

CALL NO. 400
CONTRACT ID. 192034
BOONE COUNTY
FED/STATE PROJECT NUMBER 008GR19P008-FD04
DESCRIPTION 1-71 WEIGH STATION & 1-75 REST AREAS
WORK TYPE JPC PAVEMENT REPAIRS
PRIMARY COMPLETION DATE 6/28/2019

LETTING DATE: January 25,2019

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN STANDARD TIME January 25,2019. Bids will be publicly announced at 10:00 AM EASTERN STANDARD TIME.

NO PLANS ASSOCIATED WITH THIS PROJECT.

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

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ADMINISTRATIVE DISTRICT - 06

CONTRACT ID - 192034 008GR19P008-FD04

COUNTY - BOONE

PCN - MP00800711901

FD04 SPP 008 0071 075-076

LOUISVILLE - COVINGTON ROAD (I-71) SOUTHBOUND WEIGH STATION, A DISTANCE OF 0.01 MILES.JPC PAVEMENT REPAIRS SYP NO. 06-02058.00.

GEOGRAPHIC COORDINATES LATITUDE 38:51:55.00 LONGITUDE 84:38:53.00

PCN - MP00800751901 FD04 SPP 008 0075 176-177

NEW COVINGTON-LEXINGTON-TENNESSEE STATE LINE ROAD (I 75) NORTHBOUND REST AREA, A DISTANCE OF 0.77 MILES.JPC PAVEMENT REPAIRS SYP NO. 06-02060.00.

GEOGRAPHIC COORDINATES LATITUDE 38:56:13.00 LONGITUDE 84:37:54.00

PCN - MP00800751902 FD04 SPP 008 0075 176-178

NEW COVINGTON-LEXINGTON-TENNESSEE STATE LINE ROAD (I 75) SOUTHBOUND REST AREA, A DISTANCE OF 0.63 MILES.JPC PAVEMENT REPAIRS SYP NO. 06-02059.00.

GEOGRAPHIC COORDINATES LATITUDE 38:56:20.00 LONGITUDE 84:37:56.00

COMPLETION DATE(S):

SPECIFIED COMPLETION DATE -

COMPLETED BY 06/28/2019 ALL ITEMS IN CONTRACT

0 WORKING Hours EXCAVATED AREAS WITHIN 10 FT OF TRAFFIC OPEN > THAN 24 HRS
LANE CLOSURE IN PLACE DURING

0 WORKING Hours PROHIBTED TIMES

CONTRACT NOTES

PROPOSAL ADDENDA

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

BID SUBMITTAL

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

JOINT VENTURE BIDDING

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

UNDERGROUND FACILITY DAMAGE PROTECTION

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

REGISTRATION WITH THE SECRETARY OF STATE BY A FOREIGN ENTITY

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

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

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

SPECIAL NOTE FOR PROJECT QUESTIONS DURING ADVERTISEMENT

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

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

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

HARDWOOD REMOVAL RESTRICTIONS

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

INSTRUCTIONS FOR EXCESS MATERIAL SITES AND BORROW SITES

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

ACCESS TO RECORDS

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

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SPECIAL NOTE FOR RECIPROCAL PREFERENCE

RECIPROCAL PREFERENCE TO BE GIVEN BY PUBLIC AGENCIES TO RESIDENT BIDDERS

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

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NATIONAL HIGHWAY

Be advised I-71 AND I-75 are on the NATIONAL HIGHWAY SYSTEM.

SIGNIFICANT PROJECT- PROJECT TRAFFIC COORDINATOR (PTC)

Be advised these projects are significant projects pursuant to section 112.03.12.

SURFACING AREAS

The Department estimates the surfacing to have variable widths; transitions, tapers, and curve widening will vary.

The Department estimates the shoulder width to be 10 feet; transitions, tapers, curve widening, and asphalt pavement widths will vary.

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 JPC Patching and Asphalt Patching established in the proposal estimated quantities required for curve widening and ramp gores and tapers, as applicable.

JPC RIDE QUALITY

Ride Quality requirements do not apply to these projects. JPC Pavement smoothness requirements in accordance with Section 501.03.19(B) of the 2016 Standard Specifications shall apply.

OPTION B

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

SPECIAL NOTE FOR JPC PAVEMENT PATCHING

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THIS PROJECT IS A FULLY CONTROLLED ACCESS HIGHWAY

I. DESCRIPTION

Except as specified herein, construct Jointed Plain Concrete (JPC) Pavement Patching in accordance with the Department's 2012 Standard and Supplemental Specifications, Special Provisions and Special Notes, and Standard and Sepia Drawings, current editions. Section references are to the Standard Specifications. Furnish all materials, equipment, labor, and incidentals for:

(1) Site Preparation; (2) Removing concrete pavement and replacing with JPC Pavement; (3) Maintain and Control Traffic; and (4) All other work specified as part of this contract.

II. MATERIALS & EQUIPMENT

Except as specified, herein furnish materials and equipment conforming to the Special Note for Full Depth Concrete Repair 11J and Section 501, as applicable. The Department will sample and test all materials according to the Department's Sampling Manual. Unless otherwise specified in these notes, make the materials available for sampling a sufficient time in advance of their use to allow for the necessary time for testing,

- A. Maintain and Control Traffic. See Traffic Control Plan.
- **B. Dense Graded Aggregate.** Use DGA conforming to Section 302.02, no alternate. Do not furnish Crushed Stone Base in lieu of DGA.
- **C. JPC Pavement.** Use JPC Pavement conforming to the Special Note for Full Depth Concrete Pavement Repair 11J. At Contractor's request and at no additional cost to the Department, the Engineer may approve other high early strength rapid setting concrete; however, the Department will not approve the use of chloride accelerators. The Department will allow either central mixing or truck mixing.
- **D. Joint Sealant.** Use hot-poured elastic conforming to Section 807, no alternates.

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E. Erosion Control. See Special Note for Erosion Control.

III. CONSTRUCTION METHODS

- **A. Maintain and Control Traffic.** See Traffic Control Plan. Be advised this project is a Significant Project pursuant to Section 112.03.12.
- **B. Site Preparation.** Be responsible for all site preparation, including but not limited to, incidental excavation and backfilling; removal of all obstructions or any other items; disposal of materials; sweeping and removal of debris; permanent erosion and pollution control; final dressing, and clean up; and all incidentals. See Special Note for Erosion Control. Perform all Site Preparation only as approved or directed by the Engineer.
- **C. Pavement Removal.** Consider pavement removal locations and dimensions listed on the summaries and shown on the drawings to be approximate only; the Engineer will determine exact locations and dimensions at the time of construction. The Engineer may add additional locations within the project limits at any time prior to completion. Prior to removal, saw-cut existing concrete pavement at locations directed by the Engineer to provide a neat edge where new concrete pavement will adjoin existing pavement. Remove pavement according to Special Note for Full Depth Concrete Pavement Repair 11J by a saw cut and lift method without unnecessarily disturbing the underlying base. The Department will allow double sawing of large slabs to facilitate removal.
- **D. Preparation of Base.** Prepare the base with DGA (do not use Crushed Stone Base) according to the Special Note for Full Depth Concrete Pavement Repair, except that geotextile fabric will not be required. Compact the new and existing aggregate base to the Engineer's satisfaction. Compact areas not accessible to compaction equipment with vibratory plate compactors and hand tamping.
- **E. JPC Pavement Replacement.** Except as specified herein, construct JPC Pavement Replacement according to the Special Note for Full Depth Concrete Pavement Repair 11J. Perform pavement removal and replacement in such a manner that removal and replacement at each location are accomplished on the same day. Prior to pavement removal and placing JPC Pavement, obtain the Engineer's approval of proposed method of construction for ensuring and establishing a smooth profile. Stabilize the base as directed by the Engineer with DGA. Once the removal of pavement has begun, work continuously to place the new PCC Pavement to eliminate the hole. The Engineer will allow hand finishing; however, perform initial strike-off with a rotary drum screed.

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Place PCC Pavement with nominal depth as shown on the summaries, however, transition the finished grade of the PCC Pavement to match the adjacent pavement that is to remain in place; therefore, the actual thickness of the pavement may be greater in some areas. Install tie and dowel bars according to Special Note for Full Depth Concrete Pavement Repair 11J using gang drills, capable of drilling a minimum of four holes at a time. Contrary to the Special Note for Full Depth Concrete Pavement Repair 11J, the Engineer may designate non-standard joint spacing.

Consolidate the concrete, strike off, machine finish with a vibrating or roller screed, straightedge the plastic concrete with a straightedge conforming to Section 501.02.18, and finish with a burlap drag and broom finish. Texturing will not be required. Rideability will not be required. Provide positive drainage upon completion of construction.

- **F. Joint Sealing.** Seal the joints with hot-poured elastic according to the Special Note for Full Depth Concrete Pavement Repair 11J.
- **G. Erosion Control.** See Special Note for Erosion Control.
- **H. Disposal of Waste.** Dispose of all cuttings, debris, and other 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.
- **I. Pavement Striping.** See Traffic Control Plan.
- **J. On-Site Inspection.** Prior to submitting a bid, make a thorough inspection of the site and become thoroughly familiar with the 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. The Department will not honor any claims resulting from site conditions.
- **K. Property Damage and Restoration.** Be responsible for all damage to public and/or private property resulting from the work. Repair or replace all damaged roadway features in like kind materials and design at no additional cost to the Department. Sow disturbed earthen areas with Seed Mix Type I. Repair or replace damaged private property in like kind materials and design to the satisfaction of the owner.
- **L. Caution.** Consider information shown on the drawings and in this proposal and the types and quantities of work listed to be approximate only, and not as an accurate or complete evaluation of the material and conditions to be encountered during construction. The bidder must draw his own conclusion as to the conditions to be encountered. The Department does not give any guarantee as to the accuracy of the data and no claim will be considered for

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additional compensation if the conditions encountered are not in accordance with the information shown.

- **M.** Utility Clearance. Determine the location of all underground and overhead utilities prior to construction. It is not anticipated that utility facilities will need to be relocated and/or adjusted; however, in the event that work does require relocation and/or adjustment, the utility companies will work concurrently with the Contractor while relocating their facilities.
- **N. Final Dressing, Clean Up, and Seeding and Protection.** After all work is completed, remove all waste and debris from the construction sites. Remove all temporary shoulder widening and restore disturbed shoulders. Perform Class A final dressing on all disturbed areas. Sow disturbed earthen areas with Seed Mixture No. 1.

IV. METHOD OF MEASUREMENT

The Department will measure only the bid items listed. All other items required to complete the construction shall be incidental to the listed bid items.

- A. Maintain and Control Traffic. See Traffic Control Plan.
- **B. Site Preparation.** Other than the bid items listed, the Department will not measure Site Preparation for payment, but shall be incidental to the other items of the work.
- **C. Remove PCC Pavement.** See Special Note for Full Depth Concrete Pavement Repair 11J.
- **D. DGA.** See Special Note for Full Depth Concrete Pavement Repair 11J.
- **E. JPC Pavement.** See Special Note for Full Depth Concrete Pavement Repair 11J, except the Department will field measure the actual pavement replacement areas.
- **F. Erosion Control.** See Special Note for Erosion Control.
- **G. Joint Sealing.** See Special Note for Full Depth Concrete Pavement Repair 11J.

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IV. BASIS OF PAYMENT

The Department will make payment only for the bid items listed. All other items required to complete the construction shall be incidental to the bid items listed.

- A. Maintain and Control Traffic. See Traffic Control Plan.
- **B. Erosion Control.** See Special Note for Erosion Control.
- **C. DGA.** See Special Note for Full Depth Concrete Pavement Repair11J.
- **D. Remove Pavement.** See Special Note for Full Depth Concrete Pavement Repair 11J.
- E. JPC Pavement. See Special Note for Full Depth Concrete Pavement Repair 11J.

SPECIAL NOTE FOR CONTRACTOR STAKING

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In addition to the requirements of Section 201, perform the following:

- 1. Contrary to Section 201.03.01, perform items 1-3 usually performed by the Engineer; and
- 2. Prepare Temporary Signing Plans and obtain the Engineer's approval prior to use; and
- 3. Determine and verify lines and grades and prepare Drainage Development Worksheet(s) as needed to provide for positive drainage upon completion of construction; and
- 4. Prior to incorporating into the work, obtain the Engineers approval of all designs and revisions to be provided by the Contractor; and
- 5. Perform any and all other staking operations required to control and construct the work.

Contrary to Section 201.04.01, the Department will not measure Contractor Staking, but shall be incidental to the applicable items of work.

SPECIAL NOTE FOR CURB BOX INLETS AND SIDEWALK FD04 008 0075 176-177 FD04 008 0075 176-178

Consider the locations and quantities listed on the summaries to be approximate only. The Engineer will determine the actual locations and quantities at the time of construction. Dispose of all concrete, waste, and debris 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).

