TRANSPORTATION CABINET
Frankfort, Kentucky 40622
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Steven L. Beshear
Governor

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Secretary

September 21, 2015

CALL NO. 400
CONTRACT ID NO. 152286
ADDENDUM # 1

Subject: Webster County, 117GR15P047-FE01
Letting September 25, 2015

(1) Revised – Special Note – Pages 13-20 of 107
(2) Revised – Liquidated Damages – Page 21 of 107
(3) Revised – Guardrail – Pages 25-28 of 107
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(5) Revised – Bid Items – Pages 106-107 of 107

Proposal revisions are available at http://transportation.ky.gov/Construction-Procurement/.

If you have any questions, please contact us at 502-564-3500.

Sincerely,

Rachel Mills

Rachel Mills, P.E.
Director
Division of Construction Procurement

RM:ks
Enclosures

SPECIAL NOTES FOR CULVERT REPLACEMENTS
117GR15P047-FE01

I. DESCRIPTION

Except as specified herein, perform all work 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 labor, equipment, materials, and incidentals for the following work:

(1) Site preparation and Erosion Control; (2) Designing, furnishing, and constructing Pipe Arch, Structural Plate Pipe Arch, and Structural Plate Box Culvert; (3) Excavation, backfill, and construction of embankments; (4) Restoring roadway, pavement, and shoulders; (5) Installing guardrail, guardrail end treatments, and terminal sections; (6) Maintaining and controlling traffic; and (7) any other work as specified by this contract.

II. MATERIALS

Except as provided herein, provide materials conforming to Sections 603, 612, 701, 809, and the Special Note for Aluminum and Steel Structural Plate Box Culvert, as applicable. The Department will sample and test all materials in accordance with the Department's Sampling Manual. Unless specified otherwise in these motes, make the materials available for sampling a sufficient time in advance of the use of the materials to allow for the necessary time for.

A. Maintain and Control Traffic. See Traffic Control Plan.

B. Erosion Control. See Special Notes for Erosion Control Plan.

C. Foundation Preparation. For Structural Plate Box Culvert, use Crushed Limestone Size No. 57 wrapped in Type III Geotextile Fabric. For pipe Arch and Structural Plate Pipe Arch furnish materials according to Section 701.02.04 and 701.03.02.

D. 60 Inch Equivalent Culvert. Furnish steel pipe arch with 3”x1” or 5”x1” corrugations or aluminum pipe arch with 3”x1” corrugations; according to Section 810.04 and Standard Drawings RDI-011-02, RDI-016-02 and RDI-035-01 for 2 feet fill cover height, pH range low, 0^{o} skew.

E. 84 Inch Equivalent Culvert. Furnish Bituminous Coated Steel or Aluminum Structural Plate Pipe Arch according to Section 809 and Standard Drawings RDI-12-02 and RDI-016-02 for 2 feet fill cover height, pH range low, 0^{o} skew. Provide for a manufacturer’s representative to be available on site during structural plate pipe arch assembly, installation, and backfilling.

Consider the drawings in the proposal to be conceptual and preliminary only. Prior to fabrication, verify fill cover height and pipe arch lengths and submit to the Engineer and obtain approval of the manufacturer's designs and shop drawings prepared by a Professional Engineer licensed in Kentucky. Obtain the Engineer's approval of any substitution prior to fabrication and/or construction as applicable. Include with each shipment of the structural plates and accessories a certification that all materials furnished comply with the applicable specifications and these special notes.

E. Structural Plate Box Culvert. Furnish Steel or Aluminum Structural Plate Box Culvert with invert, end walls, wing walls, and toe walls according to the Special Note for Aluminum and Steel Structural Plate Box Culverts designed by the manufacturer for 2 feet fill cover height, 0^{o} skew, with an HS25 loading arrived at by increasing the standard HS20-44 truck and lane loads as specified in the AASHTO Specifications by 25%. Provide for a manufacturer's representative to be available on site during culvert or pipe arch assembly, installation and backfilling.

Consider the drawings in the proposal to be conceptual and preliminary only. Prior to fabrication, verify the fill cover height and box culvert length and submit to the Engineer and obtain approval of the manufacturer's design and shop drawings prepared by a Professional Engineer licensed in Kentucky. Obtain the Engineer's approval of any substitution prior to fabrication and/or construction as applicable. Include with each shipment of the structural plates and accessories a certification that all materials furnished comply with the applicable specifications and these special notes.

