

CALL NO. 409
CONTRACT ID. 182027
ADAIR - CUMBERLAND - METCALFE COUNTIES
FED/STATE PROJECT NUMBER 121GR18P007-FD05
DESCRIPTION KY 61 IN VARIOUS COUNTIES
WORK TYPE ASPHALT SURFACING ULTRA THIN
PRIMARY COMPLETION DATE 9/30/2018

## LETTING DATE: January 26,2018

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN STANDARD TIME January 26,2018. Bids will be publicly announced at 10:00 AM EASTERN STANDARD TIME.

NO PLANS ASSOCIATED WITH THIS PROJECT.

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

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# PART I SCOPE OF WORK

## **ADMINISTRATIVE DISTRICT - 08**

CONTRACT ID - 182027 121GR18P007-FD05

**COUNTY - ADAIR** 

PCN - MP00100611801 FD05 001 0061 000-005

BURKESVILLE-COLUMBIA ROAD (KY 61) (MP 0.000) FROM CUMBERLAND COUNTY LINE EXTENDING NORTH TO PAVEMENT JOINT 975 FEET NORTH OF H GOWEN ROAD (MP 4.361), A DISTANCE OF 04.36 MILES.ASPHALT SURFACING ULTRA THIN

GEOGRAPHIC COORDINATES LATITUDE 36:59:39.00 LONGITUDE 85:24:49.00

#### **COUNTY - CUMBERLAND**

PCN - MP02900611801 FD05 029 0061 016-023

BURKESVILLE-COLUMBIA ROAD (KY 61) (MP 16.690) FROM PAVEMENT JOINT 0.39 MILES SOUTH OF KY 704 EXTENDING NORTH TO PAVEMENT JOINT 295 FEET SOUTH OF TRAYLOR RIDGE ROAD (MP 22.010), A DISTANCE OF 05.32 MILES.ASPHALT SURFACING ULTRA THIN

GEOGRAPHIC COORDINATES LATITUDE 36:52:22.00 LONGITUDE 85:23:32.00

PCN - MP02900611802 FD05 029 0061 022-026

BURKESVILLE-COLUMBIA ROAD (KY 61) (MP 22.010) FROM PAVEMENT JOINT 295 FEET SOUTH OF TRAYLOR RIDGE ROAD EXTENDING NORTH TO ADAIR COUNTY LINE (MP 25.787), A DISTANCE OF 03.78 MILES.ASPHALT SURFACING ULTRA THIN

GEOGRAPHIC COORDINATES LATITUDE 36:54:35.00 LONGITUDE 85:26:33.00

#### **COUNTY - METCALFE**

PCN - MP08500611801 FD05 085 0061 000-002

BURKESVILLE-COLUMBIA ROAD (KY 61) (MP 0.000) FROM ADAIR COUNTY LINE EXTENDING NORTH TO ADAIR COUNTY LINE (MP 1.139), A DISTANCE OF 01.14 MILES.ASPHALT SURFACING ULTRA THIN GEOGRAPHIC COORDINATES LATITUDE 36:56:54.00 LONGITUDE 85:26:48.00

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

COMPLETED BY 09/30/2018 APPLIES

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 Expedite Bidding Program available on the Internet web site of the Department of Highways, Division of Construction Procurement. (www.transportation.ky.gov/construction-procurement)

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.

## SPECIAL NOTE FOR COMPOSITE OFFSET BLOCKS

Contrary to the Standard Drawings (2016 edition) the Cabinet will allow 6" composite offset blocks in lieu of wooden offset blocks, except as specified on proprietary end treatments and crash cushions. The composite blocks shall be selected from the Cabinet's List of Approved Materials.

## REGISTRATION WITH THE SECRETARY OF STATE BY A FOREIGN ENTITY

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

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

Businesses can register with the Secretary of State at <a href="https://secure.kentucky.gov/sos/ftbr/welcome.aspx">https://secure.kentucky.gov/sos/ftbr/welcome.aspx</a> .

## SPECIAL NOTE FOR PROJECT QUESTIONS DURING ADVERTISEMENT

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

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

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

## HARDWOOD REMOVAL RESTRICTIONS

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

## INSTRUCTIONS FOR EXCESS MATERIAL SITES AND BORROW SITES

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

## **ACCESS TO RECORDS**

The contractor, as defined in KRS 45A.030 (9) agrees that the contracting agency, the Finance and Administration Cabinet, the Auditor of Public Accounts, and the Legislative Research Commission, or their duly authorized representatives, shall have access to any books, documents, papers, records, or other evidence, which are directly pertinent to this contract for the purpose of financial audit or program review. Records and other prequalification information confidentially disclosed as part of the bid process shall not be deemed as directly pertinent to the contract and shall be exempt from disclosure as provided in KRS 61.878(1)(c). The contractor also recognizes that any books, documents, papers, records, or other evidence, received during a financial audit or program review shall be subject to the Kentucky Open Records Act, KRS 61.870 to 61.884.

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

06/01/16

## 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 Expedite Bidding Program. Submittal of the Affidavit should be done along with the bid in Bid Express.

#### SURFACING AREAS

#### ADAIR COUNTY

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

The Department estimates the total mainline area to be surfaced to be 61,402 square yards.

The Department estimates the shoulder width to be 1.5 feet on each side.

The Department estimates the total shoulder area to be surfaced to be 7,675 square yards.

#### CUMBERLAND COUNTY MP 16.690-22.010

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

The Department estimates the total mainline area to be surfaced to be 74,906 square yards.

The Department estimates the shoulder width to be 1.5 feet on each side.

The Department estimates the total shoulder area to be surfaced to be 9,363 square yards.

#### CUMBERLAND COUNTY MP 22.010-25.787

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

The Department estimates the total mainline area to be surfaced to be 53,180 square yards.

The Department estimates the shoulder width to be 1.5 feet on each side.

The Department estimates the total shoulder area to be surfaced to be 6,648 square yards.

#### ADAIR COUNTY

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

The Department estimates the total mainline area to be surfaced to be 16,037 square yards.

The Department estimates the shoulder width to be 1.5 feet on each side.

The Department estimates the total shoulder area to be surfaced to be 2,005 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.

#### FUEL AND ASPHALT PAY ADJUSTMENT

The Department has included the Contract items Asphalt Adjustment and Fuel Adjustment for possible future payments at an established Contract unit price of \$1.00. The Department will calculate actual adjustment quantities after work is completed. If existing Contract amount is insufficient to pay all items on the contract with the adjustments, the Department will establish additional monies with a change order.

#### **OPTION B**

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

## SPECIAL NOTE FOR ASPHALT SCRUB SEAL

**1. DESCRIPTION.** This work consists of placing a polymer modified asphalt emulsion which is scrubbed with a broom to fill and seal cracks and covered with a layer of aggregate.

