

CALL NO. 404
CONTRACT ID. 172141
SPENCER COUNTY
FED/STATE PROJECT NUMBER 108GR17P027-FD05
DESCRIPTION KY 155 AND KY 55 IN SPENCER COUNTY
WORK TYPE ASPHALT RESURFACING
PRIMARY COMPLETION DATE 11/15/2017

LETTING DATE: May 26,2017

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN DAYLIGHT TIME May 26,2017. Bids will be publicly announced at 10:00 AM EASTERN DAYLIGHT TIME.

NO PLANS ASSOCIATED WITH THIS PROJECT.

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

TABLE OF CONTENTS

PART I SCOPE OF WORK

- PROJECT(S), COMPLETION DATE(S), & LIQUIDATED DAMAGES
- CONTRACT NOTES
- STATE CONTRACT NOTES
- SURFACING AREAS
- ASPHALT MIXTURE
- INCIDENTAL SURFACING
- FUEL AND ASPHALT PAY ADJUSTMENT
- COMPACTION OPTION A
- COMPACTION OPTION B
- SPECIAL NOTE(S) APPLICABLE TO PROJECT
- ASPHALT MIX PAVEMENT WEDGE MONOLITHIC OPERATION
- EDGE KEY
- ASPHALT MILLING AND TEXTURING
- TYPICAL SECTION DIMENSIONS
- TRAFFIC CONTROL PLAN 4 LANE
- DURABLE PAVEMENT EDGE DETAILS
- SKETCH MAP(S)
- MATERIAL SUMMARY
- SUMMARY SHEET(S)
- TYPICAL SECTION(S)
- BRIDGE DETAIL FOR PAVING PROJECT

PART II SPECIFICATIONS AND STANDARD DRAWINGS

- SPECIFICATIONS REFERENCE
- SUPPLEMENTAL SPECIFICATION
- [SN-1I] PORTABLE CHANGEABLE SIGNS
- 2016 STANDARD DRAWINGS THAT APPLY
- CENTERLINE RUMBLE STRIPS
- CENTERLINE RUMBLE STRIP 4 INCH STRIPING
- SHOULDER AND EDGE LINE RUMBLE STRIP DETAILS
- EDGE LINE RUMBLE STRIP DETAILS TWO LANE ROADWAYS
- SHOULDER RUMBLE STRIP DETAILS TWO LANE ROADWAYS

PART III EMPLOYMENT, WAGE AND RECORD REQUIREMENTS

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

PART IV INSURANCE

PART V BID ITEMS

PART I SCOPE OF WORK

ADMINISTRATIVE DISTRICT - 05

CONTRACT ID - 172141

108GR17P027-FD05 COUNTY - SPENCER

PCN - MP10800551701 FD05 108 0055 006-012

TAYLORSVILLE LAKE ROAD (KY 55) (OMIT MP 10.440-10.700) (MP 6.518) FROM KY 44 EXTENDING NORTH TO KY 155-KY 1633 (MP 11.270), A DISTANCE OF 04.75 MILES.ASPHALT RESURFACING GEOGRAPHIC COORDINATES LATITUDE 38:04:29.00 LONGITUDE 85:20:58.00

PCN - MP10801551701 FD05 108 0155 000-001

TAYLORSVILLE LAKE ROAD (KY 155) (MP 0.000) FROM KY 55-KY 1633 EXTENDING NORTH TO 0.232 MILES SOUTH OF VALLEYVIEW DRIVE (MP 0.270), A DISTANCE OF 0.27 MILES.ASPHALT RESURFACING GEOGRAPHIC COORDINATES LATITUDE 38:06:19.00 LONGITUDE 85:22:13.00

COMPLETION DATE(S):

COMPLETED BY 11/15/2017

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 https://secure.kentucky.gov/sos/ftbr/welcome.aspx .

SPECIAL NOTE FOR PROJECT QUESTIONS DURING ADVERTISEMENT

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

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

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

HARDWOOD REMOVAL RESTRICTIONS

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

INSTRUCTIONS FOR EXCESS MATERIAL SITES AND BORROW SITES

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

ACCESS TO RECORDS

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

SPENCER COUNTY 108GR17P027-FD05

SURFACING AREAS

KY 155

The Department estimates the mainline surfacing width to be varied 28-50 feet.

The Department estimates the total mainline area to be surfaced to be 7,047 square yards.

The Department estimates the shoulder width to be 4 feet on each side.

The Department estimates the total shoulder area to be surfaced to be 1,267 square yards.

KY 55

The Department estimates the mainline surfacing width to be varied 28-75 feet.

The Department estimates the total mainline area to be surfaced to be 101,402 square yards.

The Department estimates the shoulder width to be varied 1-3 feet on each side.

The Department estimates the total shoulder area to be surfaced to be 13,326 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 A

KY 55

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

OPTION B

KY 155

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.

Inlaid Pavement Markers Page 1 of 4

SPECIAL NOTE FOR INLAID PAVEMENT MARKERS

I. DESCRIPTION

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

(1) Maintain and Control Traffic; and (2) Furnish and install Inlaid Pavement Markers (IPMs) in recessed grooves; and (3) Any other work as specified by these notes and the Contract.

II. MATERIALS

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

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

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

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

Inlaid Pavement Markers Page 2 of 4

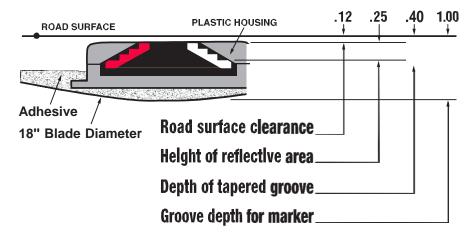
III. CONSTRUCTION

A. Experimental Evaluation. The University of Kentucky Transportation Center will be evaluating this installation of IPMs. Notify the Engineer a minimum of 14 calendar days prior to beginning work. The Engineer will coordinate the University's activities with the Contractor's work.