CURB BOX INLETS

Remove the top phase of the existing curb box inlets and construct Curb Box Inlet Type A T. Except as provided herein, reconstruct curb box inlets according to Section 710, as applicable with the frame and grate generally conforming to the existing box inlet type, as specified in the location summary and applicable Standard Drawings. It is the intent that a new frame and lid be used. Install a security device(s) conforming to Standard Drawing RDX-160-06. Vary dimensions as approved by the Engineer to match existing and proposed grades and flow lines, as applicable. Obtain Engineer's approval of grades and inlet elevations and structure dimensions before placing concrete. Provide positive drainage upon completion of construction. Replace any disturbed concrete curb or sidewalk in like kind materials and design. Deliver the existing frames and lids to the Department's Boone County maintenance facility. The Department will measure Remove Curb and Gutter Box Inlet and constructing Curb and Gutter Box Inlet Type A T as individual units, Each. Accept payment at the Contract unit prices Each as full compensation for all labor, equipment, materials, and incidentals for removing the existing top phases, delivery of the frame and lid to the Department's Boone County maintenance facility, furnishing new frame, lid, and security devices, disposing of waste and debris, and constructing new Curb Box Inlet Type A T.

SIDEWALK

Remove and construct Sidewalks in accordance with Sections 505; Supplemental Specifications; Standard Drawings RPM-150-08 and RPM-152-08, current editions, as applicable. 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.

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Sidewalk and Curb Box Inlets FD04 008 0075 176-177 FD04 008 0075 176-178 Page 2 of 2

The Department will measure Sidewalk in accordance with Section 505.04.01; 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 prices per square yard as full compensation for all labor, materials, equipment, and incidentals required for removal and disposal of existing sidewalk, excavation and embankment, constructing new Sidewalk, and restoration of disturbed features in accordance with these notes or as directed by the Engineer.

SPECIAL NOTE FOR NON-TRACKING TACK COAT

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

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

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

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

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

Ensure the bar can be raised to between 14 and 18" from the roadway.

2.3 Personnel. Ensure the tack supplier has provided training to the contractor on the installation procedures for this product. Make a technical representative from the supplier available at the request of the Engineer.

3. CONSTRUCTION.

- 3.1 Surface Preparation. Prior to the application of the non-tracking tack, ensure the pavement surface is thoroughly dry and free from dust or any other debris that would inhibit adhesion. Clean the surface by scraping, sweeping, and the use of compressed air. Ensure this preparation process occurs shortly before application to prevent the return of debris pavement. If rain is expected within one hour after application, do not apply material. Apply material only when the surface is dry, and no precipitation is expected.
- 3.2 Non-tracking Tack Application. Ensure the roadway temperature is a minimum of $40\,^{\circ}\text{F}$ and rising during the application of the tack. This material is not suitable for use in colder temperatures. Prior to applying the tack, demonstrate competence in applying the tack according to this note to the satisfaction of the Engineer. Heat the tack in the distributor to between $170-180\,^{\circ}\text{F}$. After initial heating to between $170-180\,^{\circ}\text{F}$, the material may be sprayed between $165\,^{\circ}\text{F}$ and $180\,^{\circ}\text{F}$. Do not apply outside this temperature range. Apply material at a rate of 0.50 pounds (0.06 gallons) per square yard. Ensure full coverage of the material on the pavement surface. Full coverage of this material is critical. If full coverage is not achieved, material application rate may be increased to ensure full coverage. Do not heat material more than twice in one day.
- 3.3 Non-tracking Tack Certification. Furnish the tacks certification to the Engineer stating the material conforms to all requirements herein prior to use.
- 3.4 Sampling and Testing. The Department will require a sample of non-tracking tack be taken from the distributor at a rate of one sample per 15,000 tons of mix. Take two 1 gallon samples of the heated material and forward the sample to the Division of Materials for testing within 7 days. Ensure the product temperature is between 170 and 180 °F at the time of sampling.
- 4. MEASUREMENT. The Department will measure the quantity of non-tracking tack in tons. The Department will not measure for payment any extra materials, labor, methods, equipment, or construction techniques used to satisfy the requirements of this note. The Department will not measure for payment any trial applications of non-tracking tack, the cleaning of the pavement surface, or furnishing and placing the adhesive. The Department will consider all such items incidental to the non-tracking tack.
- 5. PAYMENT. The Department will pay for the non-tracking tack at the Contract unit bid price and apply an adjustment for each manufacturer's lot of material based on the degree of compliance as defined in the following schedule. When a sample fails on two or more tests, the Department may add the deductions, but the total deduction will not exceed 100 percent.

Non-Tracking Tack Price Adjustment Schedule						
Test	Specification	100% Pay	90% Pay	80% Pay	50% Pay	0% Pay
Viscosity, SFS, 77 ° F	20 - 100	19 - 102	17 - 18	15 - 16	14	≤13
			103 - 105	106 - 107	108 - 109	≥ 110
Sieve, %	0.30 max.	≤ 0.40	0.41 - 0.50	0.51 - 0.60	0.61 - 0.70	≥ 0.71
Asphalt Residue, %	50 min.	≥49.0	48.5 – 48.9	48.0 – 48.4	47.5-47.9	≤ 47.4
Oil Distillate, %	1.0 max.	≤1.0	1.1-1.5	1.6 - 1.7	1.8-1.9	>2.0
Residue Penetration, 77 ° F	20 max.	≤ 21	22 - 23	24 - 25	26 - 27	≥ 28
Original Dynamic Shear (G*/sin δ), 82 ° C	1.0 min.	≥0.95	0.92 - 0.94	0.90 - 0.91	0.85 - 0.89	≤ 0.84
Softening Point, ° F	149 min.	≥145	142 - 144	140 - 141	138 - 139	≤ 137
Solubility, %	97.5 min.	≥ 97.0	96.8 – 96.9	96.6 – 96.7	96.4 – 96.5	≤ 96.3

CodePay ItemPay Unit24970ECAsphalt Material for Tack Non-TrackingTon

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SPECIAL NOTE FOR LIQUIDATED DAMAGES

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In addition to the Liquidated Damages specified in Section 108.09, the Department will assess Liquidated Damages in the amount \$500.00 per hour, not to exceed \$5,000.00 per day, for each hour or part of an hour a lane or ramp closure remains in place during the prohibited dates or hours as specified in the Traffic Control Plan, excluding delays caused by inclement weather. If work is delayed by inclement weather, the minimum work required to allow removal of the lane closure shall be resumed immediately as soon as weather permits.

In addition to the Liquidated Damages specified in Section 108.09, the Department will assess Liquidated damages in the amount of \$500.00 per hour, not to exceed \$5,000.00 per day, for each for each hour or part of an hour beyond one (1) calendar day an excavated area within ten (10) feet of traffic remains open without the JPC Pavement or Asphalt Base, as applicable, being placed, excluding delays caused by inclement weather. If work is delayed by inclement weather, the work required to place the new JPC Pavement shall be resumed immediately as soon as weather permits.

Contrary to section 108.09, the Department shall apply Liquidated damages for the months of December through March.

The Department will apply all liquidated damages accumulatively.

All other applicable portions of Section 108 apply.

SPECIAL PROVISION FOR WASTE AND BORROW SITES

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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 OTHER CONTRACTS FD04 008 0071 075-076 FD04 008 0075 176-177

FD04 008 0075 176-178

Be advised that other projects may be in progress within or in the near vicinity of this project. Take into consideration that the traffic control of those projects may affect this project and the traffic control of this project may affect those projects. Coordinate the work on this project with the work of the other contractors. The Engineer will coordinate the work of the Contractors. In case of a conflict, the Engineer will determine the relative priority to give to work phasing on the various projects. See Section 105.06.

SPECIAL NOTE FOR PAVEMENT WEDGE AND SHOULDER SEPARATE OPERATION

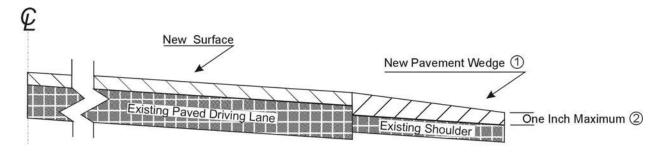
1.0 MATERIALS. Provide an Asphalt Mixture for Pavement Wedge conforming to Section 407 of the Standard Specifications or an Asphalt Surface Mixture conforming to Section 403 of the Standard Specifications, as applicable to the project, for the pavement wedge.

2.0 CONSTRUCTION. Place the Asphalt Mixture for Pavement Wedge or Asphalt Surface Mixture as a separate operation from the driving lane. Prime the existing shoulder with tack material as the Engineer directs before placing the wedge. Construct according to Sections 407.03 and 403.03 as applicable.

When the Engineer deems it appropriate to pave both the driving lane and the adjoining wedge monolithically, 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 driving lanes. Where existing site conditions permit, limit the outside edge thickness of the new paving limits to one inch above the existing shoulder wedge elevation. If an Asphalt Surface Mixture is furnished for the pavement wedge, texture according to Section 403.03.08.

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.



- ① Slope varies, but is down from the driving lanes except on outside of some curves where superelevation controls.
- ② Where existing site conditions permit.
- **3.0 MEASUREMENT.** The Department will measure Asphalt Mixture for Pavement Wedge or Asphalt Surface Mixture placed as the pavement wedge according to Sections 403 and 407 as applicable.
- **4.0 PAYMENT.** The Department will make payment for the completed and accepted quantities of Asphalt Surface Mixtures placed as pavement wedge according to Section 403. The Department will make payment for the completed and accepted quantities of Asphalt Mixture for Pavement Wedge according to Section 407.

SPECIAL NOTES FOR SHOULDER FAILURE REPAIR FD04 008 0075 176-177 FD04 008 0075 176-178

Consider repair locations and quantities listed in the summary as approximate only. The Engineer will determine actual locations and quantities at the time of construction. Trench the shoulders to an approximate nominal depth of ten (10) inches below the adjacent concrete surface. Remove all materials and stockpile in the rest area for future use by the Department as directed by the Engineer. Use all possible care to avoid damaging existing culvert pipes and any existing underground utilities. Repair or restore any damaged items at no additional cost to the Department.

Add additional DGA as directed by the Engineer and compact the shoulder and backfill the excavated area with 8.5 inches of Class 2 Asphalt Base 1.0D PG76-22 (3 lifts, maximum of 3 inches). Compact the asphalt base to the proper compaction as required by the Section 403. Seal the asphalt base with 1.5 inches Class 3 Asphalt Surface 0.38A PG76-22 up to the existing adjacent pavement elevation. Perform all shoulder repairs in such a manner that trenching and replacement 0f the asphalt base are completed on the same day.

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

Accept payment at the Contract unit prices per linear foot for Trenching and per ton for Asphalt Base, Asphalt Surface, and Tack as full compensation for all labor, materials, equipment, and incidentals for excavating and disposing of all materials; furnishing and placing asphalt base and asphalt surface, backfilling the trench up to the top pavement boundary; and all other items necessary to complete the work to the satisfaction of the Engineer.

SPECIAL NOTE FOR ASPHALT MILLING AND TEXTURING FD04 008 0075 176-177 FD04 008 0075 176-178

Begin milling and paving operations immediately after erecting lane and ramp closures. Continue milling and paving operations continuously until completed. Complete paving operations within the time allowed for rest area, ramp, and lane closures allowed by the Traffic Control Plan; else, the Department will assess liquidated damages according to the Special Note for Liquated Damages.

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

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

SPECIAL NOTE FOR PRIME

Prior to constructing asphalt base, apply Asphalt Material for Tack for prime at a rate of 1 lb/sy of undiluted asphalt residue. If an acceptable prime coat is not consistently achieved, the Engineer may require dilution with an equal amount of water and application of the diluted material at the rate of 2 lbs/sy. Except as specified herein, apply prime according to Section 406. The Department will not measure Asphalt Material for Tack for prime, but shall be incidental to the asphalt courses.

1-3715 Prime 01/02/2012

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SPECIAL NOTE FOR TYPICAL SECTION DIMENSIONS

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

1-3725 Typical Section Dimensions 01/02/2012

TRAFFIC CONTROL PLAN FD04 008 0071 075-076 SOUTH BOUND WEIGH STATION

THIS PROJECT IS A FULLY CONTROLLED ACCESS HIGHWAY

TRAFFIC CONTROL GENERAL

Except as provided herein, maintain and control traffic in accordance with the 2012 Standard and Supplemental Specifications, Special Notes and Special Provisions, 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 contractor may close the weigh station for 96 hours, one time only, when required by actual operations in progress or concrete curing. After award, informally partner with the Engineer and the Kentucky Department of Vehicle Regulation and develop a work schedule. The Engineer may specify days and hours when closure will not be allowed. Confirm with the Engineer the planned closure fourteen (14) calendar days before closure. Notify the Engineer immediately if there is a change in the approved closure schedule.

Close the weigh station when actually excavating, placing JPC patches, and curing JPC. Close the weigh station ramp only; do not close lanes and shoulder on mainline I-71 at any time.

