



STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION
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VIA OVERNIGHT DELIVERY

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March 10, 2016

Contract No. T201330009.01
Federal Aid Project No. ESTP-N061(01)
Industrial Track Greenway Phase III
New Castle County

Ladies and Gentlemen:

Enclosed is Addendum No. 4 for the referenced contract consisting of the following:

1. The Bid Proposal Cover, revised, to be substituted for the same page in the Proposal.
2. One (1) page, Table of Contents, page v, revised, to be substituted for the same page in the Proposal.
3. One (1) page, Special Provision 202508-Wetland Access Road Type II, page 44, revised, to be substituted for the same page in the Proposal.
4. Two (2) pages, Special Provision 601537-Hardwood IPE Plank Decking, pages 79 and 80, revised, to be substituted for the same pages in the Proposal.
5. One (1) page, Special Provision 745508-Bridge Mounted Conduit, page 137, revised, to be substituted for the same page in the Proposal.
6. Two (2) pages, Special Provision 908512-Temporary Grass Seeding Wet Ground (TGS-WG), pages 213 and 214, revised, to be substituted for the same pages in the proposal.
7. Twelve (12) pages, Special Provision 763502-Maintenance of Railroad Traffic (NS), pages 193A through 193L, have been added to the Proposal.
8. Five (5) pages, Bid Pages 1, 2, 7, 8 and 9, revised, to be substituted for the same pages in the proposal.

The following Item Number Quantities have been revised: 202000, 302007, 401800, 908004 and 908512.

The following Item Number has been added: 763502

9. Two (2) pages, Plan Sheets 5 and 41, revised, to be substituted for the same pages in the Proposal.
10. Expedite File, Addendum No. 4.

Please note the revision listed above and submit your bid based upon this information.

Sincerely,

signature on file

James H. Hoagland
Contract Services Administrator

:jhh
Enclosure

STATE OF DELAWARE



DEPARTMENT OF TRANSPORTATION

BID PROPOSAL

for

CONTRACT T201330009.01

FEDERAL AID PROJECT NO. ESTP-N061(01)

INDUSTRIAL TRACK GREENWAY PHASE III

NEW CASTLE COUNTY

ADVERTISEMENT DATE: February 8, 2016

**PROSPECTIVE BIDDERS ARE ADVISED THAT THERE WILL BE A PRE-BID MEETING
WEDNESDAY, FEBRUARY 24, 2016 AT 2:00 P.M. IN THE DelDOT ADMINISTRATION BUILDING,
800 BAY ROAD, DOVER, DELAWARE, 19903.**

COMPLETION TIME: 488 Calendar Days

SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION
DELAWARE DEPARTMENT OF TRANSPORTATION
AUGUST 2001

Bids will be received in the Bidder's Room at the Delaware Department of Transportation's Administration Building, 800 Bay Road, Dover, Delaware until 2:00 P.M. local time ~~March 15, 2016~~ **March 29, 2016**

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Continual maintenance of the access roads by the contractor during the construction of the bridges will be incidental to this item. No construction equipment utilized to construct the temporary access roads will be permitted to traverse outside the limits established by the stone diversionary dikes or silt fence.

Method of Measurement:

The item will be paid on a lump sum basis per location and type of wetland access as shown on the Plans. No separate measurement will be made.

Basis of Payment:

Wetland Access, Type I will be paid at the Lump Sum price bid per designated location which price shall be full compensation for furnishing all materials, labor, tools, equipment, and incidentals necessary to construct dredged canals for the purpose of accessing wetlands with construction equipment to construct Bridge foundations, piles, piers, and to erect structural beams. Payment includes dredging, disposal of dredge spoils; construction of riprap dike; furnishing and installing fine aggregate backfill, sheet pile bulkhead installation and removal, slope stabilization mats, "oil boom" placement and maintenance for containing potential fuel spills, turbidity curtains, maintenance of the canal, restoration, and all incidentals necessary to complete the access operations. The cost of floatation devices to support cranes or other conventional bridge construction equipment is also to be included in this item. The cost of installing and maintaining access roads to bulkheads at the proposed canals including, geotextile fabric, R-4 riprap, Del. Number 1 Stone, Del. Number 57 stone, clearing of necessary trees, wooden mats as necessary, and the proper removal of all materials and restoration of the wetland site to original conditions at the conclusion of the work.

Wetland Access, Type II will be paid at the lump sum price bid per designated location which price shall be full compensation for furnishing all materials, labor, tools, equipment, and incidentals necessary to construct and maintain temporary roads. Payment includes furnishing, installation and maintenance of stone diversionary dikes including polyethylene sheeting, geotextile fabric, R-4 rip-rap, Del. Number 1 Stone, Del. Number 57 Stone, clearing of necessary trees, wooden mats as necessary, and the proper removal of all materials and restoration of the wetland site to original conditions at the conclusion of the work.

Silt fence will be paid for under Item 905001. Super silt fence will be paid for under Item 905500.

~~The Contractor is required to submit, as part of the bid proposal, his estimated breakdown of all quantities involved, and the dollar value assigned to these respective quantities, for each lump sum wetland access, Type I and Type II, bid per location. Failure of the contractor to include any necessary quantities or work item in his breakdown will not relieve the contractor of his responsibility to perform all work required by these specifications. No additional compensation will be considered as a result of the contractor's failure to include any necessary items in his breakdown or his failure to accurately estimate the quantities required to perform the work required by these specifications.~~

The Contractor may submit to the Engineer after the contract has been awarded a Value Engineering Proposal(s) (VEP) for modifying the wetland access for construction of structures in designated wetland areas as per section 104.12 of the Standard Specifications. All plan and specifications changes or other requirements of the contract for the purpose of reducing the cost of construction will require written approval by the Corps of Engineers. No consideration will be given for delays or additional compensation as a result of processing the VEP to the Corps of Engineers or for the rejection of the VEP. The Contractor is required to prepare the bid proposal as per the wetland access, Type I and Type II described by this specifications.

3/9/16 11/24/15

601537 - HARDWOOD IPE PLANK DECKING

Description:

This item consists of furnishing and installing hardwood ipe deck planking as shown and described on the Plans, as directed by the Engineer, and as required by these Special Provisions.

Materials:

1. Hardwood Ipe Plank Decking

All decking shall be full thickness planks unless approved otherwise. Wood decking shall be naturally durable hardwood Ipe (Tabebuia Spp Lapacho Group). All planks shall be partially air dried to a moisture content of 20% or higher, and shall be supplied S4S (surfaced four sides), E4E (eased four edges), with the edges eased to a radius of 1/8". Measured at 25% moisture content, the width and thickness shall not vary from specified dimensions by more than $\pm 0.125"$ and $\pm 0.0625"$, respectively. All planks shall be supplied with the end sealed with "Anchorseal" Mobil CER-M or an equal aqueous wax log sealer. All planks shall be graded as FEQ (First Export Quality -) grading rules.

All planks shall be naturally fire resistant without the use of any fire resistant preservatives to meet NFPA Class A and UBC Class I. Planks shall be supplied that meet or exceed the Static Coefficient of Friction for both Neolite and leather shoes in accordance with ASTM Test Method C1028-89.

All planks shall meet or exceed the following mechanical properties (based on the 2" standard) as defined by the U.S. Forest Products Laboratory publications and testing data:

Bending Strength	22,475 psi
Modulus of Elasticity	3,145,000 psi
Max. Crush Strength	13,140 psi
Average air-dry density	56.7 to 59.3 pcf.
Basic specific gravity	0.85 - 0.97.
Janka side hardness	3,595 lbs at 12% moisture content

2. Hardware

All hardware used to attach the hardwood ipe plank decking shall be 305 and 316 grade stainless steel screws.

