

CALL NO. 320

CONTRACT ID. 192358

CAMPBELL COUNTY

FED/STATE PROJECT NUMBER FE01 019 1120 002-003

DESCRIPTION MEMORIAL PARKWAY (1120)

WORK TYPE OPERATIONS (MAINTENANCE)

PRIMARY COMPLETION DATE 11/15/2019

LETTING DATE: August 23,2019

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN DAYLIGHT TIME August 23,2019. Bids will be publicly announced at 10:00 AM EASTERN DAYLIGHT TIME.

NO PLANS ASSOCIATED WITH THIS PROJECT.

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

### TABLE OF CONTENTS

### PART I SCOPE OF WORK

- PROJECT(S), COMPLETION DATE(S), & LIQUIDATED DAMAGES
- CONTRACT NOTES
- STATE CONTRACT NOTES
- EXPEDITE WORK ORDER
- SURFACING AREAS
- ASPHALT MIXTURE
- DGA BASE
- INCIDENTAL SURFACING
- COMPACTION OPTION B
- SPECIAL NOTE(S) APPLICABLE TO PROJECT
- LIQUIDATED DAMAGES
- WASTE AND BORROW SITES
- COORDINATION OF WORK WITH OTHER CONTRACTS
- ASPHALT MILLING AND TEXTURING
- TYPICAL SECTION DIMENSIONS
- SIDEWALK RAMPS & DETECTABLE WARNINGS
- TRAFFIC CONTROL PLAN
- DURABLE PAVEMENT EDGE DETAILS
- EROSION CONTROL PLAN FOR MAINTENANCE PROJECTS
- SKETCH MAP(S)
- SUMMARY SHEET(S)
- TYPICAL SECTION(S)
- DETAIL SHEET(S)

### PART II SPECIFICATIONS AND STANDARD DRAWINGS

- SPECIFICATIONS REFERENCE
- SUPPLEMENTAL SPECIFICATION
- [SN-1] PORTABLE CHANGEABLE SIGNS
- 2016 STANDARD DRAWINGS THAT APPLY
- TYPICAL MARKINGS FOR TURN LANES
- CURB AND GUTTER, CURBS AND VALLEY GUTTER

### 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 - 06**

**CONTRACT ID - 192358** 

FE01 019 1120 002-003

**COUNTY - CAMPBELL** 

PCN - MP01911201902 FE01 019 1120 002-003

MEMORIAL PARKWAY (KY 1120) (MP 2.200) FROM 0.06 MILES WEST OF STARDUST POINTE LANE EXTENDING EAST TO 0.01 MILES WEST OF INVERNESS PLACE (MP 2.950), A DISTANCE OF 0.75 MILES.OPERATIONS (MAINTENANCE)

GEOGRAPHIC COORDINATES LATITUDE 39:05:38.00 LONGITUDE 84:27:43.00

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

SPECIFIED COMPLETION DATE -

COMPLETED BY 11/15/2019 ALL ITEMS IN CONTRACT

SPECIFIED COMPLETION DATE -

COMPLETED BY 10/31/2019 UNDERDRAIN SYSTEM

LANE CLOSURES DURING

0 WORKING Hours PROHIBTED HOURS

### **CONTRACT NOTES**

### **PROPOSAL ADDENDA**

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

### **BID SUBMITTAL**

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

### JOINT VENTURE BIDDING

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

### UNDERGROUND FACILITY DAMAGE PROTECTION

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

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

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

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

Businesses can register with the Secretary of State at <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.

April 30, 2018

### SPECIAL NOTE FOR RECIPROCAL PREFERENCE

# RECIPROCAL PREFERENCE TO BE GIVEN BY PUBLIC AGENCIES TO RESIDENT BIDDERS

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

April 30, 2018

CAMPBELL COUNTY FE01 019 1120 002-003 Contract ID: 192358 Page 9 of 62

### **EXPEDITE PROJECT WORK ORDER**

The Contractor may request that the Department expedite the work order for this project to allow for maximization of time to complete the work. In order for the Department to accomplish this task, the Contractor may be required to "hand carry" all required project documentation to facilitate the process. Immediately UPON NOTIFICATION OF AWARD OF THE CONTRACT, deliver required project documentation to:

**Division of Construction Procurement** 

200 Mero St.

Frankfort, KY 40602

### SURFACING AREAS

The Department estimates the mainline surfacing width to vary 24-42 feet.

The Department estimates the total mainline area to be surfaced to be 1,200 square yards.

The Department estimates the shoulder width to vary 0-2 feet on each side. Portions of the project have curb and gutter with no shoulder.

The Department estimates the total shoulder area to be surfaced with asphalt pavement is included in the mainline surfacing areas.

### 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.

### **DGA BASE**

Unless otherwise noted, the Department estimates the rate of application for DGA Base to be 115 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-110-07 or as directed by the Engineer. In the event signal detectors are present in the intersecting streets or roads, pave the crossroads to the right of way limit or back of the signal detector, whichever is the farthest back of the mainline. Surface or resurface these areas as directed by the Engineer. The Department will not measure placing and compacting for separate payment but shall be incidental to the Contract unit price for the asphalt mixtures.

### **OPTION 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.

### **SCOPE OF WORK**

### **SITE 1 – Milepoint 2.220**

Mill & Inlay 1" Class 3 Asphalt Surface 0.38B PG64-22

### SITE 2 – Milepoint 2.470

Construct Pipe Underdrain System
Extend Header Curb
Relocate Bus Stop (Construct new Sidewalk Ramp, remove old Ramp)
Mill & Inlay 1" Class 3 Asphalt Surface 0.38B PG64-22

### **SITE 3 – MILEPOINT 2.950**

Mill & Inlay 1" Class 3 Asphalt Surface 0.38B PG64-22



### SPECIAL NOTE FOR PERFORATED PIPE UNDERDRAIN

Except as provided herein, construct a nominal 16" wide Perforated Pipe Underdrain according to Section 704.03.02 as shown on the typical section and as directed by the Engineer. Saw cut the roadway pavement prior to trenching and excavation. Consider the location of the trench shown on the drawings to be approximate only; the Engineer will designate the location at the time of construction. Construct the trench a minimum of 14 inches below the existing surface or as directed by the Engineer. Use four (4) inch perforated pipe with the aggregate fill for the trench wrapped in Geotextile Fabric as shown on the drawings and according to Section 704.02.04; do not use Natural Sand for trench backfill. Outlet the Perforated Pipe with Non-Perforated Pipe and Perforated Pipe Headwalls. Dispose of the excavated materials at waste sites off the Right-of-Way obtained by the Contractor at no additional cost to the Department (see Special Note for Waste and Borrow). The Engineer will establish pipe flow lines and grades. Positive drainage is required upon completion of the project and shall be the responsibility or the Contractor.