The Department will allow night work on this project. Obtain the Engineer's approval of the method of lighting prior to performing night work.

Consider these restrictions in submitting bid. The Department will not consider any claims for money or grant contract time extensions for any delays to the Contractor because of these restrictions.

PUBLIC INFORMATION PLAN

The Department will prepare a Public Information Plan and provide public notification. Submit a schedule of weigh station closures for the Engineer's approval 14 calendar prior to beginning work. Notify the Engineer immediately and obtain prior approval of any deviations from the previously approved closure schedule.

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WEIGH STATION, RAMP, AND LANE CLOSURES

Do not leave weigh station closure in place during non-working hours except as described in the Phasing. Contrary to Section 112.04.17, the Department will not measure Long Term Lane Closures for payment, but shall be incidental to Maintain and Control Traffic.

STAGING AREAS

The Contractor may use approved areas within the weigh station as a staging areas. Obtain the Engineer's approval of proposed limits, access points, and signing plans prior to use. If the Contractor elects not to use the weigh station as a staging area, provide staging areas off the Right-of-Way at no additional cost to the Department.

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.

Use existing weigh station electrical message signing and Changeable Message Signs to notify the public of weigh station closure as directed by the Engineer.

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. 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.

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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 for weigh station closure and 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 STRIPING

If there is to be a deviation from the existing striping plan, the Engineer will furnish the Contractor a striping plan prior to beginning work.

Install Permanent Striping according to Section 713 with the following exception:

- 1. Place Temporary or Permanent Striping before opening a lane to traffic; and
- 2. Include Edge Lines in Temporary Striping; and
- 3. The Department will not measure Temporary Striping, but shall be incidental to Pavement Striping Permanent Paint, 6 Inch
- 4. 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 shall be incidental to Pavement Striping Permanent Paint, 6 Inch.

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 $1\frac{1}{2}$ ". 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 at no additional cost to the Department. Remove the wedges prior to placement of the final surface course.

Protect payement 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

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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, at no additional cost to the Department.

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 - Protect pedestrian traffic as directed by the engineer.

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USE AND PLACEMENT OF CHANGEABLE MESSAGE SIGNS

The following policy is based upon current Changeable Message Signs (CMS) standards and practice from many sources, including the Federal Highway Administration (FHWA), other State Departments of Transportation, and Traffic Safety Associations. It is understood that each CMS installation or use requires individual consideration due to the specific location or purpose. However, there will be elements that are constant in nearly all applications. Accordingly these recommended guidelines bring a level of uniformity, while still being open to regional experience and engineering judgment.

Application

The primary purpose of CMS is to advise the driver of unexpected traffic and routing situations. Examples of applications where CMS can be effective include:

- Closures (road, lane, bridge, ramp, shoulder, interstate)
- Changes in alignment or surface conditions
- Significant delays, congestion
- Construction/maintenance activities (delays, future activities)
- Detours/alternative routes
- Special events with traffic and safety implications
- Crash/incidents
- Vehicle restrictions (width, height, weight, flammable)
- Advance notice of new traffic control devices
- Real-time traffic conditions (must be kept up to date)
- Weather /driving conditions, environmental conditions, Roadway Weather Information Systems
- Emergency Situations
- Referral to Highway Advisory Radio (if available)
- Messages as approved by the County Engineer's Office

CMS should not be used for:

- Replacement of static signs (e.g. road work ahead), regulatory signage (e.g. speed limits), pavement markings, standard traffic control devices, conventional warning or guide signs.
- Replacement of lighted arrow board
- Advertising (Don't advertise the event unless clarifying "action" to be taken by driver e.g. Speedway traffic next exit)
- Generic messages
- Test messages (portable signs only)
- Describe recurrent congestion (e.g. rush hour)
- Public service announcements (not traffic related

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Messages

Basic principles that are important to providing proper messages and insuring the proper operation of a CMS are:

- Visible for at least ½ mile under ideal daytime and nighttime conditions
- Legible from all lanes a minimum of 650 feet
- Entire message readable twice while traveling at the posted speed
- Nor more than two message panels should be used (three panels may be used on roadways where vehicles are traveling less than 45 mph). A panel is the message that fits on the face of the sign without flipping or scrolling.
- Each panel should convey a single thought; short and concise
- Do not use two unrelated panels on a sign
- Do not use the sign for two unrelated messages
- Should not scroll text horizontally or vertically
- Should not contain both the words left and right
- Use standardized abbreviations and messages
- Should be accurate and timely
- Avoid filler/unnecessary words and periods (hazardous, a, an, the)
- Avoid use of speed limits
- Use words (not numbers) for dates

Placement

Placement of the CMS is important to insure that the signs is visible to the driver and provides ample time to take any necessary action. Some of the following principles may only be applicable to controlled access roadways. The basic principles of placement for a CMS are:

- When 2 signs are needed, place on same side of roadway and at least 1,000 feet apart
- Place behind semi-rigid/rigid protection (guardrail, barrier) or outside of the 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

Standard Abbreviations

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

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Word	Abbrev.	<u>Example</u>
Access	ACCS	ACCIDENT AHEAD/USE ACCS RD
	. T. (T)	NEXT RIGHT
Alternate	ALT	ACCIDENT AHEAD/USE ALT RTE
Avenue	AVE	NEXT RIGHT FIFTH AVE CLOSED/DETOUR
Avenue	AVE	NEXT LEFT
Blocked	BLKD	FIFTH AVE BLKD/MERGE LEFT
Boulevard	BLVD	MAIN BLVD CLOSED/USE ALT RTE
Bridge	BRDG	SMITH BRDG CLOSED/USE ALT
S		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
Г		EXIT 10
Freeway	FRWY, FWY	GN SYNDR FWY CLOSED/DETOUR
Hazardous Materials	HAZMAT	EXIT 15 HAZMAT IN ROADWAY/ALL TRAF
Hazardous Materiais	HAZMAI	EXIT 25
Highway	HWY	ACCIDENT ON AA HWY/EXPECT
Iligiiway	11 VV 1	DELAYS
Hour	HR	ACCIDENT ON AA HWY/2 HR
Tioui	IIIC	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 I75/USE ALT RTE
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

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Oversized	OVRSZ	OVRSZ COMM VEH/USE I275	
		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	
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	
		EXIT 60	
Vehicle	VEH	OVRSZ COMM VEH/USE I275	
	NEXT	RIGHT	
Westbound	W-BND	W-BND I64 CLOSED/DETOUR	
	EXIT :	50	
Work	WRK	CONST WRK 2MI/POSSIBLE	
		DELAYS	

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

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

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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

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

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

OSE KIGITI LANE

WATCH FOR FLAGGER

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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

TRAFFIC CONTROL PLAN FD04 008 0075 176-177 NORTHBOUND REST AREA

THIS PROJECT IS A FULLY CONTROLLED ACCESS HIGHWAY

TRAFFIC CONTROL GENERAL

Except as provided herein, maintain and control traffic in accordance with the 2012 Standard and Supplemental Specifications, Special Notes and Special Provisions, 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

Do not erect rest area, ramp, or mainline I-75 lane closures during the following days and hours:

April 18 - April 21, 2019 May 24 - May 27, 2019 July 3 - July 7, 2019 August 30 - September 2, 2019 8:00 a.m. Friday - 8:00 p.m. Monday Easter Weekend Memorial Day Weekend Independence Day Weekend Labor Day Weekend Every Week

The Engineer may specify additional days and hours when ramp and/or lane closures will not be allowed.

After award, informally partner with the Engineer and develop a work schedule. The contractor may close the northbound rest area, one time only for a maximum of 80 consecutive hours, between 8:00 p.m. on a Monday through 8:00 a.m. the following Friday when required by actual operations in progress. In addition, the Contractor may close one time the right lane of I-75 northbound during the same periods the rest area is closed, between the hours of 7:00 p.m. to 5:00 a.m., for Asphalt Milling and Paving operations on the ramps. Confirm with the Engineer the planned rest area and ramp closures fourteen (14) calendar days before closure. Notify the Engineer immediately if there is a change in the approved closure schedules.

Perform all work requiring a rest area or ramp closure concurrently. Maintain the rest area open and mainline I-75 open at all other times. Maintain all lanes of traffic open within the rest area at all other times, except the Contractor may close a lane and one adjacent lane when actually excavating, placing concrete patches, milling, or placing asphalt base or surface. Provide a minimum clear lane width of 11 feet; however, provide for passage of vehicles up to 16 feet in width.

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The Department will allow night work on this project. Obtain the Engineer's approval of the method of lighting prior to performing night work.

Take these restrictions in account in submitting bid. The Department will not consider any claims for money or grant contract time extensions for any delays to the Contractor because of these restrictions.

PUBLIC INFORMATION PLAN

The Department will prepare a Public Information Plan and provide public notification. Submit a schedule of proposed lane closures for the Engineer's approval 14 calendar prior to beginning work. Notify the Engineer immediately and obtain prior approval of any deviations from the previously approved closure schedule.

REST AREA, RAMP, LANE, AND SHOULDER CLOSURES

Do not leave rest area, ramp, lane, or shoulder closures in place during non-working hours except as described in the Phasing. Contrary to Section 112.04.17, the Department will not measure Long Term Lane Closures for payment, but shall be incidental to Maintain and Control Traffic.

STAGING AREAS

The Contractor may use approved areas in the rest area as a staging area. Obtain the Engineer's approval of proposed limits, access points, and signing plans prior to use. If the Contractor elects not to use the rest area as a staging area, provide a staging area off the Right-of-Way at no additional cost to the Department.

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.

Develop Temporary Signing Plans for each phase of the work. Cover or remove existing permanent signs that conflict with the work or traffic control. Use Changeable Message Signs to notify the public of altered

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traffic patterns, rest area closure, and ramp and lane closures as directed by the Engineer. Uncover or replace permanent signs when no longer needed.

ARROW PANELS

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

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. 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.

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 for rest area closures and 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.

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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 Diamond Grinding.

Install Temporary Striping according to Section 112 and Permanent Striping according to Section 713 with the following exception:

- 1. Place Temporary or Permanent Striping before opening a lane to traffic; and
- 2. Include Edge Lines in Temporary Striping; and
- 3. 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 at no additional cost to the Department. Remove the wedges prior to placement of the final surface course.

Protect payement 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, at no additional cost to the Department.

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 - Protect pedestrian traffic as directed by the engineer.

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USE AND PLACEMENT OF CHANGEABLE MESSAGE SIGNS

The following policy is based upon current Changeable Message Signs (CMS) standards and practice from many sources, including the Federal Highway Administration (FHWA), other State Departments of Transportation, and Traffic Safety Associations. It is understood that each CMS installation or use requires individual consideration due to the specific location or purpose. However, there will be elements that are constant in nearly all applications. Accordingly these recommended guidelines bring a level of uniformity, while still being open to regional experience and engineering judgment.

Application

The primary purpose of CMS is to advise the driver of unexpected traffic and routing situations. Examples of applications where CMS can be effective include:

- Closures (road, lane, bridge, ramp, shoulder, interstate)
- Changes in alignment or surface conditions
- Significant delays, congestion
- Construction/maintenance activities (delays, future activities)
- Detours/alternative routes
- Special events with traffic and safety implications
- Crash/incidents
- Vehicle restrictions (width, height, weight, flammable)
- Advance notice of new traffic control devices
- Real-time traffic conditions (must be kept up to date)
- Weather /driving conditions, environmental conditions, Roadway Weather Information Systems
- Emergency Situations
- Referral to Highway Advisory Radio (if available)
- Messages as approved by the County Engineer's Office

CMS should not be used for:

- Replacement of static signs (e.g. road work ahead), regulatory signage (e.g. speed limits), pavement markings, standard traffic control devices, conventional warning or guide signs.
- Replacement of lighted arrow board
- Advertising (Don't advertise the event unless clarifying "action" to be taken by driver e.g. Speedway traffic next exit)
- Generic messages
- Test messages (portable signs only)
- Describe recurrent congestion (e.g. rush hour)
- Public service announcements (not traffic related

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Messages

Basic principles that are important to providing proper messages and insuring the proper operation of a CMS are:

- Visible for at least ½ mile under ideal daytime and nighttime conditions
- Legible from all lanes a minimum of 650 feet
- Entire message readable twice while traveling at the posted speed
- Nor more than two message panels should be used (three panels may be used on roadways where vehicles are traveling less than 45 mph). A panel is the message that fits on the face of the sign without flipping or scrolling.
- Each panel should convey a single thought; short and concise
- Do not use two unrelated panels on a sign
- Do not use the sign for two unrelated messages
- Should not scroll text horizontally or vertically
- Should not contain both the words left and right
- Use standardized abbreviations and messages
- Should be accurate and timely
- Avoid filler/unnecessary words and periods (hazardous, a, an, the)
- Avoid use of speed limits
- Use words (not numbers) for dates

Placement

Placement of the CMS is important to insure that the signs is visible to the driver and provides ample time to take any necessary action. Some of the following principles may only be applicable to controlled access roadways. The basic principles of placement for a CMS are:

- When 2 signs are needed, place on same side of roadway and at least 1,000 feet apart
- Place behind semi-rigid/rigid protection (guardrail, barrier) or outside of the clear zone
- Place 1,000 feet in advance of work zone; at least one mile ahead of decision point
- Normally place on right side of roadway; but should be placed closest to the affected lane so that either side is acceptable
- Signs should not be dual mounted (one on each side of roadway facing same direction)
- Point trailer hitch downstream
- Secure to immovable object to prevent thief (if necessary)
- Do not place in sags or just beyond crest
- Check for reflection of sun to prevent the blinding of motorist
- Should be turned ~3 degrees outward from perpendicular to the edge of pavement
- Bottom of sign should be 7 feet above the elevation of edge of roadway
- Should be removed when not in use

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

Word	Abbrev.	<u>Example</u>
Access	ACCS	ACCIDENT AHEAD/USE ACCS RD NEXT RIGHT
Alternate	ALT	ACCIDENT AHEAD/USE ALT RTE
Avenue	AVE	NEXT RIGHT FIFTH AVE CLOSED/DETOUR
Avenue	AVE	NEXT LEFT
Blocked	BLKD	FIFTH AVE BLKD/MERGE LEFT
Boulevard	BLVD BRDG	MAIN BLVD CLOSED/USE ALT RTE
Bridge	BKDG	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
E (E (EXT EXT	STOP
Entrance, Enter	EX, EXT	DWNTN TRAF USE EX 40
Expressway	EXPWY	WTRSN EXPWY CLOSED/DETOUR
D		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
	ш	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
merstate	1	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
Mile	MI	ACCIDENT 3 MI AHEAD/ USE
Minor	MNR	ALT RTE ACCIDENT 3 MI MNR DELAY
Minutes	MIN	ACCIDENT 3 MI MIN DELAY ACCIDENT 3 MI/30 MIN DELAY
willutes	1V111N	ACCIDENT 5 MII/30 MIIN DELAY

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Northbound	N-BND	N-BND I75 CLOSED/ DETOUR
Oversized	OVRSZ	EXIT 50 OVRSZ COMM VEH/USE I275 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
	DELA	YS
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
		EXIT 60
Vehicle	VEH	OVRSZ COMM VEH/USE I275
	NEXT	RIGHT
Westbound	W-BND	W-BND I64 CLOSED/DETOUR
	EXIT	50
Work	WRK	CONST WRK 2MI/POSSIBLE
		DELAYS

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

<u>Abbrev.</u>	Intended Word	Word Erroneously Given
ACC	Accident	Access (Road)
CLRS	Clears	Colors
DLY	Delay	Daily
FDR	Feeder	Federal
L	Left	Lane (merge)
LOC	Local	Location
LT	Light (traffic)	Left
PARK	Parking	Park
POLL	Pollution (index)	Poll
RED	Reduce	Red
STAD	Stadium	Standard
TEMP	Temporary	Temperature
WRNG	Warning	Wrong

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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 PEOPLE CROSSING RAMP CLOSED

RAMP (SLIPPERY, ICE, ETC.)

RIGHT LANE CLOSED RIGHT LANE NARROWS RIGHT SHOULDER CLOSED

ROAD CLOSED

ROAD CLOSED XX MILES

Action

ALL TRAFFIC EXIT RT AVOID DELAY USE XX CONSIDER ALT ROUTE

DETOUR

DETOUR XX MILES DO NOT PASS EXPECT DELAYS FOLLOW ALT ROUTE

KEEP LEFT
KEEP RIGHT
MERGE XX MILES
MERGE LEFT
MERGE RIGHT
ONE-WAY TRAFFIC
PASS TO LEFT
PASS TO RIGHT
PREPARE TO STOP
REDUCE SPEED

SLOW

SLOW DOWN
STAY IN LANE
STOP AHEAD
STOP XX MILES
TUNE RADIO 1610 AM
USE NN ROAD
USE CENTER LANE
USE DETOUR ROUTE
USE LEFT TURN LANE

USE NEXT EXIT
USE RIGHT LANE
WATCH FOR FLAGGER

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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

TRAFFIC CONTROL PLAN FD04 008 0075 176-178 SOUTHBOUND REST AREA

THIS PROJECT IS A FULLY CONTROLLED ACCESS HIGHWAY

TRAFFIC CONTROL GENERAL

Except as provided herein, maintain and control traffic in accordance with the 2012 Standard and Supplemental Specifications, Special Notes and Special Provisions, 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

Do not erect rest area, ramp, or mainline I-75 lane closures during the following days and hours:

April 18 - April 21, 2019 May 24 - May 27, 2019 July 3 - July 7, 2019 August 30 - September 2, 2019 8:00 a.m. Friday - 8:00 p.m. Monday Easter Weekend Memorial Day Weekend Independence Day Weekend Labor Day Weekend Every Week

The Engineer may specify additional days and hours when ramp and/or lane closures will not be allowed.

After award, informally partner with the Engineer and develop a work schedule. The contractor may close the southbound rest area, one time only for a maximum of 80 consecutive hours, between 8:00 p.m. on a Monday through 8:00 a.m. the following Friday when required by actual operations in progress. In addition, the Contractor may close one time the right lane of I-75 southbound, during the same period the rest area is closed, between the hours of 8:00 p.m. to 11:00 a.m., for Asphalt Milling and Paving operations on the ramps. Confirm with the Engineer the planned rest area and ramp closures fourteen (14) calendar days before closure. Notify the Engineer immediately if there is a change in the approved closure schedules.

Perform all work requiring a rest area or ramp closure concurrently. Maintain the rest area open and mainline I-75 open at all other times. Maintain all lanes of traffic open within the rest area at all other times, except the Contractor may close a lane and one adjacent lane when actually excavating, placing concrete patches, milling, placing asphalt base or surface. Provide a minimum clear lane width of 11 feet; however, provide for passage of vehicles up to 16 feet in width.

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The Department will allow night work on this project. Obtain the Engineer's approval of the method of lighting prior to performing night work.

Take these restrictions in account in submitting bid. The Department will not consider any claims for money or grant contract time extensions for any delays to the Contractor because of these restrictions.

PUBLIC INFORMATION PLAN

The Department will prepare a Public Information Plan and provide public notification. Submit a schedule of proposed lane closures for the Engineer's approval 14 calendar prior to beginning work. Notify the Engineer immediately and obtain prior approval of any deviations from the previously approved closure schedule.

REST AREA, RAMP, LANE, & SHOULDER CLOSURES

Do not leave rest area, ramp, lane, or shoulder closures in place during non-working hours except as described in the Phasing. Contrary to Section 112.04.17, the Department will not measure Long Term Lane Closures for payment, but shall be incidental to Maintain and Control Traffic.

STAGING AREAS

The Contractor may use approved areas in the rest area as a staging area. Obtain the Engineer's approval of proposed limits, access points, and signing plans prior to use. If the Contractor elects not to use the rest area as a staging area, provide a staging area off the Right-of-Way at no additional cost to the Department.

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.

Develop Temporary Signing Plans for each phase of the work. Cover or remove existing permanent signs that conflict with the work or traffic control. Use Changeable Message Signs to notify the public of altered

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traffic patterns, rest area closure, ramp, and lane closures as directed by the Engineer. Uncover or replace permanent signs when no longer needed.

ARROW PANELS

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

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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. 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.

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

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- 2. Include Edge Lines in Temporary Striping; and
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- 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
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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
2 3		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
Mile	MI	ACCIDENT 3 MI AHEAD/ USE
		ALT RTE
Minor	MNR	ACCIDENT 3 MI MNR DELAY
Minutes	MIN	ACCIDENT 3 MI/30 MIN DELAY
		TOOLDEN'T S MIJSO MIN DEDITY

Traffic Control Plan FD04 008 0075 176-178 Page 8 of 10

		EXITE 50
versized	OVRSZ	EXIT 50 OVRSZ COMM VEH/USE I275
		NEXT RIGHT
arking	PKING	EVENT PKING NEXT RGT
arkway	PKWY	CUM PKWAY TRAF/DETOUR
•		EXIT 60
repare	PREP	ACCIDENT 3 MIL/PREP TO STOP
ight	RGT	EVENT PKING NEXT RGT
oad	RD	HAZMAT IN RD/ALL TRAF EXIT 25
oadwork	RDWK	RDWK NEXT 4 MI/POSSIBLE
		DELAYS
oute	RTE	MAJ DELAYS I75/USE ALT RTE
houlder	SHLDR	SHLDR CLOSED NEXT 5 MI
lippery	SLIP	SLIP COND POSSIBLE/ SLOW SPD
outhbound	S-BND	S-BND I75 CLOSED/DETOUR
		EXIT 50
peed	SPD	SLIP COND POSSIBLE/ SLOW SPD
treet	·-	MAIN ST CLOSED/USE ALT RTE
raffic	TRAF	CUM PKWAY TRAF/DETOUR
		EXIT 60
'ehicle	VEH	OVRSZ COMM VEH/USE I275
		NEXT RIGHT
Vestbound	W-BND	
Vork	WRK	
		DELAYS
repare ight oad oadwork oute houlder lippery outhbound peed treet	PKWY PREP RGT RD RDWK RTE SHLDR SLIP S-BND	EVENT PKING NEXT RGT CUM PKWAY TRAF/DETOUR EXIT 60 ACCIDENT 3 MIL/PREP TO STOP EVENT PKING NEXT RGT HAZMAT IN RD/ALL TRAF EXIT 2 RDWK NEXT 4 MI/POSSIBLE DELAYS MAJ DELAYS I75/USE ALT RTE SHLDR CLOSED NEXT 5 MI SLIP COND POSSIBLE/ SLOW SPD S-BND I75 CLOSED/DETOUR EXIT 50 SLIP COND POSSIBLE/ SLOW SPD MAIN ST CLOSED/USE ALT RTE CUM PKWAY TRAF/DETOUR EXIT 60 OVRSZ COMM VEH/USE I275

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
TEMP	Temporary	Temperature
WRNG	Warning	Wrong

Traffic Control Plan FD04 008 0075 176-178 Page 9 of 10

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 PEOPLE CROSSING RAMP CLOSED

RAMP (SLIPPERY, ICE, ETC.)

RIGHT LANE CLOSED RIGHT LANE NARROWS RIGHT SHOULDER CLOSED

ROAD CLOSED

ROAD CLOSED XX MILES

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 FD04 008 0075 176-178 Page 10 of 10

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

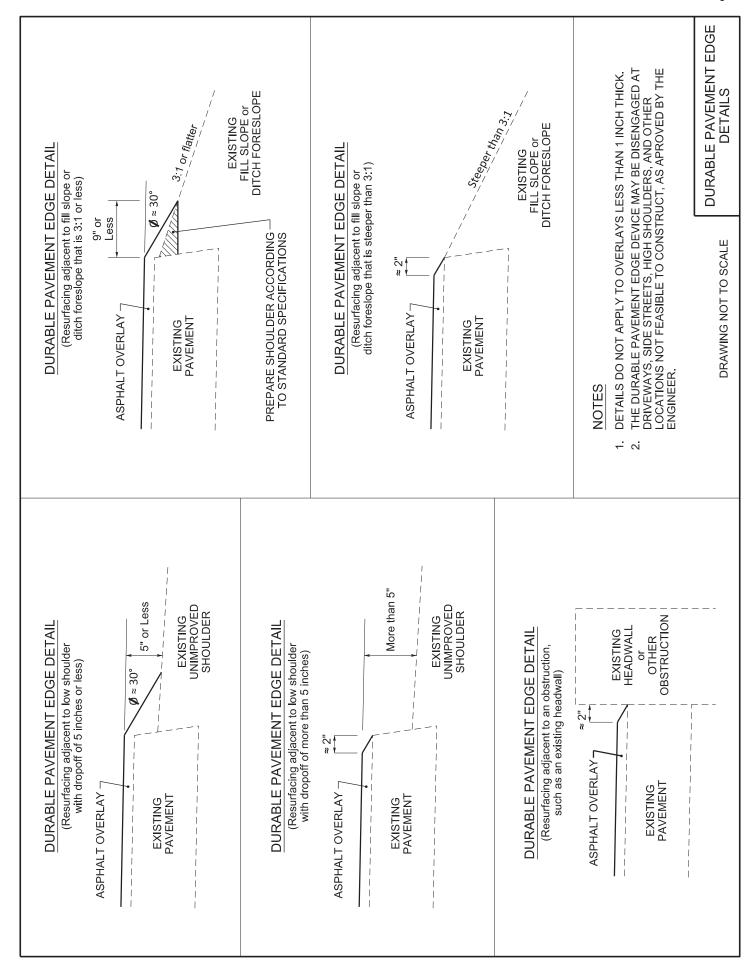
UNEVEN LANES

WATER ON ROAD

WET PAINT

WORK ZONE XX MILES

WORKERS AHEAD



SPECIAL NOTE FOR EROSION CONTROL

FD04 008 0071 075-076 FD04 008 0075 176-177 FD04 008 0075 176-178

I. DESCRIPTION

Except as provided herein, perform all erosion and water pollution control work in accordance with the Department's 2012 Standard and Supplemental Specifications, 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(s) for construction, including locating, furnishing, installing, and maintaining temporary and/or permanent erosion and water pollution control measures as required by the BMP prior to beginning any earth disturbing activity on the project site; (3) Clearing and grubbing and removal of all obstructions as required for construction; (4) Removing all erosion control devices when no longer needed; (5) Restoring all disturbed areas as nearly as possible to their original condition; (6) Preparing seedbeds and permanently seeding all disturbed areas; (7) Providing a Kentucky Erosion Prevention and Sediment Control Program (KEPSC) qualified inspector; and (8) Performing any other work to prevent erosion and/or water pollution as specified by this contract, required by the BMP, or as directed by the Engineer.

