

## **ECMS Highway Construction**

**Contract: 9419**

**HRI, Inc. XX-XXXXXXX**

**State College**

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**[hri@hrico.com](mailto:hri@hrico.com)**

Prime Business Partner

**PikeCounty**

**SR 739, Section 452**

**SR739 Ov Brnch Shohola Ck**

Location

**X044-213-L1CE**

Federal Project

**P-800739Z7452-0440-362-1**

WBS Element

**September 27, 2012**

Bid Opening

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## Contract

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Addendum issued subsequent to the printed proposal have been incorporated into the text of this contract and the modified portions are annotated in the contract - e.g., A1, A2 etc.

Incorporated Addenda are As follows:

Addendum No. 1,           A1,   dated 09/19/2012

Addendum No. 2,           A2,   dated 09/24/2012

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THIS AGREEMENT, Made this 19 day of *October* A.D. 2012, between the Commonwealth of Pennsylvania by the Secretary of Transportation, hereinafter called the Commonwealth and *HRI, Inc.* his, hers, its or their executors, administrators, successors, or assigns, hereinafter called the Contractor.

### W I T N E S S E T H:

1. That the Contractor, for and in consideration of the payment or payments herein specified and agreed to by the Commonwealth, hereby covenants and agrees to furnish and deliver all the materials and to do and perform all the work and labor in the improvement of a certain section of highway at the unit prices bid by said Contractor for the respective estimated quantities aggregating approximately the sum of \$1,796,800.00 and such other items as are mentioned in the Contractor's original proposal, which proposal and prices named, together with Publication 408/2011-2 - Specifications (as specified in the proposal), are made a part of this contract and accepted as such, also the drawings of the project, prepared and/or approved by the Department of Transportation, which drawings are also agreed by each party as being a part hereof.

2. The location and description being situated as follows:

This is a Design/ Build Project. For the rehabilitation and improvement of a certain section of STATE HIGHWAY in PIKE COUNTY, BLOOMING GROVE TOWNSHIP, Commonwealth of Pennsylvania, STATE ROUTE 0739, SECTION 452. The project being situated as follows: From a point approximately 0.09 miles (483 feet) Northwest from the intersections with SR 8008 (Ramp F I-84E ramp) at Segment 0280 Offset 2685 (Station 87+00) to a point approximately 0.35 miles (1853 feet) Northwest of the intersection with SR 8008 (Ramp F I-84E ramp) at Segment 0290 Offset 0707 (Station 24+00) along SR 739. This project is a design build bridge replacement over Shohola Creek on a new roadway alignment to the inside of the existing curve. The proposed curve radius is longer to accommodate half-width construction with temporary signals. Additional work for the project includes drainage, roadway, guide rail placement, and side road/driveway adjustments, all contained within an overall project length of 0.224 miles as indicated on the approved drawings included in the bid package.

3. The Contractor further covenants and agrees that all work shall be performed in the best and most workmanlike manner. He also agrees that all materials furnished and labor performed shall be in strict and complete conformity, in every respect, with all parts of this contract and shall be subject to the inspection and acceptance of authorized representatives of the Department of Transportation. In the event that any portion of work (including materials supplied pursuant thereto) performed by the Contractor is rejected by the Department's authorized representatives as defective, unsuitable, or unacceptable, the Contractor agrees to

remove and replace all such rejected portions of work in conformance with this contract and to the satisfaction of and at no expense to the Department. The Contractor further covenants that prompt payment will be made in full for all labor and materials used in the performance of work on this project.

4. The Contractor covenants and agrees that all work (including, but not limited to, all labor performed and all materials supplied) on this project shall be performed and completed to the satisfaction of the Chief Highway Engineer of the Department of Transportation on or before the expiration date of *12/16/2015*. If, for any reason, except as provided in the contract, the Contractor fails to complete all work on this project to the satisfaction of the Chief Highway Engineer within the aforementioned time allowed, the Department shall deduct from any sums due or which may become due the Contractor the amount indicated in the Specifications for each calendar day used in excess of the aforementioned number of days allowed, or, in case a completion date is fixed, for each calendar day elapsing between that completion date and the actual date of completion. If no sums are due the Contractor, the Contractor agrees to remit to the Department the aforementioned sum for each day used in excess of the time allowed for completion of the contract. The amounts deducted or remitted under this paragraph are liquidated damages and not penalties.

5. The Contractor further covenants and warrants that the Contractor has had sufficient time to examine and has examined the site of the contract work to ascertain for itself those conditions such as may be determined by inspection, investigation, and inquiry, including the location, accessibility, and general character of the site.

6. The Contractor further covenants that he has not relied upon any information provided by the Department, including information contained in the Special Provisions, concerning the time within which publicly or privately-owned facilities below, at or above the ground are expected to be installed, removed, repaired, replaced, and/ or relocated; that he has not relied upon any information provided by the Department concerning the location or existence of all such facilities that might be below, at or above the ground; that he has contacted or will contact all owner of such facilities to verify the location and position of all such facilities and the time within which work on such facilities will be performed; and that he is aware delays might be incurred in the performance of work on this project as a result of work being performed or that will be performed on such facilities by their owners. It is understood further that, notwithstanding assistance of any kind and extent that might be provided by the Department, the Contractor, in every instance, bears the ultimate responsibility of resolving all disputes of every kind with the owners of such facilities. The Contractor agrees to save and hold the Department harmless from liability for all delays, interference and interruptions that might arise during the performance of work on this project as a result of work being or that will be performed on such publicly or privately-owned facilities.

7. The Contractor further covenants and warrants that he has read, is completely familiar with and understands thoroughly the General Conditions; the Specifications of the Commonwealth of Pennsylvania, Department of Transportation, currently in effect; the Supplements, Special Provisions and/or Conditions; and any other addenda or requirements, contained in the governing the performance of work under this contract, whether attached hereto and made a part hereof, or incorporated herein by reference.

8. It is distinctly understood and agreed that the Contractor shall not do any work (including, but not limited to, the supply of labor and/or materials) not covered by the specifications and the contract, unless such work has been authorized in writing as provided in the Specifications. In no event shall the Contractor incur any liability by reason of refusing to obey any verbal directions or instructions that he might be given to perform additional or extra work. Likewise, the Department will not be liable for any work performed as additional or extra work, unless such work is required of the Contractor in writing as provided in the Specifications. All such work which might have been performed by the Contractor without such written order first being given shall be at the Contractor's risk, cost, and expense, and the Contractor hereby covenants and agrees that, without such written order, he shall make no claim for compensation for such unauthorized work.

9. It is further distinctly agreed that the Contractor shall not assign this contract, nor any part thereof, nor any right to any sums to be paid him hereunder, nor shall any part of the work to be done or material furnished under this contract be sublet, without the consent in writing of the Secretary of Transportation.

10. It is also agreed and understood that the acceptance of the final payment by the Contractor shall be considered as a release in full of all claims against the Commonwealth of Pennsylvania arising out of, or by reason of, the work done and materials furnished under this contract.

11. The Contractor shall accept, insofar as the work covered by the contract is concerned, the provisions of the Workmens Compensation Act of 1915, and any supplements or amendments thereto, and shall insure his liability thereunder or file with the Department of Transportation a certificate of exemption from insurance from the Bureau of Workers' Compensation of the Department of Labor and Industry.

12. In order to secure proper and complete compliance with the terms and provisions of this contract, the Contractor shall provide a bond in a sum equal to one hundred percent (100%) of the total contract price of the work to be done. The Contractor shall also secure an additional bond in the same amount for the prompt payment in full for all labor and materials supplied in performing work on this project. Both bonds are attached to and made a part of this contract.

13. Conditioned upon compliance by the Contractor with all pertinent conditions and procedures contained in the contract, claims for damages or extra costs in excess of three hundred dollars (\$300.00) arising out of disputes pertaining to this contract shall be referred to the Board of Claims pursuant to Section 1724(a) of the Commonwealth Procurement Code, 62 Pa. C.S. § 1724(a).

14. If for any reason the Commonwealth Procurement Code is inoperative or the Board of Claims cannot function, such claims shall be referred and decided by a panel consisting of the Secretary of Transportation and the General Counsel or their respective deputy or deputies.

15. The Contractor hereby further agrees to receive and the Commonwealth agrees to pay the prices set forth in the linked bid items as full compensation for furnishing all the materials and labor which may be required in the prosecution and completion of all work to be done under this contract, and in all respects to complete the contract to the satisfaction of the Secretary of Transportation.

16. The Contractor certified in his, her, its or their bid submission (covering federal aid projects only) to the disclosure of lobbying activities and, if applicable, completed the disclosure form and by said certification understands that Public Law 101-121, Section 319, prohibits federal funds from being expended by recipient or any lower tier sub-recipients of a federal contract, grant, loan or cooperative agreement to pay any person for influencing or attempting to influence a federal agency or Congress in connection with the awarding of any federal contract, the making of any federal grant or loan, or the entering into of any cooperative agreement.

17. If federal funds are involved, the Contractor shall not discriminate on the basis of race, color, national origin or sex in the performance of this contract. Contractor shall carry out applicable requirements of 49 C.F.R. Part 26 - DATED OCTOBER 16, 2001 in the award and administration of United States Department of Transportation assisted contracts. Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the Pennsylvania Department of Transportation deems appropriate. Contractor must include this assurance in each subcontract that it signs with a subcontractor.

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**Fiscal Information:**

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**Recorded Number:** 9419  
**Certified Fund Available Under Activity Program:** 362  
**Symbol:** 010-008-26185-12/13-2  
**Amount:** \$1,796,800.00

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**Contract Workflow Status**

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<b>Status</b>	<b>Name</b>	<b>Disposition</b>	<b>Date/Time</b>
Draft	Douglas A Nace/PennDOT	Award	10/12/2012 10:58:39 AM
Contractor Review	John R Kulka PE/PennDOT BP-001239	Sign	10/12/2012 02:53:26 PM
BOD CMD Review	Roland L Rode/PennDOT	Accept	10/16/2012 01:12:55 PM
BOD Director Review	J. Michael Long/PennDOT	Sign	10/16/2012 03:39:30 PM
Chief Counsel Preliminary Review	Steven I Roth/PennDOT	Accept	10/18/2012 04:51:58 PM
Chief Counsel Final Review	Steven I Roth/PennDOT	Accept	10/18/2012 04:52:05 PM
Comptroller Review	Matthew P Eng/PennDOT	Accept	10/19/2012 08:04:41 AM
CMD Execute	Delores A Ritzman/PennDOT	Submit	10/19/2012 09:28:16 AM

## Addenda

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### Addendum: 1

#### Description:

This is a Design/ Build Project.

For the rehabilitation and improvement of a certain section of STATE HIGHWAY in PIKE COUNTY, BLOOMING GROVE TOWNSHIP, Commonwealth of Pennsylvania, STATE ROUTE 0739, SECTION 452.

The project being situated as follows:

From a point approximately 0.09 miles (483 feet) Northwest from the intersections with SR 8008 (Ramp F I-84E ramp) at Segment 0280 Offset 2685 (Station 87+00) to a point approximately 0.35 miles (1853 feet) Northwest of the intersection with SR 8008 (Ramp F I-84E ramp) at Segment 0290 Offset 0707 (Station 24+00) along SR 739.

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**Estimated Project:** \$1,987,080.80  
**Federal Project Status:** PENNDOT Oversight Non-NHS  
**DBE:** 5.00%  
**Structure Work:** 51.00%  
**Wage Rates:** Yes  
**Project Type:** Standard  
**State Type of Work:** BRIDGE REPLACEMENT  
**Prequalification Required:** Yes  
**Pre-Bid Meeting:** None  
**Scheduled Let:** 09/27/2012 11:00:00 AM  
**New Let:**  
**Let Date Move:**  
**Anticipated NTP:** 11/13/2012  
**Required Completion:** 12/16/2015

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#### Additional Information

This is an ECMS project. All Addenda will be electronically posted. Place for delivery of diskette bid before 11:00 a.m. prevailing local time on the scheduled let date: PENNDOT CONTRACT AWARDS ROOM, 7TH FLOOR; COMMONWEALTH KEYSTONE BUILDING; 400 NORTH STREET; HARRISBURG PA 17120

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#### Item and Quantity

#### Special Provision

Revised SSP I82110A - c82110 ITEM 8211-0001 DESIGN OF BRIDGE STRUCTURE . (Revised 5 girders to 6 girders)

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#### Other

The correct underclearance value on the Roadway Sheets 10 & 12 is 9' 7 1/2".

**Addendum: 2**

**Description:**

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For the rehabilitation and improvement of a certain section of STATE HIGHWAY in PIKE COUNTY, BLOOMING GROVE TOWNSHIP, Commonwealth of Pennsylvania, STATE ROUTE 0739, SECTION 452.

The project being situated as follows:

From a point approximately 0.09 miles (483 feet) Northwest from the intersections with SR 8008 (Ramp F I-84E ramp) at Segment 0280 Offset 2685 (Station 87+00) to a point approximately 0.35 miles (1853 feet) Northwest of the intersection with SR 8008 (Ramp F I-84E ramp) at Segment 0290 Offset 0707 (Station 24+00) along SR 739.

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**Estimated Project:** \$2,106,980.80  
**Federal Project Status:** PENNDOT Oversight Non-NHS  
**DBE:** 5.00%  
**Structure Work:** 54.00%  
**Wage Rates:** Yes  
**Project Type:** Standard  
**State Type of Work:** BRIDGE REPLACEMENT  
**Prequalification Required:** Yes  
**Pre-Bid Meeting:** None  
**Scheduled Let:** 09/27/2012 11:00:00 AM  
**New Let:**  
**Let Date Move:**  
**Anticipated NTP:** 11/13/2012  
**Required Completion:** 12/16/2015

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**Additional Information**

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**Item and Quantity**

Component Items AA concrete and AAP concrete have been revised in ITEM 8250-0001 CONSTRUCTION OF PRESTRESSED CONCRETE BRIDGE, S-31651.

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**Special Provision**

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**Other**

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**Bid Items**

Item	Description	Quantity	Unit Price	Item Total	Addendum
0608-0001	MOBILIZATION	1.000	\$106,500.00	\$106,500.00	
0609-0003	INSPECTOR'S FIELD OFFICE AND INSPECTION FACILITIES, TYPE B	1.000	\$20,000.00	\$20,000.00	
0609-0009	EQUIPMENT PACKAGE	1.000	\$5,000.00	\$5,000.00	
0686-0010	CONSTRUCTION SURVEYING, TYPE A	1.000	\$6,000.00	\$6,000.00	
0686-0050	CONSTRUCTION SURVEYING, TYPE D	1.000	\$7,000.00	\$7,000.00	
0689-0002	NETWORK SCHEDULE	1.000	\$1,000.00	\$1,000.00	
4811-0003	TEMPORARY PROTECTIVE FENCE (MODIFIED)	1,200.000	\$5.50	\$6,600.00	
8211-0001	DESIGN OF BRIDGE STRUCTURE (NO AS-DESIGNED FOUNDATION PROVIDED, NO PERMIT), S-31651	1.000	\$137,000.00	\$137,000.00	
8250-0001	CONSTRUCTION OF PRESTRESSED CONCRETE BRIDGE, S-31651	1.000	\$670,000.00	\$670,000.00	2
8800-0001	DESIGN ROADWAY	1.000	\$26,000.00	\$26,000.00	
8800-0002	CONSTRUCT ROADWAY	1.000	\$472,000.00	\$472,000.00	
8901-1001	DESIGN TRAFFIC CONTROL	1.000	\$25,000.00	\$25,000.00	
8901-1011	CONSTRUCT MAINTENANCE AND PROTECTION OF TRAFFIC	1.000	\$155,000.00	\$155,000.00	
9000-0001	UNFORESEEN BRIDGE REPAIR	25,000.000	\$1.00	\$25,000.00	
9000-0014	BENCH MARK DISK PLACEMENT	1.000	\$500.00	\$500.00	
9000-0500	AIDS TO NAVIGATION PLAN	1.000	\$1,200.00	\$1,200.00	
9000-2000	UTILITIES RELOCATION INFORMATION FOR DESIGN BUILD PROJECTS	1.000	\$3,000.00	\$3,000.00	
9000-5001	PERMITS FOR DESIGN-BUILD PROJECTS	1.000	\$45,000.00	\$45,000.00	
9000-6001	RIGHT-OF-WAY DESIGN AND ACQUISITION SERVICES	1.000	\$30,000.00	\$30,000.00	
9018-0001	REMOVAL OF EXISTING BRIDGE STRUCTURE	1.000	\$50,000.00	\$50,000.00	
9073-0010	DISPOSAL OF BRIDGE WASTE	1.000	\$500.00	\$500.00	
9075-0001	CONTAINMENT OF BRIDGE SURFACE PREPARATION WASTE	1.000	\$2,500.00	\$2,500.00	
9077-0001	WORKER HEALTH AND SAFETY	1.000	\$2,000.00	\$2,000.00	

**Contract Total:** \$1,796,800.00

**Bid Total:** \$1,796,800.00

## Special Provisions

### G2A - a00002 PUBLIC BID OPENING LOCATION

**Addendum:**

**Associated Item(s):**

**Header:**

PUBLIC BID OPENING LOCATION

**Provision Body:**

The location of the public bid opening is the Commonwealth Keystone Building, 7th Floor, Contract Awards Room, 400 North Street, Harrisburg. Allow sufficient time before the bid opening to obtain a visitor pass on the 5th Floor and to be escorted to the 7th Floor Contract Awards Room.

### G101B - a00101 GOVERNING SPECIFICATIONS AND APPLICABLE DESIGNATED SPECIAL PROVISIONS

**Addendum:**

**Associated Item(s):**

**Header:**

GOVERNING SPECIFICATIONS AND APPLICABLE DESIGNATED SPECIAL PROVISIONS

**Provision Body:**

I. GOVERNING SPECIFICATIONS. This bid proposal is made under, subject to, and governed by:

Specifications 408/2011, Change No. 2, and effective April 6, 2012 of the Pennsylvania Department of Transportation. Within these Specifications where dual measurement and tabular options are presented English standards apply.

II. APPLICABLE DESIGNATED SPECIAL PROVISIONS. The following Designated Special Provisions are found in Appendix C to the above Governing Specifications. Those that apply to this bid proposal are preceded with a check (i.e., "X"). Goals, minimum levels of participation, or other project specific requirements associated with these documents are also established where applicable:

DSP1. Offset Provision for Commonwealth Contracts.

DSP2. Contractor Responsibility Provisions.

DSP3. Provisions for Commonwealth Contracts Concerning the Americans with Disabilities Act.

DSP4. Minority Business and Women Business Enterprise Participation Requirements. This is used on 100% State projects requiring Prequalification. The minimum levels of participation for this project are:

MBE ; WBE

(fill in)% (fill in)%

DSP5. Minority Business and Women Business Enterprise Program. This is used only on 100% State projects over \$100,000 requiring Prequalification and where DSP4 does not apply.

DSP6. Minority Business and Women Business Enterprise Utilization Requirements. This is used on State projects without Prequalification requirements. Minimum participation levels of 5% for MBE and 3% for WBE of the dollar amount of the bid have been established for this project.

DSP7. Disadvantaged Business Enterprise Requirements. This is used on Federal - aid projects only. In conjunction with this contract a goal of 5 % of the original contract amount has been established.

DSP9. Special Supplement - Anti-Pollution Measures - August 26, 1999.

DSP10. Nondiscrimination/Sexual Harassment Clause.

DSP11. Contractor Integrity Provisions.

DSP12. Executive Order 11246, with Appendix A and B.

**G113B - a00113 CONTRACT PROVISIONS - RIGHT-TO-KNOW LAW**

**Addendum:**

**Associated Item(s):**

**Header:**

CONTRACT PROVISIONS - RIGHT TO KNOW LAW

**Provision Body:**

**I. Contract Provisions – Right to Know Law 8-K-1532**

- a. The Pennsylvania Right-to-Know Law (RTKL), 65 P.S. §§ 67.101-3104, applies to this Contract.
- b. If the Department needs assistance in any matter arising out of the RTKL related to this Contract, the Department will notify the Contractor using the legal contact information provided in this Contract. The Contractor, at any time, may designate a different contact for such purpose upon reasonable prior written notice to the Department.
- c. Upon written notification from the Department that it requires assistance in responding to a request under the RTKL for information related to this Contract that may be in the Contractor's possession, constituting, or alleged to constitute, a public record in accordance with the RTKL ("Requested Information"), the Contractor will:
  - 1. Provide the Department, within 10 calendar days after receipt of written notification, access to, and copies of, any document or information in the Contractor's possession arising out of this Contract that the Department reasonably believes is Requested Information and may be a public record under the RTKL; and
  - 2. Provide such other assistance as the Department may reasonably request, in order to comply with the RTKL with respect to this Contract.
- d. If the Contractor considers the Requested Information to include a request for a Trade Secret or Confidential Proprietary Information, as those terms are defined by the RTKL, or other information that the Contractor considers exempt from production under the RTKL, notify the Department and provide, within 7 calendar days of receiving the written notification, a written statement signed by a representative of the Contractor explaining why the requested material is exempt from public disclosure under the RTKL.
- e. The Department will rely upon the written statement from the Contractor in denying a RTKL request for the Requested Information unless the Department determines that the Requested Information is clearly not protected from disclosure under the RTKL. Should the Department determine that the Requested Information is clearly not exempt from disclosure, provide the Requested Information within 7 calendar days of receipt of written notification of the Department's determination.

f. Failing to provide the Requested Information within the time period required by these provisions, indemnify and hold the Department harmless for any damages, penalties, costs, detriment or harm that the Department may incur as a result of this failure, including any statutory damages assessed against the Department.

g. The Department will reimburse the Contractor for any costs associated with complying with these provisions only to the extent allowed under the fee schedule established by the Office of Open Records or as otherwise provided by the RTKL if the fee schedule is inapplicable.

h. The Contractor may file a legal challenge to any Department decision to release a record to the public with the Office of Open Records, or in the Pennsylvania Courts, however, indemnify the Department for any legal expenses incurred by the Department as a result of such a challenge and hold the Department harmless for any damages, penalties, costs, detriment or harm that the Department may incur as a result of the failure, including any statutory damages assessed against the Department, regardless of the outcome of such legal challenge. As between the parties, agree to waive all rights or remedies that may be available as a result of the Department's disclosure of Requested information pursuant to the RTKL.

i. The Contractor's duties relating to the RTKL are continuing duties that survive the expiration of this Contract and continue as long as the Requested Information remains in the Contractor's possession.

### **G901B - a00901 ALTERNATE EROSION AND SEDIMENT POLLUTION CONTROL PLAN**

**Addendum:**

**Associated Item(s):**

**Header:**

ALTERNATE EROSION AND SEDIMENT POLLUTION CONTROL PLAN

**Provision Body:**

Comply with these requirements when submitting an alternate plan for accomplishing equal or better temporary and permanent erosion and sediment pollution control. Do not start work until the alternate erosion and sediment pollution control plan, schedules, and operation methods have been approved by the Department and the Department of Environmental Protection, or by the Department and the County Conservation District, as applicable.

Apply for any earth disturbance permits or permit amendments not included in the proposal documents that are required because of the nature of the contemplated construction procedures.

Prepare and furnish, with the applications, plans and documents that are required by the Department of Environmental Protection or the County Conservation District.

Provide simultaneously to the District Executive a copy of all plans and documents that affect the construction requirements.

Provide immediately to the District Executive any modifications that are made to the plans and documents that are required by the Department of Environmental Protection or the County Conservation District.

Obtain the approval of the Department and the permit from the Department of Environmental Protection prior to beginning any work when a permit is required, and the approval of the Department and the County Conservation District when a permit is not required.

Acquire areas outside of the right-of-way that are necessary for erosion and sediment pollution control. Proceed with the agreement procedure described in Section 105.14 (Borrow Areas and Waste Areas).

### **G1001B - a01001 CONSTRUCTION PROCEDURES - EROSION AND SEDIMENT POLLUTION CONTROL**

**Addendum:**

**Associated Item(s):**

**Header:**

CONSTRUCTION PROCEDURES - EROSION AND SEDIMENT POLLUTION CONTROL

**Provision Body:**

I. Observe the following applicable procedures, as ordered during the contract life:

(a) Conduct operations as shown or specified in the approved Erosion and Sediment Pollution Control Plan. Do not discharge water containing sediments or pollutants into streams.

(b) Direct flowing water away from project construction areas.

(c) Do not enter streams, construct rock crossings, causeways or cofferdams unless authorized by provisions of the Department of Environmental Protection Water Obstruction and Encroachment Permit or by General Permit BDWM-GP-8.

(d) If authorized, limit movement of equipment through stream beds in accordance with the approved plan to prevent siltation or disturbance. Permit equipment to cross flowing channels only on rock roadways or bridges.

(e) Unless otherwise stipulated in the Permit, construct rock crossings, causeways or cofferdams with rock having a minimum size of 75 mm (3 inches) or larger. The surface may be choked with stone aggregate having a minimum size of 9.5 mm (3/8-inch). When constructing crossings, causeways or cofferdams, do not use earth or other materials that may cause sediment pollution, unless lined with geotextiles as indicated or specified.

(f) Seed or stabilize stream banks immediately upon completion of grading.

(g) Seed and mulch finished slopes in increments of approximately 4.5 m (15 feet). If permanent seeding is not placed where indicated within 20 days after completion of earthwork, place temporary seeding (Annual Ryegrass) and mulching on disturbed areas.

(h) Control grading areas by placing erosion and sediment pollution control devices in advance of performing earthwork activities. Place stabilization devices as earthwork activity progresses.

(i) If excavated material is stockpiled more than 20 days, take interim stabilization measures to minimize erosion of stockpile slopes.

(j) Clean sedimentation structures as specified in Section 861.

(k) Separate water originating outside of the project from that originating within.

(l) Be responsible for maintenance of erosion and sediment pollution control devices.

(m) Seed and mulch borrow and waste areas as specified in Section 105.14.

II. Stage, sequence and schedule earthmoving activities to meet the requirements found in the Project Specific Details.

**G1601A - a01601 E.E.O. COVERED AREA**

**Addendum:**

**Associated Item(s):**

**Header:**

E.E.O. COVERED AREA

**Provision Body:**

For the purpose set forth in the Executive Order 11246

the covered area for this contract is Pike County,

which is within the Economic Area of New York, New York

as listed in Appendix B of Designated Special Provision 12 (DSP12) entitled "Executive Order 11246 (with Appendix A and B)" in Appendix C of Pub 408.

**G4802A - a04802 INDEX PRICE FOR DIESEL FUEL**

**Addendum:**

**Associated Item(s):**

**Header:**

Index Price for Diesel Fuel

**Provision Body:**

The index price for diesel fuel (FB), as determined by the Department, is \$3.05 per gallon. Use this index price in accordance with Section 110.12 PRICE ADJUSTMENT FOR DIESEL FUEL COST FLUCTUATIONS.

**G4891C - a04891 PRICE INDEX FOR WARM MIX ASPHALT**

**Addendum:**

**Associated Item(s):**

**Header:**

Price Index for Warm Mix Asphalt

**Provision Body:**

Section 110.04 PRICE ADJUSTMENT OF BITUMINOUS MATERIALS. Revise the list of Sections to which specified price adjustment provisions will be applied to read:

309 360 430 461 481 657

311 409 431 467 482

316 410 439 469 651

320 411 440 470 653

341 419 450 471 654

342 422 460 480 656

**G4901A - a04901 PRICE INDEX FOR ASPHALT CEMENT**

**Addendum:**

**Associated Item(s):**

**Header:**

PRICE INDEX FOR ASPHALT CEMENT

**Provision Body:**

The price index for asphalt cement (PG 64-22), as determined by the Department is \$594 per ton. Use this price index in accordance with Section 110.04 PRICE ADJUSTMENT OF BITUMINOUS MATERIALS.

**G4902C - a04902 PRICE ADJUSTMENT FOR STEEL COST FLUCTUATIONS**

**Addendum:**

**Associated Item(s):**

**Header:**

PRICE ADJUSTMENT FOR STEEL COST FLUCTUATIONS

**Provision Body:**

These requirements provide for a price adjustment, in the form of a payment to the Contractor or a rebate to the Department, for fluctuations in the cost of the steel used in the applicable materials placed as part of the construction work specified in Sections 620, 621, 948, 1002, 1005, 1050, 1056, 1080, and 1085.

**(a) General.** These price adjustment provisions apply to items in the contract Schedule of Prices, as specified above, including any modified standard or non-standard item where the work to be performed includes incorporation of one or more of the applicable steel materials specified in the above Sections and addressed herein. Additionally, items in the Component Item Schedule (CIS) for an "as-designed" or alternate design structure, as well as work performed under a design-build contract, will be included when applying the specified price adjustment requirements, provided the work to be performed includes incorporation of one or more of the applicable steel materials specified in the above Sections and addressed herein. Terminal sections, end treatments, transitions, and transition treatments associated with guide rail and metal median barrier work; as well as mechanical splice systems, pile tip reinforcement, high load multi-rotational bearings, shear connectors, and scuppers; will not be subject to the price adjustment criteria and conditions specified herein.

To elect to have these price adjustment provisions apply to one or more of the steel product categories identified herein, when planned for incorporation into a specific project, advance notification must be submitted to the Department. The apparent low bidder is required to submit the Steel Escalation Option form attached to the proposal, via fax, to (717) 705-1504, or email to [steeloptions@pa.gov](mailto:steeloptions@pa.gov) by 3:00 pm prevailing local time within 7 calendar days after the bid opening. When the seventh calendar day after the bid opening falls on a day PENNDOT offices are closed, submit the Steel Escalation Option form by 3:00 pm prevailing local time on the next business day. If a properly completed Steel Escalation Option form is not provided by the apparent low bidder within the time specified, the Department will consider the option to apply these price adjustment provisions to the project to be declined. Furthermore, if a Steel Escalation Option form, when provided within the specified time, has been completed such that the Department is unable to ascertain the bidder's intention with regard to the inclusion of any one of the applicable steel product categories, the Department will consider the option to apply these price adjustment provisions to that product category to be declined. No further opportunity to elect steel escalation for the project or an individual steel product category will be made available. In the event the apparent low bid is rejected, the next lowest bidder will be notified to submit the Steel Escalation Option form by 3:00 pm prevailing local time within 7 calendar days after notification.

The Department posts a monthly index price for steel (\$ per ton) based on data obtained from the U.S. Department of Labor (USDOL), Bureau of Labor Statistics, which publishes monthly Producer Price Index (PPI) values for various commodities. The statewide index price for steel will be based on the PPI value posted by USDOL for "Semi-finished Steel Mill Products" (Series ID:

WPU101702). The Department will post its monthly index price for steel after the USDOL lists the PPI value on which it is based as final.

The "base / benchmark" index price, SB, will be the steel index price posted by the Department, determined as specified above, for the month in which project letting occurred.

The "invoice" index price, SI, will be the steel index price posted by the Department, determined as specified above, for the month in which applicable steel material is invoiced.

Steel material will be considered invoiced as of the date when an invoice from the steel mill providing the necessary raw material is sent to the Contractor or to a subcontractor, fabricator, manufacturer, or supplier. The steel price adjustment provisions specified herein are not applicable to raw steel material having a mill invoice date that precedes the project letting date. On a quarterly basis, provide documentation of the invoice date for applicable steel material incorporated into the work during the prior 3-month period. Documentation is to be in the form of a tabulation that lists all material invoiced during the period, in chronological order by invoice date; the quantity invoiced; and the applicable contract item(s) and corresponding project location(s) where the invoiced quantity or portion thereof was incorporated, along with copies of supporting invoices. Have a representative of the Contractor, authorized to make such statements, certify that the information provided in the tabulation is complete and accurate and may be relied upon by the Department.

Failure to provide the required tabulation within 10 calendar days of the end of each, applicable 3-month period will result in the Department computing a price adjustment (rebate or increase) using a value for SI that results in the greatest possible price rebate or least possible price increase based on the monthly index prices posted by the Department, to date, since work on the project began.

**(b) Price Adjustment Criteria and Conditions.** The following criteria and conditions will be considered in determining a price adjustment for steel cost fluctuations.

**1. No Price Adjustment.** When the ratio SI/SB falls within the range of 0.95 to 1.05, no price adjustment will be made for applicable steel material having an invoice date that falls within the month for which the SI index price was posted.

**2. Price Rebate.** When the ratio SI/SB is calculated to be less than 0.95, the Department will receive an automatic price rebate, for applicable steel material having an invoice date that falls within the month for which the SI index price was posted, to be determined in accordance with the following formula:

$$P.R. = (0.95 - SI / SB) (SB) (ST)$$

where:

P.R. = Price Rebate

SI = Index price for the month in which applicable steel material is invoiced.

SB = Index price for the month in which project letting occurred.

ST = Quantity (tons) of applicable steel material incorporated into the work during the applicable 3-month period.\*

\*Computed based on the quantity paid, under applicable contract items, on current estimates processed during the 3-month period addressed in the tabulation provided by the Contractor. Not to exceed the total tonnage of applicable steel material invoiced during the month for which the SI index price was posted, as shown on the Contractor's tabulation.

**3. Price Increase.** When the ratio SI/SB is calculated to be greater than 1.05, the Contractor will receive a price increase, for applicable steel material having an invoice date that falls within the month for which the SI index price was posted, to be determined in accordance with the following formula:

$$P.I. = (SI / SB - 1.05) (SB) (ST)$$

where:

P.I. = Price Increase

SI = Index price for the month in which applicable steel material is invoiced.

SB = Index price for the month in which project letting occurred.

ST = Quantity (tons) of applicable steel material incorporated into the work during the applicable 3-month period.\*

\* Computed based on the quantity paid, under applicable contract items, on current estimates processed during the 3-month period addressed in the tabulation provided by the Contractor. Not to exceed the total tonnage of applicable steel material invoiced during the month for which the SI index price was posted, as shown on the Contractor's tabulation.

**4. Equivalent Tonnage.** For applicable steel material furnished under a separate contract item, under a design-bid-build contract, or under a design-build contract the equivalent steel tonnage will be computed as indicate in the following sections.

For design-build contracts, provide an itemized breakdown of the applicable steel materials addressed herein incorporated into the work and indicate the quantity of each actually installed. Indicated quantities should be based on field measurements or take-offs from the approved plans or shop drawings and be equivalent to those used to compute payments made against the Lump Sum construction item on current estimates.

**4.a Guide Rail and Metal Median Barrier.** For applicable guide rail and metal median barrier components (i.e. rail elements, posts, and rubbing rail) furnished under separate contract items or as part of a single contract item for guide rail / metal median barrier complete in place, the equivalent steel tonnage is computed as follows:

**4.a.1 Guide Rail or Median Barrier Rail Element (Weak Post or Strong Post).**

$$\text{Steel Tonnage (ST)} = 7.84 (Q) / 2000$$

where:

Q = Quantity (linear feet) of weak post or strong post guide rail element paid on current estimates processed during the applicable 3-month period

**4.a.2. Type 2W Posts.**

$$\text{Steel Tonnage (ST)} = 8.67 (L) (Q) / 2000$$

where:

L = Length of each post (feet) as required by the Standard Drawings or as specified

Q = Quantity (each) of Type 2W posts paid on current estimates processed during the applicable 3-month period.

**4.a.3 Type 2S Posts.**

$$\text{Steel Tonnage (ST)} = 9.17 (L) (Q) / 2000$$

where:

L = Length of each post (feet) as required by the Standard Drawings or as specified

Q = Quantity (each) of Type 2S posts paid on current estimates processed during the applicable 3-month period

**4.a.4 Rubbing Rail.**

$$\text{Steel Tonnage (ST)} = 8.56 (Q) / 2000$$

where:

Q = Quantity (linear feet) of rubbing rail paid on current estimates processed during the applicable 3-month period

**4.b Reinforcement Bars.** For applicable reinforcement bars furnished under a separate contract item, as a component item associated with an alternate design structure, or as a component item associated with a design-build contract, the equivalent steel tonnage is computed as follows:

$$\text{Steel Tonnage (ST)} = (Q) / 2000$$

where:

Q = Quantity (pounds) of reinforcement bars paid on current estimates processed during the applicable 3-month period.

**4.c Piles.** For applicable steel beam bearing piles, cast-in-place concrete bearing piles, cast-in-place concrete piles, and steel pipe piles, furnished under a separate contract item, as a component item associated with an alternate design structure, or as a component item associated with a design-build contract, the equivalent tonnage is computed as follows:

**4.c.1 Steel H-Piles.**

$$\text{Steel Tonnage (ST)} = (UW) (Q) / 2000$$

where:

UW= Unit Weight of the Steel Beam\* (pounds per foot)

Q = Quantity (linear feet) of steel piles paid on current estimates processed during the applicable 3-month period.

\* The unit weight of steel will be the second of the two numbers associated with the size designation for the beam as cited in the item description (i.e. If the item description is "Steel Beam Bearing Piles, HP12xZ4", the unit weight of the steel is 74 pounds per foot).

**4.c.2 Cast-in-Place Concrete Piles.**

$$\text{Steel Tonnage (ST)} = 2.80 (D) (Q) / 2000$$

where:

D = Diameter of the steel shell (inches)\*

Q = Quantity (linear feet) of cast-in-place concrete piles paid on current estimates processed during the applicable 3-month period.

\* From the approved structure Plans or field measurements. For cylindrical shells of varying diameter, a weighted average diameter will be used, computed based on the number of shells of each diameter actually installed. For tapered shells, an average diameter will be used, computed as the average of the shell diameters at the butt end and at the tip.

**4.c.3 Pipe Piles.**

$$\text{Steel Tonnage (ST)} = 6.70 (D) (Q) / 2000$$

where:

D = Diameter of the steel pipe (inches)\*

Q = Quantity (linear feet) of pipe piles paid on current estimates processed during the applicable 3-month period.

\* From the approved structure Plans or field measurements.

