



TRANSPORTATION CABINET

Frankfort, Kentucky 40622
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Steven L. Beshear
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December 3, 2014

CALL NO. 107
CONTRACT ID NO. 144125
ADDENDUM # 1

Subject: Floyd County, HSIP 9010 (162)
Letting December 12, 2014

(1) Revised - Special Notes - Pages 19-31 of 186

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

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

Sincerely,

A handwritten signature in blue ink that reads "Diana Castle Radcliffe".

Diana Castle Radcliffe
Director
Division of Construction Procurement

DR:ks
Enclosures



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SPECIAL NOTES FOR PROJECT

Except as provided herein, perform all work in accordance with the Department's 2012 Standard Specifications, interim Supplemental Specifications, Standard and Sepia Drawings, and Special Notes and Special Provisions, current editions. Article references are to the Standard Specifications. This project shall consist of furnishing all labor, equipment, materials, and incidentals for the following:

(1) Maintaining and controlling traffic; (2) Site preparation; (3) Constructing culvert and pipe extensions; (4) Ditching and shouldering; (5) Erosion control; (6) Constructing asphalt pavement; (7) Constructing guardrail and end treatments; (8) Furnish and install railroad rails and install wall cribbing; (9) Excavate, place geotextile material and backfill the area around the railroad rails and on the fill slope; and (10) any other work as specified by this contract.

II. MATERIALS

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

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

B. Culvert Pipe: See Section 810. Select pipe for pH range Medium and minimum fill cover height according to Standard Drawing RDI-002-04 and Standard Drawing RDI-035-01. Use flowable fill for pipe backfill according to Section 601.03.03.B. Verify maximum and minimum fill cover height required for new pipe prior to construction and obtain the Engineer's approval of the class or gauge of pipe and type of coating prior to delivering pipe to project. Furnish approved connecting bands or pipe anchors and toe walls.

C. Erosion Control: See Special Notes for Erosion Control

D. Guardrail: See Section 814. Furnish white and/or yellow Delineators for Guardrail according to the Delineators for Guardrail Sepia Drawing.

E. Concrete: See Section 608.

- F. Steel Reinforcement:** See Section 811.
- G. Asphalt:** See Section 403. See typical section for thickness and mix type.
- H. Asphalt Seal Coat:** See Section 405. Apply two applications of asphalt seal coat at the rate of 2.8 lb/sy of asphalt and 20 lb/sy of asphalt seal coat aggregate.
- I. DGA and Traffic Bound Base:** See Section 805. Do not use Crushed Stone Base.
- J. Permanent Pavement Striping:** See Section 842.
- K. Erosion Control Blanket.** Erosion control blanket is to be placed in areas determined by the Engineer when ditching is complete, on slope stabilization areas, or as directed by the Engineer. Use Seed Mixture No. 1.
- L. Drainage Structures.** See Section 710.
- M. Channel Lining Class II.** Channel lining will be limestone and is to be placed at locations in ditches and around drop boxes as directed by the Engineer.
- N. Railroad Rails:** Use recycled (used) railroad rails classified with a nominal weight of 130 pounds per yard size or greater. Use only visibly straight recycled railroad rails with no splices. The Engineer will verify rail nominal weights (Manufacturer's Stamp with lb/yd, date, etc.). Provide Certification for nominal weight if the Manufacturer's Stamp is unidentifiable.
- O. Wall Cribbing:** Use recycled (used) steel "W" beam guardrail, furnished by the Department, and will be made available to the Contractor at the Department's Bailey Bridge Lot in Frankfort.
- P. Backfill Material for Drilled Sockets:** Use the following for backfill material for Drilled sockets: concrete; free flowing sand; pea gravel, crushed limestone, or crushed sandstone. Use backfill material with one hundred percent (100%) passing a one-half (1/2) inch sieve. Do not use auger tailings. Engineer will use visual inspection and/or material testing, as applicable to determine acceptability.
- Q. Fill Material for Cribbing:** Use one of the following backfill materials: Kentucky Aggregate Gradation No. 2's or larger. Backfill material shall meet requirements of Section 805; however, excavated material shall not be used as backfill for cribbing.

The Engineer will use visual inspection and/or material testing, as applicable to determine acceptability.

