

CALL NO. 300

CONTRACT ID. 212205

ALLEN COUNTY

FED/STATE PROJECT NUMBER FD04 002 0100 015-020

DESCRIPTION SOUTH 5TH STREET/EAST LOCUST/HOLLAND ROAD (KY100)

WORK TYPE GRADE & DRAIN

PRIMARY COMPLETION DATE 11/15/2021

LETTING DATE: April 23,2021

Sealed Bids will be received el aronically arrough the Bid Express bidding service until 10:00 am EASTERN DAYL GHT TIM 7 April 23,2021. Bids will be publicly announced at 10:00 an EASTER DAYLIGHT TIME.

NO PLANS ASSOCIATED WITH THIS PROJECT.

**REQUINTED ID PROPOSAL GUARANTY:** Not less than 5% of the total bid.

### TABLE OF CONTENTS

### PART I SCOPE OF WORK

- PROJECT(S), COMPLETION DATE(S), & LIQUIDATED DAMAGES
- CONTRACT NOTES
- STATE CONTRACT NOTES
- ASPHALT MIXTURE
- INCIDENTAL SURFACING
- COMPACTION OPTION B
- WASTE AND BORROW SITES
- TRAFFIC CONTROL PLAN 2 LANE
- EROSION CONTROL PLAN FOR MAINTENANCE PROJECTS
- SKETCH MAP(S)
- SUMMARY SHEET(S)
- TYPICAL SECTION(S)
- DETAIL SHEET(S)

### PART II SPECIFICATIONS AND STANDARD DRAWINGS

- SPECIFICATIONS REFERENCE
- SUPPLEMENTAL SPECIFICATION
- 2020 STANDARD DRAWINGS THAT APPLY

### PART III EMPLOYMENT, WAGE AND RECORD REQUIREMENTS

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

### PART IV INSURANCE

### PART V BID ITEMS

### PART I SCOPE OF WORK

### **ADMINISTRATIVE DISTRICT - 03**

CONTRACT ID - 212205 FD04 002 0100 015-020

**COUNTY - ALLEN** 

PCN - MP00201002101 FD04 002 0100 015-020

SOUTH 5TH STREET/EAST LOCUST/HOLLAND ROAD (KY100) (MP 15.141) BEGIN AT KY 98 EXTENDING EAST TO KY 1421 (MP 17.244), A DISTANCE OF 02.10 MILES.GRADE & DRAIN SYP NO. 03-00134.00.

GEOGRAPHIC COORDINATES LATITUDE 36:44:18.08 LONGITUDE 86:10:48.00

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

COMPLETED BY 11/15/2021

APPLIES TO ENTIRE CONTRACT

### **CONTRACT NOTES**

### PROPOSAL ADDENDA

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

### **BID SUBMITTAL**

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

### JOINT VENTURE BIDDING

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

### UNDERGROUND FACILITY DAMAGE PROTECTION

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

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

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

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

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

### SPECIAL NOTE FOR PROJECT QUESTIONS DURING ADVERTISEMENT

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

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

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

### HARDWOOD REMOVAL RESTRICTIONS

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

### INSTRUCTIONS FOR EXCESS MATERIAL SITES AND BORROW SITES

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

### ACCESS TO RECORDS

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

ALLEN COUNTY FD04 002 0100 015-020 Contract ID: 212205 Page 7 of 43

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

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

April 30, 2018

### SPECIAL NOTE FOR RECIPROCAL PREFERENCE

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

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

April 30, 2018

ALLEN COUNTY FD04 002 0100 015-020

### Contract ID: 212205 Page 9 of 43

### ASPHALT MIXTURE

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

### INCIDENTAL SURFACING

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

### **OPTION 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.

ALLEN COUNTY FD04 002 0100 015-020 Contract ID: 212205 Page 10 of 43

### SPECIAL PROVISION FOR WASTE AND BORROW SITES

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

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

### TRAFFIC CONTROL PLAN

### TRAFFIC CONTROL GENERAL

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

Contrary to Section 106.01, furnish new, or used in like new condition, traffic control devices at the beginning of the work and maintain in like new condition until completion of the work.

### PROJECT PHASING & CONSTRUCTION PROCEDURES

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

Maintain alternating one way traffic during construction. Provide a minimum clear lane width of 9 feet; however, provide for passage of vehicles of up to 16 feet in width. If traffic should be stopped due to construction operations, and a school bus on an official run arrives on the scene, make provisions for the passage of the bus as quickly as possible.

### LANE CLOSURES

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

### **SIGNS**

Sign posts and splices shall be compliant with NCHRP 350 or MASH. Manufacturer's documentation validating this compliance shall be provided to the Engineer prior to installation. Signs, including any splices, shall be installed according to manufacturer's specifications and installation recommendations. Contrary to section 112.04.02, only long-term signs (signs intended to be continuously in place for more than 3 days) will be measured for payment. Short-term signs (signs intended to be left in place for 3 days or less) will not be measured for payment but will be incidental to Maintain and Control Traffic.

### CHANGEABLE MESSAGE SIGNS

If deemed necessary by the Engineer, the Department will furnish, operate, and maintain Changeable Message Signs.

Contract ID: 212205 Page 12 of 43

Traffic Control Plan Page 2 of 3

### **TEMPORARY ENTRANCES**

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

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

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

### **BARRICADES**

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

The Department will measure barricades used to protect pavement removal areas in individual units Each. The Department will measure for payment the maximum number of barricades in concurrent use at the same time on a single day on all sections of the contract. The Department will measure individual barricades only once for payment, regardless of how many times they are set, reset, removed, and relocated during the duration of the project. The Department will not measure replacements for damaged barricades the Engineer directs to be replaced due to poor condition or reflectivity. Retain possession of the Barricades upon completion of construction.