Immediately after installing the underdrain, backfill the excavated areas with Class 2 Asphalt Base 0.75D PG64-22. Compact the asphalt base to the compaction required in Section 403.03.10. Seal the asphalt base with leveling and wedging. Perform all base failure repairs in a continuous operation in such a manner that removal and replacement are completed on the same day. Do not allow unfilled excavated trenches during non-working hours. Do this work as one of the Contractor's first operations in order to allow further compaction by traffic. Do not mill or place new asphalt surface over installed underdrains until a minimum of seven (7) calendar days have elapsed after placement of the asphalt base. After a minimum of seven (7) calendar days and when the Engineer determines the base failure repair areas have sufficiently stabilized, begin milling and/or resurfacing operations. Prior to milling and/or constructing the new asphalt surface, level and wedge any settlement of the underdrains.

Consider information shown on the drawings and in these notes and the types and quantities of work listed to be approximate only, and do not take as an accurate or complete evaluation of the materials and conditions to be encountered during construction. The bidder must draw conclusions as to the conditions encountered. The Department does not give any guarantee as to the accuracy of the data and will not consider any claim for additional compensation if the materials encountered that are not in accord with the classification shown.

The Department has not established the exact limits of Right-of-Way. The Contractor shall limit his activities to obvious Right-of-Way and work areas secured by the Department through Consent and Release of the adjacent property owners and shall be responsible for all encroachments onto private lands. The Contractor will be responsible for all damage to public and/or private property resulting from his work.

The Department will measure Perforated Pipe and Non-Perforated Pipe, Perforated Pipe Headwalls, and Crushed Aggregate Size No. 2 according to 704.04. The Department will not measure saw cutting pavement, trenching and excavation, disposal of waste, course aggregate backfill and geotextile fabric for payment, but shall be incidental to perforated pipe and non-perforated pipe. The Department will make payment for Perforated Pipe and Non-Perforated Pipe, Perforated Pipe Headwalls, and Crushed Aggregate Size No. 2 according to Section 704.05.

### SPECIAL NOTE FOR LIQUIDATED DAMAGES

The overall completion day for all items in the Contract is November 15, 2019. The Department will assess Liquidated Damages in the amount specified in Section 108.09.

The completion date for the Underdrain System, including the asphalt cap, is November 1, 2019. In addition to the requirements of Section 108.09, the Department will assess Liquidated Damages in the amount of \$750 per day for each Calendar Day that the Underdrain System remains uncompleted after November 1, 2019.

In addition to the requirements of Section 108.09, the Department will assess Liquidated Damages in the amount of \$500 per hour or part of an hour that a lane closure remains in place during hours prohibited by the Traffic Control Plan. A lane closure shall be defined as any traffic control device or Contract worker or vehicle in the traveled way that could potentially impact the flow of traffic. This includes, but not limited to, signs, barricades, barrels, cones, arrow boards, flaggers, Contractor work vehicles, and striping operations.

Contrary to Sections 108.07.02 and 108.09, the Department will assess Liquidated Damages for the months of December through March, regardless of whether seasonal or temperature limitations prohibit the Contractor from performing work on the controlling item or operation.

The Department will apply all liquidated damages accumulatively.

All other applicable portions of Section 108 apply.

CAMPBELL COUNTY FE01 019 1120 002-003

### Contract ID: 192358 Page 13 of 62

### SPECIAL PROVISION FOR WASTE AND BORROW SITES

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

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

### COORDINATION OF WORK WITH OTHERS

Be advised, there may be active project(s) adjacent to or within this project. These may be KYTC administered contracts, work being performed as part of a KYTC issued encroachment permit, or work being performed by Department forces. The Engineer will coordinate the work of any other Contractors, permit holders, or the Department' forces. See Sections 105.06, 107.06 and 107.14 of the 2019 Standard Specifications.

### SPECIAL NOTE FOR ASPHALT MILLING AND TEXTURING

### **SITES 1 & 3**

Begin paving operations within <u>48 hours</u> of commencement of the milling operations at each site. 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 of \$250 per calendar day 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.

### SITE 2

Perform Asphalt Milling and Texturing after installation of the underdrain system and new curb and sidewalk ramps. Begin paving operations within <u>48 hours</u> of commencement of the milling operation at the site. 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 of \$250 per calendar day 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.

CAMPBELL COUNTY FE01 019 1120 002-003 Contract ID: 192358 Page 16 of 62

### SPECIAL NOTE FOR TYPICAL SECTION DIMENSIONS

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

1-3725 Typical Section Dimensions 01/02/2012

### SPECIAL NOTE FOR SIDEWALK RAMPS & DETECTABLE WARNINGS

### **GENERAL**

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

Except as required by the work, do not disturb drainage pipe, catch basins, and other roadway features, appurtenances and installations. Restore any roadway features, appurtenances, and installations damaged by the work in like kind materials and design at no additional cost to the Department. Dispose of all waste off the right of way at sites obtained by the Contractor at no additional cost to the Department (see Special Note for Waste and Borrow).

### **MEASUREMENT & PAYMENT**

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

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

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

### TRAFFIC CONTROL PLAN

### TRAFFIC CONTROL GENERAL

Except as provided herein, maintain and control traffic in accordance with the 2019 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.

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.

Except for the final surface course on the driving lanes, night work is allowed on this project. Obtain the Engineer's approval of the method of lighting prior to performing night work.

Prior to erecting any lane closures, partner with the Engineer to develop a Phasing Plan and Work Schedule to expedite the work and minimize disruption to traffic.

Consider these restrictions when submitting bid. The Department will not consider any claims for money or grant time extensions for any delays a result of these restrictions.

### LANE & SHOULDER CLOSURES

During any period when a lane closure is in place, the Traffic Coordinator will arrange for personnel to be present on the project at all times to inspect the traffic control, maintain the signing and devices, and relocate portable changeable message boards as queue lengths change. The personnel will have access on the project to a radio or telephone to be used in case of emergencies or accidents.

Traffic Control Plan Page 2 of 11

Limit the lengths of lane closures to only that needed for actual operations at each Site. Contrary to Section 112, Long Term Lane Closures will **NOT** be measured for payment, but shall be incidental to Maintain and Control Traffic.

Do not leave lane closures in place during non-working hours. Do not store materials or equipment on shoulders during non-working hours; use staging areas on the Right-of-Way only as approved by the Engineer.

### PUBLIC INFORMATION PLAN

The Department will prepare a public information plan and provide public notification. Notify the Engineer immediately and obtain approval of any changes to the approved Work Schedule.