**4.d Steel Sign Structure.** For applicable steel sign structures constructed under a separate contract item, the equivalent tonnage is computed as follows:

$$\text{Steel Tonnage (ST)} = (Q) / 2000$$

where:

Q = Quantity (pounds) of steel in each sign structure, or portion thereof, paid on current estimates processed during the applicable 3-month period.\*

\*Not to exceed the estimated weight of each sign structure as indicated on the structure Plans.

**4.e Fabricated Structural Steel.** For applicable fabricated structural steel; furnished under a separate contract item, as a component item associated with an "as-designed" or alternate design structure, or as a component item associated with a design-build contract; the equivalent tonnage is computed as follows:

$$\text{Steel Tonnage (ST)} = (Q) / 2000$$

where:

Q = Quantity (pounds) of fabricated structural steel girders, rolled beams, angle, and plate paid on current estimates processed during the applicable 3-month period.

**4.f Precast Reinforced Concrete Box Culverts and Prestressed Concrete Bridge Beams.** For applicable precast reinforced concrete box culvert segments and prestressed concrete bridge beams; furnished under a separate contract item, as a component item associated with an "as-designed" or alternate design structure, or as a component item associated with a design-build contract; the equivalent tonnage is computed as follows:

$$\text{Steel Tonnage (ST)} = (UW)(Q)/2000$$

where:

UW= Unit Weight (pounds per foot) of reinforcing steel in a box culvert segment or of reinforcing steel and prestressing strands in a prestressed bridge beam.\*

Q = Quantity (linear feet) of precast reinforced concrete box culvert segments and prestressed concrete bridge beams paid on current estimates processed during the applicable 3-month period.

\* Submit documentation indicating the weight (pounds) of reinforcing steel included in and the length (feet) of each box culvert segment, and the weight (pounds) of mild reinforcing steel and prestressing strands included in and the length (feet) of each prestressed bridge beam. UW will be computed as the average of the unit weight of steel (i.e. weight of steel divided by length) in each box culvert segment, or as the average of the unit weight of steel (i.e. weight of steel divided by length) in each prestressed bridge beam. Documentation must be submitted at the time required shop drawings are submitted for approval.

**5. Payment/Rebate.** The price adjustment will be paid, or rebated, upon approval of a contract adjustment to be prepared on a quarterly basis as applicable work is completed. Cumulative quarterly price adjustments amounting to less than \$1,000 will be disregarded.

**6. Expiration of Contract Time.** When eligible materials are purchased after expiration of contract time and liquidated damages are chargeable, the value for SI used to compute the price adjustment will be either the index price for the month in which applicable steel material is invoiced or the index price at the time contract time expired, whichever is less.

**7. Final Quantities.** Upon completion of the work and determination of final pay quantities, a final contract adjustment may be prepared to reconcile any difference between estimated quantities previously paid and the final quantities. In this situation, the

value for SI used in the price adjustment formula will be the average of all SI values previously used for computing price adjustments.

**8. Inspection of Records.** The Department, through the Office of Inspector General, reserves the right to inspect the records of the prime contractor and its subcontractors and material fabricators and suppliers to ascertain actual invoicing dates and quantity information for the steel material used in the performance of applicable items of work.

**9. Extra Work.** When applicable items of work, as specified herein, are added to the contract as Extra Work, in accordance with the provisions of Section 110.03, no price adjustment will be made for fluctuations in the cost of the steel used in manufacturing the materials placed during performance of the extra work. The current price for steel is to be used when preparing required backup data for extra work to be performed at a negotiated price. For extra work performed on a force account basis, reimbursement of actual material costs, along with the specified overhead and profit markup, will be considered to include full compensation for the current cost of steel.

### **G7022A - a07022 CHANGES TO SPECIFICATION: SECTION 107**

**Addendum:**

**Associated Item(s):**

**Header:**

CHANGES TO SPECIFICATIONS: SECTION 107

**Provision Body:**

#### **SECTION 107 - Legal Relations and Responsibility to the Public**

- Section 107.30(a)1. Revise to read as follows:

1. Equal employment opportunity requirements not to discriminate and to take affirmative action to assure equal employment opportunity, as required by Executive Order 11246 and Executive Order 11375, are set forth in Required Contract Provisions (Form FHWA-1273, except V. 2.b. revise first sentence to read as follows: the payroll records shall contain the name; an individually identifying number [e.g., the last four digits of the employee's social security number]; his or her correct classification; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalent thereof the types described in Section 1(b)(2)(B) of the Davis Bacon Act); daily and weekly number of hours worked; deductions made; and actual wages paid) and these requirements; imposed pursuant to 23 U.S.C. 140, as established by Section 22 of the Federal-Aid Highway Act of 1968. The Equal Opportunity Construction Contract Specifications set forth under 41 CFR 60-43 and the provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. The requirements set forth herein constitute the specific affirmative action requirements for project activities under this contract and supplement the equal employment opportunity requirements set forth in the Required Contract Provisions.

### **G7037D - a07037 CHANGES TO SPECIFICATIONS: SECTIONS 106, 108, 514, 515, 516, 676, AND 1107**

**Addendum:**

**Associated Item(s):**

**Header:**

Changes to Specifications: Sections 106, 108, 514, 515, 516, 676, and 1107

**Provision Body:**

**SECTION 106—CONTROL OF MATERIAL**

- **Section 106.01 General.** Revise to read as follows:

**106.01 GENERAL**—Use material complying with the requirements of these specifications. At the pre-construction conference, submit a list of material to be sampled and tested by the Contractor and a list of material to be sampled and tested by the Department.

Comply with the provisions of the Pennsylvania Trade Practices Act, 71 P.S. Section 773.101, et seq., concerning the purchase of aluminum and steel products produced in a foreign country. On Federal -Aid projects, also comply with the provisions specified in Section 106.10.

Comply with the provisions of the Steel Products Procurement Act, 73 P.S. Section 1881, et seq. in the performance of the contract or any subcontract.

Following contract execution, furnish to the Department a complete statement of the project construction material's origin, composition, and manufacture.

For Fabricated Structural Steel materials, as identified in Section 1105.01(a) and inspected in accordance with Section 1105.01(e), and any other fabricated aluminum, precast or prestressed concrete products inspected during manufacturing, stamped and approved for shipment by the Department's Representative, furnish Form CS-4171 to the Inspector-in-Charge. Certified mill test reports for any steel included will be reviewed by the Department's Inspector and retained by the fabricator.

For all other steel products or products containing steel that will serve a permanent functional use in the project, provide the Inspector-in-Charge the following when the product is delivered to the project site:

- For any "identifiable" steel products, certification that Section 4 of the Steel Products Procurement Act, 73 P.S. Section 1884, has been complied with. Identifiable steel products are steel products which contain permanent markings which indicate the material was both melted and manufactured in the United States.
- For all other "unidentifiable" steel products, documentation such as invoices, bills of lading, and mill certification that positively identify that the steel was melted and manufactured in the United States.

The provisions of the Steel Products Procurement Act will not be waived unless the Secretary has determined, under authority granted in Section 4(b) of the act, that a certain steel product or products is not produced in the United States in sufficient quantities to meet contract requirements. Such a determination will be set forth in a proposal for the Department's review and response. Include with the proposal a comprehensive list of sources, including names and contact information, for verification. The Secretary does not have the authority to waive the provisions specified in Section 106.10.

Steel products are defined as products rolled, formed, shaped, drawn, extruded, forged, cast, fabricated, otherwise similarly processed, or processed by a combination of two or more of these operations from steel made in the United States by the open hearth, basic oxygen, electric furnace, Bessemer, or any other steel-producing process. Included are cast iron products and machinery and equipment as listed in United States Department of Commerce Standard Industrial Classification 25, 35, and 37 and made of, fabricated from, or containing steel components. If a product, as delivered to the project, contains both foreign and United States steel, such product is considered to be a United States steel product only if at least 75% of the cost of the articles, materials, and supplies have been mined, produced, or manufactured, as the case may be, in the United States. On Federal -Aid projects, comply with the provisions specified in Section 106.10.

No payment will be made on the contract if unidentified steel products are supplied, until the hereinbefore requirements are met.

Any payments made that should not have been made may be recoverable from a manufacturer or supplier as well as from a contractor or subcontractor.

Any person who willfully violates the Steel Products Procurement Act will be prohibited from submitting bids for any contract for a period of 5 years from the date of determination that a violation has occurred. If a subcontractor, manufacturer or supplier, violates the Steel Products Procurement Act, such person will be prohibited from performing any work or supplying any materials to the Department for a period of 5 years from the date of determination that a violation has occurred.

If steel products are used as a construction tool or appurtenance and will not serve a permanent functional use in the project, compliance with the Steel Products Procurement Act is not required.

When standard manufactured items are specified and these items are identified by unit mass (unit weight), section dimensions, or similar characteristics, their identification will be considered to be nominal masses (weights) or dimensions. Unless more stringently controlled by specified tolerances, industry established manufacturing tolerances will be accepted.

**SECTION 108—PERFORMANCE AND PROGRESS**

- **Section 108.07(a) Construction Engineering Liquidated Damages. Revise to read as follows:**

**(a) Construction Engineering Liquidated Damages.** For each day that any physical work remains uncompleted after the Required Completion Date, the sum per day specified in the following schedule, unless otherwise stated in the proposal, will be deducted from money due or to become due. This deduction will not be as a penalty, but as Construction Engineering Liquidated Damages.

Original Contract Amount		Schedule of Daily Charges For Construction Engineering Liquidated Damages
From More Than	To and Including	Per Calendar Day
\$ 0	\$ 400,000	\$ 825
400,000	1,000,000	1,535
1,000,000	5,000,000	2,085
5,000,000	10,000,000	3,280
10,000,000	15,000,000	4,285
15,000,000		5,660

In the event the Contractor is declared in default, as specified in Section 108.08, Construction Engineering Liquidated Damages will be charged as provided by this section. If the total amount chargeable as Construction Engineering Liquidated Damages exceeds the amount payable to the Contractor or the surety, the excess is to be paid to the State by the Contractor or the surety.

**SECTION 514—DIAMOND GRINDING OF CONCRETE PAVEMENT**

- **SECTION 514.3(e) Concrete Pavement Rehabilitation. Revise to read as follows:**

**(e) Concrete Pavement Rehabilitation.** Concrete pavement repairs including concrete pavement patching, concrete spall repair, dowel retrofit, slab stabilization, and slab jacking must be completed before the start of any diamond grinding operations.

After completing the concrete rehabilitation operation, determine the ride quality of the existing pavement in accordance with Section 507.3(a) and Section 507.3(b), before performing any diamond grinding. After completing the diamond grinding operations, reevaluate the ride quality of the pavement surface according to Section 507.3(a) and Section 507.3(b). Use the same pavement surface profile measuring equipment to perform all ride quality evaluations on the project.

After diamond grinding the pavement surface, provide a maximum IRI of 70 in/mile for facilities where posted speed limits are greater than 45 miles per hour, and a maximum IRI of 90 in/mile for facilities where posted speed limits are less than or equal to 45 miles per hour. Meet these requirements in all IRI lots where diamond grinding of the pavement was performed to receive payment.

**1. Lots.** A full lot is 528 feet of a single lane. The Representative will designate lots starting at the beginning ride quality limit and continuing to the ending ride quality limit for each pavement lane and ramp that is 12 feet or wider. Do not include the length of excluded areas in the 528 feet. Excluded areas will consist of; bridge decks, ramps less than 1,500 feet, in length, tapered pavements less than 12 feet wide, partial lots less than 100 feet in length, shoulders, medians, and other pavement surfaces as indicated.

**SECTION 515—SAWING AND SEALING OF BITUMINOUS OVERLAYS**

- **SECTION 515.3(b) Sawing. Revise to read as follows:**

**(b) Sawing.** Make all saw-cuts directly above the existing transverse joints within ± 1 inch. Saw-cuts which do not meet this tolerance will be declared defective as outlined in Section 105.12. Do not saw cut until the bituminous course has cooled below 140F. Perform saw cutting within 7 days after placing the wearing course. Perform this work on all finished overlay areas before discontinuing work due to seasonal paving limitations.

Make saw-cuts only in the lane in which the existing joint is located. Extend the saw-cuts through any existing widening. Provide separate saw-cuts in each lane if existing transverse joints are offset more than 1 inch.

Use the following table to determine saw-cut reservoir size:

Overlay Thickness	Reservoir
inches	inches
≤1 1/2	1/2 deep by 1/2 wide
>1 1/2	1 deep by 1/2 wide

Additionally, if the total depth of overlay is 3 1/2 inches or greater, make an initial saw-cut 1/8 inch wide to a depth of 1 1/2 inches or one-third of the total overlay thickness, whichever is greater. Indicated overlay depths do not include scratch or leveling courses less than 1 inch.

If wet sawing, immediately flush the reservoir with water.

If not placing the wearing course within the same construction season, provide a 1/8-inch wide saw-cut in the last placed bituminous course to a minimum depth of 1 inch or one-third the thickness of the bituminous material placed, whichever is greater.

**SECTION 516—CONCRETE PAVEMENT PATCHING**

- **SECTION 516—Description. Revise to read as follows:**

**516.1 DESCRIPTION**—This work is the construction of single course, full depth, normal strength or accelerated strength, cement concrete pavement patches. Do not patch less than one lane width. If diamond grinding is to be performed, test the pavement surface in the longitudinal direction as specified in Section 514.3(d)2.

**(a) Patching Joint.** Provide full depth saw-cuts at the existing pavement/patch interface, install load transfer dowels in the transverse faces of the existing pavement, construct a sealant reservoir, and seal the joint.

**(b) New Pavement Joint.** Provide load transfer unit, construct sealant reservoir, and seal the joint.

**(c) Normal and Accelerated Concrete Pavement Patching, Type A.** Construct patches between 6 feet and 20 feet long.

**(d) Normal and Accelerated Concrete Pavement Patching, Type B.** Construct patches between 20.1 feet and 65 feet long.

**(e) Normal and Accelerated Concrete Pavement Patching, Type C.** Construct patches between 65.1 feet and 500 feet long.

- **Section 516.2(a) – Cement Concrete—Class AA. Revise to read as follows:**

**(a) Cement Concrete—Class AA.** Section 704

- **Section 516.2(g) Concrete Curing Materials. Revise to read as follows:**

**(g) Concrete Curing Materials.** For normal strength concrete, use Section 711.1(a), (b), (c), (d), and (e); or Section 711.2(a), Type 2.

For accelerated strength concrete, use Section 711.1(b) and Section 711.2(a), Type 2, or 711.2(b).

- **Section 516.2(j) Tape Bond Breaker. Revise to read as follows:**

**(j) Tape Bond Breaker.** An approved self adhesive tape.

- **Section 516.2(k) Anchor Material. Revise to read as follows:**

**(k) Anchor Material.** An approved adhesive anchoring material listed in Bulletin 15.

- **Section 516.3(a) General. Revise to read as follows:**

**(a) General.** Prepare a QC Plan as specified in Section 106.03(a)2.a and submit it for review. The QC Plan must describe appropriate action points for all phases of construction, including concrete mixing and curing, joint sawing and sealing, and sampling and testing for opening to traffic. If patching adjacent lanes, construct concrete pavement patches one lane at a time where two lane width construction would interfere with traffic. The Representative will surface mark patch areas in advance of the sawing operations.

Protect traffic from drop off conditions as specified in Section 901.3(j). Do not allow excavated patch areas to remain un-patched for more than 2 calendar days or over weekends or holidays.

If it rains while the patch area is open, excavate an outlet through the shoulder at the lowest point of the patch as directed. Repair any damage to the existing shoulders as a result of this work, at no expense to the Department. After saw cutting the existing

pavement, allow traffic on patch areas of existing pavement for a maximum of 72 hours. Do not allow saw cuts in excess of 1/2 inch in width to be opened to traffic.

For normal strength patches, do not place concrete if the air temperature falls below 40F. For accelerated strength patches, do not place concrete if the air temperature falls below 45F. Before placing concrete, ensure adequate equipment and trained personnel are available, and sufficient hauling units scheduled, to maintain continuity in placement.

- **Section 516.3(b) Saw Cutting. Revise to read as follows:**

**(b) Saw Cutting.** Use a saw equipped with a diamond-tipped blade, a blade guard, alignment guides, water cooling system, and cut-depth controls for saw cutting the perimeter of the patch. Do not allow cooling water, slurry, and dust from the sawing operation to enter any lane opened to traffic. Make all required full depth longitudinal saw cuts along the perimeter of the patch prior to making any full depth transverse saw cuts.

Where only one lane is being patched, make a full depth saw-cut in the existing longitudinal joint for the full length of the patch. Where multiple lanes are being patched one lane at a time, perform one of the following:

- Make a full depth saw-cut within the adjacent lane to be patched. Make the saw-cut parallel and not more than 1 foot from the existing longitudinal joint. Form the patch joint in the same location as the existing longitudinal joint and backfill behind the forms with aggregate at no additional cost to the Department.
- Make a full depth saw-cut in the existing longitudinal joint for the length of the patch and insert a temporary rigid separator between the adjacent lane and the patch area. Do not use a temporary rigid separator greater than 1/8 inch thick.

Make full depth transverse saw-cuts at the locations marked on the pavement surface. Do not break back the underside of the existing pavement. If break back or spalling occurs, make a new full depth transverse saw-cut beyond the area of break back or spalling. Place the additional length of patch at no expense to the Department. If break back or spalling occurs in the adjacent lane, repair the damaged area at a minimum with a full depth Type A concrete patch at no additional expense to the Department. Full depth saw cuts at the patch limits will be allowed to extend transversely into the adjacent pavement up to full depth + 2 inches provided dowel bars in the adjacent lane are not damaged. Additional full depth transverse saw cuts will be allowed to facilitate slab removal but may not extend transversely into the adjacent pavement to remain in place.

- **Section 516.3(c) Removal of Existing Pavement. Revise to read as follows:**

**(c) Removal of Existing Pavement.** Remove concrete between narrowly spaced saw-cuts at the end of a proposed patch area in a manner that does not damage any adjacent pavement that is to remain in place.

As an alternate, a wheel saw having carbide steel tips may be used before making the full depth transverse saw-cuts necessary for the patching joint. Limit penetration of the wheel to minimize disturbance to the subbase. Do not allow wheel saws with carbide steel tips to cut into pavement that is to remain in place. Discontinue using a wheel saw if unsatisfactory results are obtained as determined by the Representative.

Remove the concrete in the patch area in one or more pieces minimizing disturbance to the subbase, subgrade, and the adjacent pavement to remain in place. Do not use drop hammers or hydro hammers. If damage occurs to pavement to remain in place, repair as specified in Section 516.3(b) at no additional cost to the Department.

If the surface of the subbase is disturbed by the removal technique, recompact the surface using small vibratory compactors. If the disturbed material is deeper than 1 inch, remove the disturbed material with hand tools and replace with concrete during paving at no expense to the Department.

Correct all subbase surface irregularities exceeding 1 inch in depth by loosening the surface and removing or adding material as required. Compact the corrected area and surrounding surface by rolling to proper grade and slope.

- **Section 516.3(j) Curing of Concrete. Revise to read as follows:**

**(j) Curing of Concrete.** For normal strength patches, immediately after finishing operations have been completed, cover and cure the patch surface as specified in Section 501.3(l).

For accelerated patches, cure concrete as specified in Section 501.3(l)1.b or using approved curing insulation materials. Apply white membrane-forming curing compound as specified in Section 501.3(l)1.c. The Contractor may use black membrane-forming curing compound provided the patch area will not be accessible to traffic before placement of a surface course. Discontinue use of black membrane-forming curing compound if it performs unsatisfactorily as a curing agent, and resume curing by other methods as specified. Cure test cylinders under the same conditions as the concrete pavement patch. Provide insulation or heating of patches if the ambient temperature drops below 80F during the curing operation. Control the curing temperature and monitor at least hourly to ensure that the concrete pavement patch does not experience a curing temperature change in excess 40F within any 1-hour period during the curing operation. If a change in curing temperature in excess of 40F occurs in the concrete pavement patch within any 1-hour period, the work will be considered defective.

- **Section 516.3(m) Longitudinal Joints. Revise to read as follows:**

**(m) Longitudinal Joints.** In two lane width patching being performed at the same time, construct a Type L joint as shown on the Standard Drawings.

In two lane patching being performed one lane at a time, or one lane patching, provide a 1/4-inch, full depth, polystyrene board bond breaker in the longitudinal joint of Type A and B patches. Do not provide a bond breaker in the longitudinal joint of Type C patches. Provide tiebars in all Type C patches. For all patch types, saw cut the longitudinal joint 1/4 inch wide and 1 inch deep. Center the saw-cut over the joint.

- **Section 516.3(n) Sealing. Revise to read as follows:**

**(n) Sealing.** Seal all longitudinal and transverse joints constructed as part of this work, as specified in Section 501.3(n).

Seal all saw-cuts extending beyond the patch limits.

- **Section 516.3(q) Opening to Traffic. Revise to read as follows:**

**(q) Opening to Traffic.** For normal strength patches, do not open the repaired area to traffic until the concrete has obtained a minimum compressive strength of 3,000 pounds per square inch, when tested according to PTM No. 604.

For accelerated strength patches, obtain samples of plastic concrete, for compressive strength testing for opening to traffic, from each 100 cubic yards or fraction thereof of the day's placement, and, unless otherwise required, from the last mixer load of the day, according to the approved QC Plan. Sample locations will be selected according to PTM No. 1. Test concrete for compressive strength according to PTM No. 604, at the time of opening to traffic but no later than 7 hours after the test specimens were molded. Concrete lots that have not attained a minimum compressive strength of 1,200 pounds per square inch at the time of opening to traffic will be considered defective work.

## **SECTION 676—CEMENT CONCRETE SIDEWALKS**

- **Section 676.3(h) Curb Ramps. Revise to read as follows.**

**(h) Curb Ramps.** As required and where indicated, construct cement concrete sidewalk for curb ramp configurations as indicated on Standard Drawing RC 67M except for the detectable warning surface located at the bottom of each ramp. Construct the detectable warning surface as specified in Section 695.

Create a slip-resistant textured surface for the full width and length of the curb ramp and any side-flares excluding the detectable warning surface. Use a coarse, stiff-toothed broom to create a textured pattern that is worked perpendicular to the slopes of the curb ramp.

Shape rounded edges instead of sharp angled edges while the concrete is still plastic for all slope changes of the curb ramp especially where the top of the curb ramp meets adjacent sidewalk surfaces.

Embed detectable warning surface in fresh, wet concrete at the proper location for the curb ramp before the wet concrete has set.

## **SECTION 1107—PRESTRESSED CONCRETE BRIDGE BEAMS**

- **Section 1107.03(d)5.b. Air Content. Revise to read as follows:**

**5.b Air Content.** Provide an air content of  $6\% \pm 1.5\%$  for traditional mixes and  $7\% \pm 2\%$  for self consolidating (SCC) mixes. The air content requirement may be waived if the mix meets the following additional qualification tests before production:

- Rapid Chloride Permeability, AASHTO T277: 1500 coulombs at 56-days
- Freeze Thaw Resistance, ASTM C666, Procedure A or B: Minimum durability factor of 90 at 300 cycles.

## **G7038B - a07038 Changes to Specifications: Sections 101, 103, 110, 419, 695, 930, 931, 932, 934, 935, 938,**

**Addendum:**

**Associated Item(s):**

**Header:**

a07038 Changes to Specifications: Sections 101, 103, 110, 419, 695, 930, 931, 932, 934, 935, 938, 1012, 1015, and 1103

**Provision Body:**

## **SECTION 101—ABBREVIATIONS AND DEFINITIONS OF TERMS**

- **Section 101.03 DEFINITIONS. Revise to include the following:**

**MAJOR ITEM OF WORK**—Any item having a unit of measure of other than Lump Sum, Call, Dollar, or Predetermined Amount (PDA).

## **SECTION 103—AWARD AND EXECUTION OF CONTRACT**

- **Section 103.03 Cancellation of Award. Revise to read as follows:**

**103.03 CANCELLATION OF AWARD**—The Secretary reserves the right to cancel the award of any contract at any time before its approval by the Chief Counsel, the General Counsel, and/or the Attorney General, or their designees, when such cancellation is in the best interests of the State. In the event of such cancellation, payment will be made for the documented costs of insurance and surety bonds required under Sections 103.04 and 103.05, and the documented cost of actual expenses reasonably incurred in accordance with a Letter of Intent, when specified and issued by the Deputy Secretary for Highway Administration. No payment will be made for damages of any other kind including, but not limited to, lost profits.

- **Section 103.07 Cancellation of Contract. Revise to read as follows:**

**103.07 CANCELLATION OF CONTRACT**—The contract may be canceled by either party if the Notice to Proceed is not issued on or before the Anticipated Notice to Proceed Date specified in the bid package or within 30 days of the Award of the contract, whichever is later. Extension(s) of the cancellation period will be made only by mutual written consent of the parties to the contract provided such written consent is given before the expiration of the cancellation period. Prices will not be renegotiated. The Secretary also reserves the right to cancel the contract any time before the actual Notice to Proceed Date. If the contract is canceled, payment will be made for the documented costs of insurance and surety bonds required under Sections 103.04 and 103.05, and the documented cost of actual expenses reasonably incurred in accordance with a Letter of Intent, when specified and issued by the Deputy Secretary for Highway Administration. No payment will be made for damages of any other kind including, but not limited to, lost profits.

## **SECTION 110—PAYMENT**

- **Section 110.02(d) Required Changes in the Scope of Work.** Revise to read as follows:

**(d) Required Changes in the Scope of Work.** The Department reserves the right to make, in writing, at any time, such changes in quantities and such alterations in the work as are necessary to satisfactorily complete the project. Such changes in quantities and alterations in the work will neither invalidate the contract or release the surety, and the Contractor agrees to perform the work as changed or altered.

If alterations in the work or changes in quantities do not significantly change the character of the work to be performed under the contract, the work will be paid for at the original contract unit price.

If alterations in the work or changes in quantities significantly change the character of the work under the contract, whether such alterations or changes are in themselves significant changes to the character of the work or by affecting other work cause such other work to become significantly different in character, an adjustment, excluding loss of anticipated profits, will be made as specified in Section 110.03. The basis for the adjustment will be agreed upon before the performance of the work. If a basis cannot be agreed upon, the work will be paid for as extra work as specified in Section 110.03.

The term “significant change in character” applies only to the following circumstances:

- If the work as altered differs materially in kind or nature from that involved or included in the original proposed construction, or
- If any major item of work as defined in Section 101 is increased to in excess of 125% or decreased to below 75% of the original contract quantity. Any allowance for an increase in quantity applies only to that portion in excess of 125% of the original contract item quantity or, in case of a decrease below 75%, to the actual quantity of work performed.

When a contract item experiences a significant change in character as a result of a decrease to below 75% of the original contract quantity, the actual quantity of work performed may be paid at an adjusted price, as agreed upon with the Contractor and as approved; however, total compensation will not exceed the contract item’s original value. Item value is defined as the original contract quantity multiplied by the contract unit price.

## **SECTION 419—STONE MATRIX ASPHALT MIXTURE DESIGN, RPS CONSTRUCTION OF PLANT-MIXED HMA WEARING COURSES**

- **Section 419.2(d) Stabilizer.** Revise to read as follows:

**(d) Stabilizer.** Provide mineral fiber, cellulose fiber, or crumb rubber (CR) stabilizers conforming to the requirements below and added at a rate specified in Table B. Use the dosage rate prescribed in the JMF.

**1. Requirements for All Fiber Types.** Fibers must prevent draindown in the mixture according to the tolerances in Table B. Use a fiber of the type and properties appropriate to the plant’s metering and delivery system.

**2. Cellulose Fibers.** Fibers must be of sufficient quality to prevent mixture draindown.

**3. Cellulose Pellets.** Use cellulose fiber stabilizing additive in pellet form that disperses sufficiently at mixing temperature to blend uniformly into the asphalt mixture. Use pellets that do not exceed 6 mm (0.25 inch) average diameter. Pellets may contain binder ingredients such as asphalt cement, wax, or polymer. Do not use pellets if the binder ingredient exceeds 20.0% of the total mass (weight) of the pellets. Use binder that produces no measurable effect on the properties of the asphalt cement. Do not use fiber pellets which soften or clump together when stored at temperatures up to 50 °C (122F).

Note: If the binder material constitutes more than 3% of the pellet mass (weight), base the dosage rate on the net fiber content.

**4. Mineral Fibers.** Use mineral fibers made from virgin basalt, diabase, slag, or other silicate rock. Use an approved mineral fiber meeting the following requirements for shot content, as tested according to ASTM C 612.

Sieve	Percent Passing
250 µm (No. 60)	85 - 95
63 µm (No. 230)	60 - 80

**5. Crumb Rubber (CR).** Use CR derived from the processing of recycled tires. Rubber tire buffings produced by the retreading process qualify as a source of CR. Furnish processed, free flowing CR from a manufacturer listed in Bulletin 15, certified as specified in Section 106.03(b)3.

**5.a Gradation.** Meet the following gradation as determined according to ASTM D 5461 using 200 mm diameter sized sieves and maintaining a maximum allowable loss after sieve analysis of 7.65%. As an alternative dry sieve analysis test method, perform the sieve analysis of the CR according to Florida Test Method, FM 5-559.

CR Gradation	
Sieve Size	Percent Passing
4.75 mm (No. 200)	100
2.36 mm	98 - 100
75 µm (No. 200)	0 - 3

**5.b Contaminants.** Provide CR relatively free from fabric, wire, cord, and other contaminating materials to a maximum total contaminant content of 2.5% (maximum of 1.0% iron, 1.0% fiber, and 0.5% other contaminants by mass (weight) of total CR sample components).

Remove rubber particles from the fiber balls before weighing. Determine the metal content by thoroughly passing a magnet through a 50 ± g (1.76 ± 0.004 ounces) sample. Determine fiber content by weighing fiber balls, which are formed during the gradation test procedure.

- Section 419.2(d) Table B. Revise to read as follows:

**TABLE B**

**Mix Design Requirements for SMA Mixtures**

AGGREGATE GRADATION REQUIREMENTS, PERCENT PASSING		
Sieve Size	9.5-mm Mixture	12.5-mm Mixture
19.0 mm (3/4 inch)	-	100
12.5 mm (1/2 inch)	100	90 – 99

9.5 mm (3/8 inch)	75 – 95	70 – 85
4.75 (No. 4)	30 – 50	28 – 40
2.36 mm (No. 8)	20 – 30	20 – 30
1.18 mm (No. 16)	-	-
600 mm (No. 30)	-	-
300 mm (No. 50)	-	-
150 mm (No. 100)	-	-
75 mm (No. 200)	8 – 13	8 – 11
<b>VOLUMETRIC DESIGN REQUIREMENTS</b>		
<b>Design Gyration (<math>N_{design}</math>)</b>	100	
<b>Voids in Mineral Aggregate</b>	18.0 % Minimum	
<b>Voids in Course Aggregate (VCA)</b>	$VCA_{mix} < VCA_{dry\ rodde}$	
<b>Design air voids</b>	3.5 - 4.0 %	
<b>Minimum asphalt binder content</b>	Table C	
<b>Binder grade</b>	PG 76-22	
<b>Stabilizer content</b>	Cellulose:0.2 to 0.4 % by total mix mass (weight) Mineral:0.3 to 0.4 % by total mix mass (weight) CR:0.3 to 1 % by total mix mass (weight)	
<b>Draindown</b>	0.3 % maximum	

- **Section 419.3(l) Joints.Revise to read as follows:**

(l)Joints.Section 409.3(k).

**SECTION 695—DETECTABLE WARNING SURFACE**

- **Section 695.2(a) Detectable Warning Surface (DWS). Revise to read as follows:**

**(a) Detectable Warning Surface (DWS).** Provide a DWS product from a manufacturer listed in Bulletin 15 and meeting the requirements of the Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way (PROWAG). Provide certification as specified in Section 106.03(b)3 that the DWS meets the following PROWAG criteria:

- **General.** Detectable warning surface with the surface comprised of truncated domes. Dome size and spacing as specified and as indicated on Standard Drawing, RC-67M.
- **Surface.** Slip resistant.
- **Contrast.** Provide a DWS color, as approved by the Representative, that contrasts visually with adjacent walking surfaces either light-on-dark or dark-on-light.

**SECTION 930—POST MOUNTED SIGNS, TYPE A**

- **SECTION 930.2(a) Extruded Aluminum Channel Signs, Posts, and Miscellaneous Material. Revise to read as follows:**

**(a) Extruded Aluminum Channel Signs, Posts, and Miscellaneous Material.**

- Extruded Aluminum Channel Signs—Section 1103.02
- Steel S or W Beam Posts and Breakaway System—Section 1103.07
- Galvanized Steel Hex Head Bolts, Nuts, Lock - Washers; Aluminum Post-Clips, Auxiliary Supports for Exit Panels, 1/8-inch Rivets—Section 1103.11

- **SECTION 930.3(h) Erection. Revise to read as follows:**

**(h) Erection.** Install nuts on post clips with a torque wrench for extruded aluminum channels. Apply 225 inch-pounds of torque to each galvanized nut with the threads dry, clean, and unlubricated.

Attach the sign to posts with twist - in toggle and buckle straps or stainless steel post - clips for flat sheet aluminum. Apply 225 inch-pounds of torque to each stainless steel nut with the threads dry, clean, and unlubricated.

Clean signs after erection, removing any accumulation of oil, grease, dirt, or foreign material.

Brace the panel with one or more auxiliary supports if exit panels cannot be supported by two sign posts.

**SECTION 931—POST MOUNTED SIGNS, TYPE B**

- **SECTION 931.2 MATERIAL. Revise to read as follows:**

**931.2 MATERIAL—**As shown on the Standard Drawings and as follows:

- Flat Sheet Signs—Section 1103.04
- Breakaway Steel Posts—From a manufacturer listed in Bulletin 15, and as specified in Section 1103.08.
- Anti - Theft Hardware—Section 1103.11, System A
- Packaged Dry Concrete—Section 624.2(b)

**SECTION 932—POST MOUNTED SIGNS, TYPE C**

- **SECTION 932.2(a) Signs, Posts, Supports, and Miscellaneous Material. Revise to read as follows:**

**(a) Signs, Posts, Supports, and Miscellaneous Material.**

- Flat Sheet Signs—Section 1103.04
- Treated Wood Posts—Section 1103.09
- Anti-Theft Hardware—Section 1103.11, System A
- Lag Screws—Section 1103.11(d)
- Shims and Bars—Section 1105.02(a)2
- Brackets—Section 1105.02(f)2

**SECTION 934—POST MOUNTED SIGNS, TYPE E**

- **SECTION 934.2(a) Extruded Aluminum Channel Signs, Posts, Supports, and Miscellaneous Material.** Revise to read as follows:

**(a) Extruded Aluminum Channel Signs, Posts, Supports, and Miscellaneous Material.**

- Extruded Aluminum Channel Signs—Section 1103.02
- Treated Wood Posts—Section 1103.09(a)
- Composite Posts—Section 1103.09(b)
- Galvanized Steel Hex Head Bolts, Nuts, Lock-Washers; Aluminum Post-Clips, Auxiliary Supports for Exit Panels, Rivets—Section 1103.11
- Angles (Supports)—Section 1103.12(g)
- Shim Bars and Plates (Supports)—Section 1105.02(a)2

- **SECTION 934.2(b) Flat Sheet Aluminum Signs with Stiffeners, Posts, and Miscellaneous Material.** Revise to read as follows:

**(b) Flat Sheet Aluminum Signs with Stiffeners, Posts, and Miscellaneous Material.**

- Flat Sheet Aluminum Signs with Stiffeners—Section 1103.03
- Treated Wood Posts—Section 1103.09(a)
- Composite Posts—Section 1103.09(b)
- Rivets—Section 1103.11(e)
- Stainless Steel Bolts, Nuts, Washers, Post-Clips; Twist-In Toggles and Buckle Straps; Butting Plates; Auxiliary Supports for Exit Panels—Section 1103.11
- Angles (Support)—Section 1103.12(g)
- Shim Bars and Plates (Supports)—Section 1105.02(a)2

**SECTION 935—POST MOUNTED SIGNS, TYPE F**

- **SECTION 935.2 MATERIAL.** Revise to read as follows:

**935.2 MATERIAL**—As shown on the Standard Drawing for the corresponding type post and as follows:

- Flat Sheet Signs—Section 1103.04
- Brackets and Bars (Supports)—Section 1103.12
- Extruded Aluminum Channel Signs—Section 1103.02
- Flat Sheet Aluminum Signs with Stiffeners—Section 1103.03
- Galvanized Steel Hex Head Bolts, Nuts, Lock-Washers; Aluminum Post-Clips; Lag Screws; Rivets; Anti-Theft Sign Hardware (System A)—Section 1103.11

**SECTION 938—DISTANCE MARKERS**

- **SECTION 938.2 MATERIAL.** Revise to read as follows:

**938.2 MATERIAL**—As shown on the Standard Drawings and as follows:

- Aluminum Blanks—Section 1103.04(a)
- Breakaway Steel Posts—Section 1103.08
- Anti - Theft Hardware—Section 1103.11(j)
- Brackets, Bars, Clamps, Straps and Gussett Plates (Supports)—Section 1103.12(i)

**SECTION 1012—PEDESTRIAN RAILING**

- **SECTION 1012.2(a) Railing.** Revise to read as follows:

**(a) Railing.**

- Aluminum-Alloy Casting—ASTM B 26/B 26M, Alloy SG70A-T6 or ASTM B 108, Alloy SG70A-T6.
- Aluminum-Alloy Bolts—ASTM B 211/B 211M, Alloy 2024-T4.