B. Maintain and Control Traffic. See Traffic Control Plan.

C. Installation. Install IPMs in recessed grooves cut into the final course of asphalt pavement according to the manufacturer's recommendations. Do not cut the grooves until the pavement has cured sufficiently to prevent tearing or raveling. Cut installation grooves using diamond blades on saws that accurately control groove dimensions. Remove all dirt, grease, oil, loose or unsound layers, and any other material from the marker area which would reduce the bond of the adhesive. Maintain pavement surfaces in a clean condition until placing markers.

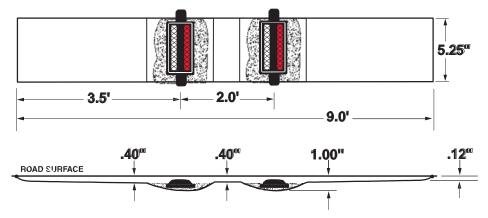
Prepare the pavement surfaces, and install the markers in the recessed groove according to the drawing below. Use an approved snowplowable epoxy adhesive. Ensure that the adhesive bed area is equal to the bottom area of the marker, and apply adhesive in sufficient quantity to force excess out around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



D. Location and Spacing. Install the markers in the pattern for high reflectivity with two (2) IPMs per groove. Locate and space markers as shown in the current standard drawings or sepias (note: use Inlaid Pavement Markers wherever Type V Pavement

Inlaid Pavement Markers Page 3 of 4

Markers are called for). Do not install markers on bridge decks. Do not install a marker on top of a pavement joint or crack. Offset the recessed groove a minimum of 2 inches from any longitudinal pavement joint or crack and at least one inch from the painted stripe, ensuring that the finished line of markers is straight with minimal lateral deviation. Give preference to maintaining the 2-inch offset between recessed groove and joint as opposed to keeping the line of markers straight.



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

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

- **E. Disposal of Waste.** Dispose of all removed asphalt pavement, debris, and other waste at sites off the right of way obtained by the Contractor at no additional cost to the Department. See Special Note for waste and Borrow.
- **F. Restoration.** Be responsible for all damage to public and/or private property resulting from the work. Restore all damaged features in like kind materials and design at no additional cost to the Department.
- **G. On-Site Inspection.** Make a thorough inspection of the site prior to submitting a bid and be thoroughly familiar with existing conditions so that the work can be expeditiously performed after a contract is awarded. The Department will consider submission of a bid as evidence of this inspection having been made and will not honor any claims for money or grant Contract time extensions resulting from site conditions.

Inlaid Pavement Markers Page 4 of 4

H. Caution. Do not take information shown on the drawings and in this proposal and the types and quantities of work listed as an accurate or complete evaluation of the material and conditions to be encountered during construction, but consider the types and quantities of work listed as approximate only. The bidder must draw his own conclusion as to the conditions encountered. The Department does not give any guarantee as to the accuracy of the data and no claim will be considered for additional compensation or extension of Contract time if the conditions encountered are not in accordance with the information shown.

IV. MEASUREMENT

- A. Maintain and Control Traffic. See Traffic Control Plan.
- **B.** "INLAID PAYMENT MARKER" shall be measured as each. One (1) installation of "INLAID PAVEMENT MARKER" will consist of grooving the pavement, removing asphalt cuttings and debris, preheating pavement to remove moisture, adhesives, and installation of two (2) markers with all lenses in accordance with this note.

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

V. PAYMENT

- A. Maintain and Control Traffic. See Traffic Control Plan.
- **B. Inlaid Pavement Markers.** The Department will make payment for the completed and accepted quantity of completely installed "INLAID PAVEMENT MARKERS" at the Contract unit price, each. Accept payment as full compensation for all labor, equipment, materials, and incidentals to accomplish this work to the satisfaction of the Engineer. A system of one (1) groove and two (2) markers shall be paid as one "INLAID PAVEMENT MARKER". The bid item "INLAID PAVEMENT MARKER" shall be used regardless of the color and type of lenses required.

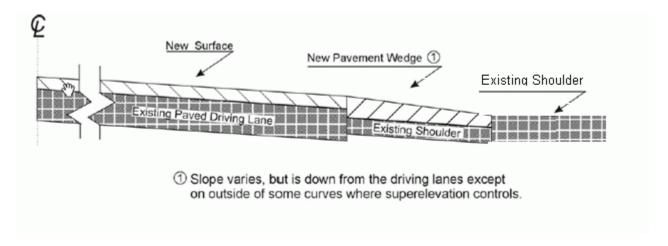
SPECIAL NOTE FOR PAVEMENT WEDGE AND SHOULDER MONOLITHIC OPERATION

- **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.

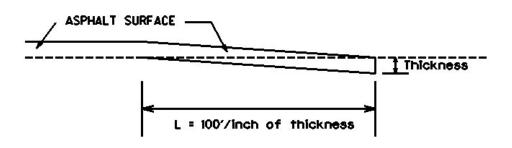


- **3.0 MEASUREMENT.** The Department will measure Asphalt Surface Mixture placed as the pavement wedge according to Section 403.
- **4.0 PAYMENT.** The Department will make payment for the completed and accepted quantities of Asphalt Surface Mixtures on pavement wedges according to Section 403.

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



 $\frac{KY 155}{Thickness} = 1.00 Inches$

L = 100 LF

L= Length of Edge Key

<u>KY 55</u>

 $\overline{\text{Thickness}} = \underline{1.25}$ Inches

L = 125 LF

L= Length of Edge Key

SPENCER COUNTY 108GR17P027-FD05 Contract ID: 172141 Page 16 of 60

SPECIAL NOTE FOR ASPHALT MILLING AND TEXTURING

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

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

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

SPENCER COUNTY 108GR17P027-FD05 Contract ID: 172141 Page 17 of 60

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 additional days and hours when lane closures will not be allowed.

At locations with three or more lanes, maintain one lane of traffic in each direction at all times during construction. At locations with two lanes, maintain alternating one way traffic during construction. 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.

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.

Traffic Control Plan Page 2 of 10

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.

Traffic Control Plan Page 3 of 10

THERMOPLASTIC INTERSECTION MARKINGS

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

BARRICADES

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

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 the work.

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 exceptions:

- 1. Place Temporary or Permanent Striping before opening a lane to traffic; and
- 2. 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.