### **SIGNS**

The Engineer may require additional signing and/or traffic control devices in addition to the items shown on the Standard Drawings. 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, the Department will measure only long term signs (signs intended to be continuously in place for more than 3 days) for payment. The Department will not measure; short term signs (signs intended to be left in place for 3 days or less) for payment, but shall be incidental to Maintain and Control Traffic. Contrary to Section 112.04.02, the Department will measure individual signs only once for payment, regardless of how many times they are erected or relocated. The Department will not measure replacements for damaged signs directed by the Engineer to be replaced due to poor condition or reflectivity.

### 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

Traffic Control Plan Page 3 of 11

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 construction.

### ARROW PANELS

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

### **BARRICADES**

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

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 MARKERS

Remove or cover the lenses of raised pavement markers that do not conform to the traffic control scheme in use, or as directed by the Engineer.

The Department will not pay for removal of raised pavement markers, but shall be incidental to Asphalt Milling and Texturing.

Traffic Control Plan Page 4 of 11

### THERMOPLASTIC PAVEMENT 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.

### **PAVEMENT STRIPING**

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 and Permanent Striping according to Section 112 and with the following exceptions:

- 1. Include Edge Lines in Temporary Striping; and
- 2. If the contractor's operations or phasing requires temporary markings which must be subsequently removed from the ultimate pavement, an approved removable lane tape will be used; however removable tape will be measured and paid as Pavement Striping-Temporary Paint 4 inches.
- 3. Place Temporary or Permanent Striping before opening a lane to traffic; and

### 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 drop-off area.

CAMPBELL COUNTY FE01 019 1120 002-003

Traffic Control Plan Page 5 of 11

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 6 of 11

### 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

### Traffic Control Plan Page 7 of 11

### 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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Traffic Control Plan Page 8 of 11

### **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 RTE
<b>Cardinal Directions</b>	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 9 of 11

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
		EXIT 50
Oversized	OVRSZ	OVRSZ COMM VEH/USE I275
		NEXT RIGHT
Parking	PKING	EVENT PKING NEXT RGT
Parkway	PKWY	CUM PKWAY TRAF/DETOUR
3		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
		DELAYS
Route	RTE	MAJ DELAYS I75/USE ALT RTE
Shoulder	SHLDR	SHLDR CLOSED NEXT 5 MI
Slippery	SLIP	SLIP COND POSSIBLE/ SLOW SPD
Southbound	S-BND	S-BND I75 CLOSED/DETOUR
	~	EXIT 50
Speed	SPD	SLIP COND POSSIBLE/ SLOW SPD
Street	ST	MAIN ST CLOSED/USE ALT RTE
Traffic	TRAF	CUM PKWAY TRAF/DETOUR
		EXIT 60
Vehicle	VEH	OVRSZ COMM VEH/USE I275
, canonic	, 211	NEXT RIGHT
Westbound	W-BND	W-BND I64 CLOSED/DETOUR
25.000110	2112	EXIT 50
Work	WRK	CONST WRK 2MI/POSSIBLE
,, om	***************************************	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.	<b>Intended Word</b>	<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

Traffic Control Plan Page 10 of 11

> 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 11 of 11

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

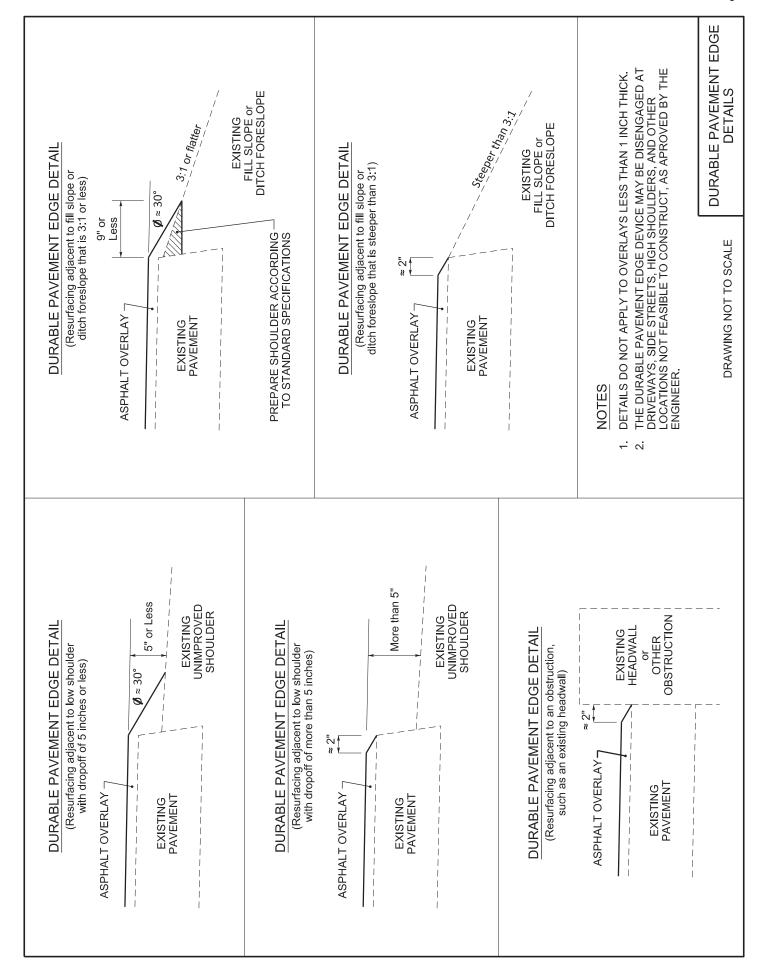
**UNEVEN LANES** 

WATER ON ROAD

**WET PAINT** 

WORK ZONE XX MILES

**WORKERS AHEAD** 



### SPECIAL NOTE FOR EROSION CONTROL

### I. DESCRIPTION

Perform all erosion and water pollution control work in accordance with the Department's Standard and Interim Supplemental Specifications, Special Provisions and Special Notes, and Standard and Sepia Drawings, current editions, and as directed by the Engineer. Section references are to the Standard Specifications. This work shall consist of:

(1) Developing and preparing a Best Management Practices Plan (BMP) tailored to suit the specific construction phasing for each site within the project; (2) Preparing the project site for construction, including locating, furnishing, installing, and maintaining temporary and/or permanent erosion and water pollution control measures as required by the BMP prior to beginning any earth disturbing activity on the project site; (3) Clearing and grubbing and removal of all obstructions as required for construction; (4) Removing all erosion control devices when no longer needed; (5) Restoring all disturbed areas as nearly as possible to their original condition; (6) Preparing seedbeds and permanently seeding all disturbed areas; (7) Providing a Kentucky Erosion Prevention and Sediment Control Program (KEPSC-RI) qualified inspector; and (8) Performing any other work to prevent erosion and/or water pollution as specified by this contract, required by the BMP, or as directed by the Engineer.