R. Geotextile Fabric: Furnish Geotextile Fabric Type IV as per Section 843.

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 saw cutting and removing pavement; clearing and grubbing trees in excess of 1 foot in diameter (not covered under bid item for ditching and shouldering); staking; removing existing guardrail systems; incidental excavation and backfilling; common and solid rock excavation; embankment in place; removal of obstructions, or any other items; foundation preparation; removing concrete masonry; restoration of pavements, slopes, and all disturbed areas; final dressing and cleanup; and disposal of materials. Limit clearing and grubbing to the absolute minimum required to construct drainage features. Perform all site preparation only as approved or directed by the Engineer. The Department will not make direct payment for site preparation.

C. Disposal of Waste. Dispose of all cutting, debris and other waste off the right-of-way at approved sites obtained by the Contractor at no additional cost to the Department. The contractor will be responsible for obtaining any necessary permits for this work. Temporary openings in the right of way fence for direct access to waste sites off the right of way or for access to other public roads will not be allowed. No separate payment will be made for the disposal of waste and debris from the project or obtaining the necessary permits, but will be incidental to the other items of the work.

D. Ditching and Shouldering: Perform ditching and shouldering according to Section 209 and the applicable Standard Drawings, Sepia Drawings, and Typical Section provided. Final front and back slopes less than a 3:1 will be determined by the Engineer.

Immediately prior to completion, clean all existing and new culvert and entrance pipes, and grade ditches to drain. Provide positive drainage of pavement, shoulders, slopes, and ditches at all times during and upon completion of construction. Use Channel Lining Class II, as directed by the Engineer, for erosion control.

E. Ditching: Perform ditching in accordance with Section 209. The bid item ditching is intended for ditches extending perpendicular to the roadway such as culvert and small streams and the approximate quantities are shown on the drainage summary. Use Channel Lining Class II, as directed by the Engineer, for erosion control.

F. Erosion Control: See Special Note for Erosion Control Plan.

G. Guardrail: Except as specified herein, construct guardrail system according to Section 719 and the Standard Drawings. Locations listed on the summary and/or shown on the drawings are approximate only. The Engineer will determine the exact termini for individual guardrail installations at the time of construction. Unless directed otherwise by the Engineer, provide a minimum two (2) foot shoulder width. Construct radii at entrances and road intersections as directed by the Engineer.

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.

When removing existing guardrail and installing new guardrail, do not leave the blunt end exposed where it 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.

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

H. Removing Headwalls, Pipe and Excavation: Remove existing headwall and/or culvert and entrance pipe at the approximate location noted on the summary. The Engineer will determine that actual location at the time of construction. Saw cut the existing asphalt pavement and base to a neat edge prior to excavation and removal of the existing pipe. Obtain the Engineer's approval of trench width prior to cutting pavement. Excavate trench and remove pipe as directed or approved by the Engineer without disturbing existing underground utilities. Waste excavated materials and removed pipe at approved sites off the right of way obtained by the Contractor at no additional cost to the Department.

- I. Pipe, Headwall, Drainage Box:** Construct culvert pipe, headwall, or drainage box at the location designated by the Engineer. 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.
- J. Pipe:** Construct culvert pipe at the location designated by the Engineer. 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 tapered sleeves as required. Pipe bands and tapered sleeves will be considered incidental to the bid item for the respective size culvert and entrance pipe. Prior to backfilling pipe, obtain the Engineer's approval of the pipe installation. Provide Positive drainage upon completion of pipe installation. Use Channel Lining Class II, as directed by the Engineer, at ends of pipe for erosion control.
- K. Pipe Backfill:** Backfill the pipe with flowable fill as per Section 701. Backfill pipe to within 6" of finished grade. Construct two 3" lifts of Class 2 Asphalt Base 1.0 D PG64-22 prior to opening to traffic. Allow the asphalt base to be exposed to traffic for a minimum of 7 days to allow for settlement. Level and wedge any settlement at the direction of the Engineer. Place 1" of Class 2 Asphalt Surface 0.38D PG64-22 over entire width of roadway for a length of 50' centered over pipe location. Tie new asphalt surface to existing pavement by use of edge key at each end. Edge key will be paid as a separate bid item by the linear foot.
- L. Embankments:** Backfill pipe/culvert extensions and construct shoulder embankments as directed by the Engineer. Provide positive drainage of slopes and median at all times during and upon completion of construction. Backfill material for pipe extensions will be considered incidental to the bid item for Culvert/Entrance Pipe. Backfill material for box culvert extensions will be considered incidental to the bid item for Foundation Preparation. Construct shoulder embankments as shown on the drawings or as directed by the Engineer. Provide positive drainage of slopes and median at all times during and upon completion of construction. The contractor shall properly bench into the existing slope according to the current Standard Drawings and apply proper compaction according to Section 206 of the Standard Specifications.
- M. Installation of Railroad Rails:** See attached summary for site locations and estimated quantities of materials required. Contrary to the attached tables and

drawings for drilled railroad rails, install only 1 row of railroad rails on 3 foot centers unless otherwise shown on the summary or mentioned in these notes. The depth to rock shown on the location summary is approximate. The embankment failures at these sites are caused by erosion.