Traffic Control Plan Page 4 of 10

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

Less than 2" - No protection required.

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

Greater than 4" - Protect drop-offs greater than 4 inches within 10 feet of traffic by placing drums, vertical panels, or barricades every 25 feet. The Engineer will not allow the use of cones in lieu of drums, vertical panels, or barricades for drop-offs greater than 4". Place Type III Barricades directly in front of the drop-off facing 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.

Traffic Control Plan Page 5 of 10

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

SPENCER COUNTY 108GR17P027-FD05

Traffic Control Plan Page 6 of 10

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

•

Traffic Control Plan Page 7 of 10

Standard Abbreviations

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

Word	Abbrev.	Example
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 RTE
Cardinal Directions	N, S, E, W	N I75 CLOSED/ DETOUR EXIT 30
Center	CNTR	CNTR LANE CLOSED/MERGE LEFT
Commercial	COMM	OVRSZ COMM VEH/USE I275
Condition	COND	ICY COND POSSIBLE
Congested	CONG	HVY CONG NEXT 3 MI
Construction	CONST	CONST WORK AHEAD/EXPECT
		DELAYS
Downtown	DWNTN	DWNTN TRAF USE EX 40
Eastbound	E-BND	E-BND I64 CLOSED/DETOUR
		EXIT 20
Emergency	EMER	EMER VEH AHEAD/PREPARE TO
		STOP
Entrance, Enter	EX, EXT	DWNTN TRAF USE EX 40
Expressway	EXPWY	WTRSN EXPWY CLOSED/DETOUR
		EXIT 10
Freeway	FRWY, FWY	GN SYNDR FWY CLOSED/DETOUR
		EXIT 15
Hazardous Materials	HAZMAT	HAZMAT IN ROADWAY/ALL TRAF
		EXIT 25
Highway	HWY	ACCIDENT ON AA HWY/EXPECT
		DELAYS
Hour	HR	ACCIDENT ON AA HWY/2 HR
		DELAY
Information	INFO	TRAF INFO TUNE TO 1240 AM
Interstate	I	E-BND I64 CLOSED/DETOUR
		EXIT 20
Lane	LN	LN CLOSED/MERGE LEFT
Left	LFT	LANE CLOSED/MERGE LFT
Local	LOC	LOC TRAF USE ALT RTE
Maintenance	MAINT	MAINT WRK ON BRDG/SLOW
Major	MAJ	MAJ DELWAYS 175/USE ALT RTE

Traffic Control Plan Page 8 of 10

Mile	MI	ACCIDENT 3 MI AHEAD/ USE 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	וא-טועט	EXIT 50
Oversized	OVRSZ	OVRSZ COMM VEH/USE I275
Oversized	OVRSZ	NEXT RIGHT
Parking	PKING	EVENT PKING NEXT RGT
Parkway	PKWY	CUM PKWAY TRAF/DETOUR
		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
110WWW OTH	100 1/11	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 I75 CLOSED/DETOUR
		EXIT 50
Speed	SPD	SLIP COND POSSIBLE/ SLOW SPD
Street	ST	MAIN ST CLOSED/USE ALT RTE
Traffic	TRAF	CUM PKWAY TRAF/DETOUR
Trutte		EXIT 60
Vehicle	VEH	OVRSZ COMM VEH/USE I275
Veincie	V LII	NEXT RIGHT
Westbound	W-BND	W-BND I64 CLOSED/DETOUR
11 Coloounu	יון אוע	EXIT 50
Work	WRK	CONST WRK 2MI/POSSIBLE
II OIK	11 1/17	DELAYS
		DUDITIO