### PAVEMENT MARKINGS

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

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

ALLEN COUNTY FD04 002 0100 015-020 Contract ID: 212205 Page 13 of 43

Traffic Control Plan Page 3 of 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. Remove the wedges prior to placement of the final surface course.

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

Less than 2" - No protection required.

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

Greater than 4" - Protect drop-offs greater than 4 inches within 10 feet of traffic by placing drums, vertical panels, or barricades every 25 feet. The Engineer will not allow the use of cones in lieu of drums, vertical panels, or barricades for drop-offs greater than 4". Place Type III Barricades directly in front of the drop-off facing on coming traffic in both directions of travel. Provide warning signs as shown on the Standard Drawings or as directed by the Engineer

Pedestrians & Bicycles - Protect pedestrian and bicycle traffic as directed by the engineer.

1-3820 Traffic Control Plan 2 Lane 7/28/2017

### SPECIAL NOTE FOR EROSION CONTROL

### I. DESCRIPTION

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

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

### II. MATERIALS

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

### III. CONSTRUCTION

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

Erosion Control Page 2 of 3

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

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

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

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

### IV. MEASUREMENT

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

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

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

**Erosion Control.** Contrary to Sections 212.04, 213.04, and 703.04 other than Erosion Control Blankets, Sodding, and Channel Lining, the Department will measure Erosion Control as one lump sum. The Department will not measure developing, updating, and maintaining a BMP plan for each site; providing a KEPSC-RI qualified inspector; locating,

ALLEN COUNTY FD04 002 0100 015-020 Contract ID: 212205 Page 16 of 43

Erosion Control Page 3 of 3

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" 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 Erosion Control.

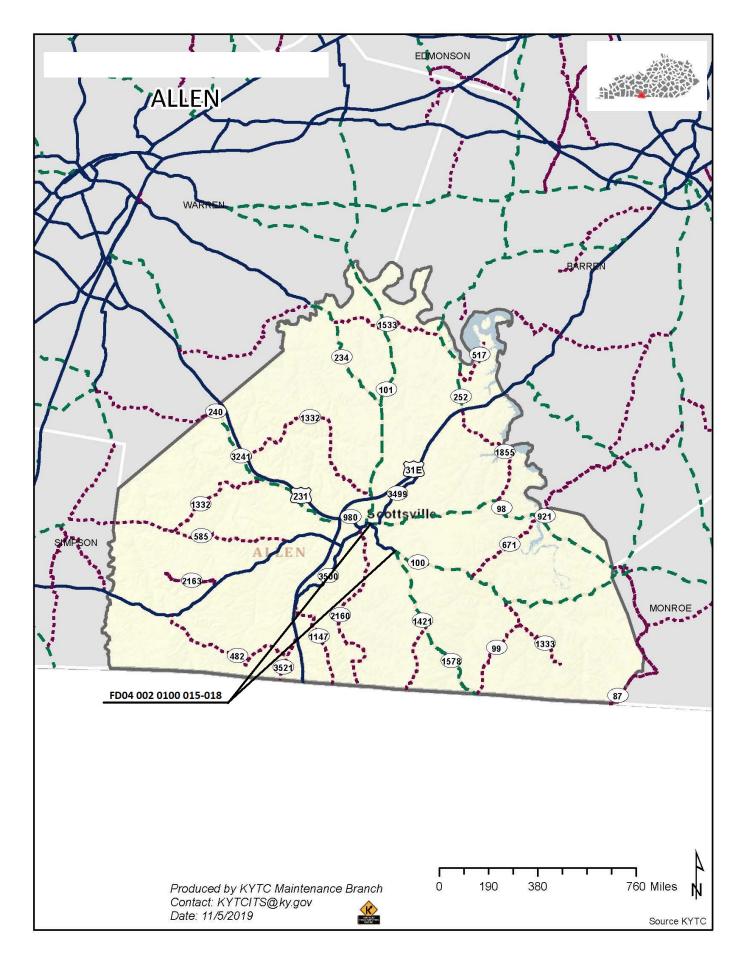
### V. Basis of Payment

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

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

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

Erosion Control. Contrary to Sections 212.05 and 213.05, other than Erosion Control Blanket, Sodding, and Channel Lining, payment at the Contract lump sum price for Erosion Control, shall be full compensation for all materials, equipment, labor and incidentals necessary to complete the erosion and water pollution control work as specified in these notes, Sections 212 and 213, the Supplemental Specifications, applicable Special Provisions and Special Notes, and Standard and Sepia Drawings, including but not limited to developing, updating, and maintaining a BMP plan for each site; providing a KEPSC-RI qualified inspector; locating, furnishing, installing, inspecting, maintaining, and removing erosion and water pollution control items; Roadway Excavation, Borrow Excavation, Embankment In Place, Topsoil Furnished and Placed, and Spreading Stockpiled Topsoil; Topdressing Fertilizer, Temporary and Permanent Seeding and Protection, Special Seeding Crown Vetch, and Temporary Mulch; Sedimentation Basin and Clean Sedimentation Basin, Silt Trap Type "A" and Clean Silt Trap Type "A"; Silt Trap Type "B" and Clean Silt Trap Type "B"; Silt Trap Type "C" and Clean Silt Trap Type "C"; Temporary Silt Fence and Clean Temporary Silt Fence; Plants, Vines, Shrubs, and Trees; Gabion and Dumped Stone Deflectors and Riffle Structures; Boulders; Temporary Ditches and clean Temporary Ditches; Geotextile Fabric and all other erosion and water pollution control items required by the BMP or the Engineer.