II. MATERIALS

Except as provided herein, furnish all materials for erosion and water pollution control work in accordance with the Department's Standard and Supplemental Specifications, and Standard and Sepia Drawings, current editions, and as directed by the Engineer.

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

Except as provided herein, construct all erosion and water pollution control work in accordance with the Department's Standard and Supplemental Specifications, and Standard and Sepia Drawings, current editions, and as directed by the Engineer.

Erosion Control FD04 008 0071 075-076 FD04 008 0075 176-177 FD04 008 0075 176-178 Page 2 of 3

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 and the supplemental specifications. 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 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 steam.

Provide for erosion control measures to be in place and functioning prior to any earth disturbance within a drainage area. Compute the volume and size of silt control devices necessary to control sediment during each phase of construction. 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

Erosion Control FD04 008 0071 075-076 FD04 008 0075 176-177 FD04 008 0075 176-178 Page 3 of 3

areas and sow all exposed earthen areas with the applicable seed mixture(s) according to Section 212.03.03.

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. See Section 703.04.05.

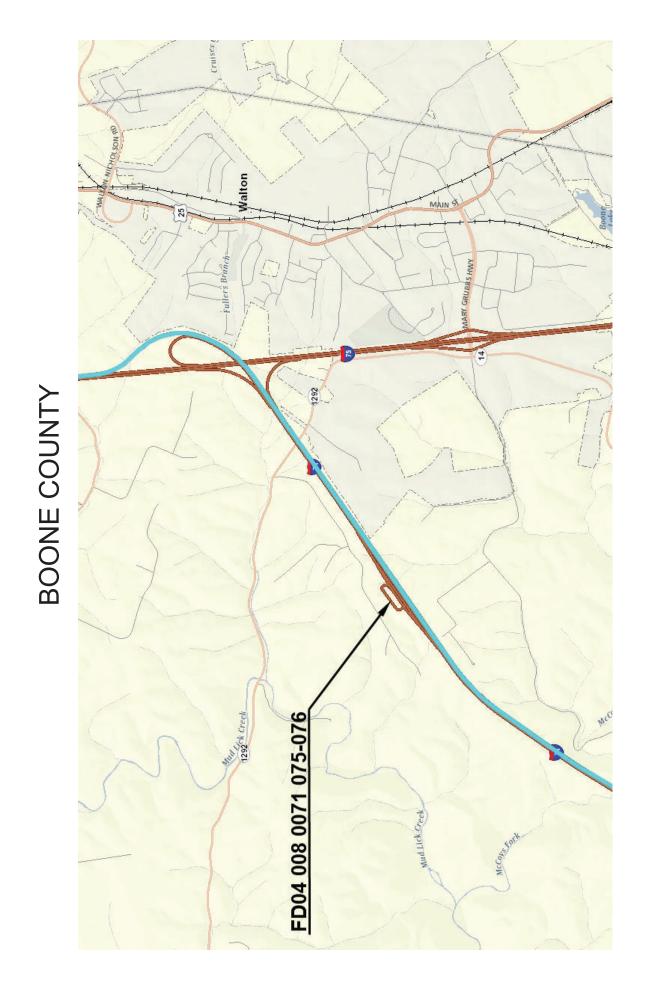
Erosion Control. Contrary to Sections 212.04, 213.04, and 703.04 other than Erosion Control Blankets, Sodding, and Channel Lining, the Department will not measure Erosion Control or developing, updating, and maintaining a BMP plan for each site; providing a KEPSC qualified inspector; locating, furnishing, 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.

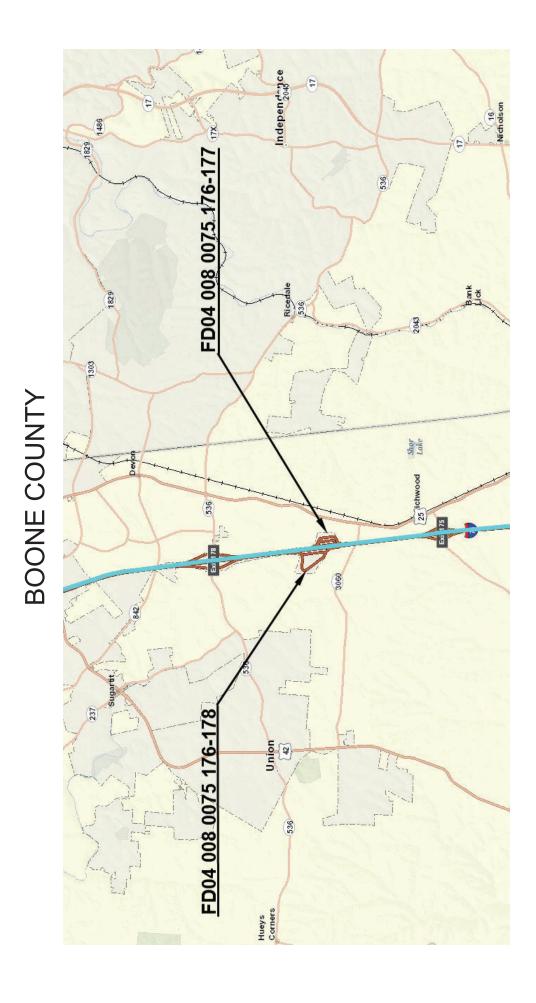
V. BASIS OF PAYMENT

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 Sodding as Extra Work according to Sections 104.03 and 109.04.





MATERIAL SUMMARY

CONTRACT ID: 192034	008GR19P008-FD04	MP00800711901
CONTRACT ID: 192034	008GR19P008-FD04	MP00800711901

LOUISVILLE - COVINGTON ROAD (I-71) SOUTHBOUND WEIGH STATION JPC PAVEMENT REPAIRS, A DISTANCE OF .01 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0005	02091	REMOVE PAVEMENT - (PCC AND/OR ASPHALT)	53.33	SQYD
0010	02086	JPC PAVEMENT-13 IN	53.33	SQYD
0015	02562	TEMPORARY SIGNS	200.00	SQFT
0020		MAINTAIN & CONTROL TRAFFIC - (I 71 WEIGH STATION)	1.00	LS
0025	00001	DGA BASE	3.00	TON
0030	06515	PAVE STRIPING-PERM PAINT-6 IN	60.00	LF
0035	02569	DEMOBILIZATION	1.00	LS
0040	02014	BARRICADE-TYPE III	4.00	EACH
0045	02671	PORTABLE CHANGEABLE MESSAGE SIGN	1.00	EACH

MATERIAL SUMMARY

CONTRACT ID: 192034	008GR19P008-FD04	MP00800751901

NEW COVINGTON-LEXINGTON-TENNESSEE STATE LINE ROAD (I 75) NORTHBOUND REST AREA JPC PAVEMENT REPAIRS, A DISTANCE OF .77 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0050	00001	DGA BASE	10.00	TON
0055	02058	REMOVE PCC PAVEMENT	186.67	SQYD
0060	02562	TEMPORARY SIGNS	200.00	SQFT
0065	02650	MAINTAIN & CONTROL TRAFFIC - (I-75 NB REST AREA)	1.00	LS
0070	06515	PAVE STRIPING-PERM PAINT-6 IN	4,795.00	LF
0075	02069	JPC PAVEMENT-10 IN	186.67	SQYD
0800	02569	DEMOBILIZATION	1.00	LS
0085	00336	CL3 ASPH SURF 0.38A PG76-22	254.00	TON
0090	20696ES403	CL2 ASPH BASE 1.0D PG76-22	145.00	TON
0095		MOBILIZATION FOR MILL & TEXT - (i-75 NORTHBOUND REST AREA)	1.00	LS
0100	02677	ASPHALT PAVE MILLING & TEXTURING	226.00	TON
0105	06427	TRENCHING - (4 FEET WIDE)	1,100.00	LF
0110	06427	TRENCHING - (6 FEET WIDE)	265.00	LF
0115	02720	SIDEWALK-4 IN CONCRETE	106.67	SQYD
0120	02721	REMOVE CONCRETE SIDEWALK	106.67	SQYD
0125	01705	REMOVE CURB & GUTTER BOX INLET - (TOP PHASE ONLY)	1.00	EACH
0130	01458	CURB BOX INLET TYPE A T	1.00	EACH
0135	02014	BARRICADE-TYPE III	6.00	EACH
0140	02671	PORTABLE CHANGEABLE MESSAGE SIGN	1.00	EACH
0145	20696ES403	CL2 ASPH BASE 1.0D PG76-22	145.00	TON
0150	06511	PAVE STRIPING-TEMP PAINT-6 IN	4,585.00	LF
0155	24970EC	ASPHALT MATERIAL FOR TACK NON-TRACKING	1.02	TON
0160	02775	ARROW PANEL	1.00	EACH

MATERIAL SUMMARY

CONTRACT ID: 192034	008GR19P008-FD04	MP00800751902
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NEW COVINGTON-LEXINGTON-TENNESSEE STATE LINE ROAD (I 75) SOUTHBOUND REST AREA JPC PAVEMENT REPAIRS, A DISTANCE OF .63 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0165	00001	DGA BASE	17.00	TON
0170	02058	REMOVE PCC PAVEMENT	317.78	SQYD
0175	02562	TEMPORARY SIGNS	200.00	SQFT
0180	02650	MAINTAIN & CONTROL TRAFFIC - (I-75 SB REST AREA)	1.00	LS
0185	06515	PAVE STRIPING-PERM PAINT-6 IN	4,845.00	LF
0190	02069	JPC PAVEMENT-10 IN	317.78	SQYD
0195	02569	DEMOBILIZATION	1.00	LS
0200	02671	PORTABLE CHANGEABLE MESSAGE SIGN	1.00	EACH
0205	02014	BARRICADE-TYPE III	6.00	EACH
0210	02720	SIDEWALK-4 IN CONCRETE	237.33	SQYD
0215	02721	REMOVE CONCRETE SIDEWALK	237.33	SQYD
0220	01458	CURB BOX INLET TYPE A T	3.00	EACH
0225	01705	REMOVE CURB & GUTTER BOX INLET - (TOP PHASE ONLY)	3.00	EACH
0230	06511	PAVE STRIPING-TEMP PAINT-6 IN	5,260.00	LF
0235	20696ES403	CL2 ASPH BASE 1.0D PG76-22	184.00	TON
0240	00336	CL3 ASPH SURF 0.38A PG76-22	290.00	TON
0245	02676	MOBILIZATION FOR MILL & TEXT - (I-75 SB REST AREA)	1.00	LS
0250	02677	ASPHALT PAVE MILLING & TEXTURING	254.00	TON
0255	24970EC	ASPHALT MATERIAL FOR TACK NON-TRACKING	.98	TON
0260	02775	ARROW PANEL	1.00	EACH

JPC PAVING SUMMARY FD04 008 0071 075-076 SOUTHBOUND WEIGH STATION

LOCATION	WIDTH (FT)	LENGTH (FT)	REMOVE PAVEMENT (SY)	DGA (TON)	JPC PAVEMENT 13 INCHES (SY)
OFF RAMP	16	30	53.33	3	53.33

JPC PAVING SUMMARY FD04 008 0075 176-177 NORTHBOUND REST AREA

LOCATION	WIDTH (FT)	LENGTH (FT)	REMOVE PCC PAVEMENT (SY)	DGA (TON)	JPC PAVEMENT 10 INCHES (SY)	NOTES
RAMP TO TRUCK LOT	16	105	186.67	10	186.67	MULTIPLE PATCHES

TOTAL 186.67 10 186.67

JPC PAVING SUMMARY FD04 008 0075 176-178 SOUTHBOUND REST AREA

LOCATION	WIDTH (FT)	LENGTH (FT)	REMOVE PCC PAVEMENT (SY)	DGA (TON)	JPC PAVEMENT 10 INCHES (SY)
RAMP TO					
TRUCK LOT	16	145	257.78	14	257.78
TRUCK LOT	12	45	60.00	3	60.00