F. Culvert Backfill. Use flowable fill.

G. Channel Lining. Use Class II Channel Lining

H. Guardrail. See Special Notes for Guardrail.

I. Surfacing and Shoulder Materials. Use DGA (do not furnish Crushed Stone Base in lieu of DGA) with Class 2 Asphalt Base 1.00D PG64-22 and Class 2 Asphalt Surface 0.38D PG64-22.

III. CONSTRUCTION METHODS

Except as provided herein, construct Structural Plate Pipe Arches and Structural Plate Box Culvert according to Sections 603, 612, and 701 as applicable

A. Maintain and Control Traffic. See Traffic Control Plan.

B. Erosion Control. See Special Notes for Erosion Control.

C. Site Preparation. Be responsible for all site preparation, including, but not limited to: clearing and grubbing and tree and stump removal; structure, common, solid rock, and special excavation; structural granular backfill, embankment, borrow, and embankment in place; removal of existing culverts, obstructions or any other items; disposal of materials, waste, and debris; cleaning inlet and outlet ditches; restoration, clean up, and final dressing. Limit clearing and grubbing to the absolute minimum required to construct the culvert, roadway approaches, and guardrail. Obtain the Engineer's prior approval before removing any trees. Perform all site preparation only as approved or directed by the Engineer.

Construct Pipe Arches on KY 120 and KY 270 at the same location as the existing structures. Construct the Structural Plate Box Culvert on KY 1063 at a location adjacent to the existing structure determined by the Engineer at the time of construction. Prior to excavation for trenches for the new culvert and culvert removal, saw cut pavement to a neat edge. Obtain the Engineer's approval of the trench widths prior to saw cutting pavement. Close the road during the approved periods allowed by the Traffic Control Plan, excavate trenches, and remove the existing culverts. Provide positive drainage of slopes and ditches at all times during and upon completion of construction. Stockpile excavation within the right of way for reuse in constructing embankments. Obtain the Engineer's approval of the suitability of excavated materials before reusing in the embankments. Use excess suitable excavation to flatten slopes as approved or directed by the Engineer. Waste unsuitable and remaining excess excavation and other removed materials 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 existing structure only as approved or directed by the Engineer.

Without regard to the materials encountered, consider all roadway, drainage, solid rock, and special excavation to 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, 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 conclusions 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 additional compensation if the materials encountered are not in accord with the classification shown.

D. Excavation and Removal of Existing Structures. Completely remove the existing culverts, including masonry (stone and/or concrete), if present. Be responsible for all excavation (structure, common, rock, and unclassified) required for foundation preparation and all other excavation required by the work. Excavate rock in channel as required to allow for construction of foundation and installation of culvert with the designed fill cover height. Use suitable excavated materials to backfill the trench from the removed structure on KY 1063. Provide positive drainage of slopes and ditches at all times during and upon completion of construction. Perform all excavation only as approved or directed by the Engineer.

E. Foundation Preparation and Bedding. Except as provided herein, prepare foundation and bedding for the Structural Plate Box Culvert according to the Special Note for Aluminum and Steel Structural Plate Box Culverts; however provide a minimum depth of 18 inches of No. 57 crushed limestone wrapped in Geotextile Fabric Type III.

Except as provided herein, prepare foundation and bedding for the Pipe Arches according to Section 701.03.

G. Pipe Arch, Structural Plate Pipe Arch, and Structural Plate Box Culvert. Construct 60 inch Equivalent Pipe Culvert with positive projection without headwalls as shown on the typical section. Construct Structural Plate 84 inch Equivalent Pipe Culvert according to the manufacturer's design with positive projection without headwalls as shown on the typical sections. Construct Structural Plate Box Culvert according to the manufacturer's design with end walls, wing walls, invert, and toe walls as shown on the typical section. Be responsible for field layout and survey of the approved pipe arches and box culvert according to the approved designs furnished by the Contractor, or the standard drawings, as applicable. Provide for a manufacturer's representative to be present during assembly, construction, and backfilling of the structures. Obtain the Engineer's approval of the final centerline, flow line, length, skew, and wing wall alignment prior to backfilling. Provide positive drainage upon completion of the project.