NOTE TO ENGINEER AND CONTRACTOR: ABSOLUTELY NO CHANGE IN SCOPE OF WORK OR INCREASE IN QUANTITIES WILL BE ALLOWED ON THIS PROJECT WITHOUT PRIOR WRITTEN APPROVAL FROM THE DISTRICT PROJECT DELIVERY AND PRESERVATION BRANCH MANAGER.

THE DEPARTMENT SHALL NOT BE LIABLE FOR PAYMENTS DUE TO ADDITIONAL WORK THAT HAS NOT BEEN AUTHORIZED BY THE AFOREMENTIONED PERSONS.

Install used railroad rail piling in drilled sockets in rock or stable material under the landslides (see Figure 1) or the eroded areas (see Figure 2) as project location dictates or as directed by the Engineer.

Drill the socket, furnish, and install the railroad rails into holes at slide locations. If the Engineer determines from the sounding obtained at a drilled socket that railroad rail piling cannot be used in that socket, the depth of the socket shall be measured and 50% of the depth shall be paid as "Railroad Rail-Drilled". Drill sockets into solid rock, if possible. The Department will monitor each hole, which will serve as a sounding for the rail to be installed in it. Embed the railroad rail into solid rock no less than one-half the free end length of the rail (See Figure 1 and Figure 2). If solid rock cannot be obtained, the Engineer will determine the length of embedment required in other stable foundation. Allow adequate size of the drilled socket to allow free insertion of the railroad rail, but the maximum socket size is 1 foot in diameter.

After each hole is drilled, install railroad rail immediately with the flanges positioned perpendicular to the direction of the landslide or break (see Figure 3). Determine the height of rail that is needed to reestablish pavement and shoulder typical section. Cut off excess rail flush with the proposed ground line that is not needed. Use cutoffs elsewhere in the project if possible; unusable cutoffs remain the property of the Contractor.

After railroad rail is installed, immediately backfill the drilled hole with the approved materials. Shovel the backfill material into the hole in small amounts. Avoid bridging between the rail and the sides of the hole. Do not use Auger tailings as backfill material.

When double or triple rows are required, stagger the rows to obtain the required spacing. Keep the spacing between the rows of rails as close as is practical; do not space between the rows of more than 2 feet, if possible. See Figure 3 (Case II and Case III) for the diagrams showing two (2) or three (3) rows of rails. Select the spacing as per Table 1 for all 130 pound per yard rail or greater. The Department shall approve the selection prior to work being performed.

Crib any exposed portion of railroad rail before placing backfill.

- N. Excavation and Backfill for Embankment Repair:** Excavate each embankment repair area to provide a platform for drilling the used railroad rails, if necessary. Excavate for roadway ditches as necessary for slope, shoulder and pavement drainage. Place geotextile fabric, then construct embankment behind railroad rails, cribbing and on slope, as per Section 206. Construct embankment up to the approximate existing pavement elevation.

Reconstruct the shoulder area with DGA up to the approximate existing elevation and width of the surrounding typical section or to a minimum width of 2 Feet at each slide location. Do not pond water on the shoulder area or at the shoulder edge. Reconstruct the shoulder before installing guardrail.

DO NOT USE EXCAVATED MATERIAL FROM THE SITE AS FILL MATERIAL. Excess excavation may be wasted at sites on the right-of-way, ONLY if approved by the Engineer. Material may NOT be wasted in flood prone areas or in streams. If the Engineer deems no suitable sites are available within the right-of-way, the Contractor will be required to waste removed material at approved sites off the right of way obtained by the Contractor at no additional cost to the Department.

- O. Installation of Wall Cribbing:** Install Cribbing as shown on Figure 1 or Figure 2 as slide location dictates or as directed by the Engineer. Extend wall cribbing 2 feet below the existing ground line. If bedded rock is encountered, install the cribbing to the bedded rock only. If necessary, the Engineer will direct changes to this procedure. Furnish all labor and equipment to deliver and install wall cribbing on the recycled (used) railroad rail piling. Wall cribbing shall be lapped, bolted, and attached solid to the drilled railroad rails.