TOTAL 317.78 17 317.78

ASPHALT MILLING & PAVING SUMMARY FD04 008 0075 176-177 NORTHBOUND REST AREA

LOCATION	WIDTH (FT)	LENGTH (FT)	ASPHALT MILL & TEXTURE (TONS)	CLASS 3 ASPHALT SURFACE 0.38A PG76-22 (TONS)
I-75 NB EXIT RAMP TO REST AREA	14	560	72	72
ENTRANCE RAMP TO NB I-75	16	1050	154	154

TOTALS 226 226

ASPHALT MILLING & PAVING SUMMARY FD04 008 0075 176-178 SOUTHBOUND REST AREA

LOCATION	WIDTH (FT)	LENGTH (FT)	ASPHALT MILL & TEXTURE (TONS)	CLASS 3 ASPHALT SURFACE 0.38A PG76-22 (TONS)
I-75 SB EXIT RAMP TO REST AREA	14	640	82	82
ENTRANCE RAMP TO SB I-75	15	1240	172	172

TOTALS 254 254

ASPHALT SHOULDERS RECONSTRUCTION SUMMARY FD04 008 0075 176-177 NORTHBOUND REST AREA

LOCATION	WIDTH (FT)	LENGTH (FT)	TRENCHING 4 FEET WIDE (LF)	TRENCHING 6 FEET WIDE (LF)	CLASS 2 ASPHALT BASE 1.0D PG76-22 (TONS)	CLASS 3 ASPHALT SURFACE 0.38A PG76-22 (TONS)
RAMP TO TRUCK LOT	4	500	500	0	94	18
RAMP TO TRUCK LOT	6	150	0	150	42	8
FRONT LOT	6	115	0	115	32	6
RAMP TO NB I-75	4	4 600 600 0		0	113	22
	TOTALS		1 100	265	1/15	28

TOTALS 1,100 265 145 28

ASPHALT SHOULDERS RECONSTRUCTION SUMMARY FD04 008 0075 176-178 SOUTHBOUND REST AREA

LOCATION	WIDTH (FT)	LENGTH (FT)	TRENCHING 4 FEET WIDE (LF)	TRENCHING 6 FEET WIDE (LF)	CLASS 2 ASPHALT BASE 1.0D PG75-22 (TONS)	CLASS 3 ASPHALT SURFACE 0.38A PG76-22 (TONS)
RAMP TO TRUCK LOT	4	300	300	0	57	11
FRONT LOT	6	210	0	210	59	12
TRUCK LOT EXIT	6	240	0	240	68	13
	TOTALS		300	450	184	36

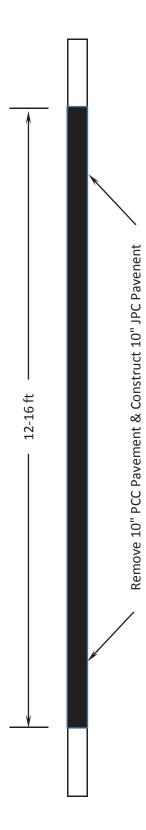
SIDEWALK AND CURB BOX INLET REPLACEMENT SUMMARY FD04 008 0075 176-177 NORTHBOUND REST AREA

MUL	IAOITA CO	REMOVE	CONSTRUCT	WIDTH	WIDTH LENGTH	AREA	STINEMINO
	LOCATION	(EACH)	(EACH)	(FEET)	(FEET)	(SY)	COMMENIO
Sidewalk - 4" Concrete	Behind Rest Rooms			6	30	30.00	
Sidewalk - 4" Concrete	Behind Rest Rooms		1	6	30	30.00	
Sidewalk - 4" Concrete	Truck Lot		1	9	30	20.00	
Sidewalk - 4" Concrete	Truck Lot		1	9	10	29'9	
Sidewalk - 4" Concrete	Front Parking Lot		-	6	20	20.00	
Curb Box Inlet	Truck Lot	1		1	1	-	Top Phase Only
Curb Box Inlet Type A T	Truck Lot		1	1	1	1	
SIATOT	S	-	1			106.67	

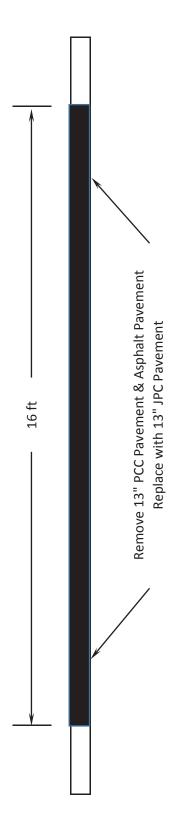
SIDEWALK AND CURB BOX INLET REPLACEMENT SUMMARY FD04 008 0075 176-178 SOUTHBOUND REST AREA

							Only		
COMMENTS							Top Phase Only		
(SY)	29.99	20.00	00'09	40.00	40.00	10.67	-	1	237.33
(FEET) (FEET)	100	30	09	30	30	12	-	1	
(FEET)	9	9	6	12	12	8	1	1	
(EACH)	-	-	-	-	-			3	က
(EACH)							3		က
LOCATION	Truck Lot	Truck Lot	Behind Rest Rooms	Front Parking Lot	Front Parking Lot	Side Lot Next to CBI	Truck Lot	Truck Lot	LS
ITEM	Sidewalk - 4" Concrete	Curb Box Inlet	Curb Box Inlet Type A T	TOTALS					

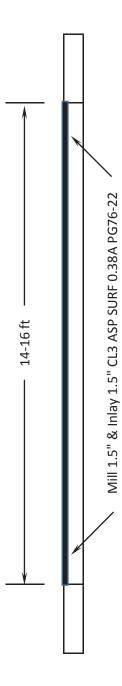
TYPICAL SECTION
JPC PAVEMENT
FD04 008 0075 176-177
FD04 008 0075 176-178



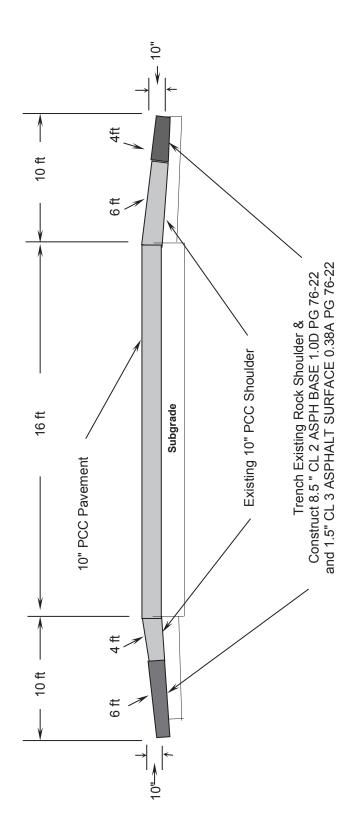
TYPICAL SECTION JPC PAVEMENT FD04 008 0071 076-077

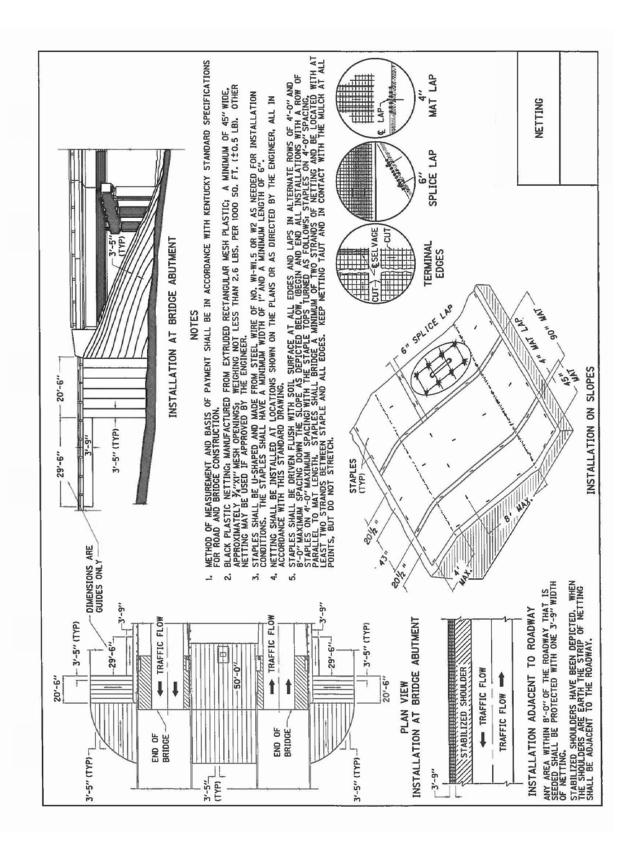


TYPICAL SECTION
ASPHALT MILL & INLAY
FD04 008 0075 176-177
FD04 008 0075 176-178



TYPICAL SECTION
SHOULDER RECONSTRUCTION
FD04 008 0075 176-177
FD04 008 0075 176-178





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:

 $\underline{http://transportation.ky.gov/Construction/Pages/Kentucky-Standard-Specifications.aspx}$

1I

SPECIAL NOTE FOR PORTABLE CHANGEABLE MESSAGE SIGNS

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

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

2.0 MATERIALS.

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

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

2.2 Sign and Controls. All signs must:

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

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

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

*Insert numerals as directed by the Engineer.

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

2.3 Power.

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

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

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

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

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

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

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

CodePay ItemPay Unit02671Portable Changeable Message SignEach

Effective June 15, 2012

SPECIAL NOTE FOR FULL DEPTH CONCRETE PAVEMENT REPAIR

This Special Note applies to full depth repairs of concrete pavement. Section references herein are to the Department's 2012 Standard Specifications for Road and Bridge Construction.

1.0 DESCRIPTION. Remove and replace concrete pavement. Comply with the applicable Standard Drawings and the Standard Specifications except as specifically superseded herein.

2.0 MATERIALS AND EQUIPMENT.

- **2.1 JPC Pavement.** Test concrete materials according to section 601.03.03. Conform to 501, 502, and 601 except that the concrete must achieve 3000 psi in accordance with Section 4.4 of this note. The Engineer may allow pavement to be opened to traffic at less than 3,000 psi subject to the deductions described in Section 4.4 of this note.
 - 2.2 Dowel Bars and Sleeves. Conform to 811.
- **2.3 Tie Bars.** Conform to Section 811. Use epoxy coated tie bars in longitudinal and transverse joints.
 - **2.4 Joint Sealants.** Conform to Subsection 807.03.01 or 807.03.05.
 - 2.5 Grout Adhesives and Epoxy Resin Systems. Conform to Section 826.
- 2.6 Dense Graded Aggregate (DGA) and Crushed Stone Base (CSB). Conform to Section 805.
 - 2.7 Geotextile Fabric. Conform to Section 843.
- **2.8 Drills.** Drill holes using a gang drill, capable of drilling a minimum of four simultaneously. Misalignment of holes shall not exceed 1/4 inch in the vertical or oblique plane.
- **2.9 Hammers.** Only use chisel point hammers weighing less than 40 pounds to remove deteriorated concrete.

3.0 CONSTRUCTION.

3.1 Removal of Existing Pavement. Remove existing pavement to the extent the Contract specifies or as the Engineer directs. The minimum length of patches measured along centerline is 3 feet on each side of an existing joint.

When working with pavements with non-skewed transverse joints, if it is necessary to remove existing pavement closer than 6 feet to a transverse joint, remove the pavement 3 feet beyond that joint .

When working with pavements with skewed transverse joints, if it is necessary to remove existing pavement closer than 3 feet to a transverse joint, remove the pavement 3 feet beyond that joint.

Details of configurations of pavement and joints for various situations are depicted in the drawings herein.

When small areas of removal and replacement are performed at bridge ends, maintain or reconstruct existing expansion joints at their existing location. When the Engineer determines extensive full width removal and replacement is required, construct new expansion joints at the locations shown on Standard Drawing No. RPN-010.

In the removal operation, make a full depth saw cut longitudinally along the centerline joint and shoulder joint and transversely along the area marked for removal. To prevent damage to the subbase, do not allow the saw to penetrate more than ½" into the subbase. The Engineer may direct or approve additional cuts within the removal area for ease of removal of the damaged slab and to prevent damage to adjacent pavement to remain in place. Do not overcut beyond the limits of the removal area. Prevent saw slurry from entering existing joints and cracks. To avoid pumping and erosion beneath the slab, do not allow traffic on sawed pavement for more than 48 hours before beginning removal procedures, unless directed by the Engineer.

Lift out the deteriorated concrete vertically with lift pins. If approved by the Engineer, use other methods that do not damage the base, shoulder, or sides of pavement that is to be left in place. If any damage does occur, repair as the Engineer directs and use an acceptable alternative method for the removal process. Do not damage the pavement base during these operations.

