

Contract No.:



**U S DEPARTMENT OF TRANSPORTATION**

**FEDERAL HIGHWAY ADMINISTRATION**

**EASTERN FEDERAL LANDS HIGHWAY DIVISION**

**PROJECT PRA-DEWA 14(12)  
DELAWARE WATER GAP  
NATIONAL RECREATION AREA  
PMIS NO. 79598**

**SOLICITATION**

**IFB NO. DTFH71-08-B-00007**

**This Contract Cites  
Standard Specifications FP- 03  
Metric Units**

**CONTRACTOR:  
ADDRESS:**

**STATE:** Pennsylvania

**COUNTY:** Monroe and Pike

**PARK:** Delaware Water Gap National Recreation Area

**BRIDGE REHABILITATION:**

U.S. Route 209 Bridge Over Bushkill Creek, Structure No. 4320-009P (MP 1.4)

Structure Length: 57.9m (190.0 FT)

Span Length: 18.9m (62.0 FT)

**LAST INSPECTION DATE:** October 2005

**TYPE OF IMPROVEMENT:**

Abutment and pier repairs, bearing and expansion joint replacement, and deck overlay. Note: No road work is proposed for this project.

# TABLE OF CONTENTS

	<u>Page</u>
Notice to Bidders	1 through 2
Checklist for Bid Submission	1 through 2
<b>*New Questionnaire Form on Calendar Days</b>	<b>1 Page</b>
<b>*SF-1442 Solicitation, Offer, and Award</b>	<b>A-1 through A-2</b>
Continuation of SF 1442	A-3 through A-4
Bid Schedule Instructions	1 through 2
<b>*Bid Schedule</b>	<b>B-1 through B-5</b>
<b>*SF-24 Bid Bond</b>	<b>C-1 through C-2</b>

## FEDERAL ACQUISITION REGULATION & TRANSPORTATION ACQUISITION REGULATION SOLICITATION PROVISIONS & CONTRACT CLAUSES

Index to Federal and Transportation Acquisition Regulations	1 through 6
Representations and Certifications (OCRA online)	D-1
Instructions to Bidders	E-1
<b>*Socioeconomic Program Requirements</b>	<b>F-1 through F-8</b>
Minimum Wage Schedule	F-9 through F-21
<b>*General Contract Requirements</b>	<b>G-1 through G-4</b>
Construction Contract Requirements	H-1

## SPECIFICATIONS

Special Contract Requirements	J-1 through J-76
Permits	15 Pages
Plans	35 Pages

**\*BOLD FACED ITEMS ARE TO BE INCLUDED WITH THE BID SUBMITTAL PACKAGE**

**Bidders Qualification questionnaire regarding the preparation of the bid for time:**

- 1) Does the bid for time include the impact of normal weather conditions on the work of the Contract?
- 2) Does the bid for time include the impact of the terms of the Contract Specifications regarding work restrictions - including all identified delays, suspensions, and shut-downs?
- 3) Does the bid for time include sufficient time to allow that all contract work can be completed within contract time without the imposition of liquidated damages?
- 4) Does the bid for time include time for the review and approval process for all submittals required by the Contract?
- 5) Does the bid for time include time for the review and approval process for required drawings submitted under Subsection 104.03 of the Specifications?
- 6) Does the bid for time include the lead time required for the procurement, manufacture, and delivery of materials that are to be incorporated into the Contract work?
- 7) Does the bid for time include sufficient time to accommodate the fact that the date of Notice to Proceed is conditional upon the Government awarding the contract up to 60 days after the bid opening?
- 8) Does the bid for time include the 14 days after the award of the Contract that the Contractor has to provide Performance and Payment bonds?
- 9) Does the bid for time include sufficient time to accommodate the fact that the Contracting Officer has up to 30 days after receipt of acceptable Performance and Payment bonds to issue the Notice to Proceed?

I hereby certify that the answer to each and every one of the questions listed above is yes.

\_\_\_\_\_  
Signature of Authorized Representative

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

**Note: If the questionnaire is not signed the bid shall be found non-responsive and rejected.**

## **NOTICE TO BIDDERS**

### **CONTRACT FORMAT:**

Offerors should note that the format of this contract is in accordance with Federal Acquisition Regulations (FAR), promulgated by the General Services Administration (GSA), effective April 1, 1984, including all applicable revisions. Applicable FAR provisions and clauses are incorporated in this contract by reference or full text as indicated in the INDEX before the D-page in this booklet. FAR provisions and clauses incorporated by reference can be accessed on the Internet on the GSA website at [www.arnet.gov/far/](http://www.arnet.gov/far/). Offerors are encouraged to review the documents thoroughly before bidding.

### **PROPOSAL BOOKLET AND OFFER SUBMITTAL:**

It is the responsibility of the Offeror to verify that this proposal is complete as listed in the Table of Contents. The Offeror is responsible for submitting all required forms and documents with the offer. Offerors should use the Checklist for Bid Submittal included in this booklet to check that their bids are complete. **New Questionnaire Form on Calendar Days with required signature.**

### **CONSTRUCTION CONTRACTS:**

As stated in FAR Clause 52.236-1, the **Contractor shall perform on the site, and with its own organization, work equivalent to at least 50%**. Additional guidance is given in FAR Subpart 35.005 where the majority of the project work is complex and specialized such as restoration work, bridge painting, and proprietary construction techniques (i.e. proprietary Cintec arch strengthening.) There are exceptions and they will be reviewed on a case-by-case basis.

### **HAZARDOUS MATERIALS IDENTIFICATION AND MATERIAL SAFETY DATA:**

As required by FAR Clause 52.223-3, Hazardous Materials Identification and Safety Data, the apparent low Offeror must submit prior to award a Material Safety Data Sheet (MSDS's) for all hazardous materials that the Offeror identifies in paragraph (b) of this clause in the D-pages of this booklet. Failure to submit MSDS's may render the Offeror ineligible for award of contract. The apparent low Offeror should submit their MSDS's within two weeks after bid opening.

### **ATTENTION LARGE BUSINESSES - UTILIZATION OF SMALL BUSINESS CONCERNS:**

Large business Offerors should note their responsibilities in the awarding of subcontracts in accordance with FAR Clause 52.219-8, Utilization of Small Business Concerns. The offeror, if a large business concern, should note its responsibility to establish and conduct a Subcontracting Plan in accordance with FAR Clause 52.219-9, Alternate I, Small Business Subcontracting Plan. If the apparent Low Offeror is a LARGE BUSINESS it will be required to submit a Subcontracting Plan within 2 weeks of receipt of request from the Contracting Officer. If the apparent low offeror fails to submit a subcontracting plan acceptable to the Contracting Officer within the allowable time, the offeror may be ineligible for award of the contract. PLEASE NOTE: A sample plan is included in this solicitation package for your use.

**FINANCING ASSISTANCE:** Minority, Women-owned, and Disadvantaged Business Enterprises (DBE's). The Department of Transportation (DOT) offers working capital financing assistance for transportation related contracts. DOT's Short-Term Lending Program (STLP) offers lines of credit to finance accounts receivable. Maximum line of credit is \$750,000 with interest at the prime rate. For further information, call (800) 532-1169. Internet address: <http://osdbuweb.dot.gov>.

**INTERNET BASED DATA BASES - REQUIRED INPUT:** According to the FAR Subpart 4.1102 contractors **MUST** be registered in Central Contractor Registration (CCR) **prior** to the award of any contract. Access the following web site to register: [www.ccr.gov](http://www.ccr.gov)

According to the FAR Subpart 4.1201 contractors **MUST** complete their Online Annual

Representations and Certifications Application (ORCA) **prior** to the closing date of the bid on line at <http://orca.bpn.gov/>.

According to the FAR Subpart 22.1302 (b) contractors and sub-contractors **MUST** complete the required Annual Vets-100 Form in order to be eligible for a contract award. It can be completed on-line at <http://vets100.cudenver.edu/>.

## **NOTICE TO BIDDERS - (CONT'D.)**

**This should be completed before submitting a bid package.**

### **PAYMENT:**

Offerors are advised to review the Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects (FP), subsection 109.05, concerning **direct** and **indirect** payment included under a pay item in the bid schedule.

### **PROGRESS PAYMENTS:**

ALL payments will be made via Electronic Funds Transfer (EFT) as such; the payment information in the CCR must be accurate in order for contractors' invoices to be considered proper invoices for the purpose of prompt payment under DOT contracts. Contractors must input and maintain (update as necessary) their EFT information in the CCR database. Offerors are advised that under FAR Clause 52.232-5, Payments Under Fixed Price Construction Contracts, upon request, progress payments will include premiums paid by the Contractor to obtain performance and payment bonds as required under this contract. These payments shall not be made in addition to the contract price. As specified in the FP, "Section 151 - MOBILIZATION", payments for performance and payment bond premiums shall be included in mobilization.

### **WELFARE-TO-WORK INITIATIVE:**

The President's Welfare Reform Bill was initiated to assist welfare recipients and hopefully aid welfare recipients to find gainful employment. In support of this bill, Contractors are encouraged to hire welfare recipients whenever possible and to use welfare recipients in performance of duties on Government contracts.

### **INCREASING SEAT BELT USE IN THE UNITED STATES:**

The President's Executive Order 13043 dated April 16, 1997, was issued to increase the use of seat belts in the United States. In support of this Order, contractors and subcontractors are encouraged to adopt and enforce on-the-job seat belt policies for their employees when operating company-owned, rented, or personally owned vehicles.

### **OBTAINING BID DOCUMENTS:**

Bid documents **will not be** mailed. All bid documents are available for direct download from the Federal Business Opportunities (FBO) website:

[http://www.fbo.gov/spg/DOT/FHWA/71/postdatePrevDays\\_1.html](http://www.fbo.gov/spg/DOT/FHWA/71/postdatePrevDays_1.html)

or the Eastern Federal Lands Highway Division website:

<http://www.efl.fhwa.dot.gov/contracting/Documents.aspx>

Contractors are encouraged to register on the FBO website (for this specific project) in order to receive Email Notifications automatically when a document is added or updated for this specific project. All questions about this construction project must be emailed to the following address:

[eflhd.contracts@fhwa.dot.gov](mailto:eflhd.contracts@fhwa.dot.gov).

**THE CONTRACTOR IS SOLELY RESPONSIBLE FOR MONITORING THE WEB PAGES NOTED ABOVE FOR ALL CHANGES TO THE SOLICITATION AND ACTING ON SAID CHANGES.**

**PLEASE NOTE: for security reasons, individuals requiring access to all government buildings must present a valid photo ID and be escorted to their destination by a Government employee. All visitors attending bid openings are urged to arrive at least 1 hour prior to schedule bid opening. All visitors must register with the receptionist in Room 100. A Government employee will collect all bids. Prior to bid opening, a Government employee will escort all bidders to the bid opening. Unescorted visitors will be denied entry and no exceptions will be made.**

## CHECKLIST FOR BID SUBMISSION

The following is a checklist of items included in the proposal/bid package that are required to be completed and returned (or filled in on-line) to the address in Block 8 of the Standard Form 1442, Solicitation, Offer, and Award (page A-1). This checklist is for informational purposes only and is not required to be filled out by the bidder. **Failure to submit a complete bid may be cause to reject your bid.**

### 1. Bid Envelope:

- a. Addressed as shown in Block 8 of Page A-1
- b. In lower left corner, indicate Solicitation No., Project Name & Number, time for Receipt of Offers and send to Room 105.

### 2. Standard Form 1442: Solicitation, Offer and Award (Pages A-1 and A-2)

- a. Block 14: Name and Address of Bidder.
- b. Block 15: Telephone Number of Bidder.
- c. Block 16: Remittance Address if different from Block 14.
- d. Block 19: **All** Amendments Acknowledged, with dates of Amendments.
- e. Block 20: Bid is signed and dated.

### 3. Bid Schedule - (Pages B-1 through B-5)

- a. Unit bid price and bid amount provided for each pay item in numbers.
- b. Corrections initialed.
- c. Price Evaluation eligibility is indicated on the Bid Summary page.

### 4. Standard Form 24, Bid Bond (Pages C-1 through C-2) (Required if bid guarantee is bid bond)

- a. Date executed
- b. Legal name and address of bidder.
- c. Type of organization.
- d. State of incorporation (if applicable).
- e. Name and business address of Treasury approved surety.
- f. Penal sum of bond (not less than 20% of bid total).
- g. Bid identification.
- h. Signature of Bidder
- i. Seal, if corporation
- j. Signature of Surety
- k. Seal, if corporation

***BIDS RECEIVED WITHOUT A VALID BID BOND WILL BE REJECTED.***

### 5. Power of Attorney.

- a. Dated on or before execution date of bond
- b. Power has original signature of surety, or is embossed with surety's seal in the certification section

***BIDS RECEIVED WITHOUT A VALID POWER OF ATTORNEY WILL BE REJECTED.***

## CHECKLIST FOR BID SUBMISSION

**6. Fill In's.** The following full text Clauses and/or Provision numbers shall be checked or filled in and return with the bid package:

- a. 52.219-4 – HubZone ONLY - See Section F, Clause 52-219-4, paragraph "C", check block if wavier is applicable.

**7. Bidder's Qualifications form (provided separately as part of the Bid Documents Package).** Form completed, signed and submitted with bid

**8. Bidder's Questionnaire on Calendar Days signature required (if not completed bid shall be found non-responsive).**

**9. Sub-Contracting Plan - Large Businesses Only:** Submittal with the bid is not mandatory, **but it is encouraged**, as it will speed up the award process should your firm be the apparent low bid.

***THE FOLLOWING THREE ITEMS ARE NOT TO BE SUBMITTED WITH THE BID; BUT FAILURE TO COMPLETE THE REQUIREMENTS WILL BE CAUSE TO REJECT THE BID.***

**10. Central Contractor Registration (CCR):** The Contractor is currently registered in the Internet-Based CCR database at <http://www.ccr.gov>.

**11. Online Representations and Certifications Application (ORCA):** The Contractor's Representations and Certifications have been input online via the Internet-Based ORCA electronic database at <http://orca.bpn.gov>.

**12. Vets100 Reporting:** The Contractor has completed the annual Internet-Based reporting requirement online at <http://vets100>.

***NOTE: THE CONTRACTOR IS FULLY RESPONSIBLE TO VERIFY THAT ALL DATA IN THE THREE DATABASES IS CORRECT EACH TIME A BID PACKAGE IS SUBMITTED. FAILURE PROPERLY INPUT AND/OR UPDATE YOUR DATA MAY CAUSE THE BID TO BE REJECTED.***

<b>SOLICITATION, OFFER, AND AWARD</b> <i>(Construction, Alteration, or Repair)</i>	1. Solicitation No. <b>DTFH71-08-B-00007</b>	2. Type of Solicitation <input checked="" type="checkbox"/> Sealed Bid ( <i>IFB</i> ) <input type="checkbox"/> Negotiated ( <i>RFP</i> )	3. Date Issued <b>03/14/08</b>	Page of Pages 1 OF 4
	<b>IMPORTANT - The "offer" section on the reverse must be fully completed by offeror.</b>			

4. Contract No.	5. Requisition/Purchase Request No.	6. Project No. <b>PRA-DEWA 14(12)</b>
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7. Issued By: <b>Federal Highway Administration Eastern Federal Lands Highway Division Loudoun Tech Center, Room 105 21400 Ridgetop Circle Sterling, Virginia 20166-6511</b>	CODE: N/A:	8. Address Offer To:  <b>See Block 7</b>
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9. FOR INFORMATION See Blocks 9A & 9B	A. Name: <b>Joanne Lowe</b>	B. Telephone No. (Include area code) (NO COLLECT CALLS) Email All Questions/Inquiries To: <b>eflhd.contracts@fhwa.dot.gov</b>
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**SOLICITATION**

See Continuation of SF 1442

**NOTE: In sealed bid solicitations "offer" and "offeror" mean "bid" and "bidder"**

10. The Government requires performance of the work described in these documents (title, identifying no., date): This Invitation for Bids is for the for the Delaware Water Gap National Recreation Area Project, located in Monroe and Pike Counties, Pennsylvania.in strict accordance with the Solicitation/Contract instructions, notices, clauses, provisions, \*items listed below, and for the quantities of work actually performed at the unit prices as bid in the Bid Schedule, including all applicable Federal, State, and local taxes.
- \* FP - Standard Specification for Construction of Roads & Bridges on Federal Highway Projects.
  - \* Bid Schedule, Section B - pages B-1 through B-5.
  - \* Special Contract Requirements, Section J - pages J-1 through J-76.
  - \* Plans (Drawings), Sheets 1 through 35.

11. The Contractor shall begin performance within **10** calendar days and complete it within    calendar days after receiving
- Award,  Notice to Proceed. This performance period is  mandatory,  negotiable. (See \*Continuation Sheet)

12A. THE CONTRACTOR MUST FURNISH ANY REQUIRED PERFORMANCE AND PAYMENT BONDS? (If "YES," indicate within how many calendar days after award in Item 12B.) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO SEE SUBSECTION 102.06 OF FP.	12B. CALENDAR DAYS Within <b>14</b> calendar days after Notice of Award
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13. ADDITIONAL SOLICITATION REQUIREMENTS:
- a. Offers in original and **0** copies to perform the work required are due at the place specified in Item 8 by **2:00 PM** local time **04/15/2008**. If this is a sealed bid solicitation, offers will be publicly opened at that time. Sealed envelopes containing offers shall be marked to show the offeror's name and address, the solicitation number, and the date and time offers are due.
- b. An offer guarantee  **is**,  is not required.
- c. All offers are subject to the (1) work requirements, and (2) other provisions and clauses incorporated in the solicitation in full text or by reference.
- d. Offers providing less than **60** calendar days for Government acceptance after the date offers are due will not be considered and will be rejected.



# CONTINUATION OF SF 1442

**Block 2:**

This project is **UN-RESTRICTED** - Bids will be accepted from **ALL** eligible business concerns.

This procurement is made pursuant to Public Law 100-656 Title VII, which established the Small Business Competitiveness Demonstration Program. This procurement falls under North American Industry Classification System (NAICS) code 237310 - Highway, Street, and Bridge Construction (see FAR Subpart 19.10)

The award of this project is subject to a 10% price evaluation preference for eligible HubZone Small Business Concerns (must be on the SBA listing) (see FAR Clause 52.219-4).

Facsimile and electronic bids will not be accepted.

**PHYSICAL DATA AVAILABLE FOR REVIEW**

1. Manual on Uniform Traffic Control Devices for Streets and Highways, 2003 Edition, published by the Federal Highway Administration. <http://mutcd.fhwa.dot.gov>.
2. National Park Service Sign Manual, revised - January 1988, United States Department of the Interior. <http://www.nps.gov/npsigns>.

**Block 9:**

In accordance with FAR Provision 52.236-27, Site Visit, a Government representative can be available to show the project to prospective bidders. **All requests** for site visits and/or questions concerning this construction project to must be emailed to

[eflhd.contracts@fhwa.dot.gov](mailto:eflhd.contracts@fhwa.dot.gov). Interested parties must provide the Solicitation Number and the relevant project name with all requests and questions.

**Block 11:**

The maximum time for completion of the contract is \* 306 calendar days.

The completion time for the contract will be the time offered by the successful bidder, not to exceed the maximum time above.

Notice to Proceed, or date specified in the Notice to Proceed will be issued within 30 days following receipt of acceptable performance and payment bonds.

**Block 12A:**

Furnish performance and payment bonds in accordance with FAR Clause 52.228-15.

**Block 13:**

A bid guarantee in the amount of not less than 20 percent of the bid price or \$3 million, whichever is less, is required with this bid. If the bidder fails to provide the required bid guarantee, such failure may require rejection of the bid. Reference FAR Provision 52.228-1, Bid Guarantee.

# CONTINUATION OF SF 1442

## Other:

Contract award is subject to availability of funds.

The estimated price is expected to fall within the price range of \$1,000, 000 to \$2,000,000.

The work requires contractor design or construction experience per Sections 555, 562, 563, 578, and 579 of the SCR's. All contractors and/or subcontractors that perform surface preparation, paint application, and any related work involving containment and collection of surface preparation debris, disposal of surface preparation debris, and a worker health protection program (including decontamination facilities) shall be certified by the Society for Protective Coatings (formerly Steel Structures Painting Council (SSPC)) to the requirements of SSPC-QP 1.

In addition, all contractors and/or J-29 subcontractors engaged in lead paint removal and any other related work shall be certified by the SSPC to the requirements of SSPC-QP 2. Contractors and/or subcontractors shall be certified at time of bid, must remain certified for the respective work for the duration of the project and submit documentation of certification at time of bid. **Contractor certification shall be submitted with bid proposal. Bid will be considered non-responsive and not accepted if contractor fails to submit certification with bid proposal.** If a contractor's certification expires, the company will not be allowed to perform any work until the certification is reissued. Requests for extension of time for any delay to the completion of the project due to inactive certification will not be considered and liquidated damages will apply.

Responsibility of bidders shall be evaluated in accordance with the information provided on the Bidder's Qualification Form, which can be downloaded from FHWA web site. FP-96 or FP-03 versions can be downloaded at the FHWA web site. FHWA web site is <http://www.epl.fhwa.dot.gov/contracting/Documents.aspx>.

## Subcontracting Goals

Required from all other than Small business when the requirement is expected to exceed \$500,000 [FAR 19.702]. The Contracting Officer, along review and advisory comments from the Office of Small Disadvantaged Business Utilization (OSDBU), is responsible for approving a reasonable and realistic plan [FAR 19.705-4] [TAM 1219.201(e)(6)]. The legislated subcontracting goals are as shown below. A copy of each subcontracting plan (or contractor statement that no subcontracts are to be awarded) must be provided to OSDBU prior to close of negotiations [TAM 1219.705-5 and - 6].

Legislated subcontracting goals: (15 USC 644 (g)(1))

- 5% Small Disadvantaged Businesses (SDB)
- 5% Small Woman Owned Business Entities (SWBE)
- 3% Service-Disabled Veteran-Owned Small Businesses (SDVOSB)

## **BID SCHEDULE INSTRUCTIONS**

**PROJECT:** Delaware Water Gap National Recreation Area,  
PRA-DEWA 14(12)

**BIDDERS PLEASE NOTE:** Before preparing the bid, carefully read the Instructions to Bidders. While preparing the bid, comply with the following:

### COMPLETING THE BID SCHEDULE

Complete the Bid Schedule(s) by handwriting in ink or typing. Specify a Unit Bid Price, in figures with cents to only two decimal places, for each pay item in the Unit Bid Price column for which a quantity is given. Do not enter or tender a Unit Bid Price for any pay item for which no estimated quantity appears in the Bid Schedule. Determine the products of the respective unit prices and quantities, and show them, in figures, in the Amount Bid column. If a Unit Bid Price and Amount Bid have been inserted by the Government for a pay item, do not change the Unit Bid Price and Amount Bid for the pay item. Determine the Bid Total by adding the amounts of the several items, and show in the space provided on Page B-4. In case of multiplication errors, the Amount Bid for the item will be based on the Unit Bid Price.

To be eligible for award, bidders must submit prices for each pay item.

Review Subsection 109.05 of the FP-03 regarding scope of payment for direct and indirect payment work.

### SCHEDULE OF WORK

The Bid Schedule is comprised of the following:

**Schedule A – Consist of the rehabilitation of US Route 209 Bridge over Bushkill Creek, with abutment and pier repairs, bearing and expansion joint replacement, and other miscellaneous work.**

### BIDDING OF CALENDAR DAYS

Determine the number of calendar days necessary to complete Schedule A work from Notice to Proceed to contract completion. Specify the number of calendar days (**NOT to exceed the maximum number of calendar days shown in Block 11 of the SF-1442**) in the space provided on the **Bid Summary** (Page B-5). Failure to specify a number of calendar days for contract completion indicates the bidder accepts the maximum contract completion time provided in Block 11 of the SF-1442.

In developing a construction schedule to determine the number of calendar days included in their bid, bidders should include the work limitations shown in the Special Contract Requirements.

Specific work limitations may be (but are not limited to): holidays and weekends; rush hours; night work; no work periods; traffic control or other work phasing. Bidders are also advised to consider those work items that are weather sensitive and when those work items will be performed. Specific work items are (but not limited to): those that require a minimum ambient air temperature (asphalt paving and surface treatment, pavement striping, stone masonry); those that require maintaining a minimum surface temperature (concrete pavement, structural concrete, painting); and those that have specific planting seasons (turf establishment, sod, trees, plants). The total calendar days bid should include any work limitations and any delay days or contractor winter shutdowns required due to weather sensitive work items.

When evaluating the bids, the Government will consider the Contract Administrative Cost for the project to be \$1,100 per calendar day bid. The Contract Administrative Cost is only used to determine the Total Price of Project.

Add the **Bid Total(s)** and the **Contract Administrative Cost(s)** for each schedule of work as directed on the **Bid Summary** page(s). Show the **Total Price of Project** in the space provided on the **Bid Summary** (Page B-5).

#### BASIS FOR AWARD

The contract will be awarded to the responsive, responsible bidder with the lowest **Total Price of Project**, which is defined as:

**Bid Total of Schedule A + Contract Administrative Cost of Schedule A**

**The number of calendar days specified by the successful bidder for the completion of Schedule A work will become the performance period for the contract.**

**NOTE: Contract Administration Cost is used for ranking purposes only.**

## Bid Schedule

Project: PRA-DEWA 14(12)  
REHABILITATION OF US ROUTE 209 BRIDGE OVER BUSHKILL CREEK

Pay Item No.	Estimated Quantity	Unit Bid Price	Amount Bid
15101-0000	Mobilization ALL	Lump Sum	\$ _____
15201-0000	Construction survey and staking ALL	Lump Sum	\$ _____
15401-0000	Contractor testing ALL	Lump Sum	\$ _____
15705-0100	Soil erosion control, silt fence 150 m	\$ _____	\$ _____
15706-1600	Soil erosion control, stabilized construction entrance 1 Each	\$ _____	\$ _____
20302-2600	Removal of pavement markings 380 m	\$ _____	\$ _____
20305-1000	Removal of concrete 25 m3	\$ _____	\$ _____
41301-0300	Asphalt pavement milling, 32mm depth (Micromilling Bridge Deck and Approach Slabs) 875 m2	\$ _____	\$ _____
55201-0800	Structural concrete, class D (AE) 13 m3	\$ _____	\$ _____
55210-0000	Seal concrete surface 281 m2	\$ _____	\$ _____
55211-0000	Clean and reseal joints 34 m	\$ _____	\$ _____

Bid Schedule A

Project: PRA-DEWA 14(12)  
REHABILITATION OF US ROUTE 209 BRIDGE OVER BUSHKILL CREEK

Pay Item No.	Estimated Quantity	Unit Bid Price	Amount Bid
55401-2000	Reinforcing steel, epoxy coated 2,612 kg	\$ _____	\$ _____
55503-0000	Bridge expansion joints 29 m	\$ _____	\$ _____
56101-0000	Structural concrete bonding 25 m	\$ _____	\$ _____
56202-0000	Temporary support structure ALL	Lump Sum	\$ _____
56302-2000	Painting, steel structure 384 m2	\$ _____	\$ _____
56401-0000	Bearing device 30 Each	\$ _____	\$ _____
57801-0000	High performance concrete 12 m3	\$ _____	\$ _____
57901-0000	Latex modified concrete overlay 906 m2	\$ _____	\$ _____
61905-0000	Tree planking (temporary fence for tree protection) 50 m	\$ _____	\$ _____
62401-0100	Furnishing and placing topsoil, 50mm depth 220 m2	\$ _____	\$ _____
62502-0000	Turf establishment 220 m2	\$ _____	\$ _____
63401-0300	Pavement markings, type B, solid 380 m	\$ _____	\$ _____
63502-0600	Temporary traffic control, barricade type 3 12 Each	\$ _____	\$ _____

Bid Schedule A

Project: PRA-DEWA 14(12)

REHABILITATION OF US ROUTE 209 BRIDGE OVER BUSHKILL CREEK

Pay Item No.	Estimated Quantity	Unit Bid Price	Amount Bid
63502-1300	Temporary traffic control, drum 30 Each	\$ _____	\$ _____
63502-1600	Temporary traffic control, warning light type B 4 Each	\$ _____	\$ _____
63502-2000	Temporary traffic control, portable changeable message sign 4 Each	\$ _____	\$ _____
63502-2100	Temporary traffic control, crash cushion 2 Each	\$ _____	\$ _____
63502-2600	Temporary traffic control, moving temporary crash cushion 2 Each	\$ _____	\$ _____
63502-3100	Temporary traffic control, traffic signal system 1 Each	\$ _____	\$ _____
63503-0400	Temporary traffic control, concrete barrier 150 m	\$ _____	\$ _____
63503-0500	Temporary traffic control, moving concrete barrier 150 m	\$ _____	\$ _____
63503-0700	Temporary traffic control, pavement markings 230 m	\$ _____	\$ _____
63503-0800	Temporary traffic control, pavement marking removal 230 m	\$ _____	\$ _____
63504-1000	Temporary traffic control, construction sign 100.00 m2	\$ _____	\$ _____

Bid Schedule A

Project: PRA-DEWA 14(12)

REHABILITATION OF US ROUTE 209 BRIDGE OVER BUSHKILL CREEK

Pay Item No.	Estimated Quantity	Unit Bid Price	Amount Bid
63701-0000	Field office 1 Each	\$ _____	\$ _____

**TOTAL** \$ \_\_\_\_\_

Submitted by: \_\_\_\_\_  
Name of Bidder

**BID SUMMARY**

Project PRA-DEWA 14(12)  
(Complete for Pages B-1 through B-4)

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**(1) Schedule A Bid Total (from Page B-4)** \$ \_\_\_\_\_

**Contract Administrative Cost**

Number of calendar days necessary to complete all Schedule A work from Notice to Proceed (or date specified in the Notice to Proceed) to completion of Schedule A.

**(2) \_\_\_\_\_ calendar days x \$1,100 per calendar day =** \$ \_\_\_\_\_

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**Total Price of Project**

(1) Bid Total for Schedule A . . . . . (1) \$ \_\_\_\_\_

+ (2) Contract Administrative Cost for Schedule A . . . . . (2) \$ \_\_\_\_\_

= **TOTAL PRICE OF PROJECT** \$ \_\_\_\_\_

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Does the Bidder claim the Price Evaluation Preference for HUBZone Small Business Concerns as defined in FAR Clause 52.219-4?

Yes

No

<b>BID BOND</b> <i>(See instruction on reverse)</i>	DATE BOND EXECUTED <i>(Must not be later than bid opening date)</i>	OMB NO.: 9000-0045
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Public reporting burden for this collection of information is estimated to average 25 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the FAR Secretariat (MVR), Federal Acquisition Policy Division, GSA, Washington, DC 20405.

PRINCIPAL <i>(Legal name and business address)</i>	TYPE OF ORGANIZATION <i>("X" one)</i> <input type="checkbox"/> INDIVIDUAL <input type="checkbox"/> PARTNERSHIP <input type="checkbox"/> JOINT VENTURE <input type="checkbox"/> CORPORATION STATE OF INCORPORATION
--	--

SURETY(IES) *(Name and business address)*

PENAL SUM OF BOND					BID IDENTIFICATION	
PERCENT OF BID PRICE	AMOUNT NOT TO EXCEED				BID DATE	INVITATION NO.
	MILLION(S)	THOUSAND(S)	HUNDRED(S)	CENTS		
					FOR <i>(Construction, Supplies, or Services)</i>	

OBLIGATION:

We, the Principal and Surety(ies) are firmly bound to the United States of America (hereinafter called the Government) in the above penal sum. For payment of the penal sum, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally. However, where the Sureties are corporations acting as co-sureties, we, the Sureties, bind ourselves in such sum "jointly and severally" as well as "severally" only for the purpose of allowing a joint action or actions against any or all of us. For all other purposes, each Surety binds itself, jointly and severally with the Principal, for the payment of the sum shown opposite the name of the Surety. If no limit of liability is indicated, the limit of liability is the full amount of the penal sum.

CONDITIONS:

The Principal has submitted the bid identified above.

THEREFORE:

The above obligation is void if the Principal - (a) upon acceptance by the Government of the bid identified above, within the period specified therein for acceptance (sixty (60) days if no period is specified), executes the further contractual documents and gives the bond(s) required by the terms of the bid as accepted within the time specified (ten (10) days if no period is specified) after receipt of the forms by the principal; or (b) in the event of failure to execute such further contractual documents and give such bonds, pays the Government for any cost of procuring the work which exceeds the amount of the bid.

Each Surety executing this instrument agrees that its obligation is not impaired by any extension(s) of the time for acceptance of the bid that the Principal may grant to the Government. Notice to the surety(ies) of extension(s) are waived. However, waiver of the notice applies only to extensions aggregating not more than sixty (60) calendar days in addition to the period originally allowed for acceptance of the bid.

WITNESS:

The Principal and Surety(ies) executed this bid bond and affixed their seals on the above date.

PRINCIPAL				
SIGNATURE(S)	1.	2.	3.	<i>Corporate Seal</i>
	<i>(Seal)</i>	<i>(Seal)</i>	<i>(Seal)</i>	
NAME(S) & TITLE(S) <i>(Typed)</i>	1.	2.	3.	

INDIVIDUAL SURETY(IES)		
SIGNATURE(S)	1.	2.
	<i>(Seal)</i>	<i>(Seal)</i>
NAME(S) <i>(Typed)</i>	1.	2.

CORPORATE SURETY(IES)				
<b>SURETY A</b>	NAME & ADDRESS		STATE OF INC.	LIABILITY LIMIT (\$)
	SIGNATURE(S)	1.	2.	<i>Corporate Seal</i>
	NAME(S) & TITLE(S) <i>(Typed)</i>	1.	2.	

<b>SURETY B</b>	NAME & ADDRESS		STATE OF INC.	LIABILITY LIMIT (\$)	<i>Corporate Seal</i>
	SIGNATURE(S)	1.	2.		
	NAME(S) & TITLE(S) <i>(Typed)</i>	1.	2.		
<b>SURETY C</b>	NAME & ADDRESS		STATE OF INC.	LIABILITY LIMIT (\$)	<i>Corporate Seal</i>
	SIGNATURE(S)	1.	2.		
	NAME(S) & TITLE(S) <i>(Typed)</i>	1.	2.		
<b>SURETY D</b>	NAME & ADDRESS		STATE OF INC.	LIABILITY LIMIT (\$)	<i>Corporate Seal</i>
	SIGNATURE(S)	1.	2.		
	NAME(S) & TITLE(S) <i>(Typed)</i>	1.	2.		
<b>SURETY E</b>	NAME & ADDRESS		STATE OF INC.	LIABILITY LIMIT (\$)	<i>Corporate Seal</i>
	SIGNATURE(S)	1.	2.		
	NAME(S) & TITLE(S) <i>(Typed)</i>	1.	2.		
<b>SURETY F</b>	NAME & ADDRESS		STATE OF INC.	LIABILITY LIMIT (\$)	<i>Corporate Seal</i>
	SIGNATURE(S)	1.	2.		
	NAME(S) & TITLE(S) <i>(Typed)</i>	1.	2.		
<b>SURETY G</b>	NAME & ADDRESS		STATE OF INC.	LIABILITY LIMIT (\$)	<i>Corporate Seal</i>
	SIGNATURE(S)	1.	2.		
	NAME(S) & TITLE(S) <i>(Typed)</i>	1.	2.		

**INSTRUCTIONS**

1. This form is authorized for use when a bid guaranty is required. Any deviation from this form will require the written approval of the Administrator of General Services.
2. Insert the full legal name and business address of the Principal in the space designated "Principal" on the face of the form. An authorized person shall sign the bond. Any person signing in a representative capacity (e.g., an attorney-in-fact) must furnish evidence of authority if that representative is not a member of the firm, partnership, or joint venture, or an officer of the corporation involved.
3. The bond may express penal sum as a percentage of the bid price. In these cases, the bond may state a maximum dollar limitation (e.g., (e.g., 20% of the bid price but the amount not to exceed \_\_\_\_\_ dollars).
4. (a) Corporations executing the bond as sureties must appear on the Department of the Treasury's list of approved sureties and must act within the limitation listed therein. where more than one corporate surety is involved, their names and addresses shall appear in the spaces (Surety A, Surety B, etc.) headed "CORPORATE SURETY(IES)." In the space designed "SURETY(IES)" on the face of the form, insert only the letter identification of the sureties.  
  
(b) Where individual sureties are involved, a completed Affidavit of Individual surety (Standard Form 28), for each individual surety, shall accompany the bond. The Government may require the surety to furnish additional substantiating information concerning its financial capability.
5. Corporations executing the bond shall affix their corporate seals. Individuals shall execute the bond opposite the word "Corporate Seal"; and shall affix an adhesive seal if executed in Maine, New Hampshire, or any other jurisdiction requiring adhesive seals.
6. Type the name and title of each person signing this bond in the space provided.
7. In its application to negotiated contracts, the terms "bid" and "bidder" shall include "proposal" and "offeror."