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

Traffic Control Plan Page 9 of 10

> 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

Traffic Control Plan Page 10 of 10

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

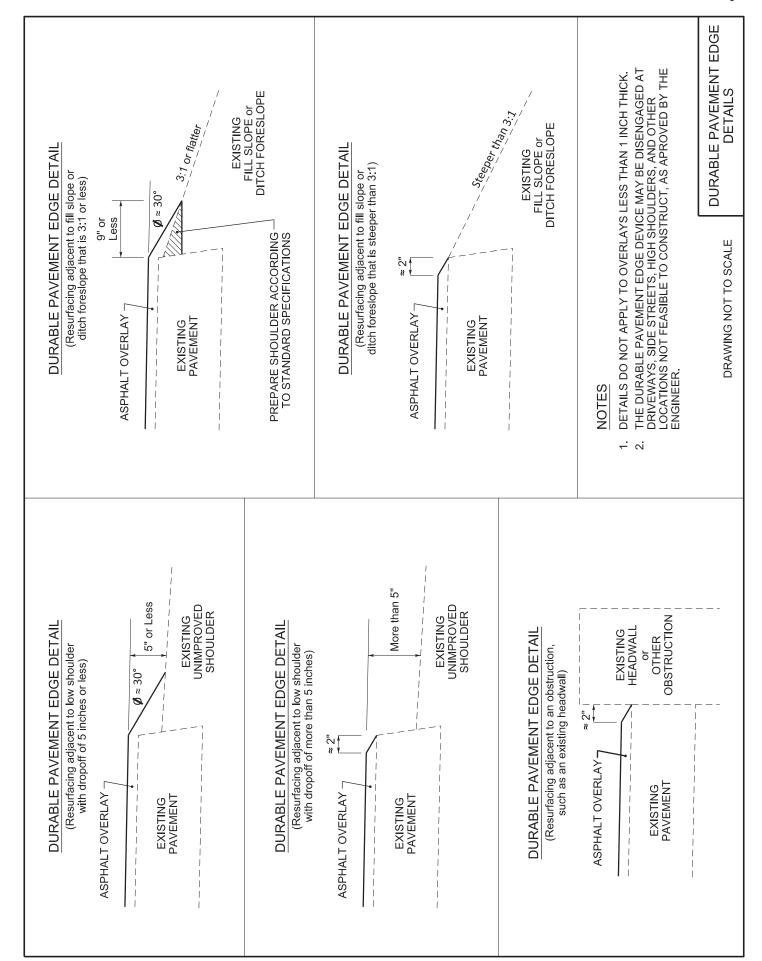
UNEVEN LANES

WATER ON ROAD

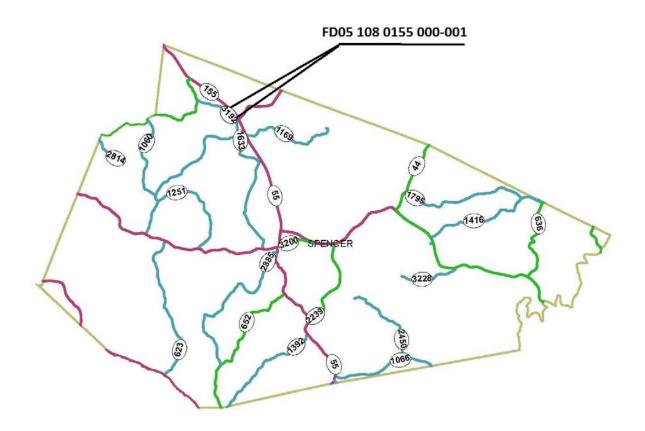
WET PAINT

WORK ZONE XX MILES

WORKERS AHEAD

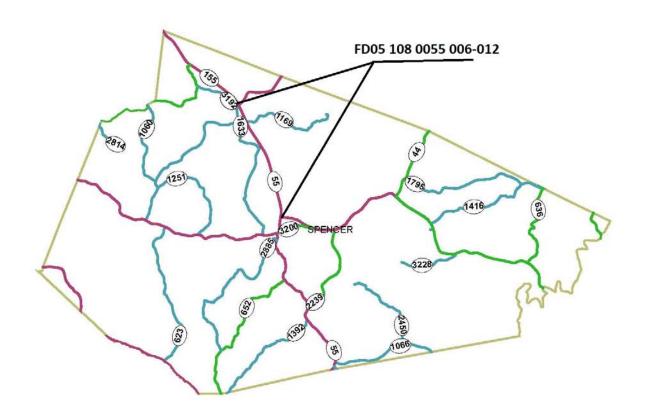


SPENCER





SPENCER





MATERIAL SUMMARY

CONTRACT ID: 172141	108GR17P027-FD05	MP10800551701
CONTRACT ID: 172141	108GR17P027-FD05	MP10800551701

TAYLORSVILLE LAKE ROAD (KY 55) (OMIT MP 10.440-10.700) FROM KY 44 EXTENDING NORTH TO KY 155-KY 1633 ASPHALT RESURFACING, A DISTANCE OF 4.75 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0090	02562	TEMPORARY SIGNS	250.00	SQFT
0095	02650	MAINTAIN & CONTROL TRAFFIC - (KY 55)	1.00	LS
0100	00388	CL3 ASPH SURF 0.38B PG64-22	7,890.00	TON
0105	06600	REMOVE PAVEMENT MARKER TYPE V	680.00	EACH
0110	24097EC	THERMO RUMBLE STRIPS TY 2	390.00	LF
0115	00190	LEVELING & WEDGING PG64-22	574.00	TON
0120	02676	MOBILIZATION FOR MILL & TEXT - (KY 55)	1.00	LS
0125	02677	ASPHALT PAVE MILLING & TEXTURING	1,340.00	TON
0130	06565	PAVE MARKING-THERMO X-WALK-6 IN	172.00	LF
0135	06568	PAVE MARKING-THERMO STOP BAR-24IN	88.00	LF
0140	06514	PAVE STRIPING-PERM PAINT-4 IN	89,183.00	LF
0145	06510	PAVE STRIPING-TEMP PAINT-4 IN	13,378.00	LF
0150	06578	PAVE MARKING-THERMO MERGE ARROW	4.00	EACH
0155	06574	PAVE MARKING-THERMO CURV ARROW	5.00	EACH
0160	02671	PORTABLE CHANGEABLE MESSAGE SIGN	1.00	EACH
0165	20458ES403	CENTERLINE RUMBLE STRIPS	21,070.00	LF
0170	02697	EDGELINE RUMBLE STRIPS	42,140.00	LF
0175	02569	DEMOBILIZATION	1.00	LS
0180	10020NS	FUEL ADJUSTMENT	13,175.00	DOLL
0185	10030NS	ASPHALT ADJUSTMENT	33,091.00	DOLL

MATERIAL SUMMARY

CONTRACT ID: 172141	108GR17P027-FD05	MP10801551701	

TAYLORSVILLE LAKE ROAD (KY 155) FROM KY 55-KY 1633 EXTENDING NORTH TO 0.232 MILES SOUTH OF VALLEYVIEW DRIVE ASPHALT RESURFACING, A DISTANCE OF .27 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0005	02562	TEMPORARY SIGNS	190.00	SQFT
0010	02650	MAINTAIN & CONTROL TRAFFIC - (KY 155)	1.00	LS
0015	00388	CL3 ASPH SURF 0.38B PG64-22	460.00	TON
0020	06568	PAVE MARKING-THERMO STOP BAR-24IN	40.00	LF
0025	06574	PAVE MARKING-THERMO CURV ARROW	8.00	EACH
0030	00190	LEVELING & WEDGING PG64-22	40.00	TON
0035	02676	MOBILIZATION FOR MILL & TEXT - (KY 155)	1.00	LS
0040	02677	ASPHALT PAVE MILLING & TEXTURING	35.00	TON
0045	24097EC	THERMO RUMBLE STRIPS TY 2	240.00	LF
0050	06600	REMOVE PAVEMENT MARKER TYPE V	62.00	EACH
0055	06514	PAVE STRIPING-PERM PAINT-4 IN	5,750.00	LF
0060	06510	PAVE STRIPING-TEMP PAINT-4 IN	900.00	LF
0065	24489EC	INLAID PAVEMENT MARKER	62.00	EACH
0070	02696	SHOULDER RUMBLE STRIPS	2,850.00	LF
0075	10020NS	FUEL ADJUSTMENT	778.00	DOLL
0080	10030NS	ASPHALT ADJUSTMENT	1,955.00	DOLL
0085	02569	DEMOBILIZATION	1.00	LS