	Comment	Clean pipe and construct custom box on a slope to maintain paved ditch capacity.	Clean Pipe insure drainage flow. Install Clean out Close to Fence approximetly 60' from Inlet		Full Replacement of pipe	Extend 2' to proposed Dropbox at inlet, extend 6' for outlet slope. Inlet 38" from roadway to flow line	Clean Existing DBI line pipe and provide extension for outlet.	Replace Pipe with New add DBI	Fill material for outlet for proper extension construction. Inlet DBII. Remove Last section of pipe with headwall.	Inlet L headwall convert to DBI/safety headwall	Inlet L headwall convert to DBI karfety headwall	Large Box Culvert Extension See Culvert 1 plan sheet	Outlet section need removed for liner extension. Field entrance pipe Replaced and extended to new DBI.	Small Box Culvert Extension See Culvert 2 plan Sheet	Double 30" pipes Inlet Headwall approximetly 14" long. 8" opening. Has 30" field pipe and 15" Entrance pipe.		Inlet might need a section of joint separation removed prior to lining. Ditching	Random Freezer			Large Box Culvert Extension See Culvert 3 plan Sheet	Oulet will need fill material prior to lining. Replace Entrance pipe and extend to DBL 6 tons asphalt Surface on entrance	Replace 35' of pipe new DBI at inlet and DBI / Cleanout at end of 36". Replace and extend Entrance pipe to DBI inlet.	Box Culvert with 2 RCP pipe. Remove RCP and extend culvert 6' inkt 8' outlet. Embankment backfill & along roadway	
	Embankment CUYD					10	10		90	10	10	100	10	91	10	01	10	01	10	10	100	01		90	436
	Cl2 Channel Tons			s	2	2	S	2	S	2	S	20	S	2	S	2	S	2	s	S	20	2	2	10	140
	e LF 24" Pipe				32																				32
Pipes	pe LF 18" pipe			4				04															36		120
	er LF 15" Ent Pipe												35									25	40		139
22	Liner LF 30" Liner														911										911
Liners	LF 18" Liner LF 24" Liner					40	40	X	40	40	40		40			04	38	04	40	38		36			392 80
	DB13 LF1	1	_	-	-	1		1	-	1	-		-		-			1				1	7		15
	Steel LBS											2768.601		806:1511							2594266			1518.5	8033.275
	Concrete CUYD											48,1533		11.1777							31.81667			17.09622	108.24389
Proposed Work	Description	Install DBI Ped safe Grate	Clean	Install New Pipe with DBI at Inlet	Replace Pipe, Install DBI	Liner with extension outlet, DBI	Clean existing DBI and pipe, Line and extend outlet	Replace Pipe install DBI for inlet.	Modify L headwall or New DBI, extend outlet	Modify L headwall or New DBI, extend outlet	Modify L headwall or New DBI, extend outlet	Extend both ends of Box Culvert	Modify Headwall or New DBI, extend outlet	Extend both ends of Box Culvert	Modify Double Headwall or new DBI Inlet. Line Pipe	Extend Inlet 4' extend outlet 6'	Extend inlet 4' and outlet 4'	Modify L headwall or New DBI	Line and Extend Outlet 6'	Line and extend inlet 4' and outlet 6'	Extend both ends of Box Culvert	DBIInkt Extend outlet 8' liner	Replace Pipe From new DBI inlet to New DBI outlet.	Remove RCP Extensions extend Box Culvert.	
Existing Structure	Size	*S1	i	-81	24" / 18"	.81	.81	.81	.81	.81	.81	10 W x 5 H	.81	3W x ZH	30*	24"	.81	24"	.81	.81	12'W x 5'H	.81	.81	4W x 2H	
Existing	Type	CMP	CMP/RCP	NEW	RCP?	RCP	RCP	RCP	RCP	RCP	RCP	BC	RCP	BC	RCP	RCP	RCP	RCP	RCP	RCP	BC	RCP	i	BC	
	Mile Point	15.141	2 15.268	3	4 15.525	5 15.719	6 15.832	7 15.896	8 15.965	9 16.025	980'91 01	11 16.218	12 16.308	13 16.377	14 16.481	15 16.568	16.623	16.693	18 16.803	898.91 61	20 16.92	17.094	22 17.18	23 17.22	
L	#										Ī	Ĺ				Ĺ		Ĺ			_	. "	_		l

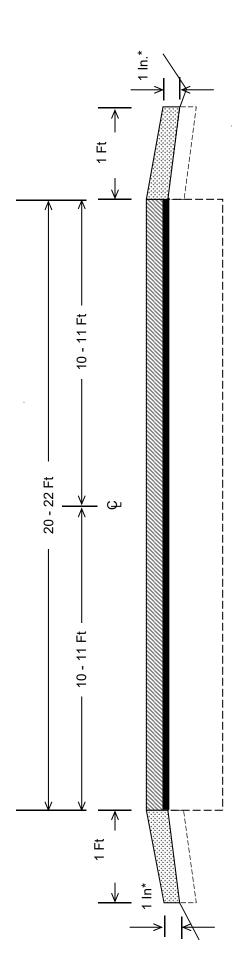
\*Control CTO A third measurement of the construction such as before inclinited to Execution, Clean Phys., Court or Bulbands, Grout, Fabric, bookfull, etc., shall be inclidented to the run Linear PL Fabric and the construction such as the not limited to Execution, Clean Phys., Court or Bulbands, Grout, Fabric, bookfull, etc., shall be inclidented to the function of the construction of





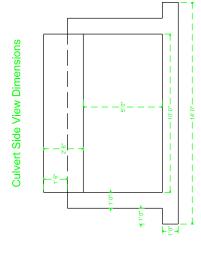
Page 1

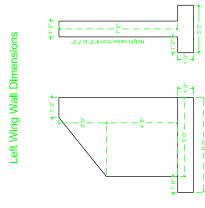
Allen County
TYPICAL SECTION
FD04 002 0100 015-018
MP's 15.141 to 17.244