# CONTRACT CLAUSES INDEX

## FEDERAL ACQUISITION REGULATION (FAR) & TRANSPORTATION ACQUISITION REGULATION (TAR)

(Updated thru FAC 2005-20 on 09/06/2007)

### 52.252-2 Clauses Incorporated By Reference (Feb 1998)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this address: [www.arnet.gov/far/](http://www.arnet.gov/far/)

(End of Clause)

### FAR & TAR CLAUSES INCORPORATED BY REFERENCE

CLAUSE	TITLE	DATE	REMARKS
52.202-01	DEFINITIONS	Jul-04	
52.203-03	GRATUITIES	Apr-84	
52.203-05	COVENANT AGAINST CONTINGENT FEES	Apr-84	
52.203-07	ANTI-KICKBACK PROCEDURES	Jul-95	
52.203-8	CANCEL. & RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY	Jan-97	
52.203-10	PRICE OR FEE ADJUSTMENT FOR ILLEGAL OR IMPROPER ACTIVITY	Jan-97	
52.203-12	LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS	Sep-07	
52.204-04	PRINTING/COPYING DOUBLE-SIDED ON RECYCLED PAPER	Aug-00	
<b>52.204-07</b>	<b>CENTRAL CONTRACTOR REGISTRATION</b>	Jul-06	Contractor Mandatory Internet Data Input
52.209-06	PROTECTING GOV. INTEREST WHEN SUBCONTRACTING W/ CONT. DEB. SUSP. OR PROP. FOR DEB.	Sep-06	
52.214-26	AUDIT AND RECORDS--SEALED BIDDING	Oct-97	
52.214-27	PRICE REDUCTION FOR DEFECT. COST OR PRICING DATA-MODIFICATIONS -SEALED BIDDING	Oct-97	
52.214-28	SUBCONTRACTOR COST OR PRICING DATA--MODIFICATIONS--SEALED BIDDING	Oct-97	
52.219-08	UTILIZATION OF SMALL BUSINESS CONCERNS	May-04	
52.219-09 ALT 1	SMALL BUSINESS SUBCONTRACTING PLAN (ALT 1 - (Oct 01))	Sep-07	Large Business Mandatory Submittal Requirement
52.219-14	LIMITATIONS ON SUBCONTRACTING	Dec-96	
52.219-16	LIQUIDATED DAMAGES - SUBCONTRACTING PLAN	Jan-99	
52.222-03	CONVICT LABOR	Jun-03	
52.222-04	CONTRACT WORK HOURS AND SAFETY STANDARDS ACT--OVERTIME COMPENSATION	Jul-05	
52.222-06	DAVIS-BACON ACT	Jul-05	Contractor Mandatory Wage Rates Posting
52.222-07	WITHHOLDING OF FUNDS	Feb-88	
52.222-08	PAYROLLS AND BASIC RECORDS	Feb-88	Contractor Weekly Payroll Submittals
52.222-09	APPRENTICES AND TRAINEES	Jul-05	
52.222-10	COMPLIANCE WITH COPELAND ACT REQUIREMENTS	Feb-88	
52.222-11	SUBCONTRACTS (LABOR STANDARDS)	Jul-05	
52.222-12	CONTRACT TERMINATION--DEBARMENT	Feb-88	
52.222-13	COMPLIANCE WITH DAVIS-BACON AND RELATED ACT REGULATIONS	Feb-88	
52.222-14	DISPUTES CONCERNING LABOR STANDARDS	Feb-88	
52.222-15	CERTIFICATION OF ELIGIBILITY	Feb-88	
52.222-21	PROHIBITION OF SEGREGATED FACILITIES	Feb-99	
52.222-26	EQUAL OPPORTUNITY	Mar-07	
52.222-27	AFFIRMATIVE ACTION COMPLIANCE REQUIREMENTS FOR CONSTRUCTION	Feb-99	
52.222-35	EQUAL OPPORTUNITY FOR SPECIAL DISABLED VETERANS, VETERANS OF THE VIETNAM ERA, & OTHER ELIGIBLE VETERANS.	Sep-06	

# CONTRACT CLAUSES INDEX

## FEDERAL ACQUISITION REGULATION (FAR) & TRANSPORTATION ACQUISITION REGULATION (TAR)

(Updated thru FAC 2005-20 on 09/06/2007)

### FAR & TAR CLAUSES INCORPORATED BY REFERENCE

CLAUSE	TITLE	DATE	REMARKS
52.222-36	AFFIRMATIVE ACTION FOR WORKERS WITH DISABILITIES	Jun-98	
52.222-37	EMPLOYMENT. REPORTS ON SPECIAL DISABLED VETS, VETS OF THE VIETNAM ERA, ETAL.	Sep-06	Contractor Annual Mandatory Reporting Requirement
52.222-39	NOTIFICATION OF EMPLOYEE RIGHTS CONCERNING PAYMENT OF UNION DUES OR FEES	Dec-04	Contractor Mandatory Postings
52.223-05	POLLUTION PREVENTION AND RIGHT TO KNOW INFORMATION	Aug-03	
52.223-06	DRUG-FREE WORKPLACE	May-01	
52.223-14	TOXIC CHEMICAL RELEASE REPORTING	Aug-03	Contractor Annual Contractor Reporting Requirement
52.225-13	RESTRICTIONS ON CERTAIN FOREIGN PURCHASES	Feb-06	
52.227-01	AUTHORIZATION AND CONSENT	Jul-95	
52.227-02	NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT	Aug-96	
52.227-04	PATENT INDEMNITY-CONSTRUCTION CONTRACTS	Apr-84	
52.228-02	ADDITIONAL BOND SECURITY	Oct-97	
52.228-5	INSURANCE - WORK ON A GOVERNMENT INSTALLATION	Jan-97	Contractor Submittal Requirement
52.228-11	PLEDGES OF ASSETS	Feb-92	
52.228-12	PROSPECTIVE SUBCONTRACTOR REQUESTS FOR BONDS	Oct-95	
52.228-14	IRREVOCABLE LETTER OF CREDIT	Dec-99	
52.228-15	PERFORMANCE AND PAYMENT BONDS - CONSTRUCTION	Nov-06	Contractor Submittal Requirement
52.229-03	FEDERAL, STATE, AND LOCAL TAXES	Apr-03	
52.232-05	PAYMENTS UNDER FIXED-PRICE CONSTRUCTION CONTRACTS	Sep-02	Contractor Submittal Requirement
52.232-17	INTEREST	Jun-96	
52.232-23	ASSIGNMENT OF CLAIMS	Jan-86	
52.232-27	PROMPT PAYMENT FOR CONSTRUCTION CONTRACTS	Sep-05	
52.232-33	PAYMENT BY ELECTRONIC FUNDS TRANSFER - CENTRAL CONTRACTOR REGISTRATION	Oct-03	
52.233-01 ALT I	DISPUTES (Alt-I, Dec-91)	Jul-02	
52.233-03	PROTEST AFTER AWARD	Aug-96	
52.233-04	APPLICABLE LAW FOR BREACH OF CONTRACT CLAIM	Oct-04	
52.236-02	DIFFERING SITE CONDITIONS	Apr-84	
52.236-03	SITE INVESTIGATION AND CONDITIONS AFFECTING THE WORK	Apr-84	
52.236-05	MATERIAL AND WORKMANSHIP	Apr-84	
52.236-06	SUPERINTENDENCE BY THE CONTRACTOR	Apr-84	
52.236-07	PERMITS AND RESPONSIBILITIES	Nov-91	
52.236-08	OTHER CONTRACTS	Apr-84	
52.236-09	PROTECTION OF EXIST. VEGETATION., STRUCTURES., EQUIPMENT., UTILITIES, & IMPROVEMENTS	Apr-84	
52.236-10	OPERATIONS AND STORAGE AREAS	Apr-84	
52.236-11	USE AND POSSESSION PRIOR TO COMPLETION	Apr-84	
52.236-12	CLEANING UP	Apr-84	
52.236-13	ACCIDENT PREVENTION	Nov-91	

**CONTRACT CLAUSES INDEX**  
**FEDERAL ACQUISITION REGULATION (FAR) & TRANSPORTATION ACQUISITION REGULATION (TAR)**  
**(Updated thru FAC 2005-20 on 09/06/2007)**

**FAR & TAR CLAUSES INCORPORATED BY REFERENCE**

<b>CLAUSE</b>	<b>TITLE</b>	<b>DATE</b>	<b>REMARKS</b>
52.236-15	SCHEDULES FOR CONSTRUCTION CONTRACTS	Apr-84	Contractor Submittal Requirement
52.236-17	LAYOUT OF WORK	Apr-84	
52.236-21	SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION	Feb-97	
52.236-26	PRECONSTRUCTION CONFERENCE	Feb-95	
52.242-13	BANKRUPTCY	Jul-95	
52.242-14	SUSPENSION OF WORK	Apr-84	
52.243-04	CHANGES	Jun-07	
52.244-06	SUBCONTRACTS FOR COMMERCIAL ITEMS	Mar-07	
52.245-02	GOVERNMENT PROPERTY (FIXED-PRICE CONTRACTS)	Jun -07	
52.246-12	INSPECTION OF CONSTRUCTION	Aug-96	
52.248-03 ALT I	VALUE ENGINEERING-CONSTRUCTION (Alt-I, Apr-84)	Sep-06	
52.249-01	TERMINATION FOR CONVENIENCE OF THE GOVERNMENT (FIXED PRICE)(SHORT FORM)	Apr-84	
52.249-02 ALT I	TERMINATION FOR CONVENIENCE OF THE GOVERNMENT (FIXED PRICE) (Alt-I, Sep-96)	May-04	
52.249-10	DEFAULT (FIXED PRICE CONSTRUCTION)	Apr-84	
52.253-01	COMPUTER GENERATED FORMS	Jan-91	

**TAR CLAUSES INCORPORATED BY REFERENCE**

<b>CLAUSE</b>	<b>TITLE</b>	<b>DATE</b>	<b>REMARKS</b>
1252.211-70	INDEX FOR SPECIFICATIONS	Apr-05	
1252.242-73	CONTRACTING OFFICERS TECHNICAL REPRESENTATIVE	Oct-94	

**FAR & TAR PROVISIONS INCORPORATED BY REFERENCE**

<b>PROVISION</b>	<b>TITLE</b>	<b>DATE</b>	<b>REMARKS</b>
52.217-03	EVALUATION EXCLUSIVE OF OPTION	Apr-84	
52.217-04	EVALUATION OF OPTIONS EXERCISED AT TIME OF CONTRACT AWARD	Jun-88	
52.217-05	EVALUATION OF OPTIONS	Jul-90	

# CONTRACT CLAUSES INDEX

## FEDERAL ACQUISITION REGULATION (FAR) & TRANSPORTATION ACQUISITION REGULATION (TAR)

(Updated thru FAC 2005-20 on 09/06/2007)

### FAR & TAR CLAUSES INCORPORATED BY FULL TEXT

CLAUSE	TITLE	DATE	SECTION	SECTION TYPE	REMARKS
52.211-10	COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK	Apr-84	H	CONSTR. CONTRACT REQS.	Government Fill In
52.211-12	LIQUIDATED DAMAGES-CONSTRUCTION	Sep-00	H	CONSTR. CONTRACT REQS.	Government Fill In
52.211-18	VARIATION IN ESTIMATED QUANTITY	Apr-84	H	CONSTR. CONTRACT REQS	
52.219-4	NOTICE OF PRICE EVALUATION. PREFERENCE FOR HUBZONE SB CONCERNS	Jul-05	F	SOCIOECON PROG REQS	Contractor Fill-In
52.222-23	NOTICE OF REQ. FOR AFFIRMATIVE ACTION TO ENSURE E.E.O.	Feb-99	F	SOCIOECON PROG REQS	Contractor Reporting Requirements
52.223-03 ALT I	HAZARDOUS MAT. IDENT. & MATERIAL SAFETY DATA (Alt-I, Jul-95)	Jan-97	G	GEN'L CONTRACT REQS.	Contractor Submittal Requirements
52.223-09	EST. OF % OF REC. MAT. CONTENT FOR EPA DESIGN. PRODUCTS	Aug-00	G	GEN'L CONTRACT REQS	Contractor Reporting Requirement
52.225-09	BUY AMERICAN ACT-CONSTRUCTION MATERIALS	Jan 05	F	SOCIOECON PROG REQS	Government & Contractor Fill In's
52-236-01	PERFORMANCE OF WORK BY THE CONTRACTOR	Apr -84	H	CONSTR. CONTRACT REQS	Government Fill In
52.236-04	PHYSICAL DATA	Apr-84	H	CONSTR. CONTRACT REQS.	Government Fill In

### TAR CLAUSES INCORPORATED BY FULL TEXT

CLAUSE	TITLE	DATE	SECTION	SECTION TYPE	REMARKS
FAR PT 22.9	NONDISCRIMINATION BECAUSE OF AGE POLICY	Feb-64	F	SOCIOECON PROG REQS	Policy Statement - Not A Clause

(End of Clauses Index)

**CONTRACT PROVISIONS INDEX**  
**FEDERAL ACQUISITION REGULATION (FAR) & TRANSPORTATION ACQUISITION REGULATION (TAR)**  
**(Updated thru FAC 2005-20 on 09/06/2007)**

**52.252-1 Solicitation Provisions Incorporated by Reference**  
**(Feb 1998)**

This solicitation incorporates one or more solicitation provisions by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. The offeror is cautioned that the listed provisions may include blocks that must be completed by the offeror and submitted with its quotation or offer. In lieu of submitting the full text of those provisions, the offeror may identify the provision by paragraph identifier and provide the appropriate information with its quotation or offer. Also, the full text of a solicitation provision may be accessed electronically at this address: [www.arnet.gov/far/](http://www.arnet.gov/far/)

(End of Clause)

**FAR & TAR PROVISIONS INCORPORATED BY REFERENCE**

<b>PROVISION</b>	<b>TITLE</b>	<b>DATE</b>	<b>REMARKS</b>
52.211-06	BRAND NAME OR EQUAL	Aug-99	
52.214-03	AMENDMENTS TO INVITATIONS FOR BIDS	Dec-89	
52.214-04	FALSE STATEMENTS IN BIDS	Apr-84	
52.214-05	SUBMISSION OF BIDS	Mar-97	
52.214-06	EXPLANATION TO PROSPECTIVE BIDDERS	Apr-84	
52.214-07	LATE SUBMISSIONS, MODIFICATIONS, AND WITHDRAWALS OF BIDS	Nov-99	
52.214-18	PREPARATION OF BIDS--CONSTRUCTION	Apr-84	
52.214-19	CONTRACT AWARD--SEALED BIDDING--CONSTRUCTION	Aug-96	
52.225-10	NOTICE OF BUY AMERICAN ACT REQUIREMENT - CONSTRUCTION MATERIAL.	May-02	

**TAR PROVISIONS INCORPORATED BY REFERENCE**

<b>PROVISION</b>	<b>TITLE</b>	<b>DATE</b>	<b>REMARKS</b>
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**CONTRACT PROVISIONS INDEX**  
**FEDERAL ACQUISITION REGULATION (FAR) & TRANSPORTATION ACQUISITION REGULATION (TAR)**  
**(Updated thru FAC 2005-20 on 09/06/2007)**

<b>FAR PROVISIONS INCORPORATED BY FULL TEXT</b>					
<b>PROVISION</b>	<b>TITLE</b>	<b>DATE</b>	<b>SECTION</b>	<b>SECTION TYPE</b>	<b>REMARKS</b>
52.204-08	<b>ANNUAL REPRESENTATIONS AND CERTIFICATIONS</b>	Jan 06	D	REPS. & CERTIFICATIONS	Mandatory Contractor On-Line Input
52.211-04	AVAILABILITY FOR EXAM. OF SPECS NOT LISTED IN GSA INDEX OF FED SPECS/STANDARDS & COM. ITEM DESCRIPTION	Jun-88	E	INSTRUCTIONS TO BIDDERS	Government Fill In.
52.216-01	TYPE OF CONTRACT	Apr-84	E	INSTRUCTIONS TO BIDDERS	Government Fill In.
52.228-01	BID GUARANTEE	Sep-96	E	INSTRUCTIONS TO BIDDERS	Contractor Submittal Requirement
52.233-02	SERVICE OF PROTEST	Aug-96	E	INSTRUCTIONS TO BIDDERS	Government Fill In.
52.236-27	SITE VISIT (CONSTRUCTION)	Feb-95	E	CONSTR. CONTRACT REQS.	Government Fill In.
<b>OTHER PROVISIONS INCORPORATED BY FULL TEXT</b>					
<b>PROVISION</b>	<b>TITLE</b>	<b>DATE</b>	<b>SECTION</b>	<b>SECTION TYPE</b>	<b>REMARKS</b>
NONE					

(End of Provisions Index)

# FEDERAL ACQUISITION REGULATION AND TRANSPORTATION ACQUISITION PROVISIONS

## REPRESENTATIONS AND CERTIFICATIONS

**Annual Representations and Certifications.** Prospective contractors shall complete electronic annual representations and certifications on-line at this web address: <http://orca.bpn.gov> (See FAR 4.1201) in conjunction with required registration in the Central Contractor Registration (CCR) database (see FAR 4.1102).

**Vets100 Form** must also be filled-in online at <http://vets100.cudenver.edu/> in accordance with FAR Clause 52.222-37.

*Contractors are **not eligible** for award without completing these requirements.*

and are current, accurate, and complete as of the date of this offer.

FAR Clause	Title	Date	Change

**Any changes provided by the offeror are applicable to this solicitation only, and do not result in an update to the representations and certifications posted on ORCA.**

**(End of Provision)**

**(End of Section D)**

### 52.204-8

#### Annual Representations and Certifications (Jan 2005)

(a)

(1) If the **clause at 52.204-7**, Central Contractor Registration **is included** in this solicitation, **paragraph (b) of this provision applies.**

(2) If the clause at 52.204-7 is not included in this solicitation, and the offeror is currently registered in CCR, and has completed the ORCA electronically, the offeror may choose to use paragraph (b) instead of completing the corresponding individual representations and certifications in the solicitation. The offeror shall indicate which option applies by checking one of the following boxes:

**(i) Paragraph (b) applies.**

(ii) Paragraph (b) does not apply and the offeror has completed the individual representations and certifications in the solicitation.

(b) The offeror has completed the annual representations and certifications electronically via the Online Representations and Certifications Application (ORCA) website at <http://orca.bpn.gov>. After reviewing the ORCA database information, the offeror verifies by submission of the offer that the representations and certifications currently posted electronically have been entered or updated within the last 12 months, are current, accurate, complete, and applicable to this solicitation (including the business size standard applicable to the NAICS code referenced for this solicitation), as of the date of this offer and are incorporated in this offer by reference (see FAR 4.1201); except for the changes identified below [*offeror to insert changes, identifying change by clause number, title, date*]. These amended representation(s) and/or certification(s) are also incorporated in this offer

# FEDERAL ACQUISITION REGULATION & TRANSPORTATION ACQUISITION REGULATION PROVISIONS

## INSTRUCTIONS TO BIDDERS

### 52.211-4

#### AVAILABILITY FOR EXAMINATION OF SPECIFICATIONS NOT LISTED IN THE GSA INDEX OF FEDERAL SPECIFICATIONS, STANDARDS AND COMMERCIAL ITEM DESCRIPTIONS (JUN 1988)

The specifications cited in this solicitation are not available for distribution. However, they may be examined at the following location(s):

**FEDERAL HIGHWAY ADMINISTRATION  
EASTERN FEDERAL LANDS HIGHWAY DIVISION  
21400 RIDGETOP CIRCLE  
STERLING, VIRGINIA 20166-6511**

Send an email to the following address to make an appointment: [eflhd.contracts@fhwa.dot.gov](mailto:eflhd.contracts@fhwa.dot.gov)

TIME(S) FOR VIEWING: 8 A.M. TO 4 P.M.

All documents are available for direct download from the following website:  
[www.efl.fhwa.dot.gov/procurement/procurement.htm](http://www.efl.fhwa.dot.gov/procurement/procurement.htm)

(End of Provision)

### 52.216-1

#### TYPE OF CONTRACT (APR 1984)

The Government contemplates award of a **firm-fixed-price** contract resulting from this solicitation.

(End of Provision)

### 52.233-2

#### SERVICE OF PROTEST (AUG 1996)

(a) Protests, as defined in section 33.101 of the Federal Acquisition Regulation, that are filed directly with an agency, and copies of any protests that are filed with the General Accounting Office (GAO), shall be served on the Contracting Officer (addressed as follows) by obtaining written and dated acknowledgment of receipt from

**FEDERAL HIGHWAY ADMINISTRATION  
EASTERN FEDERAL LANDS HIGHWAY DIVISION  
21400 RIDGETOP CIRCLE  
STERLING, VIRGINIA 20166-6511**

(b) The copy of any protest shall be received in the office designated above within one day of filing a protest with the GAO.

(End of Provision)

### 52.236-27

#### Site Visit (Construction). (Feb 1995)

(a) The clauses at 52.236-2, Differing Site Conditions, and 52.236-3, Site Investigations and Conditions Affecting the Work, will be included in any contract awarded as a result of this solicitation. Accordingly, offerors or quoters are urged and expected to inspect the site where the work will be performed.

(b) Site visits may be arranged during normal duty hours by contacting:

Kristine Provenzano, Facility Manager  
Delaware Water Gap National recreation Area  
NPS  
1 River Road  
Bushkill, PA 18324  
570-420-9784

Email address: [Kris\\_Provenzano@nps.gov](mailto:Kris_Provenzano@nps.gov)

(End of Provision)

(End of Section E)

# FEDERAL ACQUISITION REGULATION AND TRANSPORTATION ACQUISITION REGULATION CLAUSES

## SOCIOECONOMIC PROGRAM REQUIREMENTS

### 52.219-4

#### Notice of Price Evaluation Preference for HUBZone Small Business Concerns.

(Oct 2004)

(a) *Definition.* HUBZone small business concern, as used in this clause, means a small business concern that appears on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration.

(b) *Evaluation preference.*

(1) Offers will be evaluated by adding a factor of 10 percent to the price of all offers, except—

(i) Offers from HUBZone small business concerns that have not waived the evaluation preference;

(ii) Otherwise successful offers from small business concerns;

(iii) Otherwise successful offers of eligible products under the Trade Agreements Act when the dollar threshold for application of the Act is exceeded (see 25.402 of the Federal Acquisition Regulation (FAR)); and

(iv) Otherwise successful offers where application of the factor would be inconsistent with a Memorandum of Understanding or other international agreement with a foreign government.

(2) The factor of 10 percent shall be applied on a line item basis or to any group of items on which award may be made. Other evaluation factors described in the solicitation shall be applied before application of the factor.

(3) A concern that is both a HUBZone small business concern and a small disadvantaged business concern will receive the benefit of both the HUBZone small business price evaluation preference and the small disadvantaged business price evaluation adjustment (see FAR clause 52.219-23). Each applicable price evaluation preference or adjustment shall be calculated independently against an offeror's base offer. These individual preference amounts shall be added together to arrive at the total evaluated price for that offer.

(c) *Waiver of evaluation preference.* A HUBZone small business concern may elect to waive the evaluation preference, in which case the factor will be added to its offer for evaluation purposes. The agreements in paragraph (d) of this clause do not apply if the offeror has waived the evaluation preference.

#### Offer elects to waive the evaluation preference.

(d) *Agreement.* A HUBZone small business concern agrees that in the performance of the contract, in the case of a contract for

(1) Services (except construction), at least 50 percent of the cost of personnel for contract performance will be spent for employees of the concern or employees of other HUBZone small business concerns;

(2) Supplies (other than procurement from a non-manufacturer of such supplies), at least 50 percent of the cost of manufacturing, excluding the cost of materials, will be performed by the concern or other HUBZone small business concerns;

(3) General construction, at least 15 percent of the cost of the contract performance incurred for personnel will be spent on the concern's employees or the employees of other HUBZone small business concerns; or

(4) Construction by special trade contractors, at least 25 percent of the cost of the contract performance incurred for personnel will be spent on the concern's employees or the employees of other HUBZone small business concerns.

(e) A HUBZone joint venture agrees that in the performance of the contract, the applicable percentage specified in paragraph (d) of this clause will be performed by the HUBZone small business participant or participants;

(f) A HUBZone small business concern non-manufacturer agrees to furnish in performing this contract only end items manufactured or produced by HUBZone small business manufacturer concerns. This paragraph does not apply in connection with construction or service contracts.

(End of clause)

### FAR SUBPART 22.9

#### NONDISCRIMINATION BECAUSE OF AGE (FEB 96)

22.901 Policy. Executive Order 11141, February 12, 1964 (29 CFR 2477), states that the Government policy is as follows:

(a) Contractors and subcontractors shall not, in connection with employment, advancement, or discharge of employees, or the terms, conditions, or privileges of their employment, discriminate against persons because of their age except upon the basis of a bona fide occupational qualification, retirement plan, or statutory requirement.

(b) Contractors and subcontractors, or persons acting on their behalf, shall not specify in solicitations or advertisements for employees to work on Government contracts, a maximum age limit for employment unless the specified maximum age limit is based upon a bona fide occupational qualification, retirement plan, or statutory requirement.

# FEDERAL ACQUISITION REGULATION AND TRANSPORTATION ACQUISITION REGULATION CLAUSES

## SOCIOECONOMIC PROGRAM REQUIREMENTS

(c) Agencies will bring this policy to the attention of contractors. The use of contract clauses is not required.  
(End of Policy Statement)

### 52.222-23

#### **Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity for Construction (Feb 1999)**

(a) The offeror's attention is called to the Equal Opportunity clause and the Affirmative Action Compliance Requirements for Construction clause of this solicitation.

(b) The goals for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

**Monroe County:**

Goals for Minority Participation for Each Trade	Goals for Female Participation for Each Trade
29.9%	6.9%

**Pike County:**

Goals for Minority Participation for Each Trade	Goals for Female Participation for Each Trade
0.6%	6.9%

These goals are applicable to all the Contractor's construction work performed in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, the Contractor shall apply the goals established for the geographical area where the work is actually performed. Goals are published periodically in the *Federal Register* in notice form, and these notices may be obtained from any Office of Federal Contract Compliance Programs office.

(c) The Contractor's compliance with Executive Order 11246, as amended, and the regulations in 41 CFR 60-4 shall be based on

- (1) its implementation of the Equal Opportunity clause,
- (2) specific affirmative action obligations required by the clause entitled "Affirmative Action Compliance Requirements for Construction," and
- (3) its efforts to meet the goals.

The hours of minority and female employment and training

must be substantially uniform throughout the length of the contract, and in each trade. The Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor, or from project to project, for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, Executive Order 11246, as amended, and the regulations in 41 CFR 60-4. Compliance with the goals will be measured against the total work hours performed.

(d) The Contractor shall provide written notification to the Deputy Assistant Secretary for Federal Contract Compliance, U.S. Department of Labor, within 10 working days following award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the --

- (1) Name, address, and telephone number of the subcontractor;
  - (2) Employer's identification number of the subcontractor;
  - (3) Estimated dollar amount of the subcontract;
  - (4) Estimated starting and completion dates of the subcontract; and
  - (5) Geographical area in which the subcontract is to be performed.
- (e) As used in this Notice, and in any contract resulting from this solicitation, the "covered area" is as follows:

### **Monroe and Pike Counties Pennsylvania**

**(End of Provision)**

#### 52.225-9

#### **Buy American Act-Construction Materials. (Jan 2005)**

(a) *Definitions.* As used in this clause-

"Component" means an article, material, or supply incorporated directly into a construction material.

"Construction material" means an article, material, or supply brought to the construction site by the Contractor or a subcontractor for incorporation into the building or work. The term also includes an item brought to the site pre-assembled from articles, materials, or supplies. However, emergency life safety systems, such as emergency lighting, fire alarm, and audio evacuation systems, that are discrete systems incorporated into a public building or work and that are produced as complete systems, are evaluated as a single and distinct construction material regardless of when or how

# FEDERAL ACQUISITION REGULATION AND TRANSPORTATION ACQUISITION REGULATION CLAUSES

## SOCIOECONOMIC PROGRAM REQUIREMENTS

the individual parts or components of those systems are delivered to the construction site. Materials purchased directly by the Government are supplies, not construction material.

“Cost of components” means-

(1) For components purchased by the Contractor, the acquisition cost, including transportation costs to the place of incorporation into the construction material (whether or not such costs are paid to a domestic firm), and any applicable duty (whether or not a duty-free entry certificate is issued); or

(2) For components manufactured by the Contractor, all costs associated with the manufacture of the component, including transportation costs as described in paragraph (1) of this definition, plus allocable overhead costs, but excluding profit. Cost of components does not include any costs associated with the manufacture of the construction material.

“Domestic construction material” means-

(1) An un-manufactured construction material mined or produced in the United States; or

(2) A construction material manufactured in the United States, if the cost of its components mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. Components of foreign origin of the same class or kind for which non-availability determinations have been made are treated as domestic.

“Foreign construction material” means a construction material other than a domestic construction material.

“United States” means the 50 States, the District of Columbia, and outlying areas.

(b) Domestic preference.

(1) This clause implements the Buy American Act (41 U.S.C. 10a - 10d) by providing a preference for domestic construction material. The Contractor shall use only domestic construction material in performing this contract, except as provided in paragraphs (b)(2) and (b)(3) of this clause.

(2) This requirement does not apply to the construction material or components listed by the Government as follows:

**NONE**

(3) The Contracting Officer may add other foreign construction material to the list in paragraph (b)(2) of this clause if the Government determines that-

(i) The cost of domestic construction material would be unreasonable. The cost of a particular domestic construction material subject to the requirements of the Buy

American Act is unreasonable when the cost of such material exceeds the cost of foreign material by more than 6 percent;

(ii) The application of the restriction of the Buy American Act to a particular construction material would be impracticable or inconsistent with the public interest; or

(iii) The construction material is not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality.

(c) Request for determination of inapplicability of the Buy American Act.

(1)

(i) Any Contractor request to use foreign construction material in accordance with paragraph (b)(3) of this clause shall include adequate information for Government evaluation of the request, including-

(A) A description of the foreign and domestic construction materials;

(B) Unit of measure;

(C) Quantity;

(D) Price;

(E) Time of delivery or availability;

(F) Location of the construction project;

(G) Name and address of the proposed supplier; and

(H) A detailed justification of the reason for use of foreign construction materials cited in accordance with paragraph (b)(3) of this clause.

(ii) A request based on unreasonable cost shall include a reasonable survey of the market and a completed price comparison table in the format in paragraph (d) of this clause.

(iii) The price of construction material shall include all delivery costs to the construction site and any applicable duty (whether or not a duty-free certificate may be issued).

(iv) Any Contractor request for a determination submitted after contract award shall explain why the Contractor could not reasonably foresee the need for such determination and could not have requested the determination before contract award. If the Contractor does not submit a satisfactory explanation, the Contracting Officer need not make a determination.

(2) If the Government determines after contract award that an exception to the Buy American Act applies and the Contracting Officer and the Contractor negotiate adequate consideration, the Contracting Officer will modify the contract to allow use of the foreign construction material. However, when the basis for the exception is the

# FEDERAL ACQUISITION REGULATION AND TRANSPORTATION ACQUISITION REGULATION CLAUSES

## SOCIOECONOMIC PROGRAM REQUIREMENTS

unreasonable price of a domestic construction material, adequate consideration is not less than the differential established in paragraph (b)(3)(i) of this clause.

(3) Unless the Government determines that an exception to the Buy American Act applies, use of foreign construction material is noncompliant with the Buy American Act.

(d) *Data*. To permit evaluation of requests under paragraph 2 of this clause based on unreasonable cost, the Contractor shall include the following information and any applicable supporting data based on the survey of suppliers:

Foreign and Domestic Construction Materials Price Comparison			
Construction Material Description	Unit of Measure	Quantity	Price (Dollars)*
<b>Item 1:</b>			
Foreign construction material			
Domestic construction material			
<b>Item 2:</b>			
Foreign construction material			
Domestic construction material			
[List name, address, telephone number, and contact for suppliers surveyed. Attach copy of response; if oral, attach summary.] [Include other applicable supporting information.] [* Include all delivery costs to the construction site and any applicable duty (whether or not a duty-free entry certificate is issued).]			

**(End of Clause)**

### 52.225-10 -- Notice of Buy American Act Requirement— Construction Materials.

As prescribed in [25.1102](#)(b)(1), insert the following provision:

#### Notice of Buy American Act Requirement--Construction Materials (May 2002)

(a) *Definitions*. “Construction material,” “domestic construction material,” and “foreign construction material,” as used in this provision, are defined in the clause of this solicitation entitled “Buy American Act--Construction Materials” (Federal Acquisition Regulation (FAR) clause 52.225-9).

(b) *Requests for determinations of inapplicability*. An offeror requesting a determination regarding the inapplicability of the Buy American Act should submit the request to the Contracting Officer in time to allow a determination before submission of offers. The offeror shall include the information and applicable supporting data required by paragraphs (c) and (d) of the clause at FAR 52.225-9 in the request. If an offeror has not requested a determination regarding the inapplicability of the Buy American Act before

submitting its offer, or has not received a response to a previous request, the offeror shall include the information and supporting data in the offer.

(c) *Evaluation of offers*.

(1) The Government will evaluate an offer requesting exception to the requirements of the Buy American Act, based on claimed unreasonable cost of domestic construction material, by adding to the offered price the appropriate percentage of the cost of such foreign construction material, as specified in paragraph (b)(3)(i) of the clause at FAR 52.225-9.

(2) If evaluation results in a tie between an offeror that requested the substitution of foreign construction material based on unreasonable cost and an offeror that did not request an exception, the Contracting Officer will award to the offeror that did not request an exception based on unreasonable cost.

(d) *Alternate offers*.

(1) When an offer includes foreign construction material not listed by the Government in this solicitation in paragraph (b)(2) of the clause at FAR 52.225-9, the offeror also may submit an alternate offer based on use of equivalent domestic construction material.

(2) If an alternate offer is submitted, the offeror shall submit a separate Standard Form 1442 for the alternate offer, and a separate price comparison table prepared in accordance with paragraphs (c) and (d) of the clause at FAR 52.225-9 for the offer that is based on the use of any foreign construction material for which the Government has not yet determined an exception applies.

(3) If the Government determines that a particular exception requested in accordance with paragraph (c) of the clause at FAR 52.225-9 does not apply, the Government will evaluate only those offers based on use of the equivalent domestic construction material, and the offeror shall be required to furnish such domestic construction material. An offer based on use of the foreign construction material for which an exception was requested—

(i) Will be rejected as nonresponsive if this acquisition is conducted by sealed bidding; or

(ii) May be accepted if revised during negotiations.

(End of provision)

*Alternate I (May 2002)*. As prescribed in [25.1102](#)(b)(2), substitute the following paragraph (b) for paragraph (b) of the basic provision:

# FEDERAL ACQUISITION REGULATION AND TRANSPORTATION ACQUISITION REGULATION CLAUSES

## SOCIOECONOMIC PROGRAM REQUIREMENTS

(b) *Requests for determinations of inapplicability.* An offeror requesting a determination regarding the inapplicability of the Buy American Act shall submit the request with its offer, including the information and applicable supporting data required by paragraphs (c) and (d) of the clause at FAR 52.225-9.

### 52.225-11

#### **Buy American Act—Construction Materials under Trade Agreements. (Nov 2006)**

(a) *Definitions.* As used in this clause--

“Caribbean Basin country construction material” means a construction material that--

(1) Is wholly the growth, product, or manufacture of a Caribbean Basin country; or

(2) In the case of a construction material that consists in whole or in part of materials from another country, has been substantially transformed in a Caribbean Basin country into a new and different construction material distinct from the materials from which it was transformed.

“Component” means an article, material, or supply incorporated directly into a construction material.

“Construction material” means an article, material, or supply brought to the construction site by the Contractor or subcontractor for incorporation into the building or work. The term also includes an item brought to the site preassembled from articles, materials, or supplies. However, emergency life safety systems, such as emergency lighting, fire alarm, and audio evacuation systems, that are discrete systems incorporated into a public building or work and that are produced as complete systems, are evaluated as a single and distinct construction material regardless of when or how the individual parts or components of those systems are delivered to the construction site. Materials purchased directly by the Government are supplies, not construction material.

“Cost of components” means--

(1) For components purchased by the Contractor, the acquisition cost, including transportation costs to the place of incorporation into the construction material (whether or not such costs are paid to a domestic firm), and any applicable duty (whether or not a duty-free entry certificate is issued); or

(2) For components manufactured by the Contractor, all costs associated with the manufacture of the component, including transportation costs as described in paragraph (1) of this definition, plus allocable overhead costs, but excluding profit. Cost of components does not include any costs associated with the manufacture of the construction material.