- P. Final Dressing, Clean Up, Seeding and Protection, and Restoration:** After all work is completed, remove all waste and debris from the job site, clean all existing and new culvert pipe and clean ditches. Grade all disturbed areas to blend with the adjacent roadways features and to provide a suitable seed bed. Perform Class A Final

dressings on all disturbed areas. Seed and protect all disturbed earthen areas according to the Special Notes for Erosion Control Plan.

- Q. Property Damage:** Do not disturb or damage existing R-O-W markers unless directed by engineer. Be responsible for all damage to public and/or private property resulting from the work. Repair or replace damaged roadway features in like kind materials and design as directed by the Engineer at no additional cost to the Department. Repair or replace damaged private property in like kind materials and design to the satisfaction of the owner and the Engineer at no additional cost to the Department.
- R. Coordination with Utility Companies:** Utility locations are not shown on plans or in the proposal for this project and have not been located by the Department. Locate all underground, above ground and overhead utilities prior to beginning construction. Be responsible for contacting and maintaining liaison with all utility companies that have utilities located within the project limits. Do not disturb existing overhead or underground utilities. It is not anticipated that any utility facilities will need to be relocated and/or adjusted; however, in the event that it is discovered that the work does require that utilities be relocated and/or adjusted, the utility companies will work concurrently with the Contractor while relocating their facilities. NOTIFY THE ENGINEER AND THE UTILITY OWNER(S) IMMEDIATELY WHEN IT IS DISCOVERED OR ANTICIPATED THAT ANY UTILITY CONFLICT COULD DELAY THE CONTRACTOR'S OPERATIONS. Be responsible for repairing all utility damage that occurs as a result of guardrail operations at no additional cost to the Department. Working days will not be charged for those days on which work on the controlling item is delayed, 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; however no extension will be granted for any delay caused by the Contractor's failure to notify the Engineer and/or the utility company as specified above when a conflict is discovered or anticipated as specified. Comply with applicable sections of Chapter 107.
- S. Disposal of Waste:** Dispose of all removed concrete, pipe, pavement, debris, excess and unsuitable excavation, and all other waste 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).
- T. On-Site Inspection:** Before submitting a bid for the work, make a thorough inspection of the site and determine existing conditions so that the work can be

expeditiously performed after a contract is awarded. The Department will consider submission of a bid to be evidence of this inspection having been made. The Department will not honor any claims for money or time extension resulting from site conditions.

U. Right-of-Way Limits: At various locations it may be necessary to work beyond Right-of-Way limits. Unless there is a consent release from a property owner, limit work activities to the Right-of-Way and work and staging areas secured by the Contractor at no additional cost to the Department. The Department will secure consent and releases from property owners through the Engineer.

V. Caution: The information in this proposal and shown on the plans and the type of work listed herein are approximate only and are not to be taken 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 for money or time extension will be considered if the conditions encountered are not in accordance with the information shown.

W. 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 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 within the limits of, or adjacent to, the project. Conduct operations and cooperate with such other parties so that interference with such other work will be reduced to a minimum. The Department will not honor any claims for money or time extension created by the operations of 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.

IV. METHOD OF MEASUREMENT

A. Maintain and Control Traffic: See Traffic Control Plan

- B. Site Preparation:** The Department will NOT measure Site Preparation for payment, but will consider it incidental to the various items of work.
- C. Foundation Preparation:** The Department will NOT measure Foundation Preparation for pipe for payment, but will consider it incidental to Culvert/Entrance Pipe. The Department will measure Foundation Preparation for box culvert extensions as lump sum. This includes all extensions to a given box culvert, not as individual units per inlet or outlet.
- D. Erosion Control:** Erosion control items are not listed as bid items will not be measured for payment, but will be considered incidental to the “lump sum” price for the bid item “KPDES Permit & Temporary Erosion Control”. This shall include all Erosion Control Items required by the KPDES Permit and Temp Seeding and Protection.
- E. Guardrail:** See Section 719.04. For Guardrail Delineators, see Delineators for Guardrail Sepia Drawing.
- F. Remove Concrete Masonry:** See Section 203.04.02.
- G. Concrete:** The Department will measure according to Section 601.04.
- H. Steel Reinforcement:** The Department will measure according to Section 602.04.
- I. Ditching and Shouldering:** The Department will measure the quantity as the length of the work measured in linear feet along the centerline of the roadway. The Department will include in the quantity all work required on the road approaches within the limits of right-of-way. Contrary to Section 209.04, this quantity will include only one side of the roadway.
- J. Ditching:** The Department will measure according to Section 209.04.
- K. Pipe:** The Department will measure according to Section 701.04.
- L. Asphalt Seal Coat:** The Department will measure according to Section 405.04. The Department will not measure any surface preparation required prior to applying the asphalt seal coat, but shall be incidental to “Asphalt Material for Asphalt Seal Coat.”
- M. Permanent Pavement Striping:** The Department will measure according to section 713.04.