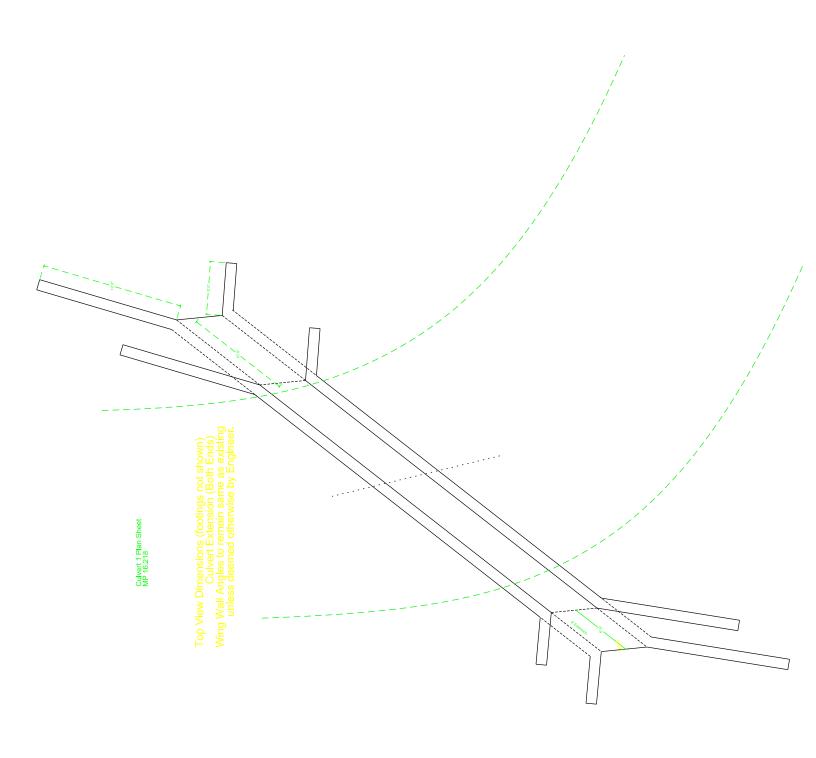


\*Where Existing Site Conditions Permit

Culvert 1 Plan Sheet MP 16.218



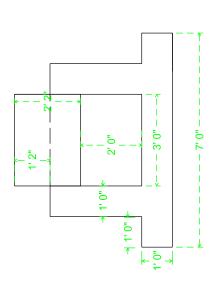


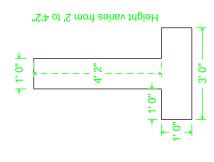


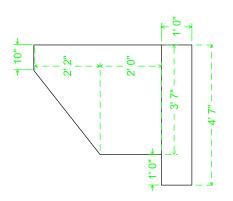
A-8 Bars

Culvert Side View Dimensions

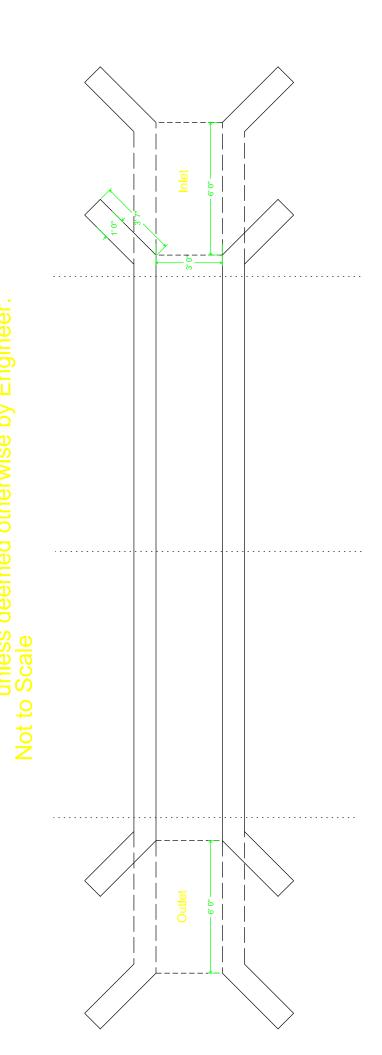
Wing Wall Dimensions



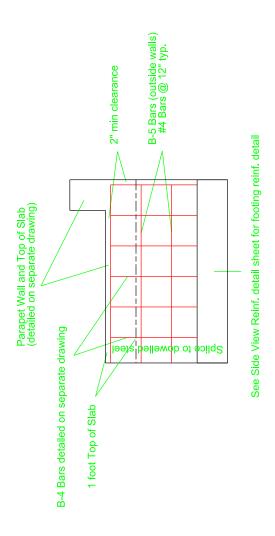




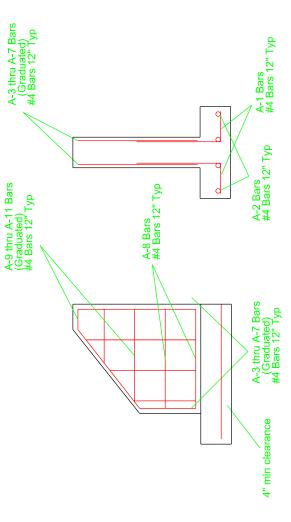
Culvert 2 Plan Sheet MP 16.377

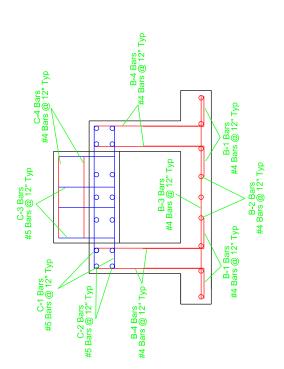


## Steel Reinforcement Detail Outside Walls



# Left and right Wing Wall Steel Detail





## Culvert Side View Steel Detail

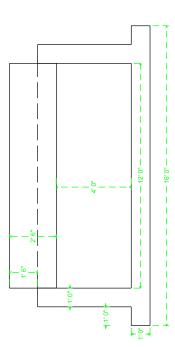
Contract ID: 212205 Page 26 of 43

Right Wing Wall Dimensions

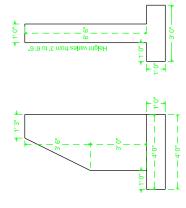
+ 1.0.1 +