“Designated country” means any of the following countries:

(1) A World Trade Organization Government Procurement Agreement country (Aruba, Austria, Belgium, Canada, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hong Kong, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea (Republic of), Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Singapore, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, or United Kingdom);

(2) A Free Trade Agreement country (Australia, Bahrain, Canada, Chile, El Salvador, Guatemala, Honduras, Mexico, Morocco, Nicaragua, or Singapore);

(3) A least developed country (Afghanistan, Angola, Bangladesh, Benin, Bhutan, Burkina Faso, Burundi, Cambodia, Cape Verde, Central African Republic, Chad, Comoros, Democratic Republic of Congo, Djibouti, East Timor, Equatorial Guinea, Eritrea, Ethiopia, Gambia, Guinea, Guinea-Bissau, Haiti, Kiribati, Laos, Lesotho, Madagascar, Malawi, Maldives, Mali, Mauritania, Mozambique, Nepal, Niger, Rwanda, Samoa, Sao Tome and Principe, Senegal, Sierra Leone, Solomon Islands, Somalia, Tanzania, Togo, Tuvalu, Uganda, Vanuatu, Yemen, or Zambia); or

(4) A Caribbean Basin country (Antigua and Barbuda, Aruba, Bahamas, Barbados, Belize, British Virgin Islands, Costa Rica, Dominica, Dominican Republic, Grenada, Guyana, Haiti, Jamaica, Montserrat, Netherlands Antilles, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, or Trinidad and Tobago).

“Designated country construction material” means a construction material that is a WTO GPA country construction material, an FTA country construction material, a least developed country construction material, or a Caribbean Basin country construction material.

“Domestic construction material” means--

(1) An unmanufactured construction material mined or produced in the United States; or

(2) A construction material manufactured in the United States, if the cost of its components mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. Components of foreign origin of the same class or kind for which nonavailability determinations have been made are treated as domestic.

“Free Trade Agreement country construction material means” a construction material that--

(1) Is wholly the growth, product, or manufacture of a Free Trade Agreement (FTA) country; or

# FEDERAL ACQUISITION REGULATION AND TRANSPORTATION ACQUISITION REGULATION CLAUSES

## SOCIOECONOMIC PROGRAM REQUIREMENTS

(2) In the case of a construction material that consists in whole or in part of materials from another country, has been substantially transformed in a FTA country into a new and different construction material distinct from the materials from which it was transformed.

“Foreign construction material” means a construction material other than a domestic construction material.

“Least developed country construction material” means a construction material that--

(1) Is wholly the growth, product, or manufacture of a least developed country; or

(2) In the case of a construction material that consists in whole or in part of materials from another country, has been substantially transformed in a least developed country into a new and different construction material distinct from the materials from which it was transformed.

“United States” means the 50 States, the District of Columbia, and outlying areas.

“WTO GPA country construction material” means a construction material that--

(1) Is wholly the growth, product, or manufacture of a WTO GPA country; or

(2) In the case of a construction material that consists in whole or in part of materials from another country, has been substantially transformed in a WTO GPA country into a new and different construction material distinct from the materials from which it was transformed.

(b) *Construction materials.*

(1) This clause implements the Buy American Act (41 U.S.C. 10a-10d) by providing a preference for domestic construction material. In addition, the Contracting Officer has determined that the WTO GPA and Free Trade Agreements (FTAs) apply to this acquisition. Therefore, the Buy American Act restrictions are waived for designated country construction materials.

(2) The Contractor shall use only domestic or designated country construction material in performing this contract, except as provided in paragraphs (b)(3) and (b)(4) of this clause.

(3) The requirement in paragraph (b)(2) of this clause does not apply to the construction materials or components listed by the Government as follows: **NONE**.

(4) The Contracting Officer may add other foreign construction material to the list in paragraph (b)(3) of this clause if the Government determines that--

(i) The cost of domestic construction material would be unreasonable. The cost of a particular domestic construction material subject to the restrictions of the Buy American Act is unreasonable when the cost of such material exceeds the cost of foreign material by more than 6 percent;

(ii) The application of the restriction of the Buy American Act to a particular construction material would be impracticable or inconsistent with the public interest; or

(iii) The construction material is not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality.

(c) Request for determination of inapplicability of the Buy American Act.

(1)

(i) Any Contractor request to use foreign construction material in accordance with paragraph (b)(4) of this clause shall include adequate information for Government evaluation of the request, including--

(A) A description of the foreign and domestic construction materials;

(B) Unit of measure;

(C) Quantity;

(D) Price;

(E) Time of delivery or availability;

(F) Location of the construction project;

(G) Name and address of the proposed supplier;

and

(H) A detailed justification of the reason for use of foreign construction materials cited in accordance with paragraph (b)(3) of this clause.

(ii) A request based on unreasonable cost shall include a reasonable survey of the market and a completed price comparison table in the format in paragraph (d) of this clause.

(iii) The price of construction material shall include all delivery costs to the construction site and any applicable duty (whether or not a duty-free certificate may be issued).

(iv) Any Contractor request for a determination submitted after contract award shall explain why the Contractor could not reasonably foresee the need for such determination and could not have requested the determination before contract award. If the Contractor does

# FEDERAL ACQUISITION REGULATION AND TRANSPORTATION ACQUISITION REGULATION CLAUSES

## SOCIOECONOMIC PROGRAM REQUIREMENTS

not submit a satisfactory explanation, the Contracting Officer need not make a determination.

(End of clause)

(2) If the Government determines after contract award that an exception to the Buy American Act applies and the Contracting Officer and the Contractor negotiate adequate consideration, the Contracting Officer will modify the contract to allow use of the foreign construction material. However, when the basis for the exception is the unreasonable price of a domestic construction material, adequate consideration is not less than the differential established in paragraph (b)(4)(i) of this clause.

(3) Unless the Government determines that an exception to the Buy American Act applies, use of foreign construction material is noncompliant with the Buy American Act.

(d) *Data.* To permit evaluation of requests under paragraph (c) of this clause based on unreasonable cost, the Contractor shall include the following information and any applicable supporting data based on the survey of suppliers:

Foreign and Domestic Construction Materials Price Comparison

Construction material description	Unit of measure	Quantity	Price (dollars) *
<i>Item 1</i>			
Foreign construction material			
Domestic construction material			
<i>Item 2</i>			
Foreign construction material			
Domestic construction material			

[List name, address, telephone number, and contact for suppliers surveyed. Attach copy of response; if oral, attach summary.]

[Include other applicable supporting information. ]

[\* Include all delivery costs to the construction site and any applicable duty (whether or not a duty-free entry certificate is issued).]

*Alternate I (Nov 2006).* As prescribed in [25.1102\(c\)\(3\)](#), add the following definitions of “Bahrainian construction material” and “Mexican construction material” to paragraph (a) of the basic clause, and substitute the following paragraphs (b)(1) and (b)(2) for paragraphs (b)(1) and (b)(2) of the basic clause:

“Bahrainian construction material” means a construction material that—

(1) Is wholly the growth, product, or manufacture of Bahrain; or

(2) In the case of a construction material that consists in whole or in part of materials from another country, has been substantially transformed in Bahrain into a new and different construction material distinct from the materials from which it was transformed.

“Mexican construction material” means a construction material that—

(1) Is wholly the growth, product, or manufacture of Mexico; or

(2) In the case of a construction material that consists in whole or in part of materials from another country, has been substantially transformed in Mexico into a new and different construction material distinct from the materials from which it was transformed.

(b) *Construction materials.*

(1) This clause implements the Buy American Act (41 U.S.C. 10a-10d) by providing a preference for domestic construction material. In addition, the Contracting Officer has determined that the WTO GPA and all the Free Trade Agreements except NAFTA apply to this acquisition. Therefore, the Buy American Act restrictions are waived for designated country construction materials other than Bahrainian or Mexican construction materials.

(2) The Contractor shall use only domestic, or designated country construction material other than Bahrainian or Mexican construction material in performing this contract, except as provided in paragraphs (b)(3) and (b)(4) of this clause.

**52.225-12**  
**Notice of Buy American Act Requirement—**  
**Construction Materials Under Trade**  
**Agreements.**  
**(Jan 2005)**

(a) *Definitions.* “Construction material,” “designated country construction material,” “domestic construction material,” and “foreign construction material,” as used in this provision, are defined in the clause of this solicitation entitled “Buy

# FEDERAL ACQUISITION REGULATION AND TRANSPORTATION ACQUISITION REGULATION CLAUSES

## SOCIOECONOMIC PROGRAM REQUIREMENTS

American Act--Construction Materials Under Trade Agreements” (Federal Acquisition Regulation (FAR) clause 52.225-11).

*(b) Requests for determination of inapplicability.* An offeror requesting a determination regarding the inapplicability of the Buy American Act should submit the request to the Contracting Officer in time to allow a determination before submission of offers. The offeror shall include the information and applicable supporting data required by paragraphs (c) and (d) of FAR clause 52.225-11 in the request. If an offeror has not requested a determination regarding the inapplicability of the Buy American Act before submitting its offer, or has not received a response to a previous request, the offeror shall include the information and supporting data in the offer.

*(c) Evaluation of offers.*

(1) The Government will evaluate an offer requesting exception to the requirements of the Buy American Act, based on claimed unreasonable cost of domestic construction materials, by adding to the offered price the appropriate percentage of the cost of such foreign construction material, as specified in paragraph (b)(4)(i) of FAR clause 52.225-11.

(2) If evaluation results in a tie between an offeror that requested the substitution of foreign construction material based on unreasonable cost and an offeror that did not request an exception, the Contracting Officer will award to the offeror that did not request an exception based on unreasonable cost.

*(d) Alternate offers.*

(1) When an offer includes foreign construction material, other than designated country construction material, that is not listed by the Government in this solicitation in paragraph (b)(3) of FAR clause 52.225-11, the offeror also may submit an alternate offer based on use of equivalent domestic or designated country construction material.

(2) If an alternate offer is submitted, the offeror shall submit a separate Standard Form 1442 for the alternate offer, and a separate price comparison table prepared in accordance with paragraphs (c) and (d) of FAR clause 52.225-11 for the offer that is based on the use of any foreign construction material for which the Government has not yet determined an exception applies.

(3) If the Government determines that a particular exception requested in accordance with paragraph (c) of FAR clause 52.225-11 does not apply, the Government will evaluate only those offers based on use of the equivalent domestic or designated country construction material, and the offeror shall be required to furnish such domestic or designated country construction material. An offer based on use of the foreign construction material for which an exception was requested--

(i) Will be rejected as nonresponsive if this acquisition is conducted by sealed bidding; or

(ii) May be accepted if revised during negotiations.

(End of provision)

*Alternate II (Nov 2006).* As prescribed in [25.1102\(d\)\(3\)](#), add the definitions of “Bahrainian construction material” and “Mexican construction material” to paragraph (a) and substitute the following paragraph (d) for paragraph (d) of the basic provision:

*(d) Alternate offers.*

(1) When an offer includes foreign construction material, except foreign construction material from a designated country other than Bahrain or Mexico, that is not listed by the Government in this solicitation in paragraph (b)(3) of FAR clause 52.225-11, the offeror also may submit an alternate offer based on use of equivalent domestic or designated country construction material other than Bahrainian or Mexican construction material.

(2) If an alternate offer is submitted, the offeror shall submit a separate Standard Form 1442 for the alternate offer, and a separate price comparison table prepared in accordance with paragraphs (c) and (d) of FAR clause 52.225-11 for the offer that is based on the use of any foreign construction material for which the Government has not yet determined an exception applies.

(3) If the Government determines that a particular exception requested in accordance with paragraph (c) of FAR clause 52.225-11 does not apply, the Government will evaluate only those offers based on use of the equivalent domestic or designated country construction material other than Bahrainian or Mexican construction material. An offer based on use of the foreign construction material for which an exception was requested--

(i) Will be rejected as nonresponsive if this acquisition is conducted by sealed bidding; or

(ii) May be accepted if revised during negotiations.

**(End of Section F)**

## MINIMUM WAGE SCHEDULE

U.S. Department of Labor  
 Employment Standards Administration  
 Wage and Hour Division

GENERAL DECISION: **PA20080014** 03/07/2008 PA14

Date: March 7, 2008

General Decision Number: **PA20080014** 03/07/2008

Superseded General Decision Number: PA20070014

State: Pennsylvania

Construction Types: Heavy and Highway

Counties: Adams, Berks, Bradford, Carbon, Columbia, Cumberland, Dauphin, Juniata, Lackawanna, Lancaster, Lebanon, Lehigh, Luzerne, Lycoming, Monroe, Montour, Northampton, Northumberland, Perry, Pike, Schuylkill, Snyder, Sullivan, Susquehanna, Tioga, Union, Wayne, Wyoming and York Counties in Pennsylvania.

HEAVY AND HIGHWAY CONSTRUCTION PROJECTS (Excluding Sewer Grouting Projects and Excluding Sewage and Water Treatment Plant Projects)

Modification Number	Publication Date
0	02/08/2008
1	02/22/2008
2	03/07/2008

BOIL0013-003 09/30/2007

	Rates	Fringes
BOILERMAKER.....	\$ 36.86	23.81

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CARP0076-011 05/01/2007

COLUMBIA, MONTOUR, NORTHUMBERLAND, SCHUYLKILL, SNYDER, UNION, the lower part of Luzerne county, Carbon County, Banks, Lusanna, Lehigh, Packer, Kidder townships, and part of Penn Forest

	Rates	Fringes
MILLWRIGHT.....	\$ 25.46	12.82

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CARP0191-002 05/01/2007

YORK COUNTY

	Rates	Fringes
MILLWRIGHT.....	\$ 25.82	12.82

-----  
 CARP0287-009 05/01/2007

ADAMS, CUMBERLAND, DAUPHIN, JUNIATA, LANCASTER, LEBANON, PERRY,  
 NEW CUMBERLAND ARMY DEPOT AND HARRISBURG YORK STATE AIRPORT IN  
 YORK COUNTY

	Rates	Fringes
MILLWRIGHT.....	\$ 25.46	12.82

-----  
 CARP0454-005 07/01/2007

	Rates	Fringes
PILEDRIVERMAN.....	\$ 35.60	23.61+A

Footnote: PAID HOLIDAYS: Washington's Birthday, Memorial  
 Day, Independence Day, Labor Day, Thanksgiving Day, and  
 Christmas Day (provided the employee works the day before  
 the holiday and the day after the holiday).

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 CARP0492-002 05/01/2007

BERKS COUNTY

	Rates	Fringes
MILLWRIGHT.....	\$ 25.46	12.82

-----  
 CARP0600-005 07/01/2007

LEHIGH AND NORTHAMPTON COUNTIES

	Rates	Fringes
CARPENTER.....	\$ 29.03	17.13

-----  
 CARP1906-002 07/01/2007

CARBON (Townships: East Penn, Lower Towamensing, Mahoning,  
 Franklin, Towamensing, Penn Forest. Everything south of Route  
 903 and east to the Kidder Township Line. Boroughs: Hauto,  
 Nesquehoning, Lansford, Summit Hill, Jim Thorpe, Weissport,  
 Bownmanstown, Palmerton, Lehighton, and Parryville) , LEHIGH  
 AND NORTHAMPTON COUNTIES

	Rates	Fringes
MILLWRIGHT.....	\$ 30.68	19.65

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CARP2235-008 05/01/2007

EXCEPT LEHIGH AND NORTHAMPTON COUNTIES

	Rates	Fringes
PILEDRIVERMAN.....	\$ 23.99	7.99

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CARP2274-002 05/01/2007

EXCEPT LEHIGH AND NORTHAMPTON COUNTIES

	Rates	Fringes
CARPENTER.....	\$ 23.99	7.77

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ELEC0126-001 06/03/2007

	Rates	Fringes
Line Construction:		
(ADAMS, CUMBERLAND, DAUPHIN, LANCASTER, LEBANON, JUNIATA, PERRY AND YORK COUNTIES)		
Groundman.....	\$ 19.28	13.26
Lineman.....	\$ 32.14	13.26
Truck Operator.....	\$ 20.89	13.26
Winch Truck Operator.....	\$ 22.50	13.26
Line Construction:		
(BERKS AND LEHIGH NORTHAMPTON COUNTIES)		
Groundman.....	\$ 20.04	13.56
Lineman.....	\$ 33.30	13.56
Truck Driver.....	\$ 21.71	13.56
Winch Truck Operator.....	\$ 23.38	13.56

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ELEC1319-001 08/29/2005

BRADFORD, CARBON, COLUMBIA, LACKAWANNA, LUZERNE, LYCOMING, MONROE, MONTOUR, NORTHUMBERLAND, PIKE, SCHUYLKILL, SNYDER, SULLIVAN, SUSQUEHANNA, TIOGA, UNION, WAYNE, AND WYOMING COUNTIES

	Rates	Fringes
Line Construction:		
Groundmen.....	\$ 21.35	11.99
Lineman.....	\$ 34.44	12.90
Truck Drivers.....	\$ 22.39	12.06
Winch Truck Operators.....	\$ 23.07	12.11

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ELEC2011-001 05/01/1988

ADAMS, BERKS, CUMBERLAND, DAUPHIN, JUNIATA, LANCASTER, LEBANON, LEHIGH, NORTHAMPTON, AND PERRY COUNTIES

	Rates	Fringes
Line Construction:		
(RAILROAD ONLY)		
GROUP 1.....	\$ 12.34	6%+.60+A
GROUP 2.....	\$ 12.34	6%+.60+A
GROUP 3.....	\$ 10.78	6%+.60+A

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 \* ENGI0542-004 05/01/2007

	Rates	Fringes
Power equipment operators:		
(HIGHWAY CONSTRUCTION AND		
WATER LINES CONSTRUCTION		
(OFF PLANT SITE))		
GROUP 1.....	\$ 24.48	14.67
GROUP 1a.....	\$ 26.73	15.35
GROUP 2.....	\$ 23.53	14.10
GROUP 3.....	\$ 22.98	14.10
GROUP 4.....	\$ 22.53	13.62
GROUP 5.....	\$ 22.02	13.47
GROUP 6.....	\$ 24.72	14.73
GROUP 6a.....	\$ 26.97	15.39

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1 - Pile drivers, all types of cranes, all types of backhoes, draglines, keystones, all types of shovels, derricks, trench shovels, trenching machines, paver (blacktop and concrete), gradalls, all front end loaders, tandem scrapers, pippin types backhoes, boat captains, batch plant with mixer, drill self contained (drill-master type), CMI Autograde, milling machine, vemeer saw, conveyor loader (euclid type) scraper and tournapulls, bulldozers and tractors, concrete pumps, motor patrols, mechanic welders, log skidder, side boom, bobcat type (with attachments), boring machines including directional boring machines, chipper with boom, hydro ax, machines similar to the above including remote control equipment.

GROUP 1a: Crawler backhoes and Crawler gradalls over one cubic yard factory rating; Hydraulic backhoes over one cubic yard factory rating; All types of cranes 15 ton and over factory rating; Single person operation truck cranes 15 ton and over factory rating; Cherry picker type machinery and equipment 15 ton and over factory rating; Machines similar to above, including remote control equipment; Equipment in this Wage Group that does not require an oiler.

GROUP 2 - Spreaders, asphalt plant engineers, rollers (high grade finishing), machine similar to above, including remote control equipment, and forklifts 20ft and over.

GROUP 3 - Welding machine, well points, compressors, pump heaters, farm tractors, form line graders, ditch witch type trencher, road finishing machines, concrete breaking machines, rollers, miscellaneous equipment operator, seaman pulverizing mixer, power broom, seeding spreader, tireman - (for power equipment ) conveyors, loaders other than EUC type, conveyors, driller second class, machines similar to the above including remote control equipment, and forklift under 20 ft.

GROUP 4 - Fireman and grease truck

GROUP 5 - Oilers and deck hands

GROUP 6 - All machines with booms (including jibs, masts, leads, etc.) 100 ft. and over.

GROUP 6a: All machines with Booms (including Jibs, Masts, Leads, etc.) 100 feet 15 ton and over factory rating; Machines similar to above, including remote control equipment; Equipment in this Wage Group that does not require an oiler.

\*\*\*TOXIC/HAZARDOUS WASTE REMOVAL\*\*\*

Add 20 per cent to basic hourly rate for all classifications

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 \* ENGI0542-022 05/01/2007

	Rates	Fringes
Power equipment operators: (HEAVY CONSTRUCTION:)		
GROUP 1.....	\$ 26.44	15.27+A
GROUP 1a.....	\$ 28.69	15.93+A
GROUP 2.....	\$ 26.17	15.17+A
GROUP 2a.....	\$ 28.42	15.84+A
GROUP 3.....	\$ 23.62	13.94+A
GROUP 4.....	\$ 22.50	13.59+A
GROUP 5.....	\$ 22.04	13.47+A
GROUP 6.....	\$ 21.16	13.21+A
HEAVY CONSTRUCTION:		

FOOTNOTE:

A: PAID HOLIDAYS: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day, the employee works the day before and the day after the holiday.

\*\*\*TOXIC/HAZARDOUS WASTE REMOVAL\*\*\*

Add 20 per cent to basic hourly rate for all classifications

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Machines doing hook work, any machine handling machinery, cable spinning machines, helicopters, machines similar to the above, including remote control equipment, all types of cranes, cableways, and draglines.

GROUP 1a: Machines doing hook work; Machines handling machinery; All types of cranes 15 ton and over factory rating; Cable ways; Draglines 15 ton and over factory rating; High Rail/Burro Crane 15 ton and over factory rating; Rail Loader (Winch Boom Type) 15 ton and over factory rating; Machines similar to above, including remote control equipment; Equipment in this Wage Group that does not require an oiler.

GROUP 2: Backhoes, keystones, shovels, derricks, trench shovels, trenching machines, hoist with two towers, pavers 21E and over, overhead cranes, building hoists (double drum) gradalls, mucking machines in tunnels, front end loaders, tandem scrapers, pippin type backhoes, boat captains, batch plant operators concrete drills, self-contained rotary drills, fork lifts, 20ft, lift and over, scrapers, tournapulls, spreaders, bulldozers and tractors, rollers (high grade finishing), mechanic-welder, motor patrols, concrete pumps, grease truck, bob cat type (all attachments), boring machines including directional boring machines, hydro ax, side boom, vermeer saw, chipper with boom, machines similar to the above including remote control equipment

GROUP 2a: Crawler backhoes and crawler gradalls over one cubic yard factory rating; Hydraulic backhoes over one cubic yard factory rating; Equipment 15 ton and over factory rating; Machines similar to above, including remote control equipment; Equipment in this Wage Group that does not require an oiler.

GROUP 3: Conveyors, building hoist (single drum), high or low pressure boilers, drill operators, well drillers, asphalt plant engineers, ditch witch type trencher, second class driller, forklift truck under 20ft. lift, stump grinder, tireman (for power equipment), machines similar to above including remote control equipment.

GROUP 4: Welding machines, well points, compressors, pumps, heaters, farm tractors, form line graders, road finishing machines, concrete breaking machines, rollers, seaman pulverzing mixer, power boom, seeding spreader, chipper without boom, machines similar to the above including remote control equipment.

GROUP 5: Fireman.

GROUP 6: Oilers and deck hands (personnel boats).

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IRON0036-002 07/01/2006

CARBON, LEHIGH (Except Fogelsville), NORTHAMPTON AND MONROE  
(Except Tobyhanna Army Depot)

	Rates	Fringes
Ironworkers:		
Projects Over 25 Million		
Dollars.....	\$ 27.95	19.02
Projects Under 25 Million		
Dollars.....	\$ 27.45	19.02

IRON0404-006 07/01/2007

ADAMS, CUMBERLAND, DAUPHIN, LEBANON (Western 3/4), LANCASTER  
(Western part), LYCOMING, MONTOUR, NORTHUMBERLAND, JUNIATA,  
PERRY, SCHUYLKILL (Western tip to include the twps. of Fearnot,  
Good Spring, Hegins, Jolett, Klingerstown, Muir, Pittman Haas,  
Rough and Ready, Sacramento, Spring Glen, Suedberg, Tower City,  
and Valley View), SNYDER, UNION, AND YORK COUNTIES

	Rates	Fringes
Ironworkers:		
Structural, Ornamental.....	\$ 24.92	20.45

IRON0420-006 07/01/2006

BERKS, LANCASTER (Eastern Part), LEBANON (Eastern 1/4), LEHIGH  
(Fogelsville), AND SCHUYKILL (Remainder) COUNTIES

	Rates	Fringes
Ironworkers:		
Projects less than		
\$200,000,000.....	\$ 25.25	18.45
STRUCTURAL, ORNAMENTAL, AND REINFORCING: Projects		
\$200,000,000 and greater, (all work).....	\$ 27.25	18.45

IRON0489-002 07/01/2006

BRADFORD, COLUMBIA, LACKAWANNA, LUZERNE, MONROE (Tobyhanna  
Depot only), PIKE, SULLIVAN, TIOGA, SUSQUEHANNA, WAYNE,  
WYOMING, CARBON (Northern tip - McAdoo), LYCOMING (Southern tip  
- Hughsville)

	Rates	Fringes
Ironworkers:		
Structural and Ornamental....	\$ 27.07	19.75

LABO0158-001 05/01/2007

	Rates	Fringes
Laborers:		
GROUP 1.....	\$ 18.48	9.53
GROUP 2.....	\$ 19.12	9.53
GROUP 3.....	\$ 18.83	9.53
GROUP 4.....	\$ 13.87	9.53
GROUP 5.....	\$ 19.50	9.53
GROUP 6.....	\$ 21.49	9.53
GROUP 7.....	\$ 18.92	9.53
GROUP 8.....	\$ 19.21	9.53
GROUP 9.....	\$ 19.69	9.53
GROUP 10.....	\$ 20.05	9.53
GROUP 11.....	\$ 20.43	9.53

## LABORERS CLASSIFICATIONS

GROUP 1: Common laborers, concrete pitman, puddlers, highway slab reinforcement placers, dumpman, landscape seeders, planters, arborist, magazine tenders, laser beam, spotters, railroad trackman, signalman, waterproofing labers, fencing (highway right of way or property line), concrete tester, grade checker, highway guard rail, highway direction signs,(ground mounted or structural mounted), asphalt rakers, asphalt tamper, creedman and lutes conduit and duct layers, pneumatic tool operators, jackmammers, paving breakers, concrete saws, asphalt saws, whackers, tampers, vibrators, chainsaw, and concrete block layers (bridge slopes), sheet hammer, electric vibrators, pipe layers, conduit and duct line layers, burning torch.

GROUP 2: Reinforcing steel placers, aligning, bonding, securiing and welders blasters

GROUP 3: Caisson-open air below 8 feet, cofferdam open air below 8 feet where excavations for circular caissons and cofferdams 8 ft and below level of natural grade adjacent to starting point, form setters (road) wagon drill diamond point drill, gunite nozzle operators, walk behind rollers and concrete rubbers.

GROUP 4: Flag person, traffic directors

GROUP 5: Concrete surfacers

GROUP 6: Toxic waste and asbestos removal

## FREE AIR TUNNELS AND ROCK SHAFTS

GROUP 7: Outside labers in conjunction with tunnels, rock shafts and change house attendant

GROUP 8: Chuck tenders, muckers, nippers, miners, inside laborers, grout men, powder-carriers, form-men

GROUP 9: Miners, drillers, blasters, pneumatic shield operators, lining, spotting and timber workmen

GROUP 10: Reinforcing steel placers, bending, aligning and securing and maintenance men

GROUP 11: Concrete surfacers , welders

PAIN0021-026 05/01/2007

ADAMS, CUMBERLAND, DAUPHIN, LANCASTER, PERRY, AND YORK COUNTIES

	Rates	Fringes
Painters:		
Bridge.....	\$ 25.98	7.80
Brush.....	\$ 23.15	7.80
Spray, Sandblast.....	\$ 24.15	7.80

PAIN0057-021 06/01/2007

JUNIATA COUNTY

	Rates	Fringes
Painters: (Commercial)		
Brush and Roller.....	\$ 23.08	11.88
Industrial Brush & Roller...	\$ 25.38	11.88
Spray.....	\$ 25.88	11.88
Painters: (Industrial)		
Bridge.....	\$ 27.80	11.88
Brush and Roller.....	\$ 25.38	11.88
Spray.....	\$ 25.88	11.88

PAIN1021-001 05/01/2007

BERKS, CARBON, LEBANON, LEHIGH, NORTHAMPTON, AND MONROE COUNTIES

	Rates	Fringes
Painters:		
Bridge; Brush, Roller.....	\$ 24.37	11.30
Bridge; Spray.....	\$ 25.37	11.30
Brush and Roller.....	\$ 23.50	11.30
Spray and Sandblast.....	\$ 24.50	11.30

\* PAIN1021-002 05/01/2007

BRADFORD, COLUMBIA, LACKWANNA, LUZERNE, LYCOMING, MONTOUR, NORTHUMBERLAND, PIKE, SCHUYLKILL, SNYDER, SULLIVAN, SUSQUEHANNA, TIOGA, UNION, WAYNE, WYOMING COUNTIES

Rates	Fringes
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Painters:

Bridge; Brush, Roller.....	\$ 24.25	11.05
Bridge; Spray.....	\$ 25.25	11.05
Brush and roller.....	\$ 23.30	11.05
Spray, Sandblast.....	\$ 24.30	11.05

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 PLAS0592-004 06/01/2007

MONROE COUNTY; (EXCEPT TOBYHANNA DEPOT)

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER....	\$ 24.78	6.75

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 PLAS0592-005 06/01/2007

COLUMBIA COUNTY

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER....	\$ 24.78	6.75

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 PLAS0592-017 05/01/2007

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER BERKS (Northeastern part lying North of a line starting from the Southern boundary line of Lehigh County continuing through Huffs Church, Fredericksville, Dryville, Lyon Station, Kutztown, Krumsville, and Stoney run in Berks County to the Lehigh County line), CARBON, LEHIGH, NORTHAMPTON (Northwest part including the towns of Walnutport, Bath, and Northampton) COUNTIES.....	\$ 23.55	14.48

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 PLAS9592-002 05/01/2000

MONROE COUNTY (TOBYHANNA ARMY DEPOT)

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER....	\$ 21.88	4.05

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 TEAM0229-003 05/01/2005

	Rates	Fringes
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TRUCK DRIVER (ADAMS, BERKS,  
 CARBON, COLUMBIA, CUMBERLAND,  
 DAUPHIN, JUNIATA, LACKAWANA,  
 LANCASTER, LEBANON, LEHIGH,  
 LUZERNE, LYCOMING, MONROE,  
 MONTOUR, NORTHAMPTON,  
 NORTHUMBERLAND, PERRY, PIKE,  
 SCHUYKILL, SNYDER, SULLIVAN,  
 SUSQUEHANNA, UNION, WAYNE,  
 WYOMING, AND YORK COUNTIES)

GROUP 1.....	\$ 25.03	0.00
GROUP 2.....	\$ 25.10	0.00
GROUP 3.....	\$ 25.59	0.00

Truck drivers: (BRADFORD AND  
 TIOGA COUNTIES)

GROUP 1.....	\$ 16.14	8.89
GROUP 2.....	\$ 16.21	8.89
GROUP 3.....	\$ 16.70	8.89

TRUCK DRIVERS CLASSIFICATIONS

GROUP 1: Flat Bed Truck (Single-Axle), Dump Trucks (Under 10  
 Yds Single Axle), Stake Body Trck (Single Axle), Dumpster  
 (Single Axle)

GROUP 2: Dump Truck (Over 10 Yds), Asphalt Distributors,  
 Transit Mix (Under 5 Yds), Transit Mix (Over 5 Yds.), Flat  
 or Stake Body (Tandem), Fuel Truck A-Frame/Winch Trucks,  
 Dry Batch Truck, Truck Mounted Sweeper and Vac Trucks,  
 Buses, Dumpster (Tandem)

GROUP 3: Euclid-Type, Off Highway Equipment-Back or Double  
 Bottom Dump Trucks (Over 20 Tons), Straddle Trucks, Pusher,  
 Articulate Dumped Trucks, Low Boy Trailers, Semi Trailers

Water Tank, Sprinkler Trucks, Winch Trucks and Fuel Trucks  
 shall be governed by the appropriate classification as  
 listed above.

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 WELDERS - Receive rate prescribed for craft performing  
 operation to which welding is incidental.  
 =====

Unlisted classifications needed for work not included within  
 the scope of the classifications listed may be added after  
 award only as provided in the labor standards contract clauses  
 (29CFR 5.5 (a) (1) (ii)).

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 In the listing above, the "SU" designation means that rates  
 listed under the identifier do not reflect collectively  
 bargained wage and fringe benefit rates. Other designations

indicate unions whose rates have been determined to be prevailing.

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WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations  
Wage and Hour Division  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board  
U.S. Department of Labor

200 Constitution Avenue, N.W.  
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

# FEDERAL ACQUISITION REGULATION AND TRANSPORTATION ACQUISITION REGULATION CLAUSES

## GENERAL CONTRACT REQUIREMENTS

### 52.223-3

#### Hazardous Material Identification and Material Safety Data. (Jan 1997) Alt I (Jul 1995)

(a) "Hazardous material," as used in this clause, includes any material defined as hazardous under the latest version of Federal Standard No. 313 (including revisions adopted during the term of the contract).

(b) The offeror must list any hazardous material, as defined in paragraph (a) of this clause, to be delivered under this contract. The hazardous material shall be properly identified and include any applicable identification number, such as National Stock Number or Special Item Number. This information shall also be included on the Material Safety Data Sheet submitted under this contract.

Material (If none, insert "None")	Identification No.
None	

(c) This list must be updated during performance of the contract whenever the Contractor determines that any other material to be delivered under this contract is hazardous.

(d) The apparently successful offeror agrees to submit, for each item as required prior to award, a Material Safety Data Sheet, meeting the requirements of 29 CFR 1910.1200(g) and the latest version of Federal Standard No. 313, for all hazardous material identified in paragraph (b) of this clause. Data shall be submitted in accordance with Federal Standard No. 313, whether or not the apparently successful offeror is the actual manufacturer of these items. Failure to submit the Material Safety Data Sheet prior to award may result in the apparently successful offeror being considered non-responsible and ineligible for award.

(e) If, after award, there is a change in the composition of the item(s) or a revision to Federal Standard No. 313, which renders incomplete or inaccurate the data submitted under paragraph (d) of this clause, the Contractor shall promptly notify the Contracting Officer and resubmit the data.

(f) Neither the requirements of this clause nor any act or failure to act by the Government shall relieve the Contractor of any responsibility or liability for the safety of Government, Contractor, or subcontractor personnel or property.

(g) Nothing contained in this clause shall relieve the Contractor from complying with applicable Federal, State, and local laws, codes, ordinances, and regulations

(including the obtaining of licenses and permits) in connection with hazardous material.

(h) The Government's rights in data furnished under this contract with respect to hazardous material are as follows:

(1) To use, duplicate and disclose any data to which this clause is applicable. The purposes of this right are to-

(i) Apprise personnel of the hazards to which they may be exposed in using, handling, packaging, transporting, or disposing of hazardous materials;

(ii) Obtain medical treatment for those affected by the material; and

(iii) Have others use, duplicate, and disclose the data for the Government for these purposes.

(2) To use, duplicate, and disclose data furnished under this clause, in accordance with paragraph (h)(1) of this clause, in precedence over any other clause of this contract providing for rights in data.

(3) The Government is not precluded from using similar or identical data acquired from other sources.

(i) Except as provided in paragraph (i)(2), the Contractor shall prepare and submit a sufficient number of Material Safety Data Sheets (MSDS's), meeting the requirements of 29 CFR 1910.1200(g) and the latest version of Federal Standard No. 313, for all hazardous materials identified in paragraph (b) of this clause.

(1) For items shipped to consignees, the Contractor shall include a copy of the MSDS's with the packing list or other suitable shipping document, which accompanies each shipment. Alternatively, the Contractor is permitted to transmit MSDS's to consignees in advance of receipt of shipments by consignees, if authorized in writing by the Contracting Officer.

(2) For items shipped to consignees identified by mailing address as agency depots, distribution centers or customer supply centers, the Contractor shall provide one copy of the MSDS's in or on each shipping container. If affixed to the outside of each container, the MSDS's must be placed in a weather resistant envelope.

**(End of Clause)**

**52.223-9**

**Estimate of Percentage of Recovered Material Content  
for EPA-Designated Products.  
(AUG 2000)**

(a) *Definitions.* As used in this clause— “Post consumer material” means a material or finished product that has served its intended use and has been discarded for disposal or recovery, having completed its life as a consumer item. Post consumer material is a part of the broader category of “recovered material.” “Recovered material” means waste materials and by-products recovered or diverted from solid waste, but the term does not include those materials and by-products generated from, and commonly reused within, an original manufacturing process.

(b) The Contractor, on completion of this contract, shall—

(1) Estimate the percentage of the total recovered material used in contract performance, including, if applicable, the percentage of post consumer material content; and

(2) Submit this estimate to:

**Contracting Officer  
Eastern Federal Lands Highway Division  
21400 Ridgetop Circle  
Sterling, VA 20166.**

(End of Clause)

**52.228-15**

**Performance and Payment Bonds -- Construction  
(Nov 2006)**

(a) *Definitions.* As used in this clause --

“Original contract price” means the award price of the contract; or, for requirements contracts, the price payable for the estimated total quantity; or, for indefinite-quantity contracts, the price payable for the specified minimum quantity. Original contract price does not include the price of any options, except those options exercised at the time of contract award.