- Aluminum-Alloy Nuts—ASTM B 211/B 211M, Alloy 6061-T6.
- Nylon Washers—Section 1103.11(j)2
- Bolt Heads—Regular hexagon, ANSI B18.2.3.5M (ANSI B18.2).
- Nuts. Finished hexagon, ANSI B18.2.4.6M (ANSI B18.2)—Threads, Class 6, 6g, or 6H (Threads, Class 2, 2A, or 2B).
- Aluminum Alloy Balusters – ASTM B 221/B 221M, Alloy 6061-T4.
- Post assembly and panel to post aluminum washers – ASTM B209, Alloy 2024-T3.
- Cast Aluminum Post Base – ASTM B 26/B 26M, Alloy SG70A-T6 or ASTM B 108/ B 108M, Alloy SG70A-T6.
- Other Aluminum Alloys—Section 1013.2(a)

Certify as specified in Section 106.03(b)3.

## SECTION 1015—PROTECTIVE BARRIER

- **SECTION 1015.2(a) Barrier.** Revise to read as follows:

### (a) Barrier.

- Aluminum-Alloy Extruded Section—ASTM B 221/B 221M, Alloy 6061-T6 or 6351-T5.
- Aluminum-Alloy Sheet and Plate—Alloy 6061-T6
- Aluminum-Alloy Bolts— ASTM B 211, Alloy 2024-T6 or 6061-T6
- Aluminum-Alloy Nuts—ASTM B 211/B 211M, Alloy 6061-T6.
- Nylon Washers—Section 1103.11(j)2
- Bolt Heads—Regular hexagon. ANSI B18.2.3.5M (B18.2)
- Nuts—Finished hexagon, ANSI B18.2.4.6M (B18.2) Thread, Class 6, 6g, or 6H (2, 2A, or 2B)
- Other Aluminum Alloys—Section 1013.02(a)

Certify as specified in Section 106.03(b)3.

## SECTION 1103—TRAFFIC SIGNING AND MARKING

- **SECTION 1103.11 MISCELLANEOUS MATERIALS.** Revise to read as follows:

### 1103.11 MISCELLANEOUS MATERIALS—

(a) **Hex Head Bolts, Nuts, and Washers for Extruded Panel Sign Post-Clips.** Galvanized steel as specified in Section 1105.02(s):

1. **Hex Head Bolts.** ASTM A307, Grade A or B.
2. **Nut.** ASTM A563 DH or ASTM A194 Grade 1 or 2.
3. **Washer.** Carbon steel helical coil or ASTM F436 or ASTM F844 (Note 1)

**Note 1:** If either ASTM F436 or ASTM F844 flat washers are used, bolt must be fastened either using two nuts or a single nut with the threads galled adjacent to the nut to prevent loosening.

(b) **Post - Clips.** For extruded panel signs, aluminum, conforming to ASTM B 108, Alloy 356-T6. For flat sheet aluminum signs with stiffeners, stainless steel, Type 304, 14 gage.

(c) **Auxiliary Supports for Exit Panels.** Aluminum conforming to ASTM B 211/B 211M, Alloy 6061-T6. 3 inches by 3 inches by 3/16-inch angle, 6 1/2 feet long or long enough to attach to three stiffeners on the main sign.

(d) **Lag Screws.** 5/16-inch round head, galvanized steel as specified in Section 1105.02(s); ASTM A 307.

(e) **Rivets.** Aluminum, self - plugging or hollow - core, as follows:

- 3/16-inch for mounting reflective units and distance plaques—Alloy 5056 with 7178 mandrels.
- 3/16-inch for mounting flat aluminum sheets to stiffeners sections— Alloy 5056 with carbon steel mandrels.

Rivet size specified is the minimum shank diameter. Use rivets with sufficient grip range to attach to background sign material, stiffeners, or posts. Use a No. 10 drill for 3/16-inch rivets for attachment of stiffeners and splice bars.

**(f)Bolts, Nuts, and Washers for Flat Sheet Aluminum Signs with Stiffeners.**Stainless steel, Type 304 bolts. Use 5/16-inch by 1 inch long for butting plates and 5/16-inch by 2 inches long for post - clips. Use standard connection bolts or twist - in bolts.

**(g)Twist - in Toggle and Buckle Straps.**Stainless steel, Type 201, and 0.75 inch wide and 0.03 inch thick, with rounded edges. Spot welded, twist - in type toggle on end of strap. Spot welded, antirotational buckle on other end of strap. Toggles and buckles shall be stainless steel, Type 304, and 1/16 inch thick.

**(h)Butting Plates.**Fabricate from stainless steel, Type 304.

**(i)Anchors.**Section 1105.02(c)2.From a manufacturer listed in Bulletin 15.

**(j) Anti - Theft Sign Hardware.**

## 1.System A.

- **Bolts.** Section 1105.02(c)1 and as follows:

Provide 5/16 inch by 2 1/2-inch steel carriage bolts with minimum 1711/16-inch diameter round head, square neck, and threads to within 1 inch of head.

Furnish bolts having a mechanically deposited cadmium coating, ASTM B 696, or zinc, Type I coating as specified in Section 1105.02(s).

- **Nuts.** Square, pyramidal-shaped nuts with all four sides sloping at an angle of 41 degrees; 5/16-18 UNC threads; C-1010 cold-rolled steel, case hardened to Rockwell hardness of 55 to 60.

Furnish nuts having a 0.002 inch to 0.005 inch thick, mechanically deposited, zinc, Type II yellow chromate coating as specified in Section 1105.02 (s) (ASTM B 695), tested according to ASTM B 201.

## 2.System B.

- **Bolts.** Section 1103.11(m) and as follows:

Provide 5/16-inch by 2 1/2-inch and 5/16-inch by 3-inch bolts with minimum 9/16-inch diameter one-way heads and threads to within 1 inch of head.

- **Nuts.** Section 1103.11(n) and as follows:

Provide nuts, Alloy 2011-T3, double-chamfered hexagon with self-locking conical shape 9/16-inch - 3/8-inch by 3/16-inch unit under the nut with 5/16-18 UNC threads. Hexagon portion should break away from self-locking unit with 5/16-18 UNC to 40 inch-pounds to 80 inch-pounds of torque.

- **Washers.** Nylon 1/8 inch thick by 1-inch minimum outside diameter with 480 inch-pounds maximum allowable applied torque.

**(k)Bandings.**Stainless steel, Type 201, 0.750 inch wide by 0.030 inch thick, with rounded edges for handling ease and safety. Buckles and other necessary hardware shall be of stainless steel, Type 304.

**(m)Aluminum Bolts.**ASTM B 211/B 211M. Alloy 2024-T4, thread fit, ANSI Class 6g, and threads shall be within two threads of the head or a minimum of 1 3/4 inches.

**(n)Aluminum Nuts.**ASTM B 211/B 211M. Alloy 2024-T6, thread fit, ANSI Class 6H (ANSI Class 2B, 18 UNC threads).

## N10502A - a10502 BRIDGE SHOP DRAWINGS (DESIGN-BUILD)

Addendum:

**Associated Item(s):**

**Header:**

BRIDGE SHOP DRAWINGS (DESIGN-BUILD)

**Provision Body:**

The Lead Design Engineer will be responsible for review and acceptance of bridge shop drawings and shop drawings for other fabricated material. Distribute approved shop drawings in accordance with Section 105.02(d).

**N29890C - a29890 SPECIAL BIDDING – DESIGN-BUILD**

**Addendum:**

**Associated Item(s):**

**Header:**

SPECIAL BIDDING – DESIGN-BUILD

**Provision Body:**

This project will utilize the Low Bid Design-Build method of contracting. The contract for this project will be between the Department and the successful Bidder.

**I. ACTIONS REQUIRED BY THE BIDDER AT THE BIDDING STAGE AND BEFORE AWARD**

When signing and submitting the bid, the Bidder is required to certify the following for all professional service firms (firms) performing activities listed in Section IV – Design Activities:

- that, if applicable, the Bidder either (a) has obtained assurance that all firms being used have no adverse interests as defined in the State Adverse Interest Act and fully comply with this Special Provision or (b) has transmitted a letter to the Contract Awards Officer disclosing any potential conflicts;
- that, if applicable, the Bidder (a) has obtained assurance that all firms being used have no organizational conflicts of interests and fully comply with this Special Provision or (b) has transmitted a letter to the Contract Awards Officer disclosing any potential conflicts;
- that, if applicable, the Bidder (a) has obtained assurance that all firms being used have fully complied with Section III of this special provision or (b) will email or fax a completed "Request for Consideration of Professional Services Involvement Restrictions" form to the District Project Manager; and
- that, if applicable, the Bidder has obtained assurance that all firms being used are familiar with the necessary AASHTO, PENNDOT, and other applicable design criteria, standards, and construction specifications required to complete the related portion of their associated work.

Contact the Contract Awards office at (717) 783-9690 to determine acceptable method of transmission of any aforementioned letters, and correct email address or fax number.

**State Adverse Interest Act** – Where required, fully disclose any potential conflict with the State Adverse Interest Act as State Advisor or State Consultant. If there is no adverse interest, certify as such.

**Organizational Conflict of Interest** – Where required, fully disclose all relevant facts concerning any past, present, or currently planned interests that may present an Organizational Conflict of Interest. This disclosure must state how their interests or those of their chief executives, directors, key project personnel, or any proposed firm could be viewed as, an Organizational Conflict of Interest. If there is no Organizational Conflict of Interest, certify as such. Note: An Organizational Conflict of Interest is defined in 23 CFR 636 as a conflict "that because of other activities or relationships with other persons, a person is unable or potentially unable to render impartial assistance or advice to the owner, or the person's objectivity in performing the contract work is or might be otherwise impaired, or a person has an unfair competitive advantage."

**Professional Services Involvement Restrictions** – Where required, indicate that involvement in such firms can be avoided, neutralized, or mitigated by completing the following:

- present these involvements on the "Request for Consideration for Professional Services Involvement Restrictions" form, located in ECMS File Cabinet (in the References Tab); and
- email or fax this form immediately upon ECMS email notification of apparent low bidder status to the District Project Manager indicated in Section V – Review Submission Contacts of this Special Provision.

The District Project Manager will notify the apparent low bidder of the result.

## II. ACTION TO BE TAKEN BY THE BIDDER AFTER AWARD

### Design Activity Firm Identification and Qualifications

The awarded bidder is required to complete the form, "Design-Build Design Activities Firm Identification and Qualifications". This form is located in ECMS File Cabinet (in the References Tab).

Email or fax the completed form to the District Project Manager indicated in the Section V of this Special Provision within three calendar days after the award of the contract.

Include on this form the name and design activity performed by each firm performing activities listed in Section IV of this special provision. Include with this form resumes for the:

- Lead Design Engineer Project Manager;
- Quality Control (QC) Manager and Alternate QC Manager;
- Quality Assurance (QA) Manager (if applicable) and Alternate QA Manager; and
- Secondary Design Services Professionals (if applicable) Project Manager.

These resumes should show the experience and expertise required by the project special provisions for the applicable design activities listed in Section IV – Design Activities of this Special Provision. At a minimum, these resumes should show experience and expertise during the last 7 years, of two similar projects of comparable complexity on Pennsylvania's State Highway, Pennsylvania Turnpike, or local system. Non-Turnpike projects must have been funded with Federal Aid Highway Funds. Also, include an affidavit stating that the Lead Design Engineer is familiar with AASHTO, the Department, and other applicable design criteria, standards, and construction specifications. Additional design qualifications may be listed in other Design-Build Special Provisions included in this Contract.

All engineering firms must have a current Annual Qualification Package on file with the Bureau of Design's Consultant Agreement Section and be registered business partners in ECMS. In addition, engineering firms' business partner relationship in ECMS must include both Consultant and Construction Contractor relationships. The ECMS USER ID security must include Construction Contractor security groups such as "Contractor Principal." Firms must be listed as a Prequalification Exempt Service Provider in the subcontractor database with the Department's Prequalification Office. These requirements also apply to all subconsultants, including Disadvantaged Business Enterprises, Minority Business Enterprises, and Women-Owned Business Enterprises.

For projects that include Right-of-Way Acquisition services, the right-of-way firm must be pre-approved to provide of Right-of-Way Acquisition Services through ECMS

All firms must comply with the restrictions listed in 23 CFR 636.116 titled *What organizational conflict of interest requirements apply to design-build projects?*

If a firm included in the submission does not meet the necessary requirements indicated in this Special Provision and in the project special provisions for the applicable design activities listed in Section IV – Design Activities, the Department reserves the right to disallow the firm for this contract. Firms identified on a "Request for Consideration for Professional Services Involvement Restrictions" form that has been submitted but not approved will be disallowed. A notification will be given to the Contractor within 8 calendar days from the time and date of submission indicating the Department approval or disallowance, and justification thereof, of each firm listed on the "Design-Build Design Activities Firm Identification and Qualifications" form. A firm cannot begin work on this contract until approval is received from the Department. Unless indicated otherwise by the Department in writing, the disapproval of any firm will not allow the extension of the contract completion date or price adjustments to any items in the contract.

## III. PROFESSIONAL SERVICES INVOLVEMENT RESTRICTIONS

All firms performing activities listed in Section IV – Design Activities must be in compliance with the following paragraphs and the Professional Services Involvement Restrictions – Design Activities of this Special Provision for Design-Build Contracts charts [Table A and Table B].

- Any Consultant that provided or is providing any design work and services to the Department for the preparation of this design-build bid package will not be eligible to provide any design work and services to the Contractor for the design-build contract.
- Any Consultant performing design work or services to the Contractor for this design-build contract, such as Lead Design Engineer, Quality Control Reviewer, Secondary Design Service Professionals, or Quality Assurance Reviewer (if applicable), is not eligible for any involvement under a Department Agreement on that contract.

**DEFINITIONS:**

**PRIME CONSULTANT** (Department agreement) – The contractual party providing design consultant work and services pursuant to an Agreement with the Department. The Consultant may be an individual, partnership, corporation, or joint venture.

**SUB-CONSULTANT** (Department agreement) - The party providing design work and services to the Prime Consultant (which is providing consultant work and services pursuant to an agreement with the Commonwealth) pursuant to an agreement with the Prime Consultant to which the Department is not a party.

**LEAD DESIGN ENGINEER (LDE)** (design-build contract) – The design consultant engineering firm or Contractor’s personnel that are responsible for the design portion of the design-build contract.

**QUALITY CONTROL REVIEWER (QC-R)** (design-build contract) - The design consultant engineering firm or individuals that are responsible to manage the quality control of the design-build contract, including the Quality Control Manager and the Alternate Quality Control Manager. The design Quality Control Reviewer is allowed to be the same firm as the Lead Design Engineer.

**QUALITY ASSURANCE REVIEWER (QA- R)** (Department agreement or design- build contract, if applicable)– The design consultant engineering firm or individuals functioning as Department and FHWA (as appropriate) representatives who check the validity of the Contractor’s Quality Plan to ensure all work is done in accordance with the contract documents. Quality Assurance Reviewer may be Department and/or FHWA personnel, consultants under a Department agreement, or a firm providing design services to the design- build Contractor (if included as a design activity in Section IV of this Special Provision, as “Quality Assurance by Peer Review”). The Quality Assurance Reviewer may not be the same firm as the Contractor, the Lead Design Engineer, or the Quality Control Reviewer.

**SECONDARY DESIGN SERVICE PROFESSIONALS (SDSP)** (design-build contract)– Other design consultant engineering firms or professional service firms providing professional services to the design-build Contractor beyond roles of Lead Design Engineer or design Quality Control Reviewer.

**PROFESSIONAL SERVICES INVOLVEMENT RESTRICTIONS - DESIGN ACTIVITIES FOR DESIGN-BUILD CONTRACTS:**

**TABLE A: INVOLVEMENT AS PRIME OR SUB CONSULTANT TO THE DEPARTMENT**

PROJECT INVOLVEMENT (Prime Consultant/ Sub- consultant in Department Agreement)	DESIGN ACTIVITY RESTRICTIONS
Feasibility Studies, Traffic Studies, Mapping Services	No restrictions if no recommendations to the Department made by the Consultant
Preliminary Engineering, Constructability Reviews, Anticipating a CEE, Preliminary Engineering and Environmental Studies	Not eligible to perform any design work or services to the Contractor for the design-build contract. Exception (1) – See “Sub-consultant Exception” below.

<p>Preliminary Engineering, Preliminary Engineering Constructability Reviews, and Environmental Studies Anticipating an EA/ EIS</p>	<p>Not eligible to perform any design work or services to the Contractor for the design-build contract. Exception (1) – See “Sub-consultant Exception” below.</p>
<p>Conceptual Design / Bid Package Preparation for Design-Build Project</p>	<p>Not eligible to perform any design work or services to the Contractor for the design-build contract. Exception (1) – See “Sub-consultant Exception” below.</p>
<p>Final Design</p>	<p>Not eligible to perform any design work or services to the Contractor for the design-build contract.</p>
<p>Preliminary Engineering-Design Management, Review Note: This includes consultants performing reviews for a District or Central Office Agreement, including an Open End Agreement.</p>	<p>Not eligible to perform any design work or services to the Contractor for the design-build contract. Exception (1) – See “Sub-consultant Exception” below.</p>
<p>Final Design Management, Review Note: This includes consultants performing reviews for a District or Central Office Agreement, including an open-end agreement.</p>	<p>Not eligible to perform any design work or services to the Contractor for the design-build contract.</p>
<p>Department Review (Any design review completed as a representative of the Department, including Quality Assurance Reviews)</p>	<p>Not eligible to perform any design work or services to the Contractor for the design-build contract.</p>
<p>Construction Management Support (Any construction activity completed as a representative of the Department other than construction inspection, or services during construction)</p>	<p>Not eligible to perform any design work or services to the Contractor for the design-build contract</p>
<p>Services during Construction (Any design support services/ reviews conducted during construction)</p>	<p>Not eligible to perform any design work or services to the Contractor for the design-build contract.</p>
<p>Construction Inspection</p>	<p>Not eligible to perform any design work or services to the Contractor for the design-build contract.</p>

(1) Sub-consultant Exception –A Sub-consultant performing certain activities under a Department agreement containing multiple “projects,” which are let under separate construction contracts, can perform design activities as part of the design-build contract provided that the design activities for the design-build contract is for a “project” in which the sub-consultant did not participate in ANY work for the Department.

See Table A.1: Department Agreement Containing Multiple Projects – Sub-consultant Eligibility.

**TABLE A.1: DEPARTMENT AGREEMENT CONTAINING MULTIPLE PROJECTS – SUB-CONSULTANT ELIGIBILITY**

<b>Sub-consultant Performed Work Only on Project A</b>	<b>Design Activities for Design-Build Contract (under Design-Build Contract)</b>			
<b>(under Agreement) Department</b>	<b>Project A</b>		<b>Project B</b>	
	<b>LDE, QC-R, or SDSP</b>	<b>QA-R<sup>1</sup></b>	<b>LDE, QC-R, or SDSP</b>	<b>QA-R<sup>1</sup></b>
	Preliminary Engineering Activities (Does not include Bid Package Prep)	N	N	Y*
Conceptual Design/ Bid Package Preparation	N	N	Y*	Y*
Department Review (includes Quality Assurance Review)	N	N	N	N
Construction Management or Construction Inspection	N	N	N	N

Note: Project A and Project B represent multiple projects under one engineering agreement that are bid under separate construction contracts.

N - Sub-consultant is not eligible to perform service.

Y\* - A sub-consultant firm, that worked on the preliminary design or the Conceptual Design/Bid Package Prep for Project A, can function as EITHER a Quality Assurance Reviewer (if applicable) OR function as a Lead Design Engineer, Quality Control Reviewer, or Secondary Design Service Provider on Project B.

<sup>1</sup> If applicable

**TABLE B: INVOLVEMENT INCLUDES PERFORMING DESIGN ACTIVITIES FOR DESIGN-BUILD CONTRACT**

<b>PROJECT INVOLVEMENT (Performance of Design Activities in Design-Build Contract)</b>	<b>RESTRICTIONS</b>
LDE	Not eligible for any future involvement under a Department Agreement for project (s) included in design- build contract, including Department Review, Quality Assurance Review, Construction Management, and Construction Inspection services.  Not eligible to perform Quality Assurance Reviews (if applicable).
QC-R	Not eligible for any future involvement under a Department Agreement for project (s) included in design- build contract, including Department Review, Quality Assurance Review,

	<p>Construction Management, and Construction Inspection services.</p> <p>Not eligible to perform Quality Assurance Reviews (if applicable)</p>
SDSP	<p>Not eligible for any future involvement under a Department Agreement for project (s) included in design- build contract, including Department Review, Quality Assurance Review, Construction Management, and Construction Inspection services.</p> <p>Not eligible to perform Quality Assurance Reviews (if applicable).</p>
QA-R (if applicable)	<p>Not eligible to function as Lead Design Engineer, Quality Control Reviewer, or Secondary Design Services Professionals.</p> <p>Not eligible for any future involvement under a Department Agreement for project (s) included in design- build contract, including Department Review, Construction Management, and Construction Inspection services.</p>

**IV. DESIGN ACTIVITIES**

Design activities include:

- Roadway Design,
- Bridge/Structural Design,
- Maintenance and Protection of Traffic Design,
- Utility Coordination,
- Right-of-Way Design and Acquisition Services,
- Permitting.

**V. REVIEW SUBMISSION CONTACTS**

Include all design activities, submission dates, and review periods in the construction schedule. Include the submission schedule in the Quality Plan.

**(a)** Make all required submissions for each design activity to the Department’s Project Manager.

- Department Project Manager

John F. Arcangelo, P.E.

Phone number: (570) 963-3445

Fax number: (570) 963-4954

Email address: : jarcangelo@pa.gov

Address for final submissions: District 4-0 Office – location information listed in Section VI of this Special Provision.

Roadway Design

- Pavement Design
- Erosion and Sediment Pollution Control Plan
- Pavement Marking Design and Signing
- Pre-Final Plans
- Roadway Plans (and associated Supplemental Plans (Final and “As-Built”))

Contact: John Pivovarnik

Phone number: (570) 963-4051

Email address: jpivovarni@pa.gov

Interim (partial) submissions: District 4-0 Office –location information listed in Section VI or FTP site.

Address for final submissions: District 4-0 Office –location information listed in Section VI of this Special Provision

◦ *Submissions other than to the Department:*

Pike County Conservation District –location information listed in Section VI of this Special Provision

Department of Environmental Protection (DEP) – Northeast Regional Office - location information listed in Section VI of this Special Provision.

## Bridge/Structural Design

- Hydrologic and Hydraulics Report
- Final TS&L
- Waterway Permits/Permit Amendments
- Foundation Submission
- Final Structure Plans (Includes Substructure, Superstructure, and As-Built Plans)

Contact: Gerard Babinski

Phone number: (570) 963-4057

Email address: gbabinski@pa.gov

Interim (partial) submissions: District 4-0 Office – location information listed in Section VI of this Special Provision or FTP site.

Address for final submissions: District 4-0 Office –location information listed in Section VI of this Special Provision

◦ *Submissions other than to the Department:*

DEP – Northeast Regional Office - location information listed in Section VI of this Special Provision.

## Quality Assurance Review

- Quality Plan

Contact: Joseph Thompson, P.E.

Phone number: (717) 540-6040

Email address: jathompson@MTmail.biz

Interim (partial) submissions: Contact Quality Assurance Reviewer.

Address for final submissions:

5 Capitol Center

Suite 400

Harrisburg, PA 17110

## Maintenance and Protection of Traffic Design:

- Traffic Control Plan (Preliminary and Final Plans)

Contact: Jamie Goetz

Phone number: (570) 496-6160

Email address: jagoetz@pa.gov

Interim (partial) submissions: District 4-0 Office –location information listed in Section VI of this Special Provision or FTP site.

Address for final submissions: District 4-0 Office – location information listed in Section VI of this Special Provision

## Temporary Signal Design:

- Temporary Signal Plan (Preliminary and Final Plans)

Contact: Thomas Pichiarella

Phone number: (570) 963-4018

Email address: tpichiarel@pa.gov

Interim (partial) submissions: District 4-0 Office –location information listed in Section VI of this Special Provision or FTP site.

Address for final submissions: District 4-0 Office – location information listed in Section VI of this Special Provision.

## Utility Coordination

- Utility Relocation Coordination/Utility Reimbursement Documentation

Contact: James J. Kropiewnicki

Phone number: (570) 963-4068

Email address: jkropiewni@pa.gov

Interim (partial) submissions:

District 4-0 Office –location information listed in Section VI of this Special Provision or FTP site.

Address for final submissions: District 4-0 Office –location information listed in Section VI of this Special Provision

## Right-of-Way Design and Acquisition

- Right-of-Way Plans
- Right-of-Way Appraisals and Negotiations

Contact: Ralph Del Rosso

Phone number: (570) 963-4071

Email address: rdelrosso@pa.gov

Interim (partial) submissions: District 4-0 Office –location information listed in Section VI of this Special Provision or FTP site.

Address for final submissions: District 4-0 Office –location information listed in Section VI of this Special Provision

**VI. LOCATION INFORMATION:**

Pennsylvania Department of Transportation  
 District 4-0 Office  
 Mailing Address: same as Street Address - Listed Below  
 Street Address: 55 Keystone Industrial Park  
 Dunmore, PA 18512  
Pike County Conservation District  
 556 Route 402  
 Suite 1  
 Hawley, PA 18428  
Department of Environmental Protection – Northeast Regional Office  
 2 Public Square  
 Wilkes-Barre, PA 18711

File Transfer Protocol (FTP) Site: The Department's FTP site will be used for the purposes of distributing electronic plan submissions to and from reviewing parties as identified in Section V of this Special Provision. Details will be provided prior to the Preconstruction Conference.

**VII. SUBMISSION REQUIREMENTS/REVIEW TIMES:**

The following table provides the required number of plans and/or documents and the schedule of review times for complete submissions. Partial submissions, where specified, will be reviewed in the time specified below for each submission. Partial submissions will require the submission of the number of plan sets and calculations specified below for the applicable design activity. Be responsible for reproduction costs for submissions and final drawings, including providing the Department with **2 full** and half-size sets and a PDF of all final drawings for use during construction, in addition to any copies specified below.

Item	Plan Sets	Setsof Calculations	Initial Submission Review Time (working days)	Subsequent Submission Review Time (working days)
<b>Roadway Design</b>				
Erosion and Sediment Pollution Control Plan (PennDOT review)	2	2	10	5
Erosion and Sediment Pollution Control Plan (County Conservation District Review)	2	2	**	**

Erosion and Sediment Pollution Control Plan (DEP Review)	2	2	**	**
Pavement Marking Design and Signing	2	2	10	5
Pre-Final Plans	FTP	FTP	10	5
Final Roadway Plans	2	2	10	5
As-Built Roadway Plans	2	2	10	5
<b>Bridge/Structural Design</b>				
Hydraulics and Hydrologic Report	2	2	10	5
Final TS&L	2	2	10	5
Waterway Permits/ Permit Amendments	2	2	10	5
Foundation Submission	2	2	10	5
Final Structure Plans	2	2	10	5
As-Built Plans	2	2	10	5
<b>Maintenance and Protection of Traffic Design</b>				
Preliminary Plan	FTP	FTP	10	5
Final Plan	2	2	10	5
<b>Temporary Signal Design</b>				
Preliminary Plan	FTP	FTP	10	5
Final Plan	2	2	10	5
<b>Utility Coordination</b>				

Utility Reimbursement Documentation	2	2	30	15
<b>ROW Activities</b>				
Preliminary Right-of-Way Plan	2	2	10	5
Appraisals	2	2	10	5
Final Right-of-Way Plans	2	2	10	5
Modified Final Right- of- Way Plans	2	2	10	5

\*\* - Review times will be in accordance with the regulations of the reviewing agency.

Review times begin and end when a submission is logged in and out, respectively, by all designated reviewers. The login time will be taken as the latest date in which the submission is received by the reviewers. Submittals received after 11:00 a.m. will be logged in as the next working day following receipt of the submission. For electronic submissions, the login time will be taken when the appropriate reviewer and District Project Manager receive an email stating a submission is ready for review. Logout time occurs when the reviewer sends an email to the Contractor with an approval and/or comments. If a submission is incomplete or otherwise requires additional information or data to complete the review properly, the review time will begin as specified for the submission when all required information is received.

Additional contract time or price adjustment to any contract items will not be considered due to failure to obtain approvals within the specified review times resulting from incomplete or non-conforming submissions. Working days are weekdays, Monday through Friday, excluding official Department holidays.

Include all review periods identified above as activities in the project schedule.

**VIII. GENERAL DESIGN REQUIREMENTS**

Have the design completed by a Professional Engineer licensed in the State. Have all surveys completed by a Professional Land Surveyor licensed in the State.

Provide the Design Engineer's P.E. seal, the date signed, and business name and address on the first sheet of all computations, including computations for partial submissions. Provide the appropriate seal and signature on plan sheets in accordance with the Department's Design Manuals. Also, provide the Design Engineer's P.E. seal, signature, and date signed on the first sheet of all computations, including computations for partial plans submissions.

Provide all Professional Engineer's seals in accordance with Pa. Code § 37.59.

Designs copied directly from Department Standard Drawings need not be documented through independent computations. List such designs on the submission by referencing the drawing number of the applicable standard, and the sheet number, table, or graph.

Experimental or demonstration-type design concepts, products, structures, or elements not pre-approved by the Department for general usage at the time of bid, will not be allowed.

If Right-of-Way Design and Acquisition Services has not been identified as Design Activity in Section IV of this Special Provision, no additional Right-of-Way may be acquired and no changes to the recorded Right-of-Way Plan will be permitted.

Value engineering construction proposals are allowed, provided that the proposal does not require approval of a Design Exception.

Designs that take advantage of any errors and/or omissions in the following requirements will not be accepted. In the event any such error, omission, or discrepancy is discovered, immediately notify the Department. Failure to notify the Department will constitute a waiver of all claims for misunderstanding, ambiguities, or other situations resulting from the error, omission, or discrepancy.

Final Plans must include a note on all tabulation of quantities sheets included therein that states "Item numbers and descriptions listed in Tabulations are solely for the purposes of identifying the specified units of work and locations, and are not to be construed as contract or pay items."

Design and construct any support of excavation required by any Design Activities identified in Section IV of this Special Provision in accordance with the Special Provision titled TEMPORARY EXCAVATION SUPPORT AND PROTECTION SYSTEM FOR DESIGN-BUILD PROJECTS.

## Design Specifications

Perform the design activities identified in Section 4, Design Activities, in accordance with the latest published edition of all Department Standards, Specifications, Regulations, Strike-off Letters, and other industry standards, at the time of advertisement, unless directed otherwise, or as identified in the bid package. These include, but are not limited to the following:

- Special Provisions;
- Publication 408, *Specifications*
- Publication 72M, *Standards for Roadway Construction*
- Publication 218M, *Standard Drawings for Bridge Design*
- Publication 219M, *Standard Drawings for Bridge Construction*
- Publication 10 Design Manual Part 1 – *Transportation Program Development and Project Delivery Process*
- Publication 10A Design Manual Part 1A – *Pre-TIP and TIP Program Development Procedures*
- Publication 10B Design Manual Part 1B – *Post-TIP NEPA Procedures*
- Publication 10C Design Manual Part 1C – *Transportation Engineering Procedures*
- Publication 10X Design Manual Part 1X – *Appendices to Design Manuals 1, 1A, 1B, and 1C*
- Publication 13M Design Manual Part 2 – *Highway Design*
- Publication 14M Design Manual Part 3 – *Plans Presentation*
- Publication 15M Design Manual Part 4 – *Structures*
- Publication 16M Design Manual Part 5 – *Utility Relocation*
- Publication 584, *Drainage Manual*
- Publication 46, *Traffic Engineering Manual*
- Publication 149, *Traffic Signal Design Handbook*
- Publication 35, *Approved Construction Materials*
- Publication 203, *Work Zone Traffic Control*
- Publication 213, *Temporary Traffic Control Guidelines*
- Publication 222, *Subsurface Boring, Sampling, and Testing Contract*
- Publication 293, *Geotechnical Engineering Manual*
- Publication 378, *Right-of-Way Manual*
- Pa Code Title 67, Chapter 204, *Guidelines to Implement Act 229 of 2002, Additional Traffic Control Devices in Highway Work Zones, Statement of Policy*
- Pa Code Title 67, Chapter 212, *Official Traffic Control Devices* (Publication 212)
- Publication 236M, *Handbook of Approved Signs*
- Publication 242, *Pavement Policy Manual*
- Publication 281, *Waste Site Evaluation Procedures for Highway Project Development Process;*
- Publication 371, *Grade Crossing Manual*
- Publication 122M, *Surveying and Mapping Manual*
- Publication 111M, *Traffic Control – Pavement Markings and Signing Standards*
- Publication 148, *Traffic Standards – Signals*
- Publication 611, *Waste Management Guidance Manual*
- *Manual on Uniform Traffic Control Devices* (FHWA)
- *A Policy on Geometric Design of Highway and Streets*, AASHTO "Green Book"
- *A Policy on Design Standards – Interstate System* (AASHTO)
- *AASHTO Guide Specifications for Horizontally Curved Highway Bridges*
- *AASHTO LRFD Bridge Design Specifications* or, when applicable, *AASHTO Standard Specifications for Highway Bridges*

In the event that a clear order of predominance cannot be established, or a difference in interpretation of the design cannot be resolved, the Assistant District Executive-Design will be the arbiter and his/her decision will be final.

For bridge/structures related design activities, refer to the "Bridge/Structures Related Effective Policy Letters" for additional design policy Strike-Off Letters that are applicable to the structure design.

In the event that certain design parameters, stresses, or specifications are in conflict regarding bridge/structures related design activities, the following order of predominance governs:

1. Design requirements listed herein and addenda (addendum) to the proposal.
2. Design related Strike-Off Letters in effect on the date of project advertisement.
3. Publication 15M Design Manual Part 4, *Structures*
4. Publications 218M and 219M *Standard Drawings for Bridge Design and Bridge Construction*
5. AASHTO *LRFD Bridge Design Specifications* or, when applicable, AASHTO *Standard Specifications for Highway Bridges*

In the foregoing instances, in the event that a clear order of precedence cannot be established, or a difference in the interpretation of the design criteria, standards, specifications, or methodology cannot be resolved, the Chief Bridge Engineer will be the arbiter and whose decision will be final.

## **IX. SCHEDULE OF VALUES**

Where indicated, partial payment for lump sum design-build items will be made on Current Estimate Payments in accordance with Section 110.05 based on the amount of work completed during the estimate period based on a payout schedule (Schedule of Values). The Department will base amount of the partial payments on the total value of the work performed to the date of the estimate cut-off, less payments previously made, in accordance with the approved Schedule of Values.

Prepare a Schedule of Values for each lump sum Item associated with the design or construction of the Design Activities identified in Section IV of this Special Provision, where the Special Provision for that "Design" or "Construct" Item indicates lump sum measurement and payment by Schedule of Values, using the attached Schedule of Values template as a guide. Hereinafter, Design Items are defined as the Contract Item associated with the Design Activities identified in Section IV, and Construct Items are defined as the Contract Item associated with the construction of the Design Activities identified in Section IV. Distribution of payments among Schedule of Values Components must bear a reasonable resemblance to the actual value of work.

(a) For Design items, if a Component is not applicable, indicate 0%; otherwise do not indicate values less than 5% in any Component. Include those Schedule of Values Components identified in the associated Design Item Special Provisions. Payment for Design Item Schedule of Values Components will be made in the amount of the approved percentage upon completion of the identified task. When Schedule of Values Components are identified in the Special Provisions with "Approval" in the Schedule of Values Component title, 75% of the approved percentage may be paid on the next estimate following login of that submission, and the remaining 25% of the approved percentage will be paid following approval of that submission. Otherwise, no partial payment will be made for Design Item Components.

(b) For Construct Item, include Schedule of Values Components relevant to the scope of work of the particular item, using the attached Schedule of Values template as a general guide. No partial payment will be made for Construct Item Schedule of Values Components. Accordingly, develop the Schedule of Values to include Schedule of Values Components in sufficient numbers and detail to be payable upon monthly estimates throughout the duration of the Contract.

Submit the Schedules of Values to the Department for review and approval. No estimate will be processed until all Schedules of Values are approved by the Department.

## **X. CONSTRUCTION CONTACT**

The Department's contact for Current Estimate Payments as defined in Section 110.05 will be:

The Project Manager identified in Section V of this Special Provision.

## **XI. FILES AVAILABLE AFTER AWARD**

Microstation CADD files will be made available to the successful bidder. After Award, submit a request to the District Executive agreeing to the terms and conditions for the release of the electronic files.

The following information will be made available for viewing at the District Office after award:

- Preliminary Geotechnical Engineering Report

Contact the Project Manager identified in Section V of this Special Provision to arrange for viewing the documents.

**N29895B - a29895 TEMPORARY EXCAVATION SUPPORT AND PROTECTION SYSTEM FOR DESIGN-BUILD PROJECTS**

**Addendum:**

**Associated Item(s):**

**Header:**

TEMPORARY EXCAVATION SUPPORT AND PROTECTION SYSTEM FOR DESIGN-BUILD PROJECTS

**Provision Body:**

**I. DESCRIPTION** - This work is the design and construction of a temporary excavation support and protection system or appropriately designed open cut excavation, in locations as required by the Final Designs prepared in conformance with the Contract Special Provisions for the Design Activities identified in the Special Provision titled SPECIAL BIDDING – DESIGN-BUILD.