SPENCER COUNTY
THERMOPLASTIC INTERSECTION PAVEMENT MARKINGS SUMMARY
FD05 108 0155 000-001
KY 155

NOTES															
RAILROAD	"R" 6 FOOT CROSS BUCK 16" EA LF														
ď	"R" 6 FOOT EA														
RUMBLE	TYPE 2 LF								120	120					240
"ONLY"	EA														
	CURVE STR COMB EA EA EA														
ARROWS	STR														
•	CURVE EA		2	2	-	-	-	-							8
	24 INCH LF														40
X-WALKS	6 INCH LF														
INTERSECTION		KY 55/KY 1633													
MPT.		0.041	0.041	0.049	0.056	0.065	0.152	0.157	0.197	0.248					TOTAL

Milling Summary FD05 108 0155 000-001 KY 155

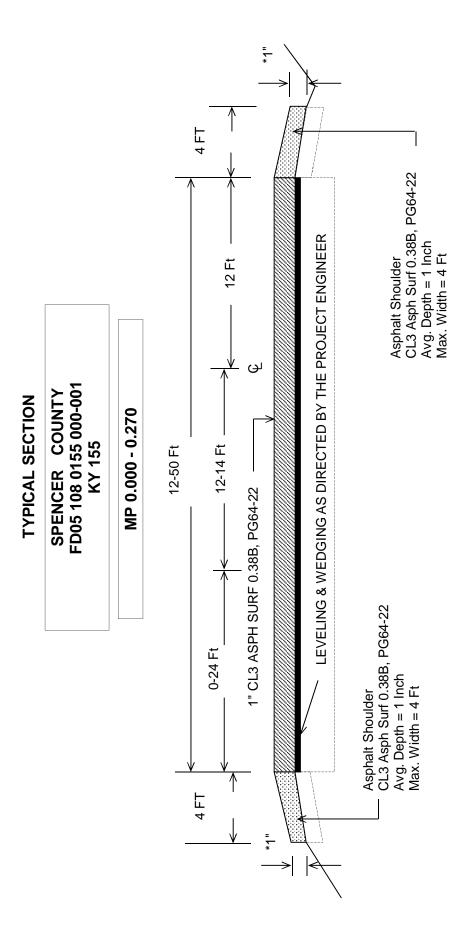
				Total	35
Milepoint	Comment	Length	Width	Avg Depth	Tons
0.000	EDGE KEY	100	56	0.5	17
0.055		40	6	0.5	1
0.083		40	6	0.5	1
0.135		63	6	0.5	1
0.169		63	6	0.5	1
0.270	EDGE KEY	100	36	0.5	11

SPENCER COUNTY
THERMOPLASTIC INTERSECTION PAVEMENT MARKINGS SUMMARY
FD05 108 0055 006-012
KY 55

NOTES														•
RAILROAD CROSS BUCK 16"	i													
RA "R" 6 FOOT EA	í													
THERMO RUMBLE	ī						130	130	130					390
"ONLY"	5													
ARROWS 'O CURVE STR MERGE EA EA EA	5					4								4
ARROWS STR	5													
CURVE	í			2	3									2
STP BARS 24 INCH		38	50											88
X-WALKS 6 INCH	172													172
INTERSECTION	KY 44	KY 44	KY 1633/KY 55											
MPT.	6.518	6.518	11.27	6.719	11.27	10.56	11.09	11.145	11.195					TOTAL

Milling Summary FD05 108 0055 006-012 KY 55

				Total	1340
Milepoint	Comment	Length	Width	Avg Depth	Tons
6.518-6.670	FULL DEPTH	802	75	1.25	459
6.670-7.000	FULL DEPTH	1743	60	1.25	799
7.925	YODER STATION	170	6	0.625	4
7.925	YODER TIPTON	170	6	0.625	4
8.689	SARAH ELIZABETH	80	6	0.625	2
10.44	EDGE KEY	125	33	0.625	16
10.7	EDGE KEY	125	33	0.625	16
11.27	EDGE KEY	125	75	0.625	36



*1" Max. Drop-off Where Existing Site Conditions Permit

1-3 ft Asphalt Shoulder CL 3 ASPH SURF 0.38B, PG 64-22 Avg. Depth = 1.25 Inches Max. Width = 3 Feet 1.25" CL 3 ASPH SURF 0.38B, PG 64-22 LEVELING & WEDGING, as directed by the 12-24Ft Project Engineer 24-60 Ft Asphalt Shoulder CL 3 ASPH SURF 0.38B, PG 64-22 12-36 Ft Avg. Depth = 1.25 Inches Max. Width = 3 Feet 1-3 ft 1 *u

FD05 108 0055 006-012 KY 55

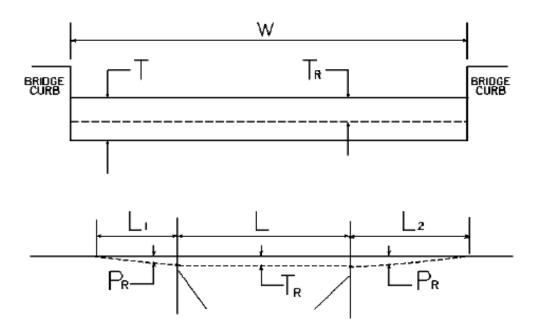
MP 6.518 - 11.270

SPENCER COUNTY

Construct Centerline Rumble Strips from MP 7.020-11.270 Construct Edge Line Rumble Strips from MP 7.020-11.270

*1" Max. Drop-off Where Existing Site Conditions Permit

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: L₁ & L₂ 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 (in)	L (ft)	P _R (in)
KY 155	B00030	0.021	56.00	0.00	0.00	0.00	0.00	38.40	0.00

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

1**I**

SPECIAL NOTE FOR PORTABLE CHANGEABLE MESSAGE SIGNS

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

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

2.0 MATERIALS.

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

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

2.2 Sign and Controls. All signs must:

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

1**I**

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

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

*Insert numerals as directed by the Engineer.