(b) *Amount of required bonds.* Unless the resulting contract price is \$100,000 or less, the successful offeror shall furnish performance and payment bonds to the Contracting Officer as follows:

(1) *Performance Bonds (Standard Form 25).* The penal amount of performance bonds at the time of contract award shall be 100 percent of the original contract price.

(2) *Payment Bonds (Standard Form 25-A).* The penal amount of payment bonds at the time of contract award shall be 100 percent of the original contract price.

(3) *Additional bond protection.*

(i) The Government may require additional performance and payment bond protection if the contract price is increased. The increase in protection generally will equal 100 percent of the increase in contract price.

(ii) The Government may secure the additional protection by directing the Contractor to increase the penal amount of the existing bond or to obtain an additional bond.

(c) *Furnishing executed bonds.* The Contractor shall furnish all executed bonds, including any necessary reinsurance agreements, to the Contracting Officer, within the time period specified in the Bid Guarantee provision of the solicitation, or otherwise specified by the Contracting Officer, but in any event, before starting work.

(d) *Surety or other security for bonds.* The bonds shall be in the form of firm commitment, supported by corporate sureties whose names appear on the list contained in Treasury Department Circular 570, individual sureties, or by other acceptable security such as postal money order, certified check, cashier’s check, irrevocable letter of credit, or, in accordance with Treasury Department regulations, certain bonds or notes of the United States. Treasury Circular 570 is published in the *Federal Register* or may be obtained from the:

U.S. Department of Treasury  
Financial Management Service  
Surety Bond Branch  
3700 East West Highway, Room 6F01  
Hyattsville, MD 20782  
Or via the internet at  
<http://www.fms.treas.gov/c570/> .

(e) *Notice of subcontractor waiver of protection (40 U.S.C. 3133(c)).* Any waiver of the right to sue on the payment bond is void unless it is in writing, signed by the person whose right is waived, and executed after such person has first furnished labor or material for use in the performance of the contract.

(End of Clause)

**52.248-3**

**Value Engineering – Construction.  
(Feb 2000)**

(a) *General.* The Contractor is encouraged to develop, prepare, and submit value engineering change proposals (VECP’s) voluntarily. The Contractor shall share in any instant contract savings realized from accepted VECP’s, in accordance with paragraph (f) below.

(b) *Definitions.* “Collateral costs,” as used in this clause, means agency costs of operation, maintenance, logistic support, or Government-furnished property.

“Collateral savings,” as used in this clause, means those measurable net reductions resulting from a VECP in the

agency's overall projected collateral costs, exclusive of acquisition savings, whether or not the acquisition cost changes.

"Contractor's development and implementation costs," as used in this clause, means those costs the Contractor incurs on a VECP specifically in developing, testing, preparing, and submitting the VECP, as well as those costs the Contractor incurs to make the contractual changes required by Government acceptance of a VECP.

"Government costs," as used in this clause, means those agency costs that result directly from developing and implementing the VECP, such as any net increases in the cost of testing, operations, maintenance, and logistic support. The term does not include the normal administrative costs of processing the VECP.

"Instant contract savings," as used in this clause, means the estimated reduction in Contractor cost of performance resulting from acceptance of the VECP, minus allowable Contractor's development and implementation costs, including subcontractors' development and implementation costs (see paragraph (h) below).

"Value engineering change proposal (VECP)" means a proposal that --

- (1) Requires a change to this, the instant contract, to implement; and
- (2) Results in reducing the contract price or estimated cost without impairing essential functions or characteristics; provided, that it does not involve a change-
  - (i) In deliverable end item quantities only; or
  - (ii) To the contract type only.

(c) *VECP preparation.* As a minimum, the Contractor shall include in each VECP the information described in subparagraphs (c)(1) through (7) below. If the proposed change is affected by contractually required configuration management or similar procedures, the instructions in those procedures relating to format, identification, and priority assignment shall govern VECP preparation. The VECP shall include the following:

- (1) A description of the difference between the existing contract requirement and that proposed, the comparative advantages and disadvantages of each, a justification when an item's function or characteristics are being altered, and the effect of the change on the end item's performance.
- (2) A list and analysis of the contract requirements that must be changed if the VECP is accepted, including any suggested specification revisions.
- (3) A separate, detailed cost estimate for

(i) the affected portions of the existing contract requirement and

(ii) the VECP.

The cost reduction associated with the VECP shall take into account the Contractor's allowable development and implementation costs, including any amount attributable to subcontracts under paragraph (h) below.

(4) A description and estimate of costs the Government may incur in implementing the VECP, such as test and evaluation and operating and support costs.

(5) A prediction of any effects the proposed change would have on collateral costs to the agency.

(6) A statement of the time by which a contract modification accepting the VECP must be issued in order to achieve the maximum cost reduction, noting any effect on the contract completion time or delivery schedule.

(7) Identification of any previous submissions of the VECP, including the dates submitted, the agencies and contract numbers involved, and previous Government actions, if known.

(d) *Submission.* The Contractor shall submit VECP's to the Resident Engineer at the worksite, with a copy to the Contracting Officer.

(e) *Government action.*

(1) The Contracting Officer will notify the Contractor of the status of the VECP within 45 calendar days after the contracting office receives it. If additional time is required, the Contracting Officer will notify the Contractor within the 45-day period and provide the reason for the delay and the expected date of the decision. The Government will process VECP's expeditiously; however, it will not be liable for any delay in acting upon a VECP.

(2) If the VECP is not accepted, the Contracting Officer will notify the Contractor in writing, explaining the reasons for rejection. The Contractor may withdraw any VECP, in whole or in part, at any time before it is accepted by the Government. The Contracting Officer may require that the Contractor provide written notification before undertaking significant expenditures for VECP effort.

(3) Any VECP may be accepted, in whole or in part, by the Contracting Officer's award of a modification to this contract citing this clause. The Contracting Officer may accept the VECP, even though an agreement on price reduction has not been reached, by issuing the Contractor a notice to proceed with the change. Until a notice to proceed is issued or a contract modification applies a VECP to this contract, the Contractor shall perform in accordance with the existing contract. The decision to accept or reject all or part of any VECP is a unilateral

decision made solely at the discretion of the Contracting Officer.

(f) *Sharing* --

(1) *Rates*. The Government's share of savings is determined by subtracting Government costs from instant contract savings and multiplying the result by --

- (i) 45 percent for fixed-price contracts; or
- (ii) 75 percent for cost-reimbursement contracts.

(2) *Payment*. Payment of any share due the Contractor for use of a VECP on this contract shall be authorized by a modification to this contract to --

- (i) Accept the VECP;
- (ii) Reduce the contract price or estimated cost by the amount of instant contract savings; and
- (iii) Provide the Contractor's share of savings by adding the amount calculated to the contract price or fee.

(g) *Collateral savings*. If a VECP is accepted, the Contracting Officer will increase the instant contract amount by 20 percent of any projected collateral savings determined to be realized in a typical year of use after subtracting any Government costs not previously offset. However, the Contractor's share of collateral savings will not exceed the contract's firm-fixed-price or estimated cost, at the time the VECP is accepted, or \$100,000, whichever is greater. The Contracting Officer is the sole determiner of the amount of collateral savings.

(h) *Subcontracts*. The Contractor shall include an appropriate value engineering clause in any subcontract of \$50,000 or more and may include one in subcontracts of lesser value. In computing any adjustment in this contract's price under paragraph (f) above, the Contractor's allowable development and implementation costs shall include any subcontractor's allowable development and implementation costs clearly resulting from a VECP accepted by the Government under this contract, but shall exclude any value engineering incentive payments to a subcontractor. The Contractor may choose any arrangement for subcontractor value engineering incentive payments; *provided*, that these payments shall not reduce the Government's share of the savings resulting from the VECP.

(i) *Data*. The Contractor may restrict the Government's right to use any part of a VECP or the supporting data by marking the following legend on the affected parts:

These data, furnished under the Value Engineering -- Construction clause of contract DTFH71-08-C-000XX, shall not be disclosed outside the Government or duplicated, used, or disclosed, in whole or in part, for any purpose other than to evaluate a value engineering change proposal submitted under the clause. This restriction does not limit the Government's right to use information

contained in these data if it has been obtained or is otherwise available from the Contractor or from another source without limitations.

**(End of Section G)**

# FEDERAL ACQUISITION REGULATION AND TRANSPORTATION ACQUISITION REGULATION CLAUSES

## CONSTRUCTION CONTRACT REQUIREMENTS

### **52.211-10 COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK (APR 1984)**

The Contractor shall be required to (a) commence work under this contract within (**SEE SF 1442, BLOCK 11 FOR NUMBER OF DAYS**) calendar days after the date the Contractor receives the notice to proceed, (b) prosecute the work diligently, and (c) complete the entire work ready for use not later than (**THE TIME INDICATED IN THE CONTINUATION OF THE SF 1442, BLOCK 11**). The time stated for completion shall include final cleanup of the premises. **(End of Clause)**.

### **52.211-12 LIQUIDATED DAMAGES--CONSTRUCTION (SEPT 2000)**

(a) If the Contractor fails to complete the work within the time specified in the contract, the Contractor shall pay liquidated damages to the Government in the amount of (**SEE SUBSECTION 108.04 OF THE FP AND/OR SPECIAL CONTRACT REQUIREMENTS FOR AMOUNT**) for each calendar day of delay until the work is completed or accepted.

(b) If the Government terminates the Contractor's right to proceed, liquidated damages will continue to accrue until the work is completed. These liquidated damages are in addition to excess costs of repurchase under the Termination clause. **(End of Clause)**

### **52.211-18 -- Variation in Estimated Quantity.**

As prescribed in [11.703\(c\)](#), insert the following clause in solicitations and contracts when a fixed-price construction contract is contemplated that authorizes a variation in the estimated quantity of unit-priced items:

#### **Variation in Estimated Quantity (Apr 1984)**

If the quantity of a unit-priced item in this contract is an estimated quantity and the actual quantity of the unit-priced item varies more than 15 percent above or below the estimated quantity, an equitable adjustment in the contract price shall be made upon demand of either party. The equitable adjustment shall be based upon any increase or decrease in costs due solely to the variation above 115 percent or below 85 percent of the estimated quantity. If the quantity variation is such as to cause an increase in the time necessary for completion, the Contractor may request, in writing, an extension of time, to be received by the Contracting Officer within 10 days from the beginning of the delay, or within such further period as may be granted by the Contracting Officer before the date of final settlement of the contract. Upon the receipt of a written request for an

extension, the Contracting Officer shall ascertain the facts and make an adjustment for extending the completion date as, in the judgment of the Contracting Officer, is justified. **(End of Clause)**

### **52.236-1 PERFORMANCE OF WORK BY THE CONTRACTOR. (Apr 1984)**

The Contractor shall perform on the site, and with its own organization, work equivalent to at least **50** percent of the total amount of work to be performed under the contract. This percentage may be reduced by a supplemental agreement to this contract if, during performing the work, the Contractor requests a reduction and the Contracting Officer determines that the reduction would be to the advantage of the Government.

**(End of Clause)**

### **52.236-4 PHYSICAL DATA (APR 1984)**

Data and information furnished or referred to below is for the Contractor's information. The Government shall not be responsible for any interpretation of or conclusion drawn from the data or information by the Contractor.

(a) The indications of physical conditions on the drawings and in the specifications are the result of site investigations (**SEE CONTINUATION OF SF 1442, BLOCK 9**).

(b) Weather conditions: **CONTACT LOCAL OFFICE OF NATIONAL WEATHER SERVICE, U.S. DEPARTMENT OF COMMERCE.**

(c) Transportation facilities: **N/A**

(d) Other Information: **SEE CONTINUATION OF SF 1442, BLOCK 9.**

**(End of Clause)**

**(End of Section H)**

FEDERAL HIGHWAY ADMINISTRATION  
EASTERN FEDERAL LANDS HIGHWAY DIVISION  
SPECIAL CONTRACT REQUIREMENTS

**Project PRA-DEWA 14(12)**  
**Delaware Water Gap National Recreation Area**  
**Rehabilitation of U.S. Route 209 Bridge Over Bushkill Creek**

The following Special Contract Requirements amend and supplement the *Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects (FP-03) Metric Units*, U. S. Department of Transportation, Federal Highway Administration.

### **Section 101.—TERMS, FORMAT, AND DEFINITIONS**

101.01. Delete the last paragraph.

101.04. Delete the definition for "Substantial Completion" and substitute the following:

**Substantial Completion** -- For conventional bridge and highway work, the point at which all bridge deck and parapet work is completed, all pavement structure and shoulder work is completed, and all permanent signing and striping is in place. In addition, all guardrail, guardwalls, and safety appurtenances within 10 meters of the traveled way is completed. For all other work, the point at which the CO determines the project can be safely and effectively used by the public without further delays, disruption, or other impediments.

### **Section 102.—BID, AWARD, AND EXECUTION OF CONTRACT**

102.04. Add the following:

Furnish documentary evidence as to the ownership and value of the assets pledged in support of the bond and details of the security interest in the assets by the individual sureties for the apparent low bidder within 14 calendar days after the opening of bids. Failure to submit evidence within the time required will be grounds for declaring the surety unacceptable.

In addition, the CO may, after reviewing the Affidavit of Individual Surety and documentary information on the security interest and the assets pledged, by certified mail to the surety's business or residence address (as shown on the bond), request the surety to provide further information and/or documents with respect to any of the documents provided. The CO may require such information to be furnished under oath. Failure of the surety to accept such mail, or failure of the surety to respond with the requested information or documents within 7 business days of receipt of the request, will be cause for rejection of the surety.

These requirements are in addition to the requirements in FAR Subpart 28.203, except where in conflict with the requirements in the FAR, in which case the FAR controls.

102.06. Add the following after the last paragraph:

Submit the documentary evidence for individual sureties at the same time as the Affidavit of Individual Surety and security interest in assets pledged. A Contractor submitting an unacceptable individual surety in satisfaction of a performance or payment bond before the issuance of the Notice to Proceed will be permitted one opportunity to substitute an acceptable surety or sureties within 7 business days of receipt of notification that the surety is unacceptable.

The Government's right to direct the substitution of sureties to ensure the continuing acceptability of the bonds during the performance of the Contract according to FAR Clause 52.228-2, Additional Bond Security, is not restricted.

These requirements are in addition to the requirements in FAR Subpart 28.203, except where in conflict with the requirements in the FAR, in which case the FAR controls.

### **Section 104. — CONTROL OF WORK**

104.03(a). Add the following to the third paragraph:

Drawings will be reviewed in the order they are received.

104.03(b)(1). Add the following:

- (m) Methods for diverting water and controlling sediment.
- (n) Survey of existing deck elevations and bearing surfaces.

104.03(b). Add the following after 104.03(b):

**(c) As-built working drawings.** Furnish 2 sets of as-built working drawings. The Government will provide 2 sets of contract drawings to be used exclusively for recording the as-built details of the project.

Keep the as-built working drawings current on a weekly basis and have at least 1 set available on the jobsite at all times. Accurately and neatly record changes from the contract plans, which are made in the work, or additional information, which might be uncovered in the course of construction, as they occur by means of details and notes. Maintain a log of all changes made to the as-built working drawings, and monthly, at the estimate cutoff date, make the as-built working drawings and log available for review by the CO.

Note all additions or revisions to the location, character, and dimensions of the prescribed work shown on the contract drawings. Line out all details shown that are not applicable to the completed work. Use the red-line process (red pencil or red ink) to record on the as-built working drawings and final as-built drawings, as a minimum, but not limited to, the information described below:

**(1) Typical section(s)**

(a) Revisions in dimensions; and

(b) Revisions in materials.

**(2) Plan and profile**

(a) Plan

(1) Revisions to the alignment;

- (2) Changes in the construction limits;
- (3) Revisions in location, type, and grade of road approaches;
- (4) Location and type of utilities;
- (5) Location, size, and type of underdrains;
- (6) Skew of culverts;
- (7) Channel changes;
- (8) Location of monuments and permanent references;
- (9) Elevations for all aerial and underground crossings of utilities; and
- (10) Location, length, and type of fencing.

*(b)* Profile

- (1) Revisions to grades, elevations, and stationing of intersection PIs;
- (2) Equations;
- (3) Culvert diameter, length, type, and stationing;
- (4) Length of culvert extension, and length of existing culvert;
- (5) Location, length, stationing, and type of retaining walls; and
- (6) Location, length, stationing, and end treatment of guardrail.

**(3)** Bridge

- (a)* Stationing of bridge ends;
- (b)* Elevations including footing, bearing pads, deck, and top of walls;
- (c)* Pile driving record with pile length, size, type, and tip elevation;
- (d)* Post-tensioning records including stressing sequence, jacking force, and duct size and layout;
- (e)* Construction and concrete placement sequences;
- (f)* Bearing details with orientation;

- (g) Expansion joints including actual clearance with atmospheric temperature; and
- (h) Any changes in plan or dimensions including any major changes in reinforcing.

**(4) Miscellaneous**

- (a) Revisions to parking areas or turnouts;
- (b) Final location, type and length of curbs, sidewalks, etc.;
- (c) Fencing type and limits; and
- (d) Landscaping and planting.

**(5) Special Contract Procedures**

- (a) Method of excavation, concrete placement, girder erection, structure repairs, etc.

Prepare final as-built drawings after the completion of each definable feature of work as listed in the Contractor Quality Control Plan (Foundations, Utilities, Structural Steel, etc., as appropriate for the project). The as-built working drawings and final as-built drawings will be jointly reviewed for accuracy and completeness by the CO and the Contractor prior to submission of each monthly pay estimate.

If the monthly review finds that the Contractor is not maintaining the as-built working drawings, payment of the Contractor's invoice will be withheld until the as-built working drawings are brought up to date.

Furnish the as-built working drawings to the CO before the final inspection. Correct all details found during the final inspection that are not shown on the as-built working drawings and return to the CO within 5 working days for approval.

Once final as-built working drawings have been approved by the CO, provide final as-built drawings in the latest version of Adobe Acrobat (PDF) format (at the time of submission) on two sets of CD-R or DVD-R. Include the latest version Adobe Acrobat reader on the CD-R or DVD-R. Provide the final as-built drawings with a resolution quality such that the redlined drawings and notations are clearly discernable. Final payment per Subsection 109.09 will not be made until the CD-R or DVD-R of the final as-built drawings have been reviewed and approved by the CO.

No direct payment will be made for maintaining and furnishing as-built working drawings.

104.04. Add the following:

The contract documents reference locations and work items by Mileposts (MP), which do not

necessarily represent actual mileage or existing milepost signs. Mileposts are included for reference purposes and should not be used as a basis for establishing construction survey.

104.05. Add the following:

When hauling on National Park Service roads, do not exceed the following load restrictions or those established for the Pennsylvania Department of Transportation and all local jurisdictions.

<u>Single Units</u>	<u>Gross Vehicle Weight – kilograms</u>
2 axles	18,100
3 axles	21,800
4 or more axles	23,600
<u>Combination Units</u>	
3 axles	25,900
4 axles	28,100
5 or more axles	29,900

Where the ground is saturated with water or during periods of freezing and thawing, the CO may impose further load restrictions or suspend hauling.

Operate loaded vehicles hauling material at speeds not exceeding 35 miles per hour and spaced at 500-foot (150-meter) minimum intervals. Do not exceed 25 miles per hour or operate more than 1 loaded hauling vehicle at a time on a bridge.

**Section 105.—CONTROL OF MATERIAL**

105.02(b). Add the following:

If any material is to be excavated from any material source outside the construction limits, other than commercially operated sites, before work begins provide a certification from the State Historic Preservation Officer or Indian Tribal Council, if applicable, stating:

- (1) That a cultural resource survey (a survey for historical sites and archeological remains) has been performed at the proposed site, and
- (2) That no significant cultural resources exist in the area that will be disturbed by the Contractor.

### **Section 106.—ACCEPTANCE OF WORK**

106.03. Delete the first sentence of the second paragraph and substitute the following:

Other than references in or to the FAR or Federal Law, when these Standard Specifications or Supplemental Contract Requirements reference certifications; certificates; or certified documents, equipment, or individuals, these references are not certifications under Section 4301 of Public Law 104-106, National Defense Authorization Act for Fiscal Year 1996.

106.05(a) Add the following:

At the Preconstruction Conference, the Government will provide a copy of the computer program "QL-PAY," along with instructions. QL-Pay is a Windows based program that computes the quality levels and pay factors as described in this Subsection.

### **Section 107.—LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC**

107.01. Add the following:

The following permits may be required for this project:

- (a) Hauling Permit
- (b) Hazardous Waste Permit
- (c) Disposal Permit or Agreement

This list of permits may not be all inclusive of those required for construction. No time or damages, including impact damages, will be allowed for failure to obtain necessary permits or agreements. Provide copies of these permits and agreements upon request.

107.01. Delete the second sentence of the third paragraph and substitute the following:

Obtain all additional permits or agreements and modifications to Government-obtained permits or agreements that are required.

107.02. Add the following after the third paragraph:

For the full duration of construction, protect the existing trees that are tagged by the CO in the following manner:

- (a) Install and maintain a 1.2-meter high wood slat fence with steel posts around the perimeter of the root protection area, per Subsection 619.06. The root protection area is defined as an area equal to 3 meters outside the dripline.
- (b) All construction which takes place within the root protection area must be approved by the CO. Do not store or locate construction materials, vehicles, staging areas, topsoil,

disposal areas, or trailers within the root protection area. Protect the area from flooding, erosion, sedimentation, and potentially harmful materials through run-off or spillage.

(c) Remove all tree protection prior to final acceptance.

107.02. Add the following after the sixth paragraph:

Notify the CO in writing at least 48 hours in advance of any scheduled utility shutdown, investigation, and /or related work.

107.05. Add the following after the second paragraph:

Submit all claims to the insurance company for investigation, regardless of deductible, unless the Contractor has chosen to pay the claim directly. Provide the results of any investigations and subsequent actions to the CO within 1 week of receipt from the insurance company or of action. Determination by the insurance company that the claim is not covered by the policy is not an adequate basis for the Contractor to fail to meet its obligations under the requirements of this Section.

### **Section 108.—PROSECUTION AND PROGRESS**

108.01. Delete the first sentence of the second paragraph and substitute the following:

A Preconstruction conference will be held after the contract is awarded and at least one week before beginning work. Coordinate with the CO to insure that the following agencies and municipalities are invited to the Preconstruction conference. Invite representatives from the following agencies and municipalities:

Pennsylvania Department of Environmental Protection – Northeast Regional Office  
Pike County Conservation District  
Monroe County Conservation District

108.01. Add the following:

Construction operations are limited as follows:

No work will be permitted on Sundays or National legal holidays.

108.01 Add the following:

**Trout stream restriction** - No work that affects the natural stream flow is permitted during the time period from March 1 through June 15 and October 1 through December 31 at Bushkill Creek.

**Indiana bat restriction** - No cutting of trees larger than 125 millimeters in diameter at breast

height (dbh) is permitted from April 1 to September 30.

### **Section 109.—MEASUREMENT AND PAYMENT**

109.08(b). Add the following:

Submit invoices by the 7th day after the closing date. Invoices received after the 16th day following the closing date will not be accepted for payment processing that month. Include late, unprocessed invoice submittals in the following month's invoice.

109.08(c). Add the following:

The government's designated billing office is:

Federal Highway Administration  
 Eastern Federal Lands Highway Division  
 Loudoun Tech Center  
 21400 Ridgetop Circle  
 Room 200  
 Sterling, Virginia 20166-6511  
 ATTN: CONSTRUCTION DIVISION

### **Section 152.—CONSTRUCTION SURVEY AND STAKING**

152.03. Delete the text of paragraphs **(b)**, **(c)**, **(d)**, **(e)**, **(f)**, **(g)**, **(i)**, **(j)**, and **(k)**.

152.03(a). Add the following:

Set benchmarks (at least every 300 meters of roadway). Replace any missing control points.

152.03(I)(9) and (10). Delete the subsections and replace with the following:

**(9)** Traffic control (both permanent and temporary) signs, signals, markings, delineators, object markers, etc.

### **Section 154.—CONTRACTOR SAMPLING AND TESTING**

154.03. Add the following:

Furnish test results to the CO immediately after completing the test. The requirements for furnishing test results do not include sample aging or curing time; therefore, reporting times will be extended accordingly.

Submit proposals for using alternate AASHTO or State approved test methods in writing for approval. Alternate methods may be allowed based on documented equivalence to the method specified.

154.04. Add the following:

On a weekly basis, submit a copy of all current Contractor test results and pay factor calculations based on those tests for items accepted under Subsection 106.05. When large quantities are produced, calculate pay factors as soon as possible. Use this information to make any necessary adjustments to operations to achieve acceptable pay factors. The Government may use the Contractor's test results to determine final pay factors for acceptance according to Subsection 154.05.

### **Section 155.—SCHEDULES FOR CONSTRUCTION CONTRACTS**

155.02. Add the following after the third paragraph:

#### **155.02A Weather Delays.**

##### **(a) Weather Delay Definitions.**

- (1) Reasonably Predictable Weather.** The number of workdays that can expected to be lost in any month due to rainfall based on 10-year historical weather data.
- (2) Rain Day.** A potentially lost workday on which rainfall is equal to or greater than 2.5 millimeters.
- (3) Drying Day.** A work day(s) immediately following a rainfall equal to or greater than 2.5 centimeters which is potentially lost because of wet ground conditions.
- (4) Workday.** A day not excluded from work by Section 108 of the Special Contract Requirements.
- (5) Unusually Severe Weather.** When the number of Actual Workdays Lost is greater than the calculated Total Lost Days for the month in question.

**(b) Reasonably Predictable Weather.** Determine Reasonably Predictable Weather for this contract by completing Table 155-1. Calculate data for Table 155-1 as follows:

- (1)** Using the last 10 years of historical weather data from the nearest NOAA weather data collection station, compute the average number of workdays lost (rain days plus drying days) for each month and the standard deviation from the average. Add the average number of workdays lost to the standard deviation.
- (2)** The Total number of Lost Days (Average Workdays Lost plus 1 Standard Deviation,

rounded to whole days) will be considered normal for each month.

(3) Submit a completed Table 155-1 with the initial construction schedule.

**(c) Unusually Severe Weather** Under FAR Clause 52.249-10, Default (Fixed-Price Construction), the Contractor can request time for a delay due to Unusually Severe Weather.

The number of Actual Workdays Lost is calculated by first totaling the actual Rain Days plus the actual Drying Days occurring in the month in question. From this total, deduct any workdays meeting the following conditions:

(1) The Rain Day or Drying Day occurred on a non-work weekday such as a holiday.

(2) Rainfall occurred at a time when no weather dependent work was in progress or occurred during planned or unplanned shutdowns due to other circumstances such as equipment failure, strikes, material supplies, delays, etc.

(3) The Contractor was still working or able to work on weather dependent activities to the extent that less than 50 percent of the workday was lost due to weather.

If the net number of Actual Workdays Lost is greater than the Total Lost Days, then Unusually Severe Weather occurred during the month in question.

**(d) Time Adjustments for Rain Delays.** If the net number of Actual Workdays Lost to rain is less than the Total Lost Days for the month in question, no time adjustments will be made. If the net number of Actual Workdays Lost is more, then an excusable time extension may be granted. The Contractor must submit a Weather Time Impact Analysis supporting any alleged delays due to Unusually Severe Weather.

**(e) Delays Due To Other Weather Conditions.** Delays due to other unusually severe weather conditions (snow, extreme cold or heat, high winds, etc.) must be supported with a Weather Time Impact Analysis using historical weather data.

155.02. Delete the last paragraph and substitute the following:

The Construction Contract Time shown on the construction schedule for contract completion or for any interim completion dates shall be the calendar dates established in the contract.

155.04. Add the following to the first paragraph:

For a computer-generated CPM, use Primavera software or software that is file-compatible with Primavera.

Add the following at the end of the Subsection:

TABLE 155-1

Project Number\_\_\_\_\_

Location of NOAA Data Collection Station\_\_\_\_\_

Data Years (10-year history): 19\_\_ through 20\_\_

REASONABLY PREDICTABLE WEATHER

MONTH	AVERAGE WORKDAYS LOST	STANDARD DEVIATION	TOTAL LOST DAYS
JANUARY			
FEBRUARY			
MARCH			
APRIL			
MAY			
JUNE			
JULY			
AUGUST			
SEPTEMBER			
OCTOBER			
NOVEMBER			
DECEMBER			

**Section 156.—PUBLIC TRAFFIC**

156.03. Add the following after the first paragraph:

For bridge rehabilitation except for the deck overlay on U.S. Route 209, reduce traffic to one-lane, two-way operation. Provide and install temporary signal system(s) to control one-lane, two way traffic operation through the work zone.

For the bridge deck overlay, close the bridge and detour all traffic for a single 96 hour window between 6:00 PM Thursday through 6:00 PM the following Monday. Additionally, truck traffic

is not permitted to drive on the new bridge deck overlay for an additional 14 calendar days after the conclusion of the specified 96 hour window. Refer to the detour plans for more information.

Ten days prior to the closure of the bridge, notify the appropriate local emergency response authorities (police, fire, EMS, etc) of the proposed closure and detour. Emergency response vehicles are not subject to the 14 day truck restriction noted above.

156.03. Add the following to the second paragraph:

Provide access and proper directional notice to all driveways, farm fields, intersections, etc., within each temporary traffic control zone.

156.03. Add the following:

Comply with all of the requirements of the Traffic Control Plan and adequately maintain all of the devices required. Clean, service, and replace all traffic control devices when they become inoperative, damaged, or when the specified reflectivity of the device is reduced by 50 percent. The Contractor will be given written notice of those traffic control items not in compliance with the Contract. Revise the identified items into compliance within 24 hours. If the Contractor fails to bring the specified items into compliance within the 24-hour period, the CO may assess a daily reduction in payment to the Contractor of \$500 per day. The CO may continue to assess the daily reduction in payment for each additional 24-hour period until the items are corrected. This reduction in payment will be subtracted from the Contractor's progress payments and will be unrecoverable. Use of this reduction in payment does not waive the CO's right to suspend the work in whole or in part according to Subsection 108.05.

Maintenance, repair, and operation of the temporary signal system to provide for one-lane, two-way traffic through the work zone will be the responsibility of the Contractor. If the temporary signal system or any of its components malfunctions, or becomes inoperable during use, repair or replace, as necessary, the malfunctioning system or any of its components to bring the system back to normal signal operation. Begin repairs within two hours of notification of the damaged or malfunctioning system. If the Contractor fails to complete system repairs within the first three hours after notification, the CO will assess a reduction in payment of \$200 per every half hour the system is malfunctioning or inoperable. Provide for temporary flagging operations until the system is returned to normal signal operation. No payment will be made for the use of flaggers in place of a malfunctioning or inoperable temporary signal system.

156.03. Add the following:

Hauling will only be permitted from the nearest point of public access to the work site. Minimize hauling over completed pavement.

156.04. Add the following:

**(f)** Ensure that all drains and inlets within the project limits are fully functional throughout the duration of the project.

156.04. Add the following after the last paragraph:

Maintain access through the project limits for emergency vehicles at all times, except as noted in the Traffic Control Plans and Detour Plans.

156.06(b). Delete the second sentence and substitute the following:

For shoulder drop-offs in excess of 7.5 centimeters, provide a 1V:3H fillet with “*Low Shoulder*” warning signs.

156.06. Add the following to paragraph (e):

Staging areas for the Contractor’s use will be provided at the parking area adjacent to the abandoned gas station directly north of the building known as the Bushkill Meeting Center. Do not use either of the parking lots adjacent to the Bushkill Meeting Center for staging or Contractor parking. Do not use other locations for additional staging areas without the approval of the CO. Do not stockpile material, park personal vehicles, or store equipment outside the approved staging area without approval of the CO.

Do not drive or place equipment beyond the limits designated or other work areas shown in the plans. Do not stockpile construction materials in non-designated stockpile or storage areas without prior approval from the CO.

Restore staging areas to their original condition. At the direction of the CO, restore any turf or trees disturbed during construction according to Section 625 and 626.

At the direction of the CO, repair any roadway or parking area pavement damaged during construction activities at no cost to the Government.

156.06(i) Delete the text and substitute the following:

(i) Limit construction caused delays to public traffic to a maximum of 15 minutes per passage through the project.

156.06. Add the following after paragraph (j):

(k) During periods of temporary signal system operation when no construction activity is taking place (i.e., nights and weekends), provide contact information (name and phone number) of personnel who can be reached should a failure occur. The individual(s) must be able to arrive on site and be familiar with traffic signal installation and operation enough to repair and/or replace malfunctioning equipment within the timeframe requirements listed in Subsection 156.03.

(l) Coordinate all temporary signal system traffic control with the CO and NPS, as well as all local and government emergency agencies (police, fire, EMS, etc.,).

(m) Install portable changeable message signs at both ends of the project limits 2 weeks before the start of construction activities to alert motorists of the construction start date.

156.08. Add the following:

Employ a full-time Traffic Safety Supervisor, exclusively for this project, and designate the person in writing to the CO at the preconstruction conference. The Traffic Safety Supervisor will be on the site at all times when work is being performed and available during non-work hours.

**Section 157. — SOIL EROSION CONTROL**

157.11. Add the following:

Apply temporary turf establishment for areas where additional soil disturbance is anticipated for a period longer than 14 days or as directed by the CO. Apply temporary turf establishment between March 15 and October 15. Prepare site by applying limestone and fertilizer and work in where possible. After seeding, apply clean, weed-free straw mulch.

157.11. Delete Table 157-1 and substitute the following:

**Table 157-1  
Application Rates For Temporary Turf Establishment**

<b>Material</b>	<b>Application Rate kg/hectare</b>
Seed [annual ryegrass ( <i>Lolium multiflorum</i> )]	45
Agricultural Limestone (85% CaCO <sub>3</sub> )	1120
Fertilizer (10-20-20)	335
Mulch, 40±10 mm depth [clean, weed-free straw]	6725

157.15. Delete the fifth paragraph and substitute the following:

Measure temporary turf establishment by the square meter on the ground surface.

**Section 203.—REMOVAL OF STRUCTURES AND OBSTRUCTIONS**

203.01. Add the following:

This work also consists of salvaging, removing, and disposing of all designated concrete, and bearing devices including removal of anchor bolts, clamp plates and masonry plates of expansion bearings as detailed in Pier Repair sheets, and surface preparation, cleaning and coating exposed reinforcing that is to be incorporated into the new construction and all labor, tools, equipment

and necessary incidentals to complete the work unless otherwise specified in the Plans or Special Contract Requirements.

203.03. Add the following:

Deliver any salvageable material identified by the CO to the NPS Maintenance Facility at Wilson Hill Road (MP 12.9). Coordinate any delivery of salvageable material with the CO and NPS. Any salvageable material delivered to the NPS Maintenance Facility becomes the property of the NPS.

203.04. Add the following at the end of the second paragraph:

Submit a debris shield plan to the CO for approval according to Subsection 104.03.

Do not start any demolition and removal work unless the debris shield has been reviewed and approved by the CO.

203.04. Add the following:

**(a) Concrete Removal by Mechanical Impact Methods.** Furnish equipment that complies with the following:

**(1)** Use power-driven hand tools for removal of existing concrete with the following restrictions:

*(a)* Do not use jackhammers heavier than 13.6 kilograms.

*(b)* Do not operate 13.6 kilogram jackhammers and mechanical chipping tools at an angle in excess of 45 degrees measured from the surface of the slab.

*(c)* Do not use chipping hammers heavier than a nominal 6.8-kilogram class to remove concrete from beneath any reinforcing bar.

**(2)** Use hand tools (hammers and chisels) for removal of final particles of concrete or to achieve the required depth.

**(b) Reinforcing Steel.** Clean all reinforcing steel that is to remain in place and has been exposed by removal operations. Remove all rust and corrosive products, including oil, dirt, concrete fragments, laitance, loose scale, and other coating of any character that would destroy or inhibit the bond with the new concrete.

When cleaned reinforcing steel will be exposed for more than 7 calendar days before placing the concrete, protect the steel from corrosion and contamination. Clean and/or replace all reinforcing steel corroded or contaminated because of the Contractor's failure to protect the steel.

Prevent cutting or damaging reinforcing steel designated to remain in place. Repair or replace any damaged bars.

203.05(b). Delete the Subsection and substitute the following:

**(b) Burn.** Burning is prohibited. Dispose of material according to Subsection 203.05(a).

203.05(c). Add the following after the first sentence of the first paragraph:

Bury debris beyond the toes of fills in areas authorized by the CO.