## 2. MATERIAL AND EQUIPMENT.

**Asphalt Material.** Furnish undiluted CMS-1P or CMS-1PC polymer modified emulsion that meets requirements below:

| EMULSIFIED ASP  | HALT SPECIFICATION                 |                 |           |  |
|---|------------------------------------|-----------------|-----------|--|
| DDODEDTV  | METHOD                             | SPECIFIC        | ATION     |  |
| PROPERTY  | METHOD                             | CMS-1P          | CMS-1PC   |  |
| Test on Emulsion  |                                    | -               |           |  |
| Viscosity @ 122 •F (SFS)  | AASHTO T 59                        | 50 - 350        | 50-350    |  |
| Residue, w%, minimum. (1)   | AASHTO T 59                        | 67              | 60        |  |
| рН  | ASTM E 70                          | 2.0-5.0         | 2.0-5.0   |  |
| Sieve, w%, max.   | AASHTO T 59                        | 0.1             | 0.1       |  |
| Oil distillate, w%, max.  | AASHTO T 59                        | 0.5             | 0.5       |  |
|   |                                    |                 |           |  |
| TEST ON RESIDUE   |                                    |                 |           |  |
| Viscosity @ 140 °F, P, maximum.                                       | AASHTO T 201                       | 3000            | -         |  |
| Penetration @ 39.2 °F, minimum.                                       | AASHTO T 49                        | 40              | 30        |  |
| Elastic Recovery on residue by distillation, %, minimum (2)           | AASHTO T 301                       | 50              | 50        |  |
| Test on Polymer:  |                                    |                 |           |  |
| Tensile strength, die C dumbbell, psi, minimum                        | ASTM D 412 (3)                     | 500             | 800       |  |
| Swelling in rejuvenating agent, % maximum; 48 hours exposure @ 104 °F | ASTM D 471 <sup>(4)</sup> Modified | 40% intact film | 40%       |  |
| Latex Density @ 73 °F   | ASTM D 6937 (5,6)                  | -               | 1.00-1.05 |  |
| TEST ON REJUVENATING AGENT:   |                                    |                 |           |  |
| Flash point, COC, °F  | AASHTO T 48                        | 380 Min         |           |  |
| Viscosity, 140 °F, CST  | AASHTO T 201                       | 50-175          |           |  |
| Saturate, % by wt.  | ASTM D 2007                        | 30 N            | lax       |  |
| Asphaltenes   | ASTM D 2007                        | 1.0 N           | lax.      |  |
| Test on Residue from RTFO   | AASHTO T 240                       |                 |           |  |
| Weight Change, %  |                                    | 6.5 Max.        |           |  |
| Viscosity Ratio   |                                    | 3 M             | ах        |  |
|   |                                    |                 |           |  |
|   |                                    |                 |           |  |

- (1) Exception to AASHTO T59: Bring the temperature on the lower thermometer slowly to  $350 \pm 10$  •F. Maintain at this temperature for 20 minutes. Complete total distillation in  $60 \pm 5$  min from first application of heat.
- (2) Elastic Recovery @ 10 •C (50 •F): Hour glass sides, pull 20 cm, hold 5 minutes then cut, let sit 1 hour.
- (3) Tensile Strength Determination: Samples for testing for tensile strength in accordance with ASTM D412 shall be tested with the following test procedure modifications:
- (4) Prepare the polymer film, dilute the waterborne polymer to 40% Total Solids Content and pour 57 g into a Teflon or silicone release mold of dimensions 7" X 7" X ¼". Allow to dry at 23°C (73 °F) and 50% RH (controlled conditions) for 7 10 days total time, during which time the film should be flipped around once, preferably after 3 or 4 days. The film should be transparent in the end. To drive out any residual water, place the film in an oven at 50 °C for 30 min. Dried film thickness should be 25 ± 5 mils. Discard films <20 mil. Cut out dumbbell-shaped test specimens of dimension 75 mm total length, 25 mm mid-section (L) and 4 mm width of mid-section. Grip in Instron machine with gap size 1 inch, use 8 in/min cross-head speed.
- g of latex into an 18 mm diameter DSR mold. Allow the sample to dry at ambient lab conditions (air conditioned) on the bench for 72 hours. Sample should be easily removable from the mold. Take the "button" out of the mold and place the sample into a forced air oven at 40 °C (104 °F) for 48 h (on release paper). If at the end of the ambient dry, the sample sticks to the mold, place it into the oven and check it after 1-2 h. After 48 h, cool and weigh the sample to the nearest 0.0001 g and record the weight. Put ½ in of Rejuvenating Agent into a 3 oz penetration tin. Place the "button" on the rejuvenating agent, and add another ½ in of rejuvenating agent, so that the "button" is covered. Put the cap on the penetration tin and place it into the 40 °C oven for 48 h. Remove the "button from the Rejuvenating Agent, blot surface of the "button" to remove excess Rejuvenating Agent, cool the "button" to room temperature and weigh it. Calculate weight gain of the "button", express as a percent.
- (6) Replace "Emulsified Asphalt" with "Latex" in text of test method. The testing temperature used should be 25 ± 3 •C. The calculation in Section 7 should be as follows:

$$\begin{split} D &= \left(W_f - W_t\right) * 0.1 \\ S.G. &= D \ / \ 8.337 \end{split}$$
 Where:  $W_f = \text{Weight of filled cup (g)}$   $W_t = \text{Weight of empty cup (g)}$ 

The Department will require a sample of the polymerized emulsion to be taken from the distributor spray bar at a lot frequency of one sample per 5,000 gallons of emulsion. Take two 1 gallon samples of the heated material and forward the sample to the Division of Materials for testing. Ensure the product temperature is between  $160^{\circ}$  and  $180^{\circ}$  F at the time of sampling.

**Aggregate.** Provide a cleaned washed aggregate cover material from an approved aggregate producer and shall meet the material requirements that conform to **Section 805**, as applicable. However, contrary to **Section 805.15** the Department will base the reduction on the bid price for the chip aggregate. Also, contrary to **Section 805.05.04** provide coarse aggregates having no more than 2.0 percent passing the No. 200 sieve.

**Equipment.** Provide, and keep on the project at all times, an accurate thermometer, hand brooms, and other small tools and equipment essential for completion of the work.

**Calibration** of equipment application rates shall be completed on day at a time directed by the engineer. A test strip shall be required at the beginning of each new project or as directed by the engineer.

The asphalt distributor for the application of the emulsion shall have full circulation spray bar that is adjustable to at least 16 feet wide in 2 feet increments and capable of heating and circulating the emulsion simultaneously, conforming to Section 406.02.05. It must have computerized rate control for adjusting and controlling the application from the cab within 0.01 gallons per square yard increments. The distributor shall also be equipped with a volume measuring device and a thermometer for measuring the emulsion temperature in the tank. For each emulsion application, follow manufactures recommendations for proper nozzle type and adjustment.

The scrub broom shall be rigid in frame construction and attached to and pulled by the distributor. It shall be light enough so not to squeegee the emulsion off the roadway surface. The leading and trailing broom heads angled at 10 to 15 degrees off the centerline of the supporting member with stiff bristles at minimum height of 5 inches.

The aggregate spreader be a front discharge, continuous mechanical feed, self-propelled aggregate spreader with a screen capable of removing oversized materials. It must have computerized control for adjusting and regulating application rates, as well as width, from the operating platform. Ensure the spreader can evenly distribute the aggregate from the transporting vehicle directly onto the fresh asphalt material in smooth, uniform layers, independent of the forward speed. The spreader must be capable of being filled and moved without discharging aggregate. The spreader must be equipped with a locking mechanism compatible with the triaxle trucks used to supply aggregate.

**Rollers.** Pneumatic tire roller shall weigh at least 5 tons. Steel wheel type roller shall weigh at least 5 tons but no more than 8 tons.

#### 3. CONSTRUCTION.

**Weather Limitations.** Application of chip seal shall be applied when air temperature is at least 50 degrees F and rising and a minimum surface temperature of 70 degrees F. Do not construct when the ambient temperature within the preceding 24 hours has been 35 degrees F or lower. Do not proceed with construction if rain is expected in a minimum period of 24 hours. If an unexpected shower arises during operations, the asphalt distributor should be shut off immediately and placement of aggregate continued until all asphalt has been covered.

**Preparation of Mixture.** Submit a complete mix design a minimum of 14 days prior to construction. Mix design shall be prepared by an approved laboratory, to verify the compatibility of the aggregate, asphalt emulsion and other additives. Perform the mix design with the same materials that will be used on the project.

**Surface Preparation.** Prior to operation, the contractor shall remove all existing thermoplastic striping, thermoplastic legends, and raised markers within application limits. All surfaces intended for application shall be thoroughly cleaned of all vegetation, loose material, dirt, or other objectionable material immediately before application of emulsion using a mechanical sweeper and wire hand brooms, when necessary. Clean the edges of the surface providing a full and uniformly clean width of roadway.