H. Backfill and Embankments. Construct flowable fill backfill to the subgrade elevation. Complete the remainder of the embankments with approved suitable excavation and/or embankment in place. Use excess suitable excavation to flatten slopes as approved or directed by Engineer. Warp finished slopes to match existing slopes and ditches. Provide positive drainage of slopes and ditches at all times during and upon completion of construction.

I. Channel Lining. Place Class II Channel Lining to protect culvert ends, wing walls, and slopes as directed by the Engineer. In addition to the requirements of section 703, the Engineer may require additional hand placement.

J. Pavement and Shoulder Restoration. Establish width, crown, superelevation and final grade lines as shown on the typical section or as directed by the Engineer.

After the existing culvert on KY 1063 is removed and trench backfilled and the Structural Plate Box Culvert is installed and backfilled, place DGA and reopen KY 1063 according to the phasing in the Traffic Control Plan; do not place asphalt base, leveling and wedging, or surface until the 2016 construction season. Correct settlement with additional DGA and maintain the DGA as directed by the Engineer through the winter shut down period.

After the Pipe Arches on KY 120 and KY 270 are completed, place DGA and asphalt base and seal the asphalt base with leveling and wedging before reopening the roads to through traffic according to the phasing in the Traffic Control Plan. If pipe arches are installed in

calendar year 2015, do not construct final asphalt surface course until the 2016 construction season.

In the 2016 construction season, do not place final surface course until a minimum of 7 calendar days after traffic is placed on the final course of asphalt base. Correct settlement with DGA and/or additional leveling and wedging as directed by the Engineer. When the Engineer determines the base is sufficiently stabilized, construct final surface course and shoulders. See additional phasing requirements in the Traffic Control Plan and the Special Note for Liquidated Damages.

K. Guardrail. See Special Notes for Guardrail.

L. Final Dressing and Clean Up. After all work is completed, completely remove all waste and debris from the construction worksite. Backfill all excavated areas and compact as directed by the Engineer. Perform Class A Final Dressing on all disturbed areas, both on and off the right of way. Sow all disturbed earthen areas according to the Special Note for Erosion Control.

M. On-Site Inspection. Make a thorough inspection of the site prior to submitting 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. The Department will not consider any claims resulting from site conditions.

N. Right-of-Way Limits. The Department has not determined exact Right-of-Way limits. Limit work activities and operations to obvious existing Right-of-Way, Permanent Easements, and work areas obtained by the Department through consent and release of the adjacent property owners. Be responsible for encroachments onto private lands.

O. Utilities. Locate all underground and overhead utilities prior to construction. Be responsible for repairing all utility damage that occurs as a result of the Contractor's operations at no additional cost to the Department.

P. Restoration. Be responsible for all damage to public and/or private property resulting from the work. Remove and replace all damaged or disturbed roadway features in like kind materials and design at no additional cost to the Department.

R. Disposal of Waste. Dispose of all removed pipe, stone masonry, concrete and reinforcing steel, pavement, debris, unsuitable and excess excavation, 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).

S. Caution. Consider the information shown on the plans and the type of work listed herein as approximate only and do not take the information as an accurate evaluation of the materials and conditions to be encountered during construction; the bidder must draw his own

conclusions. The Department does not give any guarantee as to the accuracy of the data and no claim will be considered for if the conditions encountered are not in accordance with the information shown.

T. Control. Perform all work under the absolute control of the Department of Highways. Obtain the Engineer's approval of all designs required to be furnished by the Contractor and/or the manufacturer and design modifications proposed by the Contractor or Manufacturer prior to incorporation into the work. The Department reserves the right to have other work performed by other contractors and its own forces and to permit public utility companies and others to do work during the construction of and within the limits of, or adjacent to, the project. Conduct work activities and operations in cooperation with such other parties so that interference with such other work will be reduced to a minimum. The Department will consider submission of a bid as Contractor's agreement to not make any claims for additional compensation due to delays or other conditions created by the operations of such other parties. Should a difference of opinion arise as to the rights of the Contractor and others working within the limits of, or adjacent to, the project, the Engineer will decide as to the respective rights of the various parties involved in order to assure the completion of the Department's work in general harmony and in a satisfactory manner, and his decision shall be final and binding upon the Contractor.

U. Staking. See Special Note for Staking.

IV. METHOD OF MEASUREMENT

The Department will measure for payment only 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 Notes for Erosion Control.