203.05(c). Delete the Subsection and substitute the following:

**(c) Bury.** Burying debris is prohibited. Dispose of material according to Subsection 203.05(a).

#### **Section 204.—EXCAVATION AND EMBANKMENT**

204.13(d). Add the following:

Flush the exposed faces of rock embankment with soil conserved from the excavation,

#### **Section 301.—UNTREATED AGGREGATE COURSES**

301.03. Add the following after the second paragraph:

Submit the representative 150-kilogram sample to the EFLHD Central Laboratory in Sevierville, Tennessee.

301.03. Add the following:

If an alternate State gradation is produced as provided in Subsection 703.05, notify the CO in writing. If the target values with respect to the State gradation are not identified, they will be the midpoint of the allowable State specification band.

#### **Section 401.—SUPERPAVE HOT ASPHALT CONCRETE PAVEMENT**

401.01. Add the following:

Asphalt binder is designated as performance grade PG 70-22.

401.03. Add the following:

At the option of the contractor, a State Highway Department Superpave Hot Asphalt Concrete mixture may be submitted for approval that has the same nominal maximum size aggregate, traffic level (design ESAL), and asphalt binder grade as specified.

401.03(a). Delete the first sentence and substitute the following:

Do not use mixes with over 15 percent recycled asphalt pavement in the top lift.

401.03(b). Add the following:

For State Department of Transportation mixes, submit a job-mix formula that is currently approved and has been tested by the State within a year of the date of intended use. Include documentation from a State highway official certifying that it is an approved State mix.

401.03(b). Add the following:

For percentages of recycled asphalt pavement greater than 15 percent, the contractor must submit a quality control plan showing sufficient control of the recycled asphalt pavement.

Submit all materials and information to the EFLHD Central Laboratory in Sevierville, Tennessee.

401.03(c). Add the following:

Allow a minimum of 21 calendar days for verification of each job-mix formula after receipt of all materials and information at the EFLHD Central Laboratory.

401.13. Add the following:

Begin paving operations at the furthest location from the asphalt plant and proceed towards the plant.

## **Section 552.—STRUCTURAL CONCRETE**

552.01 Add the following:

This work also consists of furnishing, placing, finishing, and curing repair concrete and sealing of concrete surfaces.

552.03(v). Add the following:

Provide Class Class D(AE) concrete with an AASHTO M43 #67 or #7 gradation and with a minimum 28-day compressive strength of 27.5 MegaPascals.

552.09(b)(4). Add the following:

Provide for compressive strength testing of the concrete cylinders by an independent laboratory, qualified to perform the testing, and as approved by the CO.

552.11(a). Add the following to the third paragraph:

Dispose of mortar, debris, foreign material and excess concrete according to Section 203.

552.11(a). Add the following:

Before placing new concrete, clean the existing concrete surface and any exposed reinforcement of all loose material, dust, etc., by shotblasting and thoroughly flushing with clean water under pressure or compressed air. If compressed air is used provide a filter in the air line to ensure that the air is oil-free. Clean all reinforcing with hand and power tool cleaning method in accordance to SSPC SP-2 and SSPC SP-3

If there is an interval of more than 24 hours between cleaning of the sound concrete surface and placement of new concrete, or there are previously prepared concrete surfaces that have been contaminated by any substance detrimental to good bonding, clean or remove the concrete.

Saw cut approximately 12 millimeters deep along all boundaries of the repair areas. Point saw cuts, extending beyond the limits of repair areas, flush with the surface with portland cement or epoxy mortar.

Where the bond between existing concrete and reinforcing steel has been destroyed, remove the concrete adjacent to the steel to a depth that will permit new concrete to bond to the entire periphery of the exposed steel. Provide a minimum of 25 millimeter clearance behind the steel.

Remove all badly deteriorated reinforcing steel in accordance with Subsection 203.4.

After removal of deteriorated or unsound concrete, shotblast exposed structural steel, reinforcing steel, and any concrete surfaces which will be in contact with repair material until free of rust and foreign material. Clean the sound concrete surface by flushing with clean water from a high pressure water jet or compressed air.

For concrete repairs with exposed reinforcing steel and areas greater than 1,850 square centimeters and less than 3,700 square centimeters, install a pair of prepackaged zinc sacrificial anodes on the cleaned exposed reinforcing steel. Install anodes within 15 centimeters of the edge of the repair. Install the anodes at opposite sides of the repair. For repairs greater than 3,700 square centimeters, install an additional pair of anodes per each incremental increase of 3,700 square centimeters of repair area. Install on reinforcing steel according to manufacturer's recommendations. Prepackage sacrificial anode to be used is a Sika Galvishield XP, Euclid Sentinel GL, or equivalent product from another manufacturer.

For all vertical and overhead concrete repairs, and those horizontal repairs to areas less than 12.5 centimeters in depth, with prepackaged zinc sacrificial anodes installed, use a concrete patching compound that has a resistivity as measured at 28 days of less than 15,000 ohm-centimeters. For all other repairs that meet the above criteria of being vertical, overhead, or a horizontal repair of less than 12.5 centimeters in depth, use a high strength concrete patching compound with corrosion inhibitor placed according to the manufacturer's recommendations. Finish new concrete to match existing concrete in color and texture as approved by the CO.

For all other repairs that do not contain installed pre-packaged zinc sacrificial anodes use an epoxy bonding coat to adhere new concrete to existing concrete. Apply a bonding coat of a two component epoxy resin binder to the surfaces of the sound existing concrete immediately before placing new concrete against it. Follow the manufacturer's recommendations for the epoxy resin binder. Repair areas using Class D(AE) concrete with a AASHTO M43#67 or #7 gradation.

Do not use epoxy resin bonding agents for repairs that contain installed pre-packaged zinc sacrificial anodes. Moisten existing concrete prior to placement of repair concrete. Repair areas using Class D(AE) concrete with a AASHTO M43 #67 or #7 gradation. Finish new concrete to match existing concrete in color and texture as approved by the CO.

552.11 Add the following

- (g.) **Sealing concrete structure surfaces.** Perform surface preparation and application of an alkylalkoxysilane penetrant sealer, with 40 percent solids and active materials dispersed in water to all exposed concrete surfaces as the project plans designate in accordance with the manufacturer's recommendations and these Specifications.

Ensure the penetrant sealer is tinted with a fugitive dye and will be distinguishable on the concrete surface a minimum of four hours after application and becomes invisible within seven days of application.

- (h.) **Penetrant sealant materials.** Penetrant sealant shall meet the following:

Appearance	White, Milky Liquid
VOC content (EPA method 24)	Less than 350 g/l
Flash Point (ASTM 3278)	Greater than 200°F SETA
Resistance to Chloride ion penetration AASHTO T259 and T260	Less than 300 grams per cubic meter (criteria of 1.5) at 12.5 millimeter level Less than 0.00 grams per cubic meter (criteria of 0.75) at 25 millimeter level
Water absorption test (ASTM C 642)	0.50 percent maximum per 48 hours; 1.5 percent maximum per 50 days

NCHRP 244	
Series II – cube test	
Water weight gain	85 percent reduction minimum
Absorbed chloride	87 percent reduction minimum
Series IV - Southern climate	
Absorbed chloride	95 percent reduction minimum
Sealing resistance test (ASTM C 672)	(non-air-entrained concrete) 0 rating “No Scaling” (100 cycles)

- (i.) **Surface preparation.** Prepare concrete surfaces to receive a penetrant sealer in accordance with these Specifications. Remove substances such as dust, grime, dirt, curing compound, form oil, stains, mineral deposits, oil, bituminous materials, debris and all other deleterious material by water blasting, wire brushing, or other methods acceptable to the CO, all in accordance with the penetrant sealer manufacturer’s recommendation.

Use approved water blasting equipment to clean existing concrete surfaces. Use water blasting equipment which is specifically manufactured to clean concrete surfaces. Use equipment that has a minimum rated nozzle capacity of 22 MegaPascals using the spray head proposed for use in the work. Water used for blasting shall meet the requirements in Subsections 725.01(a).

During the cleaning operation, exercise sufficient care to minimize the removal of the concrete matrix. Furnish hand tools, powergrinders, and other similar equipment to remove materials which cannot be removed by water blasting without abrading the concrete matrix beyond acceptable limits. Wash concrete surfaces cleaned by methods other than water blasting with water blasting equipment as the final cleaning operation.

Limit the duration of water blasting to provide a light abraded surface. Do not allow surface abrasion to exceed 0.4 millimeter. The CO will not require further cleaning of stains still apparent after abrading to a depth of 0.4 millimeter. Avoid exposure of coarse aggregate by water blasting.

Provide a surface finish to all concrete repair areas that matches the existing concrete in texture, color, and appearance.

Re-clean finished concrete surfaces which become contaminated before applying the penetrant sealer at no expense to the Government prior to applying the penetrant sealer.

- (j.) **Application of sealant materials.** Apply the penetrant sealer only to surfaces which have been prepared in accordance with these Specifications and approved by the CO. For application of the penetrant sealer, meet the Specifications and the penetrant sealer manufacturer’s recommendations. Prior to application of any penetrant sealer cure concrete for a minimum of 21 days. Coordinate the

application of the penetrant sealer so that concrete surfaces prepared to receive penetrant sealer are sealed with the penetrant sealer within ten days after completion of the surface preparation and prior to contamination of the prepared surfaces.

Apply the penetrant sealer using any suitable air or airless sprayer with an operating pressure of approximately 0.14 MegaPascal. Apply the penetrant sealer material only when the ambient air temperature is between 10° and 32° C. Apply the penetrant sealer only to concrete surfaces which have dried a minimum of 48 hours after water last contacted the concrete surfaces. Do not apply the penetrant sealer when winds are blowing 40 kilometers per hour or more, during rainfall, or when water spray or mist is present.

Apply the penetrant sealer only to concrete surfaces that have been prepared in accordance with the requirements and limitations set forth in these Specifications. Determine the actual coverage rate in square feet per gallon on the basis of field trials. Conduct a field trial to determine the coverage rate at the beginning of any penetrant sealer application operation. For each field trial, determine the optimum coverage rate for 46.5 square meters of surface area. Maintain the penetrant sealer application rate between 3.8 and 5.5 square meters covered per liter of penetrant sealer used. Apply the penetrant sealer in a uniform manner without puddling and skips. Redistribute any penetrant sealer which is applied and subsequently puddles in low areas over the concrete surfaces by use of a squeegee.

Generally, begin the application of the penetrant at the lowest elevation and proceed upward toward higher elevations.

Maintain operating pressures in the sprayers used for application of the penetrant sealer material sufficiently low so that atomization or misting of the material does not occur.

- (k.) **Control of sealant materials.** Deliver the penetrant sealer to the project in the unopened, sealed containers with the manufacturer's label identifying the product and with numbered seals intact. Ensure that each container is clearly marked by the manufacturer with the manufacturer's name and address, product name, date of manufacture, and expiration date.

Store materials delivered to the job site in original unopened containers within and appropriate storage facility. Use a storage facility that provides protection from the elements, and safe and secure storage of the materials. Do not return unused material in opened containers to storage for later use. The contractor may either apply such material to appropriate areas on concrete surfaces or remove and dispose of it at locations off site that the contractor supplies.

552.11(f) Delete the first sentence and substitute the following:

**(f) Concrete railings, parapets, and curb.**

552.19. Add the following:

Sealing concrete surfaces and cleaning and resealing joints will be evaluated under Subsection 106.02.

552.20. Delete the second paragraph.

552.20 Add the following:

Measure seal and clean concrete surfaces by the square meter.

**Section 554.—REINFORCING STEEL**

554.01 Add the following:

This work also consists of replacing damaged reinforcing in repaired areas.

554.08. Delete the first sentence of the first paragraph and substitute the following:

Place, fasten, and support the bars according to the *CRSI Manual of Standard Practice*. Use precast concrete blocks or metal supports.

554.09. Add the following:

Mechanical splices, where allowed, may be made using the following coupler devices: “**Bar-Lock MBT**” coupler, the “**OS Splice Clip**” as produced by Splice Sleeve North America, the “**Bar-Grip System**” by AFC Dayton Barsplice, or the “**Quick-Wedge**” as produced by Erico Concrete Construction Products, or an approved alternative. Approval by the CO of an alternate coupler design will be based upon technical data, including test results, and other necessary proof of satisfactory performance submitted by the manufacturer.

The criteria for acceptance of alternate coupler design is as follows: the total slip of the reinforcing bars within the splice sleeve after loading in tension to 0.2 MegaPascals and relaxing to 0.02 MegaPascals shall not exceed 0.25 millimeters for reinforcing bars No. 43 or smaller as measured between gage points clear of the splice sleeve. Mechanical couplers used in the superstructure slab must be butt type splices only.

Use only epoxy coated mechanical couplers for joining epoxy coated reinforcing. Splice sleeves shall have a clear coverage of not less than 45 millimeters measured from the surface of the concrete to the outside face of the sleeve. Do not place slab bar mechanical splices adjacent to each other.

All splicing procedures shall be in accordance with the manufacturer’s standard equipment, jigs,

clamps, and other required accessories. Use procedures in making mechanical butt splices as recommended by the manufacturer and approved by the CO.

### **Section 555.—STEEL STRUCTURES**

555.01. Add the following:

This work includes the furnishing and installation of a sealing system at the bridge expansion joints.

555.02. Add the following material:

Screws, nuts, and washers for expansion joints	717.01(f)
Expansion joint elastomeric seals	712.01(h)
Expansion joint angles and miscellaneous steel	717.01(a)(3)
Expansion joint locking rails	717.01(b)(3)
Expansion joint anchor studs	717.05

**Expansion Joint Sealing System.** Furnish a strip seal system consisting of extruded steel locking rails, anchor studs, and an extruded elastomeric sealing element.

The following are possible manufacturers of an acceptable elastomeric expansion joint sealing system:

Watson Bowman Acme Corporation, 95 Pineview Dr., Amherst, NY (716) 691- 7566  
 Structural Accessories, Inc., PO Box 10, Terryville, CT (203) 589- 8826  
 The D.S. Brown Company, PO Box 158, North Baltimore, OH (419) 257- 3561  
 E-poxy Industries, Inc., 14 W. Shore St., Ravenna, NY (800) 833- 3400

Provide steel locking rails which meet the following minimum requirements:

1. Capable of mechanically locking the elastomeric sealing element in place throughout the normal movement cycle.
2. Designed so as to allow the removal of the elastomeric sealing element without the removal of the steel locking rails.
3. Factory mitered and welded for the required angle upturn at the curb line.

Provide an elastomeric sealing element that meets the following minimum requirements:

1. Securely held in place by the steel locking rails throughout the entire range of expansion joint movement.
2. Supplied and installed in one continuous piece.

3. Promotes self-removal of foreign material during normal joint operation.

Use a lubricant/adhesive to install the elastomeric seal in accordance with the manufacturer's instructions.

555.21. Delete the second sentence and substitute the following:

The quantity of structural steel will include metal items incidental to the structure and required by the contract such as castings, steel plates, anchor bolts and nuts, pins and nuts, expansion dams, roadway drains and scuppers, weld metal, bolts embedded in concrete, cradles and brackets, posts, conduits and ducts, and structural shapes.

Add the following section:

### **Section 561.—STRUCTURAL CONCRETE BONDING**

#### **Description**

**561.01** This work consists of repairing cracks in concrete structures by pressure injecting epoxy.

#### **Material**

**561.02** Conform to the following Subsections

Epoxy resin adhesives	725.21
Polymer grout	725.22

#### **Construction Requirements**

**561.03 Crack Preparation** Provide notice of crack sealing at least 14 days before beginning work. The work areas will be identified and the locations to be repaired will be marked.

Remove all dirt, laitance and other debris from the exterior and interior of cracks. Apply a temporary surface seal material to the face of cracks. Use surface seal material with sufficient strength and adhesion to confine the injected epoxy material until cured.

Provide openings (entry points) in the surface seal along the crack. Make the distance between entry ports at least the thickness of the concrete member being repaired.

After the injection adhesive has cured, remove the surface seal. Finish face of the crack and entry ports flush with the adjacent surface.

**561.04 Injection Procedures.** Begin injecting epoxy at the lowest entry port. Continue injection

at the first port until epoxy begins to flow out of the next highest port. Plug the first port and inject epoxy in the second port until the epoxy flows from the next highest port. Continue this sequence until the entire crack is filled. Use a 2-component epoxy system. Maintain the mix ratio for the epoxy as prescribed by the manufacturer within 5 percent by volume at any discharge pressure not to exceed 1.4 MegaPascals. Do not use solvents to thin the epoxy.

Use positive inline displacement type equipment to meter, mix and inject the epoxy at pressures not to exceed 1.4 MegaPascals.

- (a.) **Test for proper ratio.** Perform this test for each injection unit at the beginning and at the end of every day that the unit is used. Disconnect the mixing head of the injection equipment and pump the 2 adhesive components through a ratio check device with 2 independent valved nozzles capable of controlling flow rate and back pressure by opening or closing valves on the check device. Use a pressure gauge capable of sensing back pressure behind each valve to adjust the discharge pressure to 1.4 MegaPascals for both epoxy components into separate calibrated containers. Compare the discharged amounts to determine the mix ratio.

After the test is completed at 1.4 MegaPascals discharge pressure, repeat the procedures for 0 MegaPascal discharge pressure

- (b.) **Test for pressure check.** Perform this test for each injection unit at the beginning and at the end of every day that the unit is used.

Disconnect the mixing head of the injection equipment and attach the 2 adhesive component delivery lines to a pressure check device with 2 independent valved nozzles capable of controlling flow rate and pressure by opening or closing the valves. Use a pressure gauge capable of sensing the pressure build-up behind each valve. Close the valves on the pressure-check device and operate the equipment until the gauge pressure on each line reads 1.4 MegaPascals. When the pumps are stopped, the gauge pressure must not drop below 1.3 MegaPascals within 3 minutes.

- (c.) **Records.** Maintain and make available complete and accurate records of the ratio check tests and the pressure check tests. Additional ratio and pressure check tests may be required.

**561.05 Coring.** Take one 50 millimeters diameter test core according to AASHTO T 24 for every 15 meters of repaired crack at designated locations. The crack repair is acceptable if the core sample indicates that 90 percent or more of the crack has been successfully bonded.

When a test core shows that the epoxy bonding has penetrated less than 90 percent of the crack volume within the core sample, redo that 15 meter crack segment that the core represents and resample. Repeat this procedure until acceptable crack repair is achieved.

Fill all sample core holes with polymer grout and finish the surface to match the adjacent concrete.

**561.06 Acceptance.** Material for structural bonding will be evaluated under Subsections 106.02 and 106.03.

Structural concrete bonding work will be evaluated under Subsections 106.02 and 106.04. See Table 561-1 for sampling and testing requirements. Crack repair will be evaluated according to Subsection 561.05.

**Measurement**

**561.07** Measure the Section 561 items listed in the bid schedule according to Subsection 109.02 and the following as applicable.

Measure structural concrete bonding by the meter along the actual length of surface crack acceptably repaired.

**Payment**

**561.08** The accepted quantities, measured as provided above, will be paid at the contract price per unit of measurement for the pay items listed in the bid schedule. Payment will be full compensation for the work prescribed in this Section. See Subsection 109.05.

**Table 561-1 Sampling and Testing**

<b>Material or Product</b>	<b>Property or Characteristic</b>	<b>Test Methods or Specifications</b>	<b>Frequency</b>	<b>Sampling Point</b>
Repaired concrete	50 mm diameter test core	AASHTO T 24	1 for every 15 meters of repaired crack.	Repaired crack

**Section 562.—TEMPORARY WORKS**

562.01 Add the following:

This work also consists of all temporary falsework, supports, jacking systems, diversion berms, dewatering, and all materials for deck transitions.

562.02. Delete the second sentence and substitute the following:

Furnish factory fabricated components of vertical shoring towers complying with the *Certification Program for Bridge Temporary Works* (FHWA-RD-93-033).

562.03. Delete the third from the last paragraph and substitute the following:

Do not use deck overhang form brackets for girder bridges that require holes to be cast or drilled into the girder webs.

562.07. Delete this Subsection and substitute the following:

**562.07 Maintenance and Inspection.** Inspect and maintain temporary works in an acceptable condition throughout the period of use.

In the presence of the CO, perform an in-depth inspection of temporary works not more than 24 hours before beginning each concrete placement or before allowing people to enter a cofferdam or excavation support structure. Inspect other temporary works at least once a month to ensure they are functioning properly. Use a registered professional engineer to inspect cofferdams, shoring, support of excavation structures, and support systems for load tests before loading.

Furnish written results of the inspections to the CO before placing concrete, allowing people to enter a cofferdam or excavation support structure, or loading temporary works. Include a certification that the system meets the requirements of the contract and drawings.

Clearly mark the capacity of factory fabricated components of vertical shoring towers according to *the Certification Program for Bridge Temporary Works* (FHWA-RD-93-033). Make inspections and certifications for factory fabricated components of vertical shoring towers according to the *Certification Program for Bridge Temporary Works* (FHWA-RD-93-033)

562.10 Delete the last sentence and substitute the following:

Temporary works will be measured as a lump sum.

This payment will be full compensation for the removal and disposal of material for deck transition.

### **Section 563. – PAINTING**

563.01 Add the following:

This work also consists of containment and collection of surface preparation debris, disposal of surface preparation debris (hazardous and contaminated), and a worker health protection program (including decontamination facilities).

Surface preparation requires the removal of existing lead-containing paint from steel surfaces.

563.03. Add the following:

**SSPC Painting Contractor Certification Program (PCCP) Requirements.** All contractors and subcontractors that perform surface preparation, paint application, and any related work involving containment and collection of surface preparation debris, disposal of surface preparation debris, and a worker health protection program (including decontamination facilities) shall be certified by the Society for Protective Coatings (formerly Steel Structures Painting Council (SSPC)) to the requirements of SSPC-QP 1. In addition, all contractors and

subcontractors engaged in lead paint removal and any other related work shall be certified by the SSPC to the requirements of SSPC-QP 2. Contractors and subcontractors shall be certified at time of bid, must remain certified for the respective work for the duration of the project and submit documentation of certification at time of bid. If a contractor's certification expires, the company will not be allowed to perform any work until the certification is reissued. Requests for extension of time for any delay to the completion of the project due to inactive certification will not be considered and liquidated damages will apply. Notify the CO of any change in contractor certification status.

563.03. Delete first statement of the second paragraph and add the following.

At least 30 calendar days before beginning surface preparation, submit for approval, a written compliance plan for the surface preparation and painting operations. Ensure that the written compliance plan includes, in addition to what is listed in (a), (b), (c), (d), (e), (f), and (g), such elements as: a description of each activity where lead is present; a description of the specific means of compliance, including engineering plans for engineering controls; a report on the controls considered for meeting the permissible exposure limit; air monitoring data that identifies lead emission sources; a schedule for implementing the plan; an administrative control schedule if administrative controls will be used; a work practice program; and a description of arrangements for informing workers of the potential for exposure to lead. Make the written compliance plan available always at the job site. Meet all Federal and the Commonwealth of Pennsylvania regulations.

563.03(h). Add the following after Subsection 563.03(g):

**(h)** The design calculations, manufacturer's specifications, and certifications for the containment system's working platform. The platform must be firm and stable, and designed to support workers, authorized persons, spent abrasive material and Contractor's equipment during all phases of construction. Calculations and specifications must state the proposed containment system's load bearing capacity and show that the system will support any imposed loads. All minimum vertical and horizontal clearances for construction operations must be maintained and approved by the CO.

Fully enclose all surface preparation and coatings application operations to eliminate all airborne blast debris, dust, and coatings. Comply with SSPC - Guide 6 "*Guide for Containing Debris Generated during Paint Removal Operations*", latest revision. Furnish a containment enclosure that provides dust and debris containment. Provide air impenetrable walls and negative air achieved by forced air flow. Maintain an average negative pressure of 0.03-inch water column inside the enclosure (as measured by manometer or magneholic gage) during blasting and blow down operations.

Design air flow inside the enclosure to meet OSHA Standards. Containment design and ventilation shall allow for the maximum practical reduction in exposure to lead dust for workers inside containment. Submit a list of the equipment, including operating capacities and manufacturer's instructions.

Handle all waste materials (surface preparation debris) as hazardous waste. Collect, contain and dispose of any accumulated debris in a manner that will prevent its release into the environment and in an effective way to protect workers from exposure to hazardous materials. Immediately correct any visible emissions from the containment enclosure. Any emissions from the containment enclosure shall meet Federal and the Commonwealth of Pennsylvania air quality standards.

Take a minimum of four representative soil samples, one at each corner of the work site in accordance with SSPC Guide 6. Take samples and perform test analysis on samples prior to work start-up, during surface preparation and paint application operations, and after work operations are completed. Particularly if elevated levels of toxic heavy metals (e.g., lead, chrome, cadmium) are found in baseline soil samples, additional samples may be obtained and retained for future analysis if any questions arise regarding the integrity of the containment during the project. Sampling will be done by an independent laboratory in the presence of the CO.

Clean up any spilled waste materials immediately and take all necessary actions to remedy resulting soil and water contamination.

Comply with SSPC - Guide 7 "*Guide for the Disposal of Lead-Contaminated Surface Preparation Debris*", latest revision. Seal collected waste materials in leak-proof drums. Place only spent abrasives, paint particles, and blast debris in the drums. Drums shall be in new condition and approved for use by the CO. Clearly identify each drum in accordance with the Commonwealth of Pennsylvania and EPA rules and regulations, with the bridge number, the contract number, the contractor's name, the contents, and the date waste material accumulation began.

Obtain all necessary permits for storage, transport, characterization and disposal of waste from the project.

Store contaminated debris in accordance with the Commonwealth of Pennsylvania requirements. Store drums containing contaminated debris in a locked sea cargo trailer within a secured staging area. Obtain the approval of the CO prior to storing drums in trailer. Prevent the entry of unauthorized persons, livestock, or wildlife onto the staging area and the lead work area. Post warning signs with clearly visible legends, "DANGER - AUTHORIZED PERSONNEL ONLY," easily visible from all routinely used approaches to the staging area and lead work area and make signs obvious both to the Contractor or any bystanders.

Sample and test the waste material, to determine if it is hazardous, according to the Toxicity Characteristic Leaching Procedure (TCLP), EPA Method 1311 of SW 846. Test waste for lead and other elements listed in Table 1, Toxicity Levels for Metals, in the SSPC - Guide 7. Supply the CO with a split of each waste material sample.

Provide hazardous waste test results to CO for all materials tested, obtain the EPA Identification Number from the CO, and prepare a manifest of all hazardous waste to be transported to an approved waste storage site. Prepare the manifest according to all Federal and the

Commonwealth of Pennsylvania regulations. Furnish the CO with a certificate or manifest indicating the weight and the number of drums of waste to be disposed. Provide proof of acceptance, at an approved disposal site, including all information required by the Commonwealth of Pennsylvania and local regulations. Ensure that the hazardous waste hauler is licensed and has an EPA Identification Number. Conform to the Commonwealth of Pennsylvania regulations regarding the maximum volume of hazardous waste which may be stored on the site. Do not store the waste materials on the site for over 90 days. Do not treat hazardous waste on site.

If lead or any of the elements listed in Table 1, Toxicity Levels for Metals, in the SSPC - Guide 7 does not meet or exceed the permissible level of concentration, as measured by TCLP, dispose of the waste material as an industrial solid waste according to all applicable Federal and the Commonwealth of Pennsylvania regulations. Dispose of waste at an approved facility. Provide the CO with an authorization prior to disposal.

If the waste material is transported outside the Commonwealth of Pennsylvania for disposal, conform to applicable Federal, state, and local regulations.

Submit a worker health and protection plan prepared by a Certified Industrial Hygienist (CIH), certified by the American Industrial Hygienist Association, and in accordance with Federal and Pennsylvania regulations. Address in the worker health and protection plan: all work practices, engineering controls, administrative controls, training, medical surveillance, hazard identification, hazard communication, protective clothing and respirator selection, handling containers, emergency response, decontamination, illumination, sanitation, and site control.

Train all workers and persons exposed to painting and/or cleaning operations.

Provide documentation of workers safety training and education that requires instruction in recognizing and avoiding unsafe conditions and hazards, conforming to OSHA 29 CFR 1910 and OSHA 29 CFR 1926.

Require all workers scheduled to receive lead exposure at or above the action level on any day during the project duration to have an initial medical surveillance consisting of blood sampling and analysis for lead and zinc protoporphyrin levels (an indicator of lead levels in the blood); provide follow-up blood tests for any worker whose initial medical surveillance results were at the permissible exposure limit or more; and furnish thorough medical examinations for all workers who are or may be exposed at or above the action level for 30 or more days in any 12-month period. Analysis of blood should be performed only by OSHA-approved laboratories. Make all initial and follow-up medical surveillance available to workers and the CO within 48 hours of a worker's exposure. Do not use prophylactic or preventive chelation to keep blood lead levels down while workers are on the job.

Designate a competent person, knowledgeable about protection of workers from the hazards of lead exposure, responsible for and having the authority to remedy any hazardous situation. This person will be responsible for ensuring human safety and shall submit written certification at completion of the project that the plan fully complied with all regulations and was fully

implemented.

563.07(b)(1). Delete the first, second, and third paragraphs and substitute the following:

**(1) Surfaces with all existing paint removed.** Remove all dirt, mill scale, rust, paint, and other foreign material from all exposed steel surfaces according to SSPC-SP-5, white metal blast cleaning. Blast clean with angular steel grit or chilled iron grit abrasives. Recycle abrasives to minimize waste material and monitor cleanliness and angularity of recycled abrasive. Continuously maintain a dry abrasive, free of oils, grease, and other harmful substances. For the paint system 1, produce an anchor profile height of 1 to 2 mils, with an anchor tooth profile that is sharp, clean and free of friable material with minimal peeling effect. Anchor profile height shall not be less than that recommended by the manufacturer's product data sheet for the coating system specified. Anchor profiles shall be measured according to ASTM D4417 (Replica Tape Method). Replica tape shall be retained as quality assurance records.

563.07(b)(1). Add the following:

Perform a test blast on a portable steel plate (measuring approximately 300 mm x 300 mm) representative of those steel surfaces cleaned throughout the structure. Begin blast cleaning only after the CO has inspected and approved the test blast plate. Preserve and protect the test blast plate as a job standard with a clear sealer and photograph for documentation and project quality control.

Provide respiratory protection and personal protective clothing to all workers and persons entering the containment and painting areas that are exposed to hazardous materials in accordance to OSHA 29 CFR 1926.62. Use OSHA approved protective clothing and equipment.

### **Section 564.—BEARING DEVICES**

564.01 Delete the first sentence and add the following:

This work consists of furnishing and installing bridge bearings; including all anchor bolts, sole plates, hardware, and elastomeric pads and the removal and disposal of existing bearings in accordance with Section 203.

Add the following section:

### **Section 578. — HIGH PERFORMANCE CONCRETE**

#### **Description**

**578.01** This work consists of furnishing, placing, finishing, and curing high performance concrete (HPC) in bridge decks, approach slabs and other structural elements.

## Material

**578.02** Conform to the following Subsections:

Air-entraining admixture	711.02
Chemical admixtures	711.03
Coarse aggregate	703.02
Color coating	725.24
Curing material	711.01
Elastomeric bearing pads	717.10
Elastomeric compression joint seals	717.16
Fiber reinforcement	711.05
Fine aggregate	703.01
Fly ash	725.04
Ground iron blast-furnace slag	725.04
Hydraulic cement	701.01
Joint fillers and sealants	712.01
Linseed oil	725.14
Masonry cement	701.02
Silica fume (microsilica)	725.04
Water	725.01

**578.02 Qualifications.** The Contractor or subcontractor performing the high performance concrete work shall have completed at least 2 high performance concrete projects within the last 3 years. Submit a brief description of each project including the owning agency's name and current telephone number.

Provide an on-site supervisor with at least 1 year experience constructing high performance concrete. At least 30 days before starting the high performance concrete work, identify the on-site supervisor assigned to the project and submit a summary of the individual's experience.

### **578.03 Definitions.**

**(a) High Performance Concrete (HPC).** Concrete that meets specified performance characteristics in addition to standard structural concrete properties. The class of concrete is designated as HPC.

**(b) HPC performance characteristics.** Specified concrete properties in addition to standard structural concrete properties of freeze thaw durability, compressive strength, slump and plastic air content. HPC performance characteristics consist of the following:

**(1) Maximum Chloride Permeability.** Measured value, of total charge passed, in coulombs, over a specified period of time, determined according to AASHTO T 277 with the following provisions: Sample specimens at the point of discharge. Cure chloride permeability specimens for seven days according to AASHTO M 201. Then cure at  $38^{\circ}\text{C} \pm 6^{\circ}\text{C}$  in saturated lime water until AASHTO T 277 sample conditioning. Test for

chloride permeability at 28 days. The value will be the result of the average of tests on three specimens. If pigment is used in the concrete mixture, sample concrete at the batch plant before and after adding pigment. Test a minimum of three specimens with and without pigment. Determine the average difference between the pigmented and nonpigmented test results. Adjust production test result by the average difference. Report both initial and adjusted test results.

**(2) Drying Shrinkage.** Measured value, of percent drying shrinkage, in microstrains, determined according to ASTM C 157 with the following provisions: Use 76 millimeters x 76 millimeters x 279 millimeters prisms for drying shrinkage specimens. Moist Cure drying shrinkage specimens the duration of the specified moist curing period for HPC elements. The zero measurement for percent drying shrinkage is the initial measurement taken at demolding of the specimens at  $23 \frac{1}{2} \pm \frac{1}{2}$  hours after introduction of mixing water to the concrete mixture. Measure percent drying shrinkage at the end of specified moist curing period for the structural elements, 1 day, 4 days, 7 days, 14 days, 28 days, and 56 days after the end of the specified field moist curing period. Drying shrinkage 28 days after the termination of moist curing (28 days drying) cannot exceed 60 percent of the maximum specified value.

**578.04 Composition (Concrete Mix Design).** For Class HPC produce a concrete mixture with a maximum Water/Cementitious (W/C) ratio of 0.45, a nominal maximum aggregate size of 20 millimeters, and a total cementitious content within the range of 335 to 502 kilograms per cubic meter. Use only type I or II Portland cement. Include the water contained in the aggregates above the amount of absorbed water in the calculation of the W/C ratio. Shrinkage reducing admixtures may be used to reduce drying shrinkage of HPC. Confirm compatibility with air entraining admixtures. Do not use gravel or ASR reactive aggregates. The total cementitious content includes Portland cement and any pozzalons added to the concrete mixture, such as, ground granulated blast furnace slag, fly ash, silica fume, metakaolin, and rice hull (husk). Determine design strength values according to ACI 318. Structural concrete shall also conform to the following ACI specifications:

- ACI 211.1 Standard Practice for Selecting Proportions for Normal, Heavy Weight and Mass Concrete;
- ACI 211.2 Standard Practice for Selecting Proportions for Structural Light Weight Concrete;

Class HPC concrete shall also conform to the following:

- (a) Plastic Properties.** Conform to Table 578-1. Slump can be adjusted using a high range water reducer (superplasticizer) as long as the maximum W/C ratio is not exceeded. If the plastic air content is low when the concrete arrives on-site, additional air entraining agent may be added to the concrete and mixed provided that 300 revolutions of the mixer has not been exceeded.

**Table 578-1  
Plastic Properties of HPC**

<b>Property</b>	<b>Specification</b>
Slump, AASHTO T 119	50 to 200 mm
Air Content, AASHTO T 152 or AASHTO T 196	5.0 to 8.0 %

(b) **HPC Performance Characteristics.** Conform to Table 578-2.

**Table 578-2  
Performance Characteristics of HPC**

<b>Performance Characteristic</b>	<b>Specification</b>
Chloride Permeability, AASHTO T 277	1,200 coulombs maximum
Drying Shrinkage, ASTM C 157 <sup>(1)</sup>	500 microstrains maximum
Compressive Strength, AASHTO T 22	27.6 MPa minimum

(1) Drying Shrinkage testing is not required if the concrete mixture contains 7.4 Liters per cubic meter of an approved Shrinkage Reducing Admixture (SRA).

Submit concrete mix designs on FHWA Form 1608.

Verify mixture design with trial mixes prepared according to ACI 318 from proposed source(s) or with previous concrete production data for the mixture design submitted from proposed source(s). Verify HPC performance characteristics that are specified in Table 578-2. Submit written concrete mix designs for approval at least 36 days before production. Each mix design submittal shall include the requirements of 552.03(a) through (x).

**578.05 Strength-Maturity Relationship.** Develop a strength-maturity relationship of the approved concrete mixture according to AASHTO T 325. Submit strength-maturity relationship for approval at least 14 day prior to production. Note that the developed strength-maturity relationship is dependent upon mix constituents. The use of a hydration stabilizer in the concrete mixture will have a significant effect on the strength-maturity relationship since it will effect when initial and final set occurs. The dosage of the hydration stabilizer needs to reflect anticipated field conditions. If the actual dosage used during placement changes drastically from what was used to develop the strength-maturity relationship, a new strength-maturity relationship will need to be developed.