Construction Methods:

~~To install, planks shall be placed tight together with no gaps.~~ **To install, planks shall be placed together with gaps as indicated in the Contract Documents.** Every plank shall be attached with at least one fastener at each end. Self-tapping screws or hex-head bolts, with a steel plank hold down, are to be used at the ends of planks. Self-tapping screws or carriage bolts are to be used as interior connection fasteners when required. Power actuated fasteners shall not be used. Planks shall be drilled prior to installation of bolts and/or screws. At least one fastener shall be installed at each end of each plank. In addition, the contractor shall install, at every plank, at least two (2) fasteners located at a minimum of two interior stringer locations, approximately at the third points of the bridge width. Attachments at the ends of the planks may be modified as required if obstructions are present.

Method of Measurement:

The quantity of Hardwood Ipe Plank Decking will be measured by the square foot. The quantity will be determined from the actual length and width of the finished deck completed and accepted.

Contract No. T201330009.01

Basis of Payment:

The quantity of Hardwood Ipe Plank Decking will be paid for at the Contract unit price bid per square foot for item 601537 – Hardwood Ipe Plank Decking. Price and payment will constitute full compensation for furnishing and placing all materials, including hardware; for fabricating glue-laminated timber decks and members; and for all labor, equipment, tools, and incidentals required to complete the work.

3/9/16 ~~08/11/2015~~

745508 - BRIDGE-MOUNTED CONDUIT

Description:

This work shall consist of furnishing and installing 4" diameter PVC multi-duct conduit, 2" and 3" diameter PVC conduit on bridge structures.

Materials:

Structural Steel	-	A36 (hot-dipped galvanized)
Expansion Anchors	-	Stainless Steel
U-Bolts	-	Stainless Steel
4" PVC Multi-duct	-	See Traffic section of the Special Provisions
3" PVC Conduit	-	Schedule 80
2" PVC Conduit	-	Schedule 80

Construction Methods:

Expansion anchors shall be installed in strict conformance with the manufacturer's recommendations. Anchors shall not be installed within one foot of the edge of a deck joint. Any damage to the galvanized coating of the supports shall be repaired.

Expansion joints shall be installed in both conduits and at expansion joints in the bridge.

Measurement and Payment:

The length of bridge-mounted conduit to be paid for under this section shall not be measured. The actual length of conduit specified in the Plans or as directed by the Engineer, and constructed according to these specifications, shall be paid for on a lump sum basis, complete, in place, and accepted.

Basis of Payment:

The length of Bridge-Mounted Conduit, as determined above, shall be paid for at the Contract lump sum price bid for "Bridge-Mounted Conduit," which price and payment shall include all conduit, structural steel, U-bolts, expansion anchors, and all other materials, labor, equipment, tools and incidentals necessary to complete the work.

NOTE:

~~On a breakout sheet attached to the Bid Proposal, the Contractor shall list the price for each Bridge Mounted Conduit installation. The lump sum bid for this item shall be the sum of the prices for all Bridge Mounted Conduit installations.~~

~~The Department reserves the right to delete from the Contract, construction of one or more of the individual Bridge Mounted Conduit installation(s), and the lump sum to be paid will be reduced in accordance with the amount listed on the breakout sheet for the particular Bridge Mounted Conduit installation(s) deleted. There will be no extra compensation to the Contractor if such a deletion is made.~~

3/9/16 8/12/15

908512 - TEMPORARY GRASS SEEDING - WET GROUND (TGS-WG)

Description:

This work consists of furnishing and placing seed. ~~Unless specified on the plan, no mulch will be placed.~~ Mulch shall be placed within non-wetland areas only. No mulch shall be placed within wetland areas (as delineated on the Plans).

Materials:

Temporary Grass Seeding - Wet Ground (TGS-WG).

Species Name Common / (Latin)	Max. % Weed Seeds	Min. % Purity	Min. % Germination	Seeding Rate lb/Ac
Annual Barnyard Grass/Duck Millet (<i>Echinochloa</i> spp.) <i>Echinochloa muricata</i> or <i>Echinochloa walteri</i> are preferred	1.00	90	90	40
Total Seed Quantity (lb/ac)				40

All seed shall be fresh, clean, from new crop seed, and delivered to the site in original unopened tagged packages in accordance with the Delaware Code and respective State laws.

Small Grain Straw: Straw for mulching will be from oats, wheat, rye, or other approved grain crops that are free from noxious weeds, mold, or other objectionable material. Straw mulch will be in an air-dry condition and will be suitable for placing with an approved mechanical blower.

Construction Methods:

Application of the Temporary Grass Seeding - Wet Ground Mix shall only occur between the following dates:

May 1 to October 1.

Seed may be broadcast or hydroseeded. No lime or fertilizer will be added. Unless specified on the plans, no mulch will be applied.

If specified on the plans, small grain straw will be uniformly and evenly applied immediately after seed has been placed. An approved mechanical blower will be used to apply the straw. Straw mulch applied by blowers will provide a loose depth of not less than 1/2 nor more than 2". Ninety-five percent of the blown and shredded straw mulch will be 6" or more in length when in place.

Straw mulch will be applied uniformly and evenly across the seeded area at the rate of 4,000 lb/ac. No crimping or tracking is required of the seed or straw.

Acceptance of 908512 - Temporary Grass Seeding - Wet Ground (TGS-WG) will be made at time of placement, provided the seed and straw placed as specified herein and as directed on the Plans.

No Maintenance Bond is required for this work.

Contract No. T201330009.01

Method of Measurement:

The Engineer will measure the quantity of acceptably placed permanent seed. The quantity of seeding shall be measured in square yards of surface area.

Basis of Payment:

The quantity and type of seeding shall be paid for at the Contract Unit Price per square yard. Price and payment will constitute full compensation for preparing the ground; for furnishing and placing all materials including seed and mulch; and for all labor, equipment, tools, maintenance bond and incidentals required to complete the work.

Payment will be made at the time seed is acceptably placed.

3/9/16 ~~9/15/2015~~

763502 - MAINTENANCE OF RAILROAD TRAFFIC (NS)

Norfolk Southern Railway Company

I. AUTHORITY OF RAILROAD ENGINEER AND STATE ENGINEER:

- a. The authorized representative of the Railroad Company, hereinafter referred to as “Railroad Engineer”, shall have final authority in all matters affecting the safe maintenance of Railroad traffic of their Company including the adequacy of the foundations and structures supporting the Railroad tracks.
- b. The authorized representative of the State, hereinafter referred to as the “Engineer”, shall have authority over all other matters as prescribed herein and in the Project Specifications.

II. DEFINITIONS’:

- a. For the purpose of this Contract, the following terms, names, titles, and/or abbreviations refer to the following:
 - i. The terms Railroad and NS shall mean the Norfolk Southern Railway Company.
 - ii. The terms DeIDOT, State, Department, Agency, Owner of Contract shall mean the Delaware Department of Transportation.

III. NOTICE OF STARTING WORK:

- a. The Contractor shall not commence any work on Railroad rights-of-way until they have complied with the following conditions:
 - i. Given the Railroad written notice, with copy to the Engineer who has been designated to be in charge of the work, at least ten days in advance of the date they propose to begin work on the Railroad’s rights-of-way.