Where mud or earth exists, remove it in advance and allow surface to thoroughly dry before applying emulsion. Mowing or removal of shoulder vegetation and or brush may be necessary for proper application.

If cracks cannot be adequately filled by emulsion, fill with proper asphalt material or hot pour joint sealer conforming to **Section 807.03.01.** If applicable, apply cover aggregate before applying chip seal application.

## **Application Rates of Materials.**

| Properties                              | Minimum | Maximum |
|---|---------|---------|
| Application rate of emulsion, gal/sqyd* | 0.25    | 0.40    |
| Emulsion temperature, F                 | 110     | 185     |
| Application rate of aggregate, lb/sqyd* | 10      | 25      |

<sup>\*</sup>For double chip seal applications:

1<sup>st</sup> treatment layer shall be applied at 40% of total emulsion rate

#### 4. APPLICATION.

**Application of Emulsion.** Heat and maintain emulsion between 110 and 185 degrees F during application. Polymer modified emulsion shall be applied when air temperature is at least 50 degrees F and rising and a minimum surface temperature of 70 degrees F.

Emulsion shall be applied using a pressure distributor in a uniform, continuous quantity at specified rates.

Keep the nozzles of the spray bar clean at all times. Immediately make any streaked areas uniform by use of a hand hose equipped with a nozzle.

**Scrubbing.** Mechanically scrub emulsion by dragging the broom directly in tow of the distributor, spreading the emulsion evenly over the road surface filling all cracks and voids.

Do not allow distributor and brooming equipment to apply asphalt material ahead of aggregate spreader for more than 150 feet.

When the scrub seal treatment is constructed in half-widths, provide complete coverage by overlapping the 2 applications approximately 4 inches along centerline.

Prevent spotting or discoloring curbs, headwalls, and other structures. When such discolorations occur, remove them at no expense to KYTC.

Utilize building paper or other materials approved by the engineer to provide a clean and proper construction joint. A straight edge shall be used to ensure a consistent and even joint.

**Aggregate.** Aggregate cover material shall be cleaned and washed to remove dirt and dust, ensuring appropriate adhesion with emulsion. Due to this process, aggregate may be damp during application. Immediately following scrubbing and prior to breaking of the emulsion, aggregate shall be continuously

<sup>2&</sup>lt;sup>nd</sup> treatment layer shall be applied at 60% of total emulsion rate

<sup>\*</sup>Engineer may adjust application rates due to existing conditions

<sup>\*</sup>In cases where adequate emulsion application rates or coverage do not meet the engineer's requirements, the engineer may remove the scrub broom from the application process.

and evenly spread with the proper equipment at the specified rates. Spreading equipment shall not contact the asphalt material before it is covered with aggregate. Precautions should be taken not to exceed the designated rate by more than 5 percent. Use hand brooms to correct any irregularities.

**Rolling.** Two self-propelled pneumatic tire rollers and one steel wheel roller shall be used for the required rolling of the aggregate. This shall be done no more than 5 minutes after the spreading of aggregate. Operate the rollers parallel to the centerline in a manner preventing the dislodgment of newly applied aggregate. Rolling should proceed from the outer edge to the center, with each pass overlapping the previous by one-half Rolling shall consist of at least 2 passes or more with pneumatic tire roller, followed by at least 1 pass with the steel wheel roller when the engineer directs. Roller speeds shall not exceed 5 mph.

**Sweeping.** Power sweep and/or vacuum the completed application to remove all excess aggregate after the asphalt material has completely cured. The curing time shall be determined by the engineer. Surface shall be swept or vacuumed prior to any striping or other surface applications. A second sweeping may be required following the initial application day. If applying an additional surface treatment over the chip seal, it may be opened to traffic for an amount of time specified in the contract or as directed by the engineer.

## Little to no aggregate shall be remaining on the following:

Entrances

Exit aprons

Intersections

Crossroads

Driveways

Lawns

Curbs

Shoulders

### 5. MEASUREMENT.

When an authorized adjustment is made, KYTC will measure quantities up to 5 percent in excess of the designated application rate for payment. KYTC will not measure quantities exceeding the designated application rate by more than 5 percent for payment.

**Asphalt Material.** KYTC will measure the quantity in tons according to **Section 109.** 

**Aggregate.** KYTC will measure the quantity in sqyd according to **Section 109.** 

#### 6. PAYMENT.

KYTC will make payment for the completed and accepted quantities of emulsified asphalt according to the following:

| Emulsified Asphalt Price Adjustment Schedule        |               |           |               |               |               |        |
|---|---------------|-----------|---------------|---------------|---------------|--------|
| Test  | Specification | 100% Pay  | 90%<br>Pay    | 80%<br>Pay    | 50%<br>Pay    | 0% Pay |
|   | CMS-1P        |           |               |               |               |        |
| Viscosity, 122 ° F (SFS)                            |               |           | 47            | 46            | 45            | ≤44    |
| AASHTO T 59   | 50 - 350      | 48 - 355  | 356           | 357           | 358           | • 359  |
| pH,   |               |           | 1.8           | 1.7           | 1.6           | • 1.5  |
| ASTM E 70   | 2.0 – 5.0     | 1.9 - 5.1 | 5.2           | 5.3           | 5.4           | • 5.5  |
| Residue Penetration @ 4 •C, AASHTO T 49             | • 40          | • 39      | 38            | 37            | 36            | • 35   |
| Particle Charge, AASHTO T 59                        | Positive      |           |               |               |               |        |
| Oil Distillate, %, AASHTO T 59                      | • 0.5         | • 0.6     | 0.65          | 0.7           | 0.75          | • 0.8  |
| Residue, % AASHTO T 59                              | ≥ 67.0        | ≥ 66.0    | 65.5          | 65            | 64.5          | ≤ 64.4 |
| Sieve, % AASHTO T 59                                | • 0.1         | • 0.2     | 0.3           | 0.4           | 0.5           | • 0.51 |
| Residue Elastic Recovery @ 50 ° F (cm) AASHTO T 301 | ≥ 50.0        | ≥ 48.0    | 47            | 46            | 45            | ≤ 44.9 |
| Residue Viscosity @ 140 • F, P                      | • 3000        | • 3020    | 3021-<br>3040 | 3041-<br>3060 | 3061-<br>3070 | • 3071 |
|   | CMS-1PC       |           |               | •             |               |        |
| Viscosity, 122 ° F (SFS)                            |               |           | 47            | 46            | 45            | ≤44    |
| AASHTO T 59   | 50 - 350      | 48 - 355  | 356           | 357           | 358           | •359   |
| pH,   |               |           | 1.8           | 1.7           | 1.6           | • 1.5  |
| ASTM E 70   | 2.0 – 5.0     | 1.9 - 5.1 | 5.2           | 5.3           | 5.4           | • 5.5  |
| Residue Penetration @ 4 •C, AASHTO T 49             | • 30          | • 29      | 28            | 27            | 26            | • 25   |
| Particle Charge, AASHTO T 59                        | Positive      |           |               |               |               |        |
| Oil Distillate, %, AASHTO T 59                      | • 0.5         | • 0.6     | 0.65          | 0.7           | 0.75          | •0.8   |
| Residue, % AASHTO T 59                              | ≥ 60.0        | ≥ 59.0    | 58.5          | 58            | 57.5          | ≤ 57.4 |
| Sieve, % AASHTO T 59                                | • 0.1         | • 0.2     | 0.3           | 0.4           | 0.5           | • 0.51 |
| Residue Elastic Recovery @ 50 •F (cm)  AASHTO T 301 | • 50.0        | • 48.0    | 47            | 46            | 45            | • 44.9 |

Pay ItemPay UnitPolymer Asphalt Emulsion for Scrub SealTonAsphalt Seal AggregateSqyd

KYTC will consider payment as full compensation for all work required under this section.