Provide a concrete maturity meter during the test placement and production. Provide a concrete maturity meter that conforms to AASHTO T 325 and is rugged, waterproof, and can withstand the construction environment, able to operate without an external power source for a minimum of 14 days, able to collect and store temperature and maturity data for a minimum of 14 days, and is able to determine equivalent maturity hours according to the Arrhenius function.

**578.06 Test Placement.** Fabricate a 2.7 meters x 2.7 meters test panel using the approved concrete mixture. Construct the test panel using the same methods of handling, placing, finishing and curing as intended for the actual placement. Monitor concrete maturity Sample for specified properties listed in Table 578-3.

Demonstrate the maturity meter operation during the test placement. Install maturity meter probes according to AASHTO T325. Measure the concrete temperature and calculate the in-place maturity. Using the strength-maturity relationship developed for the approved concrete mixture determine the in-place concrete compressive strength of the HPC Overlay. Verify that the test placement concrete has a similar time temperature relationship as the submitted concrete mixture.

Monitor the maximum temperature differential from the center of the concrete mass to the surface of the concrete. Provide means of internal cooling, external heating, or insulation to insure the temperature differential does not exceed 2°C during the test placement, curing, and immediately after form stripping or curing ends. Demonstrate methods chosen to keep maximum temperature differential less than 2°C.

Furnish a new mix design for approval if there is a change in a source of material or when the fineness modulus of the fine aggregate changes by more than 0.20.

Test methods to clean any staining or efflorescence after curing of test panels if directed by the CO to provide a uniform color to the concrete surface.

Begin production only after the test placement has been evaluated and accepted.

**578.04 Storage and Handling of Material.** See subsection 552.04.

**578.05 Measuring Material.** See subsection 552.05.

**578.06 Batching Plant, Mixers, and Agitators.** See subsection 552.06.

For HPC, furnish ready-mixed concrete produced and delivered in conformance with AASHTO M 157. Regulate the delivery of the concrete to the site so that the placing and finishing operations can proceed at a uniform rate.

**578.07 Mixing.** See subsection 552.07.

(a) **Central-mix plant.** See subsection 552.07(a).

Remove the contents of an individual mixer before a succeeding batch is charged into the drum.

**(b) Truck mixer.** See subsection 552.07(b).

Mix each batch of concrete according to AASHTO M 157. Add fibers to concrete mixture following manufacturer's recommendations. Mix until uniformly distributed in the concrete mixture.

**578.08 Delivery.** See subsection 552.08, except nonagitating equipment will not be allowed.

Do not add additional water to concrete mixture if workability is reduced after the addition of synthetic fibers. Increased addition of a Water Reducing Admixture meeting AASHTO M 194 or the use of a High Range Water Reducing Admixture is acceptable provided if directed by CO.

**578.09 Quality Control of Mix.** See subsection 552.09.

**(a) Mixing.** See subsection 552.09(a).

**(b) Delivery and sampling during actual placement.** See subsection 552.09(b), except make at least 14, 100 millimeters by 200 millimeters compressive strength test cylinders. Ten of the cylinders will be used for 1, 3, 7, 14 and 28-day compressive strength tests. Make at least 3, 100 millimeters by 200 millimeters cylinders for maximum chloride permeability testing at 28 days. Make at least 3 prisms for drying shrinkage testing.

Provide for compressive strength testing, Chloride Permeability, drying shrinkage testing, by an independent laboratory, qualified to perform the testing, and as approved by the CO.

**578.10 Temperature and Weather Conditions.** Maintain the temperature of the HPC mixture just before placement between 7 and 27 °C. Monitor concrete temperatures according to AASHTO T 325. Monitor the maximum temperature differential from the center of the concrete mass to the surface of the concrete during placement. Provide means of internal cooling, external heating, or insulation to insure the temperature differential does not exceed 2 °C during placement, curing and immediately after form stripping or curing ends.

Using the strength-maturity relationship developed for the approved concrete mixture determine in-place concrete compressive strength of structural elements. Measure concrete temperature and calculate in-place maturity.

**(a) Cold weather.** See subsection 552.10(a), except during cold weather, and protect all concrete until concrete maturity data indicates that the minimum compressive strength has been achieved.

Do not remove curing materials and insulation until the minimum compressive strength has been achieved and the moist curing period is complete. During the cooling period do not allow

the maximum temperature differential from the interior of the concrete to the surface to exceed 2 °C and do not allow the concrete surface temperature to exceed the values shown in Table 552-5. To prevent rapid convective heat loss from the surface, do not start the cooling period if the average wind speed exceeds 16 kilometers per hour as measured 914 millimeters from the concrete surface.

Place HPC for bridge decks, approach slabs, and other flatwork only when the ambient air temperature is 7°C and rising. Place all other HPC only when the ambient air temperature is 2°C and rising.

**(b) Hot weather.** See subsection 552.10(b).

Do not remove curing materials until the minimum compressive strength has been achieved and the moist curing period is complete. During the cooling period do not allow the maximum allowable temperature differential from the interior of the concrete to the surface to exceed 2 °C and do not allow the concrete surface temperature to exceed the values shown in Table 552-5. To prevent rapid evaporative cooling from the moist concrete surface, do not start the cooling period if the calculated evaporation rate exceeds 0.732 kilograms per square meter per hour as determined by Figure 552-1.

Place HPC only when the ambient air temperature is less than 29°C.

**(c) Evaporation.** During placement and finishing of HPC with exposed surfaces take care to prevent plastic shrinkage cracking by monitoring and maintaining the expected evaporation rate within acceptable limits. Fog all freshly placed HPC with exposed surfaces. Identify personnel assigned to operate the fogging equipment during the concrete placement and install and demonstrate fogging equipment for approval prior to placing HPC. Use pressure sprayers or atomizers to maintain a moist surface. Do not apply moisture under pressure directly to the concrete surface and do not allow water to accumulate sufficiently enough to cause a flow or wash on the concrete surface. Continue fogging the concrete surface until all finishing operations are complete and the surface has been covered. Do not wait until final set to cover the concrete surface.

**(d) Monitor relative humidity, air temperature, and wind speed at the project site.** Measure wind speed two feet above the concrete surface using an anemometer with  $\pm 4\%$  full scale accuracy. Measure percent relative humidity two feet above the concrete surface using a psychrometer or hygrometer with  $\pm 2\%$  full scale accuracy. Use windbreaks and other protective measures, as necessary, in addition to fogging to limit the expected evaporation rate to less than 0.488 kilograms per square meter per hour as determined by Figure 552-1. However, do not place HPC if the expected evaporation rate, determined without fogging and other protective measures, is greater than 0.732 kilograms per square meter per hour as determined by Figure 552-1.

When finishing operations are complete, cover exposed surfaces with selected water curing systems of wet burlap/polyethylene sheeting, cotton mats/polyethylene sheeting, or wet burlene sheeting.

**(d) Rain.** See subsection 552.10(d).

**578.11 Handling and Placing Concrete.** See subsection 552.11.

**(a) General.** Place concrete continuously without interruption between planned construction or expansion joints. The delivery rate, placing sequence, and methods shall be such that fresh concrete is always placed and consolidated against previously placed concrete before initial set has occurred in the previously placed concrete. Do not allow the time between the placements of successive batches to exceed 30 minutes.

Prior to placement of HPC concrete, thoroughly clean forms of any debris and wet forms. Clean reinforcing steel of all loose material, dirt, scale, prior to concrete placement.

**(b) Sequence of placement.** See subsection 552.11(b)

**(c) Placing methods.** See subsection 552.11(c).

**(d) Consolidation.** Refer to 552.11(d). Spud vibrate the concrete at edges and adjacent to expansion joints.

**578.12 Construction Joints.** Refer to 552.12.

**578.13 Expansion and Contraction Joints.**

**(a) Open joints.** Refer to 552.13(a).

**(b) Filled joints.** Refer to 552.13(b).

**(c) Steel joints.** Refer to 552.13(c).

**(d) Compression joint seals.** Refer to 552.13(d).

**(e) Elastomeric expansion joint seal.** Refer to 552.13(e).

**578.14 Finishing Plastic Concrete.** See subsection 552.14.

For bridge decks, top slabs of structures serving as finished pavement, or deck overlays, use a self-propelled rotating cylinder machine, either single or double roller that is capable of forward or reverse movement under positive control. The machine shall be equipped with an oscillating screed and any other devices required to continuously spread, consolidate, and finish the plastic concrete. The screed shall extend the full width of the deck.

**(a) Striking off and floating.** Refer to 552.14(a).

**(b) Straightedging.** Refer to 552.14(b).

**(c) Texturing.** Produce a skid-resistant surface texture on all driving surfaces by grooving. Do not groove until curing has been completed. Mechanically saw-cut the grooves perpendicular to the centerline of the bridge. Do not use hand-held saws to cut the grooves. Grooves are to be 3 millimeters (nominal) wide by 5 millimeters deep. Space grooves with a three quarter inch center to center spacing. Do not groove overlay within 450 millimeters of the curbs or within 75 millimeters of expansion joints. Continuously remove all slurry or other residue from the overlay by vacuum pickup or other approved methods. Remove all residues from the finished surface. Properly dispose of slurry and other residue off site.

Clean any staining or efflorescence after curing if directed by the CO to provide a uniform color to the concrete surface.

**578.15 Concrete Curing.** Immediately after screeding and until the application of moist curing do not allow the surface of the freshly placed concrete to dry. Use extra care to prevent plastic shrinkage cracking and crusting of the surface prior to the end of finishing operations. Immediately after finishing, cover the overlay concrete with wet burlap and polyethylene sheeting, cotton mats and polyethylene sheeting or wet burlap sheeting. Do not wait until final set to cover the overlay concrete. Within four hours after the concrete has achieved final set, apply soaker hoses, or other approved methods of keeping the coverings saturated.

Install maturity meter probes according to AASHTO T 325. Monitor the maximum temperature differential from the center of the concrete mass to the surface of the concrete. Using the strength-maturity relationship developed for the approved concrete mixture determine the in-place concrete compressive strength of the overlay concrete.

Wet cure the HPC Bridge Deck, approach slabs, sidewalks, and other flatwork for a minimum of 14 days. Keep the concrete saturated and covered for the entire curing period. During wet curing, maintain the concrete temperature above 7 °C at the outer most surfaces of the concrete mass. Provide a means of internal cooling, external heating, or insulation to ensure that the temperature differential does not exceed 2 °C during wet curing and just prior to removing the curing system. Opaque and transparent sheeting may be used when the air temperature falls below 4 °C. Do not remove the wet curing system until the in-place concrete compressive strength of the concrete has reached a minimum of 80 percent of the minimum compressive strength specified in Table 578-2 at all measured locations.

Cure HPC structural elements a minimum of 10 days. In addition, do not remove the curing system until the in-place concrete compressive strength of the concrete has reached a minimum of 80 percent of the minimum compressive strength specified in Table 578-2 at all measured locations as measured according to the Maturity Method. Use a combination of forms in place curing and water method for curing. If forms are stripped or loosened to provide a Class 2 Rubbed Finish to the concrete surface prior to the end of the curing period, complete the remainder of the curing by the water method per 552.15 (b). Provide a means of internal cooling, external heating, or insulation to ensure that the temperature differential does not exceed 2 °C during curing and just prior to removing the curing system.

**578.16 Acceptance.** See Table 578-3 for sampling and testing requirements and the acceptance

quality characteristic category.

Evaluate the material for HPC under Subsections 106.02 and 106.03. Furnish a production certification for the hydraulic cement.

The concrete mixture's slump, air content, unit mass, and temperature will be evaluated under Subsections 106.02 and 106.04.

Concrete compressive strength will be evaluated under Subsection 106.05. The lower specification limit is the minimum required compressive strength ( $f_c'$ ) at 28 days as specified in Table 578-2. A single compressive strength test result is the average result from 2 cylinders cast from the same load and tested at 28 days.

Remove and replace concrete represented by cylinders having a compressive strength less than 90 percent of the minimum 28 days compressive strength ( $f_c'$ ).

Maximum chloride permeability will be evaluated under Subsection 106.05. The upper specification limit is the maximum specified chloride permeability value as specified in Table 578-2. A single chloride permeability test result is the average result from 2 samples cast from the same load and tested.

Drying shrinkage will be evaluated under Subsection 106.04. The upper specification limit is the maximum specified drying shrinkage value as specified in Table 578-2. If the concrete mixture contains 7.4 Liters per cubic meter of an approved Shrinkage Reducing Admixture (SRA), drying shrinkage testing is not required and drying shrinkage will be evaluated under Subsection 106.03.

### **Measurement**

**578.17** Measure the Section 578 items listed in the bid schedule according to Subsection 109.02.

### **Payment**

**578.18** The accepted quantities will be paid at the contract price per unit of measurement for the Section 578 pay items listed in the bid schedule except the HPC unit bid price will be adjusted according to Subsection 106.05. Payment will be full compensation for the work prescribed in this Section. See Subsection 109.05.

Payment for HPC will be made at a price determined by multiplying the unit bid price by the concrete pay factor.

**Table 578-3  
Sampling and Testing Requirements**

<b>Material or Product</b>	<b>Type of Acceptance (Subsection)</b>	<b>Characteristic</b>	<b>Category</b>	<b>Test Methods or Specifications</b>	<b>Sampling Frequency</b>	<b>Point of Sampling</b>	<b>Split Sample</b>	<b>Reporting Time</b>
Aggregate source quality (703.02)	Measured and tested for conformance (106.04)	Quality	---	AASHTO M 80 & M 6	1 per material type	Source of material	Yes	Before producing
Concrete composition (mix design)	Measured and tested for conformance (106.04)	All	---	Subsection 572.03	1 per mix design	Source of material	Yes	Before producing
Produced aggregate (fine & coarse)	Measured and tested for conformance (106.04)	Gradation	---	AASHTO T 27 & T 11	1 per day	Flowing aggregate stream (bin, belt, discharge conveyor belt, or stockpile)	Yes, when requested	Before batching
		Fineness modulus	---	AASHTO T 27	---	“	“	“
		Moisture test	---	AASHTO T 255	---	“	“	“

**Table 578-3 (continued)  
Sampling and Testing Requirements**

HPC (test placement)	Measured and tested for conformance (106.04) <sup>(1)</sup>	Maximum <sup>(2)</sup> chloride permeability		AASHTO T 277	1 set per test placement	Discharge stream at point of placement	Yes, when requested	Upon completing tests
		Compressive strength <sup>(3)</sup>		AASHTO T 23 & 22	“	“	“	“
		Drying <sup>(4),(5)</sup> shrinkage		ASTM C 157	“	“	“	“
HPC (all)	Measured and tested for conformance (106.04)	Unit mass	---	AASHTO T 121	1 per load	Point of discharge	---	Upon completing tests
		Air content	---	AASHTO T 152 or AASHTO T 196	“	“	---	“
		Slump <sup>(6)</sup>	---	AASHTO T 119	“	“	---	“
		Temperature	---	Field measured	“	“	---	“

**Table 578-3 (continued)  
Sampling and Testing Requirements**

HPC (production)	Statistical (106.05)	Maximum chloride permeability <sup>(7)</sup>	II	AASHTO T 277	1 set per 30 yd <sup>3</sup> but not less than 1 per day	Discharge stream at point of placement	Yes, when requested	Upon completing tests
		Compressive strength <sup>(3), (8)</sup>	II	AASHTO T 23 & T 22	“	“	“	“

- (1) Sample according to AASHTO T 141 except composite samples are not required.
- (2) When using pigment in the mixture, sample an additional set of cylinders at the batch plant before and after adding pigment. Cast a minimum of 3 cylinders with and without pigment.
- (3) Cast at least 14, 100 millimeters by 200 millimeters compressive strength cylinders per set and carefully transport the cylinders to the job site curing facility. A single compressive strength test result is the average result from 2 cylinders cast from the same load.
- (4) Drying shrinkage testing is not required if the concrete mixture contains 7.4 Liters per cubic meter of an approved Shrinkage Reducing Admixture (SRA).
- (5) Cast at least 3 drying shrinkage prisms per set and carefully transport the prisms to the job site curing facility. A drying shrinkage test result is the average result from 3 prisms cast from the same load.
- (6) If using fibers at an addition rate greater than 0.3% by volume, measure slump at the batch plant prior to the addition of fibers.
- (7) Cast at least 3, 100 millimeters by 200 millimeters maximum chloride permeability cylinders per set and carefully transport the cylinders to the job site curing facility. A single maximum chloride permeability test result is the average result from 3 cylinders cast from the same load.
- (8) Deliver cylinders to designated laboratory for testing.

Add the following section:

**Section 579. — LATEX MODIFIED CONCRETE (LMC) OVERLAYS**

**Description**

**579.01** This work consists of furnishing, placing, finishing, and curing latex modified concrete in bridge deck overlays.

**Material**

**579.02** Conform to the following Subsections:

Air-entraining admixture	711.02
Chemical admixtures	711.03
Coarse aggregate	703.02
Color coating	725.24
Curing material	711.01
Elastomeric bearing pads	717.10
Elastomeric compression joint seals	717.16
Fine aggregate	703.01
Fly ash	725.04
Ground iron blast-furnace slag	725.04
Hydraulic cement	701.01
Joint fillers and sealants	712.01
Latex Modifier	711.04
Linseed oil	725.14
Masonry cement	701.02
Water	725.01

**579.02 Qualifications.** The Contractor or subcontractor performing the latex modified concrete overlay work shall have completed at least 2 latex modified concrete overlay projects within the last 3 years. Submit a brief description of each project including the owning agency's name and current telephone number.

Provide an on-site supervisor with at least 1 year experience constructing latex modified concrete overlays. At least 30 days before starting the latex modified concrete overlay work, identify the on-site supervisor assigned to the project and submit a summary of the individual's experience.

**579.03 Definitions.**

**(a) Latex Modified Concrete (LMC).** Concrete incorporating a styrene butadiene latex polymer that conforms to Subsection 711.04 and that meets specified performance

characteristics in addition to standard structural concrete properties. The class of concrete for LMC overlays is designated as LMC.

**(b) LMC performance characteristics.** Specified concrete properties in addition to standard structural concrete properties of freeze thaw durability, compressive strength, slump and plastic air content. LMC performance characteristics consist of the following:

**(1) Maximum Chloride Permeability.** Measured value, of total charge passed, in coulombs, over a specified period of time, determined according to AASHTO T 277 with the following provisions: Sample specimens at the point of discharge. Cure chloride permeability specimens for three days according to AASHTO M 201. Then air dry at  $23\text{ }^{\circ}\text{C} \pm 2\text{ }^{\circ}\text{C}$  at 40% - 60% Relative Humidity until AASHTO T 277 sample conditioning. Test for chloride permeability at 28 days. The value will be the result of the average of tests on three specimens.

**(2) Average Bond Strength of Overlay by the Tensile Pull Off Method.** Measured value, of average tensile bond strength, in pounds per square inch, determined according to ASTM C 1583 with the following provisions: Core and test the specimens in situ. Cure specimens the same length of time as the LMC overlay. Core 50 millimeter diameter specimens through the overlay and 25 millimeters into the substrate concrete. Attach loading disk with fast setting, high strength epoxy. The bond strength test value is the average bond strength from three test specimens. The locations for each test will be randomly determined by the CO.

**579.04 Composition (Concrete Mix Design).** For Class LMC produce a concrete mixture with a maximum Water/Cementitious (W/C) ratio of 0.38, a nominal maximum aggregate size of 12 millimeters, and a total cementitious content within the range of 335 to 502 kilograms per cubic meter. Use only type I or II Portland cement. Include the water contained in the aggregates above the amount of absorbed water in the calculation of the W/C ratio. LMC shall contain 13.2 liters of latex modifier per 43 kilograms of cement. Do not use gravel or ASR reactive aggregates. The total cementitious content includes Portland cement and any pozzalons added to the concrete mixture, such as ground granulated blast furnace slag or fly ash. Determine design strength values according to ACI 318. Structural concrete shall also conform to the following ACI specifications:

- ACI 211.1 Standard Practice for Selecting Proportions for Normal, Heavy Weight and Mass Concrete;
- ACI 211.2 Standard Practice for Selecting Proportions for Structural Light Weight Concrete;

Class LMC concrete shall also conform to the following:

**(e) Plastic Properties.** Conform to Table 579-1. Measure slump and plastic air content 5 minutes after discharge from volumetric mixer.

**Table 579-1  
Plastic Properties of LMC**

Property	Specification
Slump, AASHTO T 119	50 to 200 mm
Air Content, AASHTO T 152 or AASHTO T 196	3.0 to 10.0 %

**(f) LMC Performance Characteristics.** Conform to Table 579-2.

**Table 579-2  
Performance Characteristics of LMC**

Performance Characteristic	Specification
Chloride Permeability, AASHTO T 277	1,500 coulombs maximum
Average Bond Strength, ASTM C 1583	1.0 MPa minimum
Compressive Strength, AASHTO T 22	27.6 MPa minimum

Submit concrete mix designs on FHWA Form 1608.

Verify mixture design with trial mixes prepared according to ACI 318 from proposed source(s) or with previous concrete production data for the mixture design submitted from proposed source(s). Verify LMC performance characteristics that are specified in Table 579-2. Submit written concrete mix designs for approval at least 36 days before production. Each mix design submittal shall include the requirements of 552.03(a) through (x).

**579.05 Strength-Maturity Relationship.** Develop a strength-maturity relationship of the approved concrete mixture according to AASHTO T 325. Submit strength-maturity relationship for approval at least 14 day prior to production. Note that the developed strength-maturity relationship is dependent upon mix constituents.

Provide a concrete maturity meter during the test placement and production. Provide a concrete maturity meter that conforms to AASHTO T 325 and is rugged, waterproof, and can withstand the construction environment, able to operate without an external power source for a minimum of 14 days, able to collect and store temperature and maturity data for a minimum of 14 days, and is able to determine equivalent maturity hours according to the Arrhenius function.

**579.06 Test Placement.** Fabricate a 2.743 meter x 2.743 meter test panel using the approved concrete mixture. Place the test panel on the substrate concrete at the same thickness as the bridge deck overlay. Prepare the substrate concrete surface using the same methods as intended for the actual placement. Construct the test panel using the same methods of handling, placing, finishing and curing as intended for the actual placement. Sample for specified properties listed

in Table 579-3.

Demonstrate the maturity meter operation during the test placement. Install maturity meter probes according to AASHTO T325. Measure the concrete temperature and calculate the in-place maturity. Using the strength-maturity relationship developed for the approved concrete mixture determine the in-place concrete compressive strength of the LMC Overlay. Verify that the test placement concrete has a similar time temperature relationship as the submitted concrete mixture.

Monitor the maximum temperature differential from the center of the concrete mass to the surface of the concrete. Provide means of internal cooling, external heating, or insulation to insure the temperature differential does not exceed 2°C during the test placement, curing, and immediately after form stripping or curing ends. Demonstrate methods chosen to keep maximum temperature differential less than 2°C.

Furnish a new mix design for approval if there is a change in a source of material or when the fineness modulus of the fine aggregate changes by more than 0.20.

Test methods to clean any staining or efflorescence after curing of test panels if directed by the CO to provide a uniform color to the concrete surface.

Begin production only after the test placement has been evaluated and accepted.

**579.07 Storage and Handling of Material.** See subsection 552.04.

**579.08 Measuring Material.** See subsection 552.05.

**579.09 Batching Plant, Mixers, and Agitators.** Use volumetric mixing equipment conforming to ASHTO M241 supplemented as follows:

Use only potable water for mixing LMC concrete and for wash water.

Use proportioning and mixing equipment with an integral mobile unit having the capacity and continuous mixing capability to permit the finishing operations to proceed at a constant rate so that final finishing can be completed prior to the formation of a plastic film on the LMC surface. Consistently produce a uniformly blended mixture within the specified air content and slump limits. Furnish a mixer with the following capabilities:

- (a) Capable of producing not less than 4.6 cubic meters of LMC without recharging;
- (b) Equipped with a recording meter with a ticket printout device to record an indication of the cement quantity being introduced into the mix. Use a metering device that is accurate within a tolerance of -1 to -3 percent;
- (c) Equipped with a latex metering device to indicate volume dispensed. The metering device shall be accurate within a tolerance of -1 to +2 percent. Furnish a latex tank with a standpipe clearly marked in liters or gallons;

- (d) Equipped with a water flow indicator, and have a water flow control that is readily adjustable to provide for minor variations in aggregate moisture content. Use a flow indicator that is accurate within a tolerance of 2 percent in the range of expected use;
- (e) Equipped with a control to regulate the quantity of each of the LMC components to permit production of a mix having the specified composition. To ensure that the mixer can accurately proportion and blend all components of the LMC on a continuous or intermittent basis, furnish a mixer that is calibrated prior to the start of the overlay placement. The CO may require recalibration of the cement, latex and water metering devices, when deemed necessary;
- (f) Capable of discharging mixed LMC through a conventional chute directly in front of the finishing machine;
- (g) Clean, and free of partially dried or hardened materials, and properly operating at all times; and
- (h) Calibrated with the materials for the approved mix design within 6 months of the date of placement.

**579.10 Mixing.** See AASHTO M241 Section 9 – Mixing and Delivery.

**579.11 Delivery.** LMC is to be delivered through a conventional chute by the integral mobile volumetric mixer directly in front of the finishing machine.

**579.12 Quality Control of Mix.** See Subsection 552.09.

(a) **Mixing.** See Subsection 552.09(a).

(b) **Delivery and sampling during actual placement.** See subsection 552.09(b), except make at least 16, 100 millimeters by 200 millimeters compressive strength test cylinders. Twelve of the cylinders will be used for 1, 2, 4, 7, 14 and 28-day compressive strength tests. Make at least 3, 100 millimeters by 200 millimeters cylinders for maximum chloride permeability testing at 28 days. Test for unit mass, plastic air content, and slump 5 minutes after discharge of sample from mixer chute. Cover wheelbarrow or other receptacle used to hold sample with a sheet of plastic to prevent evaporation during the 5 minutes prior to sampling.

Provide for compressive strength testing, Chloride Permeability, Direct Tension (Pull-off Method), by an independent laboratory, qualified to perform the testing, and as approved by the CO.

**579.13 Temperature and Weather Conditions.** Maintain the temperature of the LMC overlay concrete mixture just before placement between 7 and 27 °C. Monitor concrete temperatures according to AASHTO T 325. Monitor the maximum temperature differential from the center of the concrete mass to the surface of the concrete during placement and curing. Provide means of internal cooling, external heating, or insulation to insure the temperature differential does not exceed 2 °C during placement, curing and immediately after form stripping or wet curing system removal.

Using the strength-maturity relationship developed for the approved concrete mixture determine in-place concrete compressive strength of overlay. Measure concrete temperature and calculate in-place maturity.

**(a) Cold weather.** See subsection 552.10(a), except during cold weather, protect all concrete until concrete maturity data indicates that the minimum compressive strength has been achieved.

Do not remove curing materials and insulation until the minimum compressive strength has been achieved and the moist curing period is complete. During the cooling period do not allow the maximum temperature differential from the interior of the concrete to the surface to exceed 2 °C and do not allow the concrete surface temperature to exceed the values shown in Table 552-5. To prevent rapid convective heat loss from the surface, do not start the cooling period if the average windspeed exceeds 16 kilometers per hour as measured 914 millimeters from the concrete surface.

Place Overlay concrete only when the ambient air temperature is 7 °C and rising. Place overlay concrete at night or early morning if temperatures are greater than 27 °C, unless otherwise approved by the CO.

**(b) Hot weather.** See subsection 552.10(b).

Do not remove curing materials until the minimum compressive strength has been achieved and the moist curing period is complete. During the cooling period do not allow the maximum allowable temperature differential from the interior of the concrete to the surface to exceed 2 °C and do not allow the concrete surface temperature to exceed the values shown in Table 552-5. To prevent rapid evaporative cooling from the moist concrete surface, do not start the cooling period if the calculated evaporation rate exceeds 0.73 kilograms per square meter per hour as determined by Figure 552-1.

**(c) Evaporation.** Take care to prevent plastic shrinkage cracking during concrete placement and finishing operations by monitoring and maintaining the expected evaporation rate within acceptable limits. Fog all freshly placed overlay concrete. Identify personnel assigned to operate the fogging equipment during the overlay concrete placement and install and demonstrate fogging equipment for approval prior to placing overlay concrete. Use pressure sprayers or atomizers to maintain a moist surface. Do not apply moisture under pressure directly to the concrete surface and do not allow water to accumulate sufficiently enough to cause a flow or wash on the concrete surface. Continue fogging the concrete surface until all finishing operations are complete and the surface has been covered. Do not wait until final set to cover the concrete surface.

Monitor relative humidity, air temperature, and wind speed at the project site. Measure wind speed 610 millimeters above the concrete surface using an anemometer with  $\pm 4\%$  full scale accuracy. Measure percent relative humidity two feet above the concrete surface using a psychrometer or hygrometer with  $\pm 2\%$  full scale accuracy. Use windbreaks and other protective measures, as necessary, in addition to fogging to limit the expected evaporation

rate to less than 0.49 kilogram per square meter per hour as determined by Figure 552-1. However, do not place bridge deck or overlay concrete if the expected evaporation rate, determined without fogging and other protective measures, is greater than 0.73 kilogram per square meter per hour as determined by Figure 552-1.

When finishing operations are complete, cover surface with selected water curing systems of wet burlap/polyethylene sheeting, cotton mats/polyethylene sheeting or wet burlene sheeting.

**(d) Rain.** See subsection 552.10(d).

**579.14 Handling and Placing Concrete.** See subsection 552.11.

**(a) General.** Place concrete continuously without interruption between planned construction or expansion joints. The delivery rate, placing sequence, and methods shall be such that fresh concrete is always placed and consolidated against previously placed concrete before initial set has occurred in the previously placed concrete. Do not allow the time between the placements of successive batches to exceed 30 minutes.

**(b) Surface Preparation.** Prior to placement of LMC overlay, remove any asphalt concrete overlay and asphaltic membrane without damaging the concrete bridge deck. Sound bridge deck and repair all badly deteriorated areas on the deck prior to performing hydrodemolition.

**(1) Concrete Repairs.** Determine location of unsound concrete. Develop and submit a repair plan for review and approval prior to repairing unsound concrete.

Remove unsound concrete per means and methods outlined in approved repair plan. Saw cut approximately 12 millimeters deep along all boundaries of the repair areas. Point saw cuts, extending beyond the limits of repair areas, flush to the surface with portland cement mortar or epoxy mortar.

After removal of the deteriorated or unsound concrete, abrasive shot blast exposed structural steel, reinforcing steel, and any concrete surfaces that will be in contact with repair material until free of rust and foreign material. Remove and replace all badly deteriorated reinforcing steel.

Where the bond between the existing concrete and reinforcing steel has been destroyed, remove the concrete adjacent to the steel to a depth that will permit new concrete to bond to the entire periphery of the exposed steel. Provide a minimum of 20 millimeters of clearance behind the steel.

Clean the sound concrete surface by flushing with clean water from a high pressure water jet or compressed air. If compressed air is used provide a filter in the air line to ensure that the air is oil-free.

Less the 24 hours before placing the repair concrete, clean the existing concrete surface and any exposed reinforcement of all loose material, dust, etc., by abrasive shot blasting

and thoroughly flushing with clean water under pressure or compressed air. If compressed air is used provide a filter in the air line to ensure that the air is oil-free.

For concrete repairs with areas greater than 0.19 square meters and less than 0.37 square meters in which the reinforcing steel is exposed, install a pair of pre-packaged zinc sacrificial anodes on the clean, exposed reinforcing steel. Install anodes within 150 millimeters of the edge of the repair. Install the anodes at opposite sides of the repair. For repairs greater than 0.37 square meters, install an additional pair of anodes per each incremental increase of 0.37 square meters of repair area. Install on reinforcing steel according to manufacturer's recommendations. Use a Sika Galvishield XP, Euclid Sentinel GL, or equivalent pre-package zinc sacrificial anode from another manufacturer.

For concrete repairs that contain installed pre-packaged zinc sacrificial anodes use a Class A (AE) concrete except use a 12 millimeters nominal maximum size aggregate. For all other concrete repairs use a Class D(AE) concrete except use a 12 millimeters nominal maximum size aggregate, or an approved high strength concrete patching compound such as Five Star Highway Patch or equivalent placed in accordance with the manufacturer's recommendations.

Sample repair concrete for compressive strength. Fill concrete patches such that the surface of the patch is level with the surface of the sound concrete deck. Moist cure patches using wet burlap and covering with polyethylene sheeting. Moist cure repair areas until compressive strength of 21 MegaPascals is obtained.

**(2) Hydrodemolition.** After all concrete repairs have been made develop a profile for bonding of LMC Overlay to the substrate concrete by hydrodemolition.

Use a computerized self-propelled hydrodemolition machine, with ultra high pressure water and a high speed rotating nozzle jet system capable of producing a surface profile with an amplitude of ½ the nominal maximum size aggregate of the substrate concrete. The pressure of water exiting the nozzle shall be in excess of 207 MegaPascals. The nozzle jet system shall rotate at 1,000 Revolutions per Minute or greater. Use hand held high pressure lances in areas that are inaccessible to the self-propelled machine. Use caution with hand held lances to avoid gouging of the substrate concrete. Use potable water in the hydrodemolition operation. Do not use stream or lake water. Take care during the hydrodemolition operations to prevent damage to surrounding property and traffic. Do not discharge waste water into a stream. Block all drains on the deck and install aggregate dams, 150 millimeters high by 300 millimeters wide, or filter sock equivalent every 46 meters, minimum to filter run-off. Use the deck as a settlement basin within itself. Use a settlement basin outside the structure or at the end of the structure if further filtering is required to produce visibly clear water.

Prior to the commencement of the removal operation, the equipment shall be calibrated on an area of representative, sound concrete as designated by the Engineer. The CO shall verify the following settings:

- (a) Water pressure gauge;
- (b) Machine Staging control (step);
- (c) Nozzle size; and
- (d) Nozzle speed (RPM).

The hydrodemolition surface preparation production may begin after the Engineer has approved the above settings. The calibration and production settings shall be maintained and given to the Engineer prior to and during hydrodemolition surface preparation production by the contractor.

A non-working technical field representative shall be present on the project site during the calibration and hydrodemolition surface preparation operations unless waived by the Engineer.

The depth of removal and at least every 15 meters along the cutting path, the readings shall be documented and the equipment re-calibrated, if necessary, to insure the proper depth of removal is achieved.

Thoroughly clean and remove all dirt, foreign materials and loose concrete from the removal area to the extent necessary to produce a firm solid surface for adherence of new concrete. Clean with a vacuum system capable of removing wet debris and water in the same pass. Blow dry the deck with air to remove excess water. Clean in a timely manner, before debris and water are allowed to dry on the deck surface.

Take care to avoid damaging exposed reinforcing steel. Provide adequate support and protect reinforcing steel that is left unsupported from the hydrodemolition process. Repair or replace all damaged or dislodged reinforcing steel with bars of the same size.

Pressure wash the surface after completion of hydrodemolition to remove any remaining fines from the prepared surface. Capture all material and debris and properly dispose of it off site.

Determine the thickness of the overlay concrete by measuring the elevation of the prepared substrate concrete at a minimum of ten locations, identified by the CO, for every 279 square meters or for one day's planned LMC overlay placement and measuring the finish surface of the overlay concrete at the same locations. . The CO will randomly select locations for tensile bond pull off testing from these measured locations.

**(3) Saturation.** Water soak the clean concrete surface thoroughly for a period of not less than 12 hours prior to placing the overlay concrete. Cover the prepared surface with polyethylene sheeting to prevent contamination. Do not use burlap. Just prior to placing the overlay concrete remove puddles of standing water using a vacuum, leaf blower, or other approved equipment. Do not use compressed air to remove water.

**(c) Placing methods.** See subsection 552.11(c).

Install a construction dam or a bulkhead in case of major delay in the placement operation. During minor delays of 1 hour or less, protect the end of the placement from drying with several layers of wet burlap.

Form the vertical edge at construction joints by bulkhead or sawcut. Make all construction joints straight and vertical.

**(d) Consolidation.** Refer to 552.11(d). Spud vibrate the concrete at edges and adjacent to expansion joints.

**579.15 Construction Joints.** Refer to 552.12.

**579.16 Expansion and Contraction Joints.**

**(a) Open joints.** Refer to 552.13(a).

**(b) Filled joints.** Refer to 552.13(b).

**(c) Steel joints.** Refer to 552.13(c).

**(d) Compression joint seals.** Refer to 552.13(d).

**(e) Elastomeric expansion joint seal.** Refer to 552.13(e).

**579.17 Finishing Plastic Concrete.** See subsection 552.14.

For bridge decks, top slabs of structures serving as finished pavement, or deck overlays, use a self-propelled rotating cylinder machine, either single or double roller that is capable of forward or reverse movement under positive control. The machine shall be equipped with an oscillating screed and any other devices required to continuously spread, consolidate, and finish the plastic concrete. The screed shall extend the full width of the deck.