Crossing Surfaces

Warning Devices

Chief Engineer - D&C
Norfolk Southern Corp.
175 Spring Street, SW
Building Box 142
Atlanta, Georgia 0303

Chief Engineer - S&C
Norfolk Southern Corp.
99 Spring Street, SW
Building Box 123
Atlanta, Georgia 30303

Bridges & Structures
Chief Engineer
Bridges and Structures
Norfolk Southern Corp.
99 Spring Street, SW
Atlanta, Georgia 30303

- ii. Obtained written authorization from the Railroad to begin work on Railroad rights-of-way, such authorization to include an outline of specific conditions with which he/she must comply.
 - iii. Obtained written approval from the Railroad of Railroad Protective Insurance Liability coverage as required by paragraph 14 herein.
 - iv. Furnished a schedule for all work within the Railroad rights-of-way as required by paragraph VIII.b.i.
- b. The Railroad's written authorization to proceed with the work shall include the names, addresses, and telephone numbers of the Railroad's representatives who are to be notified as hereinafter required. Where more than one representative is designated, the area of responsibility of each representative shall be specified.

IV. INTERFERENCE WITH RAILROAD OPERATIONS:

- a. The Contractor shall so arrange and conduct his/her work that there will be no interference with Railroad operations, including train, signal, telephone and telegraphic services, or damage to the property of the Railroad Company or to poles, wires, and other facilities of tenants on the rights-of-way of the Railroad Company. Whenever work is liable to affect the operations or safety of trains, the method of doing such work shall first be submitted to the Railroad Engineer for approval, but such approval shall not relieve the Contractor from liability. Any work to be performed by the Contractor which requires flagging service or inspection service shall be deferred by the Contractor until the flagging service or inspection service required by the Railroad is available at the job site.
- b. Whenever work within Railroad rights-of-way is of such a nature that impediment to Railroad operations such as use of runaround tracks or necessity for reduced speed is unavoidable, the Contractor shall schedule and conduct his/her operations so that such impediment is reduced to the absolute minimum.
- c. Should conditions arising from, or in connection with the work, require that immediate and unusual provisions be made to protect operations and property of the Railroad, the Contractor shall make such provisions. If in the judgment of the Railroad Engineer, or in their absence, the Engineer, such provision(s) are insufficient, either may require or provide such provisions as they deem necessary. In any event, such unusual provisions shall be at the Contractor's expense and without cost to the Railroad or the State.

V. TRACK CLEARANCES:

The minimum track clearances to be maintained by the Contractor during construction are shown on the Project Plans. The track envelope is normally defined as any contractor working within twenty-five (25) feet vertically (as measured from the top of the rail) or horizontally (as measured from the centerline of the track out from each side) of the railroad tracks.

In the event of multiple tracks, the horizontal measurement shall be taken from twenty-five (25) feet outside of the centerline of the outside tracks. The track envelope shall include all areas between the twenty-five (25) foot measurements. Deviations from the above definition shall be shown as a detail on the Contract Plans or as a Project Note found within the Specification Book or within the Contract Plans.

Before undertaking any work within Railroad right-of-way, or before placing any obstruction over any track, the Contractor shall:

- i. Notify the Railroad's representative at least 72 hours in advance of the work.
- ii. Receive assurance from the Railroad's representative that arrangements have been made for flagging service as may be necessary.
- iii. Receive permission from the Railroad's representative to proceed with the work.
- iv. Ascertain that the Engineer has received copies of notice to the Railroad and of the Railroad's response thereto.

VI. CONSTRUCTION PROCEDURES:

a. General:

Construction work and operations by the Contractor on Railroad property shall be:

- i. Subject to the inspection and approval of the Railroad.
- ii. In accord with the Railroad's written outline of specific conditions.
- iii. In accord with the Railroad's general rules, regulations and requirements including those relating to safety, fall protection and personal protective equipment.
- iv. In accord with these Special Provisions.

b. Excavation:

- i. The subgrade of an operated track shall be maintained with edge of berm at least 10'-0" (3.05 m) from centerline of track and not more than 24" (600 mm) below top of rail. Contractor will not be required to make existing section meet this specification if substandard, in which case existing section will be maintained.

c. Excavation for Structures:

- i. The Contractor will be required to take special precaution and care in connection with excavating and shoring pits, and in driving piles or sheeting for footings adjacent to tracks to provide adequate lateral support for the tracks and the loads which they carry, without disturbance of track alignment and surface, and to avoid obstructing track clearances with working equipment, tools or other material. The procedure for doing such work, including need of and plans for shoring, shall first be approved by the Engineer and the Railroad Engineer, but such approval shall not relieve the Contractor from liability.

d. Blasting:

The Contractor shall obtain advance approval of the Railroad Engineer and the Engineer for use of explosives on or adjacent to Railroad property. The request for permission to use explosives shall include a detailed blasting plan. If permission for use of explosives is granted, the Contractor will be required to comply with the following:

- i. Blasting shall be done with light charges under the direct supervision of a responsible officer or employee of the Contractor and a licensed blaster.
- ii. Electric detonating fuses shall not be used because of the possibility of premature explosions resulting from operation of two-way radios.

- iii. No blasting shall be done without the presence of an authorized representative of the Railroad. At least 72 hours advance notice to the person designated in the Railroad's notice of authorization to proceed (see Section II. Notice of Starting Work) will be required to arrange for the presence of an authorized Railroad representative and such flagging as the Railroad may require.
- iv. Have at the job site adequate equipment, labor and materials and allow sufficient time to clean up debris resulting from the blasting without delay to trains, as well as correcting at his/her expense any track misalignment or other damage to Railroad property resulting from the blasting as directed by the Railway's authorized representative. If his/her actions result in delay of trains, the Contractor shall bear the entire cost thereof.
- e. The Railroad representative will:
 - i. Determine approximate location of trains and advise the Contractor the appropriate amount of time available for the blasting operation and clean-up.
 - ii. Have the authority to order discontinuance of blasting if, in his/her opinion, blasting is too hazardous or is not in accord with these Special Provisions.
- f. Maintenance of Railroad Facilities:
 - i. The Contractor will be required to maintain all ditches and drainage structures free of silt or other obstructions which may result from his/her operations and provide and maintain any erosion control measures as required. The Contractor will promptly repair eroded areas within Railroad rights-of-way and repair any other damage to the property of the Railroad or its tenants.
 - ii. All such maintenance and repair of damages due to the Contractor's operations shall be done at the Contractor's expense.
- g. Storage of Materials and Equipment:
 - i. Materials and equipment shall not be stored within 25' (7.6 m) of the centerline of Railroad's track or where they will interfere with Railroad operations, nor on the rights-of-way of the Railroad Company without first having obtained permission from the Railroad Engineer, and such permission will be with the understanding that the Railroad Company will not be liable for damage to such material and equipment from any cause and that the Railroad Engineer may move or require the Contractor to move, at the Contractor's expense, such material and equipment.
 - ii. All grading or construction machinery that is left parked near the track unattended by a watchman shall be effectively immobilized so that it cannot be moved by unauthorized persons. The Contractor shall protect, defend, indemnify and save Railroad, and any associated, controlled or affiliated corporation, harmless from and against all losses, costs, expenses, claim or liability for loss or damage to property or the loss of life or personal injury, arising out of or incident to the Contractor's failure to immobilize grading or construction machinery.
- h. Cleanup:
 - i. Upon completion of the work, the Contractor shall remove from within the limits of the Railroad rights-of-way, all machinery, equipment, surplus materials, falsework, rubbish or temporary buildings of the Contractor, and leave said rights-of-way in a neat condition satisfactory to the Chief Engineer of the Railroad or his/her authorized representative.