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

2.3 Power.

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

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

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

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

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

1I

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

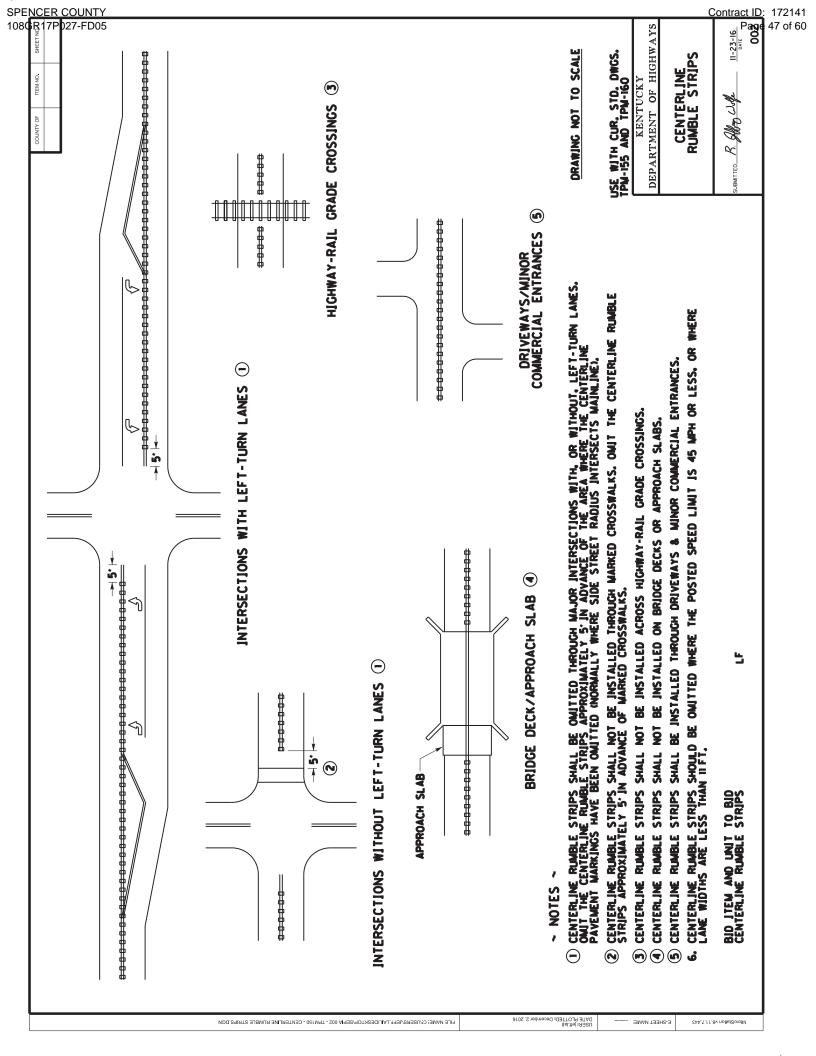
5.0 PAYMENT. The Department will pay for the Variable Message Signs at the unit price each. The Department will not pay for signs replaced due to damage or rejection. Payment is full compensation for furnishing all materials, labor, equipment, and service necessary to, operate, move, repair, and maintain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

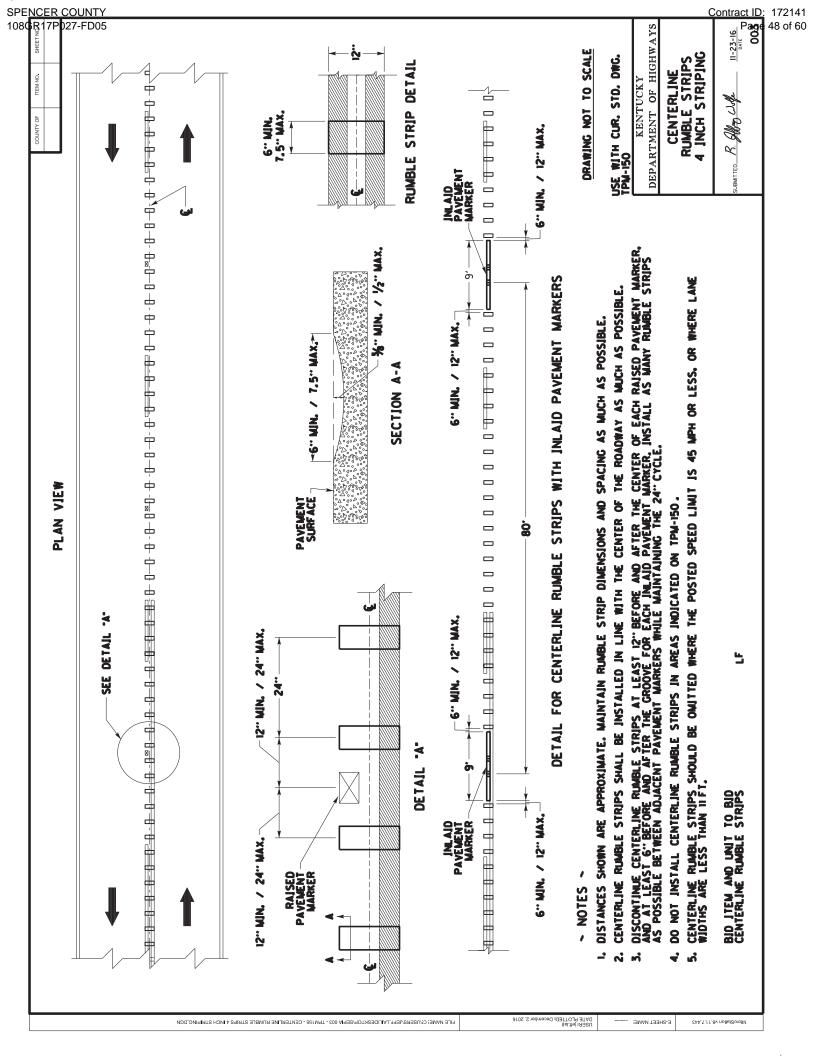
CodePay ItemPay Unit02671Portable Changeable Message SignEach