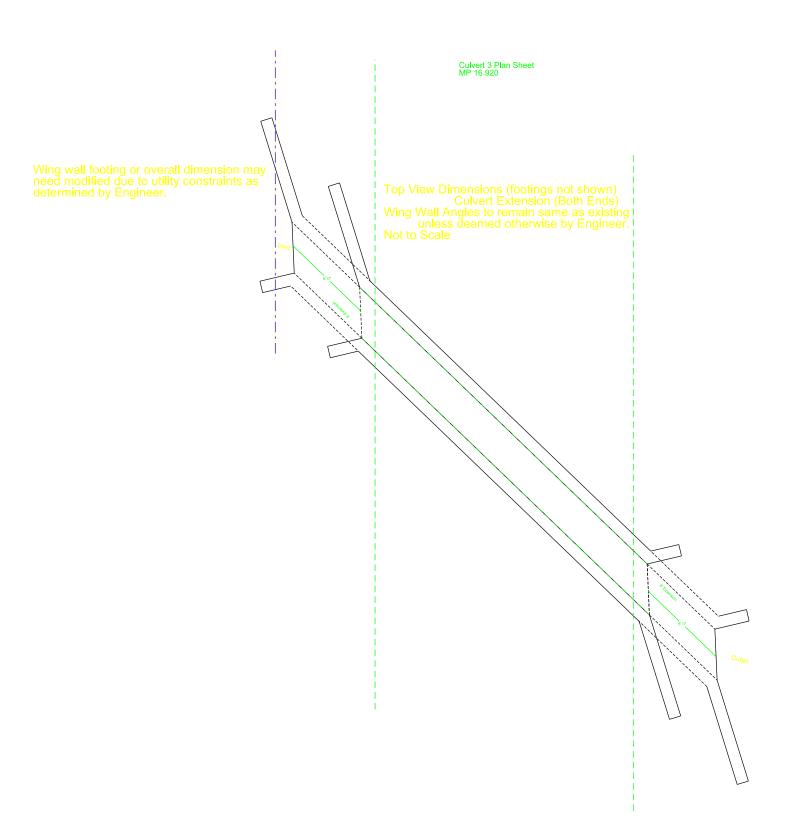
Culvert 3 Plan Sheet MP 16.920

**Culvert Side View Dimensions** 



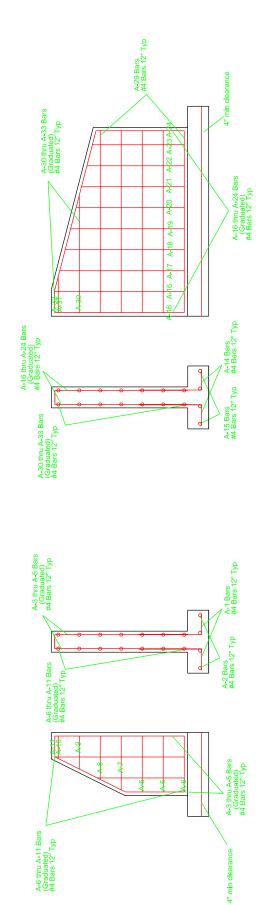
Left Wing Wall Dimensions





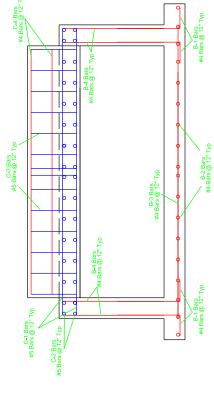
Left Wing Wall Steel Detail

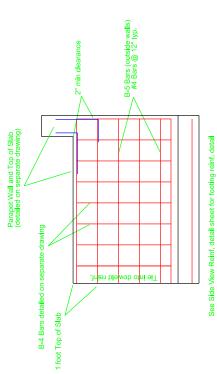
Right Wing Wall Steel Detail



Steel Reinforcement Detail Outside Walls 8' Extension

Culvert Side View Steel Detail

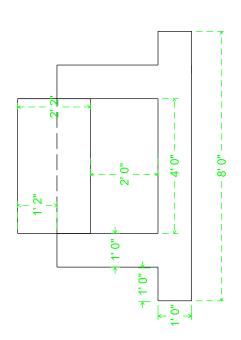


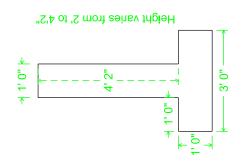


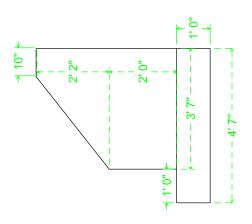
Culvert 2 Plan Sheet MP 17.220

Culvert Side View Dimensions

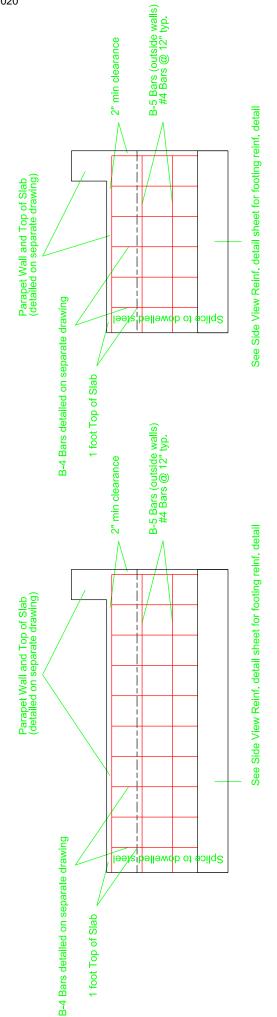
Wing Wall Dimensions





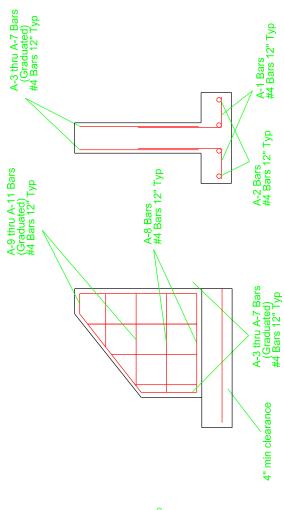


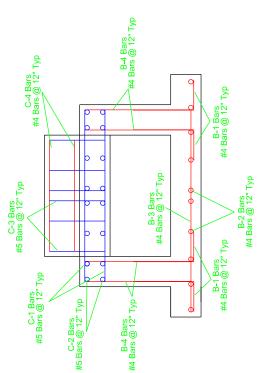
## Steel Reinforcement Detail Outside Walls