VII. DAMAGES:

- a. The Contractor shall assume all liability for any and all damages to his/her work, employees, servants, equipment and materials caused by Railroad traffic.
- b. Any cost incurred by the Railroad for repairing damages to its property or to property of its tenants, caused by or resulting from the operations of the Contractor, shall be paid directly to the Railroad by the Contractor.

VIII. FLAGGING SERVICES:

a. When Required:

- i. Under the terms of the agreement between the State and the Railroad, the Railroad has sole authority to determine the need for flagging required to protect its operations. In general, the requirements of such services will be whenever the Contractor's personnel or equipment are or are likely to be, working on the Railroad's right-of-way, or across, over, adjacent to, or under a track, or when such work has disturbed or is likely to disturb a Railroad structure or the Railroad roadbed or surface and alignment of any track to such extent that the movement of trains must be controlled by flagging.
- ii. Normally, the Railroad will assign one flagman to a project; but in some cases, more than one may be necessary, such as yard limits where three (3) flagmen may be required. However, if the Contractor works within distances that violate instructions given by the Railroad's authorized representative or performs work that has not been scheduled with the Railroad's authorized representative, a flagman or flagmen may be required full time until the project has been completed.

b. Scheduling and Notification:

- i. Not later than the time that approval is initially requested to begin work on Railroad right-of-way, Contractor shall furnish to the Railroad and the State a schedule for all work required to complete the portion of the project within Railroad right-of-way and arrange for a job site meeting between the Contractor, the State, and the Railroad's authorized representative. This schedule may be submitted in the format of a bar graft chart. Flagman or flagmen may not be provided until the job site meeting has been conducted and the Contractor's work scheduled.
- ii. The Contractor will be required to give the Railroad representative at least 10 working days of advance written notice of intent to begin work within Railroad right-of-way in accordance with this special provision. Once begun, when such work is then suspended at any time, or for any reason, the Contractor will be required to give the Railroad representative at least 3 working days of advance notice before resuming work on Railroad right-of-way. Such notices shall include sufficient details of the proposed work to enable the Railroad representative to determine if flagging will be required. If such notice is in writing, the Contractor shall furnish the Engineer a copy; if notice is given verbally, it shall be confirmed in writing with copy to the Engineer. If flagging is required, no work shall be undertaken until the flagman, or flagmen is present at the job site. It may take up to 30 days to obtain flagging initially from the Railroad. When flagging begins, the flagman is usually assigned by the Railroad to work at the project site on a continual basis until no longer needed and cannot be called for on a spot basis. If flagging becomes unnecessary and is suspended, it may take up to 30 days to again obtain from the Railroad. Due to Railroad labor agreements, it is necessary to give 5 working days' notice before flagging service may be discontinued and responsibility for payment stopped.

iii. If, after the flagman is assigned to the project site, an emergency arises that requires the flagman's presence elsewhere, then the Contractor shall delay work on Railroad right-of-way until such time as the flagman is again available. Any additional costs resulting from such delay shall be borne by the Contractor and not the State or Railroad.

c. Payment:

i. The State will be responsible for paying the Railroad directly for any and all costs of flagging which may be required to accomplish the construction.

ii. The charge to the State by the Railroad will be the actual cost based on the rate of pay for the Railroad's employees who are available for flagging service at the time the service is required.

iii. Work by a flagman in excess of 8 hours per day or 40 hours per week, but not more than 12 hours a day will result in overtime pay at 1 and 1/2 times the appropriate rate. Work by a flagman in excess of 12 hours per day will result in overtime at 2 times the appropriate rate. If work is performed on a holiday, the flagging rate is 2 and 1/2 times the normal rate.

iv. Railroad work involved in preparing and handling bills will also be charged to the State. Charges to the State by the Railroad shall be in accordance with applicable provisions of Subchapter B, Part 140, Subpart I and Subchapter G, Part 646, Subpart B of the Federal-Aid Policy Guide issued by the Federal Highway Administration on December 9, 1991, including all current amendments. Flagging costs are subject to change.

d. Verification:

i. The Contractor and State will review and sign the Railroad flagman's time sheet (Form 11123), attesting that the flagman was present during the time recorded. Flagmen may be removed by the Railroad if form is not signed. If flagman is removed, the Contractor will not be allowed to re-enter the Railroad right-of-way until the issue is resolved. Any complaints concerning flagman or flagmen must be resolved in a timely manner. If need for flagman or flagmen is questioned, please contact Railroad's Engineer, Grade Separation Structures (404)529-1641. All verbal complaints will be confirmed in writing by the Contractor within 5 working days with a copy to the Engineer. Address all written correspondence to:

CROSSING SURFACES

Norfolk Southern Corp.
Office of Chief Engineer
Bridges & Structures
Attn: T. D. Wyatt
Engineer Grade Separation
99 Spring Street, SW
Atlanta, Georgia 30303

ii. The Railroad flagman assigned to the project will be responsible for notifying the Project Engineer upon arrival at the job site on the first day (or as soon thereafter as possible) that flagging services begin and on the last day that he/she performs such services for each separate period that services are provided. The Project Engineer will document such notification in the project records. When requested, the Project Engineer will also sign the flagman's diary showing daily time spent and activity at the project site.

IX. HAUL ACROSS RAILROAD:

- a. Where the Plans show or imply that materials of any nature must be hauled across a Railroad, unless the Plans clearly show that the State has included arrangements for such haul in its agreement with the Railroad, the Contractor will be required to make all necessary arrangements with the Railroad regarding means of transporting such materials across the Railroad. The Contractor will be required to bear all costs incidental to such crossings whether services are performed by his/her own forces or by Railroad personnel.
- b. No crossing may be established for use of the Contractor for transporting materials or equipment across the tracks of the Railroad Company unless specific authority for its installation, maintenance, necessary watching and flagging thereof and removal, until a private crossing agreement has been executed between the Contractor and Railroad.

X. WORK FOR THE BENEFIT OF THE CONTRACTOR:

- a. All temporary or permanent changes in wire lines or other facilities which are considered necessary to the project are shown on the Plans; included in the force account agreement between the State and the Railroad or will be covered by appropriate revisions to same which will be initiated and approved by the State and/or the Railroad.
- b. Should the Contractor desire any changes in addition to the above, then he/she shall make separate arrangements with the Railroad for same to be accomplished at the Contractor's expense.

XI. COOPERATION AND DELAYS:

- a. It shall be the Contractor's responsibility to arrange a schedule with the Railroad for accomplishing stage construction involving work by the Railroad or tenants of the Railroad. In arranging his/her schedule he/she shall ascertain, from the Railroad, the lead time required for assembling crews and materials and shall make due allowance therefore.
- b. No charge or claim of the Contractor against either the State or the Railroad will be allowed for hindrance or delay on account of railway traffic; any work done by the Railroad or other delay incident to or necessary for safe maintenance of railway traffic or for any delays due to compliance with these special provisions.

XII. TRAINMAN'S WALKWAYS:

- a. Along the outer side of each exterior track of multiple operated track, and on each side of single operated track, an unobstructed continuous space suitable for trainman's use in walking along trains, extending to a line not less than 10' (3.05 m) from centerline of track, shall be maintained. Any temporary impediments to walkways and track drainage encroachments or obstructions allowed during work hours while Railroad's protective service is provided shall be removed before the close of each work day. If there is any excavation near the walkway, a handrail, with 10' - 0" (3.05 m) minimum clearance from centerline of track, shall be placed.

XIII. GUIDELINES FOR PERSONNEL ON RAILROAD RIGHT-OF-WAY:

- a. All persons shall wear hard hats. Appropriate eye and hearing protection must be used. Working in shorts is prohibited. Shirts must cover shoulders, back and abdomen. Working in tennis or jogging shoes, sandals, boots with high heels, cowboy and other slip-on type boots is prohibited. Hard-sole, lace-up footwear, zippered boots or boots cinched up with straps which fit snugly about the ankle are adequate. Safety boots are strongly recommended.