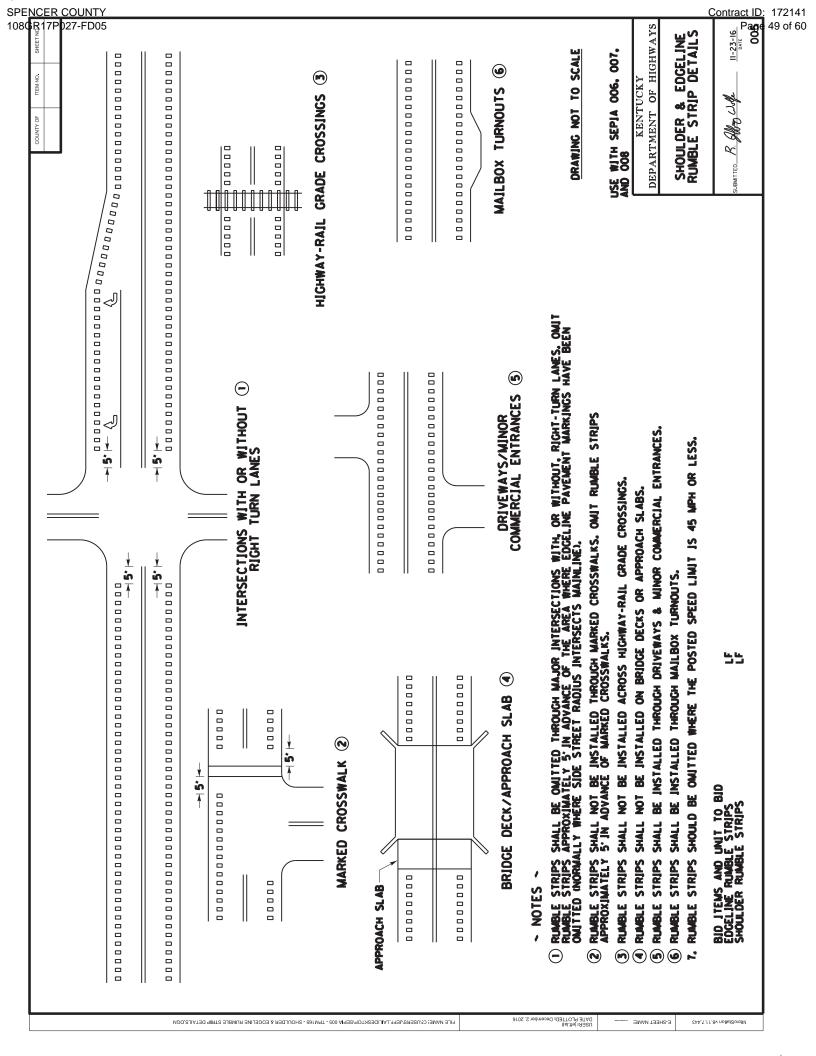
Effective June 15, 2012

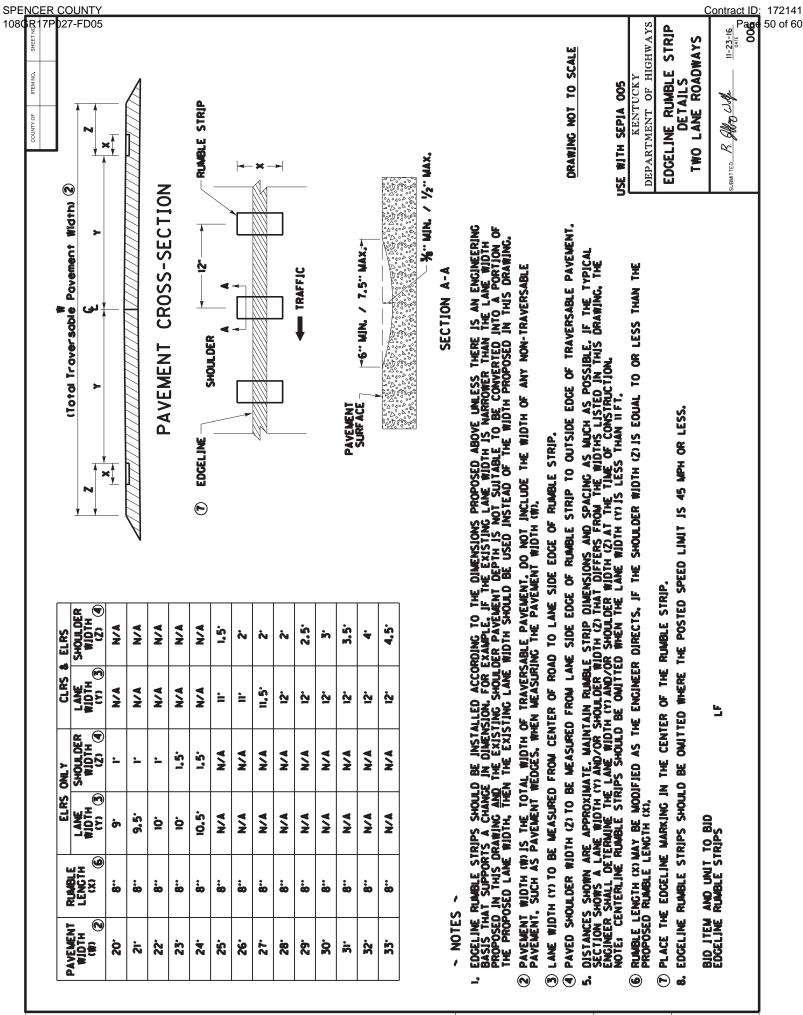
2016 KENTUCKY STANDARD DRAWINGSSUPPLEMENTS TO STANDARD SPECIFICATIONS TABLE OF CONTENTS