C. Site Preparation. The Department will measure Site Preparation as one lump sum.

D. Pipe Arch, Structural Plate Pipe Arch, and Structural Plate Box Culvert. The Department will measure the Pipe Arches and Box Culvert of each type in linear feet along the culvert centerline. The Department will not measure box culvert wing walls, end walls, invert, or toe walls; box culvert or structural plate pipe arch design; bedding, flowable fill, and backfill: and furnishing the manufacturer's technical representative for separate payment, but shall be incidental to the Pipe Arch, Structural Plate Box Culvert, Structural Plate Pipe Arch, or Site Preparation as applicable.

E. Foundation Preparation. The Department will measure Foundation Preparation for the Structural Plate Box Culvert as one lump sum. The Department will not measure Foundation

Preparation for the Pipe Arch and Structural Plate Pipe Arches, but shall be incidental to the pipe arches.

F. Excavation, Backfill, and Embankment. The Department will not measure excavation, backfill, embankment, borrow, or embankment in place for separate payment, but shall be incidental to Site Preparation and Foundation Preparation as applicable.

G. Channel Lining Class II. The Department will measure Channel Lining Class II in tons.

H. Guardrail. See Special Notes for Guardrail.

I. Staking. See Section 201.04.01

V. 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. Pipe Arch, Structural Plate Pipe Arch and Structural Plate Box Culvert. Accept payment at the contract unit prices 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 box culvert and structural plate pipe arch design, furnishing and installing the box culvert, pipe arch, and structural plate pipe arch and furnishing the manufacturer's technical representative.

D. Site Preparation. Accept payment at the contract lump sum unit price as full compensation for all materials, equipment, labor, and incidentals, necessary to complete site preparation as specified in these notes and the Standard Specifications, including, but not limited to: clearing and grubbing and tree and stump removal; structure, common, solid rock, and special excavation; backfill, embankment, borrow, and embankment in place; removal of existing culverts, obstructions or any other items; disposal of materials, waste, and debris; cleaning inlet and outlet ditches; restoration, clean up, and final dressing.

E. Guardrail. See special notes for guardrail.

F. Staking. Accept payment at the contract lump sum unit price as full compensation for all materials, equipment, labor, and incidentals, necessary to complete the staking according to the Special Note for Staking, Section 201, and these notes.

SPECIAL NOTE FOR STAKING
117GR15P047-FE01

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. Verify the Pipe Arch, Structural Plate Pipe Arch, and Structural Plate Box Culvert sections and revise alignments as necessary to provide proper alignment of culverts with stream channels and the roadway lines and grades, and provide positive drainage upon completion of construction; and
3. Verify Pipe Arch, Structural Plate Pipe Arch, and Structural Plate Box Culvert fill cover height and designs. Modify Structural Plate Box Culvert wing wall and end wall designs to conform to the construction site. Prior to incorporating into the work, obtain the Engineers approval of all designs and revisions to be provided by the Contractor; and
4. Establish pavement profiles, typical section cross slopes, crown, transitions, and tapers to align the pavement restoration to match existing roadway alignment as required by the work and to insure positive drainage upon completion of the work; and
5. Produce and furnish to the Engineer "As Built" plans; and
6. Perform any and all other staking operations required to control and construct the work.

SPECIAL NOTE FOR LIQUIDATED DAMAGES
117GR15P047-FE01

In addition to the requirements of Section 108.09, the Department will assess Liquidated Damages in the amount of $200 per hour for each hour or part of an hour, for each road, that KY 120, KY 270, or KY 1063 remains closed to through traffic beyond the time allowed for road closures by the Traffic Control Plan.

In addition to the requirements of Section 108.09, the Department will assess Liquidated Damages in the amount of $750 per day for each calendar day or part of a calendar day the KY 1063 Structural Plate Box Culvert, backfill, embankments, shoulders, and DGA surface remain uncompleted after November 30, 2015.

If culvert removal and installation begin in calendar year 2015 on either KY 120 or KY 270, in addition to the requirements of Section 108.09, the Department will assess Liquidated Damages in the amount of $750 per day for each calendar day or part of a calendar day, for each road, that the Pipe Arch or Structural Plate Pipe Arch, backfill, embankments, shoulders, and asphalt base and leveling and wedging, and surface course remain uncompleted after November 30, 2015.

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

The Department will assess Liquidated Damages in the amount specified in Section 108.09 for each calendar day or part of a calendar day that any item of work remains uncompleted after June 30, 2016.