- b. No one is allowed within 25' (7.6 m) of the centerline of track without specific authorization from the flagman.
- c. All persons working near track while train is passing are to lookout for dragging bands, chains and protruding or shifted cargo.
- d. No one is allowed to cross tracks without specific authorization from the flagman.
- e. All welders and cutting torches working within 25' (7.6 m) of track must stop when train is passing.
- f. No steel tape or chain will be allowed to cross or touch rails without permission.

XIV GUIDELINES EQUIPMENT ON RAILROAD RIGHT-OF-WAY:

- a. No crane or boom equipment will be allowed to set up to work or park within boom distance plus 15' (4.6 m) of centerline of track without specific permission from Railroad official and flagman.
- b. No crane or boom equipment will be allowed to foul track or lift a load over the track without flag protection and track time.
- c. All employees will stay with their machines when crane or boom equipment is pointed toward track.
- d. All cranes and boom equipment under load will stop work while train is passing (including pile driving).
- e. Swinging loads must be secured to prevent movement while train is passing.
- f. No loads will be suspended above a moving train.
- g. No equipment will be allowed within 25' (7.6 m) of centerline of track without specific authorization of the flagman.
- h. Trucks, tractors or any equipment will not touch ballast line without specific permission from railroad official and flagman.
- i. No equipment or load movement within 25' (7.6 m) or above a standing train or railroad equipment without specific authorization of the flagman.
- j. All operating equipment within 25' (7.6 m) of track must halt operations when a train is passing. All other operating equipment may be halted by the flagman if the flagman views the operation to be dangerous to the passing train.
- k. All equipment, loads and cables are prohibited from touching rails.
- l. While clearing and grubbing, no vegetation will be removed from Railroad embankment with heavy equipment without specific permission from the Railroad Engineer and flagman.
- m. No equipment or materials will be parked or stored on Railroad's property unless specific authorization is granted from the Railroad Engineer.
- n. All unattended equipment that is left parked on Railroad property shall be effectively immobilized so that it cannot be moved by unauthorized persons.

- o. All cranes and boom equipment will be turned away from track after each work day or whenever unattended by an operator.

XV. INSURANCE:

- a. In addition to any other forms of insurance or bonds required under the terms of the contract and specifications, the Prime Contractor will be required to carry insurance of the following kinds and amounts:

- i. Commercial General Liability Insurance having a combined single limit of not less than \$2,000,000 per occurrence for all loss, damage, cost and expense, including attorneys' fees, arising out of bodily injury liability and property damage liability during the policy period. Said policy shall include explosion, collapse, and underground hazard (XCU) coverage, shall be endorsed to name Railroad specified in item XV.a.iii.3., below, both as the certificate holder and as an additional insured, and shall include a severability of interests provision.

- ii. Railroad Protective Liability Insurance having a combined single limit of not less than \$2,000,000 each occurrence and \$6,000,000 in the aggregate applying separately to each annual period. If the project involves track over which passenger trains operate, the insurance limits required are not less than a combined single limit of \$5,000,000 each occurrence and \$10,000,000 in the aggregate applying separately to each annual period. Said policy shall provide coverage for all loss, damage or expense arising from bodily injury and property damage liability, and physical damage to property attributed to acts or omissions at the job site.

- iii. The standards for the Railroad Protective Liability Insurance are as follows:

- 1. The insurer must be rated A- or better by A.M. Best Railroad, Inc.

Note: Railroad does not accept from insurers Chartts (AIG or Affiliated Railroad Including Lexington Insurance Railroad), Hudson Group or ACE.

- 2. The policy must be written using one of the following combinations of Insurance Services Office ("ISO") Railroad Protective Liability Insurance Form Numbers:

- A. CG 00 35 0196 and CG 28 3110 93; or
- B. (2) CG 00 35 07 98 and CG 28 3107 98; or
- C. (3) CG 00 35 10 01; or
- D. (4) CG 00 35 12 04; or
- E. (5) CG 00 35 12 07.

- 3. The named insured shall read:

Norfolk Southern Railway Company
Three Commercial Place
Norfolk, Virginia 23510-2191
Attn: S. W. Dickerson Risk Management

Note: Railroad does not share coverage on Railroad Protective Liability Insurance with any other entity on this policy.

- 4. The description of operations must appear on the Declarations, must match the project description in this agreement, and must include the appropriate Sponsor project and contract identification numbers.

5. The job location must appear on the Declarations and must include the city, state, and appropriate highway name/number.

Note: Do not include any references to milepost, valuation station, or mile marker on the Insurance policy.

6. The name and address of the prime Contractor must appear on the Declarations.

7. The name and address of the Sponsor must be identified on the Declarations as the "Involved Governmental Authority or Other Contracting Party."

8. Other endorsements/forms that will be accepted are:

- A. Broad Form Nuclear Exclusion - Form IL 00 21
- B. 30-day Advance Notice of Non-renewal or cancellation
- C. Required State Cancellation Endorsement
- D. Quick Reference or Index Form CL/IL 240

9. Endorsements/forms that are NOT acceptable are:

- A. Any Pollution Exclusion Endorsement except CG 28 31
- B. Any Punitive or Exemplary Damages Exclusion
- C. Known injury or Damage Exclusion form CG 00 59
- D. Any Common Policy Conditions form
- E. Any other endorsement/form not specifically authorized in item XV.a.iii.8. above.

- b. If any part of the work is sublet, similar insurance, and evidence thereof as specified in XV.a. above, shall be provided by or on behalf of the subcontractor to cover its operations on Railroad's right of way.

- c. Prior to entry on Railroad right-of-way, the original Railroad Protective Liability Insurance Policy shall be submitted by the Sponsor's Prime Contractor to the Sponsor at the address below for its review and then transmitted to the Railroad. In addition, certificates of insurance evidencing the Sponsor's Prime Contractor's and any subcontractors' Commercial General Liability Insurance shall be issued to the Railroad and the Sponsor at the addresses below, and forwarded to the Sponsor for its review and transmittal to the Railroad. The certificates of insurance shall state that the insurance coverage will not be suspended, voided, canceled, or reduced in coverage or limits without (30) days advance written notice to Railroad and the Sponsor. No work will be permitted by Railroad on its right-of-way until it has reviewed and approved the evidence of insurance required herein.

For the Sponsor:

Construction Engineer for the DelDOT District Administrating the Project

For the Railroad:

Risk Management
Norfolk Southern Railway Company
Three Commercial Place
Norfolk, Virginia 23510-2191

- d. The insurance required herein shall in no way serve to limit the liability of Sponsor or its Contractors under the terms of this agreement.

e. Insurance Submission Procedures

- i. Railroad will only accept initial insurance submissions via US Mail or Overnight carrier to the address noted in iii above. Railroad will NOT accept initial insurance submissions via email or faxes.
- ii. Railroad requires the following two (2) forms of insurance in the initial insurance submission to be submitted under a cover letter providing details of the project and contact information:
 1. The full original or certified true countersigned copy of the railroad protective liability insurance policy in its entirety inclusive of all declarations, schedule of forms and endorsements along with the policy forms and endorsements .
 2. The Contractor's commercial general, automobile, and workers' compensation liability insurance certificate of liability insurance evidencing a combined single limit of a minimum of \$2M per occurrence of general and \$1M per occurrence of automobile liability insurance naming Norfolk Southern Railway Company, Three Commercial Place, Norfolk, VA 23510 as the certificate holder and as an additional insured on both the general and automobile liability insurance policy.
 3. It should be noted that the Railroad does not accept notation of Railroad Protective insurance on a certificate of liability insurance form or Binders as Railroad must have the full original countersigned policy. Further, please note that mere receipt of the policy is not the only issue but review for compliance. Due to the number of projects system-wide, it typically takes a minimum of 30-45 days for the Railroad to review.