# Left and right Wing Wall Steel Detail

Culvert Side View Steel Detail





### PART II

### SPECIFICATIONS AND STANDARD DRAWINGS

### **SPECIFICATIONS REFERENCE**

Any reference in the plans or proposal to previous editions of the *Standard Specifications* for Road and Bridge Construction and Standard Drawings are superseded by Standard Specifications for Road and Bridge Construction, Edition of 2019 and Standard Drawings, Edition of 2020.

### 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:

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

### 2020 KENTUCKY STANDARD DRAWINGS

### **ROADWAY**

### ~ **DRAINAGE** ~ BOX INLETS AND OUTLETS

BOX INLETS AND OUTLETS	
<u>DROP BOXES</u>	
DROP BOX INLET TYPE 3	RDB-003-08
CHANNEL LINING CLASS II AND III	RDD-040-05
PIPE AND BOX CULVERT AND HEADWALLS	
FOR ALL PIPE AND BOX CULVERT HEADWALLS (RDH SERIES) SEE HEADWALL SUPPLI	EMENT
TYPICAL DRAINAGE INSTALLATIONS	
CULVERT, ENTRANCE & STORM SEWER PIPE TYPES & COVER HEIGHTS	RDI-001-10
CULVERT, ENTRANCE & STORM SEWER PIPE TYPES & COVER HEIGHTS	RDI-002-05
TEMPORARY SILT FENCE	RDX-210-03
CURB AND GUTTER, CURBS AND VALLEY GUTTER	
APPROACHES, ENTRANCES, AND MAIL BOX TURNOUT	RPM-110-07
~ TEMPORARY ~	
TRAFFIC CONTROL	
LANE CLOSURE TWO-LANE HIGHWAY	TTC 100 05
LANE CLOSURE MULTI-LANE HIGHWAY CASE I	
LANE CLOSURE MULTI-LANE HIGHWAY CASE II	
DOUBLE LANE CLOSURE	
SHOULDER CLOSURE	
SHOULDER CLUSURE	11C-133-03
DEVICE	
DEVICES PAVEMENT CONDITION WARNING SIGNS	
PAVEMENT CONDITION WARNING SIGNS	TTD-125-06
STRIPING OPERATIONS	
MOBILE OPERATION FOR PAINT STRIPING CASE I	
MOBILE OPERATION FOR PAINT STRIPING CASE II	TTS-105-02

### **PART III**

### EMPLOYMENT, WAGE AND RECORD REQUIREMENTS

ALLEN COUNTY FD04 002 0100 015-020

#### Contract ID: 212205 Page 37 of 43

# TRANSPORTATION CABINET DEPARTMENT OF HIGHWAYS

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

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

#### I. APPLICATION

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

### II. NONDISCRIMINATION OF EMPLOYEES

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

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

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

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

Revised: January 25, 2017

### **EXECUTIVE BRANCH CODE OF ETHICS**

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

### KRS 11A.040 (7) provides:

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

### KRS 11A.040 (9) states:

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

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

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

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

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

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

Revised: January 27, 2017

### **Kentucky Equal Employment Opportunity Act of 1978**

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

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

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

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

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

# EMPLOYEE RIGHTS UNDER THE FAIR LABOR STANDARDS ACT

THE UNITED STATES DEPARTMENT OF LABOR WAGE AND HOUR DIVISION

# FEDERAL MINIMUM WAGE

**\$7.25** 

PEK HUUH

**BEGINNING JULY 24, 2009** 

### **OVERTIME PAY**

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

### **CHILD LABOR**

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

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

#### No more than

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

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

### **TIP CREDIT**

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

### **ENFORCEMENT**

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

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

# ADDITIONAL INFORMATION

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



Contract ID: 212205

Page 40 of 43

### **PART IV**

### **INSURANCE**

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

current edition

## **PART V**

## **BID ITEMS**

Contract ID: 212205 Page 43 of 43

212205

### **PROPOSAL BID ITEMS**

Report Date 3/23/21

Page 1 of 1

### Section: 0001 - DRAINAGE

LINE	BID CODE	ALT DESCRIPTION	QUANTITY	UNIT	<b>UNIT PRIC</b>	FP	AMOUNT
0010	00014	LIME	1.00	TON		\$	
0020	00020	TRAFFIC BOUND BASE	15.00	TON		\$	
0030	00301	CL2 ASPH SURF 0.38D PG64-22	6.00	TON		\$	
0040	00440	ENTRANCE PIPE-15 IN	139.00	LF		\$	
0050	00462	CULVERT PIPE-18 IN	120.00	LF		\$	
0060	00464	CULVERT PIPE-24 IN	32.00	LF		\$	
0070	01496	DROP BOX INLET TYPE 3	15.00	EACH		\$	
0800	02230	EMBANKMENT IN PLACE	436.00	CUYD		\$	
0090	02483	CHANNEL LINING CLASS II	140.00	TON		\$	
0100	02562	TEMPORARY SIGNS	330.00	SQFT		\$	
0110	02650	MAINTAIN & CONTROL TRAFFIC	1.00	LS		\$	
0120	05964	MAINTENANCE FERTILIZER	1.00	TON		\$	
0130	05985	SEEDING AND PROTECTION	300.00	SQYD		\$	
0140	08003	FOUNDATION PREPARATION	1.00	LS		\$	
0150	08100	CONCRETE-CLASS A	109.00	CUYD		\$	
0160	08150	STEEL REINFORCEMENT	8,034.00	LB		\$	
0170	21415ND	EROSION CONTROL	1.00	LS		\$	
0180	24583EC	HDPE PIPE LINER (18 Inch)	392.00	LF		\$	
0190	24583EC	HDPE PIPE LINER (24 Inch)	80.00	LF		\$	
0200	24583EC	HDPE PIPE LINER (30 Inch)	116.00	LF		\$	