**II. MATERIAL** - Provide certification or laboratory test results verifying material properties. For used steel, the salvage design values from AASHTO Guide Design Specification for Bridge Temporary Works (AASHTO Guide Spec) may be used as an alternate to testing to determine grade of steel. Materials need not be new but must be in serviceable condition as determined by the Engineer. Temporary material used does not have to be from a Bulletin 15 source, but must meet the following:

- Structural Steel.....AASHTO M 270M/270 (ASTM A709M/A709) Grade 250(Grade 36), Grade 345(Grade 50) or Grade 345W(Grade 50W)
- Steel Sheet Piling.....ASTM A328M/A328, ASTM A572M/A572
- Steel H-Piles.....AASHTO M 270M/270 (ASTM A709M/A709), Grade 250(Grade 36)
- Wood Lagging.....Rough Cut Species in AASHTO Guide Spec, Appendix A and AASHTO Construction Handbook for Bridge Temporary Works Appendix C
- Cement.....AASHTO M85 and AASHTO M240
- Pre-Stressing Steel.....ASTM A416 Grade 270
- Welded Wire Fabric.....AASHTO A55 (ASTM A185)
- Reinforcement Bars.....AASHTO M 31M/31 (ASTM A615M/A615), AASHTO M42M/M42 (ASTMA616M/A616),Grade420(Grade 60)
- Other Material.....In accordance with Publication 408

**III. DESIGN** - Design the temporary excavation support and protection system in accordance with Publication 15M, Design Manual Part 4. Design temporary excavation support and protection system for final condition and all construction conditions, including surcharge loads due to vehicle traffic and construction equipment. Submit 4 sets of design calculations and 4 sets of completed detailed drawings, signed and sealed by a Professional Engineer, registered in the State in accordance with Section 105.02(c) Working Drawings. Include in the design calculations all material properties, design loads, and design assumptions. Include on the completed detailed drawings all design dimensions, limits of work, elevations, material, member sizes and construction sequence. Provide cutoff elevation of steel and wooden components for work in streambed. Include specific installation procedures and testing requirements as part of the submittal. Allow 14 days for the review by the Department.

Ensure that temporary excavation support and protection system design and construction conforms to the following:

a) Open cut excavations are allowed, provided they meet OSHA requirements, the safety of the traveling public, the approved traffic control plan and existing structure is assured, and they stay within the legal right-of-way lines. Cuts can extend beyond legal right-of-way lines only with the written approval of the Department and written permission of the property owners. Ensure environmental compliance if cut extends beyond area cleared by the Department. Submit slope stability analysis in accordance with Publication 293.

b) Select the temporary excavation support and protection system to be used. Examples include anchored walls, mechanically stabilized earth walls, prefabricated modular walls, cantilever walls, cofferdams, and soil nailing walls. These systems may be comprised of one or more of the following: Soldier Piles, Timber Lagging, Steel Sheet Piling, Caissons, Slurry Walls, Tiebacks, Soil Nails, Shotcrete, Deadman Anchors, Wales, Cross lot Bracing, Raker Braces, Precast Concrete, Precast Lagging, Soil Cement Lagging, Cement Bentonite, Gabions, Minipiles, Concrete Reaction Blocks, Mechanically Stabilized Earth Walls or other methods.

c) Design temporary excavation support and protection system based on the following soil parameters (**see Project Specific Details for following parameters**):

- Effective angle of friction \_\_\_\_\_
- Moist unit weight of soil \_\_\_\_\_
- Saturated unit weight of soil \_\_\_\_\_
- Effective cohesion \_\_\_\_\_
- Static groundwater level at elevation \_\_\_\_\_
- Undrained shear strength of cohesive soil \_\_\_\_\_
- Shear strength for rock mass \_\_\_\_\_

d) Ensure that all components stay within the legal right-of-way unless an easement is obtained by the Contractor.

**IV. CONSTRUCTION** - Install temporary excavation support and protection system in accordance with Publication 408. Be responsible for adequacy, safety and compliance with Traffic Control Plan. Ensure that the design is compliant with the approved Traffic Control Plan. All steel and wooden components may remain in place to pavement subgrade or 0.6 meters (2 feet) below finish grade, whichever is the higher elevation. Treated wood is not required unless it is within 2 meters (6 feet) of finish grade and is to remain in place. Pressure treat with chromate copper arsenate (CCA) to refusal. Finish grade is defined as top of pavement when a roadway is behind the temporary excavation support and protection system. Have a Professional Engineer, registered in the State; certify that the temporary excavation support system or open cut excavation has been installed as shown on the Professional Engineer's signed and sealed drawings. Submit the certification to the Representative within 3 working days of completion of the system.

**V. QUALIFICATIONS** - The work must be supervised by a superintendent or foreman who is experienced, in the construction of temporary excavation support and protection system proposed. If the design height of the temporary excavation support and protection system exceeds 6 meters (20 feet), provide the following with the design submission:

- For the superintendent or foreman who will supervise the work, submit a list containing at least 5 projects which demonstrate a minimum of 3 years experience in the construction of the temporary excavation support and protection system proposed. Include a brief description of each project and the name and phone number of the owner's representative knowledgeable in each project listed.
- The name of the Professional Engineer, registered in the State and having at least 3 years experience in the design and construction of temporary excavation support and protection systems, who will design and specify the sequence of construction of the temporary excavation support and protection of system.

**VI. MEASUREMENT AND PAYMENT** – Incidental to the design and construction activities listed in Section IV of the Special Provision titled SPECIAL BIDDING – DESIGN-BUILD.

**Project Specific Details:**

The Soil Parameters as indicated in III.(c) are:

- Effective angle of friction: 30 degrees
- Moist unit weight of soil: 120 pcf
- Saturated unit weight of soil: 125 pcf
- Effective cohesion: 0
- Static groundwater level at elevation: 756.417

- Undrained shear strength of cohesive soil: N/A
- shear strength of rock mass: N/A

## **N29899A - a29899 QUALITY PLAN WITH QUALITY ASSURANCE REVIEW BY DEPARTMENT - LOW BID DESIGN**

**Addendum:**

**Associated Item(s):**

**Header:**

Quality Plan with Quality Assurance Review by Department - Low Bid Design

**Provision Body:**

**I. DESCRIPTION** - This item consists of developing, furnishing, executing, and maintaining a Quality Plan for the Design Activities listed in Section IV of the Special Provision titled SPECIAL BIDDING – DESIGN-BUILD and establishing controls to ensure compliance with all contract documents for those design activities. The Department and FHWA (as appropriate) will provide a Quality Assurance Review.

**II. DEFINITIONS.**

**a. Quality Plan** – The plan prepared for managing quality during final plan development for Design Activities as identified in the Special Provision titled SPECIAL BIDDING – DESIGN-BUILD that addresses key staff, responsibilities, milestones, monitoring budgets and schedules, communication efforts, Quality Control/Quality Assurance efforts and tracking procedures as a minimum. It should include a detailed description of the Quality Control staff, design procedures, and design review procedures

**b. Quality Control (QC)** – All processes and activities performed on the Contract to assess and control the accuracy and completeness of the design, to ensure Contract compliance.

**c. Quality Control Reviewer** – The design consultant engineering firm or individuals that are responsible to manage the quality control of the design-build contract, including the Quality Control Manager and the Alternate Quality Control Manager.

**d. Quality Control Staff** – The design consultant team or individuals that are responsible to manage the quality control of the design-build Contract. The QC Staff includes the QC Manager, Alternate QC Manager, and sufficient number of qualified personnel to ensure Contract compliance. The QC Staff may include personnel from the same firm as the Lead Design Engineer, as defined in the Special Provision titled SPECIAL BIDDING – DESIGN-BUILD, but may not be involved with other design activities on the contract.

**e. Quality Assurance (QA)** - The planned and systematic actions that are necessary to provide adequate confidence that a product or facility complies with Federal and State requirements. QA is the performance of a high level review of each product to confirm quality, economy, and compliance with Contract requirements.

**f. Quality Assurance (QA) Team** - The Department and FHWA (as appropriate) representatives who check the validity of the Quality Plan to confirm that the work is done in accordance with the Contract documents.

**g. Quality Assurance Review** - A review of the plans, specifications, and calculations by the Department and FHWA (as appropriate) to confirm that the project's approved design criteria are being followed.

**III. QUALITY PLAN**

**(a) Quality Plan Requirements.**

**1. Quality Control Requirements.** Identify and discuss the procedures that will be used to review, modify, and approve plan documents and associated permits. Include methods and procedures to control, document, and accept the quality of the design activities listed in Section IV of the Special Provision titled SPECIAL BIDDING – DESIGN-BUILD. Include the following quality control items as a minimum:

**a. Control.**

- (1) Procedures to control the quality of the final design.
- (2) Methodology used to determine design criteria to be used to develop design.
- (3) Proposed design criteria for design.
- (4) Guidelines for submission review including approach for addressing partial submissions.
- (5) A general outline of the Lead Design Engineer's document control.
- (6) Copies of the Lead Design Engineer's quality control forms and/or checklists.
- (7) Incorporate design submission deadlines and Department review cycle- times into the CPM Schedule.

**b. Records.**

- (1) Method of recording stages of design development.
- (2) System of maintaining a design submission/review/acceptance status log.
- (3) Method for updating and tracking submission status for all aspects of the design including partial submissions and permits.
- (4) Systems by which the Lead Design Engineer internally checks calculations and the Contract documents.
- (5) Records of submission reviews, approvals, and permits granted.
- (6) Records of design revisions during construction.

**c. Acceptance.**

- (1) Procedures to obtain acceptance and construction release by the Department through Quality Assurance review.
- (2) Method of documenting and recording acceptance and construction release by the Department.

**2. Quality Control Staffing.** Maintain the QC Staff at approved Quality Plan levels at all times until project completion. The Lead Design Engineer Project Manager is responsible to review all design submissions, signing and sealing as appropriate, and then submit the design to the Department as defined in the Special Provision titled SPECIAL BIDDING – DESIGN-BUILD.

Provide an organization chart showing lines of authority and contact information of the key staff of the Contractor, Lead Design Engineer, and the QC Staff.

Provide the following information in the Quality Plan:

**a. Lead Design Engineer.** The Lead Design Engineer (LDE) consists of a Lead Design Engineer Project Manager and sufficient design personnel to ensure contract compliance. Lead Design Engineer personnel will report directly to the Lead Design Engineer Project Manager. The Lead Design Engineer Project Manager will report directly to the contractor. The Quality Plan must include, but not be limited to, the following:

- (1) Provide an organization chart showing lines of authority and contact information of the Lead Design Engineer personnel.
- (2) Include resumes, qualifications, duties, responsibilities, and certifications, of all design personnel. Provide a letter from a principal of the Lead Design Engineer firm to the Lead Design Engineer Project

Manager that clearly describes their responsibilities and provide delegation of authority to stop work on any elements that do not comply with the contract documents.

(3) Identify the Lead Design Engineer Project Manager. The Lead Design Engineer Project Manager must meet the minimum requirement of being a Professional Engineer (PE) registered in the State with a minimum of 7 years of experience managing and supervising the design of roadway and/or structure projects.

(4) Provide a letter from an authorized official of the Contractor to the Lead Design Engineer Project Manager that clearly describes their responsibilities and provides delegation of authority to stop work on any elements that do not comply with the Contract.

**b. Quality Control Staff.** The QC Staff consists of a QC Manager, Alternate QC Manager, and sufficient number of qualified personnel to ensure Contract compliance. QC Staff personnel will report directly to the QC Manager. The QC Manager will report directly to the Contractor. The Quality Plan must include, but not be limited to, the following:

(1) Provide an organization chart showing lines of authority and contact information of the Quality Control Staff personnel.

(2) Include resumes, qualifications, duties, responsibilities, authorities, and certifications of all QC Staff personnel.

(3) Identify the QC Manager and Alternate QC Manager. The Alternate QC Manager is responsible to manage the QC effort during periods when the QC Manager is absent. In no instance will the QC Manager be absent from project responsibilities and the alternate manager serve for more than a continuous 2-week period without written permission from the Department.

(4) The QC Manager and Alternate QC Manager must meet the minimum requirement of being a Professional Engineer (PE) registered in the State with a minimum of 7 years of experience managing and supervising the design of roadway and/or structure projects.

(5) Provide a letter from an authorized official of the Contractor to the QC Manager that clearly describes the responsibilities and delegates the authority to stop work on any elements that do not comply with the Contract. The QC Manager will issue a letter of direction to all other Quality Control representatives outlining duties, authorities, and responsibilities. Include copies of these letters in the Quality Plan.

**(b) Quality Plan Submittal.** Clearly describe the approach to quality management and development of the Quality Plan. The discussion of the Quality Plan will address all activities listed in the Special Provision titled SPECIAL BIDDING – DESIGN-BUILD. Describe in detail the plans, procedures, references, organization, and documents required to ensure that all work complies with Contract documents. Include control measures, documentation procedures, records, and forms. Where Partial Submissions are allowed, address all specified partial submission requirements, list all partial submission components, and describe the schedule of partial submissions.

Submit the Quality Plan to the Department by the 5th working day after receiving approval of the QC Reviewer. The Department will provide comments on the Quality Plan at the Quality Coordination Meeting.

**(c) Quality Coordination Meeting.** Hold a Quality Coordination Meeting with the Department either as part of the pre-construction meeting, or as a separate meeting, and discuss the Quality Plan. Attendance by the Contractor, QC Manager, Alternate QC Manager, Lead Design Engineer, and the QA Team are mandatory at this meeting. The Department reserves the right to designate attendance by additional personnel. The meeting must be held within 10 working days following the date of the Notice to Proceed. During the meeting, a mutual agreement of the details to be included in the final Quality Plan will be developed including the forms for recording the operations, control activities, administration of the Quality Plan, and the interrelationship of the Quality Plan. Minutes of the coordination meeting must be prepared by the Lead Design Engineer, signed by the Contractor and the Department, and recorded. The Quality Coordination Meeting minutes must be incorporated as part of the final Quality Plan.

**(d) Quality Plan Approval.** Within 10 working days after the Quality Coordination Meeting, submit the final Quality Plan for approval based on comments received during the Quality Coordination Meeting. Include an updated CPM in the submission.

No payment will be made for design activities listed in Section IV of the Special Provision titled SPECIAL BIDDING – DESIGN-BUILD without an approved Quality Plan. Upon acceptance, the entire Quality Plan will become part of the Contract documents.

Once work begins under the approved Quality Plan, continuously evaluate the work in accordance with the Quality Plan. Do not implement any changes without prior acceptance by the Department.

**(e) Design Activity Submissions Monthly Report.** In addition to the records required by Section III (a) 1.b of this Special Provision, maintain the status of all submissions associated with the design activities listed in Section IV of the Special Provision titled SPECIAL BIDDING – DESIGN-BUILD on the form titled "Design Activity Submissions Monthly Report." This form is located in ECMS File Cabinet (in the References Tab). Submit this form within 30 calendar days following approval of the Quality Plan, and submit an updated version every 30 calendar days thereafter until the Final Drawings have been released for construction.

**(f) Quality Assurance Review.** The Department and FHWA (as appropriate) will perform a QA review of the plans, specifications, and calculations to confirm that the Department's approved design criteria are being followed.

Upon successful completion of the QA review, the plans will be issued to the Contractor by letter by the Department identifying the specific plans covered by the review. Plans issued will be stamped with the following statement:

"Quality Assurance Review was conducted. Released for Construction."

Upon successful completion of QA review of partial submissions, where permitted in the Special Provisions, plans will be issued to the Contractor by letter by the Department identifying the limitations of the review, and the limitations of the work released for construction. Plans issued will be stamped with the following statement:

"Quality Assurance Review was conducted. Released for Construction."

**(g) Infractions.** Any infractions of the Contract requirements, which are not monitored sufficiently by the Lead Design Engineer and the QC Reviewer, will result in any and all payments related to design activities listed in the Special Provision titled SPECIAL BIDDING – DESIGN-BUILD being withheld until infractions are corrected.

Such action may result in the District Executive giving a written order for the dismissal and replacement of the Lead Design Engineer and/or the QC Reviewer. An extension of Contract time or request for additional costs will not be considered when a delay or suspension occurs due to such infractions.

Be advised that any deliberate omissions or deliberate cover-ups will be grounds for default of the Contract.

#### IV. MEASUREMENT AND PAYMENT

Incidental to the design activities listed in Section IV of the Special Provision titled SPECIAL BIDDING – DESIGN-BUILD.

### S6081C - b06081 SECTION 608 - MOBILIZATION

**Addendum:**

**Associated Item(s):**

**Header:**

SECTION 608 - MOBILIZATION

**Provision Body:**

- Section 608.1 Description. Revise by adding the following:

When developing agreements with DBE subcontractors include an opportunity for the DBE to identify an item for their mobilization. Include any agreed upon amounts in the contract lump sum price bid for mobilization. Also, list agreed to amounts for each DBE subcontractor on the DBE Participation for Federal Projects form specified in the "Disadvantage Business Enterprise Requirements" Designated Special Provision in Appendix C of Pub. 408.

- Section 608.4 Measurement and Payment. Revise by adding the following:

(c) DBE Payment Schedule. Within the Schedule submitted as specified in Section 108.03, indicate the starting date of work subcontracted to DBE's. One month before the scheduled start of subcontracted DBE work, but not earlier than the Notice to Proceed, pay 25% of the amount shown for mobilization on the applicable DBE Participation for Federal Projects form. Pay the remaining 75% of the amount shown for mobilization on the applicable DBE Participation for Federal Projects form, in three equal payments, when subcontracted DBE work is 25%, 50%, and 75% complete. Pay the affected DBE within 7 days of its reaching the specified milestones for percentage of work completed.

**S6092A - b06092-SECTION 609.2(g) MISCELLANEOUS MATERIALS**

**Addendum:**

**Associated Item(s):**

**Header:**

SECTION 609.2(g) MISCELLANEOUS MATERIALS

**Provision Body:**

**Section 609.2(g) Miscellaneous Materials. Add the following new set of bullets:**

The laser printer(s) and/or color printer(s) needed for this project will be obtained for Department use through a statewide lease agreement and not as part of the Equipment Package contract item.

A total of (*See "a" in Project Specific Details*) Laser Printer(s) and (*See "b" in Project Specific Details*) Color Printer(s) will be leased for the project.

Provide compatible toner cartridges for each laser printer and compatible ink jet cartridges for each color printer indicated above, as required. The exact make and model of laser printer and/or color printer being used on the project will not be known until the start of work. For cost estimating purposes, toner cartridges and/or ink jet cartridges furnished must be usable with the type of printer specified in Section 609.2(d)3. and Section 609.2(d)4., as applicable.

**Project Specific Details:**

- a.1 (one)
- b.0 (zero)

**00 - BRIDGE DECK CURING REQUIREMENTS**

**Addendum:**

**Associated Item(s):**

**Header:**

BRIDGE DECK CURING REQUIREMENTS

**Provision Body:**

Water cure all concrete deck placements in accordance with Section 1001.3(p)3.b. Cure for a minimum of 14 days.

Surface curing using the membrane method will not be allowed.

**I1070A - c01070 ITEM 9000-5001 - PERMITS FOR DESIGN-BUILD PROJECTS**

**Addendum:**

**Associated Item(s):** 9000-5001

**Header:**

ITEM 9000-5001 - PERMITS FOR DESIGN-BUILD PROJECTS

**Provision Body:**

**I. DESCRIPTION** - This work is the preparation of and obtaining approval for all permits necessary to construct the project as indicated in the contract documents and signed Final Design Drawings.

**II. DESIGN –**

**(a) Department-obtained permits.** The following permits have been obtained by the Department for construction of this project:  
None

**(b) General.** Obtain the following permits for construction of this project:

- PA DEP Water Obstruction and Encroachment Permit 105/404

All permits must comply with Environmental Commitments and Mitigation Measures.

The following documents are attached (FOR INFORMATION ONLY) to facilitate the preparation of the permit submissions:

- Hydrologic and Hydraulic Report

The approved Environmental Assessment is included the Project Development Checklist on ECMS.

Be responsible to ensure that all plans and documents are relevant and current for the appropriate permit submissions. Application fees will be waived for permits submitted on behalf of the Department.

**1. Erosion and Sediment Pollution Control (E&SPC) Plan.** Prepare and submit the E&SPC Plan to the Pike County Conservation District or Pennsylvania Department of Environmental Protection, as require for review/approval, as applicable.

**2. NPDES** - If an NPDES Permit is required, develop and submit the NPDES Permit Application to the Pike County Conservation District for review/approval. The Contractor responsible for earthmoving activities on the project will become co-permittee with the Department on the NPDES Permit.

The review of the E&SPC Plan and NPDES Permit Application by the Pike County Conservation District will be according to the policies of the conservation district. The Contractor will be responsible for accounting for the review time of the E&SPC Plan and NPDES Permit by the conservation district in the project schedule.

**3. Waterway Permits** - Prepare and submit the PA DEP Water Obstruction and Encroachment Permit 105/404 Permit Application in accordance with the conditions of the permit(s). Use of the JPA2 Expert System is required. Do not commence construction activities until the applicable waterway permit(s) are obtained.

**III. MEASUREMENT AND PAYMENT – Lump Sum.**

Partial payment will be made for the design activity based on the approved Schedule of Values in accordance with Section IX of the Special Provision titled SPECIAL BIDDING – DESIGN-BUILD, utilizing the following components:

- NPDES Permit Application Initial Submission
- NPDES Permit Issuance
- Waterway Permit Application Initial Submission
- Waterway Permit Issuance

**I1072A - c01072 ITEM 9000-2000 - UTILITY RELOCATION INFORMATION FOR DESIGN/BUILD PROJECTS**

**Addendum:**

**Associated Item(s):** 9000-2000

**Header:**

ITEM 9000-2000 - UTILITY RELOCATION INFORMATION FOR DESIGN/BUILD PROJECTS

**Provision Body:**

**I. DESCRIPTION** - The utility relocation coordination for contract document 9419 has not been finalized as this is a full Design/Build Project and final design is not completed. This work is the coordination of any and all utility facility relocation required to complete the project within the project limits as shown on the Contract Drawings.

**II. COORDINATION**

Coordinate all utility work required to complete the project. Perform the following, at minimum:

- Contact all utilities identified or having facilities within the project limits within 7 calendar days from the issuance of the Notice to Proceed and thereafter in intervals not to exceed 30 calendar days, and provide updates to the District Utility Administrator (DUA) as to plan development and updated estimates in calendar days for completion of utility relocations for both the utility and contractor;
- Incorporate all utility relocation design and resulting relocation arrangements into the Schedule;
- Coordinate required utility relocation highway occupancy permits and utility reimbursement agreements through the DUA; and
- Coordinate the relocation of any utilities affected by the project. If the utilities claim a real property interest within the project limits, then forward the reimbursement documents including real property interest documentation to the DUA immediately upon receipt. The DUA will forward the information to the Central Office Utility Relocation Unit (COURU) so determination can be made on the real property interest.

Assign a Utility Coordination Manager to this project.

Be responsible for the cost and delay of any additional utility relocation that results from changes in the Contractor's plans or construction sequences made subsequent to (1) acceptance of the utility's relocation plans and (2) where the utility has physically moved its facilities based upon those relocation plans.

For all utility relocation coordination activities, follow the procedures as provided in Publication 16M, Design Manual Part 5, Utility Relocation.

Throughout the project, upon taking appropriate action, forward all utility documents and correspondence to the DUA for recordation.

Review and approve all documents associated with the utility relocation process requiring signatures within 5 working days of receipt and forward to the DUA for an expedited 30 working day review. The DUA in turn will forward to the Central Office Utility Relocation Unit all documents requiring Central Office approval. Working days are as specified in the Special Provision titled SPECIAL BIDDING – DESIGN-BUILD, Section VII.

Verify the following list of utilities and contact all utilities within the project limits, including any utilities within the project limits not listed.

**Utilities:**

BLUE RIDGE CABLE TELEVISION INC.

Contact: Dwight Hunsicker telephone: 610-826-2551

BLUE RIDGE CABLE TECHNOLOGIES, INC.

ATTN: SKIP HUNSICKER (610) 826-2551

BOX 215

PALMERTON, PA 18071

VERIZON PENNSYLVANIA, INC.

Contact: Daniel Blodnikartelephone:570-253-0048 dan.blodnikar@verizon.com

VERIZON NORTH INC.

ATTN: DAN BLODNIKAR (570) 253-0048

174 BEACH LAKE HIGHWAY

HONESDALE, PA 18431

LACKAWAXEN TELEPHONE COMPANY

Contact:Joe Schimitschtelephone:570-685-1098 schimits@ltis.net

LACKAWAXEN TELEPHONE COMPANY

ATTN: JOE SCHIMITSCH (570) 685-1098

P. O. BOX 8

104 HOTEL ROAD

ROWLAND, PA 18457

PPL ELECTRIC UTILITIES CORPORATION

Contact:Charlotte Krupatelephone:610 774-6287 cakrupa@pplweb.com

PPL ELECTRIC UTILITIES CORPORATION

ATTN: MS. CHARLOTTE KRUPA (610) 774-6287

2 NORTH NINTH STREET/GENTW19

ALLENTOWN, PA 18101-1179

### III. MEASUREMENT AND PAYMENT – Lump Sum

Full payment for Utility Coordination will be made upon completion of all utility facility relocations on the project.

### **I6091F - c06091 ITEM 0609-0009 EQUIPMENT PACKAGE**

**Addendum:**

**Associated Item(s):**

**Header:**

ITEM 0609-0009 EQUIPMENT PACKAGE

**Provision Body:**

**Appendix**

**Table A**

<b>EQUIPMENT PACKAGE</b>	
<b>Equipment</b>	<b>Quantity</b>
<b>Communications Equipment</b>	
Copier <sup>(1)</sup>	1
Fax Machine <sup>(1)</sup>	1
Cellular Phone(s)	2
<b>Electronic Equipment</b>	
Digital Camera	1
Document Scanner <sup>(2)</sup>	
Laser Printer <sup>(2)</sup>	
Color Printer <sup>(2)</sup>	
<b>Specialized Equipment</b>	
Surveyor's Level & Measuring Rod	
Electronic Digitizer	
Digital Display Level	
Infrared Thermometer	
Laser Range Finder	
Paper Shredder	
<b>Miscellaneous Items</b>	
Internet Service Provider	Yes
Computer Media	Yes
Toners/Cartridges	Yes

(1) Unless otherwise approved, a multifunction machine may not be furnished in lieu of a separate copier and fax.

(2) Unless otherwise approved, a multifunction machine may not be furnished in lieu of a separate scanner, laser printer and color printer.

**Microcomputer Systems.** A total of 1 (one) microcomputer systems will be used on the project.

This information is being provided to assist Bidders in meeting the requirements of Section 609.2(f), Internet Service, and Section 609.2(g), Miscellaneous Materials.

Microcomputer systems may be furnished by the Department. If microcomputer systems are to be furnished by the Contractor, as part of the construction Contract, the bid will include applicable, 0688-XXXX bid items. When indicated, furnish microcomputer systems meeting the requirements of Section 688.

**16092A - c06092 ITEM 0609-0003 - INSPECTOR'S FIELD OFFICE AND INSPECTION FACILITIES, DESIGN-BUILD PROJECT**

**Addendum:**

**Associated Item(s):** 0609-0003

**Header:**

ITEM 0609-0003 - INSPECTOR'S FIELD OFFICE AND INSPECTION FACILITIES, DESIGN-BUILD PROJECT

**Provision Body:**

In accordance with Section 609, modified as follows:

**609.3 CONSTRUCTION –** Replace Section 609.3 with the following:

Install the indicated facilities no later than 5 (*modify as required*) days before the scheduled start of physical construction work, exclusive of Design activities, as identified in Section IV of the Special Provision titled SPECIAL BIDDING – DESIGN-BUILD. Anchor the facilities to withstand high winds. Maintain the facilities from installation until 30 days after physical work (including punch list items from final inspection) has been satisfactorily completed, unless released earlier by the Representative. Satisfactorily clean or arrange for the indicated facilities to be cleaned at least once per week. Provide an adequate number of accessible parking spaces immediately adjacent or in close proximity to the offices or laboratory for exclusive use by Department personnel. Provide proper maintenance of parking areas. Ensure that there is sufficient lighting to illuminate the exterior of offices or laboratory and all parking areas. Designate a specific individual to serve as the contact person for service-related problems. After physical work has been completed, but before release by the Representative, arrange to meet with the Inspector-in-Charge to examine and determine the condition of all specialized equipment that is contractor-owned. Report any unresolved disputes over the condition of such equipment to the Representative. Failure to meet with the Inspector-in-Charge or to report problems with the condition of specialized equipment will create a presumption that, except for expected wear resulting from normal usage, the equipment is in good condition and remains fully functional. Specialized equipment that is lost or determined to be damaged beyond repair will be replaced or reimbursement will be made as specified in Section 110.03, provided such loss or damage is not the result of carelessness or negligence on the part of the Contractor or any other responsible third party. The Representative may direct that the facilities be maintained for more than 30 days after physical work has been satisfactorily completed, as necessary, to allow time for Department personnel to process outstanding project records. Remove and dispose of furnishings, equipment, and materials upon release by the Representative.

**609.4 MEASUREMENT AND PAYMENT –** Replace Section 609.4 with the following:

The proposal will include separate pay items for the Inspector's Field Office and Inspection Facilities, Field Laboratory, Proportioning Plant Office, and Equipment Package, as applicable.

Each contract item will be paid, as specified in Section 110.05, in two equal payments, according to the following schedule:

- When work is completed in an amount equivalent to at least 10% of the original contract amount, excluding the bid price for the applicable item and the bid prices for the items for the Design activities identified in Section IV of the Special Provision titled SPECIAL BIDDING – DESIGN-BUILD, the first payment will be made.
- When work is completed in an amount equivalent to at least 60% of the original contract amount, excluding the bid price for the applicable item and the bid prices for the items for the Design activities identified in Section IV of the Special Provision titled SPECIAL BIDDING – DESIGN-BUILD, the second payment will be made.

**(a) Price Adjustments.** Adjustments to the lump sum prices bid for the indicated office or laboratory facilities and equipment package, as applicable, will be made as follows:

**1. Time Extensions and Reductions.** In the event the time for completion of all work on the project is extended or reduced, as specified in Section 108.06, an appropriate adjustment (payment to the Contractor or rebate to the Department) will be made to the lump sum prices bid for the indicated office or laboratory facilities and equipment package, as applicable, for the days in excess of (payment) or less than (rebate) the original contract time, at the following daily rate:

$$\text{Daily Price Adjustment Rate} = \frac{75\% \times \text{Contract Lump Sum Price}}{\text{Original Contract Time in Days}}$$

No adjustment will be made when the cause for the extension or reduction of Contract Time occurs during the time before the indicated office or laboratory facilities and equipment package were installed.

**2. Facilities Maintained for More than 30 Days After Physical Work Completion.** In the event the Representative directs that the office or laboratory facilities and equipment package be maintained for more than 30 days after the date of physical work completion, as specified in Section 609.3, an appropriate adjustment (payment to the Contractor) will be made to the lump sum prices bid for the indicated office or laboratory facilities and equipment package, as applicable, for the days in excess of 30 until released by the Representative, at the Daily Price Adjustment Rate specified in Section 609.4(a)1.

No adjustment will be made if the Representative directs that the office or laboratory facilities and equipment package be maintained for more than 30 days after the date of physical work completion due to the Contractor's failure to submit, complete, and/or correct required certificates or documents, as established during the final inspection.

**110731C - c10731 ITEM 9073-0001 - DISPOSAL OF BRIDGE WASTE**

**Addendum:**

**Associated Item(s):** 9073-0010

**Header:**

TEM 9073-0001 - DISPOSAL OF BRIDGE WASTE

**Provision Body:**

Section 9073.1 DESCRIPTION -

(a) General

1. This Item provides the material and execution requirements for ensuring that all project waste is properly collected, handled, stored, classified, transported, and disposed of in accordance with applicable EPA and Pennsylvania DEP regulations. The Environmental Compliance Plan required under this Item is for the protection of the workers, the public, and the environment from exposure to harmful levels of dust, lead, and other toxic metals that may be present in the paint being removed or repaired.
2. Implement and maintain programs and procedures which comply with the requirements of this Item and all applicable Federal, State, County, and City regulations.
3. Comply with all applicable regulations even if the regulation is not specifically referenced herein. If a State, County, or City regulation is more restrictive than the requirements of this Item, follow the more restrictive requirements.
4. Identification of the items below which are of specific interest to the Department in no way relieves the Contractor of the responsibility to comply with all EPA requirements, nor should it be construed that the Department, the EPA and DEP, or City and County regulators are only interested in these items.

(b) Definitions

1. CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act; commonly called Superfund. Federal laws addressing the clean up of hazardous waste sites. Amended in 1986 by Superfund Amendments and Re-Authorization Act (SARA). EPA implementing regulations are contained in 40 CFR 300-373.
2. Containment System - Complete enclosure built around hazardous (toxic metal) paint removal areas designed to contain debris and prevent emissions to the environment.
3. Competent Person - One who is capable of identifying existing and predictable lead hazards in the surroundings or working conditions and who has authorization to take prompt corrective measures to eliminate them.
4. DEP - Pennsylvania Department of Environmental Protection
5. Department - Pennsylvania Department of Transportation
6. Disposal - The discharge, deposit, dumping, spilling, leaking or placing of any solid liquid waste or hazardous waste into or on any air, land or water, so that the solid liquid waste or hazardous waste, or any constituent thereof, may enter the environment or be emitted into the air, or discharged into any waters, including groundwaters.
7. Disposal Facility - A licensed facility where hazardous, residual, or non-hazardous waste is intentionally placed, and in which the waste will remain after closure.
8. Emission - A release of material to the air, water, or ground.
9. EPA - The U.S. Environmental Protection Agency. Regulations are contained in Title 40 of the Code of Federal Regulations (40 CFR).
10. EPA Hazardous Waste Number - The Federal number assigned to each hazardous waste. The number assigned to lead waste is D008.
11. Flood Plain - A flat, low-lying portion of a stream valley subject to periodic (50 to 100 years) inundation during a flood.
12. Generator - Any facility owner, operator or person whose act or process produces hazardous waste or whose act first causes a hazardous waste to become subject to regulation. The Department is the Generator for the work under this Item, and will obtain the EPA provisional ID Number.
13. Hazardous Waste (lead paint debris) - Waste that is classified as hazardous due to its concentrations of regulated hazardous substances. Wastes may be classified as hazardous based on the characteristics of toxicity, ignitability, corrosivity, and reactivity. Paint debris is typically classified as hazardous waste based on the characteristic of toxicity. This is determined by testing representative samples of the waste using the Toxicity Characteristic Leaching Procedure (TCLP). If the leachate contains any of the 8 metals or other substances in concentrations at or above limits established in 40 CFR 261, Identification and Listing of Hazardous Wastes, it is classified as hazardous (see Residual Waste).
14. HEPA - A high efficiency particulate filter (HEPA) that is 99.97% efficient against particles of 0.3 microns in size or larger.
15. Ignitability - A characteristic of waste that caused it to be classified as hazardous. Waste is determined to be ignitable if it is found to be capable of being set afire, or of bursting into flame spontaneously or by interaction with another substance or material, when tested in accordance with 40 CFR 261. Spent solvents and liquid paint waste typically fall into this category.
16. Leachate - The amount of a specific substance (e.g. lead) that is carried off or dissolved out of a material. The amount of leachable lead that classifies paint debris as being hazardous is 5 mg/L (ppm) when tested by TCLP.
17. Lead - Metallic lead, all inorganic lead compounds, and organic lead soaps. The lead pigments used in paints comply with this definition.
18. ug/m3 - Micrograms per cubic meter. Common units for reporting airborne concentrations of lead.
19. mg/L - Milligrams per liter. Common units for reporting a concentration of a specific substance in units of mass per volume (e.g. amount of hazardous material contained in paint debris).
20. NIOSH - National Institute of Occupational Safety and Health.

21. OSHA - Occupational Safety and Health Administration. Standards are contained in Title 29 of the Code of Federal Regulations, Parts 1910 and 1926 (29 CFR 1910 and 29 CFR 1926).

22. POTW - Publicly Owned Treatment Works

23. PPM - Parts per million. Common units for reporting a concentration of a specific substance (e.g. amount of hazardous material contained in paint debris).

24. RCRA - Resource Conservation and Recovery Act. RCRA regulations addressing waste handling and disposal and are found in 40 CFR 240 through 280.

25. Regulated Area - Area established by the Contractor to demarcate the areas where airborne concentrations of lead exceed, or can be expected to exceed, the Action Level.

26. Representative Sample - A sample of debris from a pile, drum, or container of debris which can be expected to exhibit the average properties of that pile, drum, or container of debris.

27. Residual waste - Residual waste is defined as waste resulting from industrial operations that is not classified as a hazardous waste. Residual waste in Pennsylvania is addressed under Title 25, Chapters 287 through 299 Residual Waste Management.

28. TCLP - Toxicity Characteristic Leaching Procedure. Laboratory tests conducted on wastes that determine the amount of hazardous materials that leach out into a test solution. The test is intended to simulate the properties of water as it leaches through a solid waste landfill. TCLP testing is defined in 40 CFR 261, Appendix II.

29. Treatment - Any method or process designed to change the physical, chemical or biological characteristics or the composition of any hazardous waste so as to neutralize such waste to make it non-hazardous.

30. Treatment, Storage, and Disposal (TSD) Facility - The TSD facility is the last phase of the cradle-to-grave concept in handling hazardous waste, and is responsible for its proper disposal. Requirements are found in 40 CFR 264 and 265.

31. Waste Stream - A waste stream represents debris of a similar type and make up. The paint debris from bridge represents a single waste stream if the coating system and method of removal is constant. The debris represents a different waste stream, if different coating materials or methods of removal are involved. The waste created when using recycled steel grit generates a different waste stream than waste created using a disposable abrasive (e.g., Black Beauty).