- N. Thermoplastic Pavement Striping:** The Department will measure according to section 714.04.
- O. Erosion Control Blanket.** Erosion Control Blanket is measured by square yard and is to be used in disturbed areas as directed by the Engineer.
- P. Railroad Rail-Drilled:** The Department will measure this item in linear feet finished in-place length: laps, cutoffs, excess and waste will not be measured for payment. If the Engineer determines from the sounding obtained at a drilled socket that railroad rail piling cannot be used in that socket, the depth of the socket shall be measured and 50% of the depth shall be paid as "Railroad Rail-Drilled".
- Q. Wall Cribbing:** The Department will measure this item in square feet finished in place area. Laps, cutoffs, excess and waste will not be measured for payment.
- R. Excavation and Backfill:** The Department will measure this item in cubic yards. The Department will measure the quantity in the field as per Section 204 (Roadway Excavation) or other accepted methods of measurement as directed by the Engineer. The following items will not be measured directly by the Department: Site Preparation, Clearing and Grubbing, Seeding and Protection, Final Dressing, Temporary Erosion Control, Temporary Pollution Control, Waste removal, and Disposal, but will be incidental to "Excavation and Backfill" as applicable to each project.
- S. Geotextile:** The Department will measure according to Section 214.04.
- T. DGA:** The Department will measure according to Section 302.04.
- U. Asphalt:** The Department will measure according to Section 403.04.
- V. Shoulder Rumble Strips - Sawed:** The Department will measure according to Section 403.04.07.

V. BASIS OF PAYMENT

- A. Maintain and Control Traffic:** See Traffic Control Plan.

- B. Culvert Pipe:** Payment at the Contract unit price per linear foot shall be full compensation for furnishing all labor, materials, equipment and incidentals for furnishing and installing new culvert pipe, and furnishing and placing flowable fill. Pipe bands and tapered sleeves will be considered incidental to the bid item for the respective size culvert pipe.
- C. Erosion Control:** See Special Note for Erosion Control.
- D. Guardrail:** See Section 719.05. For Guardrail Delineators, see Delineators for Guardrail Sepia Drawing.
- E. Asphalt Seal Coat:** The Department will make payment according to Section 405.05.
- F. Concrete:** The Department will make payment according to Section 601.05.
- G. Steel Reinforcement:** The Department will make payment according to Section 602.05.
- H. Pipe:** The Department will make payment according to Section 701.05.
- I. Ditching and Shouldering, and Ditching:** The Department will make payment for the completed and accepted quantities in linear feet. No additional compensation will be allowed for excavation of rock encountered in the back slope while executing the bid item "Ditching and Shouldering."
- J. Headwall:** Payment at the Contract unit price each shall be full compensation for furnishing all labor, materials, equipment and incidentals for furnishing and installing new culvert headwall.
- K. Permanent Pavement Striping:** The Department will make payment according to section 713.05.
- L. Thermoplastic Pavement Striping:** The Department will measure according to section 714.05.
- M. Railroad Rail-Drilled:** The Department will pay for the completed and accepted quantities under the bid item of "Railroad Rail-Drilled". The Department will consider payment full compensation for all work required in these notes and elsewhere in the Contract.

- N. Excavation and Backfill:** The Department will pay for the completed and accepted quantities under the bid item “Excavation and Backfill.” Payment will be based on quantity measured in the field. The Department will consider payment full compensation for all work required on the project. The following items are incidental to “Excavation and Backfill” and will not be measured directly by the Department. These items include Site Preparation, Clearing and Grubbing, Seeding and Protection, Final Dressing, Temporary Erosion Control, Temporary Pollution Control, Waste removal and Disposal.
- O. Wall Cribbing:** The Department will pay for the completed and accepted quantities under the bid item of “Cribbing” Payment will be based on the quantity installed in the field. The Department will not make separate payment for the hauling of the wall cribbing to the slide site. The Department will consider payment full compensation for all work required on the project.
- P. Geotextile:** The Department will make payment according to Section 214.05.
- Q. DGA:** The Department will make payment according to Section 302.05.
- R. Asphalt:** The Department will make payment according to Section 403.05.
- S. Shoulder Rumble Strips - Sawed:** The Department will make payment according to Section 403.05.