**(a) Striking off and floating.** Refer to 552.14(a).

**(b) Straightedging.** Refer to 552.14(b).

**(c) Texturing.** Produce a skid-resistant surface texture on all driving surfaces by grooving. Do not groove until curing and tensile bond strength testing have been completed. Mechanically saw-cut the grooves perpendicular to the centerline of the bridge. Do not use hand-held saws to cut the grooves. Grooves are to be 3 millimeters (nominal) wide by 5 millimeters deep. Space grooves with a 20 millimeter center to center spacing. Do not groove overlay within 450 millimeters of the curbs or within 75 millimeters of expansion joints. Continuously remove all slurry or other residue from the overlay by vacuum pickup or other approved methods. Remove all residues from the finished surface. Properly dispose of slurry and other residue off site.

Clean any staining or efflorescence after curing if directed by the CO to provide a uniform

color to the concrete surface.

**579.18 Concrete Curing.** Immediately after screeding and until the application of moist curing do not allow the surface of the freshly placed concrete to dry. Use extra care to prevent plastic shrinkage cracking and crusting of the surface prior to the end of finishing operations. Immediately after finishing, cover the overlay concrete with wet burlap and polyethylene sheeting, cotton mats and polyethylene sheeting or wet burlap sheeting. Do not wait until final set to cover the overlay concrete. Within four hours after the concrete has achieved final set, apply soaker hoses, or other approved methods of keeping the coverings saturated.

During wet curing, maintain the concrete temperature above 7 °C at the outer most surfaces of the concrete mass. Do not remove the wet curing system until the elapsed time from the end of placement exceeds 48 hours and the maturity meter reading exceeds 48 Maturity Hours.

Air cure LMC overlay after moist curing by the water method is complete until the elapsed time from the end of placement exceeds 96 hours and the maturity meter reading exceeds 96 Maturity Hours. Determine bond strength of LMC overlay according to ASTM C1583 after air curing is complete.

**579.19 Acceptance.** See Table 579-3 for sampling and testing requirements and the acceptance quality characteristic category.

Material for overlay concrete will be evaluated under Subsections 106.02 and 106.03. Furnish a production certification for the hydraulic cement.

The overlay concrete mixture's slump, air content, unit mass, and temperature will be evaluated under Subsections 106.02 and 106.04.

Overlay concrete compressive strength will be evaluated under Subsection 106.05. The lower specification limit is the minimum required compressive strength ( $f_c'$ ) at 28 days as specified in Table 579-2. A single compressive strength test result is the average result from 2 cylinders cast from the same load and tested at 28 days.

Remove and replace concrete represented by cylinders having a compressive strength less than 90 percent of the minimum 28 days compressive strength ( $f_c'$ ).

Maximum chloride permeability will be evaluated under Subsection 106.05. The upper specification limit is the maximum specified chloride permeability value as specified in Table 579-2. A single chloride permeability test result is the average result from 2 samples cast from the same load and tested.

The bond strength of the overlay will be evaluated under Subsection 106.05. The lower specification limit is the minimum required bond strength at 7 days. The average of the three test result values will be considered the bond strength test value. Tests that result in a failure in the base concrete at a depth of 6 millimeters or more over greater than 50 percent of the test area and a test value of less than 1 MegaPascal shall be assigned a value of 1 MegaPascal when

computing the average. When more than 50 percent of the tests result in a failure in the base concrete at a depth of 6 millimeters or more over greater than 50 percent of the test area and a test value of less than 1 MegaPascal the PWL shall be the greater of 55 or the calculated value.

Materials used for concrete repair will be evaluated under Subsection 106.03.

### **Measurement**

**579.20** Measure the Section 579 items listed in the bid schedule according to Subsection 109.02.

### **Payment**

**579.21** The accepted quantities will be paid at the contract price per unit of measurement for the Section 579 pay items listed in the bid schedule except the LMC overlay unit bid price will be adjusted according to Subsection 106.05. Payment will be full compensation for the work prescribed in this Section. See Subsection 109.05.

Payment for LMC overlay will be made at a price determined by multiplying the unit bid price by the concrete pay factor.

**Table 579-3  
Sampling and Testing Requirements**

<b>Material or Product</b>	<b>Type of Acceptance (Subsection)</b>	<b>Characteristic</b>	<b>Category</b>	<b>Test Methods or Specifications</b>	<b>Sampling Frequency</b>	<b>Point of Sampling</b>	<b>Split Sample</b>	<b>Reporting Time</b>
Aggregate source quality (703.02)	Measured and tested for conformance (106.04)	Quality	---	AASHTO M 80 & M 6	1 per material type	Source of material	Yes	Before producing
Concrete composition (mix design)	Measured and tested for conformance (106.04)	All	---	Subsection 572.03	1 per mix design	Source of material	Yes	Before producing
Produced aggregate (fine & coarse)	Measured and tested for conformance (106.04)	Gradation	---	AASHTO T 27 & T 11	1 per day	Flowing aggregate stream (bin, belt, discharge conveyor belt, or stockpile)	Yes, when requested	Before batching
		Fineness modulus	---	AASHTO T 27	---	“	“	“
		Moisture test	---	AASHTO T 255	---	“	“	“

**Table 579-3 (continued)  
Sampling and Testing Requirements**

LMC (test placement)	Measured and tested for conformance (106.04)	Maximum chloride permeability <sup>(3)</sup>		AASHTO T 277	1 set per test placement	Discharge stream at point of placement <sup>(1),(2)</sup>	Yes, when requested	Upon completing tests
		Compressive strength <sup>(4),(5)</sup>		AASHTO T 23 & 22	“	“	“	“
		Tensile bond strength		ASTM C 1583	5 cores per test placement	In-place after curing is complete	“	“
LMC (all)	Measured and tested for conformance (106.04)	Unit mass	---	AASHTO T 121	1 per load	Point of discharge	---	Upon completing tests
		Air content	---	AASHTO T 152 or AASHTO T 196	“	“	---	“
		Slump <sup>(6)</sup>	---	AASHTO T 119	“	“	---	“
		Temperature	---	Field measured	“	“	---	“

**Table 579-3 (continued)  
Sampling and Testing Requirements**

LMC(O) (production)	Statistical (106.05)	Maximum chloride permeability <sup>(3)</sup>	II	AASHTO T 277	1 set per 23 m <sup>3</sup> but not less than 1 per day	Discharge stream at point of placement	Yes, when requested	Upon completing tests
		Compressive strength <sup>(4),(5)</sup>	II	AASHTO T 23 & T 22	“	“	“	“
		Tensile bond strength	II	ASTM C 1583	1 set per 279 m <sup>2</sup> of overlay but not less than 1 per day	In-place after curing is complete	---	“

- (1) Sample according to AASHTO T 141 except composite samples are not required.
- (2) Begin sampling after an initial discharge of 0.765 cubic meters.
- (3) Cast at least 3, 100 millimeters by 200 millimeters maximum chloride permeability cylinders per set and carefully transport the cylinders to the job site curing facility. A single maximum chloride permeability test result is the average result from 3 cylinders cast from the same load.
- (4) Cast at least 14, 100 millimeters by 200 millimeters compressive strength cylinders per set and carefully transport the cylinders to the job site curing facility. A single compressive strength test result is the average result from 2 cylinders cast from the same load.
- (5) Deliver cylinders to designated laboratory for testing.
- (6) Measure slump and plastic air content 5 minutes after discharge from volumetric mixer.

### **Section 601.—MINOR CONCRETE STRUCTURES**

601.03. Delete the first sentence and substitute the following:

Conform to Table 601-1 or furnish a concrete mix used locally by either a Federal or State agency for the construction of minor concrete structures, that also meets the minimum 28-day compressive strength requirement of Table 601-1.

### **Section 619.—FENCES, GATES, AND CATTLE GUARDS**

619.06. Delete the first paragraph and substitute the following:

When necessary, construct temporary fence to keep livestock, pedestrians and traffic off the road being constructed or away from trees requiring protection. Temporary fence is intended to remain in place only during the construction of the project or until the fence is directed to be removed. At the completion of the project, remove fence and dispose of legally off Government property.

619.06. Add the following after the first paragraph:

Install fence as shown on the drawings or as directed by the CO. Use a conventional metal "T" or "U" post spaced every 2 to 3 meters. Drive posts 30 to 45 centimeters into the ground. Secure the fence to the post using 3 wire ties.

### **Section 624.—TOPSOIL**

624.04. Add the following after the second paragraph:

Where topsoil will be placed on slopes on which the character of the subsoil will not blend with the topsoil, work the topsoil into the subsoil to eliminate any slip-plane between the 2 materials and leave a sufficient cover of topsoil to ensure germination of the seed.

### **Section 625.—TURF ESTABLISHMENT**

625.01. Add the following:

The work does not include areas previously protected by soil erosion control measures according to Section 157, and upon which permanent suitable vegetation has started growth.

This work consists of establishing turf for all areas disturbed by construction activities or as directed by the CO. Furnish and place topsoil in accordance with Section 624 before initiating turf establishment.

625.02. Add the following:

Use clean, weed-free straw mulch.

625.03. Delete the first sentence and replace with the following:

Establish turf from March 15 to June 1, or August 1 to October 15. Apply turf establishment to finished slopes and ditches within 7 days after completion of construction on a portion of the site.

625.04. Add the following after the second paragraph:

Loosen the upper 50 millimeters of compacted soils prior to planting any seed mixture.

625.06. Add the following:

Apply limestone and fertilizer at the following rates for Roadside Seeding only:

<u>Item</u>	<u>Rate (kilograms/hectare)</u>
Agricultural Limestone (85% CaCO <sub>3</sub> )	4350
Fertilizer (10-20-20)	800

625.07. Add the following:

Apply a clean, weed-free seed mixture at the following rates of Pure Live Seed per hectare on all roadside turf areas subject to mowing by the maintaining agency. Provide the CO with documentation of the source and contents of all seed mixes (such as copies of the packing slips), to insure weed-free material and the seed species listed below.

Roadside Turf Area Seeding

<u>Name of Seed</u>	<u>Rate (kg/hectare)</u>
Fine Fescues Mix (combination of hard fescue, chewings fescue, and creeping red fescue, with no one variety exceeding 50% of the total Fine Fescues component.)	84.1
<u>Redtop (Agrostis alba)</u>	<u>3.4</u>
Total =	87.5

Apply a clean, weed-free seed mixture at the following rates of Pure Live Seed per hectare on all other disturbed areas (including reestablishing staging areas). Provide the CO with documentation of the source and contents of all seed mixes (such as copies of the packing slips), to insure weed-free material and the seed species listed below.

Disturbed Area Seeding

<u>Name of Seed</u>	<u>Rate (kg/hectare)</u>
Annual Rye ( <i>Lolium multiflorum</i> ) (Perennial Rye is not permitted)	22.4
Little Bluestem ( <i>Andropogon scoparius</i> ) (PA Ecotype = "Indiantown")	13.6
Indian Grass ( <i>Sorghastrum nutans</i> )	13.6
Virginia Wild Rye ( <i>Elymus virginicus</i> ) preferred or Canada Wild Rye ( <i>Elymus Canadensis</i> ) second choice (Unnamed Eastern Ecotypes Available)	13.6
Deertongue ( <i>Panicum clandestinum</i> ) (Eastern Ecotype = "Tioga")	13.6
Purpletop ( <i>Tridens flavus</i> )	4.4
<u>Path Rush (<i>Juncus tenuis</i>)</u>	<u>2.4</u>
Total =	83.6

Apply at 83.6 kg per hectare for broadcast spreading or hydroseeding, or at 44.8 kg per hectare by seed drill. Apply seed mixture with a cultipacker or hand roller to assure good seed-to-soil contact. Do not apply fertilizer, ammonium nitrate, or limestone.

625.08. Add the following:

Apply clean, weed-free straw mulch at a rate of 6,725 kg per hectare, air-dry weight or 25 to 50 mm mat for Roadside Turf Area Seeding and 2,240 kg per hectare, air-dry weight, for Disturbed Area Seeding.

625.10. Add the following:

Provide the CO with certified invoices or other similar documentation from the manufacturer or supplier indicating that the seed mix provided contains weed-free material.

**Section 626.—PLANTS, TREES, SHRUBS, VINES, AND GROUND COVERS**

626.02. Add the following:

Agricultural limestone	713.02
Backfill	704.03

626.03. Add the following:

Plant material during the following planting seasons:

Deciduous Material:                      October 15 to April 30



Shrubs	275 cubic centimeters)per shrub
Vine and Groundcovers	330 cubic centimeters) dry fertilizer per square meter of ground

When the pit is ½ full, place fertilizer according to the manufacturer's recommendations.

626.09. Delete the first paragraph and substitute the following:

Saucer shape the backfill 7.5 centimeters above the existing grade for shrubs and 15 centimeters for trees, for a diameter equal to that of the planting pit, to catch and retain water. Build up the backfill in holes on a slope on the lower side only to catch and hold water. Do not cover the tops of the rootballs with backfill.

626.09. Delete the last sentence of the first paragraph and substitute the following:

Saturate all backfill material in the pits at each watering.

Apply water only by open-end hose at a very low pressure to avoid creating air pockets in the soil and injuring the roots.

626.10. Delete the first sentence and substitute the following:

Support trees with stakes driven at equal spaces around the outside perimeter of the tree pit and to sufficient depth to hold trees firmly. Do not drive stakes through the rootball.

Cut pieces of hose long enough to extend 5 centimeters past the trunk of the tree when wrapped around. Place the hose around the trunk just below the first lateral branch for deciduous trees and halfway up the height of evergreen trees as shown on the plans. Thread a double strand of wire through the hose and pull both ends horizontally beyond each stake by 1 meter.

Provide approximately a 2.5 to 7.5-centimeters sway in the tree with the stakes in the vertical position after the guying is attached.

Stake trees no later than 48 hours after planting.

626.10. Add the following:

Provide protection for the newly planted tree from damage caused by deer browsing.

626.11. Delete the fourth sentence and substitute the following:

Do not cut the main leader. All cuts to side branches are to be just outside the branch collar (the swollen base of the branch) to encourage wound closure. Do not use tree wound dressing.

626.12. Add the following:

Apply mulch to cover the limits of the individual saucer areas of each individual plant to a loose measurement depth of 10 to 15 centimeters at the limits of the saucer area. Feather the depth back to 0 centimeters at the trunk.

626.14. Add the following:

Replace plants that have died back in the crown 25 percent beyond the normal pruning line, or where the main leader has died back, with the same size and species as the original.

Final acceptance for trees and shrubs will be given by the CO at the end of the establishment period once the following items are completed:

- (a) All plant materials that have died or are determined to be unacceptable are replaced.
- (b) All deficiencies in work, and damage to structures and grounds, are corrected.
- (c) All stakes and guys are removed.

### **Section 633.—PERMANENT TRAFFIC CONTROL**

633.01. Delete the second paragraph and substitute the following:

Sign panels are designated as aluminum.

633.03. Add the following after the first sentence:

Furnish signs also meeting the requirements of the National Park Service Uniguide Sign System Manual. See <http://www.nps.gov/hfc/acquisition/uniguide.htm>

633.03. Add the following:

Paint supports, backs and edges of sign panels with Benjamin Moore, Moorgard, exterior latex low luster paint, Federal Standard 595B Color No. 20059 (brown), or approved equal.

Furnish aluminum sign panels.

Furnish wood posts.

633.05. Delete the first sentence and substitute the following:

Furnish Type III retroreflective sheeting.

### **Section 634.—PERMANENT PAVEMENT MARKINGS**

634.03. Add the following to the first paragraph:

Place traffic markings before a winter suspension of paving operations. Replace traffic markings removed during construction operations with new permanent traffic markings. Match permanent traffic markings to the existing striping prior to start of construction, or as directed by the CO.

Survey existing traffic markings per Subsection 152.03.

**Section 635.—TEMPORARY TRAFFIC CONTROL**

635.02. Delete the Construction sign panels Section reference and substitute the following:

Construction sign panels	633.02
--------------------------	--------

635.03. Add the following:

(j) For all signs and other devices requiring orange color, use fluorescent red-orange or fluorescent yellow-orange color, type III retroreflective sheeting or better.

635.03(i). Add the following:

Submit a certification that the devices have been successfully crash tested to meet the requirements of NCHRP 350 and/or have been accepted by the FHWA.

**635.07** Delete the last sentence and substitute the following:

Remove or completely cover all unnecessary signs, or signs that conflict with the construction signing or Traffic Control Plan. Cover signs that are not removed so that no part of the covered sign is visible to traffic. Provide sign covers for temporary signs meeting the following requirements:

- a) Large enough to completely cover the sign.
- b) Easy to attach to and remove from the sign without damaging the sign face. Do not use adhesives, glues, tapes, or mechanical fasteners that mar the sign face.
- c) Black, non-reflective, and opaque.
- d) Made of plywood (minimum of 10 millimeters) thick), aluminum (minimum of 1 millimeter thick), or sheet metal of a sufficient thickness that the covering will not be lifted, bent or damaged by wind.
- e) Durable enough to resist deterioration due to weathering and atmospheric conditions for the duration of the project.

635.07. Add the following:

Furnish 40-centimeter by 40-centimeter flags for high level warning devices that are orange or fluorescent red orange in color.

635.11. Add the following after the second sentence of the first paragraph:

Use temporary barriers that meet test level TL-2 for speeds less than or equal to 45 mph, criteria, per NCHRP Report 350 for crashworthiness standards.

635.11. Delete the second paragraph and substitute the following:

Mount flexible plastic 15-centimeter by 15-centimeter delineators with Type III or IV

retroreflective sheeting to the top of concrete barriers on 7.5-meter centers. Furnish white sheeting when the delineator is to the right of traffic and yellow when to the left.

635.17. Add the following:

Patch the travelway after milling to provide a smooth, uniform traveling surface before reopening travel lanes to traffic as directed by the CO.

635.19. Delete the first sentence of the first paragraph and substitute the following:

Install an FHWA-approved temporary crash cushion conforming to test level TL-2 for speeds less than or equal to 45 mph criteria, per NCHRP Report 350 for crashworthiness standards.

635.20. Delete the first sentence of the first paragraph and substitute the following:

Design, furnish, and install a portable temporary signal system according to Subsection 156.06, Section 636, MUTCD Parts IV and VI, and plan drawings.

Install portable changeable message signs 2 weeks prior to the start of work indicating the planned construction start date. Place the signs where directed by the CO on U.S. Route 209. Use the signs during construction with updated messages as directed by the CO.

635.20. Add the following:

Time the temporary signal system in accordance with the operating modes listed in Subsection 636.04.

The maximum work space allowed under temporary signal system control is 305 meters.

Repair or replace, as necessary, any malfunctioning system or any of its components per Subsection 156.03. See Subsection 156 for additional requirements for a malfunctioning system.

635.26. Add the following:

Measure the temporary signal system by the each. A temporary signal system includes all signals and any components necessary to control three or more lanes of traffic at one location or work site. Only one temporary signal system will be measured for payment within the work limits of the following site:

#### Bushkill Creek Bridge Rehabilitation Site

Refer to the plan drawings for further description of the temporary signal system. This site is considered one location and moving the temporary signal system from one set up to another within this site will not be measured for payment.

Any components necessary for the operation of the temporary signal system is considered part of the system and will not be measured separately for payment.

### **Section 636.—SIGNAL, LIGHTING, AND ELECTRICAL SYSTEMS**

636.04. Add the following:

Design and place the temporary signal system according to the MUTCD, Part IV.

Furnish a signal controller capable of operating in the following modes:

	Signal Facing		
	<u>Northbound Traffic</u>	<u>Southbound Traffic</u>	<u>Creek Road Traffic</u>
1.	solid GREEN	solid RED	solid RED
2.	YELLOW/RED	solid RED	solid RED
3.	solid RED	solid GREEN	solid RED
4.	solid RED	YELLOW/RED	solid RED
5.	solid RED	solid RED	solid GREEN
6.	solid RED	solid RED	YELLOW/RED

Provide signal timing and programming with acceptable results for allowing traffic through the signalized traffic control zone, with most of the available green time assigned to the heaviest traffic movements. Furnish the results to the CO for approval prior to use.

A work space is defined as the variable roadway distance, measured along the centerline, in which the actual work operation is being performed. This distance does not include the distance required for traffic control devices leading up to the work operation. Refer to the plan drawings for a graphical description.

Provide a signalized traffic control zone test to determine an acceptable work space length that allows traffic to pass through the signalized traffic control zone according to Subsection 156.06(i) or as approved by the CO.

Provide a system that automatically sets to flashing red under signal control failure.

Commercial electricity is available to power the temporary signal system along the U.S. Route 209 corridor. Coordinate with the local electric company according to Subsection 107.02.

### **Section 637. — FACILITIES AND SERVICES**

637.02. Add the following:

Locate the Government field office at the parking area adjacent to the abandoned gas station directly north of the building known as the Bushkill Meeting Center, as directed by the CO. Other locations may be used with prior approval of the CO. Provide high-speed Internet access, as described in Subsection 637.03(a)(7).

637.03. Delete the third and fourth sentences of the first paragraph and substitute the following:

Provide local and long distance telephone services. The Government will be responsible for the cost of long distance calls made by Government employees for Government business and charged against this phone service. Bill the Government separately for these charges.

637.03(a). Add the following:

Divide the field office into 3 areas by permanent walls with hinged doors. If window air conditioning is provided, provide a separate unit for each room.

Clean the field office weekly to the approval of the CO.

Supply the following equipment in the field office:

**(1) Copy machine.** One self-feeding plain paper photo copying machine with the following minimum capabilities:

- (a) Automatic document feeder capable of making at least 8 copies per minute;
- (b) Reproducing copies at standard sizes up to and including 11 x 17 inches; and
- (c) Reducing 11 x 17 inches plan sheets to 8 ½ x 14 inches legal size and to 8 ½ x 11 inches letter size.

Furnish all necessary supplies, except paper. Paper will be supplied by the Government.

**(2) Printer.** One plain paper printing machine with printing capabilities of standard sizes up to and including 11 x 17 inches. The printer must be capable of printing from direct personal computer (PC) and local area network (LAN) hookups. The printer may be one machine in combination with the copy machine. Furnish all necessary supplies, except paper. Paper will be supplied by the Government.

**(3) Facsimile (FAX) machine.** One FAX machine with the following minimum capabilities:

- (a) Automatic document feeder with a minimum capacity of 20 pages;
- (b) Sending standard size documents up to and including 11 x 17 inches;
- (c) Printing on plain paper; and
- (d) Automatic dial/redial.

The FAX machine may be one machine in combination with the copy machine. Furnish all necessary supplies, except paper. Paper will be supplied by the Government.

**(4) Telephone.** Two dual line telephones (touch tone, hold button, intercom, and conference calling capabilities) with 2 separate lines, for the exclusive use of the CO.

**(5) Answering machine.** One digital answering device capable of answering, recording, storing, and playing back messages at least 30 minutes in length.

**(6) Cellular telephone.** One durable, hand held digital/cellular wireless telephone(s), manufactured by Motorola/Nextel, or approved equal, for the use of the CO. Furnish cellular telephone(s) that are similar or compatible with the Contractor's key field personnel (Project Superintendent, and Traffic Control Supervisor) to enable the direct communication between the CO and the Contractor's key field personnel. Furnish each cellular telephone(s) with the following minimum capabilities:

(a) Direct Connect feature, or equivalent, to communicate onsite with Contractor's key field personnel;

(b) Voicemail capable of answering, recording, storing, and playing back messages at least 30 minutes in length;

(c) Hands free device that can be used safely and effectively while driving, and is acceptable by the local law enforcement agencies;

(d) Customized communication configuration, independent of the other units, so that the CO may limit any features if necessary;

(e) Carrying case that can be worn on the belt and is appropriate for use on construction projects; and

(f) Other necessary cellular telephone accessories including a cigarette lighter power adapter/charger.

The cellular telephone plan shall provide the necessary amount of monthly Direct Connect airtime and monthly Digital/Cellular airtime for use on the project. Ensure that each unit has unlimited Direct Connect capabilities and each unit is equipped with a minimum of 600 minutes per month of local and long distance airtime for official business only.

**(7) High-speed Internet access.** Provide, install, and maintain high-speed Internet access service having at least 768kbps download and 256kbps upload speed. The high-speed Internet access service can be provided via DSL, FIOS, a dedicated T1 line, or cable. Alternate Internet access service options may be submitted to the CO for approval. The system must include a modem and a router with a firewall or a router and a firewall appliance. The system must have the capability to support simultaneous Internet access of at least 3 workstations connected by Category 6 RJ45 LAN office drop cables. If the router supports wireless Internet access, this feature must be disabled. Wireless Internet access does not meet U.S. DOT security requirements and is not acceptable. The firewall configuration must be submitted to the CO for approval and cannot be changed after it is approved, unless a change request is submitted and approved in advance. Only U.S. DOT equipment is to be connected to the system.

If any equipment supplied becomes defective, is stolen, or for any other reason does not

function as intended, replace the equipment with an equal or better unit at no additional cost to the Government. Replace any defective equipment within eight hours after being notified by the CO.

The Contractor will retain ownership of all equipment supplied by the Contractor. The CO will notify the Contractor when the equipment is no longer needed and request its removal.

Add the following after Section 637:

## **Section 645.—LOCATING UTILITIES**

### **Description**

**645.01** This work consists of locating and marking existing utilities by excavating test pits to, or using electromagnetic devices, where a physical conflict with proposed construction is suspected and the location is ordered by the CO.

### **Material**

**645.02** Materials for restoring the test pit area to its original condition shall be replacement of the materials excavated or their equivalent in newly furnished materials meeting the various applicable sections of this specification.

### **Construction Requirements**

**645.03 General.** Notify “Pennsylvania One Call System, Inc.” 3 working days prior to any excavation, at 1-800-242-1776 to have the utilities marked in the field. Notify the CO 72 hours prior to any excavation.

Exercise special care and extreme caution in order to protect and avoid damage to any utility company facilities. Existing utilities have been generally located and shown on the plans as they are believed to exist. The Government assumes no responsibility for the accuracy of locations shown on the plans. Locate and ensure the safety of all existing utilities. Repair any damage resulting from Contractor’s operations at no additional expense to the Government.

Locate by test pit any utility that may be in conflict with the proposed work. If a conflict appears to exist, then notify the CO in writing immediately and provide information on the location and elevation of the utility so that the CO can adjust the proposed work.

**645.04 Locating Utility.** Use electromagnetic devices to establish alignment of utilities where applicable. When necessary, thread a metal rod through non-metallic utility pipes to locate them. Where neither method is feasible, locate the utility by perpendicular trench or test pits.

**645.05 Excavation.** Excavate carefully so as not to disturb utility at its assumed depth. When excavating within roadway pavements where traffic is being maintained, excavate by air-vacuum methods or equivalent, keeping the area of disturbance to a minimum. Uncover the utility sufficiently to make accurate measurements.

**645.06 Record.** Describe the utility found (size, material, function), determine the elevation of the top of utility, and prepare a field sketch of the pit. Indicate the date and the station and offset of the utility, noting whether the baseline or the centerline of proposed facility is being referenced. Submit 1 copy to the CO within 24 hours.

**645.07 Marking.** Mark the utility location by flags or paint. Maintain the markings, including repainting faded or damaged markings as ordered by the CO, for the duration of the project, or until the CO determines that the markings are no longer needed.

**645.08 Restoration.** Backfill with original material, thoroughly compacting the material with a mechanical tamper. Restore aggregate base courses and pavement using equivalent materials and thicknesses. For portland cement concrete pavements, use fast setting concrete. For asphalt concrete pavements, cold patch, resurfacing of pit will be permitted so long as, in the opinion of the CO, it is thoroughly compacted.

**645.09 Acceptance.** Locating utilities will be evaluated under Subsection 106.02.

#### **Measurement**

**645.10** Do not measure locating utilities for payment.

#### **Payment**

**645.11** Payment for this work will be in accordance with Subsection 109.05(b).

### **Section 703.—AGGREGATE**

703.02. Add the following:

Gravel will not be permitted.

703.05(a). Delete items (3) and (4).

703.05(b). Add the following:

**(3)** Plasticity Index, AASHTO T90

3 Max

703.05(b). Add the following:

Material shall have a minimum California Bearing Ratio of 70% percent, as determined by AASHTO T 193 at 95 percent of maximum dry density in accordance with AASHTO T 180 (Method D).

703.05(b)(1) Add the following:

At the option of the Contractor, the gradation only of the aggregate base may conform to the requirements of “Commonwealth of Pennsylvania, Department of Transportation, Specifications, PennDOT Publication 408, Section 703.2, Table C – Size and Grading

Requirements for Course Aggregate”.

Add the following after Section 711:

**Section 712. —JOINT MATERIAL**

712.01. Add the following after 712.01(g):

**(h) Elastomeric expansion joint seals.** Furnish elastomeric expansion joint strip seals made of extruded synthetic rubber. Material shall be virgin neoprene which conforms to ASTM D 2000 and the following:

Neoprene Strip Seal Properties

Physical Property	ASTM Test Method	Requirements
Tensile strength, min,	D 412	13.8 MegaPascals min.
Elongation @ break, %	D 412	250 min.
Hardness, Type A durometer, points	D 2240, Modified	60Å5
Oven aging, 70 hrs. @ 100°C	D 573	
Tensile strength, max % loss		20 max.
Elongation, max % loss		20 max.
Hardness, Type A durometer, points change		0 to +10
Oil Swell, ASTM Oil No. 3, (70 hrs. @ 100°C)	D 471	
Weight increase, %		45 max.
Ozone resistance, (20% elongation, 300 pphm in air, 70 hrs. @ 40°C)	D 1149	no cracks
Low temperature stiffening, (7 days @ -10°C)	D 2240	
Hardness, Type A durometer, points change		0 to +15
Compression Set, (70 hrs. @ 100°C)	D 395, Method B(Modified)	40% max.

Bond the neoprene strip seal to the locking rails with a lubricant adhesive made of one part moisture curing polyurethane and hydrocarbon solvent mixture meeting the requirements of ASTM D 4070.

**Section 713.—ROADSIDE IMPROVEMENT MATERIAL**

713.01. Add the following:

For furnished topsoil, submit a soil analysis report from the State University Agricultural Extension Service or other approved soil testing laboratory. Include in the report the soil textural classification (percentage of sand, silt, clay and organic matter) and additive recommendations.

713.02. Add the following:

Use a maximum of 0.17 pounds (3 kilograms) of limestone per cubic foot (cubic meter) of topsoil in order to adjust an acidic condition.

713.03. Add the following:

Furnish fertilizer containing the following minimum available nutrients, unless soil analysis indicates higher concentrations are required:

Total nitrogen	10 percent
Available phosphoric acid	10 percent
Water-soluble potash	10 percent

713.05. Add the following after 713.05(h):

**(i) Shredded Hardwood Mulch.** Furnish aged hardwood mulch, dark brown to black in color, with a particle size of less than 3 inches (75 millimeters), a neutral pH, and free of sticks, stones, clay, or other matter which may injure plants.

713.06(b). Add the following:

The genus, species, and cultivar names shall agree with the nomenclature of the most current edition of "Hortus Third" by L.H. Bailey, Hortorium, Cornell University.

Provide durable tags, stating the date of installation, correct botanical name and size in weather-resistant ink or embossed letters. Secure the tags to each tree, shrub, and other plant materials in a manner which will not restrict growth. Leave the tags on all trees, shrubs, and other plant materials until final acceptance by the CO.

713.08. Add the following after 713.08(g):

**(h) Tree protection.** Tree protection shall be a flexible PVC pipe 4 inches (10 centimeters) in diameter, 12 to 13 inches (30 to 33 centimeters) in height.

### Section 717.—STRUCTURAL METAL

717.01 Add the following after 717.01(e):

**(f) Anchor bolts, nuts, and washers for expansion joints.** Stainless steel conforming to ASTM A 276, Type 304.

Add the following after Subsection 717.16:

**717.17. Elastomeric Expansion Joint Seals.** Furnish synthetic, non-wicking, fabric-reinforced, neoprene elastomeric expansion joint seals. Furnish neoprene elastomer conforming to ASTM D 2000 and to Table 717-4.

<b>Table 717-4 - Neoprene</b>		
<u>Physical Property</u>	<u>ASTM Test Method</u>	<u>Requirement</u>
Hardness, Durometer A	D 2240	60±5
Tensile Strength	D 412	2000 psi (13.8 MegaPascals) min
Elongation at Break	D 412	250% min
Low Temperature	D 746	Not Brittle at -67 °F (-55 °C)
Weather Resistant	D 1171	No Cracks
Ozone Cracking	D 1149	No Cracks
100 PPHM 70 hours @ 100 °F (38 °C), 20% strain		
Water Resistance	D 471	3% max. volume swell
Compression Set 22 hours @ 158 °F (70 °C)	D 395, Method B	25% max

### Section 725.—MISCELLANEOUS MATERIAL

725.21. Add the following:

Furnish a 2-component epoxy resin binder mixed together at the site as prescribed by the manufacturer. The pot life of the epoxy, mixing period, maximum time lapse between mixing and application, and the curing period are all dependent on the temperature, humidity, and wind conditions, and the proprietary product being used.

Package epoxy components in containers that are clearly marked with a warning of the hazards involved in handling the material.

Obtain technical assistance from the manufacturer of the epoxy binder and follow the

manufacturer's recommendations concerning proper use and installation. Submit the product proposed for use, manufacturer's name, and data concerning composition and application for approval before use on the project.



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EASTERN FEDERAL LANDS  
HIGHWAY DIVISION  
STERLING, VA

570-826-2511

Fax 570-830-3016

**Northeast Regional Office**

Federal Hwy. Administration  
Attn: Kevin Rose  
21400 Ridgetop Circle  
Sterling, VA 20166

Date Acknowledged: January 25, 2008

GP 114508402

This will acknowledge receipt of your registration (copy enclosed) to use a General Permit issued by the Department. You are responsible for assuring the work is done in accordance with the drawings and conditions contained in the General Permit.

- Attached to this acknowledgment, please find your Federal Clean Water Act Section 404 authorization in the form of the Pennsylvania State Programmatic General Permit (PASPGP). You may proceed with your project after making the required notifications stipulated in the General Permit and securing all other approvals that may be necessary.
- A copy of your General Permit registration has been sent to the Army Corps of Engineers for review. Please be advised that you do not have Federal authorization. You will be contacted directly by the Corps of Engineers regarding Federal authorization.
- Based on coordination with the U.S. Army Corps of Engineers, federal authorization is not required for your project.
- Please be advised that no additional federal authorization is required for your project.
- This will acknowledge receipt of your Check No. \_\_\_\_\_, in the amount of \_\_\_\_\_, which satisfies your agreement to participate in the Pennsylvania Wetland Replacement Project for the above-referenced permit.

Soils and Waterways Section

Enclosure(s)

cc: Pennsylvania Fish and Boat Commission, Northeast Regional Office  
Monroe & Pike County's Conservation District  
Army Corps of Engineers, Philadelphia District





COMMONWEALTH OF PENNSYLVANIA  
 DEPARTMENT OF ENVIRONMENTAL PROTECTION  
 BUREAU OF WATERSHED MANAGEMENT  
 WATER OBSTRUCTION AND ENCROACHMENT

DEP USE ONLY

Acknowledged Date 1-25-08  
 GP 114508402  
 PASPGP-2 Authorization included:  
 YES  NO

**GENERAL PERMIT REGISTRATION**

**SECTION A. APPLICANT INFORMATION**

Applicant Last Name	First Name	MI	Telephone
Rose	Kevin	S	(571) 434-1541

Organization Name or Registered Fictitious Name  
 Federal Highway Administration

Mailing Address	City	State	Zip + 4
21400 Ridgetop Circle	Sterling	VA	20166 +

**SECTION B. CONSULTANT (if different than above)**  N/A

Consultant - Last Name	First Name	MI
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Consulting Firm

Mailing Address	City	State	Zip + 4
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Telephone ( )	FAX ( )	Email
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**SECTION C. PROJECT INFORMATION**

Project Name PRA-DEWA 14(12)

Site Location	City	State	Zip + 4
Delaware Water Gap	Bushkill	PA	18324 + 9999

Municipality	City	Borough	Township	County
Middle Smithfield, Lehman	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Monroe, Pike

How many acres of earth disturbance will occur as a result of this project?  
 Less one acre  1-5 acres  5 acres or more

Detailed Written Directions to Project Site:  
 Where Route 209 crosses Bushkill Creek. Four miles Northeast of Coolbaugh.

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(12)

WATERSHED MANAGEMENT  
 COUNTY: \_\_\_\_\_  
 MUNIC: \_\_\_\_\_

NOV 19 2007

PERMIT # \_\_\_\_\_  
 FACILITY \_\_\_\_\_  
 FILE CODE \_\_\_\_\_

**Project Description:** Describe the project in enough detail to allow the Department to determine that the project complies with the terms and conditions of the General Permit. If the project consists of registering multiple structures in one county owned or managed by a single entity complete Section F.