### (c) Reference Standards and Regulations

1. The latest edition of the following regulations, guides, and standards form a part of this Item.

#### 2. Code of Federal Regulations (CFR)

- 29 CFR 1926, Occupational Safety and Health Regulations for Construction
- 40 CFR 261, Appendix II EPA, Toxicity Characteristic Leaching Procedure
- 40 CFR 262, Standards Applicable to Generators of Hazardous Waste
- 40 CFR 263, Standards Applicable to Transporters of Hazardous Waste
- 40 CFR 264, Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities
- 40 CFR 265, Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities
- 40 CFR 265, Subpart C, Preparedness and Prevention
- 40 CFR 265, Subpart D, Contingency Plan and Emergency Procedures
- 40 CFR 265.16, Personnel Training
- 40 CFR 268, Land Disposal Restrictions
- 40 CFR 302, Designation, Reportable Quantities and Notification
- 40 CFR 355, Emergency Planning and Notification
- 49 CFR 171-179, Hazardous Materials Regulations

#### 3. EPA Methods

- SW 846, Test Methods for Evaluating Solid Waste - Physical/Chemical Methods
- Method 3050, Acid Digestion of Sediment, Sludge, and Soils

- Method 1311, Toxicity Characteristic Leaching Procedure (TCLP)

#### 4. State, County, and City Regulations

- State - Title 25, Chapters 260a-266a, 266b and 268a-270a, Pennsylvania Department of Environmental Protection – Hazardous Waste Management
- State - Title 25, Chapter 271, Pennsylvania Department of Environmental Protection - Municipal Waste Management
- State - Title 25, Chapter 273, Pennsylvania Department of Environmental Protection - Municipal Waste Landfills - Permitting Requirements
- State - Title 25, Chapter 279, Pennsylvania Department of Environmental Protection - Transfer Facilities
- State - Title 25, Chapter 285, Pennsylvania Department of Environmental Protection - Storage, Collection and Transportation of Municipal Waste
- Allegheny County - Article VIII, Rules and Regulations of Allegheny County, Solid Waste Management.

#### 5. Society for Protective Coatings (SSPC)

- Guide 7, Guide for the Disposal of Lead-Contaminated Surface Preparation Debris
- SSPC 93-02, Industrial Lead Paint Removal Handbook, 2nd Edition, Volume I
- SSPC 95-06, Project Design, Industrial Lead Paint Removal Handbook, Volume II

(d) Submittals - Submit the following plans, programs, and transportation/disposal company information for Department review and acceptance a minimum of 21 calendar days before the start of the paint removal operation.

- Waste Handling Plan: A written program that addresses the proper handling and disposal of all waste. Include the procedures that will be followed for the collection of representative samples of the waste; the procedures for the site handling, storage, and packaging of the waste; and contingency plans in the event of a spill.
- Transporter Information: The names, addresses, license or permit numbers, and qualifications of the proposed haulers of hazardous waste, non-hazardous waste, and waste water. Note that for work in Allegheny County, Article VIII has specific requirements for the permitting of solid waste transportation vehicles. Note the restrictions stipulated below for the use of Ohio transporters.
- Hazardous Waste Disposal Information: Advise legally permitted recycling or waste disposal facilities that bridge paint debris will be generated (e.g., abrasive/paint debris), and identify the toxic metals that the waste will likely contain. Based on that information, request a letter from one or more of the hazardous waste recycling or disposal facilities, stating that the facility can accept this type of waste, is authorized to accept the waste under the laws of the state of residence; has the required capability to treat and dispose of the materials; and will provide or assure the ultimate disposal method indicated on the Uniform Hazardous Waste Manifest. Provide the Department's Representative with the original letter signed by a legally authorized representative of the facility. Note the restrictions stipulated below for the use of Ohio transporters.
- Restrictions on the Use of Ohio Hazardous Waste Transporters and Disposal Facilities: There are special restrictions on the use of Ohio hazardous waste transporters and disposal facilities. If the use of Ohio firms is proposed, have each proposed Ohio transporter and disposal facility complete the Certificate of Non-Affiliation Sheet (attached as Exhibit 1). Include the original sheet(s) with the submittals. Non-Hazardous and Other Waste Disposal Information: Submit the name and address of the permitted municipal waste landfill that will accept the non-hazardous and residual waste generated by the Contractor.
- Waste Water: Provide a letter from the proposed facility that will be accepting the waste water for disposal, indicating that the facility has the capability to handle and properly dispose of the water. Advise the facility of all of the toxic metals that may be present in the water. Provide the Department's Representative with the original letter signed by a legally authorized representative of the facility.
- Laboratory Qualifications: Provide the name, address, experience, and qualifications of the laboratory and/or firm that will be used for the waste sampling and analysis required under this Item.

(e) Department Review: Do not construe Department acceptance of Contractor submittals to imply approval of any particular method or sequence for conducting the work, or for addressing health and safety. Acceptance of the programs does not relieve the Contractor from the responsibility to conduct the work in strict accordance with the requirements of this Item for the proper disposal of all waste, or to adequately protect the health and safety of all workers involved in the project, the public, and the environment. The Contractor remains solely responsible for the adequacy and completeness of the programs and work practices, and adherence to them.

## SECTION 9073.2 MATERIAL

### (a) Waste Containers

1. Hazardous and Residual Waste: Provide DOT-approved containers of the appropriate size and type for the hazardous waste generated on the project. Use containers that are resistant to rust and corrosion (painted, if constructed of steel), that have tight fitting lids or covers, and which are water resistant and leak proof.
2. Municipal/Construction Waste: Provide all containers for non-hazardous municipal/construction waste. Use containers that are free of loose debris when brought on-site.
3. Spent Solvents: Provide all containers for spent solvents. Do not mix spent solvents with spent abrasives, paint debris, water, or other waste.

### (b) Container Maintenance

1. Maintain all containers in good operating condition with all lids and closing mechanisms intact and operational to prevent the escape of debris by wind, spilling of the contents, or access by unauthorized personnel.

## SECTION 9073.3 CONSTRUCTION

### (a) General

1. The Department is the generator of the hazardous waste for permitting purposes, and will provide the EPA provisional identification number, but the Contractor is responsible for the collection, handling, storage, transportation and disposal of all wastes.
2. Recover all waste products generated during cleaning and painting work, including but not limited to rags, tape, disposable coveralls, filters, paint debris, and paint cans. Unless otherwise directed by the Department, contain the waste only within the legal right-of-way.
3. Select the location of the secured waste storage area together with the Department's Representative. Transport the waste to the secured storage area at the frequency agreed upon by the Department's Representative.
4. Conduct the work in strict accordance with Federal, state, and local regulations governing the collection, handling, transportation and disposal of waste. When collecting and storing the waste, comply with Section 9077 for the protection of the workers, and to prevent the dispersion of the debris or dust.

(b) Items Provided by the Department - An EPA provisional ID number and signatures on the hazardous waste manifest will be provided by the Department.

### (c) Items Provided by the Contractor

1. Containerizing, testing (classifying), handling, and storage of all waste.
2. Contracting with licensed and/or permitted waste transporters for the transportation of all hazardous, residual, and non-hazardous waste, as well as waste water.
3. Contracting with licensed and/or permitted recyclers or disposers of all waste.
4. Locations for waste storage together with appropriate measures to assure that the area is secure (Note: storage locations must be approved by the Department).
5. Completed Waste Characterization Data Sheets for Department signature.
6. Completed hazardous waste manifests for Department signature.
7. Bill of Lading for non-hazardous waste.

### (d) Waste Sampling, Testing, and Classification

## 1. Sampling

- Collect representative samples of the paint debris generated by project activities. Collect all samples under the observation of the Department's Representative.
- Collect samples in accordance with SW-846, "Test Methods for Evaluating Solid Waste - Physical/Chemical Methods." Describe the sampling methods in the Waste Handling Plan.
- Handle and treat paint waste generated through the use of steel abrasives as hazardous. Collect and analyze a minimum of one representative sample of the steel grit/paint debris to identify the composition of the waste.
- Collect and have analyzed, a minimum of four representative samples of all other waste streams (i.e., waste streams which do not contain steel abrasives). Use a random sampling technique to collect the samples.
- Complete the initial sampling of each waste stream immediately upon filling the first container, but do not allow waste to accumulate for longer than 30 days before sampling. After the representative samples are collected, send them immediately to the laboratory for analysis.
- Unless otherwise directed by the Department's Representative, or required by state regulations or the waste recycling or disposal facility, once each waste stream is sampled, tested, and classified, additional sampling and analysis are not required for subsequent shipments unless the waste stream changes.

## 2. Testing

- Have all testing performed by a qualified laboratory acceptable to the Department. Direct the laboratory test the waste in accordance with 40 CFR 261, Appendix II, Method 1311 Toxicity Characteristic Leaching Procedure (TCLP), to determine if it is hazardous.
- Analyze the first two samples from each waste stream by TCLP for all eight (8) metals and other hazardous substances. Analyze subsequent samples of the waste stream(s) for any metal or hazardous material that is detected in the initial TCLP testing. When chemicals strippers are used, test all liquids and sludge. Include pH to determine corrosivity.

## 3. Classification

- Paint debris is classified as hazardous waste if the leachate contains any of the 8 metals or other hazardous substances in concentrations at or above limits established in 40 CFR 261. The presence of these metals at lower concentrations, classifies the waste as residual.

Arsenic - 5.0 mg/L

Barium - 100.0 mg/L

Cadmium - 1.0 mg/L

Chromium - 5.0 mg/L

Lead - 5.0 mg/L

Mercury - 0.2 mg/L

Selenium - 1.0 mg/L

Silver - 5.0 mg/L

Note that paint debris that is generated through the use of steel abrasives has been classified by the Department as hazardous for lead even though it passes the TCLP test. In Box 9b of the waste manifest, identify this waste as "paint chips-hazardous."

The above includes only those elements typically associated with paints. Take into account other substances that may be present which can cause debris to be classified as hazardous waste as defined in 40 CFR 261 (e.g., pH less than or equal to 2.0 or greater than or equal 12.5 resulting in corrosivity, or the characteristic of ignitability).

## 4. Laboratory Report

- Have the laboratory send the original test report directly to the Department's Representative with copies of the test results to the Contractor. Issue the reports no later than ten (10) calendar days after the representative samples are collected.

- Include the following minimum information in each report: Identity of the waste stream(s) analyzed, the number of samples collected and tested, dates of sampling and testing, laboratory test procedures utilized, the names and signatures of the individuals collecting the samples and conducting the laboratory tests, and an interpretation of the test results. Include copies of the chain-of-custody forms in the documentation.
- Prepare the Waste Characterization Data Sheet (WCDS) and provide to the Department's Representative for review and signature. Once approved, submit the original WCDS to the Department.

## (e) Waste Handling, Packaging, and Storage

1. Comply with 40 CFR 262 and Pennsylvania Title 25, Chapters 260a-266a, 266b and 268a-270a for the on-site handling, packaging, and storage of all hazardous waste generated by the project.
2. Comply with Pennsylvania Title 25, Chapters 285 and 299 for the handling, packaging, and storage of residual and municipal construction non-hazardous waste. Comply with additional County and City regulations as applicable.
3. Do not place hazardous waste on the unprotected ground (e.g., cover the ground with impervious tarping). Locate in a secure area with signs around the perimeter, and shield adequately to prevent dispersion of the waste by wind or water. Contact the Department's Representative for approval of the storage location(s).
4. Collect and store the waste at the end of each working day in storage drums or containers such that no waste is left exposed overnight, at a minimum. Use DOT-approved containers for hazardous and residual waste storage.
5. Cover all containers immediately upon filling and confirm that all lids are attached except when filling. Verify that all labels remain intact.
6. Store non-hazardous waste separately from hazardous waste. Do not co-mix hazardous waste with non-hazardous waste. Do not mix different types of hazardous waste together unless specifically approved by the Department's Representative and the disposal facility.
7. Arrange containers in the storage area for easy accessibility. Stage the containers together in lots no greater than two rows of five containers each. Maintain a minimum lane clearance of 915 mm (36 inches) between each lot of ten containers.
8. Verify that all waste (hazardous, residual, and non-hazardous) is transported to the appropriate recycling or disposal facility within 90 days after waste is first placed into the container.
9. Improper waste storage is cause for immediate project shut down until appropriate corrective action is completed.
10. Train all personnel in the proper handling of the hazardous waste at the work site in accordance with 40 CFR 265.16. Include procedures in the Waste Handling Plan that will be followed in the event of a release or spill, required notifications, and methods to be used for cleanup. Maintain all training records on-site.
11. Do not fill any container or roll-off in excess of the capacity marked on the container. If delays during pick-up are caused by overfilled containers, remediate the situation at no additional cost to the Department.
12. Place the soil into separate containers and assume all costs for its disposal, if soil remediation is required as a result of Contractor activities.

## (f) Labeling of Containers

1. Label all containers of project waste and debris immediately to identify the contents. Label containers of spent abrasive as "BRIDGE BLAST ABRASIVE WASTE, Contains Lead". Include the Contract Number and the Bridge Identification Number or SR and SEC Number. Provide similar labels on containers of other project waste and debris.
2. Apply hazardous waste labels after the TCLP test results are received, if the waste tests hazardous. Label each container or rolloff of hazardous waste in accordance with 40 CFR 262, 49 CFR 171-179, and Pennsylvania Title 25, Chapters 260a-266a, 266b and 268a-270a. Include the following minimum information:
  - Hazardous Waste. Federal law prohibits improper disposal. If found, contact the nearest police, or public safety authority, or the U.S. Environmental Protection Agency.
  - Proper DOT Shipping Name
  - Manifest Document Number

- Generator Name, Address, and EPA ID Number
- Date of Accumulation
- EPA Waste Number

3. Apply non-hazardous, municipal, or residual waste classification labels, as applicable, on all other project waste in accordance with Pennsylvania Title 25, Chapter 285 and 299.

4. Enter the above information using permanent marking material, printed in English, and displayed on a background of contrasting color unobscured by other labels or attachments. Locate labeling away from other markings that could substantially reduce its effectiveness.

5. Complete the labeling, marking, and placarding activities under the observation of the Department's Representative, before storing or transporting any container or rolloff.

## (g) Waste Transportation and Disposal

### 1. Hazardous Waste

- Prepare the hazardous waste manifest for each shipment and provide to the Department's Representative for review and signature.
- Arrange for the transportation of all hazardous waste by a licensed transporter in accordance with 40 CFR 263, 49 CFR 171-179, and Pennsylvania Title 25, Chapters 260a-266a, 266b and 268a-270a. Also comply with applicable County or City regulations. Verify that all waste is completely covered during transport. Provide the name, address, and qualifications of the licensed waste transporter to the Department for acceptance.
- Arrange for the recycling or disposal of all hazardous waste in accordance with 40 CFR 264, 40 CFR 268, and Pennsylvania Title 25, Chapters 260a-266a, 266b and 268a-270a. Verify that only licensed recycling or TSD facilities are used. Provide the name, address, qualifications, and letter of commitment from the recycling or TSD facility to the Department for acceptance.
- Comply with all of the manifesting, certification, and reporting requirements for hazardous waste in accordance with 40 CFR 262, 40 CFR 268 and Pennsylvania Title 25, Chapters 260a-266a, 266b and 268a-270a, including certificates of final disposal for each shipment.
- Provide a certification for each manifested shipment that the waste was accepted by the recycling or disposal facility, and properly treated and disposed.

### 2. Residual and Non-Hazardous Municipal/Construction Waste

- Transport, and dispose of all residual and non-hazardous municipal construction waste in accordance with Pennsylvania Title 25, Chapters 271, 273, 279, 285, and 299.
- Verify that waste is completely covered during transport.
- Verify that the truck is properly designated with a residual waste sign measuring 150 mm (6 inches) in height when transporting residual waste.
- Verify that the transportation vehicle has a Pollution Prevention and Contingency Plan and carries the following information: County and state where waste originated, name and address of the carrier, name and location of disposal facility, and fire extinguisher.
- Comply with additional County and City regulations as applicable.

## (h) Special Handling and Disposal Conditions for Waste Resulting from the Use of Recycled Steel Abrasives

1. Treat the waste as hazardous when recycled steel abrasives are used. Notify the waste recycling or disposal facility that the waste contains high levels of lead and that further stabilization is required before disposal. Use stabilization methods that would have been used in the event the waste tested hazardous.

2. Comply with the requirements for the site collection, handling, storage, and transportation of the waste as if it tested hazardous. Identify the waste in box 11 of the manifest as "Paint Chips - nonhazardous."

## (i) Special Handling and Disposal Conditions for Waste Water

1. Provide containers for the collection and retention of all waste water, including but not limited to the water used for hygiene purposes, laundering of clothing if done on site, and cleanup activities.

2. Filter visible paint chips and particulate from the water before placing it into the containers. Before disposal, test the water for total toxic metals and provide ample filtration (e.g., through a multi-stage filtration system ending in 5 microns or better if needed) until the water is not classified as hazardous.

3. Make disposal arrangements with the local publicly owned treatment works (POTW), sanitation company, or other appropriate permitted facility. Provide the Department's Representative with documentation signed by an official of the facility stating that the facility will accept the waste, and that the levels of any lead remaining in the water are acceptable.

4. Provide the Department with the name and address of the transporter and disposal facility for acceptance before use.

(j) Recordkeeping

1. Provide the following information to the Department's Representative: all manifests, a listing of the type and quantity of all waste generated, and the transportation and disposal facilities used for all waste.

#### SECTION 9073.4 MEASUREMENT AND PAYMENT

Lump Sum. Includes full compensation for collection, testing, handling, storage, transportation and disposal of all waste (hazardous, residual, and non-hazardous including waste water). Partial payment may be made for this item. Payment will be made only after the Department receives all properly executed waste disposal documentation, including certificates of disposal. If there are discrepancies in quantities or in any of the documentation requirements, payment will be withheld until the discrepancies are resolved.

### **110751B - c10751 ITEM 9075-0001 - CONTAINMENT**

**Addendum:**

**Associated Item(s):** 9075-0001

**Header:**

ITEM 9075-0001 - CONTAINMENT

**Provision Body:**

Section 9075.1 DESCRIPTION -

(a) General

1. This Item provides the material and execution requirements for the installation and use of containment systems for a variety of different types of paint removal methods. Containment systems are required when specified by the Department in order to control, below harmful levels, exposures of dust, lead, and other toxic metals that may be present in the paint being removed.

2. Design and use a containment system that is capable of controlling project emissions for the protection of the public and the environment in accordance with the criteria established in Section 1079, and controlling worker exposures in accordance with the requirements of Section 9077.

3. Comply with the requirements of this Item and all applicable Federal, State, County, and City regulations.

4. Comply with all applicable regulations even if the regulation is not specifically referenced herein. Follow the more restrictive requirements if a State, County, or City regulation is more restrictive than the requirements of this Item.

5. Identification of the items below which are of specific interest to the Department in no way relieves the Contractor of the responsibility to comply with all EPA requirements, nor should it be construed that the Department, the EPA and DEP, or City and County regulators are only interested in these items.

(b) Definitions

1. Containment System - Complete enclosure built around hazardous (toxic metal) paint removal areas designed to contain debris and prevent emissions to the environment.
2. Competent Person - One who is capable of identifying existing and predictable lead hazards in the surroundings or working conditions and who has authorization to take prompt corrective measures to eliminate them.
3. DEP - Pennsylvania Department of Environmental Protection
4. Department - Pennsylvania Department of Transportation
5. Engineering Controls - The use of technologically feasible controls in the work areas for the purpose of reducing and maintaining employee exposure to lead to or below the PEL, and for controlling emissions from the work area. Examples of engineering controls are mechanical dilution ventilation for the enclosure, or methods which capture the dust at the point of generation such as vacuum blast cleaning.
6. Emission - A release of material to the air, water, or ground.
7. EPA - The U.S. Environmental Protection Agency. Regulations are contained in Title 40 of the Code of Federal Regulations (40 CFR).
8. Hazardous Waste (lead paint debris) - Waste that is classified as hazardous due to its concentrations of regulated hazardous substances. Paint debris is classified as hazardous waste if, after testing by the Toxicity Characteristic Leaching Procedure (TCLP), the leachate contains any of the 8 metals or other substances in concentrations at or above limits established in 40 CFR 261, EPA, Identification and Listing of Hazardous Wastes.
9. HEPA - A high efficiency particulate filter (HEPA) that is 99.97% efficient against particles of 0.3 microns in size or larger.
10. Lead - Metallic lead, all inorganic lead compounds, and organic lead soaps. The lead pigments used in paints comply with this definition.
11. ug/m3 - Micrograms per cubic meter. Common units for reporting airborne concentrations of lead.
12. NIOSH - National Institute of Occupational Safety and Health.
13. OSHA - Occupational Safety and Health Administration. Standards are contained in Title 29 of the Code of Federal Regulations, Parts 1910 and 1926 (29 CFR 1910 and 29 CFR 1926).

#### (c) Reference Standards and Regulations

1. The latest edition of the following regulations, guides, and standards form a part of this Item.
2. Code of Federal Regulations (CFR)
  - 29 CFR 1926, Occupational Safety and Health Regulations for Construction
  - 29 CFR 1926.451, Scaffolding
3. State, County, and City Regulations
  - State - Title 25, Chapter 123, Pennsylvania Department of Environmental Resources-Standards for Contaminants
  - Allegheny County - Article XXI, 2105.51, Rules and Regulations of Allegheny County Bureau of Environmental Quality, Abrasive Blasting
  - Philadelphia County - Regulation 2, Section 8, Philadelphia County Air Monitoring Regulation - Air Contaminated Fugitive Dust
4. Society for Protective Coating (SSPC)
  - Guide 6, Guide for Containing Debris Generated During Paint Removal Operations

- SSPC 93-02, Industrial Lead Paint Removal Handbook, 2nd Edition, Volume I
- SSPC 95-06, Project Design, Industrial Lead Paint Removal Handbook, Volume II

(d) Submittals - Provide the following containment working drawings and other information for Department review and acceptance a minimum of 21 calendar days prior to the erection of the containment system:

- Detailed drawings stamped by a Professional Engineer licensed in the State of Pennsylvania. Have the engineer analyze the system for the effects of wind forces on the bridge structure as well as the containment system itself and all other imposed loads (e.g., equipment, waste, traffic, etc.). Do not allow the containment system to induce a load on the bridge which will create an overstress condition or otherwise effect the structural integrity of the bridge, and do not allow the system to encroach upon the required bridge clearances.
- Data, calculations, and assumptions used for the design of the containment and ventilation system and the imposed loads on the existing structure.
- The plan for staging, installing, moving, and removing the containment; and the methods of attachment that will be used. Make attachment points to substantial framing members only.
- Provisions for dropping the containment in inclement weather, for movement out of navigation lanes, and the controls exercised to prevent excessive sagging during cable installation (e.g., temporary cradles) to ensure the protection of traffic.
- Plans for maintaining the navigational lighting during the work.
- Plans for the collection and removal of debris from the surface of water when working over streams, rivers, lakes, and other bodies of water.
- Any other information needed to thoroughly describe the containment plan.

(e) Department Review: Do not construe Department acceptance of Contractor submittals to imply approval of any particular method or sequence for conducting the work, or for addressing health and safety. Acceptance of the programs does not relieve the Contractor from the responsibility to conduct the work in strict accordance with the requirements of this Item, or to adequately protect the health and safety of all workers involved in the project, the public, and the environment. The Contractor remains solely responsible for the adequacy and completeness of the programs and work practices, and adherence to them.

## SECTION 9075.2 MATERIAL

- (a) Supply all materials needed to contain project debris in accordance with the provisions of this Item. This includes ground covers, rigging, scaffolding, planking, and containment materials.
- (b) Use materials that are free of loose dust and debris when brought onto each bridge site, and upon removal.
- (c) Provide the Department's Representative with two portable light meters with a scale of 0.0 - 538 LUX (0.0 - 50.0 foot-candles).

## SECTION 9075.3 CONSTRUCTION

### (a) General

1. Use a containment system that maintains the work area free of emissions of dust and debris in accordance with all provisions of this Item.
2. Follow the containment requirements as specified in this Item and as stipulated in SSPC Guide 6 for the selected method of removal as summarized in Table 1 attached to this Section.

### (b) Certification of Installation

1. Have a licensed Professional Engineer registered in the State of Pennsylvania certify that the containment system has been assembled as shown on the approved, signed and sealed drawings, after the containment system is installed.
2. Submit the certification to the Engineer before starting any work within the containment.

### (c) Special Restrictions

1. Comply with the project-specific vertical clearance requirements established by the District.
2. Do not allow equipment and workers to be present or to operate over any lanes that are open to traffic, unless specifically approved by the Department.

#### (d) Enclosure System

1. Cover the floor or ground beneath the structure being prepared with air and dust impenetrable materials such as solid panels of plywood or flexible materials such as tarpaulins, if it serves as the base of the containment. Maintain the materials throughout the project to avoid losing debris through rips, tears, or breaks in the coverings.
2. Verify that the platform and its components are designed and constructed to support at least 4 times its maximum intended load without failure with wire cables capable of supporting at least 6 times their intended load without failure, if a suspended or elevated platform is constructed to serve as the base of the containment. Strictly follow all applicable OSHA regulations regarding scaffolding. Cover the platform or scaffolding with air and dust impenetrable materials.
3. Remove debris from the containment materials and equipment prior to relocation to another point along the structure or within the facility. Clean to the extent that debris or dust are not dislodged by winds or physical contact during handling and transportation.

(e) Containment Requirements - Table 1: Table 1 identifies a series of components that serve as the basis for minimum requirements for the containment system for various methods of paint removal. The components are defined in this Item.

1. Rigidity of Containment Materials: Rigid containment materials consist of solid panels of plywood, aluminum, rigid metal, plastic, fiberglass, composites, or similar materials. Flexible materials consist of screens, tarps, drapes, plastic sheeting, or similar materials.

2. Permeability of Containment Materials: The containment materials are identified as air impenetrable if they are impervious to dust or wind such as provided by rigid panels, coated solid tarps, or plastic sheeting. Air penetrable materials are those that are formed or woven to allow air flow. Water impermeable materials are those that are capable of containing and controlling water when wet methods of preparation are used. Chemical resistant materials are those resistant to chemical and solvent stripping solutions.

3. Support Structure: Rigid support structures consist of scaffolding and framing to which the containment materials are affixed to minimize movement of the containment cocoon. Flexible support structures are comprised of cables, chains, or similar systems to which the containment materials are affixed. Minimal support structures involve nothing more than the cables or connections necessary to attach the material to the structure being prepared and/or to the ground.

4. Containment Joints: Fully sealed joints require that mating surfaces between the containment materials and to the structure being prepared are completely sealed. Sealing measures include tape, caulk, Velcro, clamps, or other similar material capable of forming a continuous, impenetrable or impermeable seal. The use of overlapping containment materials (300 mm (1 foot) minimum overlap) to achieve fully sealed joints is acceptable only if emissions of dust and debris are controlled. If emissions escape at the joints, more positive means of sealing are required. Partially sealed joints involve the mating of the materials to one another and to the structure being prepared with concern for the structural soundness of the joint, but without consideration for creating a continuous, impenetrable or impermeable seal.

5. Entryway: An airlock entryway involves a minimum of one stage that is fully sealed to the containment and which is maintained under negative pressure using the ventilation system of the containment. Resealable door entryways involve the use of flexible or rigid doors capable of being repeatedly opened and resealed. Sealing methods include the use of zippers, Velcro, clamps, or similar fasteners. Overlapping door tarpaulin entryways consist of two or three overlapping door tarpaulins. Open seam entryways involve entrance into the containment through any open seam.

6. Mechanical Ventilation: The requirement for mechanical ventilation is to ensure that adequate air movement is achieved to reduce worker exposure to toxic metals to as low as feasible, and to enhance visibility. Design the system with proper exhaust ports or plenums, adequately sized ductwork, adequately sized discharge fans and air cleaning devices (dust collectors) and properly sized and distributed make-up air points. Natural ventilation does not require the use of mechanical equipment for moving dust and debris through the work area. It relies on natural air flow patterns, if any, through the containment.

7. Negative Pressure: If negative pressure is specified, verify its performance through instrument monitoring to achieve a minimum of 0.75 mm (0.03 inch) water column (W.C.) relative to ambient conditions, or through visual assessments for the concave appearance of the containment enclosure.

8. Exhaust Ventilation: When mechanical ventilation systems are used, provide filtration of the exhaust air, otherwise airborne particulate from the containment will be exhausted directly into the surrounding air. Provide a filtration efficiency of 0.5 microns or better.

## (f) Work Over Water - Containment Restrictions and Water Booms

1. Provide the necessary material and equipment on site to contain inadvertent spills or releases of dust and debris, when working over or near water. Materials and equipment that are typically acceptable include water booms and boats with skimmers. Remove all project-related dust and debris from the surface of the water or from sediment at the end of each work day at a minimum. Conduct more frequent cleaning, if directed by the Department. Describe the methods that will be used to control spills in the Containment submittals.

## 2. Coast Guard Issues and Notification

- Provide the Department and the Coast Guard with the distance that the containment will extend below the bottom of the bridge (e.g., below the bottom chord) when operating in the navigation channel. Maintain this distance to the absolute minimum required.
- Obtain advance approval from the Coast Guard any time that the work necessitates partial or total restrictions to the movement of vessels beneath the bridge. Provide the Coast Guard with the request at least 30 days prior to the need to commence such activities.
- Design the containment to allow it to be moved out of the navigation channel within 24 hours of notification that ships needing additional clearance require passage, unless otherwise directed by the Coast Guard.
- Provide the Engineer and the Coast Guard with a 24 hour telephone number and contacts for discussions regarding the containment system.

## (g) Maintenance of Bridge Lighting Systems and Containment Lighting Requirements

1. Maintain all navigational lighting throughout the project. Provide the lighting plan to the Department for approval in advance.
2. Provide adequate lighting for all surface preparation, paint application, and inspection work. Maintain a minimum of 107 LUX (10 foot-candles) for surface preparation and painting, and a minimum of 322 LUX (30 foot-candles) of general area lighting for inspection. Increase the lighting if workers or inspectors have difficulty in seeing. Use explosion-proof lighting.

## (h) Protection of Drainage Systems

1. Protect storm sewers and drains from the entrance of debris from project activities. Keep all protective systems clean and operational throughout the entire project. Remove all visible debris from the protective devices or from areas where rain water could carry the debris into drains or storm sewers at the end of each work day at a minimum. Conduct more frequent cleaning as directed by the Department's Representative.
2. Identify the methods that will be used to route run-off from the existing deck drains through the containment enclosure. Do not close any bridge deck drains without the explicit approval of the Department's Representative.

## (i) Cleaning of Contractor Materials and Equipment During Relocation and Demobilization

1. Remove loose dust and debris to the extent that they will not be dislodged during movement prior to relocating containment materials and equipment from one portion of the project to the next. Use compressed air for cleaning only if it is accomplished inside a contained area that is equipped with an operating ventilation system capable of capturing the dust and debris.
2. Remove all Contractor equipment and materials upon completion of project activities.
  - Thoroughly HEPA vacuum, wash, or otherwise decontaminate reusable items until all loose surface dust and debris have been removed. These items include, but are not limited to, paint removal equipment, containment materials, ground covers, and scaffolding.
  - Treat materials as a separate waste stream, and at no additional cost to the Department, dispose of properly, if adequate cleaning is not possible. Collect water used for cleaning and dispose of in accordance with the requirements of Section 9073.

3. Comply with Section 1079 for the clean up and clearance of the project site.

SECTION 9075.4 MEASUREMENT AND PAYMENT

Lump Sum. Price includes full compensation for all labor, containment and ventilation materials and equipment, engineering, drawings, and any equipment or facilities needed to install, operate, move, clean, dismantle, and remove the containment system from the project site. Partial payments for containment will be made based on the percentage of the structure that has been prepared and fully primed.

**110771B - c10771 ITEM 9077-0001 - WORKER HEALTH AND SAFETY**

**Addendum:**

**Associated Item(s):** 9077-0001

**Header:**

ITEM 9077-0001 - WORKER HEALTH AND SAFETY

**Provision Body:**

Section 9077.1 DESCRIPTION -

(a) General

1. This Item provides the material and execution requirements for implementing a Lead (Toxic Metal) Health and Safety Program for the protection of Contractor workers in strict compliance with all of the applicable OSHA regulations. The program is for the protection of workers from over exposure to lead and other toxic metals that may be present in the paint being removed or repaired.

2. The Department will provide information on the presence of lead, cadmium, chromium, and arsenic in the paint. Such test results will be provided in separate special provision entitled "Laboratory Analysis of Existing Paint".

If any of the test results for lead, cadmium, chromium and/or arsenic are not provided, assume that the unreported elements are present and take necessary precautions to comply with local, State and Federal regulations dealing with protection of the workers' health and safety, waste disposal, and environmental protection. Test results are for bidding purposes only. The contractor, at his cost, may obtain laboratory analysis of existing paint prior to bidding if no test results are published by the Department. Conduct work exposure monitoring at the project startup, and adjust all protection, training, medical surveillance, and record keeping provisions according to the results.

3. Implement and maintain programs and procedures which comply with the requirements of this Item and all applicable Federal and local OSHA standards or regulations.

4. Comply with all applicable regulations even if the regulation is not specifically referenced herein. If a State, County, or City regulation is more restrictive than the requirements of this Item, follow the more restrictive requirements.

5. Identification of the items below which are of specific interest to the Department in no way relieves the Contractor of the responsibility to comply with all OSHA and EPA requirements, nor should it be construed that the Department, OSHA, the EPA and DEP, or City and County regulators are only interested in these items.

(b) Definitions

1. Action Level - Employee exposure, without regard to the use of respirators, to an airborne concentration in micrograms per cubic meter of air (ug/m<sup>3</sup>) calculated as an eight hour time-weighted average (TWA). The Action Level for lead is 30 ug/m<sup>3</sup>.

2. CIH - Certified Industrial Hygienist

3. Competent Person - One who is capable of identifying existing and predictable lead hazards in the surroundings or working conditions and who has authorization to take prompt corrective measures to eliminate them.

4. Department - Pennsylvania Department of Transportation

5. Employee Lead Exposure - Exposure which would occur if the employee were not using a respirator.

6. Engineering Controls - The use of technologically feasible controls in the work areas for the purpose of reducing and maintaining employee exposure to lead to or below the PEL, and for controlling emissions from the work area. Examples of engineering controls are mechanical dilution ventilation for the enclosure, or methods which capture the dust at the point of generation such as vacuum blast cleaning.

7. EPA - The U.S. Environmental Protection Agency. Regulations are contained in Title 40 of the Code of Federal Regulations (40 CFR).

8. Hazardous Waste (lead paint debris) - Waste that is classified as hazardous due to its concentrations of regulated hazardous substances. Paint debris is classified as hazardous waste if, after testing by the Toxicity Characteristic Leaching Procedure (TCLP), the leachate contains any of the 8 metals or other substances in concentrations at or above limits established in 40 CFR 261, EPA, Identification and Listing of Hazardous Wastes.

9. HEPA - A high efficiency particulate filter (HEPA) that is 99.97% efficient against particles of 0.3 microns in size or larger.

10. Lead - Metallic lead, all inorganic lead compounds, and organic lead soaps. The lead pigments used in paints comply with this definition.

11. ug/m<sup>3</sup> - Micrograms per cubic meter. Common units for reporting airborne concentrations of lead.

12. NIOSH - National Institute of Occupational Safety and Health.

13. OSHA - Occupational Safety and Health Administration. Standards are contained in Title 29 of the Code of Federal Regulations, Parts 1910 and 1926 (29 CFR 1910 and 29 CFR 1926).

14. POTW - Publicly Owned Treatment Works

15. Permissible Exposure Limit (PEL) - Employee exposure, without regard to the use of respirators, to an airborne concentration in micrograms per cubic meter of air (ug/m<sup>3</sup>), calculated as an eight hour time-weighted average (TWA). The PEL for lead is 50 ug/m<sup>3</sup> as an 8 hour TWA. If an employee works for longer than 8 hours in a given day, the PEL is reduced using the following formula: Permissible Limit = (PEL x 8) divided by (hours worked in the day)

16. Regulated Area - Area established by the Contractor to demarcate the areas where airborne concentrations of lead exceed, or can be expected to exceed, the Action Level.

#### (c) Reference Standards

1. The latest edition of the following regulations, guides, and standards form a part of this Item.

2. Code of Federal Regulations (CFR)

- 29 CFR 1926, Occupational Safety and Health Regulations for Construction o 29 CFR 1926.51, Sanitation
- 29 CFR 1926.55, Gases, Vapors, Fumes, Dusts, and Mists
- 29 CFR 1926.62, Lead
- 29 CFR 1926.1127, Cadmium
- 29 CFR 1926.1118, Inorganic Arsenic

3. State, County, and City Regulations

4. NIOSH Methods

- Method 7048, Cadmium

- Method 7082, Lead
- Method 7300, Chromium
- Method 7900, Arsenic

## 5. Society for Protective Coating (SSPC)

- Guide 6, Guide for Containing Debris Generated During Paint Removal Operations
- SSPC 93-02, Industrial Lead Paint Removal Handbook, 2nd Edition, Volume I
- SSPC 95-06, Project Design, Industrial Lead Paint Removal Handbook, Volume II

## 6. American Industrial Hygiene Association

- Environmental Lead Proficiency Analytical Testing Program (ELPAT)

(d) Submittals - Submit the following plans and programs for Department review and acceptance a minimum of 21 calendar days prior to exposure to toxic metals.