# SPECIAL NOTE FOR POLISH-RESISTANT AGGREGATE IN NO 4 THINLAY ASPHALT MIXTURES

Contrary to Subsection 403.03.03, provide polish-resistant aggregate in the ASPH SURF NO.4 asphalt mixture conforming to one of the following requirements:

## **ASPH SURF NO.4A**

• 100 percent of total combined aggregate is Class A polish-resistant aggregate.

#### **ASPH SURF NO.4B**

- 50 percent or more of the total combined aggregate is Class A polish-resistant aggregate; or
- 100 percent of total combined aggregate is Class B polish-resistant aggregate.

**Contrary to Section 409.03.03** of the *Standards and Specifications*, for a 4.75mm asphalt mixture requiring a Class A or B polish resistant aggregate, the use of recycled/reclaimed materials is prohibited. For 4.75mm asphalt mixtures requiring Class D aggregate, recycled asphalt pavement (RAP) shall not exceed 15% of effective binder content, and the use of recycled asphalt shingles (RAS) is prohibited.

# SPECIAL NOTE FOR TACK OIL APPLICATIONS FOR NO 4 THINLAY ASPHALT MIXTURES

**Contrary to 406.03.03**, apply tack at a rate to achieve an undiluted residue of 0.8 pounds (0.10 gallons) per square yard.

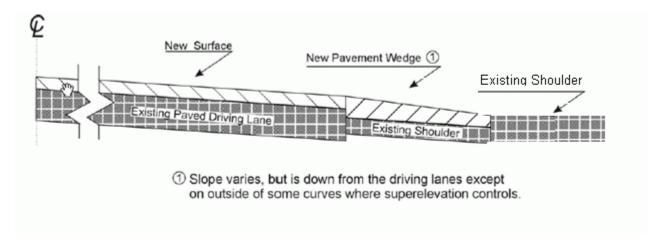
# SPECIAL NOTE FOR PAVEMENT WEDGE AND SHOULDER MONOLITHIC OPERATION

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

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

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

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

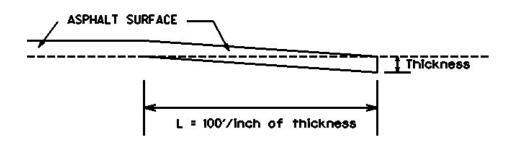


- **3.0 MEASUREMENT.** The Department will measure Asphalt Surface Mixture placed as the pavement wedge according to Section 403.
- **4.0 PAYMENT.** The Department will make payment for the completed and accepted quantities of Asphalt Surface Mixtures on pavement wedges according to Section 403.

#### SPECIAL NOTE FOR EDGE KEY

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

## EDGE KEY



Thickness = 5/8 Inches

 $L = \underline{62.5} LF$ 

L= Length of Edge Key

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# SPECIAL NOTE FOR ASPHALT MILLING AND TEXTURING

Begin paving operations within <u>two weeks</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.

1-3505 2 weeks Contractor keeps millings 01/2/2012

## SPECIAL NOTE FOR TYPICAL SECTION DIMENSIONS

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

1-3725 Typical Section Dimensions 01/02/2012

#### TRAFFIC CONTROL PLAN

#### TRAFFIC CONTROL GENERAL

Except as provided herein, maintain and control traffic in accordance with the Standard and Supplemental Specifications and the Standard and Sepia 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, furnish new, or used in like new condition, traffic control devices at the beginning of the work and maintain in like new condition until completion of the work.

#### PROJECT PHASING & CONSTRUCTION PROCEDURES

The Engineer may specify days and hours when lane closures will not be allowed.

Maintain alternating one-way traffic during construction. Provide a minimum clear lane width of 11 feet; however, provide for passage of vehicles of up to 16 feet in width. If traffic should be stopped due to construction operations, and a school bus on an official run arrives on the scene, make provisions for the passage of the bus as quickly as possible.

## **SCRUB SEAL**

At locations where the scrub seal is to be applied, provide "LOOSE GRAVEL" signs and "25 MPH" signs, as directed by the Engineer.

## LANE CLOSURES

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.

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#### **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 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 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. The Department will measure individual Changeable Message Signs 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 Changeable Message Signs or for signs the Engineer directs be replaced due to poor condition or readability. Retain possession of the Changeable Message Signs upon completion of the work.

### **TEMPORARY ENTRANCES**

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

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

The Department will measure asphalt materials required to construct and maintain any temporary entrances which may be necessary to provide temporary access; however, the Department will not measure aggregates, excavation, and/or embankment, but shall be incidental to Maintain and Control Traffic. The Engineer will determine the type of surfacing material, asphalt or aggregate, to be used at each entrance.

## **BARRICADES**

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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.

The Department will measure barricades used to protect pavement removal areas in individual units Each. The Department will measure for payment the maximum number of barricades in concurrent use at the same time on a single day on all sections of the contract. The Department will measure individual barricades 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 barricades the Engineer directs to be replaced due to poor condition or reflectivity. Retain possession of the Barricades upon completion of construction.

#### PAVEMENT MARKINGS

If there is to be a deviation from the existing striping plan, the Engineer will furnish the Contractor a striping plan prior to placement of the final surface course.

Install Temporary Striping according to Section 112 with the following exception:

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

## PAVEMENT EDGE DROP-OFFS

Do not allow a pavement edge between opposing directions of traffic or lanes that traffic is expected to cross in a lane change situation with an elevation difference greater than 1½". Place Warning signs (MUTCD W8-11 or W8-9A) in advance of and at 1500' intervals throughout the drop-off area. Dual post the signs on both sides of the traveled way. Wedge all transverse transitions between resurfaced and unresurfaced 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

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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 on coming 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 insuring 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
- Nor 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 insure that the signs 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 thief (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.

| Word                 | Abbrev.            | <b>Example</b>                                 |
|----------------------|--------------------|--|
| Access               | ACCS               | ACCIDENT AHEAD/USE ACCS RD                     |
|                      |                    | NEXT RIGHT                                     |
| Alternate            | ALT                | ACCIDENT 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                      |
| C4'1 D'4'            | NCEW               | RTE  |
| Cardinal Directions  | N, S, E, W         | N I75 CLOSED/ DETOUR EXIT 30                   |
| Center               | CNTR               | CNTR LANE CLOSED/MERGE LEFT                    |
| Commercial           | COMM               | OVRSZ COMM VEH/USE 1275                        |
| Condition            | COND               | ICY COND POSSIBLE                              |
| Congested            | CONG               | HVY CONG NEXT 3 MI                             |
| Construction         | CONST              | CONST WORK AHEAD/EXPECT                        |
| D                    |                    | DELAYS   |
| Downtown             | DWNTN              | DWNTN TRAF USE EX 40                           |
| Eastbound            | E-BND              | E-BND I64 CLOSED/DETOUR                        |
| <b>-</b>             | E) (E)             | 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                      |
| Г                    |                    | EXIT 10  |
| Freeway              | FRWY, FWY          | GN SYNDR FWY CLOSED/DETOUR                     |
| II                   | I I A 77 N // A 77 | EXIT 15  |
| Hazardous Materials  | HAZMAT             | HAZMAT IN ROADWAY/ALL TRAF                     |
| III alaman           | IIWW               | EXIT 25  |
| Highway              | HWY                | ACCIDENT ON AA HWY/EXPECT<br>DELAYS            |
| П.,,,,,              | IID                | ACCIDENT ON AA HWY/2 HR                        |
| Hour                 | HR                 | DELAY  |
| Information          | INEO               | TRAF INFO TUNE TO 1240 AM                      |
| Information          | INFO<br>I          | E-BND I64 CLOSED/DETOUR                        |
| Interstate           | 1                  | EXIT 20  |
| Long                 | LN                 | LN CLOSED/MERGE LEFT                           |
| Lane<br>Left         | LN<br>LFT          | LN CLOSED/MERGE LEFT LANE CLOSED/MERGE LFT     |
|                      |                    |  |
| Local                | LOC<br>MAINT       | LOC TRAF USE ALT RTE<br>MAINT WRK ON BRDG/SLOW |
| Maintenance<br>Maior | MAIN I<br>MAJ      |  |
| Major                | IVIAJ              | MAJ DELWAYS 175/USE ALT RTE                    |
|                      |                    |  |