### II. MATERIALS

Furnish materials in accordance with these notes, the Standard Specifications and Interim Supplemental Specifications, and applicable Special Provisions and Special Notes, and Standard and Sepia Drawings, current editions. Provide for all materials to be sampled and tested in accordance with the Department's Sampling Manual. Unless directed otherwise by the Engineer, make the materials available for sampling a sufficient time in advance of the use of the materials to allow for the necessary time for testing.

### III. CONSTRUCTION

Be advised, these Erosion Control Plan Notes do not constitute a BMP plan for the project. Jointly with the Engineer, prepare a site specific BMP plan for each drainage area within the project in accordance with Section 213. Provide a unique BMP at each project site using good engineering practices taking into account existing site conditions, the type of work to be performed, and the construction phasing, methods and techniques to be utilized to complete the work. Be responsible for all erosion prevention, sediment control, and water pollution prevention measures required by the BMP for each site. Represent and warrant compliance with the Clean Water Act (33 USC Section 1251 et seq.), the 404 Permit, the 401 Water Quality Certification, and applicable state and

Erosion Control Page 2 of 3

local government agency laws, regulations, rules, specifications, and permits. Contrary to Section 105.05, in case of discrepancy between theses notes, the Standard Specifications, Interim Supplemental Specifications, Special and Special Notes, Standard and Sepia Drawings, and such state and local government agency requirements, adhere to the most restrictive requirement.

Conduct operations in such a manner as to minimize the amount of disturbed ground during each phase of the construction and limit the haul roads to the minimum required to perform the work. Preserve existing vegetation not required to be removed by the work or the contract. Seed and/or mulch disturbed areas at the earliest opportunity. Use silt fence, silt traps, temporary ditches, brush barriers, erosion control blankets, sodding, channel lining, and other erosion control measures in a timely manner as required by the BMP and as directed or approved by the Engineer. Prevent sediment laden water from leaving the project, entering an existing drainage structure, or entering a stream.

Provide for erosion control measures to be in place and functioning prior to any earth disturbance within a drainage area. Compute the volume and size of silt control devices necessary to control sediment during each phase of construction. Remove sediment from silt traps before they become a maximum of ½ full. Maintain silt fence by removing accumulated trappings and/or replacing the geotextile fabric when it becomes clogged, damaged, or deteriorated, or when directed by the Engineer. Properly dispose of all materials trapped by erosion control devices at approved sites off the right of way obtained by the Contractor at no additional cost to the Department (See Special Note for Waste and Borrow).

As work progresses, add or remove erosion control measures as required by the BMP applicable to the Contractor's project phasing and construction methods and techniques. Update the volume calculations and modify the BMP as necessary throughout the duration of the project. Ensure that an updated BMP is kept on site and available for public inspection throughout the life of the project.

After all construction is complete, restore all disturbed areas in accordance with Section 212. Completely remove all temporary erosion control devices not required as part of the permanent erosion control from the construction site. Prior to removal, obtain the Engineer's concurrence of items to be removed. Grade the remaining exposed earth (both on and off the Right of-Way) as nearly as possible to its original condition, or as directed by the Engineer. Prepare the seed bed areas and sow all exposed earthen areas with the applicable seed mixture(s) according to Section 212.03.03.

Erosion Control Page 3 of 3

### IV. MEASUREMENT

**Erosion Control Blanket.** If required by the BMP, the Department will measure Erosion Control Blanket according to Section 212.04.07.

**Sodding.** If required by the BMP, the Department will measure Sodding according to Section 212.04.08.

**Channel Lining.** If required by the BMP, the Department will measure Channel Lining according to Sections 703.04.04-703.04.07.

Erosion Control. Contrary to Sections 212.04, 213.04, and 703.04 other than Erosion Control Blankets, Sodding, and Channel Lining, the Department will not measure Erosion Control for separate payment. The Department will not measure developing, updating, and maintaining a BMP plan for each site; providing a KEPSC-RI qualified inspector; locating, furnishing, installing, inspecting, maintaining, and removing erosion and water pollution control items; Roadway Excavation, Borrow Excavation, Embankment In Place, Topsoil Furnished and Placed, and Spreading Stockpiled Topsoil; Topdressing Fertilizer, Temporary and Permanent Seeding and Protection, Special Seeding Crown Vetch, and Temporary Mulch; Sedimentation Basin and Clean Sedimentation Basin, Silt Trap Type "A" and Clean Silt Trap Type "A"; Silt Trap Type "B" and Clean Silt Trap Type "B"; Silt Trap Type "C" and Clean Silt Trap Type "C"; Temporary Silt Fence and Clean Temporary Silt Fence; Plants, Vines, Shrubs, and Trees; Gabion and Dumped Stone Deflectors and Riffle Structures; Boulders; Temporary Ditches and clean Temporary Ditches; Geotextile Fabric, and all other erosion and water pollution control items required by the BMP or the Engineer, but shall be incidental to the applicable items of work.

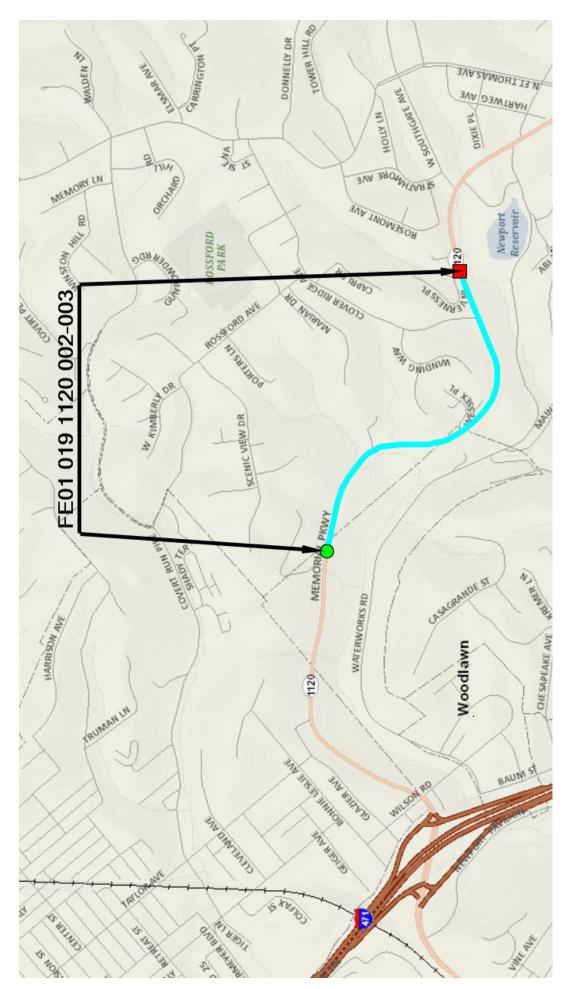
### V. BASIS OF PAYMENT

**Erosion Control Blanket.** If not listed as a bid item, but required by the BMP, the Department will pay for Erosion Control Blankets as Extra Work according to Sections 104.03 and 109.04.