- Lead (Toxic Metal) Health and Safety Compliance Program: A written project-specific compliance program, prepared under the direction of, and signed by, a Certified Industrial Hygienist (CIH), for the protection of Contractor workers from lead in accordance with 29 CFR 1926.62 and other toxic metals in the paint. Include the name of the competent person who will be making routine inspections of project activities to ensure compliance with the program. Verify that any Subcontractors working for the Contractor are included in the program or in a separate program which meets the requirements of this Item. If Subcontractors are operating under a separate program, include the program with the submittals.
- Personnel Qualifications: Provide the name, experience, and qualifications of both the CIH who will be overseeing the development of the compliance program, and the competent person who will be assigned to the project.
- Outside Laundry: Provide the name, address, and qualifications of the launderer, if one will be used, for the cleaning of reusable clothing. Provide a letter from the laundry indicating that it is permitted to handle clothing contaminated with lead and/or the other toxic metals of concern.
- Laboratory Qualifications: Provide the name of the laboratory and/or firm that will be used for the worker and area exposure monitoring required under this Item. Verify that the analytical laboratory is American Industrial Hygiene Association (AIHA) accredited for metals analysis and/or has successfully participated (previous 12 months at a minimum) in the AIHA ELPAT program.
- Personal Protective Equipment for Department Use: Acknowledge that all protective clothing and equipment, laundering or disposal, fit testing as needed, and hygiene facilities will be provided for two Department Representatives at each site for each shift.
- Training for Department Representatives: Acknowledge that site training in accordance with the requirements of 29 CFR 1926.62 will be provided for two Department Representatives at each site per shift if there is the potential for lead exposures on the project. Include training as appropriate for other toxic metals that are present in the paint.

(e) Department Review: Do not construe Department acceptance of Contractor submittals to imply approval of any particular method or sequence for conducting the work, or for addressing health and safety. Acceptance of the programs does not relieve the Contractor from the responsibility to conduct the work in strict accordance with the requirements of this Item, or to adequately protect the health and safety of all workers involved in the project, the public, and the environment. The Contractor remains solely responsible for the adequacy and completeness of the programs and work practices, and adherence to them.

## SECTION 9077.2 MATERIAL

### (a) Monitoring and Testing Equipment

1. Supply the instrumentation needed for the monitoring of worker and area exposures including all equipment needed for its operation (e.g., generators, batteries, power cords, fuel, etc.).
2. Use equipment that is free of loose dust and debris when brought onto each bridge site, and upon removal.

## (b) Personal Protective Equipment and Hygiene Facilities

1. Provide all personal protective clothing and equipment (PPE) needed for contractor workers, and for two Department Representatives each shift, including proper cleaning and disposal.
2. Repair or replace PPE as required to assure that it continues to provide its intended purpose.
3. Use PPE and hygiene facilities that are free of loose dust and debris when brought onto each bridge site, and upon removal. Properly handle and dispose of all hygiene water, cleaning materials, and PPE that cannot be cleaned for reuse. Comply with Section 9073 for disposal.

## SECTION 9077.3 CONSTRUCTION

### (a) General

1. Conduct the work in strict accordance with Federal, state, and local regulations governing worker protection. All worker protection requirements apply to Contractor and Subcontractor personnel working for the Contractor who are exposed to lead and other toxic metals.
2. Requirements identified below are based primarily on the OSHA Lead in Construction Standard, 29 CFR 1926.62, but protect employees from exposure to any of the other toxic metals which may be present in the paint in addition to lead.

### (b) Compliance Program

1. Develop a written Compliance Program under the direction of a CIH to establish and implement practices and procedures for protecting the health of those employees exposed to lead and other toxic metals contained in the paint. This program is in addition to other OSHA hazard communication and safety and health requirements of the project. Revise and update the program at least every six months during the portion(s) of the project which involve the disturbance of toxic metals. Verify that the CIH signs off on all six month reviews and revisions.
2. Establish methods for complying with this Item and any OSHA standards published for the toxic metals present in the paint (e.g., 29 CFR 1926.62 for lead, 29 CFR 1926.1127 for cadmium, and 29 CFR 1926.1118 for inorganic arsenic). Include statements that the workers will not be exposed above the PEL established for the metal as identified in 29 CFR 1926.55, when toxic metals are present in the paint for which OSHA has not developed a comprehensive health and safety standard.
3. Identify the methods of compliance that will be used to reduce worker exposures to toxic metals. Rely on respiratory protection only after feasible engineering and work practice controls have been first implemented to reduce airborne exposures.
4. Confirm that daily inspections of the work area will be made by a competent person. Identify the project competent person by name in the compliance program, his or her qualifications, and indicate the frequency of inspections that will be undertaken.
5. Include in the plan, a detailed checklist for site inspections by the competent person.

### (c) Exposure Monitoring/Initial Protection

1. Collect representative personal air samples at the beginning of the paint removal work (at project start-up) to determine employee exposures to lead and other toxic metals that might be present in the coating. Tasks resulting in the potential exposure to toxic metals include, but are not limited to, paint removal activities, cleanup, and debris handling operations. Collect full shift (at least 7 hours) air samples for each job classification in each exposure area, including Department Representatives. Provide the Department with the results of the analysis within the same 5 day notification period required for the employees.
2. Protect workers during the initial monitoring to the anticipated exposure levels as dictated by 29 CFR 1926.62 and as specified below when lead is present. A few activities in addition to those dictated by OSHA are included. Use the same level of protection when other toxic metals are found in the coating, unless OSHA has developed a comprehensive health and safety standard for that metal (e.g., cadmium and inorganic arsenic). In those cases, implement the protection requirements of the standard for that metal.
  - Assume an exposure of at least 500 ug/m<sup>3</sup> : Structures containing lead-containing coatings or paint (e.g., dry wall), manual scraping, manual sanding, heat gun applications, power tool cleaning with dust collection systems, and spray painting with lead paint. Although not identified in 29 CFR 1926.62, include chemical stripping, water washing, and the operation of abrasive grit recovery equipment in this category.

- Assume an exposure of at least 2,500 ug/m<sup>3</sup> : Using lead-containing mortar, lead burning, or conducting the following activities where lead-containing coatings or paint are present: rivet busting, power tool cleaning without dust collection systems, cleanup activities where dry expendable abrasives are used, and the movement and removal of abrasive blasting enclosures. Although not identified in 29 CFR 1926.62, include water jetting and wet abrasive blasting removal of paint in this category.
- Assume an exposure of more than 2,500 ug/m<sup>3</sup> : Activities involving lead containing coatings or paint on structures disturbed by abrasive blasting, welding, cutting, and torch burning.

3. Provide appropriate respiratory protection, personal protective clothing and equipment, change areas and washing facilities, blood lead and zinc protoporphyrin monitoring, and employee training during any of the above activities. Maintain the protection as specified above until the test results are received, then modify the protection measures as necessary.

4. Collect and analyze all air samples according to the appropriate NIOSH method, or equivalent, for the metal of concern (e.g., Method 7082 for lead, Method 7048 for cadmium, Method 7300 for chromium, Method 7900 for inorganic arsenic). Use only laboratories successfully participating (at least in the previous twelve months) in the ELPAT Program and/or accredited by the American Industrial Hygiene Association for metals analysis. Submit the name and qualifications of the laboratory to the Department for review and acceptance prior to use.

5. Conduct periodic worker and Department Representative exposure monitoring, and provide written employee notifications within five days of receipt of results in strict accordance with the applicable OSHA standard for the metal of concern (e.g., 29 CFR 1926.62 for lead). At a minimum, this requires monitoring at project start up and after any changes in work practices are made which could have an effect on airborne exposures. Conduct the monitoring and employee notification based on the requirements of OSHA 29 CFR 1926.62, if a standard does not exist. Provide the Department with the results of any subsequent monitoring within the same 5 day notification period required for the employee.

#### (d) Action Level

1. The Action Level for lead is 30 ug/m<sup>3</sup> as an eight (8) hour Time Weighted Average (TWA), the Action Level for cadmium is 2.5 ug/m<sup>3</sup> as an 8 hour TWA, and the Action Level for inorganic arsenic is 5 ug/m<sup>3</sup> as an 8 hour TWA. For other metals that are found in the coating, and for which no Action Level exists, establish the Action Level at 1/2 of the PEL.

2. Invoke the following protective measures when the airborne exposure to a toxic metal found in the coating exceeds the Action Level:

- Exposure Monitoring
- Housekeeping
- Employee Medical Surveillance and Medical Removal Protection
- Employee Information and Training
- Signs and Regulated Areas
- Record keeping

#### (e) Permissible Exposure Limit

1. The PEL for airborne lead exposure is 50 ug/m<sup>3</sup> as an 8 hour TWA. The PEL for cadmium is 5 ug/m<sup>3</sup> as an 8 hour TWA, and for inorganic arsenic is 10 ug/m<sup>3</sup> as an 8 hour TWA. The PELs for other metals can be found in 29 CFR 1926.55.

2. In addition to complying with the requirements identified when exceeding the Action Level, invoke the following protective measures when the airborne exposure to a toxic metal found in the coating exceeds the PEL:

- Compliance Program
- Respiratory Protection
- Protective Clothing and Equipment
- Hygiene Facilities and Practices

## (f) Respiratory Protection

1. Use respiratory protection if necessary to maintain employees' exposures to lead and other toxic metals below the PEL after feasible engineering controls and work practices have been implemented. Require the use of respirators for all employees, inspectors, observers, or other personnel who enter areas where airborne exposures exceed or are expected to exceed the PEL, or when entering regulated areas.
2. Provide respiratory protection for two Department Representatives at each site for each shift, including fit tests. The Department is responsible for verifying that the Representatives are medically fit to wear respirators.
3. Develop a written Respiratory Protection Program in compliance with 29 CFR 1926.103, including commitments to provide the necessary medical examinations. Include the provisions of 29 CFR 1926.62 when lead is present. Include 29 CFR 1926.1127 when cadmium is present. Include 29 CFR 1926.1118 when inorganic arsenic is present. Address the selection, use, maintenance and inspection of respirators, and qualifications for respirator users.
4. Treat used respirator cartridges as hazardous waste and dispose of in accordance with Section 9073.

## (g) Protective Clothing and Equipment

1. Provide protective clothing and equipment and ensure they are worn by all employees whose exposures exceed the PEL. Provide all required protective clothing and equipment for use by two Department Representatives at each site for each shift.
2. Do not allow workers to wear street clothing beneath protective clothing in any areas where exposures to toxic metals exceed the PEL.
3. Clean or replace the protective clothing as required by the appropriate OSHA standard for the toxic metal that is present. In the case of lead, clean or replace the clothing weekly if the airborne exposure levels are less than 200 ug/m<sup>3</sup> as an 8 hour TWA, or daily if the exposure levels are greater than or equal to 200 ug/m<sup>3</sup>. In the case of inorganic arsenic, the threshold for daily versus weekly cleaning is 100 ug/m<sup>3</sup>. Do not use disposable clothing for any longer than one day.
4. Do not remove or clean the clothing by any means which reintroduces the toxic metals into the ambient air such as brushing, shaking, or blowing. Use vacuums equipped with HEPA filters for cleaning.
5. Store the used clothing in sealed containers.
  - Label the containers with the following: "CAUTION: CLOTHING CONTAMINATED WITH LEAD. DO NOT REMOVE DUST BY BLOWING OR SHAKING. DISPOSE OF LEAD CONTAMINATED WASH WATER IN ACCORDANCE WITH APPLICABLE LOCAL, STATE, OR FEDERAL REGULATIONS," if the clothing is to be laundered and it has been exposed to lead. Modify the above text accordingly if the clothing has been exposed to cadmium, chromium, or inorganic arsenic.
  - Label the containers as lead-contaminated clothing if the clothing is disposable. Apply hazardous waste labels as appropriate after testing.
6. Provide containers for the collection and retention of the water after filtration if the clothing is washed on site. Provide ample filtration (e.g., through a multi-stage filtration system ending in 5 microns or better if needed) until the water can be disposed of as non-hazardous. Conduct all required tests of the water, and comply with Section 9073 for its disposal.

## (h) Housekeeping

1. Clean accumulations of dust or debris containing lead or other toxic metals daily, at a minimum. Clean more frequently if visible accumulations are observed that could be carried outside of the regulated area by wind, workers shoes, rain water, or other means. Containerize the debris for proper disposal.
2. Conduct all cleaning with HEPA-filtered vacuums and deposit all dust and debris in sealed containers. Do not use compressed air for housekeeping purposes unless it is used in conjunction with a ventilation system capable of capturing the resulting airborne particulate.

## (i) Personal Hygiene Facilities and Equipment

1. Provide clean lavatory and hand washing facilities in accordance with OSHA sanitation standard 29 CFR 1926.51. Locate the hand washing facilities in close proximity to the paint removal operation, in an area that is convenient for washing prior to eating or

smoking. Provide showers when exposures exceed the PEL. Confirm that all employees whose exposures exceed the PEL shower prior to leaving the project site.

2. Filter and containerize all water and make arrangements with the local POTW for proper disposal. Provide ample filtration (e.g., through a multi-stage filtration system ending in 5 microns or better if needed) until the water can be disposed of as non-hazardous. Conduct all required tests of the water, and comply with Section 9073 for its disposal.

3. Prohibit eating, drinking, smoking, chewing of food or tobacco products, or the application of cosmetics in any area where the exposure to toxic metals exceeds the PELs or within regulated areas, and confirm that workers thoroughly wash hands and face prior to undertaking any of these activities.

4. Provide clean lunch and break areas for use by all employees, and maintain airborne concentrations in these areas below the Action Levels.

5. Provide clean change area(s) for employees whose exposures exceed the PELs. Equip the change area(s) with separate storage facilities for street clothing that are adequately segregated to prevent cross-contamination from work clothing. Assure that employees do not leave the project site wearing any clothing that was worn while performing activities where exposures exceeded the PELs.

#### (j) Medical Surveillance and Medical Removal Protection

1. Provide all employees with initial and periodic blood and zinc protoporphyrin (ZPP) sampling and analysis, and medical surveillance as required by the published OSHA health and safety standards that exist for the metal of concern such as 1926.62 for lead and 1926.1127 for cadmium. Verify that the blood analysis is conducted by laboratories certified by both the PA Department of Health and OSHA. Provide the specialized medical surveillance and X-rays required by 1926.1118 for employees exposed to inorganic arsenic.

2. Conduct blood sampling and analysis at a minimum of once every two months for the first six months of exposure, and at six month intervals thereafter when lead is present. Conduct exit blood tests for each worker upon completion of his/her project activities which involve exposure to lead, even if this occurs prior to the completion of the Contractor's work on the project.

3. Do not use workers with initial blood lead tests of 40 ug/dl for any work activities involving exposure to lead above the Action Level.

4. Provide for the temporary removal of employees from exposures above the Action Level for the metal of concern when the blood analysis indicates that unacceptable results are occurring (e.g., 50 ug/dl or above in the case of blood lead). Protect employees' benefits during any period of medical removal and conduct all tests required by the appropriate OSHA standards during the removal period. In the case of lead, return workers to exposures above the PEL only after two consecutive blood tests are below 40 ug/dl.

5. Provide all physical examinations as required by the appropriate OSHA standards for metal(s) of concern and verify that all examinations are performed by or under the direct supervision of the licensed physician.

6. Provide all exam information and test results to the employees in writing within 5 days of receipt.

7. Provide the Department with a letter report signed by a CIH which summarizes all examination results as described in 9077.3 (m).

#### (k) Employee Training and Information

1. Provide initial and annual refresher training for all employees who will be exposed to toxic metals above the respective Action Levels on any one day in a 12-month period. Include all of the elements of training that are required by the appropriate OSHA standard. Use the training requirements of 29 CFR 1926.62 as the basis of the training program highlighting the differences as appropriate for the other metals of concern, if a standard for the metal does not exist. Provide the necessary training for two Department Representatives at each site for each shift in addition to the training of the Contractors' personnel.

2. Notify other contractors or employers of the nature of the lead exposure work, the need to remain out of exposure areas, the warning signs and labeling system in effect, and the potential need for them to take measures to protect their employees in accordance with the applicable OSHA regulations when they are present at the site.

#### (l) Signs and Regulated Areas

1. Establish zones (regulated areas) around areas or activities that might generate airborne emissions of lead, cadmium, chromium, inorganic arsenic, or other toxic metal in excess of the Action Level (e.g., paint removal and clean-up locations, dust collector staging areas, waste storage areas, etc.). Use ropes, ribbons, tape, or other visible means to define the areas and prohibit entrance into the regulated areas by unprotected or untrained personnel to ensure that they are not exposed to toxic metals from project activities.

2. Unless otherwise directed by the Departments' Representative, until test results are available to establish the perimeter of the regulated area, initially establish the boundary a minimum of 4.6 m (15 feet) away from any equipment or operations that might generate airborne emissions of toxic metals.

3. Post caution signs around the regulated area. If a regulation does not exist for the metal of concern, use the legend for the CAUTION sign as found in 29 CFR 1926.62 as the basis, inserting the name(s) of the other toxic metals. Sign requirements for lead, cadmium, and inorganic arsenic are as follows:

WARNING  
LEAD WORK AREA  
POISON  
NO SMOKING OR EATING

DANGER, CADMIUM,  
CANCER HAZARD,  
CAN CAUSE LUNG AND KIDNEY DISEASE,  
AUTHORIZED PERSONNEL ONLY,  
RESPIRATORS REQUIRED IN THIS AREA

DANGER  
INORGANIC ARSENIC  
CANCER HAZARD  
AUTHORIZED PERSONNEL ONLY  
NO SMOKING OR EATING  
RESPIRATOR REQUIRED

Use signs that are a minimum of 215 mm (8 ½ inches) by 275 mm (11 inches) in size with black block lettering on a white, yellow, or orange background. Do not use caution ribbons as a substitute for signs.

4. Conduct sampling according to NIOSH Method 7082, or equivalent for the other metals of concern at the pre-established boundaries of the regulated area(s). Collect the samples throughout an entire work shift upon commencement of the paint removal activities (at project-start-up).

- Establish the boundary at that location and discontinue monitoring if the monitoring confirms that project emissions at the established boundary do not exceed the Action Level as an 8 hour TWA.
- Modify and improve work practices and containment to provide better controls over the emissions, or reestablish the boundary at a different location if the monitoring shows that the emissions exceed the Action Level. Repeat the monitoring in either case.

5. After the boundaries have been established through instrument monitoring, additional monitoring is not required unless directed by the Department, if suspect visible emissions occur, or there are changes to the work practices or equipment being used within the regulated areas. In these cases, conduct additional monitoring to confirm the adequacy of the control systems in place, and to verify the suitability of the existing regulated area(s).

6. Verify that cassettes are only analyzed by laboratories that have been accepted for use by the Department. Have the laboratory provide results within 72 hours of the field sampling. Provide the test results to the Department verbally within one day of receipt, and in writing within one week thereafter.

7. Verify that all workers who enter the regulated area have had the proper training, blood analysis and medical examinations, and are wearing the required protective clothing and equipment. Prohibit eating, drinking, smoking, and chewing of food or tobacco products in any area where the exposures exceed the Action Level.

(m) Recordkeeping

1. Retain all records related to training, medical examinations, blood analysis, exposure monitoring, respirator fit testing, inspections by a competent person, and other related project documentation on file at the project site.
2. Provide the Department with letter reports signed by a CIH which summarize all examination results that are indicative of worker exposures to (or which demonstrate proper protection from) toxic metals. In the case of lead, summarize the blood lead and ZPP results, indicate any observed trends, and identify worker removal provisions that were invoked based on the results. Provide summary reports of the test results prior to worker exposures to project activities, periodic surveillance results, and results upon completion of site exposures. Provide a copy of each report with an original signature within 10 calendar days after issuing the test results to the employees.
3. Retain all records for the duration of employment plus 30 years.

## SECTION 9077.4 MEASUREMENT AND PAYMENT

Lump Sum. Price includes full compensation for protection of all Contractor personnel, including protective clothing and equipment, medical surveillance, hygiene facilities, laundering, establishment and maintenance or regulated areas, and documentation. Price also includes protective clothing and equipment for two Department Representatives at each site for each shift, as well as lead training in accordance with 29 CFR 1926.62. Partial payments for worker protection will be made based on the percentage of the structure that has been prepared and fully coated.

### **129900B - c29900 ITEM 8800-0001 - DESIGN ROADWAY**

#### **Addendum:**

**Associated Item(s):** 8800-0001

#### **Header:**

ITEM 8800-0001 - DESIGN ROADWAY

#### **Provision Body:**

**I. DESCRIPTION** - This work is the design and preparation of plans for the construction of roadway and associated work as indicated on the Conceptual Drawings. Also included are

Erosion and Sediment Pollution Control BMP's.

Provide all geotechnical investigation and engineering services required for the determination of possible utility conflicts and for the design of stable embankments and subgrade. This includes all geotechnical exploration and testing, inspection of site conditions, test borings, and sampling of the test boring materials, as required to ensure that the design and the construction of stable embankments and subgrade is achieved.

#### **II. DESIGN -**

**(a) General.** The Department will provide conceptual design plans that indicate Line, Grade and Typical Sections.

All computations must be computed and checked by Lead Design Engineer staff and initialed as such. Format all design computations on 215.9 mm x 279.4 mm (8½ inch x 11 inch) sheets. All computations must be neat and legible.

**(b) Additional Designer Qualifications.** None

**(c) Information/Data Made Available to the Contractor by the Department**

- Conceptual Roadway Plan
- The Department has obtained environmental clearance for this project. The environmental clearance level obtained is a Categorical Exclusion Evaluation (CEE). The Lead Design Engineer must submit a written response for approval to the District Representative describing how the design will comply with the approved CEE. Refer to the Special Provision titled ENVIRONMENTAL COMMITMENTS AND MITIGATION TRACKING SYSTEM (ECMTS) REPORTS.

**(d) Design Specifications.** Design the roadway construction plan in accordance with the Special Provision titled SPECIAL BIDDING – DESIGN-BUILD, Section VIII – General Design Requirements, Design Specifications.

**(e) Design Requirements**

**1. Geometry.** Maintain the horizontal and vertical alignments, and superelevation rates provided on the conceptual drawings .

Develop and provide all pertinent survey information required for the design and construction of the project. Specify type of Construction Surveying required, and include with the design submission for review and approval.

**2. Pavement Design.** The Pavement Design is for full depth reconstruction of the roadway approaches as shown on the Typical Sections in the Conceptual Roadway Plan and the Pavement Type Approval Letter, which is located in ECMS under the Project Development Checklist.

Bridge approach slabs are required as indicated on the Conceptual TS&L and Roadway plan and shall be constructed at both approaches to the bridge. Extend the far (up-Station) (Abutment 2) approach slab longitudinally a minimum of 4 feet beyond the limit of the temporary excavation support system. Once the far (Abutment 2) approach slab length is determined, utilize a similar approach slab length at the near (Abutment 1) approach. Extend the approach slab width to full width to include the integral flared barriers.

**3. Typical Sections.** Develop typical sections in accordance with Publication 14M Design Manual Part 3, Chapter 2, Section 2.3.J. Develop these typical sections based on the sections provided in the conceptual plans. Do not reduce lane and shoulder widths.

**4. Drainage.** Design drainage in accordance with Publication 13M, Design Manual Part 2, Chapter 10; Publication 584 Drainage Manual; and permit requirements. Design new drainage features indicated on the Conceptual Plan. Review the existing drainage system and design improvements to conform to Publication 584 and permit requirements.

Conceptual plan based on the following:

A trapezoidal ditch cut into the existing cut slope located along the left side of the near approach shall be designed to collect the sheet flow from the superelevated roadway.

A Type C Inlet, Pipe, and D-W Endwall, which will outlet into a proposed trapezoidal ditch, shall be designed and constructed on the low side of the superelevated curbed roadway section after the bridge on the far approach.

Provide Pavement Base Drain, Refer to RC-30M, on the low side of the sleeper slabs. Outlet the Pavement Base Drain into the new Type C Inlet at the far approach. The Pavement Base Drain at the near approach shall outlet into the proposed trapezoidal ditch using Subsurface Drain Outlets and a Subsurface Drain Outlet Endwall.

The drainage network located at the end of the project shall be designed and reconstructed, since the proposed grade will be lower than the existing. The contractor shall use new Pipes, Inlets, and Endwalls to construct the new network.

**5. Guide Rail, Cable Barrier, and Concrete Barrier.** Design guide rail, end treatments, and guide rail to barrier connections, including determining length of need and guide rail warrants to meet the current (at time of advertisement) Department criteria.

For "Long Post Guide Rail" (2440 mm length (8 feet)) details and requirements see Publication 72M Roadway Construction Standard RC-50M. Install the "Long Post Guide Rail" when the minimum clearance from the rear face of the guide rail post to the fill slope break point cannot be maintained.

Indicate on the Final Roadway Drawings the locations of existing guide rail to be removed.

Typical and Alternate Concrete Bridge Barrier Transition shall be used to connect all runs of guide rail to the proposed bridge. The following Guide Rail End Treatments shall be used:

- Near Approach – Terminal Section, Single (Left Side) and Permanent Impact Attenuating Device, Type II, Test Level 3 (Energy Absorbing Terminals Flared) (Right Side)
- Far Approach – Connect to Existing 2-S Guide Rail (Left Side) and Permanent Impact Attenuating Device, Type II, Test Level 3 (Energy Absorbing Terminals Flared) (Right Side)

**6. Utilities.** Provide for the safety and protection of all utility facilities within the project limits. Refer to the Conceptual Plan.

**7. Environmental.** Comply with the approved environmental document. Refer to the Special Provision titled ENVIRONMENTAL COMMITMENTS AND MITIGATION TRACKING SYSTEM (ECMTS) REPORTS.

**8. Soil Erosion and Sediment Pollution Control Plan / National Pollutant Discharge Elimination System (NPDES) Approval.** Refer to the Special Provision titled PERMITS FOR DESIGN-BUILD PROJECTS.

**9. Maintenance of Permanent Erosion and Sediment Pollution Control Devices.** Upon final acceptance of the project, the Department will maintain the permanent Erosion and Sediment Pollution Control.

**10. Geotechnical Design Requirements.** None

**(f) Submittals**

**1. Pre-Final Plan Submission.** Submit a Pre-Final Plan, (e.g. 60% to 70% plans) with the Lead Design Engineer's Seal in accordance with Publication 14M, Design Manual Part 3 (DM 3), Section 2.1.K and Figure 2.1, for review and approval by the Department prior to plan completion. Include the following minimum information:

- a. Existing Topography
- b. Roadway Plans(including Traffic Control Plan)
- c. Survey References
- d. Typical Sections
- e. Proposed Guide Rail
- f. Proposed Utility Relocation
- g. Right of Way location & cut/fill limits
- h. Proposed limits of Roadway Construction
- i. Proposed pavement geometry (superelevation rates, runout lengths, spot elevation details
- j. Final TS&L (in accordance with DM 4)
- k. Structure Boring Plan and Foundation Design Parameters (as applicable)
- l. Proposed Drainage Items and location
- m. Erosion & Sediment Pollution Control Plan (approved by DEP or County Conservation District)
- n. Cross Sections (as required)
- o. Surveying and Mapping deliverables in accordance with Publication 122M (as applicable)

Also submit the Geotechnical Report for Final Design.

The Lead Design Engineer will be responsible to address all plan review comments. The District will conduct a final review to ensure that all comments have been addressed. Include the plan review dates in the CPM schedule for the project.

**2. Signing and Pavement Markings.** Submit a Permanent Pavement Marking, and Signing Plan (in accordance with applicable publications and the Pavement Marking, and Delineation sheets) for review and approval by the District Traffic Unit.

Apply pavement markings on SR 0739 with a 4 -inch wide center.

Apply Type II waterborne paint as specified in Section 962.

Place pavement markers as determined necessary during design.

Place approved delineator devices at all drainage structures.

Replace all signs disrupted by construction activities with new signs. Show these signs on the Permanent Pavement Marking and Signing Plan. Include applicable sign nomenclatures, sizes, mounting types, etc., on the plan. Provide sign fabrication plans as applicable.

**3. Final Roadway Drawings.** After all applicable reviews and all comments have been addressed to the satisfaction of the District Executive, submit Final Roadway Drawings prepared in accordance with the procedures discussed in DM 3, Section 1.5. Follow the naming convention for standard ANSI D size, 863.6 mm x 558.8 mm (34 inches x 22 inches) plan sheets, which has been established for the Department's Electronic Document Management System (EDMS), and is outlined in DM 3, Appendix A. Provide Final Roadway Drawings include but not limited:

- a. Title Sheet
- b. Index Sheet
- c. Typical Section Sheet
- d. Summary of Quantities Sheets
- e. Tabulation of Quantities Sheets
- f. Plan Sheets
- g. Profile Sheets
- h. Final Structure Plans (in accordance with DM 4 and the Design Special Provisions in this Contract)
- i. Cross Sections (as required)
- j. Permanent Pavement Markings and Signing (as described above)
- k. Soil Profile Plans
- l. Supplemental Plans (Traffic Control Plan)

The above requirements must be in accordance with the appropriate Sections of DM 3 and DM 4. Show a breakdown of quantities by station/location on the Tabulation of Quantities sheet for the Final Construction Roadway Drawings. Follow the format in DM 3 Section 2.5 and 15.2. The Final Roadway Construction Plans may not be the same as the Final "As-Built" Roadway Plans.

Provide a complete set of computations, including any submitted previously, for the design and additional calculations as needed by the Department to evaluate any details throughout the life of the Contract. Submit an electronic copy if requested by the Department.

Designs copied directly from approved Department Standards need not be documented through independent computations. List these designs on the submission by referencing the drawing number of the applicable standard, sheet number, table, or graph.

Upon completion of Quality Assurance Review, or Owner's Perspective Review, as applicable, and receipt of all drawings stamped "Released for Construction" for the project, provide the Department with one vellum copy of the Title Sheet for signature by the Department.

The signed Final Roadway Drawings and computations become the Final Construction Plans for the project.

#### **4. "As-Built" Plans**

Provide "As-Built" roadway plans as per Design Manual Part 1. Comply with Publication 10, Design Manual, Part 1 and Publication 10C, Design Manual Part 1C criteria. Final "As-Built" Roadway Drawings include all Contract Drawings including Roadway Plans, Quantity Tabulations, Erosion & Sediment Pollution Control Plans, Traffic Control Plans and Structure Plans. Conform the "As-Built" drawings to the procedures as outlined in Section 5.7 of Design Manual Part 1C and prepare per plan presentation procedures as stated in DM 3 and DM 4.

Take Final "As-Built" Cross Sections at critical locations and at least 20 meter (50 foot) intervals on the Main Line and Side Roads. Template Cross Sections to reflect "As-Built" details and prepare in accordance with DM 3 Section 2.7.

All "As-Built" plans are the sole responsibility of the Contractor and must be submitted to the District within 3 months of final inspection acceptance as defined in Section 110.08(a).

**(g) Submittal Review, Approval, and Distribution.**

Make all submissions in accordance with the Special Provision titled SPECIAL BIDDING – DESIGN-BUILD.

**III. MEASUREMENT AND PAYMENT - Lump Sum**

Partial payment will be made for the design activity based on the approved Schedule of Values in accordance with Section IX the Special Provision titled SPECIAL BIDDING – DESIGN-BUILD, utilizing the following components:

- Pre-Final Plan Approval
- Signing and Pavement Marking Plan Approval
- Final Roadway Drawings Approval
- As-Built Drawings

**I29901A - c29901 ITEM 8800-0002 CONSTRUCT ROADWAY**

**Addendum:**

**Associated Item(s):** 8800-0002

**Header:**

ITEM 8800-0002 - CONSTRUCT ROADWAY

**Provision Body:**

**I. DESCRIPTION** - This work is the construction of the roadway and associated work of the type bid in the corresponding specification entitled "ITEM 8800-0001 - Design Roadway" and in accordance with the approved Final Roadway Drawings.

**II. MATERIAL** - As indicated and as specified for each respective item included in the roadway and associated work.

**III. CONSTRUCTION** - In accordance with the Publication 408, approved plans and permits, Publication 72M, the Special Provisions of the Contract, and additional requirements specified herein.

Work for the entire project area also includes seeding and mulching as required by the installation, maintaining, and removal of the erosion and sediment pollution control measures required by the Pike County Conservation District and the approved plan.

Do not start work until plans stamped "Released for Construction" are transmitted by a letter indicating which work can proceed. Construction may start on partial submissions stamped "Released for Construction" are transmitted by a letter indicating which work can proceed.

Do not start construction work until Erosion & Sediment Pollution Control plans are approved, and required permits are obtained.

Do not start construction work until Right-of-Way clearance is obtained, once Right-of-Way clearance is obtained for the subject area and construction approval issued.

Do not start construction work until utility clearance is obtained, construction may begin within sections or stages where utility clearance has been obtained and approved for construction.

Do not start incorporated utility work until an executed agreement or agreement signed by the utility is received by the Central Office Utility Unit.

Be responsible for the cost and delay of any additional utility relocation that results from changes in the Lead Design Engineer's plans or construction sequences made subsequent to (1) acceptance of the utility's relocation plans and (2) where the utility has

physically moved its facilities based on those relocation plans. Additional contract time will not be considered for additional utility relocation work or any additional work associated with an alternate construction method.

Existing guide rail removed during construction will become the property of the Contractor unless specified otherwise.

**IV. MEASUREMENT AND PAYMENT - Lump Sum**

Partial payment will be made for all work indicated on the Final Roadway Drawings based on the approved Schedule of Values in accordance with Section IX of the Special Provision titled SPECIAL BIDDING – DESIGN-BUILD.

**I29902A - c29902 ITEM 8901-1001 DESIGN TRAFFIC CONTROL PLAN**

**Addendum:**

**Associated Item(s):** 8901-1001

**Header:**

ITEM 8901-1001 - DESIGN TRAFFIC CONTROL PLAN

**Provision Body:**

**I. DESCRIPTION** - This work is the design and plan preparation for required maintenance and protection of traffic during construction.

**II. DESIGN –**

**(a) General.** Provide design and drawings in the units of measurement shown on the Conceptual Roadway Plans.

Design Traffic Control Plan is to be in agreement with Design Roadway Plan (including also plans).

Include in the Traffic Control Plan (TCP) all the Maintenance and Protection of Traffic General Notes, Index Sheets, a legend showing all traffic control devices and symbols, a sequence of construction and construction narrative, and tabulation of traffic control devices included in 'Construct Maintenance and Protection of Traffic'.

**(b) Additional Designer Qualifications.** None

**(c) Design Specifications.** Design a TCP in accordance with the Special Provision titled SPECIAL BIDDING – DESIGN-BUILD, Section VIII – General Design Requirements, Design Specifications.

**(d) Design Requirements.**

**Maintenance of Traffic During Construction.**

**1. Develop an Incident Management Plan (IMP).** None

**2. Develop a TCP.** Meet the requirements of and maintain traffic as shown on the Conceptual TCP. Detour routes and traffic restrictions must follow the Conceptual TCP. The Traffic Control Plan will require a Temporary Signal to be designed in order to control traffic during the half-width construction phasing. The driveway's and side roads located in the project area shall be signalized during construction and be accessible at all times. Install barrier stiffeners when the barrier deflection distance is greater than the lateral space behind the temporary concrete barrier and the dropoff is equal to or greater than six inches. Install barrier stiffeners in accordance with Publication 213, PATA Barrier Stiffening. Install stiffener when barrier is set and before roadway is open to traffic or prior to drop-off condition being exposed in the work zone. When barriers are placed on a radius, shim the area between the W-beam and barrier wall as indicated in PATA Barrier Stiffening.

**The following requirements are for the Temporary Signal Design:**

- Traffic data acquisition and signal timing:

Provide timing for AM and PM peak hour, Midday and Saturday.

Provide Autoturns for WB-67 or turning radius templates for all approaches to show clearances to curb and signal equipment except for private driveways in which case provide design vehicle that uses the driveway.

Provide 24 hour ATR and manual turning movement counts as directed. Provide pedestrian count data if requested

If the intersection(s) are part of an interconnected traffic signal system, the system limits must be evaluated and data collected as necessary. If the traffic signal(s) is a part of a coordinated network, or if the SimTraffic coordinability factor indicates the intersection should be in a system, a network coordination chart identifying the coordination scenarios and the signal offsets for each intersection need to be developed and placed on the plans and in the field. Also, an interconnect study must be undertaken to determine the method of interconnect and any software or hardware associated with the system coordination. Any change in the timing to the other intersections in the system need to be also been addressed along with any interconnect that needs to be established or reestablished.

Provide signal timing calculations and software analysis if requested.

Provide crash data analysis if requested.

Provide full actuation for each approach with a minimum of one detector with 40 feet x 6 feet of detection area per approach. Provide additional detection areas if requested. Do not label a specific type/brand of detection on the plan unless requested by the Department. Provide controller settings based on traffic volumes, PennDOT Publication 149 Standards, and other significant factors. Provide clearance interval calculations. Provide additional calculations such as protected/prohibited operation, volume density / extend call / presence detection, if requested.

The use of portable signals in lieu of temporaries is permissible pending portable signal criteria defined in Publication 213 criteria, site conditions and if approved by the Department.

If applicable, provide emergency ramp pre-emption anywhere traffic has the potential to queue onto an interstate.

· ADA Accessibility:

Provide ADA compliant pedestrian accommodations if requested.

### **3. Develop Final Transportation Management Plan. None**

#### **(e) Submissions.**

**1. Preliminary Plan Submission.** In accordance with Publication 14M, Design Manual Part 3, Chapter 4. Submit the plans at required scale including:

- Plans for each required stage
- Proposed Temporary Signing and Pavement Markings
- Traffic Control Details as required

Include phases and sequences, detours, traffic flow arrows (one per each lane of traffic), line striping, channelizing devices, arrow panels, temporary concrete barrier, temporary impact attenuators, barricades, and construction areas hatching.

**2. Final Plans and Computations.** In accordance with Design Manual, Part 3, Chapter 4. Submit the plans at required scale indicating all phases and sequences, and all signs and devices. Provide tabulation of all items associated with each phase, site, sequence and detour as shown on the TCP.

Upon release of the Contractor's design plans and computations, the plans become the Final Traffic Control Plans for the project. Upon written notice of completion of review by the Department and receipt of the Final Traffic Control Plans stamped "Released for Construction," submit 2 sets of signed and sealed prints and an electronic PDF copy (if required by District). Provide the Department copies of the Temporary Traffic Signal plan on Mylar or Vellum.