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| Mile        | MI      | ACCIDENT 3 MI AHEAD/ USE<br>ALT RTE   |
|-------------|---------|---------------------------------------|
| Minor       | MNR     | ACCIDENT 3 MI MNR DELAY               |
| Minutes     | MIN     | ACCIDENT 3 MI/30 MIN DELAY            |
| Northbound  | N-BND   | N-BND I75 CLOSED/ DETOUR              |
| Northbound  | N-DND   |                                       |
| 0 : 1       | OVDCZ   | EXIT 50                               |
| Oversized   | OVRSZ   | OVRSZ COMM VEH/USE I275<br>NEXT RIGHT |
| Parking     | PKING   | EVENT PKING NEXT RGT                  |
| Parkway     | PKWY    | CUM PKWAY TRAF/DETOUR                 |
| 1 421111 43 | 111,, 1 | EXIT 60                               |
| Prepare     | PREP    | ACCIDENT 3 MIL/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               |
| Ttoda Work  | 112 111 | 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               |
| Southbound  | 9-DIVD  | EXIT 50                               |
| Speed       | SPD     | SLIP COND POSSIBLE/ SLOW SPD          |
| Street      | ST      | MAIN ST CLOSED/USE ALT RTE            |
| Traffic     | TRAF    | CUM PKWAY TRAF/DETOUR                 |
| Traffic     | INAL    | EXIT 60                               |
| Val.: ala   | VEH     | OVRSZ COMM VEH/USE I275               |
| Vehicle     | VEH     |                                       |
| XX .1 1     | III DND | NEXT RIGHT                            |
| Westbound   | W-BND   | W-BND I64 CLOSED/DETOUR               |
|             |         | EXIT 50                               |
| Work        | WRK     | CONST WRK 2MI/POSSIBLE                |
|             |         | DELAYS                                |

Certain abbreviations are prone to inviting confusion because another word is abbreviated or could be abbreviated in the same way. DO NO USE THESE ABBREVIATIONS.

| Abbrev. | Intended Word     | <b>Word Erroneously Given</b> |
|---------|-------------------|-------------------------------|
| 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                      |

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> TEMP WRNG

Temporary Warning

Temperature 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

ACCIDENT ACCIDENT/XX MILES XX ROAD CLOSED XX EXIT CLOSED BRIDGE CLOSED

BRIDGE/(SLIPPERY, ICE, ETC.) CENTER/LANE/CLOSED DELAY(S), MAJOR/DELAYS

DEBRIS AHEAD DENSE FOG

DISABLED/VEHICLE
EMER/VEHICLES/ONLY
EVENT PARKING
EXIT XX CLOSED
FLAGGER XX MILES
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

LOOSE GRAVEL

MEDIAN WORK XX MILES

MOVING WORK ZONE, WORKERS IN ROADWAY

NEXT EXIT CLOSED NO OVERSIZED LOADS

NO PASSING NO SHOULDER ONE LANE BRIDGE Action

ALL TRAFFIC EXIT RT AVOID DELAY USE XX CONSIDER ALT ROUTE

**DETOUR** 

DETOUR XX MILES DO NOT PASS EXPECT DELAYS FOLLOW ALT ROUTE

KEEP LEFT
KEEP RIGHT
MERGE XX MILES
MERGE LEFT
MERGE RIGHT
ONE-WAY TRAFFIC
PASS TO LEFT
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

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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