- **3.2 Pavement Replacement.** Do not damage the pavement base during these operations.
 - 3.2.1 Preparation of Base. Compact the new and existing aggregate base to the Engineer's satisfaction. The Engineer will accept compaction by either visual inspection or by nuclear gauge. When the Engineer deems it necessary to stabilize the existing base or replace unsuitable materials, excluding bridge ends, use 12 inches of geotextile fabric wrapped No. 2 aggregate topped with 4 inches of DGA or CSB. Use either Type III or Type IV geotextile fabric. Flowable fill and cement stabilization may be used as an alternative to stabilize the existing base or to replace unsuitable materials when a plan for such is presented to and approved by the Engineer. The Engineer may also direct using only DGA or CSB to correct base deficiencies. At bridge ends, treat existing base and subgrade as the Contract specifies. During compaction, wet the base as the Engineer directs. Compact areas not accessible to compaction equipment by hand tamping.
 - **3.2.2 Underdrains.** Construct, or repair damage to, pavement edge drains according to Section 704. If underdrains are placed omitting areas to be patched, construct additional lateral drains as necessary to provide outlets for the installed underdrain until performing the pavement replacement and completing the underdrain system. Provide drainage for any undercut or base repair areas.
 - **3.2.3 Pavement Replacement.** Using load transfer assemblies for dowel joints drill into the existing slab according to the details shown herein and on the Standard Drawings.

Use plain epoxy coated dowels of the size specified on the standard drawings based on the pavement thickness for contraction and expansion joints.

Drill holes for dowel bars and tie bars into the face of the existing slab, at a diameter as specified in the following. Drill the dowel bar holes and tie bar

holes to a depth equal to 1/2 the length of the bars. Anchor tie bars into the existing pavement using an epoxy resin. Anchor dowel bars into the existing pavement using either an epoxy resin or an adhesive grout. For tie bars and dowel bars where an epoxy resin is to be used drill the holes 1/8 inch larger than the bar diameter. For dowel bars where an adhesive grout product is to be used, drill holes 1/4 inch larger than the bar diameter. Use a clear or opaque grout retention disk in both grout and epoxy applications. Operate the equipment to prevent damage to the pavement being drilled. Obtain the Engineer's approval of the drilling procedure. Install load transfer assemblies according to the Standard Drawings and Standard Specifications.

When indicated herein or in the Standard Drawings, use 1 inch deformed tie bars, 18 inches long on 30-inch centers and starting and ending 20 inches inside the edges of the repair area in the longitudinal joint. Use 1 inch deformed tie bars, or plain epoxy coated dowel bars sized in accordance with the Standard Drawings, 18 inches long beginning 12 inches inside of each edge and on 12-inch centers in transverse construction joints.

Install the dowels and tie bars according to Section 511 unless contradicted here. Ensure the holes are dry and free of dust and debris. Use a nozzle to insert the grout or epoxy starting at the back of the drilled hole to allow for full coating of the dowel or tie bar. After placement, use a bond breaker on the section of the dowel bar that is protruding from the hole.

Mix, place, finish, and cure concrete according to Section 501 with the exception that the Department will allow truck mixing, 2-bag mixers, and hand finishing.

When required, use a form on the side of the slab at longitudinal joints. When the adjacent traffic lane is not closed to traffic or the drop-off is not protected, temporarily fill the space between the form and the adjacent pavement with DGA. After placing the slab, remove the DGA and form. Fill the hole with concrete and thoroughly consolidate by rodding, spading, and sufficient vibration to form a dense homogeneous mass. Use a form on the side of the slab adjacent to shoulders. Excavate and backfill as shown on Section E' E'

For patches less than 25 feet in length, use a bond breaker and do not install tie bars at the longitudinal joint. Bond breakers should not exceed 1/8 inch in thickness, e.g. tar paper.

When resurfacing is required, a float finish is satisfactory. Otherwise, broom finish or, when the adjacent surface has a grooved finish, texture the surface according to Subsection 501.03.13 H). Finish the surface, including joints, to meet a surface tolerance of 1/8 inch in 10 feet that will be verified by straightedge. Cure the pavement and apply curing membranes according to 501.03.15.

Keep all pavement surfaces adjacent to this operation reasonably clean of excess grout and other materials at all times. Maintain all original longitudinal joints. Place transverse joints according to the details shown herein and on the Standard Drawings.

- **3.3 Joint Sealing.** Seal all new or partially new joints with silicone rubber sealant or hot-poured elastic joint sealant according to Subsection 501.03.18. **4.0 MEASUREMENT**.
- **4.1 Remove JPC Pavement.** The Department will measure the quantity in square yards of surface area. The Department will not measure removal of

underlying base material for payment and will consider it incidental to Remove JPC Pavement.

- **4.2 DGA or CSB.** The Department will measure the quantity used to stabilize the existing base or to replace unsuitable material in tons. The Department will not measure removal of existing base material or underlying material for payment and will consider incidental to DGA or CSB. The quantity of DGA used for the drop-off protection shall be incidental to this work and will not be measured for payment.
- **4.3 JPC Pavement Non-Reinforced.** The Department will measure according to 501.04.01. The Department will not measure dowels, tie bars, or joint sealing for payment and will consider it incidental to Non-Reinforced JPC Pavement.

JPC Pavement will be paid according to section 5.0 below and according to the following payment schedule based on the compressive strength. The cylinders for payment will be tested two hours prior the scheduled opening of traffic.

3000 psi and up	100% payment
2750 to 3000 psi	75% payment and approval from the Engineer to open to traffic*
2500 to 2750 psi	50% payment and approval from the Engineer to open to traffic*
2250 to 2500 psi	25% payment and approval from the Engineer to open to traffic*
Below 2250 psi	10% payment and no potential to open to traffic. Maintain traffic
	closure until concrete reaches a minimum of 2250 psi.

*If the Engineer approves opening to traffic, the Engineer will evaluate the concrete at 28 days (or sooner) to determine if the removal and replacement of the concrete is necessary due to pavement distress induced by the early opening (i.e. noticeable cracking). If required by the Engineer, remove and replace those slabs showing distress at no cost to the Department.

- **4.4 Underdrains.** The Department will measure the quantity according to Subsection 704.04. The Department will not measure lateral drains for payment and will consider them incidental to the Underdrains.
- **5.0 PAYMENT.** The Department will make payment for the completed and accepted quantities under the following:

Code	Pay Item	Pay Unit
	Remove JPC Pavement	Square Yard
00001	DGA Base	Ton
00003	Crushed Stone Base	Ton
02069-02071, 02073,	JPC Pavement Non-Reinforced,	
02075, 02084,	thickness	See Subsection 501.05
02086, 02088		
01000	Perforated Pipe, 4-inch	Linear Foot
02598, 02599	Fabric-Geotextile, Type	Square Yard

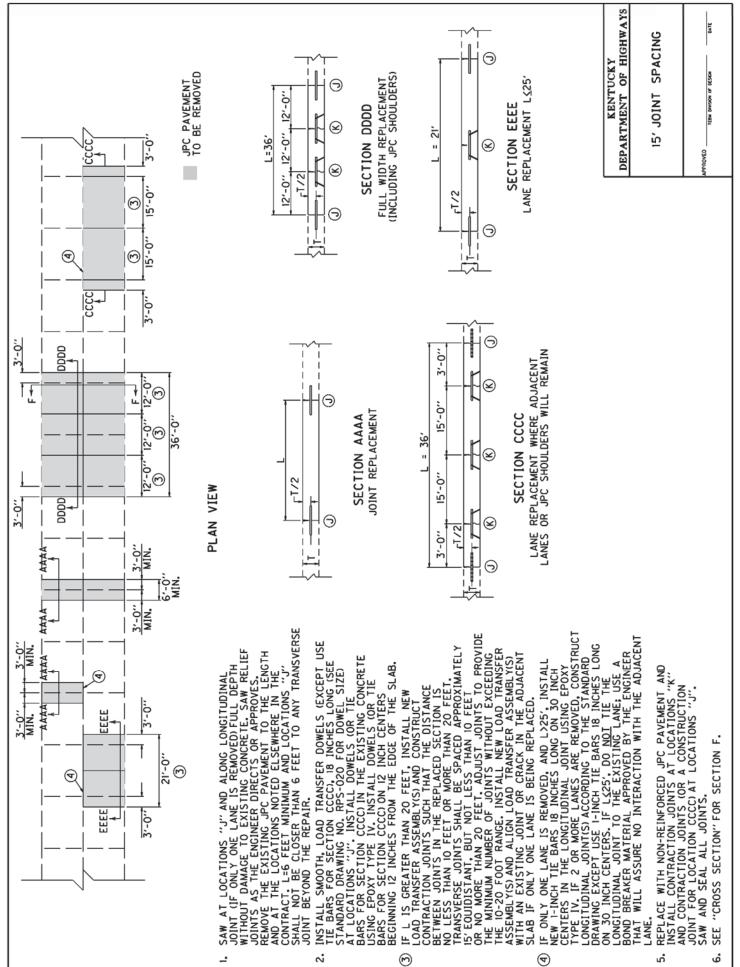
The Department will consider payment as full compensation for all work required in this provision.

June 15, 2012

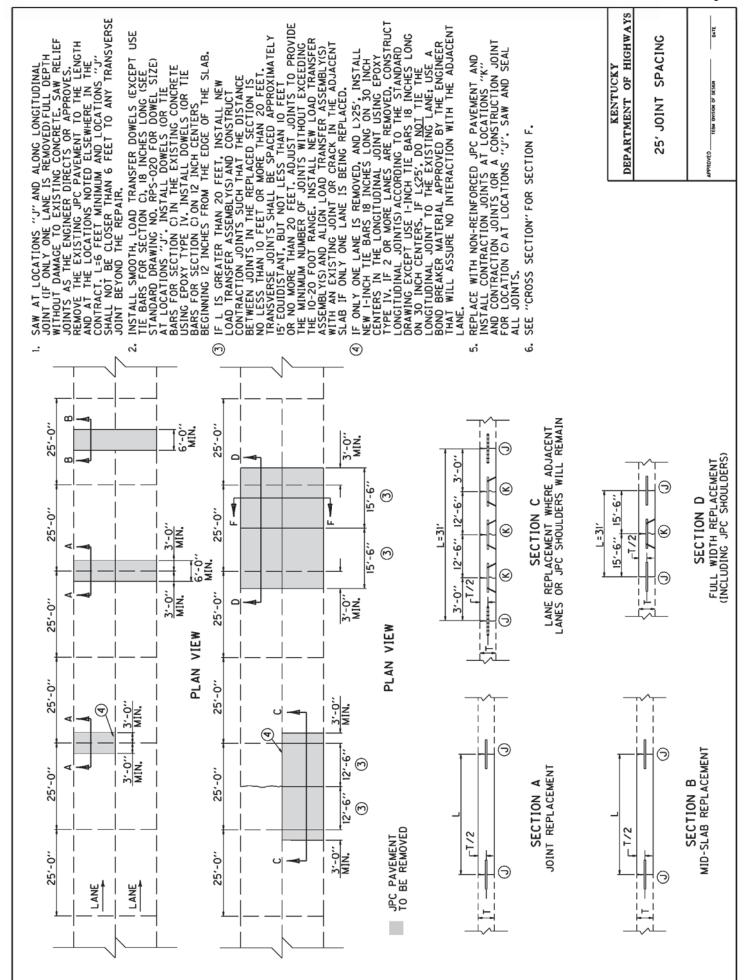
BOONE COUNTY 008GR19P008-FD0

Contract ID: 192034



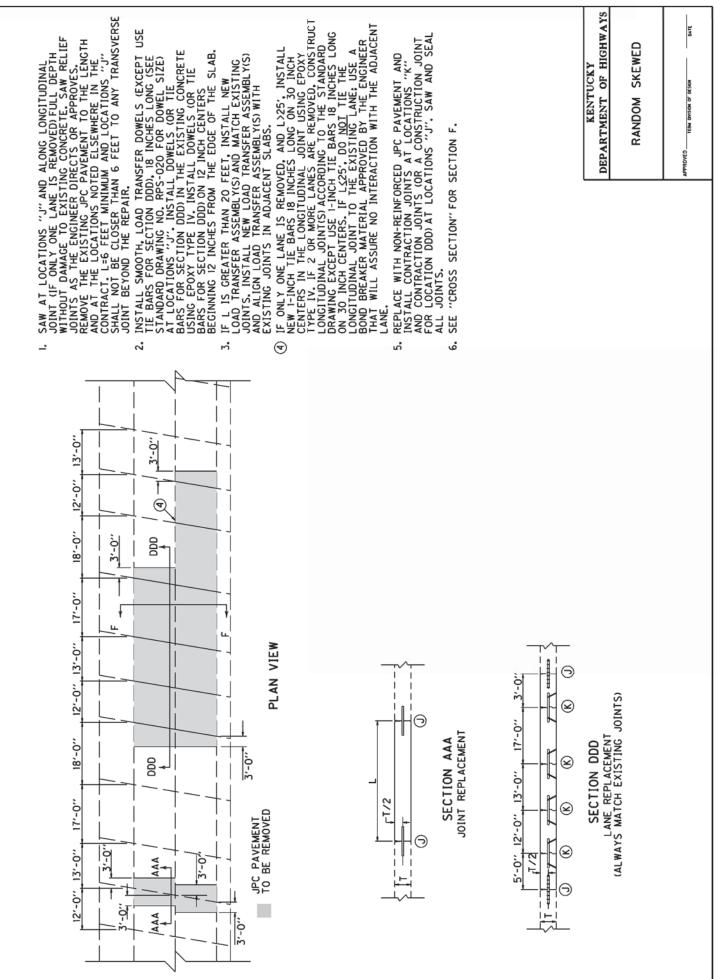


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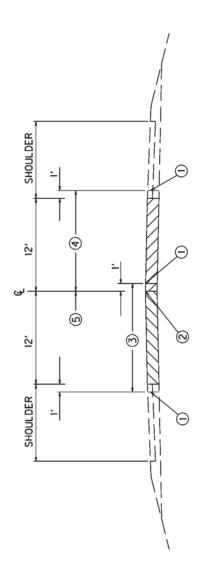