The Department will apply all liquidated damages accumulatively.

All other applicable portions of Section 108 apply.

SPECIAL NOTES FOR GUARDRAIL
117GR15P047-FE01

I. DESCRIPTION

Except as specified herein, perform all work in accordance with the Department's 2012 Standard and Supplemental Specifications and Standard and Sepia Drawings, current editions. Article references are to the Standard Specifications.

Furnish all equipment, labor, materials, and incidentals for the following work items:

(1) Maintain and Control Traffic; (2) Shoulder preparation; (3) Install Guardrail furnished by the Department; (4) Furnish and install End Treatments, Terminal Sections, and Delineators for Guardrail; and (5) All other work specified as part of this contract.

II. MATERIALS

Except as specified herein, provide for all materials to be sampled and tested in accordance with the Department's Sampling Manual and 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.

A Maintain and Control Traffic. See Traffic Control Plan.

B. Guardrail. The Department will furnish guardrail elements and radius rail, standard length steel posts, and timber off set blocks in general conformance to Section 814 and the Standard and Sepia Drawings, but may vary in some respects, such as gage, pre-punched hole patterns, etc. The Department will make the materials available to the Contractor at the Department’s Bailey Bridge Yard in Frankfort, Kentucky, between the hours of 8:00 a.m. and 3:30 p.m. Monday through Friday. Determine requirements, including curvature of radius rail for entrances and terminal sections, and provide the Engineer a materials list fourteen (14) calendar days prior to beginning work. Return any materials furnished by the Department not used in the work to the Department’s Webster County maintenance facility.

The Contractor shall furnish End Treatments, Terminal Sections, and guardrail hardware (nuts, bolts, and washers) in accordance with Section 814 and the Standard Drawings.

C. Delineators for Guardrail. Furnish bi-directional white Delineators for Guardrail according to the Delineators for Guardrail Sepia Drawing.

III. CONSTRUCTION METHODS

A. Maintain and Control Traffic. See Traffic Control Plan.

B. Site Preparation. Be responsible for all site preparation, including but not limited to, removal of all obstructions. Reshape and compact the existing shoulder to provide proper template and foundation for the guardrail. Perform all site preparation as approved or directed by the engineer.

C. Install Guardrail. Except as specified herein, install materials furnished by the Department and construct guardrail system according to Section 719 and the Standard and Sepia Drawings. Consider locations and quantities listed on the summary to be approximate only. Consider the shoulder widths shown on the typical section to be the minimum required. The Engineer will determine the exact termini for individual guardrail installations and may increase the shoulder width as allowed by site conditions at the time of construction. Unless directed otherwise by the Engineer, provide a minimum two (2) foot shoulder width.

Erect guardrail to the lines and grades shown on current Standard Drawings or as directed by the Engineer by any method approved by the Engineer which allows construction of the guardrail to the true grade without apparent sags. If a post location directly over the Pipe Arch, Structural Plate Pipe Arch, or Structural Plate Box Culvert does not have adequate depth for the full length of the post embedment required, omit the post and construct 25 feet of 2 ply rail at that location centered over the omitted post. Locate the posts in the rail string such that only 1 post need be omitted. The Engineer may allow a slight variation in post spacing to accommodate an omitted post by requiring placement of adjacent posts to minimize the gap if the gap exceeds 12’-6”.

When installing guardrail, do not leave blunt ends exposed where they would be hazardous to the public. When it is not practical to complete the construction of the guardrail and the permanent end treatments and terminal sections first, provide a temporary end by connecting at least 25 feet of rail to the last post, and by slightly flaring, and burying the end of the rail completely into the existing shoulder. If left overnight, place a drum with bridge panel in advance of the guardrail end and maintain during use.

D. Delineators for Guardrail. Construct Delineators for Guardrail according to the Delineators for Guardrail Sepia Drawing.

E. Property Damage. Be responsible for all damage to public and/or private property, including utilities, resulting from the work. Restore damaged roadway features and private property at no additional cost to the Department.

F. Coordination with Utility Companies. Locate all underground and overhead utilities prior to erecting guardrail. Be responsible for repairing all utility damage that occurs as a result of guardrail operations at no additional cost to the Department.

G. Right of Way Limits. The Department has not established exact limits of the 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.

H. Disposal of Waste. Dispose of all waste and debris off the Right-of-Way at sites obtained by the Contractor at no additional cost to the Department.