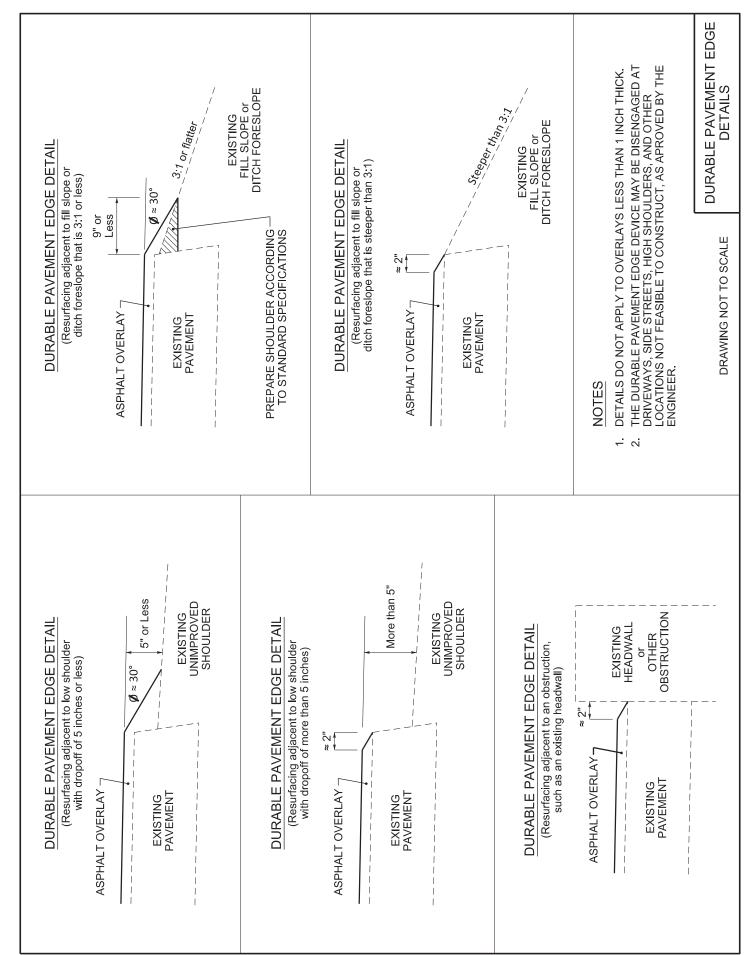
**UNEVEN LANES** 

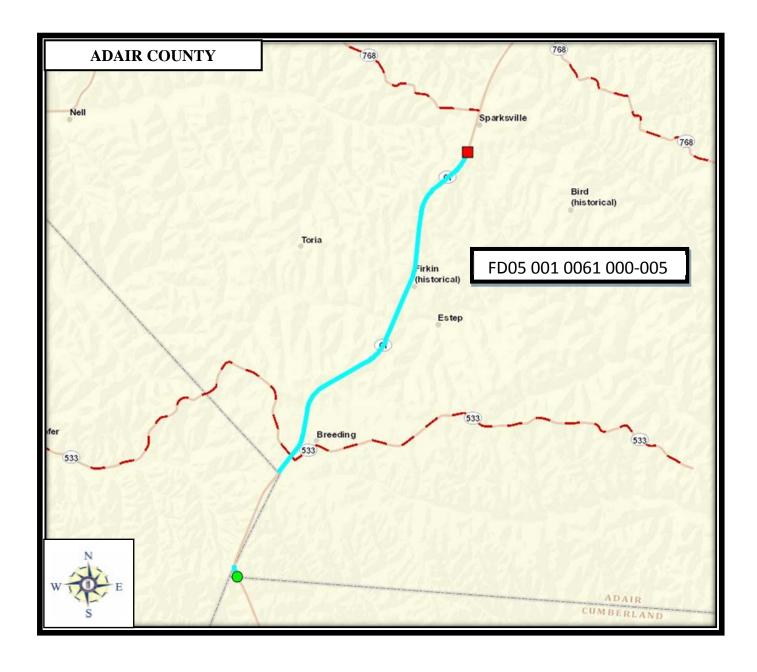
WATER ON ROAD

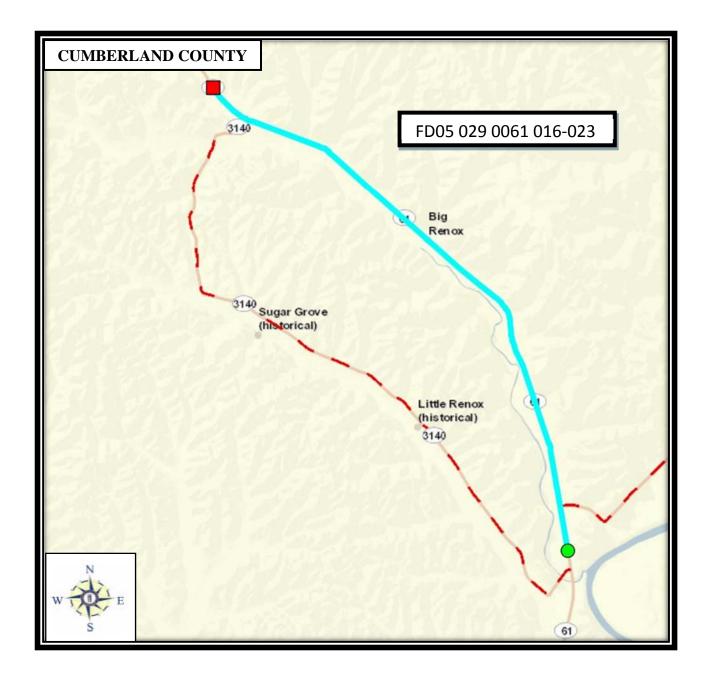
**WET PAINT** 

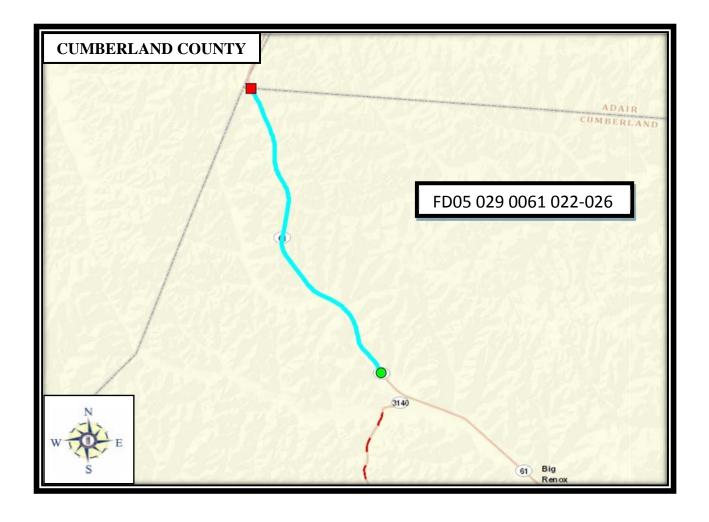
WORK ZONE XX MILES

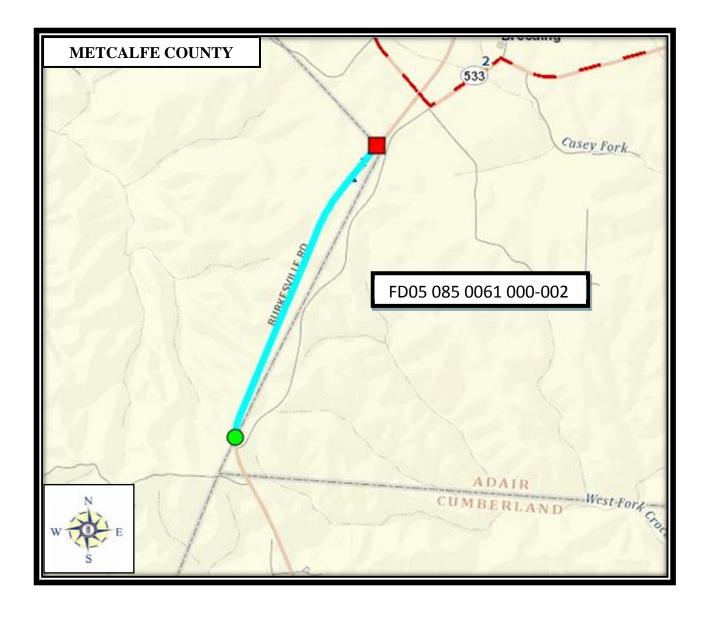
**WORKERS AHEAD** 











## **MATERIAL SUMMARY**

| CONTRACT ID: 182027 | 121GR18P007-FD05 | MP00100611801 |
|---------------------|------------------|---------------|
|---------------------|------------------|---------------|

BURKESVILLE-COLUMBIA ROAD (KY 61) FROM CUMBERLAND COUNTY LINE EXTENDING NORTH TO PAVEMENT JOINT 975 FEET NORTH OF H GOWEN ROAD ASPHALT SURFACING ULTRA THIN, A DISTANCE OF 4.36 MILES.

| Project<br>Line No | Bid Code   | DESCRIPTION                                   | Quantity  | Unit |
|--------------------|------------|---|-----------|------|
| 0005               | 02562      | TEMPORARY SIGNS                               | 350.00    | SQFT |
| 0010               | 02650      | MAINTAIN & CONTROL TRAFFIC - (ADAIR COUNTY)   | 1.00      | LS   |
| 0015               | 21653ES403 | CL2 ASPH SURF NO.4D PG64-22                   | 2,375.00  | TON  |
| 0020               | 00190      | LEVELING & WEDGING PG64-22                    | 145.00    | TON  |
| 0025               | 02676      | MOBILIZATION FOR MILL & TEXT - (ADAIR COUNTY) | 1.00      | LS   |
| 0030               | 02677      | ASPHALT PAVE MILLING & TEXTURING              | 10.00     | TON  |
| 0035               | 06514      | PAVE STRIPING-PERM PAINT-4 IN                 | 80,800.00 | LF   |
| 0040               | 06510      | PAVE STRIPING-TEMP PAINT-4 IN                 | 20,200.00 | LF   |
| 0045               | 10020NS    | FUEL ADJUSTMENT                               | 3,923.00  | DOLL |
| 0050               | 10030NS    | ASPHALT ADJUSTMENT                            | 9,852.00  | DOLL |
| 0055               | 02569      | DEMOBILIZATION                                | 1.00      | LS   |

CONTRACT ID: 182027 121GR18P007-FD05 MP02900611801

BURKESVILLE-COLUMBIA ROAD (KY 61) FROM PAVEMENT JOINT 0.39 MILES SOUTH OF KY 704 EXTENDING NORTH TO PAVEMENT JOINT 295 FEET SOUTH OF TRAYLOR RIDGE ROAD ASPHALT SURFACING ULTRA THIN, A DISTANCE OF 5.32 MILES.

| Project<br>Line No | Bid Code   | DESCRIPTION  | Quantity  | Unit |
|--------------------|------------|--|-----------|------|
| 0105               | 02562      | TEMPORARY SIGNS  | 425.00    | SQFT |
| 0110               |            | MAINTAIN & CONTROL TRAFFIC - (CUMBERLAND MP 16.690-22.010)   | 1.00      | LS   |
| 0115               | 21653ES403 | CL2 ASPH SURF NO.4D PG64-22                                  | 2,900.00  | TON  |
| 0120               | 00190      | LEVELING & WEDGING PG64-22                                   | 175.00    | TON  |
| 0125               |            | MOBILIZATION FOR MILL & TEXT - (CUMBERLAND MP 16.690-22.010) | 1.00      | LS   |
| 0130               | 02677      | ASPHALT PAVE MILLING & TEXTURING                             | 20.00     | TON  |
| 0135               | 06514      | PAVE STRIPING-PERM PAINT-4 IN                                | 85,000.00 | LF   |
| 0140               | 06510      | PAVE STRIPING-TEMP PAINT-4 IN                                | 21,000.00 | LF   |
| 0145               | 10020NS    | FUEL ADJUSTMENT  | 4,786.00  | DOLL |
| 0150               | 10030NS    | ASPHALT ADJUSTMENT   | 12,022.00 | DOLL |
| 0155               | 02569      | DEMOBILIZATION   | 1.00      | LS   |