**Sodding.** If not listed as a bid item, but required by the BMP, the Department will pay for Sodding as Extra Work according to Sections 104.03 and 109.04.

**Channel Lining.** If not listed as a bid item, but required by the BMP, the Department will pay for Channel Lining as Extra Work according to Sections 104.03 and 109.04.

CAMPBELL COUNTY



### MILLING SUMMARY FE01 019 1120 002-003

MILEPOINT	DESCRIPTION	LENGTH (FT)	WIDTH (INCHES)	AVG DEPTH (INCHES)
2.210	Full Width	225	28	1
2.470	Full Width	400	44	1
2.950	Full Width	130	28	1

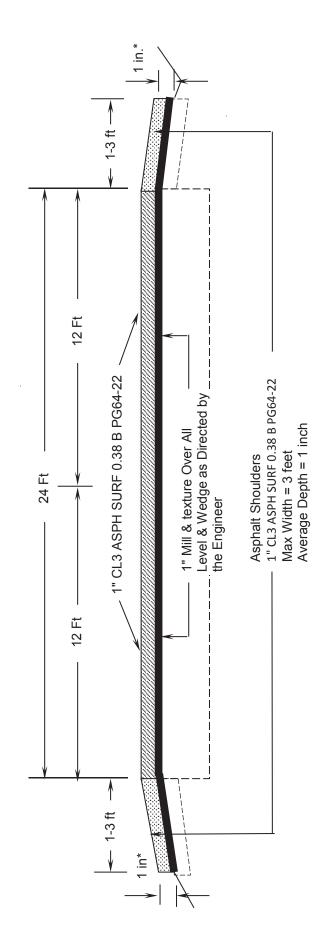
# SIDEWALK RAMP AND DETECTABLE WARNING SUMMARY

•		8	0	ß		TOTAL	
	Remove Existing Ramp @ Milepoint 2.467	8	1	5	1	Oakwood Drive	2.485
		(SF)	QUANTITY	(SY)			
	NOTES	WARNING	WARNING		RAMP TYPE	INTERSECTION	MILEPOINT
		DETECTABLE	DETECTABLE	RAMP			

# THERMOPLASTIC INTERSECTION PAVEMENT MARKINGS SUMMARY

		X-WALKS	STOP BARS	•	<b>ARROWS</b>		CONE CAP	
MILEPOINT	INTERSECTION	12 INCH	24 INCH	CURVE	STR	COMB	YELLOW	NOTES
		(LF)	(LF)	(EA)	(EA)	(EA)	(SF)	
2.470	OAKWOOD DRIVE	48	12	3			20	
	TOTAL	48	12	က	0	0	20	

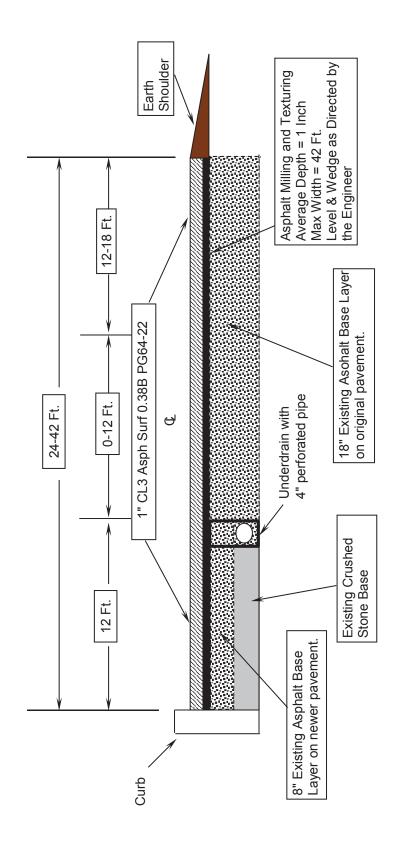
# TYPICAL SECTION SITE 1



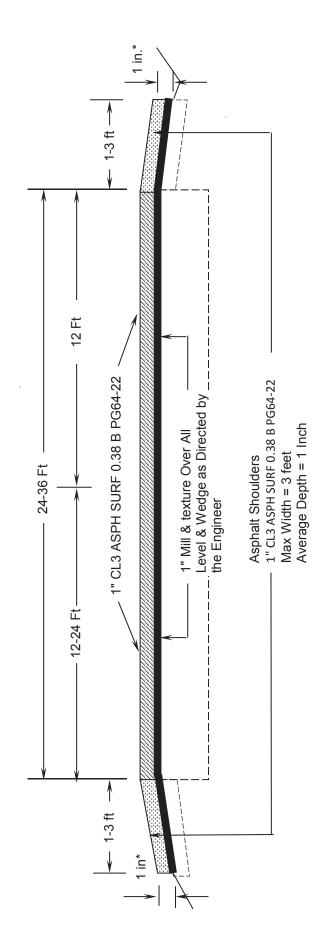
\* 1 Inch Maximum Drop-Off Where Existing Site Conditions Permit