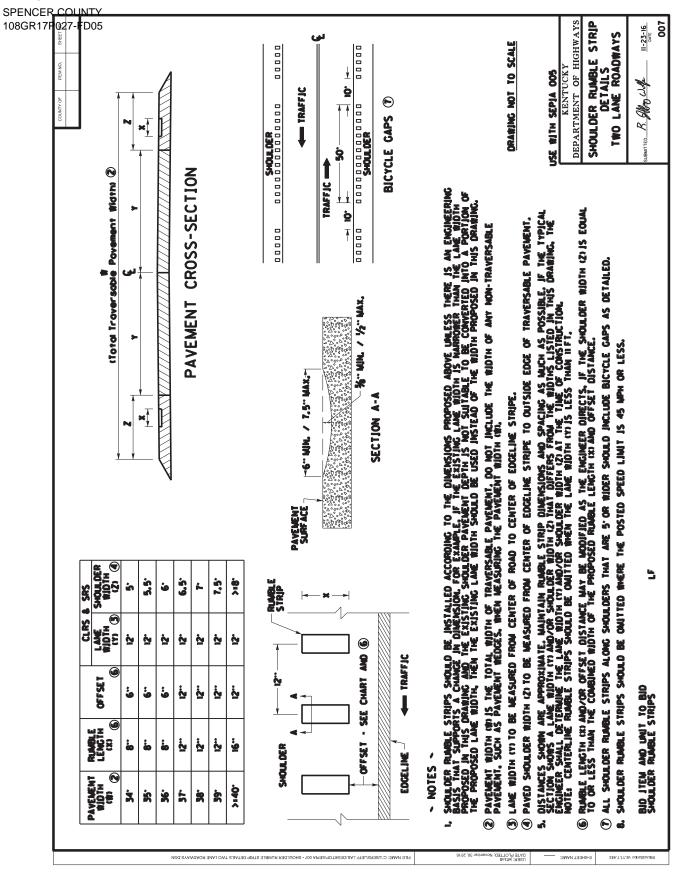
CURVE WIDENING AND SUPERELEVATION TRANSITIONS	RGS-001-07
SUPERELEVATION FOR MULTILANE PAVEMENT	RGS-002-06
MISCELLANEOUS STANDARDS	RGX-001-06
APPROACHES, ENTRANCES, AND MAIL BOX TURNOUT	RPM-110-07
PAVEMENT MARKER ARRANGEMENTS TWO-WAY LEFT, TURN LANE	TPM-140-03
LANE CLOSURE TWO-LANE HIGHWAY	TTC-100-04
SHOULDER CLOSURE	TTC-135-02
PAVEMENT CONDITION WARNING SIGNS	TTD-125-02
MOBILE OPERATION FOR PAINT STRIPING CASE I	TTS-100-02
MOBILE OPERATION FOR PAINT STRIPING CASE II	TTS-105-02











PART III

EMPLOYMENT, WAGE AND RECORD REQUIREMENTS

TRANSPORTATION CABINET DEPARTMENT OF HIGHWAYS

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

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

I. APPLICATION

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

II. NONDISCRIMINATION OF EMPLOYEES

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

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

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

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

Revised: January 25, 2017

EXECUTIVE BRANCH CODE OF ETHICS

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

KRS 11A.040 (7) provides:

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

KRS 11A.040 (9) states:

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

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

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

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

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

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

Revised: January 27, 2017

Kentucky Equal Employment Opportunity Act of 1978

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

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

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

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

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

EMPLOYEE RIGHTS UNDER THE FAIR LABOR STANDARDS ACT

THE UNITED STATES DEPARTMENT OF LABOR WAGE AND HOUR DIVISION

FEDERAL MINIMUM WAGE

\$7.25

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:

Contract ID: 172141 Page 56 of 60

SPENCER COUNTY

108GR17P027-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

172141

PROPOSAL BID ITEMS

Report Date 5/1/17

Page 1 of 1

Section: 0001 - PAVING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0010	00190		LEVELING & WEDGING PG64-22	614.00	TON		\$	
0020	00388		CL3 ASPH SURF 0.38B PG64-22	8,350.00	TON		\$	
0030	02562		TEMPORARY SIGNS	440.00	SQFT		\$	
0040	02650		MAINTAIN & CONTROL TRAFFIC (KY 155)	1.00	LS		\$	
0050	02650		MAINTAIN & CONTROL TRAFFIC (KY 55)	1.00	LS		\$	
0060	02671		PORTABLE CHANGEABLE MESSAGE SIGN	1.00	EACH		\$	
0070	02676		MOBILIZATION FOR MILL & TEXT (KY 155)	1.00	LS		\$	
0800	02676		MOBILIZATION FOR MILL & TEXT (KY 55)	1.00	LS		\$	
0090	02677		ASPHALT PAVE MILLING & TEXTURING	1,375.00	TON		\$	
0100	02696		SHOULDER RUMBLE STRIPS	2,850.00	LF		\$	
0110	02697		EDGELINE RUMBLE STRIPS	42,140.00	LF		\$	
0120	06510		PAVE STRIPING-TEMP PAINT-4 IN	14,278.00	LF		\$	
0130	06514		PAVE STRIPING-PERM PAINT-4 IN	94,933.00	LF		\$	
0140	06565		PAVE MARKING-THERMO X-WALK-6 IN	172.00	LF		\$	
0150	06568		PAVE MARKING-THERMO STOP BAR-24IN	128.00	LF		\$	
0160	06574		PAVE MARKING-THERMO CURV ARROW	13.00	EACH		\$	
0170	06578		PAVE MARKING-THERMO MERGE ARROW	4.00	EACH		\$	
0180	06600		REMOVE PAVEMENT MARKER TYPE V	742.00	EACH		\$	
0190	10020NS		FUEL ADJUSTMENT	13,953.00	DOLL	\$1.00	\$	\$13,953.00
0200	10030NS		ASPHALT ADJUSTMENT	35,046.00	DOLL	\$1.00	\$	\$35,046.00
0210	20458ES403		CENTERLINE RUMBLE STRIPS	21,070.00	LF		\$	
0220	24097EC		THERMO RUMBLE STRIPS TY 2	630.00	LF		\$	
0230	24489EC		INLAID PAVEMENT MARKER	62.00	EACH		\$	

Section: 0002 - DEMOBILIZATION

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP AMOUNT
0240	02569		DEMOBILIZATION	1.00	LS		\$