XVI. FAILURE TO COMPLY:

- a. In the event the Contractor violates or fails to comply with any of the requirements of these Special Provisions:
 - i. The Railroad Engineer may require that the Contractor vacate Railroad property.
 - ii. The Engineer may withhold all monies due the Contractor on monthly statements.
- b. Any such orders shall remain in effect until the Contractor has remedied the situation to the satisfaction of the Railroad Engineer and the Engineer.

XVII. PAYMENT FOR COST OF COMPLIANCE:

- a. The payment for the item shall be made for at the Contract unit price per Lump Sum bid for "Maintenance of Railroad Traffic (NS)", which price and payment shall constitute full compensation for maintaining Railroad traffic during the life of the project; submission of drawings and procedures to the Railroad; for all incidental costs imposed by the Railroad on the Contractor in accordance with the terms and conditions set in these Specifications; meeting all insurance requirements as described herein; for any cost incidental to or arising from the need to meet any or all requirements outlined, herein; for all materials, labor, tools, equipment, and incidentals necessary to complete the work.

- b. Payment for the Railroad Protective Liability Insurance requirements and all other required Insurance not normally held in force by the contractor shall be made under this Item. All other Insurances (such as, but not limited to, auto, etc.) required for this Contract shall be considered incidental to the Contract.

XVIII. PROJECT INFORMATION:

- a. The following information shall be shown on all correspondence with the Railroad:

- i. Date: _____
ii. NS File No.: _____
iii. NS Milepost: _____
iv. Sponsor's Project No.: _____

NOTE:

1. As stated above in this specification, the DeIDOT will pay the Railroad directly for protective services required for this project. Should deviation from the sequence of construction plan by the Contractor result in additional costs for protective services than the method and sequence of construction originally shown in the Plans, then that additional cost shall be deducted from monies due the Contractor unless prior permission was obtained from DeIDOT to revise the original method.
2. The Contractor's attention is drawn to Section VII.a.ii. that reads, in part:

"However, if the Contractor works within distances that violate instructions given by the Railroad's authorized representative or performs work that has not been scheduled with the Railroad's authorized representative, a flagman or flagmen may be required full time until the project has been completed."
3. If such "full time" flagging requirements are imposed by the Railroad because of the Contractor's negligence or willful disregard of Railroad requirements, the Contractor will be held responsible for extra cost involved. Time charges for flagging services provided, but not needed for legitimate pursuit of construction will be recorded and charges for such flagging time will be deducted from monies due the Contractor.

3/9/16

DELAWARE DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF ITEMS

PAGE: 1
 DATE:

CONTRACT ID: T201330009.01 PROJECT(S): ESTP-N061(01)

All figures must be typewritten.

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS

SECTION 0001 INDUSTRIAL TRACK GREENWAY PHASE III						

0010	201000 CLEARING AND GRUBBING	LUMP		LUMP		
0020	202000 EXCAVATION AND EMBANKMENT	4074.000 CY				
0030	202508 WETLAND ACCESS ROAD, TYPE II	LUMP		LUMP		
0040	207000 EXCAVATION AND BACKFILL FOR STRUCTURES	1500.000 CY				
0050	207500 COFFERDAMS	LUMP		LUMP		
0060	209001 BORROW, TYPE A	109.000 CY				
0070	209006 BORROW, TYPE F	1550.000 CY				
0080	209503 BRIDGING LAYER	2635.000 SF				
0090	211000 REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LUMP		LUMP		

DELAWARE DEPARTMENT OF TRANSPORTATION
SCHEDULE OF ITEMS

PAGE: 2
DATE:

CONTRACT ID: T201330009.01 PROJECT(S): ESTP-N061(01)

All figures must be typewritten.

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0100	302007 GRADED AGGREGATE BASE COURSE, TYPE B	1442.000 CY				
0110	401800 BITUMINOUS CONCRETE, SUPERPAVE, TYPE C, 115 GYRATIONS, PG 64-22 (CARBONATE STONE)	1384.000 TON				
0120	401809 BITUMINOUS CONCRETE, SUPERPAVE, TYPE B, 115 GYRATIONS, PG 64-22	290.000 TON				
0130	601002 TIMBER STRUCTURES (TREATED)	408.000 MFBM				
0140	601003 TIMBER STRUCTURES (GLUE-LAMINATED)	109.000 MFBM				
0150	601004 TIMBER STRUCTURES (GLUE-LAMINATED TIMBER DECK)	3009.000 SF				
0160	601520 TEMPORARY TIMBER MAT	LUMP	LUMP			
0170	601536 PREFABRICATED GLUE LAMINATED TIMBER ARCH	LUMP	LUMP			
0180	601537 HARDWOOD IPE PLANK DECKING	9650.000 SF				

DELAWARE DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF ITEMS

PAGE: 7
 DATE:

CONTRACT ID: T201330009.01 PROJECT(S): ESTP-N061(01)

All figures must be typewritten.

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0580	745604 FURNISH & INSTALL UP TO 4" SCHEDULE 80 PVC CONDUIT (TRENCH)	3310.000 LF				
0583	746559 BRIDGE LIGHTING AND POWER	LUMP	LUMP			
0585	746590 FURNISH & INSTALL GROUND ROD	1.000 EACH				
0590	746596 JUNCTION BOX ON STRUCTURE	22.000 EACH				
0593	747500 LIGHTING CONTROL CENTER PAD	1.000 EACH				
0610	759511 FIELD OFFICE SPECIAL II	18.000 EAMO				
0620	762001 SAW CUTTING, BITUMINOUS CONCRETE	50.000 LF				
0630	763000 INITIAL EXPENSE	LUMP	LUMP			
0640	763501 CONSTRUCTION ENGINEERING	LUMP	LUMP			
0645	763502 MAINTENANCE OF RAILROAD TRAFFIC	LUMP	LUMP			

DELAWARE DEPARTMENT OF TRANSPORTATION
SCHEDULE OF ITEMS

PAGE: 8
DATE:

CONTRACT ID: T201330009.01 PROJECT(S): ESTP-N061(01)

All figures must be typewritten.

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0650	763508 PROJECT CONTROL SYSTEM DEVELOPMENT PLAN	LUMP	LUMP			
0660	763509 CPM SCHEDULE UPDATES AND/OR REVISED UPDATES	18.000 EAMO				
0670	763510 SITE FURNISHINGS	LUMP	LUMP			
0680	763522 COAST GUARD SPECIFIC CONDITIONS	LUMP	LUMP			
0683	763620 PROTECTION OF UTILITY BY CONTRACTOR	LUMP	LUMP			
0690	905001 SILT FENCE	2900.000 LF				
0700	905500 SUPER SILT FENCE	1200.000 LF				
0710	906002 DEWATERING BAG	4.000 EACH				
0720	906003 SUMP PIT	4.000 EACH				
0730	908004 TOPSOIL, 6" DEPTH	14456.000 SY				

DELAWARE DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF ITEMS

PAGE: 9
 DATE:

CONTRACT ID: T201330009.01 PROJECT(S): ESTP-N061(01)

All figures must be typewritten.