Section: 0002 - DEMOBILIZATION

LINE	BID CODE	ALT	DESCRIPTION	QUANTIT	Υ	UNIT	UNIT PRIC	FP	AMOUNT
0210	02569		DEMOBILIZATION		1.00	LS	3	\$	

### SPECIAL NOTES FOR CULVERT PIPE

**A. Excavation**. Saw cut the existing asphalt pavement and base to a neat edge prior to excavation. Obtain the Engineer's approval of trench width prior to cutting pavement. Excavate trench as directed or approved by the Engineer without disturbing existing underground utilities. Be responsible for all excavation (common, roadway, structure, solid rock, and unclassified) required for foundation preparation, inlet boxes, toe walls, and all other excavation required for construction. Excavate rock in channel as required to allow for construction of foundation and construction of any inlet boxes.

Provide positive drainage of slopes and ditches at all times during and upon completion of construction. Waste all removed materials not incorporated into the work 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). Perform all excavation and removal of obstructions only as approved or directed by the Engineer.

- **B.** Culvert Pipe and Foundation Preparation. Construct culvert pipes according to the Drainage Structure Replacement Schedule. The Engineer will establish final centerline, flow lines and skew to obtain the best fit of the existing ditches and channels. Construct pipe bedding according to Section 701 and the applicable Standard or Sepia Drawings. Use approved connecting bands or concrete anchors as required. Prior to backfilling pipe, obtain the Engineer's approval of the pipe installation. Provide Positive drainage upon completion of pipe installation.
- **C. Backfilling and Asphalt Resurfacing.** Backfill trench around the pipe with flowable fill to subgrade elevation. Restore pavement with CL2 ASPH BASE 1.0D, PG 64-22 (4 inch maximum lifts) up to finished grade. Backfill excavated area around the new drainage structure inlets according to Section 710.03.

Where it may become necessary, and only in the most extraordinary situation, to maintain one lane of traffic or leave open trenches at night, the Contractor shall strictly adhere to all nighttime traffic control regulations per MUTCD. The project shall **not** be closed to through traffic and one lane of traffic each in each direction shall be maintained at all times. Access to all local business shall be maintained at all times.

- **D. Final Dressing, Clean Up, and Seeding and Protection.** After all work is completed, completely remove debris from the construction site. Perform Final Dressing on all disturbed areas, both on and off the Right of-Way. Sow all disturbed earthen areas with Seed Mix Type I. Top-Dressing will not be required.
- **E. Disposal of Waste.** Dispose of all excess materials, waste, and debris off the right-of-way at approved sites obtained by the Contractor at no additional cost to the Department. See Special Note for Waste and Borrow Sites.
- **F. Property Damage and Restoration.** The Contractor shall be responsible for all damage to public and/or private property resulting from the work. Restore all damaged features in like kind materials and design at no additional cost to the Department.

- **G. On-Site Inspection.** Make a thorough inspection of the site prior to submitting a bid and be thoroughly familiar with existing conditions so that the work can be expeditiously performed after a contract is awarded. The Department will consider submission of a bid as evidence of this inspection having been made and will not honor any claims resulting from site conditions.
- **H. Caution.** Do not take information shown on the plans and in this proposal and the types and quantities of work listed as an accurate or complete evaluation of the material and conditions to be encountered during construction. Without regard to the materials encountered, all excavation shall be unclassified. It shall be distinctly understood that any reference to rock, earth, or any other material on the plans or cross sections, whether in numbers or words, letters, or lines, is solely for the Department's information and is not to be taken as an indication of classified excavation or the quantity of either rock, earth, or any other material involved. The bidder must draw his own conclusion as to the conditions encountered. The Department does not give any guarantee as to the accuracy of the data and no claim will be considered for additional compensation if the conditions encountered are not in accordance with the information shown.
- **I. Right-of-Way Limits.** The Department has not determined exact limits of Right-of-Way. Limit work activities to obvious Right-of-Way, permanent or temporary Easements, and work areas secured by the Department through consent and release of the adjacent property owners. Be responsible for all encroachments onto private lands.
- **J. Utility Clearance.** Work around and do not disturb existing utilities. It is not anticipated that any utility facilities will require relocation and/or adjustment; however, in the event utilities are discovered that require relocation, the utility companies will work concurrently with the Contractor while relocating their facilities. Working days will not be charged for those days on which work on the controlling item is delayed due to the utility company's phase of the work, as provided in the Specifications. If the total delay exceeds ten working days, an extension of the specified completion date will be negotiated with the Contractor for delay to the Contractor's work.

### IV. METHOD OF MEASUREMENT

Only the items listed in Section V. will be measured for payment. All other items required to complete the work according to the Drawings, Specifications, these notes, and as directed by the Engineer shall be incidental to the applicable listed items.

- A. Maintain and Control Traffic. See Traffic Control Plan.
- **B. Site Preparation.** Site Preparation will be considered incidental to other items of work.
- C. Erosion Control. See Erosion Control notes.
- **D. Restoration, Final Dressing, Clean Up, and Seeding and Protection.** The Department will not measure Restoration, Final Dressing, clean up, and Seeding and Protection for separate payment, but shall be incidental to other items of work.