IV. METHOD OF MEASUREMENT

Except as provided herein, the Department will measure all work in accordance with the Standard and Supplemental Specifications, Special Provisions and Special Notes, and Standard and Sepia Drawings, current editions. The Department will measure only the bid items listed. Consider all other items required to complete the work as incidental to the listed items.

A. Maintain and Control Traffic. See Traffic Control Plan.

B. Site Preparation. See Special Note for Culvert Replacements.

C. Guardrail, Steel W Beam Single Face, Install. The Department will measure the actual length of guardrail furnished by the Department and installed by the Contractor. Contrary to section 719.04.01, the Department will measure the actual length of shop curved guardrail in linear feet and will not multiply the actual length by a factor of 1.3 to determine the pay quantity.

D. Guardrail, Steel W Beam Single Face 2 Ply, Install. The Department will measure the actual length of 2 ply guardrail furnished by the Department and installed by the Contractor. Contrary to section 719.04.01, the Department will measure the actual length of shop curved guardrail in linear feet and will not multiply the actual length by a factor of 1.3 to determine the pay quantity. The Department will not make deduction for an omitted post or make additional payment for an extra post required to minimize the gap for an omitted post.

E. Guardrail Hardware. The Department will not measure guardrail hardware for separate payment but shall be incidental to Guardrail, Steel W Beam Single Face, Install or Guardrail, Steel W Beam Single Face 2 Ply, Install as applicable.

F. End Treatments. See Section 719.04.04.

G. Terminal Sections. See Section 719.04.02.

H. Delineators for Guardrail. See Delineators for Guardrail Sepia Drawing.

V. BASIS OF PAYMENT

Except as provided herein, the Department will make payment for only the bid items listed. Consider all other items required to complete the work as incidental to the listed items.

A. Maintain and Control Traffic. See Traffic Control Plan.

B. Site Preparation. See Special Note for Culvert Replacements.

C. Guardrail, Steel W Beam Single Face, Install. Se Section 719.05.

D. Guardrail, Steel W Beam Single Face 2 Ply, Install. Se Section 719.05.

D. End Treatments. See Section 719.05.

E. Terminal Sections. See Section 719.05.

F. Delineators for Guardrail. See Delineators for Guardrail Sepia Drawing.

TRAFFIC CONTROL PLAN
117GR15P047-FE01

TRAFFIC CONTROL GENERAL

Except as provided herein, maintain and control traffic in accordance with the 2012 Standard and Supplemental Specifications and the Standard and Sepia Drawings, current editions. Section references are to the Standard Specifications. 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, provide new traffic control devices, or used in like new condition, at the beginning of the work and maintain in like new condition until completion of the work.

PROJECT PHASING & CONSTRUCTION PROCEDURES

Close KY 120, KY 270, and KY 1063 to through traffic for removal of the existing culverts, construction of the new Pipe Arch, Structural Plate Pipe Arch, and Structural Plate Box Culvert, roadway restoration, and guardrail subject to the following conditions:

1. Close KY 120 to through traffic for a single period for a maximum of 60 hours beginning at 6:00 PM Friday and ending at 6:00 a.m. the following Monday. Select a period within this time frame and submit to the Engineer for approval a minimum of fourteen (14) calendar days prior to proposed closure. Obtain the Engineer’s approval of the work schedule prior to closing road. If road closure is in calendar year 2015, complete construction of the culvert, embankment, shoulders, and surface through the asphalt base and leveling and wedging courses on or before November 30, 2015; however, do not place the final surface course until calendar year 2016 construction season.

2. Close KY 270 to through traffic for a single period for a maximum of 60 hours beginning at 6:00 PM Friday and ending at 6:00 a.m. the following Monday. Select a period within this time frame and submit to the Engineer for approval a minimum of fourteen (14) calendar days prior to proposed closure. Coordinate the closure with coal hauling operations of the nearby mine of Webster County Coal, LLC. Obtain the Engineer’s approval of the work schedule prior to closing road. If road closure is in calendar year 2015, complete construction of the culvert, embankment, shoulders, and surface through the asphalt base and leveling and wedging courses on or before November 30, 2015; however, do not place the final surface course until calendar year 2016 construction season.