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0750	908023 STABILIZED CONSTRUCTION ENTRANCE	60.000 TON				
0760	908512 TEMPORARY GRASS SEEDING, WET GROUND	29489.000 SY				
0770	909004 TURBIDITY CURTAIN, FLOATING	1015.000 LF				
	SECTION 0001 TOTAL					
	TOTAL BID					

PROJECT NOTES (CONTINUED)

CONSTRUCTION ACCESS, NORFOLK SOUTHERN RIGHT-OF-WAY

- 15A. ALL WORK ON, OVER, UNDER, OR ADJACENT TO NORFOLK SOUTHERN (NS) RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH THE NORFOLK SOUTHERN "SPECIAL PROVISIONS FOR THE PROTECTION OF RAILWAY INTERESTS" (NS SPECIAL PROVISIONS).
- 15B. "ONE CALL" SERVICES DO NOT LOCATE BURIED RAILROAD SIGNAL AND COMMUNICATIONS LINES. THE CONTRACTOR SHALL CONTACT THE RAILROAD'S REPRESENTATIVE TWO (2) DAYS IN ADVANCE OF THOSE PLACES WHERE EXCAVATION, PILE DRIVING, OR HEAVY LOADS MAY DAMAGE RAILROAD UNDERGROUND LINES ON RAILROAD PROPERTY. UPON REQUEST FROM THE CONTRACTOR OR AGENCY, RAILROAD SIGNAL FORCES WILL LOCATE AND PAINT MARK OR FLAG RAILROAD UNDERGROUND SIGNAL, COMMUNICATION, AND POWER LINES IN THE AREA TO BE DISTURBED FOR THE CONTRACTOR. THE CONTRACTOR SHALL AVOID EXCAVATION OR OTHER DISTURBANCE OF THESE LINES WHICH ARE CRITICAL TO THE SAFETY OF THE RAILROAD AND THE PUBLIC. IF DISTURBANCE OR EXCAVATION IS REQUIRED NEAR A BURIED RAILROAD SIGNAL, COMMUNICATION, OR POWER LINE, THE LINE SHALL BE POTHOLED MANUALLY WITH CAREFUL HAND EXCAVATION BY THE CONTRACTOR AND PROTECTED BY THE CONTRACTOR DURING THE COURSE OF THE DISTURBANCE UNDER THE SUPERVISION AND DIRECTION OF A RAILROAD SIGNAL REPRESENTATIVE.
- 15C. ALL UTILITY INSTALLATIONS OR RELOCATIONS THAT ARE REQUIRED IN CONJUNCTION WITH THIS PROJECT CAN BE INSTALLED OR RELOCATED AS PART OF THE PROJECT PROVIDED THE CONSTRUCTION IS PERFORMED BY THE PROJECT CONTRACTOR OR PROJECT CONTRACTOR'S SUB-CONTRACTOR. HOWEVER, THE UTILITY MUST SUBMIT AN APPLICATION FOR THE INSTALLATION OR RELOCATION TO AECOM FOR APPROPRIATE HANDLING FOR LICENSE AGREEMENT AND APPLICABLE FEES. FOR UTILITY APPLICATIONS GO TO: WWW.NSCORP.COM > REAL ESTATE > NS SERVICES > WIRE, PIPELINE, & FIBER OPTIC PROJECTS > AECOM. NOTE: LICENSE AGREEMENT MUST BE EXECUTED PRIOR TO UTILITY BEING INSTALLED OR RELOCATED.
- 15D. ALL WORK ON, OVER, UNDER OR ADJACENT TO NORFOLK SOUTHERN RIGHT-OF-WAY THAT IS NOT SPECIFICALLY DENOTED ON THE APPROVED PLANS SHALL BE SUBMITTED TO NORFOLK SOUTHERN FOR REVIEW AND APPROVAL PRIOR TO BEGINNING THE WORK.
- 15E. FOR PROJECTS EXCEEDING 30 DAYS OF CONSTRUCTION, THE FLAGMAN SHALL BE PROVIDED A SMALL WORK AREA WITH A DESK/COUNTER AND CHAIR WITHIN THE FIELD/SITE TRAILER, INCLUDING THE USE OF BATHROOM FACILITIES, WHERE THE FLAGMAN CAN CHECK IN/OUT WITH THE PROJECT, AS WELL AS TO THE FLAGMAN'S HOME TERMINAL. THE WORK AREA SHOULD PROVIDE ACCESS TO TWO (2) ELECTRICAL OUTLETS FOR RECHARGING RADIO(S), AND A LAPTOP COMPUTER; AND HAVE THE ABILITY TO PRINT OFF NEEDED DOCUMENTATION AND ORDERS AS NEEDED AT THE FIELD/SITE TRAILER. THIS SHOULD AID IN MAXIMIZING THE FLAGMAN'S TIME AND EFFICIENCY ON THE PROJECT.