This project consists of the repair of the existing bridge for U.S. Route 209 (a major through road in the Delaware Water gap National Recreation Area) over Bshkill Ceek. The work consists of repair of the bridge abutments, reconstruction of portions of the bridge piers, replacement of bridge expansion bearings, replacement of deck joints, removal and reconstruction of portions of the bridge deck, curb, and parapets, and replacement of the bridge deck overlay system.

**FOR BRIDGE AND/OR CULVERT MAINTENANCE AND/OR REPAIR PROJECTS\***

	Bridge Existing	Bridge Proposed	Culvert Existing	Culvert Proposed
Waterway Opening (ft.) (width x height)	186.5x13.5	186.5x13.5	N/A	N/A
Length (ft.) (upstream to downstream)	45	45	N/A	N/A
Material Type (RCP, CMP, etc.)	NA	NA	N/A	N/A

**SECTION D. COMPLIANCE REVIEW**

Yes  No

Is the applicant (owner and/or operator) currently in violation of any permits issued by the Department?

If yes, please provide:

1. Permit Number: \_\_\_\_\_

2. Nature of the violation (if any): \_\_\_\_\_

3. Status of violation (i.e., schedule for compliance, etc.): \_\_\_\_\_

**SECTION E. OTHER PERMITS**

Yes  No

Are any other Chapter 105 permits required for this project?

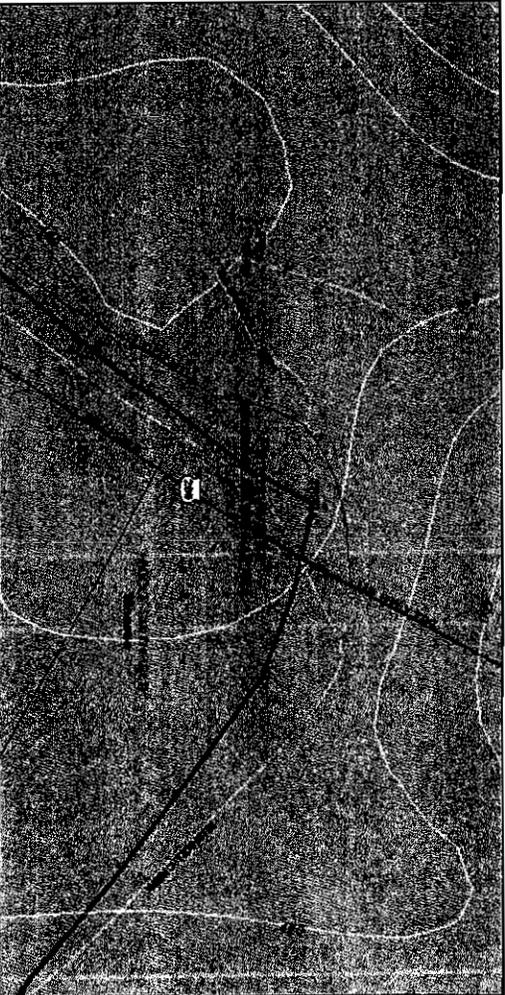
# PNDI Project Environmental Review Receipt

Project Search ID: 20070710100078

Project Name: DEWA 14(12)

Date: 7/10/2007 4:21:38 PM

## Project Location



Project Name: DEWA 14(12)

On Behalf Of: Federal Agency

Project Search ID: 20070710100078

Date: 7/10/2007 4:21:22 PM

# of Potential Impacts: 0

Jurisdictional Agency:

Project Category: Transportation, Bridge - demolition and/or construction (replacement) on existing alignment (Boring, piers, abutments, causeways, temporary stream crossings)

Project Location

Decimal Degrees: 41.09139 N, -75.00314 W

Degrees Minutes Seconds: 41° 5' 29" N, 75° 0' 11.3" W

Lambert: 825918.66666667, 776143.33333333 ft

ZIP Code: 18324

County: Monroe, Pike

Township/Municipality: MIDDLE SMITHFIELD, LEHMAN

USGS 7.5 Minute Quadrangle ID: 525

Quadrangle Name: BUSHKILL

Project Length: 210.3 feet

### Location Accuracy

Project locations are assumed to be both precise and accurate for the purposes of environmental review. The creator/owner of the Project Review Receipt is solely responsible for the project location and thus the correctness of the Project Review Receipt content.

### 0 Known Impacts

Under the Following Agencies' Jurisdiction:  
None

### Pennsylvania State Programmatic General Permit (PASPGP)

Please note that regardless of PNDI search results, projects requiring a Chapter 105 DEP Individual permit or GP 5, 6, 7, 8, 9 or 11 in certain counties (Adams, Berks, Bucks, Chester, Cumberland, Delaware, Franklin, Lancaster, Lebanon, Lehigh, Monroe, Montgomery, Northampton, Schuylkill and York) are required by DEP to comply with the bog turtle habitat screening requirements of the PASPGP.

**PENNSYLVANIA STATE PROGRAMMATIC GENERAL PERMIT – 3**  
**(PASPGP-3)**  
**July 1, 2006**

**Please note: the full text of the PASPGP-3 may be viewed on the Baltimore District web site at <http://www.nab.usace.army.mil/Regulatory/Permit/types.htm> or by calling the Corps at 410-962-5673.**

**Applicant:** **FEDERAL HIGHWAY ADMINISTRATION**  
**State Authorization(s):** **GP114508402**

**Corps District:**

**Philadelphia**  
U.S. Army Corps of Engineers,  
Philadelphia District  
Regulatory Branch  
Wanamaker Building  
100 Penn Square East  
Philadelphia, PA 19107-3390

**Baltimore**  
U.S. Army Corps of Engineers,  
Baltimore District  
Regulatory Branch  
P.O. Box 1715  
Baltimore, MD 21203

**Pittsburgh**  
U.S. Army Corps of Engineers,  
Pittsburgh District  
Regulatory Branch  
Federal Building  
1000 Liberty Avenue  
Pittsburgh, PA 15222-4186

It has been determined that your proposed project, which includes the discharge of dredged and/or fill material and/or the placement of structures into waters of the United States, including wetlands, qualifies for Federal authorization under the provisions of Section 404 of the Clean Water Act and /or Section 10 of the River and Harbor Act of 1899, under the terms and conditions of the PASPGP-3.

**All activities authorized under PASPGP-3 must comply with all conditions of the authorization, including General, Procedural, and Special Conditions. Failure to comply with all the conditions of the authorization, including project special conditions, will constitute a permit violation and may be subject to criminal, civil, or administrative penalties, and /or restoration.**

The authorized activity must be performed in compliance with the following General Conditions to be authorized under PASPGP-3:

**General Conditions:**

**1. PADEP Permit Conditions:** The permittee shall comply with all terms and conditions set forth in the PADEP authorization for use of this permit, including all conditions of Section 401 Water Quality Certification, and any subsequent amendment or modification to such authorization. The permittee shall conduct all work and activities in strict compliance with all approved maps, plans, profiles, and specifications used by PADEP and/or the Corps as the basis for its authorization or subsequent modification of authorization.

**2. Aquatic Life Movements:** No activity may substantially disrupt the movement of those species of aquatic life indigenous to the waterbody, including those species which normally migrate through the area, unless the activity's primary purpose is to impound water. Culverts placed in streams must be appropriately depressed to maintain aquatic life movement and low flow conditions.

**3. Threatened and Endangered Species:** If an activity is authorized under the PASPGP-3, and a Federally listed threatened or endangered species, or proposed species or critical habitat, is subsequently found to be present, all work must cease, and the Corps and USFWS (or NMFS) must be notified. The PASPGP-3 authorization is suspended and will not be re-issued until consultation pursuant to Section 7 of the ESA is concluded and adverse effects to Federally listed threatened, endangered and proposed species and critical habitat are avoided.

Furthermore, persons have an independent responsibility under Section 9 of ESA to not engage in any activity that could result in the “take” of a Federally listed species.

**4. Spawning Areas:** The permittee shall comply with all time-of-year restrictions as set forth by the PFBC or other designated agency. Discharges or structures in spawning or nursery areas shall not occur during spawning seasons, unless written approval is obtained by the PFBC or other designated agency. In addition, work in areas used for other time sensitive life span activities of fish and wildlife (such as hibernation or migration) may necessitate the use of seasonal restrictions for avoidance of adverse impacts to vulnerable species. Impacts to these areas shall be avoided or minimized to the maximum extent practicable during all other times of the year.

**5. Waterfowl Breeding and Wintering Areas:** Activities including discharges of dredged or fill material or the placement of structures in breeding and wintering areas of migratory waterfowl must be avoided to the maximum extent practicable.

**6. Shellfish Production:** No discharge of dredged or fill material and/or the placement of structures may occur in areas of concentrated shellfish production, unless the discharge is directly related to an authorized shellfish harvesting activity.

**7. Adverse Effects From Impoundments:** If the activity, including the discharge of dredged or fill material or the placement of a structure, creates an impoundment of water, the adverse effects on the aquatic system caused by the accelerated passage of water and/or the restriction of its flow, including impacts to wetlands, shall be minimized to the maximum extent practicable.

**8. Obstruction of High Flows:** To the maximum extent practicable, the activity must be designed to maintain pre-construction downstream flow conditions (i.e., location, capacity, and flow rates). Furthermore, the activity must not permanently restrict or impede the passage of normal or expected high flows (unless the primary purpose of the fill is to impound waters), and the structure or discharge of dredged or fill material must withstand expected high flows. The Activity must, to the maximum extent practicable, provide for retaining excess flows from the site, provide for maintaining surface flow rates from the site similar to pre-construction conditions, and must not increase water flows from the project site, relocate water, or redirect water flow beyond pre-construction conditions. In addition, the activity must, to the maximum extent practicable, reduce adverse effects such as flooding or erosion downstream and upstream of the project site, unless the activity is part of a larger system designed to manage water flows.

**9. Erosion and Siltation Controls:** During construction, appropriate erosion and siltation controls must be used and maintained in effective operating condition in accordance with State regulations. All exposed soil and other fill material must be permanently stabilized.

**10. Suitable Material:** No activity, including discharges of dredged or fill material or the placement of structures, may consist of unsuitable material (i.e., asphalt, trash, debris, car bodies, etc.). No material discharged shall contain toxic pollutants in amounts that would violate the effluent limitation standards of § 307 of the CWA.

**11. Temporary Fill:** Temporary fill in waters and wetlands authorized by the PASPGP-3 (i.e., access roads and cofferdams) shall be properly constructed and stabilized during use to prevent erosion and accretion. Temporary fill in wetlands shall be placed on geotextile fabric laid on existing wetland grade. Whenever possible, rubber or wooden mats should be used for equipment access through wetlands to the project area. Temporary fills shall be removed, in their entirety, to an approved upland site, and suitably contained to prevent erosion and transport to a waterway or wetland. Temporary fill areas shall be restored to their preconstruction contours, elevations, and hydrology and revegetated with comparable native species.

**12. Equipment Working in Wetlands:** Measures must be taken to minimize soil disturbance when heavy equipment is used in and adjacent to wetland areas. These measures include, but are not limited to, avoiding the use of such equipment, use of timber mats or geotextile fabric, and the use of low pressure tire vehicles.

**13. Installation and Maintenance:** Any structure or fill authorized shall be properly installed and maintained to ensure public safety.

**14. The Following Conditions Apply to Activities for the Maintenance of Existing Flood Control Projects that are authorized Pursuant to PADEP GP-11:**

- a. Dredging and channel cleaning are authorized only within the established limits of the project and only within previously constructed channels. Dredging and channel cleaning shall be limited solely to restoring channel width and depth to design configurations as clearly described in the baseline maintenance plan.
- b. Dredging must be accomplished using bucket-type equipment when working within the channel, unless siphon-type equipment is necessary in conjunction with a separate de-watering structure and a clean return-water procedure is used. In no instance shall sediment be bulldozed or graded within the channel.
- c. A baseline maintenance plan shall be available on-site or at the project sponsor's office. The baseline maintenance plan consists of as-built project plans provided by PADEP or the Corps. The maintenance plan shall include the name and address of the project sponsor; the name and address of the contractor; a copy of the latest inspection report from PADEP or the Corps; a suitable work plan detailing the length and width (in plan view and cross section) of the intended maintenance work; and current photographs of the work area.

**15. Permit Expiration:** The project-specific PASPGP-3 authorization is valid for the same period as the project-specific PADEP authorization, not to exceed 3 years from the date of authorization, unless modified or extended or until the PASPGP-3 expires, is suspended, or revoked, whichever date occurs sooner.

PASPGP-3 authorization for activities receiving PADEP General Permits shall not exceed 3 years or until the PASPGP-3 expires, is suspended, or revoked, whichever date occurs sooner.

Activities authorized under the PASPGP-3 that have commenced construction or are under contract to commence construction will remain authorized provided the activity is completed within 12 months of the date of the PASPGP-3's expiration, modification, or revocation; or until the expiration date of the project specific verification, whichever is sooner.

**16. One-Time Use:** A project-specific PASPGP-3 authorization is valid to construct the project, or perform the activity, one time only, except for maintenance activities associated with the authorized activity, if allowed as part of the authorized activity.

**17. Water Supply Intakes:** No activity, including discharges of dredged or fill material and/or the placement of structures, may occur in the proximity of a public water supply intake except where the activity or discharge is for repair of the public water supply intake structures or adjacent bank stabilization.

**18. Cultural Resources:** For all activities authorized under a PASPGP-3, upon the discovery of the presence of previously unknown Historic Properties (historic or archaeological), all work must cease and the permittee must notify the SHPO and the Corps of Engineers. The PASPGP-3 authorization is suspended until it is determined, through the Section 106 consultation process, whether the activity will have an affect on the Historic Property. The suspended authorization under PASPGP-3 may be reactivated or modified, through special conditions if necessary, after an affects determination on the Historic Property is made. The PASPGP-3 authorization may be revoked for the specific activity if an adverse affect on the Historic Property can not be avoided or mitigated.

**19. Tribal Rights:** No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

**20. Corps Civil Works Projects:** Navigation Projects. The PASPGP-3 does not authorize interference with any Corps navigation project. The permittee understands and agrees that, if future operations by the United States require removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall

cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal, relocation, or alteration.

Other Corps Civil Works Projects (i.e., Flood Control, Dams, and Reservoirs). The PASPGP-3 does not authorize interference with any proposed or existing Federal project.

**21. Navigation:** No activity authorized under PASPGP-3 may cause more than a minimal adverse affect on navigation. No attempt shall be made by the permittee to prevent the full and free use by the public of all navigable waters at or adjacent to the activity authorized herein. In addition, activities that require temporary causeways that prohibit continued navigational use of a waterway (i.e., temporary causeways extending greater than  $\frac{3}{4}$  the width across the waterway) shall be removed in their entirety upon completion of their use; and shall be clearly marked for purposes of public safety. Nothing in the PASPGP-3 shall in any way restrict the Corps of Engineers from exercising the legal authority to protect the federal interest in navigation and in the navigation servitude of the United States.

**22. Inspections:** The permittee shall allow a District Engineer or his authorized representative(s) to make periodic inspections at any time deemed necessary in order to ensure that the work is being performed in accordance with all the terms and conditions of the PASPGP-3. The District Engineer may also require post-construction engineering drawings (as-built plans) for completed work.

**23. Compliance Certification:** A compliance certification form, regarding the PASPGP-3 authorized work and required mitigation, will be forwarded to each permittee with the PASPGP-3 authorization. Every permittee, who receives a written PASPGP-3 authorization, shall submit the signed compliance certification form upon completion of the authorized work and required mitigation. The completed form shall be returned to the appropriate Corps District and include:

- a. A statement that the authorized work was or was not done in accordance with the PASPGP-3 authorization, including any general and/or special conditions. If the work was not done in accordance with the PASPGP-3 authorization, the permittee shall describe the specifics of the deviation from the authorized activity.
- b. A statement that any required mitigation was or was not done in accordance with the permit conditions and approved plans. If the mitigation was not performed in accordance with the permit conditions and approved plans, the permittee shall describe the specifics of the deviation from the permit conditions and plans related to the required mitigation.
- c. Photographs with written descriptions, showing completed authorized work and mitigation, as required by the terms of the compliance certification form.
- d. The signature of the permittee, certifying the completion (or not) of the authorized work and mitigation.

**24. Permit Modifications:** Any proposed modification of the authorized project that results in a change in the authorized impact to, or use of waters of the United States, including jurisdictional wetlands, must be approved by PADEP. Corps approval is also required if the project had been previously reviewed by the Corps or the proposed modification causes the project impacts to exceed 1.0 acre of waters of the United States, including jurisdictional wetlands, or 250 linear feet of streams, rivers, or other jurisdictional waterbodies including open water areas. Project modifications that cause total project impacts to exceed 1.0 acre of waters of the United States, including jurisdictional wetlands, are not eligible for PASPGP-3 and will be forwarded to the Corps for processing through alternate permit procedures.

**25. Recorded Conservation Instruments:** As per Part III. A. Activity 22 and Part III. B. Activity 4, proposed conservation instruments may be submitted by the applicant as part of the permit application package. When such proposed conservation instruments are submitted by the applicant, verification of the recorded deed restriction, conservation easement, or deed restricted open space area shall be forwarded to the appropriate Corps District and appropriate PADEP offices, prior to the initiation of any permitted work.

**U.S. Army Corps of Engineers District Offices**

**Pittsburgh District**

<http://www.lrp.usace.army.mil>

Federal Building  
1000 Liberty Avenue  
Regulatory Branch  
Pittsburgh, PA 15222-4186  
412-395-7152

**Baltimore District**

<http://www.nab.usace.army.mil/Regulatory/>

P.O. Box 1715  
Regulatory Branch, PA Section  
Baltimore, MD 21203-1715  
410-962-4522 or 814-235-0570

**Philadelphia District**

<http://www.nap.usace.army.mil>

Wanamaker Building  
100 Penn Square East  
Regulatory Branch  
Philadelphia, PA 19107-3390  
215-656-6728

**26. Property Rights:** This PASPGP-3 does not convey any property rights, either in real estate or material, or any exclusive privileges; nor does it authorize any injury to property or invasion of rights or any infringement of Federal, State, or local laws or regulations.

By Authority of the Secretary of the Army:

Robert J. Davis  
Colonel, Corps of Engineers  
District Engineer, Baltimore

Robert J. Ruch  
Lientenant Colonel, Corps of Engineers  
District Commander, Philadelphia

Stephen L. Hill  
Colonel, Corps of Engineers  
District Engineer, Pittsburgh

**PASPGP-3 PERMIT COMPLIANCE, SELF-CERTIFICATION FORM**

PADEP Permit No. \_\_\_\_\_ Date of Issuance \_\_\_\_\_  
Project Name \_\_\_\_\_ Applicant Name \_\_\_\_\_  
Corps Permit No. (if available) \_\_\_\_\_ Date of Issuance \_\_\_\_\_  
Waterway \_\_\_\_\_ County \_\_\_\_\_

Dear Permittee:

In accordance with the compliance certification condition of your PASPGP-3 authorization, you are required to complete and sign this certification form and return it to the appropriate Corps of Engineers District in which the work is located.

- U.S. Army Corps of Engineers, Philadelphia District  
Regulatory Branch  
Wanamaker Building  
100 Penn Square East  
Philadelphia, PA 19107-3390
- U.S. Army Corps of Engineers, Baltimore District  
Regulatory Branch  
P.O. Box 1715  
Baltimore, MD 21203
- U.S. Army Corps of Engineers, Pittsburgh District  
Regulatory Branch  
Federal Building  
1000 Liberty Avenue  
Pittsburgh, PA 15222-4186

Please note that the permitted activity is subject to compliance inspections by U.S. Army Corps of Engineers representatives. As a condition of this permit, failure to return this notification form, provide the required information below, or to perform the authorized work in compliance with the permit, can result in suspension, modification or revocation of your authorization in accordance with 33 CFR Part 325.7 and/or administrative, civil, and/or criminal penalties, in accordance with 33 CFR part 326.

**Please provide the following information:**

1. Date authorized work commenced: \_\_\_\_\_ 2. Date authorized work completed: \_\_\_\_\_

3. Was all work, including any required mitigation, completed in accordance with your PASPGP-3 authorization?

YES  NO

4. Explain any deviations (use additional sheets if necessary)

\_\_\_\_\_

5. Was mitigation accomplished through a contribution to the PA Wetlands Replacement Project (FUND)?

YES  NO (if NO complete Nos. 6 and 7 below).

6. Wetland Mitigation: Required?  YES  NO Required Completion Date \_\_\_\_\_

Completed?  YES  NO Mitigation Monitoring Reports Required?  YES  NO

7. Attach labeled photographs showing completed work including mitigation area(s) (**not required for PADEPGP's/Waivers**)

I hereby certify that, except as noted above, that all work, including mitigation, has been completed in accordance with the terms and conditions, including special conditions of the above referenced permit.

Signature of Permittee \_\_\_\_\_ Date \_\_\_\_\_ Signature of Contractor/Agent \_\_\_\_\_ Date \_\_\_\_\_

Address: \_\_\_\_\_ Address: \_\_\_\_\_

Telephone: \_\_\_\_\_ Telephone: \_\_\_\_\_



COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
BUREAU OF WATERSHED MANAGEMENT

**PROPOSED GENERAL PERMIT  
BWM-GP-11  
MAINTENANCE, TESTING, REPAIR, REHABILITATION, OR REPLACEMENT OF WATER  
OBSTRUCTIONS AND ENCROACHMENTS**

1. **GENERAL DESCRIPTION AND FEES** – In accordance with the following Registration Requirements, the Special Conditions, and the Standard General Permit Conditions, the Department of Environmental Protection hereby authorizes by General Permit the maintenance, testing, repair, rehabilitation or replacement of existing water obstructions or encroachments, except as noted below. Minor deviations in the structure's configuration or filled area including those due to changes in materials, construction techniques, current construction codes or safety standards which are necessary to repair, modify or replace the water obstruction or encroachment are permitted, provided the environmental impacts resulting from such repair, modification or replacement are minimal, and there is no adverse impact on public health and safety. **There is no registration fee required for a project authorized under this General Permit.**
2. **This general permit may not be used for the maintenance, repair, modification, removal, or replacement of dams.**
3. **DENIAL OF AUTHORIZATION** – The Department shall have the discretion, on a case-by-case basis, to deny, revoke or suspend the authorization to use this general permit for any project which the Department determines to have a substantial risk to life, property or the environment or otherwise could not be adequately regulated by the provisions of this general permit.
4. **AUTHORITY AND CONTINUING AUTHORIZATION** – Authorization of this General Permit is under Section 7 of the Dam Safety and Encroachments Act (32 P.S. §§693.1-693.27) and the rules and regulations promulgated thereunder at 25 Pa. Code §§105.441-105.449 (relating to General Permits). This General Permit shall authorize the maintenance, repair, rehabilitation, or replacement of existing water obstruction or encroachments except dams subject to the terms and conditions set forth herein. This General Permit becomes effective \_\_\_\_\_, 2003 and will remain in effect unless specifically modified, suspended, or revoked by the Department.
5. **NOTIFICATION OF PROPOSED USE OF GENERAL PERMIT** – Prior to the maintenance activity, the owner(s) shall submit the "Registration Form" along with the required attachments to the appropriate DEP Regional Office's Soils and Waterways Section (see attached listing). A copy of the "Registration Form" shall also be sent to the municipality and county in which the work will be performed. **The owner may not begin work until he has received the acknowledged "Registration Form" from the Department.**
6. **STANDARD DEFINITIONS FOR GENERAL PERMITS** – The terms as used in this General Permit shall have the following meanings:

**BODY OF WATER** – Any natural or artificial lake, pond, reservoir, swamp, marsh or wetland.

**DEPARTMENT** – The Department of Environmental Protection.

**EARTH DISTURBANCE** – Any construction or other human activity which disturbs the surface of the land including, but not limited to clearing and grubbing, grading, excavations, embankments, land development, subdivision development, mineral extraction and the moving, depositing or storing of soil, rock or earth. This includes any excavation or fill within a stream channel.

**EROSION AND SEDIMENT CONTROL PLAN** – A plan which is designed to minimize accelerated erosion and sediment developed in accordance with the requirements of 25 Pa. Code Chapter 102.

**FLOODWAY** – The channel of the watercourse and portions of the adjoining floodplains which are reasonably required to carry and discharge the 100-year frequency flood. Unless otherwise specified, the boundary of the floodway is as indicated on maps and flood insurance studies provided by the Federal Emergency Management

Agency (FEMA). In an area where no FEMA maps or studies have defined the boundary of the 100-year frequency floodway, it is assumed, absent evidence to the contrary, that the floodway extends from the stream to 50 feet from the top of the bank of the stream.

OWNER – A person who owns, controls, operates, maintains, or manages a reservoir, water obstruction or encroachment.

REGULATED WATER OF THIS COMMONWEALTH – Watercourses, streams or bodies of water and their floodways wholly or partly within or forming part of the boundary of this Commonwealth.

SUBMERGED LANDS OF THIS COMMONWEALTH – Waters and permanently or periodically inundated lands owned by the Commonwealth, including lands in the beds of navigable lakes and rivers and beds of streams declared public highways which are owned and held in trust by the Commonwealth.

WATERCOURSE – A channel or conveyance of surface water having defined bed and banks, whether natural or artificial, with perennial or intermittent flow.

WETLANDS – Areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions, including swamps, marshes, bogs and similar areas.

## 7. SPECIAL CONDITIONS

- A. No stream realignment, relocation, enclosure or channelization is authorized by this General Permit.
- B. All projects will be designed and constructed to protect existing aquatic features and habitat.
- C. Wetlands must be identified in accordance with the 1987 U.S. Army Corps of Engineers Manual for Identifying and Delineating wetland and properly flagged on the site to ensure they are protected. Wetland areas which cannot be avoided and which will be temporarily impacted during the maintenance activity must be identified on the plan and be properly restored at the conclusion of the activity. Wetland areas which cannot be avoided and which will be permanently impacted are limited to 0.05 acres.
- D. Where it is necessary for construction equipment to cross the stream, a temporary stream crossing shall be provided for this purpose unless the stream flow is shallow and the streambed is on non-erodible material. This crossing can be a ford or a battery of pipes. Any fill material provided for the crossing shall be clean, granular material. Upon completion of the project, the temporary crossing shall be removed in its entirety and the disturbed areas restored, as close as possible, to its original condition.
- E. Wherever possible paving metal bottom pipes, arches and culverts with concrete, grouting or the use of concrete for scour protection should be done in dry conditions.
- F. Bridge or culvert maintenance, replacement projects, or upgrades to current standards including bridge superstructure replacements and roadway approach work are subject to the following:
  - No significant reduction in existing water openings is permitted.
  - There will be no significant changes to grades of approach roadways or to overtopping characteristics.
  - Increases in outside to outside structure width will be limited to a maximum of 12 feet on each side of the bridge or culvert.
  - The removal of debris and accumulated sediment to ensure adequate hydraulic capacity for bridges or culverts is limited to fifty feet upstream and downstream of the bridge or culvert and shall be conducted in accordance with the Department's Guidelines for Channel Cleaning.

### *Hydraulic capacity.*

- Bridge and culvert maintenance or replacement projects shall be designed and constructed in accordance with the following criteria:
  - The structure shall pass regulatory flood flows without loss of stability.
  - The structure may not create or constitute a hazard to life or property, or both.

- The structure may not materially alter the natural regimen of the stream.
- The structure may not so increase velocity or direct flow in a manner which results in accelerated erosion of stream beds and banks.
- The structure may not increase water surface elevations for the 100-year flood elevation of the existing structure.

*Multiple pipes and spans.*

- Multi-culvert groups and multiple span bridges which may tend to collect debris, contribute to the formation of ice jams, and cause excessive and increases in head losses shall be avoided to the maximum extent practicable. Spans of less than 15 feet shall be by single-opening structure, except where conditions make it impractical to design the crossing with a single span.

*Bridge piers.*

- Bridge piers shall be kept to a minimum in number and cross-sectional area and shall be designed to offer the least obstruction to the passage of water and ice, consistent with safety and state of engineering practice.
- Bridge piers in channels subject to unstable or super critical flow shall require special investigation and shall be so designed as to minimize backwater and avoid standing waves downstream of the pier.

*Bridge abutments.*

- Bridge abutments shall be set well into stream banks in such manner as to assure minimal increase in water surface elevations.
- Bridge abutments shall be aligned with the flow of the stream for the design flood, generally the 100-year event. The Department may require, the construction of wing walls at the upstream side of the bridge to assist in directing flood flows through the bridge opening.

*Culverts.*

- Culverts shall be aligned with the stream flow.
- Culverts shall be of sufficient width to minimize narrowing of the stream channel.
- Culverts with a drainage area of 640 acres or less shall be installed with the invert a minimum of 6 inches below natural streambed and such that the gradient of the invert shall not deviate from that of the natural streambed.
- Culverts with a drainage area of greater than 640 acres or less shall be installed with the invert a minimum of 12 inches below natural streambed and such that the gradient of the invert shall not deviate from that of the natural streambed.
- Inlet of culverts shall be protected by wing walls, headwalls, or with other structures to provide a suitable transition for in directing flood flows into and through the culvert opening.

*Professional Engineer Certification*

Plans, specifications and reports for bridges and culverts across a stream which are to be used by the general public such as an access to an industrial, commercial or residential development, etc., shall be prepared by a registered professional engineer and shall be affixed with their seal and certification which shall read as follows:

"I (name) do hereby certify pursuant to the penalties of 18 Pa. C.S.A. Sec. 4904 to the best of my knowledge, information and belief, that the information contained in the accompanying plans, specifications, and reports has been prepared in accordance with accepted engineering practice, is true and correct, and is in conformance with Chapter 105 of the rules and regulation of the Department of Environmental Protection."

G. Pipelines and utilities:

- Trenches excavated for the maintenance and replacement of utility lines shall be the minimum width necessary.

- Trenches excavated for the maintenance and replacement of utility lines shall be backfilled with the original excavated material and restored to the original condition, elevation and stabilized.
  - Backfill material must be stored out of the floodway to prevent its discharge to the waterway prior to its use as backfill, if it will be stored longer than 24 hours.
- H. A copy of this General Permit along with the Erosion and Sedimentation Control Plan must be provided to all contracting and construction entities involved with the project and must be available on site during all phases of the project.
8. **EROSION AND SEDIMENT CONTROLS** – Work must be done in compliance with Chapter 102 (relating to Erosion Control). The Erosion and Sedimentation Control Plan shall be available at the site.
9. **ENDANGERED SPECIES HABITAT** – No regulated activity is authorized which is likely to jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, or which is likely to destroy or adversely modify the critical habitat of such species, as identified under the Federal Endangered Species Act of 1973, the Wild Resource Conservation Act, the Fish and Boat Code or the Game and Wildlife Code. Information is available through the Pennsylvania Natural Diversity Inventory Search at DCNR's Bureau of Forestry, Division of Forestry Advisory Services, P. O. Box 8552, Harrisburg, PA 17105-8552, telephone 717-787-3444.
10. **EQUIPMENT** – Use of heavy equipment in a watercourse, stream or body of water is limited to the minimum necessary to complete the project. Heavy equipment working in wetlands must be placed on mats or other measures must be taken to minimize disturbance.
11. **PROPER MAINTENANCE** – Water obstructions or encroachments which are authorized must be properly maintained to ensure public safety.
12. **AQUATIC LIFE MOVEMENTS** – No regulated activity may substantially disrupt the movement of those species of aquatic life indigenous to the watercourse, stream or body of water, including those species which normally migrate through the area.
13. **WILD AND STOCKED TROUT WATERS** – Maintenance activities in regulated waters of this Commonwealth are prohibited in the following streams for the specified time period unless written approval is obtained from the PA Fish and Boat Commission's Division of Environmental Services at 459 Robinson Lane, Bellefonte, PA 16823-9616. Stocked and wild trout stream locations are compiled and available through the Commission's Division of Fishery Management.
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|-----------------------|---|
| Stocked trout streams | March 1 through June 15                           |
| Wild trout streams    | October 1 through December 31                     |
| Lake Erie tributaries | March 1 through June 15 & Sept. 1 through Dec. 31 |
14. **WATERFOWL BREEDING AREAS** – Breeding areas for migratory waterfowl must be avoided to the maximum extent practicable.
15. **SUITABLE MATERIAL** – Fill material must be free of trash, construction debris, tires, similar materials, contaminated materials, and toxic pollutants. Temporary fills for construction purposes (e.g. road embankments, equipment staging, etc.) shall consist of only clean rock material to prevent the introduction of sediment to water resources.
16. **AVOIDANCE AND MINIMIZATION** – Discharges of dredged or fill material into waters of the Commonwealth must be avoided or minimized to the maximum extent practicable at the project site.
17. **REMOVAL OF TEMPORARY FILLS** – Temporary fills must be removed in their entirety and the affected areas returned to their pre-existing elevations.
18. **NAVIGATION** – No regulated activity shall hinder commercial or recreational navigation.
19. **EFFECTIVE TIME PERIOD** – This General Permit will remain in effect indefinitely unless specifically modified, suspended or revised by the Department.

20. **SUBMERGED LANDS OF THIS COMMONWEALTH** – This General Permit shall not be effective to authorize any project over, across or occupying submerged lands of this Commonwealth until the owner has obtained a license from the Department authorizing the occupation of such submerged lands issued under Section 15 of the Dam Safety and Encroachments Act (32 P.S. §693.15), Section 514 of the Administrative Code of 1929 (71 P.S. §194), or other applicable laws. Upon receipt of notification from the owner, the Department will review the project, determine if its location is over, across or occupies submerged lands of the Commonwealth. If applicable, the Department will prepare a Submerged Lands License Agreement and forward same to the owner for execution prior to acknowledgement of registration to use the General Permit. No annual charge is required for facilities constructed, owned or operated by a Political Subdivision of the Commonwealth.
21. **USE OF EXPLOSIVES** – Prior to the use of explosives in a watercourse or body of water, the permittee shall secure a written permit from the Pennsylvania Fish and Boat Commission, under the Fish and Boat Code, Act 1980-175 Title 30 Pennsylvania Consolidated Statutes, Section 2906. Requests should be directed to the Pennsylvania Fish and Boat Commission, Division of Environmental Services (see Exhibit A).
22. **SUSPENSION, MODIFICATION OR REVOCATION** – The Department may suspend, modify or revoke this General Permit at any time upon notice in the Pennsylvania Bulletin.
23. **PROJECT INTERFERENCE** – This General Permit does not authorize any interference with any existing or proposed local, State, Federal or Federally licensed project, and permittee shall not be entitled to compensation for damage or injury to the work authorized herein which may be caused by or a result of existing or future operations undertaken by the United States or the Commonwealth of Pennsylvania or its Political Subdivisions in the public interest.
24. **INSPECTION** – As a condition of use of this General Permit, and of the owner's authority to conduct the activities authorized by this General Permit, the owner hereby authorizes and consents to allow authorized employees or agents of the Department, including the County Conservation District, without advance notice or a search warrant, at any reasonable time and upon presentation of appropriate credentials, and without delay, to have access to and to inspect all areas where the project is being constructed, operated or maintained. The authorization and consent shall include consent to conduct tests or sampling, to take photographs, to perform measurements, survey and other tests, to inspect the methods of construction, operation or maintenance, to examine and copy books, papers and records pertinent to any matter under investigation, and to take any other action necessary to assure that the project is constructed, operated or maintained in accordance with the terms and criteria of the General Permit. This General Permit condition is referenced in accordance with Section 16 of the Dam Safety and Encroachments Act, 32 P.S. §693.16, and in no way limits any other powers granted under the Dam Safety and Encroachments Act.
25. **ACTIVITIES NOT IN ACCORDANCE WITH THE TERMS OR CONDITIONS** – If the Department determines, upon inspection, that the construction, operation or maintenance of a project has violated the terms or criteria of this General Permit or of the Chapter 105 Rules and Regulations, the Department may take such actions, legal or administrative, that it may deem to be appropriate.
26. **STRUCTURE REMOVAL** – The owner shall remove all or any portion of this project upon written notification to the owner by the Department in the event the project is causing an adverse impact on public health, safety or the environment, or in any other manner violates the conditions of this General Permit or Chapter 105 Rules and Regulations.
27. **PROPERTY RIGHTS** – This General Permit does not authorize trespassing on private property nor convey any property rights, either in real estate or material, or in any exclusive privileges; nor does it authorize any injury to property or invasion of rights or any infringement of Federal, State or local laws or regulations.
28. **WATER QUALITY CERTIFICATION** – The issuance of this General Permit also constitutes approval of Water Quality Certification under Section 401 of the Federal Clean Water Act (33 U.S.C.A. §1341).
29. **OTHER PERMITS** – Nothing in this General Permit relieves the owner(s) of the obligation of complying with all Interstate Compacts, Federal, and state laws, and regulations.
30. **SIGNATURE** – The General Permit Registration Form shall be signed by the person responsible for installation, operation and maintenance of the authorized activity.