3. Close KY 1063 to through traffic for a single period during calendar year 2015 for a maximum of 228 hours beginning at 6:00 PM Friday and ending at 6:00 a.m. Monday of the week following. Select a period within this time frame and submit to the Engineer for approval a minimum of fourteen (14) calendar days prior to proposed closure. Obtain the Engineer's approval of the work schedule prior to closing road. Complete removal and backfilling of the existing structure, construction of the new box culvert, embankment, shoulders, and DGA surface course on or before November 30, 2015; however, do not place the asphalt base, leveling and wedging, and surface courses until the calendar year 2016 construction season.

4. The Department will prepare a Public Information Plans. Notify the Engineer immediately and obtain prior approval of any deviations from the previously approved closure schedules.

5. Be responsible for advance warning signs, road closure signs, barricades, drums, work zone and pavement condition warning signs as shown on the Standard Drawings and additional signs as directed by the Engineer. If deemed necessary by the Engineer, the Department will sign and maintain a detour during construction.

6. The Department will not require the Contractor to provide continuous access to single family, duplex, or triplex residential properties or farms during working hours; however, the Contractor shall 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 residential or farm entrance is blocked to the minimum length of time required for actual operations, do not extend the time for the Contractor's convenience, and in no case allow the blockage to exceed 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.

7. Do not reopen KY 120 and KY 270 to through traffic before placing asphalt base course and initial leveling and wedging. Do not maintain traffic on DGA.

8. Do not reopen KY 1063 until DGA surface course has been constructed. Maintain the DGA surface as directed by the Engineer during the winter shutdown period and until asphalt base and leveling and wedging courses are constructed during the 2016 construction season.

At all other times during construction, maintain alternating one way traffic during working hours and maintain one lane of traffic in each direction during non-working hours. Provide a clear lane width of 8 feet; however, make provisions 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.

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

BLASTING

If required, perform blasting only during a period when a road is closed to through traffic. Halt local traffic, blast, clean the existing pavement, and return traffic to normal local traffic operation subject to the following conditions:

1. Halt all local traffic at a safe distance, as determined by the Engineer, on either side of the impending explosion.

2. Halt traffic a maximum of 15 minutes per hour to allow the execution of the "shot" and to allow for removal of rock fragments and debris.

3. Have suitable equipment at the site and in a running mode for the purpose of cleaning the existing pavement.

4. Immediately after any blast, inspect the pavement for any debris that may be a hazard to traffic prior to allowing local traffic to proceed. Return local traffic to normal operation in the least amount of time possible.

LANE & SHOULDER CLOSURES

When a road is open to through traffic, do not leave lane closures in place during non-working hours. Except as specified in the phasing above, maintain lane closures only during hours of actual operations. Reduce Lane closures to a shoulder closure, or remove as appropriate, when active operations do not require a lane closure. The Engineer will allow shoulder closures during non-working hours; however do not park equipment or store materials on a closed shoulder during non-working hours. After the Structural Plate Pipe Arches and/or the Structural Plate Box Culvert have been installed and a road reopened to through traffic, maintain a shoulder closure until guardrail is installed at the site. The Engineer may designate days and hours when lane and/or shoulder closures will not be allowed.

SIGNS

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 separate payment but shall be incidental to Maintain and Control Traffic. The Department will measure individual signs only once for payment, regardless of how many times they are set, reset, relocated, and removed during the duration of the project. The Department will not measure replacements for signs directed by the Engineer to be replaced due to damage, poor condition, or inadequate reflectivity.

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

CHANGEABLE MESSAGE SIGNS

If deemed necessary by the Engineer, the Department will furnish, operate, and maintain changeable message signs.

TRAFFIC COORDINATOR

Furnish a Project Traffic Coordinator according to Section 112.03.12. The Project Traffic Coordinator shall provide for inspection of the project maintenance of traffic a minimum of once every two hours during the Contractor's operations and at any time a lane or road closure is in place. Provide the project personnel with access on the project to a radio or telephone to be used in case of emergencies or accidents.

PAVEMENT MARKINGS

If there is to be a deviation from the existing striping plan, the Engineer will furnish the Contractor a striping plan prior to placement of the final surface course. Install Temporary Striping according to Section 112 with the following exception:

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

PAVEMENT EDGE DROP-OFFS

Do not allow a pavement edge between opposing directions of traffic or lanes that traffic is expected to cross in a lane change situation with an elevation difference greater than 1½". Place warning signs (MUTCD WY-11 or WE-9A) in advance of and at 1500 feet intervals throughout the drop-off area. Provide dual posting on both sides of the traveled way. Wedge 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 and other drop-offs 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 use of cones in lieu of plastic drums, panels, and barricades. Wedge 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.