# **MATERIAL SUMMARY**

| CONTRACT ID: 182027 | 121GR18P007-FD05 | MP02900611802 |
|---------------------|------------------|---------------|
|---------------------|------------------|---------------|

BURKESVILLE-COLUMBIA ROAD (KY 61) FROM PAVEMENT JOINT 295 FEET SOUTH OF TRAYLOR RIDGE ROAD EXTENDING NORTH TO ADAIR COUNTY LINE ASPHALT SURFACING ULTRA THIN, A DISTANCE OF 3.78 MILES.

| Project<br>Line No | Bid Code   | DESCRIPTION  | Quantity  | Unit |
|--------------------|------------|--|-----------|------|
| 0160               | 02562      | TEMPORARY SIGNS  | 270.00    | SQFT |
| 0165               |            | MAINTAIN & CONTROL TRAFFIC - (CUMBERLAND MP 22.010-25.787) | 1.00      | LS   |
| 0170               | 21653ES403 | CL2 ASPH SURF NO.4D PG64-22                                | 2,075.00  | TON  |
| 0175               | 24961EC    | ASPHALT SEAL AGGREGATE - TYPE D - (NO. 9M)                 | 59,828.00 | SQYD |
| 0180               | 24858EC    | POLYMER ASPHALT EMULSION FOR SCRUB SEAL                    | 100.00    | TON  |
| 0185               | 06514      | PAVE STRIPING-PERM PAINT-4 IN                              | 60,000.00 | LF   |
| 0190               | 06510      | PAVE STRIPING-TEMP PAINT-4 IN                              | 60,000.00 | LF   |
| 0195               | 02671      | PORTABLE CHANGEABLE MESSAGE SIGN                           | 2.00      | EACH |
| 0200               | 10020NS    | FUEL ADJUSTMENT  | 3,230.00  | DOLL |
| 0205               | 10030NS    | ASPHALT ADJUSTMENT   | 8,112.00  | DOLL |
| 0210               | 02569      | DEMOBILIZATION   | 1.00      | LS   |

CONTRACT ID: 182027 121GR18P007-FD05 MP08500611801

BURKESVILLE-COLUMBIA ROAD (KY 61) FROM ADAIR COUNTY LINE EXTENDING NORTH TO ADAIR COUNTY LINE ASPHALT SURFACING ULTRA THIN, A DISTANCE OF 1.14 MILES.

| Project<br>Line No | Bid Code   | DESCRIPTION                                    | Quantity  | Unit |
|--------------------|------------|--|-----------|------|
| 0060               | 02562      | TEMPORARY SIGNS                                | 150.00    | SQFT |
| 0065               | 02650      | MAINTAIN & CONTROL TRAFFIC - (METCALFE COUNTY) | 1.00      | LS   |
| 0070               | 21653ES403 | CL2 ASPH SURF NO.4D PG64-22                    | 625.00    | TON  |
| 0075               | 00190      | LEVELING & WEDGING PG64-22                     | 30.00     | TON  |
| 0800               | 06514      | PAVE STRIPING-PERM PAINT-4 IN                  | 15,500.00 | LF   |
| 0085               | 06510      | PAVE STRIPING-TEMP PAINT-4 IN                  | 3,875.00  | LF   |
| 0090               | 10020NS    | FUEL ADJUSTMENT                                | 1,020.00  | DOLL |
| 0095               | 10030NS    | ASPHALT ADJUSTMENT                             | 2,561.00  | DOLL |
| 0100               | 02569      | DEMOBILIZATION                                 | 1.00      | LS   |

# Milling Summary FD05 001 0061 000-005 ADAIR COUNTY

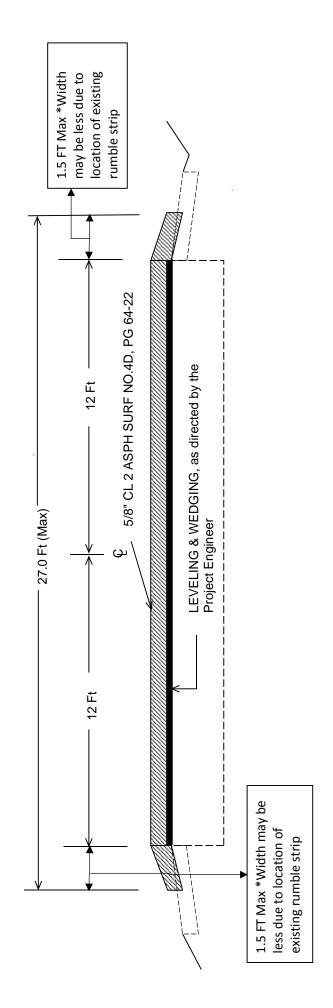
|                             |  |   | Total   | 10   |
|-----------------------------|--|---|---|--|
| Comment                     | Length   | Width   | Avg Depth   | Tons   |
| Edge key at bridge end      | 62.5   | 27  | 0.3125  | 3  |
| Edge key at bridge end      | 62.5   | 27  | 0.3125  | 3  |
| Edge key- MP 4.361 Adair Co | 62.5   | 27  | 0.3125  | 3  |
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|                             | Edge key at bridge end<br>Edge key at bridge end | Edge key at bridge end 62.5 Edge key at bridge end 62.5 | Edge key at bridge end 62.5 27 Edge key at bridge end 62.5 27 | Comment Length Width Avg Depth  Edge key at bridge end 62.5 27 0.3125  Edge key at bridge end 62.5 27 0.3125 |

# Milling Summary FD05 029 0061 016-023 CUMBERLAND COUNTY MP 16.690-22.010

| Comment  Edge key dge key at bridge end dge key at bridge end           | Length 62.5 62.5 62.5 | Width 27 27 | Avg Depth 0.3125                                 | Tons<br>3 |
|---|-----------------------|-------------|--|-----------|
| lge key at bridge end<br>lge key at bridge end<br>lge key at bridge end | 62.5                  |             |  | 3         |
| lge key at bridge end<br>lge key at bridge end                          |                       | 27          | 0.0405   |           |
| lge key at bridge end   | 62.5                  |             | 0.3125   | 3         |
|   | <b>V</b> =. <b>V</b>  | 27          | 0.3125   | 3         |
|   | 62.5                  | 27          | 0.3125   | 3         |
| lge key at bridge end   | 62.5                  | 27          | 0.3125   | 3         |
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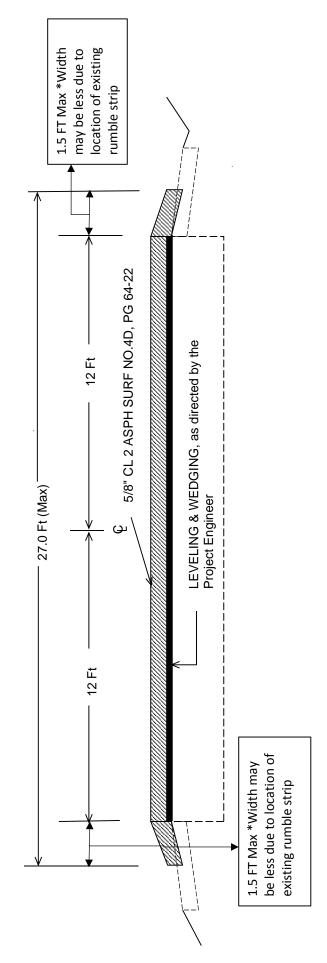
**ADAIR COUNTY** 

