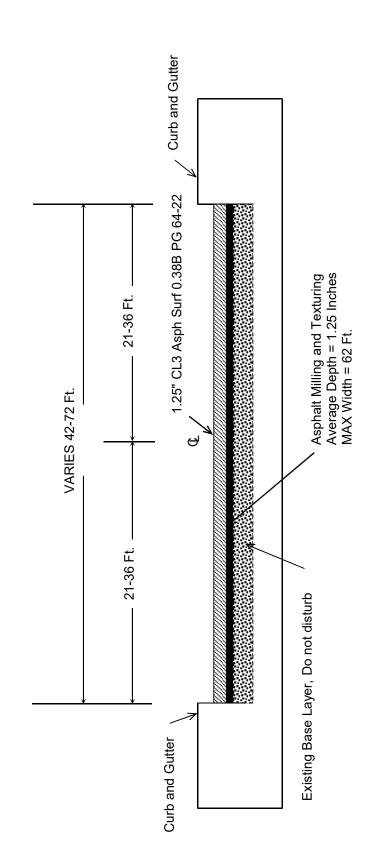
NOTES for all intersections:

Quantities are for estimating purposes only. The Contractor shall field measure and inspect items to verify quantities.
 2 - 1 1/4 inch conduits may be used in place of 2" conduit. Field verify conduit to match existing facilities/tie-in to poles/cabinets.
 Only replace existing conduit if damaged.

Base Failure Repair Summary FD05 059 0025 009-011

| | | | Total | 220 | 110 |
|-----------|----------|--------|-------|-------|-------|
| Milepoint | Lane | Length | Width | SQYD | Tons |
| 10.03 | Right NB | 6 | 6 | 4.00 | 1.98 |
| 10.09 | Both NB | 6 | 22 | 14.67 | 7.26 |
| 10.13 | Right NB | 8 | 6 | 5.33 | 2.64 |
| 10.16 | Right NB | 15 | 4 | 6.67 | 3.30 |
| 10.21 | Right NB | 4 | 6 | 2.67 | 1.32 |
| 10.25 | Right NB | 20 | 4 | 8.89 | 4.40 |
| 10.29 | Right NB | 15 | 10 | 16.67 | 8.25 |
| 10.33 | Right NB | 20 | 4 | 8.89 | 4.40 |
| 10.42 | Right NB | 6 | 6 | 4.00 | 1.98 |
| 10.45 | Right NB | 60 | 4 | 26.67 | 13.20 |
| 10.53 | Right NB | 60 | 4 | 26.67 | 13.20 |
| | | | | | |
| 10.84 | Right SB | 30 | 6 | 20.00 | 9.90 |
| 10.77 | Right SB | 30 | 4 | 13.33 | 6.60 |
| 10.67 | Right SB | 12 | 4 | 5.33 | 2.64 |
| 10.22 | Right SB | 12 | 8 | 10.67 | 5.28 |
| 10.17 | Right SB | 12 | 8 | 10.67 | 5.28 |
| | | | | | |
| Misc. | | | | 30.00 | 14.85 |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

KENTON COUNTY
TYPICAL SECTION
FD05 059 0025 009-011



PART II

SPECIFICATIONS AND STANDARD DRAWINGS

SPECIFICATIONS REFERENCE

Any reference in the plans or proposal to previous editions of the *Standard Specifications* for Road and Bridge Construction and Standard Drawings are superseded by Standard Specifications for Road and Bridge Construction, Edition of 2012 and Standard Drawings, Edition of 2016.

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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

1**I**

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.
- Be Highway Orange on all exterior surfaces of the trailer, supports, and controller cabinet.
- 7) Provide operation in ambient temperatures from -30 to + 120 degrees Fahrenheit during snow, rain and other inclement weather.
- 8) Provide the driver board as part of a module. All modules are interchangeable, and have plug and socket arrangements for disconnection and reconnection. Printed circuit boards associated with driver boards have a conformable coating to protect against moisture.
- Provide a sign case sealed against rain, snow, dust, insects, etc. The lens is UV stabilized clear plastic (polycarbonate, acrylic, or other approved material) angled to prevent glare.
- 10) Provide a flat black UV protected coating on the sign hardware, character PCB, and appropriate lens areas.
- 11) Provide a photocell control to provide automatic dimming.

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

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

*Insert numerals as directed by the Engineer.

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

2.3 Power.

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

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

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

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

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

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

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

CodePay ItemPay Unit02671Portable Changeable Message SignEach

Effective June 15, 2012

2016 KENTUCKY STANDARD DRAWINGS

| CURVE WIDENING AND SUPERELEVATION TRANSITIONS | RGS-001-07 |
|---|------------|
| SUPERELEVATION FOR MULTILANE PAVEMENT | RGS-002-06 |
| MISCELLANEOUS STANDARDS | RGX-001-06 |
| APPROACHES, ENTRANCES, AND MAIL BOX TURNOUT | RPM-110-07 |
| LANE CLOSURE TWO-LANE HIGHWAY | TTC-100-04 |
| SHOULDER CLOSURE | TTC-135-02 |
| PAVEMENT CONDITION WARNING SIGNS | TTD-125-02 |
| MOBILE OPERATION FOR PAINT STRIPING CASE I | TTS-100-02 |
| MOBILE OPERATION FOR PAINT STRIPING CASE II | TTS-105-02 |

PART III

EMPLOYMENT, WAGE AND RECORD REQUIREMENTS

Contract ID: 192127 Page 43 of 50

TRANSPORTATION CABINET DEPARTMENT OF HIGHWAYS

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

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

I. APPLICATION

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

II. NONDISCRIMINATION OF EMPLOYEES

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

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

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

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

Revised: January 25, 2017

EXECUTIVE BRANCH CODE OF ETHICS

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

KRS 11A.040 (7) provides:

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

KRS 11A.040 (9) states:

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

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

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

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

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

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

Revised: January 27, 2017

Kentucky Equal Employment Opportunity Act of 1978

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

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

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

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

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

EMPLOYEE RIGHTS
UNDER THE FAIR LABOR STANDARDS ACT

THE UNITED STATES DEPARTMENT OF LABOR WAGE AND HOUR DIVISION

FEDERAL MINIMUM WAGE

\$7.25

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BEGINNING JULY 24, 2009

OVERTIME PAY

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

CHILD LABOR

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

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

No more than

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

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

TIP CREDIT

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

ENFORCEMENT

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

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

ADDITIONAL INFORMATION

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



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PART IV

INSURANCE

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INSURANCE

The Contractor shall procure and maintain the following insurance in addition to the insurance required by law:

- 1) Commercial General Liability-Occurrence form not less than \$2,000,000 General aggregate, \$2,000,000 Products & Completed Aggregate, \$1,000,000 Personal & Advertising, \$1,000,000 each occurrence.
- 2) Automobile Liability- \$1,000,000 per accident
- 3) Employers Liability:
 - a) \$100,000 Each Accident Bodily Injury
 - b) \$500,000 Policy limit Bodily Injury by Disease
 - c) \$100,000 Each Employee Bodily Injury by Disease
- 4) The insurance required above must be evidenced by a Certificate of Insurance and this Certificate of Insurance must contain one of the following statements:
 - a) "policy contains no deductible clauses."
 - b) "policy contains _____ (amount) deductible property damage clause but company will pay claim and collect the deductible from the insured."
- 5) KENTUCKY WORKMEN'S COMPENSATION INSURANCE. The contractor shall furnish evidence of coverage of all his employees or give evidence of self-insurance by submitting a copy of a certificate issued by the Workmen's Compensation Board.

The cost of insurance is incidental to all contract items. All subcontractors must meet the same minimum insurance requirements.

PART V

BID ITEMS

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192127

PROPOSAL BID ITEMS

Report Date 2/21/19

Roport Bato 2/2 II

Section: 0001 - PAVING

| LINE | BID CODE | ALT | DESCRIPTION | QUANTITY | UNIT | UNIT PRIC | FP | AMOUNT |
|------|----------|-----|--|-----------|------|------------------|----|--------|
| 0010 | 00190 | | LEVELING & WEDGING PG64-22 | 224.00 | TON | | \$ | |
| 0020 | 00388 | | CL3 ASPH SURF 0.38B PG64-22 | 2,615.00 | TON | | \$ | |
| 0030 | 02009 | | REMOVE ASPHALT MEDIAN | 50.00 | SQYD | | \$ | |
| 0040 | 02562 | | TEMPORARY SIGNS | 370.00 | SQFT | | \$ | |
| 0050 | 02650 | | MAINTAIN & CONTROL TRAFFIC | 1.00 | LS | | \$ | |
| 0060 | 02671 | | PORTABLE CHANGEABLE MESSAGE SIGN | 2.00 | EACH | | \$ | |
| 0070 | 02676 | | MOBILIZATION FOR MILL & TEXT | 1.00 | LS | | \$ | |
| 0800 | 02677 | | ASPHALT PAVE MILLING & TEXTURING | 2,615.00 | TON | | \$ | |
| 0090 | 02775 | | ARROW PANEL | 2.00 | EACH | | \$ | |
| 0100 | 03240 | | BASE FAILURE REPAIR | 110.00 | SQYD | | \$ | |
| 0110 | 04792 | | CONDUIT-1 IN | 40.00 | LF | | \$ | |
| 0120 | 04811 | | ELECTRICAL JUNCTION BOX TYPE B | 4.00 | EACH | | \$ | |
| 0130 | 04820 | | TRENCHING AND BACKFILLING | 200.00 | LF | | \$ | |
| 0140 | 04830 | | LOOP WIRE | 1,600.00 | LF | | \$ | |
| 0150 | 04850 | | CABLE-NO. 14/1 PAIR | 800.00 | LF | | \$ | |
| 0160 | 04895 | | LOOP SAW SLOT AND FILL | 520.00 | LF | | \$ | |
| 0170 | 06510 | | PAVE STRIPING-TEMP PAINT-4 IN | 31,500.00 | LF | | \$ | |
| 0180 | 06514 | | PAVE STRIPING-PERM PAINT-4 IN | 31,500.00 | LF | | \$ | |
| 0190 | 06565 | | PAVE MARKING-THERMO X-WALK-6 IN | 844.00 | LF | | \$ | |
| 0200 | 06568 | | PAVE MARKING-THERMO STOP BAR-24IN | 425.00 | LF | | \$ | |
| 0210 | 06574 | | PAVE MARKING-THERMO CURV ARROW | 15.00 | EACH | | \$ | |
| 0220 | 06600 | | REMOVE PAVEMENT MARKER TYPE V | 315.00 | EACH | | \$ | |
| 0230 | 24900EC | | PVC CONDUIT-1 1/4 IN-SCHEDULE 80 | 200.00 | LF | | \$ | |
| 0240 | 24963ED | | LOOP TEST | 4.00 | EACH | | \$ | |
| 0250 | 24970EC | | ASPHALT MATERIAL FOR TACK NON- TRACKING | 11.00 | TON | | \$ | |

Section: 0002 - DEMOBILIZATION

| LINE | BID CODE | ALT | DESCRIPTION | QUANTITY | UNIT | UNIT PRIC | FP | AMOUNT |
|------|----------|-----|----------------|----------|------|------------------|----|--------|
| 0260 | 02569 | | DEMOBILIZATION | 1.00 | LS | 3 | \$ | |