### V. BASIS OF PAYMENT

No direct payment will be made other than 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.** Culvert Pipe. Accept payment at the contract unit price per linear foot as full compensation for all materials, equipment, labor and incidentals necessary to complete the work as specified in these notes and the Standard Specifications for furnishing and installing the Culvert Pipe and backfilling the Culvert Pipe.

### SPECIAL NOTE FOR CULVERT PIPE REHABILITATION WITH HDPE PIPE

- 1. Description. Perform all work in accordance with the Department's Standard Specifications, Supplemental Specifications, current edition, and any applicable Special Provisions, and applicable Standard and Sepia Drawings, except as hereafter specified. Furnish all materials, labor, equipment, and incidentals for installing and grouting necessary to rehabilitate existing culvert pipe by slip lining an existing culvert pipe with high density polyethylene (HDPE) pipe. The pipes shall be sizes, types, design and dimensions shown on the summary and shall include all connections, joints and other appurtenances as required to complete the work. The slip lining process will require the contractor to completely grout the annular void between the host and liner pipe. The grout and grouting process shall be considered incidental to this item.
- **Materials**. Unless otherwise specified on the plans or herein, culvert pipe renewal shall conform to the following:

### A. Liner Material - High Density Polyethylene (HDPE) Pipe

1. High density polyethylene pipe and fittings shall meet the requirements in the AASHTO M326-08 and ASTM F894 Specifications. Contractors must furnish a certificate of compliance at bid time from the pipe manufacturer that the liner pipe to be installed has been tested by a certified 3rd party laboratory and meets all AASHTO M326 requirements. The certification must list the laboratory and contact person with phone number.

### **B.** Designation of Type.

- 1. The HDPE pipes used for liners in gravity flow culverts shall be solid wall construction with mechanical end connectors, male and female.
- C. Pipe joints shall comply with ASTM D3212 Standard Specification for Joint tightness.
- **D.** Hydraulic flow characteristics for the liner pipe shall provide a Manning's coefficient of n = 0.00914.
- **E. Grouting Material.** Contractor shall utilize material specifications for solidification of the annular void between host and the inserted liner with low density flowable fill or cellular grout. The grouting material shall have a density of not less than 40 lbs per cubic foot nor greater than 125 lbs per cubic foot.
- 3. Cleaning. The existing culvert pipe shall be cleaned by whatever means necessary to remove all obstructions which may be encountered that would prevent insertion of the pipe liner into the host pipe as approved by the engineer. This work will not be paid for directly, but shall be considered incidental to this item

### 4. Construction.

A. Site Preparation. Be responsible for all site preparation. This item will include, but is not limited to, incidental excavation and backfilling; removal of all obstructions or any other items; disposal of materials; sweeping and removal of debris; shoulder preparation and restoration, temporary and permanent erosion and pollution control; and all incidentals.

Site preparation will be only as approved or directed by the Engineer. Other that the bid items listed, no direct payment will be made for site preparation, but will be incidental to the other items of work.

- **B.** Liner Pipe. Liner pipe shall be inserted and installed in accordance with manufactures recommendations. Slip liner pipe grade shall be maintained parallel to grade of host pipe.
- **C. Grouting.** Upon completion or partial completion of the slip lining process grouting will be required to be placed in the annular void between the insertion pipe and the host pipe. Cellular grout with a density between 40 and 125 lbs per cubic foot shall be used.

A detailed plan on holding the liner pipe on the invert of the host pipe shall be submitted to the engineer for approval.

The annular void shall be completely grout filled without deflecting the insertion pipe greater than 1.5 percent.

The contractor shall provide bulkheads at the open points of each run of pipe to be grouted.

The annular void shall be grouted solid by injecting grout from one end of the pipe run and allowing it to flow toward the other end. Venting of the annular void shall be performed to assure uniform filling of the void space during the grouting process. An open ended, high point tap or equivalent vent must be provided and monitored at the bulkhead opposite to the point of grouting.

Pressure on the annular void shall not exceed 2 PSI to avoid damage to the liner pipe. Regardless of the pressure, the contractor shall be solely responsible for any damage or distortion to the insertion pipe due to the grouting process.

- D. Pipe Stockpiling and Handling. Pipe and fittings shall be stockpiled in a safe manner at each contractor staging area or pit location. The stockpiling shall be arranged to cause a minimum of interference to pedestrian and stored outside the safety clear zone of vehicular traffic. When handling slip lining pipe, the contractor shall take all precautions necessary to avoid damaging the pipe. No liner pipe shall be permitted to drag across the ground. All liner pipe must be fully supported or carried above the ground while being moved until inserted into the host culvert. Pipe with deep cuts, scratches, or gouges shall be rejected or replaced at the entire expense of the contractor. If pipe is found to have developed an irregular shape that will not allow pipe joining or insertion without the use of outside forces to bring pipe to round shape, it shall be rejected and replaced at the entire expense of the contractor. An irregularly shaped pipe that would necessitate the use of undue force that could cause damage to the pipe or the joints shall be rejected and replaced at the entire expense of the contractor.
- **5.** Clean-up and Restoration. Upon acceptance of the installation work and testing, the contractor shall clean-up and restore the project area affected by operations as approved by the Engineer.
- **6. Measurement.** This item shall be measured by the foot. Such measurement shall be made along the flow line of the liner pipe complete in place.

The accepted quantities of pipe liner will be paid for at the contract unit price per linear foot for the size of the existing pipe in which the liner is installed, complete in place.

7. **Payment.** The Department will pay for HDPE Pipe Liner at the linear foot price. Payment is full compensation for cleaning existing pipe; for furnishing, hauling, installing liner pipe and placing grout, all connections and for all labor, tools equipment, materials, clean-up and incidentals.

<u>Code</u> <u>Pay Item</u> <u>Pay Unit</u>

24583EC HDPE PIPE LINER (XX INCH) LF