FD05 001 0061 000-005 TYPICAL SECTION MP 0.000 - 4.361



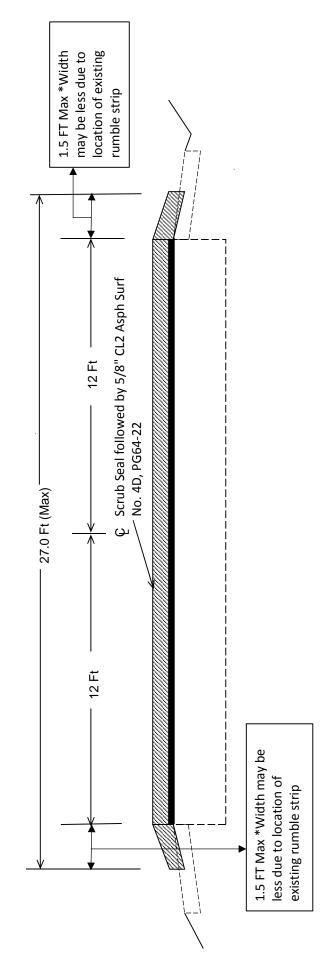
CUMBERLAND COUNTY

FD05 029 0061 016-023 TYPICAL SECTION MP 16.690 - 22.010



CUMBERLAND COUNTY

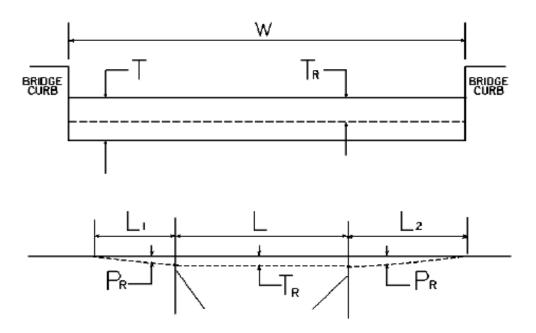
FD05 029 0061 022-026 TYPICAL SECTION MP 22.010 - 25.787



METCALFE COUNTY

may be less due to location of existing 1.5 FT Max \*Width rumble strip 5/8" CL 2 ASPH SURF NO.4D, PG 64-22 LEVELING & WEDGING, as directed by the Project Engineer FD05 085 0061 000-002 TYPICAL SECTION MP 0.000 - 1.139 27.0 Ft (Max) 12 Ft 1.5 FT Max \*Width may be less due to location of existing rumble strip

#### BRIDGE DETAIL FOR PAVING PROJECT



W = bridge width curb to curb

T = thickness of existing asphalt overlay

L = length of bridge

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

 $T_R$  = thickness to be removed and replaced on bridge

 $P_R$  = thickness to be removed and replaced on pavement

Note: L<sub>1</sub> & L<sub>2</sub> lengths shall be determined by using a transition rate of 100 ft/in of thickness

| Route | Bridge No. | MP     | W (ft) | T (in) | $L_1$ (ft) | $L_2$ (ft) | $T_R$ | L (ft) | $P_{R}$ (in) |
|-------|------------|--------|--------|--------|------------|------------|-------|--------|--------------|
|       |            |        |        |        |            |            | (in)  |        |              |
| KY 61 | 001B00080  | 2.283  | 27.00  | 0.00   | 62.50      | 62.50      | 0.00  | 304.00 | 0.625        |
|       |            |        |        |        |            |            |       |        |              |
| KY 61 | 029B00062  | 19.772 | 27.00  | 0.00   | 62.50      | 62.50      | 0.00  | 30.00  | 0.625        |
| KY 61 | 029B00063  | 21.187 | 27.00  | 0.00   | 62.50      | 62.50      | 0.00  | 29.00  | 0.625        |
|       |            |        |        |        |            |            |       |        |              |
|       |            |        |        |        |            |            |       |        |              |
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|       |            |        |        |        |            |            |       |        |              |

## **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.

#### 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

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#### 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.)
  - 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

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

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# **2016 KENTUCKY STANDARD DRAWINGS**SUPPLEMENTS TO STANDARD SPECIFICATIONS TABLE OF CONTENTS

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

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

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

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

# EMPLOYEE RIGHTS UNDER THE FAIR LABOR STANDARDS ACT

THE UNITED STATES DEPARTMENT OF LABOR WAGE AND HOUR DIVISION

# **FEDERAL MINIMUM WAGE**

\$7.25

**PER HOUR** 

**BEGINNING JULY 24, 2009** 

#### **OVERTIME PAY**

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

#### **CHILD LABOR**

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

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

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ADAIR - CUMBERLAND - METCALFE COUNTIES

121GR18P007-FD05

#### 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.



# **PART IV**

# **INSURANCE**

#### **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**

182027

#### **PROPOSAL BID ITEMS**

**Report Date** 12/27/17

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#### Section: 0001 - PAVING

| LINE | BID CODE   | ALT DESCRIPTION  | QUANTITY   | UNIT | <b>UNIT PRIC</b> | FP | AMOUNT      |
|------|------------|--|------------|------|------------------|----|-------------|
| 0010 | 00190      | LEVELING & WEDGING PG64-22                                 | 350.00     | TON  |                  | \$ |             |
| 0020 | 02562      | TEMPORARY SIGNS  | 1,195.00   | SQFT |                  | \$ |             |
| 0030 | 02650      | MAINTAIN & CONTROL TRAFFIC (ADAIR COUNTY)                  | 1.00       | LS   |                  | \$ |             |
| 0040 | 02650      | MAINTAIN & CONTROL TRAFFIC (CUMBERLAND MP 16.690-22.010)   | 1.00       | LS   |                  | \$ |             |
| 0050 | 02650      | MAINTAIN & CONTROL TRAFFIC (CUMBERLAND MP 22.010-25.787)   | 1.00       | LS   |                  | \$ |             |
| 0060 | 02650      | MAINTAIN & CONTROL TRAFFIC (METCALFE COUNTY)               | 1.00       | LS   |                  | \$ |             |
| 0070 | 02671      | PORTABLE CHANGEABLE MESSAGE SIGN                           | 2.00       | EACH |                  | \$ |             |
| 0080 | 02676      | MOBILIZATION FOR MILL & TEXT (ADAIR COUNTY)                | 1.00       | LS   |                  | \$ |             |
| 0090 | 02676      | MOBILIZATION FOR MILL & TEXT (CUMBERLAND MP 16.690-22.010) | 1.00       | LS   |                  | \$ |             |
| 0100 | 02677      | <b>ASPHALT PAVE MILLING &amp; TEXTURING</b>                | 30.00      | TON  |                  | \$ |             |
| 0110 | 06510      | PAVE STRIPING-TEMP PAINT-4 IN                              | 105,075.00 | LF   |                  | \$ |             |
| 0120 | 06514      | PAVE STRIPING-PERM PAINT-4 IN                              | 241,300.00 | LF   |                  | \$ |             |
| 0130 | 10020NS    | FUEL ADJUSTMENT  | 12,959.00  | DOLL | \$1.00           | \$ | \$12,959.00 |
| 0140 | 10030NS    | ASPHALT ADJUSTMENT   | 32,547.00  | DOLL | \$1.00           | \$ | \$32,547.00 |
| 0150 | 21653ES403 | CL2 ASPH SURF NO.4D PG64-22                                | 7,975.00   | TON  |                  | \$ |             |
| 0160 | 24858EC    | POLYMER ASPHALT EMULSION FOR SCRUB SEAL                    | 100.00     | TON  |                  | \$ |             |
| 0170 | 24961EC    | ASPHALT SEAL AGGREGATE - TYPE D (NO. 9M)                   | 59,828.00  | SQYD |                  | \$ |             |

Section: 0002 - DEMOBILIZATION

| LINE | BID CODE | ALT | DESCRIPTION    | QUANTITY | ,    | UNIT | <b>UNIT PRIC</b> | FP | AMOUNT |
|------|----------|-----|----------------|----------|------|------|------------------|----|--------|
| 0180 | 02569    |     | DEMOBILIZATION |          | 1.00 | LS   |                  | \$ |        |