**3. Revisions During Construction.** Any changes to the Final Traffic Control Plans must be submitted as revisions for review by the Department. Do not deviate from the Final Traffic Control Plans until notice of completion of review of the revisions by the Department.

#### **(f) Submittal Review, Approval, and Distribution**

Make all submissions in accordance with the Special Provision titled SPECIAL BIDDING – DESIGN-BUILD, except as follows;

- Partial Plans Submissions: None

**III. MEASUREMENT AND PAYMENT - Lump Sum**

Partial payment will be made for the design activity based on the approved Schedule of Values in accordance with Section IX of the Special Provision titled SPECIAL BIDDING – DESIGN-BUILD, utilizing the following components:

- Preliminary Plan Approval
- Final Plan Approval

**I29903A - c29903 ITEM 8901-1011 CONSTRUCTION OF MAINTENANCE AND PROTECTION OF TRAFFIC**

**Addendum:**

**Associated Item(s):** 8901-1011

**Header:**

ITEM 8901-1011- CONSTRUCTION OF MAINTENANCE AND PROTECTION OF TRAFFIC

**Provision Body:**

**I. DESCRIPTION** - This work is the construction of the maintenance and protection of traffic according to the approved Traffic Control Plan developed as part of the ITEM 9XXX-YYYY - Design Traffic Control Plan.

**II. MATERIAL** - As indicated and as specified in the Traffic Control Plan.

**III. CONSTRUCTION** - In accordance Publication 408; the Special Provisions of the contract; and any additional requirements specified herein.

Use typical placement of signs and traffic control devices for long term operations in accordance with the attached plans and sketches.

Do not allow employees to park their personal vehicles on any traveled roadway or shoulder. It will be the resident engineer's responsibility to determine/designate the appropriate parking areas, dependent upon construction.

Directly notify local residents, school districts, local and county emergency management agencies (EMAs) of work that impacts those entities at the start of the project and again seven calendar days in advance of such work. Provide documentation of such notifications to the Inspector-in-Charge.

Maintain access to private residences and businesses at all times.

Notify property owners ten days in advance of driveway restrictions affecting their properties.

All active driveways will be kept accessible at all times.

Limit personnel assigned to night work on this project to working 12 hours in any given 24 hour period, including this project and any other projects on which they perform work.

For night work provide a work light on all equipment and provide flashing yellow lights on all trucks hauling material on the project. Work lights and approved revolving yellow lights are to be operating at all times while the equipment is within the project limits.

For night work provide the necessary number of illumination devices to satisfactorily illuminate the work area. A portable lighting system with multi-directional light output encompassing 360 degrees. Light emitted shall be diffused to create a minimum glare shadow free output. The light shall be a 400 watt pulse start Metal Halide lamp or greater. Light intensity shall be such as to provide adequate illumination to a 15,000 sq. ft. area when mounted at least 14 ft. above the ground. The light shall be mounted on a self-contained trailer, to a construction vehicle such as a roller, paver or similar self-powered piece of construction equipment. The intent of the light is to provide a work area light source, which moves in conjunction with construction operations. Do not exceed a spacing of 250 feet between illumination devices. These illumination devices will be considered incidental to the item of work being performed and will not be paid separately.

Provide 24 hour contact information on each Changeable Message Sign. The contact information shall be the Contractor, or the Contractors' designated representative, who shall respond to calls from PennDOT or the Pennsylvania State Police and make message changes as directed. The information must be a permanently attached label, sign, sticker, plaque or a magnetic sign affixed to the exterior frame or cabinet of the device. The information shall be a minimum text size of 1/2 inch and be kept legible at all times and must be readable from the ground. The contact name, address, phone number and company shall be included.

Do not start construction until the Traffic Control Plans stamped "Released for Construction" are transmitted by a letter indicating which work can proceed. Construction may start on stages or phases of the Traffic control Plans provided that partial plans stamped "Released for Construction" are transmitted by a letter indicating which work can proceed.

**IV. MEASUREMENT AND PAYMENT - Lump Sum**

The Department will measure and pay for this item in a proportionate manner based on current estimates. If an item or device is required for maintenance and protection of traffic, the cost of the item is incidental to this item, without exception.

**129904C - c29904 ITEM 9000-6001 RIGHT-OF-WAY DESIGN AND ACQUISITION SERVICES**

**Addendum:**

**Associated Item(s):** 9000-6001

**Header:**

ITEM 9000-6001 - RIGHT-OF-WAY DESIGN AND ACQUISITION SERVICES

**Provision Body:**

**I. DESCRIPTION** - This work is the preparation of a Final Right-of-Way Plan and completion of Right-of-Way Services for real properties impacted by the Design Activities identified in Section IV of the Special Provision titled SPECIAL BIDDING – DESIGN-BUILD, or as indicated on the Conceptual Drawings.

**II. SERVICES**

**(a) General**

Provide drawings in the units of measurement shown on the Roadway Construction Plan.

In addition to providing a Professional Engineer's P.E. seal and signature, provide a Professional Land Surveyor's seal and signature on plan sheets in accordance with the Department's Design Manuals.

All computations must be computed and checked by qualified personnel and initialed as such. All computations must be neat and legible.

The District's Right-of-Way Administrator is the Department's point of contact for all right-of-way issues.

**(b) Additional Professional Service Qualifications**

**Right-of-Way Services.** All Right-of-Way Acquisition Services must be completed by a firm pre-qualified by the Department to perform work under WBS Code 2.10.7. A list of those pre-qualified firms is attached. The District Right-of-Way Administrator must approve the resumes of the staff members for each project and reserves the right to exclude individual staff members from an approved/selected firm from completing Right-of-Way Acquisition Services in that District. All appraisals must be completed by firms pre-qualified by the Department under the Appraisal ITQ Contract Number 357101. All contracted appraisal reviews will be completed by the firm pre-qualified by the Department to perform this work under RFP Contract Number 358R08 – Appraisal Review Services. All tasks identified in WBS Code 2.10.7 (Right-of-Way Acquisition Services) are required, with the exception of Task 7: "Other Services"; maintaining a project site office is not required. Other requirements include the following:

Have available to the project escrow closing and settlement services for all claims; submit all photography and video in a standardized digital format approved by the District; describe specific quality assurance plan for appraisal tasks, including updates; payment package/settlement document preparation through payment delivery, including specific details and steps in this process.

**Right-of-Way Appraisals.** The Right-of-Way Appraisals to be completed by the District.

**(c) Information/Data Made Available by the Department:** None

**(d) Specifications**

Prepare a Right-of-Way Plan in accordance with the most current edition of Publication 14M, Design Manual, Part 3.

Provide services required for Right-of-Way Acquisition in accordance with the Pennsylvania Eminent Domain Code, The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, (The Federal Uniform Act) and promulgated rules in 49 CFR 24; the regulations found in 23 CFR 710.313 Design-Build Projects; and 23 CFR 635.309(p) for design-build certification requirements; and the PENNDOT Right-of-Way Manual (Publication 378). Provide the following general services as a minimum: appraisal planning/services, negotiations, acquisitions and property management. The Department will pay the property owner just compensation for property acquired for the projects identified in Section II(e)5 of this Special Provision. and will also pay fees for appraisal reports and contracted appraisal reviews.

In the event that a difference in interpretation of the policies and procedures for the preparation of the Plan and Right-of-Way Services cannot be resolved, the District Right-of-Way Administrator will be the arbiter and his/her decision will be final.

**(e) Requirements**

**1. Right-of-Way Plan.** Prepare a Right-of-Way Plan with property plots including all improvements and all contiguous parcels with unity of use in accordance with Publication 14M, Design Manual Part 3, Publication 16M, Design Manual Part 5, Utility Right-of-Way Chapter, and the Pennsylvania Eminent Domain Code. A simplified Right-of-Way Plan may be prepared in lieu of a standard Right-of-Way Plan, if agreed to in writing by the Department. Required area descriptions must be shown on the plots. In addition to the items listed, Property Plots are required for every property that is impacted by the Contractor's design. Parcel numbers are required for each plot and plan sheets.

Titles to all affected properties will be searched back a minimum of 60 years and establish the previous owner or arms length transaction or a sufficient time period in order to explain any easements, adverse, and provide legal description. The following support documents are required including: Current deed(s), mortgage(s), deed(s) of easement, adverse(s), lot or subdivision plan (s), judgment(s), lien (s), tax assessment information, all tax and lien certification (s), tax map(s), current taxes including paid, unpaid, or delinquent status, bankruptcy verification, unity of use analysis and other related documents and available in a digital format, or paper copy if requested.

**2 Right-of-Way Services.** In accordance with the Pennsylvania Eminent Domain Code; Publication 378; the Federal Uniform Act and WBS Code 2.10.7 for Right-of-Way Acquisition Services: Submit written acquisition and relocation procedures on a parcel-by-parcel basis to the District Right-of-Way Administrator for approval before commencing right-of-way activities. These procedures should contain a prioritized appraisal, acquisition and relocation strategy (including time frames for the activities as provided for in the schedule) as well as milestones for Department approval, such as approval of just compensation, replacement housing payment calculations and payments, moving cost claims, appraisals, and administrative and stipulated settlement amounts and dates.

Establish a tracking system and quality control system approved by and in concurrence with the District Right-of-Way Administrator. This system must show the status of litigation, property management, appraisal, acquisition and relocation status of all parcels. The quality control system may be administered by a consultant with the necessary expertise in appraisal, acquisition

and relocation policies and procedures, and who will make monthly reviews and submit reports directly to the Contractor and the Department.

Execute a certification and include in the submission that the Contractor has received a copy of the Publication 378 and will comply with the procedures. The written relocation plan must provide reasonable time frames for the orderly relocation of residents and businesses on the projects defined in Section II(e)5 of this Special Provision as provided by 49 CFR 24.205 of the Federal Uniform Act. It should be understood that these time frames will be based on the best estimates of the time it will take to acquire the right-of-way and relocate families in accordance with certain legal requirements and time frames which may not be violated. Accordingly, the time frames estimated for right-of-way acquisition will not be compressed in the event other necessary actions preceding right-of-way acquisition miss their assigned due dates.

No property may be entered upon for the purpose of performing work in connection with the construction of any project until all temporary and permanent right-of-way is acquired by the Department in accordance with 23 CFR Part 710, and 49 CFR Part 24 and a Final Right-of-Way Clearance is issued for the projects as described in Section II(e)5 of this Special Provision.

If determined that additional right-of-way is required to perform construction work outside of the current legal right-of-way, no construction may begin on any particular parcel until a Final Right-of-Way Clearance for the project is issued by the Department in writing.

All required right-of-way and temporary easements for construction will be acquired by the in accordance with the Federal Uniform Act and Publication 378. The Department will issue a Final Right-of-Way Clearance Certification when all parcels have been acquired and all eligible occupants have been relocated from the project area.

Throughout the right-of-way acquisition activities, information will need to be entered by the Contractor's Right-of-Way consultant into the Department's Right-of-Way Office system.

**3. Appraisals.** All right-of-way appraisal activities will follow the appraisal procedures as provided in the Pennsylvania Eminent Domain Code, the Federal Uniform Act, and Publication 378. All appraisals performed by the fee appraiser will be submitted to the Department's Chief Appraiser for review. All documents associated with the right-of-way appraisal requiring signatures will be signed and approved by the Department. Appraisal review will be completed by the Department staff review appraisers or contracted appraisal reviews will be completed by the firm pre-qualified by the Department to perform this work under RFP Contract Number 358R08 - Appraisal Review Services..

**4. Authorizations to Enter** - may only be procured by District Right-of-Way Staff or a pre-qualified Right-of-Way Consultant after approval for their use is granted by the District Right-of-Way Administrator.

For any Federal-Aid contract or any contract not involving a bridge, Authorizations to Enter for construction purposes before making payment available to an owner are only to be used in exceptional circumstances, with the prior approval of the owner. It is intended that authorizations to enter for construction purposes be obtained only in the exceptional case, such as an emergency project, when there is no time to make an appraisal and purchase offer and the property owner is agreeable to the process.

For design/build bridge projects with 100% State funding in all phases, the use of Authorizations to Enter for construction purposes is permitted per Section 3.03.F.3 of Publication 378. While certain projects can be constructed using authorizations to enter, timely creation of a Right-of-Way Plan and formal acquisition of the necessary right-of-way must be completed in accordance with Publication 378.

Entrance onto private property outside of legal right-of-way may be done only for the purpose of Preliminary Design Studies such as survey work, core borings, etc., and only after proper notification has been given to the property owner in accordance with Section 309 of the Eminent Domain Code. All private property must be restored to its prior condition. Notification to private property owners must be in the form of the standard Department Intent to Enter Letter. All Intent to Enter Letters must be signed by the Department. If the Department has negotiated an Authorization to Enter, this additional notification using an Intent to Enter Letter is not necessary.

Do not impair the safety or in any way be coercive with respect to unacquired or occupied properties on the same or adjacent segments of project right-of-way.

Provide access to all occupied properties to ensure emergency and personal vehicle access.

Maintain utility services to all occupied properties at all times before and until relocations are completed.

## **5. Final Right-of-Way Clearances**

The following Final Right-of-Way Clearances have been obtained by the Department: None

Obtain the following Final Right-of-Way Clearance(s):

- MPMS #9419 – Limit of work – Sta. 87+00.00 to Sta. AA 24+00.00, Segment 0280 Offset 2685 to Segment 0290 Offset 0707.

**(f) Submissions**

**Right-of-Way Plan.** Submit 3 full size sets of plans with plots and current deed and title certifications in accordance with Publication 14M, Design Manual Part 3 and documentation of any utility’s compensable interest where a Required Substitute Utility Right-of-Way is required as per Publication 16M, Design Manual Part 5, Utility Right-of-Way Chapter. Make all necessary changes as directed and resubmit for review and approval. The Right-of-Way Plan must be approved before any negotiations can begin.

**(g) Submittal Review, Approval, and Distribution**

Make all submissions in accordance with the Special Provision titled SPECIAL BIDDING – DESIGN-BUILD

**III. MEASUREMENT AND PAYMENT – Lump Sum**

Partial payment will be made for the design activity based on the approved Schedule of Values in accordance with Section IX of the Special Provision titled SPECIAL BIDDING – DESIGN-BUILD, utilizing the following components:

- **Final Right-of-Way Plan Approval** - will be paid after the final Right-of-Way Plan is received and signed by the District Executive.
- **All Appraisals Approved** - will be paid upon the approval of all appraisals.
- **Final Right-of-Way Clearance** - will be paid upon the issuance of all Final Right-of-Way Clearance Certificates as specified in Section II(e)5.
- **Right-of-Way Plan Revisions** - will be paid when the contract work is complete and all Right-of-Way Plan revisions have been made and recorded. Revisions include updates to all affected parcels including appraisal updates and reports for Eminent Domain requirements and litigation purposes. If there are no revisions, the percentage indicated on the Schedule of Values will be paid upon completion of the project.

No additional compensation will be made for additional Right-of-Way Plan revisions or Right-of-Way Services that are a result of design omissions or designs that are not accepted.

**182110A - c82110 ITEM 8211-0001 DESIGN OF BRIDGE STRUCTURE (NO AS-DESIGNED FOUNDATION PROVIDED, NO PERMIT)....**

<b>Addendum:</b>	1
<b>Associated Item(s):</b>	8211-0001

**Header:**  
ITEM 8211-0001 DESIGN OF BRIDGE STRUCTURE (NO AS-DESIGNED FOUNDATION PROVIDED, NO PERMIT), S-31651

**Provision Body:**

**I. DESCRIPTION** - This work is the design and preparation of construction plans for a bridge structure of the type indicated on the Department's Conceptual Type, Size, and Location (TS&L) Plans or an alternate type structure. Preparation of a Final TS&L Submission and a Foundation Submission for the proposed structure type is also required.

**II. DESIGN**

**(a) General**

The Department's Conceptual TS&L Plans represent a bridge structure type and layout that will meet safety, hydraulic, geometric, environmental, and load carrying capacity requirements for the project. A structure type and configuration as that shown on the Conceptual TS&L Plans or an alternate type structure subject to the requirements specified herein may be designed and constructed. Prepare and submit a Final TS&L submission for the proposed bridge structure for review and approval.

Allowable foundation type(s) along with geotechnical design parameter limitations are provided for the structure foundation. Use this information to prepare the foundation submission for the structure.

Provide design and drawings in the units of measurement shown on the Conceptual TS&L Plans.

Provide a complete set of computations for superstructure and substructure, including the foundation. Provide additional calculations, as requested by the Department's District Bridge Engineer or Chief Bridge Engineer, to evaluate any details throughout the life of the contract.

Verify that an oversize and/or overweight permit can be issued for superloads before incorporating them into a design. Submit verification documentation with the Final TS&L submission.

Structure types, concepts, construction sequencing, or other details that are not covered in the design and construction specifications or standards, or practice not commonly used in Pennsylvania are allowed only when specifically indicated herein. Where design or construction that deviates from standard Department practice is proposed, submit a conceptual design before the Final TS&L for review and approval. Include in the submittal conceptual plans and a list of items that deviate from standard design and construction, including but not limited to design methodology, the computer program that will be used in the design, construction sequencing, and any specialized construction techniques. No extensions of contract time will be granted for pursuits of alternates or non-standard designs.

## **(b) Additional Designer Qualifications**

None.

## **(c) Additional Information/Data Made Available to the Contractor by the Department**

The following information/data will be made available to the Contractor during the advertisement period:

- Test Boring Core Boxes: Test boring core boxes are available for inspection at Dupont Maintenance Facility, Dupont, PA. Contact Richard Bohr, PE at 570-963-4023 to arrange for a date and time to inspect the core boxes.
- Conceptual TS&L and Roadway Plans – Any information can be provided to the successful bidder in Microsation format only. A request for this information must be made to the District Engineer in writing. The designer will agree to accept the terms and conditions for the release of electronic data.
- Foundation Design Guidance Report is included with the bid package.
- The Hydrologic and Hydraulic Report is included with the bid package.

## **(d) Design Specifications**

Develop the Final TS&L and prepare the structure construction plan in accordance with the Special Provision titled SPECIAL BIDDING – DESIGN-BUILD, Section VIII – General Design Requirements, Design Specifications.

Use PENNDOT Design Manual Part 4 for design policy and procedures and design criteria. Refer to the "Bridge/ Structures Related Effective Policy Letters" for additional design policy Strike-Off Letters that are applicable to the structure design.

In the event that certain design parameters, stresses, or specifications are in conflict, the following order of predominance governs:

- Design requirements listed herein and addenda (addendum) to the proposal.
- Design related Strike-Off Letters in effect on the date of project advertisement.
- PENNDOT Design Manual Part 4, Structures
- PENNDOT Bridge Design and Bridge Construction Standards

- AASHTO Guide Specifications for Horizontally Curved Highway Bridges
- AASHTO LRFD Bridge Design Specifications or, when applicable, AASHTO Standard Specifications for Highway Bridges

In the event that a clear order of precedence cannot be established, or a difference in the interpretation of the design criteria, standards, specifications, or methodology cannot be resolved, the Chief Bridge Engineer will be arbiter and the Chief Bridge Engineer's decision will be final.

## (e) Design Requirements

### 1. General

- Slip-formed barriers are not allowed.
- Segmental concrete construction is not allowed.
- Lightweight concrete is not allowed.
- Do not use the BLC Standard Drawings.
- Do not use precast concrete bridge barriers.
- Epoxy Coat all Reinforcement Bars.

### 2. Geometry

Design the structure according to the geometrics shown on the Conceptual TS&L Plans, except changes will be allowed as follows:

- Horizontal Alignment: No Change Allowed
- Vertical Alignment: No Change Allowed
- Substructure Unit Locations: Maintain a minimum waterway opening of 524 ft<sup>2</sup>
- Bridge Length: As required to maintain a minimum opening of 524 ft<sup>2</sup>
- Lane, Shoulder, and Sidewalk Widths: Minimum lane and shoulder width according to the conceptual TS&L
- Staged Construction Requirements:
  - Allow for staged construction while maintaining one lane of vehicular traffic during all stages of construction.
  - Minimum temporary lane widths of 12 ft are required.
  - Provide a maximum of 1 longitudinal construction joint in the deck slab. The longitudinal construction joint must be positioned within the middle 1/2" width of the top flange of a beam.

### 3. Seismic

Site Class is not Class E.

Design the connection force effect in the restrained directions between the superstructure and substructure as 0.25 times the vertical reaction due to the tributary permanent load.

### 4. Superstructure

Incorporate the following requirements into the superstructure design:

- Do not use less than 6 girders in the superstructure. Use more girders if required for future redecking.
- Deck Expansion Joints: None
- Steel box girders are not allowed.
- Precast panel forms for placing the concrete deck slab in lieu of metal stay-in-place forms are not allowed.
- Provide live load ratings with and without future wearing surface
- For steel girder designs, do not include longitudinal stiffeners in computing the steel section properties.
- For prestressed concrete beam designs, prestressed concrete beam sections differing significantly from the standards specified herein will be considered as nonstandard sections subject to the requirements of Section 1107.03(a) 4. Do not deviate from the minimum flange and web thickness or section properties shown in the Bridge Design Standard Drawings.
- Provide provisions for future jacking of superstructure for bearing repair or replacement.
- The TK-527 and ML-80 inventory ratings must provide a minimum rating of 1.0.

### 5. Substructure

Incorporate the following requirements into the substructure design:

- MSE abutments or wingwalls are not allowed.
- Precast modular retaining walls are not allowed.
- Integral abutments are allowed.
- Precast piers are not allowed.
- Mandatory Pre-drilling will be required at pile locations.

## 6. Temporary Bridges

Not Applicable.

## 7. Maintenance of Traffic During Construction

In accordance with items 8901-1001 and the approved Traffic Control Plans.

Maintenance of pedestrian traffic on the structure is not required during construction.

## 8. Railroad Requirements

Not Applicable.

## 9. Future Widening Requirements

None

## 10. Future Redecking Requirements

In addition to the requirements in DM 4, incorporate the following future redecking provisions into the design:

- Allow for redecking in staged construction while maintaining 1 lane of vehicular traffic during all stages of construction.
- Minimum lane widths of 12' are required.
- Design beams to carry standard design live loads at all stages of redecking.
- Allow for a maximum of 1 longitudinal construction joint in the deck slab. The longitudinal construction joint must be positioned within the width of the top flange of a beam.
- Maintenance of pedestrian traffic is not required during future redecking.
- The superstructure and substructure must be designed to meet all Strength and Service Limit States for the specified future staging shown on the Conceptual TS&L.

## 11. Inspection and Maintenance Accessibility

Provide inspection and maintenance accessibility equivalent to that provided in the Conceptual TS&L Plans, or alternate means acceptable to the Department. In case of a disagreement on accessibility, the Chief Bridge Engineer's decision will be binding.

## 12. On-Bridge Lighting

Not Applicable.

## 13. Waterway Requirements

Incorporate the following waterway requirements into the bridge design and construction:

### 13.a. Structure Shown on the Conceptual TS&L:

Normal Clear Span: 63'- 8"

Minimum Underclearance: 9'- 7 1/2"

Minimum Bottom of Beam Elevation: 1272.98 ft.

Hydraulic Opening: 524 sf

· Obtain approved waterway permit(s) for the project. Comply with all requirements of the approved permit(s). Refer to the Special Provision titled PERMITS FOR DESIGN- BUILD PROJECTS for further details. Do not start construction work until approved waterway permits are obtained.

**13.a.1. Hydraulic Analysis:**

- Hydrologic and Hydraulic documents for the Conceptual TS&L structure prepared by the Department are preliminary and for information purposes only. Prepare the final H&H documents. Prepare and submit for approval the appropriate waterway permit(s) using the final H&H documents and in accordance with the conditions of the permit.

**13.a.2. Scour Analysis:**

- Scour Analysis is preliminary and for information purposes only, Prepare Scour Analysis in conjunction with final H&H documents.

**13.a. 3. FEMA and NEPA Coordination:** In accordance with the Special Provision titled PERMITS FOR DESIGN- BUILD PROJECTS.

**13.a.4 Permits:** In accordance with the Special Provision titled PERMITS FOR DESIGN-BUILD PROJECTS.

**13.a.5. Other :** Not Applicable

**13.b. Alternate Structure**

- Obtain approved/amended waterway permit(s) for alternate structures. Comply with all requirements of the approved permit(s). Refer to the Special Provision titled PERMITS FOR DESIGN-BUILD PROJECTS for further details. Do not start construction work until approved waterway permits are obtained.
- Alternate Structures with low chord elevations less than the Conceptual TS&L structure may be used, dependant upon approved hydraulic analyses, and provided that the water surface elevations are less than the Conceptual TS&L.
- Do not increase the water surface elevations for the 25 year storms above those given for the Conceptual TS&L.
- If the Conceptual TS&L structure impacts wetlands, no additional wetland impacts will be allowed for alternate structure types.

**13.b.1. Hydraulic Analysis**

- Hydrologic and Hydraulic documents for the Conceptual TS&L structure prepared by the Department are preliminary and for information purposes only. Prepare the final H&H documents. Prepare and submit for approval the appropriate waterway permit(s) using the final H&H documents and in accordance with the conditions of the permit.

**13.b.2. Scour Analysis:**

• Scour Analysis is preliminary and for information purposes only, Prepare Scour Analysis in conjunction with final H & H documents.

**13.b. 3. FEMA and NEPA Coordination** In accordance with the Special Provision titled PERMITS FOR DESIGN- BUILD PROJECTS.

**13.b.4. Permits** In accordance with the Special Provision titled PERMITS FOR DESIGN-BUILD PROJECTS.

**13.b.5.** Other: Not Applicable.

**14. Environmental**

Refer to the Special Provision title ENVIRONMENTAL COMMITMENT AND MITIGATION TRACKING SYSTEM (ECMTS) REPORT.

**15. Utilities**

Refer to the Conceptual TS&L Plans for general utility details and a listing of required on-bridge utility materials, and material acquisition and installation responsibilities.

Design the bridge structure to accommodate the following utility facilities on, under, or above the bridge:

PPL ELECTRIC UTILITIES CORPORATION  
ATTN: MS. CHARLOTTE KRUPA (610) 774-6289  
2 NORTH NINTH ST./GENTW19  
ALLENTOWN, PA. 18101-1179

VERIZON NORTH INC.  
ATTN: DAN BLODNIKAR (570)253-0048  
174 BEACH LAKE HIGHWAY  
HONESDALE, PA. 18431

LACKAWAXEN TELEPHONE COMPANY  
ATTN: JOE SCHIMITSCH (570) 685-1098  
P.O. BOX 8  
104 HOTEL RD.  
ROWLAND, PA. 18457

BLUE RIDGE CABLE TECHNOLOGIES INC.  
ATTN: SKIP HUNSICKER (610) 826-2551  
BOX 215  
PALMERTON, PA. 18071

If utility relocations are required as part of an alternate structure, obtain approvals from the affected utility companies.

**16. Other**

Not Applicable.

**(f) Foundations**

**1. General** - A subsurface exploration investigation has been performed for this project. The subsurface exploration data, in conjunction with foundation requirements specified herein, should be used to develop the foundation design parameters. A foundation submission is required.

## 2. Allowable Foundation Types

Foundation types are allowed as follows:

Integral abutments supported on piles are allowed.

### 2.a. Geotechnical Design Parameter Limitations

Determine the applicable resistances to be used to design the substructures, limited to the maximum Ultimate Capacities given below. Designs utilizing Ultimate Capacities exceeding the maximum values indicated below will not be accepted.

#### 2.a.1. Spread footings on Soil

Not allowed.

#### 2.a.2. Spread Footings on Rock

Not allowed

#### 2.a.3. Pile Supported Foundations

Point Bearing Piles

Ultimate pile capacity is limited to a maximum yield strength of 36 ksi.

End Bearing Piles:

Not allowed

Friction Piles:

Not allowed.

#### 2.a.4. Drilled Caisson Supported Foundations

Not allowed

## 3. Required Geotechnical Exploration

Provide and utilize the following number of borings for the foundation design, at a minimum:

- Abutments - 1 Required
- Piers - Not Applicable.

Previously obtained borings as shown on the Conceptual TS&L Plans may be used as a required boring where the boring lies within the footprint of the footing of the substructure unit.

Perform the geotechnical exploration for the bridge structure according to the Special Provision titled SPECIAL BIDDING – DESIGN-BUILD, Section VIII – General Design Requirements, Design Specifications.

## 4. Laboratory Testing

Not Applicable.

## 5. Foundation Submission

Prepare and submit a foundation report according to the requirements of DM 4, Policies and Procedures (PP), Section 1.9.4. Cost comparisons per Section 1.9.4.3(c) are not required.

## 6. Construction Requirements

### 6.a. Test Piles

Provide 1 test pile per substructure unit.

**6.b. Pile Dynamic Analysis**

Not Applicable

**6.c. Load Tests**

Not Applicable

**6.d. Subgrade Preparation**

Not Applicable

**6.e. Settlement Monitoring**

Not Applicable

**6.f. Other**

None.

**(g) Submittals**

**1. Final TS&L Submission**

Include the following information in the TS&L submission:

1. Final TS&L submission letter: In accordance with DM 4 PP Section 1.9.3.3.1(a).
2. Final TS&L plans: In accordance with DM-4 PP Section 1.9.3.3.1(b).
3. Supply the following additional information:
  - (a) Route and section number, index map and segment/offset of limits
  - (b) Name of Lead Design Engineer
  - (c) Design traffic data including current and projected ADTT and class of highways on relevant roads
  - (d) Date of line and grade approval and design speed (if changes are made to the as-designed vertical and horizontal alignments)
  - (e) Copy of the H&H analysis submitted to the Department of Environmental Protection) if the Contractor obtains the waterway permit(s) or if an amendment to the waterway permit is necessary
4. Completed applicable Q/A Forms D-501, D-502, D-503 and/or D-504 (refer to DM 4 Appendix A).

Approval of the Final TS&L is contingent upon waterway permit approval from the Department of Environmental Protection, as applicable.

**2. Waterway (As Applicable)**

In accordance with Section II (e) 13 of this Special Provision. .

**3. Foundation Submission (As Applicable)**

In accordance with DM 4, PP Section 1.9.4.3.1 and Section II(f) of this Special Provision for submittal requirements.

**4. Final Structure Plans and Computations**

In accordance with DM 4. Include in the Final Structure Plans the Core Boring Logs as provided in the Conceptual Drawings in unmodified form; with the exception of superimposition of sheet numbering consistent with the Final Structure Plans and prominent designation of each sheet as "Information Provided by Others." Sign and seal each plan sheet per DM 4, Section PP 1.6.3.1, with

the exception of the aforementioned Core Boring Logs. Upon completion of Quality Assurance Review, or Owner's Perspective Review, as applicable, and receipt of drawings stamped "Recommended for Construction," provide the Department with one paper copy for signature by the District Bridge Engineer.

**5. Revisions During Construction and "As-Built" Drawings**

In accordance with DM 4, PP Section 1.10, except that the Contractor is responsible for making changes to the contract drawings, and making and distributing necessary copies of the revised plans to all affected parties. Section 1.10.5 is modified as follows: If a design error occurs, the Contractor is fully responsible for the costs associated with providing additional design analysis and construction modifications, acceptable to the Department, to correct the problem. The Department will require reimbursement for design errors to cover engineering review costs. This amount will be deducted from the lump sum cost for the construction of structure item via work order.

Maintain and submit "As-Built" drawings in accordance with Publication 10C, Design Manual Part 1C, Transportation Engineering Procedures, Section 5.7, As-Built Plans, except include major quantity changes (such as foundation pile length changes, etc).

All "As-Built" drawings are the sole responsibility of the Contractor and must be submitted to the District within 3 months of final inspection acceptance as defined in Section 110.08(a).

**(h) Submittal Review, Approval, and Distribution**

Make all submissions in accordance with Special Provisions titled SPECIAL BIDDING – DESIGN-BUILD, except as follows;

- Partial Plans Submissions: Plans and calculations for each substructure unit may be submitted separately ten (10) working days for the first and ten (10) working days for every subsequent submission.
- Utilities: Additional contract time will not be considered for additional utility relocation work associated with an alternate structure.

**III. MEASUREMENT AND PAYMENT-Lump Sum**

Partial payment will be made for the design activity based on the approved Schedule of Values in accordance with Section IX of the Special Provision titled SPECIAL BIDDING – DESIGN-BUILD, utilizing the following components:

- Final TS&L Approval-15%
- Foundation Approval-20%
- Final Plan Approval – Substructure-15%
- Final Plan Approval – Superstructure-15%
- Final Plan – for Signature-25%
- As-Built Drawings-10%

**182310A - c82310 ITEM 8250-0001 CONSTRUCTION OF PRESTRESSED CONCRETE BRIDGE , S-31651**

**Addendum:**

**Associated Item(s):** 8250-0001

**Header:**

ITEM 8250-0001 CONSTRUCTION OF PRESTRESSED CONCRETE BRIDGE, S-31651

**Provision Body:**

**I. DESCRIPTION** - This work is the construction of a bridge structure of the type bid in the corresponding specification entitled "Design of Bridge Structure" and in accordance with the approved design and structure drawings. Construction of a temporary excavation support and protection system is included, if applicable.

**II. MATERIAL** - As indicated and as specified for each respective item included in the bridge structure.

**III. CONSTRUCTION** - In accordance with Publication 408, Special Provisions for each respective item, and any additional requirements specified herein.

Prepare and submit Shop Drawings in accordance with Publication 15M, Design Manual Part 4 (DM 4), Policies and Procedures (PP) Section 1.10.2.

Mandatory Pre-drilling will be used for the placement of the bearing piles as per the recommendation of the District's Geotechnical Engineer.

Prepare and submit Pile Hammers for approval in accordance with DM 4, PP Section 1.10.3

Prepare and submit Pile Load Test Evaluations in accordance with DM 4, PP Section 1.10.4

The Department will require reimbursement for design errors to cover engineering review costs. This amount will be deducted from the lump sum cost for the construction of structure item In accordance with Section 110.03.

Be responsible for making changes to the contract drawings, and making and distributing necessary copies of revised plans to all affected parties in accordance with DM4, PP Section 1.10.6.

Do not start construction until structure plans stamped "Released for Construction" are transmitted by a letter indicating which work can proceed. Construction may start on components of the structure provided that partial structure plans stamped "Released for Construction" are transmitted by a letter indicating which work can proceed.

If utility relocations are required as part of an alternate structure, be responsible for the cost of the utility relocations in excess of those indicated in the contract documents. Additional contract time will not be considered for additional utility relocation work associated with an alternate structure.

#### **IV. MEASUREMENT AND PAYMENT - Lump Sum**

##### **(a) General**

Mandatory Predrilled Piles set on bedrock for piles used in the foundation design.

Partial payment will be made for all work indicated on the Final Structure Drawings for S-31651 based on the approved Schedule of Values in accordance with Section IX of the Special Provision titled SPECIAL BIDDING – DESIGN-BUILD, except as indicated otherwise herein.

## **00 - CONSTRUCTION/HOLIDAY RESTRICTIONS**

### **Addendum:**

### **Associated Item(s):**

### **Header:**

CONSTRUCTION/HOLIDAY RESTRICTIONS

### **Provision Body:**

The following holiday restrictions will be implemented for the time frames listed below.

Do not perform any work, including permit work, within the right-of-way of any interstate highway during the holiday time periods listed below. Do not perform any work, including permit work, which will affect traffic on any state route during the holiday time periods listed below. Such work activities include, but are not limited to the following:

- a. Slow moving construction vehicles entering or leaving the roadway.
- b. Crane swings over or near the highway.
- c. Any lane closures.

Do not work on Sundays unless approved by the District Executive sixteen (16) days in advance.

Do not perform work on any State Route during the following Holiday Periods, unless directed by the Engineer.

Easter - from Friday, 12:01 A.M. preceding the holiday to Monday, 11:59 P.M. following the holiday.

Memorial Day and Labor Day - from Friday, 12:01 A.M. preceding the holiday to Tuesday, 11:59 P.M. following the holiday.

Thanksgiving - from Wednesday, 12:01 A.M. preceding the holiday to Sunday, 11:59 P.M. following the holiday.

Independence Day (July 4th), Christmas (December 25th) and New Year's (January 1st) -

If the holiday is Monday, from Friday, 12:01 A.M. preceding the holiday to Tuesday, 11:59 P.M. following the holiday.

If the holiday is Wednesday, from Tuesday, 12:01 A.M. preceding the holiday to Thursday, 11:59 P.M. following the holiday.

If the holiday is Thursday, from Wednesday, 12:01 A.M. preceding the holiday to Sunday, 11:59 P.M. following the holiday.

If the holiday is Friday, from Thursday, 12:01 A.M. preceding the holiday to Monday, 11:59 P.M. following the holiday.

If the holiday is Saturday or Sunday, from Friday, 12:01 A.M. preceding the holiday to Monday, 11:59 P.M. following the holiday.

Independence Day (July 4th) -

If the holiday is Tuesday, from Monday, 12:01 A.M. preceding the holiday to Wednesday, 11:59 P.M. following the holiday.

Christmas (December 25th) and New Year's (January 1st) -

If the holiday is Tuesday, from Friday, 12:01 A.M. preceding the holiday to Wednesday, 11:59 P.M. following the holiday.

Work will be done during daylight hours 6:00 am - 6 pm, except in locations where night work is required. No work will be done during inclement weather.

Call James May, Community Relations Coordinator for PennDOT District 4-0 at (570) 963-3502 for media releases of work and lane closures. Contact Jeff Fuhr, Traffic Unit, PennDOT, at (570) 963-4056 to coordinate the usage of existing Department Message Boards.

Notify the Engineer at least 10 calendar days in advance of the start of any operation, which will affect the flow of traffic and provide the resident engineer with details of the work to be done.