Contract ID: 192034 **BOONE COUNTY** age 94 of 106 008GR19P008-FD04 (3) IF L IS GREATER THAN 20 FEET, INSTALL NEW LOAD TRANSFER ASSEMBLY(S) AND CONSTRUCT CONTRACTION JOINTS SUCH THAT THE DISTANCE BETWEEN JOINTS IN THE REPLACED SECTION IS NO LESS THAN 10 FEET OR WORE THAN 20 FEET. TRANSVERSE JOINTS SHALL BE SPACED APPROXIMATELY IS' COUIDISTANT, BUT NOT LESS THAN 10 FEET OR NO MORE THAN 20 FEET, ADJUST JOINTS TO PROVIDE THE IN-COOP FOOT RANGE, INSTALL NEW LOAD TRANSFER ASSEMBLY(S) AND ALIGN LOAD TRANSFER ASSEMBLY(S) AND ALIGN LOAD TRANSFER ASSEMBLY(S) WITH AN EXISTING JOINT OR CRACK IN THE ADJACENT SLAB IF ONLY ONE LANE IS BEING REPLACED. 4) IF ONLY ONE LANE IS REMOVED, AND LY25', INSTALL NEW 1-INCH TIE BARS 18 INCHES LONG ON 30 INCH CENTERS IN THE LONGITUDINAL JOINT USING EPOXY TYPE IV. IF 2 OR MORE LANES ARE REMOVED, CONSTRUCT LONGITUDINAL JOINT(S) ACCORDING TO THE STANDARD DRAWING EXCEPT USE 1-INCH TIE BARS 18 INCHES LONG ON 30 INCH CENTERS, IF L225', DO NOT TIE THE LONGITUDINAL JOINT TO THE EXISTING LANE; USE A BOND BREAKER MATERIAL APPROVED BY THE ENGINEER THAT WILL ASSURE NO INTERACTION WITH THE ADJACENT LANE. SAW AT LOCATIONS "J" AND ALONG LONGITUDINAL JOINT (IF ONLY ONE LANE IS REMOVED) FULL DEPTH WITHOUT DAMAGE TO EXISTING CONCRETE. SAW RELIEF JOINTS AS THE ENGINEER DIRECTS OR APPROVES. REMOVE THE EXISTING JPC PAVEMENT TO THE LENGTH AND AT THE LOCATIONS NOTED ELSEWHERE IN THE CONTRACT. L=6 FEET MINIMUM AND LOCATIONS "J" SHALL NOT BE CLOSER THAN 6 FEET TO ANY TRANSVERSE JOINT BEYOND THE REPAIR. DEPARTMENT OF HIGHWAYS INSTALL SMOOTH, LOAD TRANSFER DOWELS (EXCEPT USE TIE BARS FOR SECTION CC), 18 INCHES LONG (SEE STANDARD DRAWING NO. RPS-020 FOR DOWEL SIZE) AT LOCATIONS "J", INSTALL DOWELS (OR TIE BARS FOR SECTION CC) IN THE EXISTING CONCRETE USING EPOXY TYPE IV, INSTALL DOWELS (OR TIE BARS FOR SECTION CC) ON 12 INCH CENTERS BEGINNING 12 INCHES FROM THE EDGE OF THE SLAB. DATE REPLACE WITH NON-REINFORCED JPC PAVEMENT AND INSTALL CONTRACTION JOINTS AT LOCATIONS "K" AND CONTRACTION JOINTS (OR A CONSTRUCTION JOINT FOR LOCATION CC) AT LOCATIONS "J". SAW AND SEAL 50' JOINT SPACING KENTUCKY TEBM DIVISION OF DESIGN "CROSS SECTION" FOR SECTION F. JOINTS. 'n ی (m) 9 ν Ν 8 LANE REPLACEMENT WHERE ADJACENT LANES OR JPC SHOULDERS WILL REMAIN 3′-0′′ 14,-0, (m) 88 FULL WIDTH REPLACEMENT (INCLUDING JPC SHOULDERS) 14,-0, (\mathbf{Z}) 16′-8′′′ 16′-8″ 14'-0' SECTION DD 14'-0" 88 ¥ (D) SECTION CC 50'-0" 50′-0″ ш L=56′ _=56′ 14'-0" 14'-0" (m) 16'-8'' \otimes rT/2 ۸A 14,-0,, 14'-0" \otimes (m) 3,-0,, 3′-0″ 9 3'-0' PLAN VIEW PLAN VIEW 50'-0" 50'-0" 3'-0'. MIN. ۷V (4) ဗ .,8-,91 SECTION BB MID-SLAB REPLACEMENT (m) JOINT REPLACEMENT (d) JPC PAVEMENT TO BE REMOVED SECTION AA 50'-0' .,8-,91 50'-0" (m) rT/2 .,8-,91 LANE LANE ල 3'-0" MIN.

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SAW-CUT LINE. THIS ONE FOOT IS TO ALLOW FOR A FORM AND THE REMOVAL AND REPLACEMENT SHALL BE INCIDENTAL TO THE WORK, EXCEPT NEW ASPHALT MIXTURE SHALL BE PAID DIRECT ON A TONNAGE BASIS, AND NEW JPC PAVEMENT WILL BE PAID BY THE SOUARE YARD. COMPACT THE DGA BASE BY MECHANICAL TAMPERS TO THE ENGINEER'S SATISFACTION. Θ

SECTION F

EXISTING LONGITUDINAL JOINT.

FIRST SLAB REMOVAL LIMITS AND REPLACE 12-FOOT LANE.

SECOND SLAB REMOVAL LIMITS AND REPLACE 12-FOOT LANE.

THIS ONE FOOT IS TO ALLOW FOR A FORM ON THE FIRST POUR, AND A TEMPORARY PAVEMENT IS REQUIRED. THE DEPARTMENT WILL NOT REQUIRE REMOVAL OF THIS ONE FOOT IF THE GRADE OF THE EXISTING PAVEMENT IS ADEQUATE TO ENSURE THE NEW CONCRETE CAN BE PLACED AND FINISHED TO THE SATISFACTION OF THE ENGINEER. ANY TEMPORARY PAVEMENT IS INCIDENTAL TO JPC PAVEMENT. $\Theta\Theta\Theta\Theta$

THE ABOVE DRAWING DEPICTS THE ORDER OF SLAB REMOVAL WHEN BOTH ARE TO BE REMOVED AT THE SAME LOCATION. WHEN ONLY ONE SLAB OR LANE IS TO BE REMOVED, REMOVE AND REPLACE ACCORDING TO SECTION C, CC, OR CCCC, TRAFFIC CONTROL WILL SPECIFY WHICH LANE TO REMOVE FIRST. ģ

DATE CROSS SECTION TERM DIVISION OF DESIGN PPROVED .

KENTUCKY
DEPARTMENT OF HIGHWAYS

2016 STANDARD DRAWINGS THAT APPLY

FD04 008 0071 075-076 FD04 008 0075 176-177 FD04 008 0075 176-178

CURB BOX INLET TYPE A (DETAIL DRAWING)	RDB-270-09
CURB BOX INLET TYPE A (STEEL DRAWING)	RDB-271-05
CURB BOX INLET TYPE A (TOP PHASE TABLE)	RDB-272-07
CURB BOX INLET TYPE A (DETAIL & BAR CHART FOR 8" LID)	RDB-273.06
FRAME AND LID TYPE 1	RDM-100-03
SECURITY DEVICES FOR FRAMES, GRATES AND LIDS	RDX-160-06
TEMPORARY SILT FENCE	RDX-210-03
SILT TRAP TYPE B	RDX-225-01
SILT TRAP TYPE C	
CURVE WIDENING AND SUPERELEVATION TRANSITIONS	RGS-001-07
MISCELLANEOUS STANDARDS PART 1	
CONCRETE ENTRANCE PAVEMENT AND SIDEWALK	RPM-150-08
CONCRETE ENTRANCE PAVEMENT AND SIDEWALK	RPM-152-08
JOINTED PLAIN CONCRETE PAVEMENT	
CONCRETE PAVEMENT JOINTS - TYPES AND SPACING	
CONCRETE PAVEMENT JOINT DETAILS	
EXPANSION AND CONTRACTION JOINTS - LOAD TRANSFER ASSEMBLIES	
CONCRETE PAVEMENT JOINTS - TYPES AND SPACING	
CONCRETE PAVEMENT JOINTS - TYPES AND SPACING	
CONCRETE PAVEMENT JOINTS - TYPES AND SPACING	
CONCRETE PAVEMENT JOINTS - TYPES AND SPACING	
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CONCRETE PAVEMENT JOINTS - TYPES AND SPACING	
CONCRETE PAVEMENT JOINTS - TYPES AND SPACING	
HOT-POURED ELASTIC JOINT SEALS FOR CONCRETE PAVEMENT	
LANE CLOSURE MULTI-LANE HIGHWAY CASE I	
DOUBLE LANE CLOSURE	
SHOULDER CLOSURE	
PAVEMENT CONDITION WARNING SIGNS	
MOBIL OPERATION FOR PAINT STRIPING CASE I	
MOBIL OPERATION FOR PAINT STRIPING CASE II	
MOBIL OPERATION FOR PAINT STRIPING CASE III	
MOBIL OPERATION FOR PAINT STRIPING CASE IV	TTS-115-02

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.

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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.



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

192034

PROPOSAL BID ITEMS

Report Date 12/26/18

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Section: 0001 - ROADWAY

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0010	00001		DGA BASE	30.00	TON		\$	
0020	00336		CL3 ASPH SURF 0.38A PG76-22	544.00	TON		\$	
0030	01458		CURB BOX INLET TYPE A T	4.00	4.00 EACH		\$	
0040	01705		REMOVE CURB & GUTTER BOX INLET (TOP PHASE ONLY)	4.00	EACH		\$	
0050	02014		BARRICADE-TYPE III	16.00	EACH		\$	
0060	02058		REMOVE PCC PAVEMENT	504.45	SQYD		\$	
0070	02069		JPC PAVEMENT-10 IN	504.45	SQYD		\$	
0800	02086		JPC PAVEMENT-13 IN	53.33	SQYD		\$	
0090	02091		REMOVE PAVEMENT (PCC AND/OR ASPHALT)	53.33	SQYD		\$	
0100	02562		TEMPORARY SIGNS	600.00	SQFT		\$	
0110	02650		MAINTAIN & CONTROL TRAFFIC (I 71 WEIGH STATION)	1.00	LS		\$	
0120	02650		MAINTAIN & CONTROL TRAFFIC (I-75 NB REST AREA)	1.00	LS		\$	
0130	02650		MAINTAIN & CONTROL TRAFFIC (I-75 SB REST AREA)	1.00	LS		\$	
0140	02671		PORTABLE CHANGEABLE MESSAGE SIGN	3.00	EACH		\$	
0150	02676		MOBILIZATION FOR MILL & TEXT (1-75 NORTHBOUND REST AREA)	1.00	LS		\$	
0160	02676		MOBILIZATION FOR MILL & TEXT (I-75 SB REST AREA)	1.00	LS		\$	
0170	02677		ASPHALT PAVE MILLING & TEXTURING	480.00	TON		\$	
0180	02720		SIDEWALK-4 IN CONCRETE	344.00	SQYD		\$	
0190	02721		REMOVE CONCRETE SIDEWALK	344.00	SQYD		\$	
0200	02775		ARROW PANEL	2.00	EACH		\$	
0210	06427		TRENCHING (4 FEET WIDE)	1,100.00	LF		\$	
0220	06427		TRENCHING (6 FEET WIDE)	265.00	LF		\$	
0230	06511		PAVE STRIPING-TEMP PAINT-6 IN	9,845.00	LF		\$	
0240	06515		PAVE STRIPING-PERM PAINT-6 IN	9,700.00	LF		\$	
250	20696ES403		CL2 ASPH BASE 1.0D PG76-22	474.00	TON		\$	
0260	24970EC		ASPHALT MATERIAL FOR TACK NON- TRACKING	2.00	TON		\$	

Section: 0002 - DEMOBILIZATION

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC F	PAMOUNT
0270	02569		DEMOBILIZATION	1.00	LS	\$	