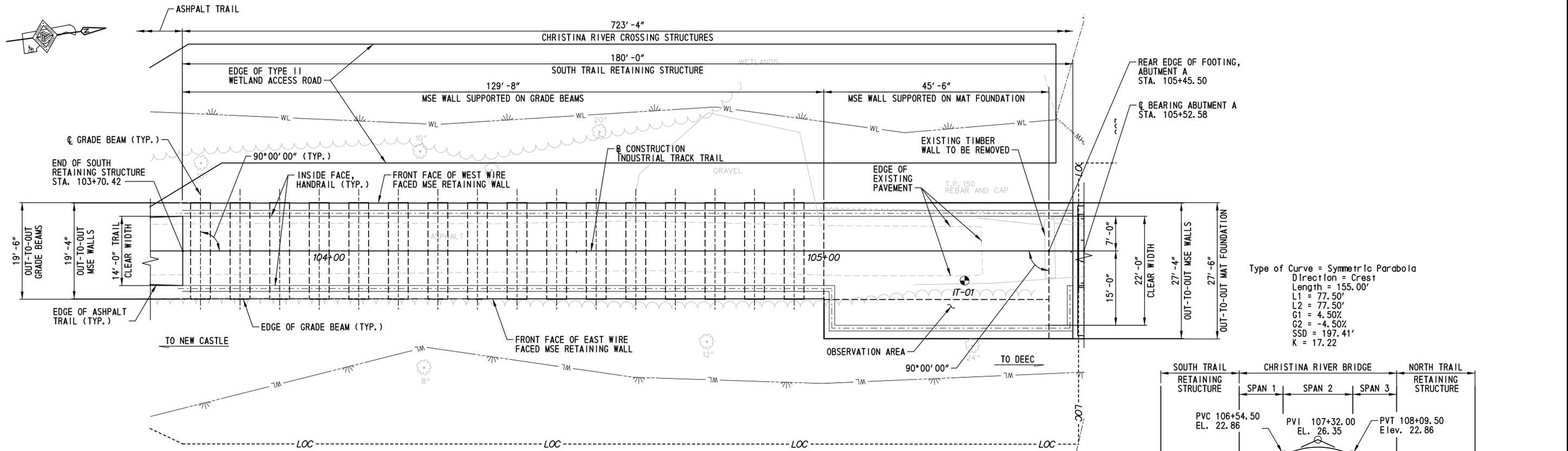
CONSTRUCTION ACCESS,
EXISTING TRAIL SOUTH OF THE CHRISTINA RIVER

- 16A. CONSTRUCTION ACCESS VIA THE EXISTING TRAIL BETWEEN BAYLOR BOULEVARD AND THE CHRISTINA RIVER IS PERMITTED.
- 16B. PRIOR TO CONSTRUCTION OF THE PROJECT AND WITHIN 20 DAYS OF EXECUTION OF THE CONTRACT, A VIDEO SHALL BE TAKEN OF THE EXISTING TRAIL BETWEEN BAYLOR BOULEVARD AND THE CHRISTINA RIVER. THE VIDEO SHALL SHOW PAVEMENT CONDITIONS AND THE GRASS AREA ADJACENT TO THE TRAIL. THE VIDEO WILL BE SUBJECT TO THE APPROVAL OF THE ENGINEER. THE COST OF THE VIDEO SHALL BE INCIDENTAL TO ITEM 763501 - CONSTRUCTION ENGINEERING.
- △ 16C. ANY DAMAGE TO THE TRAIL, INCLUDING ~~THE PAVEMENT, GRASS ADJACENT TO THE TRAIL,~~ DRAINAGE FACILITIES, FENCING, TRAIL AMENITIES (KIOSK, BENCHES, SIGNS, ETC.) AND THE GATE AT BAYLOR BOULEVARD, INCURRED DURING USE SHALL BE REPAIRED AND REPLACED IN-KIND AT THE CONTRACTOR'S EXPENSE.
- 16D. THE TYPICAL SECTION OF THIS EXISTING PAVED TRAIL IS 3" TYPE C ASPHALT OVER 6" TYPE B, GABC.
- 16E. AFTER COMPLETION OF THE CHRISTINA RIVER BRIDGE, THE CONTRACTOR MAY USE THIS BRIDGE TO TRANSPORT MATERIALS OVER THE CHRISTINA RIVER. SEE BRIDGE PLANS (SHEET PN-101) FOR REQUIREMENTS. ALL REQUIREMENTS MUST BE STRICTLY ADHERED TO.

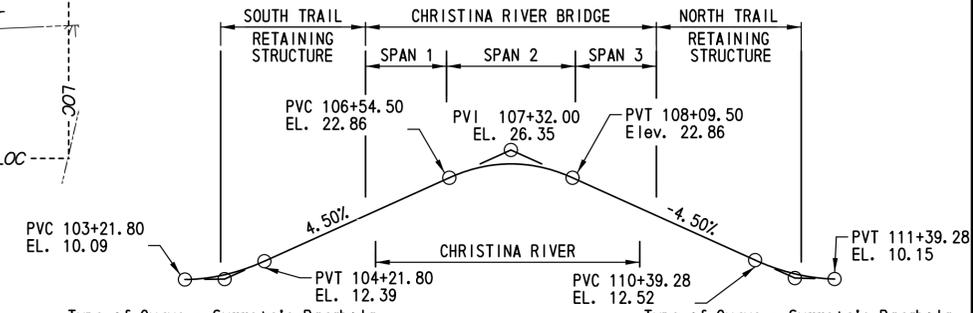
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 DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS		NOT TO SCALE	NEW CASTLE INDUSTRIAL TRACK TRAIL, PHASE 3	CONTRACT	BRIDGE NO.	X	NOTES	SHEET NO.
	△ REVISED NOTE 16C. QUANTITIES FOR PHASE 2				T201330009	DESIGNED BY: DAD			5
	TRAIL REPAIR ADDED TO CONTRACT;				COUNTY	CHECKED BY: JRR			TOTAL SHTS.
	D.D./J.N. 03/07/16				NEW CASTLE				207

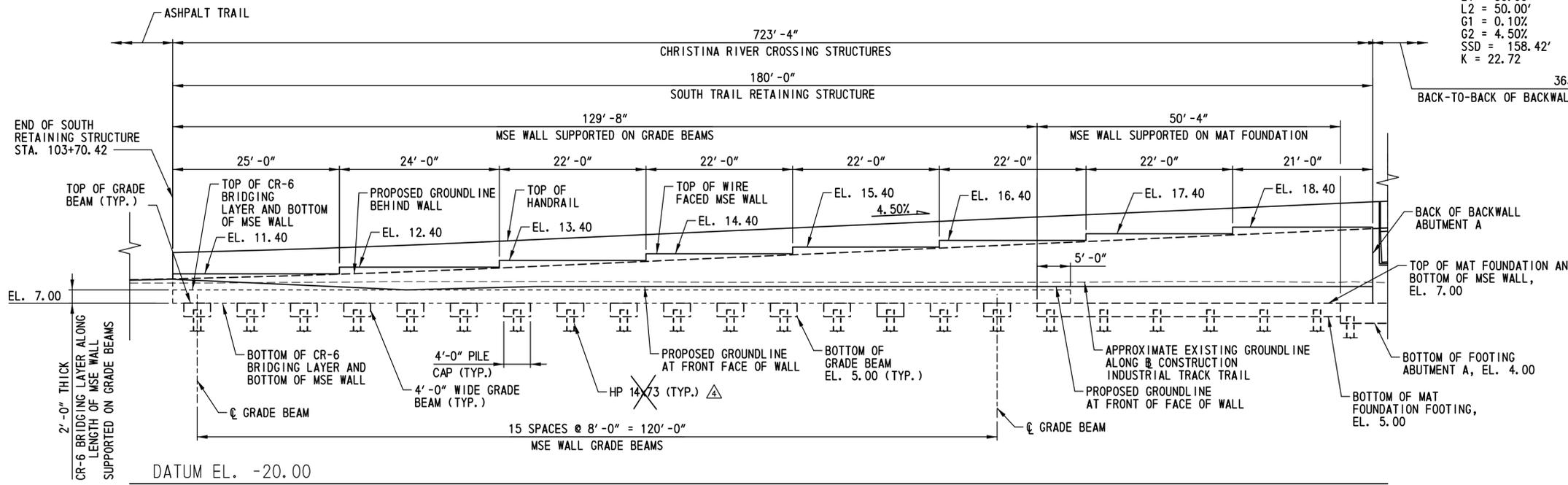
PN-02
SHEET NO.
5
TOTAL SHTS.
207



PLAN
SCALE: 1"=10'-0"



VERTICAL CURVE DATA



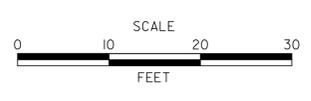
EAST WALL ELEVATION
SCALE: 1"=10'-0"

- NOTES:
- FOR CHRISTINA RIVER BRIDGE, SEE DWG. NO. PE-102. FOR NORTH TRAIL RETAINING STRUCTURE, SEE DWG. NO. PE-103.
 - EAST WALL ELEVATION SHOWN. WEST WALL ELEVATION IS SIMILAR TO EAST ELEVATION OF THE NORTH TRAIL RETAINING STRUCTURE, BUT OPPOSITE HAND. SEE DWG. NO. PE-103.
 - FOR GEOMETRIC WORKING POINTS, SEE DWG. NOS. FT-101 AND FT-102.
 - RAILING AND POSTS NOT SHOWN FOR CLARITY.
 - THE HIGH STRENGTH GEOTEXTILE BRIDGING LAYER IS CONTINUOUS FROM STA. 103+70.42 TO STA. 105+05.00.

N:\31896-002\CADD\BRIDGE\MARCH 2016\ADDENDUM SHEETS\PE101.ITG.DGN



ADDENDUMS / REVISIONS	
DELETED TEXT CALL-OUT: A.D./J.N. 03/04/16	



NEW CASTLE INDUSTRIAL TRACK TRAIL, PHASE 3

CONTRACT T201330009	BRIDGE NO. X
COUNTY NEW CASTLE	DESIGNED BY: NAH CHECKED BY: WAG

SOUTH TRAIL RETAINING STRUCTURE GENERAL PLAN AND ELEVATION - 1

PE-101	SHEET NO. 41
	TOTAL SHTS. 207