Culvert Trench - Close a road during allowable periods when culvert trench is open. Protect local traffic by placing Type III Barricades directly in front of the trench facing both directions of travel. Provide warning signs as shown on the Standard Drawings or as directed by the Engineer. When a road is reopened after installation of the pipe arches or culverts, maintain shoulder closures until guardrail is erected.

Pedestrian and Bicycle Traffic - Provide protection for pedestrian and bicycle traffic as directed or approved by the Engineer.

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PROPOSAL BID ITEMS

Report Date 9/21/15

Section: 0001 - DRAINAGE

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0010	00001		DGA BASE	210.00	TON		$	
0020	00190		LEVELING & WEDGING PG64-22	70.00	TON		$	
0030	00212		CL2 ASPH BASE 1.00D PG64-22	195.00	TON		$	
0040	00301		CL2 ASPH SURF 0.38D PG64-22	360.00	TON		$	
0050	01987		DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	18.00	EACH		$	
0060	02014		BARRICADE-TYPE III	12.00	EACH		$	
0070	02353		INSTALL GUARDRAIL-STEEL W BM-S FACE 2 PLY	150.00	LF		$	
0080	02353		INSTALL GUARDRAIL-STEEL W BM-S FACE	575.00	LF		$	
0090	02360		GUARDRAIL TERMINAL SECTION NO 1	3.00	EACH		$	
0100	02371		GUARDRAIL END TREATMENT TYPE 7	9.00	EACH		$	
0110	02562		TEMPORARY SIGNS	500.00	SQFT		$	
0120	02585		EDGE KEY	140.00	LF		$	
0130	02650		MAINTAIN & CONTROL TRAFFIC KY 1063	1.00	LS		$	
0140	02650		MAINTAIN & CONTROL TRAFFIC KY 270	1.00	LS		$	
0150	02650		MAINTAIN & CONTROL TRAFFIC KY 120	1.00	LS		$	
0160	02726		STAKING KY 1063	1.00	LS		$	
0170	02726		STAKING KY 270	1.00	LS		$	
0180	02726		STAKING KY 120	1.00	LS		$	
0190	06510		PAVE STRIPING-TEMP PAINT-4 IN	300.00	LF		$	
0200	06514		PAVE STRIPING-PERM PAINT-4 IN	5,250.00	LF		$	
0210	08003		FOUNDATION PREPARATION KY 1063	1.00	LS		$	
0220	20257NC		SITE PREPARATION KY 1063	1.00	LS		$	
0230	20257NC		SITE PREPARATION KY 270	1.00	LS		$	
0240	20257NC		SITE PREPARATION KY 120	1.00	LS		$	
0250	21415ND		EROSION CONTROL KY 270	1.00	LS		$	
0260	21415ND		EROSION CONTROL KY 120	1.00	LS		$	
0270	21415ND		EROSION CONTROL KY 1063	1.00	LS		$	
0280	20694EN	AA1	ALUMINUM STRUCTURAL PLATE BOX CULVERT KY 1063 16'-4" X 5'-11"	45.00	LF		$	
0290	20695EN	AA2	STEEL STRUCTURAL PLATE BOX CULVERT KY 1063 16'-4" X 5'-11"	45.00	LF		$	
0300	00501	BB1	CULVERT PIPE-60 IN EQUIV 3"X1" OR 5"X1" CSPA (KY 120) (REVISED: 9-21-15)	42.00	LF		$	
0310	00501	BB2	CULVERT PIPE-60 IN EQUIV 3"X1" CAPA (KY 120) (REVISED: 9-21-15)	42.00	LF		$	

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PROPOSAL BID ITEMS

Report Date 9/21/15

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0320	00506	CC1	CULVERT PIPE-84 IN EQUIV ALUMINUM STRUCTURAL PLATE (KY 270)	55.00	LF		$	
0330	00506	CC2	CULVERT PIPE-84 IN EQUIV STEEL STRUCTURAL PLATE (KY 270)	55.00	LF		$	

Section: 0002 - DEMOBILIZATION

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0340	02569		DEMOBILIZATION	1.00	LS		$	