## **00 - ITEM 4811-0003-TEMPORARY PROTECTIVE FENCE**

### **Addendum:**

**Associated Item(s):** 4811-0003

### **Header:**

ITEM 4811-0003-TEMPORARY PROTECTIVE FENCE

### **Provision Body:**

In accordance with Section 811 and as follows:

CONSTRUCTION – Furnish, install, and maintain temporary orange protective fence to identify limits of disturbance for the project. Install fence prior to the start of any construction activities.

Place a total of 12 signs incidental to fence installation with the following wording. " Caution Bridge Construction", "Do Not Enter". Equally space signs along limits of temporary fence, all four corners. Signs are flat aluminum, 10 inches by 18 inches, white background, black letters with orange border.

Do not disturb any area outside the limits of disturbance for project.

Adjust final fence location to fit field conditions or as directed by the Engineer.

MEASUREMENT AND PAYMENT – Linear Foot

**00 - ITEM 9000-0001 – UNFORESEEN BRIDGE REPAIR**

**Addendum:**

**Associated Item(s):** 9000-0001

**Header:**

ITEM 9000-0001 – UNFORESEEN BRIDGE REPAIR

**Provision Body:**

Description – This work is the design and construction of unforeseen bridge repairs encountered during the duration of the project.

Design –

(a) General

Provide design and drawings in the units of measurement shown on the structure plans.

On the first sheet of the plans and partial plans submissions, provide the Design Engineer's P.E. seal, valid signature in ink, the date signed, business name and address. Provide the Design Engineer's P.E. seal, signature, and date signed on the first sheet of all computations, including computations for partial plans submissions.

Provide a complete set of computations for any unforeseen bridge repair, if required by the Department's District Bridge Engineer or Chief Bridge Engineer, computed and checked by qualified personnel and initialed as such. Format all design computations on 8 1/2 x 11" sheets printed on one side only, and save in PDF format for submission.

Designs copied directly from Department Standard Drawings need not be documented through independent computations. List such designs on the submission by referencing the drawing number of the applicable standard, and the sheet number, table, or graph.

Experimental or demonstration-type design concepts, products, structures, or elements not pre-approved by the Department for general usage at the time of bid, will not be permitted.

Concepts, construction sequencing, or other details that are not covered in the design and construction specifications or standards, or practice not commonly used in Pennsylvania are permitted only when specifically indicated herein. Where design or construction that deviates from standard practice is proposed, a conceptual design shall be submitted for review and approval. The submittal shall contain conceptual plans, a list of items that deviate from standard design and construction, including but not limited to design methodology, the computer program that will be used in the design, construction sequencing, and any specialized construction techniques.

Value engineering will not be permitted

(b) Designer Qualifications

Have the design completed by a Professional Engineer licensed in the Commonwealth of Pennsylvania.

Submit to the Department, at or prior to the pre-construction meeting, the name and address of the Contractor's Design Engineer including the firm's resume showing the experience and expertise, during the last 5 years, of two similar projects of comparable complexity on Pennsylvania's State Highway or local system. Local projects must have been funded with Federal Aid Highway Funds. Also include an affidavit stating that the Design Engineer is familiar with AASHTO, PENNDOT, and other applicable design criteria, standards, and construction specifications. The Design Engineer will be approved or disapproved by the Department within 5 working days from the time and date of submission. Unless indicated otherwise by the Department in writing, Design Engineer disapproval will not permit the extension of the construction completion date or price adjustments to any items in the contract.

### (c) Design Specifications

Use PENNDOT Design Manual Part 4 for design policy and procedures and design criteria. Refer to the "Bridge/ Structures Related Effective Policy Letters" for additional design policy Strike-Off Letters that are applicable to the structure design.

In the event that certain design parameters, stresses, or specifications are in conflict, the following order of predominance governs:

- Design requirements listed herein and addenda (addendum) to the proposal.
- Design related Strike-Off Letters in effect on the date of project advertisement.
- PENNDOT Design Manual Part 4, Structures
- PENNDOT Bridge Design and Bridge Construction Standards.
- AASHTO guide Specifications for Horizontally Curved Highway Bridges.
- AASHTO LRFD Bridge Design Specifications or, when applicable, AASHTO Standard Specifications for Highway Bridges.

In the event that a clear order of precedence cannot be established, or a difference in the interpretation of the design criteria, standards, specifications, or methodology cannot be resolved, the Chief Bridge Engineer will be arbiter and the Chief Bridge Engineer's decision will be final.

Material & Construction – In accordance with applicable sections of Specifications Publication 408/2007.

Design and/or construction shall not begin until the work is authorized by the Engineer.

A time extension to the contract will not be granted based solely on performing work under this item.

Measurement and Payment - Dollar

## **00 - ITEM 9000-0014 - SET BENCH MARK DISK**

### **Addendum:**

**Associated Item(s):** 9000-0014

### **Header:**

ITEM 9000-0014 - SET BENCH MARK DISK

### **Provision Body:**

DESCRIPTION This work is the removal and replacement of an existing Pennsylvania Department of Transportation, United States Geological Survey, or National Geodetic Survey bench mark disk or the placement of a new Pennsylvania of Transportation disk if one does not exist.

MATERIAL Furnished by the Department.

CONSTRUCTION Remove the existing benchmark disk and deliver it to the Engineer. The Department will supply a new or reconditioned bench mark disk. Install the new bench mark disk at a stable and accessible location as determined by the engineer. Department forces will re establish the bench mark elevation after construction is completed.

MEASUREMENT AND PAYMENT EACH

**00 - ITEM 9000-0500- AIDS TO NAVIGATION PLAN**

**Addendum:**

**Associated Item(s):** 9000-0500

**Header:**

ITEM 9000-0500- AIDS TO NAVIGATION PLAN

**Provision Body:**

DESCRIPTION – This item is the implementation and maintenance of an Aids To Navigation (ATON) boat safety and recreational angler plan for this project over Shohola Creek. The ATON Plan is to include signing as approved by the Pennsylvania Fish and Boat Commission (PAFBC).

CONSTRUCTION – Place and maintain 1 sign 100 feet upstream and 1 sign 100 feet downstream of project area as required by aids to navigation plan alerting users of construction project and scheduled activities. Provide signs with sufficient anchorage to prevent dislodging or disorienting by stream currents. Designate an individual as Boat Safety Coordinator for the project.

Maintain constant surveillance of the boat safety operation and replace any missing, ineffective or misaligned equipment to the satisfaction of the Engineer. Do not deviate from the ATON Plan without approval from the Department.

Provide necessary personnel when on site to direct recreational users when working over, in, or around Shohola Creek so that a safe corridor for possible passage is maintained.

MEASUREMENT AND PAYMENT – Lump Sum

**00 - ITEM 9018-0001 – REMOVAL OF EXISTING BRIDGE STRUCTURE**

**Addendum:**

**Associated Item(s):** 9018-0001

**Header:**

ITEM 9018-0001 – REMOVAL OF EXISTING BRIDGE STRUCTURE

**Provision Body:**

DESCRIPTION:

This work is the removal of the existing bridge structure over Shohola Creek. This work includes the removal, in phases according to the traffic control plan, of the existing bituminous over lay, bridge railing, deck, steel beams, abutments, wing walls, as indicated, and as directed by the Engineer in charge.

## CONSTRUCTION:

Completely remove the existing bridge structure according to the phases of construction and properly dispose of debris.

Do not use explosives at any time during the removal of the existing structure.

Submit a method of removal and sequence of removal to the District Bridge Engineer for review and approval before beginning removal of the existing structure.

During the removal of the existing structure, prevent any debris from falling into Shohola Creek. If any debris does fall into the stream, remove it immediately and properly dispose of it.

MEASUREMENT AND PAYMENT - Lump Sum.

## 00 - MANDATORY PRE-DRILLING FOR DRIVEN PILES

### Addendum:

### Associated Item(s):

### Header:

MANDATORY PRE-DRILLING FOR DRIVEN PILES

### Provision Body:

I. DESCRIPTION - This work is the mandatory drilling, augering, or boring holes for indicated bearing piles and test piles at abutments to the estimated pile tip elevations as shown on the plans.

### II. MATERIAL -

(a) Aggregate - Section 703.1 or AASHTO No. 10 as specified in Section 703.2 Table C.

(b) Casing Pipe - Section 1006.2(a).

### III. CONSTRUCTION -

(a) Drill holes at pile locations and depths as shown on the plans. Deviations of drill hole from plan location and verticality are permitted, provided the driven pile is as specified in Section 1005.3(b)2.

(b) Drill a hole with a minimum diameter 10 inches larger than the largest cross sectional dimension of the pile.

(c) Place pile in drill hole. For pile lengths less than 20 feet, backfilling the hole with aggregate prior to placing the pile is optional.

(d) If casing is used, remove during backfilling operations unless otherwise specified.

(e) Backfill drill hole with aggregate prior to obtaining required refusal. Ensure the pile achieves the pre-drilled length as a minimum.

(f) Drive piles as specified in Section 1005.

### IV. MEASUREMENT AND PAYMENT – Incidental to ITEM#8250-0001.

(a) Measured from the bottom of the hole elevation to the bottom of the footing elevation. Includes mobilization, access to the foundations, drilling, maintaining an open hole, casing and backfilling with aggregate.

**00 - REQUIRED NOTIFICATIONS**

**Addendum:**

**Associated Item(s):**

**Header:**

REQUIRED NOTIFICATIONS

**Provision Body:**

Provide the following notification to the Inspector-in-Charge of the following:

·Start of physical work – four calendar days

·Width, height, or weight restrictions to any roadway – ten working days (excluding State holidays). This information should be on the form M-937.

·Removal of width, height, or weight restrictions to any roadway – immediately upon removal. This information should be on the form M-937RO.

·Start of any operation affecting traffic (lane closures, total closures, etc.)-- four calendar days with a confirmation the morning of the operation.

The contractor will not be permitted to close or restrict any roadway until ten working days (excluding State holidays) after such notification is received by the District Permits Unit.

No time extensions will be granted for failure to submit the required notices.

Also, directly notify local residents, school districts, local and county emergency management agencies (EMAs) of work that impacts those entities at the start of the project and again no less than four calendar days in advance of such work. Provide documentation of such notifications to the Inspector-in-Charge.

Regardless of these provisions, the contractor is expected to provide notification to any entities that are affected by his operations sufficiently ahead of the operations to allow those entities to adjust their operations accordingly.

## Performance Bonds

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**Surety Company:** Liberty Mutual Insurance Company  
**Bonding Agency:** Willis of New York, Inc.  
**Producer:** Jeannette Porrini/PennDOT BP-002702  
**Co-Insurer:** Yes

**Status:** Accepted  
**Bond Number:** 014063546  
**Bond Amount:** \$898,400.00  
**NAIC:** 23043

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KNOW ALL MEN BY THESE PRESENTS, That we, *HRI, Inc. of 1750 West College Avenue, State College, PA 16801* as PRINCIPAL, and Liberty Mutual Insurance Company a corporation, as SURETY, are held and firmly bound unto the *Commonwealth of Pennsylvania* in the full and just sum of *\$898,400.00*, lawful money of the United States of America, to be paid to the said Commonwealth of Pennsylvania, or it assigns, to which payment well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

Sealed with our respective seals and dated this 16 day of October A.D. 2012.

Whereas, the above bounden PRINCIPAL has undertaken to contract with the said Commonwealth of Pennsylvania, by and through the Secretary of Transportation covering the work identified below for approximately the sum of the bond amount defined above.

This is a Design/ Build Project. For the rehabilitation and improvement of a certain section of STATE HIGHWAY in PIKE COUNTY, BLOOMING GROVE TOWNSHIP, Commonwealth of Pennsylvania, STATE ROUTE 0739, SECTION 452. The project being situated as follows: From a point approximately 0.09 miles (483 feet) Northwest from the intersections with SR 8008 (Ramp F I-84E ramp) at Segment 0280 Offset 2685 (Station 87+00) to a point approximately 0.35 miles (1853 feet) Northwest of the intersection with SR 8008 (Ramp F I-84E ramp) at Segment 0290 Offset 0707 (Station 24+00) along SR 739. This project is a design build bridge replacement over Shohola Creek on a new roadway alignment to the inside of the existing curve. The proposed curve radius is longer to accommodate half-width construction with temporary signals. Additional work for the project includes drainage, roadway, guide rail placement, and side road/driveway adjustments, all contained within an overall project length of 0.224 miles as indicated on the approved drawings included in the bid package.

and

WHEREAS, it was one of the conditions of the award of the Secretary of Transportation, acting for and on behalf of the Commonwealth of Pennsylvania, pursuant to which said contract was undertaken by the PRINCIPAL that these presents should be executed, to become binding upon the date the said contract is approved for the office of Budget, by the Comptroller.

NOW, THEREFORE, The conditions of this obligation is such that if the above bounden PRINCIPAL, as Contractor, shall in all respects comply with and faithfully perform the terms and conditions of said contract, and his, their, or its obligations thereunder, including the plans, specifications, and conditions therein referred to and made a part thereof, and such alterations as may be made in said specifications as therein provided for, and shall well and truly, and in a manner satisfactory to the Commonwealth of Pennsylvania, complete the work contracted for, and shall save harmless the Commonwealth of Pennsylvania from any expense incurred through the failure of said contractor to complete the work as specified, or for any damages growing out of the carelessness and/or negligence of said contractor or his, their, or its servants.

And shall save and keep harmless the said Commonwealth of Pennsylvania against and from all losses to it from any cause whatsoever, including patent, trademark, and copyright infringements, in the manner of constructing said section of roadway; then this obligation to be void or otherwise to be and remain in full force and virtue.

It is further provided that any alteration which may be made in the terms of the contract or in the work to be done under it or the giving by the Commonwealth of any extension of time for the performance of the contract or any other forbearance on the part of either the Commonwealth or the PRINCIPAL to the other shall not in any way release the PRINCIPAL and the SURETY or SURETIES or either or any of them, their heirs, executors, administrators, successors or assigns, from their liability hereunder, notice to the SURETY or SURETIES of any such alteration, extension, or forbearance being hereby waived.

IN WITNESS WHEREOF, the said PRINCIPAL and SURETY have duly executed this Bond under seal the day and year first above written.

### Attorney-in-Fact Certification

\*The undersigned attorney-in-fact by executing this Performance Bond certifies that he/she is licensed with the company named as surety for this bond and that to the best of his/her knowledge the said surety is licensed with the Pennsylvania Insurance Department.

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**Bond Workflow Status**

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<b>Status</b>	<b>Name</b>	<b>Disposition</b>	<b>Date/Time</b>
Draft	John R Kulka PE/PennDOT BP-001239	Submit	10/12/2012 02:54:16 PM
Producer Review	Jeannette Porrini/PennDOT BP-002702	Sign	10/16/2012 09:50:57 AM
Contractor Review	John R Kulka PE/PennDOT BP-001239	Sign	10/16/2012 10:01:56 AM
BOD CMD Review	Roland L Rode/PennDOT	Accept	10/16/2012 01:12:10 PM

**Surety Company:** The Fidelity and Deposit Company of Maryland  
**Bonding Agency:** Willis of New York, Inc.  
**Producer:** Jeannette Porrini/PennDOT BP-002702  
**Co-Insurer:** Yes

**Status:** Accepted  
**Bond Number:** 9100282  
**Bond Amount:** \$898,400.00  
**NAIC:** 39306

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KNOW ALL MEN BY THESE PRESENTS, That we, *HRI, Inc. of 1750 West College Avenue, State College, PA 16801* as PRINCIPAL, and The Fidelity and Deposit Company of Maryland a corporation, as SURETY, are held and firmly bound unto the Commonwealth of Pennsylvania in the full and just sum of \$898,400.00, lawful money of the United States of America, to be paid to the said Commonwealth of Pennsylvania, or it assigns, to which payment well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

Sealed with our respective seals and dated this 16 day of October A.D. 2012.

Whereas, the above bounden PRINCIPAL has undertaken to contract with the said Commonwealth of Pennsylvania, by and through the Secretary of Transportation covering the work identified below for approximately the sum of the bond amount defined above.

This is a Design/ Build Project. For the rehabilitation and improvement of a certain section of STATE HIGHWAY in PIKE COUNTY, BLOOMING GROVE TOWNSHIP, Commonwealth of Pennsylvania, STATE ROUTE 0739, SECTION 452. The project being situated as follows: From a point approximately 0.09 miles (483 feet) Northwest from the intersections with SR 8008 (Ramp F I-84E ramp) at Segment 0280 Offset 2685 (Station 87+00) to a point approximately 0.35 miles (1853 feet) Northwest of the intersection with SR 8008 (Ramp F I-84E ramp) at Segment 0290 Offset 0707 (Station 24+00) along SR 739. This project is a design build bridge replacement over Shohola Creek on a new roadway alignment to the inside of the existing curve. The proposed curve radius is longer to accommodate half-width construction with temporary signals. Additional work for the project includes drainage, roadway, guide rail placement, and side road/driveway adjustments, all contained within an overall project length of 0.224 miles as indicated on the approved drawings included in the bid package.

and

WHEREAS, it was one of the conditions of the award of the Secretary of Transportation, acting for and on behalf of the Commonwealth of Pennsylvania, pursuant to which said contract was undertaken by the PRINCIPAL that these presents should be executed, to become binding upon the date the said contract is approved for the office of Budget, by the Comptroller.

NOW, THEREFORE, The conditions of this obligation is such that if the above bounden PRINCIPAL, as Contractor, shall in all respects comply with and faithfully perform the terms and conditions of said contract, and his, their, or its obligations thereunder, including the plans, specifications, and conditions therein referred to and made a part thereof, and such alterations as may be made in said specifications as therein provided for, and shall well and truly, and in a manner satisfactory to the Commonwealth of Pennsylvania, complete the work contracted for, and shall save harmless the Commonwealth of Pennsylvania from any expense incurred through the failure of said contractor to complete the work as specified, or for any damages growing out of the carelessness and/or negligence of said contractor or his, their, or its servants.

And shall save and keep harmless the said Commonwealth of Pennsylvania against and from all losses to it from any cause whatsoever, including patent, trademark, and copyright infringements, in the manner of constructing said section of roadway; then this obligation to be void or otherwise to be and remain in full force and virtue.

It is further provided that any alteration which may be made in the terms of the contract or in the work to be done under it or the giving by the Commonwealth of any extension of time for the performance of the contract or any other forbearance on the part of either the Commonwealth or the PRINCIPAL to the other shall not in any way release the PRINCIPAL and the SURETY or SURETIES or either or any of them, their heirs, executors, administrators, successors or assigns, from their liability hereunder, notice to the SURETY or SURETIES of any such alteration, extension, or forbearance being hereby waived.

IN WITNESS WHEREOF, the said PRINCIPAL and SURETY have duly executed this Bond under seal the day and year first above written.

**Attorney-in-Fact Certification**

\*The undersigned attorney-in-fact by executing this Performance Bond certifies that he/she is licensed with the company named as surety for this bond and that to the best of his/her knowledge the said surety is licensed with the Pennsylvania Insurance Department.

**Bond Workflow Status**

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<b>Status</b>	<b>Name</b>	<b>Disposition</b>	<b>Date/Time</b>
Draft	John R Kulka PE/PennDOT BP-001239	Submit	10/12/2012 02:54:38 PM
Producer Review	Jeannette Porrini/PennDOT BP-002702	Sign	10/16/2012 09:51:55 AM
Contractor Review	John R Kulka PE/PennDOT BP-001239	Sign	10/16/2012 10:02:23 AM
BOD CMD Review	Roland L Rode/PennDOT	Accept	10/16/2012 01:11:27 PM

## Payment Bonds

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**Surety Company:** Liberty Mutual Insurance Company  
**Bonding Agency:** Willis of New York, Inc.  
**Producer:** Jeannette Porrini/PennDOT BP-002702  
**Co-Insurer:** Yes

**Status:** Accepted  
**Bond Number:** 014063546  
**Bond Amount:** \$898,400.00  
**NAIC:** 23043

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KNOW ALL MEN BY THESE PRESENTS, That we, *HRI, Inc. of 1750 West College Avenue, State College, PA 16801* as PRINCIPAL, and Liberty Mutual Insurance Company a corporation, as SURETY, are held and firmly bound unto the *Commonwealth of Pennsylvania* in the full and just sum of *\$898,400.00*, lawful money of the United States of America, to be paid to the said Commonwealth of Pennsylvania, or it assigns, to which payment well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

Sealed with our respective seals and dated this 16 day of October A.D. 2012.

Whereas, the above bounden PRINCIPAL has undertaken to contract with the said Commonwealth of Pennsylvania, by and through the Secretary of Transportation covering the work identified below for approximately the sum of the bond amount defined above.

This is a Design/ Build Project. For the rehabilitation and improvement of a certain section of STATE HIGHWAY in PIKE COUNTY, BLOOMING GROVE TOWNSHIP, Commonwealth of Pennsylvania, STATE ROUTE 0739, SECTION 452. The project being situated as follows: From a point approximately 0.09 miles (483 feet) Northwest from the intersections with SR 8008 (Ramp F I-84E ramp) at Segment 0280 Offset 2685 (Station 87+00) to a point approximately 0.35 miles (1853 feet) Northwest of the intersection with SR 8008 (Ramp F I-84E ramp) at Segment 0290 Offset 0707 (Station 24+00) along SR 739. This project is a design build bridge replacement over Shohola Creek on a new roadway alignment to the inside of the existing curve. The proposed curve radius is longer to accommodate half-width construction with temporary signals. Additional work for the project includes drainage, roadway, guide rail placement, and side road/driveway adjustments, all contained within an overall project length of 0.224 miles as indicated on the approved drawings included in the bid package.

and

WHEREAS, it was one of the conditions of the award of the Secretary of Transportation, acting for and on behalf of the Commonwealth of Pennsylvania, pursuant to which said contract was undertaken by the PRINCIPAL that these presents should be executed, to become binding upon the date the said contract is approved for the office of Budget, by the Comptroller.

NOW, THEREFORE, The conditions of this obligation is such that if the above bounden PRINCIPAL shall and will promptly or cause to be paid in full all sums of money which may be due by contractor or corporation, for all materials furnished or labor supplied or performed in the prosecution of the work, whether or not the said material or labor entered into and became component parts of the work or improvement contemplated, and for rental of the equipment used and services rendered by public utilities in, or in connection with, the prosecution of such work, then this obligation to be void, otherwise to remain in full force and effect.

The PRINCIPAL and SURETY hereby, jointly and severally, agree with the obligee herein that any individual, firm, partnership, association or corporation, which has performed labor or furnished material in the prosecution of the work as provided, and any public utility which has rendered services in, or in connection with, the prosecution of such work, and which has not been paid in full therefor, may sue *assumpsit* on this Payment Bond in his, their, or its own name and may prosecute the same to final judgement for such sum or sums as may be justly due to him, them, or it, and have execution thereon. Provided, however, that the Commonwealth shall not be liable for the payment of any costs or expenses of such suit.

Recovery by any individual, firm, partnership, association or corporation hereunder shall be subject to the provisions of the "Public Works Contractors' Bond Law of 1967", Act No. 385, approved December 20, 1967, P.L. 869, which Act shall be incorporated herein and made a part hereof, as fully and completely as though its provisions were fully and at length herein recited.

It is further provided that any alteration which may be made in the terms of the contract or in the work to be done or materials to be furnished or labor to be supplied or performed under it or the giving by the Commonwealth of any extension of time for the performance of the contract or any other forbearance on the part of either the Commonwealth or the Principal to the other shall not in any way release the PRINCIPAL and the SURETY or SURETIES or either or any of them, their heirs, executors, administrators, successors or assigns, from their liability hereunder, notice to the SURETY or SURETIES of any such alteration, extension, or forbearance being hereby waived.

IN WITNESS WHEREOF, the said PRINCIPAL and SURETY have duly executed this Bond under seal the day and year firstabove written.

**Attorney-in-Fact Certification**

\*The undersigned attorney-in-fact by executing this Payment Bond certifies that he/she is licensed with the company named as surety for this bond and that to the best of his/her knowledge the said surety is licensed with the Pennsylvania Insurance Department.

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**Bond Workflow Status**

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Status	Name	Disposition	Date/Time
Draft	John R Kulka PE/PennDOT BP-001239	Submit	10/12/2012 02:53:54 PM
Producer Review	Jeannette Porrini/PennDOT BP-002702	Sign	10/16/2012 09:48:03 AM
Contractor Review	John R Kulka PE/PennDOT BP-001239	Sign	10/16/2012 10:01:10 AM
BOD CMD Review	Roland L Rode/PennDOT	Accept	10/16/2012 01:11:57 PM

**Surety Company:** The Fidelity and Deposit Company of Maryland  
**Bonding Agency:** Willis of New York, Inc.  
**Producer:** Jeannette Porrini/PennDOT BP-002702  
**Co-Insurer:** Yes

**Status:** Accepted  
**Bond Number:** 9100282  
**Bond Amount:** \$898,400.00  
**NAIC:** 39306

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KNOW ALL MEN BY THESE PRESENTS, That we, *HRI, Inc. of 1750 West College Avenue, State College, PA 16801* as PRINCIPAL, and The Fidelity and Deposit Company of Maryland a corporation, as SURETY, are held and firmly bound unto the Commonwealth of Pennsylvania in the full and just sum of \$898,400.00, lawful money of the United States of America, to be paid to the said Commonwealth of Pennsylvania, or it assigns, to which payment well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

Sealed with our respective seals and dated this 16 day of October A.D. 2012.

Whereas, the above bounden PRINCIPAL has undertaken to contract with the said Commonwealth of Pennsylvania, by and through the Secretary of Transportation covering the work identified below for approximately the sum of the bond amount defined above.

This is a Design/ Build Project. For the rehabilitation and improvement of a certain section of STATE HIGHWAY in PIKE COUNTY, BLOOMING GROVE TOWNSHIP, Commonwealth of Pennsylvania, STATE ROUTE 0739, SECTION 452. The project being situated as follows: From a point approximately 0.09 miles (483 feet) Northwest from the intersections with SR 8008 (Ramp F I-84E ramp) at Segment 0280 Offset 2685 (Station 87+00) to a point approximately 0.35 miles (1853 feet) Northwest of the intersection with SR 8008 (Ramp F I-84E ramp) at Segment 0290 Offset 0707 (Station 24+00) along SR 739. This project is a design build bridge replacement over Shohola Creek on a new roadway alignment to the inside of the existing curve. The proposed curve radius is longer to accommodate half-width construction with temporary signals. Additional work for the project includes drainage, roadway, guide rail placement, and side road/driveway adjustments, all contained within an overall project length of 0.224 miles as indicated on the approved drawings included in the bid package.

and

WHEREAS, it was one of the conditions of the award of the Secretary of Transportation, acting for and on behalf of the Commonwealth of Pennsylvania, pursuant to which said contract was undertaken by the PRINCIPAL that these presents should be executed, to become binding upon the date the said contract is approved for the office of Budget, by the Comptroller.

NOW, THEREFORE, The conditions of this obligation is such that if the above bounden PRINCIPAL shall and will promptly or cause to be paid in full all sums of money which may be due by contractor or corporation, for all materials furnished or labor supplied or performed in the prosecution of the work, whether or not the said material or labor entered into and became component parts of the work or improvement contemplated, and for rental of the equipment used and services rendered by public utilities in, or in connection with, the prosecution of such work, then this obligation to be void, otherwise to remain in full force and effect.

The PRINCIPAL and SURETY hereby, jointly and severally, agree with the obligee herein that any individual, firm, partnership, association or corporation, which has performed labor or furnished material in the prosecution of the work as provided, and any public utility which has rendered services in, or in connection with, the prosecution of such work, and which has not been paid in full therefor, may sue *assumpsit* on this Payment Bond in his, their, or its own name and may prosecute the same to final judgement for such sum or sums as may be justly due to him, them, or it, and have execution thereon. Provided, however, that the Commonwealth shall not be liable for the payment of any costs or expenses of such suit.

Recovery by any individual, firm, partnership, association or corporation hereunder shall be subject to the provisions of the "Public Works Contractors' Bond Law of 1967", Act No. 385, approved December 20, 1967, P.L. 869, which Act shall be incorporated herein and made a part hereof, as fully and completely as though its provisions were fully and at length herein recited.

It is further provided that any alteration which may be made in the terms of the contract or in the work to be done or materials to be furnished or labor to be supplied or performed under it or the giving by the Commonwealth of any extension of time for the performance of the contract or any other forbearance on the part of either the Commonwealth or the Principal to the other shall not in any way release the PRINCIPAL and the SURETY or SURETIES or either or any of them, their heirs, executors, administrators, successors or assigns, from their liability hereunder, notice to the SURETY or SURETIES of any such alteration, extension, or forbearance being hereby waived.

IN WITNESS WHEREOF, the said PRINCIPAL and SURETY have duly executed this Bond under seal the day and year first above written.

**Attorney-in-Fact Certification**

\*The undersigned attorney-in-fact by executing this Payment Bond certifies that he/she is licensed with the company named as surety for this bond and that to the best of his/her knowledge the said surety is licensed with the Pennsylvania Insurance Department.

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**Bond Workflow Status**

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<b>Status</b>	<b>Name</b>	<b>Disposition</b>	<b>Date/Time</b>
Draft	John R Kulka PE/PennDOT BP-001239	Submit	10/12/2012 02:54:04 PM
Producer Review	Jeannette Porrini/PennDOT BP-002702	Sign	10/16/2012 09:49:04 AM
Contractor Review	John R Kulka PE/PennDOT BP-001239	Sign	10/16/2012 10:00:18 AM
BOD CMD Review	Roland L Rode/PennDOT	Accept	10/16/2012 01:11:00 PM

## Insurance

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**Liberty Mutual**

Riverside Office Park  
9 Riverside Road  
Weston, MA 02493-2298

**Company:** Liberty Mutual - Adrienne Kisonas  
**Policy:** TB2-631-004125-692  
**Expiration:** 04/01/2013

## DBE Commitments

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**DBE:** 5%  
**Approved:** 5.10%

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**Perform Less Than 50% of Work Items:** No  
**Good Faith Effort Evaluation:** No

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<b>Status</b>	<b>Business Partner</b>	<b>Business</b>	<b>% of Bid</b>	<b>Submitted</b>	<b>Acknowledged</b>
Conditionally Approved	Guidemark, Inc.	Subcontractor	0.58%	10/03/2012	10/01/2012
Conditionally Approved	Ward Steel Services & Supply Company LLC	Regular Dealer	2.12%	10/03/2012	10/03/2012
Approved	American Geotechnical & Environmental Services, Inc.	Subcontractor	0.83%	10/03/2012	10/01/2012
Approved	Established Traffic Control, Inc.	Subcontractor	1.56%	10/03/2012	10/01/2012

**Guidemark, Inc.**

**Prime**

**Contact:** Phillip Carper  
**Phone:** 570-585-2128  
**DBE:** 5%

**Status:** Conditionally Approved  
**Revision Number:**

**DBE**

**Business Partner:** Guidemark, Inc.  
**Type:** DBE  
**Contact:** Doug Dolinar  
**Phone:** 215-721-7100  
**DBE JVT%:**  
**Certification:** 11706  
**Cert. Expiration:** 03/31/2014

**Agreement Amount:** \$10,336.00  
**% of Bid:** 0.58  
**Mobilization:** \$1,800.00  
**Starting:** 04/01/2014  
**Completion:** 10/31/2014  
**Business Type:** Subcontractor

**Items**

None

**Partial Items**

Item	Description	Unit of Measure	Quantity
8901-1011	CONSTRUCT MAINTENANCE AND PROTECTION OF TRAFFIC	LS	1.000

**Comment**

None

**Workflow**

Status	Name	Disposition	Date/Time
Draft	Phil A Carper/PennDOT BP-001239	Submit	10/01/2012 12:36:41 PM
Awaiting Acknowledgement	Nancy E Dolinar/PennDOT BP-000759	Acknowledge	10/01/2012 04:11:35 PM
Acknowledged	Phil A Carper/PennDOT BP-001239	Submit	10/03/2012 08:46:50 AM
PennDOT Review	Delores A Ritzman/PennDOT	Conditionally Approve	10/03/2012 01:40:06 PM

**Ward Steel Services & Supply Company LLC**

**Prime**

**Contact:** Phillip Carper  
**Phone:** 570-585-2128  
**DBE:** 5%

**Status:** Conditionally Approved  
**Revision Number:**

**DBE**

**Business Partner:** Ward Steel Services & Supply Company LLC  
**Type:** DBE  
**Contact:** Ed Stover  
**Phone:** 717-678-8989  
**DBE JVT%:**  
**Certification:** 12618  
**Cert. Expiration:** 04/30/2015

**Agreement Amount:** \$38,071.60  
**% of Bid:** 2.12  
**Mobilization:** \$0.00  
**Starting:** 04/01/2014  
**Completion:** 10/31/2014  
**Business Type:** Regular Dealer

**Items**

None

**Partial Items**

Item	Description	Unit of Measure	Quantity
8250-0001	CONSTRUCTION OF PRESTRESSED CONCRETE BRIDGE, S-31651	LS	1.000

**Comment**

None

**Workflow**

Status	Name	Disposition	Date/Time
Draft	Phil A Carper/PennDOT BP-001239	Submit	10/02/2012 04:05:49 PM
Awaiting Acknowledgement	Edward S Stover 111/ PennDOT BP-004136	Acknowledge	10/03/2012 08:23:05 AM
Acknowledged	Phil A Carper/PennDOT BP-001239	Submit	10/03/2012 08:46:50 AM
PennDOT Review	Delores A Ritzman/PennDOT	Conditionally Approve	10/03/2012 01:44:05 PM

**American Geotechnical & Environmental Services, Inc.**

**Prime**

**Contact:** Phillip Carper  
**Phone:** 570-585-2128  
**DBE:** 5%

**Status:** Approved  
**Revision Number:**

**DBE**

**Business Partner:** American Geotechnical & Environmental Services, Inc.  
**Type:** DBE  
**Contact:** K P Chopra  
**Phone:** 724-916-0300  
**DBE JVT%:**  
**Certification:** 10702  
**Cert. Expiration:** 01/31/2013

**Agreement Amount:** \$15,000.00  
**% of Bid:** 0.83  
**Mobilization:** \$0.00  
**Starting:** 01/01/2013  
**Completion:** 10/31/2013  
**Business Type:** Subcontractor

**Items**

None

**Partial Items**

Item	Description	Unit of Measure	Quantity
8211-0001	DESIGN OF BRIDGE STRUCTURE (NO AS-DESIGNED FOUNDATION PROVIDED, NO PERMIT), S-31651	LS	1.000

**Comment**

None

**Workflow**

Status	Name	Disposition	Date/Time
Draft	Phil A Carper/PennDOT BP-001239	Submit	10/01/2012 12:13:00 PM
Awaiting Acknowledgement	Neil Styler/PennDOT BP-000025	Acknowledge	10/01/2012 02:56:21 PM
Acknowledged	Phil A Carper/PennDOT BP-001239	Submit	10/03/2012 08:46:50 AM
PennDOT Review	Delores A Ritzman/PennDOT	Approve	10/03/2012 12:44:12 PM

**Established Traffic Control, Inc.**

**Prime**

**Contact:** Phillip Carper  
**Phone:** 570-585-2128  
**DBE:** 5%

**Status:** Approved  
**Revision Number:**

**DBE**

**Business Partner:** Established Traffic Control, Inc.  
**Type:** DBE  
**Contact:** Kevin McFadden  
**Phone:** 215-997-8801  
**DBE JVT%:**  
**Certification:** 12119  
**Cert. Expiration:** 04/30/2014

**Agreement Amount:** \$27,987.00  
**% of Bid:** 1.56  
**Mobilization:** \$0.00  
**Starting:** 03/17/2014  
**Completion:** 10/31/2014  
**Business Type:** Subcontractor

**Items**

None

**Partial Items**

Item	Description	Unit of Measure	Quantity
9000-0500	AIDS TO NAVIGATION PLAN	LS	1.000
8901-1011	CONSTRUCT MAINTENANCE AND PROTECTION OF TRAFFIC	LS	1.000

**Comment**

None

**Workflow**

Status	Name	Disposition	Date/Time
Draft	Phil A Carper/PennDOT BP-001239	Submit	10/01/2012 12:06:53 PM
Awaiting Acknowledgement	Kevin McFadden/PennDOT BP-002897	Acknowledge	10/01/2012 03:29:22 PM
Acknowledged	Phil A Carper/PennDOT BP-001239	Submit	10/03/2012 08:46:50 AM
PennDOT Review	Delores A Ritzman/PennDOT	Approve	10/03/2012 01:37:13 PM

# Plans

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**Plans**

**Addendum**

Roadway Plan

**Supplemental Plans**

Cross Section

Existing Structure Plan

Other/Project-Specific Plan - Soil Borings

Structure Plan

Traffic Control Plan

## Attachments

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### Project-Specific Checklist Items

Addendum

- Project Specific - H&H Report
- Project Specific - Pre-Qualified RW Consultant List
- Project Specific - R-O-W Scope of Work
- Project Specific - Bridge Restriction
- Project Specific - Bridge Restriction Opening
- Project Specific - Steel Escalation Option Form
- Project Specific - Bridge / Structures Related Effective Policy Letters
- Project Specific - Certificate of Non-Affiliation
- Project Specific - ATON Sign
- Project Specific - ATON Sign Specs

### Reviews

None

### Contract Award Items

- Disclosure of Lobbying Activities
- F.A.R. REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS
- Federal Wage Rate

### Local Agreements and Coordination

None

### Environmental Clearances

None

### Permits

- Environmental Due Diligence (EDD) - Contractor
- Environmental Due Diligence (EDD) - PennDOT

### Right of Way

None

### Survey

None

### Utilities Clearance

None

### Utility Engineering

None

### Construction Items

- Pre-Bid Construction Schedule

### Structures and Geotechnical

- Foundation Report - Foundation Guidance Report

### Railroad Coordination

None

**Traffic**

None

**Construction Coordination**

None

**Maintenance Items**

None

**Estimates**

None

**Comments:**