# TYPICAL SECTION

SITE 2

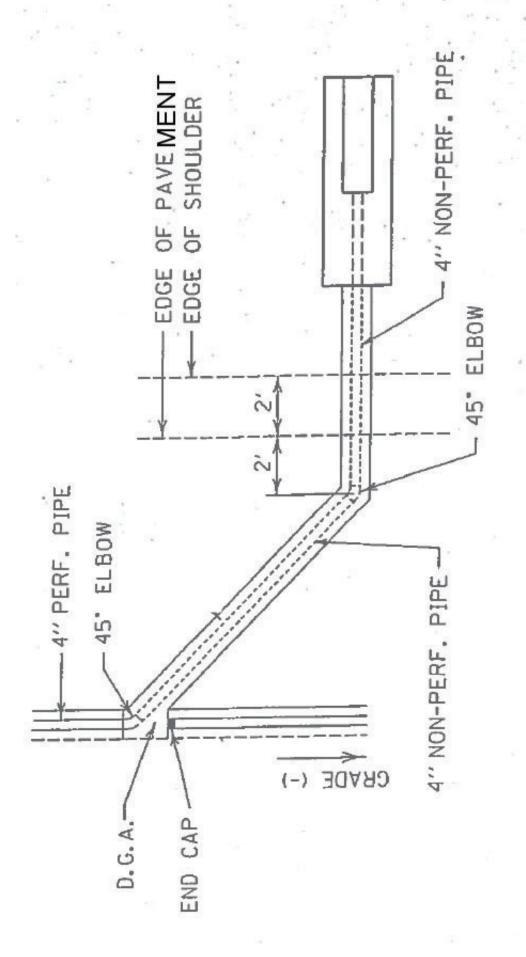


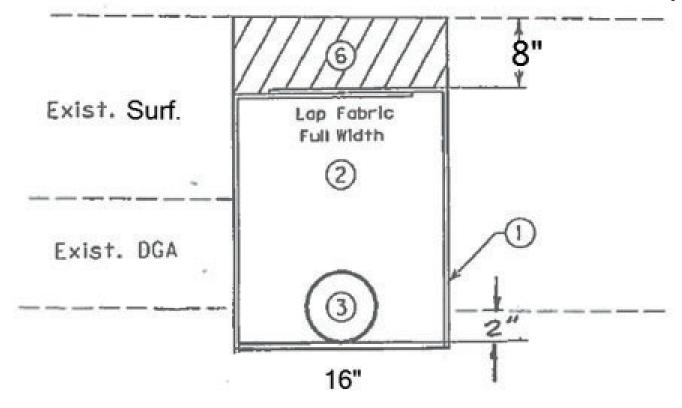
TYPICAL SECTION SITE 3



\* 1 Inch Maximum Drop-Off Where Existing Site Conditions Permit







# PERFORATED PIPE DRAIN (Aggregate Backfilled Trench)

- \*① FABRIC-GEOTEXTILE TYPE IV
- \* (2) CRUSHED AGGREGATE SIZE NO. 57 (No Sond)
  - (3) 1000 PERFORATED PIPE- 4" (No Sock)

(6) CLASS 2 ASPHALT BASE 0.75D

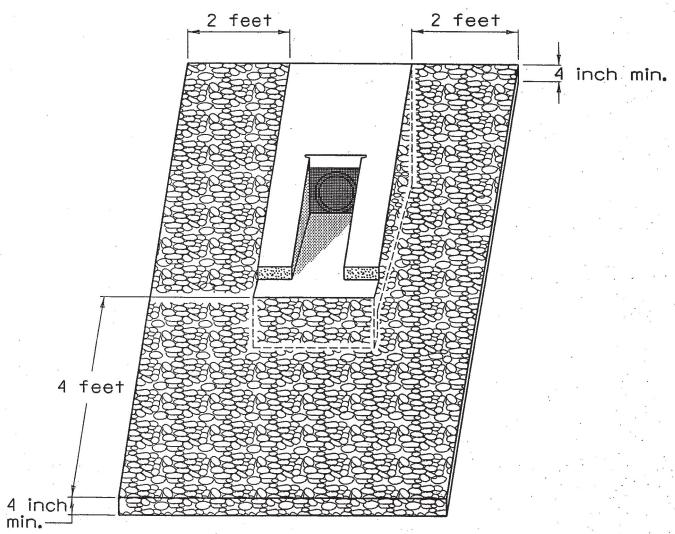
# DETAIL SHEET FOR PAVEMENT SUBSURFACE DRAINAGE OUTLET

Use approximately one ton of Crushed Aggregate Size No. 2 at all Perforated Pipe Headwall Outlets as illustrated in the detail below. Place Crushed Aggregate Size No. 2 to a minimum depth of 4" as detailed below.

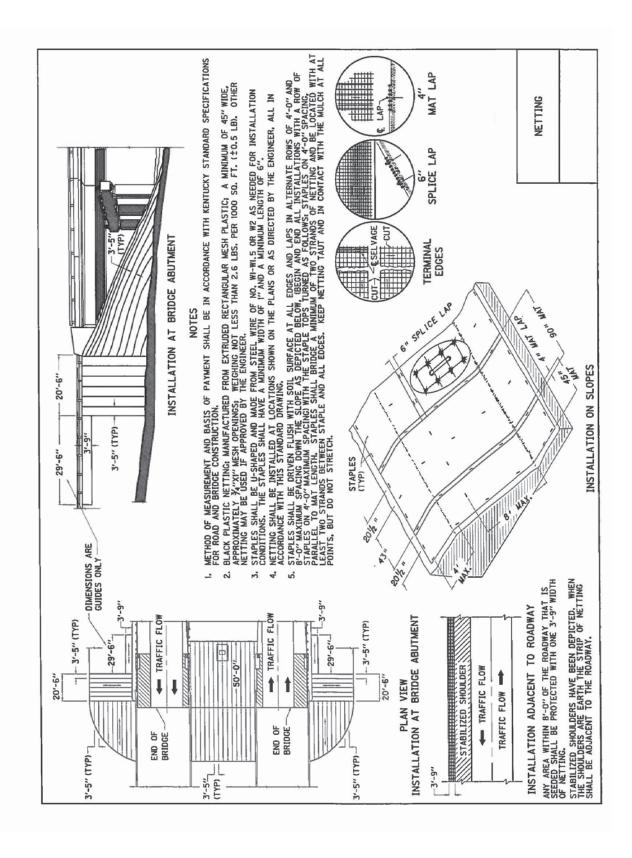
Use Dense Graded Aggregate (DGA) removed during placement of the Crushed Aggreagate Size No. 2 to dress existing shoulders where DGA is exposed. Waste other materials removed during placement of the Crushed Aggregate Size No. 2 as directed by the Engineer. The Department will make no direct payment for disposal of wasted material.

The Department will consider payment for Crushed Aggregate Size No. 2 as full compensation for all materials, labor, and other incidentals necessary to place Crushed Aggregate Size No. 2 for vegetation control and/or erosion control at payement edge drain outlets.

See current Standard Drawing RDP-010 for dimensions and other details.



PERFORATED PIPE HEADWALL OUTLET



#### 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 2019 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.)
  - c) Non-volatile memory or suitable memory with battery backup for storing pre-programmed messages.
  - d) Logic circuitry to control the sequence of messages and flash rate.
- 4) Provide a serial interface that is capable of supporting complete remote control ability through land line and cellular telephone operation. Include communication software capable of immediately updating the message, providing complete sign status, and allowing message library queries and updates.
- 5) Allow a single person easily to raise the sign to a satisfactory height above the pavement during use, and lower the sign during travel.
- Be Highway Orange on all exterior surfaces of the trailer, supports, and controller cabinet.
- 7) Provide operation in ambient temperatures from -30 to + 120 degrees Fahrenheit during snow, rain and other inclement weather.
- 8) Provide the driver board as part of a module. All modules are interchangeable, and have plug and socket arrangements for disconnection and reconnection. Printed circuit boards associated with driver boards have a conformable coating to protect against moisture.
- Provide a sign case sealed against rain, snow, dust, insects, etc. The lens is UV stabilized clear plastic (polycarbonate, acrylic, or other approved material) angled to prevent glare.
- 10) Provide a flat black UV protected coating on the sign hardware, character PCB, and appropriate lens areas.
- 11) Provide a photocell control to provide automatic dimming.

1I

- 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.

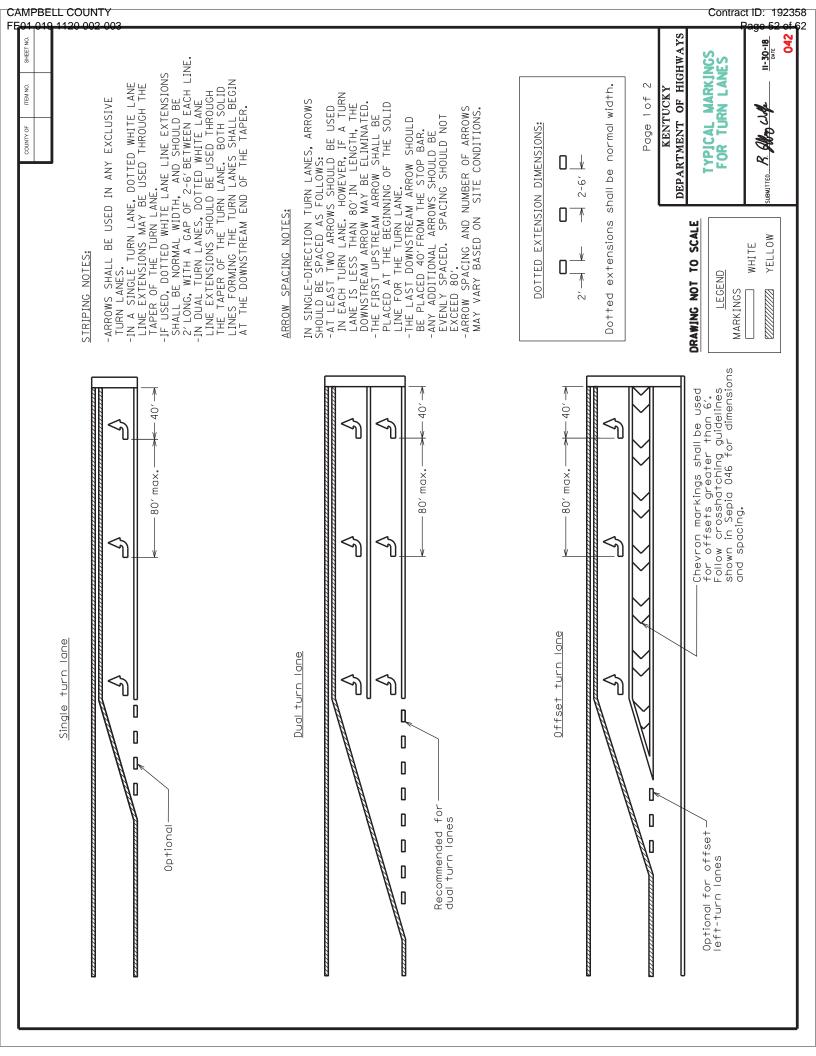
**5.0 PAYMENT.** The Department will pay for the Variable Message Signs at the unit price each. The Department will not pay for signs replaced due to damage or rejection. Payment is full compensation for furnishing all materials, labor, equipment, and service necessary to, operate, move, repair, and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

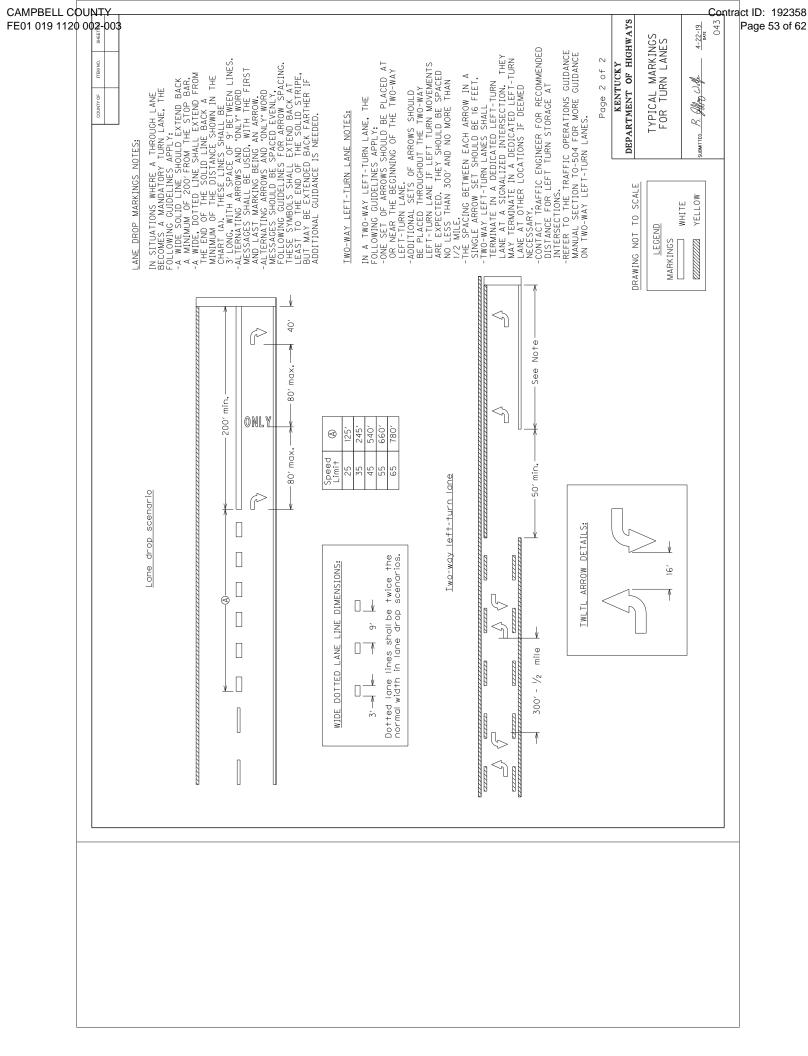
CodePay ItemPay Unit02671Portable Changeable Message SignEach

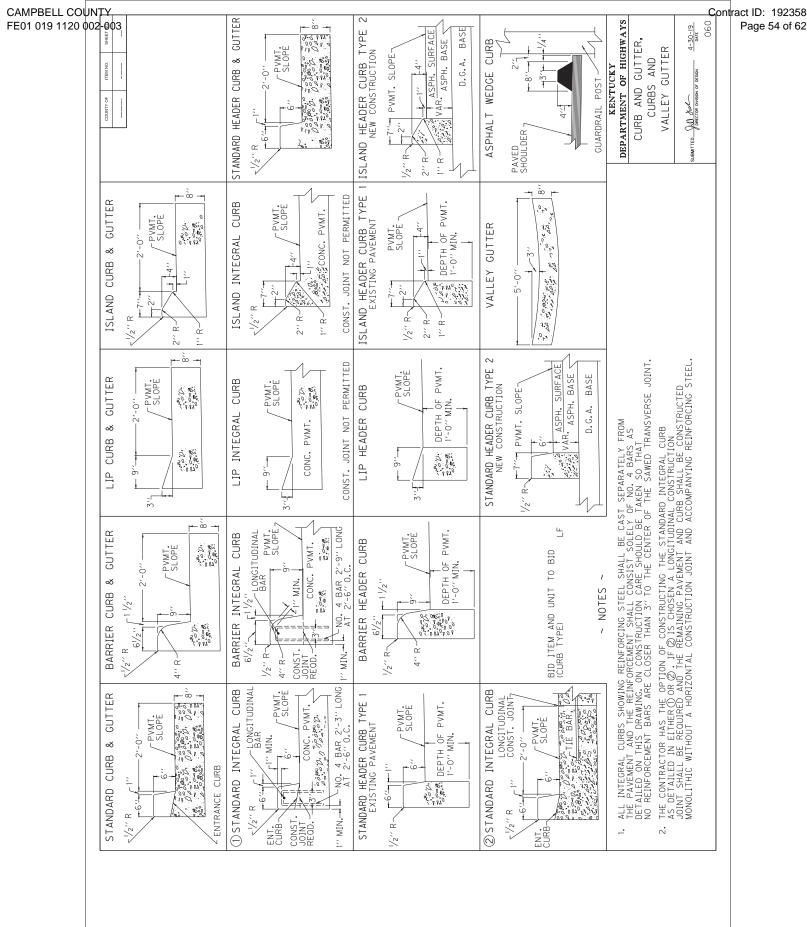
Effective June 15, 2012

#### 2016 APPLICABLE KENTUCKY STANDARD DRAWINGS

PERFORATED PIPE TYPES AND COVER HEIGHTS	. RDP-001-06
PERFORATED PIPE FOR SUBGRADE DRAINAGE ON TWO-LANE (CLASS 2	2) AND
MULTI-LANE ROADS	. RDP-005-05
PERFORATED PIPE UNDERDRAINS (LONGITUDINAL AND TRANSVERSE)	) RDP-006-04
PERFORATED PIPE HEADWALLS	. RDP-010-09
TEMPORARY SILT FENCE	.RDX-210-03
SILT TRAP - TYPE A	
SILT TRAP - TYPE B	.RDX-225-01
SILT TRAP - TYPE C	.RDX-230-01
CURVE WIDENING AND SUPERELEVATION TRANSITIONS	. RGS-001-07
MISCELLANEOUS STANDARDS	.RGX-001-06
APPROACHES, ENTRANCES, AND MAIL BOX TURNOUT	.RPM-110-07
LANE CLOSURE TWO-LANE HIGHWAY	TTC-100-04
SHOULDER CLOSURE	TTC-135-02
PAVEMENT CONDITION WARNING SIGNS	. TTD-125-02
MOBILE OPERATION FOR PAINT STRIPING CASE I	TTS-100-02
MOBILE OPERATION FOR PAINT STRIPING CASE II	TTS-105-02
MOBILE OPERATION FOR PAINT STRIPING CASE III	TTS-110-02
MOBILE OPERATION FOR PAINT STRIPING CASE IV	TTS-115-02







#### **PART III**

## EMPLOYMENT, WAGE AND RECORD REQUIREMENTS

#### Contract ID: 192358 Page 56 of 62

## 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** 

**BEGINNING JULY 24, 2009** 

#### **OVERTIME PAY**

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

#### **CHILD LABOR**

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

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

#### No more than

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

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

#### **TIP CREDIT**

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

#### **ENFORCEMENT**

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

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

# ADDITIONAL INFORMATION

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



Contract ID: 192358

Page 59 of 62

#### **PART IV**

#### **INSURANCE**

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

current edition

### **PART V**

### **BID ITEMS**

#### Contract ID: 192358 Page 62 of 62

192358

#### **PROPOSAL BID ITEMS**

Report Date 8/16/19

Page 1 of 1

#### Section: 0001 - ROADWAY

LINE	BID CODE	ALT DESCRIPTION	QUANTITY	UNIT	<b>UNIT PRIC</b>	FP	<b>AMOUNT</b>
0010	00078	CRUSHED AGGREGATE SIZE NO 2 (LIMESTONE)	2.00	TON		\$	
0020	00190	LEVELING & WEDGING PG64-22	50.00	TON		\$	
0030	00221	CL2 ASPH BASE 0.75D PG64-22	50.00	TON		\$	
0040	00388	CL3 ASPH SURF 0.38B PG64-22	170.00	TON		\$	
0050	01000	PERFORATED PIPE-4 IN	440.00	LF		\$	
0060	01010	NON-PERFORATED PIPE-4 IN	70.00	LF		\$	
0070	01024	PERF PIPE HEADWALL TY 2-4 IN	2.00	EACH		\$	
0800	01875	STANDARD HEADER CURB TYPE 1	160.00	LF		\$	
0090	02014	BARRICADE-TYPE III	2.00	EACH		\$	
0100	02562	TEMPORARY SIGNS	225.00	SQFT		\$	
0110	02650	MAINTAIN & CONTROL TRAFFIC	1.00	LS		\$	
0120	02671	PORTABLE CHANGEABLE MESSAGE SIGN	2.00	EACH		\$	
0130	02676	MOBILIZATION FOR MILL & TEXT	1.00	LS		\$	
0140	02677	ASPHALT PAVE MILLING & TEXTURING	170.00	TON		\$	
0150	02720	SIDEWALK-4 IN CONCRETE	5.00	SQYD		\$	
0160	02721	REMOVE CONCRETE SIDEWALK	5.00	SQYD		\$	
0170	02775	ARROW PANEL	1.00	EACH		\$	
0180	06510	PAVE STRIPING-TEMP PAINT-4 IN	1,500.00	LF		\$	
0190	06514	PAVE STRIPING-PERM PAINT-4 IN	5,000.00	LF		\$	
0200	06566	PAVE MARKING-THERMO X-WALK-12 IN	48.00	LF		\$	
0210	06568	PAVE MARKING-THERMO STOP BAR-24IN	12.00	LF		\$	
0220	06574	PAVE MARKING-THERMO CURV ARROW	3.00	EACH		\$	
0230	21417ES717	PAVE MARK THERMO CONE CAP-SOLID YELLOW	50.00	SQFT		\$	
0240	23158ES505	DETECTABLE WARNINGS NEW CONSTRUCTION	8.00	SQFT		\$	

#### Section: 0002 - DEMOBILIZATION

LINE	BID CODE	ALT DESCRIPTION	QUANTITY	UNIT	<b>UNIT PRIC</b>	FP	AMOUNT
0250	02569	DEMOBILIZATION	1.00	LS		\$	